



**CONTRACT NO: HK/2015/01**

**WANCHAI DEVELOPMENT PHASE II AND CENTRAL  
WANCHAI BYPASS  
SAMPLING, FIELD MEASUREMENT AND TESTING WORKS  
(STAGE 3)**

**ENVIRONMENTAL PERMIT NO. EP-356/2009,  
FURTHER ENVIRONMENTAL PERMIT NOS. FEP-02/356/2009,  
FEP-03/356/2009, FEP-04/356/2009 , FEP-06/356/2009,  
FEP-07/356/2009 AND FEP-08/356/2009**

**MONTHLY ENVIRONMENTAL MONITORING & AUDIT REPORT**

**- JANUARY 2017 -**

**CLIENTS:**

**Civil Engineering and Development  
Department**

**and**

**Highways Department**

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**CERTIFIED BY:**

Raymond Dai  
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**DATE:**

13 February 2017

Ref.: AACWBIECEM00\_0\_9048L.17

13 February 2017

AECOM Asia Company Limited  
Engineer's Representative's Office  
25 Hung Hing Road,  
Causeway Bay,  
Hong Kong

By Post and Fax (3912 3010)

Attention: Mr. Peter Poon

Dear Mr. Poon,

**Re: Contract No. HK/2015/01  
Wan Chai Development Phase II - Central-Wan Chai Bypass  
Sampling, Field Measurement and Testing Works (Stage 3)**

**Monthly Environmental Monitoring and Audit Report (January 2017)  
for EP-356/2009, FEP-02/356/2009, FEP-03/356/2009, FEP-  
04/356/2009, 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 January 2017 received by e-mail on 13 February 2017 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

Encl.

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C.c.

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## EXECUTIVE SUMMARY

- i. This is the Environmental Monitoring and Audit (EM&A) Monthly Report – January 2017 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-06/356/2009, FEP-07/356/2009 and FEP-08/356/2009. This report presents the environmental monitoring findings and information recorded during the period of 27<sup>th</sup> December 2016 to 26<sup>th</sup> January 2017. The cut-off date of reporting is at 26<sup>th</sup> 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:
  - Nil
- iii. During this reporting period, the major work activities for Contract no. HK/2009/02 included:
  - Nil
- iv. During this reporting period, the major work activities for Contract no. HY/2009/15 included:
  - Reinstatement of Eastern Breakwater
  - Trimming works of high sport at TPCWAW
- v. During this reporting period, the major work activities for Contract no. HY/2009/19 included:
  - Nil
- vi. During this reporting period, the major work activities for Contract no. HK/2012/08 included:
  - Installation of Box 1 unit
  - Construction of culver L Bay 8
- vii. During this reporting period, the major work activities for Contract no. HY/2010/08.
  - Diversion pipe maintenance
  - Diaphragm Wall Removal Works

### Noise Monitoring

- viii. With respect to the shift in major construction site portions at Wan Chai North, the noise monitoring station M1a – Harbour Sports Centre was finely adjusted from East of Harbour Road Sports Centre to West of Harbour Road Sports Centre on 21 June 2016.
- ix. School examination was scheduled to be taken place at Henrietta Secondary School on 24 January 2017 and 25 January 2017, the limit level of noise monitoring at station M6 was adjusted to 65dB(A) during examination period accordingly.

- x. One limit level exceedance was recorded at M6 – HK Baptist Church Henrietta School on 24 January 2017 in the reporting month. The exceedances were concluded as non-Project related.
- xi. 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.

#### Air Quality Monitoring

- xii. Due to interruption of electricity supply, the 24hr TSP was rescheduled as follows:  
CMA1b monitoring station from 3 and 26 January 2017 to 4 and 27 January 2017 respectively  
CMA4a monitoring station from 9 and 20 January 2017 to 10 and 21 January 2017 respectively
- xiii. Two 24hr TSP action level exceedances were recorded at CMA5b – Pedestrian Plaza on 09 and 20 January 2017 in the reporting month. The exceedances were concluded to be non-Project related.
- xiv. With respect to the proposed demolition of eastern podium of Oil Street Site Office, the respective air quality monitoring station CMA1b – Oil Street Site Office was finely adjusted from East podium of the Oil Street Site Office to the West podium of the Oil Street Site Office on 21 December 2016.
- xv. 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; CMA5b – Pedestrian Plaza; CMA6a – WDII PRE Site Office in the reporting month.

#### Water Quality Monitoring

- xvi. With respect to the reinstatement of the silt screen system for Cooling Water Intakes P7, P8, P9 and WSD Water Intake RW21, the respective water quality monitoring was reverted to the previous monitoring location for Water Quality Monitoring Station RW21-P789 from water quality stations RW21-P789 East (RW21-P789E) and RW21-P789 West (RW21-P789W) from 25 January 2017 onwards.
- xvii. With respect to the removal of temporary reclamation zone within Ex-PCWA, the Enhance DO Monitoring Station Ex-PCWA SW was finely adjusted since 20 January 2017 ebb tide.
- xviii. With respect to the removal of silt screen at WQM station RW21-P789 on 26 November 2016, the respective water quality monitoring at RW21-P789 was adjusted to RW21-P789E and RW21-P789W since 28 November 2016 ebb-tide.
- xix. With respect to the temporarily suspension of marine construction works at WCR3 Area by Contract HK/2009/02, the installed silt screen for intake group (P7, P8, P9 and WSD21) was removed on 26 November 2016.
- xx. As advised by the Contractor of HK/2009/01, all silt screen removal works at P1, P3, P4, P5 and C1 water quality monitoring stations were completed on 8 May 2016.
- xxi. With respect to the marine works undertaken at WCR3 by Contract HK/2009/02, the respective water quality monitoring station C1 associated with Contract HK/2009/01 was updated as in association with Contract HK/2009/01 and Contract HK/2009/02.

- xxii. With respect to the marine works undertaken at CBTS by Contract HY/2010/08, the respective water quality monitoring station C7 associated with Contract HY/2009/15 was updated as in association with Contract HY/2009/15 and Contract HY/2010/08.
- xxiii. With respect to the marine works undertaken at HKCEC2 by Contract HK/2012/08, the respective water quality monitoring station WSD19, P1, P3, P4, and P5 were associated with Contract HK/2012/08.

**Table I Summary of Water Quality Monitoring Exceedances in Reporting Month**

| Contract no.            | Water quality monitoring Station | Mid-flood |    |           |    |    |    | Mid-ebb |    |           |    |    |    |   |
|-------------------------|----------------------------------|-----------|----|-----------|----|----|----|---------|----|-----------|----|----|----|---|
|                         |                                  | DO        |    | Turbidity |    | SS |    | DO      |    | Turbidity |    | SS |    |   |
|                         |                                  | AL        | LL | AL        | LL | AL | LL | AL      | LL | AL        | LL | AL | LL |   |
| HK/2009/01 & HK/2009/02 | C1                               | 0         | 0  | 0         | 0  | 0  | 0  | 0       | 0  | 0         | 0  | 0  | 0  | 0 |
| HK/2012/08              | WSD19                            | 0         | 0  | 1         | 0  | 0  | 0  | 0       | 0  | 0         | 0  | 0  | 0  | 0 |
|                         | P1                               | 0         | 0  | 0         | 0  | 0  | 0  | 0       | 0  | 0         | 0  | 0  | 0  | 0 |
|                         | P3                               | 0         | 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  | 0 |
|                         | P5                               | 0         | 0  | 0         | 0  | 0  | 0  | 0       | 0  | 0         | 0  | 0  | 0  | 0 |
| HK/2009/02              | RW21-P789W                       | 0         | 0  | 0         | 0  | 0  | 0  | 0       | 0  | 0         | 0  | 0  | 0  | 0 |
|                         | RW21-P789E                       | 0         | 0  | 0         | 0  | 0  | 0  | 0       | 0  | 0         | 0  | 0  | 0  | 0 |
| HY/2009/15 & HY/2010/08 | C7                               | 0         | 0  | 0         | 2  | 0  | 0  | 0       | 0  | 0         | 0  | 0  | 1  | 0 |
| <b>Total</b>            |                                  | 0         | 0  | 1         | 2  | 0  | 0  | 0       | 0  | 0         | 0  | 0  | 1  | 0 |

- Remarks: - The cessation of seawater intake operation for C6 was confirmed on 17 May 2011 and the water quality monitoring at C6 was then terminated since 17 May 2011.
- 4-week post construction water quality monitoring at WSD9, WSD10, WSD15 and WSD17 were completed on 6 Feb 2012 and the water quality monitoring at WSD 10 and WSD15 were temporary suspended since 8 Feb 2012, and WSD9 and WSD17 was implemented with respect to HK/2009/02 from 8 Feb 2012 onwards.
  - C8 and C9 were implemented with respect to HY/2009/19 from 28 Jan 2012.
  - C8 & C9 were temporary suspended since 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 22 Apr 2013
  - P1, P3, P4 and P5 were commenced since 24 Apr 2013
  - C5e and C5w water quality monitoring station was temporarily suspended since 29 Jul 2013.
  - WSD21 water quality monitoring station was temporarily suspended since 12 Mar 2014
  - WSD9 and WSD17 water quality monitoring station was temporarily suspended since 8 Sep 2014 flood tide.
  - The water quality monitoring station C1 shall be associated with Contract No. HK/2009/02 upon commencement of marine works under DP3 at WCR3 area.
  - The water quality monitoring station RW21-P789 was adjusted to RW21-P789E and RW21-P789W since 28 November 2016 ebb-tide.
  - The water quality monitoring was reverted to previous monitoring station RW21-P789 from PW21-P789E and RW21-P789W from 25 January 2017 onwards.

- xxiv. There were 1 action level and 2 limit level of turbidity exceedances and 1 action level of suspended solid exceedances recorded in the reporting month.

- xxv. Investigation found that the turbidity and suspended solid exceedances recorded in this reporting month were not related to Project works. The details of the recorded exceedance can be referred to the **Section 6.4**.
- xxvi. Enhanced DO monitoring at 3 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 no.            | Water quality monitoring Station | Mid-flood |    | Mid-ebb |    |
|-------------------------|----------------------------------|-----------|----|---------|----|
|                         |                                  | DO        |    | DO      |    |
|                         |                                  | AL        | LL | AL      | LL |
| HY/2009/15 & HY/2010/08 | C6                               | 0         | 0  | 0       | 0  |
| HY/2009/15              | Ex-WPCWA SW                      | 0         | 0  | 0       | 0  |
|                         | Ex-WPCWA SE                      | 0         | 2  | 0       | 0  |
| Total                   |                                  | 0         | 2  | 0       | 0  |

Remarks:

- Enhanced DO monitoring at Windsor House Cooling (Station Ref: C7) was temporarily suspended since 22 October 2014 with respect to the formation of temporary reclamation zone TS3 and to be resumed upon removal of the respective temporary reclamation zone.
- Enhanced DO monitoring at Monitoring station Ex-WPCWA SE was temporarily suspended from 31 August 2015 with respect to seawall reinstatement works and formation of active works area. The Enhance DO monitoring at Ex-WPCWA SE was resumed on 11 May 2016 due to completed section of seawall reinstatement works at Ex-PCWA.

- xxvii. There were 2 limit level exceedances recorded for enhanced dissolved oxygen monitoring in this reporting month. Investigation found that the exceedances recorded in this reporting month were not related to Project works. The details of the recorded exceedances can be referred to the **Section 6.4**.

Complaints, Notifications of Summons and Successful Prosecutions

- xxviii. There was no environmental complaint received in this reporting month.

Site Inspections and Audit

- xxix. The Environmental Team (ET) conducted weekly site inspections for Contract nos. HK/2009/01, HK/2009/02, HY/2009/15, 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.

Future Key Issues

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

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

- Nil

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

- Nil

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

- Nil

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

- Nil

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

- Construction of Box 1 unit
- Construction of culvert L Bay 8

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

- Diversion pipe maintenance
- Diaphragm Wall Removal works



## 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-06/356/2009, FEP-07/356/2009 and FEP-08/356/2009 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-041/2001).
- 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-06/356/2009, FEP-07/356/2009 and FEP-08/356/2009 during the period of 27<sup>th</sup> December 2016 to 26<sup>th</sup> January 2017. The cut-off date of reporting is at 26<sup>th</sup> 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**     **Environmental Site Audit** – 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 water mains 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 |
|--------------|--|------------------|--------------------------------|
| HK/2009/01   | Wan Chai Development Phase II – Central –Wanchai Bypass at Hong Kong Convention and Exhibition Centre                  | DP3, DP6         | 23 July 2010                   |
|              |  | DP1, DP2         | 25 August 2011                 |
| HK/2009/02   | Wan Chai Development Phase II – Central – Wan Chai Bypass at WanChai East  | DP3, DP5         | 5 July 2010                    |
|              |  | DP1              | 26 April 2011                  |
| HY/2009/11   | Wan Chai Development Phase II and Central – Wan Chai Bypass – North Point Reclamation                                  | DP3              | 17 March 2010<br>(Completed)   |
| HY/2009/15   | Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section)   | DP3              | 10 November 2010               |
|              |  | 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<br>(Completed)   |
| 04/HY/2006   | Reconstruction of Bus Terminus near Man Yiu Street and Man Kwong Street  | DP1              | September 2010<br>(Completed)  |
| HY/2009/17   | Central – Wan Chai Bypass (CWB) at FEHD Whitfield Depot – Advanced piling works.                                       | DP1              | 5 October 2010<br>(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   | DP1,DP2, DP3     | 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              | 8 October 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 Venture                 | Contractor under Contract no. HK/2009/01 | Project Manager                               | Mr. Simon Liu   | 9304 8355   | 2587 1878   |
|  |  | Site Agent                                    | Mr. Andy Yu     | 9648 4896   |             |
|  |  | Construction Manager                          | Mr. Wyman Wong  | 9627 2467   |             |
|  |  | Environmental Officer                         | Mr. Terry Tsang | 6683 9394   |             |
| Chun Wo – CRGL Joint Venture                   | Contractor under Contract no. HK/2009/02 | Project Manager                               | Mr. Paul Yu     | 3658-3085   | 2827 9996   |
|  |  | Quality & Environmental Manager               | Mr. C.P. Ho     | 9191 8856   |             |
| China State Construction Engineering (HK) Ltd. | Contractor under Contract no. HY/2009/15 | Project Director                              | Chris Leung     | 3557 6393   | 2566 2192   |
|  |  | Senior Site Manager                           | Y Huo           | 3557 6368   |             |
|  |  | Contractor's Representative                   | Rex Lau         | 3557 6405   |             |
|  |  | Environmental Officer                         | Andy Mak        | 3557 6347   |             |
| Chun Wo – CRGL – MBEC Joint Venture            | Contractor under Contract no. HY/2009/19 | Project Manager                               | Rayland Lee     | 3758 6788   | 2570 8013   |
|  |  | Site Agent                                    | David Lau       | 3758 8879   |             |
|  |  | Deputy Site Agent                             | Eric Fong       | 6191 9337   |             |
|  |  | Environmental Manager / Environmental Officer | M.H. Isa        | 9884 0810   |             |
|  |  | Construction Manager (Marine)                 | Andy Chan       | 9879 4325   |             |
|  |  | Construction Manager (Land)                   | Bear Ding       | 6483 6198   |             |
|  |  | Operation Manager (Land)                      | Yung Kwok Wah   | 9834 1010   |             |
| China State-Build King Joint Venture           | Contractor under Contract no. HK/2012/08 | Project Director                              | C. N. Lai       | 9106 5806   | 2877 1522   |
|  |  | Project Manager                               | Eddie Chung     | 9189 8118   |             |
|  |  | Site Agent                                    | Keith Tse       | 9037 1839   |             |
|  |  | Environmental Officer                         | James Ma        | 9130 9549   |             |
|  |  | Environmental Supervisor                      | Y. L. Ho        | 9856 5669   |             |

| Party                             | Role                                     | Post                                    | Name              | Contact No. | Contact Fax |
|-----------------------------------|--|---|-------------------|-------------|-------------|
| China State                       | Contractor under Contract no. HY/2010/08 | Project Director                        | Chris Leung       | 3467 4299   | 2566 8061   |
|                                   |  | Project Manager                         | Chan Ying Lun     | 3418 3001   |             |
|                                   |  | Site Agent                              | Francis Suen      | 6672 0311   |             |
|                                   |  | Environmental Officer                   | Gabriel Wong      | 35576466    |             |
|                                   |  | Environmental Supervisor                | Desmond Ho Tsz Ho | 3557 6466   |             |
| Ramboll Environ Hong Kong Limited | Independent Environmental Checker (IEC)  | Independent Environmental Checker (IEC) | Mr. David Yeung   | 3465 2888   | 3465 2899   |
| Lam Geotechnics 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:

- Nil

2.4.4. For Contract no. HK/2009/02, the principal work activities in this reporting month included:

- Nil

2.4.5. For Contract no. HY/2009/15, the principal work activities in this reporting month included:

- Reinstatement of Eastern Breakwater
- Trimming works of high sports at TPCWAW

2.4.6. For Contract no. HY/2009/19, the principal work activity in this reporting month included:

- Nil

2.4.7. For Contract no. HK/2012/08, the principal work activity in this reporting month included:

- Installation for Box 1 unit
- Construction of culvert L Bay 8

2.4.8. For Contract no. HY/2010/08, no principal work activities this reporting month.

- Diversion pipe maintenance

- Diaphragm Wall Removal Works

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

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

- Nil

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

- Nil

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

- Nil

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

- Nil

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

- Construction of Box 1 unit
- Construction of culvert L Bay 8

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

- Diversion pipe maintenance
- Diaphragm Wall Removal Works

### 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 | Superseded  |
| Environmental Permit         | EP-364/2009/D     | 24 Nov 2016 | Superseded  |
| Environmental Permit         | EP-364/2009/E     | 22 Dec 2016 | 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 | Surrendered |
| 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 | Surrendered |
| Further Environmental Permit | FEP-07/364/2009/D | 24 Nov 2015 | Valid       |
| Further Environmental Permit | FEP-08/364/2009/A | 15 Jun 2012 | Surrendered |
| Further Environmental Permit | FEP-06/356/2009   | 5 Mar 2013  | Valid       |



| Permits and/or Licences      | Reference No.     | Issued Date  | Status     |
|------------------------------|-------------------|--------------|------------|
| Further Environmental Permit | FEP-07/356/2009   | 26 July 2013 | Valid      |
| Further Environmental Permit | FEP-09/364/2009/B | 5 March 2013 | Valid      |
| Further Environmental Permit | FEP-10/364/2009/B | 26 July 2013 | Valid      |
| Further Environmental Permit | FEP-11/364/2009/B | 2 May 2014   | Superseded |
| Further Environmental Permit | FEP-08/356/2009   | 1 Aug 2016   | Valid      |
| Further Environmental Permit | FEP-11/364/2009/E | 22 Dec 2016  | Valid      |

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:

Contract no. HK/2010/06 – Wan Chai Development Phase II – Central – Wan Chai Bypass over MTR Tsuen Wan Line under FEP-05/356/2009

3.1.3. The construction works were completed and the FEP-05/356/2009 was surrendered by the Contractor on 3 October 2014.

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

3.1.4. 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 3.2** and **Table 3.3**.

**Table 3.2 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 Permit                             | FEP-02/356/2009 | 24 Mar 2010 | N/A                        | Valid  |
|  | 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 (CNP) for non-piling equipment | GW-RS1004-16    | 28 Sep 2016 | 29 Sep 2016 to 27 Mar 2017 | Valid  |
|  | GW-RS1079-16    | 27 Oct 2016 | 27 Oct 2016 to 20 Apr 2017 | Valid  |
|  | GW-RS1241-16    | 12 Dec 2016 | 15 Dec 2016 to 6 Jun 2017  | Valid  |

| Permits and/or Licences                        | Reference No.        | Issued Date | Valid Period/<br>Expiry Date | Status |
|--|----------------------|-------------|------------------------------|--------|
|  | GW-RS1240-16         | 12 Dec 2016 | 13 Dec 2016 to 6 Jun 2017    | Valid  |
|  | GW-RS1233-16         | 12 Dec 2016 | 14 Dec 2016 to 6 Jun 2017    | Valid  |
|  | GW-RS1234-16         | 12 Dec 2016 | 20 Dec 2016 to 19 Jun 2017   | Valid  |
| Discharge Licence                              | WT00024952-2016      | 6 Jul 2016  | 31 Jul 2021                  | Valid  |
|  | WT00024844-2016      | 29 Jun 2016 | 31 Mar 2020                  | Valid  |
| Billing account under Waste Disposal Ordinance | 7010069              | 21 Jan 2010 | N/A                          | Valid  |
| Registration as a Chemical Waste Producer      | WPN5213-134-C3585-01 | 21 Jan 2010 | N/A                          | Valid  |

**Table 3.3 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         |
| Condition 2.8 | Silt Curtain Deployment Plan (Rev. 5)                  | 24 Aug 2012        |
|               | Silt Curtain Deployment Plan (Rev. 4)                  | 12 July 2012       |
|               | Silt Curtain Deployment Plan (Rev. 3)                  | 27 June 2012       |
|               | Silt Curtain Deployment Plan                           | 19 Apr 2010        |
| Condition 2.9 | Silt Screen Deployment Plan (Rev. 9)                   | 5 Nov 2015         |
|               | Silt Screen Deployment Plan (Rev. 8)                   | 7 Sep 2015         |
|               | Silt Screen Deployment Plan (Rev. 7)                   | 21 Nov 2014        |
|               | Silt Screen Deployment Plan (Rev. 6)                   | 20 Aug 2014        |
|               | Silt Screen Deployment Plan (Rev.5)                    | 24 Jul 2013        |
|               | Silt Screen Deployment Plan (Rev.4)                    | 15 Nov 2012        |
|               | Silt Screen Deployment Plan                            | 19 Apr 2010        |

| EP Condition           | Submission  | Date of Submission |
|------------------------|---|--------------------|
| Conditions 2.8 and 2.9 | Supplementary Document on Silt Curtain and Silt Screen Deployment Plan  | 19 Jul 2010        |
|                        | 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        |
| 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        |

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

- 3.1.5. 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 3.4** and **Table 3.5**.

**Table 3.4 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  |
| Construction Noise Permit (CNP) for non-piling | GW-RS1047-16    | 13 Oct 2016 | 26 Oct 2016 to 25 Apr 2017 | Valid  |

| Permits and/or Licences                                 | Reference No.            | Issued Date | Valid Period/<br>Expiry Date | Status  |
|---|--------------------------|-------------|------------------------------|---------|
| equipment   | GW-RS1140-16             | 11 Nov 2016 | 14 Nov 2016 to 9 May 2017    | Valid   |
|   | GW-RS1297-16             | 15 Dec 2016 | 16 Dec 2016 to 14 Jun 2017   | Valid   |
|   | GW-RS1305-16             | 22 Dec 2016 | 24 Dec 2016 to 13 Jun 2017   | Valid   |
| Discharge Licence                                       | WT00022295-2015          | 12 Aug 2015 | 31 July 2020                 | Valid   |
|   | WT00025276-2016          | 19 Sep 2016 | 31 July 2021                 | 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<br>593-01 | 10 Mar 2010 | N/A                          | Valid   |
| Registration as Chemical Waste Producer (TKO 137)       | WPN5213-839-C3<br>593-02 | 22 Sep 2010 | N/A                          | Valid   |
| Dumping Permit (Type 1 – Open Sea Disposal)             | EP/MD/17-041             | 23 Jun 2017 | 01 Jul 2016 to 31 Dec 2016   | Expired |

**Table 3.5 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       |
| Condition 2.8  | 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        |
|                | Silt Curtain Deployment Plan (Revision H)              | 15 Feb 2011        |
|                | 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        |
|                | Silt Curtain Deployment Plan (Revision M)              | 30 Nov 2012        |
| Condition 2.9  | Silt Screen Deployment Plan                            | 21 April 2010      |

| EP Condition   | Submission   | Date of Submission |
|----------------|--|--------------------|
|                | Supplementary Information for Existing WSD Salt Water Intakes at Quarry Bay and Sai Wan Ho | 5 Oct 2010         |
|                | 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        |
|                | Silt Screen Deployment Plan (Revision E)   | 6 May 2013         |
|                | Silt Screen Deployment Plan (Revision F)   | 23 Nov 2016        |
| Condition 2.17 | Noise Management Plan  | 6 May 2010         |
| Condition 2.18 | Landscape Plan (Decorative Screen Hoarding)  | 11 May 2010        |
|                | Landscape Plan (Control of Night Time Lighting)  | 2 June 2010        |
|                | Landscape Plan (Combined Version)  | 20 July 2011       |
|                | Landscape Plan (Combined Version)  | 5 Aug 2011         |
| -----          | Acknowledge of Submission  | 22 Aug 2011        |

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

3.1.6. Summary of the current status on licences and/or permits on environmental protection pertinent and submission for contract no. HY/2009/15 under FEP-04/356/2009 are shown in **Table 3.6** and **Table 3.7**.

**Table 3.6 Cumulative Summary of Valid Licences and Permits under Contract no. HY/2009/15**

| Permits and/or Licences  | Reference No.   | Issued Date | Valid Period/<br>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-RS0889-16    | 23 Aug 2016 | 11 Sep 2016 to 10 Mar 2017   | Valid  |
| Construction Noise Permit (CNP) for reclamation and d-wall works at Ex-PCWA        | GW-RS0884-16    | 23 Aug 2016 | 8 Sep 2016 to 7 Mar 2017     | Valid  |

| Permits and/or Licences   | Reference No.            | Issued Date | Valid Period/<br>Expiry Date  | Status  |
|---|--------------------------|-------------|-------------------------------|---------|
| Registration as a Chemical Waste Producer                           | WPN5213-147-C116<br>9-35 | 15 Nov 2010 | N/A                           | Valid   |
| Billing Account under Waste Disposal Ordinance                      | 7011553                  | 30 Sep 2010 | N/A                           | Valid   |
| Billing Account under Waste Disposal Ordinance (Disposal by Vessel) | 7011761                  | 24 Oct 2016 | 24 Oct 2016 to<br>16 Jan 2017 | Expired |

**Table 3.7 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        |
| Condition 2.23 | Noise Management Plan  | 20 Oct 2010        |
|                | Amendment for Noise Management Plan                                  | 27 Jan 2011        |

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

3.1.7. Summary of the current status on licences and/or permits on environmental protection pertinent for contract no. HY/2009/19 is shown in **Table 3.8**

**Table 3.8 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/D | 24 Nov 2015  | Granted                    | Valid  |
| Notification of Works Under APCO                        | 326160            | 24 Jan 2011  | Notified                   | Valid  |
| Construction Noise Permit (CNP) (For Portion Vi Marine) | GW-RS1251-16      | 7 Dec 2016   | 18 Dec 2016 to 17 Jun 2017 | 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                 | -      |

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

- 3.1.8. Summary of the current status on licences and/or permits on environmental protection pertinent and submission for contract no. HK/2012/08 under FEP-08/356/2009 are shown in **Table 3.9** and **Table 3.10**.

**Table 3.9 Cumulative Summary of Valid Licences and Permits under Contract no. HK/2012/08**

| 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   |
|  | FEP-08/356/2009   | 1 Aug 2016  | 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 | 30 Jun 2016 | N/A                        | Valid   |
| Billing Account under Waste Disposal Ordinance | 7016883           | 18 Feb 2013 | 18 Jul 2017                | Valid   |
| Water Discharge Licence                        | WT00020594-2014   | 22 Dec 2014 | 31 Jan 2019                | Valid   |
| Construction Noise Permit                      | GW-RS0726-16      | 12 Jul 2016 | 14 Jul 2016 to 12 Jan 2017 | Expired |
|  | GW-RS00739-16     | 12 Jul 2016 | 14 Jul 2016 to 12 Jan 2017 | Expired |
|  | GW-RS0733-16      | 12 Jul 2016 | 14 Jul 2016 to 12 Jan 2017 | Expired |

| Permits and/or Licences                        | Reference No. | Issued Date | Valid Period/<br>Expiry Date  | Status  |
|--|---------------|-------------|-------------------------------|---------|
|  | GW-RS0746-16  | 12 Jul 2016 | 14 Jul 2016 to<br>12 Jan 2017 | Expired |
|  | GW-RS0902-16  | 24 Aug 2016 | 26 Aug 2016 to<br>25 Feb 2017 | Valid   |
|  | GW-RS1076-16  | 14 Oct 2016 | 17 Oct 2016 to<br>31 Jan 2017 | Valid   |
|  | GW-RS1335-16  | 29 Dec 2016 | 13 Jan 2017 to<br>12 Jul 2017 | Valid   |
|  | GW-RS1340-16  | 23 Dec 2016 | 13 Jan 2017 to<br>12 Jul 2017 | Valid   |
|  | GW-RS1336-16  | 29 Dec 2016 | 13 Jan 2017 to<br>12 Jul 2017 | Valid   |
|  | GW-RS1349-16  | 23 Dec 2016 | 13 Jan 2017 to<br>12 Jul 2017 | Valid   |
| Dumping Permit (Type 1 – Open<br>Sea Disposal) | EP/MD/17-052  | 28 Jun 2016 | 1 Jul 2016 to 31<br>Dec 2016  | Expired |

**Table 3.10 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)

- 3.1.9. Summary of the current status on licences and/or permits on environmental protection pertinent and submission for contract no. HY/2010/08 under FEP-07/356/2009 are shown in Table 3.11 and **Table 3.12**.



**Table 3.11 Cumulative Summary of Valid Licences and Permits under Contract no. HY/2010/08**

| Permits and/or Licences  | Reference No.            | Issued Date | Valid Period/<br>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<br>69-44 | 27 Mar 2013 | NIL                           | Valid  |
| Billing Account under Waste Disposal Ordinance                     | 7017170                  | 27 Mar 2013 | NIL                           | Valid  |
| Billing Account under Waste Disposal Ordinance (Dumping by Vessel) | 7020947                  | 22 Dec 2014 | NIL                           | Valid. |
| Water Discharge Licence  | WT00020753-2015          | 3 Feb 2015  | 28 Feb 2017                   | Valid  |
| Construction Noise Permit  | GW-RW-0562-16            | 28 Oct 2016 | 28 Oct 2016 to<br>26 Apr 2017 | Valid  |

**Table 3.12 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 (rev03) | 24 Dec 2014        |
| Condition 2.9  | Silt Screen Deployment Plan (rev02)  | 18 Feb 2015        |
| Condition 2.23 | Noise Management Plan (rev02)        | 25 Mar 2014        |
| Condition 2.24 | Landscape Plant (rev04)              | 23 Sep 2014        |

## 4 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                                |
| M3a     | Tung Lo Wan Fire Station                     |
| M4b     | Victoria Centre                              |
| M5b     | City Garden                                  |
| M6      | HK Baptist Church Henrietta Secondary School |

#### NOISE MONITORING PARAMETERS, FREQUENCY AND DURATION

- 4.1.2. The construction noise level shall be measured in terms of the A-weighted equivalent continuous sound pressure level ( $L_{eq}$ ).  $L_{eq(30\text{ minutes})}$  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.
- 4.1.3. 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.
- 4.1.4. 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

- 4.1.5. As referred to in the Technical Memorandum <sup>TM</sup> 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.

- 4.1.6. 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 4.2** and **Figure 4.1**. **Appendix 4.1** shows the established Action/Limit Levels for the monitoring works.

**Table 4.2 Air Monitoring Station**

| Station ID | Monitoring Location                              | Description  |
|------------|--|--------------|
| CMA1b      | Oil Street Site Office**                         | 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     |
| CMA5b      | Pedestrian Plaza***                              | Wan Chai     |
| CMA6a      | WDII PRE Site Office *                           | Wan Chai     |

Remarks\*: As per the ENPC meeting in March 2011, the monitoring stations CMA3a – Future CWB site office at Wanchai Waterfront Promenade was renamed as remark.

Remarks\*\*: The location ID of monitoring station CMA1b was updated as “Oil Street Site Office” in April 2013.

Remarks\*\*\*: The station ID and monitoring location was updated in December 2014 with respect to monitoring station relocation.

### 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 m<sup>3</sup> 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 cm<sup>2</sup>;
- 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 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 **Figure 4.1** 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 **Appendix 4.1**.

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. Water quality monitoring was undertaken at 9 monitoring stations for WSD salt water intakes and cooling water intakes along the seafront of the Victoria Harbour in the reporting month. The proposed water quality monitoring stations of the Project are 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 Marine Water Quality Stations for Water Quality Monitoring**

| Station Ref.  | Location  | Easting  | Northing |
|---|---|----------|----------|
| <b>WSD Salt Water Intake</b>                        |   |          |          |
| WSD19   | Sheung Wan  | 833415.0 | 816771.0 |
| <b>Cooling Water Intake</b>                         |   |          |          |
| 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 |
| P4  | Shui on Centre  | 835865.6 | 816220.0 |
| P5  | Government Buildings<br>(Wanchai Tower / Revenue Tower / Immigration Tower)                       | 835895.2 | 816215.2 |
| <b>Cooling Water Intake / WSD Salt Water Intake</b> |   |          |          |
| RW21-P789   | Great Eagle Centre/ Sun Hung Kai Centre/ WSD Wanchai salt water intake / China Resources Building | 836268.0 | 816020.0 |
| RW21-P789E  | Great Eagle Centre/ Sun Hung Kai Centre/ WSD Wanchai salt water intake / China Resources Building | 836317.0 | 816030.0 |
| RW21-P789W  | Great Eagle Centre/ Sun Hung Kai Centre/ WSD Wanchai salt water intake / China Resources Building | 836201.0 | 816021.0 |

- Remarks: - The cessation of seawater intake operation for C6 was confirmed on 17 May 2011 and the water quality monitoring at C6 was then terminated since 17 May 2011.
- 4-week post construction water quality monitoring at WSD9, WSD10, WSD15 and WSD17 were completed on 6 Feb 2012 and the water quality monitoring at WSD 10 and WSD15 were temporarily suspended since 8 Feb 2012, and WSD9 and WSD17 was implemented with respect to HK/2009/02 from 8 Feb 2012 onwards.
  - C8 and C9 were implemented with respect to HY/2009/19 from 28 Jan 2012.
  - C8 & C9 were temporarily suspended since 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 22 Apr 2013
- P1, P3, P4 and P5 were commenced since 24 Apr 2013
- C5e and C5w water quality monitoring station was temporarily suspended since 29 Jul 2013.
- WSD21 water quality monitoring station was temporarily suspended since 12 Mar 2014
- WSD9 and WSD17 water quality monitoring station was temporarily suspended since 8 Sep 2014 flood tide.
- The water quality monitoring station C1 shall be associated with Contract No. HK/2009/02 upon commencement of marine works under DP3 at WCR3 area.
- The water quality monitoring station RW21-P789 was adjusted to RW21-P789E and RW21-P789W since 28 November 2016 ebb-tide.
- The water quality monitoring was reverted to previous monitoring station RW21-P789 from PW21-P789E and RW21-P789W from 25 January 2017 onwards.

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 4.4** 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 4.4 Marine Water Quality Monitoring Frequency and Parameters**

| Activities                                    | Monitoring Frequency <sup>1</sup>                   | Parameters <sup>2</sup>  |
|---|---|--|
| 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:

1. 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 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 4.5** and **Figure 4.1**.

**Table 4.5 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 |

## Remarks:

1. Enhanced DO monitoring at Windsor House Cooling (Station Ref: C7) was temporarily suspended since 22 October 2014 with respect to the formation of temporary reclamation zone TS3 and to be resumed upon removal of the respective temporary reclamation zone.
2. Enhanced DO monitoring at Monitoring station Ex-WPCWA SE was temporarily suspended from 31 August 2015 with respect to seawall reinstatement works and formation of active works area. The Enhanced DO monitoring at Ex-WPCWA SE was resumed on 11 May 2016 due to completed section of seawall reinstatement works at Ex-PCWA.

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 turbidity 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 shall be downloaded daily and compared with the Action and Limit level determined during the baseline water quality monitoring at the cooling water intake locations.

#### ADDITIONAL DISSOLVED OXYGEN MONITORING FOR CULVERT L WATER DISCHARGE 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).

**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 **Figure 2.1** and **Figure 4.1**. 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. 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

5.1.1. The proposed division of noise monitoring stations are summarized in **Table 5.1** below.

**Table 5.1 Noise Monitoring Station for Contract nos. HK/2009/01 and HK/2009/02**

| 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 **Appendix 5.2**.

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

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 5.2** below.

**Table 5.2 Noise Monitoring Station for Contract no. HY/2009/15**

| Station | Description              |
|---------|--------------------------|
| M2b     | Noon Gun Area            |
| M3a     | Tung Lo Wan Fire Station |

5.1.5. No action or limit level exceedance was recorded in this reporting month.

5.1.6. Noise monitoring results measured in this reporting period are reviewed and summarized. Details of noise monitoring results and graphical presentation can be referred in **Appendix 5.2**.

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

5.1.7. The proposed division of noise monitoring stations are summarized in **Table 5.3** below.

**Table 5.3 Noise Monitoring Station for Contract no. HY/2009/19**

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

5.1.8. School examination was scheduled to be taken place at Henrietta Secondary School on 24 January 2017 and 25 January 2017, the limit level of noise monitoring at station M6 was adjusted to 65dB(A) during examination period accordingly.

5.1.9. One limit level exceedances were recorded at M6- HK Baptist Church Henrietta Secondary School on 24 January 2017 in this reporting month.

5.1.10. Traffic noise was observed during monitoring 24 January 2017 and it were considered as the major noise contribution. As such, the limit level exceedances were concluded as non-project related.

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 **Appendix 5.2**.

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

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

**Table 5.4 Noise Monitoring Station for Contract no. HY/2010/08**

| Station | Description              |
|---------|--------------------------|
| M2b     | Noon Gun Area            |
| M3a     | Tung Lo Wan Fire Station |

5.1.13. No action or limit level exceedance was recorded in this reporting month.

5.1.14. Noise monitoring results measured in this reporting period are reviewed and summarized. Details of noise monitoring results and graphical presentation can be referred in **Appendix 5.2**.

**5.2 Air Monitoring Results**

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

5.2.1 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 5.5** below.

**Table 5.5 Air Monitoring Stations for Contract no. HK/2009/01**

| Station | Description          |
|---------|----------------------|
| CMA5b   | Pedestrian Plaza     |
| CMA6a   | WDII PRE Site Office |

- 5.2.2 One 24hr TSP action level exceedance was recorded at CMA5b on 09 January 2017.
- 5.2.3 No construction works was undertaken on 20 January 2017 around Pedestrian Plaza under Contract HK/2009/01, no particular observation regarding air quality impact was observed during sampling. In view of the above, the action level exceedance was considered to be non-project related and potentially contributed by local ambient condition.
- 5.2.4 One 24hr TSP action level exceedance was recorded at CMA5b on 20 January 2017.
- 5.2.5 No construction works was undertaken on 20 January 2017 around Pedestrian Plaza under Contract HK/2009/01, no particular observation regarding air quality impact was observed during sampling. In view of the above, the action level exceedance was considered to be non-project related and potentially contributed by local ambient condition such as road traffic next to the monitoring station.
- 5.2.6 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/2009/02 - Wan Chai Development Phase II – Central – Wan Chai Bypass at WanChai East

5.2.7 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 5.6** below.

**Table 5.6 Air Monitoring Station for Contract no. HK/2009/02**

| Station | Description                                      |
|---------|--|
| CMA4a   | Society for the Prevention of Cruelty to Animals |

5.2.8 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. HY/2009/15 - Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section)

- 5.2.9 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 5.7** below.

**Table 5.7 Air Monitoring Station for Contract no. HY/2009/15**

| Station | Description         |
|---------|---------------------|
| CMA3a   | CWB PRE Site Office |

- 5.2.10 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. HY/2009/19- Wan Chai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link

- 5.2.11 The proposed division of air monitoring stations are summarized in **Table 5.8** below.

**Table 5.8 Air Monitoring Stations for Contract no. HY/2009/19**

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

- 5.2.12 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

- 5.2.13 The proposed division of air monitoring stations are summarized in **Table 5.9** below.

**Table 5.9 Air Monitoring Stations for Contract no. HK/2012/08**

| Station | Description      |
|---------|------------------|
| CMA5b   | Pedestrian Plaza |

- 5.2.14 One 24hr TSP action level exceedance was recorded at CMA5b on 09 January 2017.
- 5.2.15 Despite formwork erection and rebar fixing was undertaken on 09 January 2017 date around Pedestrian Plaza under Contract HK/2012/08, no particular observation regarding air quality impact was observed during sampling. In view of the above, the action level exceedance was considered to be non-project related and potentially contributed by local ambient condition.
- 5.2.16 One 24hr TSP action level exceedance was recorded at CMA5b on 20 January 2017.

- 5.2.17 Despite formwork erection and rebar fixing was undertaken on 20 January 2017 around Pedestrian Plaza under Contract HK/2012/08, no particular observation regarding air quality impact was observed during sampling. In view of the above, the action level exceedance was considered to be non-project related and potentially contributed by local ambient condition such as road traffic next to the monitoring station.
- 5.2.18 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. HY/2010/08- Central-Wanchai Bypass Tunnel (Slip Road 8 Section)

The proposed division of air monitoring stations are summarized in **Table 5.10** below.

**Table 5.10 Air Monitoring Stations for Contract no. HY/2010/08**

| Station | Description         |
|---------|---------------------|
| CMA3a   | CWB PRE Site Office |

- 5.2.19 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 Water quality monitoring Results

- 5.3.1. With respect to the reinstatement of the silt screen system for Cooling Water Intakes P7, P8, P9 and WSD Water Intake RW21, the respective water quality monitoring was reverted to the previous monitoring location for Water Quality Monitoring Station RW21-P789 from water quality stations RW21-P789 East (RW21-P789E) and RW21-P789 West (RW21-P789W) from 25 January 2017 onwards.
- 5.3.2. With respect to the removal of temporary reclamation zone within Ex-PCWA, the Enhance DO Monitoring Station Ex-PCWA SW was finely adjusted since 20 January 2017 ebb tide.
- 5.3.3. With respect to the temporarily suspension of marine construction works at WCR3 Area by Contract HK/2009/02, the installed silt screen for intake group (P7, P8, P9 and WSD21) was removed on 26 November 2016.
- 5.3.4. As advised by the Contractor of HK/2009/01, all silt screen remains removal works at P1, P3, P4, P5 and C1 water quality monitoring stations were completed on 8 May 2016.
- 5.3.5. With respect to the marine works undertaken at WCR3 by Contract HK/2009/02, the respective water quality monitoring station C1 associated with Contract HK/2009/01 was updated as in association with Contract HK/2009/01 and Contract HK/2009/02.
- 5.3.6. With respect to the marine works undertaken at CBTS by Contract HY/2010/08, the respective water quality monitoring station C7 associated with Contract HY/2009/15 was updated as in association with Contract HY/2009/15 and Contract HY/2010/08.



5.3.7. With respect to the marine works undertaken at HKCEC2 by Contract HK/2012/08, the respective water quality monitoring station WSD19, P1, P3, P4, and P5 were associated with Contract HK/2012/08.

**Table 5.11 Water quality 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 quality monitoring Stations,  | Division of WQM w.r.t tentative works commenced / to be commenced |
|--------------|--|--|---|
| HK/2009/01   | WCR3                                       | C1 <sup>1</sup>  | Apr 2013  |
| HK/2009/02   | WCR3, WCR4, TWCR4                          | RW21-P789 <sup>2,6</sup> ,<br>RW21-P789W <sup>2,5</sup> ,<br>RW21-P789E <sup>2,5</sup> , C1 <sup>1</sup> | Apr 2013  |
| HK/2012/08   | HKCEC2W, HKCEC2E                           | WSD19, P1 <sup>3</sup> , P3 <sup>3</sup> , P4 <sup>3</sup> , P5 <sup>3</sup>                             | Aug 2013  |
| HY/2009/15   | TCBR2, TCBR3,<br>TCBR1W, TPCWAE,<br>TPCWAW | C6 <sup>4</sup> , C7, Ex-WPCWA SW,<br>Ex-WPCWA SE (plus<br>enhanced DO monitoring)                       | Nov 2010  |
| HY/2010/08   | TCBR3, TCBR4                               | C6 <sup>4</sup> , C7 (plus enhanced DO<br>monitoring)  | Mar 2014  |

Remarks:

1. The water quality monitoring station C1 shall be associated with Contract No. HK/2009/02 upon commencement of marine works under DP3 at WCR3 area.
2. 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)
3. The water quality 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. Enhanced DO Monitoring at C6 since the intake abandon in May 2011.
5. With respect to the removal of silt screen at WQM station RW21-P789 on 26 November 2016, the respective water quality monitoring at RW21-P789 was adjusted to RW21-P789E and RW21-P789W since 28 November 2016 ebb-tide.
6. With respect to the reinstatement of the silt screen system for Cooling Water Intakes P7, P8, P9 and WSD Water Intake RW21, the respective water quality monitoring was reverted to the previous monitoring location for Water Quality Monitoring Station RW21-P789 from water quality stations RW21-P789 East (RW21-P789E) and RW21-P789 West (RW21-P789W) from 25 January 2017 onwards.

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

5.3.10 Water quality monitoring for Contract no. HK/2009/01 was commenced on 23 July 2010. The proposed division of water quality monitoring stations are summarized in **Table 5.12** below.

**Table 5.12 Water quality monitoring Stations for Contract no. HK/2009/01**

| Station Ref.                | Location        | Easting  | Northing |
|-----------------------------|-----------------|----------|----------|
| <b>Cooling Water Intake</b> |                 |          |          |
| C1                          | HKCEC Extension | 835885.6 | 816223.0 |

5.3.11 No action or limit level was recorded in this reporting month.

5.3.12 Water quality 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.**

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

5.3.13 Water quality monitoring for Contract no. HK/2009/02 was commenced on 8 July 2010. The proposed division of water quality monitoring stations are summarized in **Table 5.13** below.

**Table 5.13 Water quality Monitoring Stations for Contract no. HK/2009/02**

| Station Ref.  | Location  | Easting  | Northing |
|---|---|----------|----------|
| <b>Cooling Water Intake</b>                         |   |          |          |
| C1  | HKCEC Extension   | 835885.6 | 816223.0 |
| <b>Cooling Water Intake / WSD Salt Water Intake</b> |   |          |          |
| RW21-P789   | Great Eagle Centre/ Sun Hung Kai Centre/ WSD Wanchai salt water intake / China Resources Building | 836268.0 | 816020.0 |
| RW21-P789E  | Great Eagle Centre/ Sun Hung Kai Centre/ WSD Wanchai salt water intake / China Resources Building | 836317.0 | 816030.0 |
| RW21-P789W  | Great Eagle Centre/ Sun Hung Kai Centre/ WSD Wanchai salt water intake / China Resources Building | 836201.0 | 816021.0 |

Remarks:

1. With respect to the removal of silt screen at WQM station RW21-P789 on 26 November 2016, the respective water quality monitoring at RW21-P789 was adjusted to RW21-P789E and RW21-P789W since 28 November 2016 ebb-tide.
2. With respect to the reinstatement of the silt screen system for Cooling Water Intakes P7, P8, P9 and WSD Water Intake RW21, the respective water quality monitoring was reverted to the previous monitoring location for Water Quality Monitoring Station RW21-P789 from water quality stations RW21-P789 East (RW21-P789E) and RW21-P789 West (RW21-P789W) from 25 January 2017 onwards.

5.3.14 No action or limit level exceedance was recorded in this reporting month.

5.3.15 Water quality 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.**

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

5.3.16 Water quality monitoring for Contract no. HK/2012/08 was commenced on 5 March 2013. The proposed division of water quality monitoring stations are summarized in **Table 5.14** below.

**Table 5.14 Water quality Monitoring Stations for Contract no. HK/2012/08**

| Station Ref.                 | Location   | Easting  | Northing |
|------------------------------|--|----------|----------|
| <b>WSD Salt Water Intake</b> |  |          |          |
| WSD19                        | Sheung Wan   | 833415.0 | 816771.0 |
| <b>Cooling Water Intake</b>  |  |          |          |
| P1                           | HKCEC Phase I  | 835774.7 | 816179.4 |
| 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 |

5.3.17 There was 1 action level of turbidity exceedance recorded at WSD19 on 13 January 2017.

5.3.18 After checking with the Contractor, no marine activity was conducted on 13 January 2017. In view of no marine construction activity, the exceedance was considered not project related.

5.3.19 Water quality 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**.

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

5.3.20 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 quality monitoring stations are summarized in **Table 5.15** and **Table 5.16** below.

**Table 5.15 Water quality monitoring Stations for Contract no. HY/2009/15**

| Station Ref.                | Location      | Easting  | Northing |
|-----------------------------|---------------|----------|----------|
| <b>Cooling Water Intake</b> |               |          |          |
| C7                          | Windsor House | 837193.7 | 816150.0 |

Remarks:

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

**Table 5.16 Enhance Dissolved Oxygen Monitoring Stations for Contract no. HY/2009/15**

| Station Ref. | Location   |
|--------------|--|
| C6           | Excelsior Hotel  |
| 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 |

Remarks:

- Enhanced DO monitoring at Windsor House Cooling (Station Ref: C7) was temporarily suspended since 22 October 2014 with respect to the formation of temporary reclamation zone TS3 and to be resumed upon removal of the respective temporary reclamation zone.

- 5.3.21 There were 2 limit level of turbidity exceedances recorded at C7 on 3 and 16 January 2017.
- 5.3.22 After checking with the Contractor, no marine activity was conducted on 3 and 16 January 2017 at Causeway Bay Typhoon Shelter. In view of no marine construction activity, the exceedances were considered not project related.
- 5.3.23 There was 1 action level of suspended solid exceedance recorded at C7 on 9 January 2017.
- 5.3.24 After checking with the Contractor, no marine activity was conducted on 9 January 2017 at Causeway Bay Typhoon Shelter. In view of no marine construction activity, the exceedance was considered not project related.
- 5.3.25 There were 2 limit level of DO exceedances recorded at Ex-WPCWA SE on 20 January 2017.
- 5.3.26 After checking with the Contractor, despite trimming works of high sport was conducted at TPCWAW on 20 January 2017, Contractor mitigation measures including the use of localized silt curtain was generally in order. No particular observation regarding water quality was observed during sampling while upstream discharge from nearby culvert was noted. In view of the above, the exceedance was considered not related to Project works.
- 5.3.27 Water quality 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**.

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

- 5.3.28 The proposed division of water quality monitoring stations are summarized in **Table 5.17** and **Table 5.18** below:

**Table 5.17 Water quality monitoring Stations for Contract no. HY/2010/08**

| Station Ref.                | Location      | Easting  | Northing |
|-----------------------------|---------------|----------|----------|
| <b>Cooling Water Intake</b> |               |          |          |
| C7                          | Windsor House | 837193.7 | 816150.0 |

**Table 5.18 Enhance Dissolved Oxygen Monitoring Stations for Contract no. HY/2010/08**

| Station Ref. | Location        |
|--------------|-----------------|
| C6           | Excelsior Hotel |

Remarks:

1. Enhanced DO monitoring at Windsor House Cooling (Station Ref: C7) was temporarily suspended since 22 October 2014 with respect to the formation of temporary reclamation zone TS3 and to be resumed upon removal of the respective temporary reclamation zone.
- 5.3.29 There were 2 limit level of turbidity exceedances recorded at C7 on 3 and 16 January 2017.
- 5.3.30 After checking with the Contractor, no marine activity was conducted on 3 and 16 January 2017, and the installed silt screen was in place. In view of no marine construction activity, the exceedances were considered not project related.
- 5.3.31 There was 1 action level of suspended solid exceedance recorded at C7 on 9 January 2017.
- 5.3.32 After checking with the Contractor, no marine activity was conducted on 9 January 2017, and the installed silt screen was in place. In view of no marine construction activity, the exceedance was considered not project related.
- 5.3.33 Water quality 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**.

#### 5.4 Waste Monitoring Results

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

5.4.1. 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 5.19**.

**Table 5.19 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 <sup>3</sup>   | NIL                  | 62116.405                   | TKO137, TM38               |
| Inert C&D materials recycled, m <sup>3</sup>   | NIL                  | 5856.5                      | N/A                        |
| Non-inert C&D materials disposed, m <sup>3</sup>   | 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), m <sup>3</sup>   | NIL<br>(Bulk Volume) | 97428.2<br>(Bulk Volume)    | South of Cheung Chau       |
| Marine Sediment (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal) , m <sup>3</sup> | NIL<br>(Bulk Volume) | 52250<br>(Bulk Volume)      | East of Cha Chau           |
| Dredged Sediment Requiring Type 3 – Special Treatment / Disposal contained in Geosynthetic Containers              | NIL<br>(Bulk Volume) | 6773<br>(Bulk Volume)       | East of Cha Chau           |

5.4.2. 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.

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

5.4.3. No inert C&D waste and Non-inert C&D waste disposed of 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/2009/02**

| Waste Type   | Quantity this month | Cumulative Quantity-to-Date | Disposal / Dumping Grounds |
|--|---------------------|-----------------------------|----------------------------|
| Inert C&D materials disposed, m <sup>3</sup>   | NIL                 | 276075.1                    | TKO137 / TM 38             |
| Inert C&D materials recycled, m <sup>3</sup>   | NIL                 | 18161                       | N/A                        |
| Non-inert C&D materials disposed, m <sup>3</sup>   | NIL                 | 1515.103                    | SENT Landfill              |
| Non-inert C&D materials recycled, m <sup>3</sup>   | N/A                 | N/A                         | N/A                        |
| Chemical waste disposed, kg  | NIL                 | 13860                       | SENT Landfill              |
| Marine Sediment (Type 1 – Open Sea Disposal), m <sup>3</sup>   | NIL                 | 240222<br>(Bulk volume)     | South of Cheung Chau       |
| Marine Sediment (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal) , m <sup>3</sup> | NIL                 | 146445<br>(Bulk volume)     | East of Sha Chau           |

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

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

- 5.4.5. No Inert and non-inert C&D material was recycled 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. HY/2009/15**

| Waste Type                                       | Quantity this month | Cumulative Quantity-to-Date | Disposal / Dumping Grounds | Remarks |
|--|---------------------|-----------------------------|----------------------------|---------|
| Inert C&D materials disposed, m <sup>3</sup>     | NIL                 | 141579.2                    | Tuen Mun Area 38           | NIL     |
|  | NIL                 | 65216                       | TKO137 FB                  | NIL     |
| Inert C&D materials recycled, m <sup>3</sup>     | NIL                 | 8127.21                     | HY/2010/08                 | NIL     |
|  | NIL                 | 304                         | Ex-PCWA                    | NIL     |
|  | NIL                 | 111.9                       | TS4                        | NIL     |
| Non-inert C&D materials disposed, m <sup>3</sup> | NIL                 | 252.2                       | SENT Landfill              | NIL     |

| Waste Type   | Quantity this month  | Cumulative Quantity-to-Date | Disposal / Dumping Grounds               | Remarks   |
|--|----------------------|-----------------------------|--|---|
| 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 <sup>3</sup>   | NIL<br>(Bulk Volume) | 156909<br>(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 <sup>3</sup> | NIL<br>(Bulk Volume) | 327746<br>(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 <sup>3</sup>        | NIL<br>(Bulk Volume) | 12640<br>(Bulk Volume)      | East of Sha Chau / South of the Brothers | Dredging from TCBR1W / Maintenance dredging                                 |
| Marine Sediment (Type 2 – Confined Marine Disposal), m <sup>3</sup>  | NIL                  | 9350<br>(Bulk Volume)       | East of Sha Chau                         | Dredging from Eastern Breakwater of CBTS                                    |
| Marine Sediment (Type 1 – Open Sea Disposal) , m3  | NIL<br>(Bulk Volume) | 600<br>(Bulk Volume)        | East Sha Chau / South of The Brothers    | Dredging from Phase 3 Mooring Re-arrangement                                |
| Marine Sediment (Type 2– Confined Marine Disposal) , m3  | NIL<br>(Bulk Volume) | 14,780<br>(Bulk Volume)     | South of The Brothers                    | Dredging from Phase 3 Mooring Re-arrangement                                |
| Marine Sediment (Type 3 – Special Treatment / Disposal contained in Geosynehetic Containers) , m3                  | NIL<br>(Bulk Volume) | 2,760<br>(Bulk Volume)      | South of The Brothers                    | Dredging from Phase 3 Mooring Re-arrangement                                |

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



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

5.4.7. 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 5.22**.

**Table 5.22 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 <sup>3</sup>   | NIL                 | 355921.04                   | TM38                       |
| Inert C&D materials recycled, m <sup>3</sup>   | NIL                 | 59367                       | N/A                        |
| Non-inert C&D materials disposed, m <sup>3</sup>   | 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), m <sup>3</sup>   | NIL                 | 162                         | South Cheung Chau          |
| Marine Sediment (Type 2 – Confined Marine Disposal) , m <sup>3</sup>   | NIL                 | 681                         | East Sha Chau              |
| Marine Sediment (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal) , m <sup>3</sup> | NIL                 | 4976.00                     | East Sha Chau              |

5.4.8. 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 disposed in this reporting month.

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

5.4.9. There was no Inert C&D waste disposed and no non-inert C&D waste disposed 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/2012/08**

| Waste Type                                     | Quantity this month | Cumulative Quantity-to-Date | Disposal / Dumping Grounds |
|--|---------------------|-----------------------------|----------------------------|
| Inert C&D materials disposed, m <sup>3</sup> * | NIL                 | 4131                        | TM38                       |
|  | NIL                 | 273                         | TKO137                     |
| Inert C&D materials recycled, m <sup>3</sup>   | NIL                 | NIL                         | N/A                        |

| Waste Type  | Quantity this month  | Cumulative Quantity-to-Date | Disposal / Dumping Grounds                       |
|---|----------------------|-----------------------------|--|
| Non-inert C&D materials disposed, m <sup>3</sup>  | NIL                  | 315                         | N/A  |
| Non-inert C&D materials recycled, kg  | NIL                  | NIL                         | N/A  |
| Chemical waste disposed, L  | NIL                  | NIL                         | N/A  |
| Marine Sediment (Type 1 – Open Sea Disposal), m <sup>3</sup>  | NIL<br>(Bulk volume) | 31759<br>(Bulk volume)      | South of Cheung Chau                             |
| Marine Sediment (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal), m <sup>3</sup> | NIL<br>(Bulk volume) | 108542<br>(Bulk volume)     | South of The Brothers (from 27 Aug 2013 onwards) |

\*Remarks: The details of waste disposal is recorded in calendar month period.

There was 35m<sup>3</sup> of inert C&D materials disposed at TKO137 in August reporting month. The cumulative quantity of captioned inert C&D materials is updated in this reporting month.

- 5.4.10. There was no Marine Sediment Type 1 – Open Sea Disposal (Delicate Sites) & Type 2 – Confined Marine Disposal and Marine Sediment Type 1 – Open Sea Disposal disposed in this reporting month.

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

- 5.4.11. No inert C&D and no 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/2010/08**

| Waste Type  | Quantity this month | Cumulative Quantity-to-Date | Disposal / Dumping Grounds            |
|---|---------------------|-----------------------------|---------------------------------------|
| Inert C&D materials disposed, m <sup>3</sup>  | NIL                 | 26849.2                     | TM38                                  |
|   | NIL                 | 19739.4                     | TKO137                                |
| Inert C&D materials recycled, m <sup>3</sup>  | NIL                 | NIL                         | N/A                                   |
| Non-inert C&D materials disposed, m <sup>3</sup>  | NIL                 | NIL                         | N/A                                   |
| Non-inert C&D materials recycled, kg  | NIL                 | NIL                         | N/A                                   |
| Chemical waste disposed, L  | NIL                 | NIL                         | N/A                                   |
| Marine Sediment (Type 1 – Open Sea Disposal)  | NIL                 | 62559.4                     | South Cheung Chau / Brothers Island * |
| Marine Sediment (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine disposal) | NIL                 | 28309.2                     | Brothers Island                       |
| Marine Sediment (Type 3 – Special Treatment)  | NIL                 | 7780                        | Brothers Island                       |



5.4.12. There were no Type 1 – Open Sea Disposal and no Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal disposed in this reporting month, and no Type 3-Special Treatment 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

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

6.1.1 No action or limit level exceedance was recorded in this reporting month.

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

6.1.2 No action or limit level exceedance was recorded in this reporting month.

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

6.1.3 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

6.1.6. One limit level exceedances were recorded at M6- HK Baptist Church Henrietta Secondary School on 24 January 2017 in this reporting month.

6.1.7. Traffic noise was observed during monitoring 24 January 2017 and it were considered as the major noise contribution. As such, the limit level exceedances were concluded as non-project related.

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

6.1.8. No exceedance was recorded in the reporting month.

### 6.2 Air Monitoring

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

6.2.1 One 24hr TSP action level exceedance was recorded at CMA5b on 09 January 2017.

6.2.2 No construction works was undertaken on 09 January 2017 around Pedestrian Plaza under Contract HK/2009/01, no particular observation regarding air quality impact was observed during sampling. In view of the above, the action level exceedance was considered to be non-project related and potentially contributed by local ambient condition.

6.2.3 One 24hr TSP action level exceedance was recorded at CMA5b on 20 January 2017.

6.2.4 No construction works was undertaken on 20 January 2017 around Pedestrian Plaza under Contract HK/2009/01, no particular observation regarding air quality impact was observed during sampling. In view of the above, the action level exceedance was considered to be non-project related and potentially contributed by local ambient condition such as road traffic next to the monitoring station.

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

6.2.5 No exceedance was recorded in the reporting month.

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

6.2.6 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

6.2.7 No exceedance was recorded in the reporting month.

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

6.2.8 One 24hr TSP action level exceedance was recorded at CMA5b on 09 January 2017.

6.2.9 Despite formwork erection and rebar fixing was undertaken on 09 January 2017 date around Pedestrian Plaza under Contract HK/2012/08, no particular observation regarding air quality impact was observed during sampling. In view of the above, the action level exceedance was considered to be non-project related and potentially contributed by local ambient condition.

6.2.10 One 24hr TSP action level exceedance was recorded at CMA5b on 20 January 2017.

6.2.11 Despite formwork erection and rebar fixing was undertaken on 20 January 2017 around Pedestrian Plaza under Contract HK/2012/08, no particular observation regarding air quality impact was observed during sampling. In view of the above, the action level exceedance was considered to be non-project related and potentially contributed by local ambient condition such as road traffic next to the monitoring station.

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

6.2.12 No exceedance was recorded in the reporting month.

### 6.3 Water Quality Monitoring

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

6.3.1 No action or limit level exceedance was recorded in this reporting month.

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

6.3.2 No action or limit level exceedance was recorded in this reporting month.

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

- 6.3.3 There were 2 limit level of turbidity exceedances recorded at C7 on 3 and 16 January 2017.
- 6.3.4 After checking with the Contractor, no marine activity was conducted on 3 and 16 January 2017 at Causeway Bay Typhoon Shelter. In view of no marine construction activity, the exceedances were considered not project related.
- 6.3.5 There was 1 action level of suspended solid exceedance recorded at C7 on 9 January 2017.
- 6.3.6 After checking with the Contractor, no marine activity was conducted on 9 January 2017 at Causeway Bay Typhoon Shelter. In view of no marine construction activity, the exceedance was considered not project related.
- 6.3.7 There were 2 limit level of DO exceedances recorded at Ex-WPCWA SE on 20 January 2017.
- 6.3.8 After checking with the Contractor, despite trimming works of high sport was conducted at TPCWAW on 20 January 2017, Contractor mitigation measures including the use of localized silt curtain was generally in order. No particular observation regarding water quality was observed during sampling while upstream discharge from nearby culvert was noted. In view of the above, the exceedance was considered not related to Project works.

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

- 6.3.9 No action or limit level exceedance was recorded in this reporting month.

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

- 6.3.10 There was 1 action level of turbidity exceedance recorded at WSD19 on 13 January 2017.
- 6.3.11 After checking with the Contractor, no marine activity was conducted on 13 January 2017. In view of no marine construction activity, the exceedance was considered not project related.

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

- 6.3.12 There were 2 limit level of turbidity exceedances recorded at C7 on 3 and 16 January 2017.
- 6.3.13 After checking with the Contractor, no marine activity was conducted on 3 and 16 January 2017, and the installed silt screen was in place. In view of no marine construction activity, the exceedances were considered not project related.
- 6.3.14 There was 1 action level of suspended solid exceedance recorded at C7 on 9 January 2017.
- 6.3.15 After checking with the Contractor, no marine activity was conducted on 9 January 2017, and the installed silt screen was in place. In view of no marine construction activity, the exceedance was considered not project related.

**6.4 Review of the Reasons for and the Implications of Non-compliance**

6.4.1 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.

6.4.2 No non-compliances from monitoring was recorded in reporting month.

**6.5 Summary of action taken in the event of and follow-up on non-compliance**

6.5.1 There was no particular action taken since no non-compliance was recorded from the site audit in the reporting period.

## **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 include road works, backfilling works and reinstatement of Culvert K were performed in January 2017 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, road and drains, building demolition and tunnel works at Wan Chai East, tunnel construction and backfilling works and ELS works at Wan Chai West. The major construction activities under Central-Wan Chai Bypass and Island Eastern Corridor Link Projects were road works and ventilation building construction at Central Interchange, reinstatement of Eastern Breakwater, ELS works and retaining wall construction at Victoria Park, ELS works and tunnel works at TS3, bridge construction, piling and tunnel works at North Point area in the reporting month. In addition, other non-Wan Chai Development Phase II, Central-Wan Chai Bypass and Island Eastern Corridor Link projects was observed undertaken at Wan Chai North and North Point area.
- 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, HY/2009/19, HK/2012/08 and HY/2010/08. No non-conformance was identified during the site audits.

8.0.2. Five site inspections for Contract no. HK/2009/01 were conducted on 28 December 2016, 4, 11, 19 and 25 January 2017 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                                   |
|-----------|------------|---|---|---|
| 170104_01 | 4 Jan 2017 | Drip tray shall be provided for chemical container. (WA4) | Drip tray was provided for the concerned chemical container at WA4. | Completion as observed on 11 January 2017 |

8.0.3. Five site inspections for Contract no. HK/2009/02 were carried out on 29 December 2016, 5, 12, 17 and 24 January 2017 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 Contractor  | Outcome                                    |
|-----------|-------------|---|---|--|
| 161229_01 | 29 Dec 2016 | Water spraying for dust suppression shall be implemented during breaking works at Portion 5.  | Water spraying was implemented during breaking works at Portion 5.                              | Completion as observed on 5 January 2017.  |
| 161229_02 | 29 Dec 2016 | Wheel washing shall be strengthen and improved to avoid muddy trail on public road outside Gate 6.  | Wheel washing facilities was generally in order and no muddy trail on public road was observed. | Completion as observed on 5 January 2017.  |
| 161229_03 | 29 Dec 2016 | It is needed to ensure all wheel washing shall be implemented within the site area and avoiding washing effluent flowed into nearby gulley at Gate 6. | Wheel washing facilities was generally in order and was implemented within the site area.       | Completion as observed on 5 January 2017.  |
| 170105_1  | 5 Jan 2017  | Silt/mud sitting on the edge of seawall shall be cleaned regularly to avoid drop off and cause potential contamination to nearby water (Portion 5)    | Silt material at the edge of seawall was cleared.   | Completion as observed on 12 January 2017. |
| 170112_1  | 12 Jan 2017 | Breaker shall be covered with acoustic material when operating at Portion 5   | Breaker was covered with acoustic material at Portion 5.  | Completion as observed on 17 January 2017  |
| 170112_2  | 12 Jan 2017 | Leaked oil from the concrete pump trucks shall be cleaned properly and handled as chemical waste at Portion 5   | Leaked oil was cleaned at Portion 5.  | Completion as observed on 12 January 2017. |

| Item     | Date        | Observations  | Action taken by Contractor   | Outcome                                    |
|----------|-------------|---|--|--|
| 170117_1 | 17 Jan 2017 | The soak away area at Portion 5 shall regularly maintained to avoid overflowing of effluent to nearby public area.  | The diversion of soak away area was under progress at Portion 5 to avoid overflowing of effluent.              | Completion as observed on 2 February 2017. |
| 170124_1 | 24 Jan 2017 | Leaked oil from the roller machinery at Portion 3 & 4 shall be cleaned and ensure the oil container is properly maintained.                                       | Leaked oil was cleaned at Portion 3 & 4.   | Completion as observed on 2 February 2017. |
| 170124_2 | 24 Jan 2017 | Contractor is required to review the existing drainage system at the soak away area at Portion 5 to ensure no direct discharge of effluent to nearby public area. | The concerned area has been reviewed and the concerned hole has been blocked to avoid discharging of effluent. | Completion as observed on 2 February 2017. |

8.0.4. Five site inspections for Contract no. HY/2009/15 were carried out on 28 December 2016, 3, 10, 17 and 24 January 2017 in reporting month. 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                               |
|----------|-------------|--|---|---------------------------------------|
| 170103_1 | 3 Jan 2017  | Leaked oil shall be cleaned as chemical waste (Eastern Breakwater) | Leaked oil was cleared as chemical waste. | Completion as observed on 10 Jan 2017 |
| 170117_1 | 17 Jan 2017 | Leaked oil shall be cleaned as chemical waste (Eastern Breakwater) | Leaked oil was cleared as chemical waste. | Completion as observed on 24 Jan 2017 |

8.0.5. Five site inspections for Contract no. HY/2009/19 were carried out on 28 December 2016, 4, 11, 18 and 25 January 2017 in reporting month. Results of these inspections and outcomes are summarized in **Table 8.4**.

**Table 8.4 Summary of Environmental Inspections for Contract no. HY/2009/19**

| Item     | Date        | Observations   | Action taken by Contractor  | Outcome                               |
|----------|-------------|--|---|---------------------------------------|
| 161228_2 | 28 Dec 2016 | Watering shall be provided for hand-held electric circular cutting works to avoid dust meter (Harbour Grand Hotel) | Concerned cutting works was completed and no further dust impact was observed | Completion as observed on 4 Jan 2017  |
| 161228_3 | 28 Dec 2016 | Noise barrier in accordance to EP condition shall be installed for IEC demolition works (Harbour Height)           | Noise barrier was provided to relevant IEC demolition works                   | Completion as observed on 4 Jan 2017  |
| 170111_2 | 11 Jan 2017 | Chemical waste shall be stored properly (Watson Road)  | Chemical waste was stored in chemical waste container                         | Completion as observed on 18 Jan 2017 |

8.0.6. Five site inspections for Contract no. HK/2012/08 were carried out on 28 December 2016, 3, 10, 17 and 24 January 2017 in this reporting period. 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                                    |
|-----------|-------------|--|---|--|
| 161220_01 | 20 Dec 2016 | Contractor shall ensure the discharge at Slip Road 1 is following the terms and condition of the wastewater discharge licence. | The concerned discharge was observed suspended. | Completion as observed on 24 January 2017. |

8.0.7. Five site inspections for Contract no. HY/2010/08 were carried out on 28 December 2016, 4, 13, 18 and 24 January 2017 in this reporting period. 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                              |
|----------|-------------|--|--|--------------------------------------|
| 161228_1 | 28 Dec 2016 | NRMM Label shall be provide to PME operated on site(TS3)   | NRMM Label was provided to the concerned PME | Completion as observed on 4 Jan 2017 |
| 161228_2 | 28 Dec 2016 | Drip tray shall be provided to chemical container and leaked oil shall be cleaned as chemical waste(TS3) | Drip tray was provided to chemical container | Completion as observed on 4 Jan 2017 |

**9. Complaints, Notification of Summons and Prosecution**

- 9.0.1. There was no environmental complaint received in this reporting month.
- 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 | 47                |
| January 2017  | 0                 |
| <b>Total</b>  | <b>47</b>         |

**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                              |
| <b>Total</b>             | <b>-</b>                       | <b>0</b>   | <b>0</b>                       |

**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. 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**

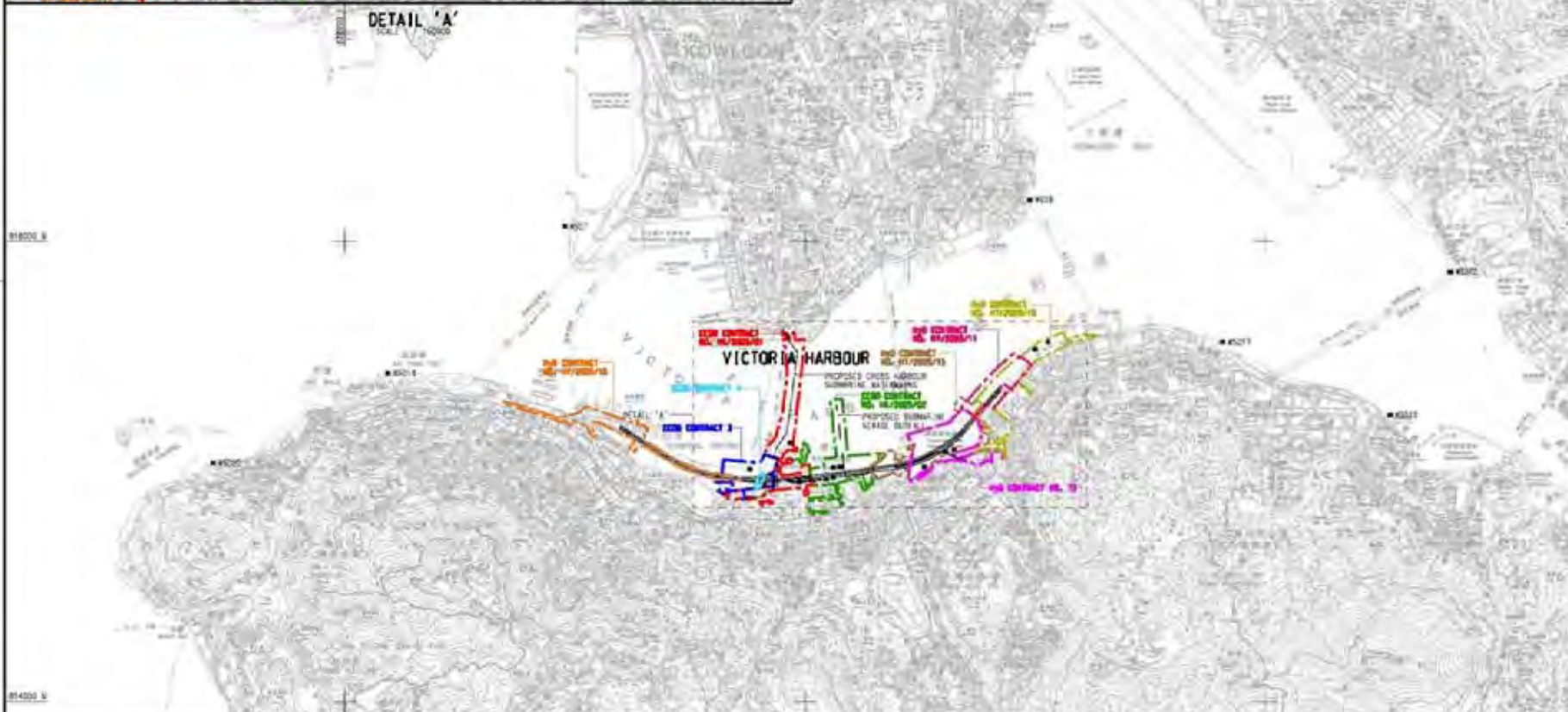
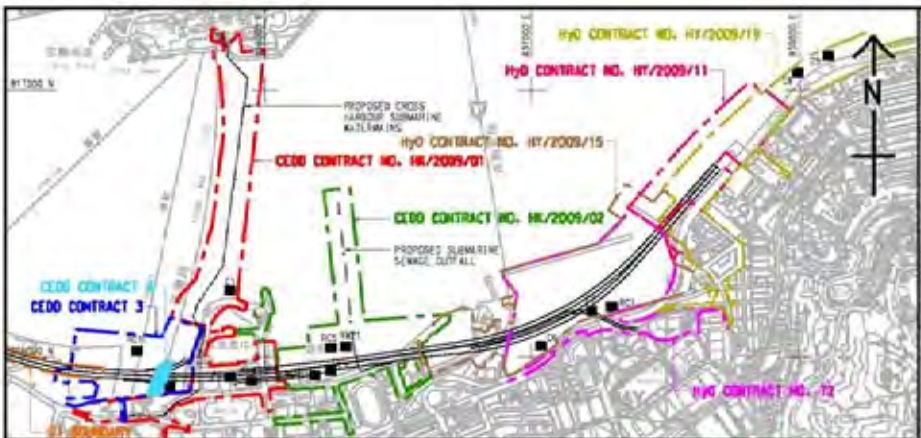
| Contract No. | Key Construction Works  | Recommended Mitigation Measures   |
|--------------|---|---|
| HK/2009/01   | <ul style="list-style-type: none"> <li>Nil</li> </ul>   | <ul style="list-style-type: none"> <li>Nil</li> </ul>   |
| HK/2009/02   | <ul style="list-style-type: none"> <li>Nil</li> </ul>   | <ul style="list-style-type: none"> <li>Daily visual inspection of silt screen and silt curtain to ensure its operation properly.</li> <li>Implement silt curtain in accordance with the associated plans submitted to EPD.</li> </ul>   |
| HY/2009/15   | <ul style="list-style-type: none"> <li>Nil</li> </ul>   | <ul style="list-style-type: none"> <li>Daily visual inspection of silt screen and silt curtain to ensure its operation properly</li> <li>Implement silt curtain in accordance with the associated plans submitted to EPD.</li> </ul>  |
| HY/2009/19   | <ul style="list-style-type: none"> <li>Nil</li> </ul>   | <ul style="list-style-type: none"> <li>Nil</li> </ul>   |
| HK/2012/08   | <ul style="list-style-type: none"> <li>Construction of Box 1 unit</li> <li>Construction of culvert L Bay 8</li> </ul> | <ul style="list-style-type: none"> <li>To conform the installation and setting as in the silt screen and silt curtain deployment plan</li> <li>To space out noisy equipment and position as far as possible from sensitive receiver.</li> <li>Daily visual inspection of silt screen and silt curtain to ensure its operation properly</li> </ul> |
| HY/2010/08   | <ul style="list-style-type: none"> <li>Diversion pipe maintenance</li> <li>Diaphragm Wall Removal Works</li> </ul>    | <ul style="list-style-type: none"> <li>To conform the installation and setting as in the silt screen and silt curtain deployment plan</li> <li>Daily visual inspection of silt screen and silt curtain to ensure its operation properly</li> </ul>  |



***Figure 2.1***

***Project Layout***





- LEGEND:**
- WATER QUALITY MONITORING STATIONS
- COOLING WATER INTAKES**
- 01 WONG KONG CONVENTION AND EXHIBITION CENTRE EXTENSION
  - 02 TELECOM HOUSE AND ACADEMY 1 ON PEARLMAN AVENUE / SAULT CENTRE
  - 03 WONG KONG CONVENTION AND EXHIBITION CENTRE PHASE 1
  - 04 WAN CHAI TOWER AND GREAT WALL CENTRE
  - 05 SUN HANG KAI CENTRE
  - 06 PROPOSED EXHIBITION STATION / WORLD TRADE CENTRE
  - 07 WINDSOR HOUSE
  - 08 CITY GREEN
  - 09 PROVIDENT CENTRE
  - 102 PROPOSED HERPA EXTENSION
  - 103 SUN HANG KAI CENTRE / REPRODUCTION
  - 107 WINDSOR HOUSE / TEMPORARY REPRODUCTION
- WSD SALT WATER INTAKE**
- #201 WAN CHAI
  - #401 WAN CHAI (REPRODUCTION)
  - #501 CEMILION SQUARE
  - #620 SA. SAN
  - #6210 CHA KWO LING
  - #6215 SA. SAN ISD
  - #6217 CLARRY BAY
  - #6219 SHILOE BAY
  - #6220 KENNEDY TOWER

| DESIGNATED PROJECT'S TOP   | WORK CONTRACT                | DESIGNATED PROJECT NUMBER | COMPLETION (APPROXIMATE) |
|--|------------------------------|---------------------------|--------------------------|
| SP1 - CENTRAL WAN CHAI STYASS WORKS INCLUDING 15 ROAD TUNNEL AND SLOPE ROADS   | CEDD CONTRACT NO. HK/2009/01 | SP1 - SP3 - SP6           | APRIL 2010               |
| SP2 - ROAD P2 AND OTHER ROADS (PRIMARY + DISTRICT DISTRIBUTION ROADS)  | CEDD CONTRACT NO. HK/2009/02 | SP1 - SP3 - SP5           | APRIL 2010               |
| SP3 - PERMANENT AND TEMPORARY ROAD MAINTENANCE WORKS INCLUDING ASSOCIATED DRAINAGE WORKS IN WAN CHAI DEVELOPMENT PHASE 1T - WSD17 AREA | CEDD CONTRACT 3              | SP1 - SP3                 | END 2011                 |
| SP4 - TEMPORARY BRIDGE-SHELTER 1 (SP4 NOT TO BE IMPLEMENTED)   | CEDD CONTRACT 4              | SP1 - SP3                 | END 2011                 |
| SP5 - WAN CHAI EAST SEWAGE DUCT/FALL   | CEDD CONTRACT 5              | SP3                       | 2010                     |
| SP6 - DISCREET FOR THE CROSS-HARBOUR WATER MAINS   | HYD CONTRACT NO. HY/2009/11  | SP3                       | 18 AUGUST 2010           |
|  | HYD CONTRACT NO. HY/2009/15  | SP1 - SP3                 | SEPTEMBER 2010           |
|  | HYD CONTRACT NO. HY/2009/16  | SP1                       | OCTOBER 2010             |
|  | HYD CONTRACT NO. HY/2009/18  | SP1                       | NOVEMBER 2010            |
|  | HYD CONTRACT 12              | SP1 - SP3                 | MID 2010                 |



**CEDD** 土木工程發展局  
Civil Engineering and Development Department

**WAN CHAI DEVELOPMENT PHASE II**

WAN CHAI DEVELOPMENT PHASE II, PHASE CENTRE - SANITARY AND SEWERAGE WORKS (STAGE 1) AND TESTING WORKS (STAGE 1)

**LOCATIONS OF WATER QUALITY MONITORING STATIONS**

**AECOM**

PROJECT NUMBER: **60041297/C5/SK001**

|                      |                      |                      |                      |
|----------------------|----------------------|----------------------|----------------------|
| DATE: 2010           | SCALE: 1:10000       | DATE: 2010           | SCALE: 1:10000       |
| BY: [Signature]      | BY: [Signature]      | BY: [Signature]      | BY: [Signature]      |
| CHECKED: [Signature] | CHECKED: [Signature] | CHECKED: [Signature] | CHECKED: [Signature] |

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**NOTES:**

1. SETTING OUT COORDINATES REFER DRG. No. 60095653/NP/1601.
2. THE CONTRACTOR SHALL KEEP OPEN AND PROVIDE ACCESS (PEDESTRIAN AND TRAFFIC) TO THE PUBLIC AT ALL TIMES DURING THE PERIOD OF THE CONTRACTOR'S OCCUPATION OF OIL STREET. THE CONTRACTOR SHALL MAINTAIN THIS PORTION OF SITE IN A CLEAN, PASSABLE AND SAFE STATE AT ALL TIMES.
3. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH DRG. No. 60095653/NP/1652.

**LEGEND:**

|                    |               |                       |                |
|--------------------|---------------|-----------------------|----------------|
| [Dotted pattern]   | PORTION NPR1  | [Cross-hatch pattern] | PORTION NPR4   |
| [Diagonal lines /] | PORTION NPR2  | [Diagonal lines \]    | PORTION NPR5   |
| [Diagonal lines /] | PORTION NPR3  | [Diagonal lines \]    | PORTION NPR6   |
| [Diagonal lines /] | PORTION NPR4  | [Diagonal lines \]    | PORTION NPR7   |
| [Diagonal lines /] | PORTION NPR5  | [Diagonal lines \]    | PORTION NPR8   |
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| [Diagonal lines /] | PORTION NPR45 | [Diagonal lines \]    | PORTION NPR48  |
| [Diagonal lines /] | PORTION NPR46 | [Diagonal lines \]    | PORTION NPR49  |
| [Diagonal lines /] | PORTION NPR47 | [Diagonal lines \]    | PORTION NPR50  |
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| [Diagonal lines /] | PORTION NPR51 | [Diagonal lines \]    | PORTION NPR54  |
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| [Diagonal lines /] | PORTION NPR53 | [Diagonal lines \]    | PORTION NPR56  |
| [Diagonal lines /] | PORTION NPR54 | [Diagonal lines \]    | PORTION NPR57  |
| [Diagonal lines /] | PORTION NPR55 | [Diagonal lines \]    | PORTION NPR58  |
| [Diagonal lines /] | PORTION NPR56 | [Diagonal lines \]    | PORTION NPR59  |
| [Diagonal lines /] | PORTION NPR57 | [Diagonal lines \]    | PORTION NPR60  |
| [Diagonal lines /] | PORTION NPR58 | [Diagonal lines \]    | PORTION NPR61  |
| [Diagonal lines /] | PORTION NPR59 | [Diagonal lines \]    | PORTION NPR62  |
| [Diagonal lines /] | PORTION NPR60 | [Diagonal lines \]    | PORTION NPR63  |
| [Diagonal lines /] | PORTION NPR61 | [Diagonal lines \]    | PORTION NPR64  |
| [Diagonal lines /] | PORTION NPR62 | [Diagonal lines \]    | PORTION NPR65  |
| [Diagonal lines /] | PORTION NPR63 | [Diagonal lines \]    | PORTION NPR66  |
| [Diagonal lines /] | PORTION NPR64 | [Diagonal lines \]    | PORTION NPR67  |
| [Diagonal lines /] | PORTION NPR65 | [Diagonal lines \]    | PORTION NPR68  |
| [Diagonal lines /] | PORTION NPR66 | [Diagonal lines \]    | PORTION NPR69  |
| [Diagonal lines /] | PORTION NPR67 | [Diagonal lines \]    | PORTION NPR70  |
| [Diagonal lines /] | PORTION NPR68 | [Diagonal lines \]    | PORTION NPR71  |
| [Diagonal lines /] | PORTION NPR69 | [Diagonal lines \]    | PORTION NPR72  |
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| [Diagonal lines /] | PORTION NPR71 | [Diagonal lines \]    | PORTION NPR74  |
| [Diagonal lines /] | PORTION NPR72 | [Diagonal lines \]    | PORTION NPR75  |
| [Diagonal lines /] | PORTION NPR73 | [Diagonal lines \]    | PORTION NPR76  |
| [Diagonal lines /] | PORTION NPR74 | [Diagonal lines \]    | PORTION NPR77  |
| [Diagonal lines /] | PORTION NPR75 | [Diagonal lines \]    | PORTION NPR78  |
| [Diagonal lines /] | PORTION NPR76 | [Diagonal lines \]    | PORTION NPR79  |
| [Diagonal lines /] | PORTION NPR77 | [Diagonal lines \]    | PORTION NPR80  |
| [Diagonal lines /] | PORTION NPR78 | [Diagonal lines \]    | PORTION NPR81  |
| [Diagonal lines /] | PORTION NPR79 | [Diagonal lines \]    | PORTION NPR82  |
| [Diagonal lines /] | PORTION NPR80 | [Diagonal lines \]    | PORTION NPR83  |
| [Diagonal lines /] | PORTION NPR81 | [Diagonal lines \]    | PORTION NPR84  |
| [Diagonal lines /] | PORTION NPR82 | [Diagonal lines \]    | PORTION NPR85  |
| [Diagonal lines /] | PORTION NPR83 | [Diagonal lines \]    | PORTION NPR86  |
| [Diagonal lines /] | PORTION NPR84 | [Diagonal lines \]    | PORTION NPR87  |
| [Diagonal lines /] | PORTION NPR85 | [Diagonal lines \]    | PORTION NPR88  |
| [Diagonal lines /] | PORTION NPR86 | [Diagonal lines \]    | PORTION NPR89  |
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| [Diagonal lines /] | PORTION NPR88 | [Diagonal lines \]    | PORTION NPR91  |
| [Diagonal lines /] | PORTION NPR89 | [Diagonal lines \]    | PORTION NPR92  |
| [Diagonal lines /] | PORTION NPR90 | [Diagonal lines \]    | PORTION NPR93  |
| [Diagonal lines /] | PORTION NPR91 | [Diagonal lines \]    | PORTION NPR94  |
| [Diagonal lines /] | PORTION NPR92 | [Diagonal lines \]    | PORTION NPR95  |
| [Diagonal lines /] | PORTION NPR93 | [Diagonal lines \]    | PORTION NPR96  |
| [Diagonal lines /] | PORTION NPR94 | [Diagonal lines \]    | PORTION NPR97  |
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| [Diagonal lines /] | PORTION NPR96 | [Diagonal lines \]    | PORTION NPR99  |
| [Diagonal lines /] | PORTION NPR97 | [Diagonal lines \]    | PORTION NPR100 |

|   |                       |           |
|---|-----------------------|-----------|
| B | WORKING DRAWING       | 09 DEC 09 |
| A | TENDER ADDENDUM NO. 1 | 09 OCT 09 |
| - | TENDER DRAWING        | 09 SEP 09 |

Highways Department 路政署  
Major Works Project Management Office

CENTRAL - WAN CHAI BYPASS AND IEC LINK  
CENTRAL - WAN CHAI BYPASS - NORTH POINT RECLAMATION

PORTION OF SITE  
SHEET 1 OF 2

**AECOM**

|             |                   |
|-------------|-------------------|
| DRGNO.      | 60095653/NP/1651B |
| DESIGNED BY | TTF               |
| CHECKED BY  | CJH               |
| DATE        | 11/2/2009         |
| SCALE       | AS SHOWN          |
| UNIT        | METRES            |

WORKING DRAWING  
COPYRIGHT RESERVED





LOCATION PLAN  
SCALE 1 : 5000

- NOTES:
1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE NOTED.
  2. THE RESTRICTION ZONE IS THIS DRAWING WILL COME INTO EFFECT AFTER THE OPERATION OF THE GOVERNMENT HULLING AT EIP/D/D/18/18.

LEGEND:

- CONTRACT BOUNDARY
- [Diagonal Hatching] WORKING RESTRICTION ZONE
- [Cross Hatching] NAVIGATION AND WORKING RESTRICTION ZONE
- [Grid Hatching] WORKING BARGE, NAVIGATION AND WORKING RESTRICTION ZONE

|                       |              |
|-----------------------|--------------|
| TENDER ADDENDUM NO. 4 | SEP 25, 2009 |
| TENDER ADDENDUM NO. 1 | SEP 25, 2009 |
| TENDER DRAWING        | SEP 25, 2009 |

CEDD 土木工程發展局  
Civil Engineering and Development Department

WAN CHAI DEVELOPMENT PHASE II

WAN CHAI DEVELOPMENT PHASE II -  
KONG KONG CONVENTION AND EXHIBITION CENTRE  
**RESTRICTED ZONE FOR CONSTRUCTION VESSELS**  
(Contract no: HK/2009/01)

**AECOM**

|                    |                       |
|--------------------|-----------------------|
| DRGNO.<br>圖號       | 60041297/C1/100/1010B |
| DATE<br>日期         | 16/2009/01            |
| SCALE<br>比例        | AS 1:8000             |
| COPYRIGHT RESERVED |                       |



INSET 'A'  
SCALE 1:1000

CENTRAL DISTRICT



EIA-141/2007  
DP3

HKCEC (Western Part)

HKCEC (Middle Part)

HKCEC (Eastern Part)

| INT   | COORDINATES |            |
|-------|-------------|------------|
|       | EASTING     | NORTHING   |
| C41   | 835986.528  | 818105.708 |
| C42   | 835979.417  | 818104.468 |
| C43   | 835963.943  | 818079.706 |
| C44   | 835963.543  | 818086.581 |
| C45   | 835964.818  | 818085.528 |
| C46   | 835965.504  | 818085.514 |
| C46   | 835955.757  | 818081.208 |
| C47   | 835954.956  | 818082.441 |
| C48   | 835950.846  | 818075.887 |
| C49   | 835951.347  | 818073.238 |
| C50   | 835950.828  | 818066.814 |
| C51   | 835948.478  | 818080.846 |
| C52   | 835975.226  | 818089.224 |
| C53   | 835971.504  | 818077.897 |
| C54   | 835975.827  | 818084.764 |
| C55   | 835973.745  | 818070.883 |
| C56   | 835991.071  | 818078.764 |
| C56-1 | 835995.679  | 818078.873 |
| C56-2 | 835982.468  | 818078.765 |
| C56-3 | 835987.248  | 818182.758 |
| C57   | 835983.403  | 818181.878 |
| C58   | 835978.498  | 818087.198 |
| C59   | 835978.574  | 818083.818 |
| C60   | 835978.507  | 818120.744 |
| C61   | 835990.881  | 818184.524 |
| C62   | 835923.434  | 818171.812 |
| C63   | 835923.504  | 818280.744 |
| C64   | 835923.818  | 818276.507 |

| INT   | COORDINATES |            |
|-------|-------------|------------|
|       | EASTING     | NORTHING   |
| C65   | 836028.933  | 818410.438 |
| C66   | 836034.000  | 818410.614 |
| C67   | 836022.816  | 818410.240 |
| C68   | 836019.515  | 818410.882 |
| C69   | 836021.110  | 818410.000 |
| C70   | 836027.289  | 818411.880 |
| C71   | 836041.050  | 818410.270 |
| C72   | 836048.415  | 818407.187 |
| C72-1 | 835555.589  | 818106.587 |
| C73   | 836047.435  | 818385.890 |
| C74   | 836049.797  | 818374.107 |
| C75   | 836024.185  | 818382.148 |
| C76   | 836038.298  | 818388.000 |
| C77   | 836048.906  | 818382.888 |
| C78   | 836048.439  | 818374.038 |
| C79   | 836042.630  | 818351.015 |
| C80   | 836024.635  | 818328.880 |
| C81   | 836028.417  | 818308.782 |
| C82   | 836028.882  | 818378.148 |
| C83   | 836107.025  | 818326.084 |
| C84   | 836098.473  | 818322.444 |
| C85   | 836092.342  | 818340.714 |
| C86   | 836084.499  | 818348.925 |
| C87   | 836084.196  | 818340.388 |
| C88   | 836082.512  | 818340.742 |
| C89   | 836078.987  | 818345.898 |
| C90   | 836077.630  | 818347.194 |

CUT LINE B-B  
SEE AT DRAWING NO. A00025/C1/100/1006



KEY PLAN  
SCALE 1:10000

NOTE:  
1. FOR NOTES & LEGEND, REFER TO DRAWING NO. A00025/C1/100/1006.

| INT | COORDINATES |            |
|-----|-------------|------------|
|     | EASTING     | NORTHING   |
| C1  | 836875.205  | 818222.551 |
| C2  | 836875.207  | 818222.599 |
| C3  | 836874.563  | 818224.825 |
| C4  | 836871.020  | 818231.014 |
| C5  | 836882.492  | 818229.522 |
| C6  | 836881.584  | 818218.612 |
| C7  | 836886.585  | 818215.197 |
| C8  | 836886.191  | 818217.147 |
| C9  | 836886.433  | 818212.247 |
| C10 | 836891.082  | 818207.050 |
| C11 | 836885.389  | 818208.075 |
| C12 | 836877.486  | 818208.107 |
| C13 | 836923.468  | 818204.817 |
| C14 | 836886.433  | 818217.122 |
| C15 | 836874.285  | 818208.500 |
| C16 | 836875.195  | 818205.525 |
| C17 | 836878.138  | 818204.441 |
| C18 | 836846.085  | 818208.816 |
| C19 | 836871.421  | 818205.587 |
| C20 | 836902.537  | 818220.881 |
| C21 | 836915.295  | 818217.484 |
| C22 | 836913.182  | 818218.442 |
| C23 | 836827.086  | 818209.074 |
| C24 | 836926.984  | 818221.670 |
| C25 | 836915.288  | 818220.251 |
| C26 | 836881.647  | 818212.286 |
| C27 | 836904.025  | 818243.836 |
| C28 | 836906.218  | 818244.445 |
| C29 | 836911.525  | 818230.380 |
| C30 | 836883.781  | 818208.487 |
| C31 | 836837.216  | 818228.470 |
| C32 | 836824.142  | 818225.117 |
| C33 | 836821.081  | 818210.482 |
| C34 | 836826.290  | 818204.700 |
| C35 | 836827.428  | 818210.256 |
| C36 | 836808.187  | 818210.280 |
| C37 | 836824.812  | 818208.093 |
| C38 | 836824.747  | 818210.285 |
| C39 | 836828.850  | 818219.134 |
| C40 | 836819.190  | 818208.037 |
| C41 | 836828.810  | 818217.295 |
| C42 | 836816.906  | 818219.080 |
| C43 | 836825.682  | 818215.512 |

|   |                      |                 |
|---|----------------------|-----------------|
| C | TENDER ADDENDUM NO.4 | SHEN JYL DEP C8 |
| B | TENDER ADDENDUM NO.2 | SHEN JYL DEP C8 |
| A | TENDER ADDENDUM NO.1 | SHEN JYL DEP C8 |
| - | TENDER DRAWING       | SHEN JYL DEP C8 |

EDD 土木工程師事務所  
Civil Engineering and Development Department

WAN CHAI DEVELOPMENT PHASE II

WAN CHAI DEVELOPMENT PHASE II -  
CONTRACT NO. HK/2009/01 -  
HONG KONG CONVENTION AND EXHIBITION CENTRE

SITE BOUNDARY  
SETTING OUT PLAN  
(Contract no. HK/2009/01)

**AECOM**

DRGNO. 60041297/C1/100/1006C

|                  |                 |                        |                  |
|------------------|-----------------|------------------------|------------------|
| DATE: 05/11/2009 | SCALE: AS SHOWN | PROJECT NO: HK/2009/01 | DATE: 05/11/2009 |
| DRAWN BY: JEC    | CHECKED BY: JEC | DESIGNED BY: JEC       | APPROVED BY: JEC |
| DATE: 05/11/2009 | SCALE: AS SHOWN | PROJECT NO: HK/2009/01 | DATE: 05/11/2009 |

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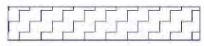
港口  
HARBOUR



LEGEND:



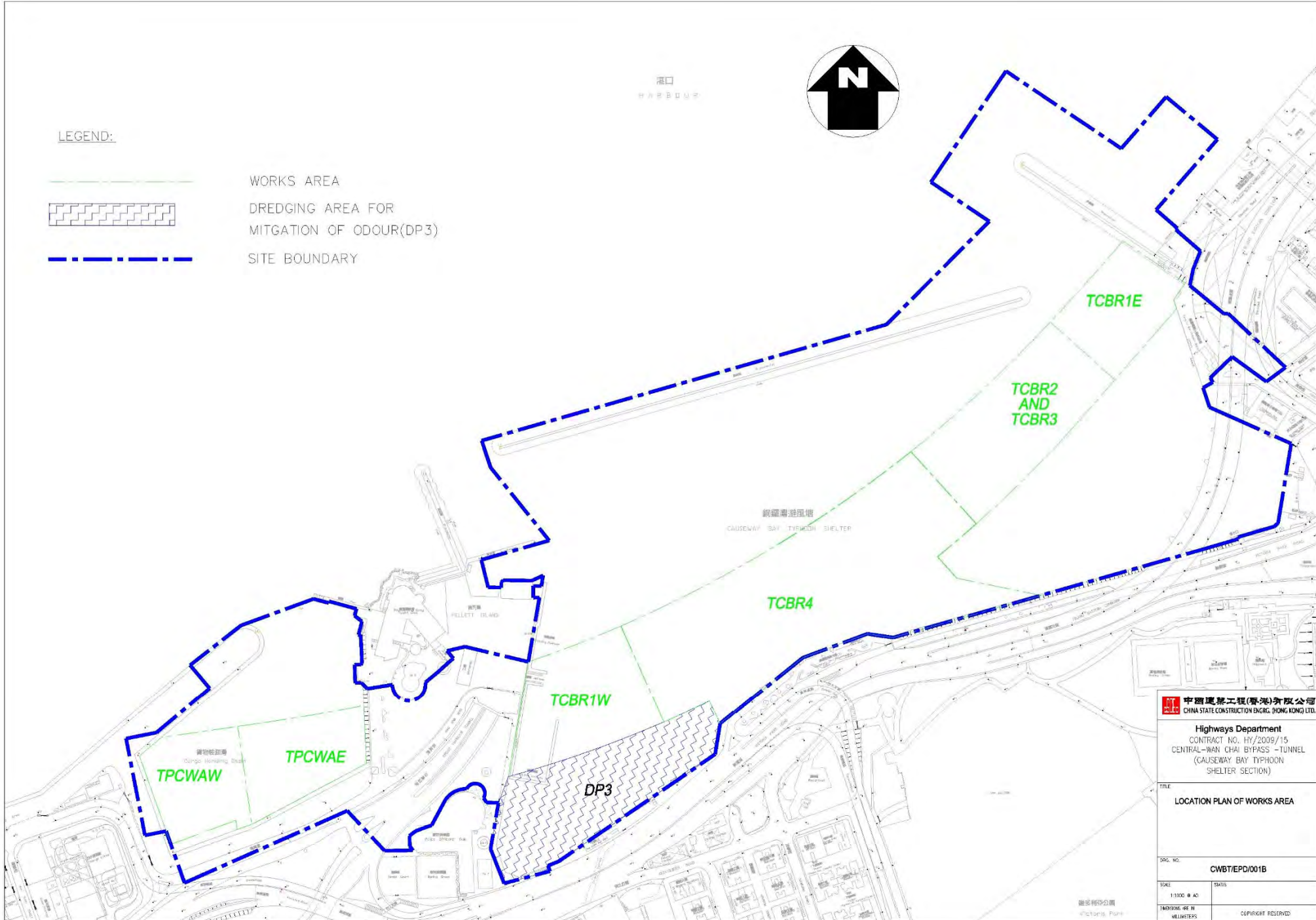
WORKS AREA



DREDGING AREA FOR  
MITIGATION OF ODOUR(DP3)



SITE BOUNDARY



中國建築工程(香港)有限公司  
CHINA STATE CONSTRUCTION ENG. (HONG KONG) LTD.

Highways Department  
CONTRACT NO. HY/2009/15  
CENTRAL-WAN CHAI BYPASS - TUNNEL  
(CAUSEWAY BAY TYPHOON  
SHELTER SECTION)

TITLE  
LOCATION PLAN OF WORKS AREA

DRG. NO.  
CWBT/EPD/001B

SCALE  
1:1000 @ A0

DATE  
MAY 2010

DRAWING SHEET NO.  
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維多利亞公園  
Victoria Park



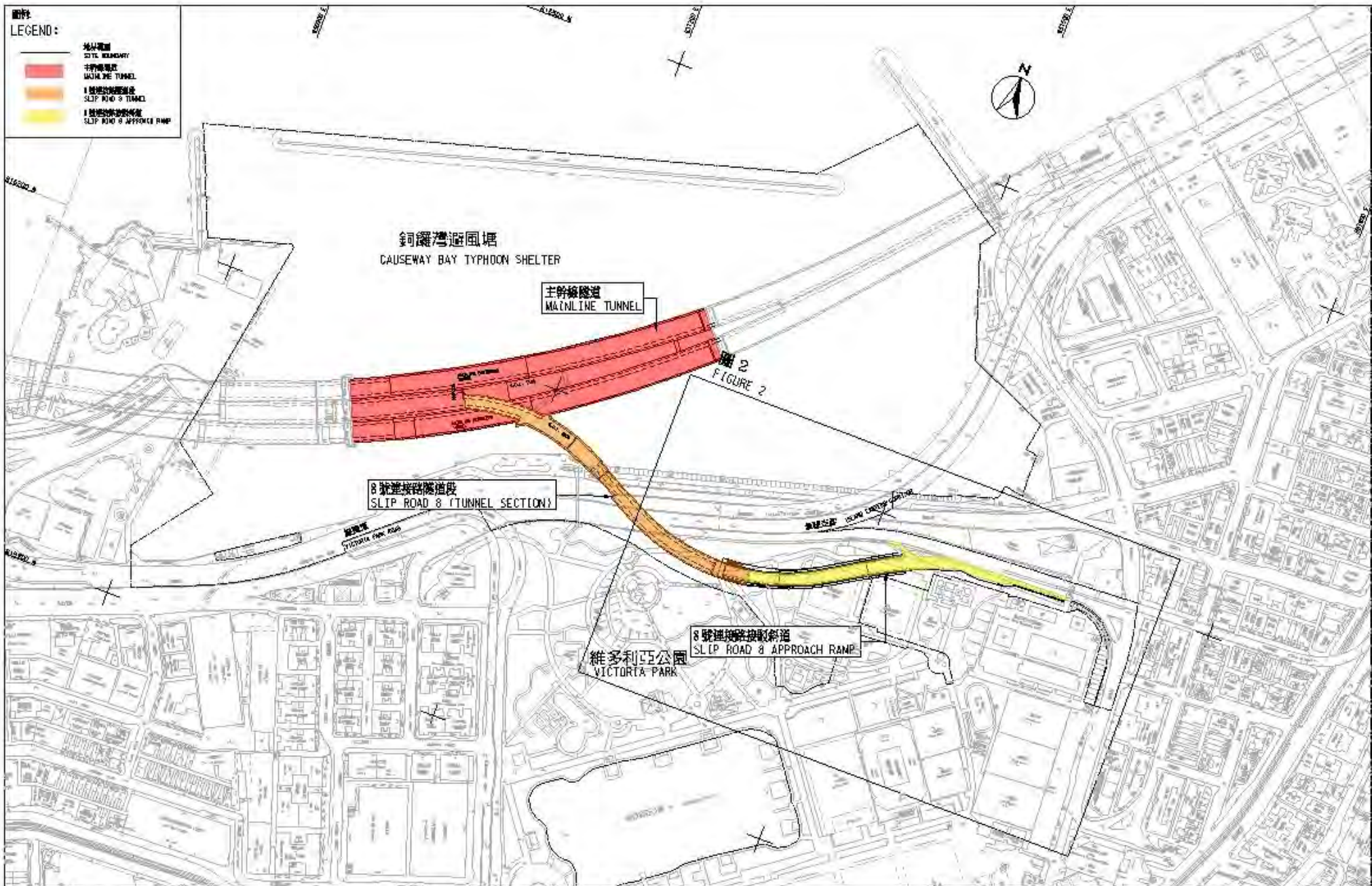
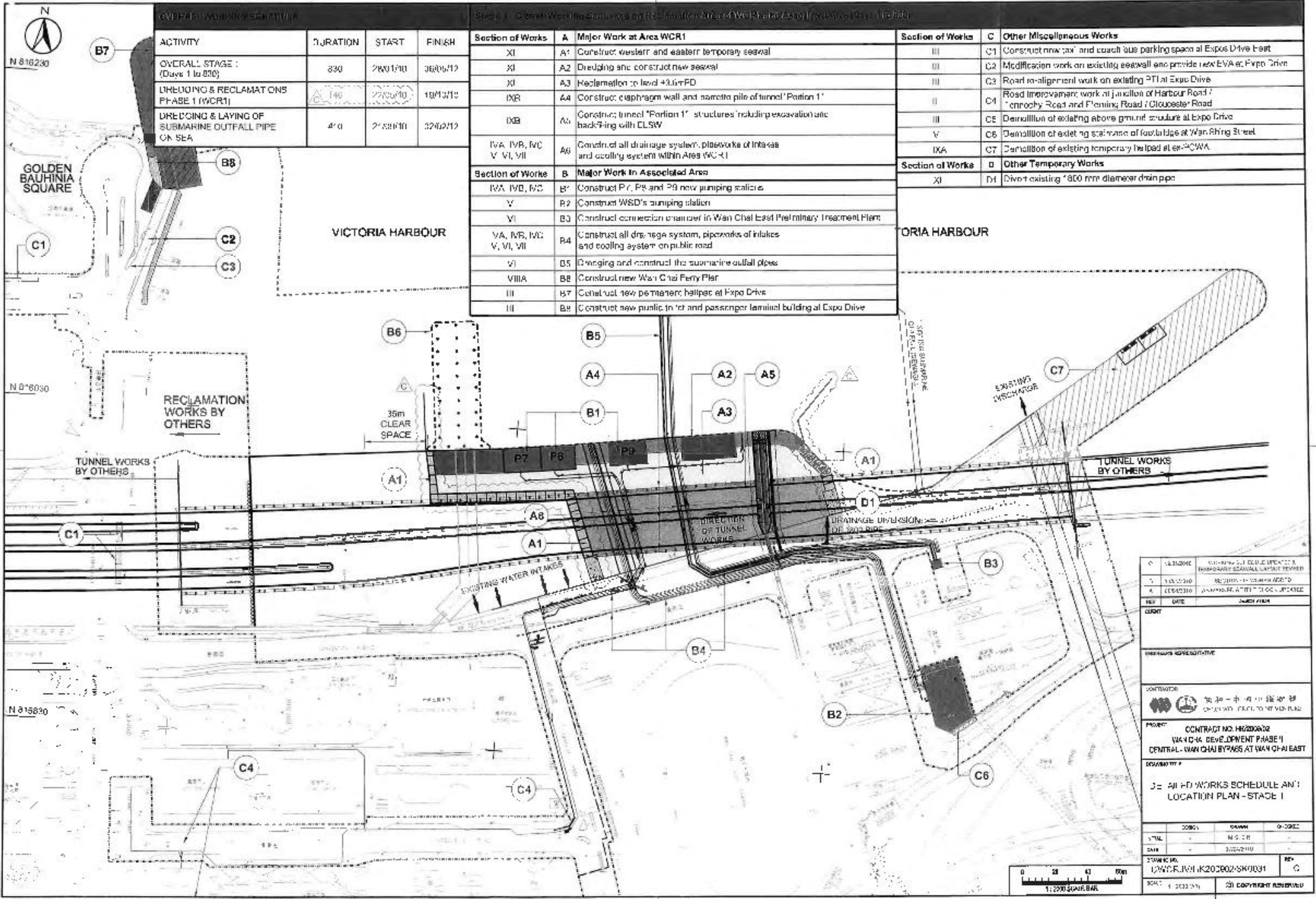


圖1- 合約編號 HY/2010/08 中環灣仔繞道-8號連接路段隧道

FIGURE 1 - CONTRACT NO. HY/2010/08 - CENTRAL - WAN CHAI BYPASS - TUNNEL (SLIP ROAD 8 SECTION)





OVERALL WORK SCHEDULE

| ACTIVITY   | DURATION | START   | FINISH   |
|--|----------|---------|----------|
| OVERALL STAGE I (Days 1 to 830)                    | 830      | 2/20/10 | 36/06/12 |
| DRILLING & RECLAMATIONS PHASE I (WCR1)             | 146      | 2/20/10 | 18/13/11 |
| DRILLING & LAYING OF SUBMARINE OUTFALL PIPE ON SEA | 470      | 2/28/10 | 32/02/12 |

Stage I - Overall Work Schedule and Overall Work at Area WCR1 and Associated Area (Days 1 to 830)

| Section of Works          | A  | Major Work at Area WCR1   |
|---------------------------|----|---|
| XI                        | A1 | Construct western and eastern temporary seawall   |
| XI                        | A2 | Dredging and construct new seawall  |
| XI                        | A3 | Reclamation to level +3.5m PD   |
| IXB                       | A4 | Construct diaphragm wall and concrete pile of tunnel 'Portion 1'                        |
| IXB                       | A5 | Construct tunnel 'Portion 1' structures including excavation and backfilling with CLSW  |
| IVA, IVB, IVC, V, VI, VII | A6 | Construct all drainage system, pipeworks of intakes and cooling system within Area WCR1 |
| Section of Works          | B  | Major Work in Associated Area   |
| IVA, IVB, IVC             | B1 | Construct P7, P8 and P9 new pumping stations  |
| V                         | B2 | Construct WSD's pumping station   |
| VI                        | B3 | Construct connection chamber in Wan Chai East Preliminary Treatment Plant               |
| VA, IVB, IVC, V, VI, VII  | B4 | Construct all drainage system, pipeworks of intakes and cooling system on public road   |
| VI                        | B5 | Dredging and construct the submarine outfall pipes                                      |
| VIII A                    | B6 | Construct new Wan Chai Ferry Pier   |
| III                       | B7 | Construct new permanent hallpact at Expo Drive  |
| III                       | B8 | Construct new public toilet and passenger terminal building at Expo Drive               |

| Section of Works | C  | Other Miscellaneous Works  |
|------------------|----|--|
| III              | C1 | Construct new taxi and coach bus parking space at Expo Drive East                                  |
| III              | C2 | Modification work on existing seawall and provide new EVA at Expo Drive                            |
| III              | C3 | Road re-alignment work on existing PTI at Expo Drive   |
| II               | C4 | Road improvement work at junction of Harbour Road / canopy Road and Fleming Road / Gloucester Road |
| III              | C5 | Demolition of existing above ground structure at Expo Drive  |
| V                | C6 | Demolition of existing staircase of footbridge at Wan Chai Street                                  |
| IXA              | C7 | Demolition of existing temporary helped at ex-SCWA   |
| Section of Works | D  | Other Temporary Works  |
| XI               | D1 | Divert existing 1800 mm diameter drain pipe  |

|  |               |                   |
|--|---------------|-------------------|
| 1. 14/3/2010   | 010-1111-2211 | 010-1111-2211     |
| 2. 14/3/2010   | 010-1111-2211 | 010-1111-2211     |
| 3. 14/3/2010   | 010-1111-2211 | 010-1111-2211     |
| REV  | DATE          | REASON FOR CHANGE |
| DESIGNER   |               |                   |
| CHECKER  |               |                   |
| APPROVER   |               |                   |
|  |               |                   |
| <b>PROJECT</b><br>CONTRACT NO. H200802<br>WAH-14 DEVELOPMENT PHASE I<br>CENTRAL WAN CHAI BYPASS AT WAN CHAI EAST |               |                   |
| <b>DESCRIPTION</b><br>J-1 ALL PD WORKS SCHEDULE AND LOCATION PLAN - STAGE I                                      |               |                   |
| DATE   | SCALE         | PROJECT NO.       |
| 14/3/2010  | 1:200         | H200802-SK0031    |
| DRAWN BY   |               | REV               |
| 14/3/2010  |               | C                 |
| 1:200 SCALE BAR<br>0 20 40 60m   |               |                   |

1:200 Scale Bar

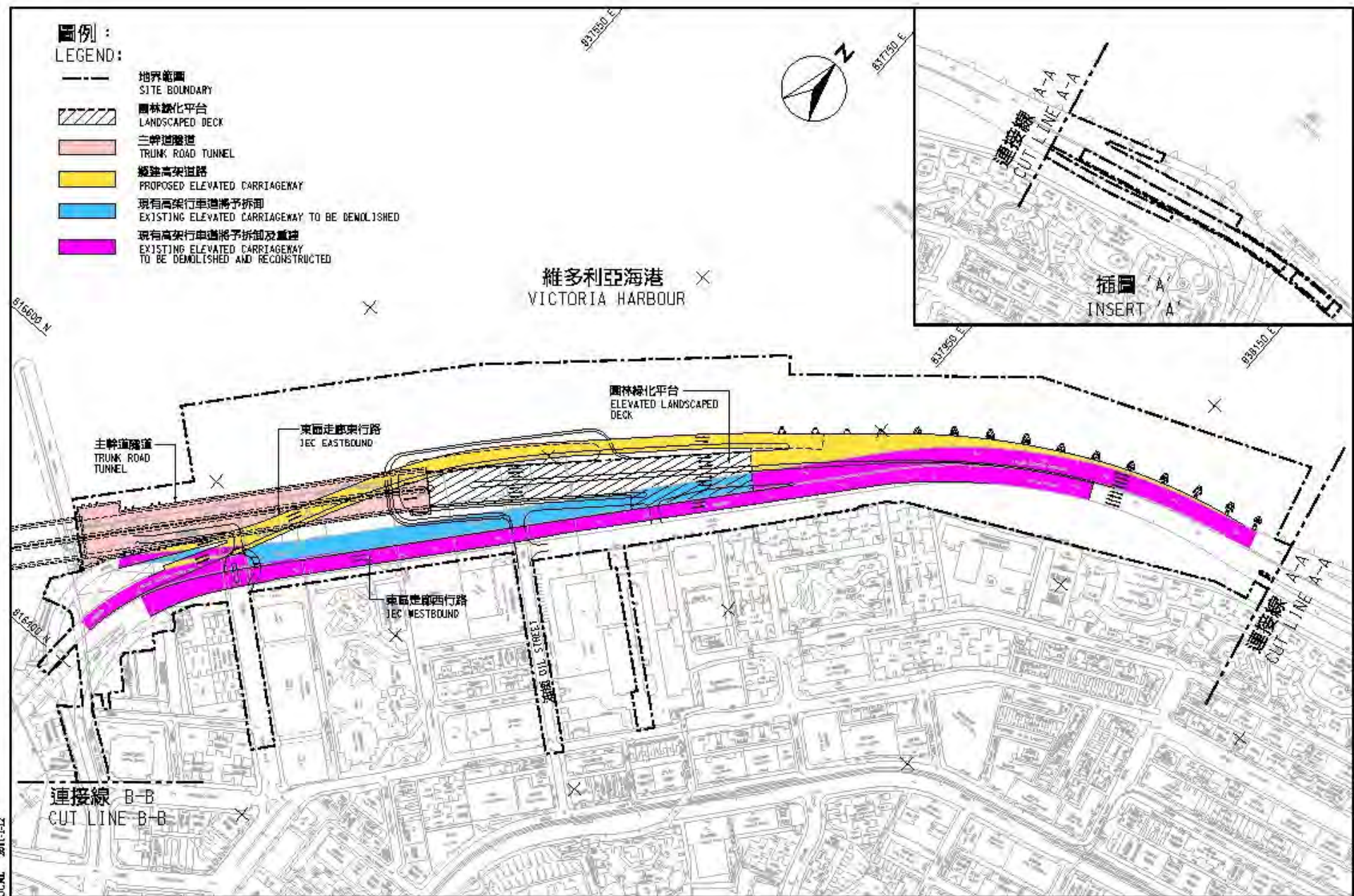
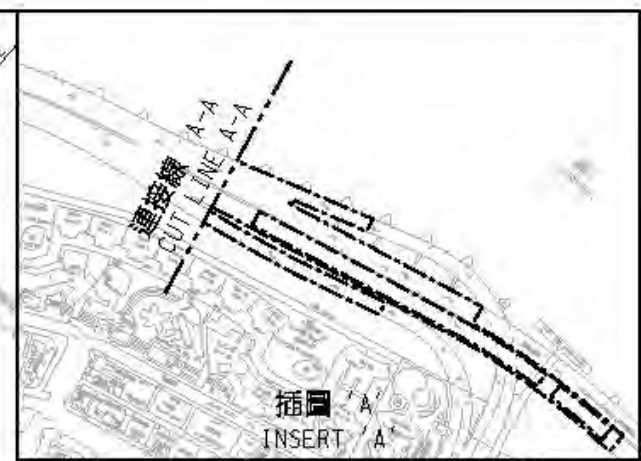


**圖例：**  
**LEGEND:**

-  地界範圍  
SITE BOUNDARY
-  園林綠化平台  
LANDSCAPED DECK
-  主幹道隧道  
TRUNK ROAD TUNNEL
-  擬議高架道路  
PROPOSED ELEVATED CARRIAGEWAY
-  現有高架行車道將予拆卸  
EXISTING ELEVATED CARRIAGEWAY TO BE DEMOLISHED
-  現有高架行車道將予拆卸及重建  
EXISTING ELEVATED CARRIAGEWAY TO BE DEMOLISHED AND RECONSTRUCTED



維多利亞海港 ×  
VICTORIA HARBOUR ×



合約編號 HY/2009/19 - 中環灣仔繞道 - 北角段隧道及東區走廊連接路  
CONTRACT NO. HY/2009/19 - CENTRAL-WAN CHAI BYPASS - TUNNEL (NORTH POINT SECTION) AND ISLAND EASTERN CORRIDOR LINK

SCALE 1 : 3000



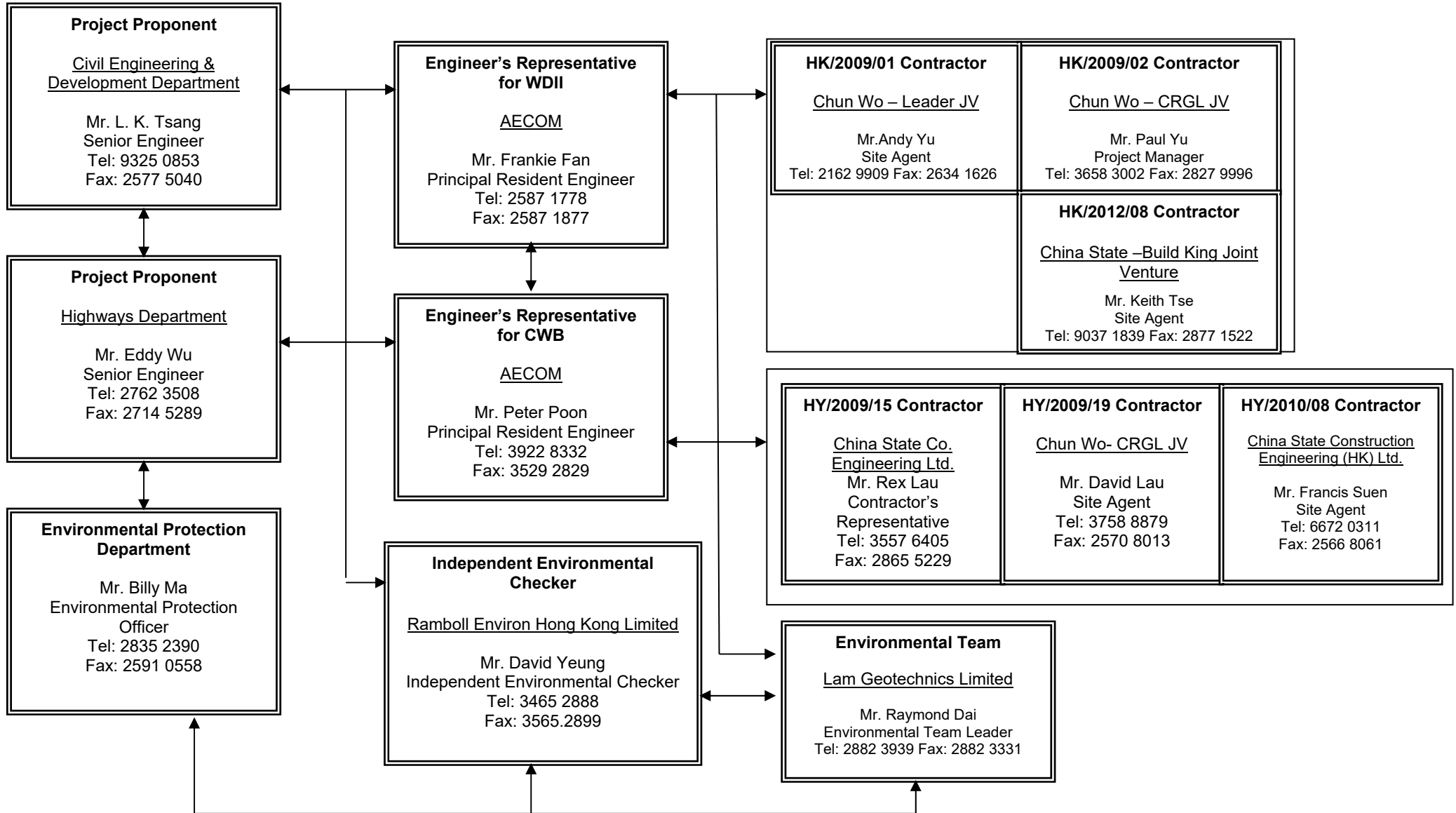
***Figure 2.2***

***Project Organization Chart***





**Project Organization Chart**



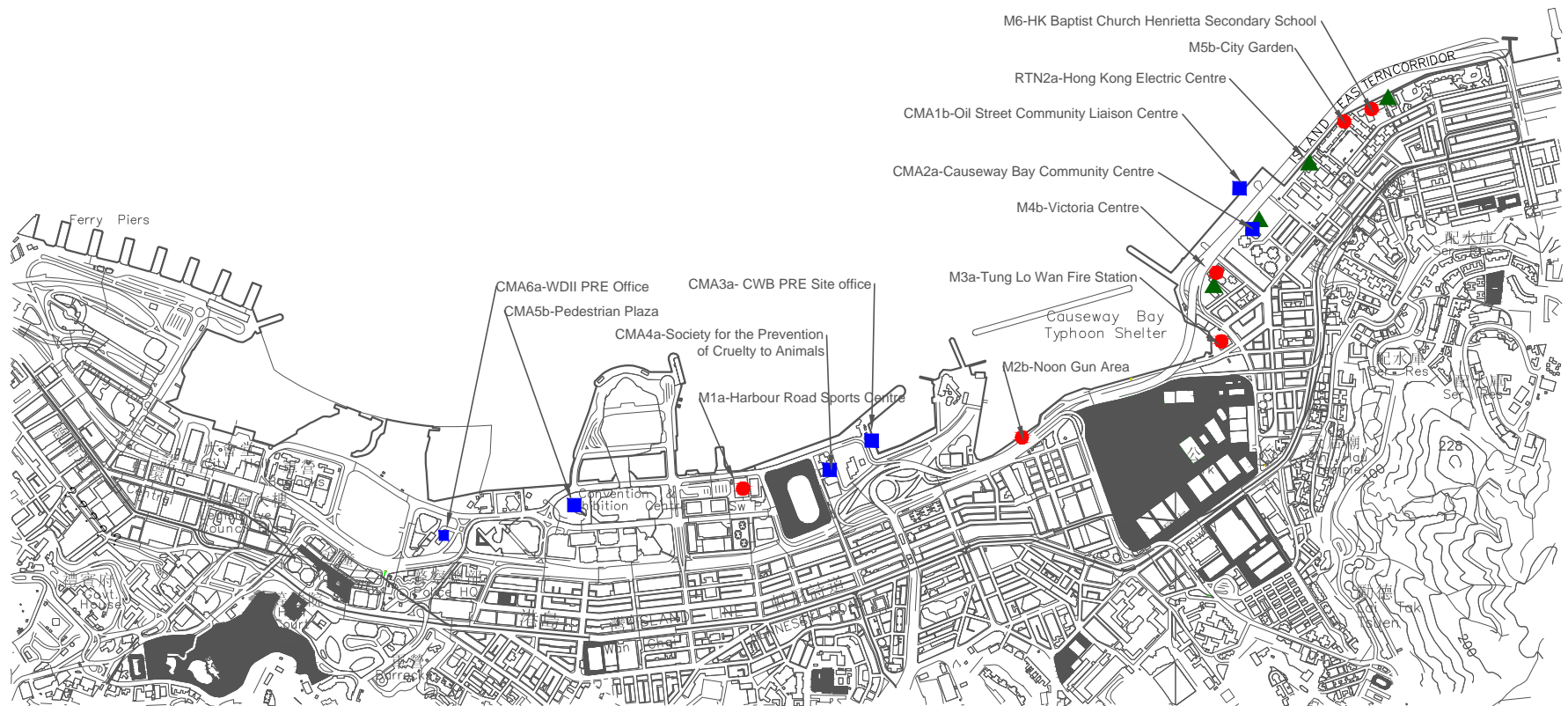


***Figure 4.1***

***Locations of Monitoring Stations***

### Legend

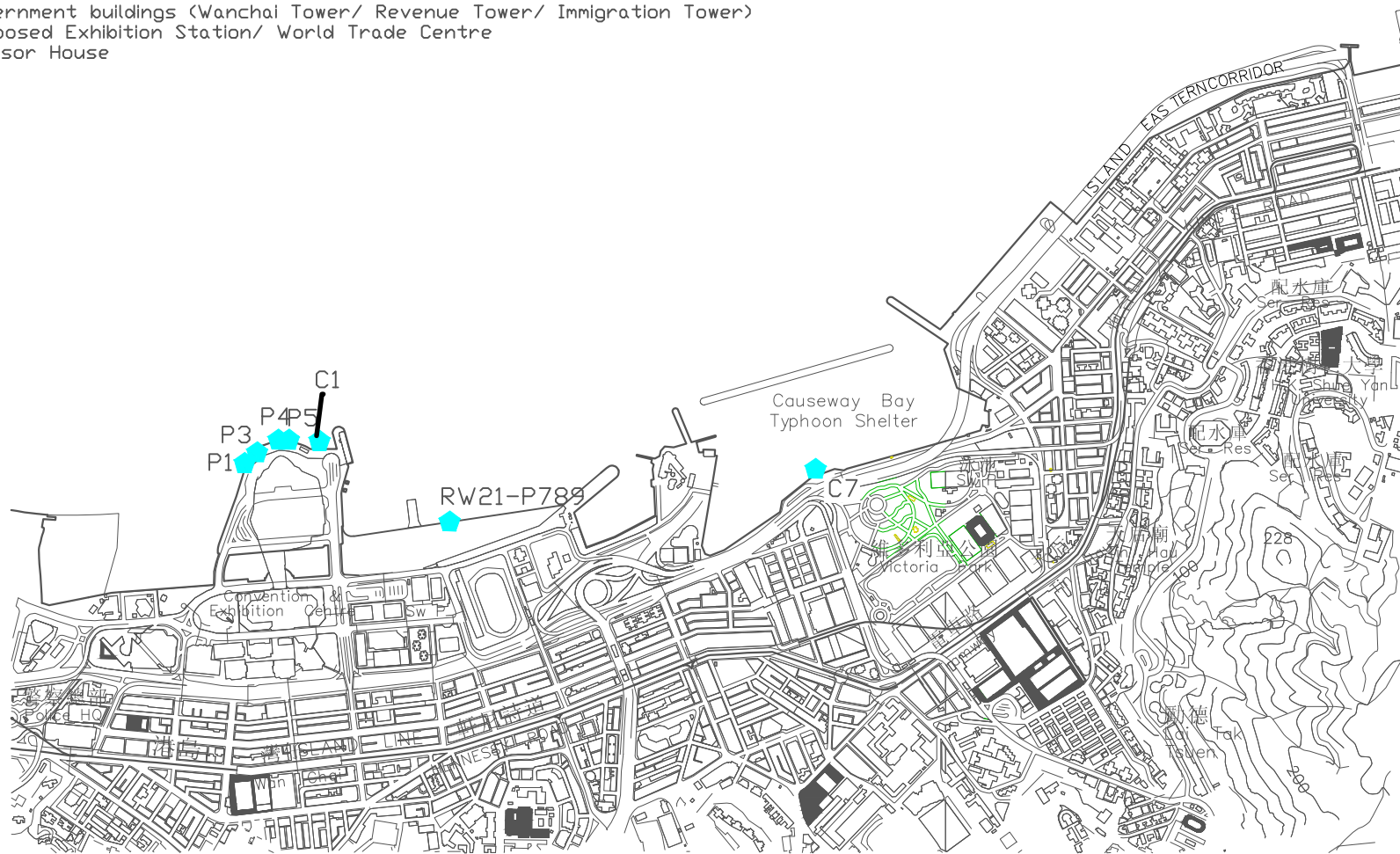
- Noise Monitoring Station
- Air Monitoring Station
- ▲ Real-time Noise Monitoring Station



## LOCATIONS OF AIR QUALITY AND NOISE MONITORING STATIONS

**Legend**

- ◆ Water Quality Monitoring Stations
- RW21-P789 (Wanchai WSD intake/ Great Eagle Centre/ China Resources Centre/ Sun Hung Kai Centre)
- C1 Hong Kong Convention and Exhibition Centre Extension
- P1 Hong Kong Convention and Exhibition Centre Phase 1
- P3 HK Academy For Performing Art
- P4 Shui On Centre
- P5 Government buildings (Wanchai Tower/ Revenue Tower/ Immigration Tower)
- C6 Proposed Exhibition Station/ World Trade Centre
- C7 Windsor House

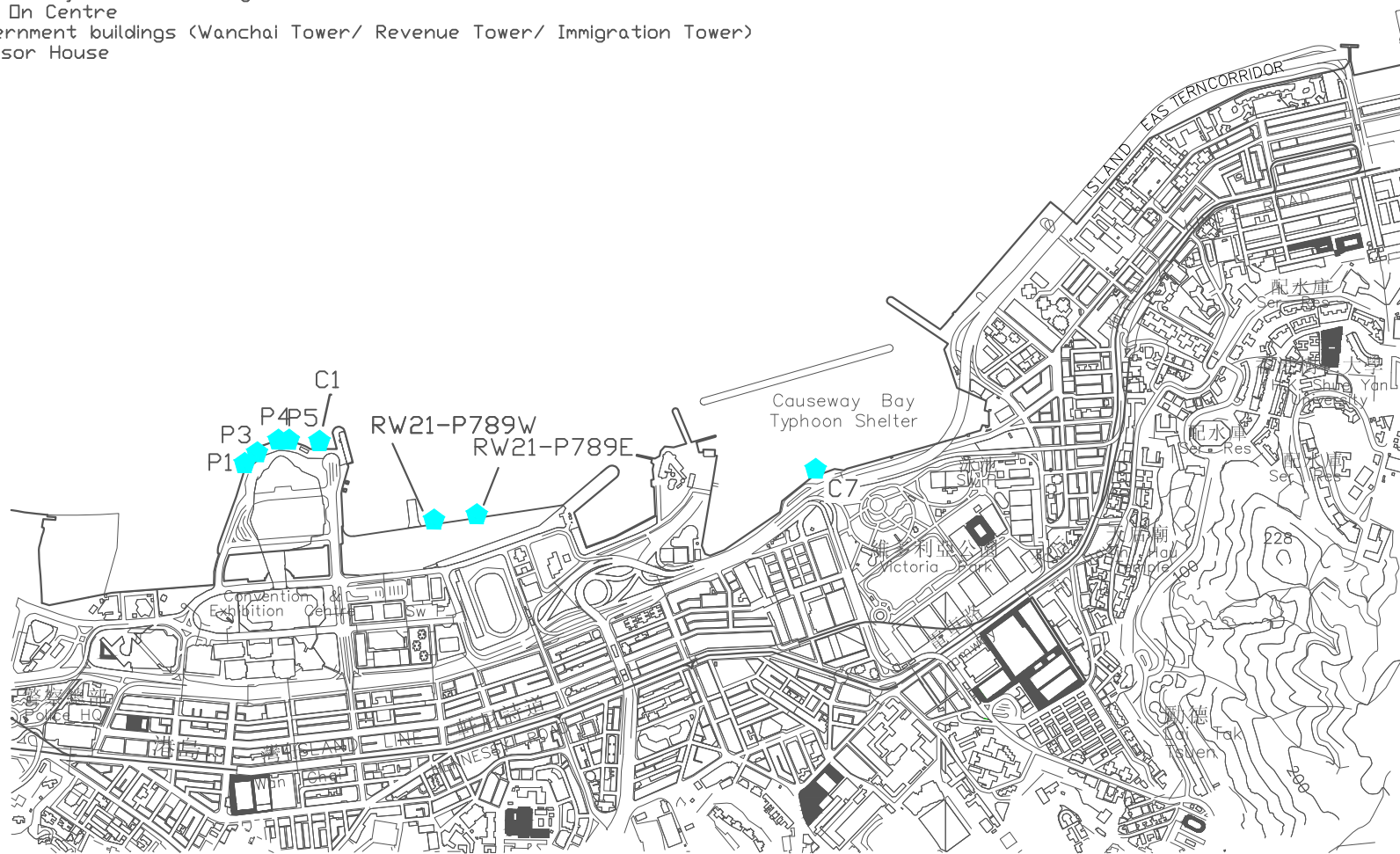


**FIGURE**

**LOCATIONS OF WATER QUALITY MONITORING STATIONS**

**Legend**

- ◆ Water Quality Monitoring Stations
- RW21-P789E (Wanchai WSD intake/ Great Eagle Centre/ China Resources Centre/ Sun Hung Kai Centre)
- RW21-P789W (Wanchai WSD intake/ Great Eagle Centre/ China Resources Centre/ Sun Hung Kai Centre)
- C1 Hong Kong Convention and Exhibition Centre Extension
- P1 Hong Kong Convention and Exhibition Centre Phase 1
- P3 HK Academy For Performing Art
- P4 Shui On Centre
- P5 Government buildings (Wanchai Tower/ Revenue Tower/ Immigration Tower)
- C7 Windsor House



**FIGURE**

**LOCATIONS OF WATER QUALITY MONITORING STATIONS**



**Legend**

- ◆ Enhance DO Monitoring Stations
- Ex-PCWA SE Ex-Public Cargo Wanchai Area SouthEast Station
- Ex-PCWA SW Ex-Public Cargo Wanchai Area Southwest Station
- C6 Proposed Exhibition Station/ World Trade Centre
- C7 Windsor House



**FIGURE**

**LOCATIONS OF ENHANCE DO MONITORING STATIONS**







***Appendix 3.1***

***Environmental Mitigation Implementation Schedule***

## Environmental Mitigation Implementation Schedule

## Implementation Schedule for Air Quality Control

| EIA Ref                      | Environmental Protection Measures / Mitigation Measures   | Location / Timing               | Implementation Agent | Implementation Stages* |   |   |     | Relevant Legislation and Guidelines |
|------------------------------|---|---------------------------------|----------------------|------------------------|---|---|-----|-------------------------------------|
|                              |   |                                 |                      | Des                    | C | O | Dec |                                     |
| <b>Construction Phase</b>    |   |                                 |                      |                        |   |   |     |                                     |
| <i>For the Whole Project</i> |   |                                 |                      |                        |   |   |     |                                     |
| S3.6.5                       | Four times a day watering of the work site with active operations.  | Work site / during construction | Contractor           |                        | √ |   |     | 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. <ul style="list-style-type: none"> <li>Strictly limit the truck speed on site to below 10 km per hour and water spraying to keep the haul roads in wet condition;</li> <li>Watering during excavation and material handling;</li> <li>Provision of vehicle wheel and body washing facilities at the exit points of the site, combined with cleaning of public roads where necessary; and</li> <li>Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations.</li> </ul> | Work site / during construction | Contractor           |                        | √ |   |     |                                     |

Appendix 3.1

| EIA Ref                      | Environmental Protection Measures / Mitigation Measures  | Location / Timing   | Implementation Agent | Implementation Stages* |   |   |     | Relevant Legislation and Guidelines |
|------------------------------|--|---|----------------------|------------------------|---|---|-----|-------------------------------------|
|                              |  |   |                      | Des                    | C | O | Dec |                                     |
| S3.5.6                       | 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 <sup>1</sup>    |                        | √ |   |     | 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 <sup>2</sup>    |                        | √ |   |     | EIAO-TM                             |
| <b>Operation Phase</b>       |  |   |                      |                        |   |   |     |                                     |
| <i>For the Whole Project</i> |  |   |                      |                        |   |   |     |                                     |

<sup>1</sup> CEDD will identify an implementation agent.<sup>2</sup> CEDD will identify an implementation agent.

Appendix 3.1

| EIA Ref  | Environmental Protection Measures / Mitigation Measures  | Location / Timing  | Implementation Agent | Implementation Stages* |   |   |     | Relevant Legislation and Guidelines |
|--|--|--|----------------------|------------------------|---|---|-----|-------------------------------------|
|  |  |  |                      | Des                    | C | O | Dec |                                     |
| 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 on-going odour impacts at the ASRs. | Planned ASRs (CBTS Breakwater)/First 5-year period of operation phase                              | CEDD <sup>1</sup>    |                        |   | √ |     | EIAO-TM                             |
| <b>For DPI – CWB (Within the Project Boundary)</b> |  |  |                      |                        |   |   |     |                                     |
| S3.6.53 – S3.6.54                                  | The design parameters of the East and Central Ventilation Buildings as set in Tables 3.10 and 3.11   | East and Central Ventilation Buildings / During operation of the Trunk Road                        | HyD                  |                        |   | √ |     |                                     |
| 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                  |                        |   | √ |     | EIAO-TM                             |

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

**Table A13.2 Implementation Schedule for Noise Control**

| EIA Ref                      | Environmental Protection Measures / Mitigation Measures | Location / Timing | Implementation Agent | Implementation Stages* |   |   |     | Relevant Legislation and Guidelines |
|------------------------------|---|-------------------|----------------------|------------------------|---|---|-----|-------------------------------------|
|                              |   |                   |                      | Des                    | C | O | Dec |                                     |
| <b>Construction Phase</b>    |   |                   |                      |                        |   |   |     |                                     |
| <b>For the Whole Project</b> |   |                   |                      |                        |   |   |     |                                     |

| EIA Ref  | Environmental Protection Measures / Mitigation Measures   | Location / Timing                | Implementation Agent | Implementation Stages* |   |   |     | Relevant Legislation and Guidelines |
|--|---|----------------------------------|----------------------|------------------------|---|---|-----|-------------------------------------|
|  |   |                                  |                      | Des                    | C | O | Dec |                                     |
| S4.9.4   | <p>Good Site Practice:</p> <ul style="list-style-type: none"> <li>Only well-maintained plant shall be operated on-site and plant shall be serviced regularly during the construction program.</li> <li>Silencers or mufflers on construction equipment shall be utilized and shall be properly maintained during the construction program.</li> <li>Mobile plant, if any, shall be sited as far away from NSRs as possible.</li> <li>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.</li> <li>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.</li> <li>Material stockpiles and other structures shall be effectively utilized, wherever practicable, in screening noise from on-site construction activities.</li> </ul> | Work Sites / During Construction | Contractor           |                        | √ |   |     | EIAO-TM, NCO                        |
| <i>For DP1 – CWB (Within the Project Boundary)</i> |   |                                  |                      |                        |   |   |     |                                     |

| EIA Ref                                    | Environmental Protection Measures / Mitigation Measures  | Location / Timing                | Implementation Agent | Implementation Stages* |   |   |     | Relevant Legislation and Guidelines |
|--|--|----------------------------------|----------------------|------------------------|---|---|-----|-------------------------------------|
|  |  |                                  |                      | Des                    | C | O | Dec |                                     |
| S4.8.3 – S4.8.5                            | <p>Use of quiet powered mechanical equipment, movable noise barrier and temporary noise barrier for the following tasks:</p> <ul style="list-style-type: none"> <li>Slip road 8 tunnel</li> <li>Construction of diaphragm wall and substructures of the tunnel approach ramp</li> <li>Excavation</li> <li>Construction of slabs</li> <li>Backfill</li> <li>Demolition and construction of substructures for the IEC</li> <li>Demolition works of existing piers and crossheads of the marine section of the existing IEC</li> </ul> <p>Use of PME grouping for the following tasks:</p> <ul style="list-style-type: none"> <li>At-grade road construction</li> <li>Substructure for IECL connection</li> </ul> | Work Sites / During Construction | Contractor           |                        | √ |   |     | EIAO-TM, NCO                        |
| <i>For DP2 – WDI Major Roads (Road P2)</i> |  |                                  |                      |                        |   |   |     |                                     |
| S4.8.3 – S4.8.4                            | <p>Use of quiet powered mechanical equipment, movable noise barrier and temporary noise barrier for the following tasks:</p> <ul style="list-style-type: none"> <li>Temporary road diversion</li> <li>Resurfacing</li> <li>At-grade roadwork</li> </ul>  | Work Sites / During Construction | Contractor           |                        | √ |   |     | EIAO-TM, NCO                        |
| <i>For DP3 – Reclamation Works</i>         |  |                                  |                      |                        |   |   |     |                                     |
| S4.8.3 – S4.8.4                            | <p>Use of quiet powered mechanical equipment for the following task:</p> <ul style="list-style-type: none"> <li>Filling behind seawall</li> <li>Seawall construction</li> </ul>  | Work Sites / During Construction | Contractor           |                        | √ |   |     | EIAO-TM, NCO                        |

| EIA Ref   | Environmental Protection Measures / Mitigation Measures  | Location / Timing                | Implementation Agent | Implementation Stages* |   |   |     | Relevant Legislation and Guidelines |
|---|--|----------------------------------|----------------------|------------------------|---|---|-----|-------------------------------------|
|   |  |                                  |                      | Des                    | C | O | Dec |                                     |
| <i>For DP5 – Wan Chai East Sewage Outfall</i>                             |  |                                  |                      |                        |   |   |     |                                     |
| S4.8.3 – S4.8.4   | Use of quiet powered mechanical equipment for the following tasks:<br><ul style="list-style-type: none"> <li>Submarine pipelines (marine section)</li> </ul> Use of quiet powered mechanical equipment and movable noise barrier for the following tasks:<br><ul style="list-style-type: none"> <li>Installation of a new pipeline (land section)</li> </ul> | Work Sites / During Construction | Contractor           |                        | √ |   |     | EIAO-TM, NCO                        |
| <i>For DP6 – Cross-Harbour Water Mains from Wan Chai to Tsim Sha Tsui</i> |  |                                  |                      |                        |   |   |     |                                     |
| S4.8.3 – S4.8.4   | Use of quiet powered mechanical equipment for the following tasks:<br><ul style="list-style-type: none"> <li>Submarine pipelines (marine section)</li> </ul>   | Work Sites / During Construction | Contractor           |                        | √ |   |     | EIAO-TM, NCO                        |

Appendix 3.1

| EIA Ref  | Environmental Protection Measures / Mitigation Measures | Location / Timing | Implementation Agent | Implementation Stages* |   |   |     | Relevant Legislation and Guidelines |
|--|---|-------------------|----------------------|------------------------|---|---|-----|-------------------------------------|
|  |   |                   |                      | Des                    | C | O | Dec |                                     |
| <b>Operation Phase</b>                             |   |                   |                      |                        |   |   |     |                                     |
| <i>For DP1 – CWB (Within the Project Boundary)</i> |   |                   |                      |                        |   |   |     |                                     |

Appendix 3.1



**Table A13.3 Implementation Schedule for Water Quality Control**

| EIA Ref   | Environmental Protection Measures / Mitigation Measures  | Location / Timing                          | Implementation Agent | Implementation Stages* |   |   |     | Relevant Legislation and Guidelines |
|---|--|--|----------------------|------------------------|---|---|-----|-------------------------------------|
|   |  |  |                      | Des                    | C | O | Dec |                                     |
| <b>Construction Phase</b>   |  |  |                      |                        |   |   |     |                                     |
| <i>For DP3 – Reclamation Works, DP5 (Wan Chai East Sewage Outfall), DP6 (Cross-Harbour Water Mains from Wan Chai to Tsim Sha Tsui), DP1 – CWB (within the Project Boundary)</i> |  |  |                      |                        |   |   |     |                                     |
| 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: <ul style="list-style-type: none"> <li>• Seawall construction in all the reclamation areas;</li> <li>• Construction of the CWB Tunnel</li> <li>• Construction of the proposed WSD water mains; and</li> <li>• Construction of the proposed Wan Chai East sewage outfall pipelines.</li> </ul>  | Work site / During the construction period | Contractor           |                        | √ |   |     | 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: <ul style="list-style-type: none"> <li>• Dredging along the proposed cross-harbour water mains;</li> <li>• Dredging along the seawall in the Wan Chai Reclamation (WCR) zone (area between HKCEC Extension and PCWA).</li> </ul>  | Work site / During the construction period | Contractor           |                        | √ |   |     | EIAO-TM, WPCO                       |

Appendix 3.1

| EIA Ref                                     | Environmental Protection Measures / Mitigation Measures  | Location / Timing                            | Implementation Agent                            | Implementation Stages* |   |                        |  | Relevant Legislation and Guidelines         |  |  |  |                                  |       |     |        |              |     |    |        |                |      |       |     |        |           |       |     |        |  |            |  |   |  |               |
|---|--|--|---|------------------------|---|------------------------|--|---|--|--|--|----------------------------------|-------|-----|--------|--------------|-----|----|--------|----------------|------|-------|-----|--------|-----------|-------|-----|--------|--|------------|--|---|--|---------------|
|   |  |  |   | Des                    | C   | O                      | Dec  |   |  |  |  |                                  |       |     |        |              |     |    |        |                |      |       |     |        |           |       |     |        |  |            |  |   |  |               |
| S5.8  | The water body behind the temporary reclamations within the Causeway Bay typhoon shelter shall not be fully enclosed.  | Work site / During the construction period   | Contractor                                      |                        | √   |                        |  | EIAO-TM, WPCO                               |  |  |  |                                  |       |     |        |              |     |    |        |                |      |       |     |        |           |       |     |        |  |            |  |   |  |               |
| S5.8  | As a mitigation measure, to avoid the accumulation of water borne pollutants within the temporary embayment between CR111 and HKCEC1, an impermeable barrier, suspended from a floating boom on the water surface 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.  | Work site / During the construction period   | Contractor                                      |                        | √   |                        |  | EIAO-TM, WPCO                               |  |  |  |                                  |       |     |        |              |     |    |        |                |      |       |     |        |           |       |     |        |  |            |  |   |  |               |
| 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. <table border="1" style="margin: 10px auto; width: 80%;"> <thead> <tr> <th rowspan="2">Reclamation Area</th> <th colspan="2">Maximum Dredging Rate</th> <th rowspan="2">Maximum Dredging Rate (m<sup>3</sup> per week)</th> </tr> <tr> <th>m<sup>3</sup> per day</th> <th>m<sup>3</sup> per hour (for 16 hrs per day)</th> </tr> </thead> <tbody> <tr> <td colspan="4"><b>Dredging along seawall or breakwater</b></td> </tr> <tr> <td>North Point Shoreline Zone (NPR)</td> <td>6,000</td> <td>375</td> <td>42,000</td> </tr> <tr> <td>Causeway Bay</td> <td>TBW</td> <td>94</td> <td>10,500</td> </tr> <tr> <td>Shoreline Zone</td> <td>TGBR</td> <td>6,000</td> <td>375</td> <td>42,000</td> </tr> <tr> <td>PCWA Zone</td> <td>5,000</td> <td>313</td> <td>35,000</td> </tr> </tbody> </table> | Reclamation Area                             | Maximum Dredging Rate                           |                        | Maximum Dredging Rate (m <sup>3</sup> per week) | m <sup>3</sup> per day | m <sup>3</sup> per hour (for 16 hrs per day) | <b>Dredging along seawall or breakwater</b> |  |  |  | North Point Shoreline Zone (NPR) | 6,000 | 375 | 42,000 | Causeway Bay | TBW | 94 | 10,500 | Shoreline Zone | TGBR | 6,000 | 375 | 42,000 | PCWA Zone | 5,000 | 313 | 35,000 | Work site / During the construction period | Contractor |  | √ |  | EIAO-TM, WPCO |
| Reclamation Area                            | Maximum Dredging Rate  |  | Maximum Dredging Rate (m <sup>3</sup> per week) |                        |   |                        |  |   |  |  |  |                                  |       |     |        |              |     |    |        |                |      |       |     |        |           |       |     |        |  |            |  |   |  |               |
|   | m <sup>3</sup> per day   | m <sup>3</sup> per hour (for 16 hrs per day) |   |                        |   |                        |  |   |  |  |  |                                  |       |     |        |              |     |    |        |                |      |       |     |        |           |       |     |        |  |            |  |   |  |               |
| <b>Dredging along seawall or breakwater</b> |  |  |   |                        |   |                        |  |   |  |  |  |                                  |       |     |        |              |     |    |        |                |      |       |     |        |           |       |     |        |  |            |  |   |  |               |
| North Point Shoreline Zone (NPR)            | 6,000  | 375  | 42,000  |                        |   |                        |  |   |  |  |  |                                  |       |     |        |              |     |    |        |                |      |       |     |        |           |       |     |        |  |            |  |   |  |               |
| Causeway Bay                                | TBW  | 94   | 10,500  |                        |   |                        |  |   |  |  |  |                                  |       |     |        |              |     |    |        |                |      |       |     |        |           |       |     |        |  |            |  |   |  |               |
| Shoreline Zone                              | TGBR   | 6,000  | 375   | 42,000                 |   |                        |  |   |  |  |  |                                  |       |     |        |              |     |    |        |                |      |       |     |        |           |       |     |        |  |            |  |   |  |               |
| PCWA Zone                                   | 5,000  | 313  | 35,000  |                        |   |                        |  |   |  |  |  |                                  |       |     |        |              |     |    |        |                |      |       |     |        |           |       |     |        |  |            |  |   |  |               |

Appendix 3.1



| EIA Ref   | Environmental Protection Measures / Mitigation Measures   |  |                          |   | Location / Timing  | Implementation Agent         | Implementation Stages*  |  |            |                   | Relevant Legislation and Guidelines |     |        |               |       |               |        |                           |       |    |        |   |       |    |        |  |  |  |  |  |  |  |  |
|---|---|--|--------------------------|---|--|------------------------------|---|--|------------|-------------------|-------------------------------------|-----|--------|---------------|-------|---------------|--------|---------------------------|-------|----|--------|---|-------|----|--------|--|--|--|--|--|--|--|--|
|   |   |  |                          |   |  |                              | Des   | C  | O          | Dec               |                                     |     |        |               |       |               |        |                           |       |    |        |   |       |    |        |  |  |  |  |  |  |  |  |
|   | <table border="1"> <tr> <td>Wan Chai Shoreline Zone (WCR)</td> <td>6,000</td> <td>375</td> <td>42,000</td> </tr> <tr> <td>HKCEC Shoreline Zone (HKCEC)</td> <td>1,500</td> <td>94</td> <td>10,500</td> </tr> <tr> <td>HKCEC Stage 1 &amp; 3</td> <td>6,000</td> <td>375</td> <td>42,000</td> </tr> <tr> <td>HKCEC Stage 2</td> <td>1,500</td> <td>94</td> <td>10,500</td> </tr> <tr> <td>Cross Harbour Water Mains</td> <td>1,500</td> <td>94</td> <td>10,500</td> </tr> <tr> <td>Wan Chai East Submarine Sewage Pipeline</td> <td>1,500</td> <td>94</td> <td>10,500</td> </tr> </table> <p>Note: 1,500 m<sup>3</sup> per day shall be applied for construction of the western seawall of WCR1.</p> | Wan Chai Shoreline Zone (WCR)              | 6,000                    | 375   | 42,000   | HKCEC Shoreline Zone (HKCEC) | 1,500   | 94   | 10,500     | HKCEC Stage 1 & 3 | 6,000                               | 375 | 42,000 | HKCEC Stage 2 | 1,500 | 94            | 10,500 | Cross Harbour Water Mains | 1,500 | 94 | 10,500 | Wan Chai East Submarine Sewage Pipeline | 1,500 | 94 | 10,500 |  |  |  |  |  |  |  |  |
| Wan Chai Shoreline Zone (WCR)   | 6,000   | 375  | 42,000                   |   |  |                              |   |  |            |                   |                                     |     |        |               |       |               |        |                           |       |    |        |   |       |    |        |  |  |  |  |  |  |  |  |
| HKCEC Shoreline Zone (HKCEC)  | 1,500   | 94   | 10,500                   |   |  |                              |   |  |            |                   |                                     |     |        |               |       |               |        |                           |       |    |        |   |       |    |        |  |  |  |  |  |  |  |  |
| HKCEC Stage 1 & 3   | 6,000   | 375  | 42,000                   |   |  |                              |   |  |            |                   |                                     |     |        |               |       |               |        |                           |       |    |        |   |       |    |        |  |  |  |  |  |  |  |  |
| HKCEC Stage 2   | 1,500   | 94   | 10,500                   |   |  |                              |   |  |            |                   |                                     |     |        |               |       |               |        |                           |       |    |        |   |       |    |        |  |  |  |  |  |  |  |  |
| Cross Harbour Water Mains   | 1,500   | 94   | 10,500                   |   |  |                              |   |  |            |                   |                                     |     |        |               |       |               |        |                           |       |    |        |   |       |    |        |  |  |  |  |  |  |  |  |
| Wan Chai East Submarine Sewage Pipeline   | 1,500   | 94   | 10,500                   |   |  |                              |   |  |            |                   |                                     |     |        |               |       |               |        |                           |       |    |        |   |       |    |        |  |  |  |  |  |  |  |  |
| S5.8, Figure 5.3  | Dredging along the seawall at WCR1 shall be undertaken initially at 1,500m <sup>3</sup> 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               |   | √  |                              |   |  |            | 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               |   | √  |                              |   |  |            | 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               |   | √  |                              |   |  |            | EIAO-TM, WPCO     |                                     |     |        |               |       |               |        |                           |       |    |        |   |       |    |        |  |  |  |  |  |  |  |  |
| S5.8, Figure 5.3  | <p>Silt screens shall be applied to seawater intakes at interim construction stages as stated below:</p> <table border="1"> <thead> <tr> <th>Interim Construction Stage</th> <th>Location of Applications</th> </tr> </thead> <tbody> <tr> <td>Scenario 2A in early 2009 with concurrent dredging activities at HKCEC, WCR, TPCWA,</td> <td>WSD saltwater intakes at Sai Wan Ho, Quarry Bay, Sheung Wan, Wan Chai, Kowloon South</td> </tr> <tr> <td></td> <td>Cooling water intakes for Hong Kong Convention and Exhibition Centre Extension, Hong Kong</td> </tr> </tbody> </table>   | Interim Construction Stage                 | Location of Applications | Scenario 2A in early 2009 with concurrent dredging activities at HKCEC, WCR, TPCWA, | WSD saltwater intakes at Sai Wan Ho, Quarry Bay, Sheung Wan, Wan Chai, Kowloon South |                              | Cooling water intakes for Hong Kong Convention and Exhibition Centre Extension, Hong Kong | Work site / During the construction period | Contractor |                   | √                                   |     |        |               |       | EIAO-TM, WPCO |        |                           |       |    |        |   |       |    |        |  |  |  |  |  |  |  |  |
| Interim Construction Stage  | Location of Applications  |  |                          |   |  |                              |   |  |            |                   |                                     |     |        |               |       |               |        |                           |       |    |        |   |       |    |        |  |  |  |  |  |  |  |  |
| Scenario 2A in early 2009 with concurrent dredging activities at HKCEC, WCR, TPCWA, | WSD saltwater intakes at Sai Wan Ho, Quarry Bay, Sheung Wan, Wan Chai, Kowloon South  |  |                          |   |  |                              |   |  |            |                   |                                     |     |        |               |       |               |        |                           |       |    |        |   |       |    |        |  |  |  |  |  |  |  |  |
|   | Cooling water intakes for Hong Kong Convention and Exhibition Centre Extension, Hong Kong   |  |                          |   |  |                              |   |  |            |                   |                                     |     |        |               |       |               |        |                           |       |    |        |   |       |    |        |  |  |  |  |  |  |  |  |

Appendix 3.1

| EIA Ref  | Environmental Protection Measures / Mitigation Measures   |  | Location / Timing   | Implementation Agent   | Implementation Stages*  |  |  |     | Relevant Legislation and Guidelines |  |  |  |  |  |  |
|--|---|--|---|--|---|--|--|-----|-------------------------------------|--|--|--|--|--|--|
|  |   |  |   |  | Des   | C  | O  | Dec |                                     |  |  |  |  |  |  |
|  | <table border="1"> <tr> <td>TBW, NP and Water Mains Zone</td> <td>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</td> </tr> <tr> <td>Scenario 2B in late 2009/2010 with concurrent dredging activities at Sewage Pipelines Zone and TCBR.</td> <td>WSD saltwater intakes at Sheung Wan, Wan Chai<br/>Cooling water intakes for Queensway Government Offices, Excelsior Hotel, World Trade Centre and Windsor House.</td> </tr> <tr> <td>Scenario 2C in 2011 with concurrent dredging activities at HKCEC and TCBR.</td> <td>WSD saltwater intakes at Sheung Wan and Reprovisioned WSD Wan Chai saltwater intake.<br/>Cooling water intakes for MTR South, Excelsior Hotel &amp; World Trade Centre and reprovisioned Windsor House.</td> </tr> </table>  | TBW, NP and Water Mains Zone               | 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 | Scenario 2B in late 2009/2010 with concurrent dredging activities at Sewage Pipelines Zone and TCBR. | WSD saltwater intakes at Sheung Wan, Wan Chai<br>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.<br>Cooling water intakes for MTR South, Excelsior Hotel & World Trade Centre and reprovisioned Windsor House. |     |                                     |  |  |  |  |  |  |
| TBW, NP and Water Mains Zone   | 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   |  |   |  |   |  |  |     |                                     |  |  |  |  |  |  |
| Scenario 2B in late 2009/2010 with concurrent dredging activities at Sewage Pipelines Zone and TCBR. | WSD saltwater intakes at Sheung Wan, Wan Chai<br>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.<br>Cooling water intakes for MTR South, Excelsior Hotel & World Trade Centre and reprovisioned Windsor House.  |  |   |  |   |  |  |     |                                     |  |  |  |  |  |  |
| S5.8   | <p>Other mitigation measures include:</p> <ul style="list-style-type: none"> <li>mechanical grabs, if used, shall be designed and maintained to avoid spillage and sealed tightly while being lifted. For dredging of any contaminated mud, closed watertight grabs must be used;</li> <li>all vessels shall be sized so that adequate clearance is maintained between vessels and the seabed in all tide conditions, to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash;</li> <li>all hopper barges and dredgers shall be fitted with tight fitting seals to their bottom openings to prevent leakage of material;</li> <li>construction activities shall not cause foam, oil, grease, scum, litter or other objectionable matter to be present on the water within the site or dumping grounds;</li> <li>loading of barges and hoppers shall be controlled to prevent splashing of dredged material into the surrounding water. Barges or hoppers shall not be filled to a level that will cause the overflow of materials or polluted water during loading or transportation; and</li> </ul> | Work site / During the construction period | Contractor  |  | √   |  |  |     | ProPECC PN 1/94; WPCO (TM-DSS)      |  |  |  |  |  |  |

Appendix 3.1

| EIA Ref | Environmental Protection Measures / Mitigation Measures  | Location / Timing                          | Implementation Agent | Implementation Stages* |   |   |     | Relevant Legislation and Guidelines |
|---------|--|--|----------------------|------------------------|---|---|-----|-------------------------------------|
|         |  |  |                      | Des                    | C | O | Dec |                                     |
|         | <ul style="list-style-type: none"> <li>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.</li> </ul>   |  |                      |                        |   |   |     |                                     |
| S5.8    | <p>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.</p> | Work site / During the construction period | Contractor           |                        | √ |   |     | EIAO-TM, WPCO                       |

Appendix 3.1

| EIA Ref | Environmental Protection Measures / Mitigation Measures   | Location / Timing   | Implementation Agent | Implementation Stages* |   |   |     | Relevant Legislation and Guidelines |
|---------|---|---|----------------------|------------------------|---|---|-----|-------------------------------------|
|         |   |   |                      | Des                    | C | O | Dec |                                     |
| S5.8    | <p>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 1 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.</p> | Causeway Bay typhoon shelter/Implementation of harbour-front enhancement. | CEDD <sup>3</sup>    |                        | √ |   |     | WPCO                                |

Appendix 3.1

| EIA Ref                      | Environmental Protection Measures / Mitigation Measures  | Location / Timing  | Implementation Agent | Implementation Stages* |   |   |     | Relevant Legislation and Guidelines |                                |
|------------------------------|--|--|----------------------|------------------------|---|---|-----|-------------------------------------|--------------------------------|
|                              |  |  |                      | Des                    | C | O | Dec |                                     |                                |
| <b>For the Whole Project</b> |  |  |                      |                        |   |   |     |                                     |                                |
| S5.8                         | <ul style="list-style-type: none"> <li>Construction Runoff and Drainage</li> <li>use of sediment traps, wheel washing facilities for vehicles leaving the site, and adequate maintenance of drainage systems to prevent flooding and overflow;</li> <li>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;</li> <li>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;</li> <li>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;</li> <li>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;</li> <li>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;</li> <li>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</li> </ul> | <ul style="list-style-type: none"> <li>Work site / During the construction period</li> </ul> | Contractor           |                        | √ |   |     |                                     | ProPECC PN 1/94; WPCO (TM-DSS) |

<sup>3</sup> CEDD will identify an implementation agent.

| EIA Ref | Environmental Protection Measures / Mitigation Measures  | Location / Timing  | Implementation Agent | Implementation Stages* |   |   |     | Relevant Legislation and Guidelines |
|---------|--|--|----------------------|------------------------|---|---|-----|-------------------------------------|
|         |  |  |                      | Des                    | C | O | Dec |                                     |
|         | <p>required.</p> <ul style="list-style-type: none"> <li>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.</li> </ul>   |  |                      |                        |   |   |     |                                     |
|         | <ul style="list-style-type: none"> <li>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.</li> </ul>  |  |                      |                        |   |   |     |                                     |
| S5.8    | <p><i>Sewage from Construction Work Force</i></p> <p>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.</p> | Work site / During the construction period                     | Contractor           |                        | √ |   |     | ProPECC PN 1/94; WPCO (TM-DSS)      |
| S5.8    | <p><i>Floating Debris and Refuse</i></p> <p>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.</p>   | Work site and adjacent water / During the construction period. | Contractor           |                        | √ |   |     | WPCO                                |

| EIA Ref  | Environmental Protection Measures / Mitigation Measures   | Location / Timing   | Implementation Agent | Implementation Stages* |   |   |     | Relevant Legislation and Guidelines |
|--|---|---|----------------------|------------------------|---|---|-----|-------------------------------------|
|  |   |   |                      | Des                    | C | O | Dec |                                     |
| S5.8   | <p><i>Storm Water Discharges</i></p> <p>Minimum distances of 100 m shall be maintained between the existing or planned stormwater discharges and the existing or planned WSD flushing water intakes.</p>  | Work site and adjacent water / During the design and construction period. | Contractor           | √                      | √ |   |     | WPCO                                |
| <b>Operation Phase</b>                         |   |   |                      |                        |   |   |     |                                     |
| <i>DPI – CWB (within the Project Boundary)</i> |   |   |                      |                        |   |   |     |                                     |
| S5.8   | <p>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:</p> <ul style="list-style-type: none"> <li>The drainage from tunnel sections shall be directed through petrol interceptors to remove oil and grease before being discharged to the nearby foul water manholes.</li> <li>Petrol interceptors shall be regularly cleaned and maintained in good working condition.</li> <li>Oily contents of the petrol interceptors shall be properly handled and disposed of, in compliance with the requirements of the Waste Disposal Ordinance.</li> <li>Sewage arising from ancillary facilities of CWB (for examples, car park,</li> </ul> | CWB/During design and operational period                                  | HyD/TD <sup>3</sup>  | √                      |   | √ |     | WPCO                                |

Appendix 3.1

| EIA Ref | Environmental Protection Measures / Mitigation Measures   | Location / Timing | Implementation Agent | Implementation Stages* |   |   |     | Relevant Legislation and Guidelines |
|---------|---|-------------------|----------------------|------------------------|---|---|-----|-------------------------------------|
|         |   |                   |                      | Des                    | C | O | Dec |                                     |
|         | <p>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.</p> <ul style="list-style-type: none"> <li>Road drainage shall also be provided with adequately designed silt trap to minimize discharge of silty runoff.</li> <li>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.</li> </ul> |                   |                      |                        |   |   |     |                                     |

\* Des - Design, C - Construction, O – Operation, and Dec - Decommissioning

<sup>3</sup> 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 Agent | Implementation Stages* |   |   |     | Relevant Legislation and Guidelines |
|------------------------------------|--|--|----------------------|------------------------|---|---|-----|-------------------------------------|
|                                    |  |  |                      | Des                    | C | O | Dec |                                     |
| <b>Construction Phase</b>          |  |  |                      |                        |   |   |     |                                     |
| <i>For DP3 – Reclamation Works</i> |  |  |                      |                        |   |   |     |                                     |
| S6.7.2                             | <p><b>Marine Sediments</b></p> <p>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.</p> | Work site / During the construction period | Contractor           |                        | √ |   |     | ETWB TCW No. 34/2002                |
| 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 Mm <sup>3</sup> . 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

| EIA Ref | Environmental Protection Measures / Mitigation Measures  | Location / Timing | Implementation Agent | Implementation Stages* |   |   |     | Relevant Legislation and Guidelines |
|---------|--|-------------------|----------------------|------------------------|---|---|-----|-------------------------------------|
|         |  |                   |                      | Des                    | C | O | Dec |                                     |
| 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  | <p>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:</p> <ul style="list-style-type: none"> <li>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.</li> </ul> |                   |                      |                        |   |   |     |                                     |

Appendix 3.1

| EIA Ref                      | Environmental Protection Measures / Mitigation Measures  | Location / Timing                          | Implementation Agent | Implementation Stages* |   |   |     | Relevant Legislation and Guidelines |
|------------------------------|--|--|----------------------|------------------------|---|---|-----|-------------------------------------|
|                              |  |  |                      | Des                    | C | O | Dec |                                     |
|                              | <ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul> |  |                      |                        |   |   |     |                                     |
| S6.6.12                      | <p><b>Floating Refuse</b></p> <p>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.</p>  | Work site / During the construction period | Contractor           |                        | √ |   |     |                                     |
| <b>For the Whole Project</b> |  |  |                      |                        |   |   |     |                                     |

| EIA Ref | Environmental Protection Measures / Mitigation Measures  | Location / Timing                          | Implementation Agent | Implementation Stages* |   |   |     | Relevant Legislation and Guidelines |
|---------|--|--|----------------------|------------------------|---|---|-----|-------------------------------------|
|         |  |  |                      | Des                    | C | O | Dec |                                     |
| S6.7.7  | <p><b>Good Site Practices</b></p> <p>Recommendations for good site practices during the construction activities include:</p> <ul style="list-style-type: none"> <li>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;</li> <li>training of site personnel in proper waste management and chemical waste handling procedures;</li> <li>provision of sufficient waste disposal points and regular collection for disposal;</li> <li>appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers;</li> <li>regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors; and</li> <li>a recording system for the amount of wastes generated, recycled and disposed of (including the disposal sites).</li> </ul> | Work site / During the construction period | Contractor           |                        | √ |   |     | Waste Disposal Ordinance (Cap.354)  |

| EIA Ref | Environmental Protection Measures / Mitigation Measures  | Location / Timing  | Implementation Agent | Implementation Stages* |   |   |     | Relevant Legislation and Guidelines |
|---------|--|--|----------------------|------------------------|---|---|-----|-------------------------------------|
|         |  |  |                      | Des                    | C | O | Dec |                                     |
| S6.7.8  | <p><i>Waste Reduction Measures</i></p> <p>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:</p> <ul style="list-style-type: none"> <li>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;</li> <li>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;</li> <li>any unused chemicals or those with remaining functional capacity shall be recycled;</li> <li>use of reusable non-timber formwork, such as in casting the tunnel box sections, to reduce the amount of C&amp;D material.</li> <li>prior to disposal of C&amp;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;</li> <li>proper storage and site practices to minimise the potential for damage or contamination of construction materials; and</li> <li>plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste.</li> </ul> | Work site / During planning and design stage, and construction stage | Contractor           | √                      | √ |   |     |                                     |

Appendix 3.1

| EIA Ref | Environmental Protection Measures / Mitigation Measures  | Location / Timing                          | Implementation Agent | Implementation Stages* |   |   |     | Relevant Legislation and Guidelines   |
|---------|--|--|----------------------|------------------------|---|---|-----|---|
|         |  |  |                      | Des                    | C | O | Dec |   |
| S6.7.10 | <p><i>General Refuse</i></p> <p>General refuse shall be stored in enclosed bins or compaction units separate from C&amp;D material. A licensed waste collector shall be employed by the contractor to remove general refuse from the site, separately from C&amp;D material.</p> <p>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.</p>  | Work site / During the construction period | Contractor           |                        | √ |   |     | Public Health and Municipal Services Ordinance (Cap. 132)   |
| S6.7.11 | <p><i>Chemical Wastes</i></p> <p>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.</p>  | Work site / During the construction period | Contractor           |                        | √ |   |     | Waste Disposal (Chemical Waste) (General) Regulation<br><br>Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes |
| S6.7.12 | <p><i>Construction and Demolition Material</i></p> <p>C&amp;D material shall be sorted on-site into inert C&amp;D material (that is, public fill) and C&amp;D waste. All the suitable inert C&amp;D material shall be broken down to 250 mm in size for reuse as public fill in the WDII reclamation. C&amp;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.</p> | Work site / During the construction period | Contractor           |                        | √ |   |     | ETWB TCW No. 33/2002, 31/2004, 19/2005  |

Appendix 3.1



| EIA Ref | Environmental Protection Measures / Mitigation Measures  | Location / Timing                          | Implementation Agent                             | Implementation Stages* |   |   |     | Relevant Legislation and Guidelines |
|---------|--|--|--|------------------------|---|---|-----|-------------------------------------|
|         |  |  |  | Des                    | C | O | Dec |                                     |
| 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 |                        | √ |   |     | ETWB TCW No. 31/2004                |
| S6.7.14 | <p><i>Bentonite Slurry</i></p> <p>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:</p> <ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>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.</li> </ul> | Work site / During the construction period | Contractor                                       |                        | √ |   |     | ProPECC PN 1/94                     |

\* Des - Design, C - Construction, O - Operation, and Dec - Decommissioning

Appendix 3.1

Table A13.5 Implementation Schedule for Land Contamination

| EIA Ref                      | Environmental Protection Measures / Mitigation Measures  | Location / Timing  | Implementation Agent                                    | Implementation Stages* |   |   |     | Relevant Legislation and Guidelines  |
|------------------------------|--|--|---|------------------------|---|---|-----|--|
|                              |  |  |   | Des                    | C | O | Dec |  |
| <b>Construction Phase</b>    |  |  |   |                        |   |   |     |  |
| <i>For the Whole Project</i> |  |  |   |                        |   |   |     |  |
| S.12.6                       | <ul style="list-style-type: none"> <li>The contaminated site shall be cleaned up before commencement of site clearance and construction work at the concerned area which may disturb the ground.</li> </ul>  | A King Marine / Before commencement of construction activities at A King Marine. | Project proponent for the re-provisioned Tin Hau Temple | √                      |   |   |     | <p>"Guidance Notes for Investigation and Remediation of Contaminated Sites of Petrol Filling Stations, Boatyards, and Car Repair/Dismantling Workshops" published by EPD, HKSAR</p> <p>EPD ProPECC Note No. 3/94</p> |
| S7.10                        | <p>During soil remediation works, the Contractor for the excavation works shall take note of the following points for excavation:</p> <ul style="list-style-type: none"> <li>Excavation profiles must be properly designed and executed;</li> <li>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;</li> <li>Quantities of soil to be excavated must be estimated;</li> <li>It maybe necessary to split quantities of soil according to soil type, degree and nature of contamination.</li> <li>Temporary storage of soil at intermediate depot or on-site</li> </ul> | A King Marine / During soil remediation works                                    | Contractor  | √                      |   |   |     | <p>Air Pollution Control Ordinance</p> <p>Noise Control Ordinance</p> <p>Waste Disposal Ordinance</p> <p>Waste Disposal (Chemical Waste) (General) Regulation</p>  |

Appendix 3.1

| EIA Ref | Environmental Protection Measures / Mitigation Measures  | Location / Timing | Implementation Agent | Implementation Stages* |   |   |     | Relevant Legislation and Guidelines |
|---------|--|-------------------|----------------------|------------------------|---|---|-----|-------------------------------------|
|         |  |                   |                      | Des                    | C | O | Dec |                                     |
|         | maybe required. The storage site shall include protection facilities for leaching into the ground. eg. Liner maybe required.   |                   |                      |                        |   |   |     |                                     |
|         | <ul style="list-style-type: none"> <li>Supply of suitable clean backfill materials is needed after excavation.</li> <li>Care must be taken of existing buildings and utilities.</li> <li>Precautions must be taken to control of ground settlement</li> <li>Speed controls for vehicles shall be imposed on dusty site areas.</li> <li>Vehicle wheel and body washing facilities at the site's exit points shall be established and used.</li> </ul> <p>The following environmental mitigation measures shall be strictly followed during the operation and/or maintenance of the CS/S facilities:</p> |                   |                      |                        |   |   |     | Water Pollution Control Ordinance   |

Appendix 3.1

| EIA Ref | Environmental Protection Measures / Mitigation Measures  | Location / Timing | Implementation Agent | Implementation Stages* |   |   |     | Relevant Legislation and Guidelines |
|---------|--|-------------------|----------------------|------------------------|---|---|-----|-------------------------------------|
|         |  |                   |                      | Des                    | C | O | Dec |                                     |
|         | <p><u>Air Quality Mitigation Measures</u></p> <ul style="list-style-type: none"> <li>The loading, unloading, handling, transfer or storage of cement shall be carried out in an enclosed system.</li> <li>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.</li> <li>All practicable measures, including speed controls for vehicles, shall be taken to prevent or minimize the dust emission caused by vehicle movement.</li> <li>Tarpaulin or low permeable sheet shall be put on dusty vehicle loads transported between site locations.</li> </ul> |                   |                      |                        |   |   |     |                                     |
|         | <p><u>Noise Mitigation Measures</u></p> <ul style="list-style-type: none"> <li>The mixing facilities shall be sited as far as practicable to the nearby noise sensitive receivers.</li> <li>Simultaneous operation of mixing facilities and other equipment shall be avoided.</li> <li>Mixing process and other associated material handling activities shall be properly scheduled to minimise potential cumulative noise impact on the nearby noise sensitive receivers.</li> <li>Construction Noise Permit shall be applied for the operation of powered mechanical equipment during restricted hours (if any).</li> </ul>  |                   |                      |                        |   |   |     |                                     |

Appendix 3.1

| EIA Ref | Environmental Protection Measures / Mitigation Measures  | Location / Timing | Implementation Agent | Implementation Stages* |   |   |     | Relevant Legislation and Guidelines |
|---------|--|-------------------|----------------------|------------------------|---|---|-----|-------------------------------------|
|         |  |                   |                      | Des                    | C | O | Dec |                                     |
|         | <p><u>Water Quality Mitigation Measures</u></p> <ul style="list-style-type: none"> <li>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.</li> </ul> <p><u>Waste Mitigation Measures</u></p> <ul style="list-style-type: none"> <li>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.</li> <li>Stabilized soils shall be broken into suitable size for backfilling or reuse on site.</li> <li>A high standard of housekeeping shall be maintained within the mixing plant area.</li> <li>If necessary, there shall be clear and separated areas for stockpiling of untreated and treated materials.</li> </ul> |                   |                      |                        |   |   |     |                                     |

\* Des - Design, C - Construction, O - Operation, and Dec - Decommissioning

Appendix 3.1

Table A13.6 Implementation Schedule for Marine Ecology

| EIA Ref                                      | Environmental Protection Measures / Mitigation Measures  | Location / Timing   | Implementation Agent | Implementation Stages* |   |   |     | Relevant Legislation and Guidelines                             |
|--|--|---|----------------------|------------------------|---|---|-----|---|
|  |  |   |                      | Des                    | C | O | Dec |   |
| <b>Construction Phase</b>                    |  |   |                      |                        |   |   |     |   |
| <i>For the Whole Project - Schedule 3 DP</i> |  |   |                      |                        |   |   |     |   |
| 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             | √                      |   |   |     | EIAO TM Annex 16 (Section 8.4) & EIAO Guidance Note No. 3/2002. |
| <i>For DP3 - Reclamation Works</i>           |  |   |                      |                        |   |   |     |   |
| 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. |

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| EIA Ref | Environmental Protection Measures / Mitigation Measures   | Location / Timing                     | Implementation Agent | Implementation Stages* |   |   |     | Relevant Legislation and Guidelines                             |
|---------|---|---------------------------------------|----------------------|------------------------|---|---|-----|---|
|         |   |                                       |                      | Des                    | C | O | Dec |   |
| S.9.7.4 | <p>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:</p> <ul style="list-style-type: none"> <li>• Installation of silt curtains during dredging activities</li> <li>• Use of tightly-closed grab dredger</li> <li>• Reduction of dredging rate</li> <li>• Control of grab descending speed</li> <li>• Construction of leading edges of seawall in the early stages of the reclamation works</li> </ul> | Work site / during construction phase | Contractor           |                        | √ |   |     | EIAO TM Annex 16 (Section 8.4) & EIAO Guidance Note No. 3/2002. |
|         | <ul style="list-style-type: none"> <li>• Adoption of multiple-phase construction schedule</li> </ul>  |                                       |                      |                        |   |   |     |   |

Appendix 3.1

| EIA Ref | Environmental Protection Measures / Mitigation Measures  | Location / Timing                     | Implementation Agent | Implementation Stages* |   |   |     | Relevant Legislation and Guidelines                             |
|---------|--|---------------------------------------|----------------------|------------------------|---|---|-----|---|
|         |  |                                       |                      | Des                    | C | O | Dec |   |
| S.9.7.6 | <p>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:</p> <ul style="list-style-type: none"> <li>• Use of Quiet Mechanical Plant during the construction phase shall be adopted wherever possible.</li> <li>• Adoption of multiple-phase construction schedule.</li> <li>• General measures to reduce noise generated during the construction phase (see noise impact assessment) shall be effectively implemented.</li> </ul> | Work site / during construction phase | Contractor           |                        | √ |   |     | EIAO TM Annex 16 (Section 8.4) & EIAO Guidance Note No. 3/2002. |
| S.9.7.7 | 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           |                        | √ |   |     | EIAO TM Annex 16 (Section 8.4) & EIAO Guidance Note No. 3/2002. |

\*Des - Design, C - Construction, O - Operation, and Dec - Decommissioning

Appendix 3.1

**Table A13.7 Implementation Schedule for Landscape and Visual**

| EIA Ref  | Environmental Protection Measures / Mitigation Measures  | Location / Timing                     | Implementation Agent | Implementation Stages* |   |   |     | Relevant Legislation and Guidelines |
|--|--|---------------------------------------|----------------------|------------------------|---|---|-----|-------------------------------------|
|  |  |                                       |                      | Des                    | C | O | Dec |                                     |
| <b>Construction Phase</b>                          |  |                                       |                      |                        |   |   |     |                                     |
| <b>For the Whole Project</b>                       |  |                                       |                      |                        |   |   |     |                                     |
| 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           | √                      | √ |   |     | 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           | √                      | √ |   |     | EIAO TM                             |
| Table 10.5   | CM3 Trees unavoidably affected by the works shall be transplanted where practical.   | Work site / During Construction Phase | Contractor           | √                      | √ |   |     | EIAO TM                             |
| Table 10.5   | CM4 Compensatory tree planting shall be provided to compensate for felled trees.   | Work site / During Construction Phase | Contractor           | √                      | √ |   |     | 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                             |
| <b>For DPI – CWB (Within the Project Boundary)</b> |  |                                       |                      |                        |   |   |     |                                     |
| 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           |                        | √ |   |     | 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           | √                      | √ |   |     | EIAO TM                             |
| Table 10.5   | CM3 Trees unavoidably affected by the works shall be transplanted where practical.   | Work site / During Construction Phase | Contractor           | √                      | √ |   |     | EIAO TM                             |
| Table 10.5   | CM4 Compensatory tree planting shall be provided to compensate for felled trees.   | Work site / During Construction Phase | Contractor           | √                      | √ |   |     | EIAO TM                             |
| Table 10.5   | CM5 Control of night-time lighting.  | Work site / During Construction Phase | Contractor           |                        | √ |   |     | EIAO TM                             |

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| EIA Ref                                       | Environmental Protection Measures / Mitigation Measures  | Location / Timing                     | Implementation Agent | Implementation Stages* |   |   |     | Relevant Legislation and Guidelines |
|---|--|---------------------------------------|----------------------|------------------------|---|---|-----|-------------------------------------|
|   |  |                                       |                      | Des                    | C | O | Dec |                                     |
| Table 10.5                                    | CM6 Erection of decorative screen hoarding compatible with the surrounding setting.  | Work site / During Construction Phase | Contractor           |                        | √ |   |     | EIAO TM                             |
| <b>For DP2 – WDII Major Roads (Road P2)</b>   |  |                                       |                      |                        |   |   |     |                                     |
| 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           | √                      | √ |   |     | 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           | √                      | √ |   |     | EIAO TM                             |
| Table 10.5                                    | CM3 Trees unavoidably affected by the works shall be transplanted where practical.   | Work site / During Construction Phase | Contractor           | √                      | √ |   |     | EIAO TM                             |
| Table 10.5                                    | CM4 Compensatory tree planting shall be provided to compensate for felled trees.   | Work site / During Construction Phase | Contractor           | √                      | √ |   |     | 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                             |
| <b>For DP3 – Reclamation Works</b>            |  |                                       |                      |                        |   |   |     |                                     |
| 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                             |
| <b>For DP5 – Wan Chai East Sewage Outfall</b> |  |                                       |                      |                        |   |   |     |                                     |
| Refer to EIA-058/2001 Table 10.13             | CM2 Minimisation of works areas.   | Work site / During Construction Phase | Contractor           |                        | √ |   |     | EIAO TM                             |
| Refer to EIA-058/2001 Table 10.13             | CM3 Erection of decorative hoardings.  | Work site / During Construction Phase | Contractor           |                        | √ |   |     | EIAO TM                             |

Appendix 3.1

| EIA Ref   | Environmental Protection Measures / Mitigation Measures   | Location / Timing                                    | Implementation Agent | Implementation Stages* |   |   |     | Relevant Legislation and Guidelines |
|---|---|--|----------------------|------------------------|---|---|-----|-------------------------------------|
|   |   |  |                      | Des                    | C | O | Dec |                                     |
| Refer to EIA-058/2001 Table 10.13   | CM4 Control night-time lighting.  | Work site / During Construction Phase                | Contractor           |                        | √ |   |     | 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           |                        | √ |   |     | EIAO TM                             |
| <b>For DP6 – Cross-Harbour Water Mains from Wan Chai to Tsim Sha Tsui</b> |   |  |                      |                        |   |   |     |                                     |
| Refer to EIA-058/2001 Table 10.13   | CM2 Minimisation of works areas.  | Work site / During Construction Phase                | Contractor           |                        | √ |   |     | EIAO TM                             |
| Refer to EIA-058/2001 Table 10.13   | CM3 Erection of decorative hoardings.   | Work site / During Construction Phase                | Contractor           |                        | √ |   |     | EIAO TM                             |
| Refer to EIA-058/2001 Table 10.13   | CM4 Control night-time lighting.  | Work site / During Construction Phase                | Contractor           |                        | √ |   |     | 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           |                        | √ |   |     | EIAO TM                             |
| <b>Operation Phase</b>  |   |  |                      |                        |   |   |     |                                     |
| <b>For the Whole Project - Schedule 3 DP</b>                              |   |  |                      |                        |   |   |     |                                     |
| 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             | √                      | √ | √ |     | 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             | √                      | √ | √ |     | ETWB TCW 2/2004                     |

Appendix 3.1

| EIA Ref  | Environmental Protection Measures / Mitigation Measures   | Location / Timing                                    | Implementation Agent | Implementation Stages* |   |   |     | Relevant Legislation and Guidelines |
|--|---|--|----------------------|------------------------|---|---|-----|-------------------------------------|
|  |   |  |                      | Des                    | C | O | Dec |                                     |
| 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/            | √                      | √ | √ |     | ETWB TCW 2/2004                     |
| 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 <sup>4</sup>    | √                      | √ | √ |     | 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             | √                      | √ | √ |     | 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             | √                      | √ | √ |     | ETWB TCW 2/2004                     |
| <b>For DP1 – CWB (Within the Project Boundary)</b> |   |  |                      |                        |   |   |     |                                     |
| 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 | HyD                  | √                      | √ | √ |     | 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 | HyD                  | √                      | √ | √ |     | 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                  | √                      | √ | √ |     | 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                  | √                      | √ | √ |     | 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 | HyD                  | √                      | √ | √ |     | ETWB TCW 2/2004                     |
| <b>For DP2 – WDII Major Roads (Road P2)</b>        |   |  |                      |                        |   |   |     |                                     |

<sup>4</sup> CEDD will identify an implementation agent

Appendix 3.1

| EIA Ref                            | Environmental Protection Measures / Mitigation Measures   | Location / Timing                                    | Implementation Agent | Implementation Stages* |   |   |     | Relevant Legislation and Guidelines |
|------------------------------------|---|--|----------------------|------------------------|---|---|-----|-------------------------------------|
|                                    |   |  |                      | Des                    | C | O | 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             |                        | √ | √ |     | 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             |                        | √ | √ |     | 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             |                        | √ | √ |     | 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             |                        | √ | √ |     | ETWB TCW 2/2004                     |
| <b>For DP3 – Reclamation Works</b> |   |  |                      |                        |   |   |     |                                     |
| 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 <sup>5</sup>    | √                      | √ | √ |     | ETWB TCW 2/2004                     |

\*Des - Design, C - Construction, O – Operation, and Dec - Decommissioning

<sup>5</sup> CEDD will identify an implementation agent





***Appendix 4.1***

***Action and Limit Level***

**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) <sup>Note 1</sup> |

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 Quality Monitoring**

| Monitoring Location | 1-hour TSP Level in $\mu\text{g}/\text{m}^3$ |             | 24-hour TSP Level in $\mu\text{g}/\text{m}^3$ |             |
|---------------------|--|-------------|---|-------------|
|                     | Action Level                                 | Limit Level | Action Level                                  | Limit Level |
| CMA1b               | 320.1  | 500         | 176.7   | 260         |
| CMA2a               | 323.4  | 500         | 169.5   | 260         |
| CMA3a               | 311.3  | 500         | 171.0   | 260         |
| CMA4a               | 312.5  | 500         | 171.2   | 260         |
| CMA5b               | 332.0  | 500         | 181.0   | 260         |
| CMA6a               | 300.1  | 500         | 187.3   | 260         |

**Action and Limit Level for Water Quality Monitoring**

| Parameters                   | Dry Season |       | Wet Season |       |
|------------------------------|------------|-------|------------|-------|
|                              | Action     | Limit | Action     | Limit |
| <b>WSD Salt Water Intake</b> |            |       |            |       |
| SS in $\text{mg L}^{-1}$     | 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  |
| <b>Cooling Water Intake</b>  |            |       |            |       |
| SS in $\text{mg L}^{-1}$     | 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 Level for Enhance DO Monitoring**

| Parameters  | Depth              | Dry Season |       | Wet Season |       |
|-------------|--------------------|------------|-------|------------|-------|
|             |                    | Action     | Limit | Action     | Limit |
| C6          | Surface and Middle | 3.13       | 2.00  | 2.60       | 2.00  |
|             | Bottom             | 4.14       | 3.33  | 2.91       | 2.34  |
| C7          | Surface and Middle | 3.87       | 3.09  | 3.31       | 2.57  |
|             | Bottom             | 3.91       | 3.53  | 2.75       | 2.48  |
| Ex-WPCWA SW | Surface and Middle | 3.84       | 3.73  | 3.19       | 3.10  |
|             | Bottom             | 4.71       | 4.63  | 3.31       | 3.25  |
| Ex-WPCWA SE | Surface and Middle | 4.26       | 3.61  | 3.55       | 3.00  |
|             | Bottom             | 5.36       | 5.35  | 3.76       | 3.76  |

**Action and Limit Levels for Odour Patrol**

| Parameters   | Action  | Limit  |
|--|---|--|
| Odour Nuisance (from odour intensity analysis or odour patrol) | <ul style="list-style-type: none"> <li>• When two documented complaint are received; or</li> <li>• Odour Intensity of 2 is measured from odour intensity analysis.</li> </ul> | <ul style="list-style-type: none"> <li>• Five or more consecutive genuine documented complaints within a week; or</li> <li>• Odour Intensity of 3 or above is measured from odour intensity analysis.</li> </ul> |



***Appendix 4.2***

***Copies of Calibration Certificates***



## CERTIFICATE OF CALIBRATION

Certificate No.: 16CA1117 01-01 Page 1 of 2

### Item tested

|                       |                            |   |            |
|-----------------------|----------------------------|---|------------|
| Description:          | Sound Level Meter (Type 1) | , | Microphone |
| Manufacturer:         | B & K                      | , | B & K      |
| Type/Model No.:       | 2236                       | , | 4188       |
| Serial/Equipment No.: | 2100736                    | , | 2288941    |
| Adaptors used:        | -                          | , | -          |

### Item submitted by

|                      |                         |
|----------------------|-------------------------|
| Customer Name:       | Lam Geotechnics Limited |
| Address of Customer: | -                       |
| Request No.:         | -                       |
| Date of receipt:     | 17-Nov-2016             |

Date of test: 18-Nov-2016

### Reference equipment used in the calibration

| Description:                    | Model:   | Serial No. | Expiry Date: | Traceable to: |
|---------------------------------|----------|------------|--------------|---------------|
| Multi function sound calibrator | B&K 4226 | 2288444    | 18-Jun-2017  | CIGISMEC      |
| Signal generator                | DS 360   | 33873      | 18-Apr-2017  | CEPREI        |
| Signal generator                | DS 360   | 61227      | 18-Apr-2017  | CEPREI        |

### Ambient conditions

|                    |              |
|--------------------|--------------|
| Temperature:       | 23 ± 1 °C    |
| Relative humidity: | 50 ± 10 %    |
| Air pressure:      | 1005 ± 5 hPa |

### Test specifications

- 1, The Sound Level Meter has been calibrated in accordance with the requirements as specified in BS 7580: Part 1: 1997 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%.
- 3, The acoustic calibration was performed using an B&K 4226 sound calibrator and corrections was applied for the difference between the free-field and pressure responsiveness of the Sound Level Meter.

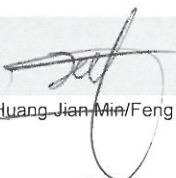
### Test results

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.

Actual Measurement data are documented on worksheets.

Approved Signatory:

  
Huang Jian Min/Feng Jun Qi

Date: 21-Nov-2016

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.



## CERTIFICATE OF CALIBRATION

(Continuation Page)

Certificate No.: 16CA1117 01-01

Page 2 of 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 Uncertainty (dB) | Coverage Factor |
|-------------------------|--|---------|---------------------------|-----------------|
| Self-generated noise    | A  | Pass    | 0.3                       |                 |
|                         | C  | 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                       |                 |
|                         | A  | Pass    | 0.3                       |                 |
|                         | C  | 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 1/10 <sup>3</sup> at 4kHz | Pass    | 0.3                       |                 |
|                         | 1 ms burst duty factor 1/10 <sup>4</sup> 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 Uncertainty (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.

- End -

Calibrated by:

Date:

Fung Chi Yip  
18-Nov-2016

Checked by:

Date:

Lam Tze Wai  
21-Nov-2016

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.





## CERTIFICATE OF CALIBRATION

Certificate No.: 16CA0513 01-02

Page: 1 of 2

### Item tested

Description: Acoustical Calibrator (Class 1)  
Manufacturer: Rion Co., Ltd.  
Type/Model No.: NC-73  
Serial/Equipment No.: 10465798  
Adaptors used: -

### Item submitted by

Customer: Lam Geotechnics Ltd.  
Address of Customer: -  
Request No.: -  
Date of receipt: 13-May-2016

Date of test: 17-May-2016

### Reference equipment used in the calibration

| Description:            | Model:   | Serial No. | Expiry Date: | Traceable to: |
|-------------------------|----------|------------|--------------|---------------|
| Lab standard microphone | B&K 4180 | 2412857    | 14-Apr-2017  | SCL           |
| Preamplifier            | B&K 2673 | 2239857    | 28-Apr-2017  | CEPREI        |
| Measuring amplifier     | B&K 2610 | 2346941    | 26-Apr-2017  | CEPREI        |
| Signal generator        | DS 360   | 61227      | 18-Apr-2017  | CEPREI        |
| Digital multi-meter     | 34401A   | US36087050 | 18-Apr-2017  | CEPREI        |
| Audio analyzer          | 8903B    | GB41300350 | 19-Apr-2017  | CEPREI        |
| Universal counter       | 53132A   | MY40003662 | 19-Apr-2017  | CEPREI        |

### Ambient conditions

Temperature:  $22 \pm 1$  °C  
Relative humidity:  $55 \pm 10$  %  
Air pressure:  $1010 \pm 5$  hPa

### Test specifications

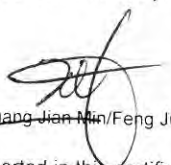
- The Sound Calibrator has been calibrated in accordance with the requirements as specified in IEC 60942 1997 Annex B and the lab calibration procedure SMTP004-CA-156.
- The calibrator was tested with its axis vertical facing downwards at the specific frequency using insert voltage technique.
- The results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

### Test results

This is to certify that the sound calibrator conforms to the requirements of annex B of IEC 60942: 1997 for the conditions under which the test was performed. This does not imply that the sound calibrator meets IEC 60942 under any other conditions.

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

Approved Signatory:

  
Huang Jian Min/Feng Jun Qi

Date: 18-May-2016

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.





# CERTIFICATE OF CALIBRATION

(Continuation Page)

Certificate No.: 16CA0513 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.

| Frequency Shown<br>Hz | Output Sound Pressure Level Setting<br>dB | Measured Output Sound Pressure Level<br>dB | (Output level in dB re 20 µPa) |                            |
|-----------------------|---|--|--------------------------------|----------------------------|
|                       |   |  | Estimated Uncertainty<br>dB    | Expanded Uncertainty<br>dB |
| 1000                  | 94.00                                     | 93.96                                      | 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 = 967.3 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 = 0.8 %  
 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:

Date:

Fung Chi Yip  
17-May-2016

End

Checked by:

Date:

Lam Tze Wai  
18-May-2016

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.



## EQUIPMENT PERFORMANCE CHECK / CALIBRATION REPORT

Report No. : HK1610567  
 Project Name : EQUIPMENT PERFORMANCE CHECK/CALIBRATION REPORT  
 Date of Issue : 25/10/2016

Customer : LAM GEOTECHNICS LIMITED  
 Address : 11/F., CENTRE POINT, 181-185 GLOUCESTER ROAD, WAN CHAI, HONG KONG

---

Calibration Job No. : HK1610567  
 Test Item No. : HK1610567-01  
 Test Item Details

Test Item Description : Multifunctional Meter  
 Manufacturer : YSI  
 Model No. : Professional Plus  
 Serial No. : 16J100298  
 Performance Method : Checked according to in-house method CAL005  
 (References: Temperature (Section 6 of International Accreditation New Zealand Technical Guide No. 3 Second edition March 2008: Working Thermometer Calibration Procedure), pH value (APHA 21e 4500H:B), Salinity (Refer to Conductivity APHA 19e 2510B ) , Dissolved oxygen (APHA 19e 4500-O,C))

Test Item Receipt Date : 20-Oct-16  
 Test Item Calibration Date : 24-Oct-16

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- Notes :
1. This report shall not be reproduced, except in full, without prior approval from Pilot Testing Limited.
  2. Results relate to item(s) as received.
  3. ± indicates the tolerance limit
  4. N/A = Not applicable
  5. APHA - American Public Health Association, American Water Works Association and Water Environment Federation, Standard Methods for the Examination of Water and Wastewater, APHA-AWWA-WEF. USA
  6. DO, pH, salinity and temperature performance check was conducted by Pilot Testing Limited.
  7. Because of high sensitivity and ease of measurement, the conductivity method (according to APHA 19e 2510) is used to determine salinity.

Approved Signatory :

Issue Date:

25/10/2016

Ms. Wong Po Yan, Pauline  
 (Testing Engineer)


**REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION**

**WORK ORDER:** HK1610567  
**DATE OF ISSUE:** 25/10/2016  
**CLIENT:** LAM GEOTECHNICS LIMITED

|                                 |                       |
|---------------------------------|-----------------------|
| <b>Equipment Type</b>           | Multifunctional Meter |
| <b>Manufacturer</b>             | YSI                   |
| <b>Model No.</b>                | Professional Plus     |
| <b>Serial No.</b>               | 16J100298             |
| <b>Date of Calibration</b>      | 24-Oct-16             |
| <b>Date of next Calibration</b> | 24-Jan-17             |

**Parameters:**

**Temperature (Method Ref: Section 6 of International Accreditation New Zealand Technical Guide No.3 Second edition March 2008: Working Thermometer Calibration Procedure)**

| Reference Reading (°C) | Display Reading (°C) | Deviation (°C) |
|------------------------|----------------------|----------------|
| 4.5                    | 4.7                  | 0.2            |
| 15.0                   | 14.9                 | -0.1           |
| 24.6                   | 24.6                 | 0.0            |
| Tolerance Limit        |                      | ±2.0           |

**pH Value (Method Ref: APHA21e, 4500H:B)**

| Expected Reading (pH unit) | Reference Reading (pH unit) | Display Reading (pH unit) | Deviation (pH unit) |
|----------------------------|-----------------------------|---------------------------|---------------------|
| 4.0                        | 4.00                        | 3.92                      | -0.08               |
| 7.0                        | 6.96                        | 7.07                      | 0.11                |
| 10.0                       | 9.98                        | 9.97                      | -0.01               |
| Tolerance Limit            |                             |                           | ±0.20               |

**Conductivity (Method Ref: APHA 19e, 2510)**

| KCl concentration (mol/L) | Reference Reading (ms/cm) | Display Reading (ms/cm) | Deviation (%) |
|---------------------------|---------------------------|-------------------------|---------------|
| 0.0000                    | 0.00                      | 0.00                    | --            |
| 0.1000                    | 12.81                     | 12.87                   | 0.47          |
| 0.2000                    | 25.20                     | 24.92                   | -1.11         |
| 0.5000                    | 58.80                     | 58.60                   | -0.34         |
| Tolerance Limit           |                           |                         | ±2.0          |

**Dissolved Oxygen (DO) (Method Ref: APHA 19e, 4500-O, C)**

| Reference DO reading (mg/L) | DO reading od DO probe (mg/L) | Deviation (mg/L) |
|-----------------------------|-------------------------------|------------------|
| 7.00                        | 7.10                          | 0.10             |
| 4.76                        | 4.79                          | 0.03             |
| 4.64                        | 4.61                          | -0.03            |
| Tolerance Limit             |                               | ±0.20            |

- Remarks:
- (1) Maxium tolerance and calibration frequency stated in the report, unless otherwise stated, the internal acceptance criteria of Pilot Testing Limited will be followed.
  - (2) Displayed reading presents the figures shown on item under calibration/checking regardless of equipment precision or significant figures.
  - (3) Because of high sensitivity and ease of measurement, the conductivity method (accoridng to APHA 19e 2510) is used to determine salinity.

- End of Report -



## EQUIPMENT PERFORMANCE CHECK / CALIBRATION REPORT

**Report No.** : HK1710077  
**Project Name** : EQUIPMENT PERFORMANCE CHECK/CALIBRATION REPORT  
**Date of Issue** : 27/01/2017  
  
**Customer** : LAM GEOTECHNICS LIMITED  
**Address** : 11/F., CENTRE POINT, 181-185 GLOUCESTER ROAD, WAN CHAI, HONG KONG

---

**Calibration Job No.** : HK1710077  
**Test Item No.** : HK1710077-01  
**Test Item Details**  
**Test Item Description** : Sonde  
**Manufacturer** : YSI  
**Model No.** : Professional Plus  
**Serial No.** : 14E100105  
**Performance Method** : Checked according to in-house method CAL005  
 (References: Temperature (Section 6 of International Accreditation New Zealand Technical Guide No. 3 Second edition March 2008: Working Thermometer Calibration Procedure), pH value (APHA 21e 4500H:B), Salinity (Refer to Conductivity APHA 19e 2510B ) , Dissolved oxygen (APHA 19e 4500-O,C))  
  
**Test Item Receipt Date** : 25/01/2017  
**Test Item Calibration Date** : 26/01/2017

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- Notes :
1. This report shall not be reproduced, except in full, without prior approval from Pilot Testing Limited.
  2. Results relate to item(s) as received.
  3.  $\pm$  indicates the tolerance limit
  4. N/A = Not applicable
  5. APHA - American Public Health Association, American Water Works Association and Water Environment Federation, Standard Methods for the Examination of Water and Wastewater, APHA-AWWA-WEF. USA
  6. DO, pH, salinity and temperature performance check was conducted by Pilot Testing Limited.
  7. Because of high sensitivity and ease of measurement, the conductivity method (according to APHA 19e 2510) is used to determine salinity.

Approved Signatory

:

Ms. Wong Po Yan, Pauline  
(Testing Engineer)

Issue Date:

27/01/2017




**REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION**

**WORK ORDER:** HK1710077  
**DATE OF ISSUE:** 27/01/2017  
**CLIENT:** LAM GEOTECHNICS LIMITED

|                                 |                   |
|---------------------------------|-------------------|
| <b>Equipment Type</b>           | Sonde             |
| <b>Manufacturer</b>             | YSI               |
| <b>Model No.</b>                | Professional Plus |
| <b>Serial No.</b>               | 14E100105         |
| <b>Date of Calibration</b>      | 26-Jan-17         |
| <b>Date of next Calibration</b> | 26-Apr-17         |

**Parameters:**

**Temperature (Method Ref: Section 6 of International Accreditation New Zealand Technical Guide No.3 Second edition March 2008: Working Thermometer Calibration Procedure)**

| Reference Reading (°C) | Display Reading (°C) | Deviation (°C) |
|------------------------|----------------------|----------------|
| 7.2                    | 7.2                  | 0.0            |
| 14.9                   | 15.1                 | 0.2            |
| 29.4                   | 29.0                 | -0.4           |
|                        | Tolerance Limit      | ±2.0           |

**pH Value (Method Ref: APHA21e, 4500H:B)**

| Expected Reading (pH unit) | Reference Reading (pH unit) | Display Reading (pH unit) | Deviation (pH unit) |
|----------------------------|-----------------------------|---------------------------|---------------------|
| 4.0                        | 3.97                        | 3.90                      | -0.07               |
| 7.0                        | 7.00                        | 7.17                      | 0.17                |
| 10.0                       | 10.00                       | 9.95                      | -0.05               |
|                            | Tolerance Limit             |                           | ±0.20               |

**Conductivity (Method Ref: APHA 19e, 2510)**

| KCl concentration (mol/L) | Reference Reading (ms/cm) | Display Reading (ms/cm) | Deviation (%) |
|---------------------------|---------------------------|-------------------------|---------------|
| 0.0000                    | 0.00                      | 0.00                    | --            |
| 0.1000                    | 11.82                     | 11.59                   | -1.95         |
| 0.2000                    | 22.60                     | 22.35                   | -1.11         |
| 0.5000                    | 51.30                     | 50.50                   | -1.56         |
|                           | Tolerance Limit           |                         | ±2.0          |

**Dissolved Oxygen (DO) (Method Ref: APHA 19e, 4500-O, C)**

| Reference DO reading (mg/L) | DO reading od DO probe (mg/L) | Deviation (mg/L) |
|-----------------------------|-------------------------------|------------------|
| 9.90                        | 9.98                          | 0.08             |
| 8.30                        | 8.17                          | -0.13            |
| 7.68                        | 7.57                          | -0.11            |
|                             | Tolerance Limit               | ±0.20            |

- Remarks:
- (1) Maximum tolerance and calibration frequency stated in the report, unless otherwise stated, the internal acceptance criteria of Pilot Testing Limited will be followed.
  - (2) Displayed reading presents the figures shown on item under calibration/checking regardless of equipment precision or significant figures.
  - (3) Because of high sensitivity and ease of measurement, the conductivity method (according to APHA 19e 2510) is used to determine salinity.

- End of Report -



## EQUIPMENT PERFORMANCE CHECK / CALIBRATION REPORT

**Report No.** : HK1610730  
**Project Name** : EQUIPMENT PERFORMANCE CHECK/CALIBRATION REPORT  
**Date of Issue** : 23/12/2016  
  
**Customer** : LAM GEOTECHNICS LIMITED  
**Address** : 11/F., CENTRE POINT, 181-185 GLOUCESTER ROAD, WAN CHAI, HONG KONG

---

**Calibration Job No.** : HK1610730  
**Test Item No.** : HK1610730-01  
**Test Item Details**  
**Test Item Description** : Sonde  
**Manufacturer** : YSI  
**Model No.** : Professional Plus  
**Serial No.** : 14M100277  
**Performance Method** : Checked according to in-house method CAL005  
 (References: Temperature (Section 6 of International Accreditation New Zealand Technical Guide No. 3 Second edition March 2008: Working Thermometer Calibration Procedure), pH value (APHA 21e 4500H:B), Salinity (Refer to Conductivity APHA 19e 2510B ) , Dissolved oxygen (APHA 19e 4500-O,C))  
  
**Test Item Receipt Date** : 22-Dec-16  
**Test Item Calibration Date** : 23-Dec-16

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- Notes :
1. This report shall not be reproduced, except in full, without prior approval from Pilot Testing Limited.
  2. Results relate to item(s) as received.
  3.  $\pm$  indicates the tolerance limit
  4. N/A = Not applicable
  5. APHA - American Public Health Association, American Water Works Association and Water Environment Federation, Standard Methods for the Examination of Water and Wastewater, APHA-AWWA-WEF. USA
  6. DO, pH, salinity and temperature performance check was conducted by Pilot Testing Limited.
  7. Because of high sensitivity and ease of measurement, the conductivity method (according to APHA 19e 2510) is used to determine salinity.

Approved Signatory

:

Ms. Wong Po Yan, Pauline  
(Testing Engineer)

Issue Date:

23/12/2016




**REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION**

**WORK ORDER:** HK1610730  
**DATE OF ISSUE:** 23/12/2016  
**CLIENT:** LAM GEOTECHNICS LIMITED

|                                 |                   |
|---------------------------------|-------------------|
| <b>Equipment Type</b>           | Sonde             |
| <b>Manufacturer</b>             | YSI               |
| <b>Model No.</b>                | Professional Plus |
| <b>Serial No.</b>               | 14M100277         |
| <b>Date of Calibration</b>      | 23-Dec-16         |
| <b>Date of next Calibration</b> | 24-Mar-17         |

**Parameters:**

**Temperature (Method Ref: Section 6 of International Accreditation New Zealand Technical Guide No.3 Second edition March 2008: Working Thermometer Calibration Procedure)**

| Reference Reading (°C) | Display Reading (°C)   | Deviation (°C) |
|------------------------|------------------------|----------------|
| 9.6                    | 9.4                    | -0.2           |
| 19.1                   | 19.3                   | 0.2            |
| 28.1                   | 28.3                   | 0.2            |
|                        | <b>Tolerance Limit</b> | <b>±2.0</b>    |

**pH Value (Method Ref: APHA21e, 4500H:B)**

| Expected Reading (pH unit) | Reference Reading (pH unit) | Display Reading (pH unit) | Deviation (pH unit) |
|----------------------------|-----------------------------|---------------------------|---------------------|
| 4.0                        | 4.07                        | 4.10                      | 0.03                |
| 7.0                        | 6.95                        | 7.04                      | 0.09                |
| 10.0                       | 9.92                        | 9.90                      | -0.02               |
|                            | <b>Tolerance Limit</b>      |                           | <b>±0.20</b>        |

**Conductivity (Method Ref: APHA 19e, 2510)**

| KCl concentration (mol/L) | Reference Reading (ms/cm) | Display Reading (ms/cm) | Deviation (%) |
|---------------------------|---------------------------|-------------------------|---------------|
| 0.0000                    | 0.00                      | 0.00                    | --            |
| 0.1000                    | 12.40                     | 12.37                   | -0.24         |
| 0.2000                    | 23.80                     | 23.36                   | -1.85         |
| 0.5000                    | 53.10                     | 52.80                   | -0.56         |
|                           | <b>Tolerance Limit</b>    |                         | <b>±2.0</b>   |

**Dissolved Oxygen (DO) (Method Ref: APHA 19e, 4500-O, C)**

| Reference DO reading (mg/L) | DO reading od DO probe (mg/L) | Deviation (mg/L) |
|-----------------------------|-------------------------------|------------------|
| 8.96                        | 9.05                          | 0.09             |
| 5.84                        | 5.88                          | 0.04             |
| 4.95                        | 5.01                          | 0.06             |
|                             | <b>Tolerance Limit</b>        | <b>±0.20</b>     |

- Remarks:
- (1) Maximum tolerance and calibration frequency stated in the report, unless otherwise stated, the internal acceptance criteria of Pilot Testing Limited will be followed.
  - (2) Displayed reading presents the figures shown on item under calibration/checking regardless of equipment precision or significant figures.
  - (3) Because of high sensitivity and ease of measurement, the conductivity method (according to APHA 19e 2510) is used to determine salinity.
  - (4) Due to the malfunction of pH sensor, there is no reading shown on the multimeter's screen. pH parameter is failed to comply with the tolerance.

- End of Report -



**REPORT OF EQUIPMENT PERFORMANCE CHECK / CALIBRATION**

**Information supplied by customer:**

**CONTACT:** MR. SAM LAM **WORK ORDER:** HK1610515  
**CLIENT:** LAM GEOTECHNICS LIMITED  
**DATE RECEIVED:** 30/09/2016  
**DATE OF ISSUE:** 15/10/2016  
**ADDRESS:** 11/F, CENTRE POINT, 181-185, GLOUCESTER ROAD,  
WANCHAI, HONG KONG  
**PROJECT:** ---

**METHOD OF PERFORMANCE CHECK/ CALIBRATION:**

Ref: APHA22nd ed 2130B

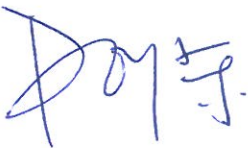
**COMMENTS**

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.

|                             |              |
|-----------------------------|--------------|
| <b>Scope of Test:</b>       | Turbidity    |
| <b>Equipment Type:</b>      | Turbidimeter |
| <b>Brand Name:</b>          | Xin Rui      |
| <b>Model No.:</b>           | WGZ-3B       |
| <b>Serial No.:</b>          | 1403009      |
| <b>Equipment No.:</b>       | ---          |
| <b>Date of Calibration:</b> | 30/09/2016   |

**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.

Approved Signatory:   
Ms. Wong Po Yan, Pauline  
Testing Engineer

Issue Date: 15/10/2016

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**REPORT OF EQUIPMENT PERFORMANCE CHECK / CALIBRATION**

**WORK ORDER:** HK1610515  
**DATE OF ISSUE:** 15/10/2016  
**CLIENT:** LAM GEOTECHNICS LIMITED

|                                  |              |
|----------------------------------|--------------|
| <b>Equipment Type:</b>           | Turbidimeter |
| <b>Brand Name:</b>               | Xin Rui      |
| <b>Model No.:</b>                | WGZ-3B       |
| <b>Serial No.:</b>               | 1403009      |
| <b>Equipment No.:</b>            | ---          |
| <b>Date of Calibration:</b>      | 30/09/2016   |
| <b>Date of next Calibration:</b> | 30/12/2016   |

**Parameters:**  
**Turbidity**

Method Ref: APHA 22<sup>nd</sup> ed. 2130B

| Expected Reading (NTU) | Display Reading (NTU) | Tolerance |
|------------------------|-----------------------|-----------|
| 0                      | 0.00                  | ---       |
| 4                      | 3.96                  | -1.0%     |
| 10                     | 10.0                  | 0.0%      |
| 40                     | 39.1                  | -2.3%     |
| 100                    | 99.0                  | -1.0%     |
| 400                    | 400                   | 0.0%      |
| 1000                   | 995                   | -0.5%     |
|                        | Tolerance Limit (±)   | 10%       |

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

**REPORT OF EQUIPMENT PERFORMANCE CHECK / CALIBRATION****Information supplied by customer:**

**CONTACT:** MR. SAM LAM **WORK ORDER:** HK1710016  
**CLIENT:** LAM GEOTECHNICS LIMITED  
**DATE RECEIVED:** 05/01/2017  
**DATE OF ISSUE:** 10/01/2017  
**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.

|                             |              |
|-----------------------------|--------------|
| <b>Scope of Test:</b>       | Turbidity    |
| <b>Equipment Type:</b>      | Turbidimeter |
| <b>Brand Name:</b>          | Xin Rui      |
| <b>Model No.:</b>           | WGZ-3B       |
| <b>Serial No.:</b>          | 1403009      |
| <b>Equipment No.:</b>       | ---          |
| <b>Date of Calibration:</b> | 09/01/2017   |

## 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.

Approved Signatory:

Ms. Wong Po Yan, Pauline  
Testing Engineer

Issue Date:

10/01/2017

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**REPORT OF EQUIPMENT PERFORMANCE CHECK / CALIBRATION**

**WORK ORDER:** HK1710016  
**DATE OF ISSUE:** 10/01/2017  
**CLIENT:** LAM GEOTECHNICS LIMITED

|                                  |              |
|----------------------------------|--------------|
| <b>Equipment Type:</b>           | Turbidimeter |
| <b>Brand Name:</b>               | Xin Rui      |
| <b>Model No.:</b>                | WGZ-3B       |
| <b>Serial No.:</b>               | 1403009      |
| <b>Equipment No.:</b>            | ---          |
| <b>Date of Calibration:</b>      | 09/01/2017   |
| <b>Date of next Calibration:</b> | 09/04/2017   |

**Parameters:**  
**Turbidity**

Method Ref: APHA 22<sup>nd</sup> ed. 2130B

| Expected Reading (NTU) | Display Reading (NTU)      | Tolerance  |
|------------------------|----------------------------|------------|
| 0                      | 0.00                       | ---        |
| 4                      | 4.02                       | 0.5%       |
| 10                     | 9.81                       | -1.9%      |
| 40                     | 38.7                       | -3.2%      |
| 100                    | 93.4                       | -6.6%      |
| 400                    | 392                        | -2.0%      |
| 1000                   | 1000                       | 0.0%       |
|                        | <b>Tolerance Limit (±)</b> | <b>10%</b> |

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



REPORT OF EQUIPMENT PERFORMANCE CHECK / CALIBRATION

Information supplied by customer:

CONTACT: MR. SAM LAM WORK ORDER: HK1610696
CLIENT: LAM GEOTECHNICS LIMITED
DATE RECEIVED: 05/12/2016
DATE OF ISSUE: 12/12/2016
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.

Table with 2 columns: Test Parameter and Value. Rows include Scope of Test (Turbidity), Equipment Type (Turbidimeter), Brand Name (Xin Rui), Model No. (WGZ-3B), Serial No. (1512046), Equipment No. (---), and Date of Calibration (05/12/2016).

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.

Approved Signatory: Ms. Wong Po Yan, Pauline Testing Engineer

Issue Date: 12/12/2016

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**REPORT OF EQUIPMENT PERFORMANCE CHECK / CALIBRATION**

**WORK ORDER:** HK1610696  
**DATE OF ISSUE:** 12/12/2016  
**CLIENT:** LAM GEOTECHNICS LIMITED

|                                  |              |
|----------------------------------|--------------|
| <b>Equipment Type:</b>           | Turbidimeter |
| <b>Brand Name:</b>               | Xin Rui      |
| <b>Model No.:</b>                | WGZ-3B       |
| <b>Serial No.:</b>               | 1512046      |
| <b>Equipment No.:</b>            | ---          |
| <b>Date of Calibration:</b>      | 05/12/2016   |
| <b>Date of next Calibration:</b> | 05/03/2017   |

**Parameters:****Turbidity**Method Ref: APHA 22<sup>nd</sup> ed. 2130B

| Expected Reading (NTU) | Display Reading (NTU) | Tolerance |
|------------------------|-----------------------|-----------|
| 0                      | 0.00                  | ---       |
| 4                      | 3.94                  | -1.5%     |
| 10                     | 9.30                  | -7.0%     |
| 40                     | 38.4                  | -4.0%     |
| 100                    | 102                   | 2.0%      |
| 400                    | 380                   | -5.0%     |
| 1000                   | 1000                  | 0.0%      |
|                        | Tolerance Limit (±)   | 10%       |

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

**REPORT OF EQUIPMENT PERFORMANCE CHECK / CALIBRATION****Information supplied by customer:**

**CONTACT:** MR. SAM LAM **WORK ORDER:** HK1610731  
**CLIENT:** LAM GEOTECHNICS LIMITED  
**DATE RECEIVED:** 21/12/2016  
**DATE OF ISSUE:** 23/12/2016  
**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.

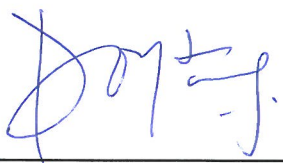
Maximum Tolerance and calibration frequency stated in the report, unless otherwise stated, the internal acceptance criteria of Pilot Testing Limited will be followed.

|                             |              |
|-----------------------------|--------------|
| <b>Scope of Test:</b>       | Turbidity    |
| <b>Equipment Type:</b>      | Turbidimeter |
| <b>Brand Name:</b>          | Xin Rui      |
| <b>Model No.:</b>           | WGZ-3B       |
| <b>Serial No.:</b>          | 1512036      |
| <b>Equipment No.:</b>       | ---          |
| <b>Date of Calibration:</b> | 22/12/2016   |

**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.

Approved Signatory: \_\_\_\_\_



Ms. Wong Po Yan, Pauline  
Testing Engineer

Issue Date: \_\_\_\_\_

23/12/2016

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**REPORT OF EQUIPMENT PERFORMANCE CHECK / CALIBRATION**

**WORK ORDER:** HK1610731  
**DATE OF ISSUE:** 23/12/2016  
**CLIENT:** LAM GEOTECHNICS LIMITED

|                                  |              |
|----------------------------------|--------------|
| <b>Equipment Type:</b>           | Turbidimeter |
| <b>Brand Name:</b>               | Xin Rui      |
| <b>Model No.:</b>                | WGZ-3B       |
| <b>Serial No.:</b>               | 1512036      |
| <b>Equipment No.:</b>            | ---          |
| <b>Date of Calibration:</b>      | 22/12/2016   |
| <b>Date of next Calibration:</b> | 22/03/2017   |

**Parameters:****Turbidity**Method Ref: APHA 22<sup>nd</sup> ed. 2130B

| Expected Reading (NTU) | Display Reading (NTU) | Tolerance |
|------------------------|-----------------------|-----------|
| 0                      | 0.00                  | ---       |
| 4                      | 4.17                  | 4.3%      |
| 10                     | 9.99                  | -0.1%     |
| 40                     | 40.3                  | 0.7%      |
| 100                    | 99.2                  | -0.8%     |
| 400                    | 411                   | 2.8%      |
| 1000                   | 1000                  | 0.0%      |
|                        | Tolerance Limit (±)   | 10%       |

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



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 513.467.9009 FAX

ORIFICE TRANSFER STANDARD CERTIFICATION WORKSHEET TE-5025A

Date - May 20, 2016 Rootsmeter S/N 0438320 Ta (K) - 293  
 Operator Tisch Orifice I.D. - 3166 Pa (mm) - 748.03

| PLATE OR Run # | VOLUME START (m3) | VOLUME STOP (m3) | DIFF VOLUME (m3) | DIFF TIME (min) | METER        | ORFICE         |
|----------------|-------------------|------------------|------------------|-----------------|--------------|----------------|
|                |                   |                  |                  |                 | DIFF Hg (mm) | DIFF H2O (in.) |
| 1              | NA                | NA               | 1.00             | 1.4270          | 3.2          | 2.00           |
| 2              | NA                | NA               | 1.00             | 1.0220          | 6.4          | 4.00           |
| 3              | NA                | NA               | 1.00             | 0.9100          | 7.9          | 5.00           |
| 4              | NA                | NA               | 1.00             | 0.8730          | 8.8          | 5.50           |
| 5              | NA                | NA               | 1.00             | 0.7180          | 12.7         | 8.00           |

DATA TABULATION

| Vstd                                | (x axis) Qstd | (y axis) | Va                        | (x axis) Qa | (y axis) |
|-------------------------------------|---------------|----------|---------------------------|-------------|----------|
| 0.9967                              | 0.6985        | 1.4150   | 0.9957                    | 0.6977      | 0.8851   |
| 0.9925                              | 0.9711        | 2.0010   | 0.9915                    | 0.9701      | 1.2517   |
| 0.9904                              | 1.0883        | 2.2372   | 0.9893                    | 1.0872      | 1.3995   |
| 0.9892                              | 1.1332        | 2.3464   | 0.9882                    | 1.1320      | 1.4678   |
| 0.9840                              | 1.3705        | 2.8299   | 0.9830                    | 1.3691      | 1.7702   |
| Qstd slope (m) = 2.10714            |               |          | Qa slope (m) = 1.31946    |             |          |
| intercept (b) = -0.05158            |               |          | intercept (b) = -0.03226  |             |          |
| coefficient (r) = 0.99978           |               |          | coefficient (r) = 0.99978 |             |          |
| y axis = SQRT[H2O(Pa/760) (298/Ta)] |               |          | y axis = SQRT[H2O(Ta/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 }



## Calibration Data for High Volume Sampler (TSP Sampler)

Location : CMA1b  
 Equipment no. : HVS001

Calibration Date : 22-Dec-16  
 Calibration Due Date : 22-Feb-17

### CALIBRATION OF CONTINUOUS FLOW RECORDER

| Ambient Condition  |     |        |                 |
|--------------------|-----|--------|-----------------|
| Temperature, $T_a$ | 295 | Kelvin | Pressure, $P_a$ |
|                    |     |        | 1019 mmHg       |

| Orifice Transfer Standard Information |           |  |         |                  |          |
|---------------------------------------|-----------|--|---------|------------------|----------|
| Equipment No.                         | Ori002    | Slope, $m_c$   | 2.10714 | Intercept, $b_c$ | -0.05158 |
| Last Calibration Date                 | 20-May-16 | $(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$<br>$= m_c \times Q_{std} + b_c$ |         |                  |          |
| Next Calibration Date                 | 20-May-17 |  |         |                  |          |

| Calibration of TSP |                   |        |              |  |                                      |  |
|--------------------|-------------------|--------|--------------|--|--------------------------------------|--|
| Calibration Point  | Manometer Reading |        |              | $Q_{std}$<br>( $m^3 / \text{min.}$ )<br>X-axis | Continuous Flow Recorder, W<br>(CFM) | IC<br>( $W(P_a/1013.3 \times 298/T_a)^{1/2}/35.31$ )<br>Y-axis |
|                    | (up)              | (down) | (difference) |  |                                      |  |
| 1                  | 1.6               | 1.6    | 3.2          | 0.8801   | 25                                   | 25.1974  |
| 2                  | 2.3               | 2.3    | 4.6          | 1.0504   | 34                                   | 34.2684  |
| 3                  | 3.8               | 3.8    | 7.6          | 1.3431   | 42                                   | 42.3316  |
| 4                  | 4.9               | 4.9    | 9.8          | 1.5219   | 48                                   | 48.3789  |
| 5                  | 6.1               | 6.1    | 12.2         | 1.6952   | 54                                   | 54.4263  |

By Linear Regression of Y on X

Slope, m = 34.3507      Intercept, b = -3.6713  
 Correlation Coefficient\* = 0.9949  
 Calibration Accepted = Yes/No\*\*

\* if Correlation Coefficient < 0.990, check and recalibration again.

\*\* Delete as appropriate.

Remarks : As per client's provided information, the equipment reference no. of the calibrated High Volume Sampler has been re-assigned from EL452 to HVS001 with respect to the update in quality management system.

Calibrated by : Jackey MA  
 Date : 22-Dec-16

Checked by : Pauline Wong  
 Date : 22-Dec-16





## Calibration Data for High Volume Sampler (TSP Sampler)

**Location** : CMA2a **Calibration Date** : 21-Dec-16  
**Equipment no.** : HVS002 **Calibration Due Date** : 21-Feb-17

### CALIBRATION OF CONTINUOUS FLOW RECORDER

| Ambient Condition  |     |        |                 |
|--------------------|-----|--------|-----------------|
| Temperature, $T_a$ | 295 | Kelvin | Pressure, $P_a$ |
|                    |     |        | 1017 mmHg       |

| Orifice Transfer Standard Information |           |  |         |                  |          |
|---------------------------------------|-----------|--|---------|------------------|----------|
| Equipment No.                         | Ori002    | Slope, $m_c$   | 2.10714 | Intercept, $b_c$ | -0.05158 |
| Last Calibration Date                 | 20-May-16 | $\left( H \times P_a / 1013.3 \times 298 / T_a \right)^{1/2}$ $= m_c \times Q_{std} + b_c$ |         |                  |          |
| Next Calibration Date                 | 20-May-17 |  |         |                  |          |

| Calibration of TSP |                   |        |              |   |                                      |  |
|--------------------|-------------------|--------|--------------|---|--------------------------------------|--|
| Calibration Point  | Manometer Reading |        |              | $Q_{std}$<br>( $m^3 / min.$ )<br>X-axis | Continuous Flow Recorder, W<br>(CFM) | IC<br>( $W(P_a/1013.3 \times 298/T_a)^{1/2}/35.31$ )<br>Y-axis |
|                    | (up)              | (down) | (difference) |   |                                      |  |
| 1                  | 1.6               | 1.6    | 3.2          | 0.8793                                  | 28                                   | 28.1933  |
| 2                  | 2.5               | 2.5    | 5.0          | 1.0930                                  | 36                                   | 36.2486  |
| 3                  | 3.6               | 3.6    | 7.2          | 1.3067                                  | 48                                   | 48.3314  |
| 4                  | 4.6               | 4.6    | 9.2          | 1.4739                                  | 54                                   | 54.3729  |
| 5                  | 5.5               | 5.5    | 11.0         | 1.6093                                  | 60                                   | 60.4143  |

By Linear Regression of Y on X

Slope,  $m$  = 44.9481 Intercept,  $b$  = -11.6816  
 Correlation Coefficient\* = 0.9976  
 Calibration Accepted = Yes/No\*\*

\* if Correlation Coefficient < 0.990, check and recalibration again.

\*\* Delete as appropriate.

Remarks : As per client's provided information, the equipment reference no. of the calibrated High Volume Sampler has been  
 re-assigned from EL449 to HVS002 with respect to the update in quality management system.

**Calibrated by** : Jackey MA **Checked by** : Pualine Wong  
**Date** : 21-Dec-16 **Date** : 21-Dec-16





## Calibration Data for High Volume Sampler (TSP Sampler)

Location : CMA3a Calibration Date : 11-Nov-16  
 Equipment no. : HVS012 Calibration Due Date : 11-Jan-17

### CALIBRATION OF CONTINUOUS FLOW RECORDER

| Ambient Condition                     |                   |  |                          |   |                                      |   |
|---------------------------------------|-------------------|--|--------------------------|---|--------------------------------------|---|
| Temperature, T <sub>a</sub>           | 293               | Kelvin   | Pressure, P <sub>a</sub> | 1019  | mmHg                                 |   |
| Orifice Transfer Standard Information |                   |  |                          |   |                                      |   |
| Equipment No.                         | Ori002            | Slope, m <sub>c</sub>  | 2.10714                  | Intercept, b <sub>c</sub>                             | -0.05158                             |   |
| Last Calibration Date                 | 20-May-16         | $\left( H \times P_a / 1013.3 \times 298 / T_a \right)^{1/2}$ $= m_c \times Q_{std} + b_c$ |                          |   |                                      |   |
| Next Calibration Date                 | 20-May-17         |  |                          |   |                                      |   |
| Calibration of TSP                    |                   |  |                          |   |                                      |   |
| Calibration Point                     | Manometer Reading |  |                          | Q <sub>std</sub><br>(m <sup>3</sup> / min.)<br>X-axis | Continuous Flow Recorder, W<br>(CFM) | IC<br>(W(P <sub>a</sub> /1013.3x298/T <sub>a</sub> ) <sup>1/2</sup> /35.31)<br>Y-axis |
|                                       | (up)              | (down)   | (difference)             |   |                                      |   |
| 1                                     | 1.3               | 1.3  | 2.6                      | 0.7984  | 32                                   | 32.3625   |
| 2                                     | 2.1               | 2.1  | 4.2                      | 1.0081  | 38                                   | 38.4305   |
| 3                                     | 3.3               | 3.3  | 6.6                      | 1.2575  | 45                                   | 45.5098   |
| 4                                     | 4.2               | 4.2  | 8.4                      | 1.4155  | 50                                   | 50.5664   |
| 5                                     | 5.2               | 5.2  | 10.4                     | 1.5723  | 56                                   | 56.6344   |
| By Linear Regression of Y on X        |                   |  |                          |   |                                      |   |
| Slope, m                              | =                 | 30.8649  | Intercept, b             | =   | 7.3433                               |   |
| Correlation Coefficient*              | =                 | 0.9982   |                          |   |                                      |   |
| Calibration Accepted                  | =                 | Yes/No**   |                          |   |                                      |   |

\* if Correlation Coefficient < 0.990, check and recalibration again.

\*\* Delete as appropriate.

Remarks : As per client's provided information, the equipment reference no. of the calibrated High Volume Sampler has been re-assigned from EL333 to HVS012 with respect to the update in quality management system.

Calibrated by : Jackey MA Checked by : Pauline Wong  
 Date : 11-Nov-16 Date : 11-Nov-16



## Calibration Data for High Volume Sampler (TSP Sampler)

Location : CMA3a  
 Equipment no. : HVS012  
 Calibration Date : 30-Dec-16  
 Calibration Due Date : 28-Feb-17

### CALIBRATION OF CONTINUOUS FLOW RECORDER

| Ambient Condition           |     |        |                          |
|-----------------------------|-----|--------|--------------------------|
| Temperature, T <sub>a</sub> | 290 | Kelvin | Pressure, P <sub>a</sub> |
|                             |     |        | 1024 mmHg                |

| Orifice Transfer Standard Information |           |  |         |                           |          |
|---------------------------------------|-----------|--|---------|---------------------------|----------|
| Equipment No.                         | Ori002    | Slope, m <sub>c</sub>  | 2.10714 | Intercept, b <sub>c</sub> | -0.05158 |
| Last Calibration Date                 | 20-May-16 | $\left( H \times P_a / 1013.3 \times 298 / T_a \right)^{1/2}$ $= m_c \times Q_{std} + b_c$ |         |                           |          |
| Next Calibration Date                 | 20-May-17 |  |         |                           |          |

| Calibration of TSP |                   |        |              |   |                                      |   |
|--------------------|-------------------|--------|--------------|---|--------------------------------------|---|
| Calibration Point  | Manometer Reading |        |              | Q <sub>std</sub><br>(m <sup>3</sup> / min.)<br>X-axis | Continuous Flow Recorder, W<br>(CFM) | IC<br>(W(P <sub>a</sub> /1013.3x298/T <sub>a</sub> ) <sup>1/2</sup> /35.31)<br>Y-axis |
|                    | (up)              | (down) | (difference) |   |                                      |   |
| 1                  | 1.3               | 1.3    | 2.6          | 0.8043  | 30                                   | 30.5711   |
| 2                  | 2.1               | 2.1    | 4.2          | 1.0156  | 36                                   | 36.6853   |
| 3                  | 3.5               | 3.5    | 7.0          | 1.3040  | 42                                   | 42.7996   |
| 4                  | 4.6               | 4.6    | 9.2          | 1.4913  | 48                                   | 48.9138   |
| 5                  | 5.8               | 5.8    | 11.6         | 1.6716  | 53                                   | 54.0090   |

By Linear Regression of Y on X

Slope, m = 26.5975      Intercept, b = 9.1531  
 Correlation Coefficient\* = 0.9978  
 Calibration Accepted = Yes/Ne\*\*

\* if Correlation Coefficient < 0.990, check and recalibration again.

\*\* Delete as appropriate.

Remarks : As per client's provided information, the equipment reference no. of the calibrated High Volume Sampler has been re-assigned from EL333 to HVS012 with respect to the update in quality management system.

Calibrated by : Jackey MA      Checked by : Pauline Wong  
 Date : 30-Dec-16      Date : 30-Dec-16



## Calibration Data for High Volume Sampler (TSP Sampler)

Location : CMA4a  
 Equipment no. : HVS004

Calibration Date : 11-Nov-16  
 Calibration Due Date : 11-Jan-17

### CALIBRATION OF CONTINUOUS FLOW RECORDER

| Ambient Condition  |     |        |                 |
|--------------------|-----|--------|-----------------|
| Temperature, $T_a$ | 293 | Kelvin | Pressure, $P_a$ |
|                    |     |        | 1019 mmHg       |

| Orifice Transfer Standard Information |           |  |         |                  |          |
|---------------------------------------|-----------|--|---------|------------------|----------|
| Equipment No.                         | Ori002    | Slope, $m_c$   | 2.10714 | Intercept, $b_c$ | -0.05158 |
| Last Calibration Date                 | 20-May-16 | $\left( H \times P_a / 1013.3 \times 298 / T_a \right)^{1/2}$ $= m_c \times Q_{std} + b_c$ |         |                  |          |
| Next Calibration Date                 | 20-May-17 |  |         |                  |          |

| Calibration of TSP |                   |        |              |   |                                      |  |
|--------------------|-------------------|--------|--------------|---|--------------------------------------|--|
| Calibration Point  | Manometer Reading |        |              | $Q_{std}$<br>( $m^3 / min.$ )<br>X-axis | Continuous Flow Recorder, W<br>(CFM) | IC<br>$(W(P_a/1013.3 \times 298/T_a)^{1/2}/35.31)$<br>Y-axis |
|                    | (up)              | (down) | (difference) |   |                                      |  |
| 1                  | 1.4               | 1.4    | 2.8          | 0.8276                                  | 25                                   | 25.2832  |
| 2                  | 2.2               | 2.2    | 4.4          | 1.0312                                  | 32                                   | 32.3625  |
| 3                  | 3.3               | 3.3    | 6.6          | 1.2575                                  | 41                                   | 41.4645  |
| 4                  | 4.3               | 4.3    | 8.6          | 1.4320                                  | 46                                   | 46.5211  |
| 5                  | 5.6               | 5.6    | 11.2         | 1.6307                                  | 52                                   | 52.5891  |

By Linear Regression of Y on X

Slope, m = 34.3403      Intercept, b = -2.7938  
 Correlation Coefficient\* = 0.9982  
 Calibration Accepted = Yes/No\*\*

\* if Correlation Coefficient < 0.990, check and recalibration again.

\*\* Delete as appropriate.

Remarks : As per client's provided information, the equipment reference no. of the calibrated High Volume Sampler has been re-assigned from EL390 to HVS004 with respect to the update in quality management system.

Calibrated by : Jackey MA  
 Date : 11-Nov-16

Checked by : Pauline Wong  
 Date : 11-Nov-16



## Calibration Data for High Volume Sampler (TSP Sampler)

Location : CMA4a Calibration Date : 30-Dec-16  
 Equipment no. : HVS004 Calibration Due Date : 28-Feb-17

### CALIBRATION OF CONTINUOUS FLOW RECORDER

| Ambient Condition           |     |        |                          |           |
|-----------------------------|-----|--------|--------------------------|-----------|
| Temperature, T <sub>a</sub> | 290 | Kelvin | Pressure, P <sub>a</sub> | 1024 mmHg |

| Orifice Transfer Standard Information |           |   |         |                           |          |
|---------------------------------------|-----------|---|---------|---------------------------|----------|
| Equipment No.                         | Ori002    | Slope, m <sub>c</sub>   | 2.10714 | Intercept, b <sub>c</sub> | -0.05158 |
| Last Calibration Date                 | 20-May-16 | $(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$ $= m_c \times Q_{std} + b_c$ |         |                           |          |
| Next Calibration Date                 | 20-May-17 |   |         |                           |          |

| Calibration of TSP |  |        |              |   |                                      |   |
|--------------------|--|--------|--------------|---|--------------------------------------|---|
| Calibration Point  | Manometer Reading<br>H (inches of water) |        |              | Q <sub>std</sub><br>(m <sup>3</sup> / min.)<br>X-axis | Continuous Flow Recorder, W<br>(CFM) | IC<br>(W(P <sub>a</sub> /1013.3x298/T <sub>a</sub> ) <sup>1/2</sup> /35.31)<br>Y-axis |
|                    | (up)                                     | (down) | (difference) |   |                                      |   |
| 1                  | 1.4                                      | 1.4    | 2.8          | 0.8337  | 22                                   | 22.4188   |
| 2                  | 2.1                                      | 2.1    | 4.2          | 1.0156  | 30                                   | 30.5711   |
| 3                  | 3.1                                      | 3.1    | 6.2          | 1.2287  | 40                                   | 40.7615   |
| 4                  | 3.9                                      | 3.9    | 7.8          | 1.3751  | 46                                   | 46.8757   |
| 5                  | 5.2                                      | 5.2    | 10.4         | 1.5841  | 52                                   | 52.9899   |

By Linear Regression of Y on X

Slope, m = 41.6284 Intercept, b = -11.5402  
 Correlation Coefficient\* = 0.9956  
 Calibration Accepted = Yes/No\*\*

\* if Correlation Coefficient < 0.990, check and recalibration again.

\*\* Delete as appropriate.

Remarks : As per client's provided information, the equipment reference no. of the calibrated High Volume Sampler has been re-assigned from EL390 to HVS004 with respect to the update in quality management system.

Calibrated by : Jackey MA Checked by : Pauline Wong  
 Date : 30-Dec-16 Date : 30-Dec-16





### Calibration Data for High Volume Sampler (TSP Sampler)

Location : CMA5b  
 Equipment no. : HVS010

Calibration Date : 11-Nov-16  
 Calibration Due Date : 11-Jan-17

#### CALIBRATION OF CONTINUOUS FLOW RECORDER

| Ambient Condition  |     |        |                 |
|--------------------|-----|--------|-----------------|
| Temperature, $T_a$ | 293 | Kelvin | Pressure, $P_a$ |
|                    |     |        | 1019 mmHg       |

| Orifice Transfer Standard Information |           |  |         |                  |
|---------------------------------------|-----------|--|---------|------------------|
| Equipment No.                         | Ori002    | Slope, $m_c$   | 2.10714 | Intercept, $b_c$ |
|                                       |           |  |         | -0.05158         |
| Last Calibration Date                 | 20-May-16 | $\left( H \times P_a / 1013.3 \times 298 / T_a \right)^{1/2}$ $= m_c \times Q_{std} + b_c$ |         |                  |
| Next Calibration Date                 | 20-May-17 |  |         |                  |

| Calibration of TSP |                   |        |              |   |                                      |  |
|--------------------|-------------------|--------|--------------|---|--------------------------------------|--|
| Calibration Point  | Manometer Reading |        |              | $Q_{std}$<br>( $m^3 / min.$ )<br>X-axis | Continuous Flow Recorder, W<br>(CFM) | IC<br>( $W(P_a/1013.3 \times 298/T_a)^{1/2}/35.31$ )<br>Y-axis |
|                    | (up)              | (down) | (difference) |   |                                      |  |
| 1                  | 1.4               | 1.4    | 2.8          | 0.8276                                  | 32                                   | 32.3625  |
| 2                  | 2.3               | 2.3    | 4.6          | 1.0539                                  | 38                                   | 38.4305  |
| 3                  | 3.5               | 3.5    | 7.0          | 1.2943                                  | 48                                   | 48.5438  |
| 4                  | 4.6               | 4.6    | 9.2          | 1.4802                                  | 52                                   | 52.5891  |
| 5                  | 5.8               | 5.8    | 11.6         | 1.6591                                  | 60                                   | 60.6797  |

By Linear Regression of Y on X

Slope, m = 33.8651      Intercept, b = 3.7484  
 Correlation Coefficient\* = 0.9956  
 Calibration Accepted = Yes/No\*\*

\* if Correlation Coefficient < 0.990, check and recalibration again.

\*\* Delete as appropriate.

Remarks : As per client's provided information, the equipment reference no. of the calibrated High Volume Sampler has been re-assigned from EL222 to HVS010 with respect to the update in quality management system.

Calibrated by : Jackey MA  
 Date : 11-Nov-16

Checked by : Pauline Wong  
 Date : 11-Nov-16



## Calibration Data for High Volume Sampler (TSP Sampler)

Location : CMA5b  
 Equipment no. : HVS010

Calibration Date : 30-Dec-16  
 Calibration Due Date : 28-Feb-17

### CALIBRATION OF CONTINUOUS FLOW RECORDER

| Ambient Condition           |     |        |                          |
|-----------------------------|-----|--------|--------------------------|
| Temperature, T <sub>a</sub> | 290 | Kelvin | Pressure, P <sub>a</sub> |
|                             |     |        | 1024 mmHg                |

| Orifice Transfer Standard Information |           |   |         |                           |
|---------------------------------------|-----------|---|---------|---------------------------|
| Equipment No.                         | Ori002    | Slope, m <sub>c</sub>   | 2.10714 | Intercept, b <sub>c</sub> |
|                                       |           |   |         | -0.05158                  |
| Last Calibration Date                 | 20-May-16 | $(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$ $= m_c \times Q_{std} + b_c$ |         |                           |
| Next Calibration Date                 | 20-May-17 |   |         |                           |

| Calibration of TSP |                   |        |              |   |                                      |   |
|--------------------|-------------------|--------|--------------|---|--------------------------------------|---|
| Calibration Point  | Manometer Reading |        |              | Q <sub>std</sub><br>(m <sup>3</sup> / min.)<br>X-axis | Continuous Flow Recorder, W<br>(CFM) | IC<br>(W(P <sub>a</sub> /1013.3x298/T <sub>a</sub> ) <sup>1/2</sup> /35.31)<br>Y-axis |
|                    | (up)              | (down) | (difference) |   |                                      |   |
| 1                  | 1.4               | 1.4    | 2.8          | 0.8337  | 38                                   | 38.7234   |
| 2                  | 2.3               | 2.3    | 4.6          | 1.0617  | 44                                   | 44.8376   |
| 3                  | 3.5               | 3.5    | 7.0          | 1.3040  | 53                                   | 54.0090   |
| 4                  | 4.5               | 4.5    | 9.0          | 1.4753  | 58                                   | 59.1042   |
| 5                  | 5.8               | 5.8    | 11.6         | 1.6716  | 64                                   | 65.2184   |

By Linear Regression of Y on X

Slope, m = 32.2163                      Intercept, b = 11.4875  
 Correlation Coefficient\* = 0.9987  
 Calibration Accepted = Yes/No\*\*

\* if Correlation Coefficient < 0.990, check and recalibration again.

\*\* Delete as appropriate.

Remarks : As per client's provided information, the equipment reference no. of the calibrated High Volume Sampler has been re-assigned from EL222 to HVS010 with respect to the update in quality management system.

Calibrated by : Jackey MA  
 Date : 30-Dec-16

Checked by : Pauline Wong  
 Date : 30-Dec-16





## Calibration Data for High Volume Sampler (TSP Sampler)

Location : CMA6a  
 Equipment no. : HVS013

Calibration Date : 11-Nov-16  
 Calibration Due Date : 11-Jan-17

### CALIBRATION OF CONTINUOUS FLOW RECORDER

| Ambient Condition  |     |        |                 |
|--------------------|-----|--------|-----------------|
| Temperature, $T_a$ | 293 | Kelvin | Pressure, $P_a$ |
|                    |     |        | 1019 mmHg       |

| Orifice Transfer Standard Information |           |  |         |                  |          |
|---------------------------------------|-----------|--|---------|------------------|----------|
| Equipment No.                         | Ori002    | Slope, $m_c$   | 2.10714 | Intercept, $b_c$ | -0.05158 |
| Last Calibration Date                 | 20-May-16 | $(H \times P_a / 1013.3 \times 298 / T_a)^{1/2}$<br>$= m_c \times Q_{std} + b_c$ |         |                  |          |
| Next Calibration Date                 | 20-May-17 |  |         |                  |          |

| Calibration of TSP |                   |        |              |   |                                      |  |
|--------------------|-------------------|--------|--------------|---|--------------------------------------|--|
| Calibration Point  | Manometer Reading |        |              | $Q_{std}$<br>( $m^3 / min.$ )<br>X-axis | Continuous Flow Recorder, W<br>(CFM) | IC<br>( $W(P_a/1013.3 \times 298/T_a)^{1/2}/35.31$ )<br>Y-axis |
|                    | (up)              | (down) | (difference) |   |                                      |  |
| 1                  | 1.5               | 1.5    | 3.0          | 0.8558                                  | 33                                   | 33.3739  |
| 2                  | 2.2               | 2.2    | 4.4          | 1.0312                                  | 42                                   | 42.4758  |
| 3                  | 3.5               | 3.5    | 7.0          | 1.2943                                  | 48                                   | 48.5438  |
| 4                  | 4.6               | 4.6    | 9.2          | 1.4802                                  | 53                                   | 53.6004  |
| 5                  | 5.9               | 5.9    | 11.8         | 1.6732                                  | 59                                   | 59.6684  |

By Linear Regression of Y on X

Slope,  $m$  = 30.4334      Intercept,  $b$  = 8.9749  
 Correlation Coefficient\* = 0.9909  
 Calibration Accepted = Yes/No\*\*

\* if Correlation Coefficient < 0.990, check and recalibration again.

\*\* Delete as appropriate.

Remarks : As per client's provided information, the equipment reference no. of the calibrated High Volume Sampler has been re-assigned from EL551 to HVS013 with respect to the update in quality management system.

Calibrated by : Jackey MA  
 Date : 11-Nov-16

Checked by : Pauline Wong  
 Date : 11-Nov-16



## Calibration Data for High Volume Sampler (TSP Sampler)

Location : CMA6a  
 Equipment no. : HVS013

Calibration Date : 30-Dec-16  
 Calibration Due Date : 28-Feb-17

### CALIBRATION OF CONTINUOUS FLOW RECORDER

| Ambient Condition  |     |        |                 |
|--------------------|-----|--------|-----------------|
| Temperature, $T_a$ | 290 | Kelvin | Pressure, $P_a$ |
|                    |     |        | 1024 mmHg       |

| Orifice Transfer Standard Information |           |  |         |                  |          |
|---------------------------------------|-----------|--|---------|------------------|----------|
| Equipment No.                         | Ori002    | Slope, $m_c$   | 2.10714 | Intercept, $b_c$ | -0.05158 |
| Last Calibration Date                 | 20-May-16 | $\left( \frac{H \times P_a}{1013.3 \times 298 / T_a} \right)^{1/2}$ $= m_c \times Q_{std} + b_c$ |         |                  |          |
| Next Calibration Date                 | 20-May-17 |  |         |                  |          |

| Calibration of TSP |                     |        |              |                               |                                      |  |
|--------------------|---------------------|--------|--------------|-------------------------------|--------------------------------------|--|
| Calibration Point  | Manometer Reading   |        |              | $Q_{std}$<br>( $m^3 / min.$ ) | Continuous Flow Recorder, W<br>(CFM) | IC<br>$(W(P_a/1013.3 \times 298/T_a)^{1/2}/35.31)$ |
|                    | H (inches of water) |        |              |                               |                                      |  |
|                    | (up)                | (down) | (difference) |                               |                                      |  |
| 1                  | 1.6                 | 1.6    | 3.2          | 0.8896                        | 36                                   | 36.6853  |
| 2                  | 2.5                 | 2.5    | 5.0          | 1.1059                        | 43                                   | 43.8186  |
| 3                  | 3.9                 | 3.9    | 7.8          | 1.3751                        | 52                                   | 52.9899  |
| 4                  | 5.0                 | 5.0    | 10.0         | 1.5538                        | 59                                   | 60.1232  |
| 5                  | 6.3                 | 6.3    | 12.6         | 1.7411                        | 64                                   | 65.2184  |

By Linear Regression of Y on X

Slope, m = 34.1269      Intercept, b = 6.2724  
 Correlation Coefficient\* = 0.9991  
 Calibration Accepted = Yes/No\*\*

\* if Correlation Coefficient < 0.990, check and recalibration again.

\*\* Delete as appropriate.

Remarks : As per client's provided information, the equipment reference no. of the calibrated High Volume Sampler has been re-assigned from EL551 to HVS013 with respect to the update in quality management system.

Calibrated by : Jackey MA  
 Date : 30-Dec-16

Checked by : Pauline Wong  
 Date : 30-Dec-16



***Appendix 5.1***

***Monitoring Schedules for Reporting Month and Coming Reporting Month***

Contract No. HK/2015/01  
Wan Chai Development Phase II and Central-Wan Chai Bypass  
Sampling, Field Measurement and Testing Works (Stage 3)  
Environmental Monitoring Schedule  
January 2017

| Sunday   | Monday  | Tuesday  | Wednesday  | Thursday   | Friday   | Saturday  |
|--|---|--|--|--|--|---|
| 25-Dec   | 26-Dec  | 27-Dec   | 28-Dec   | 29-Dec   | 30-Dec   | 31-Dec  |
|  | Impact WQM<br>Mid-ebb<br>Mid-flood                                      | 11:45<br>17:17   | 24hr TSP<br><br>Noise (daytime)<br>(M1a, M2b)<br><br>Impact WQM<br><br>Mid-flood | 1hr TSP<br><br>Noise (daytime)<br>(M3a, M4b, M5b, M6)<br><br>Impact WQM<br><br>Mid-ebb | Impact WQM<br><br>Mid-flood                          | Impact WQM<br><br>Mid-ebb                           |
| 1-Jan  | 2-Jan   | 3-Jan  | 4-Jan  | 5-Jan  | 6-Jan  | 7-Jan   |
|  |   | 24hr TSP<br><br>Noise (daytime)<br>(M1a, M2b, M3a, M4b, M5b, M6)<br><br>Impact WQM<br>Mid-ebb<br>Mid-flood                       | 24hr TSP<br>(CMA1b)<br>1hr TSP<br><br>3:02<br>10:25                              | Impact WQM<br>Mid-ebb<br>Mid-flood   | 4:26<br>11:58  | Impact WQM<br>Mid-ebb<br>Mid-flood                  |
| 8-Jan  | 9-Jan   | 10-Jan   | 11-Jan   | 12-Jan   | 13-Jan   | 14-Jan  |
| 24hr TSP<br><br>Impact WQM<br>Mid-flood<br>Mid-ebb | 15:19<br>22:19  | 24hr TSP<br>(CMA4a)<br>1hr TSP<br><br>Noise (daytime)<br>(M1a, M2b, M3a, M4b, M5b, M6)<br><br>Impact WQM<br>Mid-flood<br>Mid-ebb | Impact WQM<br>Mid-flood<br>Mid-ebb   | 16:57<br>23:54   | Impact WQM<br>Mid-flood                              | 24hr TSP<br><br>Impact WQM<br>Mid-ebb               |
| 15-Jan   | 16-Jan  | 17-Jan   | 18-Jan   | 19-Jan   | 20-Jan   | 21-Jan  |
| 1hr TSP<br><br>Impact WQM<br>Mid-ebb<br>Mid-flood  | 2:46<br>9:42  |  | Noise (daytime)<br>(M3a, M4b, M5b, M6)<br><br>Impact WQM<br>Mid-ebb<br>Mid-flood | Noise (daytime)<br>(M1a, M2b)<br><br>3:59<br>11:02                                     | 24hr TSP<br><br>Impact WQM<br>Mid-ebb<br>Mid-flood   | 24hr TSP<br>(CMA4a)<br>1hr TSP<br><br>4:19<br>12:31 |
| 22-Jan   | 23-Jan  | 24-Jan   | 25-Jan   | 26-Jan   | 27-Jan   |   |
|  | Noise (daytime)<br>(M1a, M2b)<br><br>Impact WQM<br>Mid-flood<br>Mid-ebb | Noise (daytime)<br>(M3a, M4b, M5b, M6)<br><br>Impact WQM<br>Mid-flood<br>Mid-ebb   |  | 24hr TSP<br><br>Impact WQM<br>Mid-flood<br>Mid-ebb                                     | 24hr TSP<br>(CMA1b)<br>1hr TSP<br><br>10:24<br>16:29 |   |

Contract No. HK/2015/01  
Wan Chai Development Phase II and Central-Wan Chai Bypass  
Sampling, Field Measurement and Testing Works (Stage 3)  
Tentative Environmental Monitoring Schedule  
February 2017

| Sunday | Monday                             | Tuesday                            | Wednesday                          | Thursday                           | Friday                             | Saturday                           |
|--------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
|        |                                    |                                    |                                    | 26-Jan                             | 27-Jan                             | 28-Jan                             |
|        |                                    |                                    |                                    |                                    | Impact WQM<br>Mid-flood            | Impact WQM<br>Mid-ebb              |
| 29-Jan | 30-Jan                             | 31-Jan                             | 1-Feb                              | 2-Feb                              | 3-Feb                              | 4-Feb                              |
|        |                                    |                                    | 24hr TSP<br>Noise (daytime)        | 1hr TSP<br>Noise (daytime)         |                                    |                                    |
|        |                                    | Impact WQM<br>Mid-flood<br>Mid-ebb | 9:02<br>14:49                      | Impact WQM<br>Mid-flood<br>Mid-ebb | 10:24<br>16:29                     | Impact WQM<br>Mid-flood<br>Mid-ebb |
|        |                                    |                                    |                                    |                                    |                                    | 11:58<br>18:44                     |
| 5-Feb  | 6-Feb                              | 7-Feb                              | 8-Feb                              | 9-Feb                              | 10-Feb                             | 11-Feb                             |
|        | Noise (daytime)                    | 24hr TSP<br>Noise (daytime)        | 1hr TSP                            |                                    |                                    |                                    |
|        | Impact WQM<br>Mid-flood<br>Mid-ebb |                                    | Impact WQM<br>Mid-flood<br>Mid-ebb |                                    |                                    | Impact WQM<br>Mid-flood<br>Mid-ebb |
|        |                                    | 13:46<br>21:11                     | 15:53<br>22:59                     |                                    |                                    | 7:17<br>12:51                      |
| 12-Feb | 13-Feb                             | 14-Feb                             | 15-Feb                             | 16-Feb                             | 17-Feb                             | 18-Feb                             |
|        | 24hr TSP<br>Noise (daytime)        | 1hr TSP<br>Noise (daytime)         |                                    |                                    |                                    | 24hr TSP                           |
|        | Impact WQM<br>Mid-flood<br>Mid-ebb |                                    | Impact WQM<br>Mid-flood<br>Mid-ebb |                                    | Impact WQM<br>Mid-flood<br>Mid-ebb |                                    |
|        |                                    | 8:20<br>14:02                      | 9:17<br>15:10                      |                                    | 10:22<br>16:35                     |                                    |
| 19-Feb | 20-Feb                             | 21-Feb                             | 22-Feb                             | 23-Feb                             | 24-Feb                             | 25-Feb                             |
|        | 1hr TSP<br>Noise (daytime)         | Noise (daytime)                    |                                    |                                    | 24hr TSP                           | 1hr TSP                            |
|        | Impact WQM<br>Mid-flood<br>Mid-ebb |                                    | Impact WQM<br>Mid-flood<br>Mid-ebb |                                    | Impact WQM<br>Mid-flood<br>Mid-ebb |                                    |
|        |                                    | 12:26<br>20:44                     | 14:35<br>22:08                     |                                    | 16:27<br>23:23                     |                                    |



***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

| Date                  | Time  | Weather | Measurement Noise Level |      |      | Baseline Level | Construction Noise Level | Limit Level |
|-----------------------|-------|---------|-------------------------|------|------|----------------|--------------------------|-------------|
|                       |       |         | Leq                     | L10  | L90  | Leq            | Leq                      | Leq         |
| Unit: dB(A), (30-min) |       |         |                         |      |      |                |                          |             |
| 28/12/2016            | 14:04 | Fine    | 75.8                    | 77.5 | 73.5 | 72             | 73                       | 75          |
| 3/1/2017              | 15:55 | Fine    | 74.3                    | 76.5 | 71.0 | 72             | 70                       | 75          |
| 10/1/2017             | 13:00 | Fine    | 70.0                    | 71.5 | 68.5 | 72             | 70                       | 75          |
| 19/1/2017             | 13:37 | Fine    | 74.6                    | 76.5 | 71.5 | 72             | 71                       | 75          |
| 23/1/2017             | 11:00 | Fine    | 74.3                    | 76.0 | 70.5 | 72             | 70                       | 75          |

Location: M2b - Noon-day gun area

| Date                  | Time  | Weather | Measurement Noise Level |      |      | Baseline Level | Construction Noise Level | Limit Level |
|-----------------------|-------|---------|-------------------------|------|------|----------------|--------------------------|-------------|
|                       |       |         | Leq                     | L10  | L90  | Leq            | Leq                      | Leq         |
| Unit: dB(A), (30-min) |       |         |                         |      |      |                |                          |             |
| 28/12/2016            | 15:00 | Fine    | 67.0                    | 68.0 | 64.5 | 68             | 67                       | 75          |
| 3/1/2017              | 16:38 | Fine    | 67.2                    | 68.5 | 65.0 | 68             | 67                       | 75          |
| 10/1/2017             | 14:00 | Fine    | 67.1                    | 68.5 | 65.0 | 68             | 67                       | 75          |
| 19/1/2017             | 14:26 | Fine    | 67.7                    | 69.0 | 65.5 | 68             | 51                       | 75          |
| 23/1/2017             | 10:10 | Fine    | 69.2                    | 71.5 | 66.0 | 68             | 64                       | 75          |

Location: M3a - Tung Lo Wan Fire Station

| Date                  | Time  | Weather | Measurement Noise Level |      |      | Baseline Level | Construction Noise Level | Limit Level |
|-----------------------|-------|---------|-------------------------|------|------|----------------|--------------------------|-------------|
|                       |       |         | Leq                     | L10  | L90  | Leq            | Leq                      | Leq         |
| Unit: dB(A), (30-min) |       |         |                         |      |      |                |                          |             |
| 29/12/2016            | 14:05 | Fine    | 66.1                    | 67.5 | 63.5 | 69             | 66                       | 75          |
| 3/1/2017              | 13:00 | Fine    | 64.3                    | 66.0 | 61.5 | 69             | 64                       | 75          |
| 10/1/2017             | 14:45 | Fine    | 65.9                    | 67.0 | 64.0 | 69             | 66                       | 75          |
| 18/1/2017             | 13:00 | Cloudy  | 67.0                    | 68.5 | 65.5 | 69             | 67                       | 75          |
| 24/1/2017             | 08:10 | Fine    | 67.0                    | 68.0 | 66.0 | 69             | 67                       | 75          |

Location: M4b - Victoria Centre

| Date                 | Time  | Weather | Measurement Noise Level |      |      | Baseline Noise Level | Construction Noise Level | Limit Level |
|----------------------|-------|---------|-------------------------|------|------|----------------------|--------------------------|-------------|
|                      |       |         | Leq                     | L10  | L90  | Leq                  | Leq                      | Leq         |
| Unit: dB(A), (30min) |       |         |                         |      |      |                      |                          |             |
| 29/12/2016           | 14:45 | Fine    | 65.7                    | 67.5 | 61.5 | 67                   | 66                       | 75          |
| 3/1/2017             | 13:40 | Fine    | 64.2                    | 66.5 | 61.5 | 67                   | 64                       | 75          |
| 10/1/2017            | 15:25 | Fine    | 66.3                    | 68.5 | 63.0 | 67                   | 66                       | 75          |
| 18/1/2017            | 13:40 | Cloudy  | 64.9                    | 66.0 | 62.5 | 67                   | 65                       | 75          |
| 24/1/2017            | 09:00 | Fine    | 65.0                    | 66.5 | 63.5 | 67                   | 65                       | 75          |

Location: M5b - City Garden

| Date                 | Time  | Weather | Measurement Noise Level |      |      | Baseline Level | Construction Noise Level | Limit Level |
|----------------------|-------|---------|-------------------------|------|------|----------------|--------------------------|-------------|
|                      |       |         | Leq                     | L10  | L90  | Leq            | Leq                      | Leq         |
| Unit: dB(A), (30min) |       |         |                         |      |      |                |                          |             |
| 29/12/2016           | 15:25 | Fine    | 69.6                    | 71.5 | 66.0 | 68             | 64                       | 75          |
| 3/1/2017             | 14:26 | Fine    | 68.0                    | 68.5 | 64.0 | 68             | 68                       | 75          |
| 10/1/2017            | 16:10 | Fine    | 68.0                    | 69.5 | 65.0 | 68             | 68                       | 75          |
| 18/1/2017            | 14:21 | Cloudy  | 66.1                    | 67.5 | 64.0 | 68             | 66                       | 75          |
| 24/1/2017            | 09:48 | Fine    | 67.8                    | 68.5 | 65.0 | 68             | 68                       | 75          |

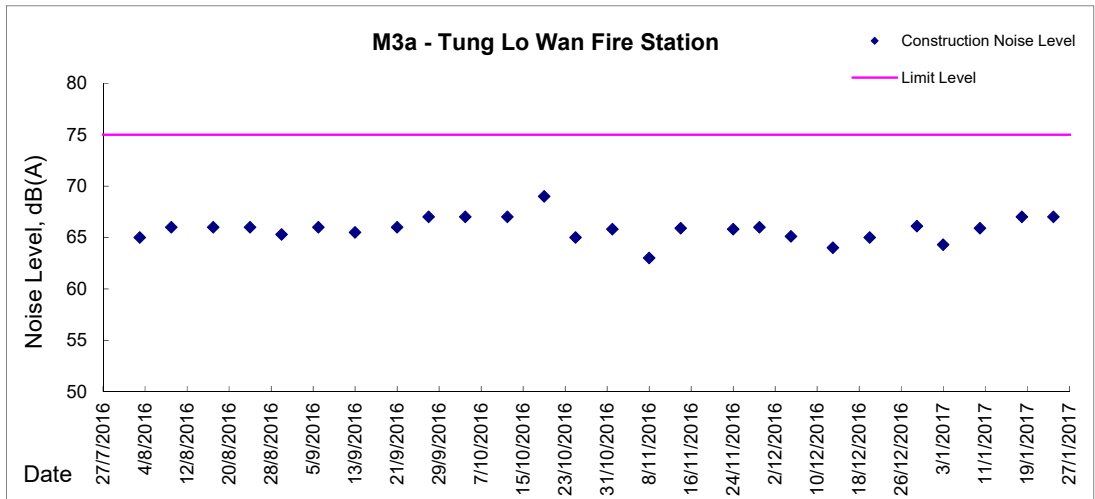
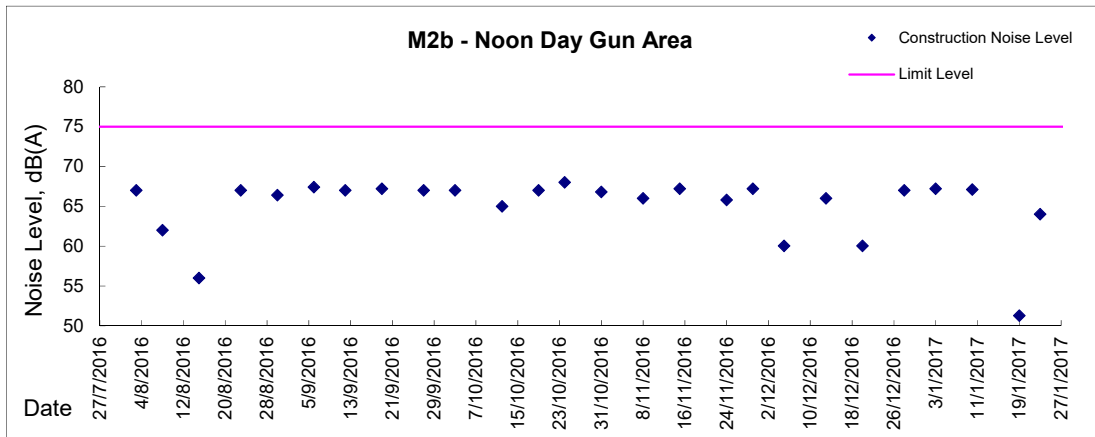
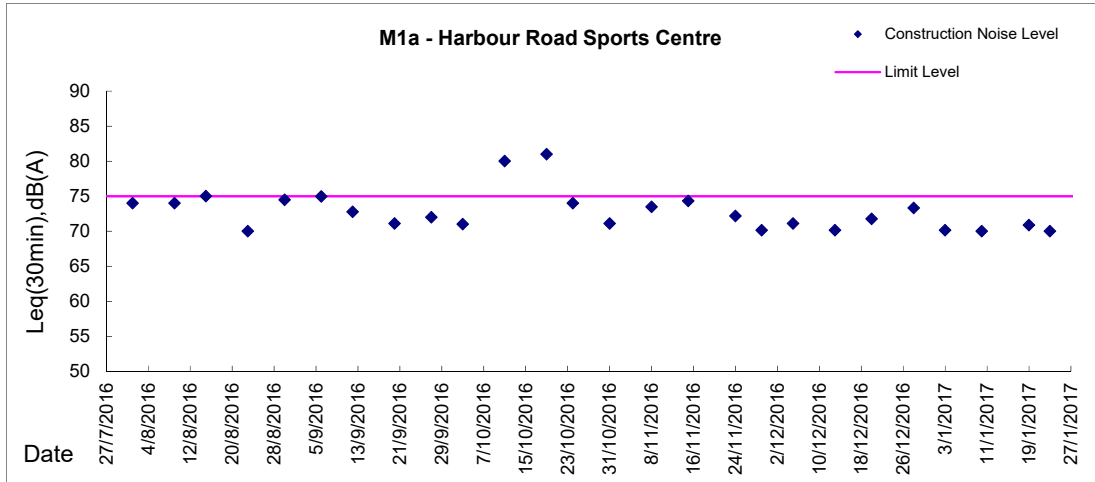
Location: M6 - HK Baptist Church Henrietta Secondary School

| Date                  | Time  | Weather | Measurement Noise Level |      |      | Baseline Level | Construction Noise Level | Limit Level |
|-----------------------|-------|---------|-------------------------|------|------|----------------|--------------------------|-------------|
|                       |       |         | Leq                     | L10  | L90  | Leq            | Leq                      | Leq         |
| Unit: dB(A), (30-min) |       |         |                         |      |      |                |                          |             |
| 29/12/2016            | 16:05 | Fine    | 67.4                    | 68.5 | 65.5 | 71             | 67                       | 70          |
| 3/1/2017              | 15:02 | Fine    | 67.6                    | 68.5 | 66.0 | 71             | 68                       | 70          |
| 10/1/2017             | 16:50 | Fine    | 66.9                    | 68.0 | 65.5 | 71             | 67                       | 70          |
| 18/1/2017             | 15:00 | Cloudy  | 66.3                    | 68.0 | 63.5 | 71             | 66                       | 70          |
| 24/1/2017             | 10:25 | Fine    | 68.0                    | 69.0 | 65.5 | 71             | 68                       | 65          |



**Graphic Presentation of Noise Monitoring Result**

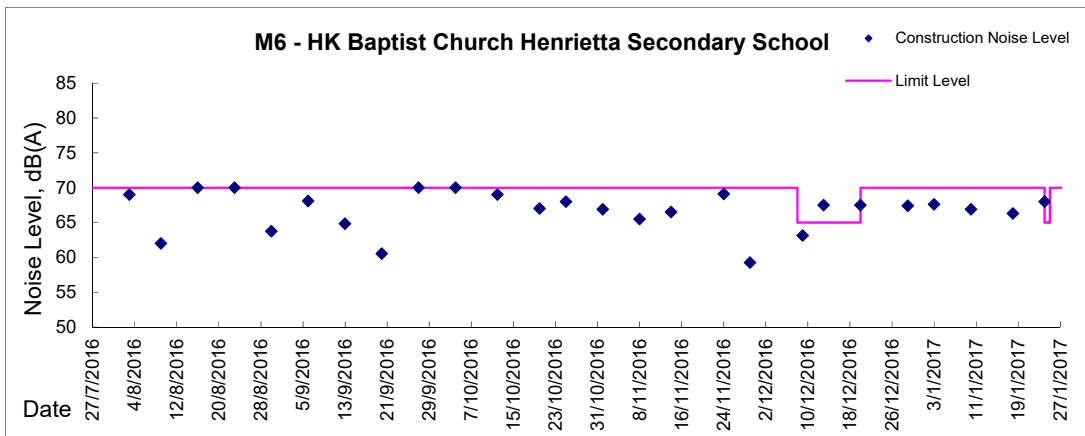
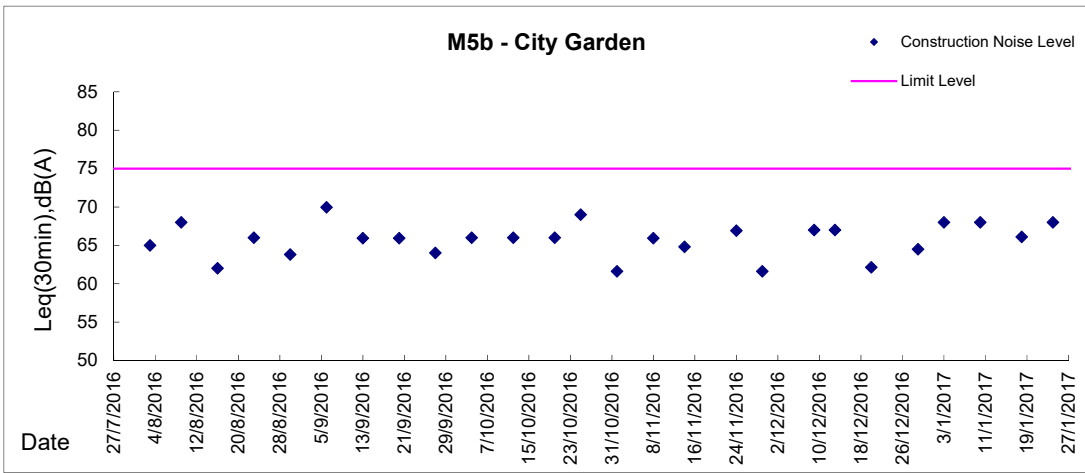
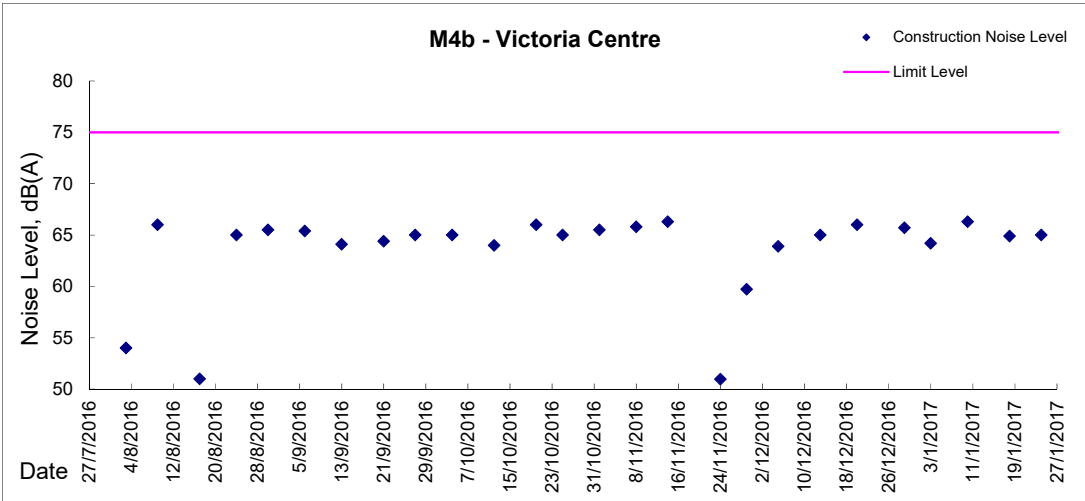
**Day Time (0700 - 1900hrs on normal weekdays)**





**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 ( $\mu\text{g}/\text{m}^3$ ) - 176.7

Limit Level ( $\mu\text{g}/\text{m}^3$ ) - 260

| Date      | Sampling Time | Weather Condition | Filter paper no. | Filter Weight, g |        | Elapse Time, hr |         | Sampling Time, hr | Flow Rate, $\text{m}^3/\text{min}$ |                 |         | Total Volume, $\text{m}^3$ | TSP Level, $\mu\text{g}/\text{m}^3$ |
|-----------|---------------|-------------------|------------------|------------------|--------|-----------------|---------|-------------------|------------------------------------|-----------------|---------|----------------------------|-------------------------------------|
|           |               |                   |                  | Initial          | Final  | Initial         | Final   |                   | Initial, $Q_{si}$                  | Final, $Q_{sf}$ | Average |                            |                                     |
| 28-Dec-16 | 8:00          | Cloudy            | 18653            | 2.6413           | 2.8735 | 9268.74         | 9292.74 | 24.00             | 1.31                               | 1.30            | 1.31    | 1880                       | 123.5                               |
| 4-Jan-17  | 15:06         | Fine              | 19646            | 2.6372           | 2.7693 | 9304.84         | 9328.84 | 24.00             | 1.29                               | 1.29            | 1.29    | 1861                       | 71.0                                |
| 9-Jan-17  | 8:00          | Fine              | 18491            | 2.8277           | 3.1617 | 9328.84         | 9352.84 | 24.00             | 1.32                               | 1.32            | 1.32    | 1902                       | 175.6                               |
| 14-Jan-17 | 8:00          | Cloudy            | 18842            | 2.8430           | 3.0070 | 9357.15         | 9381.15 | 24.00             | 1.30                               | 1.30            | 1.30    | 1874                       | 87.5                                |
| 20-Jan-17 | 8:00          | Fine              | 18816            | 2.6663           | 2.9129 | 9384.15         | 9408.15 | 24.00             | 1.30                               | 1.30            | 1.30    | 1874                       | 131.6                               |
| 27-Jan-17 | 16:00         | Fine              | 18966            | 2.8463           | 3.0006 | 9437.90         | 9461.90 | 24.00             | 1.30                               | 1.30            | 1.30    | 1872                       | 82.4                                |

Remarks: Due to interruption of electricity, the 24hr TSP was rescheduled from 3 and 26 Jan 2017 to 4 and 27 Jan 2017 respectively.

Report on 1-hour TSP monitoring

Action Level ( $\mu\text{g}/\text{m}^3$ ) - 320.1

Limit Level ( $\mu\text{g}/\text{m}^3$ ) - 500

| Date      | Sampling Time | Weather Condition | Filter paper no. | Filter Weight, g |        | Elapse Time, hr |         | Sampling Time, hr | Flow Rate, $\text{m}^3/\text{min}$ |                 |         | Total Volume, $\text{m}^3$ | TSP Level, $\mu\text{g}/\text{m}^3$ |
|-----------|---------------|-------------------|------------------|------------------|--------|-----------------|---------|-------------------|------------------------------------|-----------------|---------|----------------------------|-------------------------------------|
|           |               |                   |                  | Initial          | Final  | Initial         | Final   |                   | Initial, $Q_{si}$                  | Final, $Q_{sf}$ | Average |                            |                                     |
| 29-Dec-16 | 8:40          | Cloudy            | 18470            | 2.8567           | 2.8660 | 9292.74         | 9293.74 | 1.00              | 1.30                               | 1.30            | 1.30    | 78                         | 118.8                               |
| 29-Dec-16 | 10:15         | Cloudy            | 18662            | 2.6610           | 2.6745 | 9293.74         | 9294.74 | 1.00              | 1.30                               | 1.30            | 1.30    | 78                         | 172.5                               |
| 29-Dec-16 | 13:00         | Cloudy            | 18461            | 2.8151           | 2.8277 | 9294.74         | 9295.74 | 1.00              | 1.30                               | 1.30            | 1.30    | 78                         | 161.0                               |
| 4-Jan-17  | 9:00          | Fine              | 18684            | 2.6632           | 2.6804 | 9301.84         | 9302.84 | 1.00              | 1.29                               | 1.29            | 1.29    | 78                         | 221.6                               |
| 4-Jan-17  | 10:50         | Fine              | 18651            | 2.6401           | 2.6539 | 9302.84         | 9303.84 | 1.00              | 1.29                               | 1.29            | 1.29    | 78                         | 177.8                               |
| 4-Jan-17  | 13:24         | Fine              | 18647            | 2.6581           | 2.6694 | 9303.84         | 9304.84 | 1.00              | 1.29                               | 1.29            | 1.29    | 78                         | 145.6                               |
| 10-Jan-17 | 8:30          | Fine              | 18864            | 2.8231           | 2.8414 | 9352.84         | 9353.84 | 1.00              | 1.30                               | 1.30            | 1.30    | 78                         | 235.5                               |
| 10-Jan-17 | 9:58          | Fine              | 18855            | 2.8602           | 2.8794 | 9353.84         | 9354.84 | 1.00              | 1.30                               | 1.30            | 1.30    | 78                         | 247.1                               |
| 10-Jan-17 | 11:00         | Fine              | 18847            | 2.8422           | 2.8598 | 9354.84         | 9355.84 | 1.00              | 1.30                               | 1.30            | 1.30    | 78                         | 226.5                               |
| 16-Jan-17 | 8:30          | Cloudy            | 18837            | 2.8639           | 2.8808 | 9381.15         | 9382.15 | 1.00              | 1.30                               | 1.30            | 1.30    | 78                         | 216.3                               |
| 16-Jan-17 | 10:30         | Cloudy            | 18809            | 2.6593           | 2.6686 | 9382.15         | 9383.15 | 1.00              | 1.30                               | 1.30            | 1.30    | 78                         | 119.1                               |
| 16-Jan-17 | 13:00         | Cloudy            | 18802            | 2.6456           | 2.6575 | 9383.15         | 9384.15 | 1.00              | 1.30                               | 1.30            | 1.30    | 78                         | 152.3                               |
| 21-Jan-17 | 8:30          | Fine              | 18490            | 2.8207           | 2.8382 | 9408.15         | 9409.15 | 1.00              | 1.30                               | 1.30            | 1.30    | 78                         | 223.9                               |
| 21-Jan-17 | 9:32          | Fine              | 18453            | 2.8303           | 2.8467 | 9409.15         | 9410.15 | 1.00              | 1.30                               | 1.30            | 1.30    | 78                         | 209.8                               |
| 21-Jan-17 | 11:00         | Fine              | 18446            | 2.8372           | 2.8527 | 9410.15         | 9411.15 | 1.00              | 1.30                               | 1.30            | 1.30    | 78                         | 198.3                               |
| 27-Jan-17 | 8:50          | Fine              | 18474            | 2.8524           | 2.8601 | 9434.29         | 9435.29 | 1.00              | 1.30                               | 1.30            | 1.30    | 78                         | 98.7                                |
| 27-Jan-17 | 10:15         | Fine              | 18973            | 2.8789           | 2.8872 | 9435.29         | 9436.29 | 1.00              | 1.30                               | 1.30            | 1.30    | 78                         | 106.4                               |
| 27-Jan-17 | 13:00         | Fine              | 18970            | 2.8155           | 2.8222 | 9436.29         | 9437.29 | 1.00              | 1.30                               | 1.30            | 1.30    | 78                         | 85.9                                |



Location: CMA2a - Causeway Bay Community Centre

Report on 24-hour TSP monitoring

Action Level ( $\mu\text{g}/\text{m}^3$ ) - 169.5

Limit Level ( $\mu\text{g}/\text{m}^3$ ) - 260

| Date      | Sampling Time | Weather Condition | Filter paper no. | Filter Weight, g |        | Elapse Time, hr |          | Sampling Time, hr | Flow Rate, $\text{m}^3/\text{min}$ |                 |         | Total Volume, $\text{m}^3$ | TSP Level, $\mu\text{g}/\text{m}^3$ |
|-----------|---------------|-------------------|------------------|------------------|--------|-----------------|----------|-------------------|------------------------------------|-----------------|---------|----------------------------|-------------------------------------|
|           |               |                   |                  | Initial          | Final  | Initial         | Final    |                   | Initial, $Q_{si}$                  | Final, $Q_{sf}$ | Average |                            |                                     |
| 28-Dec-16 | 8:00          | Cloudy            | 18654            | 2.6451           | 2.6912 | 18909.04        | 18933.04 | 24.00             | 1.09                               | 1.09            | 1.09    | 1568                       | 29.4                                |
| 3-Jan-17  | 8:00          | Fine              | 18458            | 2.8276           | 2.9427 | 18936.04        | 18960.04 | 24.00             | 1.12                               | 1.12            | 1.12    | 1619                       | 71.1                                |
| 9-Jan-17  | 8:00          | Fine              | 18644            | 2.6247           | 2.7344 | 18963.04        | 18987.04 | 24.00             | 1.08                               | 1.08            | 1.08    | 1555                       | 70.6                                |
| 14-Jan-17 | 8:00          | Cloudy            | 18841            | 2.8402           | 2.9298 | 18990.04        | 19014.04 | 24.00             | 1.13                               | 1.13            | 1.13    | 1626                       | 55.1                                |
| 20-Jan-17 | 8:00          | Fine              | 18817            | 2.6846           | 2.8037 | 19017.04        | 19041.04 | 24.00             | 1.13                               | 1.13            | 1.13    | 1626                       | 73.3                                |
| 26-Jan-17 | 8:00          | Fine              | 18484            | 2.8376           | 2.9609 | 19044.04        | 19068.04 | 24.00             | 1.09                               | 1.08            | 1.09    | 1563                       | 78.9                                |

Report on 1-hour TSP monitoring

Action Level ( $\mu\text{g}/\text{m}^3$ ) - 323.4

Limit Level ( $\mu\text{g}/\text{m}^3$ ) - 500

| Date      | Sampling Time | Weather Condition | Filter paper no. | Filter Weight, g |        | Elapse Time, hr |          | Sampling Time, hr | Flow Rate, $\text{m}^3/\text{min}$ |                 |         | Total Volume, $\text{m}^3$ | TSP Level, $\mu\text{g}/\text{m}^3$ |
|-----------|---------------|-------------------|------------------|------------------|--------|-----------------|----------|-------------------|------------------------------------|-----------------|---------|----------------------------|-------------------------------------|
|           |               |                   |                  | Initial          | Final  | Initial         | Final    |                   | Initial, $Q_{si}$                  | Final, $Q_{sf}$ | Average |                            |                                     |
| 29-Dec-16 | 8:15          | Cloudy            | 18471            | 2.8563           | 2.8631 | 18933.04        | 18934.04 | 1.00              | 1.09                               | 1.09            | 1.09    | 65                         | 104.2                               |
| 29-Dec-16 | 9:30          | Cloudy            | 18663            | 2.6599           | 2.6664 | 18934.04        | 18935.04 | 1.00              | 1.13                               | 1.13            | 1.13    | 68                         | 95.8                                |
| 29-Dec-16 | 11:00         | Cloudy            | 18459            | 2.8298           | 2.8358 | 18935.04        | 18936.04 | 1.00              | 1.09                               | 1.09            | 1.09    | 65                         | 91.9                                |
| 4-Jan-17  | 8:30          | Fine              | 18685            | 2.6455           | 2.6502 | 18960.04        | 18961.04 | 1.00              | 1.08                               | 1.08            | 1.08    | 65                         | 72.5                                |
| 4-Jan-17  | 11:00         | Fine              | 18650            | 2.6498           | 2.6560 | 18961.04        | 18962.04 | 1.00              | 1.08                               | 1.08            | 1.08    | 65                         | 95.6                                |
| 4-Jan-17  | 13:00         | Fine              | 18649            | 2.6756           | 2.6810 | 18962.04        | 18963.04 | 1.00              | 1.08                               | 1.08            | 1.08    | 65                         | 83.3                                |
| 10-Jan-17 | 8:30          | Fine              | 18863            | 2.8248           | 2.8334 | 18987.04        | 18988.04 | 1.00              | 1.12                               | 1.12            | 1.12    | 67                         | 127.4                               |
| 10-Jan-17 | 9:45          | Fine              | 18856            | 2.8472           | 2.8539 | 18988.04        | 18989.04 | 1.00              | 1.08                               | 1.08            | 1.08    | 65                         | 103.3                               |
| 10-Jan-17 | 11:00         | Fine              | 18848            | 2.8351           | 2.8437 | 18989.04        | 18990.04 | 1.00              | 1.08                               | 1.08            | 1.08    | 65                         | 132.5                               |
| 16-Jan-17 | 8:30          | Cloudy            | 18838            | 2.8531           | 2.8594 | 19014.04        | 19015.04 | 1.00              | 1.13                               | 1.13            | 1.13    | 68                         | 92.9                                |
| 16-Jan-17 | 10:30         | Cloudy            | 18810            | 2.6612           | 2.6650 | 19015.04        | 19016.04 | 1.00              | 1.09                               | 1.09            | 1.09    | 65                         | 58.3                                |
| 16-Jan-17 | 13:00         | Cloudy            | 18803            | 2.6573           | 2.6634 | 19016.04        | 19017.04 | 1.00              | 1.13                               | 1.13            | 1.13    | 68                         | 90.0                                |
| 21-Jan-17 | 8:30          | Fine              | 18782            | 2.6501           | 2.6582 | 19041.04        | 19042.04 | 1.00              | 1.13                               | 1.13            | 1.13    | 68                         | 119.4                               |
| 21-Jan-17 | 9:32          | Fine              | 18454            | 2.8093           | 2.8160 | 19042.04        | 19043.04 | 1.00              | 1.11                               | 1.11            | 1.11    | 67                         | 100.7                               |
| 21-Jan-17 | 11:00         | Fine              | 18447            | 2.8444           | 2.8527 | 19043.04        | 19044.04 | 1.00              | 1.09                               | 1.09            | 1.09    | 65                         | 127.3                               |
| 27-Jan-17 | 8:52          | Fine              | 18976            | 2.8956           | 2.8997 | 19068.04        | 19069.04 | 1.00              | 1.08                               | 1.08            | 1.08    | 65                         | 63.0                                |
| 27-Jan-17 | 10:30         | Fine              | 18988            | 2.9077           | 2.9111 | 19069.04        | 19070.04 | 1.00              | 1.08                               | 1.08            | 1.08    | 65                         | 52.2                                |
| 27-Jan-17 | 13:00         | Fine              | 18984            | 2.8974           | 2.9018 | 19070.04        | 19071.04 | 1.00              | 1.08                               | 1.08            | 1.08    | 65                         | 67.6                                |





Location: CMA3a - CWB PRE Site Office Area

Report on 24-hour TSP monitoring

Action Level ( $\mu\text{g}/\text{m}^3$ ) - 171

Limit Level ( $\mu\text{g}/\text{m}^3$ ) - 260

| Date      | Sampling Time | Weather Condition | Filter paper no. | Filter Weight, g |        | Elapse Time, hr |         | Sampling Time, hr | Flow Rate, $\text{m}^3/\text{min}$ |                 |         | Total Volume, $\text{m}^3$ | TSP Level, $\mu\text{g}/\text{m}^3$ |
|-----------|---------------|-------------------|------------------|------------------|--------|-----------------|---------|-------------------|------------------------------------|-----------------|---------|----------------------------|-------------------------------------|
|           |               |                   |                  | Initial          | Final  | Initial         | Final   |                   | Initial, $Q_{si}$                  | Final, $Q_{sf}$ | Average |                            |                                     |
| 28-Dec-16 | 8:00          | Cloudy            | 18655            | 2.6758           | 2.7861 | 6363.77         | 6387.77 | 24.00             | 1.10                               | 1.09            | 1.10    | 1579                       | 69.9                                |
| 3-Jan-17  | 8:00          | Fine              | 18682            | 2.6413           | 2.6912 | 6390.82         | 6414.82 | 24.00             | 1.04                               | 1.04            | 1.04    | 1502                       | 33.2                                |
| 9-Jan-17  | 8:00          | Fine              | 18728            | 2.6711           | 2.8049 | 6417.82         | 6441.82 | 24.00             | 1.11                               | 1.12            | 1.11    | 1605                       | 83.4                                |
| 14-Jan-17 | 8:00          | Cloudy            | 18843            | 2.8385           | 2.9094 | 6444.83         | 6468.83 | 24.00             | 1.05                               | 1.05            | 1.05    | 1515                       | 46.8                                |
| 20-Jan-17 | 8:00          | Fine              | 18818            | 2.6836           | 2.8040 | 6472.95         | 6496.95 | 24.00             | 1.12                               | 1.13            | 1.12    | 1620                       | 74.3                                |
| 26-Jan-17 | 8:00          | Fine              | 18486            | 2.8374           | 2.9612 | 6499.95         | 6523.95 | 24.00             | 1.13                               | 1.12            | 1.12    | 1620                       | 76.4                                |

Report on 1-hour TSP monitoring

Action Level ( $\mu\text{g}/\text{m}^3$ ) - 311.3

Limit Level ( $\mu\text{g}/\text{m}^3$ ) - 500

| Date      | Sampling Time | Weather Condition | Filter paper no. | Filter Weight, g |        | Elapse Time, hr |         | Sampling Time, hr | Flow Rate, $\text{m}^3/\text{min}$ |                 |         | Total Volume, $\text{m}^3$ | TSP Level, $\mu\text{g}/\text{m}^3$ |
|-----------|---------------|-------------------|------------------|------------------|--------|-----------------|---------|-------------------|------------------------------------|-----------------|---------|----------------------------|-------------------------------------|
|           |               |                   |                  | Initial          | Final  | Initial         | Final   |                   | Initial, $Q_{si}$                  | Final, $Q_{sf}$ | Average |                            |                                     |
| 29-Dec-16 | 8:25          | Cloudy            | 18442            | 2.8365           | 2.8412 | 6387.77         | 6388.77 | 1.00              | 1.09                               | 1.09            | 1.09    | 66                         | 71.6                                |
| 29-Dec-16 | 9:50          | Cloudy            | 18665            | 2.6071           | 2.6109 | 6388.77         | 6389.77 | 1.00              | 1.09                               | 1.09            | 1.09    | 66                         | 57.9                                |
| 29-Dec-16 | 10:55         | Cloudy            | 18462            | 2.8245           | 2.8293 | 6389.77         | 6390.77 | 1.00              | 0.97                               | 0.97            | 0.97    | 58                         | 82.7                                |
| 4-Jan-17  | 8:30          | Fine              | 18687            | 2.6350           | 2.6367 | 6414.82         | 6415.82 | 1.00              | 1.04                               | 1.04            | 1.04    | 63                         | 27.2                                |
| 4-Jan-17  | 9:53          | Fine              | 18707            | 2.6382           | 2.6399 | 6415.82         | 6416.82 | 1.00              | 1.04                               | 1.04            | 1.04    | 63                         | 27.2                                |
| 4-Jan-17  | 13:00         | Fine              | 18723            | 2.6580           | 2.6642 | 6416.82         | 6417.82 | 1.00              | 1.04                               | 1.04            | 1.04    | 63                         | 99.1                                |
| 10-Jan-17 | 8:15          | Fine              | 18867            | 2.8351           | 2.8421 | 6441.82         | 6442.82 | 1.00              | 1.19                               | 1.19            | 1.19    | 71                         | 98.0                                |
| 10-Jan-17 | 9:50          | Fine              | 18858            | 2.8514           | 2.8577 | 6442.82         | 6443.82 | 1.00              | 1.04                               | 1.04            | 1.04    | 63                         | 100.5                               |
| 10-Jan-17 | 11:00         | Fine              | 18850            | 2.8583           | 2.8664 | 6443.82         | 6444.82 | 1.00              | 1.04                               | 1.04            | 1.04    | 63                         | 129.3                               |
| 16-Jan-17 | 8:30          | Cloudy            | 18813            | 2.6293           | 2.6370 | 6468.83         | 6469.83 | 1.00              | 1.05                               | 1.05            | 1.05    | 63                         | 122.0                               |
| 16-Jan-17 | 10:30         | Cloudy            | 18812            | 2.6238           | 2.6281 | 6469.83         | 6470.83 | 1.00              | 1.05                               | 1.05            | 1.05    | 63                         | 68.1                                |
| 16-Jan-17 | 13:00         | Cloudy            | 18804            | 2.6496           | 2.6531 | 6470.83         | 6471.83 | 1.00              | 1.05                               | 1.05            | 1.05    | 63                         | 55.4                                |
| 21-Jan-17 | 8:15          | Fine              | 18688            | 2.6482           | 2.6542 | 6496.95         | 6497.95 | 1.00              | 1.13                               | 1.13            | 1.13    | 68                         | 88.7                                |
| 21-Jan-17 | 9:25          | Fine              | 18455            | 2.8150           | 2.8195 | 6497.95         | 6498.95 | 1.00              | 1.13                               | 1.13            | 1.13    | 68                         | 66.5                                |
| 21-Jan-17 | 10:26         | Fine              | 18449            | 2.8221           | 2.8300 | 6498.95         | 6499.95 | 1.00              | 1.13                               | 1.13            | 1.13    | 68                         | 116.8                               |
| 27-Jan-17 | 8:35          | Fine              | 18476            | 2.8738           | 2.8779 | 6523.95         | 6524.95 | 1.00              | 1.05                               | 1.05            | 1.05    | 63                         | 65.1                                |
| 27-Jan-17 | 9:56          | Fine              | 18974            | 2.8903           | 2.8935 | 6524.95         | 6525.95 | 1.00              | 1.05                               | 1.05            | 1.05    | 63                         | 50.8                                |
| 27-Jan-17 | 11:00         | Fine              | 18971            | 2.9104           | 2.9135 | 6525.95         | 6526.95 | 1.00              | 1.05                               | 1.05            | 1.05    | 63                         | 49.2                                |



Location: CMA4a - SPCA

Report on 24-hour TSP monitoring

Action Level ( $\mu\text{g}/\text{m}^3$ ) - 171.2  
Limit Level ( $\mu\text{g}/\text{m}^3$ ) - 260

| Date      | Sampling Time | Weather Condition | Filter paper no. | Filter Weight, g |        | Elapse Time, hr |          | Sampling Time, hr | Flow Rate, $\text{m}^3/\text{min}$ |                 |         | Total Volume, $\text{m}^3$ | TSP Level, $\mu\text{g}/\text{m}^3$ |
|-----------|---------------|-------------------|------------------|------------------|--------|-----------------|----------|-------------------|------------------------------------|-----------------|---------|----------------------------|-------------------------------------|
|           |               |                   |                  | Initial          | Final  | Initial         | Final    |                   | Initial, $Q_{si}$                  | Final, $Q_{sf}$ | Average |                            |                                     |
| 28-Dec-16 | 8:00          | Cloudy            | 18656            | 2.6432           | 2.7427 | 23147.38        | 23171.38 | 24.00             | 1.23                               | 1.17            | 1.20    | 1721                       | 57.8                                |
| 3-Jan-17  | 8:00          | Fine              | 18683            | 2.6636           | 2.7170 | 23174.43        | 23198.43 | 24.00             | 1.16                               | 1.16            | 1.16    | 1676                       | 31.9                                |
| 10-Jan-17 | 13:00         | Fine              | 18727            | 2.6737           | 2.8330 | 23204.43        | 23228.43 | 24.00             | 1.21                               | 1.23            | 1.22    | 1755                       | 90.8                                |
| 14-Jan-17 | 8:00          | Cloudy            | 18834            | 2.8619           | 2.9466 | 23228.43        | 23252.43 | 24.00             | 1.22                               | 1.22            | 1.22    | 1751                       | 48.4                                |
| 21-Jan-17 | 13:00         | Fine              | 18819            | 2.6682           | 2.8310 | 23258.43        | 23282.43 | 24.00             | 1.17                               | 1.17            | 1.17    | 1686                       | 96.5                                |
| 26-Jan-17 | 8:00          | Fine              | 18482            | 2.8308           | 2.9553 | 23282.43        | 23306.43 | 24.00             | 1.22                               | 1.21            | 1.22    | 1751                       | 71.1                                |

Remarks: Due to interruption of electricity, the 24hr TSP was rescheduled from 9 and 20 Jan 2017 to 10 and 21 Jan 2017 respectively.

Report on 1-hour TSP monitoring

Action Level ( $\mu\text{g}/\text{m}^3$ ) - 312.5  
Limit Level ( $\mu\text{g}/\text{m}^3$ ) - 500

| Date      | Sampling Time | Weather Condition | Filter paper no. | Filter Weight, g |        | Elapse Time, hr |          | Sampling Time, hr | Flow Rate, $\text{m}^3/\text{min}$ |                 |         | Total Volume, $\text{m}^3$ | TSP Level, $\mu\text{g}/\text{m}^3$ |
|-----------|---------------|-------------------|------------------|------------------|--------|-----------------|----------|-------------------|------------------------------------|-----------------|---------|----------------------------|-------------------------------------|
|           |               |                   |                  | Initial          | Final  | Initial         | Final    |                   | Initial, $Q_{si}$                  | Final, $Q_{sf}$ | Average |                            |                                     |
| 29-Dec-16 | 8:10          | Cloudy            | 18473            | 2.8512           | 2.8554 | 23171.38        | 23172.38 | 1.00              | 1.28                               | 1.28            | 1.28    | 77                         | 54.7                                |
| 29-Dec-16 | 9:40          | Cloudy            | 18678            | 2.6802           | 2.6854 | 23172.38        | 23173.38 | 1.00              | 1.25                               | 1.25            | 1.25    | 75                         | 69.3                                |
| 29-Dec-16 | 11:00         | Cloudy            | 18463            | 2.8249           | 2.8306 | 23173.38        | 23174.38 | 1.00              | 1.22                               | 1.22            | 1.22    | 73                         | 77.7                                |
| 4-Jan-17  | 8:15          | Fine              | 18689            | 2.6785           | 2.6840 | 23198.43        | 23199.43 | 1.00              | 1.16                               | 1.16            | 1.16    | 70                         | 78.8                                |
| 4-Jan-17  | 9:35          | Fine              | 18708            | 2.6463           | 2.6516 | 23199.43        | 23200.43 | 1.00              | 1.16                               | 1.16            | 1.16    | 70                         | 75.9                                |
| 4-Jan-17  | 13:00         | Fine              | 18724            | 2.6555           | 2.6625 | 23200.43        | 23201.43 | 1.00              | 1.16                               | 1.16            | 1.16    | 70                         | 100.3                               |
| 10-Jan-17 | 8:15          | Fine              | 18866            | 2.8273           | 2.8358 | 23201.43        | 23202.43 | 1.00              | 1.21                               | 1.21            | 1.21    | 73                         | 117.0                               |
| 10-Jan-17 | 9:30          | Fine              | 18859            | 2.8298           | 2.8375 | 23202.43        | 23203.43 | 1.00              | 1.21                               | 1.21            | 1.21    | 73                         | 106.0                               |
| 10-Jan-17 | 11:00         | Fine              | 18851            | 2.8527           | 2.8591 | 23203.43        | 23204.43 | 1.00              | 1.21                               | 1.21            | 1.21    | 73                         | 88.1                                |
| 16-Jan-17 | 8:30          | Cloudy            | 18814            | 2.6165           | 2.6199 | 23252.43        | 23253.43 | 1.00              | 1.22                               | 1.22            | 1.22    | 73                         | 46.6                                |
| 16-Jan-17 | 10:30         | Cloudy            | 18811            | 2.6292           | 2.6347 | 23253.43        | 23254.43 | 1.00              | 1.22                               | 1.22            | 1.22    | 73                         | 75.4                                |
| 16-Jan-17 | 13:00         | Cloudy            | 18805            | 2.6734           | 2.6780 | 23254.43        | 23255.43 | 1.00              | 1.22                               | 1.22            | 1.22    | 73                         | 63.0                                |
| 21-Jan-17 | 8:15          | Fine              | 18795            | 2.6463           | 2.6526 | 23255.43        | 23256.43 | 1.00              | 1.22                               | 1.22            | 1.22    | 73                         | 86.3                                |
| 21-Jan-17 | 9:20          | Fine              | 18456            | 2.8319           | 2.8355 | 23256.43        | 23257.43 | 1.00              | 1.17                               | 1.17            | 1.17    | 70                         | 51.3                                |
| 21-Jan-17 | 10:30         | Fine              | 18448            | 2.8206           | 2.8261 | 23257.43        | 23258.43 | 1.00              | 1.17                               | 1.17            | 1.17    | 70                         | 78.3                                |
| 27-Jan-17 | 8:37          | Fine              | 18477            | 2.8681           | 2.8728 | 23306.43        | 23307.43 | 1.00              | 1.21                               | 1.21            | 1.21    | 73                         | 64.5                                |
| 27-Jan-17 | 10:01         | Fine              | 18989            | 2.8956           | 2.8987 | 23307.43        | 23308.43 | 1.00              | 1.19                               | 1.19            | 1.19    | 71                         | 43.4                                |
| 27-Jan-17 | 13:00         | Fine              | 18985            | 2.8998           | 2.9049 | 23308.43        | 23309.43 | 1.00              | 1.17                               | 1.17            | 1.17    | 70                         | 72.8                                |



Location: CMA5b - Pedestrian Plaza

Report on 24-hour TSP monitoring

Action Level ( $\mu\text{g}/\text{m}^3$ ) - 181  
Limit Level ( $\mu\text{g}/\text{m}^3$ ) - 260

| Date      | Sampling Time | Weather Condition | Filter paper no. | Filter Weight, g |        | Elapse Time, hr |         | Sampling Time, hr | Flow Rate, $\text{m}^3/\text{min}$ |                 |         | Total Volume, $\text{m}^3$ | TSP Level, $\mu\text{g}/\text{m}^3$ |
|-----------|---------------|-------------------|------------------|------------------|--------|-----------------|---------|-------------------|------------------------------------|-----------------|---------|----------------------------|-------------------------------------|
|           |               |                   |                  | Initial          | Final  | Initial         | Final   |                   | Initial, $Q_{si}$                  | Final, $Q_{sf}$ | Average |                            |                                     |
| 28-Dec-16 | 8:00          | Cloudy            | 18695            | 2.6357           | 2.7271 | 7754.77         | 7778.77 | 24.00             | 0.99                               | 0.99            | 0.99    | 1425                       | 64.1                                |
| 3-Jan-17  | 8:00          | Fine              | 18538            | 2.7975           | 2.9382 | 7781.77         | 7805.77 | 24.00             | 0.79                               | 0.79            | 0.79    | 1136                       | 123.9                               |
| 9-Jan-17  | 8:00          | Fine              | 18722            | 2.6728           | 2.9362 | 7808.77         | 7832.77 | 24.00             | 0.85                               | 0.91            | 0.88    | 1264                       | 208.4                               |
| 14-Jan-17 | 8:00          | Cloudy            | 18846            | 2.8518           | 3.0150 | 7835.77         | 7859.77 | 24.00             | 0.86                               | 0.86            | 0.86    | 1234                       | 132.3                               |
| 20-Jan-17 | 8:00          | Fine              | 18801            | 2.6650           | 2.9490 | 7862.77         | 7886.77 | 24.00             | 0.91                               | 0.92            | 0.92    | 1320                       | 215.1                               |
| 26-Jan-17 | 8:00          | Fine              | 18489            | 2.8413           | 3.0590 | 7889.77         | 7913.77 | 24.00             | 0.95                               | 0.95            | 0.95    | 1364                       | 159.6                               |

Report on 1-hour TSP monitoring

Action Level ( $\mu\text{g}/\text{m}^3$ ) - 332  
Limit Level ( $\mu\text{g}/\text{m}^3$ ) - 500

| Date      | Sampling Time | Weather Condition | Filter paper no. | Filter Weight, g |        | Elapse Time, hr |         | Sampling Time, hr | Flow Rate, $\text{m}^3/\text{min}$ |                 |         | Total Volume, $\text{m}^3$ | TSP Level, $\mu\text{g}/\text{m}^3$ |
|-----------|---------------|-------------------|------------------|------------------|--------|-----------------|---------|-------------------|------------------------------------|-----------------|---------|----------------------------|-------------------------------------|
|           |               |                   |                  | Initial          | Final  | Initial         | Final   |                   | Initial, $Q_{si}$                  | Final, $Q_{sf}$ | Average |                            |                                     |
| 29-Dec-16 | 8:05          | Cloudy            | 18616            | 2.8360           | 2.8437 | 7778.77         | 7779.77 | 1.00              | 1.10                               | 1.10            | 1.10    | 66                         | 116.3                               |
| 29-Dec-16 | 9:15          | Cloudy            | 18469            | 2.8398           | 2.8497 | 7779.77         | 7780.77 | 1.00              | 1.10                               | 1.10            | 1.10    | 66                         | 149.5                               |
| 29-Dec-16 | 11:00         | Cloudy            | 18466            | 2.8374           | 2.8525 | 7780.77         | 7781.77 | 1.00              | 1.10                               | 1.10            | 1.10    | 66                         | 228.0                               |
| 4-Jan-17  | 8:04          | Fine              | 18609            | 2.8047           | 2.8147 | 7805.77         | 7806.77 | 1.00              | 0.91                               | 0.91            | 0.91    | 55                         | 183.4                               |
| 4-Jan-17  | 9:15          | Fine              | 18714            | 2.6963           | 2.7131 | 7806.77         | 7807.77 | 1.00              | 0.91                               | 0.91            | 0.91    | 55                         | 308.0                               |
| 4-Jan-17  | 11:00         | Fine              | 18717            | 2.6760           | 2.6899 | 7807.77         | 7808.77 | 1.00              | 0.91                               | 0.91            | 0.91    | 55                         | 254.9                               |
| 10-Jan-17 | 8:02          | Fine              | 18769            | 2.6804           | 2.6901 | 7832.77         | 7833.77 | 1.00              | 0.79                               | 0.79            | 0.79    | 47                         | 204.7                               |
| 10-Jan-17 | 9:30          | Fine              | 18860            | 2.8351           | 2.8508 | 7833.77         | 7834.77 | 1.00              | 0.85                               | 0.85            | 0.85    | 51                         | 307.8                               |
| 10-Jan-17 | 10:45         | Fine              | 18854            | 2.8277           | 2.8378 | 7834.77         | 7835.77 | 1.00              | 0.88                               | 0.88            | 0.88    | 53                         | 191.2                               |
| 16-Jan-17 | 8:02          | Cloudy            | 18902            | 2.8224           | 2.8296 | 7859.77         | 7860.77 | 1.00              | 0.92                               | 0.86            | 0.89    | 53                         | 135.2                               |
| 16-Jan-17 | 9:30          | Cloudy            | 18836            | 2.8410           | 2.8492 | 7860.77         | 7861.77 | 1.00              | 0.92                               | 0.86            | 0.89    | 53                         | 154.0                               |
| 16-Jan-17 | 13:00         | Cloudy            | 18808            | 2.6508           | 2.6653 | 7861.77         | 7862.77 | 1.00              | 0.92                               | 0.92            | 0.92    | 55                         | 263.4                               |
| 21-Jan-17 | 8:04          | Fine              | 18910            | 2.8194           | 2.8358 | 7886.77         | 7887.77 | 1.00              | 0.92                               | 0.92            | 0.92    | 55                         | 297.5                               |
| 21-Jan-17 | 9:20          | Fine              | 18781            | 2.6622           | 2.6767 | 7887.77         | 7888.77 | 1.00              | 0.92                               | 0.92            | 0.92    | 55                         | 263.0                               |
| 21-Jan-17 | 10:50         | Fine              | 18451            | 2.8395           | 2.8547 | 7888.77         | 7889.77 | 1.00              | 0.80                               | 0.80            | 0.80    | 48                         | 317.7                               |
| 27-Jan-17 | 8:04          | Fine              | 18977            | 2.8929           | 2.8968 | 7913.77         | 7914.77 | 1.00              | 0.79                               | 0.79            | 0.79    | 48                         | 81.8                                |
| 27-Jan-17 | 9:43          | Fine              | 18975            | 2.8969           | 2.9095 | 7914.77         | 7915.77 | 1.00              | 0.92                               | 0.92            | 0.92    | 55                         | 229.4                               |
| 27-Jan-17 | 10:50         | Fine              | 18987            | 2.9171           | 2.9210 | 7915.77         | 7916.77 | 1.00              | 0.79                               | 0.79            | 0.79    | 48                         | 81.8                                |



Location: CMA6a - WD2 PRE Office

Report on 24-hour TSP monitoring

Action Level - 187.3  $\mu\text{g}/\text{m}^3$   
Limit Level - 260  $\mu\text{g}/\text{m}^3$

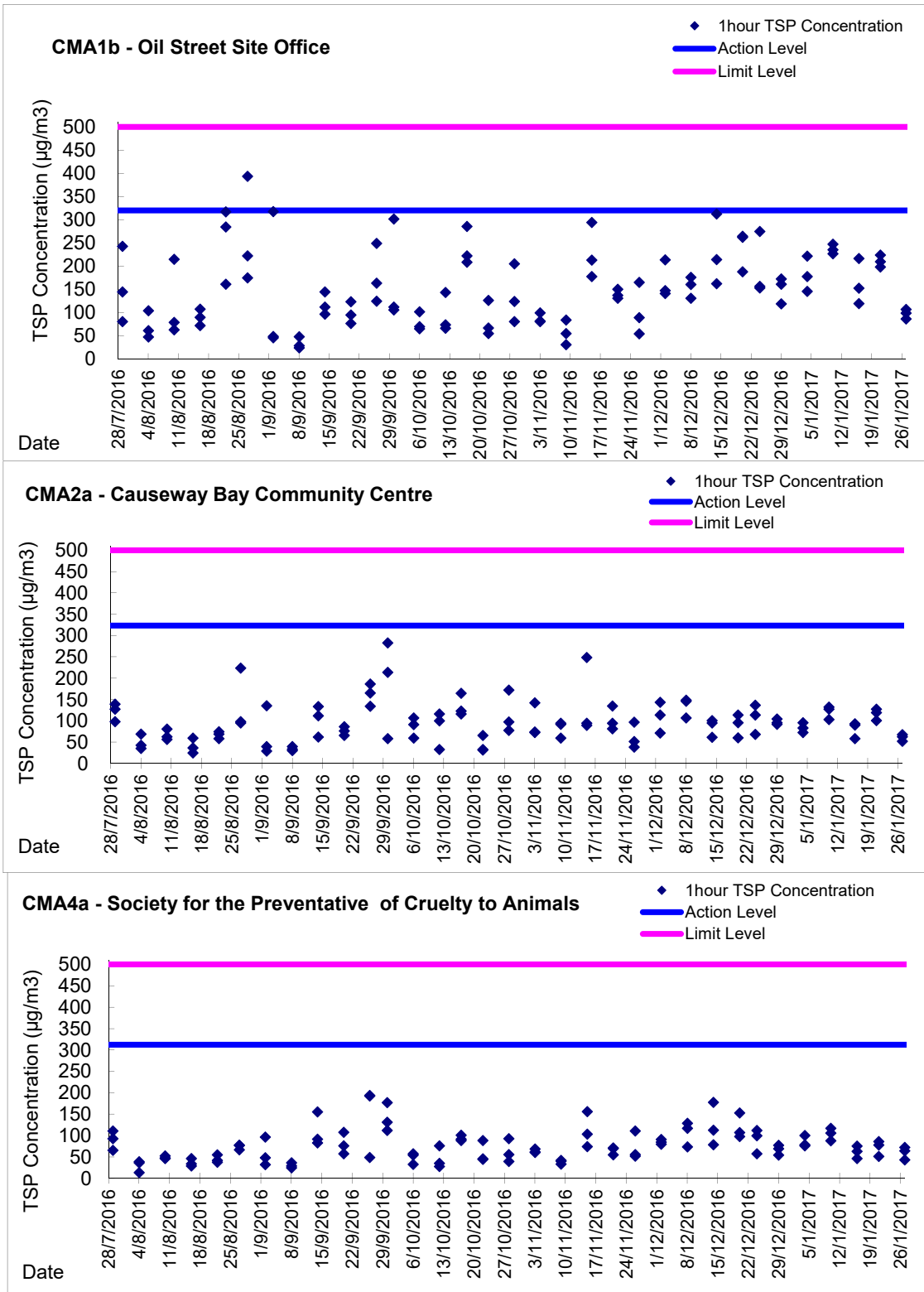
| Date      | Sampling Time | Weather Condition | Filter paper no. | Filter Weight, g |        | Elapse Time, hr |         | Sampling Time, hr | Flow Rate, $\text{m}^3/\text{min}$ |                 |         | Total Volume, $\text{m}^3$ | TSP Level, $\mu\text{g}/\text{m}^3$ |
|-----------|---------------|-------------------|------------------|------------------|--------|-----------------|---------|-------------------|------------------------------------|-----------------|---------|----------------------------|-------------------------------------|
|           |               |                   |                  | Initial          | Final  | Initial         | Final   |                   | Initial, $Q_{si}$                  | Final, $Q_{sf}$ | Average |                            |                                     |
| 28-Dec-16 | 8:00          | Cloudy            | 18657            | 2.6376           | 2.7205 | 1440.60         | 1464.60 | 24.00             | 0.93                               | 0.93            | 0.93    | 1339                       | 61.9                                |
| 3-Jan-17  | 8:00          | Fine              | 18531            | 2.7976           | 2.9075 | 1467.61         | 1491.61 | 24.00             | 1.01                               | 1.01            | 1.01    | 1456                       | 75.5                                |
| 9-Jan-17  | 8:00          | Fine              | 18720            | 2.6967           | 2.8600 | 1494.61         | 1518.61 | 24.00             | 0.89                               | 0.90            | 0.90    | 1290                       | 126.6                               |
| 14-Jan-17 | 8:00          | Cloudy            | 18844            | 2.8446           | 2.9299 | 1521.61         | 1545.61 | 24.00             | 1.02                               | 1.02            | 1.02    | 1467                       | 58.1                                |
| 20-Jan-17 | 8:00          | Fine              | 18820            | 2.6760           | 2.7941 | 1548.61         | 1572.61 | 24.00             | 1.02                               | 1.02            | 1.02    | 1466                       | 80.5                                |
| 26-Jan-17 | 8:00          | Fine              | 18488            | 2.8220           | 2.9624 | 1575.61         | 1599.61 | 24.00             | 1.02                               | 1.02            | 1.02    | 1466                       | 95.7                                |

Report on 1-hour TSP monitoring

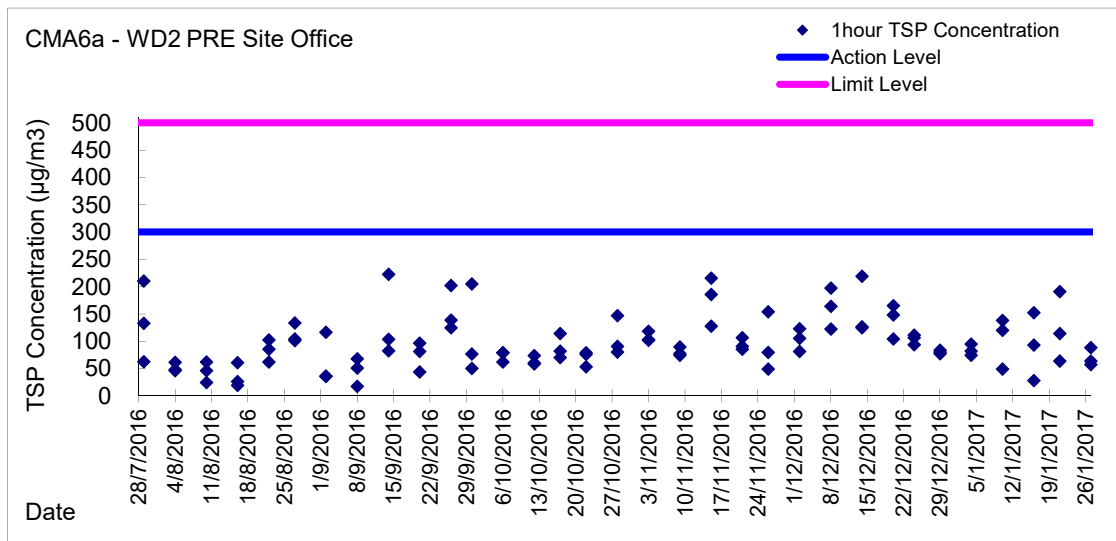
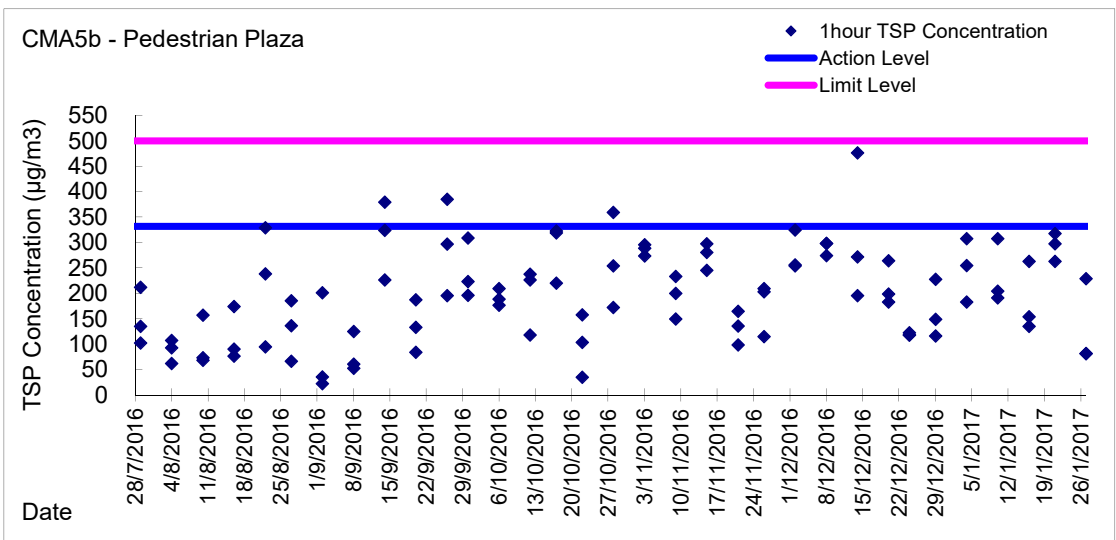
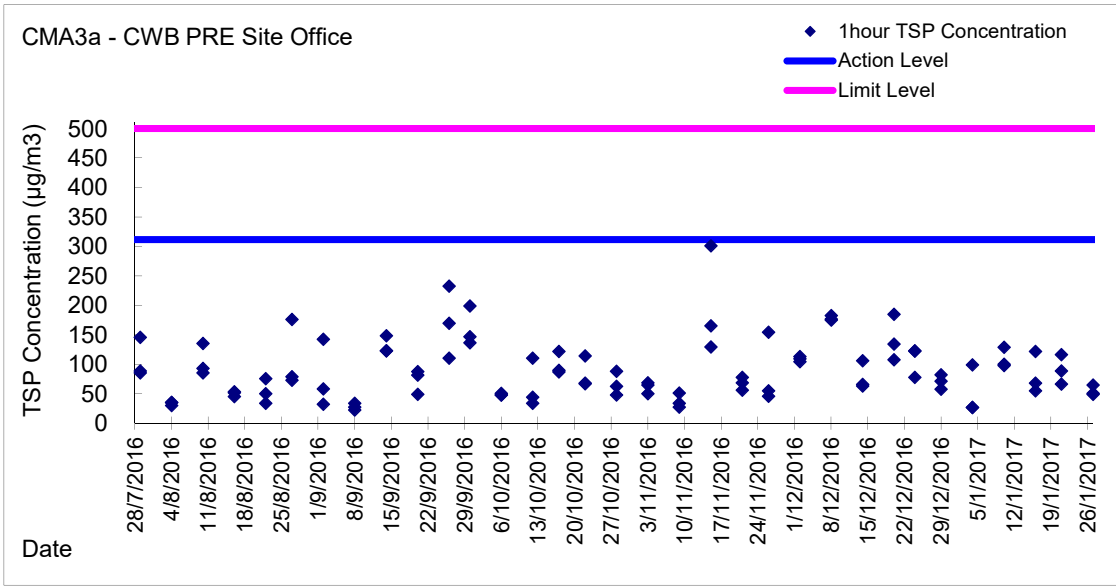
Action Level - 300.1  $\mu\text{g}/\text{m}^3$   
Limit Level - 500  $\mu\text{g}/\text{m}^3$

| Date      | Sampling Time | Weather Condition | Filter paper no. | Filter Weight, g |        | Elapse Time, hr |         | Sampling Time, hr | Flow Rate, $\text{m}^3/\text{min}$ |                 |         | Total Volume, $\text{m}^3$ | TSP Level, $\mu\text{g}/\text{m}^3$ |
|-----------|---------------|-------------------|------------------|------------------|--------|-----------------|---------|-------------------|------------------------------------|-----------------|---------|----------------------------|-------------------------------------|
|           |               |                   |                  | Initial          | Final  | Initial         | Final   |                   | Initial, $Q_{si}$                  | Final, $Q_{sf}$ | Average |                            |                                     |
| 29-Dec-16 | 8:05          | Cloudy            | 18443            | 2.8533           | 2.8586 | 1464.60         | 1465.60 | 1.00              | 1.06                               | 1.06            | 1.06    | 63                         | 83.6                                |
| 29-Dec-16 | 9:15          | Cloudy            | 18467            | 2.8356           | 2.8405 | 1465.60         | 1466.60 | 1.00              | 1.06                               | 1.06            | 1.06    | 63                         | 77.3                                |
| 29-Dec-16 | 10:20         | Cloudy            | 18464            | 2.8398           | 2.8449 | 1466.60         | 1467.60 | 1.00              | 1.06                               | 1.06            | 1.06    | 63                         | 80.4                                |
| 4-Jan-17  | 8:03          | Fine              | 18705            | 2.6398           | 2.6438 | 1491.61         | 1492.61 | 1.00              | 0.90                               | 0.90            | 0.90    | 54                         | 74.3                                |
| 4-Jan-17  | 9:50          | Fine              | 18712            | 2.6718           | 2.6769 | 1492.61         | 1493.61 | 1.00              | 0.90                               | 0.90            | 0.90    | 54                         | 94.7                                |
| 4-Jan-17  | 10:55         | Fine              | 18706            | 2.6806           | 2.6850 | 1493.61         | 1494.61 | 1.00              | 0.90                               | 0.90            | 0.90    | 54                         | 81.7                                |
| 10-Jan-17 | 8:08          | Fine              | 18868            | 2.8386           | 2.8470 | 1518.61         | 1519.61 | 1.00              | 1.01                               | 1.01            | 1.01    | 61                         | 138.3                               |
| 10-Jan-17 | 9:30          | Fine              | 18862            | 2.8641           | 2.8714 | 1519.61         | 1520.61 | 1.00              | 1.01                               | 1.01            | 1.01    | 61                         | 120.2                               |
| 10-Jan-17 | 11:00         | Fine              | 18852            | 2.8415           | 2.8445 | 1520.61         | 1521.61 | 1.00              | 1.01                               | 1.01            | 1.01    | 61                         | 49.4                                |
| 16-Jan-17 | 8:15          | Cloudy            | 18537            | 2.8174           | 2.8191 | 1545.61         | 1546.61 | 1.00              | 1.02                               | 1.02            | 1.02    | 61                         | 27.8                                |
| 16-Jan-17 | 9:45          | Cloudy            | 18839            | 2.8593           | 2.8650 | 1546.61         | 1547.61 | 1.00              | 1.02                               | 1.02            | 1.02    | 61                         | 93.2                                |
| 16-Jan-17 | 13:00         | Cloudy            | 18806            | 2.6754           | 2.6847 | 1547.61         | 1548.61 | 1.00              | 1.02                               | 1.02            | 1.02    | 61                         | 152.1                               |
| 21-Jan-17 | 8:02          | Fine              | 18815            | 2.6409           | 2.6526 | 1572.61         | 1573.61 | 1.00              | 1.02                               | 1.02            | 1.02    | 61                         | 191.2                               |
| 21-Jan-17 | 9:10          | Fine              | 18457            | 2.8307           | 2.8377 | 1573.61         | 1574.61 | 1.00              | 1.02                               | 1.02            | 1.02    | 61                         | 114.4                               |
| 21-Jan-17 | 10:50         | Fine              | 18452            | 2.8316           | 2.8355 | 1574.61         | 1575.61 | 1.00              | 1.02                               | 1.02            | 1.02    | 61                         | 63.7                                |
| 27-Jan-17 | 8:02          | Fine              | 18478            | 2.8535           | 2.8574 | 1599.61         | 1600.61 | 1.00              | 1.02                               | 1.02            | 1.02    | 61                         | 63.9                                |
| 27-Jan-17 | 9:45          | Fine              | 19005            | 2.8222           | 2.8276 | 1600.61         | 1601.61 | 1.00              | 1.02                               | 1.02            | 1.02    | 61                         | 88.5                                |
| 27-Jan-17 | 10:48         | Fine              | 18972            | 2.8769           | 2.8804 | 1601.61         | 1602.61 | 1.00              | 1.02                               | 1.02            | 1.02    | 61                         | 57.4                                |

Graphic Presentation of 1 hour TSP Result

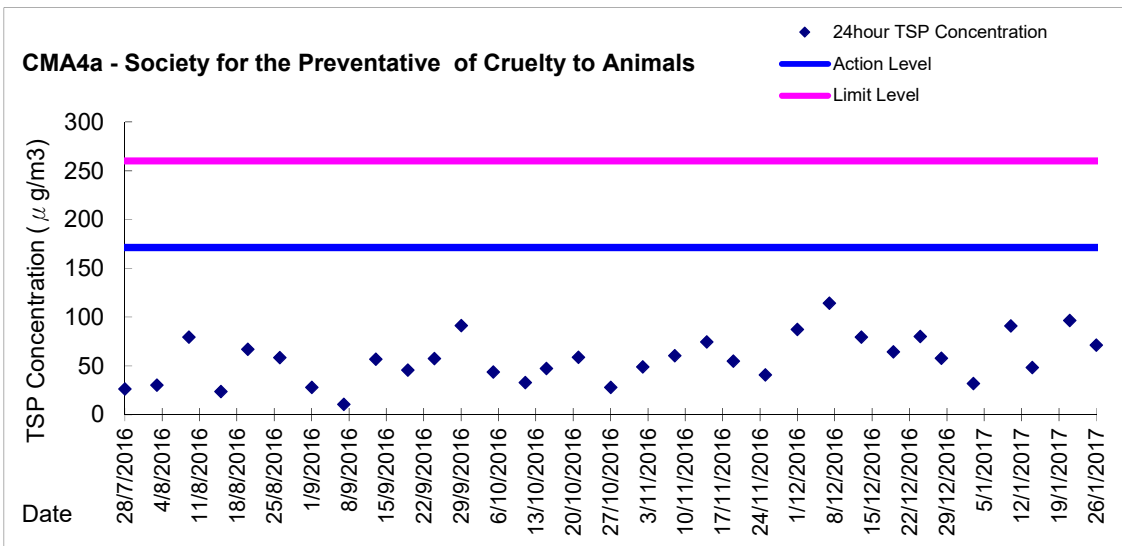
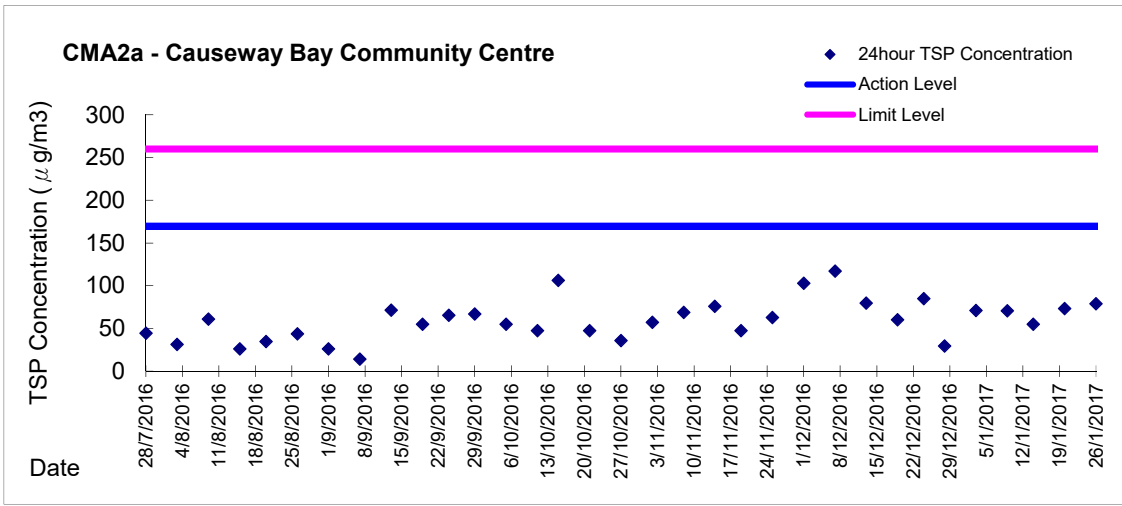
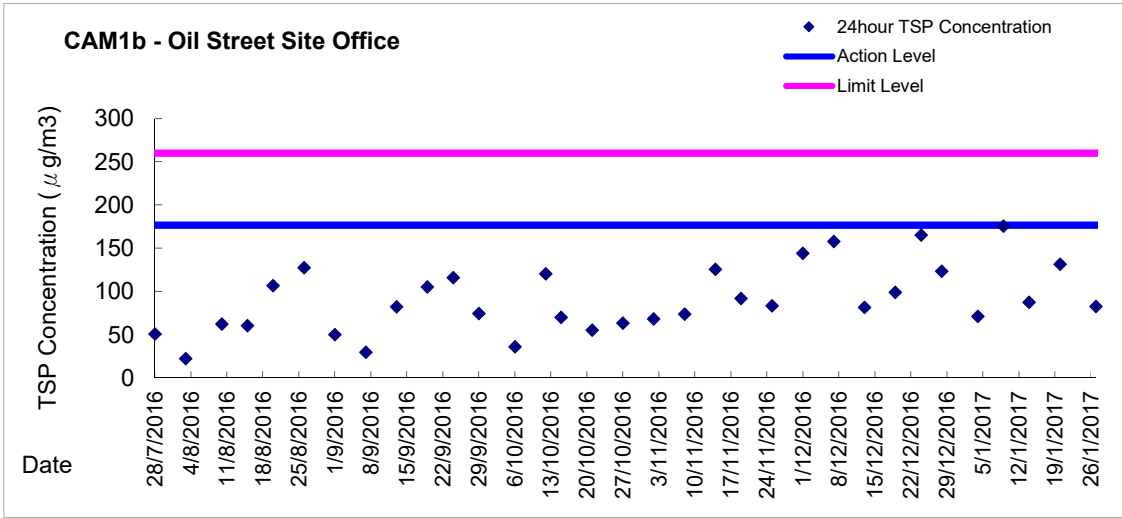


**Graphic Presentation of 1 hour TSP Result**

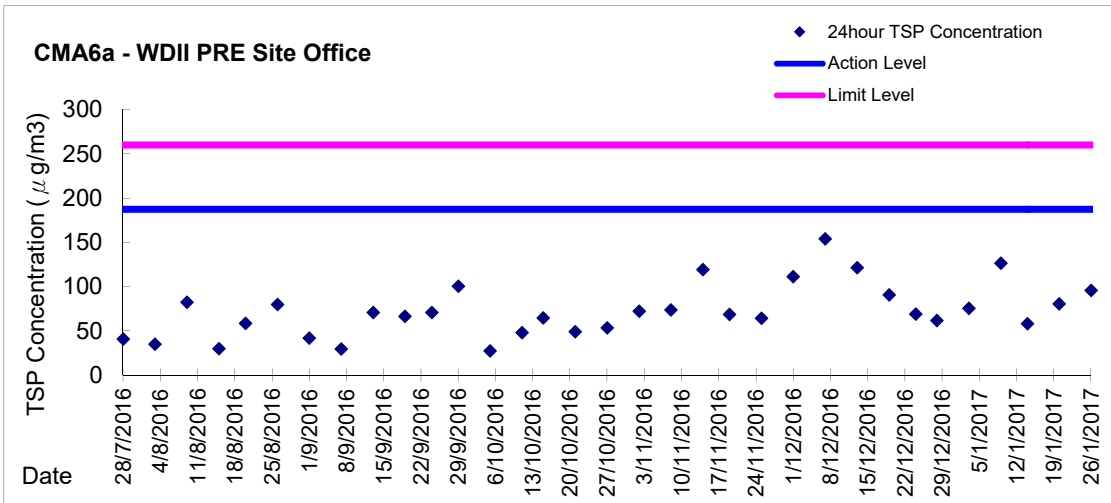
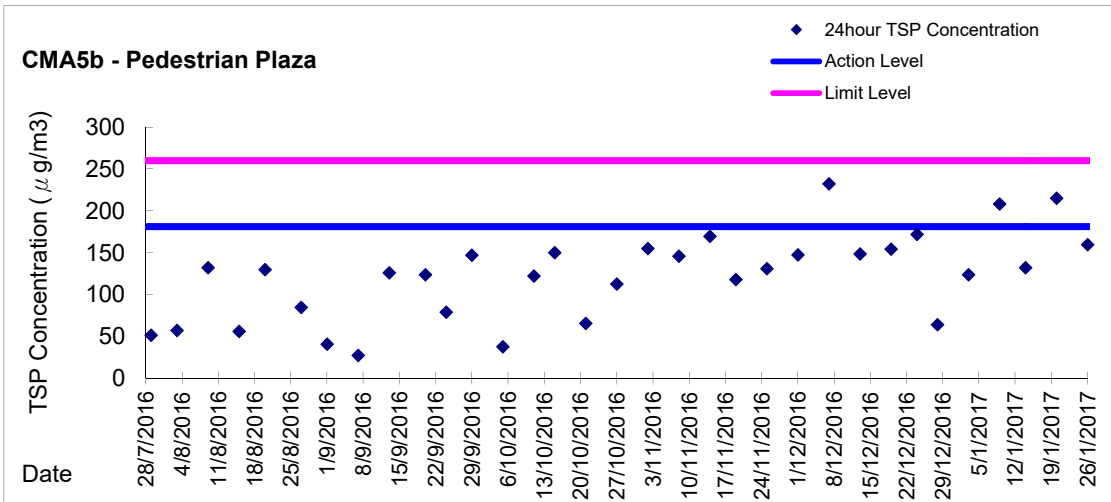
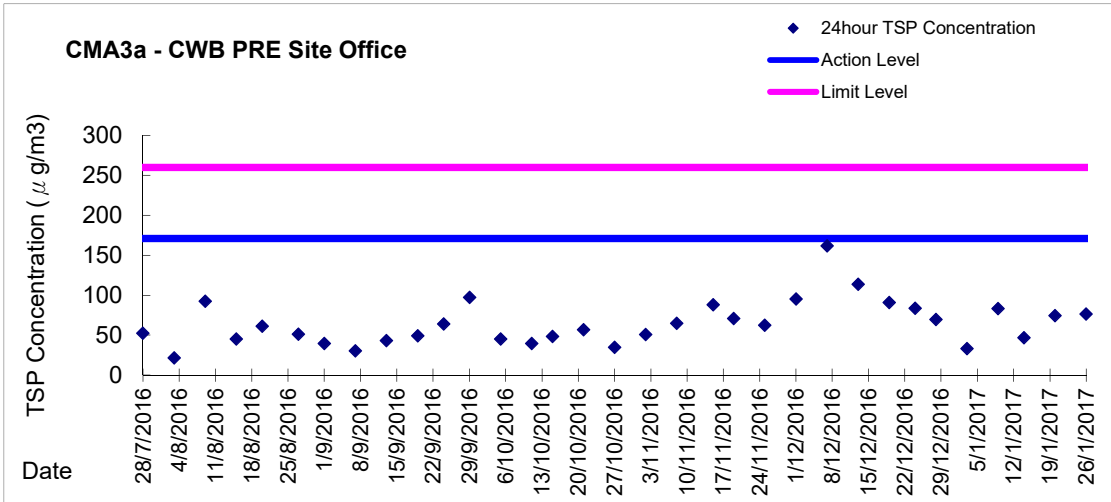




Graphic Presentation of 24 hour TSP Result



Graphic Presentation of 24 hour TSP Result





***Appendix 5.4***

***Water Quality Monitoring Results and Graphical Presentations***



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

| Date       | Time  | Weather Condition | Sampling Depth |         | Water Temperature |         |       | pH      |       |         | Salinity |         |       | DO Saturation |       |         | DO    |         | Turbidity |         |       | Suspended Solids |       |         |
|------------|-------|-------------------|----------------|---------|-------------------|---------|-------|---------|-------|---------|----------|---------|-------|---------------|-------|---------|-------|---------|-----------|---------|-------|------------------|-------|---------|
|            |       |                   |                |         | °C                |         |       | -       |       |         | ppt      |         |       | %             |       |         | mg/L  |         | NTU       |         |       | mg/L             |       |         |
|            |       |                   | Value          | Average | Value             | Average | Value | Average | Value | Average | Value    | Average | Value | Average       | Value | Average | Value | Average | Value     | Average | Value | Average          | Value | Average |
| 28/12/2016 | 15:25 | Cloudy            | Middle         | -       | 19.80             | 19.80   | 19.75 | 8.28    | 8.28  | 8.28    | 30.28    | 30.28   | 30.28 | 91.2          | 92.3  | 91.3    | 6.96  | 7.05    | 6.90      | 5.76    | 5.77  | 5.76             | 6     | 5.00    |
|            | 15:27 |                   | Middle         | -       | 19.70             | 19.70   |       | 8.28    | 8.28  |         | 30.28    | 30.28   |       | 90.9          | 90.9  |         | 6.94  | 6.64    |           | 5.76    | 5.74  |                  | 4     |         |
| 30/12/2016 | 18:35 | Fine              | Middle         | -       | 20.20             | 20.20   | 20.15 | 8.31    | 8.31  | 8.32    | 30.47    | 30.47   | 30.47 | 91.8          | 91.8  | 91.7    | 6.96  | 6.96    | 6.96      | 3.93    | 3.92  | 3.91             | 4     | 5.00    |
|            | 18:37 |                   | Middle         | -       | 20.10             | 20.10   |       | 8.32    | 8.32  |         | 30.47    | 30.47   |       | 91.5          | 91.8  |         | 6.94  | 6.96    |           | 3.90    | 3.89  |                  | 6     |         |
| 3/1/2017   | 12:00 | Fine              | Middle         | -       | 20.80             | 20.80   | 20.80 | 8.28    | 8.28  | 8.28    | 30.37    | 30.37   | 30.37 | 83.4          | 84.1  | 84.7    | 6.25  | 6.30    | 6.34      | 11.69   | 11.53 | <u>11.55</u>     | 10    | 10.00   |
|            | 12:02 |                   | Middle         | -       | 20.80             | 20.80   |       | 8.28    | 8.28  |         | 30.37    | 30.37   |       | 85.2          | 85.9  |         | 6.38  | 6.44    |           | 11.50   | 11.48 |                  | 10    |         |
| 5/1/2017   | 14:55 | Cloudy            | Middle         | -       | 21.50             | 21.50   | 21.55 | 8.26    | 8.26  | 8.26    | 30.35    | 30.35   | 30.35 | 91.5          | 92.1  | 91.4    | 6.76  | 6.80    | 6.75      | 4.97    | 4.89  | 4.91             | 5     | 5.00    |
|            | 14:57 |                   | Middle         | -       | 21.60             | 21.60   |       | 8.26    | 8.26  |         | 30.34    | 30.34   |       | 91.1          | 90.9  |         | 6.73  | 6.71    |           | 4.86    | 4.93  |                  | 5     |         |
| 7/1/2017   | 13:45 | Fine              | Middle         | -       | 21.80             | 21.80   | 21.80 | 8.19    | 8.19  | 8.19    | 30.24    | 30.24   | 30.23 | 85.9          | 86.2  | 86.3    | 6.32  | 6.34    | 6.35      | 3.06    | 3.07  | 3.05             | 4     | 3.00    |
|            | 13:47 |                   | Middle         | -       | 21.80             | 21.80   |       | 8.19    | 8.19  |         | 30.22    | 30.22   |       | 86.4          | 86.8  |         | 6.35  | 6.37    |           | 3.05    | 3.01  |                  | 2     |         |
| 9/1/2017   | 15:35 | Fine              | Middle         | -       | 21.50             | 21.50   | 21.60 | 8.22    | 8.22  | 8.22    | 30.30    | 30.30   | 30.30 | 88.5          | 88.1  | 89.3    | 6.32  | 6.30    | 6.48      | 4.48    | 4.46  | 4.46             | 4     | 4.50    |
|            | 15:37 |                   | Middle         | -       | 21.70             | 21.70   |       | 8.22    | 8.22  |         | 30.29    | 30.29   |       | 90.5          | 90.0  |         | 6.67  | 6.64    |           | 4.45    | 4.43  |                  | 5     |         |
| 11/1/2017  | 16:50 | Cloudy            | Middle         | -       | 20.60             | 20.60   | 20.60 | 8.30    | 8.30  | 8.31    | 30.56    | 30.56   | 30.57 | 92.1          | 92.9  | 92.6    | 6.93  | 6.99    | 6.97      | 5.46    | 5.47  | 5.48             | 5     | 5.00    |
|            | 16:52 |                   | Middle         | -       | 20.60             | 20.60   |       | 8.31    | 8.31  |         | 30.57    | 30.57   |       | 92.9          | 92.4  |         | 6.99  | 6.95    |           | 5.49    | 5.49  |                  | 5     |         |
| 13/1/2017  | 18:25 | Rainy             | Middle         | -       | 19.80             | 19.80   | 19.70 | 8.27    | 8.28  | 8.27    | 30.28    | 30.28   | 30.28 | 89.3          | 90.4  | 90.4    | 6.83  | 6.82    | 6.90      | 5.44    | 5.45  | 5.45             | 8     | 8.00    |
|            | 18:27 |                   | Middle         | -       | 19.60             | 19.60   |       | 8.27    | 8.27  |         | 30.28    | 30.28   |       | 91.1          | 90.9  |         | 6.97  | 6.96    |           | 5.45    | 5.45  |                  | 8     |         |
| 16/1/2017  | 12:15 | Cloudy            | Middle         | -       | 19.80             | 19.80   | 19.80 | 8.28    | 8.28  | 8.29    | 30.58    | 30.58   | 30.59 | 91.7          | 92.6  | 92.3    | 6.99  | 7.06    | 7.04      | 12.47   | 12.44 | <u>12.31</u>     | 14    | 13.50   |
|            | 12:17 |                   | Middle         | -       | 19.80             | 19.80   |       | 8.30    | 8.30  |         | 30.59    | 30.59   |       | 92.6          | 92.3  |         | 7.06  | 7.03    |           | 12.15   | 12.17 |                  | 13    |         |
| 18/1/2017  | 12:06 | Cloudy            | Middle         | -       | 19.80             | 19.80   | 19.80 | 8.29    | 8.29  | 8.30    | 30.60    | 30.60   | 30.60 | 97.0          | 97.4  | 95.3    | 7.23  | 7.16    | 7.15      | 3.66    | 3.61  | 3.60             | 3     | 3.50    |
|            | 12:08 |                   | Middle         | -       | 19.80             | 19.80   |       | 8.30    | 8.30  |         | 30.60    | 30.60   |       | 93.7          | 93.1  |         | 7.13  | 7.09    |           | 3.57    | 3.54  |                  | 4     |         |
| 20/1/2017  | 13:45 | Fine              | Middle         | -       | 21.60             | 21.60   | 21.40 | 7.73    | 7.73  | 7.79    | 30.39    | 30.39   | 30.39 | 85.1          | 83.4  | 83.1    | 6.31  | 6.22    | 6.18      | 5.00    | 4.98  | 4.96             | 5     | 5.00    |
|            | 13:47 |                   | Middle         | -       | 21.20             | 21.20   |       | 7.85    | 7.85  |         | 30.38    | 30.38   |       | 82.1          | 81.8  |         | 6.11  | 6.08    |           | 4.94    | 4.90  |                  | 5     |         |
| 23/1/2017  | 14:35 | Fine              | Middle         | -       | 19.90             | 19.90   | 19.90 | 8.07    | 8.07  | 8.09    | 30.74    | 30.74   | 30.75 | 82.0          | 81.9  | 82.3    | 6.25  | 6.21    | 6.26      | 5.84    | 5.76  | 5.79             | 3     | 2.50    |
|            | 14:37 |                   | Middle         | -       | 19.90             | 19.90   |       | 8.11    | 8.11  |         | 30.76    | 30.76   |       | 82.3          | 83.0  |         | 6.26  | 6.30    |           | 5.76    | 5.81  |                  | 2     |         |
| 25/1/2017  | 16:25 | Fine              | Middle         | -       | 19.60             | 19.60   | 19.65 | 8.10    | 8.10  | 8.12    | 30.98    | 30.98   | 30.98 | 87.0          | 87.1  | 87.5    | 6.63  | 6.63    | 6.66      | 4.04    | 4.03  | 4.03             | 3     | 3.50    |
|            | 16:27 |                   | Middle         | -       | 19.70             | 19.70   |       | 8.13    | 8.13  |         | 30.98    | 30.98   |       | 87.9          | 87.9  |         | 6.69  | 6.69    |           | 4.03    | 4.02  |                  | 4     |         |

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



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

| Date       | Time  | Weather Condition | Sampling Depth |     | Water Temperature |         |       | pH      |       |         | Salinity |         |       | DO Saturation |       | DO      |       | Turbidity |      | Suspended Solids |      |      |   |      |
|------------|-------|-------------------|----------------|-----|-------------------|---------|-------|---------|-------|---------|----------|---------|-------|---------------|-------|---------|-------|-----------|------|------------------|------|------|---|------|
|            |       |                   | m              |     | °C                |         | -     |         | ppt   |         | %        |         | mg/L  |               | NTU   |         | mg/L  |           |      |                  |      |      |   |      |
|            |       |                   |                |     | Value             | Average | Value | Average | Value | Average | Value    | Average | Value | Average       | Value | Average | Value | Average   |      |                  |      |      |   |      |
| 28/12/2016 | 16:51 | Cloudy            | Middle         | 3.5 | 19.70             | 19.70   | 19.70 | 8.36    | 8.36  | 8.36    | 30.47    | 30.47   | 31.48 | 86.4          | 86.3  | 83.4    | 6.60  | 6.60      | 6.45 | 6.57             | 6.61 | 6.57 | 5 | 6.00 |
|            | 16:53 |                   | Middle         | 3.5 | 19.70             | 19.70   |       | 8.36    | 8.36  |         | 32.49    | 32.49   |       | 80.6          | 80.2  |         | 6.54  | 6.07      |      | 6.54             | 6.57 |      | 7 |      |
| 30/12/2016 | 16:30 | Fine              | Middle         | 3.0 | 19.50             | 19.50   | 19.45 | 8.38    | 8.38  | 8.38    | 30.62    | 30.62   | 30.63 | 91.1          | 91.6  | 91.6    | 6.99  | 7.02      | 7.02 | 3.41             | 3.30 | 3.34 | 4 | 4.50 |
|            | 16:37 |                   | Middle         | 3.0 | 19.40             | 19.40   |       | 8.38    | 8.38  |         | 30.63    | 30.63   |       | 91.7          | 91.8  |         | 7.03  | 7.04      |      | 3.30             | 3.34 |      | 5 |      |
| 3/1/2017   | 10:45 | Fine              | Middle         | 3.5 | 20.40             | 20.40   | 20.50 | 8.32    | 8.32  | 8.33    | 30.52    | 30.52   | 30.50 | 91.3          | 90.4  | 90.2    | 6.87  | 6.80      | 6.66 | 3.87             | 3.64 | 3.73 | 8 | 7.00 |
|            | 10:47 |                   | Middle         | 3.5 | 20.60             | 20.60   |       | 8.33    | 8.33  |         | 30.48    | 30.48   |       | 89.7          | 89.3  |         | 6.25  | 6.71      |      | 3.72             | 3.69 |      | 6 |      |
| 5/1/2017   | 11:30 | Cloudy            | Middle         | 3.5 | 20.50             | 20.50   | 20.60 | 8.31    | 8.31  | 8.31    | 30.46    | 30.46   | 30.46 | 91.3          | 90.9  | 90.9    | 6.86  | 6.82      | 6.82 | 4.28             | 4.24 | 4.16 | 4 | 3.00 |
|            | 11:32 |                   | Middle         | 3.5 | 20.70             | 20.70   |       | 8.31    | 8.31  |         | 30.45    | 30.45   |       | 90.7          | 90.5  |         | 6.80  | 6.78      |      | 4.07             | 4.05 |      | 2 |      |
| 7/1/2017   | 11:01 | Fine              | Middle         | 3.5 | 21.10             | 21.10   | 21.10 | 8.26    | 8.06  | 8.21    | 30.27    | 30.27   | 30.27 | 81.3          | 82.5  | 82.5    | 6.06  | 6.16      | 6.15 | 2.45             | 2.45 | 2.46 | 4 | 4.00 |
|            | 11:03 |                   | Middle         | 3.5 | 21.10             | 21.10   |       | 8.26    | 8.26  |         | 30.27    | 30.27   |       | 83.1          | 83.2  |         | 6.19  | 6.20      |      | 2.47             | 2.48 |      | 4 |      |
| 9/1/2017   | 14:33 | Fine              | Middle         | 2.5 | 20.80             | 20.80   | 20.85 | 8.30    | 8.30  | 8.30    | 30.30    | 30.30   | 30.31 | 77.8          | 76.9  | 76.4    | 5.82  | 5.76      | 5.72 | 2.47             | 2.46 | 2.46 | 4 | 3.00 |
|            | 14:35 |                   | Middle         | 2.5 | 20.90             | 20.90   |       | 8.30    | 8.30  |         | 30.31    | 30.31   |       | 76.6          | 74.4  |         | 5.73  | 5.57      |      | 2.45             | 2.45 |      | 2 |      |
| 11/1/2017  | 16:05 | Cloudy            | Middle         | 3.0 | 20.00             | 20.00   | 20.00 | 8.37    | 8.37  | 8.37    | 30.68    | 30.68   | 30.69 | 87.9          | 89.8  | 89.7    | 6.67  | 6.81      | 6.81 | 3.73             | 3.85 | 3.82 | 3 | 3.00 |
|            | 16:07 |                   | Middle         | 3.0 | 20.00             | 20.00   |       | 8.37    | 8.37  |         | 30.71    | 30.71   |       | 90.5          | 90.7  |         | 6.86  | 6.88      |      | 3.86             | 3.85 |      | 3 |      |
| 13/1/2017  | 16:40 | Rainy             | Middle         | 3.0 | 19.20             | 19.20   | 19.15 | 8.35    | 8.35  | 8.35    | 30.56    | 30.56   | 30.57 | 87.9          | 88.4  | 88.2    | 6.78  | 6.82      | 6.81 | 4.82             | 4.82 | 4.86 | 5 | 5.00 |
|            | 16:42 |                   | Middle         | 3.0 | 19.10             | 19.10   |       | 8.35    | 8.35  |         | 30.57    | 30.57   |       | 88.4          | 88.2  |         | 6.83  | 6.82      |      | 4.83             | 4.95 |      | 5 |      |
| 16/1/2017  | 10:25 | Cloudy            | Middle         | 3.5 | 18.30             | 18.30   | 18.25 | 8.36    | 8.36  | 8.36    | 30.63    | 30.63   | 30.64 | 87.4          | 87.9  | 87.5    | 6.86  | 6.88      | 6.86 | 5.23             | 5.25 | 5.19 | 4 | 4.00 |
|            | 10:27 |                   | Middle         | 3.5 | 18.20             | 18.20   |       | 8.36    | 8.36  |         | 30.65    | 30.65   |       | 87.2          | 87.5  |         | 6.84  | 6.87      |      | 5.14             | 5.13 |      | 4 |      |
| 18/1/2017  | 10:50 | Cloudy            | Middle         | 3.5 | 19.50             | 19.50   | 19.45 | 8.29    | 8.29  | 8.29    | 30.62    | 30.62   | 30.62 | 88.2          | 88.0  | 86.7    | 6.74  | 6.73      | 6.57 | 4.02             | 4.06 | 4.08 | 6 | 6.50 |
|            | 10:52 |                   | Middle         | 3.5 | 19.10             | 19.70   |       | 8.29    | 8.29  |         | 30.62    | 30.62   |       | 88.0          | 82.4  |         | 6.12  | 6.68      |      | 4.11             | 4.12 |      | 7 |      |
| 20/1/2017  | 11:05 | Fine              | Middle         | 3.0 | 19.40             | 19.40   | 19.40 | 8.11    | 8.11  | 8.11    | 30.30    | 30.30   | 30.30 | 82.4          | 81.9  | 82.4    | 6.34  | 6.30      | 6.34 | 4.89             | 4.93 | 4.90 | 4 | 5.00 |
|            | 11:07 |                   | Middle         | 3.0 | 19.40             | 19.40   |       | 8.11    | 8.11  |         | 30.30    | 30.30   |       | 82.3          | 82.9  |         | 6.33  | 6.37      |      | 4.89             | 4.87 |      | 6 |      |
| 23/1/2017  | 13:20 | Fine              | Middle         | 3.0 | 19.10             | 19.10   | 19.10 | 8.18    | 8.18  | 8.19    | 30.90    | 30.90   | 30.90 | 81.6          | 82.3  | 82.5    | 6.29  | 6.34      | 6.36 | 3.89             | 3.85 | 3.87 | 2 | 2.00 |
|            | 13:22 |                   | Middle         | 3.0 | 19.10             | 19.10   |       | 8.19    | 8.19  |         | 30.90    | 30.90   |       | 83.0          | 82.9  |         | 6.40  | 6.39      |      | 3.86             | 3.86 |      | 2 |      |
| 25/1/2017  | 15:05 | Fine              | Middle         | 3.0 | 19.50             | 19.50   | 19.55 | 8.20    | 8.20  | 8.20    | 31.09    | 31.09   | 31.09 | 89.0          | 89.1  | 89.2    | 6.79  | 6.80      | 6.80 | 4.34             | 4.26 | 4.28 | 4 | 3.00 |
|            | 15:07 |                   | Middle         | 3.0 | 19.60             | 19.60   |       | 8.20    | 8.20  |         | 31.08    | 31.08   |       | 89.8          | 88.9  |         | 6.84  | 6.78      |      | 4.25             | 4.26 |      | 2 |      |

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



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

| Date       | Time  | Weather Condition | Sampling Depth |       | Water Temperature |       |         | pH    |         |       | Salinity |       |         | DO Saturation |         | DO    |         | Turbidity |         |       | Suspended Solids |       |         |      |
|------------|-------|-------------------|----------------|-------|-------------------|-------|---------|-------|---------|-------|----------|-------|---------|---------------|---------|-------|---------|-----------|---------|-------|------------------|-------|---------|------|
|            |       |                   |                |       | °C                |       |         | -     |         |       | ppt      |       |         | %             |         | mg/L  |         | NTU       |         |       | mg/L             |       |         |      |
|            |       |                   | m              | Value | Average           | Value | Average | Value | Average | Value | Average  | Value | Average | Value         | Average | Value | Average | Value     | Average | Value | Average          | Value | Average |      |
| 28/12/2016 | 16:35 | Cloudy            | Middle         | 3.5   | 19.00             | 19.00 | 19.00   | 8.35  | 8.35    | 8.35  | 30.52    | 30.52 | 30.53   | 90.5          | 90.5    | 90.3  | 7.00    | 7.00      | 6.98    | 5.09  | 5.12             | 5.11  | 4       | 5.00 |
|            | 16:37 |                   | Middle         | 3.5   | 19.00             | 19.00 |         | 8.35  | 8.35    |       | 30.53    | 30.53 |         | 90.2          | 89.9    |       | 6.98    | 6.95      |         | 5.12  | 5.11             |       | 6       |      |
| 30/12/2016 | 16:10 | Fine              | Middle         | 3.0   | 19.20             | 19.20 | 19.25   | 8.38  | 8.38    | 8.38  | 30.62    | 30.62 | 30.62   | 87.6          | 87.3    | 88.7  | 6.74    | 6.72      | 6.79    | 3.72  | 3.72             | 3.73  | 4       | 3.50 |
|            | 16:12 |                   | Middle         | 3.0   | 19.30             | 19.30 |         | 8.38  | 8.38    |       | 30.62    | 30.62 |         | 89.8          | 90.1    |       | 6.81    | 6.88      |         | 3.73  | 3.74             |       | 3       |      |
| 3/1/2017   | 10:49 | Fine              | Middle         | 3.5   | 20.20             | 20.20 | 20.25   | 8.32  | 8.32    | 8.32  | 30.51    | 30.51 | 30.51   | 86.7          | 86.4    | 86.1  | 6.55    | 6.53      | 6.51    | 3.59  | 3.61             | 3.57  | 5       | 4.50 |
|            | 10:51 |                   | Middle         | 3.5   | 20.30             | 20.30 |         | 8.32  | 8.32    |       | 30.51    | 30.51 |         | 85.1          | 86.3    |       | 6.43    | 6.52      |         | 3.59  | 3.50             |       | 4       |      |
| 5/1/2017   | 11:05 | Cloudy            | Middle         | 3.5   | 21.40             | 21.40 | 21.40   | 8.28  | 8.28    | 8.29  | 30.42    | 30.42 | 30.43   | 92.9          | 92.4    | 92.1  | 6.89    | 6.85      | 6.83    | 3.31  | 3.22             | 3.29  | <2      | <2   |
|            | 11:07 |                   | Middle         | 3.5   | 21.40             | 21.40 |         | 8.29  | 8.29    |       | 30.43    | 30.43 |         | 91.6          | 91.5    |       | 6.79    | 6.78      |         | 3.30  | 3.32             |       | <2      |      |
| 7/1/2017   | 10:45 | Fine              | Middle         | 3.5   | 21.20             | 21.20 | 21.25   | 8.27  | 8.27    | 8.27  | 30.57    | 30.57 | 30.56   | 84.5          | 83.6    | 83.5  | 6.27    | 6.20      | 6.20    | 2.59  | 2.59             | 2.58  | 2       | 3.00 |
|            | 10:47 |                   | Middle         | 3.5   | 21.30             | 21.30 |         | 8.27  | 8.27    |       | 30.54    | 30.54 |         | 83.1          | 82.9    |       | 6.17    | 6.16      |         | 2.58  | 2.57             |       | 4       |      |
| 9/1/2017   | 14:17 | Fine              | Middle         | 2.5   | 20.90             | 20.90 | 20.90   | 8.27  | 8.27    | 8.26  | 30.49    | 30.49 | 30.48   | 76.3          | 76.2    | 75.8  | 5.70    | 5.69      | 5.66    | 2.23  | 2.22             | 2.17  | 2       | 2.50 |
|            | 14:19 |                   | Middle         | 2.5   | 20.90             | 20.90 |         | 8.23  | 8.27    |       | 30.47    | 30.47 |         | 75.6          | 75.1    |       | 5.64    | 5.60      |         | 2.12  | 2.11             |       | 3       |      |
| 11/1/2017  | 15:45 | Cloudy            | Middle         | 3.0   | 20.20             | 20.20 | 20.25   | 8.34  | 8.34    | 8.34  | 30.75    | 30.75 | 30.74   | 83.4          | 82.6    | 84.4  | 6.30    | 6.24      | 6.37    | 3.18  | 3.16             | 3.15  | 3       | 3.00 |
|            | 15:47 |                   | Middle         | 3.0   | 20.30             | 20.30 |         | 8.34  | 8.34    |       | 30.74    | 30.71 |         | 83.3          | 88.2    |       | 6.29    | 6.66      |         | 3.15  | 3.12             |       | 3       |      |
| 13/1/2017  | 16:20 | Rainy             | Middle         | 3.0   | 19.00             | 19.00 | 19.00   | 8.34  | 8.34    | 8.35  | 30.56    | 30.56 | 30.56   | 92.0          | 91.8    | 91.9  | 7.13    | 7.12      | 7.12    | 5.10  | 5.10             | 5.10  | 6       | 6.00 |
|            | 16:22 |                   | Middle         | 3.0   | 19.00             | 19.00 |         | 8.35  | 8.35    |       | 30.56    | 30.56 |         | 92.8          | 91.1    |       | 7.17    | 7.06      |         | 5.10  | 5.09             |       | 6       |      |
| 16/1/2017  | 10:00 | Cloudy            | Middle         | 3.5   | 17.80             | 17.80 | 17.80   | 8.33  | 8.33    | 8.33  | 30.59    | 30.59 | 30.60   | 83.6          | 84.1    | 83.9  | 6.62    | 6.66      | 6.64    | 5.35  | 5.42             | 5.44  | 4       | 4.00 |
|            | 10:05 |                   | Middle         | 3.5   | 17.80             | 17.80 |         | 8.33  | 8.33    |       | 30.61    | 30.61 |         | 83.9          | 83.8    |       | 6.64    | 6.63      |         | 5.47  | 5.51             |       | 4       |      |
| 18/1/2017  | 10:54 | Cloudy            | Middle         | 3.5   | 19.30             | 19.30 | 19.35   | 8.30  | 8.30    | 8.30  | 30.60    | 30.60 | 30.60   | 87.0          | 86.9    | 86.3  | 6.69    | 6.68      | 6.63    | 4.49  | 4.46             | 4.47  | 3       | 3.00 |
|            | 10:56 |                   | Middle         | 3.5   | 19.40             | 19.40 |         | 8.29  | 8.29    |       | 30.60    | 30.60 |         | 86.0          | 85.2    |       | 6.60    | 6.55      |         | 4.46  | 4.45             |       | 3       |      |
| 20/1/2017  | 10:45 | Fine              | Middle         | 3.0   | 19.20             | 19.20 | 19.20   | 8.06  | 8.06    | 8.07  | 30.49    | 30.49 | 30.54   | 81.9          | 82.0    | 81.1  | 6.31    | 6.32      | 6.26    | 6.17  | 6.15             | 6.13  | 6       | 5.00 |
|            | 10:47 |                   | Middle         | 3.0   | 19.20             | 19.20 |         | 8.07  | 8.07    |       | 30.59    | 30.59 |         | 80.1          | 80.5    |       | 6.18    | 6.22      |         | 6.10  | 6.11             |       | 4       |      |
| 23/1/2017  | 13:00 | Fine              | Middle         | 3.0   | 19.20             | 19.20 | 19.25   | 8.04  | 8.04    | 8.07  | 31.06    | 31.06 | 31.06   | 85.4          | 85.6    | 85.0  | 6.56    | 6.52      | 6.51    | 4.80  | 4.82             | 4.81  | <2      | <2   |
|            | 13:02 |                   | Middle         | 3.0   | 19.30             | 19.30 |         | 8.09  | 8.09    |       | 31.07    | 31.05 |         | 84.6          | 84.3    |       | 6.49    | 6.47      |         | 4.81  | 4.82             |       | <2      |      |
| 25/1/2017  | 14:45 | Fine              | Middle         | 3.0   | 19.90             | 19.90 | 20.00   | 8.10  | 8.10    | 8.12  | 31.11    | 31.11 | 31.11   | 88.3          | 87.6    | 67.9  | 6.68    | 6.62      | 6.62    | 3.44  | 3.44             | 3.43  | 4       | 3.00 |
|            | 14:47 |                   | Middle         | 3.0   | 20.10             | 20.10 |         | 8.13  | 8.13    |       | 31.10    | 31.10 |         | 87.4          | 81      |       | 6.60    | 6.58      |         | 3.42  | 3.42             |       | 2       |      |

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.





**Water Monitoring Result at P3 - APA  
Mid-Flood Tide**

| Date       | Time  | Weather Condition | Sampling Depth |       | Water Temperature |       |         | pH    |         |       | Salinity |       |         | DO Saturation |         |       | DO      |       | Turbidity |       |         | Suspended Solids |         |      |
|------------|-------|-------------------|----------------|-------|-------------------|-------|---------|-------|---------|-------|----------|-------|---------|---------------|---------|-------|---------|-------|-----------|-------|---------|------------------|---------|------|
|            |       |                   |                |       | °C                |       |         | -     |         |       | ppt      |       |         | %             |         |       | mg/L    |       | NTU       |       |         | mg/L             |         |      |
|            |       |                   | m              | Value | Average           | Value | Average | Value | Average | Value | Average  | Value | Average | Value         | Average | Value | Average | Value | Average   | Value | Average | Value            | Average |      |
| 28/12/2016 | 16:39 | Cloudy            | Middle         | 3.5   | 19.20             | 19.20 | 19.15   | 8.36  | 8.36    | 8.36  | 30.51    | 30.51 | 30.52   | 87.4          | 87.7    | 87.8  | 6.74    | 6.77  | 6.78      | 5.28  | 5.27    | 5.27             | 4       | 4.50 |
|            | 16:41 |                   | Middle         | 3.5   | 19.10             | 19.10 |         | 8.36  | 8.36    |       | 30.52    | 30.52 |         | 87.9          | 88.1    |       | 6.79    | 6.80  |           | 5.26  | 5.26    |                  | 5       |      |
| 30/12/2016 | 16:15 | Fine              | Middle         | 3.0   | 19.20             | 19.20 | 19.20   | 8.38  | 8.38    | 8.38  | 30.66    | 30.66 | 30.66   | 91.7          | 90.5    | 91.8  | 7.06    | 6.97  | 7.07      | 4.83  | 4.89    | 4.82             | 4       | 3.50 |
|            | 16:17 |                   | Middle         | 3.0   | 19.20             | 19.20 |         | 8.38  | 8.38    |       | 30.66    | 30.66 |         | 92.2          | 92.6    |       | 7.10    | 7.13  |           | 4.73  | 4.84    |                  | 3       |      |
| 3/1/2017   | 10:53 | Fine              | Middle         | 3.5   | 20.10             | 20.10 | 25.15   | 8.30  | 8.32    | 8.32  | 30.51    | 30.51 | 30.51   | 80.0          | 80.5    | 82.6  | 6.44    | 6.47  | 6.43      | 4.55  | 4.84    | 4.56             | 5       | 5.00 |
|            | 10:55 |                   | Middle         | 3.5   | 30.20             | 30.20 |         | 8.32  | 8.32    |       | 30.51    | 30.51 |         | 85.4          | 84.4    |       | 6.42    | 6.39  |           | 4.40  | 4.44    |                  | 5       |      |
| 5/1/2017   | 11:10 | Cloudy            | Middle         | 3.5   | 20.80             | 20.80 | 20.85   | 8.31  | 8.31    | 8.31  | 30.48    | 30.48 | 30.48   | 90.1          | 90.0    | 89.5  | 6.74    | 6.72  | 6.68      | 2.96  | 2.96    | 2.96             | 2       | 3.00 |
|            | 11:12 |                   | Middle         | 3.5   | 20.90             | 20.90 |         | 8.31  | 8.31    |       | 30.48    | 30.48 |         | 89.0          | 88.7    |       | 6.65    | 6.62  |           | 2.95  | 2.95    |                  | 4       |      |
| 7/1/2017   | 10:49 | Fine              | Middle         | 3.5   | 20.80             | 20.80 | 20.85   | 8.28  | 8.28    | 8.28  | 30.46    | 30.46 | 30.46   | 81.2          | 81.3    | 81.2  | 6.08    | 6.08  | 6.07      | 2.23  | 2.22    | 2.21             | 4       | 4.00 |
|            | 10:51 |                   | Middle         | 3.5   | 20.90             | 20.90 |         | 8.27  | 8.27    |       | 30.46    | 30.46 |         | 81.2          | 81.1    |       | 6.07    | 6.06  |           | 2.20  | 2.17    |                  | 4       |      |
| 9/1/2017   | 14:21 | Fine              | Middle         | 2.5   | 20.70             | 20.70 | 20.75   | 8.26  | 8.26    | 8.26  | 30.41    | 30.41 | 30.41   | 84.9          | 86.9    | 86.6  | 6.37    | 6.51  | 6.49      | 2.11  | 2.11    | 2.11             | 3       | 4.00 |
|            | 14:23 |                   | Middle         | 2.5   | 20.80             | 20.80 |         | 8.26  | 8.26    |       | 30.40    | 30.40 |         | 87.2          | 87.4    |       | 6.54    | 6.55  |           | 2.12  | 2.11    |                  | 5       |      |
| 11/1/2017  | 15:50 | Cloudy            | Middle         | 3.0   | 19.80             | 19.80 | 19.80   | 8.36  | 8.36    | 8.36  | 30.70    | 30.70 | 30.70   | 89.7          | 90.4    | 90.3  | 6.82    | 6.88  | 6.87      | 3.85  | 3.65    | 3.63             | 7       | 6.00 |
|            | 15:52 |                   | Middle         | 3.0   | 19.80             | 19.80 |         | 8.36  | 8.36    |       | 30.70    | 30.70 |         | 90.5          | 90.4    |       | 6.88    | 6.88  |           | 3.50  | 3.50    |                  | 5       |      |
| 13/1/2017  | 16:25 | Rainy             | Middle         | 3.0   | 19.20             | 19.20 | 19.15   | 8.35  | 8.35    | 8.36  | 30.56    | 30.56 | 30.57   | 89.7          | 90.0    | 89.8  | 6.92    | 6.94  | 6.92      | 5.12  | 5.09    | 5.08             | 4       | 4.50 |
|            | 16:27 |                   | Middle         | 3.0   | 19.10             | 19.10 |         | 8.36  | 8.36    |       | 30.57    | 30.57 |         | 89.8          | 89.6    |       | 6.92    | 6.91  |           | 5.08  | 5.01    |                  | 5       |      |
| 16/1/2017  | 10:10 | Cloudy            | Middle         | 3.5   | 18.10             | 18.10 | 18.05   | 8.34  | 8.34    | 8.34  | 30.53    | 30.53 | 30.56   | 87.2          | 87.5    | 87.4  | 6.88    | 6.90  | 6.90      | 4.40  | 4.34    | 4.36             | 4       | 4.00 |
|            | 10:12 |                   | Middle         | 3.5   | 18.00             | 18.00 |         | 8.34  | 8.34    |       | 30.59    | 30.59 |         | 87.5          | 87.4    |       | 6.90    | 6.90  |           | 4.35  | 4.35    |                  | 4       |      |
| 18/1/2017  | 10:58 | Cloudy            | Middle         | 3.5   | 19.30             | 19.30 | 19.30   | 8.32  | 8.32    | 8.32  | 30.67    | 30.67 | 30.67   | 85.6          | 85.5    | 84.8  | 6.60    | 6.57  | 6.52      | 6.20  | 6.06    | 6.14             | 3       | 3.50 |
|            | 11:00 |                   | Middle         | 3.5   | 19.30             | 19.30 |         | 8.32  | 8.32    |       | 30.67    | 30.67 |         | 84.6          | 83.3    |       | 6.50    | 6.40  |           | 6.14  | 6.16    |                  | 4       |      |
| 20/1/2017  | 10:50 | Fine              | Middle         | 3.0   | 19.00             | 19.00 | 19.05   | 8.02  | 8.02    | 8.06  | 30.49    | 30.49 | 30.49   | 77.5          | 78.6    | 78.0  | 5.99    | 6.04  | 6.02      | 4.66  | 4.65    | 4.65             | 6       | 5.50 |
|            | 10:52 |                   | Middle         | 3.0   | 19.10             | 19.10 |         | 8.09  | 8.09    |       | 30.48    | 30.48 |         | 77.9          | 77.8    |       | 6.02    | 6.02  |           | 4.65  | 4.65    |                  | 5       |      |
| 23/1/2017  | 13:05 | Fine              | Middle         | 3.0   | 18.90             | 18.90 | 18.95   | 8.12  | 8.12    | 8.13  | 30.99    | 30.99 | 30.99   | 83.1          | 82.8    | 83.4  | 6.42    | 6.40  | 6.44      | 3.48  | 3.43    | 3.41             | <2      | <2   |
|            | 13:07 |                   | Middle         | 3.0   | 19.00             | 19.00 |         | 8.14  | 8.14    |       | 30.99    | 30.99 |         | 83.7          | 83.9    |       | 6.46    | 6.47  |           | 3.41  | 3.31    |                  | <2      |      |
| 25/1/2017  | 14:50 | Fine              | Middle         | 3.0   | 19.50             | 19.50 | 19.60   | 8.15  | 8.15    | 8.16  | 31.10    | 31.10 | 31.10   | 87.7          | 87.9    | 88.3  | 6.70    | 6.71  | 6.73      | 3.80  | 3.82    | 3.80             | 6       | 5.50 |
|            | 14:52 |                   | Middle         | 3.0   | 19.70             | 19.70 |         | 8.16  | 8.16    |       | 31.09    | 31.09 |         | 88.7          | 88.7    |       | 6.76    | 6.76  |           | 3.83  | 3.74    |                  | 5       |      |

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



**Water Monitoring Result at P4 - SOC  
Mid-Flood Tide**

| Date       | Time  | Weather Condition | Sampling Depth |     | Water Temperature |         |       | pH    |         |      | Salinity |         |       | DO Saturation |         |      | DO    |         | Turbidity |       |         | Suspended Solids |       |         |
|------------|-------|-------------------|----------------|-----|-------------------|---------|-------|-------|---------|------|----------|---------|-------|---------------|---------|------|-------|---------|-----------|-------|---------|------------------|-------|---------|
|            |       |                   |                |     | °C                |         |       | -     |         |      | ppt      |         |       | %             |         |      | mg/L  |         | NTU       |       |         | mg/L             |       |         |
|            |       |                   | m              |     | Value             | Average |       | Value | Average |      | Value    | Average |       | Value         | Average |      | Value | Average |           | Value | Average |                  | Value | Average |
| 28/12/2016 | 16:43 | Cloudy            | Middle         | 3.5 | 19.40             | 19.40   | 19.40 | 8.35  | 8.35    | 8.36 | 30.53    | 30.53   | 30.53 | 87.7          | 87.9    | 88.0 | 6.74  | 6.75    | 6.73      | 5.43  | 5.37    | 5.40             | 6     | 5.50    |
|            | 16:45 |                   | Middle         | 3.5 | 19.40             | 19.40   |       | 8.36  | 8.36    |      | 30.53    | 30.53   |       | 88.1          | 88.1    |      | 6.71  | 6.71    |           | 5.39  | 5.41    |                  | 5     |         |
| 30/12/2016 | 16:20 | Fine              | Middle         | 3.0 | 19.40             | 19.40   | 19.40 | 8.38  | 8.38    | 8.38 | 30.62    | 30.62   | 30.63 | 90.1          | 90.6    | 90.2 | 6.94  | 6.96    | 6.93      | 4.53  | 4.55    | 4.47             | 5     | 6.00    |
|            | 16:22 |                   | Middle         | 3.0 | 19.40             | 19.40   |       | 8.38  | 8.38    |      | 30.64    | 30.64   |       | 90.9          | 89.2    |      | 6.97  | 6.84    |           | 4.47  | 4.33    |                  | 7     |         |
| 3/1/2017   | 10:47 | Fine              | Middle         | 3.5 | 20.20             | 20.20   | 20.20 | 8.33  | 8.33    | 8.33 | 30.53    | 30.53   | 30.53 | 84.1          | 84.1    | 84.1 | 6.41  | 6.40    | 6.37      | 4.66  | 4.68    | 4.79             | 6     | 5.50    |
|            | 10:49 |                   | Middle         | 3.5 | 20.20             | 20.20   |       | 8.33  | 8.33    |      | 30.52    | 30.52   |       | 84.6          | 83.6    |      | 6.36  | 6.32    |           | 4.80  | 5.01    |                  | 5     |         |
| 5/1/2017   | 11:15 | Cloudy            | Middle         | 3.5 | 20.60             | 20.60   | 20.65 | 8.30  | 8.30    | 8.30 | 30.36    | 30.36   | 30.41 | 89.6          | 89.4    | 89.0 | 6.72  | 6.71    | 6.68      | 3.21  | 3.20    | 3.11             | 4     | 4.00    |
|            | 11:17 |                   | Middle         | 3.5 | 20.70             | 20.70   |       | 8.30  | 8.30    |      | 30.45    | 30.45   |       | 88.8          | 88.3    |      | 6.66  | 6.62    |           | 3.05  | 2.99    |                  | 4     |         |
| 7/1/2017   | 10:53 | Fine              | Middle         | 3.5 | 20.80             | 20.80   | 20.85 | 8.28  | 8.28    | 8.28 | 30.34    | 30.34   | 30.34 | 80.6          | 80.9    | 80.9 | 6.03  | 6.05    | 6.05      | 2.57  | 2.63    | 2.62             | 3     | 2.50    |
|            | 10:55 |                   | Middle         | 3.5 | 20.90             | 20.90   |       | 8.28  | 8.28    |      | 30.34    | 30.34   |       | 80.9          | 81.0    |      | 6.05  | 6.05    |           | 2.64  | 2.64    |                  | 2     |         |
| 9/1/2017   | 14:25 | Fine              | Middle         | 2.5 | 20.80             | 20.80   | 20.80 | 8.29  | 8.29    | 8.29 | 30.41    | 30.41   | 30.42 | 75.9          | 76.1    | 74.8 | 5.69  | 5.70    | 5.61      | 3.19  | 2.97    | 3.03             | 4     | 4.50    |
|            | 14:27 |                   | Middle         | 2.5 | 20.80             | 20.80   |       | 8.29  | 8.29    |      | 30.42    | 30.42   |       | 74.6          | 72.7    |      | 5.59  | 5.45    |           | 2.97  | 2.97    |                  | 5     |         |
| 11/1/2017  | 15:55 | Cloudy            | Middle         | 3.0 | 19.90             | 19.90   | 19.90 | 8.36  | 8.36    | 8.34 | 30.69    | 30.69   | 30.69 | 88.4          | 88.4    | 89.1 | 6.72  | 6.71    | 6.77      | 3.41  | 3.41    | 3.41             | 3     | 3.50    |
|            | 15:57 |                   | Middle         | 3.0 | 19.90             | 19.90   |       | 8.26  | 8.36    |      | 30.69    | 30.69   |       | 89.8          | 89.8    |      | 6.82  | 6.82    |           | 3.41  | 3.41    |                  | 4     |         |
| 13/1/2017  | 16:30 | Rainy             | Middle         | 3.0 | 19.30             | 19.30   | 19.25 | 8.35  | 8.35    | 8.35 | 30.57    | 30.57   | 30.57 | 89.9          | 90.1    | 89.7 | 6.91  | 6.93    | 6.90      | 4.83  | 4.83    | 4.84             | 4     | 4.50    |
|            | 16:32 |                   | Middle         | 3.0 | 19.20             | 19.20   |       | 8.35  | 8.35    |      | 30.57    | 30.57   |       | 89.7          | 89.1    |      | 6.90  | 6.84    |           | 4.84  | 4.84    |                  | 5     |         |
| 16/1/2017  | 10:15 | Cloudy            | Middle         | 3.5 | 18.20             | 18.20   | 18.15 | 8.36  | 8.36    | 8.36 | 30.61    | 30.61   | 30.62 | 83.9          | 84.2    | 84.1 | 6.59  | 6.62    | 6.61      | 5.36  | 5.37    | 5.40             | 4     | 4.50    |
|            | 10:17 |                   | Middle         | 3.5 | 18.10             | 18.10   |       | 8.36  | 8.36    |      | 30.63    | 30.63   |       | 84.4          | 84.0    |      | 6.63  | 6.60    |           | 5.42  | 5.43    |                  | 5     |         |
| 18/1/2017  | 11:02 | Cloudy            | Middle         | 3.5 | 19.20             | 19.20   | 19.25 | 8.33  | 8.33    | 8.33 | 30.68    | 30.68   | 30.68 | 88.1          | 87.9    | 87.5 | 6.78  | 6.76    | 6.73      | 6.51  | 6.52    | 6.51             | 8     | 7.50    |
|            | 11:04 |                   | Middle         | 3.5 | 19.30             | 19.30   |       | 8.33  | 8.33    |      | 30.68    | 30.68   |       | 87.5          | 86.6    |      | 6.73  | 6.66    |           | 6.52  | 6.50    |                  | 7     |         |
| 20/1/2017  | 10:55 | Fine              | Middle         | 3.0 | 19.40             | 19.40   | 19.40 | 8.09  | 8.09    | 8.09 | 30.46    | 30.46   | 30.47 | 79.5          | 79.8    | 79.6 | 6.11  | 6.13    | 6.12      | 5.15  | 5.01    | 5.06             | 4     | 4.50    |
|            | 10:57 |                   | Middle         | 3.0 | 19.40             | 19.40   |       | 8.09  | 8.09    |      | 30.48    | 30.48   |       | 79.6          | 79.6    |      | 6.11  | 6.11    |           | 5.00  | 5.07    |                  | 5     |         |
| 23/1/2017  | 13:10 | Fine              | Middle         | 3.0 | 18.90             | 18.90   | 18.90 | 8.16  | 8.16    | 8.16 | 30.89    | 30.89   | 30.92 | 82.5          | 82.7    | 82.9 | 6.39  | 6.41    | 6.42      | 4.66  | 4.60    | 4.55             | 3     | 3.00    |
|            | 13:12 |                   | Middle         | 3.0 | 18.90             | 18.90   |       | 8.16  | 8.16    |      | 30.95    | 30.95   |       | 83.1          | 83.2    |      | 6.44  | 6.44    |           | 4.50  | 4.45    |                  | 3     |         |
| 25/1/2017  | 14:55 | Fine              | Middle         | 3.0 | 19.40             | 19.40   | 19.45 | 8.18  | 8.18    | 8.18 | 31.10    | 31.10   | 31.10 | 88.8          | 89.0    | 88.2 | 6.79  | 6.81    | 6.75      | 3.79  | 3.82    | 3.78             | 5     | 4.50    |
|            | 14:57 |                   | Middle         | 3.0 | 19.50             | 19.50   |       | 8.18  | 8.18    |      | 31.09    | 31.09   |       | 87.6          | 87.5    |      | 6.70  | 6.69    |           | 3.75  | 3.74    |                  | 4     |         |

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



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

| Date       | Time  | Weather Condition | Sampling Depth |     | Water Temperature |         |       | pH    |         |      | Salinity |         |       | DO Saturation |         |      | DO    |         | Turbidity |       |         | Suspended Solids |       |         |
|------------|-------|-------------------|----------------|-----|-------------------|---------|-------|-------|---------|------|----------|---------|-------|---------------|---------|------|-------|---------|-----------|-------|---------|------------------|-------|---------|
|            |       |                   |                |     | °C                |         |       | -     |         |      | ppt      |         |       | %             |         |      | mg/L  |         | NTU       |       |         | mg/L             |       |         |
|            |       |                   | m              |     | Value             | Average |       | Value | Average |      | Value    | Average |       | Value         | Average |      | Value | Average |           | Value | Average |                  | Value | Average |
| 28/12/2016 | 16:47 | Cloudy            | Middle         | 3.5 | 19.50             | 19.50   | 19.50 | 8.36  | 8.36    | 8.36 | 30.50    | 30.50   | 30.51 | 87.5          | 86.2    | 81.4 | 6.70  | 6.61    | 6.62      | 6.28  | 6.24    | 6.23             | 5     | 4.50    |
|            | 16:49 |                   | Middle         | 3.5 | 19.50             | 19.50   |       | 8.36  | 8.36    |      | 30.51    | 30.51   |       | 65.4          | 86.3    |      | 6.55  | 6.62    |           | 6.21  | 6.18    |                  | 4     |         |
| 30/12/2016 | 16:25 | Fine              | Middle         | 3.0 | 19.00             | 19.00   | 19.25 | 8.38  | 8.38    | 8.38 | 30.62    | 30.62   | 30.63 | 91.5          | 91.2    | 91.7 | 7.00  | 6.99    | 7.02      | 3.83  | 3.84    | 3.86             | 3     | 3.50    |
|            | 16:27 |                   | Middle         | 3.0 | 19.50             | 19.50   |       | 8.38  | 8.38    |      | 30.63    | 30.63   |       | 92.0          | 92.0    |      | 7.04  | 7.04    |           | 3.88  | 3.90    |                  | 4     |         |
| 3/1/2017   | 10:51 | Fine              | Middle         | 3.5 | 20.40             | 20.40   | 20.40 | 8.33  | 8.33    | 8.33 | 30.53    | 30.53   | 30.53 | 86.7          | 87.0    | 86.9 | 6.54  | 6.56    | 6.56      | 5.84  | 6.16    | 5.83             | 6     | 7.00    |
|            | 10:53 |                   | Middle         | 3.5 | 20.40             | 20.40   |       | 8.33  | 8.33    |      | 30.53    | 30.53   |       | 86.9          | 86.9    |      | 6.55  | 6.57    |           | 5.76  | 5.55    |                  | 8     |         |
| 5/1/2017   | 11:20 | Cloudy            | Middle         | 3.5 | 20.50             | 20.50   | 20.55 | 8.31  | 8.31    | 8.31 | 30.46    | 30.46   | 30.47 | 88.2          | 88.3    | 88.3 | 6.63  | 6.64    | 6.63      | 4.10  | 4.08    | 4.08             | 5     | 4.50    |
|            | 11:22 |                   | Middle         | 3.5 | 20.60             | 20.60   |       | 8.31  | 8.31    |      | 30.47    | 30.47   |       | 88.2          | 88.3    |      | 6.62  | 6.63    |           | 4.07  | 4.06    |                  | 4     |         |
| 7/1/2017   | 10:57 | Fine              | Middle         | 3.5 | 20.90             | 20.90   | 20.95 | 8.26  | 8.26    | 8.26 | 30.77    | 30.27   | 30.65 | 76.2          | 71.3    | 74.3 | 5.69  | 5.77    | 5.77      | 2.88  | 2.88    | 2.88             | <2    | 2.00    |
|            | 10:59 |                   | Middle         | 3.5 | 21.00             | 21.00   |       | 8.25  | 8.25    |      | 30.77    | 30.77   |       | 77.7          | 71.9    |      | 5.80  | 5.82    |           | 2.88  | 2.88    |                  | 2     |         |
| 9/1/2017   | 14:29 | Fine              | Middle         | 2.5 | 20.70             | 20.70   | 20.75 | 8.30  | 8.30    | 8.30 | 30.33    | 30.33   | 30.33 | 80.8          | 80.2    | 80.2 | 6.06  | 6.02    | 6.02      | 2.72  | 2.65    | 2.63             | 3     | 3.00    |
|            | 14:31 |                   | Middle         | 2.5 | 20.80             | 20.80   |       | 8.30  | 8.30    |      | 30.33    | 30.33   |       | 80.2          | 79.7    |      | 6.01  | 5.97    |           | 2.59  | 2.55    |                  | 3     |         |
| 11/1/2017  | 16:00 | Cloudy            | Middle         | 3.0 | 20.20             | 20.20   | 20.10 | 8.36  | 8.36    | 8.36 | 30.67    | 30.67   | 30.69 | 88.7          | 89.3    | 89.0 | 6.73  | 6.78    | 6.76      | 3.72  | 3.82    | 3.80             | 4     | 3.50    |
|            | 16:02 |                   | Middle         | 3.0 | 20.00             | 20.00   |       | 8.36  | 8.36    |      | 30.71    | 30.71   |       | 88.9          | 89.2    |      | 6.75  | 6.76    |           | 3.83  | 3.83    |                  | 3     |         |
| 13/1/2017  | 16:35 | Rainy             | Middle         | 3.0 | 19.30             | 19.30   | 19.25 | 8.35  | 8.35    | 8.35 | 30.58    | 30.58   | 30.58 | 88.4          | 88.9    | 88.6 | 6.81  | 6.85    | 6.83      | 4.73  | 4.74    | 4.73             | 5     | 5.00    |
|            | 16:37 |                   | Middle         | 3.0 | 19.20             | 19.20   |       | 8.35  | 8.35    |      | 30.58    | 30.58   |       | 88.5          | 88.6    |      | 6.82  | 6.83    |           | 4.74  | 4.72    |                  | 5     |         |
| 16/1/2017  | 10:20 | Cloudy            | Middle         | 3.5 | 18.30             | 18.30   | 18.25 | 8.36  | 8.36    | 8.36 | 30.61    | 30.61   | 30.63 | 82.4          | 82.3    | 82.3 | 6.45  | 6.45    | 6.45      | 5.96  | 5.77    | 5.74             | 6     | 5.00    |
|            | 10:22 |                   | Middle         | 3.5 | 18.20             | 18.20   |       | 8.36  | 8.36    |      | 30.65    | 30.65   |       | 82.3          | 82.1    |      | 6.45  | 6.44    |           | 5.68  | 5.55    |                  | 4     |         |
| 18/1/2017  | 11:06 | Cloudy            | Middle         | 3.5 | 19.30             | 19.30   | 19.30 | 8.33  | 8.33    | 8.33 | 30.67    | 30.67   | 30.68 | 89.0          | 88.8    | 88.5 | 6.84  | 6.83    | 6.80      | 4.98  | 4.96    | 4.95             | 5     | 5.50    |
|            | 11:08 |                   | Middle         | 3.5 | 19.30             | 19.30   |       | 8.33  | 8.33    |      | 30.68    | 30.68   |       | 88.4          | 87.7    |      | 6.79  | 6.74    |           | 4.94  | 4.90    |                  | 6     |         |
| 20/1/2017  | 11:00 | Fine              | Middle         | 3.0 | 19.40             | 19.40   | 19.40 | 8.10  | 8.10    | 8.13 | 30.47    | 30.47   | 30.48 | 78.8          | 79.0    | 78.7 | 6.05  | 6.07    | 6.04      | 4.45  | 4.46    | 4.57             | 5     | 6.00    |
|            | 11:02 |                   | Middle         | 3.0 | 19.40             | 19.40   |       | 8.16  | 8.16    |      | 30.48    | 30.48   |       | 78.3          | 78.5    |      | 6.01  | 6.02    |           | 4.58  | 4.77    |                  | 7     |         |
| 23/1/2017  | 13:15 | Fine              | Middle         | 3.0 | 19.00             | 19.00   | 19.00 | 8.17  | 8.17    | 8.18 | 30.90    | 30.90   | 30.90 | 83.3          | 83.2    | 83.2 | 6.41  | 6.41    | 6.41      | 4.15  | 4.20    | 4.20             | 3     | 2.50    |
|            | 13:17 |                   | Middle         | 3.0 | 19.00             | 19.00   |       | 8.18  | 8.18    |      | 30.90    | 30.90   |       | 83.0          | 83.1    |      | 6.40  | 6.42    |           | 4.22  | 4.23    |                  | 2     |         |
| 25/1/2017  | 15:00 | Fine              | Middle         | 3.0 | 19.40             | 19.40   | 19.40 | 8.19  | 8.19    | 8.19 | 31.10    | 31.10   | 31.10 | 87.2          | 87.9    | 87.8 | 6.67  | 6.73    | 6.73      | 3.44  | 3.44    | 3.44             | 4     | 4.00    |
|            | 15:02 |                   | Middle         | 3.0 | 19.40             | 19.40   |       | 8.19  | 8.19    |      | 31.10    | 31.10   |       | 88.1          | 88.0    |      | 6.75  | 6.75    |           | 3.44  | 3.43    |                  | 4     |         |

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



**Water Monitoring Result at RW21-P789W - GEC / CRB / SHK  
Mid-Flood Tide**

| Date       | Time  | Weather Condition | Sampling Depth |       | Water Temperature |       |         | pH    |         |       | Salinity |       |         | DO Saturation |         | DO    |         | Turbidity |         | Suspended Solids |         |      |   |      |
|------------|-------|-------------------|----------------|-------|-------------------|-------|---------|-------|---------|-------|----------|-------|---------|---------------|---------|-------|---------|-----------|---------|------------------|---------|------|---|------|
|            |       |                   |                |       | °C                |       |         | -     |         |       | ppt      |       |         | %             |         | mg/L  |         | NTU       |         | mg/L             |         |      |   |      |
|            |       |                   | m              | Value | Average           | Value | Average | Value | Average | Value | Average  | Value | Average | Value         | Average | Value | Average | Value     | Average | Value            | Average |      |   |      |
| 28/12/2016 | 17:00 | Cloudy            | Middle         | 3.5   | 20.00             | 20.00 | 20.05   | 8.35  | 8.35    | 8.35  | 30.57    | 30.57 | 30.58   | 89.5          | 89.5    | 89.6  | 6.81    | 6.81      | 6.82    | 5.60             | 5.60    | 5.62 | 5 | 5.50 |
|            | 17:02 |                   | Middle         | 3.5   | 20.20             | 20.00 |         | 8.35  | 8.35    |       | 30.58    | 30.58 |         | 89.6          | 89.9    |       | 6.82    | 6.85      |         | 5.63             | 5.65    |      | 6 |      |
| 30/12/2016 | 17:00 | Fine              | Middle         | 4.0   | 19.80             | 19.80 | 19.80   | 8.38  | 8.38    | 8.39  | 30.62    | 30.62 | 30.63   | 91.5          | 92.1    | 91.9  | 6.97    | 7.02      | 7.01    | 4.06             | 4.04    | 4.04 | 8 | 7.00 |
|            | 17:02 |                   | Middle         | 4.0   | 19.80             | 19.80 |         | 8.39  | 8.39    |       | 30.63    | 30.63 |         | 92.0          | 92.1    |       | 7.01    | 7.02      |         | 4.03             | 4.02    |      | 6 |      |
| 3/1/2017   | 11:20 | Fine              | Middle         | 3.5   | 20.50             | 20.50 | 20.50   | 8.32  | 8.32    | 8.32  | 30.48    | 30.48 | 30.48   | 90.0          | 90.4    | 89.9  | 6.78    | 6.81      | 6.77    | 4.85             | 4.95    | 4.91 | 6 | 5.50 |
|            | 11:22 |                   | Middle         | 3.5   | 20.50             | 20.50 |         | 8.32  | 8.32    |       | 30.48    | 30.48 |         | 90.0          | 89.1    |       | 6.77    | 6.70      |         | 4.95             | 4.89    |      | 5 |      |
| 5/1/2017   | 14:35 | Cloudy            | Middle         | 3.5   | 20.80             | 20.80 | 20.85   | 8.29  | 8.29    | 8.29  | 30.53    | 30.53 | 30.52   | 86.5          | 87.5    | 87.0  | 6.47    | 6.55      | 6.51    | 3.84             | 3.84    | 3.85 | 4 | 4.00 |
|            | 14:37 |                   | Middle         | 3.5   | 20.90             | 20.90 |         | 8.29  | 8.29    |       | 30.51    | 30.51 |         | 87.5          | 86.5    |       | 6.55    | 6.47      |         | 3.87             | 3.86    |      | 4 |      |
| 7/1/2017   | 13:00 | Fine              | Middle         | 4.0   | 21.50             | 21.50 | 21.50   | 8.28  | 8.28    | 8.28  | 30.44    | 30.44 | 30.43   | 90.0          | 90.0    | 90.0  | 6.65    | 6.65      | 6.65    | 3.59             | 3.50    | 3.50 | 6 | 5.00 |
|            | 13:02 |                   | Middle         | 4.0   | 21.50             | 21.50 |         | 8.28  | 8.28    |       | 30.41    | 30.41 |         | 90.0          | 90.1    |       | 6.65    | 6.66      |         | 3.47             | 3.44    |      | 4 |      |
| 9/1/2017   | 15:04 | Fine              | Middle         | 3.5   | 21.00             | 21.00 | 21.00   | 8.30  | 8.30    | 8.30  | 30.43    | 30.43 | 30.43   | 81.6          | 81.9    | 81.7  | 6.09    | 6.07      | 6.08    | 2.88             | 2.87    | 2.88 | 3 | 3.50 |
|            | 15:06 |                   | Middle         | 3.5   | 21.00             | 21.00 |         | 8.30  | 8.30    |       | 30.43    | 30.43 |         | 81.6          | 81.6    |       | 6.09    | 6.08      |         | 2.87             | 2.90    |      | 4 |      |
| 11/1/2017  | 16:20 | Cloudy            | Middle         | 3.5   | 20.30             | 20.30 | 20.25   | 8.35  | 8.35    | 8.36  | 30.69    | 30.69 | 30.70   | 92.4          | 93.2    | 93.2  | 6.89    | 7.04      | 7.01    | 2.88             | 2.88    | 2.87 | 5 | 4.50 |
|            | 16:22 |                   | Middle         | 3.5   | 20.20             | 20.20 |         | 8.36  | 8.36    |       | 30.70    | 30.70 |         | 93.5          | 93.7    |       | 7.06    | 7.04      |         | 2.87             | 2.84    |      | 4 |      |
| 13/1/2017  | 17:00 | Rainy             | Middle         | 4.0   | 19.50             | 19.50 | 19.45   | 8.35  | 8.36    | 8.36  | 30.61    | 30.61 | 30.62   | 89.8          | 89.0    | 89.0  | 6.89    | 6.83      | 6.83    | 5.63             | 5.63    | 5.63 | 8 | 7.50 |
|            | 17:02 |                   | Middle         | 4.0   | 19.40             | 19.40 |         | 8.36  | 8.36    |       | 30.63    | 30.63 |         | 88.6          | 88.4    |       | 6.80    | 6.79      |         | 5.63             | 5.64    |      | 7 |      |
| 16/1/2017  | 10:35 | Cloudy            | Middle         | 4.0   | 18.80             | 18.80 | 18.70   | 8.36  | 8.36    | 8.36  | 30.66    | 30.66 | 30.67   | 86.3          | 86.3    | 86.0  | 6.71    | 6.71      | 6.69    | 3.93             | 3.93    | 3.90 | 4 | 3.50 |
|            | 10:37 |                   | Middle         | 4.0   | 18.60             | 18.60 |         | 8.36  | 8.36    |       | 30.67    | 30.67 |         | 86.1          | 85.3    |       | 6.70    | 6.64      |         | 3.93             | 3.82    |      | 3 |      |
| 18/1/2017  | 11:20 | Cloudy            | Middle         | 4.0   | 19.60             | 19.60 | 19.60   | 8.32  | 8.32    | 8.32  | 30.73    | 30.73 | 30.73   | 90.1          | 90.3    | 90.2  | 6.88    | 6.90      | 6.89    | 8.00             | 7.98    | 7.96 | 5 | 5.00 |
|            | 11:22 |                   | Middle         | 4.0   | 19.60             | 19.60 |         | 8.32  | 8.32    |       | 30.73    | 30.73 |         | 90.4          | 90.0    |       | 6.91    | 6.88      |         | 7.98             | 7.87    |      | 5 |      |
| 20/1/2017  | 11:32 | Fine              | Middle         | 3.5   | 19.80             | 19.80 | 19.80   | 8.11  | 8.11    | 8.12  | 30.54    | 30.54 | 30.54   | 77.2          | 77.5    | 77.1  | 5.89    | 5.91      | 5.88    | 5.85             | 5.84    | 5.86 | 9 | 8.00 |
|            | 11:34 |                   | Middle         | 3.5   | 19.80             | 19.80 |         | 8.12  | 8.12    |       | 30.54    | 30.54 |         | 76.8          | 76.9    |       | 5.85    | 5.86      |         | 5.86             | 5.88    |      | 7 |      |
| 23/1/2017  | 13:45 | Fine              | Middle         | 3.5   | 19.30             | 19.30 | 19.25   | 8.13  | 8.13    | 8.15  | 30.96    | 30.96 | 30.96   | 85.9          | 86.2    | 85.8  | 6.60    | 6.63      | 6.60    | 4.23             | 4.24    | 4.26 | 3 | 2.50 |
|            | 13:47 |                   | Middle         | 3.5   | 19.20             | 19.20 |         | 8.17  | 8.17    |       | 30.96    | 30.96 |         | 85.8          | 85.3    |       | 6.59    | 6.56      |         | 4.26             | 4.29    |      | 2 |      |

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



**Water Monitoring Result at RW21-P789E - GEC / CRB / SHK  
Mid-Flood Tide**

| Date       | Time  | Weather Condition | Sampling Depth |       | Water Temperature |       |         | pH    |         |       | Salinity |       |         | DO Saturation |         |       | DO      |       | Turbidity |       |         | Suspended Solids |         |      |
|------------|-------|-------------------|----------------|-------|-------------------|-------|---------|-------|---------|-------|----------|-------|---------|---------------|---------|-------|---------|-------|-----------|-------|---------|------------------|---------|------|
|            |       |                   |                |       | °C                |       |         | -     |         |       | ppt      |       |         | %             |         |       | mg/L    |       | NTU       |       |         | mg/L             |         |      |
|            |       |                   | m              | Value | Average           | Value | Average | Value | Average | Value | Average  | Value | Average | Value         | Average | Value | Average | Value | Average   | Value | Average | Value            | Average |      |
| 28/12/2016 | 17:10 | Cloudy            | Middle         | 3.5   | 19.80             | 19.80 | 19.70   | 8.35  | 8.35    | 8.36  | 30.54    | 30.54 | 30.56   | 86.5          | 87.6    | 87.9  | 6.60    | 6.68  | 6.71      | 6.15  | 6.16    | 6.16             | 6       | 5.00 |
|            | 17:12 |                   | Middle         | 3.5   | 19.60             | 19.60 |         | 8.36  | 8.36    |       | 30.57    | 30.57 |         | 88.3          | 89.0    |       | 6.74    | 6.80  |           | 6.17  | 6.16    |                  | 4       |      |
| 30/12/2016 | 17:10 | Fine              | Middle         | 4.0   | 19.70             | 19.70 | 19.70   | 8.39  | 8.39    | 8.39  | 30.62    | 30.62 | 32.12   | 91.0          | 92.0    | 91.8  | 6.94    | 7.03  | 7.01      | 3.48  | 3.52    | 3.50             | 7       | 6.00 |
|            | 17:12 |                   | Middle         | 4.0   | 19.70             | 19.70 |         | 8.39  | 8.39    |       | 30.63    | 36.62 |         | 92.1          | 91.9    |       | 7.03    | 7.02  |           | 3.51  | 3.50    |                  | 5       |      |
| 3/1/2017   | 11:25 | Fine              | Middle         | 3.5   | 20.40             | 20.40 | 20.40   | 8.33  | 8.33    | 8.33  | 30.56    | 30.56 | 30.56   | 88.0          | 87.9    | 87.8  | 6.63    | 6.63  | 6.62      | 5.88  | 5.68    | 5.63             | 8       | 8.00 |
|            | 11:27 |                   | Middle         | 3.5   | 20.40             | 20.40 |         | 8.33  | 8.33    |       | 30.56    | 30.56 |         | 87.0          | 88.1    |       | 6.59    | 6.64  |           | 5.26  | 5.71    |                  | 8       |      |
| 5/1/2017   | 14:29 | Cloudy            | Middle         | 3.5   | 20.90             | 20.90 | 20.90   | 8.29  | 8.29    | 8.29  | 30.45    | 30.45 | 30.45   | 89.3          | 89.4    | 88.5  | 6.65    | 6.66  | 6.59      | 3.75  | 3.83    | 3.81             | 5       | 4.50 |
|            | 14:31 |                   | Middle         | 3.5   | 20.90             | 20.90 |         | 8.29  | 8.29    |       | 30.44    | 30.44 |         | 87.7          | 87.4    |       | 6.54    | 6.51  |           | 3.83  | 3.83    |                  | 4       |      |
| 7/1/2017   | 13:05 | Fine              | Middle         | 4.0   | 21.10             | 21.10 | 21.15   | 8.29  | 8.29    | 8.29  | 30.45    | 30.45 | 30.45   | 89.0          | 89.6    | 89.3  | 6.62    | 6.66  | 6.64      | 3.63  | 3.64    | 3.63             | 6       | 5.00 |
|            | 13:07 |                   | Middle         | 4.0   | 21.20             | 21.20 |         | 8.29  | 8.29    |       | 30.44    | 30.44 |         | 89.6          | 89.0    |       | 6.66    | 6.61  |           | 3.63  | 3.62    |                  | 4       |      |
| 9/1/2017   | 15:10 | Fine              | Middle         | 3.5   | 20.90             | 20.90 | 20.90   | 8.31  | 8.31    | 8.31  | 30.48    | 30.48 | 30.73   | 73.7          | 73.9    | 73.7  | 5.50    | 5.48  | 5.50      | 3.65  | 3.64    | 3.64             | 4       | 5.00 |
|            | 15:12 |                   | Middle         | 3.5   | 20.90             | 20.90 |         | 8.31  | 8.31    |       | 31.47    | 30.47 |         | 73.5          | 73.7    |       | 5.49    | 5.51  |           | 3.63  | 3.63    |                  | 6       |      |
| 11/1/2017  | 16:30 | Cloudy            | Middle         | 3.5   | 20.10             | 20.10 | 20.10   | 8.36  | 8.36    | 8.36  | 30.71    | 30.71 | 30.71   | 91.6          | 91.8    | 91.7  | 6.94    | 6.95  | 6.95      | 3.94  | 3.95    | 3.95             | 6       | 5.00 |
|            | 16:32 |                   | Middle         | 3.5   | 20.10             | 20.10 |         | 8.36  | 8.36    |       | 30.71    | 30.71 |         | 91.8          | 91.7    |       | 6.95    | 6.95  |           | 3.97  | 3.94    |                  | 4       |      |
| 13/1/2017  | 17:05 | Rainy             | Middle         | 4.0   | 19.50             | 19.50 | 19.45   | 8.36  | 8.36    | 8.36  | 30.61    | 30.61 | 30.61   | 87.3          | 87.6    | 87.5  | 6.70    | 6.72  | 6.72      | 4.44  | 4.40    | 4.42             | 7       | 6.50 |
|            | 17:07 |                   | Middle         | 4.0   | 19.40             | 19.40 |         | 8.36  | 8.36    |       | 30.61    | 30.61 |         | 87.7          | 87.4    |       | 6.73    | 6.71  |           | 4.41  | 4.43    |                  | 6       |      |
| 16/1/2017  | 10:45 | Cloudy            | Middle         | 4.0   | 18.30             | 18.30 | 18.45   | 8.36  | 8.36    | 8.36  | 30.67    | 30.67 | 30.68   | 86.7          | 87.2    | 87.0  | 6.74    | 6.78  | 6.76      | 4.39  | 4.40    | 4.39             | 7       | 7.50 |
|            | 10:47 |                   | Middle         | 4.0   | 18.60             | 18.60 |         | 8.36  | 8.36    |       | 30.68    | 30.68 |         | 86.7          | 87.3    |       | 6.74    | 6.79  |           | 4.39  | 4.39    |                  | 8       |      |
| 18/1/2017  | 11:30 | Cloudy            | Middle         | 3.5   | 19.40             | 19.40 | 19.40   | 8.33  | 8.33    | 8.33  | 30.75    | 30.75 | 30.75   | 86.7          | 87.1    | 86.9  | 6.65    | 6.68  | 6.66      | 6.42  | 6.44    | 6.39             | 6       | 6.50 |
|            | 11:32 |                   | Middle         | 3.5   | 19.40             | 19.40 |         | 8.33  | 8.33    |       | 30.75    | 30.75 |         | 86.9          | 86.9    |       | 6.66    | 6.66  |           | 6.37  | 6.31    |                  | 7       |      |
| 20/1/2017  | 11:40 | Fine              | Middle         | 3.5   | 19.10             | 19.10 | 19.40   | 8.12  | 8.12    | 8.12  | 30.57    | 30.57 | 30.57   | 72.9          | 72.8    | 72.7  | 5.59    | 5.58  | 5.57      | 6.62  | 6.51    | 6.52             | 8       | 7.00 |
|            | 11:42 |                   | Middle         | 3.5   | 19.70             | 19.70 |         | 8.12  | 8.12    |       | 30.57    | 30.57 |         | 72.1          | 73.0    |       | 5.51    | 5.60  |           | 6.48  | 6.46    |                  | 6       |      |
| 23/1/2017  | 13:55 | Fine              | Middle         | 3.5   | 19.30             | 19.30 | 19.30   | 8.13  | 8.13    | 8.15  | 30.99    | 30.99 | 30.99   | 82.2          | 82.2    | 82.5  | 6.31    | 6.31  | 6.33      | 5.34  | 5.35    | 5.36             | 6       | 5.50 |
|            | 13:57 |                   | Middle         | 3.5   | 19.30             | 19.30 |         | 8.16  | 8.16    |       | 30.99    | 30.99 |         | 82.7          | 82.9    |       | 6.34    | 6.36  |           | 5.37  | 5.36    |                  | 5       |      |

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



**Water Monitoring Result at RW21-P789 - GEC / CRB / SHK  
Mid-Flood Tide**

| Date      | Time  | Weater Condition | Sampling Depth |       | Water Temperature |       |         | pH    |         |       | Salinity |       |         | DO Saturation |         | DO    |         | Turbidity |         | Suspended Solids |         |      |   |      |
|-----------|-------|------------------|----------------|-------|-------------------|-------|---------|-------|---------|-------|----------|-------|---------|---------------|---------|-------|---------|-----------|---------|------------------|---------|------|---|------|
|           |       |                  |                |       | °C                |       |         | -     |         |       | ppt      |       |         | %             |         | mg/L  |         | NTU       |         | mg/L             |         |      |   |      |
|           |       |                  | m              | Value | Average           | Value | Average | Value | Average | Value | Average  | Value | Average | Value         | Average | Value | Average | Value     | Average | Value            | Average |      |   |      |
| 25/1/2017 | 15:15 | Fine             | Middle         | 3.5   | 19.50             | 19.50 | 19.60   | 8.15  | 8.15    | 8.17  | 31.10    | 31.10 | 31.10   | 88.2          | 90.0    | 89.3  | 6.74    | 6.86      | 6.81    | 3.35             | 3.32    | 3.32 | 4 | 4.50 |
|           | 15:17 |                  | Middle         | 3.5   | 19.70             | 19.70 |         | 8.19  | 8.19    |       | 31.10    | 31.10 |         | 89.8          | 89.2    |       | 6.84    | 6.79      |         | 3.31             | 3.30    |      | 5 |      |

Remarks:  
 Single underline denotes exceedance over Action Level.  
 Double underline denotes exceedance over Limit Level.





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

| Date       | Time  | Weather Condition | Sampling Depth |     | Water Temperature |         |       | pH      |       |         | Salinity |         |       | DO Saturation |       |         | DO    |         |       | Turbidity |      |             | Suspended Solids |       |
|------------|-------|-------------------|----------------|-----|-------------------|---------|-------|---------|-------|---------|----------|---------|-------|---------------|-------|---------|-------|---------|-------|-----------|------|-------------|------------------|-------|
|            |       |                   | m              |     | °C                |         | -     |         | ppt   |         | %        |         | mg/L  |               | NTU   |         | mg/L  |         |       |           |      |             |                  |       |
|            |       |                   |                |     | Value             | Average | Value | Average | Value | Average | Value    | Average | Value | Average       | Value | Average | Value | Average | Value | Average   |      |             |                  |       |
| 28/12/2016 | 15:52 | Cloudy            | Middle         | 3.5 | 19.70             | 19.70   | 19.55 | 8.31    | 8.31  | 8.32    | 30.50    | 30.50   | 31.03 | 90.4          | 91.9  | 91.6    | 6.92  | 7.04    | 7.02  | 6.92      | 6.94 | 6.97        | 6                | 6.00  |
|            | 15:54 |                   | Middle         | 3.5 | 19.40             | 19.40   |       | 8.32    | 8.32  |         | 32.55    | 30.55   |       | 92.0          | 91.9  |         | 7.06  | 7.05    |       | 6.99      | 7.02 |             | 6                |       |
| 30/12/2016 | 15:35 | Fine              | Middle         | 3.5 | 20.10             | 20.10   | 20.15 | 8.36    | 8.36  | 8.37    | 30.75    | 30.75   | 30.76 | 92.2          | 92.0  | 92.2    | 6.97  | 6.95    | 6.97  | 5.38      | 5.37 | 5.34        | 6                | 6.50  |
|            | 15:37 |                   | Middle         | 3.5 | 20.20             | 20.20   |       | 8.37    | 8.37  |         | 30.77    | 30.77   |       | 92.5          | 92.1  |         | 6.99  | 6.96    |       | 5.31      | 5.28 |             | 7                |       |
| 3/1/2017   | 10:07 | Fine              | Middle         | 3.5 | 20.60             | 20.60   | 20.70 | 8.29    | 8.29  | 8.31    | 30.60    | 30.60   | 30.60 | 87.9          | 88.1  | 86.3    | 6.59  | 6.60    | 6.46  | 4.20      | 4.33 | 4.31        | 6                | 6.50  |
|            | 10:09 |                   | Middle         | 3.5 | 20.80             | 20.80   |       | 8.32    | 8.32  |         | 30.59    | 30.59   |       | 82.6          | 86.7  |         | 6.18  | 6.48    |       | 4.35      | 4.34 |             | 7                |       |
| 5/1/2017   | 10:19 | Cloudy            | Middle         | 3.5 | 21.00             | 21.00   | 21.10 | 8.26    | 8.26  | 8.27    | 30.44    | 30.44   | 30.43 | 85.2          | 84.9  | 85.0    | 6.35  | 6.32    | 6.32  | 5.69      | 5.54 | 5.57        | 6                | 6.00  |
|            | 10:21 |                   | Middle         | 3.5 | 21.20             | 21.20   |       | 8.28    | 8.28  |         | 30.41    | 30.41   |       | 85.1          | 84.6  |         | 6.33  | 6.29    |       | 5.59      | 5.47 |             | 6                |       |
| 7/1/2017   | 10:00 | Fine              | Middle         | 3.5 | 21.20             | 21.20   | 21.25 | 8.25    | 8.25  | 8.26    | 30.53    | 30.53   | 30.53 | 91.4          | 90.9  | 90.7    | 6.78  | 6.74    | 6.73  | 3.21      | 3.19 | 3.19        | 4                | 4.50  |
|            | 10:02 |                   | Middle         | 3.5 | 21.30             | 21.30   |       | 8.26    | 8.26  |         | 30.53    | 30.53   |       | 90.7          | 89.7  |         | 6.73  | 6.65    |       | 3.19      | 3.18 |             | 5                |       |
| 9/1/2017   | 13:35 | Fine              | Middle         | 3.5 | 21.70             | 21.70   | 21.75 | 8.23    | 8.23  | 8.23    | 30.46    | 30.46   | 30.46 | 84.7          | 85.3  | 85.4    | 6.24  | 6.27    | 6.29  | 3.19      | 3.21 | 3.20        | 3                | 3.50  |
|            | 13:37 |                   | Middle         | 3.5 | 21.80             | 21.80   |       | 8.23    | 8.23  |         | 30.45    | 30.45   |       | 85.9          | 85.8  |         | 6.32  | 6.31    |       | 3.20      | 3.18 |             | 4                |       |
| 11/1/2017  | 15:05 | Cloudy            | Middle         | 3.5 | 20.70             | 20.70   | 20.53 | 8.28    | 8.28  | 8.29    | 30.69    | 30.69   | 30.69 | 92.4          | 92.7  | 92.3    | 6.92  | 6.94    | 6.92  | 4.64      | 4.64 | 4.62        | 5                | 5.50  |
|            | 15:07 |                   | Middle         | 3.5 | 20.70             | 20.00   |       | 8.29    | 8.29  |         | 30.69    | 30.69   |       | 92.4          | 91.6  |         | 6.92  | 6.89    |       | 4.61      | 4.59 |             | 6                |       |
| 13/1/2017  | 15:45 | Rainy             | Middle         | 3.5 | 19.60             | 19.60   | 19.55 | 8.32    | 8.32  | 8.33    | 30.59    | 30.59   | 30.60 | 88.8          | 89.4  | 89.2    | 6.80  | 6.85    | 6.83  | 8.89      | 8.89 | <u>8.89</u> | 9                | 9.00  |
|            | 15:47 |                   | Middle         | 3.5 | 19.50             | 19.50   |       | 8.34    | 8.34  |         | 30.60    | 30.60   |       | 89.3          | 89.3  |         | 6.84  | 6.84    |       | 8.89      | 8.90 |             | 9                |       |
| 16/1/2017  | 8:00  | Cloudy            | Middle         | 3.5 | 18.90             | 18.90   | 18.85 | 8.26    | 8.26  | 8.28    | 30.45    | 30.45   | 30.46 | 83.0          | 83.2  | 82.7    | 6.45  | 6.46    | 6.42  | 6.91      | 6.92 | 6.92        | 7                | 7.50  |
|            | 8:02  |                   | Middle         | 3.5 | 18.80             | 18.80   |       | 8.29    | 8.29  |         | 30.47    | 30.47   |       | 82.9          | 81.6  |         | 6.44  | 6.34    |       | 6.93      | 6.93 |             | 8                |       |
| 18/1/2017  | 10:05 | Cloudy            | Middle         | 3.5 | 19.90             | 19.90   | 19.95 | 8.14    | 8.14  | 8.12    | 30.40    | 30.40   | 30.41 | 83.9          | 84.1  | 83.7    | 6.38  | 6.39    | 6.36  | 4.93      | 4.89 | 4.89        | 5                | 4.50  |
|            | 10:07 |                   | Middle         | 3.5 | 20.00             | 20.00   |       | 8.10    | 8.10  |         | 30.41    | 30.41   |       | 83.5          | 83.1  |         | 6.35  | 6.31    |       | 4.88      | 4.87 |             | 4                |       |
| 20/1/2017  | 9:30  | Fine              | Middle         | 3.5 | 18.90             | 18.90   | 18.90 | 7.91    | 7.91  | 7.93    | 30.49    | 30.49   | 30.49 | 83.2          | 83.4  | 82.9    | 6.37  | 6.38    | 6.34  | 6.25      | 6.28 | 6.27        | 6                | 6.50  |
|            | 9:32  |                   | Middle         | 3.5 | 18.90             | 18.90   |       | 7.95    | 7.95  |         | 30.48    | 30.48   |       | 82.9          | 82.1  |         | 6.34  | 6.28    |       | 6.27      | 6.26 |             | 7                |       |
| 23/1/2017  | 15:05 | Fine              | Middle         | 3.5 | 19.30             | 19.30   | 19.35 | 8.00    | 8.00  | 8.04    | 30.90    | 30.90   | 30.91 | 86.0          | 85.5  | 85.3    | 6.60  | 6.55    | 6.55  | 5.30      | 5.28 | 5.28        | 4                | 4.00  |
|            | 15:07 |                   | Middle         | 3.5 | 19.40             | 19.40   |       | 8.07    | 8.07  |         | 30.92    | 30.92   |       | 85.6          | 84.0  |         | 6.56  | 6.49    |       | 5.27      | 5.27 |             | 4                |       |
| 25/1/2017  | 14:00 | Fine              | Middle         | 3.5 | 20.30             | 20.30   | 20.40 | 7.90    | 7.90  | 7.93    | 31.13    | 31.13   | 31.13 | 88.3          | 88.1  | 88.0    | 6.63  | 6.61    | 6.60  | 4.72      | 4.67 | 4.73        | 11               | 11.50 |
|            | 14:02 |                   | Middle         | 3.5 | 20.50             | 20.50   |       | 7.96    | 7.96  |         | 31.13    | 31.13   |       | 88.1          | 87.6  |         | 6.61  | 6.56    |       | 4.73      | 4.79 |             | 12               |       |

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



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

| Date       | Time  | Weather Condition | Sampling Depth |   | Water Temperature |         | pH    |         |       | Salinity |       |         | DO Saturation |         | DO    |         | Turbidity |         | Suspended Solids |         |      |      |    |              |
|------------|-------|-------------------|----------------|---|-------------------|---------|-------|---------|-------|----------|-------|---------|---------------|---------|-------|---------|-----------|---------|------------------|---------|------|------|----|--------------|
|            |       |                   |                |   | °C                |         | -     |         | ppt   |          | %     |         | mg/L          |         | NTU   |         | mg/L      |         |                  |         |      |      |    |              |
|            |       |                   |                |   | Value             | Average | Value | Average | Value | Average  | Value | Average | Value         | Average | Value | Average | Value     | Average | Value            | Average |      |      |    |              |
| 29/12/2016 | 23:23 | Cloudy            | Middle         | - | 17.60             | 17.60   | 17.60 | 7.94    | 7.94  | 7.96     | 30.22 | 30.21   | 30.21         | 82.2    | 82.9  | 82.2    | 6.54      | 6.60    | 6.55             | 4.18    | 4.20 | 4.19 | 11 | 8.50         |
|            | 23:24 |                   | Middle         | - | 17.60             | 17.60   |       | 7.97    | 7.97  |          | 30.21 | 30.21   |               | 82.1    | 81.7  |         | 6.54      | 6.51    |                  | 4.22    | 4.16 |      | 6  |              |
| 31/12/2016 | 0:25  | Cloudy            | Middle         | - | 18.20             | 18.20   | 18.20 | 7.96    | 7.96  | 7.98     | 30.29 | 30.29   | 30.29         | 80.0    | 82.3  | 81.2    | 6.29      | 6.47    | 6.38             | 3.64    | 3.66 | 3.63 | 4  | 3.00         |
|            | 0:26  |                   | Middle         | - | 18.20             | 18.20   |       | 8.00    | 7.99  |          | 30.29 | 30.29   |               | 81.8    | 80.5  |         | 6.43      | 6.33    |                  | 3.62    | 3.60 |      | 2  |              |
| 3/1/2017   | -     | -                 | Middle         | - | -                 | -       | -     | -       | -     | -        | -     | -       | -             | -       | -     | -       | -         | -       | -                | -       | -    | -    | -  | -            |
|            | -     |                   | Middle         | - | -                 | -       |       | -       | -     |          | -     | -       |               | -       | -     |         | -         | -       |                  | -       | -    |      | -  |              |
| 5/1/2017   | 2:00  | Cloudy            | Middle         | - | 20.40             | 20.40   | 20.40 | 7.77    | 7.77  | 7.81     | 30.19 | 30.19   | 30.19         | 78.2    | 79.0  | 79.3    | 5.90      | 5.96    | 5.98             | 3.52    | 3.61 | 3.74 | 7  | 6.50         |
|            | 2:01  |                   | Middle         | - | 20.40             | 20.40   |       | 7.85    | 7.85  |          | 30.19 | 30.20   |               | 80.4    | 79.4  |         | 6.07      | 6.00    |                  | 3.91    | 3.93 |      | 6  |              |
| 7/1/2017   | 4:40  | Cloudy            | Middle         | - | 20.50             | 20.60   | 20.58 | 7.98    | 7.98  | 7.98     | 30.24 | 30.24   | 30.25         | 75.5    | 77.5  | 77.6    | 5.67      | 5.83    | 5.84             | 2.59    | 2.61 | 2.61 | 18 | 13.50        |
|            | 4:41  |                   | Middle         | - | 20.60             | 20.60   |       | 7.98    | 7.98  |          | 30.26 | 30.26   |               | 79.3    | 78.0  |         | 5.96      | 5.90    |                  | 2.58    | 2.66 |      | 9  |              |
| 9/1/2017   | 22:40 | Cloudy            | Middle         | - | 20.10             | 20.10   | 20.15 | 7.86    | 7.86  | 7.88     | 30.31 | 30.31   | 30.31         | 80.2    | 80.6  | 80.4    | 6.08      | 6.11    | 6.10             | 2.87    | 2.85 | 2.84 | 14 | <u>16.00</u> |
|            | 22:41 |                   | Middle         | - | 20.20             | 20.20   |       | 7.90    | 7.90  |          | 30.31 | 30.31   |               | 80.4    | 80.3  |         | 6.10      | 6.09    |                  | 2.83    | 2.80 |      | 18 |              |
| 11/1/2017  | 23:00 | Cloudy            | Middle         | - | 20.20             | 20.20   | 20.25 | 7.95    | 7.95  | 7.97     | 30.44 | 30.44   | 30.45         | 80.7    | 80.8  | 81.1    | 6.10      | 6.10    | 6.13             | 4.62    | 4.59 | 4.58 | 5  | 5.50         |
|            | 23:01 |                   | Middle         | - | 20.30             | 20.30   |       | 7.98    | 7.98  |          | 30.46 | 30.46   |               | 81.5    | 81.4  |         | 6.15      | 6.15    |                  | 4.56    | 4.54 |      | 6  |              |
| 14/1/2017  | 2:45  | Cloudy            | Middle         | - | 19.10             | 19.10   | 19.05 | 7.95    | 7.95  | 7.96     | 30.37 | 30.37   | 30.37         | 79.8    | 79.9  | 79.7    | 6.18      | 6.18    | 6.17             | 2.86    | 2.88 | 2.84 | 3  | 3.00         |
|            | 2:46  |                   | Middle         | - | 19.00             | 19.00   |       | 7.97    | 7.97  |          | 30.37 | 30.37   |               | 79.3    | 79.7  |         | 6.14      | 6.16    |                  | 2.80    | 2.83 |      | 3  |              |
| 16/1/2017  | 2:05  | Cloudy            | Middle         | - | 17.50             | 17.50   | 17.50 | 7.95    | 7.95  | 7.95     | 30.41 | 30.41   | 30.42         | 77.8    | 78.6  | 78.7    | 6.20      | 6.26    | 6.27             | 3.42    | 3.40 | 3.46 | 5  | 5.00         |
|            | 2:06  |                   | Middle         | - | 17.50             | 17.50   |       | 7.95    | 7.95  |          | 30.41 | 30.43   |               | 79.1    | 79.2  |         | 6.31      | 6.31    |                  | 3.52    | 3.49 |      | 5  |              |
| 18/1/2017  | 2:05  | Cloudy            | Middle         | - | 19.00             | 19.00   | 19.00 | 7.94    | 7.94  | 7.96     | 30.39 | 30.39   | 30.40         | 79.6    | 79.6  | 80.4    | 6.18      | 6.16    | 6.23             | 6.62    | 6.60 | 6.63 | 10 | 8.00         |
|            | 2:06  |                   | Middle         | - | 19.00             | 19.00   |       | 7.98    | 7.98  |          | 30.41 | 30.39   |               | 81.3    | 81.2  |         | 6.29      | 6.29    |                  | 6.71    | 6.58 |      | 6  |              |
| 20/1/2017  | 3:01  | Cloudy            | Middle         | - | 19.00             | 19.00   | 19.05 | 7.95    | 7.95  | 7.96     | 30.45 | 30.45   | 30.46         | 80.8    | 81.5  | 81.1    | 6.24      | 6.30    | 6.26             | 3.52    | 3.60 | 3.57 | 4  | 4.50         |
|            | 3:02  |                   | Middle         | - | 19.10             | 19.10   |       | 7.96    | 7.96  |          | 30.46 | 30.46   |               | 81.2    | 80.7  |         | 6.27      | 6.23    |                  | 3.62    | 3.54 |      | 5  |              |
| 23/1/2017  | 23:23 | Cloudy            | Middle         | - | 18.60             | 18.60   | 18.48 | 8.37    | 8.37  | 8.37     | 31.01 | 31.01   | 31.01         | 91.6    | 91.8  | 91.4    | 7.25      | 7.27    | 7.24             | 4.67    | 4.74 | 4.68 | 11 | 7.50         |
|            | 23:24 |                   | Middle         | - | 18.00             | 18.70   |       | 8.37    | 8.37  |          | 31.01 | 31.01   |               | 91.4    | 90.7  |         | 7.24      | 7.18    |                  | 4.68    | 4.62 |      | 4  |              |
| 25/1/2017  | 22:35 | Fine              | Middle         | - | 18.40             | 18.40   | 18.40 | 8.02    | 8.02  | 8.02     | 30.87 | 30.87   | 30.87         | 77.3    | 78.9  | 78.0    | 6.03      | 6.16    | 6.08             | 3.41    | 3.38 | 3.33 | 3  | 3.50         |
|            | 22:36 |                   | Middle         | - | 18.40             | 18.40   |       | 8.02    | 8.02  |          | 30.87 | 30.87   |               | 78.0    | 77.7  |         | 6.08      | 6.06    |                  | 3.24    | 3.27 |      | 4  |              |

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



**Water Monitoring Result at C1 - HKCEC  
Mid-Ebb Tide**

| Date       | Time  | Weather Condition | Sampling Depth |       | Water Temperature |       | pH      |       |         | Salinity |         | DO Saturation |         | DO    |         | Turbidity |         | Suspended Solids |         |      |      |      |    |      |
|------------|-------|-------------------|----------------|-------|-------------------|-------|---------|-------|---------|----------|---------|---------------|---------|-------|---------|-----------|---------|------------------|---------|------|------|------|----|------|
|            |       |                   |                |       | °C                |       | -       |       | ppt     |          | %       |               | mg/L    |       | NTU     |           | mg/L    |                  |         |      |      |      |    |      |
|            |       |                   | m              | Value | Average           | Value | Average | Value | Average | Value    | Average | Value         | Average | Value | Average | Value     | Average | Value            | Average |      |      |      |    |      |
| 29/12/2016 | 2:31  | Cloudy            | Middle         | 2.5   | 18.10             | 18.10 | 18.05   | 8.04  | 8.04    | 8.06     | 30.40   | 30.40         | 30.42   | 80.1  | 80.5    | 80.3      | 6.31    | 6.35             | 6.33    | 4.91 | 4.96 | 4.97 | 7  | 6.00 |
|            | 2:32  |                   | Middle         | 2.5   | 18.00             | 18.00 |         | 8.08  | 8.08    |          | 30.44   | 30.44         |         | 80.0  | 80.6    |           | 6.31    | 6.35             |         | 4.99 | 5.01 |      | 5  |      |
| 31/12/2016 | 4:30  | Cloudy            | Middle         | 2.5   | 18.50             | 18.50 | 18.50   | 8.14  | 8.14    | 8.15     | 30.52   | 30.52         | 30.52   | 80.1  | 82.1    | 81.3      | 6.26    | 6.41             | 6.35    | 5.04 | 4.86 | 4.82 | 8  | 8.00 |
|            | 4:31  |                   | Middle         | 2.5   | 18.50             | 18.50 |         | 8.16  | 8.16    |          | 30.52   | 30.52         |         | 81.5  | 81.6    |           | 6.37    | 6.37             |         | 4.75 | 4.63 |      | <2 |      |
| 3/1/2017   | 5:29  | Fine              | Middle         | 2.5   | 18.90             | 18.90 | 18.90   | 7.71  | 7.71    | 7.70     | 30.16   | 30.16         | 30.18   | 78.4  | 79.1    | 79.0      | 5.90    | 6.04             | 6.01    | 3.60 | 3.64 | 3.64 | 6  | 7.50 |
|            | 5:30  |                   | Middle         | 2.5   | 18.90             | 18.90 |         | 7.69  | 7.69    |          | 30.20   | 30.20         |         | 79.3  | 79.2    |           | 6.05    | 6.04             |         | 3.65 | 3.67 |      | 9  |      |
| 5/1/2017   | 5:03  | Cloudy            | Middle         | 3.0   | 20.30             | 20.30 | 20.35   | 7.90  | 7.90    | 7.92     | 30.36   | 30.36         | 30.36   | 78.4  | 77.6    | 77.9      | 5.92    | 5.85             | 5.88    | 3.02 | 2.97 | 3.01 | 5  | 4.50 |
|            | 5:04  |                   | Middle         | 3.0   | 20.40             | 20.40 |         | 7.93  | 7.93    |          | 30.36   | 30.36         |         | 78.2  | 77.5    |           | 5.90    | 5.85             |         | 2.96 | 3.10 |      | 4  |      |
| 7/1/2017   | 5:55  | Cloudy            | Middle         | 3.0   | 20.40             | 20.40 | 20.45   | 7.99  | 7.99    | 8.00     | 30.11   | 30.11         | 30.11   | 77.6  | 76.7    | 76.3      | 5.85    | 5.77             | 5.75    | 1.97 | 1.99 | 1.99 | 12 | 9.50 |
|            | 5:56  |                   | Middle         | 3.0   | 20.50             | 20.50 |         | 8.00  | 8.00    |          | 30.11   | 30.11         |         | 76.0  | 75.0    |           | 5.72    | 5.64             |         | 1.96 | 2.03 |      | 7  |      |
| 9/1/2017   | 21:57 | Cloudy            | Middle         | 3.0   | 20.10             | 20.10 | 20.10   | 8.13  | 8.13    | 8.13     | 30.57   | 30.57         | 30.57   | 81.9  | 82.3    | 81.7      | 6.20    | 6.25             | 6.19    | 2.66 | 2.71 | 2.61 | 6  | 9.00 |
|            | 21:58 |                   | Middle         | 3.0   | 20.10             | 20.10 |         | 8.13  | 8.13    |          | 30.57   | 30.57         |         | 81.5  | 81.0    |           | 6.17    | 6.14             |         | 2.54 | 2.53 |      | 12 |      |
| 11/1/2017  | 2:50  | Cloudy            | Middle         | 2.5   | 19.50             | 19.60 | 19.63   | 7.88  | 7.88    | 7.90     | 30.15   | 30.15         | 30.17   | 74.3  | 74.9    | 75.9      | 5.68    | 5.73             | 5.81    | 5.39 | 5.44 | 5.40 | 7  | 7.00 |
|            | 2:51  |                   | Middle         | 2.5   | 19.70             | 19.70 |         | 7.92  | 7.92    |          | 30.18   | 30.18         |         | 77.4  | 77.1    |           | 5.92    | 5.90             |         | 5.41 | 5.37 |      | 7  |      |
| 14/1/2017  | 2:04  | Cloudy            | Middle         | 2.5   | 18.90             | 18.90 | 18.90   | 8.14  | 8.14    | 8.15     | 30.64   | 30.64         | 30.64   | 77.2  | 76.7    | 77.5      | 5.98    | 5.95             | 6.01    | 4.17 | 4.15 | 4.16 | 7  | 6.00 |
|            | 2:05  |                   | Middle         | 2.5   | 18.90             | 18.90 |         | 8.15  | 8.15    |          | 30.64   | 30.64         |         | 77.4  | 78.6    |           | 6.00    | 6.10             |         | 4.20 | 4.13 |      | 5  |      |
| 16/1/2017  | 5:30  | Cloudy            | Middle         | 2.5   | 18.20             | 18.20 | 18.15   | 8.04  | 8.04    | 8.05     | 30.41   | 30.41         | 30.42   | 72.0  | 71.2    | 71.5      | 5.66    | 5.61             | 5.63    | 3.95 | 3.87 | 3.87 | 5  | 5.00 |
|            | 5:31  |                   | Middle         | 2.5   | 18.10             | 18.10 |         | 8.05  | 8.05    |          | 30.43   | 30.43         |         | 71.6  | 71.1    |           | 5.64    | 5.60             |         | 3.81 | 3.86 |      | 5  |      |
| 18/1/2017  | 4:58  | Cloudy            | Middle         | 3.0   | 18.80             | 18.80 | 18.80   | 8.13  | 8.13    | 8.13     | 30.65   | 30.65         | 30.65   | 79.3  | 79.8    | 79.9      | 6.15    | 6.19             | 6.20    | 3.44 | 3.52 | 3.45 | 6  | 5.50 |
|            | 4:59  |                   | Middle         | 3.0   | 18.80             | 18.80 |         | 8.13  | 8.13    |          | 30.65   | 30.65         |         | 80.5  | 80.0    |           | 6.25    | 6.21             |         | 3.45 | 3.40 |      | 5  |      |
| 20/1/2017  | 5:55  | Cloudy            | Middle         | 3.0   | 18.60             | 18.60 | 18.65   | 8.04  | 8.04    | 8.05     | 30.54   | 30.54         | 30.54   | 81.3  | 81.4    | 81.2      | 6.32    | 6.33             | 6.31    | 2.69 | 2.55 | 2.72 | 7  | 6.00 |
|            | 5:56  |                   | Middle         | 3.0   | 18.70             | 18.70 |         | 8.05  | 8.05    |          | 30.54   | 30.54         |         | 81.6  | 80.3    |           | 6.36    | 6.24             |         | 2.80 | 2.82 |      | 5  |      |
| 23/1/2017  | 22:37 | Cloudy            | Middle         | 3.0   | 18.40             | 18.40 | 18.40   | 8.40  | 8.40    | 8.40     | 31.21   | 31.21         | 31.21   | 93.0  | 93.3    | 93.1      | 7.25    | 7.26             | 7.25    | 3.32 | 3.36 | 3.33 | 9  | 8.00 |
|            | 22:38 |                   | Middle         | 3.0   | 18.40             | 18.40 |         | 8.40  | 8.40    |          | 31.21   | 31.21         |         | 93.2  | 92.9    |           | 7.26    | 7.23             |         | 3.30 | 3.34 |      | 7  |      |
| 25/1/2017  | 2:11  | Fine              | Middle         | 2.5   | 18.20             | 18.20 | 18.20   | 8.10  | 8.10    | 8.10     | 30.02   | 30.02         | 30.02   | 78.7  | 79.3    | 78.5      | 6.19    | 6.24             | 6.18    | 3.15 | 3.10 | 3.03 | 6  | 4.00 |
|            | 2:12  |                   | Middle         | 2.5   | 18.20             | 18.20 |         | 8.10  | 8.10    |          | 30.02   | 30.02         |         | 78.0  | 77.9    |           | 6.14    | 6.13             |         | 2.92 | 2.94 |      | 2  |      |

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



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

| Date       | Time  | Weather Condition | Sampling Depth |       | Water Temperature |       | pH      |       |         | Salinity |         | DO Saturation |         | DO    |         | Turbidity |         | Suspended Solids |         |      |      |      |    |       |
|------------|-------|-------------------|----------------|-------|-------------------|-------|---------|-------|---------|----------|---------|---------------|---------|-------|---------|-----------|---------|------------------|---------|------|------|------|----|-------|
|            |       |                   |                |       | °C                |       | -       |       | ppt     |          | %       |               | mg/L    |       | NTU     |           | mg/L    |                  |         |      |      |      |    |       |
|            |       |                   | m              | Value | Average           | Value | Average | Value | Average | Value    | Average | Value         | Average | Value | Average | Value     | Average | Value            | Average |      |      |      |    |       |
| 29/12/2016 | 1:53  | Cloudy            | Middle         | 2.5   | 17.40             | 17.40 | 17.40   | 8.19  | 8.19    | 8.20     | 30.44   | 30.44         | 30.45   | 83.1  | 83.6    | 83.3      | 6.63    | 6.67             | 6.65    | 5.45 | 5.47 | 5.48 | 7  | 5.50  |
|            | 1:54  |                   | Middle         | 2.5   | 17.40             | 17.40 |         | 8.20  | 8.20    |          | 30.46   | 30.44         |         | 83.6  | 82.9    |           | 6.67    | 6.62             |         | 5.49 | 5.51 |      | 4  |       |
| 31/12/2016 | 4:04  | Cloudy            | Middle         | 2.5   | 18.10             | 18.10 | 18.10   | 8.19  | 8.19    | 8.20     | 30.49   | 30.49         | 30.49   | 86.7  | 86.5    | 86.3      | 6.82    | 6.82             | 6.79    | 3.95 | 3.99 | 3.98 | 4  | 4.00  |
|            | 4:05  |                   | Middle         | 2.5   | 18.10             | 18.10 |         | 8.20  | 8.20    |          | 30.50   | 30.49         |         | 85.5  | 86.4    |           | 6.73    | 6.80             |         | 4.06 | 3.93 |      | 4  |       |
| 3/1/2017   | 4:45  | Fine              | Middle         | 2.5   | 19.60             | 19.60 | 19.60   | 7.76  | 7.76    | 7.76     | 30.37   | 30.37         | 30.37   | 82.4  | 83.1    | 82.8      | 6.30    | 6.36             | 6.33    | 3.83 | 3.89 | 3.82 | 4  | 5.00  |
|            | 4:46  |                   | Middle         | 2.5   | 19.60             | 19.60 |         | 7.76  | 7.76    |          | 30.37   | 30.37         |         | 82.3  | 83.2    |           | 6.30    | 6.37             |         | 3.80 | 3.77 |      | 6  |       |
| 5/1/2017   | 4:40  | Cloudy            | Middle         | 3.0   | 20.20             | 20.20 | 20.25   | 8.03  | 8.03    | 8.04     | 30.56   | 30.45         | 30.47   | 78.4  | 79.4    | 79.0      | 5.92    | 6.00             | 5.97    | 2.82 | 2.80 | 2.79 | 5  | 6.00  |
|            | 4:41  |                   | Middle         | 3.0   | 20.30             | 20.30 |         | 8.04  | 8.04    |          | 30.44   | 30.43         |         | 78.9  | 79.3    |           | 5.96    | 6.00             |         | 2.78 | 2.76 |      | 7  |       |
| 7/1/2017   | 5:35  | Cloudy            | Middle         | 3.0   | 20.20             | 20.20 | 20.25   | 8.06  | 8.06    | 8.06     | 30.35   | 30.35         | 30.35   | 78.5  | 79.0    | 78.7      | 5.93    | 5.97             | 5.94    | 2.32 | 2.51 | 2.37 | 4  | 5.50  |
|            | 5:36  |                   | Middle         | 3.0   | 20.30             | 20.30 |         | 8.06  | 8.06    |          | 30.35   | 30.35         |         | 79.1  | 78.1    |           | 5.97    | 5.89             |         | 2.35 | 2.30 |      | 7  |       |
| 9/1/2017   | 21:37 | Cloudy            | Middle         | 3.0   | 20.30             | 20.30 | 20.30   | 7.96  | 7.96    | 7.97     | 30.56   | 30.57         | 30.56   | 83.1  | 83.3    | 83.0      | 6.28    | 6.29             | 6.27    | 2.68 | 2.39 | 2.52 | 6  | 10.00 |
|            | 21:38 |                   | Middle         | 3.0   | 20.30             | 20.30 |         | 7.98  | 7.98    |          | 30.56   | 30.56         |         | 83.0  | 82.7    |           | 6.27    | 6.24             |         | 2.60 | 2.41 |      | 14 |       |
| 11/1/2017  | 2:10  | Cloudy            | Middle         | 2.5   | 19.40             | 19.40 | 19.45   | 8.14  | 8.14    | 8.14     | 30.44   | 30.44         | 30.44   | 74.7  | 75.5    | 76.0      | 5.72    | 5.78             | 5.82    | 4.17 | 4.11 | 4.19 | 7  | 6.50  |
|            | 2:11  |                   | Middle         | 2.5   | 19.50             | 19.50 |         | 8.14  | 8.14    |          | 30.44   | 30.44         |         | 77.0  | 76.9    |           | 5.90    | 5.89             |         | 4.25 | 4.21 |      | 6  |       |
| 14/1/2017  | 1:30  | Cloudy            | Middle         | 2.5   | 18.40             | 18.40 | 18.40   | 8.04  | 8.04    | 8.05     | 30.53   | 30.53         | 30.53   | 75.7  | 74.3    | 73.8      | 5.92    | 5.82             | 5.77    | 4.22 | 4.20 | 4.18 | 8  | 7.50  |
|            | 1:31  |                   | Middle         | 2.5   | 18.40             | 18.40 |         | 8.05  | 8.05    |          | 30.53   | 30.53         |         | 73.2  | 71.9    |           | 5.70    | 5.63             |         | 4.18 | 4.13 |      | 7  |       |
| 16/1/2017  | 5:02  | Cloudy            | Middle         | 2.5   | 17.60             | 17.60 | 17.55   | 8.08  | 8.08    | 8.09     | 30.44   | 30.44         | 30.44   | 77.4  | 78.9    | 78.5      | 6.16    | 6.28             | 6.27    | 3.97 | 3.81 | 3.84 | 8  | 7.00  |
|            | 5:03  |                   | Middle         | 2.5   | 17.50             | 17.50 |         | 8.09  | 8.09    |          | 30.43   | 30.43         |         | 79.2  | 78.3    |           | 6.30    | 6.34             |         | 3.79 | 3.78 |      | 6  |       |
| 18/1/2017  | 4:25  | Cloudy            | Middle         | 3.0   | 18.70             | 18.80 | 18.78   | 8.05  | 8.05    | 8.06     | 30.68   | 30.68         | 30.68   | 78.0  | 78.8    | 78.7      | 6.05    | 6.12             | 6.11    | 4.03 | 4.05 | 4.04 | 5  | 5.50  |
|            | 4:26  |                   | Middle         | 3.0   | 18.80             | 18.80 |         | 8.06  | 8.06    |          | 30.68   | 30.68         |         | 79.1  | 78.7    |           | 6.14    | 6.12             |         | 4.07 | 4.00 |      | 6  |       |
| 20/1/2017  | 5:25  | Cloudy            | Middle         | 3.0   | 18.50             | 18.50 | 18.55   | 7.90  | 7.90    | 7.91     | 30.36   | 30.36         | 30.36   | 84.3  | 84.4    | 83.9      | 6.58    | 6.59             | 6.55    | 4.18 | 4.23 | 4.22 | 6  | 6.00  |
|            | 5:26  |                   | Middle         | 3.0   | 18.60             | 18.60 |         | 7.92  | 7.92    |          | 30.36   | 30.36         |         | 83.3  | 83.5    |           | 6.50    | 6.52             |         | 4.25 | 4.21 |      | 6  |       |
| 23/1/2017  | 22:02 | Cloudy            | Middle         | 3.0   | 18.00             | 18.00 | 18.05   | 8.38  | 8.38    | 8.39     | 30.98   | 30.98         | 30.98   | 93.6  | 93.8    | 93.2      | 7.34    | 7.36             | 7.31    | 3.62 | 3.55 | 3.55 | 8  | 5.50  |
|            | 22:03 |                   | Middle         | 3.0   | 18.10             | 18.10 |         | 8.39  | 8.39    |          | 30.98   | 30.98         |         | 93.0  | 92.3    |           | 7.29    | 7.24             |         | 3.51 | 3.52 |      | 3  |       |
| 25/1/2017  | 1:30  | Fine              | Middle         | 2.5   | 18.00             | 18.00 | 18.05   | 8.12  | 8.12    | 8.13     | 30.93   | 30.93         | 30.94   | 77.2  | 76.8    | 76.5      | 6.06    | 6.04             | 6.01    | 2.32 | 2.61 | 2.40 | 2  | 2.50  |
|            | 1:31  |                   | Middle         | 2.5   | 18.10             | 18.10 |         | 8.13  | 8.13    |          | 30.94   | 30.94         |         | 76.1  | 76.0    |           | 5.97    | 5.97             |         | 2.28 | 2.40 |      | 3  |       |

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



**Water Monitoring Result at P3 - APA  
Mid-Ebb Tide**

| Date       | Time  | Weather Condition | Sampling Depth |     | Water Temperature |         | pH    |         |       | Salinity |       |         | DO Saturation |         | DO    |         | Turbidity |         | Suspended Solids |         |      |      |    |              |
|------------|-------|-------------------|----------------|-----|-------------------|---------|-------|---------|-------|----------|-------|---------|---------------|---------|-------|---------|-----------|---------|------------------|---------|------|------|----|--------------|
|            |       |                   |                |     | °C                |         | -     |         | ppt   |          | %     |         | mg/L          |         | NTU   |         | mg/L      |         |                  |         |      |      |    |              |
|            |       |                   |                |     | Value             | Average | Value | Average | Value | Average  | Value | Average | Value         | Average | Value | Average | Value     | Average | Value            | Average |      |      |    |              |
| 29/12/2016 | 2:05  | Cloudy            | Middle         | 2.5 | 17.50             | 17.50   | 17.50 | 8.21    | 8.21  | 8.22     | 30.48 | 30.48   | 30.49         | 81.7    | 83.0  | 82.8    | 6.50      | 6.65    | 6.61             | 4.60    | 4.58 | 4.58 | 2  | 4.50         |
|            | 2:06  |                   | Middle         | 2.5 | 17.50             | 17.50   |       | 8.22    | 8.22  |          | 30.49 | 30.49   |               | 83.4    | 83.2  |         | 6.65      | 6.63    |                  | 4.57    | 4.58 |      | 7  |              |
| 31/12/2016 | 4:10  | Cloudy            | Middle         | 2.5 | 18.10             | 18.10   | 18.10 | 8.22    | 8.22  | 8.22     | 30.52 | 30.52   | 30.52         | 85.4    | 85.2  | 85.0    | 6.72      | 6.70    | 6.69             | 3.35    | 3.51 | 3.49 | 6  | 5.00         |
|            | 4:11  |                   | Middle         | 2.5 | 18.10             | 18.10   |       | 8.22    | 8.22  |          | 30.52 | 30.52   |               | 84.8    | 84.7  |         | 6.67      | 6.66    |                  | 3.53    | 3.57 |      | 4  |              |
| 3/1/2017   | 4:52  | Fine              | Middle         | 2.5 | 19.70             | 19.70   | 19.70 | 7.65    | 7.65  | 7.65     | 30.37 | 30.37   | 30.38         | 83.2    | 83.4  | 82.9    | 6.36      | 6.37    | 6.33             | 4.16    | 4.24 | 4.22 | 5  | 5.50         |
|            | 4:53  |                   | Middle         | 2.5 | 19.70             | 19.70   |       | 7.65    | 7.65  |          | 30.38 | 30.38   |               | 82.7    | 82.2  |         | 6.32      | 6.28    |                  | 4.27    | 4.20 |      | 6  |              |
| 5/1/2017   | 4:45  | Cloudy            | Middle         | 3.0 | 20.30             | 20.30   | 20.35 | 8.06    | 8.06  | 8.07     | 30.44 | 30.44   | 30.44         | 81.2    | 82.6  | 81.8    | 6.13      | 6.23    | 6.17             | 3.69    | 3.64 | 3.61 | 7  | 5.50         |
|            | 4:46  |                   | Middle         | 3.0 | 20.40             | 20.40   |       | 8.07    | 8.07  |          | 30.44 | 30.45   |               | 82.2    | 81.0  |         | 6.20      | 6.11    |                  | 3.60    | 3.52 |      | 4  |              |
| 7/1/2017   | 5:40  | Cloudy            | Middle         | 3.0 | 20.30             | 20.30   | 20.35 | 8.02    | 8.02  | 8.03     | 30.32 | 30.32   | 30.33         | 79.6    | 79.5  | 79.2    | 6.00      | 6.00    | 5.97             | 2.20    | 2.11 | 2.16 | 6  | 5.00         |
|            | 5:41  |                   | Middle         | 3.0 | 20.40             | 20.40   |       | 8.04    | 8.04  |          | 30.33 | 30.33   |               | 78.8    | 78.7  |         | 5.94      | 5.94    |                  | 2.16    | 2.18 |      | 4  |              |
| 9/1/2017   | 21:42 | Cloudy            | Middle         | 3.0 | 20.20             | 20.20   | 20.20 | 8.11    | 8.11  | 8.11     | 30.54 | 30.54   | 30.54         | 83.4    | 83.7  | 83.1    | 6.31      | 6.33    | 6.28             | 3.05    | 3.00 | 2.98 | 7  | 7.00         |
|            | 21:43 |                   | Middle         | 3.0 | 20.20             | 20.20   |       | 8.11    | 8.11  |          | 30.54 | 30.54   |               | 82.7    | 82.4  |         | 6.25      | 6.23    |                  | 2.96    | 2.89 |      | 7  |              |
| 11/1/2017  | 2:19  | Cloudy            | Middle         | 2.5 | 19.40             | 19.40   | 19.45 | 8.12    | 8.12  | 8.12     | 30.43 | 30.43   | 30.43         | 82.9    | 83.7  | 82.8    | 6.26      | 6.42    | 6.31             | 4.22    | 4.17 | 4.17 | 6  | 7.50         |
|            | 2:20  |                   | Middle         | 2.5 | 19.50             | 19.50   |       | 8.12    | 8.12  |          | 30.43 | 30.43   |               | 82.0    | 82.5  |         | 6.25      | 6.31    |                  | 4.16    | 4.14 |      | 9  |              |
| 14/1/2017  | 1:36  | Cloudy            | Middle         | 2.5 | 18.70             | 18.70   | 18.65 | 8.10    | 8.10  | 8.10     | 30.63 | 30.63   | 30.63         | 80.0    | 80.3  | 80.0    | 6.23      | 6.26    | 6.23             | 4.06    | 4.08 | 4.07 | 6  | 6.50         |
|            | 1:37  |                   | Middle         | 2.5 | 18.60             | 18.60   |       | 8.10    | 8.10  |          | 30.63 | 30.63   |               | 80.0    | 79.7  |         | 6.23      | 6.21    |                  | 4.10    | 4.04 |      | 7  |              |
| 16/1/2017  | 5:11  | Cloudy            | Middle         | 2.5 | 17.70             | 17.70   | 17.70 | 8.11    | 8.11  | 8.12     | 30.41 | 30.41   | 30.42         | 82.4    | 82.9  | 82.3    | 6.55      | 6.58    | 6.54             | 4.06    | 3.99 | 4.00 | 6  | 5.50         |
|            | 5:12  |                   | Middle         | 2.5 | 17.70             | 17.70   |       | 8.12    | 8.12  |          | 30.43 | 30.43   |               | 82.2    | 81.6  |         | 6.53      | 6.49    |                  | 3.96    | 3.97 |      | 5  |              |
| 18/1/2017  | 4:33  | Cloudy            | Middle         | 3.0 | 18.70             | 18.70   | 18.75 | 7.93    | 7.93  | 7.95     | 30.50 | 30.50   | 30.50         | 77.7    | 78.7  | 78.6    | 6.04      | 6.11    | 6.10             | 4.88    | 4.85 | 4.78 | 5  | 6.00         |
|            | 4:34  |                   | Middle         | 3.0 | 18.80             | 18.80   |       | 7.96    | 7.96  |          | 30.50 | 30.50   |               | 79.9    | 78.0  |         | 6.20      | 6.06    |                  | 4.67    | 4.70 |      | 7  |              |
| 20/1/2017  | 5:31  | Cloudy            | Middle         | 3.0 | 18.30             | 18.30   | 18.35 | 8.09    | 8.09  | 8.09     | 30.54 | 30.54   | 30.54         | 83.0    | 83.1  | 82.0    | 6.49      | 6.50    | 6.41             | 2.98    | 3.04 | 3.04 | 3  | 3.00         |
|            | 5:32  |                   | Middle         | 3.0 | 18.40             | 18.40   |       | 8.08    | 8.08  |          | 30.54 | 30.54   |               | 81.1    | 80.7  |         | 6.34      | 6.30    |                  | 3.07    | 3.08 |      | 3  |              |
| 23/1/2017  | 22:10 | Cloudy            | Middle         | 3.0 | 18.10             | 18.10   | 18.15 | 8.41    | 8.41  | 8.41     | 31.25 | 31.25   | 31.24         | 95.1    | 94.9  | 94.4    | 7.44      | 7.42    | 7.38             | 4.90    | 4.63 | 4.66 | 23 | <u>21.00</u> |
|            | 22:11 |                   | Middle         | 3.0 | 18.20             | 18.20   |       | 8.41    | 8.41  |          | 31.23 | 31.23   |               | 94.1    | 93.4  |         | 7.36      | 7.30    |                  | 4.55    | 4.56 |      | 19 |              |
| 25/1/2017  | 1:37  | Fine              | Middle         | 2.5 | 18.00             | 17.90   | 17.93 | 8.16    | 8.16  | 8.16     | 30.97 | 30.97   | 30.97         | 84.2    | 84.1  | 83.4    | 6.63      | 6.62    | 6.57             | 3.90    | 3.67 | 3.76 | 3  | 3.00         |
|            | 1:38  |                   | Middle         | 2.5 | 17.90             | 17.90   |       | 8.16    | 8.16  |          | 30.97 | 30.97   |               | 83.2    | 82.1  |         | 6.55      | 6.46    |                  | 3.72    | 3.75 |      | 3  |              |

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



**Water Monitoring Result at P4 - SOC  
Mid-Ebb Tide**

| Date       | Time  | Weather Condition | Sampling Depth |     | Water Temperature |         | pH    |         |       | Salinity |       | DO Saturation |       | DO      |       | Turbidity |       | Suspended Solids |       |         |      |      |    |              |
|------------|-------|-------------------|----------------|-----|-------------------|---------|-------|---------|-------|----------|-------|---------------|-------|---------|-------|-----------|-------|------------------|-------|---------|------|------|----|--------------|
|            |       |                   |                |     | °C                |         | -     |         | ppt   |          | %     |               | mg/L  |         | NTU   |           | mg/L  |                  |       |         |      |      |    |              |
|            |       |                   |                |     | Value             | Average | Value | Average | Value | Average  | Value | Average       | Value | Average | Value | Average   | Value | Average          | Value | Average |      |      |    |              |
| 29/12/2016 | 2:13  | Cloudy            | Middle         | 2.5 | 17.60             | 17.60   | 17.60 | 8.12    | 8.12  | 8.13     | 30.18 | 30.18         | 30.18 | 80.7    | 82.4  | 81.3      | 6.41  | 6.55             | 6.46  | 4.55    | 4.58 | 4.47 | 11 | 8.00         |
|            | 2:14  |                   | Middle         | 2.5 | 17.60             | 17.60   |       | 8.13    | 8.13  |          | 30.18 | 30.18         |       | 81.6    | 80.5  |           | 6.49  | 6.40             |       | 4.39    | 4.37 |      | 5  |              |
| 31/12/2016 | 4:17  | Cloudy            | Middle         | 2.5 | 18.30             | 18.30   | 18.30 | 8.24    | 8.24  | 8.24     | 30.49 | 30.49         | 30.49 | 82.7    | 83.1  | 82.7      | 6.49  | 6.51             | 6.48  | 3.38    | 3.59 | 3.57 | 7  | 6.50         |
|            | 4:18  |                   | Middle         | 2.5 | 18.30             | 18.30   |       | 8.23    | 8.23  |          | 30.49 | 30.50         |       | 82.6    | 82.2  |           | 6.48  | 6.45             |       | 3.64    | 3.66 |      | 6  |              |
| 3/1/2017   | 4:58  | Fine              | Middle         | 2.5 | 19.40             | 19.40   | 19.60 | 7.21    | 7.21  | 7.26     | 30.40 | 30.40         | 30.40 | 81.0    | 81.1  | 80.8      | 6.19  | 6.19             | 6.17  | 3.97    | 4.04 | 4.02 | 5  | 8.00         |
|            | 4:59  |                   | Middle         | 2.5 | 19.80             | 19.80   |       | 7.30    | 7.30  |          | 30.40 | 30.40         |       | 80.5    | 80.6  |           | 6.14  | 6.15             |       | 4.07    | 4.01 |      | 11 |              |
| 5/1/2017   | 4:52  | Cloudy            | Middle         | 3.0 | 20.60             | 20.60   | 20.60 | 8.08    | 8.08  | 8.08     | 30.30 | 30.30         | 30.31 | 79.4    | 80.6  | 79.6      | 5.96  | 6.60             | 6.12  | 3.20    | 3.22 | 3.30 | 4  | 3.50         |
|            | 4:53  |                   | Middle         | 3.0 | 20.60             | 20.60   |       | 8.08    | 8.08  |          | 30.31 | 30.31         |       | 79.1    | 79.4  |           | 5.95  | 5.97             |       | 3.27    | 3.51 |      | 3  |              |
| 7/1/2017   | 5:46  | Cloudy            | Middle         | 3.0 | 20.20             | 20.20   | 20.25 | 8.07    | 8.07  | 8.07     | 30.35 | 30.35         | 30.35 | 79.0    | 79.7  | 78.9      | 5.97  | 6.02             | 5.96  | 1.90    | 1.95 | 1.83 | 5  | 5.00         |
|            | 5:47  |                   | Middle         | 3.0 | 20.30             | 20.30   |       | 8.07    | 8.07  |          | 30.35 | 30.35         |       | 79.3    | 77.4  |           | 5.99  | 5.85             |       | 1.71    | 1.75 |      | 5  |              |
| 9/1/2017   | 21:47 | Cloudy            | Middle         | 3.0 | 20.10             | 20.10   | 20.10 | 8.04    | 8.04  | 8.05     | 30.55 | 30.55         | 30.55 | 83.7    | 83.8  | 83.6      | 6.34  | 6.35             | 6.33  | 2.60    | 2.58 | 2.53 | 11 | 9.50         |
|            | 21:48 |                   | Middle         | 3.0 | 20.10             | 20.10   |       | 8.05    | 8.05  |          | 30.55 | 30.55         |       | 84.0    | 83.0  |           | 6.36  | 6.27             |       | 2.55    | 2.40 |      | 8  |              |
| 11/1/2017  | 2:27  | Cloudy            | Middle         | 2.5 | 19.40             | 19.40   | 19.50 | 8.03    | 8.03  | 8.04     | 30.43 | 30.43         | 30.43 | 74.9    | 74.8  | 75.3      | 5.73  | 5.72             | 5.76  | 4.37    | 4.35 | 4.31 | 7  | 7.50         |
|            | 2:28  |                   | Middle         | 2.5 | 19.60             | 19.60   |       | 8.05    | 8.05  |          | 30.43 | 30.43         |       | 75.7    | 75.8  |           | 5.79  | 5.80             |       | 4.27    | 4.26 |      | 8  |              |
| 14/1/2017  | 1:42  | Cloudy            | Middle         | 2.5 | 18.80             | 18.80   | 18.80 | 8.15    | 8.15  | 8.15     | 30.63 | 30.63         | 30.63 | 78.9    | 79.7  | 79.5      | 6.12  | 6.19             | 6.15  | 4.47    | 4.22 | 4.30 | 7  | 6.00         |
|            | 1:43  |                   | Middle         | 2.5 | 18.80             | 18.80   |       | 8.15    | 8.15  |          | 30.63 | 30.63         |       | 80.1    | 79.1  |           | 6.22  | 6.06             |       | 4.24    | 4.26 |      | 5  |              |
| 16/1/2017  | 5:19  | Cloudy            | Middle         | 2.5 | 17.70             | 17.70   | 17.70 | 8.13    | 8.13  | 8.13     | 30.42 | 30.42         | 30.42 | 79.0    | 79.7  | 79.1      | 6.28  | 6.33             | 6.29  | 3.94    | 3.92 | 3.90 | 5  | 5.00         |
|            | 5:20  |                   | Middle         | 2.5 | 17.70             | 17.70   |       | 8.13    | 8.13  |          | 30.42 | 30.42         |       | 79.1    | 78.7  |           | 6.28  | 6.25             |       | 3.84    | 3.90 |      | 5  |              |
| 18/1/2017  | 4:47  | Cloudy            | Middle         | 3.0 | 18.70             | 18.70   | 18.75 | 8.10    | 8.10  | 8.11     | 30.68 | 30.68         | 30.69 | 75.0    | 76.8  | 76.7      | 5.82  | 5.96             | 5.95  | 4.53    | 4.41 | 4.38 | 5  | 5.00         |
|            | 4:48  |                   | Middle         | 3.0 | 18.80             | 18.80   |       | 8.11    | 8.11  |          | 30.69 | 30.69         |       | 77.6    | 77.3  |           | 6.02  | 6.00             |       | 4.27    | 4.31 |      | 5  |              |
| 20/1/2017  | 5:40  | Cloudy            | Middle         | 3.0 | 18.70             | 18.70   | 18.70 | 8.06    | 8.06  | 8.06     | 30.50 | 30.50         | 30.50 | 77.8    | 76.9  | 77.4      | 6.05  | 5.98             | 6.02  | 2.43    | 2.41 | 2.39 | 3  | 3.50         |
|            | 5:41  |                   | Middle         | 3.0 | 18.70             | 18.70   |       | 8.06    | 8.06  |          | 30.50 | 30.50         |       | 77.1    | 77.7  |           | 6.00  | 6.04             |       | 2.40    | 2.31 |      | 4  |              |
| 23/1/2017  | 22:18 | Cloudy            | Middle         | 3.0 | 18.10             | 18.10   | 18.15 | 8.40    | 8.40  | 8.40     | 31.19 | 31.16         | 31.19 | 94.8    | 95.1  | 94.9      | 7.42  | 7.44             | 7.42  | 4.59    | 4.50 | 4.51 | 18 | <u>20.50</u> |
|            | 22:19 |                   | Middle         | 3.0 | 18.20             | 18.20   |       | 8.40    | 8.40  |          | 31.20 | 31.19         |       | 94.8    | 94.9  |           | 7.41  | 7.42             |       | 4.57    | 4.37 |      | 23 |              |
| 25/1/2017  | 1:46  | Fine              | Middle         | 2.5 | 18.00             | 18.00   | 18.00 | 8.18    | 8.18  | 8.18     | 30.90 | 30.90         | 30.90 | 82.2    | 81.6  | 81.7      | 6.42  | 6.42             | 6.41  | 2.77    | 2.81 | 2.75 | 5  | 4.00         |
|            | 1:47  |                   | Middle         | 2.5 | 18.00             | 18.00   |       | 8.18    | 8.18  |          | 30.90 | 30.90         |       | 81.7    | 81.1  |           | 6.42  | 6.38             |       | 2.73    | 2.69 |      | 3  |              |

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.





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

| Date       | Time  | Weather Condition | Sampling Depth |       | Water Temperature |       | pH      |       |         | Salinity |         | DO Saturation |         | DO    |         | Turbidity |         | Suspended Solids |         |      |      |      |    |              |
|------------|-------|-------------------|----------------|-------|-------------------|-------|---------|-------|---------|----------|---------|---------------|---------|-------|---------|-----------|---------|------------------|---------|------|------|------|----|--------------|
|            |       |                   |                |       | °C                |       | -       |       | ppt     |          | %       |               | mg/L    |       | NTU     |           | mg/L    |                  |         |      |      |      |    |              |
|            |       |                   | m              | Value | Average           | Value | Average | Value | Average | Value    | Average | Value         | Average | Value | Average | Value     | Average | Value            | Average |      |      |      |    |              |
| 29/12/2016 | 2:22  | Cloudy            | Middle         | 2.5   | 17.90             | 17.90 | 17.90   | 8.16  | 8.16    | 8.17     | 30.16   | 30.16         | 30.32   | 80.6  | 81.7    | 81.1      | 6.37    | 6.46             | 6.43    | 4.32 | 4.27 | 4.31 | 6  | 6.50         |
|            | 2:23  |                   | Middle         | 2.5   | 17.90             | 17.90 |         | 8.17  | 8.17    |          | 30.48   | 30.48         |         | 81.1  | 80.9    |           | 6.45    | 6.44             |         | 4.30 | 4.36 |      | 7  |              |
| 31/12/2016 | 4:25  | Cloudy            | Middle         | 2.5   | 18.50             | 18.50 | 18.50   | 8.07  | 8.07    | 8.08     | 30.46   | 30.46         | 30.47   | 81.6  | 80.5    | 80.9      | 6.37    | 6.29             | 6.31    | 3.77 | 3.75 | 3.70 | 5  | 5.00         |
|            | 4:26  |                   | Middle         | 2.5   | 18.50             | 18.50 |         | 8.09  | 8.09    |          | 30.47   | 30.47         |         | 81.1  | 80.3    |           | 6.30    | 6.28             |         | 3.60 | 3.67 |      | <2 |              |
| 3/1/2017   | 5:17  | Fine              | Middle         | 2.5   | 19.80             | 19.80 | 19.80   | 7.68  | 7.68    | 7.69     | 30.43   | 30.43         | 30.43   | 78.4  | 79.8    | 79.3      | 5.98    | 6.09             | 6.05    | 3.36 | 3.51 | 3.34 | 6  | 5.50         |
|            | 5:18  |                   | Middle         | 2.5   | 19.80             | 19.80 |         | 7.69  | 7.69    |          | 30.43   | 30.43         |         | 79.0  | 79.9    |           | 6.03    | 6.10             |         | 3.25 | 3.23 |      | 5  |              |
| 5/1/2017   | 4:58  | Cloudy            | Middle         | 3.0   | 20.40             | 20.40 | 20.45   | 7.99  | 7.99    | 8.00     | 30.37   | 30.37         | 30.37   | 80.5  | 80.4    | 80.3      | 6.06    | 6.06             | 6.05    | 3.79 | 3.90 | 3.79 | 5  | 4.50         |
|            | 4:59  |                   | Middle         | 3.0   | 20.50             | 20.50 |         | 8.00  | 8.00    |          | 30.37   | 30.37         |         | 80.0  | 80.3    |           | 6.01    | 6.05             |         | 3.77 | 3.69 |      | 4  |              |
| 7/1/2017   | 5:51  | Cloudy            | Middle         | 3.0   | 20.30             | 20.30 | 20.35   | 8.02  | 8.02    | 8.02     | 29.87   | 29.87         | 29.87   | 78.1  | 77.7    | 76.8      | 5.91    | 5.88             | 5.80    | 1.96 | 1.98 | 2.03 | 4  | 6.50         |
|            | 5:52  |                   | Middle         | 3.0   | 20.40             | 20.40 |         | 8.02  | 8.02    |          | 29.87   | 29.87         |         | 76.4  | 75.0    |           | 5.78    | 5.64             |         | 2.10 | 2.06 |      | 9  |              |
| 9/1/2017   | 21:52 | Cloudy            | Middle         | 3.0   | 20.20             | 20.20 | 20.20   | 8.08  | 8.08    | 8.09     | 30.58   | 30.58         | 30.58   | 82.0  | 82.6    | 82.5      | 6.20    | 6.25             | 6.24    | 3.93 | 3.84 | 3.87 | 6  | 10.50        |
|            | 21:53 |                   | Middle         | 3.0   | 20.20             | 20.20 |         | 8.09  | 8.09    |          | 30.58   | 30.58         |         | 82.8  | 82.4    |           | 6.26    | 6.23             |         | 3.92 | 3.78 |      | 15 |              |
| 11/1/2017  | 2:41  | Cloudy            | Middle         | 2.5   | 19.60             | 19.60 | 19.60   | 8.09  | 8.09    | 8.09     | 30.45   | 30.45         | 30.46   | 77.1  | 76.1    | 76.7      | 5.89    | 5.81             | 5.86    | 4.42 | 4.37 | 4.35 | 7  | 7.50         |
|            | 2:42  |                   | Middle         | 2.5   | 19.60             | 19.60 |         | 8.09  | 8.09    |          | 30.46   | 30.46         |         | 77.1  | 76.5    |           | 5.89    | 5.85             |         | 4.35 | 4.26 |      | 8  |              |
| 14/1/2017  | 1:51  | Cloudy            | Middle         | 2.5   | 18.70             | 18.70 | 18.70   | 8.12  | 8.12    | 8.13     | 30.61   | 30.61         | 30.62   | 76.0  | 77.0    | 76.5      | 5.91    | 5.99             | 5.96    | 4.58 | 4.64 | 4.71 | 6  | 5.00         |
|            | 1:52  |                   | Middle         | 2.5   | 18.70             | 18.70 |         | 8.13  | 8.13    |          | 30.62   | 30.62         |         | 76.6  | 76.5    |           | 5.97    | 5.96             |         | 4.81 | 4.79 |      | 4  |              |
| 16/1/2017  | 5:24  | Cloudy            | Middle         | 2.5   | 17.80             | 17.80 | 17.75   | 8.14  | 8.14    | 8.14     | 30.42   | 30.42         | 30.43   | 75.8  | 77.0    | 76.9      | 6.01    | 6.10             | 6.10    | 4.46 | 4.45 | 4.45 | 7  | 6.00         |
|            | 5:25  |                   | Middle         | 2.5   | 17.70             | 17.70 |         | 8.13  | 8.13    |          | 30.43   | 30.43         |         | 77.3  | 77.5    |           | 6.13    | 6.15             |         | 4.48 | 4.42 |      | 5  |              |
| 18/1/2017  | 4:52  | Cloudy            | Middle         | 3.0   | 18.80             | 18.80 | 18.80   | 8.15  | 8.15    | 8.15     | 30.62   | 30.62         | 30.63   | 77.6  | 78.8    | 78.5      | 6.02    | 6.11             | 6.09    | 3.80 | 3.75 | 3.74 | 6  | 6.00         |
|            | 4:53  |                   | Middle         | 3.0   | 18.80             | 18.80 |         | 8.15  | 8.15    |          | 30.63   | 30.63         |         | 79.2  | 78.5    |           | 6.14    | 6.07             |         | 3.72 | 3.70 |      | 6  |              |
| 20/1/2017  | 5:47  | Cloudy            | Middle         | 3.0   | 18.70             | 18.70 | 18.75   | 8.00  | 8.00    | 8.01     | 30.55   | 30.55         | 30.55   | 80.1  | 80.2    | 80.1      | 6.23    | 6.23             | 6.23    | 3.02 | 3.00 | 2.99 | 6  | 5.50         |
|            | 5:48  |                   | Middle         | 3.0   | 18.80             | 18.80 |         | 8.01  | 8.01    |          | 30.55   | 30.55         |         | 80.2  | 80.0    |           | 6.23    | 6.21             |         | 2.97 | 2.98 |      | 5  |              |
| 23/1/2017  | 22:26 | Cloudy            | Middle         | 3.0   | 18.30             | 18.30 | 18.30   | 8.40  | 8.40    | 8.40     | 31.23   | 31.23         | 31.23   | 95.0  | 95.3    | 95.0      | 7.41    | 7.43             | 7.41    | 3.73 | 3.23 | 3.30 | 24 | <u>21.00</u> |
|            | 22:27 |                   | Middle         | 3.0   | 18.30             | 18.30 |         | 8.40  | 8.40    |          | 31.23   | 31.23         |         | 94.9  | 94.8    |           | 7.40    | 7.40             |         | 3.13 | 3.11 |      | 18 |              |
| 25/1/2017  | 1:55  | Fine              | Middle         | 2.5   | 18.20             | 18.20 | 18.20   | 8.20  | 8.20    | 8.20     | 30.27   | 30.27         | 30.27   | 71.0  | 72.1    | 72.2      | 5.58    | 5.67             | 5.68    | 3.05 | 2.95 | 2.93 | 3  | 4.00         |
|            | 1:56  |                   | Middle         | 2.5   | 18.20             | 18.20 |         | 8.20  | 8.19    |          | 30.27   | 30.27         |         | 73.3  | 72.5    |           | 5.76    | 5.70             |         | 2.82 | 2.90 |      | 5  |              |

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



**Water Monitoring Result at RW21-P789W - GEC / CRB / SHK  
Mid-Ebb Tide**

| Date       | Time  | Weather Condition | Sampling Depth |       | Water Temperature |       | pH      |       | Salinity |       | DO Saturation |       | DO      |       | Turbidity |       | Suspended Solids |       |         |      |      |      |    |      |
|------------|-------|-------------------|----------------|-------|-------------------|-------|---------|-------|----------|-------|---------------|-------|---------|-------|-----------|-------|------------------|-------|---------|------|------|------|----|------|
|            |       |                   |                |       | °C                |       | -       |       | ppt      |       | %             |       | mg/L    |       | NTU       |       | mg/L             |       |         |      |      |      |    |      |
|            |       |                   | m              | Value | Average           | Value | Average | Value | Average  | Value | Average       | Value | Average | Value | Average   | Value | Average          | Value | Average |      |      |      |    |      |
| 29/12/2016 | 1:10  | Cloudy            | Middle         | 3.5   | 17.60             | 17.60 | 17.60   | 7.91  | 7.91     | 7.92  | 30.30         | 30.30 | 30.30   | 82.7  | 83.4      | 82.8  | 6.58             | 6.54  | 6.54    | 3.45 | 3.96 | 3.82 | 8  | 7.50 |
|            | 1:11  |                   | Middle         | 3.5   | 17.60             | 17.60 | 17.60   | 7.93  | 7.93     | 7.92  | 30.30         | 30.30 | 30.30   | 83.0  | 82.2      | 82.8  | 6.51             | 6.54  | 6.54    | 4.05 | 3.82 | 3.82 | 7  |      |
| 31/12/2016 | 2:29  | Cloudy            | Middle         | 3.5   | 18.40             | 18.40 | 18.40   | 8.10  | 8.10     | 8.10  | 29.21         | 29.20 | 29.20   | 78.4  | 78.5      | 79.0  | 6.18             | 6.19  | 6.23    | 5.39 | 5.41 | 5.42 | 5  | 5.00 |
|            | 2:30  |                   | Middle         | 3.5   | 18.40             | 18.40 | 18.40   | 8.10  | 8.10     | 8.10  | 29.20         | 29.20 | 29.20   | 80.0  | 79.2      | 79.0  | 6.31             | 6.25  | 6.23    | 5.43 | 5.45 | 5.42 | 5  |      |
| 3/1/2017   | 3:33  | Fine              | Middle         | 3.5   | 19.50             | 19.50 | 19.50   | 7.77  | 7.77     | 7.77  | 28.55         | 28.55 | 28.55   | 67.7  | 68.2      | 68.0  | 5.25             | 5.29  | 5.27    | 3.78 | 3.82 | 3.78 | 5  | 5.00 |
|            | 3:34  |                   | Middle         | 3.5   | 19.50             | 19.50 | 19.50   | 7.77  | 7.77     | 7.77  | 28.55         | 28.55 | 28.55   | 68.0  | 67.9      | 68.0  | 5.27             | 5.27  | 5.27    | 3.80 | 3.72 | 3.78 | 5  |      |
| 5/1/2017   | 3:22  | Cloudy            | Middle         | 3.5   | 20.20             | 20.20 | 20.25   | 7.80  | 7.80     | 7.82  | 29.92         | 29.92 | 29.93   | 72.3  | 74.7      | 73.6  | 5.49             | 5.56  | 5.55    | 3.57 | 3.66 | 3.55 | 4  | 3.50 |
|            | 3:23  |                   | Middle         | 3.5   | 20.30             | 20.30 | 20.25   | 7.83  | 7.83     | 7.82  | 29.93         | 29.93 | 29.93   | 74.3  | 73.0      | 73.6  | 5.61             | 5.52  | 5.55    | 3.53 | 3.45 | 3.55 | 3  |      |
| 7/1/2017   | 6:06  | Cloudy            | Middle         | 4.0   | 20.30             | 20.30 | 20.35   | 7.94  | 7.94     | 7.95  | 30.13         | 30.13 | 30.15   | 78.8  | 79.9      | 79.5  | 5.96             | 6.04  | 6.01    | 2.06 | 2.09 | 2.10 | 5  | 4.50 |
|            | 6:07  |                   | Middle         | 4.0   | 20.40             | 20.40 | 20.35   | 7.95  | 7.95     | 7.95  | 30.17         | 30.17 | 30.15   | 80.1  | 79.2      | 79.5  | 6.05             | 5.98  | 6.01    | 2.11 | 2.13 | 2.10 | 4  |      |
| 9/1/2017   | 22:06 | Cloudy            | Middle         | 4.0   | 20.00             | 20.00 | 20.05   | 7.93  | 7.93     | 7.93  | 30.56         | 30.56 | 30.56   | 81.2  | 81.1      | 80.7  | 6.16             | 6.15  | 6.11    | 2.45 | 2.52 | 2.49 | 6  | 7.50 |
|            | 22:07 |                   | Middle         | 4.0   | 20.10             | 20.10 | 20.05   | 7.93  | 7.93     | 7.93  | 30.56         | 30.56 | 30.56   | 80.1  | 80.3      | 80.7  | 6.05             | 6.07  | 6.11    | 2.50 | 2.48 | 2.49 | 9  |      |
| 11/1/2017  | 0:01  | Cloudy            | Middle         | 3.5   | 20.10             | 20.10 | 20.20   | 7.94  | 7.94     | 7.97  | 30.69         | 30.69 | 30.70   | 81.2  | 81.2      | 81.4  | 6.13             | 6.13  | 6.14    | 2.68 | 2.66 | 2.61 | 4  | 4.00 |
|            | 0:02  |                   | Middle         | 3.5   | 20.30             | 20.30 | 20.20   | 7.99  | 8.00     | 7.97  | 30.70         | 30.70 | 30.70   | 81.7  | 81.4      | 81.4  | 6.17             | 6.14  | 6.14    | 2.56 | 2.52 | 2.61 | 4  |      |
| 14/1/2017  | 23:15 | Cloudy            | Middle         | 4.0   | 18.20             | 18.20 | 18.20   | 7.99  | 7.99     | 8.00  | 30.70         | 30.70 | 30.70   | 78.0  | 78.9      | 78.8  | 6.12             | 6.19  | 6.19    | 3.60 | 3.71 | 3.72 | 5  | 6.00 |
|            | 23:16 |                   | Middle         | 4.0   | 18.20             | 18.20 | 18.20   | 8.00  | 8.00     | 8.00  | 30.70         | 30.70 | 30.70   | 79.4  | 79.0      | 78.8  | 6.23             | 6.20  | 6.19    | 3.77 | 3.78 | 3.72 | 7  |      |
| 16/1/2017  | 3:53  | Cloudy            | Middle         | 4.0   | 17.60             | 17.60 | 17.58   | 7.85  | 7.85     | 7.87  | 29.15         | 29.16 | 29.16   | 70.1  | 70.3      | 70.3  | 5.61             | 5.64  | 5.63    | 3.78 | 3.94 | 3.73 | 7  | 5.50 |
|            | 3:54  |                   | Middle         | 4.0   | 17.50             | 17.60 | 17.58   | 7.89  | 7.89     | 7.87  | 29.17         | 29.17 | 29.16   | 70.7  | 70.0      | 70.3  | 5.67             | 5.61  | 5.63    | 3.59 | 3.61 | 3.73 | 4  |      |
| 18/1/2017  | 3:40  | Cloudy            | Middle         | 4.0   | 18.90             | 18.90 | 18.90   | 7.62  | 7.62     | 7.66  | 30.38         | 30.38 | 30.38   | 69.7  | 71.8      | 71.7  | 5.40             | 5.57  | 5.56    | 3.10 | 3.08 | 3.14 | 4  | 4.00 |
|            | 3:41  |                   | Middle         | 4.0   | 18.90             | 18.90 | 18.90   | 7.70  | 7.69     | 7.66  | 30.38         | 30.38 | 30.38   | 73.3  | 72.0      | 71.7  | 5.68             | 5.58  | 5.56    | 3.15 | 3.22 | 3.14 | 4  |      |
| 20/1/2017  | 4:35  | Cloudy            | Middle         | 4.0   | 19.10             | 19.10 | 19.15   | 7.91  | 7.91     | 7.92  | 29.71         | 29.71 | 29.72   | 78.9  | 80.3      | 79.5  | 6.10             | 6.21  | 6.14    | 2.48 | 2.41 | 2.42 | 3  | 4.00 |
|            | 4:36  |                   | Middle         | 4.0   | 19.20             | 19.20 | 19.15   | 7.92  | 7.93     | 7.92  | 29.72         | 29.72 | 29.72   | 80.6  | 78.0      | 79.5  | 6.23             | 6.03  | 6.14    | 2.38 | 2.42 | 2.42 | 5  |      |
| 23/1/2017  | 22:45 | Cloudy            | Middle         | 4.0   | 18.50             | 18.50 | 18.50   | 8.37  | 8.37     | 8.37  | 31.08         | 31.08 | 31.08   | 93.6  | 92.8      | 93.3  | 7.42             | 7.36  | 7.40    | 4.24 | 4.22 | 4.29 | 12 | 9.00 |
|            | 22:46 |                   | Middle         | 4.0   | 18.50             | 18.50 | 18.50   | 8.37  | 8.37     | 8.37  | 31.08         | 31.08 | 31.08   | 93.2  | 93.6      | 93.3  | 7.39             | 7.42  | 7.40    | 4.21 | 4.50 | 4.29 | 6  |      |

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



**Water Monitoring Result at RW21-P789E - GEC / CRB / SHK  
Mid-Ebb Tide**

| Date       | Time  | Weather Condition | Sampling Depth |     | Water Temperature |         | pH    |         |       | Salinity |       | DO Saturation |       | DO      |       | Turbidity |       | Suspended Solids |      |      |      |      |    |      |
|------------|-------|-------------------|----------------|-----|-------------------|---------|-------|---------|-------|----------|-------|---------------|-------|---------|-------|-----------|-------|------------------|------|------|------|------|----|------|
|            |       |                   | m              |     | °C                |         | -     |         | ppt   |          | %     |               | mg/L  |         | NTU   |           | mg/L  |                  |      |      |      |      |    |      |
|            |       |                   |                |     | Value             | Average | Value | Average | Value | Average  | Value | Average       | Value | Average | Value | Average   | Value | Average          |      |      |      |      |    |      |
| 29/12/2016 | 1:16  | Cloudy            | Middle         | 3.5 | 17.80             | 17.80   | 17.75 | 8.02    | 8.02  | 8.02     | 30.10 | 30.10         | 30.11 | 79.1    | 79.3  | 78.9      | 6.29  | 6.31             | 6.27 | 3.61 | 3.56 | 3.58 | 7  | 5.50 |
|            | 1:17  |                   | Middle         | 3.5 | 17.70             | 17.70   |       | 8.03    | 8.02  |          | 30.11 | 30.11         |       | 78.8    | 78.3  |           | 6.26  | 6.22             |      | 3.59 | 3.54 |      | 4  |      |
| 31/12/2016 | 2:45  | Cloudy            | Middle         | 3.5 | 18.70             | 18.70   | 18.65 | 7.86    | 7.86  | 7.89     | 30.37 | 30.37         | 30.38 | 84.2    | 84.4  | 83.5      | 6.57  | 6.58             | 6.51 | 5.50 | 5.46 | 5.44 | 5  | 6.00 |
|            | 2:46  |                   | Middle         | 3.5 | 18.60             | 18.60   |       | 7.92    | 7.92  |          | 30.38 | 30.38         |       | 83.0    | 82.2  |           | 6.48  | 6.41             |      | 5.38 | 5.40 |      | 7  |      |
| 3/1/2017   | 3:45  | Fine              | Middle         | 3.5 | 19.60             | 19.60   | 19.60 | 7.79    | 7.79  | 7.81     | 28.84 | 28.86         | 28.86 | 67.6    | 67.8  | 67.4      | 5.22  | 5.23             | 5.20 | 4.57 | 4.59 | 4.58 | 4  | 5.00 |
|            | 3:46  |                   | Middle         | 3.5 | 19.60             | 19.60   |       | 7.82    | 7.82  |          | 28.86 | 28.86         |       | 66.8    | 67.3  |           | 5.16  | 5.20             |      | 4.60 | 4.55 |      | 6  |      |
| 5/1/2017   | 3:31  | Cloudy            | Middle         | 3.5 | 20.20             | 20.20   | 20.25 | 7.88    | 7.88  | 7.89     | 30.44 | 30.44         | 30.44 | 77.6    | 79.0  | 78.4      | 5.98  | 5.97             | 5.95 | 4.56 | 4.26 | 4.32 | 4  | 4.50 |
|            | 3:32  |                   | Middle         | 3.5 | 20.30             | 20.30   |       | 7.90    | 7.90  |          | 30.44 | 30.44         |       | 78.6    | 78.2  |           | 5.94  | 5.90             |      | 4.22 | 4.25 |      | 5  |      |
| 7/1/2017   | 6:11  | Cloudy            | Middle         | 4.0 | 20.40             | 20.40   | 20.40 | 7.83    | 7.83  | 7.84     | 30.31 | 30.31         | 30.31 | 78.8    | 79.1  | 77.9      | 5.94  | 5.96             | 5.87 | 2.47 | 2.50 | 2.37 | 10 | 9.50 |
|            | 6:12  |                   | Middle         | 4.0 | 20.40             | 20.40   |       | 7.85    | 7.85  |          | 30.31 | 30.31         |       | 76.4    | 77.4  |           | 5.75  | 5.83             |      | 2.24 | 2.26 |      | 9  |      |
| 9/1/2017   | 22:13 | Cloudy            | Middle         | 4.0 | 20.10             | 20.10   | 20.15 | 7.66    | 7.66  | 7.69     | 30.53 | 30.53         | 30.53 | 82.6    | 81.2  | 82.1      | 6.25  | 6.14             | 6.22 | 2.46 | 2.48 | 2.49 | 6  | 5.50 |
|            | 10:29 |                   | Middle         | 4.0 | 20.20             | 20.20   |       | 7.72    | 7.72  |          | 30.53 | 30.53         |       | 82.4    | 82.3  |           | 6.24  | 6.24             |      | 2.51 | 2.52 |      | 5  |      |
| 11/1/2017  | 0:10  | Cloudy            | Middle         | 3.5 | 20.10             | 20.10   | 20.15 | 8.04    | 8.04  | 8.05     | 30.75 | 30.75         | 30.75 | 74.4    | 75.0  | 75.2      | 5.62  | 5.67             | 5.68 | 3.53 | 3.59 | 3.51 | 6  | 6.00 |
|            | 0:11  |                   | Middle         | 3.5 | 20.20             | 20.20   |       | 8.06    | 8.06  |          | 30.75 | 30.75         |       | 76.0    | 75.3  |           | 5.74  | 5.69             |      | 3.50 | 3.42 |      | 6  |      |
| 14/1/2017  | 23:32 | Cloudy            | Middle         | 4.0 | 18.20             | 18.20   | 18.20 | 7.86    | 7.86  | 7.88     | 30.57 | 30.57         | 30.57 | 82.5    | 83.3  | 83.2      | 6.48  | 6.54             | 6.53 | 4.23 | 4.25 | 4.20 | 5  | 4.50 |
|            | 23:33 |                   | Middle         | 4.0 | 18.20             | 18.20   |       | 7.90    | 7.89  |          | 30.57 | 30.58         |       | 83.3    | 83.5  |           | 6.54  | 6.56             |      | 4.19 | 4.12 |      | 4  |      |
| 16/1/2017  | 4:05  | Cloudy            | Middle         | 4.0 | 17.80             | 17.80   | 17.80 | 7.61    | 7.61  | 7.74     | 30.03 | 30.06         | 30.04 | 70.8    | 71.0  | 71.5      | 5.62  | 5.64             | 5.68 | 2.89 | 2.69 | 2.76 | 4  | 4.00 |
|            | 4:06  |                   | Middle         | 4.0 | 17.80             | 17.80   |       | 7.87    | 7.87  |          | 30.03 | 30.03         |       | 71.9    | 72.1  |           | 5.71  | 5.73             |      | 2.75 | 2.72 |      | 4  |      |
| 18/1/2017  | 3:57  | Cloudy            | Middle         | 4.0 | 18.90             | 18.90   | 18.93 | 8.05    | 8.05  | 8.06     | 30.55 | 30.55         | 30.55 | 82.4    | 82.4  | 81.9      | 6.38  | 6.38             | 6.34 | 4.73 | 4.67 | 4.66 | 6  | 5.50 |
|            | 3:58  |                   | Middle         | 4.0 | 19.00             | 18.90   |       | 8.08    | 8.07  |          | 30.55 | 30.55         |       | 82.1    | 80.6  |           | 6.35  | 6.24             |      | 4.65 | 4.59 |      | 5  |      |
| 20/1/2017  | 4:45  | Cloudy            | Middle         | 4.0 | 18.70             | 18.70   | 18.75 | 8.00    | 8.00  | 8.00     | 29.37 | 29.37         | 29.38 | 67.5    | 67.8  | 67.2      | 5.27  | 5.29             | 5.24 | 4.34 | 4.43 | 4.34 | 7  | 5.50 |
|            | 4:46  |                   | Middle         | 4.0 | 18.80             | 18.80   |       | 8.00    | 8.00  |          | 29.38 | 29.38         |       | 66.7    | 66.6  |           | 5.21  | 5.20             |      | 4.38 | 4.20 |      | 4  |      |
| 23/1/2017  | 22:53 | Cloudy            | Middle         | 4.0 | 18.60             | 18.60   | 18.60 | 8.40    | 8.40  | 8.40     | 31.23 | 31.23         | 31.23 | 90.1    | 91.2  | 90.8      | 7.13  | 7.22             | 7.19 | 4.53 | 4.32 | 4.38 | 7  | 7.00 |
|            | 22:54 |                   | Middle         | 4.0 | 18.60             | 18.60   |       | 8.40    | 8.40  |          | 31.23 | 31.23         |       | 91.4    | 90.6  |           | 7.23  | 7.17             |      | 4.31 | 4.34 |      | 7  |      |

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



**Water Monitoring Result at RW21-P789 - GEC / CRB / SHK  
Mid-Ebb Tide**

| Date      | Time  | Weater Condition | Sampling Depth |       | Water Temperature |       | pH      |       | Salinity |       | DO Saturation |       | DO      |       | Turbidity |       | Suspended Solids |       |         |      |      |      |   |      |
|-----------|-------|------------------|----------------|-------|-------------------|-------|---------|-------|----------|-------|---------------|-------|---------|-------|-----------|-------|------------------|-------|---------|------|------|------|---|------|
|           |       |                  |                |       | °C                |       | -       |       | ppt      |       | %             |       | mg/L    |       | NTU       |       | mg/L             |       |         |      |      |      |   |      |
|           |       |                  | m              | Value | Average           | Value | Average | Value | Average  | Value | Average       | Value | Average | Value | Average   | Value | Average          | Value | Average |      |      |      |   |      |
| 25/1/2017 | 23:22 | Fine             | Middle         | 3.5   | 18.40             | 18.40 | 18.40   | 8.04  | 8.04     | 8.05  | 30.31         | 30.31 | 30.31   | 78.6  | 78.2      | 78.1  | 6.15             | 6.12  | 6.11    | 4.36 | 4.17 | 4.24 | 3 | 4.00 |
|           | 23:23 |                  | Middle         | 3.5   | 18.40             | 18.40 | 18.40   | 8.05  | 8.05     | 8.05  | 30.31         | 30.31 | 30.31   | 78.0  | 77.6      | 78.1  | 6.11             | 6.07  | 6.11    | 4.20 | 4.22 | 4.24 | 5 | 4.00 |

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



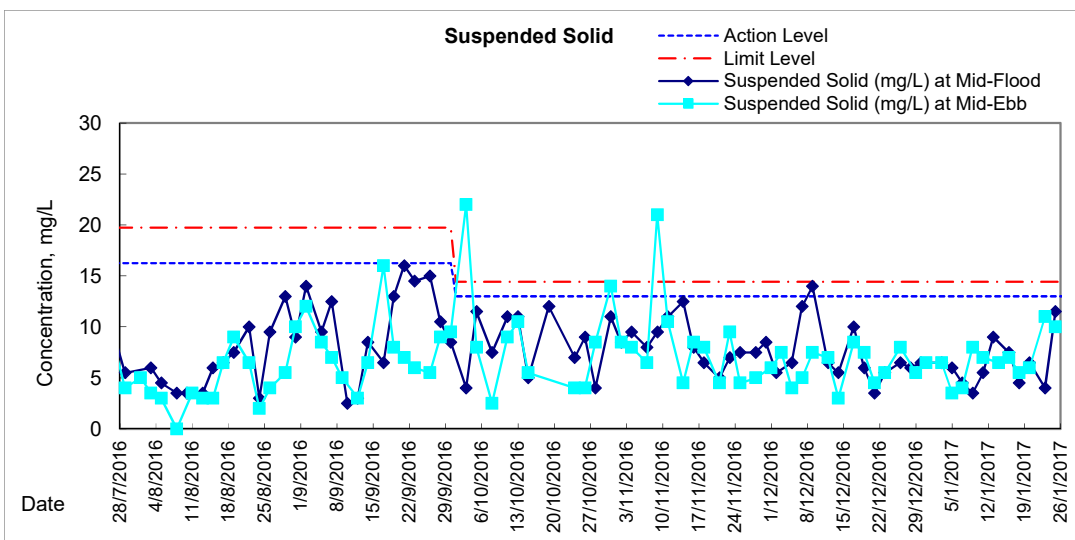
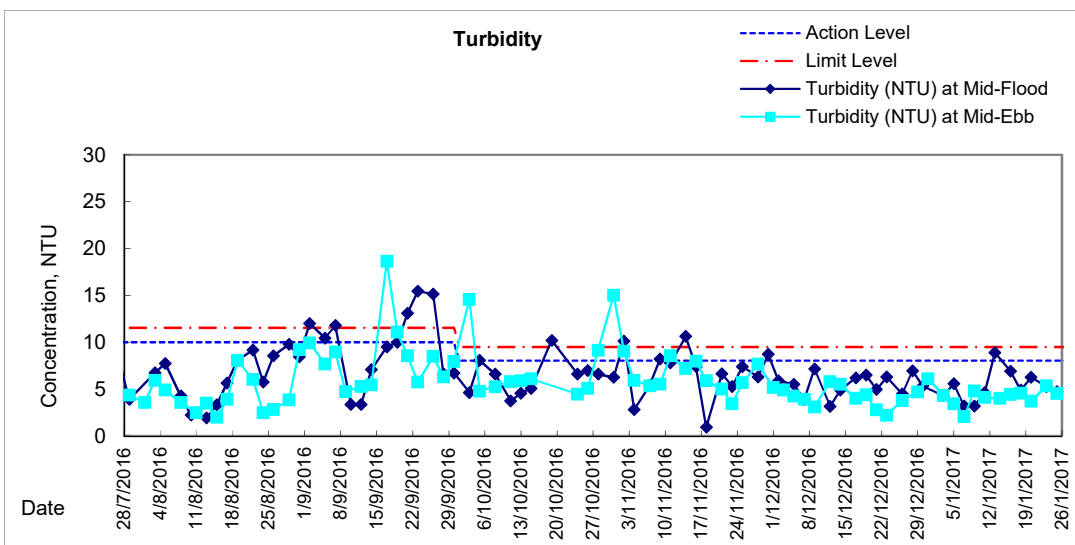
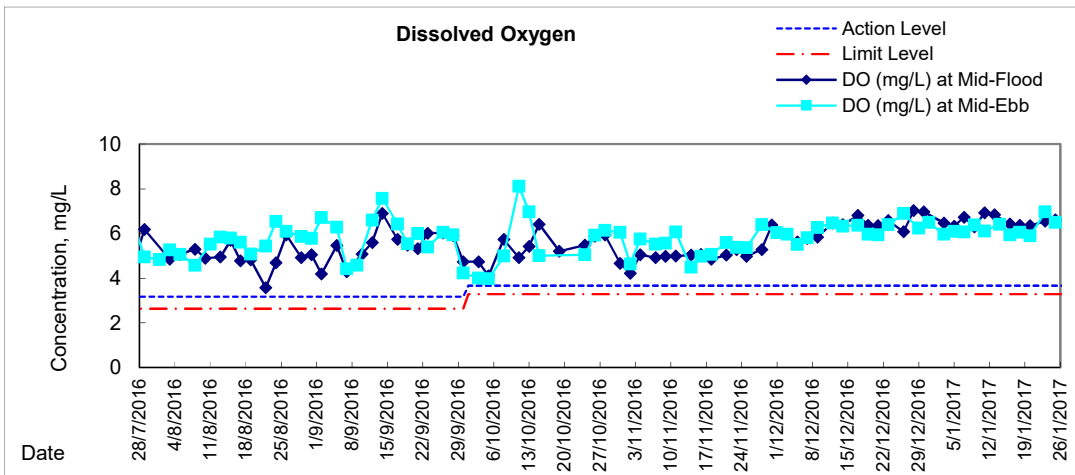
**Water Monitoring Result at WSD19 - Sheung Wan  
Mid-Ebb Tide**

| Date       | Time  | Weather Condition | Sampling Depth |       | Water Temperature |       | pH      |       |         | Salinity |         | DO Saturation |         | DO    |         | Turbidity |         | Suspended Solids |         |      |      |      |    |       |
|------------|-------|-------------------|----------------|-------|-------------------|-------|---------|-------|---------|----------|---------|---------------|---------|-------|---------|-----------|---------|------------------|---------|------|------|------|----|-------|
|            |       |                   |                |       | °C                |       | -       |       | ppt     |          | %       |               | mg/L    |       | NTU     |           | mg/L    |                  |         |      |      |      |    |       |
|            |       |                   | m              | Value | Average           | Value | Average | Value | Average | Value    | Average | Value         | Average | Value | Average | Value     | Average | Value            | Average |      |      |      |    |       |
| 29/12/2016 | 2:45  | Cloudy            | Middle         | 3.5   | 18.30             | 18.30 | 18.30   | 7.68  | 7.68    | 7.68     | 30.23   | 30.23         | 30.24   | 79.2  | 81.0    | 79.4      | 6.22    | 6.36             | 6.23    | 4.68 | 4.71 | 4.71 | 4  | 5.50  |
|            | 2:46  |                   | Middle         | 3.5   | 18.30             | 18.30 |         | 7.68  | 7.68    |          | 30.24   | 30.24         |         | 79.1  | 78.2    |           | 6.21    | 6.14             |         | 4.74 | 4.72 |      | 7  |       |
| 31/12/2016 | 3:25  | Cloudy            | Middle         | 3.5   | 18.70             | 18.70 | 18.65   | 8.01  | 8.01    | 8.02     | 30.37   | 30.37         | 30.38   | 83.2  | 83.8    | 83.3      | 6.49    | 6.54             | 6.50    | 6.30 | 6.08 | 6.10 | 8  | 6.50  |
|            | 3:26  |                   | Middle         | 3.5   | 18.60             | 18.60 |         | 8.02  | 8.02    |          | 30.38   | 30.38         |         | 83.4  | 82.6    |           | 6.50    | 6.45             |         | 5.95 | 6.05 |      | 5  |       |
| 3/1/2017   | 4:12  | Fine              | Middle         | 3.5   | 19.70             | 19.70 | 19.70   | 7.76  | 7.76    | 7.77     | 30.10   | 30.11         | 30.12   | 77.2  | 78.2    | 77.9      | 5.91    | 5.98             | 5.96    | 4.37 | 4.34 | 4.33 | 7  | 6.50  |
|            | 4:13  |                   | Middle         | 3.5   | 19.70             | 19.70 |         | 7.77  | 7.77    |          | 30.13   | 30.13         |         | 78.3  | 78.0    |           | 5.99    | 5.96             |         | 4.32 | 4.30 |      | 6  |       |
| 5/1/2017   | 4:07  | Cloudy            | Middle         | 3.5   | 20.40             | 20.40 | 20.50   | 7.75  | 7.75    | 7.75     | 29.80   | 29.80         | 29.82   | 80.1  | 81.2    | 80.8      | 6.04    | 6.14             | 6.09    | 3.61 | 3.42 | 3.44 | 3  | 3.50  |
|            | 4:08  |                   | Middle         | 3.5   | 20.60             | 20.60 |         | 7.75  | 7.75    |          | 29.83   | 29.83         |         | 81.1  | 80.6    |           | 6.10    | 6.08             |         | 3.37 | 3.34 |      | 4  |       |
| 7/1/2017   | 5:10  | Cloudy            | Middle         | 3.5   | 20.50             | 20.50 | 20.60   | 7.58  | 7.58    | 7.57     | 29.79   | 29.80         | 29.80   | 80.6  | 80.8    | 80.5      | 6.06    | 6.09             | 6.06    | 2.10 | 2.07 | 2.06 | 4  | 4.00  |
|            | 5:11  |                   | Middle         | 3.5   | 20.70             | 20.70 |         | 7.55  | 7.55    |          | 29.80   | 29.80         |         | 80.3  | 80.4    |           | 6.04    | 6.04             |         | 2.00 | 2.05 |      | 4  |       |
| 9/1/2017   | 21:05 | Cloudy            | Middle         | 3.5   | 20.70             | 20.70 | 20.75   | 7.58  | 7.58    | 7.58     | 30.25   | 30.25         | 30.25   | 85.4  | 85.7    | 85.3      | 6.39    | 6.41             | 6.38    | 4.90 | 4.80 | 4.80 | 9  | 8.00  |
|            | 21:06 |                   | Middle         | 3.5   | 20.80             | 20.80 |         | 7.58  | 7.58    |          | 30.25   | 30.25         |         | 85.1  | 84.9    |           | 6.37    | 6.35             |         | 4.74 | 4.77 |      | 7  |       |
| 11/1/2017  | 0:49  | Cloudy            | Middle         | 3.5   | 20.00             | 20.00 | 20.10   | 7.83  | 7.83    | 7.85     | 30.26   | 30.26         | 30.26   | 81.0  | 81.1    | 80.6      | 6.13    | 6.14             | 6.10    | 4.07 | 4.16 | 4.11 | 6  | 7.00  |
|            | 0:50  |                   | Middle         | 3.5   | 20.20             | 20.20 |         | 7.86  | 7.86    |          | 30.26   | 30.26         |         | 80.2  | 80.0    |           | 6.07    | 6.06             |         | 4.12 | 4.10 |      | 8  |       |
| 14/1/2017  | 0:45  | Cloudy            | Middle         | 3.5   | 18.30             | 18.30 | 18.30   | 8.07  | 8.07    | 8.07     | 30.41   | 30.41         | 30.41   | 81.3  | 81.5    | 81.6      | 6.38    | 6.40             | 6.41    | 4.04 | 4.10 | 4.03 | 5  | 6.50  |
|            | 0:46  |                   | Middle         | 3.5   | 18.30             | 18.30 |         | 8.07  | 8.07    |          | 30.41   | 30.41         |         | 82.1  | 81.3    |           | 6.45    | 6.39             |         | 4.00 | 3.96 |      | 8  |       |
| 16/1/2017  | 4:27  | Cloudy            | Middle         | 3.5   | 17.90             | 17.90 | 17.90   | 7.69  | 7.69    | 7.69     | 29.99   | 30.02         | 30.01   | 74.3  | 75.3    | 74.8      | 5.90    | 5.98             | 5.94    | 4.47 | 4.50 | 4.44 | 7  | 7.00  |
|            | 4:28  |                   | Middle         | 3.5   | 17.90             | 17.90 |         | 7.69  | 7.69    |          | 30.02   | 30.02         |         | 75.1  | 74.5    |           | 5.96    | 5.90             |         | 4.41 | 4.38 |      | 7  |       |
| 18/1/2017  | 5:10  | Cloudy            | Middle         | 3.5   | 19.00             | 19.00 | 19.00   | 7.94  | 7.94    | 7.95     | 30.32   | 30.32         | 30.33   | 78.3  | 78.0    | 78.0      | 6.06    | 6.04             | 6.04    | 4.67 | 4.60 | 4.56 | 5  | 5.50  |
|            | 5:11  |                   | Middle         | 3.5   | 19.00             | 19.00 |         | 7.95  | 7.95    |          | 30.33   | 30.33         |         | 78.1  | 77.6    |           | 6.05    | 6.01             |         | 4.48 | 4.50 |      | 6  |       |
| 20/1/2017  | 6:03  | Cloudy            | Middle         | 3.5   | 18.80             | 18.80 | 18.85   | 7.99  | 7.99    | 7.99     | 30.21   | 30.21         | 30.21   | 75.2  | 75.9    | 75.7      | 5.84    | 5.90             | 5.88    | 3.78 | 3.73 | 3.72 | 7  | 6.00  |
|            | 6:04  |                   | Middle         | 3.5   | 18.90             | 18.90 |         | 7.99  | 7.99    |          | 30.21   | 30.21         |         | 75.8  | 76.0    |           | 5.89    | 5.90             |         | 3.69 | 3.67 |      | 5  |       |
| 23/1/2017  | 21:30 | Cloudy            | Middle         | 3.5   | 18.70             | 18.70 | 18.70   | 8.17  | 8.17    | 8.22     | 30.77   | 30.77         | 30.82   | 90.2  | 89.9    | 89.6      | 7.01    | 6.99             | 6.96    | 5.44 | 5.42 | 5.35 | 11 | 11.00 |
|            | 21:31 |                   | Middle         | 3.5   | 18.70             | 18.70 |         | 8.27  | 8.27    |          | 30.86   | 30.86         |         | 89.2  | 89.1    |           | 6.93    | 6.92             |         | 5.23 | 5.30 |      | 11 |       |
| 25/1/2017  | 0:45  | Fine              | Middle         | 3.0   | 18.50             | 18.50 | 18.50   | 7.97  | 7.97    | 7.98     | 30.93   | 30.93         | 30.89   | 83.1  | 83.0    | 83.2      | 6.47    | 6.46             | 6.49    | 4.57 | 4.52 | 4.54 | 14 | 10.00 |
|            | 0:46  |                   | Middle         | 3.0   | 18.50             | 18.50 |         | 7.98  | 7.98    |          | 30.85   | 30.85         |         | 83.6  | 82.9    |           | 6.60    | 6.44             |         | 4.60 | 4.48 |      | 6  |       |

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



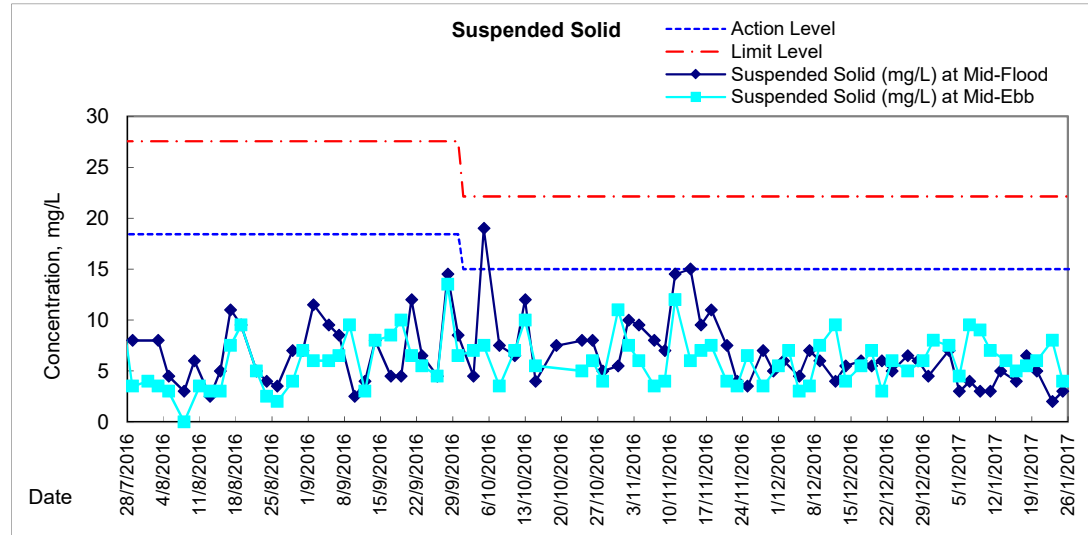
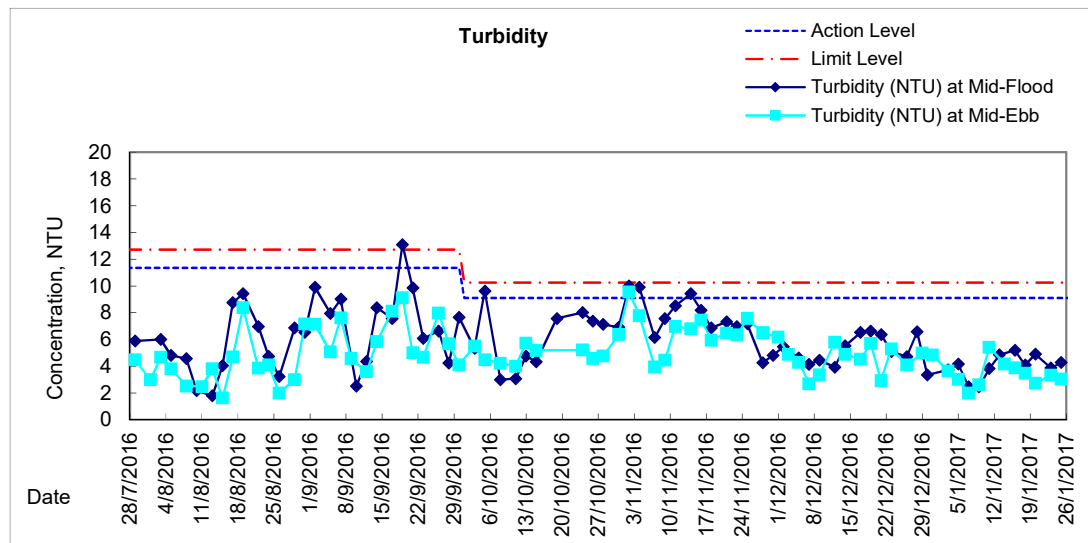
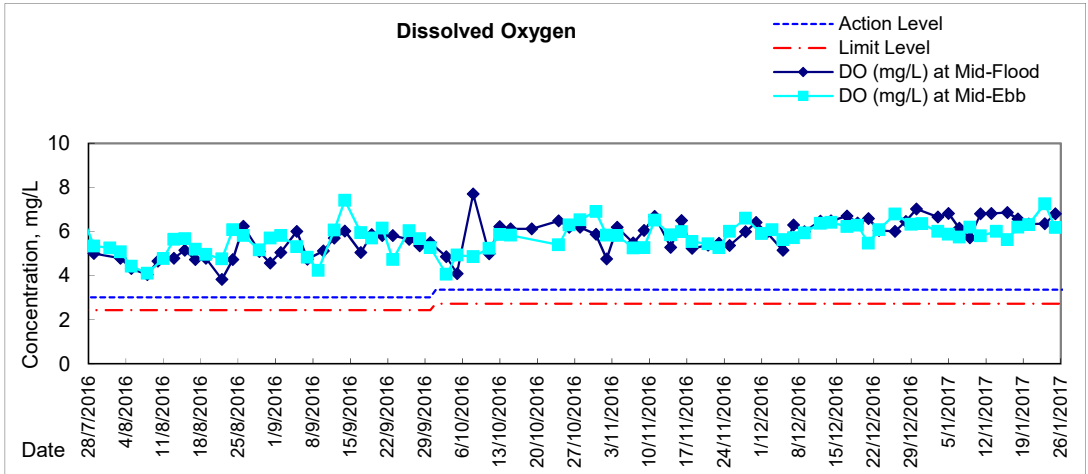
# Graphic Presentation of Water Quality Result of WSD19 - Sheung Wan





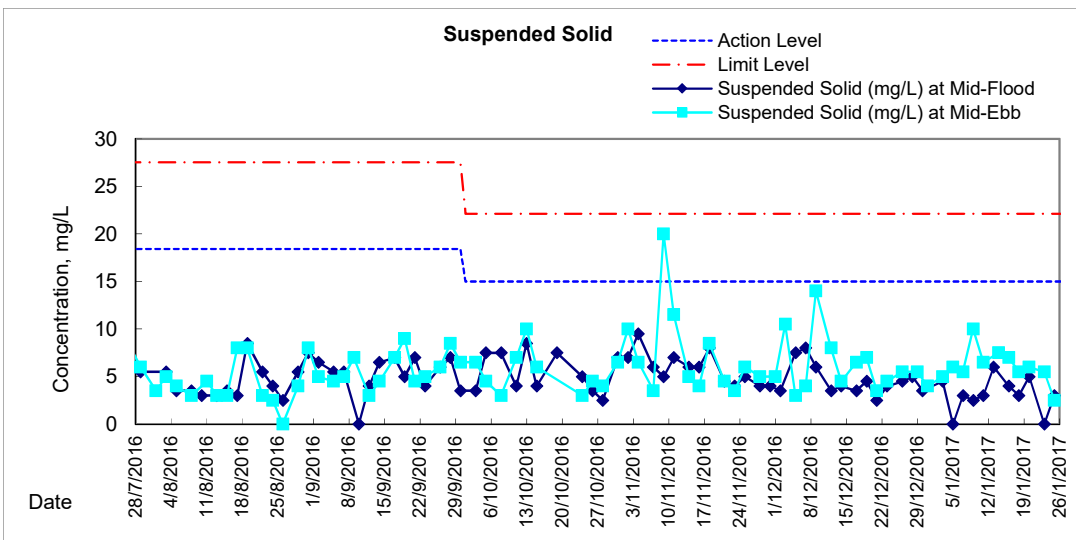
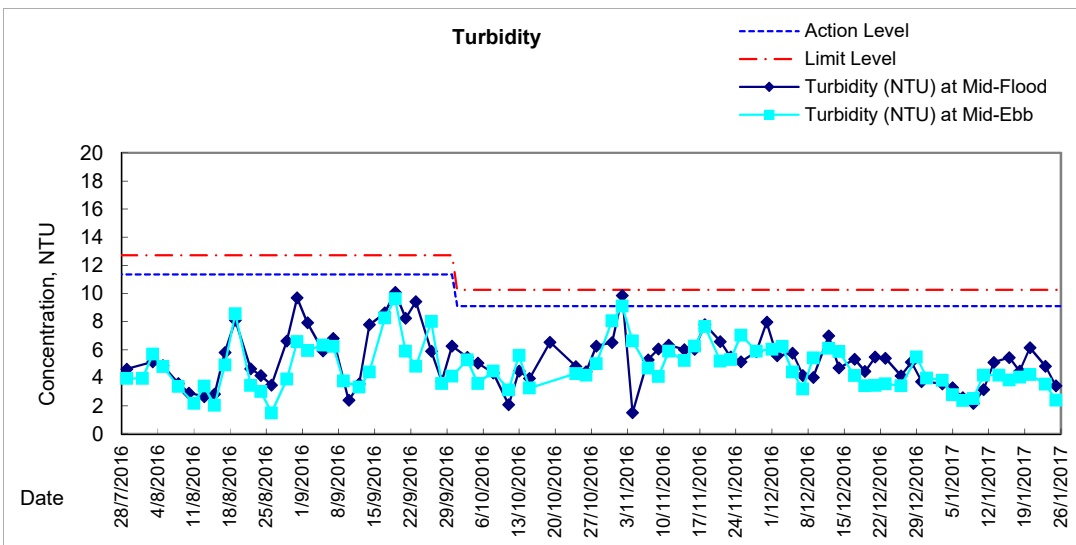
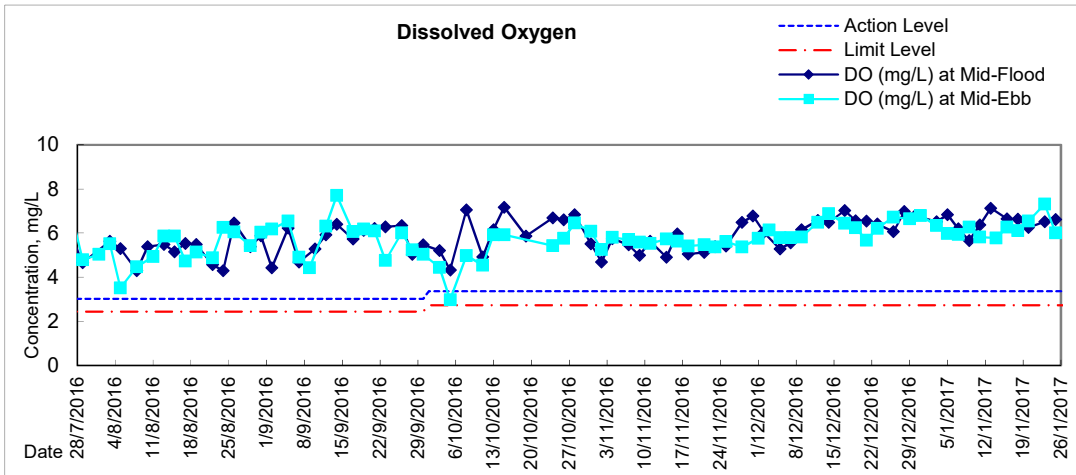


### Graphic Presentation of Water Quality Result of C1 - HKCEC



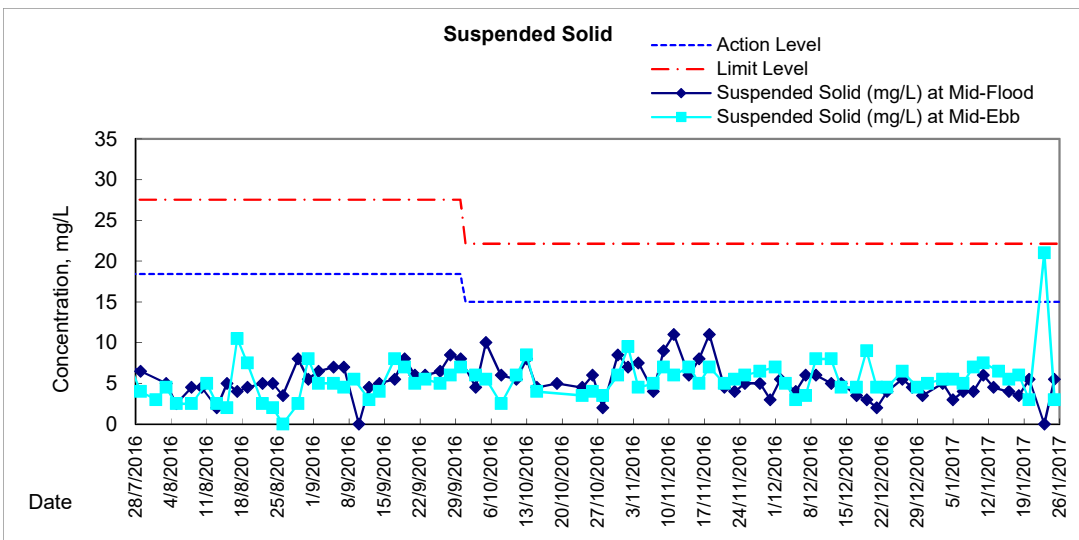
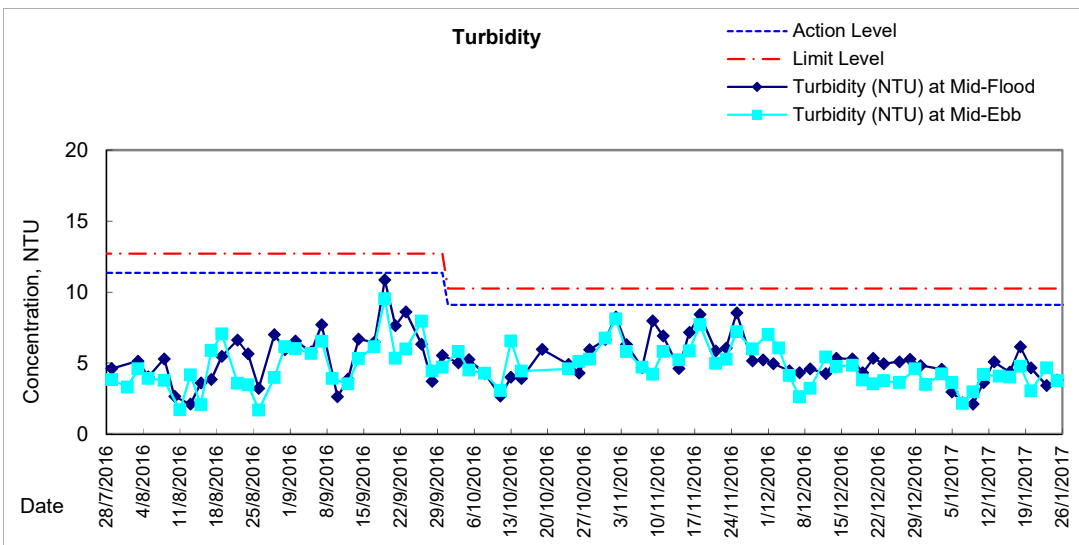
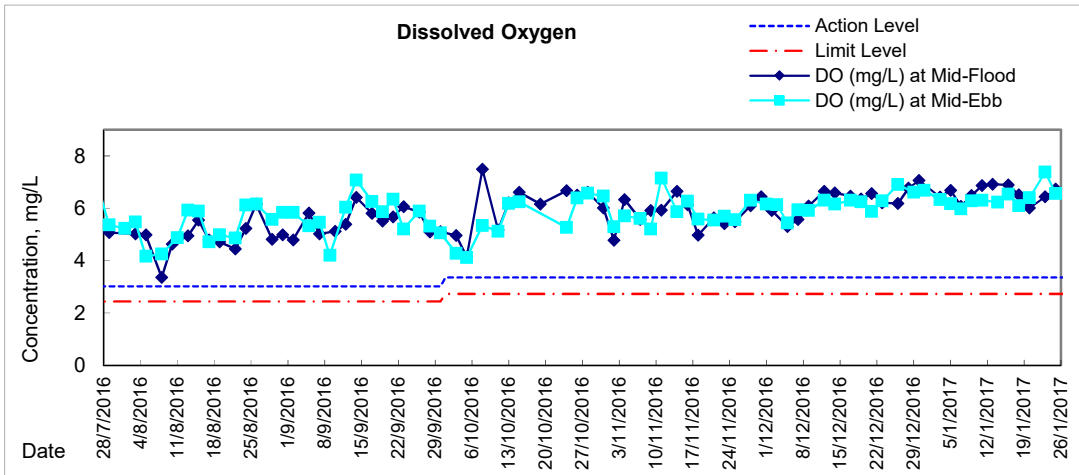


# Graphic Presentation of Water Quality Result of P1 - HKCEC Phase I



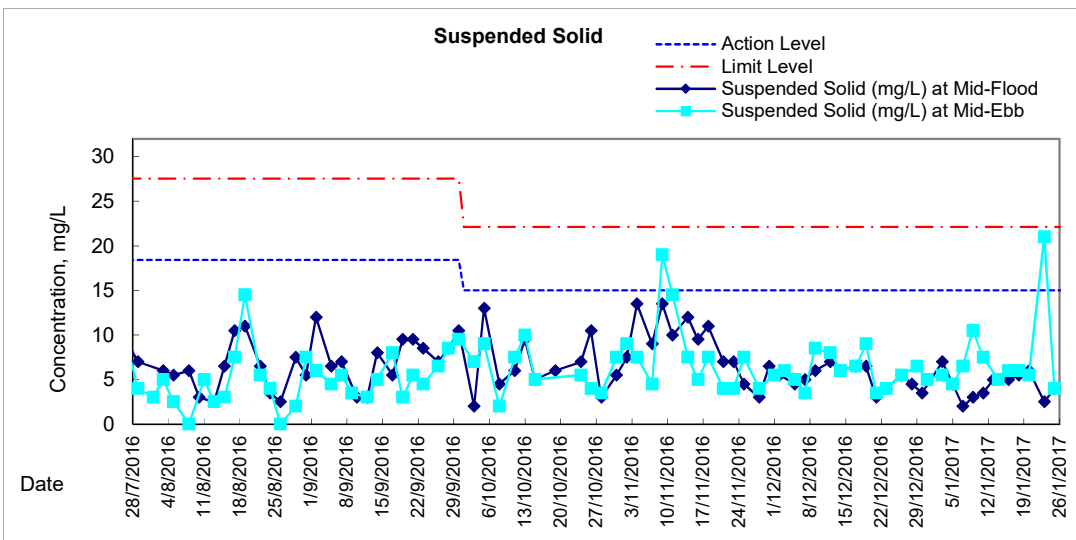
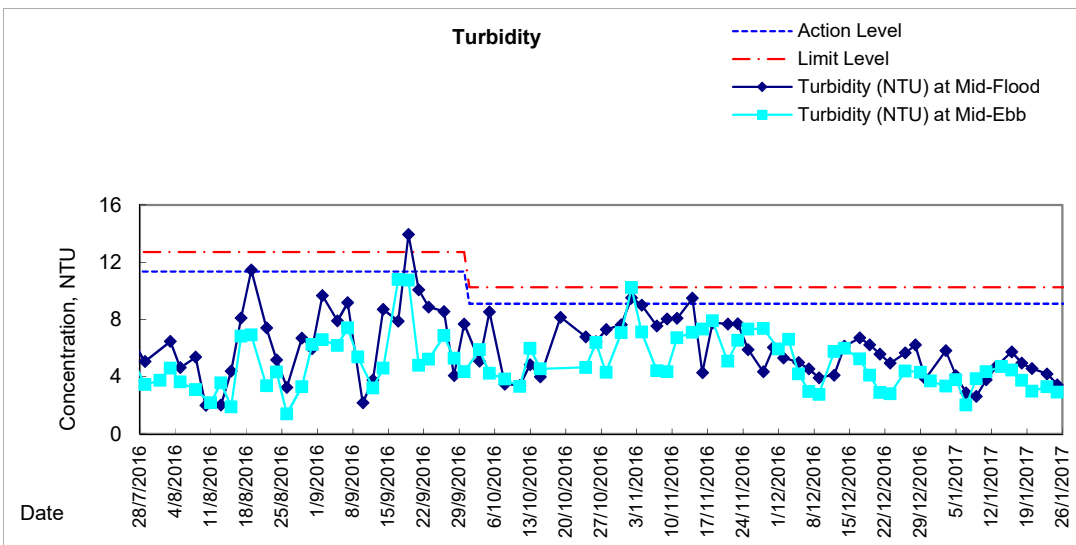
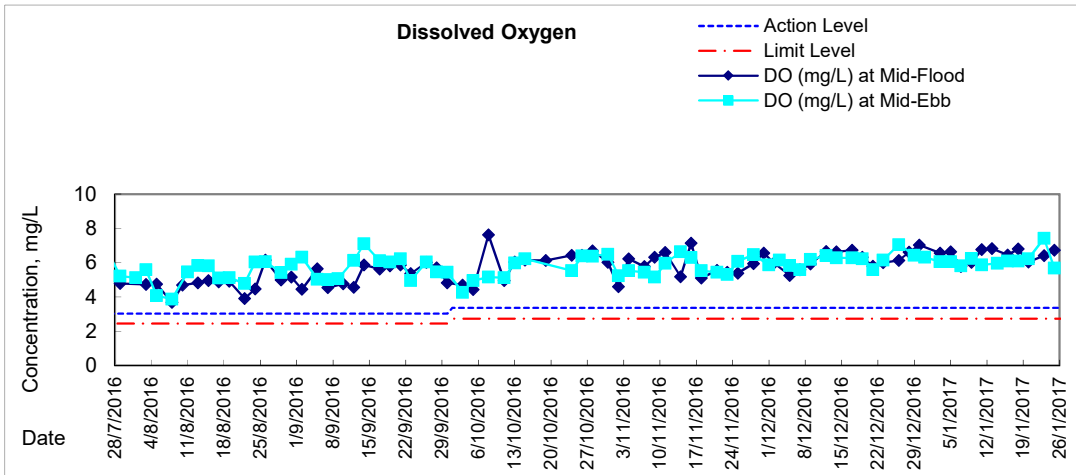


### Graphic Presentation of Water Quality Result of P3 - APA



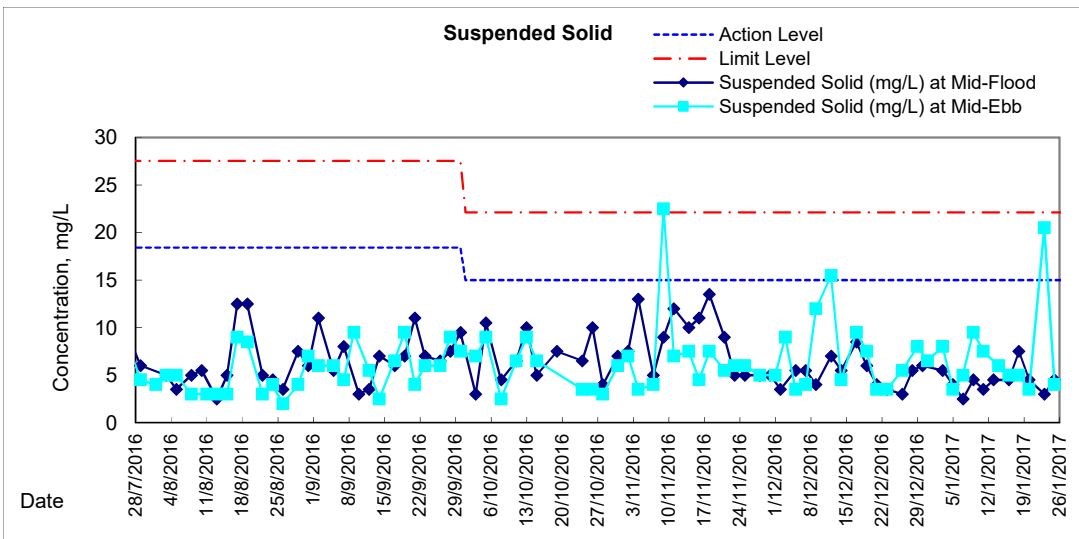
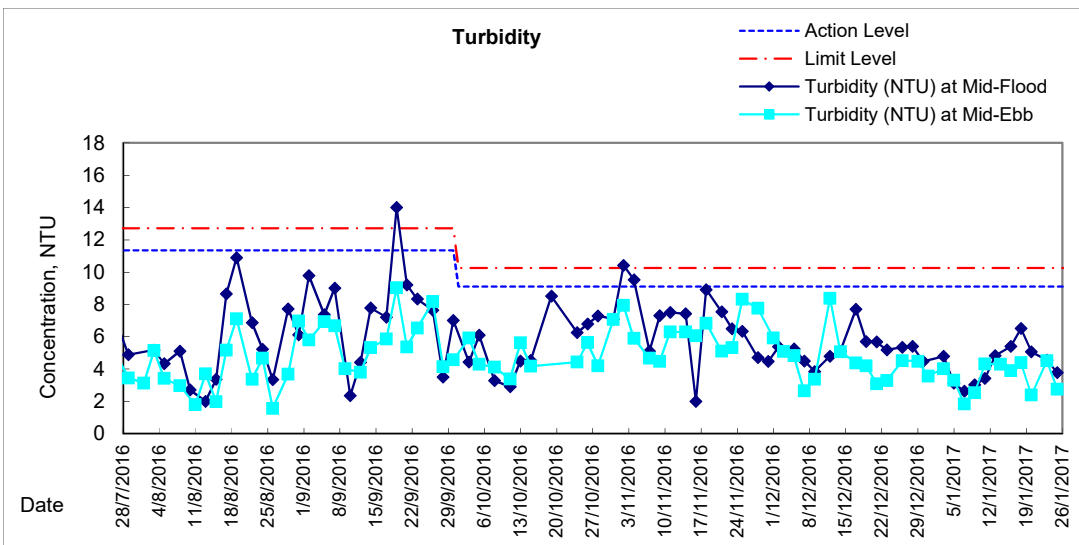
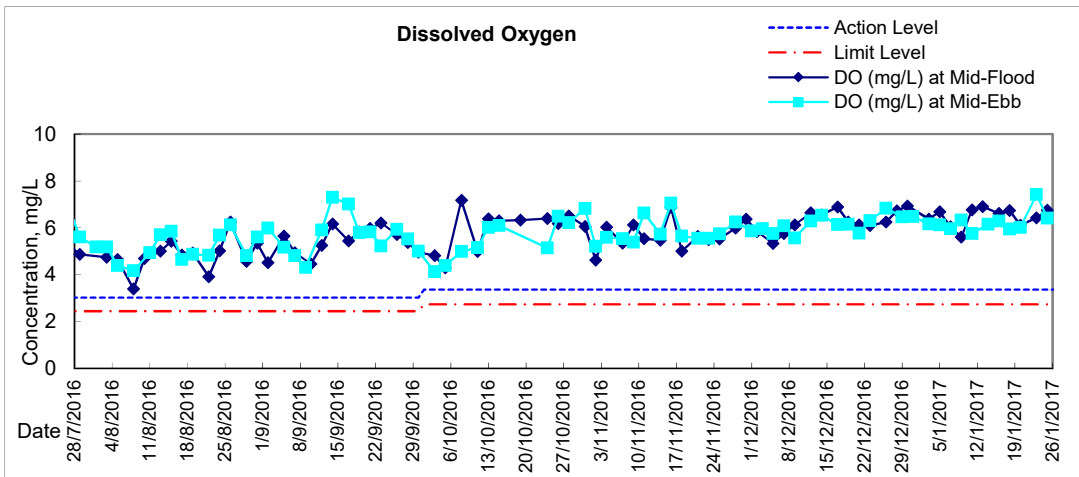


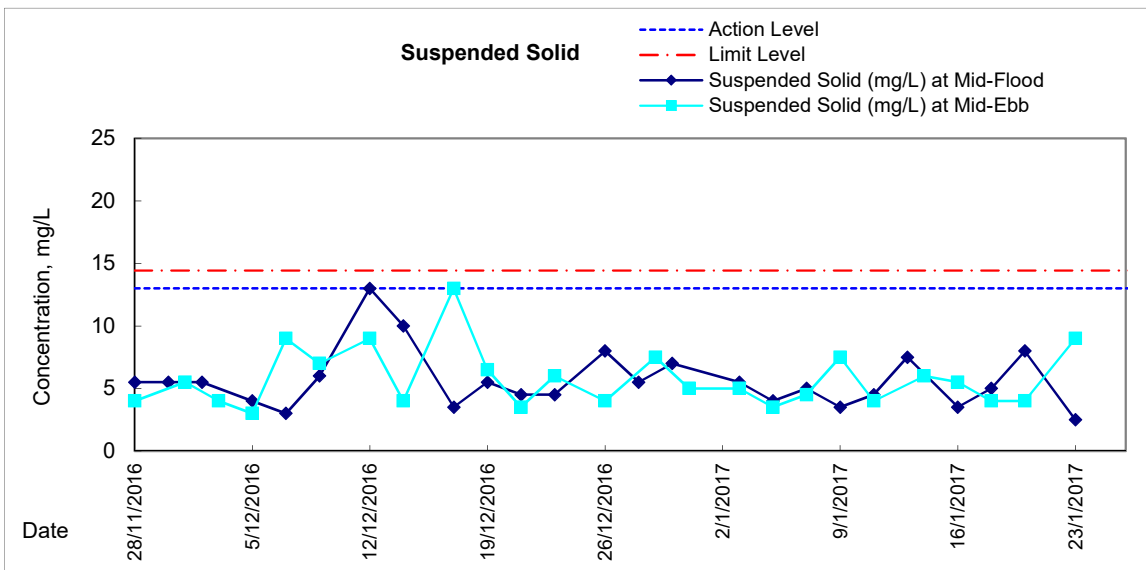
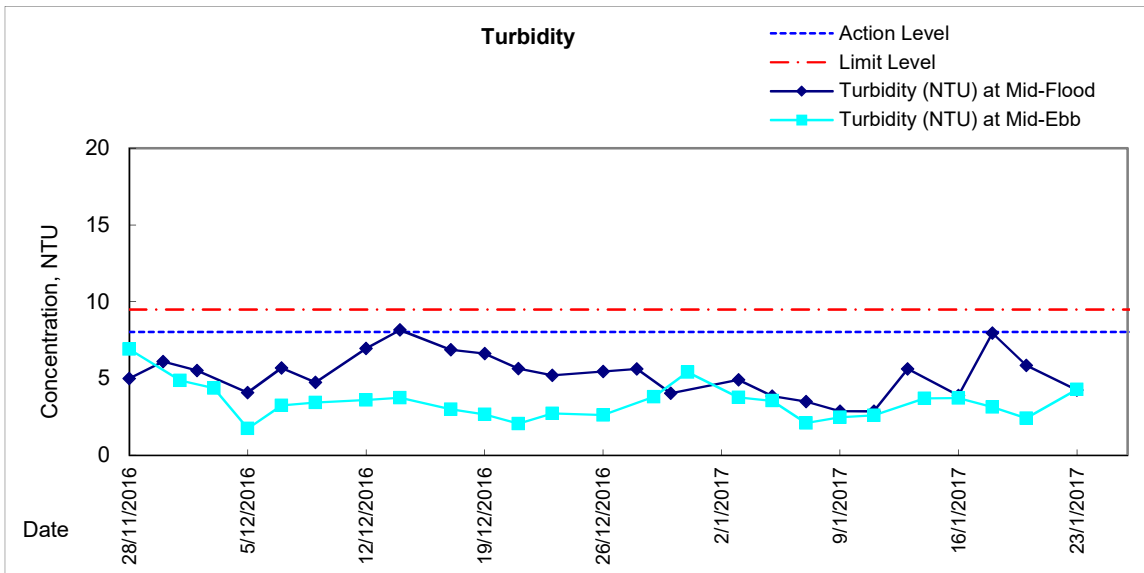
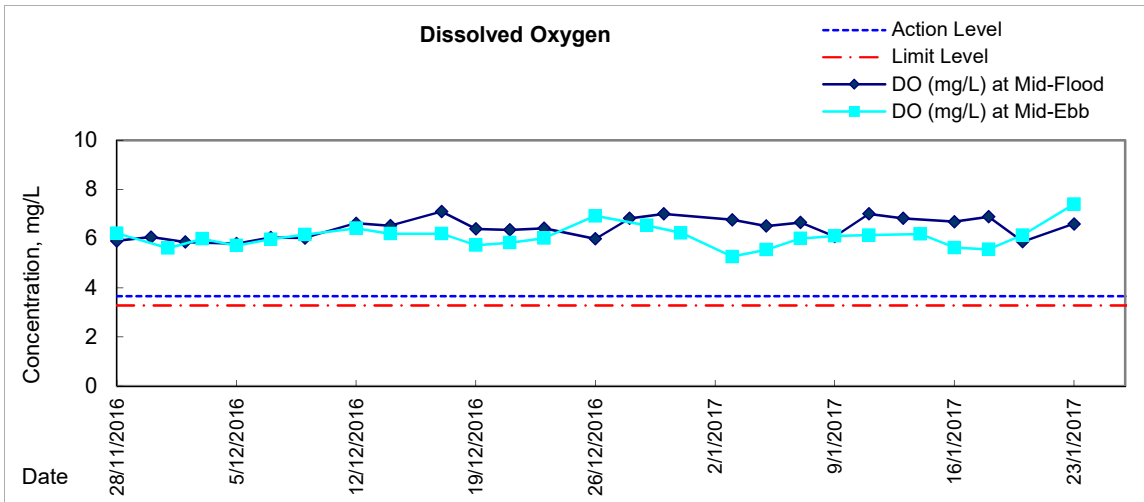
### Graphic Presentation of Water Quality Result of P5 - WCT / RT / IT





### Graphic Presentation of Water Quality Result of P4 - SOC

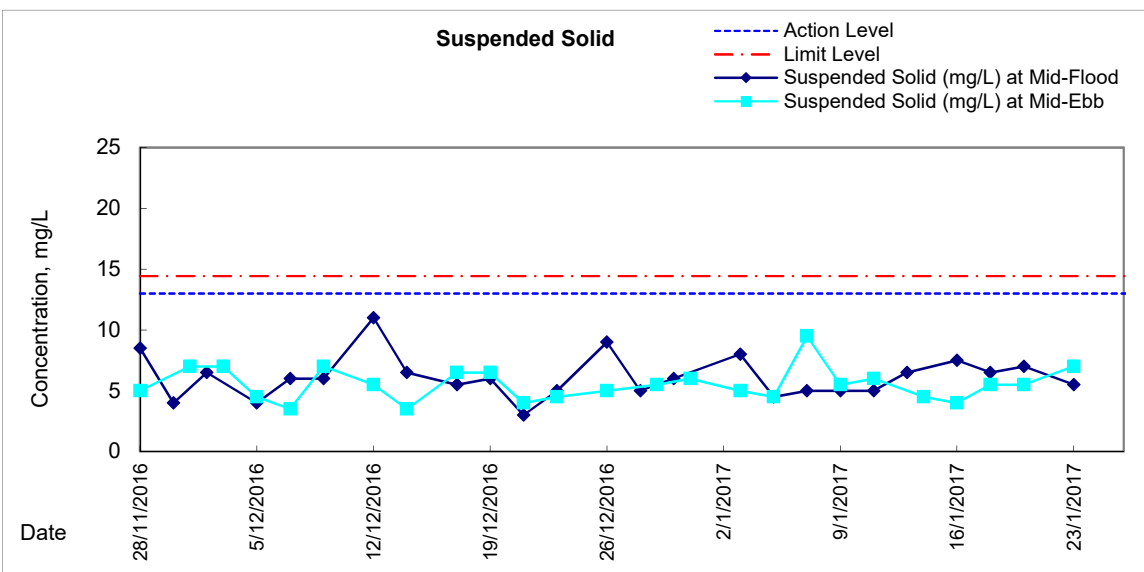
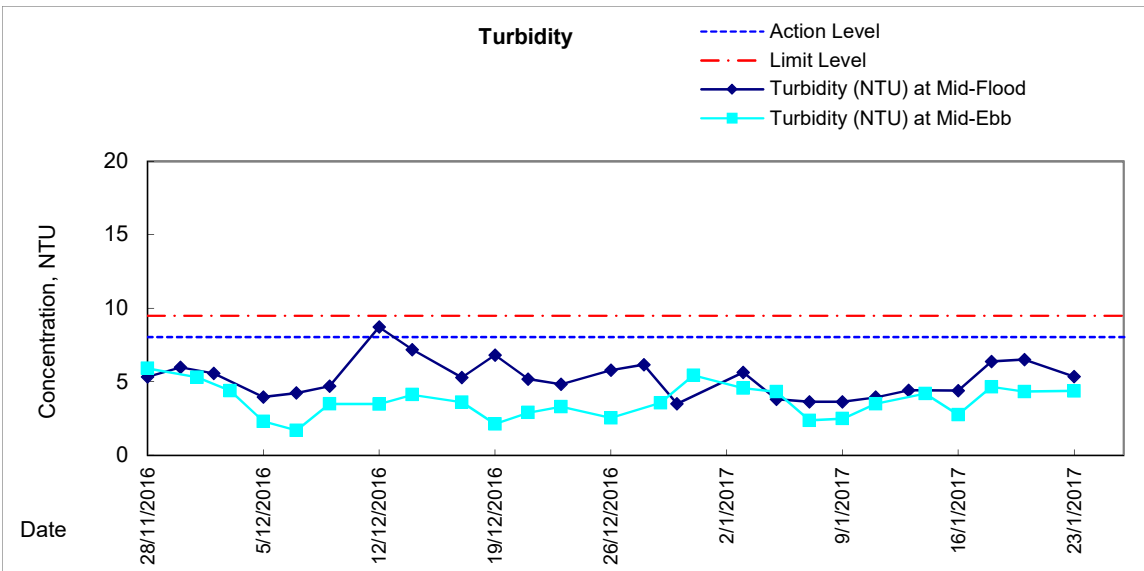
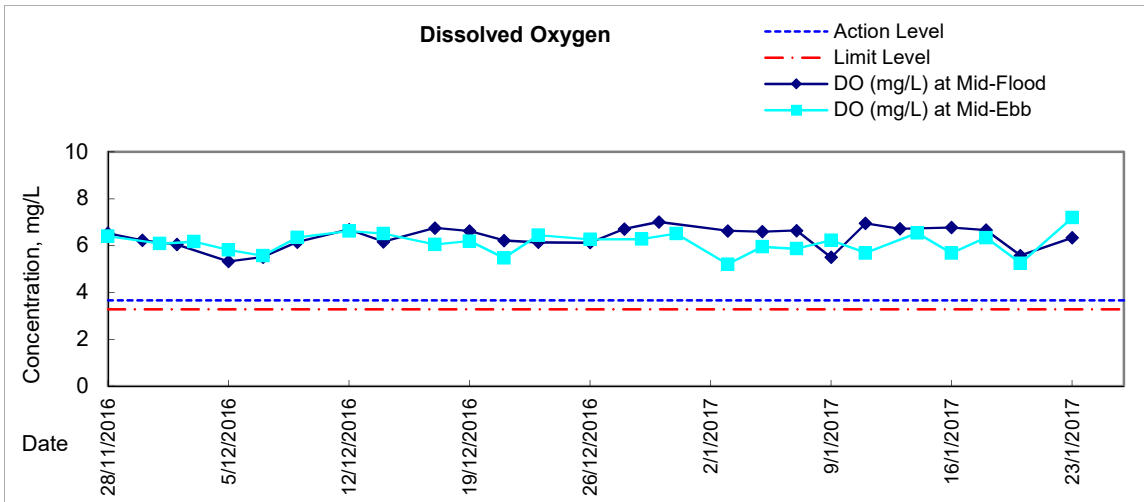


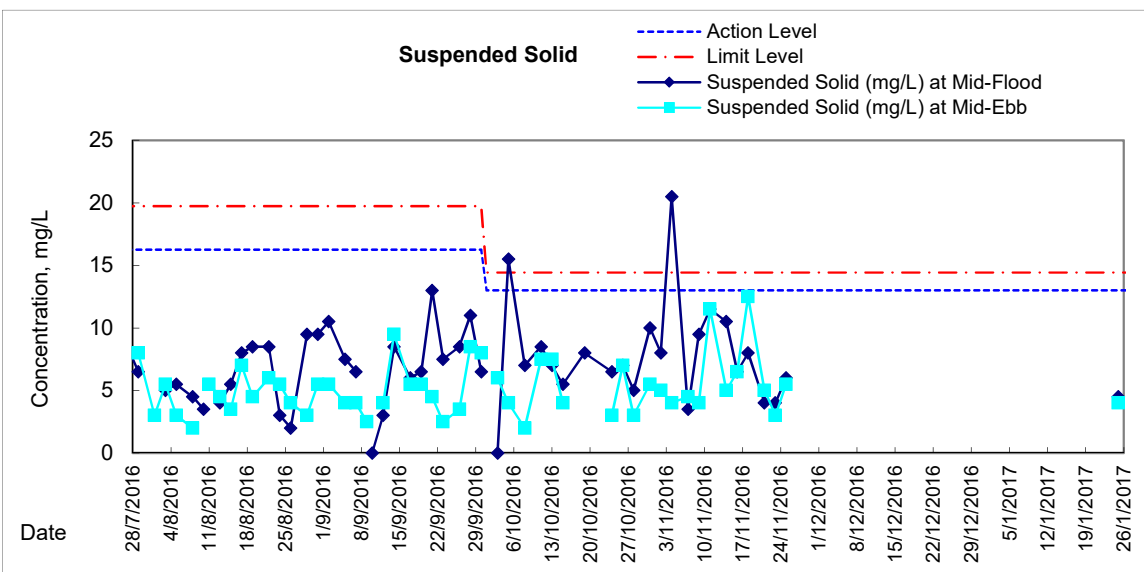
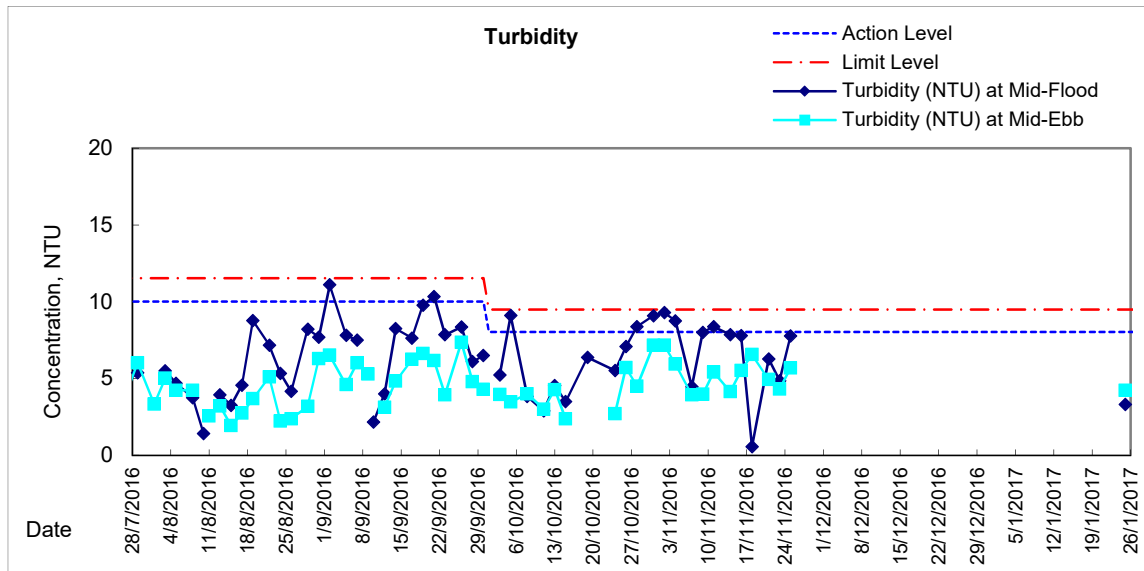
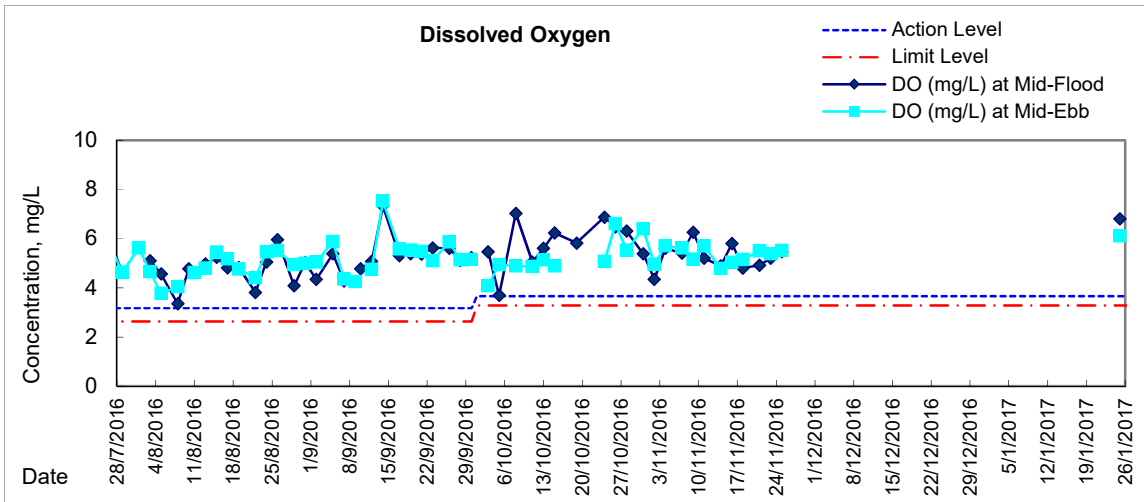






# Graphic Presentation of Water Quality Result of RW21-P789E - GEC/CRC/SHK

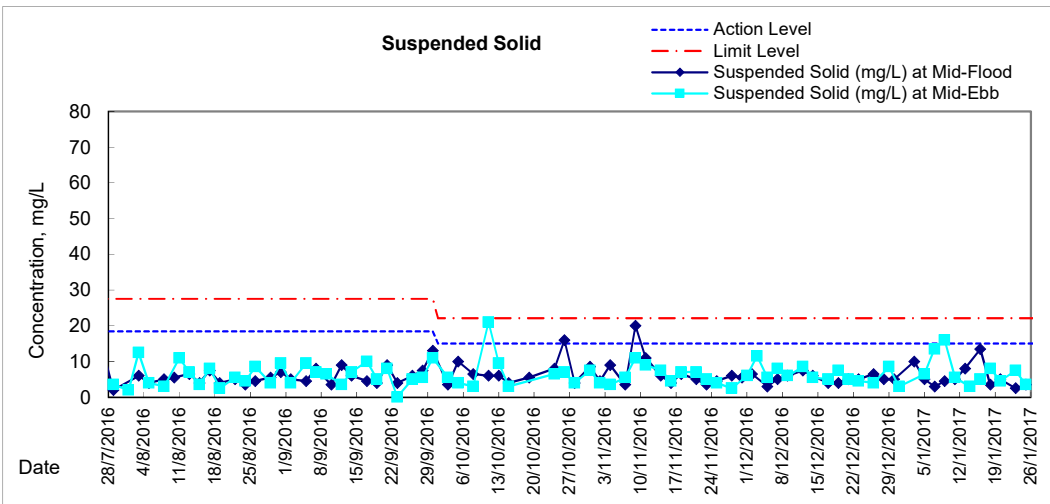
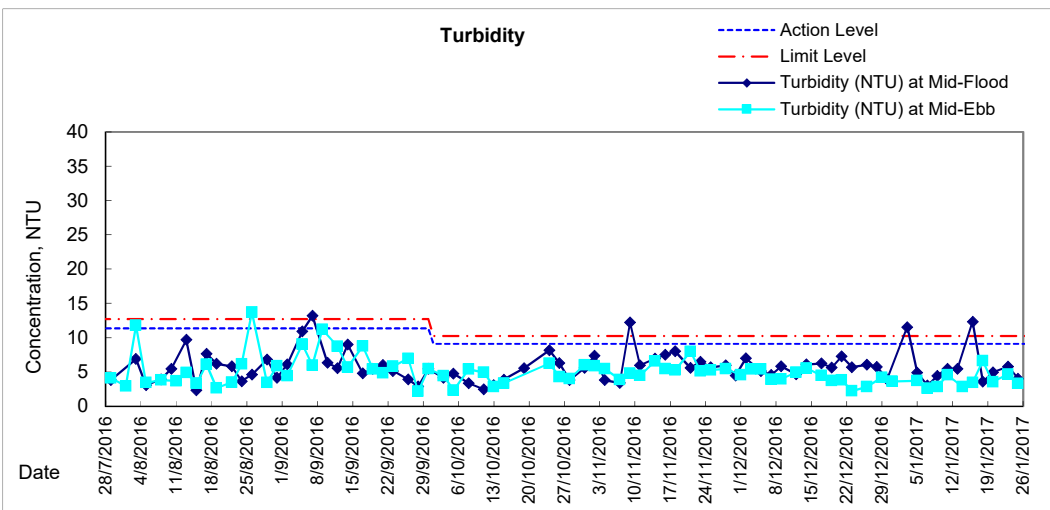
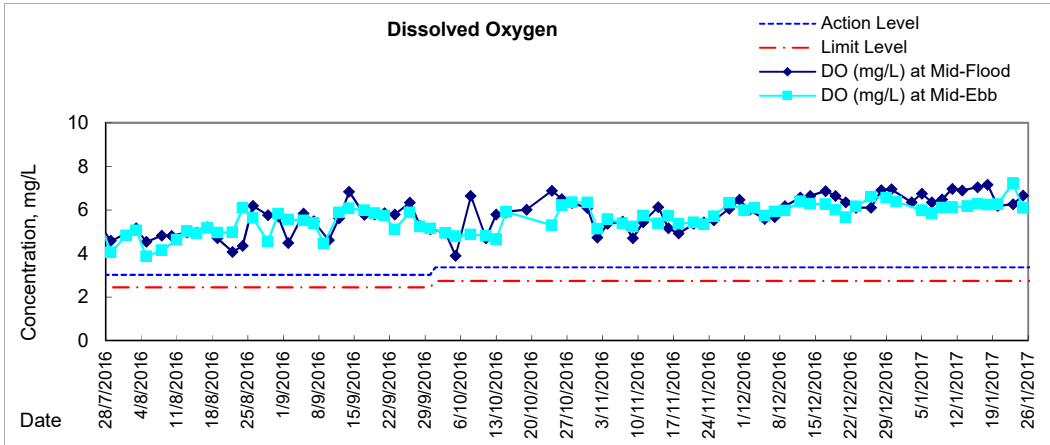




Remarks: With respect to the removal of silt screen system for Cooling Water Intakes P7, P8, P9 and WSD Water Intake RW21, the respective water quality monitoring at monitoring station RW21-P789 was adjusted to RW21-P789 East (RW21-P789E) and RW21-P789 West (RW21-P789W) from 28 November 2016 ebb tide. Due to the reinstatement of the captioned silt screen system, the respective water quality monitoring was reverted to previous monitoring station RW21-P789 from 25 January 2017 onwards.



# Graphic Presentation of Water Quality Result of C7 - Windsor House





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

| Date       | Time  | Weather Condition | Sampling Depth<br>m |     | Water Temperature<br>°C |         |       | pH      |       |         | Salinity<br>ppt |         | DO Saturation<br>% |         |       | DO<br>mg/L |      |      |      |
|------------|-------|-------------------|---------------------|-----|-------------------------|---------|-------|---------|-------|---------|-----------------|---------|--------------------|---------|-------|------------|------|------|------|
|            |       |                   |                     |     | Value                   | Average | Value | Average | Value | Average | Value           | Average | Value              | Average | Value | Average    |      |      |      |
|            |       |                   |                     |     |                         |         |       |         |       |         |                 |         |                    |         |       |            |      |      |      |
| 28/12/2016 | -     | Cloudy            | Surface             | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    |      |
|            | 15:15 |                   | Middle              | 1.5 | 20.00                   | 20.00   | 20.0  | 8.18    | 8.18  | 8.2     | 29.50           | 29.50   | 29.5               | 77.2    | 77.2  | 77.2       | 5.90 | 5.90 | 5.90 |
|            | -     |                   | Bottom              | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    | -    |
| 30/12/2016 | 18:40 | Fine              | Surface             | 1.0 | 19.70                   | 19.70   | 19.7  | 8.26    | 8.26  | 8.3     | 29.26           | 29.26   | 29.3               | 76.6    | 76.8  | 76.7       | 5.90 | 5.91 | 5.91 |
|            | -     |                   | Middle              | 2.0 | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    | -    |
|            | 18:42 |                   | Bottom              | 3.0 | 19.60                   | 19.60   | 19.6  | 8.28    | 8.28  | 8.3     | 29.58           | 29.58   | 29.6               | 86.1    | 86.9  | 86.5       | 6.62 | 6.67 | 6.65 |
| 3/1/2017   | -     | Fine              | Surface             | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    |      |
|            | 12:05 |                   | Middle              | 1.5 | 20.30                   | 20.30   | 20.3  | 8.20    | 8.20  | 8.2     | 28.96           | 28.96   | 29.0               | 77.4    | 77.3  | 77.4       | 5.90 | 5.89 | 5.90 |
|            | -     |                   | Bottom              | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    | -    |
| 5/1/2017   | -     | Cloudy            | Surface             | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    |      |
|            | 15:05 |                   | Middle              | 1.5 | 20.80                   | 20.80   | 20.8  | 8.20    | 8.20  | 8.2     | 29.06           | 29.06   | 29.1               | 74.0    | 74.0  | 74.0       | 5.57 | 5.57 | 5.57 |
|            | -     |                   | Bottom              | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    | -    |
| 7/1/2017   | -     | Cloudy            | Surface             | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    |      |
|            | 13:48 |                   | Middle              | 1.0 | 21.40                   | 21.40   | 21.4  | 8.08    | 8.08  | 8.1     | 28.08           | 28.08   | 28.1               | 72.3    | 71.2  | 71.8       | 5.42 | 5.34 | 5.38 |
|            | -     |                   | Bottom              | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    | -    |
| 9/1/2017   | 15:40 | Fine              | Surface             | 1.0 | 21.30                   | 21.30   | 21.3  | 8.15    | 8.15  | 8.2     | 29.07           | 29.07   | 29.1               | 65.8    | 66.3  | 66.1       | 4.92 | 4.95 | 4.94 |
|            | -     |                   | Middle              | 2.0 | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    | -    |
|            | 15:42 |                   | Bottom              | 3.0 | 21.00                   | 21.00   | 21.0  | 8.18    | 8.18  | 8.2     | 29.58           | 29.58   | 29.6               | 79.7    | 80.6  | 80.2       | 5.98 | 6.03 | 6.01 |
| 11/1/2017  | -     | Cloudy            | Surface             | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    |      |
|            | 17:00 |                   | Middle              | 1.5 | 20.20                   | 20.20   | 20.2  | 8.28    | 8.28  | 8.3     | 29.51           | 29.51   | 29.5               | 85.0    | 84.3  | 84.7       | 6.48 | 6.43 | 6.46 |
|            | -     |                   | Bottom              | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    | -    |
| 13/1/2017  | -     | Rainy             | Surface             | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    |      |
|            | 18:39 |                   | Middle              | 1.5 | 19.40                   | 19.40   | 19.4  | 8.26    | 8.26  | 8.3     | 29.50           | 29.50   | 29.5               | 72.8    | 72.3  | 72.6       | 5.63 | 5.69 | 5.66 |
|            | -     |                   | Bottom              | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    | -    |
| 16/1/2017  | -     | Cloudy            | Surface             | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    |      |
|            | 12:15 |                   | Middle              | 1.5 | 19.30                   | 19.30   | 19.3  | 8.24    | 8.24  | 8.2     | 29.46           | 29.46   | 29.5               | 69.4    | 69.2  | 69.3       | 5.38 | 5.36 | 5.37 |
|            | -     |                   | Bottom              | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    | -    |
| 18/1/2017  | -     | Cloudy            | Surface             | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    |      |
|            | 12:00 |                   | Middle              | 1.5 | 19.70                   | 19.70   | 19.7  | 8.23    | 8.23  | 8.2     | 29.67           | 29.67   | 29.7               | 80.2    | 78.5  | 79.4       | 6.06 | 6.02 | 6.04 |
|            | -     |                   | Bottom              | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    | -    |
| 20/1/2017  | -     | Fine              | Surface             | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    |      |
|            | 13:50 |                   | Middle              | 1.5 | 20.40                   | 20.40   | 20.4  | 7.94    | 7.94  | 7.9     | 29.62           | 29.62   | 29.6               | 62.8    | 62.9  | 62.9       | 4.75 | 4.76 | 4.76 |
|            | -     |                   | Bottom              | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    | -    |
| 23/1/2017  | -     | Fine              | Surface             | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    |      |
|            | 14:40 |                   | Middle              | 1.5 | 19.60                   | 19.60   | 19.6  | 8.11    | 8.11  | 8.1     | 29.11           | 29.11   | 29.1               | 67.2    | 68.3  | 67.8       | 5.19 | 5.31 | 5.25 |
|            | -     |                   | Bottom              | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    | -    |
| 25/1/2017  | -     | Fine              | Surface             | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    |      |
|            | 16:00 |                   | Middle              | 1.5 | 19.70                   | 19.70   | 19.7  | 8.04    | 8.04  | 8.0     | 29.95           | 29.95   | 30.0               | 88.5    | 88.4  | 88.5       | 6.77 | 6.76 | 6.77 |
|            | -     |                   | Bottom              | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    | -    |

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



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

| Date       | Time  | Weather Condition | Sampling Depth<br>m |     | Water Temperature<br>°C |         |       | pH      |       |         | Salinity<br>ppt |         | DO Saturation<br>% |         |      | DO<br>mg/L |      |      |      |
|------------|-------|-------------------|---------------------|-----|-------------------------|---------|-------|---------|-------|---------|-----------------|---------|--------------------|---------|------|------------|------|------|------|
|            |       |                   |                     |     | Value                   | Average | Value | Average | Value | Average | Value           | Average | Value              | Average |      |            |      |      |      |
|            |       |                   |                     |     |                         |         |       |         |       |         |                 |         |                    |         |      |            |      |      |      |
| 28/12/2016 | -     | Cloudy            | Surface             | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -    | -          | -    | -    |      |
|            | 17:24 |                   | Middle              | 1.5 | 19.70                   | 19.70   | 19.7  | 8.25    | 8.25  | 8.3     | 28.20           | 28.20   | 28.2               | 75.8    | 75.1 | 75.5       | 5.86 | 5.81 | 5.84 |
|            | -     |                   | Bottom              | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -    | -          | -    | -    | -    |
| 30/12/2016 | -     | Fine              | Surface             | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -    | -          | -    | -    |      |
|            | 17:25 |                   | Middle              | 1.5 | 18.80                   | 18.80   | 18.8  | 8.33    | 8.33  | 8.3     | 29.12           | 29.12   | 29.1               | 80.3    | 80.4 | 80.4       | 6.18 | 6.19 | 6.19 |
|            | -     |                   | Bottom              | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -    | -          | -    | -    | -    |
| 3/1/2017   | -     | Fine              | Surface             | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -    | -          | -    | -    |      |
|            | 11:30 |                   | Middle              | 1.5 | 20.70                   | 20.70   | 20.7  | 8.18    | 8.18  | 8.2     | 26.26           | 26.26   | 26.3               | 66.6    | 66.3 | 66.5       | 5.12 | 5.10 | 5.11 |
|            | -     |                   | Bottom              | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -    | -          | -    | -    | -    |
| 5/1/2017   | -     | Cloudy            | Surface             | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -    | -          | -    | -    |      |
|            | 14:05 |                   | Middle              | 1.5 | 21.50                   | 21.50   | 21.5  | 8.26    | 8.26  | 8.3     | 29.42           | 29.42   | 29.4               | 81.1    | 79.7 | 80.4       | 6.02 | 5.91 | 5.97 |
|            | -     |                   | Bottom              | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -    | -          | -    | -    | -    |
| 7/1/2017   | -     | Cloudy            | Surface             | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -    | -          | -    | -    |      |
|            | 11:15 |                   | Middle              | 1.5 | 21.30                   | 21.30   | 21.3  | 8.21    | 8.21  | 8.2     | 29.39           | 28.39   | 28.9               | 75.0    | 73.4 | 74.2       | 5.63 | 5.50 | 5.57 |
|            | -     |                   | Bottom              | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -    | -          | -    | -    | -    |
| 9/1/2017   | -     | Fine              | Surface             | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -    | -          | -    | -    |      |
|            | 14:48 |                   | Middle              | 1.5 | 21.20                   | 21.20   | 21.2  | 8.13    | 8.13  | 8.1     | 26.76           | 26.76   | 26.8               | 59.4    | 59.0 | 59.2       | 4.51 | 4.48 | 4.50 |
|            | -     |                   | Bottom              | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -    | -          | -    | -    | -    |
| 11/1/2017  | -     | Cloudy            | Surface             | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -    | -          | -    | -    |      |
|            | 16:38 |                   | Middle              | 1.5 | 20.50                   | 20.50   | 20.5  | 8.31    | 8.31  | 8.3     | 30.13           | 30.13   | 30.1               | 81.4    | 80.3 | 80.9       | 6.17 | 6.08 | 6.13 |
|            | -     |                   | Bottom              | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -    | -          | -    | -    | -    |
| 13/1/2017  | -     | Rainy             | Surface             | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -    | -          | -    | -    |      |
|            | 17:13 |                   | Middle              | 1.5 | 19.60                   | 19.60   | 19.6  | 8.29    | 8.29  | 8.3     | 29.25           | 29.25   | 29.3               | 76.1    | 75.8 | 76.0       | 5.88 | 5.85 | 5.87 |
|            | -     |                   | Bottom              | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -    | -          | -    | -    | -    |
| 16/1/2017  | -     | Cloudy            | Surface             | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -    | -          | -    | -    |      |
|            | 10:50 |                   | Middle              | 1.5 | 19.20                   | 19.20   | 19.2  | 8.24    | 8.24  | 8.2     | 27.41           | 27.41   | 27.4               | 64.4    | 64.0 | 64.2       | 5.06 | 5.03 | 5.05 |
|            | -     |                   | Bottom              | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -    | -          | -    | -    | -    |
| 18/1/2017  | -     | Cloudy            | Surface             | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -    | -          | -    | -    |      |
|            | 11:20 |                   | Middle              | 1.5 | 19.70                   | 19.70   | 19.7  | 8.24    | 8.24  | 8.2     | 27.83           | 27.83   | 27.8               | 73.6    | 72.8 | 73.2       | 5.70 | 5.65 | 5.68 |
|            | -     |                   | Bottom              | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -    | -          | -    | -    | -    |
| 20/1/2017  | -     | Fine              | Surface             | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -    | -          | -    | -    |      |
|            | 11:50 |                   | Middle              | 1.5 | 19.80                   | 19.80   | 19.8  | 8.10    | 8.10  | 8.1     | 24.33           | 24.33   | 24.3               | 54.9    | 54.9 | 54.9       | 4.34 | 4.33 | 4.34 |
|            | -     |                   | Bottom              | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -    | -          | -    | -    | -    |
| 23/1/2017  | 14:07 | Fine              | Surface             | 1.0 | 19.50                   | 19.50   | 19.5  | 8.14    | 8.14  | 8.1     | 29.88           | 29.88   | 29.9               | 72.4    | 73.9 | 73.2       | 5.58 | 5.69 | 5.64 |
|            | -     |                   | Middle              | 2.0 | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -    | -          | -    | -    | -    |
|            | 14:05 |                   | Bottom              | 3.0 | 19.20                   | 19.20   | 19.2  | 8.15    | 8.15  | 8.2     | 30.18           | 30.18   | 30.2               | 79.7    | 80.9 | 80.3       | 6.15 | 6.24 | 6.20 |
| 25/1/2017  | -     | Fine              | Surface             | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -    | -          | -    | -    |      |
|            | 15:35 |                   | Middle              | 1.0 | 19.90                   | 19.90   | 19.9  | 8.17    | 8.17  | 8.2     | 27.11           | 27.11   | 27.1               | 70.6    | 71.8 | 71.2       | 5.47 | 5.54 | 5.51 |
|            | -     |                   | Bottom              | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -    | -          | -    | -    | -    |

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



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

| Date       | Time  | Weater Condition | Sampling Depth<br>m |     | Water Temperature<br>°C |         |       | pH      |       |         | Salinity<br>ppt |         | DO Saturation<br>% |         |       | DO<br>mg/L |      |      |             |
|------------|-------|------------------|---------------------|-----|-------------------------|---------|-------|---------|-------|---------|-----------------|---------|--------------------|---------|-------|------------|------|------|-------------|
|            |       |                  |                     |     | Value                   | Average | Value | Average | Value | Average | Value           | Average | Value              | Average | Value | Average    |      |      |             |
|            |       |                  |                     |     |                         |         |       |         |       |         |                 |         |                    |         |       |            |      |      |             |
| 28/12/2016 | 17:20 | Cloudy           | Surface             | 1.0 | 19.90                   | 19.90   | 19.9  | 8.29    | 8.20  | 8.2     | 29.05           | 29.05   | 29.1               | 84.3    | 82.5  | 83.4       | 6.48 | 6.35 | 6.42        |
|            | -     |                  | Middle              | 2.0 | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    | -           |
|            | 17:22 |                  | Bottom              | 3.0 | 19.70                   | 19.70   | 19.7  | 8.29    | 8.29  | 8.3     | 29.32           | 29.32   | 29.3               | 83.8    | 83.4  | 83.6       | 6.45 | 6.42 | 6.44        |
| 30/12/2016 | 17:18 | Fine             | Surface             | 1.0 | 19.80                   | 19.80   | 19.8  | 8.34    | 8.34  | 8.3     | 29.42           | 29.42   | 29.4               | 85.3    | 83.6  | 84.5       | 6.54 | 6.41 | 6.48        |
|            | -     |                  | Middle              | 2.0 | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    |             |
|            | 17:20 |                  | Bottom              | 3.0 | 19.70                   | 19.70   | 19.7  | 8.34    | 8.34  | 8.3     | 29.58           | 29.58   | 29.6               | 96.8    | 94.9  | 95.9       | 6.65 | 6.52 | 6.59        |
| 3/1/2017   | 11:35 | Fine             | Surface             | 1.0 | 20.30                   | 20.30   | 20.3  | 8.18    | 8.18  | 8.2     | 27.63           | 27.63   | 27.6               | 70.6    | 69.9  | 70.3       | 5.42 | 5.36 | 5.39        |
|            | -     |                  | Middle              | 2.0 | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    |             |
|            | 11:37 |                  | Bottom              | 3.0 | 20.30                   | 20.30   | 20.3  | 8.25    | 8.25  | 8.3     | 29.10           | 29.10   | 29.1               | 80.4    | 80.7  | 80.6       | 6.12 | 6.14 | 6.13        |
| 5/1/2017   | 14:10 | Cloudy           | Surface             | 1.0 | 21.20                   | 21.20   | 21.2  | 8.25    | 8.26  | 8.3     | 24.74           | 24.74   | 24.7               | 58.2    | 58.5  | 58.4       | 4.47 | 4.49 | 4.48        |
|            | -     |                  | Middle              | 2.0 | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    |             |
|            | 14:12 |                  | Bottom              | 3.0 | 21.10                   | 21.10   | 21.1  | 8.24    | 8.24  | 8.2     | 26.45           | 26.45   | 26.5               | 72.4    | 72.7  | 72.6       | 5.51 | 5.53 | 5.52        |
| 7/1/2017   | 11:17 | Cloudy           | Surface             | 1.0 | 21.10                   | 21.10   | 21.1  | 8.22    | 8.22  | 8.2     | 28.31           | 28.31   | 28.3               | 75.3    | 74.4  | 74.9       | 5.67 | 5.60 | 5.64        |
|            | -     |                  | Middle              | 2.0 | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    |             |
|            | 11:19 |                  | Bottom              | 3.0 | 21.00                   | 21.00   | 21.0  | 8.23    | 8.23  | 8.2     | 29.20           | 29.20   | 29.2               | 82.1    | 82.1  | 82.1       | 6.20 | 6.15 | 6.18        |
| 9/1/2017   | 14:53 | Fine             | Surface             | 1.0 | 21.00                   | 21.00   | 21.0  | 8.14    | 8.14  | 8.1     | 28.12           | 28.12   | 28.1               | 64.0    | 63.2  | 63.6       | 4.83 | 4.78 | 4.81        |
|            | -     |                  | Middle              | 2.0 | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    |             |
|            | 14:55 |                  | Bottom              | 3.0 | 20.80                   | 20.80   | 20.8  | 8.23    | 8.23  | 8.2     | 29.38           | 29.38   | 29.4               | 75.3    | 74.2  | 74.8       | 5.67 | 5.59 | 5.63        |
| 11/1/2017  | 16:44 | Cloudy           | Surface             | 1.0 | 20.20                   | 20.00   | 20.1  | 8.34    | 8.34  | 8.3     | 30.22           | 30.22   | 30.2               | 87.0    | 85.9  | 86.5       | 6.62 | 6.54 | 6.58        |
|            | -     |                  | Middle              | 2.0 | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    |             |
|            | 16:45 |                  | Bottom              | 3.0 | 20.10                   | 20.10   | 20.1  | 8.32    | 8.32  | 8.3     | 30.24           | 30.24   | 30.2               | 79.9    | 80.3  | 80.1       | 5.99 | 6.03 | 6.01        |
| 13/1/2017  | 17:15 | Rainy            | Surface             | 1.0 | 19.10                   | 19.10   | 19.1  | 8.17    | 8.17  | 8.2     | 25.69           | 25.60   | 25.6               | 65.6    | 65.8  | 65.7       | 5.51 | 5.23 | 5.37        |
|            | -     |                  | Middle              | 2.0 | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    |             |
|            | 17:17 |                  | Bottom              | 3.0 | 19.10                   | 19.10   | 19.1  | 8.30    | 8.30  | 8.3     | 29.13           | 29.13   | 29.1               | 77.6    | 78.5  | 78.1       | 6.05 | 6.11 | 6.08        |
| 16/1/2017  | 10:55 | Cloudy           | Surface             | 1.0 | 19.10                   | 19.10   | 19.1  | 8.24    | 8.24  | 8.2     | 28.04           | 28.04   | 28.0               | 72.1    | 71.7  | 71.9       | 5.65 | 5.63 | 5.64        |
|            | -     |                  | Middle              | 2.0 | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    |             |
|            | 10:57 |                  | Bottom              | 3.0 | 18.80                   | 18.80   | 18.8  | 8.30    | 8.30  | 8.3     | 29.59           | 29.59   | 29.6               | 82.9    | 82.9  | 82.9       | 6.47 | 6.47 | 6.47        |
| 18/1/2017  | 11:42 | Cloudy           | Surface             | 1.0 | 19.60                   | 19.60   | 19.6  | 8.22    | 8.22  | 8.2     | 27.02           | 27.02   | 27.0               | 70.7    | 70.3  | 70.5       | 5.52 | 5.48 | 5.50        |
|            | -     |                  | Middle              | 2.0 | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    |             |
|            | 11:44 |                  | Bottom              | 3.0 | 19.50                   | 19.50   | 19.5  | 8.26    | 8.26  | 8.3     | 28.25           | 28.25   | 28.3               | 82.3    | 82.5  | 82.4       | 6.39 | 6.41 | 6.40        |
| 20/1/2017  | 11:45 | Fine             | Surface             | 1.0 | 20.20                   | 20.20   | 20.2  | 8.20    | 8.21  | 8.2     | 23.19           | 23.25   | 23.2               | 40.7    | 40.3  | 40.5       | 3.14 | 3.10 | <u>3.12</u> |
|            | -     |                  | Middle              | 2.5 | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    |             |
|            | 11:47 |                  | Bottom              | 4.0 | 19.90                   | 20.00   | 20.0  | 8.05    | 8.05  | 8.1     | 27.67           | 27.65   | 27.7               | 59.9    | 59.5  | 59.7       | 4.50 | 4.46 | <u>4.48</u> |
| 23/1/2017  | -     | Fine             | Surface             | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    |             |
|            | 14:15 |                  | Middle              | 1.0 | 19.30                   | 19.30   | 19.3  | 8.11    | 8.11  | 8.1     | 28.48           | 28.48   | 28.5               | 73.3    | 72.3  | 72.8       | 5.71 | 5.63 | 5.67        |
|            | -     |                  | Bottom              | -   | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    |             |
| 25/1/2017  | 15:27 | Fine             | Surface             | 1.0 | 20.10                   | 20.10   | 20.1  | 8.26    | 8.26  | 8.3     | 25.09           | 25.09   | 25.1               | 69.3    | 69.7  | 69.5       | 5.42 | 5.44 | 5.43        |
|            | -     |                  | Middle              | 2.0 | -                       | -       | -     | -       | -     | -       | -               | -       | -                  | -       | -     | -          | -    | -    |             |
|            | 15:25 |                  | Bottom              | 3.0 | 19.90                   | 19.90   | 19.9  | 8.17    | 8.17  | 8.2     | 28.85           | 28.85   | 28.9               | 84.8    | 85.1  | 85.0       | 6.49 | 6.62 | 6.56        |

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.



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

| Date       | Time  | Weather Condition | Sampling Depth |     | Water Temperature °C |         |       | pH      |       |         | Salinity ppt |         | DO Saturation % |         |       | DO mg/L |      |      |      |
|------------|-------|-------------------|----------------|-----|----------------------|---------|-------|---------|-------|---------|--------------|---------|-----------------|---------|-------|---------|------|------|------|
|            |       |                   | m              |     | Value                | Average | Value | Average | Value | Average | Value        | Average | Value           | Average | Value | Average |      |      |      |
|            |       |                   |                |     |                      |         |       |         |       |         |              |         |                 |         |       |         |      |      |      |
| 29/12/2016 | -     | Cloudy            | Surface        | -   | -                    | -       | -     | -       | -     | -       | -            | -       | -               | -       | -     | -       | -    | -    |      |
|            | 23:40 |                   | Middle         | 1.0 | 17.90                | 17.90   | 17.9  | 8.07    | 8.07  | 8.1     | 24.44        | 24.44   | 24.4            | 59.6    | 58.8  | 59.2    | 4.85 | 4.79 | 4.82 |
|            | -     |                   | Bottom         | -   | -                    | -       | -     | -       | -     | -       | -            | -       | -               | -       | -     | -       | -    | -    | -    |
| 31/12/2016 | -     | Cloudy            | Surface        | -   | -                    | -       | -     | -       | -     | -       | -            | -       | -               | -       | -     | -       | -    | -    |      |
|            | 0:45  |                   | Middle         | 1.0 | 18.40                | 18.40   | 18.4  | 7.91    | 7.91  | 7.9     | 24.15        | 25.15   | 24.7            | 66.0    | 65.2  | 65.6    | 5.19 | 5.13 | 5.16 |
|            | -     |                   | Bottom         | -   | -                    | -       | -     | -       | -     | -       | -            | -       | -               | -       | -     | -       | -    | -    |      |
| 3/1/2017   | -     | Fine              | Surface        | -   | -                    | -       | -     | -       | -     | -       | -            | -       | -               | -       | -     | -       | -    |      |      |
|            | 2:28  |                   | Middle         | 1.0 | 19.70                | 19.70   | 19.7  | 7.70    | 7.71  | 7.7     | 22.90        | 22.90   | 22.9            | 68.4    | 67.9  | 68.2    | 5.22 | 5.16 | 5.19 |
|            | -     |                   | Bottom         | -   | -                    | -       | -     | -       | -     | -       | -            | -       | -               | -       | -     | -       | -    |      |      |
| 5/1/2017   | -     | Cloudy            | Surface        | -   | -                    | -       | -     | -       | -     | -       | -            | -       | -               | -       | -     | -       | -    |      |      |
|            | 2:18  |                   | Middle         | 1.5 | 20.30                | 20.30   | 20.3  | 7.89    | 7.89  | 7.9     | 25.19        | 25.19   | 25.2            | 43.3    | 43.7  | 43.5    | 3.37 | 3.40 | 3.39 |
|            | -     |                   | Bottom         | -   | -                    | -       | -     | -       | -     | -       | -            | -       | -               | -       | -     | -       | -    |      |      |
| 7/1/2017   | -     | Cloudy            | Surface        | -   | -                    | -       | -     | -       | -     | -       | -            | -       | -               | -       | -     | -       | -    |      |      |
|            | 4:50  |                   | Middle         | 1.5 | 20.60                | 20.60   | 20.6  | 7.89    | 7.89  | 7.9     | 23.34        | 23.35   | 23.3            | 56.7    | 57.7  | 57.2    | 4.41 | 4.49 | 4.45 |
|            | -     |                   | Bottom         | -   | -                    | -       | -     | -       | -     | -       | -            | -       | -               | -       | -     | -       | -    |      |      |
| 9/1/2017   | -     | Cloudy            | Surface        | -   | -                    | -       | -     | -       | -     | -       | -            | -       | -               | -       | -     | -       |      |      |      |
|            | 22:52 |                   | Middle         | 1.5 | 20.10                | 20.10   | 20.1  | 7.84    | 7.84  | 7.8     | 27.93        | 27.99   | 28.0            | 45.1    | 45.5  | 45.3    | 3.46 | 3.49 | 3.48 |
|            | -     |                   | Bottom         | -   | -                    | -       | -     | -       | -     | -       | -            | -       | -               | -       | -     | -       |      |      |      |
| 11/1/2017  | -     | Cloudy            | Surface        | -   | -                    | -       | -     | -       | -     | -       | -            | -       | -               | -       | -     | -       |      |      |      |
|            | 23:16 |                   | Middle         | 1.5 | 20.20                | 20.20   | 20.2  | 8.15    | 8.15  | 8.2     | 27.46        | 27.46   | 27.5            | 61.6    | 61.1  | 61.4    | 4.65 | 4.61 | 4.63 |
|            | -     |                   | Bottom         | -   | -                    | -       | -     | -       | -     | -       | -            | -       | -               | -       | -     | -       |      |      |      |
| 14/1/2017  | -     | Cloudy            | Surface        | -   | -                    | -       | -     | -       | -     | -       | -            | -       | -               | -       | -     | -       |      |      |      |
|            | 3:00  |                   | Middle         | 1.0 | 18.90                | 18.90   | 18.9  | 8.09    | 8.09  | 8.1     | 24.78        | 24.78   | 24.8            | 59.1    | 58.2  | 58.7    | 4.69 | 4.61 | 4.65 |
|            | -     |                   | Bottom         | -   | -                    | -       | -     | -       | -     | -       | -            | -       | -               | -       | -     | -       |      |      |      |
| 16/1/2017  | -     | Cloudy            | Surface        | -   | -                    | -       | -     | -       | -     | -       | -            | -       | -               | -       | -     | -       |      |      |      |
|            | 2:21  |                   | Middle         | 1.5 | 17.70                | 17.70   | 17.7  | 7.94    | 7.92  | 7.9     | 25.77        | 25.77   | 25.8            | 59.9    | 59.4  | 59.7    | 4.76 | 4.73 | 4.75 |
|            | -     |                   | Bottom         | -   | -                    | -       | -     | -       | -     | -       | -            | -       | -               | -       | -     | -       |      |      |      |
| 18/1/2017  | -     | Cloudy            | Surface        | -   | -                    | -       | -     | -       | -     | -       | -            | -       | -               | -       | -     | -       |      |      |      |
|            | 2:21  |                   | Middle         | 1.5 | 19.00                | 19.00   | 19.0  | 8.22    | 8.22  | 8.2     | 22.42        | 22.42   | 22.4            | 62.0    | 61.9  | 62.0    | 4.81 | 4.80 | 4.81 |
|            | -     |                   | Bottom         | -   | -                    | -       | -     | -       | -     | -       | -            | -       | -               | -       | -     | -       |      |      |      |
| 20/1/2017  | -     | Cloudy            | Surface        | -   | -                    | -       | -     | -       | -     | -       | -            | -       | -               | -       | -     | -       |      |      |      |
|            | 3:15  |                   | Middle         | 1.5 | 18.80                | 18.80   | 18.8  | 8.17    | 8.17  | 8.2     | 22.29        | 22.29   | 22.3            | 63.8    | 63.4  | 63.6    | 4.95 | 4.92 | 4.94 |
|            | -     |                   | Bottom         | -   | -                    | -       | -     | -       | -     | -       | -            | -       | -               | -       | -     | -       |      |      |      |
| 23/1/2017  | -     | Cloudy            | Surface        | -   | -                    | -       | -     | -       | -     | -       | -            | -       | -               | -       | -     | -       |      |      |      |
|            | 23:35 |                   | Middle         | 1.5 | 18.70                | 18.70   | 18.7  | 7.90    | 7.90  | 7.9     | 27.42        | 27.42   | 27.4            | 67.0    | 66.9  | 67.0    | 5.42 | 5.40 | 5.41 |
|            | -     |                   | Bottom         | -   | -                    | -       | -     | -       | -     | -       | -            | -       | -               | -       | -     | -       |      |      |      |
| 25/1/2017  | -     | Fine              | Surface        | -   | -                    | -       | -     | -       | -     | -       | -            | -       | -               | -       | -     | -       |      |      |      |
|            | 22:47 |                   | Middle         | 1.5 | 18.40                | 18.40   | 18.4  | 8.13    | 8.13  | 8.1     | 26.70        | 26.70   | 26.7            | 40.4    | 40.5  | 40.5    | 3.23 | 3.24 | 3.24 |
|            | -     |                   | Bottom         | -   | -                    | -       | -     | -       | -     | -       | -            | -       | -               | -       | -     | -       |      |      |      |

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.





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

| Date       | Time  | Weater Condition | Sampling Depth |       | Water Temperature |       |       | pH      |       | Salinity |       | DO Saturation |       | DO      |      |      |      |      |      |
|------------|-------|------------------|----------------|-------|-------------------|-------|-------|---------|-------|----------|-------|---------------|-------|---------|------|------|------|------|------|
|            |       |                  | m              | °C    |                   |       | -     |         | ppt   |          | %     |               | mg/L  |         |      |      |      |      |      |
|            |       |                  |                | Value | Average           |       | Value | Average | Value | Average  | Value | Average       | Value | Average |      |      |      |      |      |
| 29/12/2016 | -     | Cloudy           | Surface        | -     | -                 | -     | -     | -       | -     | -        | -     | -             | -     | -       | -    | -    | -    | -    |      |
|            | 1:32  |                  | Middle         | 1.0   | 17.80             | 17.80 | 17.8  | 8.13    | 8.13  | 8.1      | 28.20 | 28.20         | 28.2  | 64.8    | 64.4 | 64.6 | 5.25 | 5.23 | 5.24 |
|            | -     |                  | Bottom         | -     | -                 | -     | -     | -       | -     | -        | -     | -             | -     | -       | -    | -    | -    | -    | -    |
| 31/12/2016 | -     | Cloudy           | Surface        | -     | -                 | -     | -     | -       | -     | -        | -     | -             | -     | -       | -    | -    | -    | -    | -    |
|            | 3:07  |                  | Middle         | 1.5   | 18.40             | 18.40 | 18.4  | 8.25    | 8.25  | 8.3      | 20.30 | 20.30         | 20.3  | 47.4    | 47.7 | 47.6 | 3.95 | 3.97 | 3.96 |
|            | -     |                  | Bottom         | -     | -                 | -     | -     | -       | -     | -        | -     | -             | -     | -       | -    | -    | -    | -    | -    |
| 3/1/2017   | -     | Fine             | Surface        | -     | -                 | -     | -     | -       | -     | -        | -     | -             | -     | -       | -    | -    | -    | -    | -    |
|            | 3:55  |                  | Middle         | 1.5   | 19.60             | 19.60 | 19.6  | 7.75    | 7.75  | 7.8      | 25.41 | 25.41         | 25.4  | 53.1    | 53.2 | 53.2 | 4.19 | 4.20 | 4.20 |
|            | -     |                  | Bottom         | -     | -                 | -     | -     | -       | -     | -        | -     | -             | -     | -       | -    | -    | -    | -    | -    |
| 5/1/2017   | -     | Cloudy           | Surface        | -     | -                 | -     | -     | -       | -     | -        | -     | -             | -     | -       | -    | -    | -    | -    | -    |
|            | 3:47  |                  | Middle         | 1.5   | 20.20             | 20.20 | 20.2  | 8.00    | 8.00  | 8.0      | 26.49 | 26.49         | 26.5  | 54.6    | 54.9 | 54.8 | 4.23 | 4.26 | 4.25 |
|            | -     |                  | Bottom         | -     | -                 | -     | -     | -       | -     | -        | -     | -             | -     | -       | -    | -    | -    | -    | -    |
| 7/1/2017   | -     | Cloudy           | Surface        | -     | -                 | -     | -     | -       | -     | -        | -     | -             | -     | -       | -    | -    | -    | -    | -    |
|            | 7:25  |                  | Middle         | 1.5   | 20.50             | 20.50 | 20.5  | 7.89    | 7.89  | 7.9      | 25.24 | 25.24         | 25.2  | 61.2    | 61.5 | 61.4 | 4.75 | 4.78 | 4.77 |
|            | -     |                  | Bottom         | -     | -                 | -     | -     | -       | -     | -        | -     | -             | -     | -       | -    | -    | -    | -    | -    |
| 9/1/2017   | -     | Cloudy           | Surface        | -     | -                 | -     | -     | -       | -     | -        | -     | -             | -     | -       | -    | -    | -    | -    | -    |
|            | 22:25 |                  | Middle         | 1.5   | 20.10             | 20.10 | 20.1  | 8.11    | 8.11  | 8.1      | 23.54 | 23.54         | 23.5  | 66.4    | 65.6 | 66.0 | 5.04 | 4.98 | 5.01 |
|            | -     |                  | Bottom         | -     | -                 | -     | -     | -       | -     | -        | -     | -             | -     | -       | -    | -    | -    | -    | -    |
| 11/1/2017  | -     | Cloudy           | Surface        | -     | -                 | -     | -     | -       | -     | -        | -     | -             | -     | -       | -    | -    | -    | -    | -    |
|            | 0:26  |                  | Middle         | 1.5   | 20.00             | 20.00 | 20.0  | 8.15    | 8.15  | 8.2      | 23.59 | 23.59         | 23.6  | 64.4    | 64.1 | 64.3 | 4.86 | 4.84 | 4.85 |
|            | -     |                  | Bottom         | -     | -                 | -     | -     | -       | -     | -        | -     | -             | -     | -       | -    | -    | -    | -    | -    |
| 14/1/2017  | -     | Cloudy           | Surface        | -     | -                 | -     | -     | -       | -     | -        | -     | -             | -     | -       | -    | -    | -    | -    | -    |
|            | 23:50 |                  | Middle         | 1.5   | 18.30             | 18.30 | 18.3  | 8.10    | 8.10  | 8.1      | 28.80 | 28.80         | 28.8  | 62.3    | 61.7 | 62.0 | 4.91 | 4.88 | 4.90 |
|            | -     |                  | Bottom         | -     | -                 | -     | -     | -       | -     | -        | -     | -             | -     | -       | -    | -    | -    | -    | -    |
| 16/1/2017  | -     | Cloudy           | Surface        | -     | -                 | -     | -     | -       | -     | -        | -     | -             | -     | -       | -    | -    | -    | -    | -    |
|            | 4:17  |                  | Middle         | 1.5   | 17.90             | 17.90 | 17.9  | 8.08    | 8.08  | 8.1      | 23.68 | 23.68         | 23.7  | 62.6    | 62.0 | 62.3 | 4.98 | 4.92 | 4.95 |
|            | -     |                  | Bottom         | -     | -                 | -     | -     | -       | -     | -        | -     | -             | -     | -       | -    | -    | -    | -    | -    |
| 18/1/2017  | -     | Cloudy           | Surface        | -     | -                 | -     | -     | -       | -     | -        | -     | -             | -     | -       | -    | -    | -    | -    | -    |
|            | 4:15  |                  | Middle         | 1.5   | 18.90             | 18.90 | 18.9  | 8.05    | 8.05  | 8.1      | 25.32 | 25.32         | 25.3  | 66.0    | 64.9 | 65.5 | 5.12 | 4.99 | 5.06 |
|            | -     |                  | Bottom         | -     | -                 | -     | -     | -       | -     | -        | -     | -             | -     | -       | -    | -    | -    | -    | -    |
| 20/1/2017  | -     | Cloudy           | Surface        | -     | -                 | -     | -     | -       | -     | -        | -     | -             | -     | -       | -    | -    | -    | -    | -    |
|            | 5:07  |                  | Middle         | 1.0   | 18.70             | 18.70 | 18.7  | 8.00    | 8.00  | 8.0      | 25.47 | 25.47         | 25.5  | 65.3    | 67.3 | 66.3 | 5.10 | 5.23 | 5.17 |
|            | -     |                  | Bottom         | -     | -                 | -     | -     | -       | -     | -        | -     | -             | -     | -       | -    | -    | -    | -    | -    |
| 23/1/2017  | -     | Cloudy           | Surface        | -     | -                 | -     | -     | -       | -     | -        | -     | -             | -     | -       | -    | -    | -    | -    | -    |
|            | 23:13 |                  | Middle         | 1.0   | 18.60             | 18.60 | 18.6  | 7.77    | 7.77  | 7.8      | 25.68 | 25.68         | 25.7  | 56.1    | 55.9 | 56.0 | 4.59 | 4.56 | 4.58 |
|            | -     |                  | Bottom         | -     | -                 | -     | -     | -       | -     | -        | -     | -             | -     | -       | -    | -    | -    | -    | -    |
| 25/1/2017  | -     | Fine             | Surface        | -     | -                 | -     | -     | -       | -     | -        | -     | -             | -     | -       | -    | -    | -    | -    | -    |
|            | 0:21  |                  | Middle         | 1.0   | 18.30             | 18.30 | 18.3  | 8.02    | 8.02  | 8.0      | 26.41 | 26.41         | 26.4  | 56.0    | 56.3 | 56.2 | 4.50 | 4.51 | 4.51 |
|            | -     |                  | Bottom         | -     | -                 | -     | -     | -       | -     | -        | -     | -             | -     | -       | -    | -    | -    | -    | -    |

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.

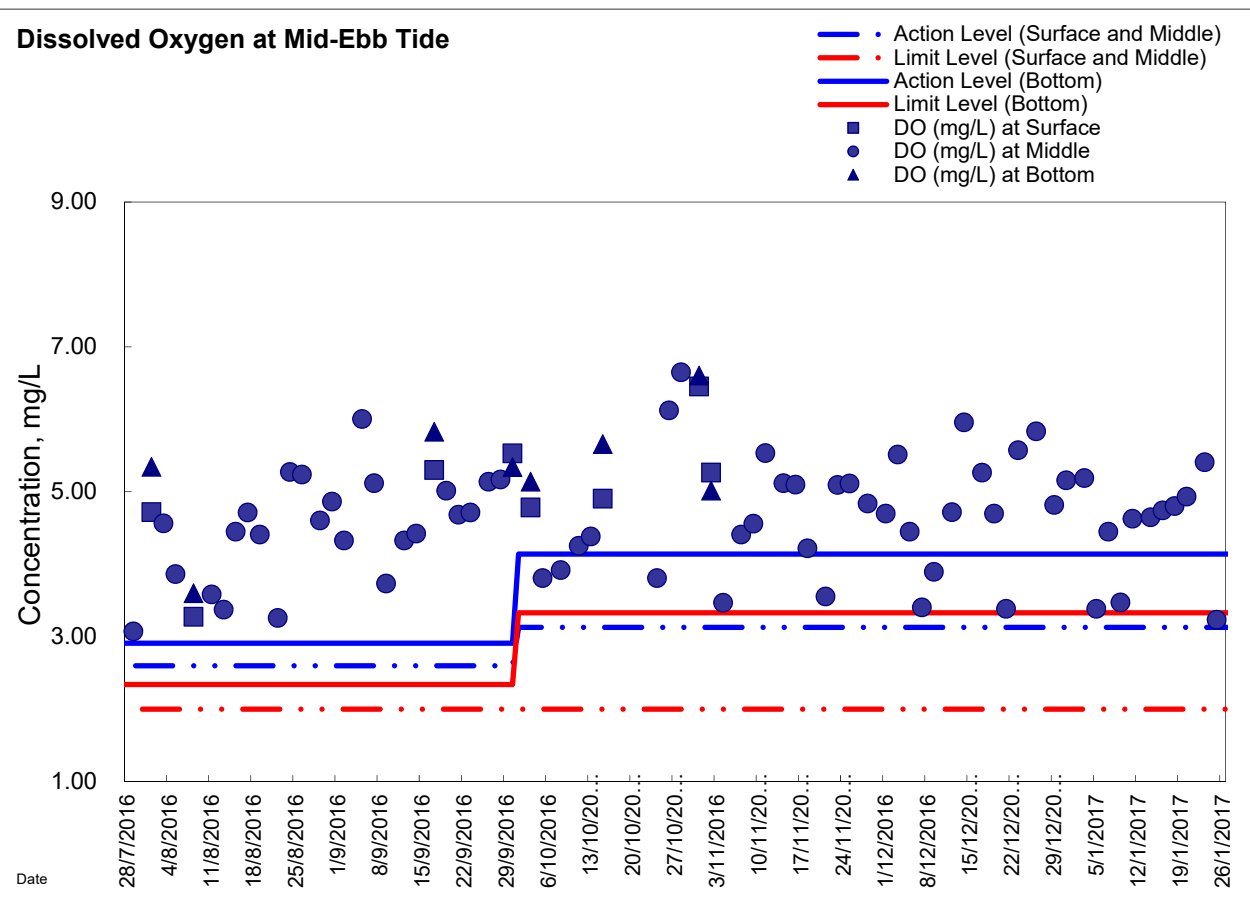
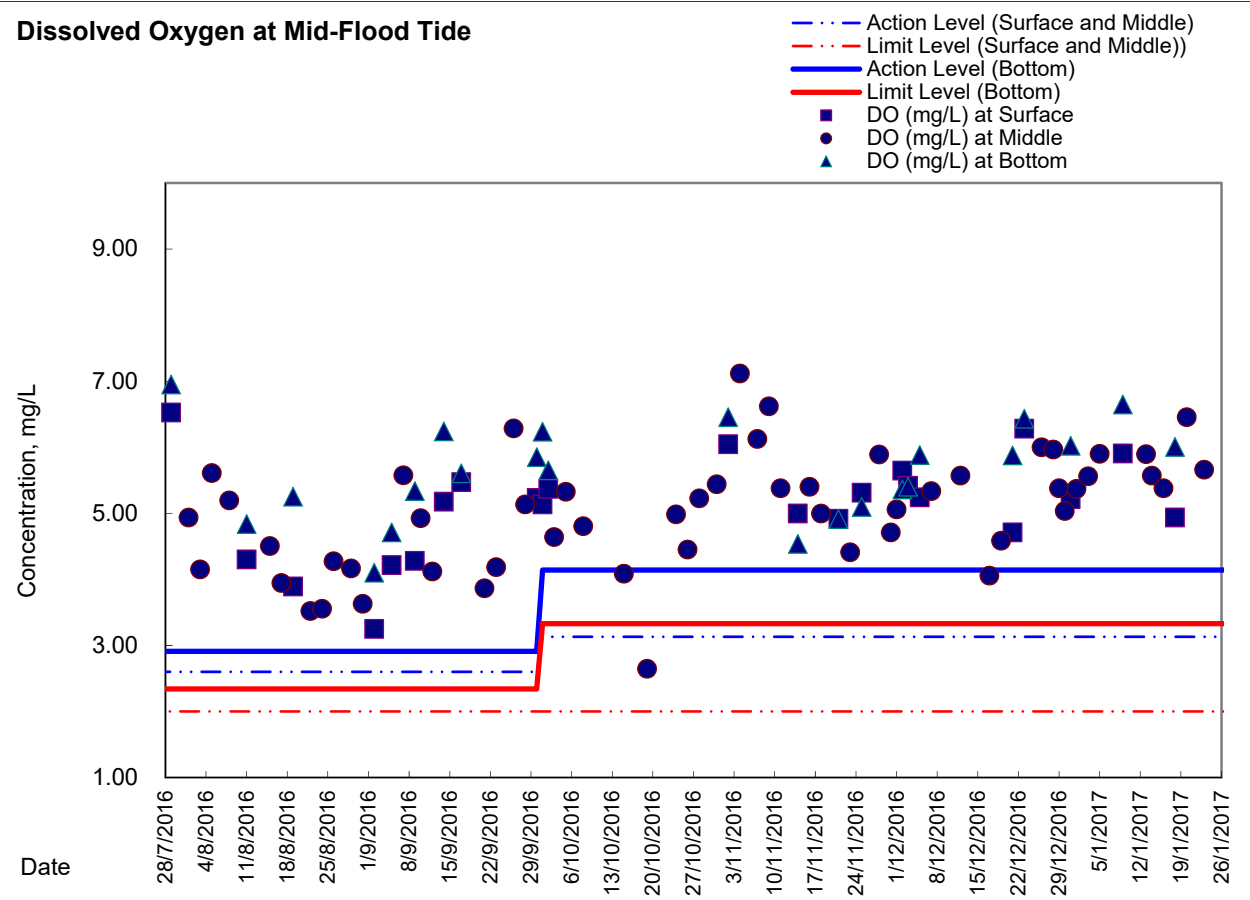


**Water Monitoring Result at Ex-WPCWA SE - South-eastern corners of ex-Public Cargo Works Area  
Mid-Ebb Tide**

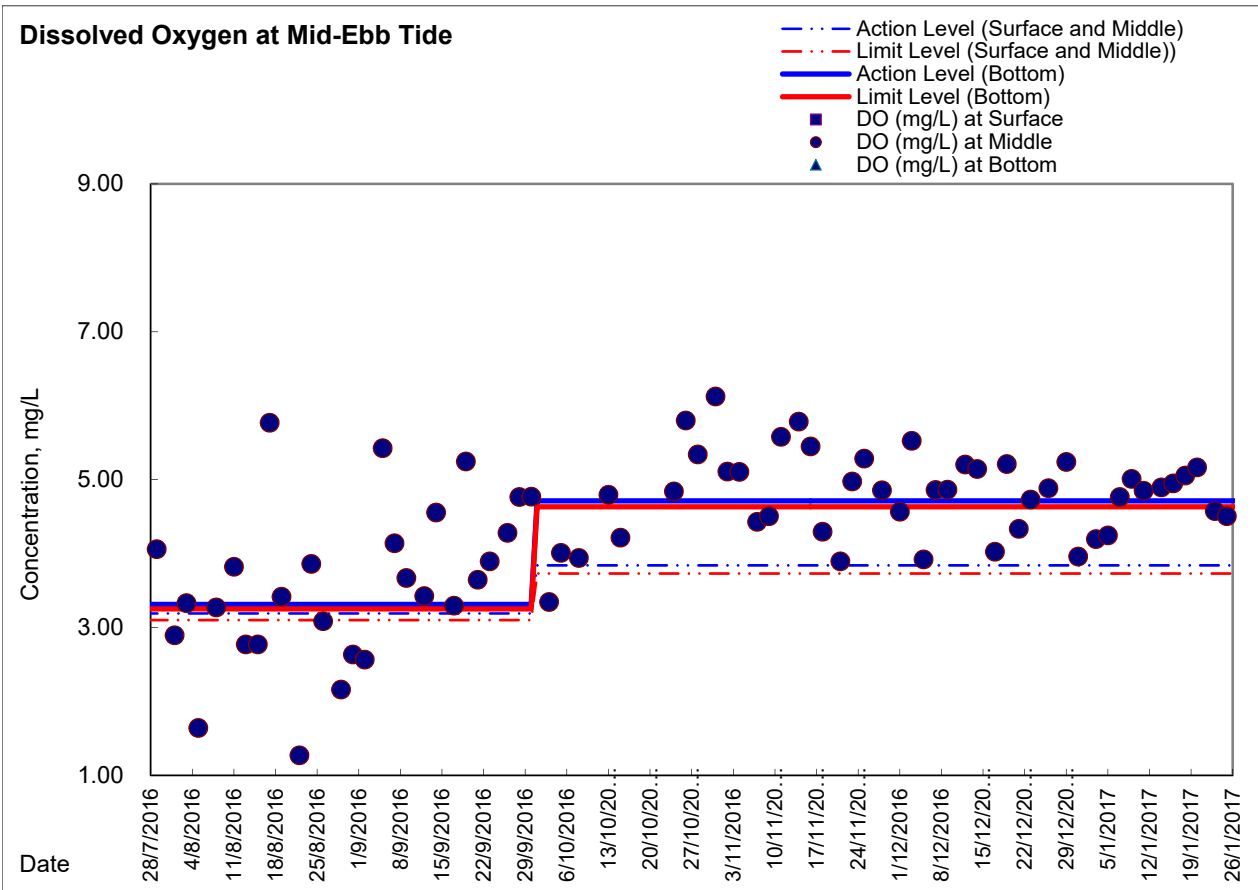
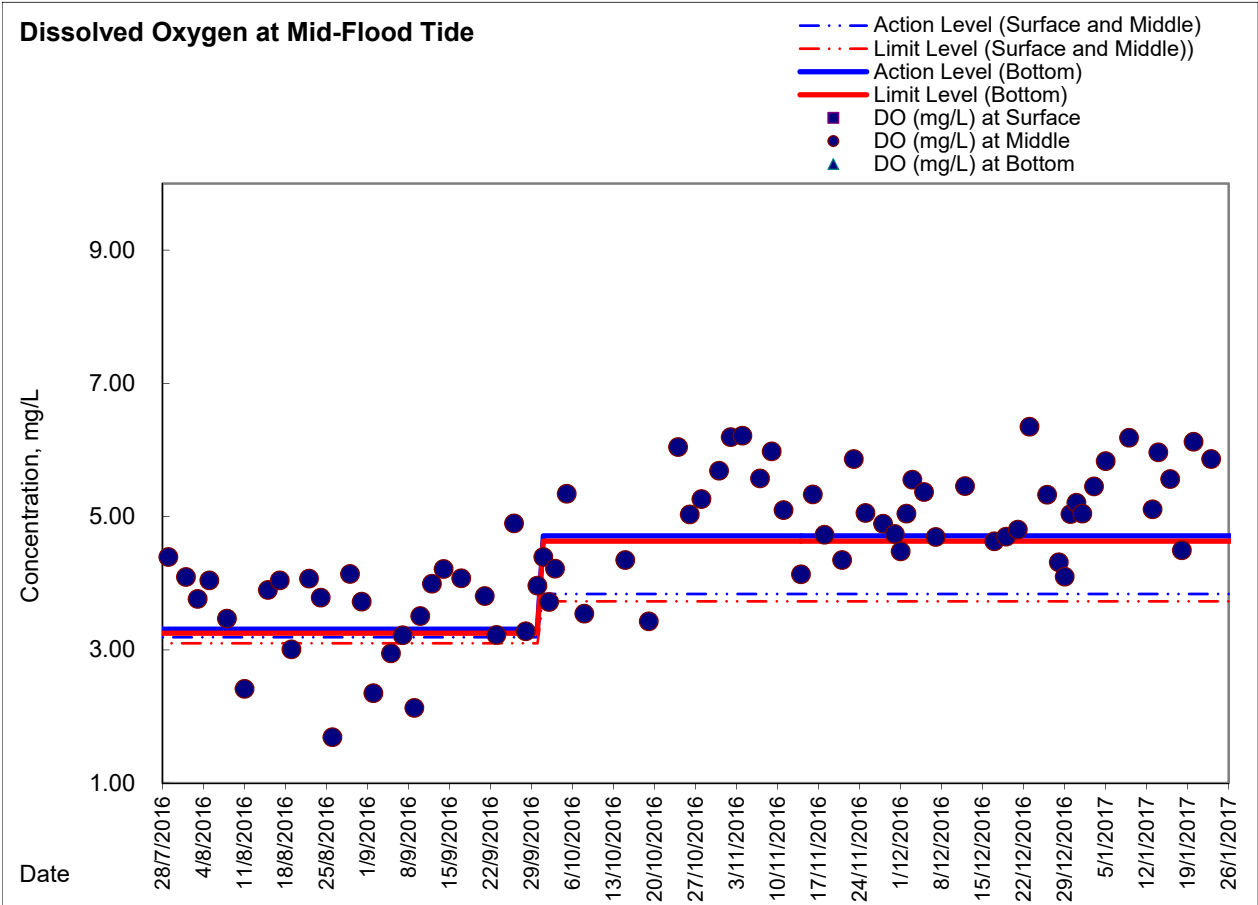
| Date       | Time  | Weater Condition | Sampling Depth |     | Water Temperature |         |       | pH      |       |         | Salinity |         | DO Saturation |         |      | DO   |      |      |      |
|------------|-------|------------------|----------------|-----|-------------------|---------|-------|---------|-------|---------|----------|---------|---------------|---------|------|------|------|------|------|
|            |       |                  | m              |     | °C                |         | -     |         | ppt   |         | %        |         | mg/L          |         |      |      |      |      |      |
|            |       |                  |                |     | Value             | Average | Value | Average | Value | Average | Value    | Average | Value         | Average |      |      |      |      |      |
| 29/12/2016 | 1:37  | Cloudy           | Surface        | 1.0 | 17.80             | 17.80   | 17.8  | 8.11    | 8.11  | 8.1     | 28.27    | 28.27   | 28.3          | 63.7    | 64.1 | 63.9 | 5.16 | 6.20 | 5.68 |
|            | -     |                  | Middle         | 2.0 | -                 | -       | -     | -       | -     | -       | -        | -       | -             | -       | -    | -    | -    | -    | -    |
|            | 1:38  |                  | Bottom         | 3.0 | 17.80             | 17.80   | 17.8  | 8.08    | 8.08  | 8.1     | 28.27    | 28.27   | 28.3          | 66.3    | 66.5 | 66.4 | 5.39 | 5.41 | 5.40 |
| 31/12/2016 | 3:11  | Cloudy           | Surface        | 1.0 | 18.30             | 18.30   | 18.3  | 8.19    | 8.19  | 8.2     | 20.27    | 20.27   | 20.3          | 69.5    | 68.8 | 69.2 | 5.47 | 5.41 | 5.44 |
|            | -     |                  | Middle         | 2.0 | -                 | -       | -     | -       | -     | -       | -        | -       | -             | -       | -    | -    | -    | -    | -    |
|            | 3:12  |                  | Bottom         | 3.0 | 18.30             | 18.30   | 18.3  | 8.13    | 8.13  | 8.1     | 20.27    | 20.27   | 20.3          | 74.7    | 73.7 | 74.2 | 5.87 | 5.79 | 5.83 |
| 3/1/2017   | 4:00  | Fine             | Surface        | 1.0 | 19.60             | 19.60   | 19.6  | 7.70    | 7.70  | 7.7     | 25.40    | 25.40   | 25.4          | 55.2    | 55.3 | 55.3 | 4.35 | 4.37 | 4.36 |
|            | -     |                  | Middle         | 2.0 | -                 | -       | -     | -       | -     | -       | -        | -       | -             | -       | -    | -    | -    | -    | -    |
|            | 4:01  |                  | Bottom         | 3.0 | 19.60             | 19.60   | 19.6  | 7.70    | 7.70  | 7.7     | 25.41    | 25.41   | 25.4          | 73.3    | 72.7 | 73.0 | 5.60 | 5.56 | 5.58 |
| 5/1/2017   | 3:52  | Cloudy           | Surface        | 1.0 | 20.20             | 20.20   | 20.2  | 7.96    | 7.96  | 8.0     | 26.48    | 26.48   | 26.5          | 57.4    | 57.6 | 57.5 | 4.43 | 4.45 | 4.44 |
|            | -     |                  | Middle         | 2.0 | -                 | -       | -     | -       | -     | -       | -        | -       | -             | -       | -    | -    | -    | -    | -    |
|            | 3:53  |                  | Bottom         | 3.0 | 20.30             | 20.30   | 20.3  | 7.94    | 7.94  | 7.9     | 26.48    | 26.48   | 26.5          | 73.4    | 72.3 | 72.9 | 5.55 | 5.47 | 5.51 |
| 7/1/2017   | 7:30  | Cloudy           | Surface        | 1.0 | 20.40             | 20.40   | 20.4  | 7.90    | 7.90  | 7.9     | 25.28    | 25.28   | 25.3          | 67.7    | 66.2 | 67.0 | 5.08 | 4.98 | 5.03 |
|            | -     |                  | Middle         | 2.0 | -                 | -       | -     | -       | -     | -       | -        | -       | -             | -       | -    | -    | -    | -    | -    |
|            | 7:31  |                  | Bottom         | 3.0 | 20.50             | 20.50   | 20.5  | 7.89    | 7.89  | 7.9     | 25.25    | 25.25   | 25.3          | 73.3    | 73.7 | 73.5 | 5.46 | 5.53 | 5.50 |
| 9/1/2017   | 22:30 | Cloudy           | Surface        | 1.0 | 20.20             | 20.20   | 20.2  | 8.03    | 8.03  | 8.0     | 23.57    | 23.57   | 23.6          | 67.8    | 67.6 | 67.7 | 5.16 | 5.14 | 5.15 |
|            | -     |                  | Middle         | 2.0 | -                 | -       | -     | -       | -     | -       | -        | -       | -             | -       | -    | -    | -    | -    | -    |
|            | 22:31 |                  | Bottom         | 3.0 | 20.20             | 20.20   | 20.2  | 8.00    | 8.00  | 8.0     | 23.57    | 23.57   | 23.6          | 71.5    | 71.0 | 71.3 | 5.44 | 5.41 | 5.43 |
| 11/1/2017  | 0:30  | Cloudy           | Surface        | 1.0 | 20.00             | 20.00   | 20.0  | 8.12    | 8.12  | 8.1     | 23.59    | 23.59   | 23.6          | 64.4    | 64.1 | 64.3 | 4.86 | 4.84 | 4.85 |
|            | -     |                  | Middle         | 2.0 | -                 | -       | -     | -       | -     | -       | -        | -       | -             | -       | -    | -    | -    | -    | -    |
|            | 0:31  |                  | Bottom         | 3.0 | 20.10             | 20.10   | 20.1  | 8.10    | 8.10  | 8.1     | 23.59    | 23.59   | 23.6          | 73.6    | 72.4 | 73.0 | 5.56 | 5.45 | 5.51 |
| 14/1/2017  | 23:55 | Cloudy           | Surface        | 1.0 | 18.30             | 18.30   | 18.3  | 8.05    | 8.05  | 8.1     | 28.83    | 28.83   | 28.8          | 62.9    | 63.1 | 63.0 | 4.98 | 5.00 | 4.99 |
|            | -     |                  | Middle         | 2.0 | -                 | -       | -     | -       | -     | -       | -        | -       | -             | -       | -    | -    | -    | -    | -    |
|            | 23:56 |                  | Bottom         | 3.0 | 18.20             | 18.20   | 18.2  | 8.03    | 8.03  | 8.0     | 28.83    | 28.83   | 28.8          | 72.2    | 72.8 | 72.5 | 5.64 | 5.69 | 5.67 |
| 16/1/2017  | 4:22  | Cloudy           | Surface        | 1.0 | 17.80             | 17.80   | 17.8  | 8.03    | 8.03  | 8.0     | 23.69    | 23.69   | 23.7          | 65.8    | 65.2 | 65.5 | 5.28 | 5.22 | 5.25 |
|            | -     |                  | Middle         | 2.0 | -                 | -       | -     | -       | -     | -       | -        | -       | -             | -       | -    | -    | -    | -    | -    |
|            | 4:23  |                  | Bottom         | 3.0 | 17.80             | 17.80   | 17.8  | 8.01    | 8.01  | 8.0     | 23.69    | 23.69   | 23.7          | 69.1    | 70.9 | 70.0 | 5.49 | 5.63 | 5.56 |
| 18/1/2017  | 4:20  | Cloudy           | Surface        | 1.0 | 19.00             | 19.00   | 19.0  | 8.03    | 8.03  | 8.0     | 25.34    | 25.34   | 25.3          | 68.8    | 68.0 | 68.4 | 5.34 | 5.28 | 5.31 |
|            | -     |                  | Middle         | 2.0 | -                 | -       | -     | -       | -     | -       | -        | -       | -             | -       | -    | -    | -    | -    | -    |
|            | 4:21  |                  | Bottom         | 3.0 | 19.00             | 19.00   | 19.0  | 8.01    | 8.01  | 8.0     | 25.34    | 25.34   | 25.3          | 72.2    | 72.9 | 72.6 | 5.60 | 5.65 | 5.63 |
| 20/1/2017  | 5:12  | Cloudy           | Surface        | 1.0 | 18.70             | 18.70   | 18.7  | 7.98    | 7.98  | 8.0     | 25.46    | 25.46   | 25.5          | 72.5    | 71.2 | 71.9 | 5.64 | 5.54 | 5.59 |
|            | -     |                  | Middle         | 2.0 | -                 | -       | -     | -       | -     | -       | -        | -       | -             | -       | -    | -    | -    | -    | -    |
|            | 5:13  |                  | Bottom         | 3.0 | 18.80             | 18.80   | 18.8  | 7.97    | 7.97  | 8.0     | 25.45    | 25.45   | 25.5          | 70.2    | 70.0 | 70.1 | 5.46 | 5.44 | 5.45 |
| 23/1/2017  | 23:07 | Cloudy           | Surface        | 1.0 | 18.60             | 18.60   | 18.6  | 7.74    | 7.74  | 7.7     | 25.69    | 25.69   | 25.7          | 66.0    | 65.4 | 65.7 | 5.31 | 5.26 | 5.29 |
|            | -     |                  | Middle         | 2.0 | -                 | -       | -     | -       | -     | -       | -        | -       | -             | -       | -    | -    | -    | -    | -    |
|            | 23:08 |                  | Bottom         | 3.0 | 18.60             | 18.60   | 18.6  | 7.74    | 7.74  | 7.7     | 25.69    | 25.69   | 25.7          | 69.6    | 69.5 | 69.6 | 5.60 | 5.58 | 5.59 |
| 25/1/2017  | 0:27  | Fine             | Surface        | 1.0 | 18.40             | 18.40   | 18.4  | 8.01    | 8.01  | 8.0     | 26.43    | 26.43   | 26.4          | 58.1    | 57.8 | 58.0 | 4.65 | 4.63 | 4.64 |
|            | -     |                  | Middle         | 2.0 | -                 | -       | -     | -       | -     | -       | -        | -       | -             | -       | -    | -    | -    | -    | -    |
|            | 0:28  |                  | Bottom         | 3.0 | 18.40             | 18.40   | 18.4  | 8.01    | 8.01  | 8.0     | 26.43    | 26.43   | 26.4          | 71.1    | 71.8 | 71.5 | 5.55 | 5.59 | 5.57 |

Remarks:  
Single underline denotes exceedance over Action Level.  
Double underline denotes exceedance over Limit Level.

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

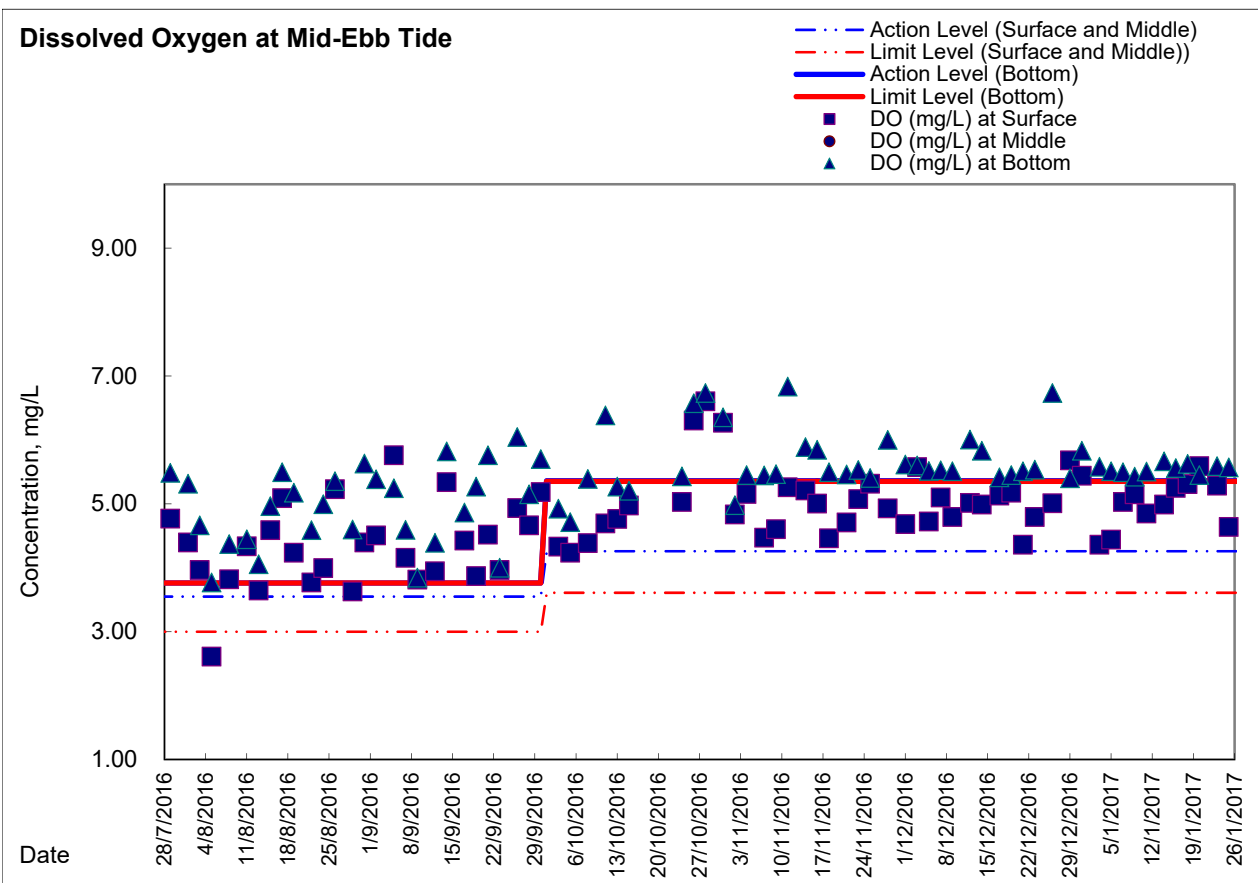
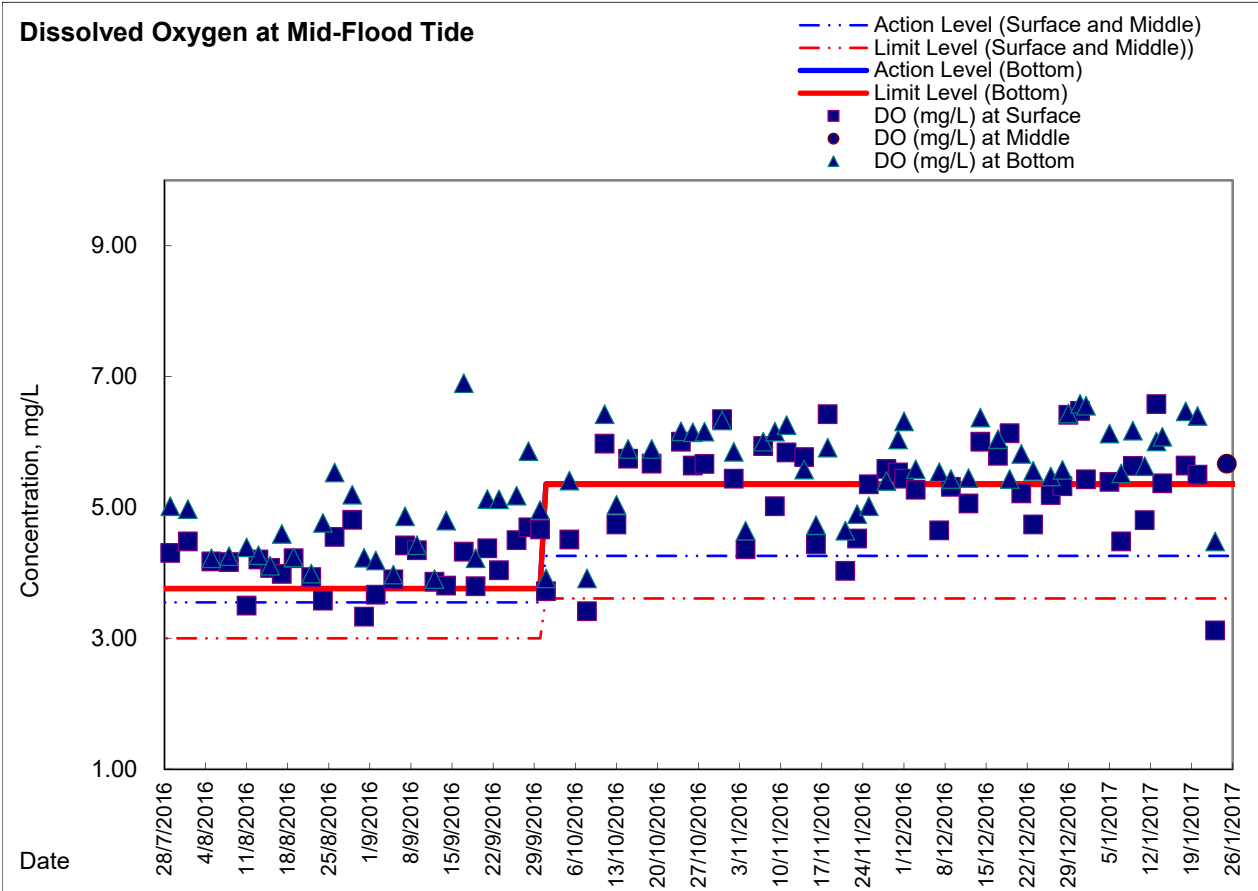


**Graphic Presentation of Enhanced Water Monitoring Results (DO) at Ex-WPCWA SW  
- South-western corners of ex-Public Cargo Works Area**





### Graphic Presentation of Enhanced Water Monitoring Results (DO) at Ex-WPCWA SE - South-eastern corners of ex-Public Cargo Works Area





***Appendix 6.1***

***Event Action Plans***



Event/Action Plan for Construction Noise

| EVENT                       | ACTION  |   |   |  |
|-----------------------------|---|---|---|--|
|                             | ET  | IEC   | ER  | CONTRACTOR   |
| Action Level being exceeded | <ol style="list-style-type: none"><li>1. Notify ER, IEC and Contractor;</li><li>2. Carry out investigation;</li><li>3. Report the results of investigation to the IEC, ER and Contractor;</li><li>4. Discuss with the IEC and Contractor on remedial measures required;</li><li>5. Increase monitoring frequency to check mitigation effectiveness.</li></ol> <p>(The above actions should be taken within 2 working days after the exceedance is identified)</p> | <ol style="list-style-type: none"><li>1. Review the investigation results submitted by the ET;</li><li>2. Review the proposed remedial measures by the Contractor and advise the ER accordingly;</li><li>3. Advise the ER on the effectiveness of the proposed remedial measures.</li></ol> <p>(The above actions should be taken within 2 working days after the exceedance is identified)</p> | <ol style="list-style-type: none"><li>1. Confirm receipt of notification of failure in writing;</li><li>2. Notify Contractor;</li><li>3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented;</li><li>4. Supervise the implementation of remedial measures.</li></ol> <p>(The above actions should be taken within 2 working days after the exceedance is identified)</p> | <ol style="list-style-type: none"><li>1. Submit noise mitigation proposals to IEC and ER;</li><li>2. Implement noise mitigation proposals.</li></ol> <p>(The above actions should be taken within 2 working days after the exceedance is identified)</p> |





| EVENT                      | ACTION  |   |  |   |
|----------------------------|---|---|--|---|
|                            | ET  | IEC   | ER   | CONTRACTOR  |
| Limit Level being exceeded | 1. Inform IEC, ER, Contractor and EPD;<br>2. Repeat measurements to confirm findings;<br>3. Increase monitoring frequency;<br>4. Identify source and investigate the cause of exceedance;<br>5. Carry out analysis of Contractor's working procedures;<br>6. Discuss with the IEC, Contractor and ER on remedial measures required;<br>7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results;<br>8. If exceedance stops, cease additional monitoring.<br>(The above actions should be taken within 2 working days after the exceedance is identified) | 1. Discuss amongst ER, ET, and Contractor on the potential remedial actions;<br>2. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly.<br>(The above actions should be taken within 2 working days after the exceedance is identified) | 1. Confirm receipt of notification of failure in writing;<br>2. Notify Contractor;<br>3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented;<br>4. Supervise the implementation of remedial measures;<br>5. If exceedance continues, consider stopping the Contractor to continue working on that portion of work which causes the exceedance until the exceedance is abated.<br>(The above actions should be taken within 2 working days after the exceedance is identified) | 1. Take immediate action to avoid further exceedance;<br>2. Submit proposals for remedial actions to IEC and ER within 3 working days of notification;<br>3. Implement the agreed proposals;<br>4. Submit further proposal if problem still not under control;<br>5. Stop the relevant portion of works as instructed by the ER until the exceedance is abated.<br>(The above actions should be taken within 2 working days after the exceedance is identified) |



**Event / Action Plan for Construction Air Quality**

| EVENT   | ACTION  |   |   |   |
|---|---|---|---|---|
|   | ET  | IEC   | ER  | CONTRACTOR  |
| <b>ACTION LEVEL</b>                               |   |   |   |   |
| 1. Exceedance for one sample                      | <ol style="list-style-type: none"> <li>Identify source, investigate the causes of exceedance and propose remedial measures;</li> <li>Inform IEC and ER;</li> <li>Repeat measurement to confirm finding;</li> <li>Increase monitoring frequency to daily.</li> </ol> (The above actions should be taken within 2 working days after the exceedance is identified)  | <ol style="list-style-type: none"> <li>Check monitoring data submitted by ET;</li> <li>Check Contractor's working method.</li> </ol> (The above actions should be taken within 2 working days after the exceedance is identified)   | <ol style="list-style-type: none"> <li>Notify Contractor.</li> </ol> (The above actions should be taken within 2 working days after the exceedance is identified)   | <ol style="list-style-type: none"> <li>Rectify any unacceptable practice;</li> <li>Amend working methods if appropriate.</li> </ol> (The above actions should be taken within 2 working days after the exceedance is identified)  |
| 2. Exceedance for two or more consecutive samples | <ol style="list-style-type: none"> <li>Identify source;</li> <li>Inform IEC and ER;</li> <li>Advise the ER on the effectiveness of the proposed remedial measures;</li> <li>Repeat measurements to confirm findings;</li> <li>Increase monitoring frequency to daily;</li> <li>Discuss with IEC and Contractor on remedial actions required;</li> <li>If exceedance continues, arrange meeting with IEC and ER;</li> <li>If exceedance stops, cease additional monitoring.</li> </ol> (The above actions should be taken within 2 working days after the exceedance is identified)  | <ol style="list-style-type: none"> <li>Check monitoring data submitted by ET;</li> <li>Check Contractor's working method;</li> <li>Discuss with ET and Contractor on possible remedial measures;</li> <li>Advise the ET on the effectiveness of the proposed remedial measures;</li> <li>Supervise Implementation of remedial measures.</li> </ol> (The above actions should be taken within 2 working days after the exceedance is identified) | <ol style="list-style-type: none"> <li>Confirm receipt of notification of failure in writing;</li> <li>Notify Contractor;</li> <li>Ensure remedial measures properly implemented.</li> </ol> (The above actions should be taken within 2 working days after the exceedance is identified)   | <ol style="list-style-type: none"> <li>Submit proposals for remedial to ER within 3 working days of notification;</li> <li>Implement the agreed proposals;</li> <li>Amend proposal if appropriate.</li> </ol> (The above actions should be taken within 2 working days after the exceedance is identified)  |
| <b>LIMIT LEVEL</b>                                |   |   |   |   |
| 1. Exceedance for one sample                      | <ol style="list-style-type: none"> <li>Identify source, investigate the causes of exceedance and propose remedial measures;</li> <li>Inform ER, Contractor and EPD;</li> <li>Repeat measurement to confirm finding;</li> <li>Increase monitoring frequency to daily;</li> <li>Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results.</li> </ol> (The above actions should be taken within 2 working days after the exceedance is identified)   | <ol style="list-style-type: none"> <li>Check monitoring data submitted by ET;</li> <li>Check Contractor's working method;</li> <li>Discuss with ET and Contractor on possible remedial measures;</li> <li>Advise the ER on the effectiveness of the proposed remedial measures;</li> <li>Supervise implementation of remedial measures.</li> </ol> (The above actions should be taken within 2 working days after the exceedance is identified) | <ol style="list-style-type: none"> <li>Confirm receipt of notification of failure in writing;</li> <li>Notify Contractor;</li> <li>Ensure remedial measures properly implemented.</li> </ol> (The above actions should be taken within 2 working days after the exceedance is identified)   | <ol style="list-style-type: none"> <li>Take immediate action to avoid further exceedance;</li> <li>Submit proposals for remedial actions to IEC within 3 working days of notification;</li> <li>Implement the agreed proposals;</li> <li>Amend proposal if appropriate.</li> </ol> (The above actions should be taken within 2 working days after the exceedance is identified)   |
| 2. Exceedance for two or more consecutive samples | <ol style="list-style-type: none"> <li>Notify IEC, ER, Contractor and EPD;</li> <li>Identify source;</li> <li>Repeat measurement to confirm findings;</li> <li>Increase monitoring frequency to daily;</li> <li>Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented;</li> <li>Arrange meeting with IEC and ER to discuss the remedial actions to be taken;</li> <li>Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results;</li> <li>If exceedance stops, cease additional monitoring.</li> </ol> (The above actions should be taken within 2 working days after the exceedance is identified) | <ol style="list-style-type: none"> <li>Discuss amongst ER, ET, and Contractor on the potential remedial actions;</li> <li>Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly;</li> <li>Supervise the implementation of remedial measures.</li> </ol>   | <ol style="list-style-type: none"> <li>Confirm receipt of notification of failure in writing;</li> <li>Notify Contractor;</li> <li>In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented;</li> <li>Ensure remedial measures properly implemented;</li> <li>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.</li> </ol> (The above actions should be taken within 2 working days after the exceedance is identified) | <ol style="list-style-type: none"> <li>Take immediate action to avoid further exceedance;</li> <li>Submit proposals for remedial actions to IEC within 3 working days of notification;</li> <li>Implement the agreed proposals;</li> <li>Resubmit proposals if problem still not under control;</li> <li>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)</li> </ol> |



**Event and Action Plan for Marine Water Quality**

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



**Event and Action Plan for Odour Patrol**

| Event                      | ACTION   |   |
|----------------------------|--|---|
|                            | Person-in-charge of Odour Monitoring   | Implementation Agent Identified by CEDD   |
| <b>Action Level</b>        |  |   |
| Exceedance of Action Level | 1. Identify source/reason of exceedance;<br>2. Repeat odour patrol to confirm finding.   | 1. Carry out investigation to identify the source/reason of exceedance;<br>2. Rectify any unacceptable practice<br>3. Implement more mitigation measures if necessary;<br>4. Inform EPD or MD if exceedance is considered to be caused by expedient connections or floating debris.   |
| <b>Limit Level</b>         |  |   |
| Exceedance of Limit Level  | 1. Identify source / reason of exceedance;<br>2. Repeat odour patrol to confirm findings;<br>3. Increase odour patrol frequency;<br>4. If exceedance stops, cease additional odour patrol. | 1. Carry out investigation to identify the source/reason of exceedance. Investigation shall be completed within 2 weeks;<br>2. Rectify any unacceptable practice;<br>3. Formulate remedial actions;<br>4. Ensure remedial actions properly implemented;<br>5. If exceedance continues, consider what more/enhanced mitigation measures shall be implemented;<br>6. 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      | Time | Location                | Measured TSP Level | Unit                           | Action Level | Limit Level | Follow-up action  |
|----------|-----------|------|-------------------------|--------------------|--------------------------------|--------------|-------------|---|
| X_16A021 | 9-Jan-17  | 8:00 | CMA5b- Pedestrian Plaza | 208.4              | 24 hr TSP (ug/m <sup>3</sup> ) | 181.0        | 260         | <p><b>Possible reason:</b> Elevated TSP level potentially in relate to local ambient condition and smog was observed across the monitoring period.</p> <p><b>Action taken / to be taken:</b> Reviewed the trend of air quality measurement across monitoring stations. Reviewed Contractor's working procedures. Mitigation measures including maintaining haul road in dampened condition was implemented by Contractor.</p> <p><b>Remarks / Other Obs:</b> Despite formwork erection and re-bar fixing for MVB were undertaken on the monitoring date at around Pedestrian Plaza under Contractor of HK/2012/08, dust suppression measure including haul road maintained in dampened condition was implemented and no particular air quality impact from construction activity was observed during sampling while smog was reported observed across the monitoring period. In view of the above, the action level exceedance was considered to be non-project related and contributed by local ambient condition. In addition, non WDII-CWB Project construction activities opposite to the monitoring station was observed on the monitoring date. Nevertheless, the Contractor of HK/2012/08 was reminded to maintain regularly dust suppression measures for any potential dusty surface and dust generating operation around the concerned location to avoid any potential cumulative air quality impact.</p>   |
| X_16A022 | 9-Jan-17  | 8:00 | CMA5b- Pedestrian Plaza | 208.4              | 24 hr TSP (ug/m <sup>3</sup> ) | 181.0        | 260         | <p><b>Possible reason:</b> Elevated TSP level potentially in relate to local ambient condition and smog was observed across the monitoring period.</p> <p><b>Action taken / to be taken:</b> Reviewed the trend of air quality measurement across monitoring stations. Reviewed Contractor's working procedures.</p> <p><b>Remarks / Other Obs:</b> No construction works was undertaken on the monitoring date at around Pedestrian Plaza under Contractor of HK/2009/01 and no particular air quality impact from construction activity was observed during sampling while smog was reported observed across the monitoring period. In view of the above, the action level exceedance was considered to be non-project related and contributed by local ambient condition. In addition, non WDII-CWB Project construction activities opposite to the monitoring station was observed on the monitoring date. Nevertheless, the Contractor of HK/2009/01 was reminded to maintain regularly dust suppression measures for any potential dusty surface and dust generating operation around the concerned location to avoid any potential cumulative air quality impact.</p>  |
| X_16A023 | 20-Jan-17 | 8:00 | CMA5b- Pedestrian Plaza | 215.1              | 24 hr TSP (ug/m <sup>3</sup> ) | 181.0        | 260         | <p><b>Possible reason:</b> Elevated TSP level potentially in relate to other sources affecting local ambient condition such as road traffic next to the monitoring station</p> <p><b>Action taken / to be taken:</b> Reviewed the trend of air quality measurement across monitoring stations. Analysis of contractor's working procedures.</p> <p><b>Remarks / Other Obs:</b> No construction works was undertaken on the monitoring date around Pedestrian Plaza under Contract HK/2009/01 and no particular observation regarding air quality impact was observed during sampling. In view of the above, the action level exceedance was considered to be non-project related and potentially contributed by other sources affecting local ambient condition such as road traffic next to the monitoring station. In addition, non WDII-CWB Project construction activities opposite to the monitoring station was observed on the monitoring date. Nevertheless, the Contractor of HK/2009/01 was reminded to maintain regular dust suppression measures for any potential dusty surface and dust generating operation around the concerned location to avoid any potential cumulative air quality impact.</p>  |
| X_16A024 | 20-Jan-17 | 8:00 | CMA5b- Pedestrian Plaza | 215.1              | 24 hr TSP (ug/m <sup>3</sup> ) | 181.0        | 260         | <p><b>Possible reason:</b> Elevated TSP level potentially in relate to other sources affecting local ambient condition such as road traffic next to the monitoring station</p> <p><b>Action taken / to be taken:</b> Reviewed the trend of air quality measurement across monitoring stations. Analysis of contractor's working procedures. Mitigation measures including maintaining haul road in dampened condition was implemented by contractor.</p> <p><b>Remarks / Other Obs:</b> Despite formwork erection and rebar fixing were undertaken on the monitoring date at around Pedestrian Plaza under Contractor of HK/2012/08, dust suppression measure including haul road maintained in dampened condition were implemented and no particular observation regarding air quality impact was observed during sampling. In view of the above, the action level exceedance was considered to be non-project related and potentially contributed by other sources affecting local ambient condition such as road traffic next to the monitoring station. In addition, non WDII-CWB Project construction activities opposite to the monitoring station was observed on the monitoring date. Nevertheless, the Contractor of HK/2012/08 was reminded to maintain regularly dust suppression measures for any potential dusty surface and dust generating operation around the concerned location to avoid any potential cumulative air quality impact.</p> |





| Ref. No. | Date      | Time  | Location  | Construction Noise Level, dB(A) | Parameter  | Action Level                                | Limit Level dB(A) | Follow-up action  |
|----------|-----------|-------|---|---------------------------------|------------|---|-------------------|---|
| X_16N059 | 24-Jan-17 | 10:25 | M6 - HK Baptist Church Henrietta Secondary School | 68                              | Leq(30min) | when one documented complaint was received. | 65                | <p>Possible reason: Traffic nearby was observed during monitoring and was considered as the major noise contribution.</p> <p>Action taken / to be taken: Repeated measurement to confirm result and reviewed the trend of noise measurement. Analysis of contractor's working procedure.</p> <p>Remarks / Other Obs: Despite lifting of U-Beam by launching girder was conducted under HY/2009/19 around the monitoring location, no particular noise was considered from the construction activities and nearby traffic noise was observed as major noise source during monitoring. As such, the exceedance was considered as non-Project related.</p> |



Lam Geotechnics Limited

Contract No. HK/2015/01  
 Wanchai Development Phase II and Central Wanchai Bypass  
 Sampling, Field Measurement and Testing Work (Stage3)  
 Summary for Notification of Exceedance

| Ref no.  | Date      | Tidal     | Location | Parameters (Unit) | Measured | Action Level | Limit Level | Follow-up action   |
|----------|-----------|-----------|----------|-------------------|----------|--------------|-------------|--|
| X_16C064 | 3-Jan-17  | Mid-flood | C7       | DO(mg/l)          | 6.34     | 3.36         | 2.73        | <b>Possible reason:</b><br>Natural variation or changes of water quality in the vicinity of water abstraction location for the water quality monitoring station.   |
|          |           |           |          | Turbidity         | 11.55    | 9.10         | 10.25       | <b>Action taken/ to be taken:</b><br>Repeated the measurement to confirm the result. Checked with Contractor works and reviewed previous monitoring data.  |
|          |           |           |          | SS                | 10.00    | 15.00        | 22.13       | <b>Remarks/ Other Obs:</b><br>No marine activity was conducted under Contract HY/2009/15 at Causeway Bay Typhoon Shelter on the monitoring date. In view of no marine construction activity, the exceedance was considered not related to Contract HY/2009/15 construction works. No marine activity was conducted under Contract HY/2010/08 on the monitoring date, and the installed silt screen was in place. In view of the above, it was considered that the exceedance was not project related. No exceedance was recorded on the subsequent monitoring on 5 January 2017 ebb tide.    |
| X_16C065 | 9-Jan-17  | Mid-ebb   | C7       | DO(mg/l)          | 6.10     | 3.36         | 2.73        | <b>Possible reason:</b><br>Natural variation or changes of water quality in the vicinity of water abstraction location for the water quality monitoring station.   |
|          |           |           |          | Turbidity         | 2.84     | 9.10         | 10.25       | <b>Action taken/ to be taken:</b><br>Checked with Contractor works and reviewed previous monitoring data.  |
|          |           |           |          | SS                | 16.00    | 15.00        | 22.13       | <b>Remarks/ Other Obs:</b><br>No marine activity was conducted under Contract HY/2009/15 at Causeway Bay Typhoon Shelter on the monitoring date. In view of no marine construction activity, the exceedance was considered not related to Contract HY/2009/15 construction works. No marine activity was conducted under Contract HY/2010/08 on the monitoring date, and the installed silt screen was in place. In view of the above, it was considered that the exceedance was not project related. No exceedance was recorded on the subsequent monitoring on 11 January 2017 flood tide. |
| X_16C066 | 16-Jan-17 | Mid-flood | C7       | DO(mg/l)          | 7.04     | 3.36         | 2.73        | <b>Possible reason:</b><br>Natural variation or changes of water quality in the vicinity of water abstraction location for the water quality monitoring station.   |
|          |           |           |          | Turbidity         | 12.31    | 9.10         | 10.25       | <b>Action taken/ to be taken:</b><br>Repeated the measurement to confirm the result. Checked with Contractor works and reviewed previous monitoring data.  |
|          |           |           |          | SS                | 13.50    | 15.00        | 22.13       | <b>Remarks/ Other Obs:</b><br>No marine activity was conducted under Contract HY/2009/15 at Causeway Bay Typhoon Shelter on the monitoring date. In view of no marine construction activity, the exceedance was considered not related to Contract HY/2009/15 construction works. No marine activity was conducted under Contract HY/2010/08 on the monitoring date, and the installed silt screen was in place. In view of the above, it was considered that the exceedance was not project related. No exceedance was recorded on the subsequent monitoring on 18 January 2017 ebb tide.   |



Lam Geotechnics Limited

Contract No. HK/2015/01  
Wanchai Development Phase II and Central Wanchai Bvoass  
Sampling, Field Measurement and Testing Work (Stage3)  
Summary for Notification of Exceedance

| Ref no.  | Date      | Tidal     | Location | Parameters (Unit) | Measured | Action Level | Limit Level | Follow-up action   |
|----------|-----------|-----------|----------|-------------------|----------|--------------|-------------|--|
| X_16W077 | 13-Jan-17 | Mid-flood | WSD19    | DO(mg/l)          | 6.83     | 3.66         | 3.28        | <b>Possible reason:</b> Natural variation or changes of water quality in the vicinity of water quality monitoring station.   |
|          |           |           |          | Turbidity         | 8.89     | 8.04         | 9.49        | <b>Action taken/ to be taken:</b> Immediate repeated in-situ measurement to confirm the exceedances. Checked with Contractor works and reviewed previous monitoring data.  |
|          |           |           |          | SS                | 9.00     | 13.00        | 14.43       | <b>Remarks/ Other Obs:</b> No marine activity was conducted under Contract HK/2012/08 on the monitoring date. In view of no marine activity was conducted, the exceedance was considered not project related. No exceedance was recorded on the subsequent monitoring on 14 January 2017 ebb tide. |



| Ref no.   | Date      | Tidal     | Location    | Depth   | Parameters (Unit) | Measured | Action Level | Limit Level | Follow-up action  |
|-----------|-----------|-----------|-------------|---------|-------------------|----------|--------------|-------------|---|
| X_16D0057 | 20-Jan-17 | Mid-flood | Ex-WPCWA SE | Surface | DO(mg/l)          | 3.12     | 4.26         | 3.61        | <p><b>Possible reason:</b></p> <p>Possible in relation to the nearby upstream organic discharge and associated variation of water quality within Ex-PCWA area.</p> <p><b>Action taken/ to be taken:</b></p> <p>Repeated the measurement to confirm the result. No odour nuisance was noted during the DO monitoring. Checking with Contractor works and review previous monitoring data.</p> <p><b>Remarks/ Other Obs:</b></p> <p>Despite trimming works of high spot was conducted under Contract HY/2009/15 at TPCWAW on the monitoring date, contractor mitigation measures including the use of localized silt curtain was generally in order. No particular observation regarding water quality impact was observed during sampling while upstream discharge from nearby culvert was noted. In view of the above, the exceedance was considered not related to Project works. No exceedance was recorded on the subsequent monitoring on 23 January 2017 flood tide.</p> |
| X_16D0058 | 20-Jan-17 | Mid-flood | Ex-WPCWA SE | Bottom  | DO(mg/l)          | 4.48     | 5.36         | 5.35        | <p><b>Possible reason:</b></p> <p>Possible in relation to the nearby upstream organic discharge and associated variation of water quality within Ex-PCWA area.</p> <p><b>Action taken/ to be taken:</b></p> <p>Repeated the measurement to confirm the result. No odour nuisance was noted during the DO monitoring. Checking with Contractor works and review previous monitoring data.</p> <p><b>Remarks/ Other Obs:</b></p> <p>Despite trimming works of high spot was conducted under Contract HY/2009/15 at TPCWAW on the monitoring date, contractor mitigation measures including the use of localized silt curtain was generally in order. No particular observation regarding water quality impact was observed during sampling while upstream discharge from nearby culvert was noted. In view of the above, the exceedance was considered not related to Project works. No exceedance was recorded on the subsequent monitoring on 23 January 2017 flood tide.</p> |



***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  | Outcome   | 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).   | <ol style="list-style-type: none"><li>1) A valid Construction Noise Permit no. GW-RS0119-10 was granted from EPD since 18<sup>th</sup> Feb. 2010 for the dredging works which carry out at area for North Point Reclamation.</li><li>2) Officer from Marine Department, Police and EPD's officer attended the scene for inspection and investigation.</li><li>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.</li><li>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.</li><li>5) No further complaints were received from Mr. Tsang in the reporting month. The complaint is considered closed.</li></ol> | Closed |
| 100321b           | 21/3/2010         | Unknown                             | Near the eastern breakwater of the Causeway Bay Typhoon Shelter | A public complaint and enquiry regarding loud noises emanated from dredging activities on 21/3/2010 (Sunday) until 2220 hours and between 1920-1946 hours in the evening of 22 March 2010(Monday). | <ol style="list-style-type: none"><li>1) A valid Construction Noise Permit no. GW-RS0119-10 was granted from EPD since 18<sup>th</sup> 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.</li><li>2) Officer from Marine Department, Police and EPD's officer attended the scene for inspection and investigation.</li><li>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.</li><li>4) No further complaints were received in the reporting month. The complaint is considered closed.</li></ol>   | Closed |



| Complaint Log No. | Date of Complaint | Received From and Received By                              | Location of Complainant   | Nature of Complaint   | Outcome  | Status |
|-------------------|-------------------|--|---------------------------|---|--|--------|
| 100504            | 4/5/2010          | Public complainant received by ICC (ICC case: 1-233384048) | Watson Road               | 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 to reduce the noise level.           | <ol style="list-style-type: none"><li>1) 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.</li><li>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.</li><li>3) No further complaints were received in the reporting month. The complaint is considered closed.</li></ol>        | Closed |
| 100731            | 31/7/2010         | Mr. Lee received by ICC (CC Case: 1-250702681)             | Oil Street to Watson Road | Complaint on the noise nuisance due to the dredging works. Three construction plants were operated concurrently.  | <ol style="list-style-type: none"><li>1) Contractor for HY/2009/11 was granted valid Construction Noise Permit no. GW-RS0371-10 for their dredging works.</li><li>2) There was only 1 grab dredger operated by Contractor within NPR project site area for dredging works.</li><li>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.</li><li>4) It is considered as invalid from the EP and CNP point of view.</li></ol>   | Closed |
| 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 works area adjacent to the Harbour Height during the period from 0700 to 2200. | <ol style="list-style-type: none"><li>1) 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.</li><li>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.</li><li>3) It is considered as invalid complaint. No further complaints were received in the reporting month. The complaint is considered closed.</li></ol> | Closed |





| Complaint Log No. | Date of Complaint    | Received From and Received By  | Location of Complainant  | Nature of Complaint   | Outcome  | Status |
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| 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)    | <ol style="list-style-type: none"><li>1) Contractor for HY/2009/11 has 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.</li><li>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.</li><li>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.</li></ol>  | Closed |
| 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 | <ol style="list-style-type: none"><li>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.</li><li>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.</li><li>3) It is considered as invalid complaint. No further complaints were received in the reporting month. The complaint is considered closed.</li></ol>  | Closed |
| 101203            | 3/12/2010, 01:45a.m. | The resident of Block 11, City Garden by ICC referral from Marine Department | North Point              | Bad odour was generated from the dredging plant off North Point   | <ol style="list-style-type: none"><li>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.</li><li>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.</li><li>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.</li></ol> | Closed |
| 101206            | 6/12/2010            | Ms Lui, the resident of 27/F, Block 10, City                                 | City Garden, North Point | Two barges were generating noise at 22:00 on 6 December 2010 in which the noise from  | <ol style="list-style-type: none"><li>1) ET confirmed the following information with resident site staff on the complaint:<ul style="list-style-type: none"><li>• It was referred to the filling operation at North Point</li></ul></li></ol>  | Closed |



| Complaint Log No. | Date of Complaint | Received From and Received By                                    | Location of Complainant | Nature of Complaint  | Outcome   | Status |
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|                   |                   | Garden by ICC (ICC case: 1-266039336)                            |                         | <p>filling operation was louder than the traffic noise &amp; visual impact was generated due to the spot-light pointing directly to the complainant flat, suspected the filling operation was part of Wanchai Development Phase II;</p> <p>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.</p> | <p>Reclamation of Central Wan Chai Bypass site area instead of part of Wanchai Development Phase II;</p> <ul style="list-style-type: none"> <li>• 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;</li> <li>• Flood light on the control mast of derrick barge have no lighting shields for the prevention of glare of flood lights;</li> <li>• No starting work on 7 Dec 2010 at 0630hours.</li> </ul> <p>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;</p> <p>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;</p> <p>4) The absence of the lighting shields at flood light results in visual glare to the complainant at night-time.</p> <p>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;</p> <p>6) No further complaint was received after implementation of proposed measures</p> |        |
| 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.   | <p>1) The concerned stockpile was a working stockpile under Contract HY/209/15 and was covered at night time after work.</p> <p>2) 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.</p> <p>3) It is considered invalid but preventive actions can be taken because the stockpile is relatively large and easily visible by complainant.</p> <p>4) 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</p> <p>5) The concern of mosquitoes breeding is out the scope of EM&amp;A, the follow-up action is not reported in this monthly EM&amp;A report.</p>  | Closed |



| Complaint Log No. | Date of Complaint | Received From and Received By   | Location of Complainant | Nature of Complaint  | Outcome  | Status |
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| 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.  | <ol style="list-style-type: none"><li>1) According to the RSS's record, there was no construction works undertaken under the EP-356/2009 during the concern time period.</li><li>2) There was no abnormal real-time noise monitoring data recorded in RTN1 - FEHD Hong Kong Transport Section Whitefield Depot which is next to the Victoria Centre.</li><li>3) It is considered as invalid complaint under this Project.</li></ol>  | Closed |
| 110617            | 9/06/2011         | Mr. Law from Victoria Centre Management Office                          | North Point             | An odour nuisance suspected generating from the discharge point – Channel T at Watson Road in part of the site area was related to CWB under Contract no. HY/2009/11 | <ol style="list-style-type: none"><li>1) The complaint was received by ET on 13 Jun 2011. During the weekly site inspection on 7 and 17 June 2011, there was no any odour impact detected in the site area.</li><li>2) According to the site record, there was muddy water discharged from the unknown source at upstream of Channel T during heavy rainstorm. No any site surface runoff to the Channel T and out of site boundary was observed in the inspection.</li><li>3) In order to prevent muddy water washing out to the water body under heavy rainstorm, a silt curtain was installed at the outfall of the channel by Contractor. ET confirmed with the Resident Site Staff that a silt curtain was installed at the outfall of the channel to prevent muddy water washing out to the water body under heavy rainstorm. Besides, regular cleaning of refuse in the channel has been conducted by Contractor.</li><li>4) A further site investigation on 28 June 2011 revealed that no odour nuisance was detected at the upstream of the Channel T and no source of odour nuisance was identified at site. As such, it was concluded that the source of odour nuisance was not related to the Project works.</li><li>5) Although no source of odour nuisance was identified at site, the muddy water and dirt from the unknown source at upstream of Channel T may cause a potential smell during low tide and low water flow. Contractor was reminded to remove the silt curtain at the channel on non-rainy day so as to avoid the accumulation of the sediment and dirt in the water channel.</li></ol> | Closed |



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| 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, nylon-wire 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. | <ol style="list-style-type: none"> <li>1) 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</li> <li>2) 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.</li> <li>3) 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.</li> <li>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.</li> </ol>   | Closed |
| 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.   | <ol style="list-style-type: none"> <li>1) 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.</li> <li>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.</li> <li>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</li> </ol> | Closed |



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|                   |                   |   |                         |   | so as to prevent recurrent by barge defect   |        |
| 110723a           | 23/07/2011        | Ms. Law at Victoria Centre by ICC no. 1-303887687                     | North Point             | She concerned that Highways Department published a notice in their Management Office about construction works will be conducted from 0700 hours to 2300 hours during July to December 2011 including Saturday, Sunday and public holiday. | <ol style="list-style-type: none"> <li>1) It was referred by AECOM to ET on 28 July 2011</li> <li>2) 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.</li> <li>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.</li> <li>4) 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.</li> <li>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.</li> </ol> | Closed |
| 110723b           | 23/07/2011        | Ms. Yau at Block 2, Victoria Centre by ICC no. 1-304013959            | North Point             | Reclamation work was 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              | <ol style="list-style-type: none"> <li>1) It was referred by AECOM to ET on 8 August 2011</li> <li>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</li> <li>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.</li> <li>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.</li> </ol>   | Closed |
| 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  | <ol style="list-style-type: none"> <li>1) It was referred by AECOM to ET on 28 July 2011</li> <li>2) 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.</li> <li>3) No noise exceedance was recorded at construction noise</li> </ol>   | Closed |



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|                   |                   |                                  |                         | Central-Wanchai Bypass at noon rather than in morning at 7am.  | <p>monitoring station at Victoria Centre on 25 July and 4 August 2011 during daytime while breaking and excavation works were undertaken during monitoring.</p> <p>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.</p>   |        |
| 110727b           | 27/07/2011        | Ms. Chiu by ICC no.1-304615409   | North Point             | Noise nuisance from the excavation works for the Highways Department adjacent to the Victoria Centre was conducted from 7am  | <p>1) It was referred by AECOM to ET on 28 July 2011</p> <p>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.</p> <p>3) As a mitigation measure to minimize the noise nuisance in the vicinity of the residents, rock breaking activities will be started at 8am.</p>   | Closed |
|                   | 08/08/2011        |                                  |                         |  | <p>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.</p> <p>5) Highways contacted the complainant on 15 August 2011 that the noisy rock breaking operation had been completed.</p> <p><i>Remarks: There will be counted as two complaints in this complaint log.</i></p>   |        |
| 110810            | 10/08/2011        | Mr. Yip by ICC no. 1 - 306740207 | North Point             | Muddy water was discharged from work site to the seafront near Oil Street during heavy rain. The environmental protection measures were not good enough and are needed to rectify. | <p>1) It was referred by AECOM to ET on 17 August 2011.</p> <p>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.</p> <p>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.</p> <p>4) Contractors were advised to relocate the loose materials</p> | Closed |



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|                   |                   |  |                         |   | 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                | Construction noise and vibration nuisance generated from the works at Convention Avenue and inside the HKCEC1 reclamation area.                         | <ol style="list-style-type: none"> <li>1) Confirmed with the Resident Site Staff that the construction works were referred to the Contractor HK/2009/01.</li> <li>2) The Excavator mounted breaker at Convention Avenue and Drilling rig at HKCEC1 reclamation area were the dominant construction noise source during this period.</li> <li>3) The drilling rig at HKCEC1 reclamation area and excavator mounted breaker at Convention Avenue were then temporary suspended after received the complaint.</li> <li>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.</li> <li>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.</li> <li>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.</li> </ol> | Closed |
| 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. | <ol style="list-style-type: none"> <li>1) It was referred by AECOM to ET on 29 August 2011. Confirmed with the Resident Site Staff that the <ul style="list-style-type: none"> <li>• construction works were referred to the Contractors HY/2009/11 and HY/2009/19.</li> <li>• The pump is located on the site area of HY/2009/19</li> <li>• 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 exclude the outfall.</li> <li>• An ad hoc inspection of the effectiveness of garbage defender was conducted with RSS (CWB project</li> </ul> </li> </ol>  | Closed |





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|                   |                   |  |                         |  | <p>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.</p> <ul style="list-style-type: none"><li>• Daily cleaning near the water intake was conducted twice a day by contractor HY/2009/19.</li><li>• 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</li></ul> <p>2) According to the complaint letter from Cayley Property, the outcomes of the preventive measures were not complying with their expectation.</p> <p>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.</p> <p>4) All daily cleaning actions had been taken by contractor to minimize floating refuse inside the construction site.</p> <p>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.</p> <p>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.</p> <p>7) Contractors have fulfilled the requirement of site cleanliness and no exceedance was recorded during Water Quality Monitoring. It is considered 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</p> |        |
| 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) | <p>1) RSS notified ET to carry out investigation on 17 October 2011.</p> <p>2) 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 re-provision works along the Harbour Road. The plants including the excavator have been checked before using</p>  | Closed |



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|                   |                   |  |                         |   | <p>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.</p> <p>3) After receiving the complaint, the excavator was then removal off-site for checking and maintenance works on 17 October 2011.</p> <p>4) Contractor was reminded to enhance regular checking and maintenance to all plants at site.</p> <p>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.</p>   |        |
| 111104            | 04/11/2011        | Mr. Liu from LCS D 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. | <p>1) ET confirmed with the Resident Site Staff that</p> <ul style="list-style-type: none"><li>• 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.</li><li>• 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.</li></ul> <p>2) 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.</p> | Closed |
| 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   | <p>1) 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</p>  | Closed |



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|                   |                   |                               |                         |  | <p>CNP was checked by the police officer.</p> <ol style="list-style-type: none"><li>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.</li><li>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.</li><li>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. Furthermore, Construction Noise Permit should be checked and in place for the construction works during restricted hour</li><li>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.</li></ol> |        |
| 120405            | 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 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. | <ol style="list-style-type: none"><li>RSS notified ET on 5 April 2012.</li><li>ET confirmed with the Resident Site Staff that no piling works were performed during the concerned period.</li><li>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.</li><li>HyD made a reply to the complainant on 16 April 2012 via 1823. HyD replied that the current works at CBTS were drilling, diaphragm wall construction and deep excavations. In order to minimize the noise generated</li></ol>  | Closed |



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|                   |                   |                                |                         |  | 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. | <p>1) RSS notified ET on 8 March 2013</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>The contractor was advised and committed to implement preventive measures to minimize the potential impact of work including conducting regular diver check to ensure the integrity and the extend of silt curtain deployment and to provide adequate back up stock of silt curtain for emergency use.</p> | 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.   | <p>1) WSII RSS team notified ET on 12 June 2014; Notification letter from EPD (ref: EP/860/F2/24 Annex IV) was received by ET on 13 June 2014.</p> <p>2) ET confirmed with RSS that neither marine construction works nor barge operation was conducted at the concerned location during the time of complaint. With respect to the complaint case, muddy dispersion was observed at HKCEC2W works area on 12 June 2014, and</p>   | Closed |



| Complaint Log No. | Date of Complaint | Received From and Received By | Location of Complainant                  | Nature of Complaint   | Outcome   | Status   |
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|                   |                   |                               |  |   | <p>the dispersion was observed partly extended beyond the outermost layer silt curtain at 1000hrs. Immediate follow up action was requested.</p> <p>3) 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.</p> <p>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.</p> <p>The Contractor's investigation report on the complaint case was submitted to EPA via email on 18 June 2014.</p>  |  |
| 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. | <p>1) Construction noise impact referred by RSS was received by ET on 25 July 2014</p> <p>2) 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.</p> <p>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</p> <p>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."</p> | <p>Final report (Issue1) issued on 31 July 2014.</p> <p>Further to complainant follow-up, Final report (Issue2) Issued on 12 Aug 2014.</p> |



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|                   |                   |  |   |  | <p>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.</p> <p>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.</p>  |  |
| 141016            | 14/10/2014        | <p>EPD Ref.: EP860/E2/24 Annex IV</p> <p>ICC complaint received by ET on 10 October 2014</p> | Work site next to new Wan Chai Ferry Pier and opposite to Wan Chai Sports Ground. | Construction noise like piling works was heard on 14 October 2014 night until 23:45 hrs. It was suspected that the noise was emanated from the work site next to new Wan Chai Ferry Pier and opposite to Wan Chai Sports Ground. | <p>A public complaint regarding construction noise impact referred by EPD was received by ET on 16 October 2014 (EPD Ref.: EP860/E2/24 Annex IV dated 16 October 2014).</p> <p>The complainant reported that construction noise like piling works was heard on 14 October 2014 night until 23:45 hrs. It was suspected that the noise was emanated from the work site next to new Wan Chai Ferry Pier and opposite to Wan Chai Sports Ground.</p> <p>ET confirmed with the Resident Site Staff that From 19:00hrs to 23:00hrs on 14 October 2014, dredging works was conducted under Contractor of HK/2009/02 at WCR3 Area.</p> <p>Total one grab dredger was in operation. Mitigation measures including provision of steel sheeting screening to the power generation part of the grab dredger was implemented by the Contractor of HK/2009/02.</p> <p>From 23:00 hrs to 05:00 hrs, dredging works was conducted under Contractor of HK/2009/02 at WCR3 Area.</p> <p>Total one grab dredger was in operation. Mitigation measures including provision of steel sheeting screening to the power generation part of the grab dredger was implemented by the Contractor of HK/2009/02.</p> | <p>Interim investigation report submitted to EPD on 23 October 2014.</p> <p>Updated interim investigation with supplementary information submitted to EPD on 17 November 2014</p> <p>EPD</p> |



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|                   |                   |                               |                         |                     | <p>From 23:00 hrs to 06:00hrs, panel replacement works was conducted under Contractor of HK/2009/02 at the Temporary Covered Walkway.</p> <p>Total one scissor platform and two hand held drills (battery) were in operation.</p> <p>From 23:00 hrs to 06:00hrs, trial pit works was conducted under Contractor of HK/2009/02 at Hung Hing Road.Total one crane lorry was in operation.</p> <p>According to the relevant site records under Contract HK/2009/02, from 19:00hrs to 23:00hrs on 14 October 2014, dredging works was conducted under Contractor of HK/2009/02 at WCR3 Area. Total one grab dredger was in operation. Mitigation measures including provision of steel sheeting screening to the power generation part of the grab dredger was implemented by the Contractor of HK/2009/02.</p> <p>From 23:00 hrs to 05:00 hrs, dredging works was conducted under Contractor of HK/2009/02 at WCR3 Area.Total one grab dredger was in operation. Mitigation measures including provision of steel sheeting screening to the power generation part of the grab dredger was implemented by the Contractor of HK/2009/02.</p> <p>From 23:00 hrs to 06:00hrs, panel replacement works was conducted under Contractor of HK/2009/02 at the Temporary Covered Walkway. Total one scissor platform and two hand held drills (battery) were in operation.</p> <p>From 23:00 hrs to 06:00hrs, trial pit works was conducted under Contractor of HK/2009/02 at Hung Hing Road. Total one crane lorry was in operation.</p> <p>In view of the above findings, no direct information associated with the noise concern was considered available.</p> | advised no further comment on the updated interim report and case closed on 27 Nov 2014. |





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| 141110            | 07/11/2014        | EPD Ref.: H05/RS/000278 15-14<br><br>EPD complaint received by ET on 10 November 2014 | Construction site at old Wan Chai Ferry Pier | Malodour of construction plant exhaust from the construction site at old Wan Chai Ferry Pier was scented that affecting the swimmers at Wan Chai Swimming Pool. | <p>A public complaint regarding odour concern referred by EPD was received by ET on 07 November 2014 (EPD Ref.: H05/RS/00027815-14 dated 10 November 2014).</p> <p>The complainant reported that Malodour of construction plant exhaust from the construction site at old Wan Chai Ferry Pier was scented that affecting the swimmers at Wan Chai Swimming Pool.</p> <p>ET confirmed with the Resident Site Staff that</p> <p>ELS works was conducted on 7 November 2014 during daytime at Portion 2 (Area oppsite to WanChai Swimming Pool).</p> <p>Total 3 nos. of excavators, 2 nos. of crawler cranes, 2 nos. of generator, 1 no. of crane lorry and 2 no. of dump trucks were operated.</p> <p>Demolition works was conducted on 7 November 2014 during daytime at West of old Wan Chai Ferry Pier.</p> <p>Total 2 nos. of excavators, 1 no. of derrick barge and 1 no. of tug boat were operated.</p> <p>Dredging works was conducted on 7 November 2014 during daytime at WCR3 (East of old Wan Chai Ferry Pier)</p> <p>Total 1 no .of dredger, 1 no. of hopper and 1 no. of tug boat were operated.</p> <p>According to the relevant site records under Contract HK/2009/02, ELS works was conducted on 7 November 2014 during daytime at Portion 2 (Area oppsite to WanChai Swimming Pool). Total 3 nos. of excavators, 2 nos. of crawler cranes, 2 nos. of generator, 1 no. of crane lorry and 2 no. of dump trucks were operated. Demolition works was conducted on 7 November 2014 during daytime at West of old Wan Chai Ferry Pier. Total 2 nos. of excavators, 1 no. of derrick barge and 1 no. of tug boat were operated.</p> <p>Follow-up inspection was conducted during weekly environmental inspection on 13 November 2014, no dark smoke emission was observed from the PMEs operating on-site. The condition of chemical waste storage was considered satisfactory and no malodour was identified. Despite no information related to malodour was identified, the Contractor was reminded to conduct regular checking on the condition of PMEs to ensure only well maintained PMEs are used on site.</p> | <p>Interim investigation report submitted to EPD on 17 November 2014.</p> <p>EPD advised no comment on the interim report and case closed on 1 Dec 2014.</p> |



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|                   |                   |   |  |   | Based on the relevant information provided by RSS, despite no information associated with the malodour concern was identified after investigation, the Contractor was reminded to conduct regular checking on the condition of PME used on site to ensure only well maintained PME are used on site<br>The interim report would be submitted to EPD on 17 November 2014.  |   |
| 141113            | 12/11/2014        | EPD Ref.: H05/RS/000282 53-14<br><br>EPD complaint received by ET on 13 November 2014 | Construction site at old Wan Chai Ferry Pier | Malodour and dark smoke emission from an excavator located at the construction site at old Wan Chai Ferry Pier was observed that affecting the pedestrians. | <p>A public complaint regarding odour concern referred by EPD was received by ET on 13 November 2014 (EPD Ref.: H05/RS/00028253-14 dated 13 November 2014). The complainant reported that Malodour and dark smoke emission from an excavator located at the construction site at old Wan Chai Ferry Pier was observed that affecting the pedestrians. (Contract HK/2009/02)</p> <p>ET confirmed with the Resident Site Staff that demolition works was conducted under Contract HK/2009/02 on 12 November 2014 during daytime at old Wan Chai Ferry Pier. Total 2 nos. of excavators, 1 no. of derrick barge and 1 no. tug boat were operated.</p> <p>According to the relevant site records under Contract HK/2009/02, demolition works was conducted on 12 November 2014 during daytime at old Wan Chai Ferry Pier. Total 2 nos. of excavators, 1 no. of derrick barge and 1 no. tug boat were operated.</p> <p>In addition, investigation found that due to malfunctioning of one of the excavators deployed at old Wan Chai Ferry Pier, dark smoke was emitted from the defective excavator for a short period of approximately 30 seconds at around 15:00 hrs on 12 November 2014. The operation of excavator was immediately suspended and followed by repair works. The normal operation of the excavator was resumed after repair.</p> <p>Follow-up inspection was conducted during weekly environmental inspection on 13 November 2014, no dark smoke emission was observed from the PMEs operating on-site and the Contractor of HK/2009/02 was reminded to conduct regular checking on the condition of PMEs to ensure only well maintained PMEs are used on site.</p> | Interim investigation report submitted to EPD on 19 November 2014.<br><br>EPD advised no comment on the interim report and case closed on 8 Dec 2014. |



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| 141121            | Not Specified     | <p>EPD Ref: H08/RS/28263-14</p> <p>EPD complaint information and findings was received by ET via email on 21 Nov 2014</p>   | Causeway Bay Typhoon Shelter  | Resident in Hing Fat Street complaining about loud noise from dredging work in CBTS up to 10pm at night.             | <p>EPD received a construction noise complaint from dredging works at Causeway Bay Typhoon Shelter and a resident in Hing Fat Street complaining about loud noise from dredging work in CBTS up to 10pm at night.</p> <p>EPD investigation found that the operation of a derrick barge is covered by CNP no. GW-RS0701-14.</p> <p>EPD reminded the Contractor of HY/2011/08 to ensure the work strictly follow the permit conditions and endeavor to minimize the noise as so not to disturb the nearby residents.</p>  | Complaint case handled by EPD and relevant investigation findings was sent to ET on 21 November 2014  |
| 150127            | 21 Jan 2015       | <p>EPD complaint (EPD Ref.: H05/RS/00001725-15) received by ET on 27 January 2015 and further information from EPD regarding the updated location under complaint was received by ET on 30 January 2015</p> | A portion of Hung Hing Road immediately to the east of Marsh Road near SPCA | Construction dust and grit was emitted from the construction site to the carriageway causing nuisance to the public. | <p>A public complaint regarding air quality impact referred by EPD was received by ET on 27 January 2015 (EPD Case Ref.: H05/RS/00001725-15 dated 27 January 2015) and further information from EPD regarding the updated location under complaint was received by ET on 30 January 2015. The complainant reported that construction dust and grit was emitted from the construction site to the carriageway causing nuisance to the public.</p> <p>ET confirmed with the Resident Site Staff that the major construction activities around the concerned location conducted on 21 January 2015 include breaking of seawall blocks and D-wall at TPCWAW; concreting, grouting and drilling works at TPCWAW;reclamation/ backfilling works at TPCWAW</p> <p>Mitigation measures implemented by the Contractor for the above construction works include spraying haul road with water; covering bagged cement with tarpaulin; providing three sided and top covering for grouting stations; providing water spraying to dusty activities such as breaking works</p> <p>According to the relevant site records, breaking of seawall blocks and D-wall, concreting, grouting and drilling works and reclamation/ backfilling works were</p> | Interim report submitted to EPD on 9 February 2015, EPD advised no comment on 27 February 2016 on the interim report submitted and case closed. |



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|                   |                   |  |   |   | <p>conducted at TPCWAW. Dust mitigation measures including spraying haul road with water, covering bagged cement with tarpaulin, providing three sided and top covering for grouting stations and water spraying to dusty activities such as breaking works were implemented by the Contractor of HY/2009/15 near the concerned location on 21 January 2015.</p> <p>Follow-up investigation was conducted on 27 January 2015 during weekly environmental inspection, dust mitigation measures including water spraying for dusty haul road and major dust generation works; and provision of three sides and top covering for grouting station were confirmed in place.</p> <p>In addition, based on the review of the monitoring data of the monitoring station located at the concerned location raised by the complainant, namely monitoring station CMA3a , no action or limit level exceedance was recorded during air quality monitoring conducted on 20 and 21 January 2015. Nevertheless, the Air Quality Health Index (AQHI) recorded by EPD across Western District and Eastern District on the complaint date was ranged from 4 to 10+ indicating a severely high concentration of ambient air pollutants.</p> <p>As such, the site condition under Contract HY/2009/15 at the concerned location was considered to be generally satisfactory and no non-conformity related to cumulative air quality impact was observed. Nevertheless, in view of the public concern, the contractor was reminded to enhance the dust mitigation measures implemented to minimize potential nuisance to nearby public.</p> |   |
| 150622            | 18 June 2015      | EPD<br>Ref.:H05/RS/<br>00015054-15<br>dated 8 June | A mooring location near shore and at location outside Wan Chai Sports | Dark smoke and malodour emission was observed from a hopper barge moored near shore and | A public complaint regarding dark smoke and malodour concern referred by EPD was received by ET on 22 June 2015 (EPD Ref.: H05/RS/00015054-15 dated 22 June 2015). The complainant reported that dark smoke and malodour emission was observed from a hopper barge  | Interim report submitted to EPD on 29 June 2015 and EPD |



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|                   |                   | 2015                          | Ground                  | other construction plants under operation from the reclamation construction site | <p>moored near shore and other construction plants under operation from the reclamation construction site with Contract no. HK/2009/02 at location outside Wan Chai Sports Ground caused air pollution. The complainant alleged that the said situation had been observed for a prolonged period.</p> <p>ET confirmed with the Resident Site Staff that reinforced bar fixing and concreting work (on 17 June 2015 only) were conducted at Portion 2 from 15 June 2015 to 19 June 2015. Total 3 nos. of mobile crane were in operation. On 17 June 2015, one no. of concrete pump truck and two nos. of concrete mixer were in operation. Excavation and Lateral Support was conducted at Portions 3 &amp; 4 from 15 June 2015 to 19 June 2015. Total 4 nos. of excavator, 2 nos. of truck and 2 nos. of crawler crane were in operation. In addition, on 15 June 2015, 17 June 2015 and 19 June 2015, 1 no. of derrick barge was moored near Portions 3 &amp; 4 for transportation of the excavated material away from site.</p> <p>According to the relevant site records under Contract HK/2009/02, from 15 June 2015 to 19 June 2015, reinforced bar fixing and concreting work (on 17 June 2015 only) were conducted at Portion 2 and total 3 nos. of mobile crane, one no. of concrete pump truck (on 17 June 2015 only) and two nos. of concrete mixer (on 17 June 2015 only) were in operation; excavation and lateral support was conducted at Portions 3 &amp; 4 and total 4 nos. of excavator, 2 nos. of truck and 2 nos. of crawler crane were in operation. Based on relevant site record, no hopper barge was moored under Contract HK/2009/02 around the concerned location while 1 no. of derrick barge was moored under Contract HK/2009/02 near Portions 3 &amp; 4 for transportation of the excavated material from Portions 3 &amp; 4 away from site on 15 June 2015, 17 June 2015 and 19 June 2015 respectively.</p> <p>Follow-up inspection was conducted during weekly</p> | advised no comment on 20 July 2016 on the interim report submitted and case closed. |



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|                   |                   |  |   |                               | environmental inspection on 25 June 2015, no dark smoke and malodour emission was observed from the PME's operating on-site. A derrick barge was observed moored near Portions 3 & 4 and excavated material was transferred to the derrick barge by the excavators on land without barge operation and no particular dark smoke and malodour emission was observed. Nevertheless, the Contractor was reminded to conduct regular checking on the condition of the derrick barge and other PME's deployed on site to ensure only well maintained PME's are used to avoid potential dark smoke and maldour emission affecting nearby public.  |  |
| 150723            | 20 July 2015      | EPD Ref.:H05/RS/00018040-15 dated 23 July 2015 | Ex-Wanchai Ferry Pier near 720 & 722 Bus stop | Malodour from marine sediment | <p>A public complaint regarding malodour referred by EPD was received by ET on 23 July 2015 (EPD Ref.: H05/RS/00018040-15 dated 23 July 2015).</p> <p>The complainant reported that malodour from marine sediment was scented at ex-Wanchai ferry pier near route 720 &amp; 722 bus stop. (Contract HK/2009/02).</p> <p>ET confirmed with the Resident Site Staff that Rockfill placing works was conducted by one derrick barge at the concerned location (WCR3) under Contract HK/2009/02 on 20 July 2015. No marine sediment was stored or placed on site at the concerned location under Contract HK/2009/02 on 20 July 2015.</p> <p>According to the relevant site records under Contract HK/2009/02, rockfill placing works was conducted by one derrick barge at WCR3 area on 20 July 2015 and no marine sediment was stored or placed on site at the concerned location on the concerned date.</p> <p>Follow-up inspection was conducted during weekly environmental inspection on 29 July 2015. No marine sediment was observed stored or placed at the concerned location while it was noted that a culvert outfall with potential odour concern is located adjacent to the concerned location.</p> | Interim report submitted to EPD on 30 July 2015. EPD advised no comment on 17 August 2015 on the interim report submitted and case closed. |



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|                   |                   |  |                                |  | Nevertheless, the Contractor was reminded to review the handling procedures in case of any future marine sediment handling at the concerned location and to consider the implementation of mitigation measures as appropriate to minimize potential malodour impact to nearby public.  |  |
| 150904            | 01 Sept 2015      | EPD Ref.: H05/RS/0002 2241-15 dated 04 September 2015 received by ET on 4 September 2015 | East of New WanChai Ferry Pier | Dropping of excavated material from land to sea during loading of material | <p>A public complaint regarding dropping of excavated material from land to sea referred by EPD was received by ET on 04 September 2015 (EPD Ref.: H05/RS/00022241-15 dated 04 September 2015). The complainant reported that dropping of excavated materials from land to sea during loading of materials by excavator at the construction site to work boat. (Contract HK/2009/02)</p> <p>ET confirmed with the Resident Site Staff that transferring of C&amp;D materials from land to hopper barge by excavator at seaside along CWB Tunnel Portions 3 and 4 was undertaken by Contract HK/2009/02 on 01 September 2015.</p> <p>Mitigation measure including providing tarpaulin sheet to cover the gap between seawall and the hopper barge to prevent dropping of material to the sea was implemented by the Contractor.</p> <p>According to the relevant site records under Contract HK/2009/02, transferring of C&amp;D materials from land to hopper barge by excavator at seaside along CWB Tunnel Portions 3 and 4 was carried out on 01 September 2015 and mitigation measures including provision of tarpaulin sheet between seawall and the hopper barge was implemented by the Contractor of HK/2009/02 on the concerned date. Follow-up inspection was conducted during weekly environmental inspection on 10 September 2015. Transferring of C&amp;D materials from land to barge by excavator was observed at the concerned location and mitigation measures including provision of tarpaulin sheet between seawall and hopper</p> | Interim report submitted to EPD on 14 September 2015. EPD advised no comment on 5 October 2015 on the interim report submitted and case closed |





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|                   |                   |   |                               |   | <p>barge and the material transfer works was generally in order. Nevertheless, the Contractor of HK/2009/02 was reminded to maintain the handling procedure for C&amp;D materials transfer from land to hopper barge and regularly inspect the condition of the tarpaulin sheet provided to ensure the nearby water quality are not affected by the loading and unloading of material from land side to hopper barge.</p> <p>The Contractor was reminded to maintain the handling procedure for C&amp;D materials transfer from land to hopper barge and regularly inspect the condition of the tarpaulin sheet provided to ensure the nearby water quality are not affected by the loading and unloading of material from land side to hopper barge.</p>   |  |
| 150904            | 02 Sept 2015      | EPD Ref.: H04/RS/0002 2385-15 dated 04 September 2015 received by ET on 04 September 2015 | Location outside Fleet Arcade | Construction noise was generated from the construction site of HK/2012/08 at location outside Fleet Arcade during night time on weekdays and daytime during General Holidays. The complainant also concerned construction dust and exhaust emission from derrick barges during transporting C&D material at the site. | <p>A public complaint regarding construction noise and dust and exhaust emission referred by EPD was received by ET on 04 September 2015 (EPD Ref.: H04/RS/00022385-15 dated 04 September 2015). The complainant reported that construction noise was generated from the construction site of HK/2012/08 at location outside Fleet Arcade during night time on weekdays and daytime during General Holidays. The complainant also concerned construction dust and exhaust emission from derrick barges during transporting C&amp;D material at the site. (Contract HK/2012/08) ET confirmed with the Resident Site Staff that from 0800 hrs to 1800 hrs on 30 August 2015, removal of scaffold and timber and installation of bulkhead was undertaken by the Contractor of HK/2012/08 at the concerned location. Total one generator and one circular saw were in operation.</p> <p>From 1900hrs on 30 August 2015 to 0700 on 31 August 2015, no construction works was undertaken by the Contractor of HK/2012/08 at the concerned location.</p> | <p>Interim report submitted to EPD on 14 September 2015.</p> <p>2<sup>nd</sup> interim report submitted to EPD on 17 Dec 2015</p> <p>3<sup>rd</sup> interim report submitted to EPD on 31 Dec 2015</p> |



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|                   |                   |                               |                         |                     | <p>From 1900hrs on 31 August 2015 to 0700hrs on 01 September 2015, no construction works was undertaken by the Contractor of HK/2012/08 at the concerned location.</p> <p>From 1900hrs to 2115 hrs on 01 September 2015, unloading of soil was undertaken by the Contractor of HK/2012/08 at the concerned location. Total one derrick barge was in operation.</p> <p>From 2300hrs on 01 September 2015 to 0700hrs on 02 September 2015, no construction works was undertaken by the Contractor of HK/2012/08 at the concerned location. One derrick barge was deployed for unloading of soil on 02 September 2015 during daytime under Contract HK/2012/08 at the concerned location.</p> <p>Based on the relevant site records, from 0800 hrs to 1800 hrs on 30 August 2015, removal of scaffold and timber and installation of bulkhead was undertaken by the Contractor of HK/2012/08 at the concerned location. Total one generator and one circular saw were in operation and the relevant Construction Noise Permit GW-RS0296-15 for the concerned operation was confirmed in place.</p> <p>From 1900hrs on 30 August 2015 to 0700 on 31 August 2015, no construction works was undertaken by the Contractor of HK/2012/08 at the concerned location and from 1900hrs on 31 August 2015 to 0700hrs on 01 September 2015, no construction works was undertaken by the Contractor of HK/2012/08 at the concerned location.</p> <p>From 1900hrs to 2115 hrs on 01 September 2015, unloading of soil was undertaken by the Contractor of HK/2012/08 at the concerned location. Total one derrick barge was in operation and the Construction Noise Permit GW-RS0296-15 for the concerned operation was confirmed in place.</p> |        |



| Complaint Log No. | Date of Complaint | Received From and Received By                                  | Location of Complainant  | Nature of Complaint  | Outcome  | Status  |
|-------------------|-------------------|--|--|--|--|---|
|                   |                   |  |  |  | <p>From 2300hrs on 01 September 2015 to 0700hrs on 02 September 2015, no construction works was undertaken by the Contractor of HK/2012/08 at the concerned location. In view of the above, the construction activities conducted under Contract HK/2012/08 during the concerned period was in compliance with the statutory requirement.</p> <p>In addition, one derrick barge was deployed for unloading of soil on 02 September 2015 during daytime under Contract HK/2012/08 at the concerned location. Follow-up inspection was conducted during weekly environmental inspection on 08 September 2015 and no dark smoke emission was observed from the derrick barge moored outside the concerned location. Nevertheless, the Contractor of HK/2012/08 was reminded to conduct regular checking on the condition of the all derrick barges deployed on site to ensure only well maintained equipment are used to avoid potential dark smoke emission affecting nearby public and the Contractor of HK/2012/08 was reminded to upkeep the site control system for construction works carrying out at restricted hours and night time for Construction Noise Permit compliance.</p> <p>The Contractor was reminded to conduct regular checking on the condition of derrick barges deployed on site to ensure only well maintained equipments are used on site to avoid potential dark smoke emission affecting nearby public.</p> <p>The Contractor of HK/2012/08 was reminded to upkeep the site control system for construction works carrying out at restricted hours and night time for Construction Noise Permit compliance.</p> |   |
| 150917            | 17 Sep 2015       | A public complaint regarding water quality referred by EPD was | Central and Wan Chai Reclamation coastline (between LUNG WUI ROAD to LUNG WO ROAD, | Silt from Central and Wan Chai Reclamation was spotted along the coastline (between LUNG WUI ROAD to LUNG WO ROAD, Central & Wan | Based on the site records confirmed by RSS, removal of seawall blocks by derrick barge was undertaken by Contract HK/2012/08 at Central Reclamation Phase III works area while mitigation measures including provision of silt curtain implemented by the Contractor of HK/2012/08 during the  | Interim investigation report submitted to EPD on 25 |



| Complaint Log No. | Date of Complaint | Received From and Received By   | Location of Complainant   | Nature of Complaint  | Outcome   | Status   |
|-------------------|-------------------|---|---|--|---|--|
|                   |                   | received by ET on 17 September 2015   | Central & Wan Chai, Hong Kong)                                  | Chai, Hong Kong)   | <p>seawall block removal works. According to relevant record, muddy dispersion at HKCEC2W (area opposite to Lung King Street) was observed by the Environmental Team on 14 September 2015 afternoon. The muddy patch was observed dispersing outside the outer layer silt curtain deployed by the Contractor of HK/2012/08 towards the Central Reclamation Phase III area while the outer layer silt curtain was observed partially opened.</p> <p>In view of the above observations, the Contractor was advised to rectify any environmental deficiencies such that adequate protection such as silt curtain shall be provided for exposed soil slope to mitigate for potential runoff related water quality impact to the surrounding waters; outer layer silt curtain deployed shall be entirely closed during works to safeguard the surrounding water quality. Any opening for marine vessel shall be closed promptly after passage and localized silt curtain deployed on site shall be properly maintained to avoid any gap or opening to effectively safeguard the nearby waters.</p>   | September 2015. EPD advised no comment on 14 October 2015 and case closed.   |
| 151015            | 11 Oct 2015       | A public complaint regarding direct discharge of muddy effluent referred by RSS was received by ET on 14 October 2015 | Seafront opposite to Watson Road adjacent to Eastern Breakwater | Pink fluid was observed discharged into marine waters at seafront opposite to Watson Road adjacent to the Eastern Breakwater on 11 October 2015. | <p>Based on the site records confirmed by RSS, no construction activity near the seaside between Eastern Breakwater and the Dumping Jetty was undertaken by Contract HY/2009/19 while at site area away from the seawall, construction of EVB substructure, EVB and APS structure was undertaken on 11 October 2015. In addition, no works involving the use of paint was carried out at the concerned site area (Site Portion between Eastern Breakwater and the Dumping Jetty) and along the alignment of the Culvert T1 under Contract HY/2009/19 and no temporary storage of paint was located at the concerned site area and along the alignment of the Culvert T1 under HY/2009/19 on 11 October 2015.</p> <p>Follow-up inspection was conducted during weekly environmental inspection on 14 October 2015. No construction works involving the use of paint was observed undertaken at the concerned location while a few number of small containers of paint was observed placed around the concerned location and the paint containers were sealed and no sign of leakage was observed. The few containers were further checked and was found not matching the pink fluid observed on the complaint date. On the other hand, a culvert discharge outfall was found located within the concerned area where the pink fluid was observed.</p> <p>Based on the above, no direct information indicating the pink</p> | HyD will consolidate all input from relevant parties to form a reply to ICC. |



| Complaint Log No. | Date of Complaint | Received From and Received By  | Location of Complainant                                      | Nature of Complaint  | Outcome  | Status   |
|-------------------|-------------------|--|--|--|--|--|
|                   |                   |  |  |  | fluid was originated from the worksarea under HY/2009/19 was considered available. Nevertheless, the Contractor was reminded that paints stored on site shall be properly labelled and stored in sealed container at weather proof location to avoid potential spillage.   |  |
| 151028            | 26 Oct 2015       | A public complaint regarding construction noise impact referred by EPD was received by ET on 28 October 2015 (EPD Ref:H05/RS/00 027330-15 Dated 28 October 2015) | Construction Site next to ex-Wan Chai Ferry Pier             | Operation of grab dredger at construction site near the ex-Wan Chai Ferry Pier from around 0100 to 0400 hours on 26 October 2015 caused noise nuisance.  | <p>According to the relevant site records under Contract HK/2009/02, from 01:00hrs to 04:00hrs on 26 October 2015, rock filling was conducted under Contractor of HK/2009/02 at WCR3 Area. Total one grab dredger was in operation. Mitigation measures including provision of steel sheeting screening to the power generation part of the grab dredger was implemented by the Contractor of HK/2009/02 and the relevant Construction Noise Permit</p> <p>GW-RS1121-15 for the concerned construction works was in place.</p> <p>The construction activity conducted under Contract HK/2009/02 during the concerned period was in compliance with the statutory requirement. Nevertheless, the Contractor was reminded to upkeep the site control system for construction works carrying out at restricted hours and night time for Construction Noise Permit compliance in view of the nearby public concern.</p>  | The interim report would be submitted to EPD on 05 November 2015 and EPD advised no comment on 16 November 2016 and case closed.   |
| 151116            | 13 November 2015  | A public complaint regarding water quality referred by EPD was received by ET on 16 November 2015 (EPD Ref: H05/RS/000291 26-15)                                 | Construction Site at HKCEC and seafront outside Lung Wo Road | Muddy water was discharged from the construction site at HKCEC and dispersed to seafront outside Lung Wo Road on 13 November 2015 afternoon. The complainant also alleged that the deployment of the silt curtain did not follow the design requirement under the environmental permit that the curtain should be hanged to seabed level | <p>Based on the site records, rock mound trimming works was conducted under Contract HK/2012/08 at HKECE2 area on 13 November 2015 and mitigation measures including provision of localized silt curtain around the works area was implemented by the Contractor. Follow-up inspection was conducted during weekly environmental inspection on 17 November 2015, both outer layer silt curtain and localized layer of silt curtain around the active works area were observed deployed while the localized silt curtain deployed around the marine works area was observed partially opened for marine access. Despite no muddy dispersion was generated around the localized silt curtain enclosed area, the Contractor was advised to promptly improve the condition of the silt curtain to ensure the effectiveness of the mitigation measure deployed and to ensure the silt curtain is closed after marine vessel movement.</p> <p>Based on further review on the current construction stage at HKECE2, the dredging works and trench filling works were completed and filling works were conducted behind seawall or temporarily seawall in form of rockbund, the outer layer of silt curtain currently serves as the additional mitigation measure to</p> | The interim investigation report would be submitted to EPD on 1 December 2015 and record of diving inspection conducted on 27 November 2016 was forwarded to EPD on 4 Dec 2016. EPD advised no further comment on 14 Dec 2015 and case closed. |



| Complaint Log No. | Date of Complaint | Received From and Received By   | Location of Complainant                           | Nature of Complaint                          | Outcome   | Status   |
|-------------------|-------------------|---|---|--|---|--|
|                   |                   |   |   |  | <p>the required silt curtain deployment for safeguarding the water quality in the area. To clarify for the current silt curtain arrangement, the Contractor was advised to submit an updated silt curtain deployment plan with respect to the latest silt curtain arrangement for the current construction stage. In addition, contaminated discharge at Culvert L originating from upstream locations was intermittently observed based on previous site records. Nevertheless, in view of the public concern, the Contractor was reminded to conduct regular checking on the condition and maintenance for the silt curtain deployed on site to ensure the effectiveness of the mitigation measure.</p> <p>A joint meeting for the complaint was held amongst the EPD, WDII RSS team, the ET and the Contractor of HK/2012/08 on 24 November 2015 and a joint silt curtain diver inspection check amongst EPD, ET, IEC, WDII RSS and the Contractor was conducted on 27 November 2015 to confirm the silt curtain condition and the silt curtain deployed at the HKCEC2 water channel was found generally in order.</p> |  |
| 160413 (HK201208) | 13 April 2016     | A public complaint referred by EPD was received by ET on 13 April 2016 (EPD Ref.: H05/RS/00008367-16 dated 13 April 2016) | Outside the Hong Kong Academy for Performing Arts | Muddy water discharge from construction site | <p>A public complaint regarding muddy water discharge referred by EPD was received by ET on 13 April 2016 (EPD Ref.: H05/RS/00008367-16 dated 13 April 2016). The complainant reported that muddy water was discharged from the construction work of Contract HK/2012/08 to the sea outside the Hong Kong Academy for Performing Arts on 13 April 2016 morning.</p> <p>ET confirmed with the Resident Site Staff that internal transport of soil to the hopper barge for storage via landing barge was conducted by Contractor of HK/2012/08 during 0800 hours to 1000 hours on 13 April 2016 at the sea outside the concerned location and 3 nos. of dump trucks were deployed for the operation.</p> <p>Protection measure including provision of sandbag bunding along the side of the landing barge was implemented by the Contractor of HK/2012/08.</p> <p>According to the relevant site records provided by RSS, internal transport of soil to the hopper barge for storage via landing barge was conducted by Contractor of HK/2012/08 during 0800 hours to 1000 hours on 13</p>                                  | <p>Interim investigation report was submitted to the EPD on 21 April 2016.</p> <p>EPD advised no further comment on 6 June 2016 on the interim report submitted and case closed.</p> |



| Complaint Log No. | Date of Complaint | Received From and Received By                                    | Location of Complainant                           | Nature of Complaint   | Outcome  | Status   |
|-------------------|-------------------|--|---|---|--|--|
|                   |                   |  |   |   | <p>April 2016 at the sea outside the concerned location and 3 nos. of dump trucks were deployed for the operation. Protection measure including provision of sandbag bunding along the side of the landing barge was implemented by the Contractor of HK/2012/08. In addition, amber rainstorm warning signal was hoisted from 0630 hours to 1200 hours on 13 April 2016 and during the above time period, muddy water was observed from the upstream of culvert L outside the HK/2012/08 site.</p> <p>Follow up inspection was conducted on 19 April 2016, protection measures including provision of sandbag bunding along the side of the landing barge was implemented and no mud or soil deposition was observed along the seawall and no discharge point was located within the temporary water channel connecting the Culvert L outfall location to the Victoria Harbour. In addition, piling works was observed at the north side of Zone A1 on 19 April 2016 and construction effluent collection from piling work via sedimentation tank to wastewater treatment facility was implemented and steel barrier was installed around the piling works area to mitigate against potential surface runoff related impact.</p> <p>Nevertheless, in view of the public concern, the Contractor was reminded to maintain adequate perimeter embankment protection along the seawall boundary and maintain proper construction effluent collection system to avoid potential runoff related impact to nearby waters.</p> |  |
| 160706            | 30 June 2016      | A public complaint referred by EPD was received by ET on 06 July | Construction area near Royal Hong Kong Yacht Club | Derrick barge moored near Royal Hong Kong Yacht Club emitted dark smoke since mid of June 2016. | A public complaint referred by EPD was received by ET on 06 July 2016 (Case Ref.: H05/RS/0016226-16). The complainant reported that a derrick barge in green colour under Contract HY/2009/15 moored near Royal Hong Kong Yacht Club emitted dark smoke since mid of June 2016.  | Interim report was submitted to EPD on 14 July 2016. |





| Complaint Log No. | Date of Complaint | Received From and Received By          | Location of Complainant | Nature of Complaint | Outcome  | Status   |
|-------------------|-------------------|--|-------------------------|---------------------|--|--|
|                   |                   | 2016 (Case Ref.: H05/RS/00016 226-16), |                         |                     | <p>ET confirmed with Resident Site Staff that the concerned green derrick barge was identified as Yue Fat 206 (YF 206) and the concerned green derrick barge was operated within the Ex-PCWA area for excavation works intermittently across the period from 15 June 2016 to 30 June 2016. The concerned green derrick barge YF206 within Ex-PCWA area was no longer deployed under Contract HY/2009/15 after 02 July 2016.</p> <p>Follow-up inspection was conducted on 11 July 2016, the concerned derrick barge YF206 was not deployed at the concerned location and no dark smoke was observed from other derrick barge operating on-site. Nevertheless, in view of the public concern, the Contractor of HY/2009/15 was reminded to conduct regular checking and maintenance of all derrick barges deployed on site to ensure only well maintained equipment is used to avoid potential dark smoke emission affect nearby surroundings.</p> | EPD advised no further comment on 20 September 2016 on the interim report submitted and case closed. |



| Complaint Log No. | Date of Complaint | Received From and Received By   | Location of Complainant  | Nature of Complaint                                      | Outcome  | Status  |
|-------------------|-------------------|---|--|--|--|---|
| 160825            | 25 August 2016    | A public complaint referred by EPD was received by ET on 25 August 2016 (Case Ref.: H08/RS/00012592-16) | East of Temporary Reclamation Zone TS3, Causeway Bay Typhoon Shelter | Muddy water was observed at Causeway Bay Typhoon Shelter | <p>A public complaint referred by EPD was received on 25 August 2016 (Case Ref.: H08/RS/00012592-16). The complainant reported that muddy water was observed at Causeway Bay Typhoon Shelter.</p> <p>ET confirmed with the Resident Site Staff that no marine construction activities were undertaken at the concerned location at East of Temporary Reclamation Zone TS3 within Causeway Bay Typhoon Shelter from 14:00hrs to 17:00hrs on 25 May 2016. Site control measures including the following were implemented by the Contractor of HY/2010/08 around the concerned location. Site control measures including i) Wastewater treatment facilities (AquaSed) were installed at TS3 for treatment of wastewater generated during construction activities. Sampling of effluent from AquaSed was conducted by the Contractor of HY/2010/08 and all results complied with the requirements in the Discharge Licence. Visual inspection and pH measurement of effluent were conducted daily by Environmental Supervisors and all results passed. ii) Brick/ earth/ sandbag bunds were installed alongside the site perimeter of TS3 to prevent muddy runoff into the sea. iii) Piping with idled ends were removed to prevent accidental discharge of untreated wastewater. iv) Diver inspection for silt curtains and/ or impermeable barriers was conducted on an ad-hoc basis. vii) Temporary cut slopes were shotcreted or properly covered with tarpaulin sheets. viii) Regular inspections were conducted by the RSS and Contractor's environmental representatives on regular basis on the conditions of mitigation measures implemented on site.</p> <p>Based on the complainant photo information, the exposed soil slope at Temporary Reclamation Zone TS3 were observed protected by covering and enclosed by double layer of impermeable barrier/ silt curtain and no contaminated discharge was identified. In addition, based on information from Hong Kong Observatory, the tidal condition on 25 May 2016 afternoon was found to</p> | <p>The Interim investigation report was submitted to EPD on 2 September 2016.</p> <p>EPD advised no further comment on 31 October 2016 on the interim report submitted and case closed.</p> |



| Complaint Log No. | Date of Complaint | Received From and Received By | Location of Complainant | Nature of Complaint | Outcome  | Status |
|-------------------|-------------------|-------------------------------|-------------------------|---------------------|--|--------|
|                   |                   |                               |                         |                     | <p>be ebb-tide while non construction works marine vessel movements around the identified muddy plume within Causeway Bay Typhoon Shelter was observed in the complainant photo information.</p> <p>Based on review on relevant records, no contaminated surface runoff and no contaminated discharge was identified at the concerned location during the environmental site inspection conducted on 25 May 2016. Follow up inspection was conducted on 31 August 2016 and seawall construction and filling works at the Temporary Reclamation Zone TS3 was observed completed. No contaminated discharge and no contaminated surface runoff was found.</p> <p>Nevertheless, the contractor of HY/2010/08 was reminded to maintain appropriate bunding at seawall boundary for protection against potential surface runoff related impact. Also, the Contractor of HY/2010/08 was reminded to maintain proper site drainage for effluent collection and treatment system to ensure the compliance with relevant discharge license.</p> |        |





***Appendix 10.1***

***Construction Programme of Individual Contracts***

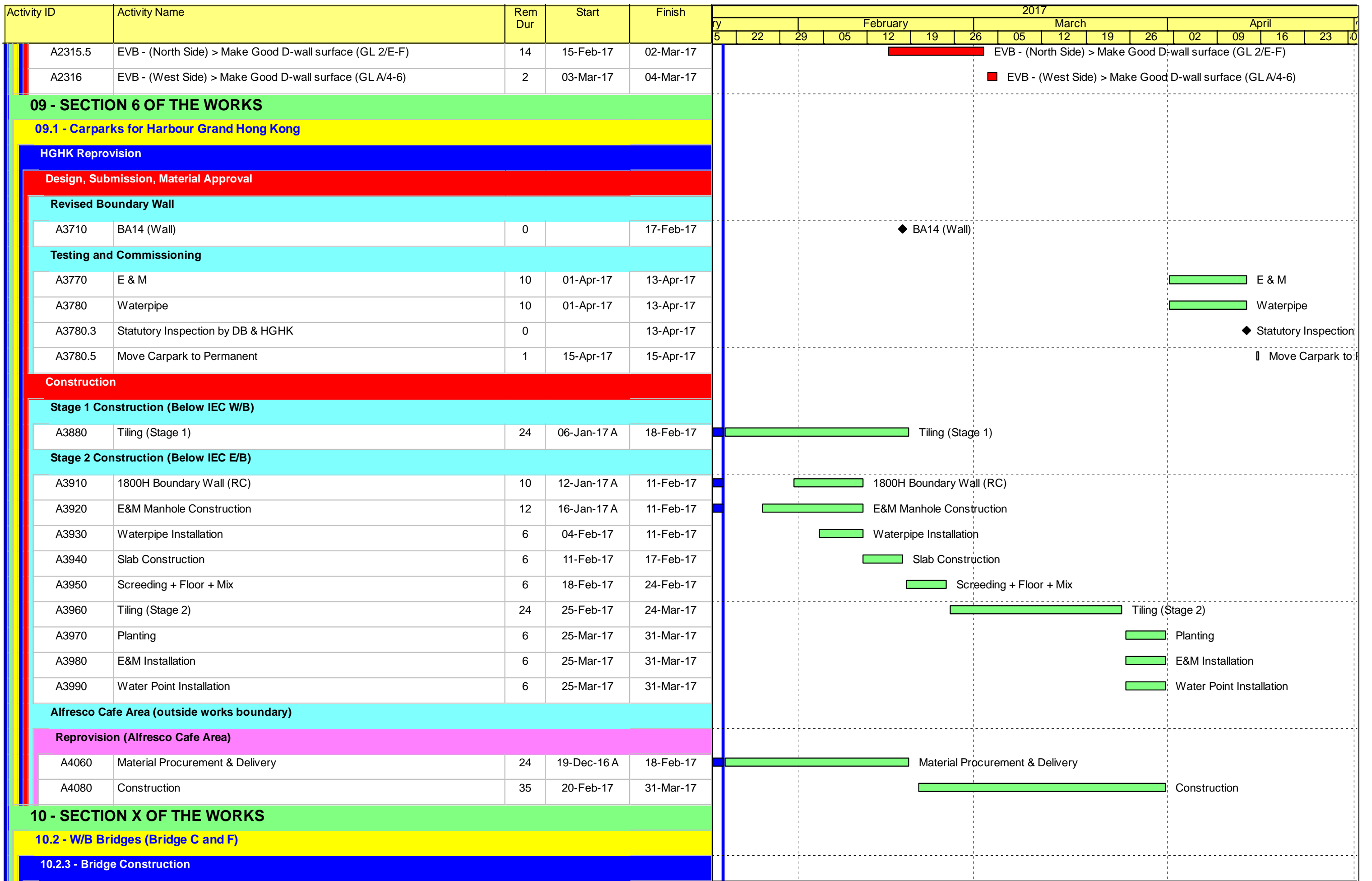
Contract No. HK/2009/01  
Wan Chai Development Phase II – Central -Wan Chai Bypass at  
Hong Kong Convention and Exhibition Centre

## **Construction Activities For Three Months Rolling**

| Construction Activities       | Dec<br>2016  | Jan<br>2017 | Feb<br>2017 | Mar<br>2017 | Apr<br>2017 |
|-------------------------------|--|-------------|-------------|-------------|-------------|
| Reinstatement of Amenity Area |  |             |             |             |             |
| Road and Drain Works          |  |             |             |             |             |

| Activity ID   | Activity Name  | Rem Dur | Start       | Finish    | 2017    |    |    |    |   |          |    |    |    |       |    |    |    |       |    |  |    |
|---|--|---------|-------------|-----------|---------|----|----|----|---|----------|----|----|----|-------|----|----|----|-------|----|--|----|
|   |  |         |             |           | January |    |    |    |   | February |    |    |    | March |    |    |    | April |    |  |    |
|   |  |         |             |           | 5       | 12 | 19 | 26 | 3 | 10       | 17 | 24 | 31 | 7     | 14 | 21 | 28 | 5     | 12 | 19   | 26 |
| <b>3MRP - Jan 2017 to Apr 2017</b>                                |  |         |             |           |         |    |    |    |   |          |    |    |    |       |    |    |    |       |    |  |    |
| <b>02 - PRE-CONSTRUCTION WORKS</b>                                |  |         |             |           |         |    |    |    |   |          |    |    |    |       |    |    |    |       |    |  |    |
| <b>02.3 - Method Statement / Shop Drawings</b>                    |  |         |             |           |         |    |    |    |   |          |    |    |    |       |    |    |    |       |    |  |    |
| 0230-1410   | MS Landscape Deck Structure - ER Approval                    | 28      | 20-Jan-17   | 16-Feb-17 |         |    |    |    |   |          |    |    |    |       |    |    |    |       |    | MS Landscape Deck Structure - ER Approval                    |    |
| 0240-1280   | Landscaping Design - ER Review/Resubmission                  | 28      | 20-Jan-17   | 16-Feb-17 |         |    |    |    |   |          |    |    |    |       |    |    |    |       |    | Landscaping Design - ER Review/Resubmission                  |    |
| 0240-1290   | Landscaping Design - ER Approval                             | 28      | 07-Dec-16 A | 16-Mar-17 |         |    |    |    |   |          |    |    |    |       |    |    |    |       |    | Landscaping Design - ER Approval                             |    |
| 0240-1295   | Landscaping Design - Fabrication & Delivery                  | 28      | 17-Mar-17   | 13-Apr-17 |         |    |    |    |   |          |    |    |    |       |    |    |    |       |    | Landscaping Design   |    |
| 0240-1297   | Green Wall Minimum 2 years Establishment - Finish            | 0       |             | 20-Apr-17 |         |    |    |    |   |          |    |    |    |       |    |    |    |       |    | ◆ Green Wall   |    |
| 0240-1298   | Green Roof Minimum 2 years Establishment - Start             | 0       | 04-Feb-17   |           |         |    |    |    |   |          |    |    |    |       |    |    |    |       |    | ◆ Green Roof Minimum 2 years Establishment - Start           |    |
| 0240-2470   | MS for for trial erection of green roof - No Adverse Comment | 15      | 30-Oct-16 A | 03-Feb-17 |         |    |    |    |   |          |    |    |    |       |    |    |    |       |    | MS for for trial erection of green roof - No Adverse Comment |    |
| <b>02.5 - Bridge Segment/Beam Off-site Precasting</b>             |  |         |             |           |         |    |    |    |   |          |    |    |    |       |    |    |    |       |    |  |    |
| 0250-4015   | Bridge F2B - Pier F3B Segment - 5 nos. - Mould 2             | 29      | 20-Jan-17   | 24-Feb-17 |         |    |    |    |   |          |    |    |    |       |    |    |    |       |    | Bridge F2B - Pier F3B Segment - 5 nos. - Mould 2             |    |
| 0250-4016   | Bridge F2B - Pier F4B Segment - 7 nos. - Mould 2             | 23      | 25-Feb-17   | 23-Mar-17 |         |    |    |    |   |          |    |    |    |       |    |    |    |       |    | Bridge F2B - Pier F4B Segment - 7 nos. - Mould 2             |    |
| 0250-4017   | Bridge F1B2 - Pier D12 Segment - 6 nos. - Mould 2            | 24      | 24-Mar-17   | 24-Apr-17 |         |    |    |    |   |          |    |    |    |       |    |    |    |       |    | Bridge   |    |
| 0250-4018   | Bridge F1B2 - Pier F2B Segment - 6 nos. - Mould 2            | 23      | 25-Apr-17   | 22-May-17 |         |    |    |    |   |          |    |    |    |       |    |    |    |       |    |  |    |
| 0250-4045   | Bridge F3B - Pier F6B & F7B Segment - 11 nos. - Mould 1      | 52      | 20-Jan-17*  | 23-Mar-17 |         |    |    |    |   |          |    |    |    |       |    |    |    |       |    | Bridge F3B - Pier F6B & F7B Segment - 11 nos.                |    |
| 0250-4050   | Bridge F2B - Pier F4B Segment - 6 nos. - Mould 1             | 18      | 24-Mar-17   | 15-Apr-17 |         |    |    |    |   |          |    |    |    |       |    |    |    |       |    | Bridge F2B - Pier  |    |
| 0250-4055   | Bridge F1B2 - Pier F1B Segment - 6 nos. - Mould 1            | 20      | 18-Apr-17   | 11-May-17 |         |    |    |    |   |          |    |    |    |       |    |    |    |       |    |  |    |
| 0250-4100   | Bridge F1B1 - Abut D12 Segment - 5 nos. - Mould 3            | 15      | 06-Mar-17*  | 22-Mar-17 |         |    |    |    |   |          |    |    |    |       |    |    |    |       |    | Bridge F1B1 - Abut D12 Segment - 5 nos. - Mould              |    |
| 0250-4110   | Bridge F1B1 - Pier F1A Segment - 13 nos. - Mould 3           | 36      | 23-Mar-17   | 08-May-17 |         |    |    |    |   |          |    |    |    |       |    |    |    |       |    |  |    |
| A3160   | Delivery of Segments - Bridge F3B                            | 14      | 11-Mar-17   | 27-Mar-17 |         |    |    |    |   |          |    |    |    |       |    |    |    |       |    | Delivery of Segments - Bridge F3B                            |    |
| A3170   | Delivery of Segments - Bridge F2B                            | 18      | 28-Mar-17   | 20-Apr-17 |         |    |    |    |   |          |    |    |    |       |    |    |    |       |    | Delivery of  |    |
| <b>05 - SECTION 2 &amp; 2A OF THE WORKS</b>                       |  |         |             |           |         |    |    |    |   |          |    |    |    |       |    |    |    |       |    |  |    |
| <b>05.1 - Cut &amp; Cover Tunnel Ch 4855-4932 (APS Footprint)</b> |  |         |             |           |         |    |    |    |   |          |    |    |    |       |    |    |    |       |    |  |    |
| <b>05.1.6 - EVB Sub-structure &amp; Tunnel</b>                    |  |         |             |           |         |    |    |    |   |          |    |    |    |       |    |    |    |       |    |  |    |
| <b>05.1.7 - EVB &amp; Tunnel Remedial Works</b>                   |  |         |             |           |         |    |    |    |   |          |    |    |    |       |    |    |    |       |    |  |    |
| A2275   | EVB - Rectification of Concrete Defects to Plenum B1-07      | 12      | 20-Feb-17   | 04-Mar-17 |         |    |    |    |   |          |    |    |    |       |    |    |    |       |    | EVB - Rectification of Concrete Defects to Plenum B1-07      |    |
| A2276   | EVB - Rectification of Concrete Defects to Vent Shaft B1-18  | 5       | 14-Feb-17   | 18-Feb-17 |         |    |    |    |   |          |    |    |    |       |    |    |    |       |    | EVB - Rectification of Concrete Defects to Vent Shaft B1-18  |    |
| A2277   | EVB - Rectification of Concrete Defects to Plenum B1-24 & 26 | 10      | 02-Feb-17   | 13-Feb-17 |         |    |    |    |   |          |    |    |    |       |    |    |    |       |    | EVB - Rectification of Concrete Defects to Plenum B1-24 & 26 |    |
| A2278   | EVB - Rectification of Concrete Defects to Plenum B1-23      | 6       | 24-Jan-17   | 01-Feb-17 |         |    |    |    |   |          |    |    |    |       |    |    |    |       |    | EVB - Rectification of Concrete Defects to Plenum B1-23      |    |
| A2279   | EVB - Rectification of Concrete Defects to GL A-E/3-5        | 3       | 12-Jan-17 A | 23-Jan-17 |         |    |    |    |   |          |    |    |    |       |    |    |    |       |    | EVB - Rectification of Concrete Defects to GL A-E/3-5        |    |
| A2314   | EVB - (South Side) > Make Good D-wall surface (GL 6/M-O)     | 3       | 09-Jan-17 A | 23-Jan-17 |         |    |    |    |   |          |    |    |    |       |    |    |    |       |    | EVB - (South Side) > Make Good D-wall surface (GL 6/M-O)     |    |
| A2315   | EVB - (North Side) > Make Good D-wall surface (GL 2/E-F)     | 14      | 24-Jan-17   | 10-Feb-17 |         |    |    |    |   |          |    |    |    |       |    |    |    |       |    | EVB - (North Side) > Make Good D-wall surface (GL 2/E-F)     |    |

Remaining Level of Effort    Remaining Work  
 Actual Level of Effort    Critical Remaining Work  
 Actual Work    Milestone



Remaining Level of Effort   
 Remaining Work  
 Actual Level of Effort   
 Critical Remaining Work  
 Actual Work   
 Milestone



| Activity ID  | Activity Name                          | Rem Dur | Start     | Finish    | 2017                                     |    |    |    |    |    |          |    |    |    |       |    |    |    |       |  |  |  |
|--|--|---------|-----------|-----------|--|----|----|----|----|----|----------|----|----|----|-------|----|----|----|-------|--|--|--|
|  |  |         |           |           | January                                  |    |    |    |    |    | February |    |    |    | March |    |    |    | April |  |  |  |
|  |  |         |           |           | 5  | 12 | 19 | 26 | 02 | 09 | 5        | 12 | 19 | 26 | 02    | 09 | 16 | 23 |       |  |  |  |
| <b>Bridge C1</b>                                   |  |         |           |           |  |    |    |    |    |    |          |    |    |    |       |    |    |    |       |  |  |  |
| <b>Outstanding Works Between Bridge C1 &amp; E</b> |  |         |           |           |  |    |    |    |    |    |          |    |    |    |       |    |    |    |       |  |  |  |
| A4530  | Pier 17 to 18 - Steel Mould Erection   | 2       | 20-Jan-17 | 21-Jan-17 | ■ Pier 17 to 18 - Steel Mould Erection   |    |    |    |    |    |          |    |    |    |       |    |    |    |       |  |  |  |
| A4550  | Pier 17 to 18 - Concreting             | 1       | 23-Jan-17 | 23-Jan-17 | ■ Pier 17 to 18 - Concreting             |    |    |    |    |    |          |    |    |    |       |    |    |    |       |  |  |  |
| A4570  | Pier 16 to 17 - Forwork Erection       | 2       | 20-Jan-17 | 21-Jan-17 | ■ Pier 16 to 17 - Forwork Erection       |    |    |    |    |    |          |    |    |    |       |    |    |    |       |  |  |  |
| A4590  | Pier 16 to 17 - Rebar Bending          | 2       | 20-Jan-17 | 21-Jan-17 | ■ Pier 16 to 17 - Rebar Bending          |    |    |    |    |    |          |    |    |    |       |    |    |    |       |  |  |  |
| A4610  | Pier 16 to 17 - Rebar Fixing           | 2       | 23-Jan-17 | 24-Jan-17 | ■ Pier 16 to 17 - Rebar Fixing           |    |    |    |    |    |          |    |    |    |       |    |    |    |       |  |  |  |
| A4630  | Pier 16 to 17 - Steel Mould Erection   | 2       | 25-Jan-17 | 26-Jan-17 | ■ Pier 16 to 17 - Steel Mould Erection   |    |    |    |    |    |          |    |    |    |       |    |    |    |       |  |  |  |
| A4650  | Pier 16 to 17 - Concreting             | 1       | 27-Jan-17 | 27-Jan-17 | ■ Pier 16 to 17 - Concreting             |    |    |    |    |    |          |    |    |    |       |    |    |    |       |  |  |  |
| A4670  | Pier 15 to 16 - Forwork Erection       | 2       | 24-Jan-17 | 25-Jan-17 | ■ Pier 15 to 16 - Forwork Erection       |    |    |    |    |    |          |    |    |    |       |    |    |    |       |  |  |  |
| A4690  | Pier 15 to 16 - Rebar Bending          | 2       | 24-Jan-17 | 25-Jan-17 | ■ Pier 15 to 16 - Rebar Bending          |    |    |    |    |    |          |    |    |    |       |    |    |    |       |  |  |  |
| A4710  | Pier 15 to 16 - Rebar Fixing           | 2       | 26-Jan-17 | 27-Jan-17 | ■ Pier 15 to 16 - Rebar Fixing           |    |    |    |    |    |          |    |    |    |       |    |    |    |       |  |  |  |
| A4730  | Pier 15 to 16 - Steel Mould Erection   | 2       | 31-Jan-17 | 01-Feb-17 | ■ Pier 15 to 16 - Steel Mould Erection   |    |    |    |    |    |          |    |    |    |       |    |    |    |       |  |  |  |
| A4750  | Pier 15 to 16 - Concreting             | 1       | 02-Feb-17 | 02-Feb-17 | ■ Pier 15 to 16 - Concreting             |    |    |    |    |    |          |    |    |    |       |    |    |    |       |  |  |  |
| A4770  | Temp Lighting (2 Nos)                  | 2       | 07-Feb-17 | 08-Feb-17 | ■ Temp Lighting (2 Nos)                  |    |    |    |    |    |          |    |    |    |       |    |    |    |       |  |  |  |
| A4790  | Noise Barrier Const. Pier E1 to D1     | 12      | 20-Jan-17 | 04-Feb-17 | ■ Noise Barrier Const. Pier E1 to D1     |    |    |    |    |    |          |    |    |    |       |    |    |    |       |  |  |  |
| A4810  | Noise Barrier Const. Pier 18 to 19     | 13      | 06-Feb-17 | 20-Feb-17 | ■ Noise Barrier Const. Pier 18 to 19     |    |    |    |    |    |          |    |    |    |       |    |    |    |       |  |  |  |
| A4830  | Noise Barrier Const. Pier 17 to 18     | 12      | 21-Feb-17 | 06-Mar-17 | ■ Noise Barrier Const. Pier 17 to 18     |    |    |    |    |    |          |    |    |    |       |    |    |    |       |  |  |  |
| A4850  | Paving & Road Marking                  | 2       | 07-Mar-17 | 08-Mar-17 | ■ Paving & Road Marking                  |    |    |    |    |    |          |    |    |    |       |    |    |    |       |  |  |  |
| <b>10.3 - Middle Bridge (Bridge F)</b>             |  |         |           |           |  |    |    |    |    |    |          |    |    |    |       |    |    |    |       |  |  |  |
| <b>10.3.1 - Pier Construction</b>                  |  |         |           |           |  |    |    |    |    |    |          |    |    |    |       |    |    |    |       |  |  |  |
| <b>Pier F1B2 to F4B</b>                            |  |         |           |           |  |    |    |    |    |    |          |    |    |    |       |    |    |    |       |  |  |  |
| 1031-1440  | Existing P39/F4B Prepare C.J.          | 7       | 04-Apr-17 | 12-Apr-17 | ■ Existing P39/F4B Prepare C.J.          |    |    |    |    |    |          |    |    |    |       |    |    |    |       |  |  |  |
| 1031-1460  | Existing P39/F4B Construct Pier/Column | 14      | 13-Apr-17 | 02-May-17 | ■ Existing P39/F4B Construct Pier/Column |    |    |    |    |    |          |    |    |    |       |    |    |    |       |  |  |  |
| <b>Pier F5B to F8B</b>                             |  |         |           |           |  |    |    |    |    |    |          |    |    |    |       |    |    |    |       |  |  |  |
| 1031-1520  | Existing P40/F5B Prepare C.J.          | 6       | 21-Mar-17 | 27-Mar-17 | ■ Existing P40/F5B Prepare C.J.          |    |    |    |    |    |          |    |    |    |       |    |    |    |       |  |  |  |
| 1031-1540  | Existing P40/F5B Construct Pier/Column | 14      | 28-Mar-17 | 13-Apr-17 | ■ Existing P40/F5B Construct Pier/Column |    |    |    |    |    |          |    |    |    |       |    |    |    |       |  |  |  |
| 1031-1600  | Existing P41/F6B Prepare C.J.          | 6       | 07-Mar-17 | 13-Mar-17 | ■ Existing P41/F6B Prepare C.J.          |    |    |    |    |    |          |    |    |    |       |    |    |    |       |  |  |  |
| 1031-1620  | Existing P41/F6B Construct Pier/Column | 14      | 14-Mar-17 | 29-Mar-17 | ■ Existing P41/F6B Construct Pier/Column |    |    |    |    |    |          |    |    |    |       |    |    |    |       |  |  |  |
| 1031-1640  | Existing P41/F6B Construct Crosshead   | 18      | 30-Mar-17 | 22-Apr-17 | ■ Existing P41/F6B Construct Crosshead   |    |    |    |    |    |          |    |    |    |       |    |    |    |       |  |  |  |
| 1031-1680  | Existing P42/F7B Prepare C.J.          | 6       | 21-Feb-17 | 27-Feb-17 | ■ Existing P42/F7B Prepare C.J.          |    |    |    |    |    |          |    |    |    |       |    |    |    |       |  |  |  |
| 1031-1700  | Existing P42/F7B Construct Pier/Column | 14      | 28-Feb-17 | 15-Mar-17 | ■ Existing P42/F7B Construct Pier/Column |    |    |    |    |    |          |    |    |    |       |    |    |    |       |  |  |  |
| 1031-1720  | Existing P42/F7B Construct Crosshead   | 18      | 16-Mar-17 | 06-Apr-17 | ■ Existing P42/F7B Construct Crosshead   |    |    |    |    |    |          |    |    |    |       |    |    |    |       |  |  |  |

■ Remaining Level of Effort    ■ Remaining Work  
■ Actual Level of Effort        ■ Critical Remaining Work  
■ Actual Work                        ◆ ◆ Milestone

**Contract HY/2009/19**  
**Three Months Rolling Programme (20 Jan 2017 to 19 Apr 2017)**



| Activity ID   | Activity Name   | Rem Dur | Start       | Finish      | 2017    |    |    |    |    |          |    |    |    |       |    |    |    |       |    |   |
|---|---|---------|-------------|-------------|---------|----|----|----|----|----------|----|----|----|-------|----|----|----|-------|----|---|
|   |   |         |             |             | January |    |    |    |    | February |    |    |    | March |    |    |    | April |    |   |
|   |   |         |             |             | 5       | 12 | 19 | 26 | 31 | 5        | 12 | 19 | 26 | 5     | 12 | 19 | 26 | 02    | 09 | 16  |
| A3240   | Demolish Four(4nos) Beams at Pier 42-41 - by LG-BM                              | 2       | 08-Feb-17   | 09-Feb-17   |         |    |    |    |    | ■        |    |    |    |       |    |    |    |       |    | Demolish Four(4nos) Beams at Pier 42-41 - by LG-BM                              |
| A3250   | Demolish Pier + Steel Support at Pier 42  | 9       | 10-Feb-17   | 20-Feb-17   |         |    |    |    |    | ■        |    |    |    |       |    |    |    |       |    | Demolish Pier + Steel Support at Pier 42  |
| A3260   | Launch LG-BM to next Bridge Span  | 1       | 21-Feb-17   | 21-Feb-17   |         |    |    |    |    | ■        |    |    |    |       |    |    |    |       |    | Launch LG-BM to next Bridge Span  |
| A3270   | Demolish Four(4nos) Beams at Pier 41-40 - by LG-BM                              | 2       | 22-Feb-17   | 23-Feb-17   |         |    |    |    |    | ■        |    |    |    |       |    |    |    |       |    | Demolish Four(4nos) Beams at Pier 41-40 - by LG-BM                              |
| A3280   | Demolish Pier + Steel Support at Pier 41  | 9       | 24-Feb-17   | 06-Mar-17   |         |    |    |    |    | ■        |    |    |    |       |    |    |    |       |    | Demolish Pier + Steel Support at Pier 41  |
| A3290   | Launch LG-BM to next Bridge Span  | 1       | 07-Mar-17   | 07-Mar-17   |         |    |    |    |    | ■        |    |    |    |       |    |    |    |       |    | Launch LG-BM to next Bridge Span  |
| A3300   | Demolish Four(4nos) Beams at Pier 40-39 - by LG-BM                              | 2       | 08-Mar-17   | 09-Mar-17   |         |    |    |    |    | ■        |    |    |    |       |    |    |    |       |    | Demolish Four(4nos) Beams at Pier 40-39 - by LG-BM                              |
| A3310   | Demolish Pier + Steel Support at Pier 40  | 9       | 10-Mar-17   | 20-Mar-17   |         |    |    |    |    | ■        |    |    |    |       |    |    |    |       |    | Demolish Pier + Steel Support at Pier 40  |
| A3320   | Launch LG-BM to next Bridge Span  | 1       | 21-Mar-17   | 21-Mar-17   |         |    |    |    |    | ■        |    |    |    |       |    |    |    |       |    | Launch LG-BM to next Bridge Span  |
| A3330   | Demolish Four(4nos) Beams at Pier 39-38 - by LG-BM                              | 2       | 22-Mar-17   | 23-Mar-17   |         |    |    |    |    | ■        |    |    |    |       |    |    |    |       |    | Demolish Four(4nos) Beams at Pier 39-38 - by LG-BM                              |
| A3340   | Demolish Pier + Steel Support at Pier 39  | 9       | 24-Mar-17   | 03-Apr-17   |         |    |    |    |    | ■        |    |    |    |       |    |    |    |       |    | Demolish Pier + Steel Support at Pier 39  |
| A3350   | Launch LG-BM to next Bridge Span  | 1       | 04-Apr-17   | 04-Apr-17   |         |    |    |    |    | ■        |    |    |    |       |    |    |    |       |    | Launch LG-BM to next Bridge Span  |
| A3360   | Demolish Four(4nos) Beams at Pier 38-37 - by LG-BM                              | 2       | 06-Apr-17   | 07-Apr-17   |         |    |    |    |    | ■        |    |    |    |       |    |    |    |       |    | Demolish Four(4nos) Beams at Pier 38-37 - by LG-BM                              |
| A3370   | Demolish Pier + Steel Support at Pier 38  | 9       | 08-Apr-17   | 20-Apr-17   |         |    |    |    |    | ■        |    |    |    |       |    |    |    |       |    | Demolish Pier + Steel Support at Pier 38  |
| <b>10.5 - Temporary Bridge</b>                        |   |         |             |             |         |    |    |    |    |          |    |    |    |       |    |    |    |       |    |   |
| <b>10.5.2 - Temporary Bridge 'TB'</b>                 |   |         |             |             |         |    |    |    |    |          |    |    |    |       |    |    |    |       |    |   |
| 1052-1260   | TB > Demolition of Temporary Bridge "TB"  | 27      | 25-Mar-17   | 28-Apr-17   |         |    |    |    |    |          |    |    |    |       |    |    |    |       |    |   |
| A4140   | TTA Implementation prior to Demolition  | 14      | 09-Mar-17   | 24-Mar-17   |         |    |    |    |    |          |    |    |    |       |    |    |    |       |    |   |
| <b>10.6 - Tunnel Approach Ramp</b>                    |   |         |             |             |         |    |    |    |    |          |    |    |    |       |    |    |    |       |    |   |
| <b>10.6.1 - Approach Ramp (Excluding Portion IIB)</b> |   |         |             |             |         |    |    |    |    |          |    |    |    |       |    |    |    |       |    |   |
| <b>Piling Works</b>                                   |   |         |             |             |         |    |    |    |    |          |    |    |    |       |    |    |    |       |    |   |
| 1061-3490   | Moving Temp Car Park to Permanent Car Park Completed                            | 0       |             | 18-Apr-17   |         |    |    |    |    |          |    |    |    |       |    |    |    |       |    | ◆ Moving Temp C   |
| 1061-3495   | Modify Contractor's Temp Site Office  | 28      | 13-Mar-17   | 18-Apr-17   |         |    |    |    |    |          |    |    |    |       |    |    |    |       |    | Modify Contrac  |
| 1061-3500   | Pre Bored H-Pile > Pile Ramp - BM03 A   | 4       | 18-Apr-17   | 21-Apr-17   |         |    |    |    |    |          |    |    |    |       |    |    |    |       |    | Pre Bored   |
| <b>Excavation &amp; ELS Works</b>                     |   |         |             |             |         |    |    |    |    |          |    |    |    |       |    |    |    |       |    |   |
| 1061-4901.1   | Sheet Piling Works (WF2>B1:46m@1.5m/d) (including Re-boring for remedial works) | 27      | 10-Oct-16 A | 22-Feb-17   |         |    |    |    |    |          |    |    |    |       |    |    |    |       |    | Sheet Piling Works (WF2>B1:46m@1.5m/d) (including Re-boring for remedial works) |
| 1061-4901.2   | Sheet Piling Works (WF1>B3:19m@1.5m/d) (including Re-boring for remedial works) | 41      | 12-Jul-16 A | 10-Mar-17   |         |    |    |    |    |          |    |    |    |       |    |    |    |       |    | Sheet Piling Works (WF1>B3:19m@1.5m/d) (including Re-boring for remedial works) |
| 1061-4910   | Advance Sheet Piling Works + Pre-drilling in Phase 2 - Cul de sac Area (30m)    | 14      | 11-Mar-17   | 27-Mar-17   |         |    |    |    |    |          |    |    |    |       |    |    |    |       |    | Advance Sheet Piling Works + Pre-drilling                                       |
| 1061-4915   | Tam Grouting  | 43      | 14-Sep-16 A | 13-Mar-17   |         |    |    |    |    |          |    |    |    |       |    |    |    |       |    | Tam Grouting  |
| 1061-5040   | Recharge Well Installation (8Nos)   | 0       | 22-Dec-16 A | 10-Jan-17 A |         |    |    |    |    |          |    |    |    |       |    |    |    |       |    | Recharge Well Installation (8Nos)   |
| 1061-5060   | Dewatering Well Installation (14Nos)  | 18      | 11-Jan-17 A | 11-Feb-17   |         |    |    |    |    |          |    |    |    |       |    |    |    |       |    | Dewatering Well Installation (14Nos)  |
| 1061-5080   | Observation Well Installation (10Nos)   | 15      | 13-Feb-17   | 01-Mar-17   |         |    |    |    |    |          |    |    |    |       |    |    |    |       |    | Observation Well Installation (10Nos)   |

|                           |                         |
|---------------------------|-------------------------|
| Remaining Level of Effort | Remaining Work          |
| Actual Level of Effort    | Critical Remaining Work |
| Actual Work               | Milestone               |

**Contract HY/2009/19**  
**Three Months Rolling Programme (20 Jan 2017 to 19 Apr 2017)**





| MU71  |  | CWB - MU71 Programme Layout_1 |                   |             |             |             |      |     |     |     |     | 01-Sep-16 13:40 |     |     |     |     |  |     |      |     |
|---|--|-------------------------------|-------------------|-------------|-------------|-------------|------|-----|-----|-----|-----|-----------------|-----|-----|-----|-----|--|-----|------|-----|
| Activity ID   | Activity Name  | Physical % Complete           | Original Duration | Start       | Finish      | Total Float | 2016 |     |     |     |     |                 |     |     |     |     |  |     | 2017 |     |
|   |  |                               |                   |             |             |             | Dec  | Jan | Feb | Mar | Apr | May             | Jun | Jul | Aug | Sep | Oct  | Nov | Dec  | Jan |
| <b>HY/2009/15 - Works Programme Update 20 August 2016</b> |  |                               |                   |             |             |             |      |     |     |     |     |                 |     |     |     |     |  |     |      |     |
| <b>Stage and Section Completion</b>                       |  |                               |                   |             |             |             |      |     |     |     |     |                 |     |     |     |     |  |     |      |     |
| KD_5745   | KD10 - Completion of Section 5, (1863d)  | 100%                          | 0d                |             | 25-Mar-16 A |             |      |     |     |     |     |                 |     |     |     |     | ◆ KD10 - Completion of Section 5, (1863d)  |     |      |     |
| KD_5750   | KD11 - Completion of Section 6, (1949d)  | 0%                            | 0d                |             | 30-Sep-16*  | -245d       |      |     |     |     |     |                 |     |     |     |     | ◆ KD11 - Completion of Section 6, (1949d)  |     |      |     |
| KD_5740   | KD9 - Completion of Section 4, (1739d)   | 0%                            | 0d                |             | 30-Sep-16*  | -455d       |      |     |     |     |     |                 |     |     |     |     | ◆ KD9 - Completion of Section 4, (1739d)   |     |      |     |
| <b>TPCWAW</b>   |  |                               |                   |             |             |             |      |     |     |     |     |                 |     |     |     |     |  |     |      |     |
| <b>TPCWAW ELS Works - East Section</b>                    |  |                               |                   |             |             |             |      |     |     |     |     |                 |     |     |     |     |  |     |      |     |
| S5_61070  | Demolition of bulkhead wall TPCWAE/TPCWAW  | 100%                          | 34d               | 06-Dec-15 A | 09-Jan-16 A |             |      |     |     |     |     |                 |     |     |     |     | Demolition of bulkhead wall TPCWAE/TPCWAW  |     |      |     |
| S5_6180   | East excavation to formation   | 100%                          | 85d               | 18-Sep-15 A | 24-Dec-15 A |             |      |     |     |     |     |                 |     |     |     |     | East excavation to formation   |     |      |     |
| <b>TPCWAW-CCT RC Structure, Base Slab</b>                 |  |                               |                   |             |             |             |      |     |     |     |     |                 |     |     |     |     |  |     |      |     |
| S5_60600  | Waterproofing + Base slab Bay 1 (incl. removal of 7th layer struts after casting of base slab) | 100%                          | 15d               | 03-Dec-15 A | 23-Dec-15 A |             |      |     |     |     |     |                 |     |     |     |     | Waterproofing + Base slab Bay 1 (incl. removal of 7th layer struts after casting of base slab) |     |      |     |
| S5_60620  | Waterproofing + Base slab Bay 5  | 100%                          | 11d               | 05-Dec-15 A | 29-Dec-15 A |             |      |     |     |     |     |                 |     |     |     |     | Waterproofing + Base slab Bay 5  |     |      |     |
| S5_60625  | Waterproofing + Base slab Bay 6  | 100%                          | 11d               | 16-Dec-15 A | 19-Jan-16 A |             |      |     |     |     |     |                 |     |     |     |     | Waterproofing + Base slab Bay 6  |     |      |     |
| S5_60630  | Waterproofing + Base slab Bay 7  | 100%                          | 7d                | 07-Jan-16 A | 05-Feb-16 A |             |      |     |     |     |     |                 |     |     |     |     | Waterproofing + Base slab Bay 7  |     |      |     |
| S5_60635  | Waterproofing + Base slab Bay 8  | 100%                          | 6d                | 12-Jan-16 A | 05-Feb-16 A |             |      |     |     |     |     |                 |     |     |     |     | Waterproofing + Base slab Bay 8  |     |      |     |
| S5_61065  | Waterproofing + Base slab Bay 9 (stitching with TPCWAE)  | 100%                          | 6d                | 15-Jan-16 A | 05-Feb-16 A |             |      |     |     |     |     |                 |     |     |     |     | Waterproofing + Base slab Bay 9 (stitching with TPCWAE)  |     |      |     |
| <b>TPCWAW-CCT RC Structure, Wall</b>                      |  |                               |                   |             |             |             |      |     |     |     |     |                 |     |     |     |     |  |     |      |     |
| S5_60670  | Wall Bay 1 (+ repropping and removal of 5th & 6th struts)                                      | 100%                          | 21d               | 15-Dec-15 A | 10-Jan-16 A |             |      |     |     |     |     |                 |     |     |     |     | Wall Bay 1 (+ repropping and removal of 5th & 6th struts)                                      |     |      |     |
| S5_60675  | Wall Bay 2 (+ repropping and removal of 5th & 6th struts)                                      | 100%                          | 10d               | 10-Dec-15 A | 05-Jan-16 A |             |      |     |     |     |     |                 |     |     |     |     | Wall Bay 2 (+ repropping and removal of 5th & 6th struts)                                      |     |      |     |
| S5_60680  | Wall Bay 3 (+ repropping and removal of 5th & 6th struts)                                      | 100%                          | 21d               | 10-Dec-15 A | 07-Jan-16 A |             |      |     |     |     |     |                 |     |     |     |     | Wall Bay 3 (+ repropping and removal of 5th & 6th struts)                                      |     |      |     |
| S5_60685  | Wall Bay 4 (+ repropping and removal of 5th & 6th struts)                                      | 100%                          | 22d               | 20-Dec-15 A | 11-Jan-16 A |             |      |     |     |     |     |                 |     |     |     |     | Wall Bay 4 (+ repropping and removal of 5th & 6th struts)                                      |     |      |     |
| S5_60690  | Wall Bay 5 (+ removal of 5th strut)  | 100%                          | 10d               | 02-Jan-16 A | 29-Jan-16 A |             |      |     |     |     |     |                 |     |     |     |     | Wall Bay 5 (+ removal of 5th strut)  |     |      |     |
| S5_60695  | Wall Bay 6 (+ removal of 5th strut)  | 100%                          | 7d                | 21-Jan-16 A | 25-Feb-16 A |             |      |     |     |     |     |                 |     |     |     |     | Wall Bay 6 (+ removal of 5th strut)  |     |      |     |
| S5_60700  | Wall Bay 7 (+ removal of 5th strut)  | 100%                          | 8d                | 16-Feb-16 A | 25-Feb-16 A |             |      |     |     |     |     |                 |     |     |     |     | Wall Bay 7 (+ removal of 5th strut)  |     |      |     |
| S5_60705  | Wall Bay 8 (+ removal of 5th strut)  | 100%                          | 9d                | 16-Feb-16 A | 25-Feb-16 A |             |      |     |     |     |     |                 |     |     |     |     | Wall Bay 8 (+ removal of 5th strut)  |     |      |     |
| S5_61075  | Wall Bay 9 (+ removal of 5th strut)  | 100%                          | 8d                | 16-Feb-16 A | 25-Feb-16 A |             |      |     |     |     |     |                 |     |     |     |     | Wall Bay 9 (+ removal of 5th strut)  |     |      |     |
| <b>TPCWAW -Maintenance Walkway</b>                        |  |                               |                   |             |             |             |      |     |     |     |     |                 |     |     |     |     |  |     |      |     |

- Remaining Work
- Actual Work
- Remaining Work
- Critical Remaining Work
- Milestone
- Summary
- Actual Work

1 of 3

China State Construction Engineering (Hong Kong) Ltd.

Contract No. HY/2009/15 - Central Wan Chai By Pass - Tunnel ( Causeway Bay Typhoon Shelter Section)

**WORKS PROGRAMME UPDATE**

| Prepared by Anthony Fesalbon |                                     |         |          |
|------------------------------|-------------------------------------|---------|----------|
| Date                         | Revision                            | Checked | Approved |
| 20-Aug-16                    | Progress Update                     | WC      | WVSL     |
|                              | (based on WP Rev. N-4th Submission) |         |          |
|                              |                                     |         |          |
|                              |                                     |         |          |
|                              |                                     |         |          |



| Activity ID   | Activity Name   | Physical % Complete | Original Duration | Start       | Finish      | Total Float | 2016  |     |     |     |     |     |     |     |     |     |     |     | 2017 |     |
|---|---|---------------------|-------------------|-------------|-------------|-------------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|
|   |   |                     |                   |             |             |             | Dec   | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec  | Jan |
| S6_9085   | TPCWAW - Maintenance walkway / profile barrier              | 100%                | 23d               | 20-Dec-15 A | 23-Mar-16 A |             | TPCWAW - Maintenance walkway / profile barrier                |     |     |     |     |     |     |     |     |     |     |     |      |     |
| <b>TPCWAW- CCT RC Structure, OHVD</b>                               |   |                     |                   |             |             |             |   |     |     |     |     |     |     |     |     |     |     |     |      |     |
| S5_60740  | OHVD Bay 1  | 100%                | 12d               | 29-Dec-15 A | 21-Jan-16 A |             | OHVD Bay 1  |     |     |     |     |     |     |     |     |     |     |     |      |     |
| S5_61100  | OHVD Bay 10   | 100%                | 7d                | 16-Feb-16 A | 26-Feb-16 A |             | OHVD Bay 10   |     |     |     |     |     |     |     |     |     |     |     |      |     |
| S5_60745  | OHVD Bay 2  | 100%                | 12d               | 31-Dec-15 A | 18-Jan-16 A |             | OHVD Bay 2  |     |     |     |     |     |     |     |     |     |     |     |      |     |
| S5_60750  | OHVD Bay 3  | 100%                | 12d               | 02-Jan-16 A | 18-Jan-16 A |             | OHVD Bay 3  |     |     |     |     |     |     |     |     |     |     |     |      |     |
| S5_60755  | OHVD Bay 4  | 100%                | 12d               | 24-Dec-15 A | 25-Jan-16 A |             | OHVD Bay 4  |     |     |     |     |     |     |     |     |     |     |     |      |     |
| S5_60760  | OHVD Bay 5  | 100%                | 12d               | 06-Jan-16 A | 25-Jan-16 A |             | OHVD Bay 5  |     |     |     |     |     |     |     |     |     |     |     |      |     |
| S5_61080  | OHVD Bay 6  | 100%                | 9d                | 20-Jan-16 A | 16-Feb-16 A |             | OHVD Bay 6  |     |     |     |     |     |     |     |     |     |     |     |      |     |
| S5_61085  | OHVD Bay 7  | 100%                | 9d                | 12-Feb-16 A | 28-Feb-16 A |             | OHVD Bay 7  |     |     |     |     |     |     |     |     |     |     |     |      |     |
| S5_61090  | OHVD Bay 8  | 100%                | 9d                | 16-Feb-16 A | 28-Feb-16 A |             | OHVD Bay 8  |     |     |     |     |     |     |     |     |     |     |     |      |     |
| S5_61095  | OHVD Bay 9  | 100%                | 9d                | 12-Feb-16 A | 28-Feb-16 A |             | OHVD Bay 9  |     |     |     |     |     |     |     |     |     |     |     |      |     |
| S5_61110  | Shaft B Reinstatement - OHVD                                | 100%                | 20d               | 20-Feb-16 A | 22-Apr-16 A |             | Shaft B Reinstatement - OHVD                                  |     |     |     |     |     |     |     |     |     |     |     |      |     |
| <b>TPCWAW- CCT RC Structure, Top Slab + Waterproofing</b>           |   |                     |                   |             |             |             |   |     |     |     |     |     |     |     |     |     |     |     |      |     |
| S6_9135   | Completion of Section 5 - TPCWAW Area (KD10), below -20mPD  | 100%                | 0d                |             | 09-Mar-16 A |             | ◆ Completion of Section 5 - TPCWAW Area (KD10), below -20mPD  |     |     |     |     |     |     |     |     |     |     |     |      |     |
| S5_61120  | Provide access to CWB (CC) Contractor - TPCWAW Area         | 100%                | 0d                |             | 29-Feb-16 A |             | ◆ Provide access to CWB (CC) Contractor - TPCWAW Area         |     |     |     |     |     |     |     |     |     |     |     |      |     |
| S6_9055   | Provide Access to WDII Contractor for bulkhead wall removal | 100%                | 0d                |             | 29-Feb-16 A |             | ◆ Provide Access to WDII Contractor for bulkhead wall removal |     |     |     |     |     |     |     |     |     |     |     |      |     |
| S5_61105  | Shaft B Reinstatement - Top Slab                            | 100%                | 15d               | 14-Feb-16 A | 29-Feb-16 A |             | Shaft B Reinstatement - Top Slab                              |     |     |     |     |     |     |     |     |     |     |     |      |     |
| S5_60810  | Top slab Bay 1  | 100%                | 11d               | 19-Jan-16 A | 23-Feb-16 A |             | Top slab Bay 1  |     |     |     |     |     |     |     |     |     |     |     |      |     |
| S5_60875  | Top slab Bay 10   | 100%                | 5d                | 20-Feb-16 A | 09-Mar-16 A |             | Top slab Bay 10   |     |     |     |     |     |     |     |     |     |     |     |      |     |
| S5_60815  | Top slab Bay 2  | 100%                | 10d               | 08-Jan-16 A | 02-Feb-16 A |             | Top slab Bay 2  |     |     |     |     |     |     |     |     |     |     |     |      |     |
| S5_60820  | Top slab Bay 3  | 100%                | 10d               | 11-Jan-16 A | 16-Feb-16 A |             | Top slab Bay 3  |     |     |     |     |     |     |     |     |     |     |     |      |     |
| S5_60825  | Top slab Bay 4  | 100%                | 11d               | 19-Jan-16 A | 24-Feb-16 A |             | Top slab Bay 4  |     |     |     |     |     |     |     |     |     |     |     |      |     |
| S5_60830  | Top slab Bay 5  | 100%                | 10d               | 19-Feb-16 A | 29-Feb-16 A |             | Top slab Bay 5  |     |     |     |     |     |     |     |     |     |     |     |      |     |
| S5_60835  | Top slab Bay 6  | 100%                | 12d               | 20-Feb-16 A | 02-Mar-16 A |             | Top slab Bay 6  |     |     |     |     |     |     |     |     |     |     |     |      |     |
| S5_60840  | Top slab Bay 7  | 100%                | 7d                | 20-Feb-16 A | 05-Mar-16 A |             | Top slab Bay 7  |     |     |     |     |     |     |     |     |     |     |     |      |     |
| S5_60845  | Top slab Bay 8  | 100%                | 16d               | 20-Feb-16 A | 05-Mar-16 A |             | Top slab Bay 8  |     |     |     |     |     |     |     |     |     |     |     |      |     |
| S5_60865  | Top slab Bay 9  | 100%                | 15d               | 20-Feb-16 A | 07-Mar-16 A |             | Top slab Bay 9  |     |     |     |     |     |     |     |     |     |     |     |      |     |
| <b>TPCWAW - King Post Load Transfer / Waterproofing on Top Slab</b> |   |                     |                   |             |             |             |   |     |     |     |     |     |     |     |     |     |     |     |      |     |

- Remaining Work
- Actual Work
- ◆ Remaining Work
- Critical Remaining Work
- ◆ Milestone
- Summary
- ◆ Actual Work

2 of 3

**China State Construction Engineering (Hong Kong) Ltd.**  
**Contract No. HY/2009/15 - Central Wan Chai By Pass - Tunnel ( Causeway Bay Typhoon Shelter Section)**

**WORKS PROGRAMME UPDATE**

| Prepared by Anthony Fesalbon |  |         |          |
|------------------------------|--|---------|----------|
| Date                         | Revision   | Checked | Approved |
| 20-Aug-16                    | Progress Update<br>(based on WP Rev. N-4th Submission) | WC      | WSL      |
|                              |  |         |          |
|                              |  |         |          |
|                              |  |         |          |



| Activity ID  | Activity Name  | Physical % Complete | Original Duration | Start       | Finish      | Total Float | 2016 |     |     |     |     |     |     |     |     |     |     |     | 2017 |     |     |  |
|--|--|---------------------|-------------------|-------------|-------------|-------------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|--|
|  |  |                     |                   |             |             |             | Dec  | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec  | Jan | Feb |  |
| S5_61115   | TPCWAW waterproofing - Bay 10                                  | 100%                | 2d                | 09-Mar-16 A | 10-Mar-16 A |             |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |  |
| S6_9076  | TPCWAW King post load transfer + waterproofing (except Bay 10) | 100%                | 26d               | 04-Mar-16 A | 29-Mar-16 A |             |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |  |
| <b>TPCWAW Removal of Temporary Reclamation</b>                                 |  |                     |                   |             |             |             |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |  |
| S6_9140  | Backfilling/Removal of ELS + Re charge water                   | 100%                | 25d               | 30-Mar-16 A | 04-Jul-16 A |             |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |  |
| S6_7550  | Completion of Section 6- (KD11), above - 20mPD                 | 0%                  | 0d                |             | 30-Sep-16*  | -245d       |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |  |
| S6_9105  | Remove general fill/ seawall block (concurrent activities)     | 0%                  | 25d               | 28-May-16 A | 30-Sep-16   | 0d          |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |  |
| S6_9120  | Saw cut diaphragm wall   | 44%                 | 75d               | 20-Jul-16 A | 30-Sep-16*  | -244d       |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |  |
| <b>Works in Portion 11 under KD9 (incl. Reinstatement of Vertical Seawall)</b> |  |                     |                   |             |             |             |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |  |
| S6_9148  | Completion of KD9- Works in Portion 11                         | 0%                  | 0d                |             | 30-Sep-16   | -455d       |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |  |
| S6_9147  | Reinstate ground level at Portion 11                           | 10%                 | 40d               | 26-Jul-16 A | 30-Sep-16   | -385d       |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |  |
| S6_9144  | Reinstate vertical seawall (by marine plant)                   | 0%                  | 21d               | 23-Jul-16 A | 30-Sep-16   | -384d       |      |     |     |     |     |     |     |     |     |     |     |     |      |     |     |  |

- Remaining Work
- Actual Work
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- Critical Remaining Work
- Milestone
- Summary
- Actual Work

3 of 3

**China State Construction Engineering (Hong Kong) Ltd.**

Contract No. HY/2009/15 - Central Wan Chai By Pass - Tunnel ( Causeway Bay Typhoon Shelter Section)

**WORKS PROGRAMME UPDATE**

| Prepared by Anthony Fesalbon |                                     |         |          |
|------------------------------|-------------------------------------|---------|----------|
| Date                         | Revision                            | Checked | Approved |
| 20-Aug-16                    | Progress Update                     | WC      | WSL      |
|                              | (based on WP Rev. N-4th Submission) |         |          |
|                              |                                     |         |          |
|                              |                                     |         |          |

































| Activity ID  | Activity Name   | Original Duration | Start       | Finish      | 2016 |     | 2017 |     |     |  |  |  |  |  |
|--|---|-------------------|-------------|-------------|------|-----|------|-----|-----|--|--|--|--|--|
|  |   |                   |             |             | Dec  | Jan | Feb  | Mar | Apr |  |  |  |  |  |
| <b>Total</b>   |   | 1791d             | 21-Mar-13 A | 14-Dec-17   |      |     |      |     |     |  |  |  |  |  |
| <b>DWP-07 (5) - Update Progress As of 20 Dec 16</b>  |   | 1791d             | 21-Mar-13 A | 14-Dec-17   |      |     |      |     |     |  |  |  |  |  |
| <b>Works in KD7</b>  |   | 137d              | 03-Oct-16 A | 24-Mar-17   |      |     |      |     |     |  |  |  |  |  |
| <b>Works in TS3-West</b>   |   | 137d              | 03-Oct-16 A | 24-Mar-17   |      |     |      |     |     |  |  |  |  |  |
| <b>Tunnel Structure</b>  |   | 137d              | 03-Oct-16 A | 24-Mar-17   |      |     |      |     |     |  |  |  |  |  |
| <b>TS3W CCT Structure (Mainline E/B, W/B Tunnel)</b>   |   | 60d               | 03-Oct-16 A | 14-Jan-17   |      |     |      |     |     |  |  |  |  |  |
| <b>Wall &amp; CP of Tunnel Structure Northern &amp; Southern Tunnel E/B &amp; W/B - 4,000 m3 + SM(A), SM(B), TF(A)</b> |   | 22d               | 21-Nov-16 A | 22-Dec-16 A |      |     |      |     |     |  |  |  |  |  |
| <b>Bay 2</b>   |   | 5d                | 25-Nov-16 A | 06-Dec-16 A |      |     |      |     |     |  |  |  |  |  |
| A1500  | Spray Type Waterproofing, Protection Board and Backfilling (EP02 Construction Controlled)                             | 5d                | 25-Nov-16 A | 06-Dec-16 A |      |     |      |     |     |  |  |  |  |  |
| <b>Bay 3</b>   |   | 10d               | 25-Nov-16 A | 04-Dec-16 A |      |     |      |     |     |  |  |  |  |  |
| A1530  | Spray Type Waterproofing, Protection Board and Backfilling  | 10d               | 25-Nov-16 A | 04-Dec-16 A |      |     |      |     |     |  |  |  |  |  |
| <b>Bay 4</b>   |   | 10d               | 21-Nov-16 A | 09-Dec-16 A |      |     |      |     |     |  |  |  |  |  |
| A1560  | Spray Type Waterproofing, Protection Board and Backfilling for SR8 Tunnel Construction                                | 10d               | 21-Nov-16 A | 09-Dec-16 A |      |     |      |     |     |  |  |  |  |  |
| <b>Bay 5</b>   |   | 10d               | 08-Dec-16 A | 09-Dec-16 A |      |     |      |     |     |  |  |  |  |  |
| A1590  | Spray Type Waterproofing, Protection Board and Backfilling for SR8 Tunnel Construction                                | 10d               | 08-Dec-16 A | 09-Dec-16 A |      |     |      |     |     |  |  |  |  |  |
| <b>Bay 6</b>   |   | 10d               | 09-Dec-16 A | 12-Dec-16 A |      |     |      |     |     |  |  |  |  |  |
| A1620  | Spray Type Waterproofing, Protection Board and Backfilling for SR8 Tunnel Construction (EP03 Construction controlled) | 10d               | 09-Dec-16 A | 12-Dec-16 A |      |     |      |     |     |  |  |  |  |  |
| <b>Bay 7</b>   |   | 10d               | 11-Dec-16 A | 12-Dec-16 A |      |     |      |     |     |  |  |  |  |  |
| A1650  | Spray Type Waterproofing, Protection Board and Backfilling for SR8 Tunnel Construction                                | 10d               | 11-Dec-16 A | 12-Dec-16 A |      |     |      |     |     |  |  |  |  |  |
| <b>Bay 8</b>   |   | 14d               | 30-Nov-16 A | 22-Dec-16 A |      |     |      |     |     |  |  |  |  |  |
| A1690  | Removal of 6th and 7th layer ELS  | 14d               | 30-Nov-16 A | 08-Dec-16 A |      |     |      |     |     |  |  |  |  |  |
| A1720  | Backfilling for construction of SR8B  | 6d                | 11-Dec-16 A | 18-Dec-16 A |      |     |      |     |     |  |  |  |  |  |
| A1680  | Waterproofing and repropping installation   | 5d                | 19-Dec-16 A | 22-Dec-16 A |      |     |      |     |     |  |  |  |  |  |
| <b>OHVD, Maintenance Walkway &amp; Profile Barrier Construction (Northern &amp; Southern Tunnel E/B &amp; W/B)</b>     |   | 27d               | 08-Dec-16 A | 06-Jan-17   |      |     |      |     |     |  |  |  |  |  |
| <b>Bay 8</b>   |   | 27d               | 08-Dec-16 A | 06-Jan-17   |      |     |      |     |     |  |  |  |  |  |
| A1880  | Bay S8 OHVD and Kicker Wall, Maintenance Walkway and Profile Barrier  | 8d                | 08-Dec-16 A | 19-Dec-16 A |      |     |      |     |     |  |  |  |  |  |
| A1870  | Bay N8 OHVD and Kicker Wall, Maintenance Walkway and Profile Barrier  | 8d                | 30-Dec-16   | 06-Jan-17   |      |     |      |     |     |  |  |  |  |  |
| <b>Bay 9</b>   |   | 21d               | 12-Dec-16 A | 03-Jan-17   |      |     |      |     |     |  |  |  |  |  |
| A1900  | Bay S9 OHVD and Kicker Wall, Maintenance Walkway and Profile Barrier  | 5d                | 12-Dec-16 A | 21-Dec-16 A |      |     |      |     |     |  |  |  |  |  |
| A1890  | Bay N9 OHVD and Kicker Wall, Maintenance Walkway and Profile Barrier  | 5d                | 30-Dec-16   | 03-Jan-17   |      |     |      |     |     |  |  |  |  |  |
| <b>Top Slab (Northern and Southern Side Tunnel E/B and W/B - 18000 m3)</b>   |   | 47d               | 03-Oct-16 A | 14-Jan-17   |      |     |      |     |     |  |  |  |  |  |
| <b>Bay 1</b>   |   | 30d               | 08-Nov-16 A | 14-Jan-17   |      |     |      |     |     |  |  |  |  |  |
| A2090  | Bulkhead Breakthrough of TS3E/TS3W  | 30d               | 08-Nov-16 A | 14-Jan-17   |      |     |      |     |     |  |  |  |  |  |
| <b>Bay 6</b>   |   | 11d               | 03-Oct-16 A | 03-Dec-16 A |      |     |      |     |     |  |  |  |  |  |
| A2020  | Bay S6R Top Slab (29m approx.)  | 11d               | 03-Oct-16 A | 30-Nov-16 A |      |     |      |     |     |  |  |  |  |  |
| A2010  | Bay N6R Top Slab (27m approx.)  | 11d               | 05-Oct-16 A | 03-Dec-16 A |      |     |      |     |     |  |  |  |  |  |
| <b>Bay 7</b>   |   | 17d               | 31-Oct-16 A | 09-Dec-16 A |      |     |      |     |     |  |  |  |  |  |
| A2040  | Bay S7R Top Slab (29m approx.)  | 10d               | 31-Oct-16 A | 07-Dec-16 A |      |     |      |     |     |  |  |  |  |  |
| A2030  | Bay N7R Top Slab (26m approx.)  | 10d               | 07-Nov-16 A | 09-Dec-16 A |      |     |      |     |     |  |  |  |  |  |
| <b>Bay 8</b>   |   | 6d                | 12-Dec-16 A | 12-Jan-17   |      |     |      |     |     |  |  |  |  |  |
| A2060  | Bay S8R Top Slab (29m approx.)  | 5d                | 12-Dec-16 A | 03-Jan-17   |      |     |      |     |     |  |  |  |  |  |
| A2050  | Bay N8R Top Slab (26m approx.)  | 6d                | 22-Dec-16 A | 12-Jan-17   |      |     |      |     |     |  |  |  |  |  |
| <b>Bay 9</b>   |   | 1d                | 08-Dec-16 A | 04-Jan-17   |      |     |      |     |     |  |  |  |  |  |

- Actual Work
- Remaining Work
- Critical Remaining Work
- ◆ Milestone

| Date      | Revision                      | Checked | Approved |
|-----------|-------------------------------|---------|----------|
| 30-Dec-16 | DWP-07 (5) - 3 Months Rolling | FS      | TL       |

| Activity ID   | Activity Name  | Original Duration | Start              | Finish           | 2016   |     |     |     |     | 2017 |     |     |     |  |
|---|--|-------------------|--------------------|------------------|--|-----|-----|-----|-----|------|-----|-----|-----|--|
|   |  |                   |                    |                  | Dec  | Jan | Feb | Mar | Apr | Jan  | Feb | Mar | Apr |  |
| A2080   | Bay S9R Top Slab (29m approx.)   | 1d                | 08-Dec-16 A        | 30-Dec-16        | ■ Bay S9R Top Slab (29m approx.)   |     |     |     |     |      |     |     |     |  |
| A2070   | Bay N9R Top Slab (26m approx.)   | 1d                | 17-Dec-16 A        | 04-Jan-17        | ■ Bay N9R Top Slab (26m approx.)   |     |     |     |     |      |     |     |     |  |
| <b>SR8 Tunnel Structure</b>   |  | <b>96d</b>        | <b>13-Nov-16 A</b> | <b>16-Feb-17</b> |  |     |     |     |     |      |     |     |     |  |
| <b>Base Slab of Slip Road 8 (SR8) - 8000 m3</b>                                 |  | <b>73d</b>        | <b>13-Nov-16 A</b> | <b>24-Jan-17</b> |  |     |     |     |     |      |     |     |     |  |
| A2130   | Placement of Seawall Blocks for SR4B Construction  | 8d                | 13-Nov-16 A        | 30-Dec-16        | ■ Placement of Seawall Blocks for SR4B Construction  |     |     |     |     |      |     |     |     |  |
| A2150   | Placement of Seawall Blocks for SR5B Construction  | 8d                | 18-Nov-16 A        | 01-Jan-17        | ■ Placement of Seawall Blocks for SR5B Construction  |     |     |     |     |      |     |     |     |  |
| A2170   | Placement of Seawall Blocks for SR6B Construction  | 8d                | 16-Dec-16 A        | 02-Jan-17        | ■ Placement of Seawall Blocks for SR6B Construction  |     |     |     |     |      |     |     |     |  |
| A2200   | Bay SR8B   | 8d                | 30-Dec-16          | 06-Jan-17        | ■ Bay SR8B   |     |     |     |     |      |     |     |     |  |
| A2140   | Bay SR4B   | 7d                | 31-Dec-16          | 06-Jan-17        | ■ Bay SR4B   |     |     |     |     |      |     |     |     |  |
| A2160   | Bay SR5B   | 7d                | 01-Jan-17          | 08-Jan-17        | ■ Bay SR5B   |     |     |     |     |      |     |     |     |  |
| A2180   | Bay SR6B   | 5d                | 02-Jan-17          | 07-Jan-17        | ■ Bay SR6B   |     |     |     |     |      |     |     |     |  |
| A2190   | Bay SR7B   | 5d                | 11-Jan-17          | 15-Jan-17        | ■ Bay SR7B   |     |     |     |     |      |     |     |     |  |
| A2110   | Breaking to the Cut Off Level of Diaphragm Wall to be Carried Out after Bay S3R Completion | 2d                | 18-Jan-17          | 19-Jan-17        | ■ Breaking to the Cut Off Level of Diaphragm Wall to be Carried Out after Bay S3R Completion |     |     |     |     |      |     |     |     |  |
| A2120   | Bay SR3B   | 5d                | 20-Jan-17          | 24-Jan-17        | ■ Bay SR3B   |     |     |     |     |      |     |     |     |  |
| <b>Wall Structure of SR8 - 2500 m3</b>  |  | <b>27d</b>        | <b>07-Jan-17</b>   | <b>02-Feb-17</b> |  |     |     |     |     |      |     |     |     |  |
| A2230   | Removal of 4th layer and 5th layer ELS   | 6d                | 07-Jan-17          | 12-Jan-17        | ■ Removal of 4th layer and 5th layer ELS   |     |     |     |     |      |     |     |     |  |
| A2270   | Removal of 4th layer and 5th layer ELS   | 6d                | 07-Jan-17          | 13-Jan-17        | ■ Removal of 4th layer and 5th layer ELS   |     |     |     |     |      |     |     |     |  |
| A2250   | Removal of 4th layer and 5th layer ELS   | 6d                | 08-Jan-17          | 14-Jan-17        | ■ Removal of 4th layer and 5th layer ELS   |     |     |     |     |      |     |     |     |  |
| A2240   | Bay SR4 Walls  | 7d                | 13-Jan-17          | 19-Jan-17        | ■ Bay SR4 Walls  |     |     |     |     |      |     |     |     |  |
| A2280   | Bay SR6 Walls  | 7d                | 13-Jan-17          | 20-Jan-17        | ■ Bay SR6 Walls  |     |     |     |     |      |     |     |     |  |
| A2260   | Bay SR5 Walls  | 7d                | 14-Jan-17          | 21-Jan-17        | ■ Bay SR5 Walls  |     |     |     |     |      |     |     |     |  |
| A2290   | Removal of 5th layer ELS   | 4d                | 16-Jan-17          | 19-Jan-17        | ■ Removal of 5th layer ELS   |     |     |     |     |      |     |     |     |  |
| A2300   | Bay SR7 Walls  | 5d                | 20-Jan-17          | 24-Jan-17        | ■ Bay SR7 Walls  |     |     |     |     |      |     |     |     |  |
| A2210   | Removal of 4th layer and 5th layer ELS   | 4d                | 25-Jan-17          | 28-Jan-17        | ■ Removal of 4th layer and 5th layer ELS   |     |     |     |     |      |     |     |     |  |
| A2220   | Bay SR3 Walls  | 5d                | 29-Jan-17          | 02-Feb-17        | ■ Bay SR3 Walls  |     |     |     |     |      |     |     |     |  |
| <b>OHVD Structure, Maintenance Walkway and Profile Barrier of SR8 - 2000 m3</b> |  | <b>35d</b>        | <b>04-Jan-17</b>   | <b>07-Feb-17</b> |  |     |     |     |     |      |     |     |     |  |
| A2320   | Bay SR1R OHVD, Maintenance Walkway and Profile Barrier                                     | 7d                | 04-Jan-17*         | 10-Jan-17        | ■ Bay SR1R OHVD, Maintenance Walkway and Profile Barrier                                     |     |     |     |     |      |     |     |     |  |
| A2380   | Removal of 5th Layer ELS   | 5d                | 07-Jan-17          | 11-Jan-17        | ■ Removal of 5th Layer ELS   |     |     |     |     |      |     |     |     |  |
| A2390   | Bay SR8R OHVD, Maintenance Walkway and Profile Barrier                                     | 4d                | 12-Jan-17          | 15-Jan-17        | ■ Bay SR8R OHVD, Maintenance Walkway and Profile Barrier                                     |     |     |     |     |      |     |     |     |  |
| A2340   | Bay SR4R OHVD, Maintenance Walkway and Profile Barrier                                     | 5d                | 20-Jan-17          | 24-Jan-17        | ■ Bay SR4R OHVD, Maintenance Walkway and Profile Barrier                                     |     |     |     |     |      |     |     |     |  |
| A2360   | Bay SR6R OHVD, Maintenance Walkway and Profile Barrier                                     | 4d                | 20-Jan-17          | 24-Jan-17        | ■ Bay SR6R OHVD, Maintenance Walkway and Profile Barrier                                     |     |     |     |     |      |     |     |     |  |
| A2350   | Bay SR5R OHVD, Maintenance Walkway and Profile Barrier                                     | 7d                | 21-Jan-17          | 28-Jan-17        | ■ Bay SR5R OHVD, Maintenance Walkway and Profile Barrier                                     |     |     |     |     |      |     |     |     |  |
| A2370   | Bay SR7R OHVD, Maintenance Walkway and Profile Barrier                                     | 4d                | 25-Jan-17          | 28-Jan-17        | ■ Bay SR7R OHVD, Maintenance Walkway and Profile Barrier                                     |     |     |     |     |      |     |     |     |  |
| A2330   | Bay SR3R OHVD, Maintenance Walkway and Profile Barrier                                     | 5d                | 03-Feb-17          | 07-Feb-17        | ■ Bay SR3R OHVD, Maintenance Walkway and Profile Barrier                                     |     |     |     |     |      |     |     |     |  |
| <b>Top Slab of SR8 - 12000 m3</b>   |  | <b>37d</b>        | <b>11-Jan-17</b>   | <b>16-Feb-17</b> |  |     |     |     |     |      |     |     |     |  |
| A2400   | Bay SR1R   | 10d               | 11-Jan-17          | 20-Jan-17        | ■ Bay SR1R   |     |     |     |     |      |     |     |     |  |
| A2460   | Bay SR8R   | 9d                | 16-Jan-17          | 24-Jan-17        | ■ Bay SR8R   |     |     |     |     |      |     |     |     |  |
| A2440   | Bay SR6R   | 9d                | 24-Jan-17          | 02-Feb-17        | ■ Bay SR6R   |     |     |     |     |      |     |     |     |  |
| A2420   | Bay SR4R   | 6d                | 25-Jan-17          | 30-Jan-17        | ■ Bay SR4R   |     |     |     |     |      |     |     |     |  |
| A2430   | Bay SR5R   | 8d                | 28-Jan-17          | 05-Feb-17        | ■ Bay SR5R   |     |     |     |     |      |     |     |     |  |
| A2450   | Bay SR7R   | 9d                | 29-Jan-17          | 06-Feb-17        | ■ Bay SR7R   |     |     |     |     |      |     |     |     |  |
| A2410   | Bay SR3R   | 7d                | 10-Feb-17          | 16-Feb-17        | ■ Bay SR3R   |     |     |     |     |      |     |     |     |  |
| <b>Earthwork Backfilling, ELS Removal and Water Recharging</b>                  |  | <b>122d</b>       | <b>10-Nov-16 A</b> | <b>11-Mar-17</b> |  |     |     |     |     |      |     |     |     |  |
| <b>East Portion</b>   |  | <b>116d</b>       | <b>10-Nov-16 A</b> | <b>05-Mar-17</b> |  |     |     |     |     |      |     |     |     |  |

| Activity ID   | Activity Name  | Original Duration | Start              | Finish           | 2016 |     | 2017 |     |     |  |  |
|---|--|-------------------|--------------------|------------------|------|-----|------|-----|-----|--|--|
|   |  |                   |                    |                  | Dec  | Jan | Feb  | Mar | Apr |  |  |
| A2470   | Stage 1 Backfilling- 6000 m3 (-30 mPD~ -20 mPD, Bay 2 -Bay 4) - 500 m3 per day                                   | 13d               | 10-Nov-16 A        | 17-Jan-17        |      |     |      |     |     |  |  |
| A2480   | Stage 2 Backfilling- 28000 m3 (-20 mPD~ -10 mPD, Bay 2- Bay 4) - 1560 m3 per day                                 | 18d               | 18-Jan-17          | 04-Feb-17        |      |     |      |     |     |  |  |
| A2490   | Stage 3 Backfilling- 18000 m3 (-10mPD~ -7.0 mPD, Bay 2- Bay 4) - 1000 m3 per day                                 | 18d               | 05-Feb-17          | 22-Feb-17        |      |     |      |     |     |  |  |
| A2510   | Closure of wall opening in Bay 1 of CCT (Wall 4 and Wall 5)  | 11d               | 12-Feb-17          | 23-Feb-17        |      |     |      |     |     |  |  |
| A2520   | Stage 5 Backfilling ~ 10000 m3 (-30 mPD ~ -7.0 mPD, Bay 1) ~ 1000 m3 per day                                     | 11d               | 18-Feb-17          | 28-Feb-17        |      |     |      |     |     |  |  |
| A2500   | Removal of 2nd Layer ELS and Removal of Reprop inside Tunnel (Bay 2- Bay 4)                                      | 10d               | 23-Feb-17          | 04-Mar-17        |      |     |      |     |     |  |  |
| A2515   | Backfilling of Bay 1   | 11d               | 23-Feb-17          | 05-Mar-17        |      |     |      |     |     |  |  |
| A2530   | Removal of 2nd Layer ELS (Bay 1)   | 5d                | 01-Mar-17          | 05-Mar-17        |      |     |      |     |     |  |  |
| <b>West Portion</b>   |  | <b>33d</b>        | <b>13-Jan-17</b>   | <b>14-Feb-17</b> |      |     |      |     |     |  |  |
| A2540   | Stage 4 Backfilling - 69000 m3 (-30mPD~ -7.0 mPD, Bay 5-8) - 2500 m3 per day                                     | 28d               | 13-Jan-17          | 09-Feb-17        |      |     |      |     |     |  |  |
| A2550   | Removal of 2nd Layer ELS - 10 days   | 13d               | 02-Feb-17          | 14-Feb-17        |      |     |      |     |     |  |  |
| <b>Water Recharge (CNY- 27/1- 2/2)</b>                                    |  | <b>6d</b>         | <b>06-Mar-17</b>   | <b>11-Mar-17</b> |      |     |      |     |     |  |  |
| A2560   | Water Re-charge to ELS Cofferdam   | 6d                | 06-Mar-17          | 11-Mar-17        |      |     |      |     |     |  |  |
| <b>Skin Wall Removal Works between TS4/TS3W and Shaft D Closure</b>       |  | <b>85d</b>        | <b>30-Dec-16</b>   | <b>24-Mar-17</b> |      |     |      |     |     |  |  |
| A2570   | Design Review and ICE Cert for 1st Stage Skin Wall Removal   | 15d               | 30-Dec-16          | 13-Jan-17        |      |     |      |     |     |  |  |
| A2580   | Skin Wall Removal Works between TS4/TS3W - 20 days (1st stage) - SR8   | 20d               | 14-Jan-17          | 02-Feb-17        |      |     |      |     |     |  |  |
| A2590   | Skin Wall Removal Works between TS4/TS3W - 20 days (2nd stage) - After Tunnel Roof Slab Completion - E/B and W/B | 20d               | 03-Feb-17          | 22-Feb-17        |      |     |      |     |     |  |  |
| A2600   | Construction of Remaining Tunnel Structure between CH. 4260.2- 4265.2 at SOL T100 for Mainline E/B, W/B, SR8     | 30d               | 23-Feb-17          | 24-Mar-17        |      |     |      |     |     |  |  |
| A2610   | Shaft D R/C Slab Reinstatement   | 20d               | 23-Feb-17          | 14-Mar-17        |      |     |      |     |     |  |  |
| <b>Removal Bulkhead at CH525 (TS3W / SR8 Junction)</b>                    |  | <b>51d</b>        | <b>21-Jan-17</b>   | <b>12-Mar-17</b> |      |     |      |     |     |  |  |
| A4830   | Curing Period for Removal of Scaffolding of Bay SR1R of SR8 Roof Slab  | 10d               | 21-Jan-17          | 30-Jan-17        |      |     |      |     |     |  |  |
| A5180   | Remove Scaffolding of SR1R Roof  | 4d                | 31-Jan-17          | 03-Feb-17        |      |     |      |     |     |  |  |
| A6080   | Remove Bulkhead between TS3W & SR8   | 37d               | 04-Feb-17          | 12-Mar-17        |      |     |      |     |     |  |  |
| <b>Works in KD8</b>   |  | <b>66d</b>        | <b>27-Jan-17</b>   | <b>02-Apr-17</b> |      |     |      |     |     |  |  |
| <b>TS3W - Remove Temporary Reclamation</b>                                |  | <b>66d</b>        | <b>27-Jan-17</b>   | <b>02-Apr-17</b> |      |     |      |     |     |  |  |
| <b>Stage 1 - North West Corner (Bay Z4-25 to Bay 20)</b>                  |  | <b>24d</b>        | <b>27-Jan-17</b>   | <b>19-Feb-17</b> |      |     |      |     |     |  |  |
| A2650   | Break concrete slab at Bay Z4-25 to Bay 20   | 4d                | 27-Jan-17          | 30-Jan-17        |      |     |      |     |     |  |  |
| A2660   | Remove filled material to -4.35mPD at Bay Z4-25 to Bay 19 (6,500m3)  | 8d                | 31-Jan-17          | 07-Feb-17        |      |     |      |     |     |  |  |
| A2670   | Remove seawall blocks at Bay Z4-25 to Bay 20 (426 nos.)  | 8d                | 08-Feb-17          | 15-Feb-17        |      |     |      |     |     |  |  |
| A2680   | Remove filled material to -7.0 mPD   | 4d                | 16-Feb-17          | 19-Feb-17        |      |     |      |     |     |  |  |
| <b>Stage 2 - North to East Side (Bay 19 to Bay 11 + Bay 26 to Bay 28)</b> |  | <b>14d</b>        | <b>31-Jan-17</b>   | <b>13-Feb-17</b> |      |     |      |     |     |  |  |
| A2690   | Break concrete slab at Bay 19 to Bay 11 + Bay 26 to Bay 28 (2,500m2)   | 7d                | 31-Jan-17          | 06-Feb-17        |      |     |      |     |     |  |  |
| A2700   | Remove filled material to +2.8mPD (2,500m3)  | 7d                | 07-Feb-17          | 13-Feb-17        |      |     |      |     |     |  |  |
| <b>Stage 3 - North to East Side (Bay 19 to bay 26)</b>                    |  | <b>22d</b>        | <b>12-Mar-17</b>   | <b>02-Apr-17</b> |      |     |      |     |     |  |  |
| <b>North West D-wall Opening</b>  |  | <b>19d</b>        | <b>12-Mar-17</b>   | <b>30-Mar-17</b> |      |     |      |     |     |  |  |
| A2720   | Core D-wall cut holes at Panel DW02 to NA6 (27 nos.)   | 4d                | 12-Mar-17          | 15-Mar-17        |      |     |      |     |     |  |  |
| A2730   | Vertical cut at Panel DW02 to NA6 (19 nos.)  | 8d                | 16-Mar-17          | 23-Mar-17        |      |     |      |     |     |  |  |
| A2740   | Horizontal cut at Panel DW02 to NA6 (25 nos.)  | 7d                | 24-Mar-17          | 30-Mar-17        |      |     |      |     |     |  |  |
| <b>North East &amp; East</b>  |  | <b>22d</b>        | <b>12-Mar-17</b>   | <b>02-Apr-17</b> |      |     |      |     |     |  |  |
| A2750   | Remove filled material to -4.35mPD (22,500m3)  | 9d                | 12-Mar-17          | 20-Mar-17        |      |     |      |     |     |  |  |
| A2760   | Remove seawall blocks at Bay 19 to 11 & Bay 26 to 28 (1,335 nos.)  | 13d               | 21-Mar-17          | 02-Apr-17        |      |     |      |     |     |  |  |
| <b>Works in KD6</b>   |  | <b>333d</b>       | <b>19-Apr-16 A</b> | <b>18-Mar-17</b> |      |     |      |     |     |  |  |
| <b>Works in SR8 (Open Cut Method)</b>                                     |  | <b>333d</b>       | <b>19-Apr-16 A</b> | <b>18-Mar-17</b> |      |     |      |     |     |  |  |
| <b>SR8 (Zone C) - Ch. 528 to Ch. 368</b>                                  |  | <b>109d</b>       | <b>18-Nov-16 A</b> | <b>18-Mar-17</b> |      |     |      |     |     |  |  |

| Activity ID  | Activity Name  | Original Duration | Start       | Finish      | 2016 |     | 2017 |     |     |  |  |  |  |
|--|--|-------------------|-------------|-------------|------|-----|------|-----|-----|--|--|--|--|
|  |  |                   |             |             | Dec  | Jan | Feb  | Mar | Apr |  |  |  |  |
| <b>ELS</b>   |  |                   |             |             |      |     |      |     |     |  |  |  |  |
| <b>Area B (CH475 to CH514) - steel Deck EB + SR8/TS3 Interface</b>                         |  |                   |             |             |      |     |      |     |     |  |  |  |  |
| <b>Strut &amp; Waling Installation for SL5</b>   |  |                   |             |             |      |     |      |     |     |  |  |  |  |
| A3470  | Area B - Waling Installation   | 6d                | 19-Nov-16 A | 02-Dec-16 A |      |     |      |     |     |  |  |  |  |
| A3480  | Area B - Strut Installation for SL5  | 9d                | 30-Nov-16 A | 03-Dec-16 A |      |     |      |     |     |  |  |  |  |
| A1621  | Area B - Bracing Installation for Layer 2 (Bottom Horizontal & Diagonal)               | 1d                | 07-Dec-16 A | 07-Dec-16 A |      |     |      |     |     |  |  |  |  |
| <b>Excavation to -17.9mPD From SL5 to Formation (3,908 m3 / 540m3/D approx.3.3m Depth)</b> |  |                   |             |             |      |     |      |     |     |  |  |  |  |
| A3440  | Area B - Excavation 1st cycle (1.2m Depth) & Lagging Plate                             | 4d                | 30-Nov-16 A | 01-Dec-16 A |      |     |      |     |     |  |  |  |  |
| A3450  | Area B - Excavation 2nd cycle (1.2m Depth) & Lagging Plate                             | 4d                | 02-Dec-16 A | 03-Dec-16 A |      |     |      |     |     |  |  |  |  |
| A3460  | Area B - Excavation 3rd cycle (0.9m Depth) & Lagging Plate                             | 3d                | 04-Dec-16 A | 05-Dec-16 A |      |     |      |     |     |  |  |  |  |
| <b>Excavation for Rock Fill (1000mm Below F.L./1,576 m3/ 540m3/D)</b>                      |  |                   |             |             |      |     |      |     |     |  |  |  |  |
| A3490  | Area B - Excavation further down to 1000mm below F.L.                                  | 1d                | 30-Dec-16   | 30-Dec-16   |      |     |      |     |     |  |  |  |  |
| A3500  | Area B - Lay & Compact Rock Fill   | 4d                | 31-Dec-16   | 03-Jan-17   |      |     |      |     |     |  |  |  |  |
| A3510  | Area B - Blinding / Divert Ground Water by Submerge Pump                               | 2d                | 03-Jan-17   | 04-Jan-17   |      |     |      |     |     |  |  |  |  |
| <b>Tunnel Structure</b>  |  |                   |             |             |      |     |      |     |     |  |  |  |  |
| <b>Area A (CH384 to CH475 - Victoria Park to Steel Deck WB + IEC)</b>                      |  |                   |             |             |      |     |      |     |     |  |  |  |  |
| <b>Vertical Blinding Bay C1 to C4</b>  |  |                   |             |             |      |     |      |     |     |  |  |  |  |
| A4300  | Bay C4   | 13d               | 29-Nov-16 A | 09-Dec-16 A |      |     |      |     |     |  |  |  |  |
| <b>Tunnel Structure at Area A - Bay C1 to C4</b>   |  |                   |             |             |      |     |      |     |     |  |  |  |  |
| <b>Bay C2</b>  |  |                   |             |             |      |     |      |     |     |  |  |  |  |
| <b>Structure</b>   |  |                   |             |             |      |     |      |     |     |  |  |  |  |
| <b>1.2m Thick Base Slab</b>  |  |                   |             |             |      |     |      |     |     |  |  |  |  |
| T1350  | C2 Base - Concreting   | 1d                | 30-Nov-16 A | 30-Nov-16 A |      |     |      |     |     |  |  |  |  |
| T1370  | C2 Base - Remove 3th & 5th Strut SL3 & SL5 (2 Nos@SL5 & 8 Nos@SL3)                     | 3d                | 09-Dec-16 A | 16-Dec-16 A |      |     |      |     |     |  |  |  |  |
| <b>1m Thick Tunnel Wall at Both Sides &amp; OHVD Slab</b>                                  |  |                   |             |             |      |     |      |     |     |  |  |  |  |
| T1380  | C2 Wall & OHVD - Erect Scaffolding & Soffit Formwork                                   | 4d                | 22-Dec-16 A | 30-Dec-16   |      |     |      |     |     |  |  |  |  |
| T1390  | C2 Wall & OHVD - Steel Fixing & Wall Formwork  | 5d                | 30-Dec-16   | 03-Jan-17   |      |     |      |     |     |  |  |  |  |
| T1400  | C2 Wall & OHVD - Concreting  | 1d                | 04-Jan-17   | 04-Jan-17   |      |     |      |     |     |  |  |  |  |
| <b>400mm Thick OHVD Hanger Wall &amp; 1.2m Thick Top Slab</b>                              |  |                   |             |             |      |     |      |     |     |  |  |  |  |
| T1440  | C2 OHVD Hanger Wall & Roof - Erect Falsework & Soffit Formworks + Hanger Wall Formwork | 3d                | 05-Jan-17   | 07-Jan-17   |      |     |      |     |     |  |  |  |  |
| T1450  | C2 OHVD Hanger Wall & Roof - Steel Fixing (+1 d for Wall Steel fixing)                 | 6d                | 08-Jan-17   | 13-Jan-17   |      |     |      |     |     |  |  |  |  |
| T1460  | C2 OHVD Hanger Wall & Roof - Top slab CJ Formwork Erection & Water Stop                | 2d                | 14-Jan-17   | 15-Jan-17   |      |     |      |     |     |  |  |  |  |
| T1470  | C2 OHVD Hanger Wall & Roof - Concreting  | 1d                | 16-Jan-17   | 16-Jan-17   |      |     |      |     |     |  |  |  |  |
| <b>Removal of Falseworks &amp; SL4</b>   |  |                   |             |             |      |     |      |     |     |  |  |  |  |
| T1550  | C2 Roof - 10 Days Curing of Roof Prior to Removal of Falsework                         | 10d               | 17-Jan-17   | 26-Jan-17   |      |     |      |     |     |  |  |  |  |
| T1560  | C2 Roof - Remove Falsework   | 6d                | 27-Jan-17   | 05-Feb-17   |      |     |      |     |     |  |  |  |  |
| T2730  | C2 Wall - Remove Strut SL4 (8 No / Layer/ Bay C2)                                      | 3d                | 06-Feb-17   | 08-Feb-17   |      |     |      |     |     |  |  |  |  |
| <b>Egress Passage</b>  |  |                   |             |             |      |     |      |     |     |  |  |  |  |
| <b>Wall of EP</b>  |  |                   |             |             |      |     |      |     |     |  |  |  |  |
| A3780  | C2 Erect Scaffolding & working Platform  | 1d                | 08-Feb-17   | 09-Feb-17   |      |     |      |     |     |  |  |  |  |
| A3750  | C2 Internal Wall Formwork  | 2d                | 09-Feb-17   | 11-Feb-17   |      |     |      |     |     |  |  |  |  |
| A3760  | C2 Steel Fixing to Wall  | 2d                | 11-Feb-17   | 13-Feb-17   |      |     |      |     |     |  |  |  |  |
| A3770  | C2 External Wall Formwork  | 3d                | 13-Feb-17   | 16-Feb-17   |      |     |      |     |     |  |  |  |  |
| A3790  | C2 Concrete to Wall  | 1d                | 16-Feb-17   | 17-Feb-17   |      |     |      |     |     |  |  |  |  |

- Actual Work
- Remaining Work
- Critical Remaining Work
- ◆ Milestone

|           |                               |         |          |
|-----------|-------------------------------|---------|----------|
| Date      | Revision                      | Checked | Approved |
| 30-Dec-16 | DWP-07 (5) - 3 Months Rolling | FS      | TL       |



| Activity ID   | Activity Name  | Original Duration | Start       | Finish      | 2016 |     | 2017 |     |     |  |  |  |  |
|---|--|-------------------|-------------|-------------|------|-----|------|-----|-----|--|--|--|--|
|   |  |                   |             |             | Dec  | Jan | Feb  | Mar | Apr |  |  |  |  |
| <b>Roof of EP</b>   |  |                   |             |             |      |     |      |     |     |  |  |  |  |
| A3800   | C2 Scaffolding & Soffit Formwork   | 3d                | 17-Feb-17   | 20-Feb-17   |      |     |      |     |     |  |  |  |  |
| A3810   | C2 Steel Fixing to Roof  | 2d                | 20-Feb-17   | 22-Feb-17   |      |     |      |     |     |  |  |  |  |
| A3820   | C2 Side Formwork for Wall up to Roof Top   | 2d                | 22-Feb-17   | 24-Feb-17   |      |     |      |     |     |  |  |  |  |
| A3830   | C2 Concrete to Roof  | 1d                | 24-Feb-17   | 25-Feb-17   |      |     |      |     |     |  |  |  |  |
| <b>Utility Trough</b>   |  |                   |             |             |      |     |      |     |     |  |  |  |  |
| <b>Left Hand Side</b>   |  |                   |             |             |      |     |      |     |     |  |  |  |  |
| A3850   | C2 - LHS Backing Concrete of Utility Trough  | 4d                | 25-Feb-17   | 01-Mar-17   |      |     |      |     |     |  |  |  |  |
| A3840   | C2 - LHS Profile Barrier of Utility Trough   | 4d                | 01-Mar-17   | 05-Mar-17   |      |     |      |     |     |  |  |  |  |
| <b>Right Hand Side</b>  |  |                   |             |             |      |     |      |     |     |  |  |  |  |
| A3860   | C2 - RHS Backing Concrete of Utility Trough  | 4d                | 08-Feb-17   | 12-Feb-17   |      |     |      |     |     |  |  |  |  |
| A3870   | C2 - RHS Profile Barrier of Utility Trough   | 4d                | 12-Feb-17   | 16-Feb-17   |      |     |      |     |     |  |  |  |  |
| <b>Bay C1</b>   |  |                   |             |             |      |     |      |     |     |  |  |  |  |
| <b>Structure</b>  |  |                   |             |             |      |     |      |     |     |  |  |  |  |
| A4280   | Fixing T-Grid Waterproofing on Base Slab & Vertical Blinding                           | 3d                | 18-Nov-16 A | 01-Dec-16 A |      |     |      |     |     |  |  |  |  |
| <b>1.2m Thick Base Slab</b>                                   |  |                   |             |             |      |     |      |     |     |  |  |  |  |
| T2780   | C1 Base - Rebar Fixing   | 5d                | 02-Dec-16 A | 06-Dec-16 A |      |     |      |     |     |  |  |  |  |
| T2790   | C1 Base - Kicker Formwork & Water Stop   | 2d                | 07-Dec-16 A | 07-Dec-16 A |      |     |      |     |     |  |  |  |  |
| T2800   | C1 Base - Concreting   | 1d                | 08-Dec-16 A | 08-Dec-16 A |      |     |      |     |     |  |  |  |  |
| T2820   | C1 Base - Remove 3th & 5th Strut SL3 & SL5 (0 Nos@SL5 & 6 Nos@SL3)                     | 2d                | 12-Dec-16 A | 19-Dec-16 A |      |     |      |     |     |  |  |  |  |
| <b>1m Thick Tunnel Wall at Both Sides &amp; OHVD Slab</b>     |  |                   |             |             |      |     |      |     |     |  |  |  |  |
| T2830   | C1 Wall & OHVD - Erect Scaffolding & Soffit Formwork                                   | 3d                | 30-Dec-16   | 01-Jan-17   |      |     |      |     |     |  |  |  |  |
| T2840   | C1 Wall & OHVD - Steel Fixing  | 4d                | 02-Jan-17   | 05-Jan-17   |      |     |      |     |     |  |  |  |  |
| T2850   | C1 Wall & OHVD - Wall Formwork + Side Formwork for OHVD Slab                           | 1d                | 06-Jan-17   | 06-Jan-17   |      |     |      |     |     |  |  |  |  |
| T2860   | C1 Wall & OHVD - Concreting  | 1d                | 07-Jan-17   | 07-Jan-17   |      |     |      |     |     |  |  |  |  |
| <b>400mm Thick OHVD Hanger Wall &amp; 1.2m Thick Top Slab</b> |  |                   |             |             |      |     |      |     |     |  |  |  |  |
| T2870   | C1 OHVD Hanger Wall & Roof - Erect Falsework & Soffit Formworks + Hanger Wall Formwork | 3d                | 08-Jan-17   | 10-Jan-17   |      |     |      |     |     |  |  |  |  |
| T2880   | C1 OHVD Hanger Wall & Roof - Steel Fixing (+1 D for Wall Steel Fixing)                 | 6d                | 11-Jan-17   | 16-Jan-17   |      |     |      |     |     |  |  |  |  |
| T2890   | C1 OHVD Hanger Wall & Roof - Top slab CJ Formwork Erection & Water Stop                | 1d                | 17-Jan-17   | 17-Jan-17   |      |     |      |     |     |  |  |  |  |
| T2910   | C1 OHVD Hanger Wall & Roof - Concreting  | 1d                | 18-Jan-17   | 18-Jan-17   |      |     |      |     |     |  |  |  |  |
| <b>Removal of Falseworks &amp; SL4</b>                        |  |                   |             |             |      |     |      |     |     |  |  |  |  |
| T1310   | C1 Roof - 10 Days Curing of Roof Prior to Removal of Falsework                         | 10d               | 19-Jan-17   | 28-Jan-17   |      |     |      |     |     |  |  |  |  |
| T1320   | C1 Roof - Remove Falsework   | 6d                | 01-Feb-17   | 06-Feb-17   |      |     |      |     |     |  |  |  |  |
| T2740   | C1 Wall - Remove Strut SL4 (6 No / Layer/ Bay C1)                                      | 2d                | 07-Feb-17   | 08-Feb-17   |      |     |      |     |     |  |  |  |  |
| <b>Egress Passage</b>   |  |                   |             |             |      |     |      |     |     |  |  |  |  |
| <b>Wall of EP</b>   |  |                   |             |             |      |     |      |     |     |  |  |  |  |
| A3650   | C1 Erect Scaffolding & working Platform  | 1d                | 09-Feb-17   | 09-Feb-17   |      |     |      |     |     |  |  |  |  |
| A3620   | C1 Internal Wall Formwork  | 2d                | 10-Feb-17   | 11-Feb-17   |      |     |      |     |     |  |  |  |  |
| A3630   | C1 Steel Fixing to Wall  | 2d                | 12-Feb-17   | 13-Feb-17   |      |     |      |     |     |  |  |  |  |
| A3640   | C1 External Wall Formwork  | 3d                | 14-Feb-17   | 16-Feb-17   |      |     |      |     |     |  |  |  |  |
| A3660   | C1 Concrete to Wall  | 1d                | 17-Feb-17   | 17-Feb-17   |      |     |      |     |     |  |  |  |  |
| <b>Roof of EP</b>   |  |                   |             |             |      |     |      |     |     |  |  |  |  |
| A3670   | C1 Scaffolding & Soffit Formwork   | 3d                | 18-Feb-17   | 20-Feb-17   |      |     |      |     |     |  |  |  |  |
| A3680   | C1 Steel Fixing to Roof  | 2d                | 21-Feb-17   | 22-Feb-17   |      |     |      |     |     |  |  |  |  |









| Activity ID  | Activity Name  | Original Duration | Start       | Finish    | 2016   |     |     |     |     | 2017   |     |     |     |
|--|--|-------------------|-------------|-----------|--|-----|-----|-----|-----|--|-----|-----|-----|
|  |  |                   |             |           | Dec  | Jan | Feb | Mar | Apr | Jan  | Feb | Mar | Apr |
| <b>Structure</b>   |  |                   |             |           |  |     |     |     |     |  |     |     |     |
| <b>1.2m Thick Base Slab</b>  |  |                   |             |           |  |     |     |     |     |  |     |     |     |
| T2490  | C6 Base - Rebar Fixing   | 4d                | 07-Jan-17   | 11-Jan-17 |  |     |     |     |     | C6 Base - Rebar Fixing   |     |     |     |
| T2500  | C6 Base - Kicker Formwork & Water Stop                                 | 1d                | 11-Jan-17   | 12-Jan-17 |  |     |     |     |     | C6 Base - Kicker Formwork & Water Stop                         |     |     |     |
| T2510  | C6 Base - Concreting   | 1d                | 12-Jan-17   | 13-Jan-17 |  |     |     |     |     | C6 Base - Concreting   |     |     |     |
| T2520  | C6 Base - Remove Kicker Formwork & Make Good C.J.                      | 1d                | 13-Jan-17   | 14-Jan-17 |  |     |     |     |     | C6 Base - Remove Kicker Formwork & Make Good C.J.              |     |     |     |
| T2530  | C6 Base - Remove Strut SL6 (3 Nos/Bay C6)                              | 1d                | 14-Jan-17   | 15-Jan-17 |  |     |     |     |     | C6 Base - Remove Strut SL6 (3 Nos/Bay C6)                      |     |     |     |
| <b>200 mm Thick OHVD Slab</b>  |  |                   |             |           |  |     |     |     |     |  |     |     |     |
| T2660  | C6 OHVD - Erect Falsework  | 2d                | 15-Jan-17   | 17-Jan-17 |  |     |     |     |     | C6 OHVD - Erect Falsework                                      |     |     |     |
| T2670  | C6 OHVD - Erect Soffit Formwork  | 2d                | 17-Jan-17   | 19-Jan-17 |  |     |     |     |     | C6 OHVD - Erect Soffit Formwork                                |     |     |     |
| T2680  | C6 OHVD - Steel Fixing for Slab  | 2d                | 28-Jan-17   | 30-Jan-17 |  |     |     |     |     | C6 OHVD - Steel Fixing for Slab                                |     |     |     |
| T2690  | C6 OHVD - Placing Concrete to Slab                                     | 1d                | 30-Jan-17   | 31-Jan-17 |  |     |     |     |     | C6 OHVD - Placing Concrete to Slab                             |     |     |     |
| <b>1.2m Thick Top Slab</b>   |  |                   |             |           |  |     |     |     |     |  |     |     |     |
| T3570  | C6 Roof - Erect Falsework & Soffit Formwork                            | 4d                | 06-Feb-17   | 10-Feb-17 |  |     |     |     |     | C6 Roof - Erect Falsework & Soffit Formwork                    |     |     |     |
| T3580  | C6 Roof - Steel Fixing   | 4d                | 10-Feb-17   | 14-Feb-17 |  |     |     |     |     | C6 Roof - Steel Fixing   |     |     |     |
| T3590  | C6 Roof - Placing Concrete to Roof Slab & OHVD Hanger Wall             | 1d                | 14-Feb-17   | 15-Feb-17 |  |     |     |     |     | C6 Roof - Placing Concrete to Roof Slab & OHVD Hanger Wall     |     |     |     |
| <b>Removal of Falseworks &amp; SL4</b>   |  |                   |             |           |  |     |     |     |     |  |     |     |     |
| T2640  | C6 Roof - 10 Days Curing of Roof Prior to Removal of Falsework         | 10d               | 15-Feb-17   | 25-Feb-17 |  |     |     |     |     | C6 Roof - 10 Days Curing of Roof Prior to Removal of Falsework |     |     |     |
| T2650  | C6 Roof - Remove Falsework   | 5d                | 25-Feb-17   | 02-Mar-17 |  |     |     |     |     | C6 Roof - Remove Falsework                                     |     |     |     |
| <b>Utility Trough</b>  |  |                   |             |           |  |     |     |     |     |  |     |     |     |
| <b>Left Hand Side</b>  |  |                   |             |           |  |     |     |     |     |  |     |     |     |
| A4240  | C6 - LHS Backing Concrete of Utility Trough                            | 4d                | 10-Mar-17   | 14-Mar-17 |  |     |     |     |     | C6 - LHS Backing Concrete of Utility Trough                    |     |     |     |
| A4250  | C6 - LHS Profile Barrier of Utility Trough                             | 4d                | 14-Mar-17   | 18-Mar-17 |  |     |     |     |     | C6 - LHS Profile Barrier of Utility Trough                     |     |     |     |
| <b>Right Hand Side</b>   |  |                   |             |           |  |     |     |     |     |  |     |     |     |
| A4260  | C6 - RHS Backing Concrete of Utility Trough                            | 4d                | 02-Mar-17   | 06-Mar-17 |  |     |     |     |     | C6 - RHS Backing Concrete of Utility Trough                    |     |     |     |
| A4270  | C6 - RHS Profile Barrier of Utility Trough                             | 4d                | 06-Mar-17   | 10-Mar-17 |  |     |     |     |     | C6 - RHS Profile Barrier of Utility Trough                     |     |     |     |
| <b>SR8 (Zone B) - Ch.385.000 to Ch.317.500 - (Inside Victoria Park to Tunnel Portal)</b> |  |                   |             |           |  |     |     |     |     |  |     |     |     |
| <b>SR8 (Zone B) Tunnel - ELS / CCT / BF Works ( 7 Bays Ch. 385.000 to Ch.317.500)</b>    |  |                   |             |           |  |     |     |     |     |  |     |     |     |
| <b>Portal Structure</b>  |  |                   |             |           |  |     |     |     |     |  |     |     |     |
| <b>Backfill &amp; Remove Struts</b>  |  |                   |             |           |  |     |     |     |     |  |     |     |     |
| SR8_ZB_1350  | Zone B - Backfill Gap between Structural Wall & Pipe Piles             | 4d                | 19-Apr-16 A | 17-Jan-17 | Zone B - Backfill Gap between Structural Wall & Pipe Piles             |     |     |     |     |  |     |     |     |
| SR8_ZB_1380  | Zone B - Remove Top Layer of Strut for Pump House Manhole Construction | 8d                | 17-Jan-17   | 26-Jan-17 | Zone B - Remove Top Layer of Strut for Pump House Manhole Construction |     |     |     |     |  |     |     |     |
| <b>OHVD</b>  |  |                   |             |           |  |     |     |     |     |  |     |     |     |
| <b>Bay B2 (CH338.625 to CH351.8)</b>   |  |                   |             |           |  |     |     |     |     |  |     |     |     |
| SR8_ZB_1390  | Zone B - OHVD Bay 2 - Erect Scaffolding & Soffit Formwork              | 6d                | 25-Jan-17   | 03-Feb-17 | Zone B - OHVD Bay 2 - Erect Scaffolding & Soffit Formwork              |     |     |     |     |  |     |     |     |
| SR8_ZB_1400  | Zone B - OHVD Bay 2 - Rebar Fixing for Slab of OHVD                    | 3d                | 06-Feb-17   | 08-Feb-17 | Zone B - OHVD Bay 2 - Rebar Fixing for Slab of OHVD                    |     |     |     |     |  |     |     |     |
| SR8_ZB_1410  | Zone B - OHVD Concrete of Slab of OHVD                                 | 1d                | 09-Feb-17   | 09-Feb-17 | Zone B - OHVD Concrete of Slab of OHVD                                 |     |     |     |     |  |     |     |     |
| SR8_ZB_1420  | Zone B - OHVD Rebar Fixing to Hanger Wall                              | 1d                | 10-Feb-17   | 10-Feb-17 | Zone B - OHVD Rebar Fixing to Hanger Wall                              |     |     |     |     |  |     |     |     |
| SR8_ZB_1450  | Zone B - OHVD Curing Period for OHVD Slab                              | 10d               | 10-Feb-17   | 19-Feb-17 | Zone B - OHVD Curing Period for OHVD Slab                              |     |     |     |     |  |     |     |     |
| SR8_ZB_1430  | Zone B - OHVD Erect Hanger Wall Formwork for OHVD                      | 2d                | 11-Feb-17   | 13-Feb-17 | Zone B - OHVD Erect Hanger Wall Formwork for OHVD                      |     |     |     |     |  |     |     |     |
| SR8_ZB_1440  | Zone B - OHVD Concrete Hanger Wall of OHVDV                            | 1d                | 14-Feb-17   | 14-Feb-17 | Zone B - OHVD Concrete Hanger Wall of OHVDV                            |     |     |     |     |  |     |     |     |
| SR8_ZB_1460  | Zone B - OHVD Remove Soffit Formwork & Scaffolding                     | 5d                | 20-Feb-17   | 24-Feb-17 | Zone B - OHVD Remove Soffit Formwork & Scaffolding                     |     |     |     |     |  |     |     |     |
| <b>Bay B3 (CH351.8 to CH368)</b>   |  |                   |             |           |  |     |     |     |     |  |     |     |     |
| SR8_ZB_1470  | Zone B - OHVD Bay 3 - Erect Scaffolding & Soffit Formwork              | 6d                | 17-Jan-17   | 23-Jan-17 | Zone B - OHVD Bay 3 - Erect Scaffolding & Soffit Formwork              |     |     |     |     |  |     |     |     |

| Activity ID   | Activity Name   | Original Duration | Start              | Finish           | 2016 |     | 2017 |     |     |  |  |  |  |  |
|---|---|-------------------|--------------------|------------------|------|-----|------|-----|-----|--|--|--|--|--|
|   |   |                   |                    |                  | Dec  | Jan | Feb  | Mar | Apr |  |  |  |  |  |
| SR8_ZB_1480   | Zone B - OHVD Bay 3 - Rebar Fixing for Slab of OHVD         | 3d                | 24-Jan-17          | 26-Jan-17        |      |     |      |     |     |  |  |  |  |  |
| SR8_ZB_1490   | Zone B - OHVD Bay 3 - Concrete of Slab of OHVD              | 1d                | 27-Jan-17          | 27-Jan-17        |      |     |      |     |     |  |  |  |  |  |
| SR8_ZB_1530   | Zone B - OHVD Bay 3 - Curing Period for OHVD Slab           | 10d               | 28-Jan-17          | 06-Feb-17        |      |     |      |     |     |  |  |  |  |  |
| SR8_ZB_1500   | Zone B - OHVD Bay 3 - Rebar Fixing to Hanger Wall           | 1d                | 01-Feb-17          | 01-Feb-17        |      |     |      |     |     |  |  |  |  |  |
| SR8_ZB_1510   | Zone B - OHVD Bay 3 - Erect Hanger Wall Formwork for OHVD   | 2d                | 02-Feb-17          | 03-Feb-17        |      |     |      |     |     |  |  |  |  |  |
| SR8_ZB_1520   | Zone B - OHVD Bay 3 - Concrete Hanger Wall of OHVDV         | 1d                | 04-Feb-17          | 04-Feb-17        |      |     |      |     |     |  |  |  |  |  |
| SR8_ZB_1540   | Zone B - OHVD Bay 3 - Remove Soffit Formwork & Scaffolding  | 5d                | 07-Feb-17          | 11-Feb-17        |      |     |      |     |     |  |  |  |  |  |
| <b>Utility Trough</b>   |   | <b>28d</b>        | <b>30-Dec-16</b>   | <b>04-Feb-17</b> |      |     |      |     |     |  |  |  |  |  |
| <b>Left Hand Side</b>   |   | <b>21d</b>        | <b>09-Jan-17</b>   | <b>04-Feb-17</b> |      |     |      |     |     |  |  |  |  |  |
| SR8_ZB_1570   | Zone B - U trough (LHS) Bay 3                               | 7d                | 09-Jan-17          | 16-Jan-17        |      |     |      |     |     |  |  |  |  |  |
| SR8_ZB_1560   | Zone B - U trough (LHS) Bay 2                               | 7d                | 17-Jan-17          | 24-Jan-17        |      |     |      |     |     |  |  |  |  |  |
| SR8_ZB_1550   | Zone B - U trough (LHS) Bay 1                               | 7d                | 25-Jan-17          | 04-Feb-17        |      |     |      |     |     |  |  |  |  |  |
| <b>Right Hand Side</b>  |   | <b>21d</b>        | <b>30-Dec-16</b>   | <b>24-Jan-17</b> |      |     |      |     |     |  |  |  |  |  |
| SR8_ZB_1600   | Zone B - U trough (RHS) Bay 3                               | 7d                | 30-Dec-16*         | 07-Jan-17        |      |     |      |     |     |  |  |  |  |  |
| SR8_ZB_1590   | Zone B - U trough (RHS) Bay 2                               | 7d                | 09-Jan-17          | 16-Jan-17        |      |     |      |     |     |  |  |  |  |  |
| SR8_ZB_1580   | Zone B - U trough (RHS) Bay 1                               | 7d                | 17-Jan-17          | 24-Jan-17        |      |     |      |     |     |  |  |  |  |  |
| <b>Pump House</b>   |   | <b>53d</b>        | <b>30-Dec-16</b>   | <b>20-Feb-17</b> |      |     |      |     |     |  |  |  |  |  |
| <b>Pressure Relief Manhole</b>  |   | <b>14d</b>        | <b>26-Jan-17</b>   | <b>15-Feb-17</b> |      |     |      |     |     |  |  |  |  |  |
| SR8_ZB_1800   | PS- Manhole Internal Wall Formwork                          | 4d                | 26-Jan-17          | 03-Feb-17        |      |     |      |     |     |  |  |  |  |  |
| SR8_ZB_1810   | PS- Erect Scaffolding + Roof Soffit Formwork                | 5d                | 03-Feb-17          | 09-Feb-17        |      |     |      |     |     |  |  |  |  |  |
| SR8_ZB_1820   | PS- Rebar Fixing  | 4d                | 09-Feb-17          | 14-Feb-17        |      |     |      |     |     |  |  |  |  |  |
| SR8_ZB_1830   | PS- Place Concrete to Manhole Wall & Roof Slab              | 1d                | 14-Feb-17          | 15-Feb-17        |      |     |      |     |     |  |  |  |  |  |
| <b>Floor Slabs &amp; Partition Walls</b>  |   | <b>14d</b>        | <b>03-Feb-17</b>   | <b>20-Feb-17</b> |      |     |      |     |     |  |  |  |  |  |
| SR8_ZB_1860   | PS-Internal Wall Inside Pump House                          | 14d               | 03-Feb-17          | 20-Feb-17        |      |     |      |     |     |  |  |  |  |  |
| <b>Remining Works inside Pump Sump E</b>  |   | <b>52d</b>        | <b>30-Dec-16</b>   | <b>19-Feb-17</b> |      |     |      |     |     |  |  |  |  |  |
| SR8_ZB_1890   | Steel Works Installation inside Pump Sump E                 | 45d               | 30-Dec-16          | 12-Feb-17        |      |     |      |     |     |  |  |  |  |  |
| SR8_ZB_1900   | Installation Manhole Covers for Pump Sump E                 | 7d                | 13-Feb-17          | 19-Feb-17        |      |     |      |     |     |  |  |  |  |  |
| <b>SR8 (Zone A) - Ch 317.500 to Ch 210.000 - U-Structure &amp; Slab (Victoria Park)</b> |   | <b>37d</b>        | <b>23-Dec-16 A</b> | <b>02-Feb-17</b> |      |     |      |     |     |  |  |  |  |  |
| <b>RC CCT &amp; Backfill Ch317.5000 to Ch240.000</b>                                    |   | <b>28d</b>        | <b>23-Dec-16 A</b> | <b>02-Feb-17</b> |      |     |      |     |     |  |  |  |  |  |
| <b>Structure</b>  |   | <b>28d</b>        | <b>23-Dec-16 A</b> | <b>02-Feb-17</b> |      |     |      |     |     |  |  |  |  |  |
| <b>Utility Through</b>  |   | <b>28d</b>        | <b>23-Dec-16 A</b> | <b>02-Feb-17</b> |      |     |      |     |     |  |  |  |  |  |
| SR8_ZA_1260   | Zone A - Utility Trough for Zone A (CH240 to CH317)         | 28d               | 23-Dec-16 A        | 02-Feb-17        |      |     |      |     |     |  |  |  |  |  |
| <b>SR8 Structural Slab Ch.240.000 to Ch.210.000</b>                                     |   | <b>14d</b>        | <b>30-Dec-16</b>   | <b>12-Jan-17</b> |      |     |      |     |     |  |  |  |  |  |
| SR8_2090B   | Zone A - Wall - Bay 3                                       | 14d               | 30-Dec-16*         | 12-Jan-17        |      |     |      |     |     |  |  |  |  |  |
| <b>Works in KD9 (Include Re-provisioning Works of KD4,KD5)</b>                          |   | <b>231d</b>       | <b>10-Oct-16 A</b> | <b>05-Jul-17</b> |      |     |      |     |     |  |  |  |  |  |
| <b>External Works Under KD9</b>   |   | <b>231d</b>       | <b>14-Nov-16 A</b> | <b>05-Jul-17</b> |      |     |      |     |     |  |  |  |  |  |
| <b>Tsing Fung St - RW &amp; Subway Extension &amp; Toe Wall at Hing Fat St</b>          |   | <b>115d</b>       | <b>03-Dec-16 A</b> | <b>30-Mar-17</b> |      |     |      |     |     |  |  |  |  |  |
| <b>Retaining Wall + Toe Wall at Hing Fat Street</b>                                     |   | <b>115d</b>       | <b>03-Dec-16 A</b> | <b>30-Mar-17</b> |      |     |      |     |     |  |  |  |  |  |
| <b>Retaining Wall RW8D</b>  |   | <b>115d</b>       | <b>03-Dec-16 A</b> | <b>14-Mar-17</b> |      |     |      |     |     |  |  |  |  |  |
| <b>Bay 3(10m) to Bay 4(10m)</b>   |   | <b>3d</b>         | <b>30-Dec-16</b>   | <b>01-Jan-17</b> |      |     |      |     |     |  |  |  |  |  |
| RW8D_1220   | RW8D (Bay 3 to Bay 4) - Sub-soil & Backfilling to Base Slab | 3d                | 30-Dec-16          | 01-Jan-17        |      |     |      |     |     |  |  |  |  |  |
| <b>Bay 2(10m) to Bay 1(12.5m)</b>   |   | <b>3d</b>         | <b>30-Dec-16</b>   | <b>01-Jan-17</b> |      |     |      |     |     |  |  |  |  |  |
| RW8D_1230   | RW8D(B2 to B1) - Sub-soil & Backfilling to Base             | 3d                | 30-Dec-16          | 01-Jan-17        |      |     |      |     |     |  |  |  |  |  |
| <b>Re-open Hing Fat Street Footpath to Plubic (Request by VPMO)</b>                     |   | <b>111d</b>       | <b>03-Dec-16 A</b> | <b>14-Mar-17</b> |      |     |      |     |     |  |  |  |  |  |



| Activity ID  | Activity Name   | Original Duration | Start              | Finish           | 2016  |     |     |     |     | 2017 |     |     |     |     |     |     |     |  |
|--|---|-------------------|--------------------|------------------|---|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|--|
|  |   |                   |                    |                  | Dec   | Jan | Feb | Mar | Apr | May  | Jun | Jul | Aug | Sep | Oct | Nov | Dec |  |
| A4590  | Backfilling of Wall after Completion of RW8D Construction   | 9d                | 03-Dec-16 A        | 07-Dec-16 A      | Wall after Completion of RW8D Construction  |     |     |     |     |      |     |     |     |     |     |     |     |  |
| A4600  | Reinstatement of footpath for temp open to public   | 9d                | 07-Dec-16 A        | 14-Dec-16 A      | Reinstatement of footpath for temp open to public   |     |     |     |     |      |     |     |     |     |     |     |     |  |
| A4610  | Re-open Hing Fat Street Footpath for Public (From 5m CCTV footing to subway)                      | 90d               | 15-Dec-16 A        | 14-Mar-17        | Re-open Hing Fat Street Footpath for Public   |     |     |     |     |      |     |     |     |     |     |     |     |  |
| <b>Works along RW8D During Reopen Hing Fat Street Footpath to Public</b>             |   | <b>63d</b>        | <b>03-Jan-17</b>   | <b>07-Mar-17</b> |   |     |     |     |     |      |     |     |     |     |     |     |     |  |
| A4910  | Cross Road Duct to Connect C19 Cable Draw Pit at Island in Tsing Fung Street                      | 45d               | 03-Jan-17*         | 28-Feb-17        | Cross Road Duct to Connect C19 Cable Draw Pit at Island in Tsing Fung Street                      |     |     |     |     |      |     |     |     |     |     |     |     |  |
| A4920  | Demolition of Wall Head of Existing Retaining Wall at Tsing Fung Street                           | 14d               | 19-Jan-17          | 08-Feb-17        | Demolition of Wall Head of Existing Retaining Wall at Tsing Fung Street                           |     |     |     |     |      |     |     |     |     |     |     |     |  |
| A4930  | Install Steel Vehicle Parapet on Wall Top from RW8D to RW8C                                       | 14d               | 07-Feb-17          | 21-Feb-17        | Install Steel Vehicle Parapet on Wall Top from RW8D to RW8C                                       |     |     |     |     |      |     |     |     |     |     |     |     |  |
| A4940  | Minor Road Works above Demolished Wall Head   | 14d               | 08-Feb-17          | 24-Feb-17        | Minor Road Works above Demolished Wall Head   |     |     |     |     |      |     |     |     |     |     |     |     |  |
| A4950  | Realign & Provide the New Road Marking From Hing Fat Street to Tsing Fung Street                  | 7d                | 25-Feb-17          | 07-Mar-17        | Realign & Provide the New Road Marking From Hing Fat Street to Tsing Fung Street                  |     |     |     |     |      |     |     |     |     |     |     |     |  |
| <b>Retaining Walls RW8E, Sign Footings &amp; Sewer Pipe (SK266G, SK539C, SK375B)</b> |   | <b>14d</b>        | <b>15-Mar-17</b>   | <b>30-Mar-17</b> |   |     |     |     |     |      |     |     |     |     |     |     |     |  |
| A4620  | Excavate and lay blinding layer of RW8E   | 14d               | 15-Mar-17          | 30-Mar-17        | Excavate  |     |     |     |     |      |     |     |     |     |     |     |     |  |
| <b>Foul Drain Pipe (VP Area, SK266G, SK265C &amp; SK226L)</b>                        |   | <b>76d</b>        | <b>14-Nov-16 A</b> | <b>21-Feb-17</b> |   |     |     |     |     |      |     |     |     |     |     |     |     |  |
| A4480  | MH2-68B to MH2-69   | 14d               | 14-Nov-16 A        | 12-Dec-16 A      | MH2-68B to MH2-69   |     |     |     |     |      |     |     |     |     |     |     |     |  |
| A4490  | MH2-69 to MH2-70  | 14d               | 30-Dec-16          | 16-Jan-17        | MH2-69 to MH2-70  |     |     |     |     |      |     |     |     |     |     |     |     |  |
| A4440  | MH2-63 to MH2-64 (under temp containers)  | 14d               | 16-Jan-17*         | 04-Feb-17        | MH2-63 to MH2-64 (under temp containers)  |     |     |     |     |      |     |     |     |     |     |     |     |  |
| A4460  | MHA (beside pump sump E) to MH2-61  | 14d               | 04-Feb-17          | 21-Feb-17        | MHA (beside pump sump E) to MH2-61  |     |     |     |     |      |     |     |     |     |     |     |     |  |
| <b>Storm Drain Pipe behind RW8C along Tsing Fung Street (SK547A)</b>                 |   | <b>60d</b>        | <b>21-Nov-16 A</b> | <b>16-Jan-17</b> |   |     |     |     |     |      |     |     |     |     |     |     |     |  |
| A4510  | MH TFS-03 to MH TFS-04 (with gully)   | 14d               | 21-Nov-16 A        | 14-Dec-16 A      | MH TFS-03 to MH TFS-04 (with gully)   |     |     |     |     |      |     |     |     |     |     |     |     |  |
| A4520  | MH TFS-04 to TFS-04a  | 11d               | 05-Dec-16 A        | 09-Dec-16 A      | MH TFS-04 to TFS-04a  |     |     |     |     |      |     |     |     |     |     |     |     |  |
| A4530  | TFS-04a to Extg MHA1  | 11d               | 10-Dec-16 A        | 15-Dec-16 A      | TFS-04a to Extg MHA1  |     |     |     |     |      |     |     |     |     |     |     |     |  |
| A4540  | MHTFS-05 to extg MH A3 (gully)  | 14d               | 30-Dec-16          | 16-Jan-17        | MHTFS-05 to extg MH A3 (gully)  |     |     |     |     |      |     |     |     |     |     |     |     |  |
| <b>Sign Footings at Victoria Park</b>  |   | <b>75d</b>        | <b>30-Dec-16</b>   | <b>31-Mar-17</b> |   |     |     |     |     |      |     |     |     |     |     |     |     |  |
| A4570  | Construction of 5m CCTV, AID, OHVD, TSG, luminance meter at verge inside VP                       | 60d               | 30-Dec-16          | 14-Mar-17        | Construction of 5m CCTV, AID, OHVD, TSG, luminance meter at verge inside VP                       |     |     |     |     |      |     |     |     |     |     |     |     |  |
| A4580  | All drawpits (ATC, E&M and lighting) and ductings at verge inside VP (SK375B)                     | 60d               | 18-Jan-17          | 31-Mar-17        | All drawpits (ATC, E&M and lighting) and ductings at verge inside VP (SK375B)                     |     |     |     |     |      |     |     |     |     |     |     |     |  |
| <b>Boundary Fence, Type 2 Railing Footings &amp; Fence Wall From RW8C to Zone B</b>  |   | <b>188d</b>       | <b>23-Dec-16 A</b> | <b>05-Jul-17</b> |   |     |     |     |     |      |     |     |     |     |     |     |     |  |
| A4710  | Modification of extg type 2 railing footing in front of RW8C (approx. 40m)                        | 30d               | 23-Dec-16 A        | 14-Mar-17        | Modification of extg type 2 railing footing   |     |     |     |     |      |     |     |     |     |     |     |     |  |
| A4700  | Construction of boundary fence adjacent RW8C toe wall (approx. 40m)                               | 30d               | 30-Dec-16*         | 07-Feb-17        | Construction of boundary fence adjacent RW8C toe wall (approx. 40m)                               |     |     |     |     |      |     |     |     |     |     |     |     |  |
| A4990  | Abour Footings Construction   | 14d               | 11-Mar-17          | 25-Mar-17        | Abour Footings Construction   |     |     |     |     |      |     |     |     |     |     |     |     |  |
| A4720  | Construction of boundary fence (approx. 460m)   | 90d               | 15-Mar-17          | 05-Jul-17        | Construction of boundary fence (approx. 460m)   |     |     |     |     |      |     |     |     |     |     |     |     |  |
| A5000  | Shelter & Benches Installation  | 21d               | 25-Mar-17          | 15-Apr-17        | Shelter & Benches Installation  |     |     |     |     |      |     |     |     |     |     |     |     |  |
| A4730  | Fence wall between BGO and Zone A (60m)   | 30d               | 24-Nov-17 A        | 11-Mar-17        | Fence wall between BGO and Zone A (60m)   |     |     |     |     |      |     |     |     |     |     |     |     |  |
| <b>Other Storm, Sewerage Pipe &amp; Irrigation System in VP (SK336D, SK539C)</b>     |   | <b>70d</b>        | <b>04-Feb-17</b>   | <b>04-May-17</b> |   |     |     |     |     |      |     |     |     |     |     |     |     |  |
| A4740  | FMH-B03 to Extg 1-40 (8 MHS and 7 foul pipeline)  | 40d               | 04-Feb-17          | 23-Mar-17        | FMH-B03 to Extg 1-40  |     |     |     |     |      |     |     |     |     |     |     |     |  |
| A4780  | Complete Backfilling & Removal Top Two Layer of Strut at Bay 3 of Zone B                          | 14d               | 01-Mar-17*         | 16-Mar-17        | Complete Backfilling & Removal Top Two Layer of Strut at Bay 3 of Zone B                          |     |     |     |     |      |     |     |     |     |     |     |     |  |
| A4760  | MHB (beside pump sump E) to MH2-70 (300 dia. stormwater pipeline)                                 | 14d               | 17-Mar-17          | 01-Apr-17        | MHB (beside pump sump E) to MH2-70 (300 dia. stormwater pipeline)                                 |     |     |     |     |      |     |     |     |     |     |     |     |  |
| A4750  | SHM-B01 to Extg. MH A3 (4 MHS and 4 storm pipeline)   | 30d               | 23-Mar-17          | 04-May-17        | SHM-B01 to Extg. MH A3 (4 MHS and 4 storm pipeline)   |     |     |     |     |      |     |     |     |     |     |     |     |  |
| <b>Preparation Works before Implementation TTA at Central Median</b>                 |   | <b>64d</b>        | <b>30-Dec-16</b>   | <b>04-Mar-17</b> |   |     |     |     |     |      |     |     |     |     |     |     |     |  |
| A4790  | Construction of drawpit, ducting and remedial work on top of RW8C etc on top of RW8C              | 30d               | 30-Dec-16          | 07-Feb-17        | Construction of drawpit, ducting and remedial work on top of RW8C etc on top of RW8C              |     |     |     |     |      |     |     |     |     |     |     |     |  |
| A4800  | Lay temp bituminous pavement for road diversion beside RW8C (Incl. Steel Vehicle Parapet on RW8C) | 20d               | 08-Feb-17          | 02-Mar-17        | Lay temp bituminous pavement for road diversion beside RW8C (Incl. Steel Vehicle Parapet on RW8C) |     |     |     |     |      |     |     |     |     |     |     |     |  |
| A4810  | Implement TTA for Closing Central Median at Tsing Fung Street                                     | 1d                | 03-Mar-17          | 04-Mar-17        | Implement TTA for Closing Central Median at Tsing Fung Street                                     |     |     |     |     |      |     |     |     |     |     |     |     |  |
| <b>Centre Median at Tsing Fung Street (SK375B, SK226L)</b>                           |   | <b>60d</b>        | <b>04-Mar-17</b>   | <b>19-May-17</b> |   |     |     |     |     |      |     |     |     |     |     |     |     |  |
| A4820  | Construct VMS6, LCS footing, ATC drawpit and ducts, steel vehicle parapet                         | 60d               | 04-Mar-17          | 19-May-17        | Construct VMS6, LCS footing, ATC drawpit and ducts, steel vehicle parapet                         |     |     |     |     |      |     |     |     |     |     |     |     |  |
| <b>Works in Victoria Park (KD4, KD5, KD9)</b>  |   | <b>153d</b>       | <b>10-Oct-16 A</b> | <b>02-Jun-17</b> |   |     |     |     |     |      |     |     |     |     |     |     |     |  |
| <b>Re-Provisioning Works</b>   |   | <b>153d</b>       | <b>10-Oct-16 A</b> | <b>02-Jun-17</b> |   |     |     |     |     |      |     |     |     |     |     |     |     |  |





| Activity ID   | Activity Name  | Original Duration | Start       | Finish    | 2016 |     | 2017 |     |     |  |  |
|---|--|-------------------|-------------|-----------|------|-----|------|-----|-----|--|--|
|   |  |                   |             |           | Dec  | Jan | Feb  | Mar | Apr |  |  |
| <b>KD15 &amp; KD8 - Mooring Components Upkeep (CBTS and ATS)</b>                  |  | 1423d             | 21-Mar-13 A | 30-Dec-16 |      |     |      |     |     |  |  |
| MAR_2000  | Mooring Upkeep at Portion XIX(19) & XX(20) - ATS (if instructed by Engineer) | 1399d             | 21-Mar-13 A | 30-Dec-16 |      |     |      |     |     |  |  |
| MAR_3020  | Mooring Upkeep at Portion X(10) & XVI(16) - CBTS                             | 979d              | 15-May-14 A | 30-Dec-16 |      |     |      |     |     |  |  |
| <b>Works for Public Works Regional Laboratory (North Lantau) - KD1,KD16,KD17)</b> |  | 1301d             | 19-Jul-13 A | 21-Nov-17 |      |     |      |     |     |  |  |
| <b>KD17 - Maintenance and Upkeep of New PWRL (Portion XVII)</b>                   |  | 1301d             | 19-Jul-13 A | 21-Nov-17 |      |     |      |     |     |  |  |
| PWRL_1050   | Maintenance/ Upkeep of New PWRL  | 1301d             | 19-Jul-13 A | 21-Nov-17 |      |     |      |     |     |  |  |



| Activity ID  | Activity Name  | Remaining Dur | Early Start | Early Finish | Total Float | Activity % Complete | 2017 |     |     |     |
|--|--|---------------|-------------|--------------|-------------|---------------------|------|-----|-----|-----|
|  |  |               |             |              |             |                     | Jan  | Feb | Mar | Apr |
| <b>HK/2012/08 Revised Works Programme Rev.9(DD 31 December 2016)</b> |  |               |             |              |             |                     |      |     |     |     |
| <b>Dredging and Reclamation</b>                                      |  |               |             |              |             |                     |      |     |     |     |
| <b>Marine Work Construction</b>                                      |  |               |             |              |             |                     |      |     |     |     |
| <b>Others - Landing Steps</b>  |  |               |             |              |             |                     |      |     |     |     |
| MAR21420   | Zone A2 - [summary] landing steps at seawall 13                            | 73            | 09-Feb-17   | 11-May-17    | -23         | 0%                  |      |     |     |     |
| MAR21360   | Zone A2 - [summary] landing steps at seawall 4                             | 77            | 09-Feb-17   | 16-May-17    | -27         | 0%                  |      |     |     |     |
| MAR21380   | Zone B - [summary] landing steps at seawall 5                              | 73            | 09-Feb-17   | 11-May-17    | -23         | 0%                  |      |     |     |     |
| MAR21400   | Zone D - [summary] landing steps at seawall 9                              | 70            | 09-Feb-17   | 08-May-17    | -20         | 0%                  |      |     |     |     |
| <b>Works for Section Completion</b>                                  |  |               |             |              |             |                     |      |     |     |     |
| <b>Construction</b>  |  |               |             |              |             |                     |      |     |     |     |
| <b>Section II - MVB Structure</b>                                    |  |               |             |              |             |                     |      |     |     |     |
| <b>MVB Substructure - ELS &amp; Structural Works for Portion A</b>   |  |               |             |              |             |                     |      |     |     |     |
| <b>MVB Substructure - Other Works for Portion A</b>                  |  |               |             |              |             |                     |      |     |     |     |
| SII11400   | Sec II - MVB A: Backfilling to ground level (2.0mPD to 4.0mPD)             | 14            | 17-Jan-17   | 30-Jan-17    | -163        | 0%                  |      |     |     |     |
| SII11320   | Sec II - MVB A: Remove falsework & formwork                                | 10            | 05-Jan-17   | 14-Jan-17    | -143        | 0%                  |      |     |     |     |
| SII11340   | Sec II - MVB A: Repair defect  | 10            | 15-Jan-17   | 24-Jan-17    | -143        | 0%                  |      |     |     |     |
| SII11360   | Sec II - MVB A: Screeding of Roof Slab                                     | 7             | 10-Jan-17   | 16-Jan-17    | -163        | 0%                  |      |     |     |     |
| SII11344   | Sec II - MVB A: Waterproofing of D-wall                                    | 5             | 25-Jan-17   | 29-Jan-17    | -143        | 0%                  |      |     |     |     |
| SII11350   | Sec II - MVB A: Waterproofing of Roof Slab                                 | 7             | 10-Jan-17   | 16-Jan-17    | -163        | 0%                  |      |     |     |     |
| <b>MVB Substructure - ELS &amp; Structural Works for Portion B</b>   |  |               |             |              |             |                     |      |     |     |     |
| <b>MVB Substructure - Structural Works for Portion B</b>             |  |               |             |              |             |                     |      |     |     |     |
| SII12450   | Sec II - MVB B - Construct remaining walland slab below B1/F               | 11            | 31-Dec-16*  | 10-Jan-17    | -255        | 0%                  |      |     |     |     |
| SII12560   | Sec II - MVB B: Construct wall above capping beam and slab at G/F          | 28            | 19-Jan-17   | 15-Feb-17    | -160        | 0%                  |      |     |     |     |
| SII12520   | Sec II - MVB B: Construct Capping Beam at South                            | 19            | 31-Dec-16   | 18-Jan-17    | -160        | 0%                  |      |     |     |     |
| SII12500   | Sec II - MVB B: Construct wall of B1/F and capping beam at East            | 15            | 31-Dec-16   | 14-Jan-17    | -259        | 0%                  |      |     |     |     |
| <b>MVB Substructure - Other Works for Portion B</b>                  |  |               |             |              |             |                     |      |     |     |     |
| SII12360   | Sec II - MVB B: Repair Defect  | 10            | 25-Jan-17   | 03-Feb-17    | -154        | 0%                  |      |     |     |     |
| SII12120   | Sec II - MVB B: seal up the openings                                       | 5             | 25-Jan-17   | 29-Jan-17    | -143        | 0%                  |      |     |     |     |
| SII12420   | Sec II - MVB B: Waterproofing of D-wall                                    | 6             | 04-Feb-17   | 09-Feb-17    | -154        | 0%                  |      |     |     |     |
| SII12100   | Sec III - MVB B: Remove falsework & formwork                               | 10            | 15-Jan-17   | 24-Jan-17    | -154        | 0%                  |      |     |     |     |
| <b>MVB Substructure - ELS &amp; Structural Works for Portion C</b>   |  |               |             |              |             |                     |      |     |     |     |
| <b>MVB Substructure - ELS for Portion C</b>                          |  |               |             |              |             |                     |      |     |     |     |
| SII12380   | Sec III - MVB C : Remove bulhead wall between MVB plant room and MVB South | 7             | 21-Dec-16 A | 06-Jan-17    | -185        | 56.25%              |      |     |     |     |
| <b>MVB Substructure - Structural Works for Portion C</b>             |  |               |             |              |             |                     |      |     |     |     |
| SII12600   | Sec II - MVB Plant Room : Construct fence wall above G/F slab              | 14            | 25-Feb-17   | 10-Mar-17    | -192        | 0%                  |      |     |     |     |

Data Date:  
31-Dec-16

- ◆ Current Milestone
- Actual Work
- Critical Remaining Work
- Remaining Work
- Remaining Level of Effort

**3 Months Rolling Programme for Non-CRIII  
(Jan 2017 - March 2017)  
Ref. to DWP Rev. 9**

| Date      | Revision | Checked | Approved |
|-----------|----------|---------|----------|
| 20-Nov-16 | 8        |         |          |
|           |          |         |          |
|           |          |         |          |



| Activity ID  | Activity Name   | Remaining Dur | Early Start | Early Finish | Total Float | Activity % Complete | 2017 |     |     |     |
|--|---|---------------|-------------|--------------|-------------|---------------------|------|-----|-----|-----|
|  |   |               |             |              |             |                     | Jan  | Feb | Mar | Apr |
| SII12260   | Sec II - MVB Plant Room : Construct Floor Slab of G/F                       | 11            | 14-Jan-17   | 24-Jan-17    | -192        | 0%                  |      |     |     |     |
| SII12580   | Sec II - MVB Plant Room : Construct slab of Raised Floor                    | 15            | 10-Feb-17   | 24-Feb-17    | -192        | 0%                  |      |     |     |     |
| SII12240   | Sec II - MVB Plant Room : Construct Wall of B1/F                            | 14            | 22-Dec-16 A | 13-Jan-17    | -192        | 15%                 |      |     |     |     |
| SII12540   | Sec II - MVB Plant Room : Construct wall of Raised Floor                    | 16            | 25-Jan-17   | 09-Feb-17    | -192        | 0%                  |      |     |     |     |
| <b>Section II A - CWB Tunnel &amp; Slip Road Structures and Facilities</b> |   |               |             |              |             |                     |      |     |     |     |
| <b>CWB A2(2)</b>   |   |               |             |              |             |                     |      |     |     |     |
| <b>CWB A2 (2) - ELS &amp; Tunnel Structure</b>                             |   |               |             |              |             |                     |      |     |     |     |
| <b>CWB A2 - Other Works</b>  |   |               |             |              |             |                     |      |     |     |     |
| SIIA12660  | Sec II A - CWB A2(2) : Backfilling from +2.0mPD to formation level          | 25            | 07-Feb-17   | 03-Mar-17    | -229        | 0%                  |      |     |     |     |
| SIIA12610  | Sec II A - CWB A2(2) : Backfilling up to +2.0 mPD                           | 14            | 25-Nov-16 A | 13-Jan-17    | -229        | 0%                  |      |     |     |     |
| SIIA12630  | Sec II A - CWB A2(2) : Demolition of temporary Dwall                        | 24            | 14-Jan-17   | 06-Feb-17    | -229        | 0%                  |      |     |     |     |
| <b>CWB B &amp; A2(1)</b>   |   |               |             |              |             |                     |      |     |     |     |
| <b>CWB B - ELS &amp; Tunnel Structure</b>                                  |   |               |             |              |             |                     |      |     |     |     |
| <b>CWB A2(1) &amp; B - Tunnel Structure</b>                                |   |               |             |              |             |                     |      |     |     |     |
| SIIA13900  | Sec II A - CWB B: Construct Bay 7b - OHVD                                   | 15            | 13-Jan-17   | 27-Jan-17    | -257        | 0%                  |      |     |     |     |
| SIIA13920  | Sec II A - CWB B: Construct Bay 7b - Top Slab                               | 14            | 02-Feb-17   | 15-Feb-17    | -257        | 0%                  |      |     |     |     |
| SIIA13880  | Sec II A - CWB B: Construct Bay 7b - Wall                                   | 19            | 19-Dec-16 A | 18-Jan-17    | -257        | 38.71%              |      |     |     |     |
| <b>CWB A2(1) &amp; B - Associated Facilities</b>                           |   |               |             |              |             |                     |      |     |     |     |
| SIIA14460  | Sec II A - CWB A2(1) & B : Civil Provisions - waterproofing & lay screeding | 14            | 19-Feb-17   | 04-Mar-17    | -231        | 0%                  |      |     |     |     |
| SIIA14480  | Sec II A - CWB A2(1) & B : Remove flamework & formwork                      | 7             | 16-Feb-17   | 22-Feb-17    | -257        | 0%                  |      |     |     |     |
| SIIA14500  | Sec II A - CWB A2(1) & B : Repair defect                                    | 7             | 23-Feb-17   | 02-Mar-17    | -209        | 0%                  |      |     |     |     |
| <b>CWB C (W)</b>   |   |               |             |              |             |                     |      |     |     |     |
| <b>CWB C(W) - ELS &amp; Tunnel Structure</b>                               |   |               |             |              |             |                     |      |     |     |     |
| <b>CWB C(W) - Tunnel Structure</b>   |   |               |             |              |             |                     |      |     |     |     |
| SIIA12650  | Sec II A - CWB CW: Construct Bay 1 & 2 - Internal Wall                      | 8             | 09-Jan-17   | 16-Jan-17    | -258        | 0%                  |      |     |     |     |
| SIIA12700  | Sec II A - CWB CW: Construct Bay 1 & 2 - OHVD                               | 11            | 17-Jan-17   | 27-Jan-17    | -258        | 0%                  |      |     |     |     |
| SIIA12720  | Sec II A - CWB CW: Construct Bay 1 & 2 - Roof Slab                          | 23            | 03-Feb-17   | 25-Feb-17    | -258        | 0%                  |      |     |     |     |
| SIIA12640  | Sec II A - CWB CW: Construct Bay 1 & 2 - Southern Wall                      | 8             | 09-Jan-17   | 16-Jan-17    | -257        | 0%                  |      |     |     |     |
| SIIA12460  | Sec II A - CWB CW: Construct Bay 2b - B1/F slab                             | 14            | 23-Jan-17   | 05-Feb-17    | -111        | 0%                  |      |     |     |     |
| SIIA12520  | Sec II A - CWB CW: Construct Bay 2b - G/F roof slab                         | 7             | 13-Feb-17   | 19-Feb-17    | -118        | 0%                  |      |     |     |     |
| SIIA12430  | Sec II A - CWB CW: Construct Bay 2b - Saw cut D-wall at B1/F                | 14            | 09-Jan-17   | 22-Jan-17    | -118        | 0%                  |      |     |     |     |
| SIIA12480  | Sec II A - CWB CW: Construct Bay 2b - Saw cut D-wall at G/F                 | 21            | 23-Jan-17   | 12-Feb-17    | -118        | 0%                  |      |     |     |     |
| SIIA12180  | Sec II A - CWB CW: Construct Raking Struts                                  | 4             | 23-Dec-16 A | 03-Jan-17    | -258        | 50%                 |      |     |     |     |
| SIIA12200  | Sec II A - CWB CW: Remove walling/struct/concrete packing                   | 5             | 04-Jan-17   | 08-Jan-17    | -258        | 0%                  |      |     |     |     |
| <b>CWB C(W) - Associated Facilities</b>                                    |   |               |             |              |             |                     |      |     |     |     |
| SIIA14220  | Sec II A - CWB CW: Remove flamework & formwork                              | 7             | 26-Feb-17   | 04-Mar-17    | -258        | 0%                  |      |     |     |     |
| SIIA14240  | Ssec II A - CWB CW: Repair defect   | 7             | 26-Feb-17   | 04-Mar-17    | -258        | 0%                  |      |     |     |     |
| <b>CWB C (E)</b>   |   |               |             |              |             |                     |      |     |     |     |
| <b>CWB C(E) - ELS &amp; Tunnel Structure</b>                               |   |               |             |              |             |                     |      |     |     |     |
| <b>CWB C(E) - Tunnel Structure</b>   |   |               |             |              |             |                     |      |     |     |     |



| Activity ID  | Activity Name  | Remaining Dur | Early Start | Early Finish | Total Float | Activity % Complete | 2017 |     |     |     |
|--|--|---------------|-------------|--------------|-------------|---------------------|------|-----|-----|-----|
|  |  |               |             |              |             |                     | Jan  | Feb | Mar | Apr |
| SIIA13455  | Sec II A - CWB CE: Construct Bay 3 - Roof Slab   | 11            | 17-Jan-17   | 27-Jan-17    | -240        | 0%                  |      |     |     |     |
| SIIA13444  | Sec II A - CWB CE: Remove concrete wall between C1 and zone CE (Bay 3)                     | 6             | 11-Jan-17*  | 16-Jan-17    | -240        | 0%                  |      |     |     |     |
| <b>CWB C(E) - Other Works</b>  |  |               |             |              |             |                     |      |     |     |     |
| SIIA13325  | Sec II A - CWB CE: backfill to +4.0mPD   | 45            | 11-Feb-17   | 27-Mar-17    | -154        | 0%                  |      |     |     |     |
| SIIA13300  | Sec II A - CWB CE: Remove falsework and formwork   | 8             | 28-Jan-17   | 04-Feb-17    | -240        | 0%                  |      |     |     |     |
| SIIA13310  | Sec IIA - CWB CE: Repair defect  | 8             | 06-Feb-17   | 14-Feb-17    | -195        | 0%                  |      |     |     |     |
| SIIA13316  | Ssec IIA - CWB CE: Waterproofing of D-wall   | 5             | 15-Feb-17   | 20-Feb-17    | -195        | 0%                  |      |     |     |     |
| <b>CWB C(E) - Associated Facilities</b>                                |  |               |             |              |             |                     |      |     |     |     |
| SIIA14272  | Sec II A - CWB CE: Civil Provisions - lay screeding and waterproofing                      | 14            | 28-Jan-17   | 10-Feb-17    | -154        | 0%                  |      |     |     |     |
| <b>CWB C - Exhaust Duct</b>  |  |               |             |              |             |                     |      |     |     |     |
| <b>CWB C - Exhaust Duct Structural Work</b>                            |  |               |             |              |             |                     |      |     |     |     |
| SIIA12936  | Sec II A - Exhaust Duct at Slip Rd 3: Demolish bulkhead between MVB south and exhaust duct | 18            | 15-Jan-17   | 01-Feb-17    | -259        | 0%                  |      |     |     |     |
| SIIA12938  | Sec II A - Exhaust Duct at Slip Rd3: Construt Bay 1 - base slab                            | 8             | 02-Feb-17   | 09-Feb-17    | -259        | 0%                  |      |     |     |     |
| SIIA13480  | Sec II A - Exhaust Duct at Slip Rd3: Construt Bay 1 - roof slab                            | 8             | 19-Feb-17   | 26-Feb-17    | -259        | 0%                  |      |     |     |     |
| SIIA12940  | Sec II A - Exhaust Duct at Slip Rd3: Construt Bay 1 - wall                                 | 9             | 10-Feb-17   | 18-Feb-17    | -259        | 0%                  |      |     |     |     |
| <b>CWB C - Exhaust Duct Others</b>                                     |  |               |             |              |             |                     |      |     |     |     |
| SIIA12950  | Sec II A - Exhaust Duct at Slip Rd3: dismantle formwork / falsework                        | 12            | 27-Feb-17   | 10-Mar-17    | -259        | 0%                  |      |     |     |     |
| <b>CWB D - Slip Road 1</b>   |  |               |             |              |             |                     |      |     |     |     |
| <b>CWB D - Slip Road 1 - ELS &amp; Tunnel Structure</b>                |  |               |             |              |             |                     |      |     |     |     |
| <b>CWB D - Slip Road 1 - ELS</b>                                       |  |               |             |              |             |                     |      |     |     |     |
| <b>CWB D - SR1 - ELS - Bay 1 &amp; 2</b>                               |  |               |             |              |             |                     |      |     |     |     |
| SIIA 12584   | Sec II A - CWB SR1 Concrete Plug: Remove concrete bulkhead                                 | 14            | 02-Feb-17   | 15-Feb-17    | -249        | 0%                  |      |     |     |     |
| <b>CWB D - Slip Road 1 - Tunnel Structure</b>                          |  |               |             |              |             |                     |      |     |     |     |
| SIIA13060  | Sec II A - CWB SR1: Construct Bay 1a - Base Slab (adjacent to C4 unit)                     | 17            | 11-Jan-17   | 27-Jan-17    | -249        | 0%                  |      |     |     |     |
| SIIA13080  | Sec II A - CWB SR1: Construct Bay 1a - Roof Slab (adjacen to C4 unit)                      | 13            | 16-Feb-17   | 28-Feb-17    | -249        | 0%                  |      |     |     |     |
| SIIA13055  | Sec II A - CWB SR1: Trimming and post drill to Bay 1a base slab                            | 11            | 31-Dec-16   | 10-Jan-17    | -249        | 0%                  |      |     |     |     |
| <b>CWB D - Associated Facilities</b>                                   |  |               |             |              |             |                     |      |     |     |     |
| SIIA13940  | Sec II A - CWB SR1 : Repair Defect   | 7             | 08-Jan-17   | 14-Jan-17    | -209        | 0%                  |      |     |     |     |
| SIIA13980  | Sec II A - CWB SR1 : Waterproofing of D-wall   | 5             | 15-Jan-17   | 19-Jan-17    | -209        | 0%                  |      |     |     |     |
| SIIA12580  | Sec II A - CWB SR1: Civil Provisions - Waterproofing & lay screeding                       | 14            | 09-Jan-17   | 22-Jan-17    | -212        | 0%                  |      |     |     |     |
| SIIA13560  | Sec II A - CWB SR1: Remove falsework and formwork  | 7             | 01-Jan-17   | 07-Jan-17    | -209        | 0%                  |      |     |     |     |
| <b>CWB D - Slip Road 1 - Trough / Retaining Wall</b>                   |  |               |             |              |             |                     |      |     |     |     |
| <b>CWB D - Slip Road 1 - Trough/Retaining Wall Temp Work &amp; ELS</b> |  |               |             |              |             |                     |      |     |     |     |
| SIIA13320  | Sec II A - CWB SR1 Trough & RW: Remedial works for Blinding layer (Trough Bay 1)           | 10            | 10-Jan-17   | 19-Jan-17    | -271        | 0%                  |      |     |     |     |
| SIIA13780  | Sec II A - CWB SR1 Trough & RW: Remedial works for Blinding layer (Trough Bay 2)           | 5             | 05-Jan-17   | 09-Jan-17    | -271        | 0%                  |      |     |     |     |
| SIIA14000  | Sec II A - CWB SR1 Trough & RW: Remedial works for Blinding layer (Trough Bay 3)           | 5             | 14-Dec-16 A | 04-Jan-17    | -271        | 75%                 |      |     |     |     |
| SIIA14080  | Sec II A - CWB SR1 Trough & RW: Retaining Wall - Cast Blinding Layer                       | 2             | 15-Jan-17   | 16-Jan-17    | -263        | 0%                  |      |     |     |     |
| SIIA14060  | Sec II A - CWB SR1 Trough & RW: Retaining Wall - Excavation                                | 7             | 08-Jan-17*  | 14-Jan-17    | -263        | 0%                  |      |     |     |     |
| <b>CWB D - Slip Road 1 - Trough/Retaining Wall Structure</b>           |  |               |             |              |             |                     |      |     |     |     |
| SIIA13800  | Sec II A - CWB SR1 Trough & RW: Retaining Walls RW3 (bay 1)                                | 19            | 17-Jan-17   | 04-Feb-17    | -263        | 0%                  |      |     |     |     |



| Activity ID  | Activity Name  | Remaining Dur | Early Start | Early Finish | Total Float | Activity % Complete | 2017 |     |     |     |
|--|--|---------------|-------------|--------------|-------------|---------------------|------|-----|-----|-----|
|  |  |               |             |              |             |                     | Jan  | Feb | Mar | Apr |
| SIIA13820  | Sec II A - CWB SR1 Trough & RW: Retaining Walls RW3 (bay 2&3)                      | 18            | 25-Jan-17   | 11-Feb-17    | -263        | 0%                  |      |     |     |     |
| SIIA13860  | Sec II A - CWB SR1 Trough & RW: Retaining Walls RW4 (bay 1)                        | 19            | 17-Jan-17   | 04-Feb-17    | -256        | 0%                  |      |     |     |     |
| SIIA12800  | Sec II A - CWB SR1 Trough & RW: Trough Structure - Base Slab & Wall (bay 1)        | 31            | 20-Jan-17   | 19-Feb-17    | -271        | 0%                  |      |     |     |     |
| SIIA13740  | Sec II A - CWB SR1 Trough & RW: Trough Structure - Base Slab & Wall (bay 3)        | 19            | 05-Jan-17   | 23-Jan-17    | -244        | 0%                  |      |     |     |     |
| SIIA13720  | Sec II A - CWB SR1 Trough & RW: Trough Structure - Base Slab & Wall (bay 2)        | 31            | 10-Jan-17   | 09-Feb-17    | -261        | 0%                  |      |     |     |     |
| <b>CWB D - Slip Road 1 - Trough/ Retaining Wall Other Works</b>          |  |               |             |              |             |                     |      |     |     |     |
| SIIA13845  | Sec II A - CWB SR1: Waterproofing & lay screeding                                  | 14            | 20-Feb-17   | 05-Mar-17    | -271        | 0%                  |      |     |     |     |
| <b>Section III A - Road A2, A4, A5, Area 11; Implement 2nd Stage ITA</b> |  |               |             |              |             |                     |      |     |     |     |
| <b>Roadwork &amp; Utilities at CR11/A1</b>                               |  |               |             |              |             |                     |      |     |     |     |
| SIIIA10260   | Sec III A - roadwork and utilities (Zone A1) - Backfill to pavement founding level | 42            | 06-Jan-17   | 28-Feb-17    | -188        | 0%                  |      |     |     |     |
| <b>Roadwork &amp; Utilities at B</b>                                     |  |               |             |              |             |                     |      |     |     |     |
| SIIIA10840   | Sec III A - roadwork and utilities (Zone B) - Backfill to pavement founding level  | 40            | 28-Feb-17   | 19-Apr-17    | -188        | 0%                  |      |     |     |     |
| <b>Box Culvert L1 &amp; FRP-L - Bay 8</b>                                |  |               |             |              |             |                     |      |     |     |     |
| <b>Box Culvert L1 &amp; FRP-L - Bay 8 Structure</b>                      |  |               |             |              |             |                     |      |     |     |     |
| CUL11323   | Culvert L - Bay 8 - construct base slab (Portion 1)                                | 14            | 31-Dec-16   | 13-Jan-17    | -259        | 0%                  |      |     |     |     |
| CUL11324   | Culvert L - Bay 8 - construct base slab (Portion 2)                                | 9             | 14-Jan-17   | 22-Jan-17    | -259        | 0%                  |      |     |     |     |
| CUL11326   | Culvert L - Bay 8 - construct wall   | 14            | 23-Jan-17   | 05-Feb-17    | -259        | 0%                  |      |     |     |     |
| CUL11328   | Culvert L - bay 8 - constr top slab  | 11            | 17-Feb-17   | 27-Feb-17    | -259        | 0%                  |      |     |     |     |
| CUL11327   | Culvert L - Bay 8 - Dismantle formwork & Remove sheet pipe                         | 11            | 06-Feb-17   | 16-Feb-17    | -259        | 0%                  |      |     |     |     |
| <b>Box Culvert L1 &amp; FRP-L - Bay 8 Others</b>                         |  |               |             |              |             |                     |      |     |     |     |
| CUL11340   | Culvert L - bay 8 - backfill above box section                                     | 12            | 28-Feb-17   | 13-Mar-17    | -211        | 0%                  |      |     |     |     |
| <b>Section VI D - Area 8B &amp; 10</b>                                   |  |               |             |              |             |                     |      |     |     |     |
| <b>WDII Box 1 Construction</b>   |  |               |             |              |             |                     |      |     |     |     |
| <b>WDII Box 1 Remaining Structure</b>                                    |  |               |             |              |             |                     |      |     |     |     |
| WD-C6090   | Sec VID - Remaining of Box I: Blasting tank at wall 12, 15 & 16                    | 23            | 02-Feb-17   | 28-Feb-17    | -237        | 0%                  |      |     |     |     |
| WD-C6040   | Sec VID - Remaining of Box I: Construct lower part BHW, Wall 12, 15 and 16         | 10            | 12-Dec-16 A | 09-Jan-17    | -290        | 62.96%              |      |     |     |     |
| WD-C6060   | Sec VID - Remaining of Box I: Construct Upper part BHW, Wall 12, 15 and 16         | 17            | 10-Jan-17   | 26-Jan-17    | -290        | 0%                  |      |     |     |     |
| WD-C6080   | Sec VID - Remaining of Box I: Construct Wall 13(23m run)                           | 37            | 10-Jan-17   | 15-Feb-17    | -278        | 0%                  |      |     |     |     |
| WD-C6075   | Sec VID -Remaining of Box I: Extension of sacrificial wall (2.3m)                  | 37            | 27-Jan-17   | 04-Mar-17    | -281        | 0%                  |      |     |     |     |
| <b>Section IV - Slip Road 3</b>  |  |               |             |              |             |                     |      |     |     |     |
| <b>Roadwork &amp; Utilities (Lung King Street)</b>                       |  |               |             |              |             |                     |      |     |     |     |
| SIV11060   | Sec IV - Stage 3: Roadwork & Utilities   | 23            | 11-Nov-16 A | 27-Jan-17    | -79         | 0%                  |      |     |     |     |
| <b>Section VII - Remainder Works</b>                                     |  |               |             |              |             |                     |      |     |     |     |
| <b>Retaining Wall RW5 Construction</b>                                   |  |               |             |              |             |                     |      |     |     |     |
| SVII10660  | Sec VII - Retaining Wall RW5 (bay 1) - construct base slab and wall                | 18            | 03-Feb-17*  | 23-Feb-17    | -24         | 0%                  |      |     |     |     |
| SVII10680  | Sec VII - Retaining wall RW5 (bay 2) - construct base slab and wall                | 18            | 24-Feb-17   | 16-Mar-17    | -24         | 0%                  |      |     |     |     |
| SVII10800  | Sec VII - Retaining wall RW5 (bay 3) - construct base slab and wall                | 18            | 03-Feb-17   | 23-Feb-17    | -24         | 0%                  |      |     |     |     |
| SVII10820  | Sec VII - Retaining wall RW5 (bay 4) - construct base slab and wall                | 18            | 24-Feb-17   | 16-Mar-17    | -24         | 0%                  |      |     |     |     |
| <b>Landing Steps Construction</b>  |  |               |             |              |             |                     |      |     |     |     |
| <b>Landing Steps BSW13</b>   |  |               |             |              |             |                     |      |     |     |     |



| Activity ID   | Activity Name   | Remaining Dur | Early Start | Early Finish | Total Float | Activity % Complete | 2017 |     |     |     |
|---|---|---------------|-------------|--------------|-------------|---------------------|------|-----|-----|-----|
|   |   |               |             |              |             |                     | Jan  | Feb | Mar | Apr |
| SVIII10700  | Sec VII - Landing steps (BSW13) - construct mass concrete coping                        | 26            | 09-Feb-17*  | 10-Mar-17    | -27         | 0%                  |      |     |     |     |
| <b>Landing Steps BSW4</b>                                 |   |               |             |              |             |                     |      |     |     |     |
| SVIII10940  | Sec VII - Landing steps (BSW4) - construct mass concrete coping                         | 26            | 09-Feb-17   | 10-Mar-17    | -27         | 0%                  |      |     |     |     |
| <b>Landing Steps BSW5</b>                                 |   |               |             |              |             |                     |      |     |     |     |
| SVIII11020  | Sec VII - Landing steps (BSW5) - construct mass concrete coping                         | 26            | 09-Feb-17   | 10-Mar-17    | -23         | 0%                  |      |     |     |     |
| <b>Landing Steps BSW9</b>                                 |   |               |             |              |             |                     |      |     |     |     |
| SVIII11100  | Sec VII - Landing steps (BSW9) - construct mass concrete coping                         | 24            | 09-Feb-17*  | 08-Mar-17    | -20         | 0%                  |      |     |     |     |
| <b>Promenade Seawall Parapet Construction</b>             |   |               |             |              |             |                     |      |     |     |     |
| SVIII10400  | Sec VII - construct block seawall mass concrete coping & backfill to pavement formation | 60            | 06-Feb-17*  | 20-Apr-17    | -12         | 0%                  |      |     |     |     |
| <b>Section VIII - Landscape Softworks</b>                 |   |               |             |              |             |                     |      |     |     |     |
| <b>Soft Landscaping Works</b>                             |   |               |             |              |             |                     |      |     |     |     |
| SVIII10040  | Sec VIII - Trees Planting   | 64            | 31-Dec-16   | 21-Mar-17    | -57         | 0%                  |      |     |     |     |
| <b>Section X - Protection &amp; Preservation of Trees</b> |   |               |             |              |             |                     |      |     |     |     |
| <b>Soft Landscaping Works</b>                             |   |               |             |              |             |                     |      |     |     |     |
| SX10020   | Sec X - Protection & Preservation of Trees  | 265           | 31-Jan-13 A | 21-Sep-17    | -52         | 83.76%              |      |     |     |     |
| <b>VO : Construction of Box 4A &amp; 4B</b>               |   |               |             |              |             |                     |      |     |     |     |
| <b>Box 4A</b>   |   |               |             |              |             |                     |      |     |     |     |
| 4A10000   | Concrete Fill with 300 dia. carrier drain (Approx. 50m)                                 | 10            | 05-Jan-17*  | 14-Jan-17    | -217        | 0%                  |      |     |     |     |
| 4A10020   | Internal Suspended Slab & Internal Wall   | 13            | 15-Jan-17   | 27-Jan-17    | -217        | 0%                  |      |     |     |     |
| <b>Box 4B</b>   |   |               |             |              |             |                     |      |     |     |     |
| 4B10000   | Concrete Fill with 300 dia. carrier drain (Approx. 50m)                                 | 10            | 05-Jan-17   | 14-Jan-17    | -205        | 0%                  |      |     |     |     |
| 4B10010   | Internal Suspended Slab & Internal Wall   | 13            | 15-Jan-17   | 27-Jan-17    | -217        | 0%                  |      |     |     |     |