Contract No. HK/2015/01 Wanchai Development Phase II and Central Wanchai Bypass Sampling, Field Measurement and testing Works (Stage 3) Quarterly EM&A Report (June 2018 – August 2018)

CONTRACT NO: HK/2015/01

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

ENVIRONMENTAL PERMIT NO. EP-356/2009, FURTHER EVIRONMENTAL 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

# QUARTERLY ENVIRONMENTAL MONITORING AND AUDIT REPORT

- JUNE TO AUGUST 2018 -

**CLIENTS:** 

**Civil Engineering and Development Department** 

and

**Highways Department** 

PREPARED BY:

Lam Geotechnics Limited

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

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

CHECKED BY:

Raymond Dai

**Environmental Team Leader** 

DATE:

2 October 2018



Ref.: AACWBIECEM00\_0\_10750L.18

3 October 2018

By Post and Fax (2691 2649)

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

Attention: Mr. Peter Poon

Dear Sirs,

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

<u>Quarterly EM&A Report (June to August 2018) for EP-356/2009, FEP-02/356/2009, FEP-03/356/2009, FEP-04/356/2009, FEP-06/356/2009</u>, FEP-06/356/2009, FEP-07/356/2009 and FEP-08/356/2009

Reference is made to the Environmental Team's submission of the captioned Quarterly Environmental Monitoring and Audit (EM&A) Report for June to August 2018 received by e-mail on 2 October 2018.

Please be informed that we have no adverse comment on the captioned submission and thereby write to verify the captioned submission.

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.

Q:\Projects\AACWBIECEM00\Corr\AACWBIECEM00\_0\_10750L.18.docx

C.C.

HyDAttn: Mr. Eddy Wuby fax: 2714 5289CEDDAttn: Mr. Henry Tsangby fax: 2577 5040AECOMAttn: Mr. Francis Leong/Stephen Laiby fax: 2691 2649AECOMAttn: Mr. Conrad Ngby fax: 2691 2649LamAttn: Mr. Raymond Daiby fax: 2882 3331



# **TABLE OF CONTENTS**

| EXE | CUTIV  | E SUMMARY   | 3              |
|-----|--|---|----------------|
| 1.  | INTRO  | DDUCTION  | 7              |
|     | 1.1<br>1.2                                   | Scope of the Report Structure of the Report   |                |
| 2.  | PROJ   | ECT BACKGROUND  | 8              |
|     | 2.1<br>2.2<br>2.3<br>2.4<br>2.5              | Background  | 8<br>9<br>11   |
| 3.  | MONI   | TORING REQUIREMENTS   | 14             |
|     | 3.1.<br>3.2.<br>3.3                          | Noise Monitoring Air Monitoring Water Quality Monitoring  | 15             |
| 4.  | MONI   | TORING RESULTS  | 24             |
|     | 4.1.<br>4.2.<br>4.3<br>4.4                   | Noise Monitoring Results  Air Monitoring Results  Water Monitoring Results  Waste Monitoring Results  | 26<br>28       |
| 5.  | COMF   | PLIANCE AUDIT   | 37             |
|     | 5.1.<br>5.2.<br>5.3.<br>5.4.<br>5.5.<br>5.6. | Noise Monitoring  Air Monitoring  Water Quality Monitoring  Site Audit  Review of the Reasons for and the Implications of Non-compliance  Summary of action taken in the event of and follow-up on non-compliance | 37<br>37<br>38 |
| 6.  | СОМЕ   | PLAINTS, NOTIFICATION OF SUMMONS AND PROSECUTION  | 38             |
| 7.  | CUML   | ILATIVE CONSTRUCTION IMPACT DUE TO THE CONCURRENT PROJECTS  | 41             |
| 0   | CONO   | HISION  | 12             |



# **LIST OF TABLES**

| Table II   | Principal Work Activities for Contract no. HK/2009/02                    |
|------------|--|
| Table IV   | Principal Work Activities for Contract no. HY/2009/19                    |
| Table V    | Principal Work Activities for Contract no. HK/2012/08                    |
| Table VI   | Principal Work Activities for Contract no. HY/2010/08                    |
| Table 2.1  | Schedule 2 Designated Projects under this Project                        |
| Table 2.2  | Details of Individual Contracts under the Project                        |
| Table 2.3  | Contact Details of Key Personnel   |
| Table 2.5  | Principal Work Activities for Contract no. HK/2009/02                    |
| Table 2.7  | Principal Work Activities for Contract no. HY/2009/19                    |
| Table 2.8  | Principal Work Activities for Contract no. HK/2012/08                    |
| Table 2.9  | Principal Work Activities for Contract no. HY/2010/08                    |
| Table 3.1  | Noise Monitoring Stations  |
| Table 3.2  | Air Monitoring Stations  |
| Table 3.3  | Marine Water Quality Stations for Water Quality Monitoring               |
| Table 3.4  | Marine Water Quality Monitoring Frequency and Parameters                 |
| Table 3.5  | Marine Water Quality Stations for Enhanced Water Quality Monitoring      |
| Table 4.1  | Noise Monitoring Station for Contract nos. HK/2009/02                    |
| Table 4.3  | Noise Monitoring Stations for Contract no. HY/2009/19                    |
| Table 4.4  | Noise Monitoring Stations for Contract no. HY/2010/08                    |
| Table 4.6  | Air Monitoring Station for Contract no. HK/2009/02                       |
| Table 4.8  | Air Monitoring Stations for Contract no. HY/2009/19                      |
| Table 4.9  | Air Monitoring Station for Contract no. HK/2012/08                       |
| Table 4.10 | Air Monitoring Stations for Contract no. HY/2010/08                      |
| Table 4.12 | Water Monitoring Stations for Contract no. HK/2009/02                    |
| Table 4.13 | Water Monitoring Stations for Contract no. HK/2012/08                    |
| Table 4.16 | Water quality monitoring Stations for Contract no. HY/2010/08            |
| Table 4.17 | Enhance Dissolved Oxygen Monitoring Stations for Contract no. HY/2010/08 |
| Table 4.18 | Details of Waste Disposal for Contract no. HK/2009/01                    |
| Table 4.19 | Details of Waste Disposal for Contract no. HK/2009/02                    |
| Table 4.20 | Details of Waste Disposal for Contract no. HY/2009/15                    |
| Table 4.21 | Details of Waste Disposal for Contract no. HY/2009/19                    |
| Table 4.22 | Details of Waste Disposal for Contract no. HK/2012/08                    |
| Table 4.23 | Details of Waste Disposal for Contract no. HY/2010/08                    |
| Table 6.1  | Cumulative Statistics on Complaints                                      |
| Table 6.2  | Cumulative Statistics on Successful Prosecutions                         |

# **LIST OF FIGURES**

| Figure 2.1 | Project Layout                                 |
|------------|--|
| Figure 2.2 | Project Organization Chart                     |
| Figure 3.1 | Locations of Environmental Monitoring Stations |

# **LIST OF APPENDICES**

| Appendix 2.1 | Environmental Mitigation Implementation Schedule |
|--------------|--|
| Appendix 3.1 | Action and Limit Level                           |
| Appendix 4.1 | Noise Monitoring Graphical Presentations         |
| Appendix 4.2 | Air Quality Monitoring Graphical Presentations   |
| Appendix 4.3 | Water Quality Monitoring Graphical Presentations |
| Appendix 5.1 | Event Action Plans                               |
| Appendix 6.1 | Complaint Log                                    |
| Appendix 7.1 | Construction Programme of Individual Contracts   |



# **EXECUTIVE SUMMARY**

i. This is the Quarterly Environmental Monitoring and Audit (EM&A) Report – June 2018 to August 2018 prepared 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 and FEP-07/356/2009. This report presents the environmental monitoring and audit findings and information during the period from 27th June 2018 to 26th August 2018. The cut-off date of reporting is at 26th of each reporting period.

#### Construction Activities for the Reported Period

ii. Contract no. HK/2009/02 was commenced on 5 July 2010. During this reporting period, the principal work activities for Contract no. HK/2009/02 are summarized as below:

Table II Principal Work Activities for Contract no. HK/2009/02

| June 2018 |                                      | July 2018        | August 2018                          |  |
|-----------|--------------------------------------|------------------|--------------------------------------|--|
|           | <ul> <li>Removal of TWCR4</li> </ul> | Removal of TWCR4 | <ul> <li>Removal of TWCR4</li> </ul> |  |

iii. Contract no. HY/2009/19 was commenced on 24 March 2011. During this reporting period, the principal work activities for Contract no. HY/2009/19 are summarized as below:

Table IV Principal Work Activities for Contract no. HY/2009/19

| June 2018 | July 2018 | August 2018 |  |  |
|-----------|-----------|-------------|--|--|
| • Nil     | • Nil     | • Nil       |  |  |

iv. Contract no. HK/2012/08 was commenced on 5 March 2013. During this reporting period, the principal work activities for Contract no. HK/2012/08 are summarized as below:

Table V Principal Work Activities for Contract no. HK/2012/08

| June 2018 | July 2018 | August 2018 |  |
|-----------|-----------|-------------|--|
| • Nil     | • Nil     | • Nil       |  |

v. Contract no. HY/2010/08 was commenced on 21 March 2013. During this reporting period, the principal work activities for Contract no. HY/2010/08 are summarized as below:

Table VI Principal Work Activities for Contract no. HY/2010/08

| June 2018             | July 2018             | August 2018           |
|-----------------------|-----------------------|-----------------------|
| Seawall reinstatement | Seawall reinstatement | Seawall reinstatement |



# Noise Monitoring

- vi. 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.
- vii. Noise monitoring during day time and evening time were conducted at the M1a, M2b, M3a, M4b, M5b and M6 on a weekly basis in the reporting period. The Action and Limit level exceedances recorded in the reporting period are listed below. Investigation found that exceedances were not related to the Project.
- viii. With respect to the demolition of Ex-Harbour Road Sports Centre, the respective noise monitoring station M1a Harbour Road Sports Centre were finely adjusted on 16 and 25 May 2017 and thereafter to the Footbridge at Harbour Road Sports Centre for noise monitoring.
- ix. One limit level exceedance was recorded at M6 HK Baptist Church Henrietta Secondary School on 7 June 2018 in the June 2018 reporting period. After the investigation, the exceedance recorded was considered as non-project related.
- x. No action or limit level exceedance was recorded in the July 2018 reporting period.
- xi. No action or limit level exceedance was recorded in the August 2018 reporting period.

#### Air Quality Monitoring

- xii. No action or limit level exceedance was recorded in the June 2018 reporting period.
- xiii. No action or limit level exceedance was recorded in the July 2018 reporting period.
- xiv. No action or limit level exceedance was recorded in the August 2018 reporting period.
- xv. 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
- xvi. The location ID of air monitoring station CMA1b was updated as Oil Street Site Office in April 2013.
- xvii. With respect to the area handover, the air quality monitoring station CMA5a at Children Playgrounds opposite to the Pedestrian Plaza was relocated to the Pedestrian Plaza on 3 December 2014. The station reference and location ID of the air quality monitoring station CMA5a was updated as CMA5b and Pedestrian Plaza respectively.
- xviii. 1hr and 24hr TSP monitoring were conducted at CMA1b, CMA2a, CMA3a, CMA4a, CMA5b and CMA6a in the reporting period.

#### Water Quality Monitoring

- xix. Action and Limit level of water quality monitoring was transited from dry season to wet season from 01 April 2018.
- xx. Due to the hoisting of Amber Rainstorm Warning Signal, the water quality monitoring event on 6 June 2018 during ebb tide and 13 June 2018 during flood tide were cancelled.
- xxi. Due to the hoisting of Tropical Cyclone Warning Signal No. 3, the water quality monitoring event on 18 July 2018 during flood tide was cancelled.
- xxii. Due to the hoisting of Amber Rainstorm Warning Signal, the water quality monitoring event scheduled on 11 August 2018 during ebb tide and 17 August 2018 during flood tide were cancelled.
- xxiii. No action or limit level exceedance was recorded in the June 2018 reporting period.



- xxiv. Total 2 action level exceedances of dissolved oxygen, 2 limit level exceedances of turbidity, 1 action level exceedance of suspended solids and 1 limit level exceedance of suspended solids were recorded in the July 2018 reporting period. After the investigation, the exceedances recorded were considered as non-project related.
- xxv. Total 2 limit level exceedance of turbidity, 1 action level exceedance of turbidity and 1 limit level exceedance of suspended solids were recorded in the August 2018 reporting period. After the investigation, the exceedances recorded were considered as non-project related.
- xxvi. 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.
- xxvii. 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.
- xxviii. 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.
- xxix. 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.
- xxx. 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.
- xxxi. 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.
- xxxii. 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.
- xxxiii. 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
- xxxiv. Referring to CWB RSS confirmation on the completion of marine construction activities within the Ex-PCWA area and the completion of the post construction water quality monitoring, the respective Enhance DO Monitoring within Ex-PCWA for monitoring station Ex-PCWA SE and Ex-PCWA SW was temporarily suspended since 07 March 2017 ebb tide onwards.
- xxxv. Water quality monitoring station C7 and Enhance DO monitoring station C6 shall be associated with Contract HY/2010/08, upon confirmation of marine construction works completion under Contract HY/2009/15 at CBTS area and Ex-PCWA area since 19 June 2017.
- xxxvi. Enhanced DO monitoring at Windsor House Cooling (Station Ref: C7) was resumed from 1 February 2018 onwards with respect to the completion of removal of temporary reclamation zone.
- xxxvii. Referring to CWB RSS confirmation on the completion of marine construction activities within the TS3 area and the completion of the post construction water quality monitoring, the



respective Enhance DO Monitoring within TS3 for monitoring station C6 and C7 was temporarily suspended since 05 March 2018 onwards.

# Complaints, Notifications of Summons and Successful Prosecutions

xxxviii. Two environmental complaints were received in the June 2018 reporting period.

An EPD complaint was referred to the ET on 25 June 2018 (CASE Ref: H05/RS/000015459-18). The complainant reported that muddy water discharge was found at the site outside Lung Wo Road on 5 June 2018 afternoon. ET confirmed with the Resident Site Staff that installation of metal formwork at seawall was carried out on 5 June 2018 afternoon and mitigation measure including placing rock fill material on slope surface was implemented at the concerned location to reduce surface runoff. Follow up site inspection was conducted by the Environmental Team on 26 June 2018, no muddy water discharge or surface runoff related water quality impact was observed at construction area under HK/2012/08 near the concerned area Nevertheless, in view of the public concern, the Contractor of HK/2012/08 was reminded to provide addition tarpaulin covering to the slope surface along the seawall around the concerned location to reduce the potential surface runoff. In addition, the Contractor of HK/2012/08 is recommended to maintain regular checking on the embankment condition to ensure no gap / void to avoid potential seepage / surface runoff to nearby water.

An EPD complaint was referred to the ET on 25 June 2018 (CASE Ref: H05/RS/00015954-18). The complainant reported that construction dust and muddy water discharge was found at the site near Wan Chai Pier on 11 June 2018 afternoon. ET confirmed with the Resident Site Staff that marine construction activity of removal of TWCR4 and stockpile of fill material at WCR3 Area were conducted under the Contractor of HK/2009/02 on 11 June 2018 afternoon. The Contractor of HK/2009/02 reported that double silt curtain was in place as mitigation measures during the marine activity and regular spraying water was provided as dust mitigation measures at WCR3 Area. Follow-up inspection was conducted on 28 June 2018, excavation works was observed at WCR3 Area and mitigation measures including watering during excavation was generally in place. Other dust mitigation measure including covering the stockpile material and watering the dusty surface and haul road were generally in place. No particular dust impact was observed. No muddy water discharge or surface runoff related water quality monitoring impact was observed at Contract HK/2009/02 site area. Mitigation measures for marine activity includes providing double layers of silt curtain to enclose the marine activity area was generally in place and additional tarpaulin was provided to cover the temporary cut slope to avoid the potential surface runoff. In view of the public concern, the Contractor of HK/2009/02 was reminded to keep review the performance of dust mitigation measures including watering during excavation and material handling, covering the stockpile material and watering the dusty surface and haul road to avoid potential dust impact and minimize any potential dust impact to the surroundings. The Contractor of HK/2009/02 is also reminded to maintain regular checking on the embankment, silt curtain and tarpaulin condition to ensure no gap / void to avoid potential water quality related impact.

xxxix. No environmental complaint was received in the July and August 2018 reporting period.



# 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 10.4 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 during the period from 27<sup>th</sup> June 2018 to 26<sup>th</sup> August 2018.

# 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** *Monitoring Requirements* summarizes all monitoring parameters, monitoring locations, monitoring frequency, duration and action plan.
- **Section 4** *Monitoring Results* summarizes the monitoring results obtained in the reporting period.
- **Section 5 Compliance Audit** summarizes the auditing of monitoring results, all exceedances environmental parameters.
- Section 6 Complaints, Notification of summons and Prosecution summarizes the cumulative statistics on complaints, notification of summons and prosecution
- 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 Conclusion



# 2. PROJECT BACKGROUND

#### 2.1 Background

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

# 2.2 Scope of the Project and Site Description

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

#### 2.2.3. The scope of the Project comprises:

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



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

Table 2.1 Schedule 2 Designated Projects under this Project

| Item | Designated Project   | EIAO Reference                   | Reason for inclusion   |
|------|--|----------------------------------|--|
| DP1  | Central-Wanchai Bypass<br>(CWB) including its road<br>tunnel and slip roads        | Schedule 2, Part I, A.1 and A.7  | Trunk road and road tunnel<br>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<br>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-<br>harbour Water Mains from<br>Wan Chai to Tsim Sha Tsui   | Schedule 2, Part I, C.12         | A dredging operation less<br>than 100 m from a seawater<br>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 *Table2.2*.



Table 2.2 Details of Individual Contracts under the Project

| Contract<br>No. | Contract Title   | Associated DP(s) | Construction Commencement Date |
|-----------------|--|------------------|--------------------------------|
| HK/2009/01      | Wan Chai Development Phase II –  | DD2 DD6          | 23 July 2010                   |
|                 | Central –Wanchai Bypass at Hong Kong<br>Convention and Exhibition Centre   | DP3, DP6         | (Completed)                    |
|                 |  | DP1, DP2         | 25 August 2011                 |
|                 |  | DP1, DP2         | (Completed)                    |
| HK/2009/02      | Wan Chai Development Phase II –  | DP3, DP5         | 5 July 2010                    |
|                 | Central – Wan Chai Bypass at WanChai<br>East   | DP1              | 26 April 2011                  |
| HY/2009/11      | Wan Chai Development Phase II and  | DD0              | 17 March 2010                  |
|                 | Central – Wan Chai Bypass – North<br>Point Reclamation   | DP3              | (Completed)                    |
| HY/2009/15      | Central-Wanchai Bypass – Tunnel  | DD0              | 10 November 2010               |
|                 | (Causeway Bay Typhoon Shelter Section)   | DP3              | (Completed)                    |
|                 | Cooliest)  | DP1              | 13 July 2011                   |
|                 |  | DPT              | (Completed)                    |
| HK/2010/06      | Wan Chai Development Phase II-<br>Central-Wan Chai Bypass over MTR<br>Tsuen Wan Line                                   | DP3              | 22 March 2011                  |
|                 |  |                  | (Completed)                    |
| 04/HY/2006      | Reconstruction of Bus Terminus near<br>Man Yiu Street and Man Kwong Street   | DP1              | September 2010                 |
|                 |  | DPT              | (Completed)                    |
| HY/2009/17      | Central - Wan Chai Bypass (CWB) at   | DD4              | 5 October 2010                 |
|                 | FEHD Whitfield Depot - Advanced piling works.  | DP1              | (Completed)                    |
| HY/2009/18      | Central - Wan Chai Bypass (CWB) -  | DP1              | 10 March 2014                  |
|                 | Central Interchange  | DPT              | (Completed)                    |
| HY/2009/19      | Central - Wanchai Bypass Tunnel (North<br>Point Section) and Island Eastern<br>Corridor Link                           | DP1              | 24 March 2011                  |
| HK/2012/08      | Wan Chai Development Phase II<br>Central- Wan Chai Bypass at Wan Chai<br>West  | DP1,DP2, DP3     | 5 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 <u>Figure 2.2</u>. 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<br>Representative<br>for WDII | Chief Resident<br>Engineer            | Ms. Gloria Tang | 2587 1778   | 2587 1877   |
|                              | Engineer's<br>Representative<br>for CWB  | Principal<br>Resident<br>Engineer     | Mr. Peter Poon  | 3912 3388   | 3912 3010   |
| Chun Wo –                    | Contractor                               | Project Manager                       | Mr. Paul Yu     | 3658 3085   | 2827 9996   |
| CRGL Joint<br>Venture        | under Contract<br>no. HK/2009/02         | Quality &<br>Environmental<br>Manager | Mr. C.P. Ho     | 9191 8856   |             |
| China State<br>Construction  | Contractor under Contract                | Project Director                      | Mr. Chris Leung | 3557 6393   | 2566 2192   |
| Engineering<br>(HK) Ltd.     | no. HY/2009/15                           | Site Agent                            | Mr. Patrick Ho  | 3557 6405   |             |
|                              |  | Construction<br>Manager               | Mr. Tom Tong    | 3557 6415   |             |
|                              |  | Environmental<br>Officer              | Mr. Desmond Ho  | 3557 6347   |             |
|                              |  | Environmental<br>Supervisor           | Mr. Gordon Lai  | 6145 6365   |             |
| Chun Wo -                    | -  | Project Manager                       | Mr. David Lau   | 3758 8879   | 3757 8901   |
| CRGL - MBEC<br>Joint Venture |  | Site Agent                            | Mr. William Luk | 3758 6868   |             |
|                              |  | Deputy Site<br>Agent                  | Mr. Andy Chan   | 9879 4325   |             |
|                              |  | Environmental<br>Manager /            | Mr. M.H. Isa    | 9884 0810   |             |
|                              | A<br>E                                   | Environmental<br>Officer              |                 |             |             |
|                              |  | Assistant<br>Environmental<br>Officer | Mr. James Chan  | 9602 2911   |             |
|                              |  | Construction<br>Manager<br>(Marine)   | Mr. Wingo Wong  | 9608 6366   |             |
|                              |  | Construction                          | Mr. Ray Ho      | 9834 1010   | ]           |



# **Lam Geotechnics Limited**

| Party                         | Role  | Post  | Name                 | Contact No. | Contact Fax |
|-------------------------------|---|---|----------------------|-------------|-------------|
|                               |   | Manager (Land)                                | Mr. Mark Mak         | 9356 4421   |             |
|                               |   | Construction                                  | Mr. Yung Kwok        | 9834 1010   | ]           |
|                               |   | Manager (Land)                                | Wah                  |             |             |
|                               |   | Construction<br>Manager (Ext.<br>Works)       | Mr. Paul Wan         | 6629 4652   |             |
| China State-                  | Contractor                                    | Project Director                              | Mr. C. N. Lai        | 9106 5806   | 2877 1522   |
| Build King Joint<br>Venture   | under Contract                                | Project Manager                               | Mr. George<br>Cheung | 9268 1918   |             |
|                               | 110. HK/2012/06                               | Environmental<br>Officer                      | Mr. James Ma         | 9130 9549   |             |
|                               |   | Environmental<br>Supervisor                   | Mr. Y. L. Ho         | 9856 5669   |             |
| China State                   | Contractor                                    | Project Director                              | Mr. Chris Leung      | 3467 4299   | 2566 8061   |
|                               | under Contract<br>no. HY/2010/08              | Project Manager                               | Mr. Chan Ying<br>Lun | 3418 3001   |             |
|                               |   | Site Agent                                    | Mr. Thomas Lui       | 3557 6452   | ]           |
|                               |   | Marine Manager                                | Mr. Nickael Chan     | 3557 6333   |             |
|                               |   | Construction                                  | Mr. Tom Tong         | 3557 6415   |             |
|                               |   | Manager                                       |                      |             |             |
|                               |   | Environmental<br>Officer                      | Mr. Gabriel Wong     | 3557 6466   |             |
| Ramboll Hong<br>Kong Limited  | Independent<br>Environmental<br>Checker (IEC) | Independent<br>Environmental<br>Checker (IEC) | Mr. David Yeung      | 3465 2888   | 3465 2899   |
| Lam<br>Geotechnics<br>Limited | Environmental<br>Team (ET)                    | Environmental<br>Team Leader<br>(ETL)         | Mr. Raymond Dai      | 2882 3939   | 2882 3331   |

# 2.5 Principal Work and Activities

2.5.1. During this reporting period, the principal work activities for Contract no. HK/2009/02 are summarized in *Table 2.5*.

Table 2.5 Principal Work Activities for Contract no. HK/2009/02

| June 2018        | July 2018        | August 2018      |
|------------------|------------------|------------------|
| Removal of TWCR4 | Removal of TWCR4 | Removal of TWCR4 |

2.5.2. Contract no. HY/2009/19 was commenced on 24 March 2011. During this reporting period, the principal work activities for Contract no. HY/2009/19 are summarized as below:

Table 2.7 Principal Work Activities for Contract no. HY/2009/19

| June 2018 | July 2018 | August 2018 |
|-----------|-----------|-------------|
| • Nil     | • Nil     | • Nil       |

2.5.3. Contract no. HK/2012/08 was commenced on March 2013. During this reporting period, the principal work activities for Contract no. HK/2012/08 are summarized as below:

Table 2.8 Principal Work Activities for Contract no. HK/2012/08

| June 2018 | July 2018 | August 2018 |
|-----------|-----------|-------------|
| • Nil     | • Nil     | • Nil       |

2.5.4. Contract no. HY/2010/08 was commenced on 21 March 2013. During this reporting period, the principal work activities for Contract no. HY/2010/08 are summarized as below:

Table 2.9 Principal Work Activities for Contract no. HY/2010/08

| June 2018             | July 2018             | August 2018           |
|-----------------------|-----------------------|-----------------------|
| Seawall reinstatement | Seawall reinstatement | Seawall reinstatement |

2.5.5. Implementation status of the recommended mitigation measures during this reporting period is presented in *Appendix 2.1*.



#### 3. MONITORING REQUIREMENTS

# 3.1. Noise Monitoring

# **NOISE MONITORING STATIONS**

3.1.1. The noise monitoring stations for the Project are listed and shown in *Table 3.1* and *Figure*3.1. Appendix 3.1 shows the established Action/Limit Levels for the monitoring works.

Table 3.1 Noise Monitoring Stations

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

Remarks\*: With respect to the demolition of Ex-harbour Road Sports Centre, the respective noise monitoring station M1a- Harbour Road Sports Centre were finely adjusted on 16 and 25 May 2017 and thereafter to the Footbridge at Harbour Road Sports Centre for noise monitoring.

# NOISE MONITORING PARAMETERS, FREQUENCY AND DURATION

- 3.1.2. The construction noise level shall be measured in terms of the A-weighted equivalent continuous sound pressure level (L<sub>eq</sub>). L<sub>eq (30 minutes)</sub> 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<sub>eq (5 minutes)</sub> 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.
- 3.1.3. 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.
- 3.1.4. 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.
- 3.1.5. Real time noise shall be carried out at the designated monitoring stations. The following is an initial guide on the regular monitoring frequency for each station on a 24 hours daily basis when noise generating activities are underway:



#### Lam Geotechnics Limited

- One set of measurements between 0700 and 1900 hours on normal weekdays.
- One set of measurements between 1900 and 2300 hours on normal weekdays and 0700 and 2300 hours on public holidays.
- One set of measurements between 2300 and 0700 hours on next day on everyday.

# **MONITORING EQUIPMENT**

- 3.1.6. As referred to in the Technical Memorandum ™ issued under the NCO, sound level meters in compliance with the International Electrotechnical Commission Publications 651: 1979 (Type 1) and 804: 1985 (Type 1) specifications shall be used for carrying out the noise monitoring. Immediately prior to and following each noise measurement the accuracy of the sound level meter shall be checked using an acoustic calibrator generating a known sound pressure level at a known frequency. Measurements may be accepted as valid only if the calibration level from before and after the noise measurement agree to within 1.0 dB.
- 3.1.7. 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.

# 3.2. Air Monitoring

# **AIR QUALITY MONITORING STATIONS**

3.2.1. The air monitoring stations for the Project are listed and shown in *Table 3.2* and *Figure 3.1*. *Appendix 3.1* shows the established Action/Limit Levels for the monitoring works.

Table 3.2 Air Monitoring Stations

| 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 January 2011, the monitoring stations CMA3a - Future CWB site office at Wanchai Waterfront Promenade and CMA6a - Future AECOM site office at Work Area were renamed as remark.

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

- 3.2.2. 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.
- 3.2.3. 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.
- 3.2.4. 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

- 3.2.5 High volume samplers (HVSs) in compliance with the following specifications shall be used for carrying out the 1-hour and 24-hour TSP monitoring:
  - 0.6 1.7 m3 per minute adjustable flow range;
  - equipped with a timing / control device with +/- 5 minutes accuracy for 24 hours operation;
  - installed with elapsed-time meter with +/- 2 minutes accuracy for 24 hours operation;
  - capable of providing a minimum exposed area of 406 cm2;
  - flow control accuracy: +/- 2.5% deviation over 24-hour sampling period;
  - equipped with a shelter to protect the filter and sampler;
  - incorporated with an electronic mass flow rate controller or other equivalent devices;
  - equipped with a flow recorder for continuous monitoring;
  - provided with a peaked roof inlet;
  - incorporated with a manometer;
  - able to hold and seal the filter paper to the sampler housing at horizontal position;
  - · easily changeable filter; and
  - capable of operating continuously for a 24-hour period.
- 3.2.6 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**

3.2.7 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.
- 3.2.8 An alternative non-HOKLAS accredited laboratory was set-up for carrying out the laboratory analysis, the laboratory equipment was approved by the ER on 8 February 2011 and the measurement procedures were witnessed by the IEC. Any measurement performed by the laboratory was be demonstrated to the satisfaction of the ER and IEC. IEC shall regularly audit to the measurement performed by the laboratory to ensure the accuracy of measurement results.
- 3.2.9 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.
- 3.2.10 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.
- 3.2.11 All the collected samples shall be kept in a good condition for 6 months before disposal.

#### IMPACT MONITORING FOR ODOUR PATROL

- 3.2.12 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
- 3.2.13 Odour patrol shall be conducted by independent trained personnel / competent persons patrolling and sniffing around the shore as shown in <u>Figure 3.1</u> to detect any odour at the concerned hours (afternoon is preferred for higher daily temperature).
- 3.2.14 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.
- 3.2.15 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.
- 3.2.16 The findings including odour intensity, odour nature and possible odour sources, and also the local wind speed and direction at each location will be recorded. In addition, some relevant meteorological and tidal data such as daily average temperature, and daily average humidity, on that surveyed day will be obtained from the Hong Kong Observatory Station for reference. The Action and Limit levels for odour patrol are shown in <u>Appendix 3.1.</u>

# 3.3 Water Quality Monitoring

- 3.3.1. 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.
- 3.3.2. 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

3.3.3. Water quality monitoring was undertaken at WSD salt water intakes and cooling water intakes along the seafront of the Victoria Harbour. The proposed water quality monitoring stations of the Project are shown in *Table 3.3* and *Figure 3.1*. *Appendix 3.1* shows the established Action/Limit Levels for the monitoring works.

Table 3.3 Marine Water Quality Stations for Water Quality Monitoring

| Station Ref.       | Location   | Easting  | Northing |
|--------------------|--|----------|----------|
| WSD Salt Water In  | take   |          |          |
| WSD19              | Sheung Wan   | 833415.0 | 816771.0 |
| Cooling Water Inta | ke   |          |          |
| 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<br>Tower / Immigration Tower) | 835895.2 | 816215.2 |



#### Lam Geotechnics Limited

| Station Ref.       | Location   | Easting  | Northing |
|--------------------|--|----------|----------|
| Cooling Water Inta | ke / WSD Salt Water Intake   |          |          |
| RW21-P789          | Great Eagle Centre/ Sun Hung Kai<br>Centre/ WSD Wanchai salt water<br>intake | 836268.0 | 816020.0 |

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

- 4-week post construction water quality monitoring at WSD9, WSD10, WSD15, WSD17, C8 and C9 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 30 March 2013.
- WSD7 and WSD20 water quality monitoring were temporarily suspended from 27 Apr 2012.
- C2, C3 C4e and C4w water quality monitoring station was temporarily suspended since 24 Apr 2013
- C5e and C5w water quality monitoring station was temporarily suspended since 29 July 2013
- WSD21 water quality monitoring station was temporarily suspended since 12 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 AND FREQUENCY

- 3.3.4. 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 insitu while SS is determined in laboratory.
- 3.3.5. 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.
- 3.3.6. 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 3.4* 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 3.4 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-<br>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-<br>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-<br>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

- 3.3.7. 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
- 3.3.8. 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).
- 3.3.9. 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**

3.3.10 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**

3.3.11 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

3.3.12 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

3.3.13 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**

3.3.14 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**

3.3.15 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**

- 3.3.16 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.
- 3.3.17 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.
- 3.3.18 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.

# **LABORATORY MEASUREMENT / ANALYSIS**

3.3.19 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

- 3.3.20 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.
- 3.3.21 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 southwestern 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 3.5* and *Figure 3.1.*

Table 3.5 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 |

3.3.22 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 less than 3m, only the mid-depth will be monitored).

# DAILY SS MONITORING AND 24 HOURS TURBIDITY MONITORING SYSTEM

- 3.3.23 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.
- 3.3.24 The 24 hours monitoring of turbidty at the cooling water intakes (C6 and C7) shall be established by setting up a continuous water quality monitoring station in front of the intakes during the dredging activities. The monitoring system include the turbidity sensor and data logger which is capable of data capturing at every 5 minutes. The data 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.

# <u>ADDITIONAL DISSOVLED OXYGEN MONITORING FOR CULVERT L WATER DISCHARGE FLOW</u>

3.3.25 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.

- 3.3.26 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
- 3.3.27 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).



# 4. MONITORING RESULTS

- 4.0.1. The environmental monitoring will be implemented based on the division of works areas of each designed project managed under different contracts with separate FEP applied by individual contractors. Overall layout showing work areas of various contracts, latest status of work commencement and monitoring stations is shown in <u>Figure 2.1</u> and <u>Figure 3.1</u>. The monitoring results are presented in according to the Individual Contract(s).
- 4.0.2. According to EP-364/2009/A Part B, "Scale and Scope of Designated Project", Remarks (c), "The permanent and temporary reclamation and associated dredging works related to the CWB construction are separately covered by environmental permit No. EP-356/2009 issued to Civil Engineering and Development Department", and marine piling works to be conducted by the Contractor of Contract no. HY/2009/19 from 28 January 2012 was considered to be governed under EP-356/2009. As the construction site area of Contract no. HY/2009/11 had already been handed over to Contract no. HY/2009/19, the designated noise, water and air quality monitoring stations for Contract no. HY/2009/11 would be shared with Contract no. HY/2009/19 from 28 January 2012.
- 4.0.3. As confirmed by WDII RSS, the marine construction works under Contract HK/2009/01 have been completed since 24 July 2017, the monitoring association with Contract HK/2009/01 and relevant reporting has been ceased from November 2017. FEP-02/356/356/2009 under Contract HK/2009/01 was surrendered on 19 April 2018.
- 4.0.4. As confirmed by CWB RSS, the marine construction works under Contract HY/2009/15 and relevant reporting have been completed by 19 June 2017, the monitoring association with Contract HY/2009/15 and relevant reporting has been ceased from November 2017.

#### 4.1. Noise Monitoring Results

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

4.1.1. The proposed divisions of noise monitoring stations are summarized in *Table 4.1* below.

Table 4.1 Noise Monitoring Station for Contract nos. HK/2009/02

| Station | Description                                 |
|---------|---|
| M1a     | Footbridge at Ex-Harbour Road Sports Centre |

4.1.2. No action or limit level exceedance was recorded in the June, July and August 2018 reporting period.



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

- 4.1.3. Noise quality monitoring at M4b and M5b have been implemented with respect to HY/2009/19 since the marine bore piling work started on 28 Jan 2012.
- 4.1.4. The proposed division of noise monitoring stations for Contract no. HY/2009/19 are summarized in *Table 4.3* below:

Table 4.3 Noise Monitoring Stations for Contract no. HY/2009/19

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

4.1.1 One limit level exceedance was recorded at M6 - HK Baptist Church Henrietta Secondary School on 7 June 2018 in the June 2018 reporting period.

No construction work was conducted under HY/2009/19 around the monitoring location and nearby traffic noise was observed as major noise source during monitoring. As such, the exceedance was considered as non-Project related. No action or limit level exceedance was recorded in the April 2018 reporting month.

4.1.2 No action or limit level exceedance was recorded in the July and August 2018 reporting month

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

4.1.5. The proposed division of noise monitoring stations are summarized in **Table 4.4** below.

Table 4.4 Noise Monitoring Station for Contract no. HY/2010/08

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

- 4.1.6. No action or limit level exceedance was recorded in the June, July and August 2018 reporting period.
- 4.1.7. All Noise monitoring results measured in this reporting period are reviewed and summarized. Details of noise monitoring results and graphical presentation can be referred in <a href="Appendix 4.1">Appendix 4.1</a>.



# 4.2. Air Monitoring Results

4.2.1 1hr and 24hr TSP monitoring were conducted at CMA1b, CMA2a, CMA3a, CMA4a, CMA5b and CMA6a in the reporting period.

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

4.2.2 Air monitoring was commenced in mid-January 2011 for the land-filling work for Contract no. HK/2009/02. The proposed division of air monitoring stations is summarized in *Table 4.6* below.

Table 4.6 Air Monitoring Station for Contract no. HK/2009/02

| Station | Description                                      |  |  |
|---------|--|--|--|
| CMA3a   | CWB PRE Site Office                              |  |  |
| CMA4a   | Society for the Prevention of Cruelty to Animals |  |  |

4.2.3 No action or limit exceedance was recorded in in the June, July and August 2018 reporting period. .

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

- 4.2.4 Air monitoring at CMA1b and CMA2a have been implemented with respect to HY/2009/19 since the marine bore piling works started on 28 Jan 2012. No exceedance was recorded in the reporting period.
- 4.2.5 The proposed division of air monitoring stations is summarized in *Table 4.8* below.

Table 4.8 Air Monitoring Stations for Contract no. HY/2009/19

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

4.2.6 No action or limit exceedance was recorded in in the June, July and August 2018 reporting period.

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

4.2.7 The proposed division of air monitoring stations are summarized in *Table 4.9* below.

Table 4.9 Air Monitoring Stations for Contract no. HK/2012/08

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

4.2.8 No action or limit exceedance was recorded in in the June, July and August 2018 reporting month.

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

4.2.9 The proposed division of air monitoring stations are summarized in *Table 4.10* below.

Table 4.10 Air Monitoring Stations for Contract no. HY/2010/08

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

4.2.10 No action or limit exceedance was recorded in in the June, July and August 2018 reporting month.



# 4.3. Water Monitoring Results

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

4.3.1 Water quality monitoring for Contract no. HK/2009/02 was commenced on 8 July 2010. The proposed division of water monitoring stations is summarized in *Table 4.12* below.

Table 4.12 Water Monitoring Stations for Contract no. HK/2009/02

| Station Ref.         | Location   | Easting  | Northing |  |
|----------------------|--|----------|----------|--|
| Cooling Water        | Intake   |          |          |  |
| C1                   | HKCEC Extension  | 835885.6 | 816223.0 |  |
| Cooling Water Intake |  |          |          |  |
| RW21-P789            | Great Eagle Centre/ Sun Hung Kai Centre/WSD Wanchai salt water intake / China Resources Building | 836268.0 | 816020.0 |  |

- 4.3.2 No action or limit level exceedance was recorded in the June 2018 reporting period.
- 4.3.3 1 action level exceedance of dissolved oxygen was recorded at RW21-P789 on 20 July 2018 during flood tide in the July 2018 reporting period.

Removal of temporary seawall block at Portion 3 & 4 under Contract HK/2009/02 was conducted on the monitoring date. Location of the construction area was at downstream of monitoring station RW21-P789 during the monitoring period and contractor mitigation measure including the use of silt curtain and installation of silt screen was general in order. In view of the above, it is considered the exceedance was not related to Project work. No exceedance was recorded on the subsequent monitoring on 21 July 2018 Flood tide.

4.3.4 No action or limit level exceedance was recorded in the August 2018 reporting period.



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

4.3.5 Water monitoring for Contract no. HK/2012/08 was commenced on 5 March 2013. The proposed division of water monitoring stations are summarized in *Table 4.13* below.

Table 4.13 Water Monitoring Stations for Contract no. HK/2012/08

| Station Ref.       | Location   | Easting  | Northing |  |  |  |
|--------------------|--|----------|----------|--|--|--|
| WSD Salt Water In  | WSD Salt Water Intake  |          |          |  |  |  |
| WSD19              | Sheung Wan   | 833415.0 | 816771.0 |  |  |  |
| Cooling Water Inta | ike  |          | ·        |  |  |  |
| 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<br>Tower / Immigration Tower) | 835895.2 | 816215.2 |  |  |  |

- 4.3.6 No action or limit level exceedance was recorded in the June 2018 reporting period.
- 4.3.7 1 action level of dissolved oxygen was recorded at WSD19 on 3 July 2018 during ebb tide in the July 2018 reporting period. No marine construction activity under Contract HK/2012/08 was conducted on the monitoring date. In view of above, it is considered the exceedance was not related to Project work. No exceedance was recorded in the subsequent monitoring on 5 July 2018 Flood tide.

1 action level of suspended solids was recorded at WSD19 on 14 July 2018 during flood tide in the July 2018 reporting period. No marine construction activity under Contract HK/2012/08 was conducted on the monitoring date. In view of above, it is considered the exceedance was not related to Project work.

1 limit level of suspended solids and 1 limit level of turbidity was recorded at WSD19 on 16 July 2018 during flood tide in the July 2018 reporting period. No marine construction activity under Contract HK/2012/08 was conducted on the monitoring date. In view of above, it is considered the exceedance was not related to Project work.

1 limit level of turbidity was recorded at WSD19 on 20 July 2018 during flood tide in the July 2018 reporting period. No marine construction activity under Contract HK/2012/08 was conducted on the monitoring date. In view of above, it is considered the exceedance was not related to Project work.

4.3.8 1 limit level exceedance of turbidity and one limit level of suspended solids were recorded at WSD19 on 15 August 2018 during flood tide in the August 2018 reporting period. No marine construction activity under Contract HK/2012/08 was conducted on the monitoring date. In view of above, it is considered the exceedance was not related to Project work.



1 limit level exceedance of turbidity was recorded at WSD19 on 15 August 2018 during ebb tide in the August 2018 reporting period. No marine construction activity under Contract HK/2012/08 was conducted on the monitoring date. In view of above, it is considered the exceedance was not related to Project work.

1 action level exceedance of turbidity was recorded at P4 on 15 August 2018 during flood tide in the reporting period. No marine construction activity was conducted under Contract HK/2012/08 on the monitoring date, while the location of the construction area was at downstream of monitoring station P4 during monitoring period. In view of the above, it is considered that the exceedance was not related to Project works. No exceedance was recorded in the subsequent monitoring on 15 August 2018 during ebb tide.

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

4.3.9 The proposed division of water quality monitoring stations are summarized in *Table 4.16* and *Table 4.17* below:

Table 4.16 Water quality monitoring Stations for Contract no. HY/2010/08

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

4.3.10 No action or limit level exceedance was recorded in the June, July and August 2018 reporting period.

Table 4.17 Enhance Dissolved Oxygen Monitoring Stations for Contract no. HY/2010/08

| Station Ref. | Location              |  |
|--------------|-----------------------|--|
| C6           | Excelsior Hotel       |  |
| C7           | Windsor House Cooling |  |

4.3.11 Referring to CWB RSS confirmation on the completion of marine construction activities within the TS3 area and the completion of the post construction water quality monitoring, the respective Enhance DO Monitoring within TS3 for monitoring station C6 and C7 was temporarily suspended since 05 March 2018 onwards.



# 4.4 Waste Monitoring Results

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

4.4.1 Inert C&D waste and no Non-inert C&D waste were disposed of for the site works in this reporting period. Details of the waste flow table are summarized in *Table 4.19*.

Table 4.19 Details of Waste Disposal for Contract no. HK/2009/02

| Waste Type  | Quantity this quarter | Cumulative Quantity-<br>to-Date | Disposal / Dumping<br>Grounds |
|---|-----------------------|---------------------------------|-------------------------------|
| Inert C&D materials disposed, m <sup>3</sup>  | 13838.3               | 301565.9                        | TKO137/ TM 38                 |
| Inert C&D materials recycled, m <sup>3</sup>  | NIL                   | 18161                           | N/A                           |
| Non-inert C&D materials disposed, m³  | 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<br>(Type 1 – Open Sea<br>Disposal), m <sup>3</sup>  | NIL                   | 240222<br>(Bulk volume)         | South of Cheung Chau          |
| Marine Sediment<br>(Type 1 – Open Sea<br>Disposal (Dedicate<br>Sites) & Type 2 –<br>Confined Marine<br>Disposal), m³* | NIL                   | 146445<br>(Bulk volume)         | East of Sha Chau              |

4.4.2 There was no Marine Sediment (Type 1 – Open Sea Disposal) and no Marine Sediment (Type
 1- Open Sea Disposal (Dedicate Sites) & Type 2- Confined Marine Disposal) disposed of in this reporting quarter.



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

4.4.3 There was no Inert C&D waste disposed in this reporting period and no non-inert C&D waste was disposed in this reporting period. Details of the waste flow table are summarized in *Table 4.20*.

Table 4.20 Details of Waste Disposal for Contract no. HY/2009/15

| Waste Type  | Quantity this quarter | Cumulative<br>Quantity-to-Date | Disposal /<br>Dumping<br>Grounds            | Remarks   |
|---|-----------------------|--------------------------------|---|---|
| Inert C&D materials disposed, m³  | NIL                   | 141579.2                       | Tuen Mun Area<br>38                         | NIL   |
|   | NIL                   | 65216                          | TKO137 FB                                   | NIL   |
| Inert C&D materials   | NIL                   | 8127.21                        | HY/2010/08                                  | NIL   |
| recycled, m <sup>3</sup>  | 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   |
| 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 –   | NIL                   | 156909                         | South of Cheung                             | Dredging from   |
| Open Sea Disposal) , m <sup>3</sup>   |                       | (Bulk Volume)                  | Chau  | TCBR1E /<br>TCBR1W /<br>TCBR2/ TCBR3<br>/ TCBR4 /<br>Maintenance<br>dredging                  |
| Marine Sediment (Type 1 –<br>Open Sea Disposal<br>(Dedicate Sites) & Type 2 –<br>Confined Marine Disposal),<br>m <sup>3</sup> | NIL                   | 327746<br>(Bulk Volume)        | East of Sha Chau                            | Dredging from<br>TCBR1E /<br>TCBR1W /<br>TCBR2/ TCBR3<br>/ TCBR4 /<br>Maintenance<br>dredging |
| Marine Sediment (Type 3 –<br>Special Treatment / Disposal<br>contained in Geosynthetic<br>Containers)                         | NIL                   | 12640<br>(Bulk Volume)         | East of Sha Chau                            | Dredging from<br>TCBR1W /<br>Maintenance<br>dredging  |
| Marine Sediment (Type 2 –<br>Confined Marine Disposal),<br>m3   | NIL<br>(Bulk Volume)  | 9350<br>(Bulk Volume)          | East of Sha Chau                            | Dredging from<br>Eastern<br>Breakwater of<br>CBTS   |
| Marine Sediment (Type 1 –<br>Open Sea Disposal) , m3  | NIL<br>(Bulk Volume)  | 600<br>(Bulk Volume)           | East Sha Chau /<br>South of The<br>Brothers | Dredging from<br>Phase 3<br>Mooring Re-<br>arrangement  |
| Marine Sediment (Type 2–<br>Confined Marine<br>Disposal) , m3   | NIL<br>(Bulk Volume)  | 14,780<br>(Bulk Volume)        | South of The<br>Brothers                    | Dredging from<br>Phase 3<br>Mooring Re-<br>arrangement  |



| Waste Type   | Quantity this quarter | Cumulative<br>Quantity-to-Date | Disposal /<br>Dumping<br>Grounds | Remarks  |
|--|-----------------------|--------------------------------|----------------------------------|--|
| Marine Sediment (Type 3 –<br>Special Treatment / Disposal<br>contained in Geosynehetic<br>Containers) , m3 | NIL<br>(Bulk Volume)  | 2,760<br>(Bulk Volume)         | South of The<br>Brothers         | Dredging from<br>Phase 3<br>Mooring Re-<br>arrangement |

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



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

4.4.5 No Inert and non-inert C&D waste were disposed of in this reporting quarter. Details of the waste flow table are summarized in *Table 4.21*.

Table 4.21 Details of Waste Disposal for Contract no. HY/2009/19

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

4.4.6 No marine sediments Type1- Open Sea Disposal and no Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal in this reporting quarter.



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

4.4.7 No Inert and non-inert C&D waste were disposed of in this reporting quarter. Details of the waste flow table are summarized in *Table 4.22*.

Table 4.22 Details of Waste Disposal for Contract no. HK/2012/08

| Waste Type  | Quantity this quarter | Cumulative Quantity-<br>to-Date | Disposal / Dumping<br>Grounds                          |
|---|-----------------------|---------------------------------|--|
| Inert C&D materials disposed,   | NIL                   | 4131                            | TM38   |
| m <sup>3</sup>  | NIL                   | 273                             | TKO 137  |
| Inert C&D materials recycled, m³  | NIL                   | NIL                             | NIL  |
| Non-inert C&D materials disposed, m <sup>3</sup> *  | NIL                   | 400                             | SENT   |
| Non-inert C&D materials recycled, kg  | NIL                   | NIL                             | N/A  |
| Chemical waste disposed, L  | NIL                   | NIL                             | N/A  |
| Marine Sediment (Type 1 –   | NIL                   | 31759                           | South of Cheung  |
| Open Sea Disposal), m <sup>3</sup> *  | (Bulk volume)         | (Bulk volume)                   | Chau   |
| Marine Sediment (Type 1 –<br>Open Sea Disposal (Dedicate<br>Sites) & Type 2 – Confined<br>Marine Disposal) , m <sup>3</sup> * | NIL<br>(Bulk volume)  | 108542<br>(Bulk volume)         | South of The Brothers<br>(from 27 Aug 2013<br>onwards) |

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

4.4.8 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 quarter.



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

4.4.9 No Inert or non-inert C&D waste was disposed in this reporting period. Details of the waste flow table are summarized in *Table 4.23* 

Table 4.23 Details of Waste Disposal for Contract no. HY/2010/08

| Waste Type   | Quantity this quarter | Cumulative Quantity-<br>to-Date | Disposal / Dumping<br>Grounds |
|--|-----------------------|---------------------------------|-------------------------------|
| Inert C&D materials disposed,  | NIL                   | 95094.759                       | TM38                          |
| m <sup>3</sup>   | NIL                   | 19739.4                         | TKO137                        |
| Inert C&D materials recycled, m³   | NIL                   | NIL                             | N/A                           |
| Non-inert C&D materials disposed, m³   | NIL                   | NIL                             | N/A                           |
| Non-inert C&D materials recycled, kg   |                       |                                 | N/A                           |
| Chemical waste disposed, L   | NIL                   | NIL                             | N/A                           |
| Marine Sediment (Type 1 –<br>Open Sea Disposal)  |                       |                                 | South Cheung Chau             |
| Marine Sediment (Type 1 –<br>Open Sea Disposal (Dedicate<br>Sites) & Type 2 – Confined<br>Marine disposal) | NIL                   | 28309.2                         | Brothers Island               |
| Marine Sediment (Type 3 – Special Treatment)   | NIL                   | 7780                            | Brothers Island               |

4.4.10 No marine Sediment Type 1 – Open Sea Disposal and Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal disposed in this reporting period, and no Type 3- Special Treatment disposed in this reporting period.

#### 5. COMPLIANCE AUDIT

5.0.1. The Event Action Plan for construction noise, air quality and water quality are presented in *Appendix 5.1*.

### 5.1. Noise Monitoring

# Reporting period of June 2018

One limit level exceedance was recorded at M6 - HK Baptist Church Henrietta Secondary School on 7 June 2018 in the reporting period. After the investigation, the exceedance was considered as non-project related.

Reporting period of July 2018

5.1.1 No action or limit level exceedance was recorded in the reporting period.

Reporting period of August 2018

5.1.2 No action or limit level exceedance was recorded in the reporting period.

# 5.2. Air Monitoring

Reporting period of June 2018

5.2.1 No action or limit level exceedance was recorded in the reporting period.

Reporting period of July 2018

5.2.2 No action or limit level exceedance was recorded in the reporting period.

Reporting period of August 2018

5.2.3 No action or limit level exceedance was recorded in the reporting period.

#### 5.3. Water Quality Monitoring

- 5.3.1 Due to the hoisting of Amber Rainstorm Warning Signal, the water quality monitoring event on 6 June 2018 during ebb tide and 13 June 2018 during flood tide were cancelled.
- 5.3.2 Due to the hoisting of Tropical Cyclone Warning Signal No. 3, the water quality monitoring event on 18 July 2018 during flood tide was cancelled.
- 5.3.3 Due to the hoisting of Amber Rainstorm Warning Signal, the water quality monitoring event scheduled on 11 August 2018 during ebb tide and 17 August 2018 during flood tide were cancelled.

Reporting period of June 2018

5.3.4 No action or limit level exceedance was recorded in the reporting period.



#### 5.3.5 Reporting period of July 2018

5.3.6 Total 2 action level exceedances of dissolved oxygen, 2 limit level exceedances of turbidity, 1 action level exceedance of suspended solids and 1 limit level exceedance of suspended solids were recorded in the reporting period. After the investigation, the exceedances recorded were considered as non-project related.

#### Reporting period of August 2018

5.3.7 Total 2 limit level exceedance of turbidity, 1 action level exceedance of turbidity and 1 limit level exceedance of suspended solids were recorded in the reporting period. After the investigation, the exceedances recorded were considered as non-project related.

#### 5.4. Site Audit

5.4.1 There was no non-compliance from the site audits in the reporting period. During environmental site inspections conducted during the reporting period, minor deficiencies were note.

#### 5.5. Review of the Reasons for and the Implications of Non-compliance

5.5.1 There was no non-compliance from the site audits in the June, July and August 2018 reporting period.

#### 5.6. Summary of action taken in the event of and follow-up on non-compliance

5.6.1 There was no particular action taken since no non-compliance was recorded from the site audits in the June, July and August 2018 reporting period.



#### 6. COMPLAINTS, NOTIFICATION OF SUMMONS AND PROSECUTION

6.0.1. Two environmental complaints were received in the June 2018 reporting period.

An EPD complaint was referred to the ET on 25 June 2018 (CASE Ref: H05/RS/000015459-18). The complainant reported that muddy water discharge was found at the site outside Lung Wo Road on 5 June 2018 afternoon. ET confirmed with the Resident Site Staff that installation of metal formwork at seawall was carried out on 5 June 2018 afternoon and mitigation measure including placing rock fill material on slope surface was implemented at the concerned location to reduce surface runoff. Follow up site inspection was conducted by the Environmental Team on 26 June 2018, no muddy water discharge or surface runoff related water quality impact was observed at construction area under HK/2012/08 near the concerned area Nevertheless, in view of the public concern, the Contractor of HK/2012/08 was reminded to provide addition tarpaulin covering to the slope surface along the seawall around the concerned location to reduce the potential surface runoff. In addition, the Contractor of HK/2012/08 is recommended to maintain regular checking on the embankment condition to ensure no gap / void to avoid potential seepage / surface runoff to nearby water.

An EPD complaint was referred to the ET on 25 June 2018 (CASE Ref: H05/RS/00015954-18). The complainant reported that construction dust and muddy water discharge was found at the site near Wan Chai Pier on 11 June 2018 afternoon. ET confirmed with the Resident Site Staff that marine construction activity of removal of TWCR4 and stockpile of fill material at WCR3 Area were conducted under the Contractor of HK/2009/02 on 11 June 2018 afternoon. The Contractor of HK/2009/02 reported that double silt curtain was in place as mitigation measures during the marine activity and regular spraying water was provided as dust mitigation measures at WCR3 Area. Follow-up inspection was conducted on 28 June 2018, excavation works was observed at WCR3 Area and mitigation measures including watering during excavation was generally in place. Other dust mitigation measure including covering the stockpile material and watering the dusty surface and haul road were generally in place. No particular dust impact was observed. No muddy water discharge or surface runoff related water quality monitoring impact was observed at Contract HK/2009/02 site area. Mitigation measures for marine activity includes providing double layers of silt curtain to enclose the marine activity area was generally in place and additional tarpaulin was provided to cover the temporary cut slope to avoid the potential surface runoff. In view of the public concern, the Contractor of HK/2009/02 was reminded to keep review the performance of dust mitigation measures including watering during excavation and material handling, covering the stockpile material and watering the dusty surface and haul road to avoid potential dust impact and minimize any potential dust impact to the surroundings. The Contractor of HK/2009/02 is also reminded to maintain regular checking on the embankment, silt curtain and tarpaulin condition to ensure no gap / void to avoid potential water quality related impact.

6.0.2. No environmental complaint was received in the July and August 2018 reporting period.



- 6.0.3. The details of cumulative complaint log and summary of complaints are presented in *Appendix 6.1*.
- 6.0.4. Cumulative statistic on complaints and successful prosecutions are summarized in *Table 6.1* and *Table 6.2* respectively.

Table 6.1 Cumulative Statistics on Complaints

| Reporting Period  | No. of Complaints |
|---|-------------------|
| Commencement works (Mar 2010) to last reporting quarter | 47                |
| June to August 2018                                     | 2                 |
| Project-to-Date   | 49                |

Table 6.2 Cumulative Statistics on Successful Prosecutions

| Environmental<br>Parameters | Cumulative No.<br>Brought Forward | No. of Successful<br>Prosecutions this quarter<br>(Offence Date) | Cumulative No.<br>Project-to-Date |
|-----------------------------|-----------------------------------|--|-----------------------------------|
| Air                         | -                                 | 0  | 0                                 |
| Noise                       | e - 0                             |  | 0                                 |
| Water                       | -                                 | 0  | 0                                 |
| Waste                       | - 0                               |  | 0                                 |
| Total                       | -                                 | 0  | 0                                 |



#### 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 roadworks, drainage and seawall coping were performed in August 2018 reporting period. 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 construction and removal of temporary reclamation at Wan Chai. The major construction activities under Central-Wan Chai Bypass and Island Eastern Corridor Link Projects were ventilation building construction junction modification at Central; reinstatement works along Causeway Bay Typhoon Shelter, road works and landscape works at Victoria Park; bridge construction, approach ramp construction, landscape deck construction, drainage construction and ventilation building construction at North Point area in the reporting period. In addition, other non-Wan Chai Development Phase II, Central-Wan Chai Bypass and Island Eastern Corridor Link projects were 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.

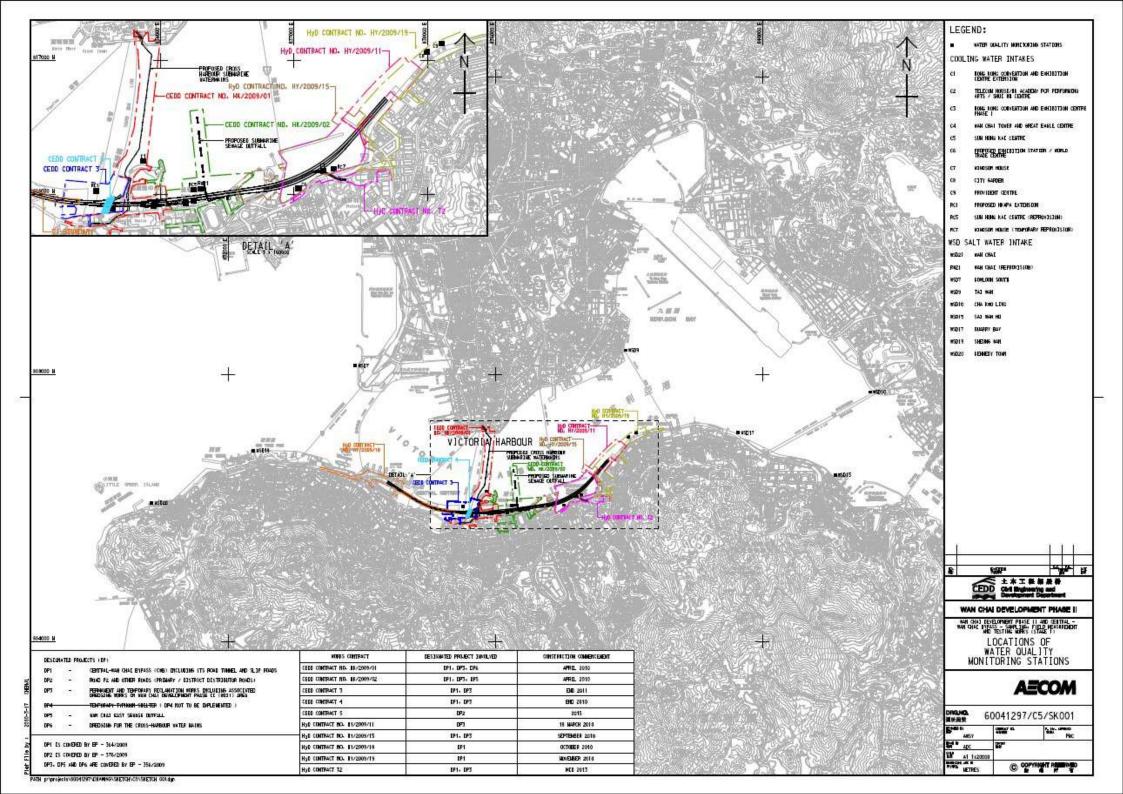


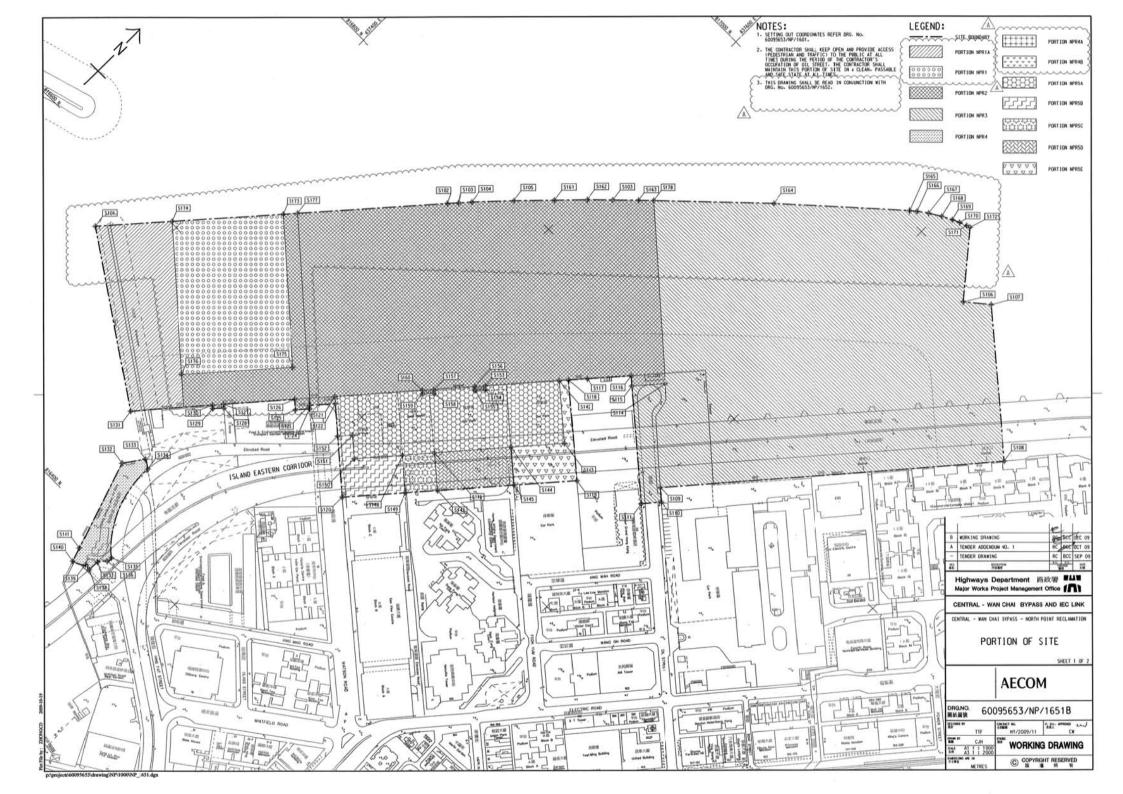
# 8. CONCLUSION

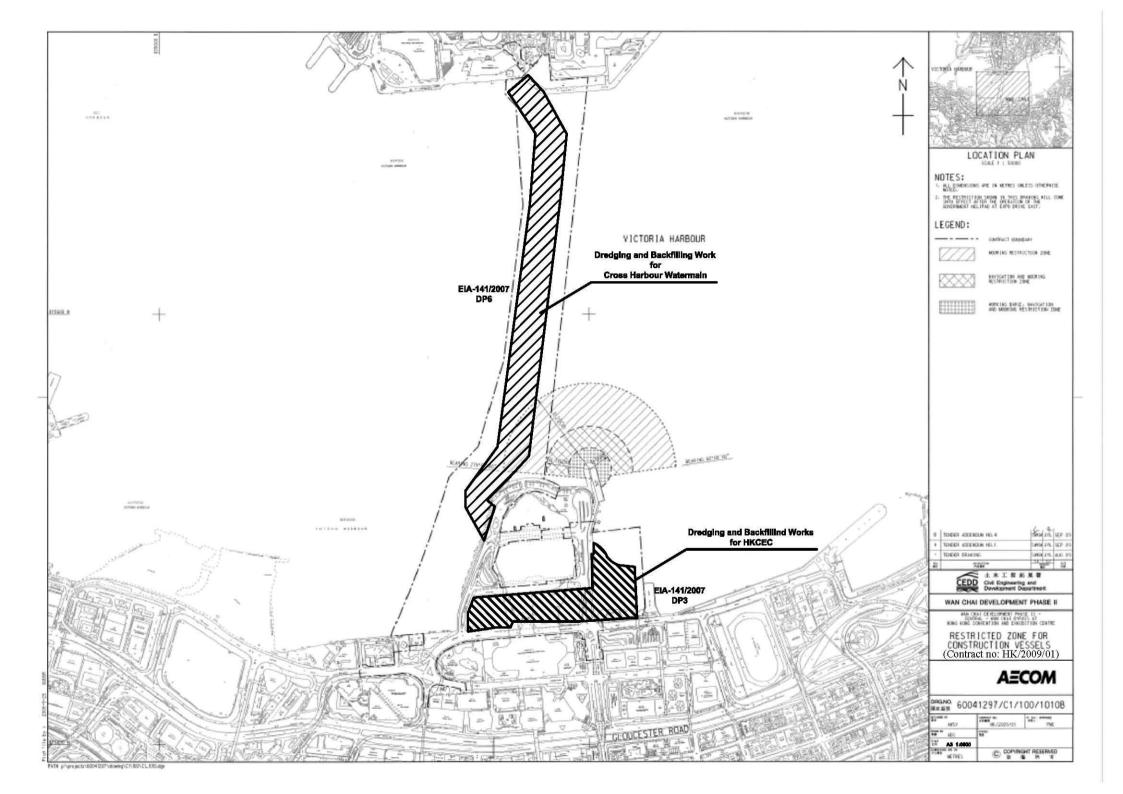
- 8.0.1. The EM&A programme was carried out in accordance with the EM&A Manual requirements, minor alterations to the programme proposed were made in response to changing circumstances.
- 8.0.2. There was no non-compliance from the site audits in the June, July and August 2018 reporting period.
- 8.0.3. Two environmental complaints were received in the June 2018 reporting period. No environmental complaint was received in the July and August reporting period.
- 8.0.4. No summon or prosecution was received in the June, July and August 2018 reporting period.
- 8.0.5. The construction programmes of individual contracts are provided in *Appendix 8.1*.

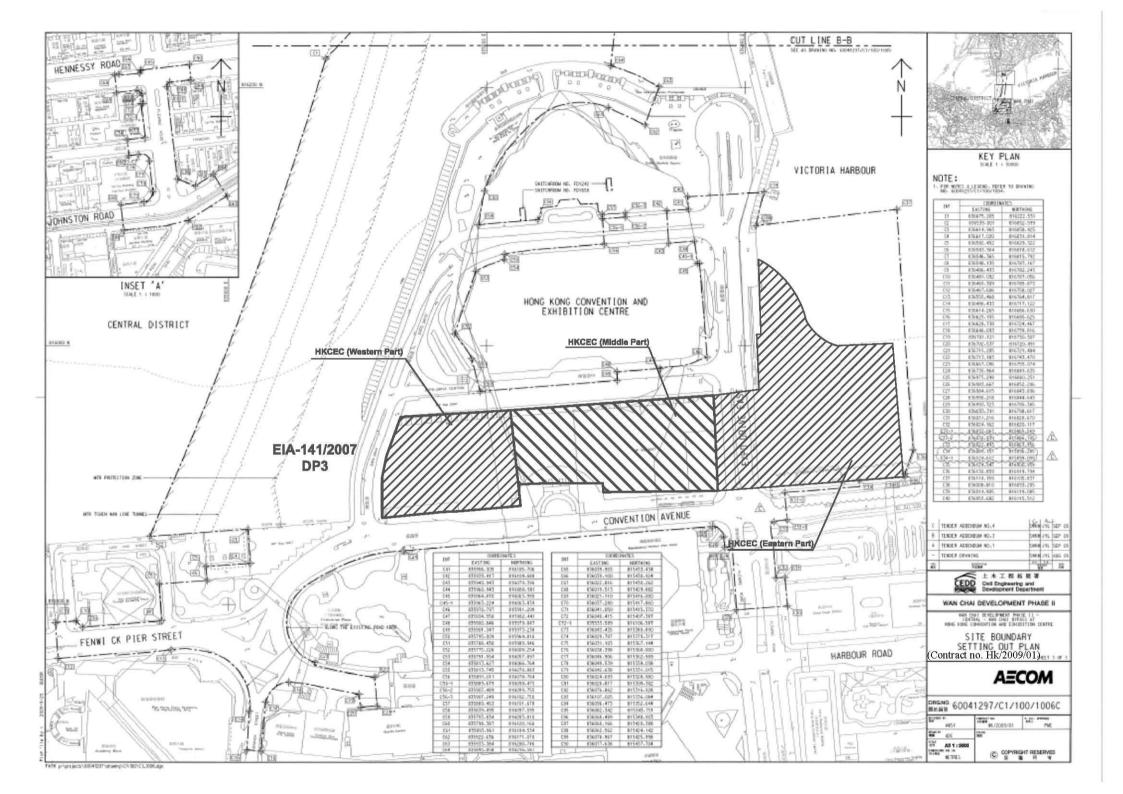
Figure 2.1

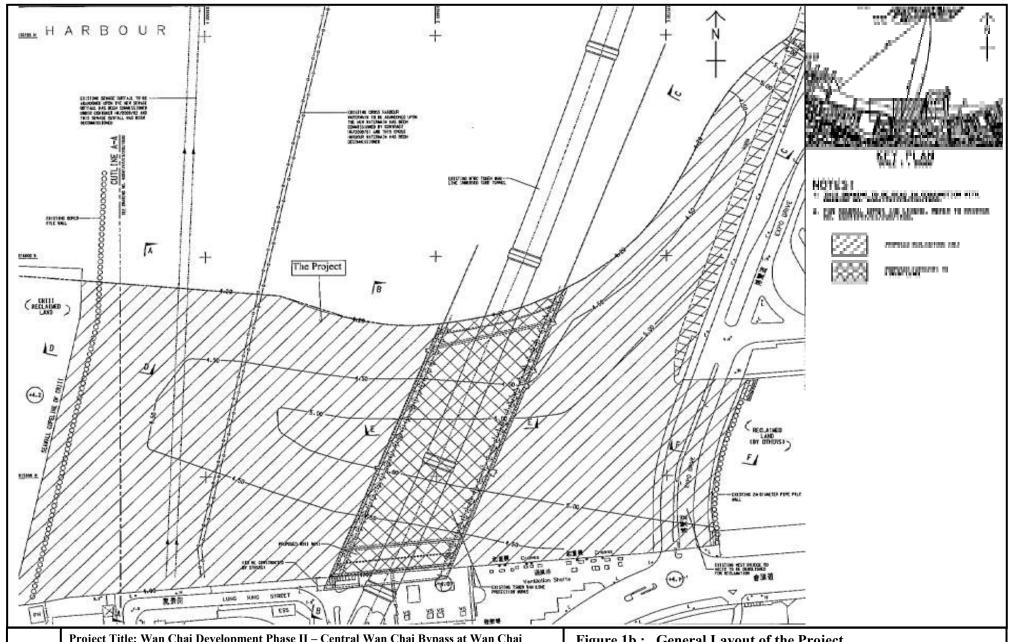
Project Layout













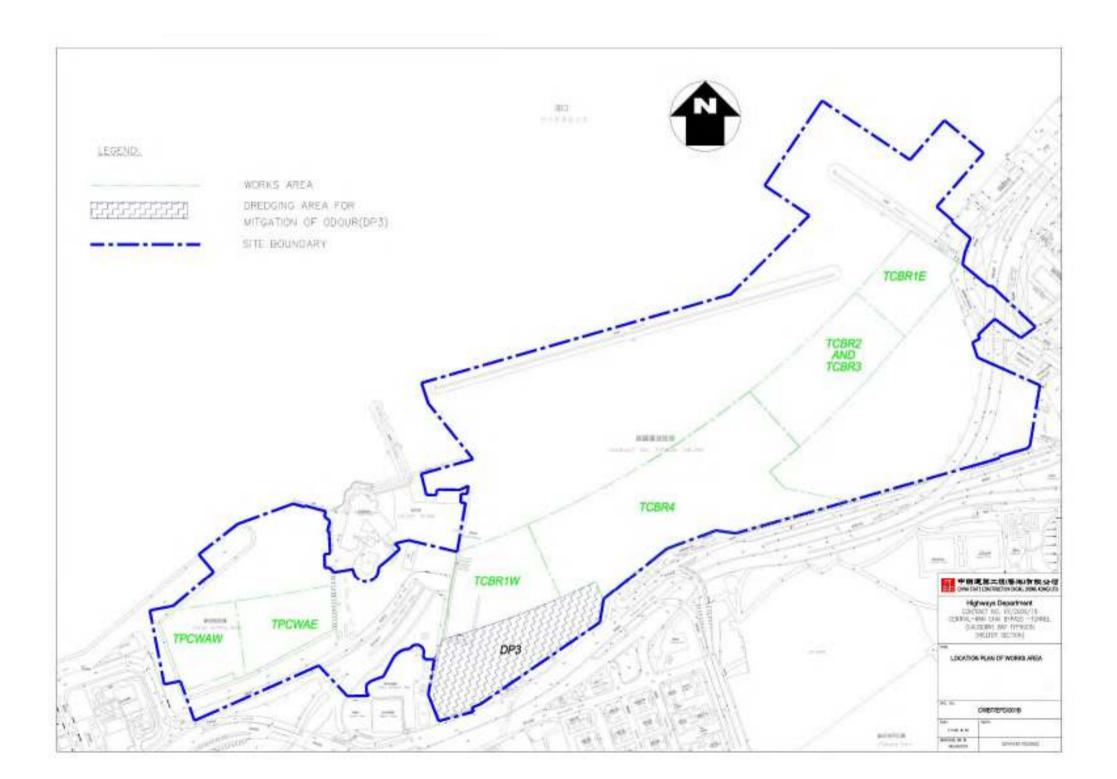
Project Title: Wan Chai Development Phase II – Central Wan Chai Bypass at Wan Chai West (Contract No. HK/2012/08) – Marine Works

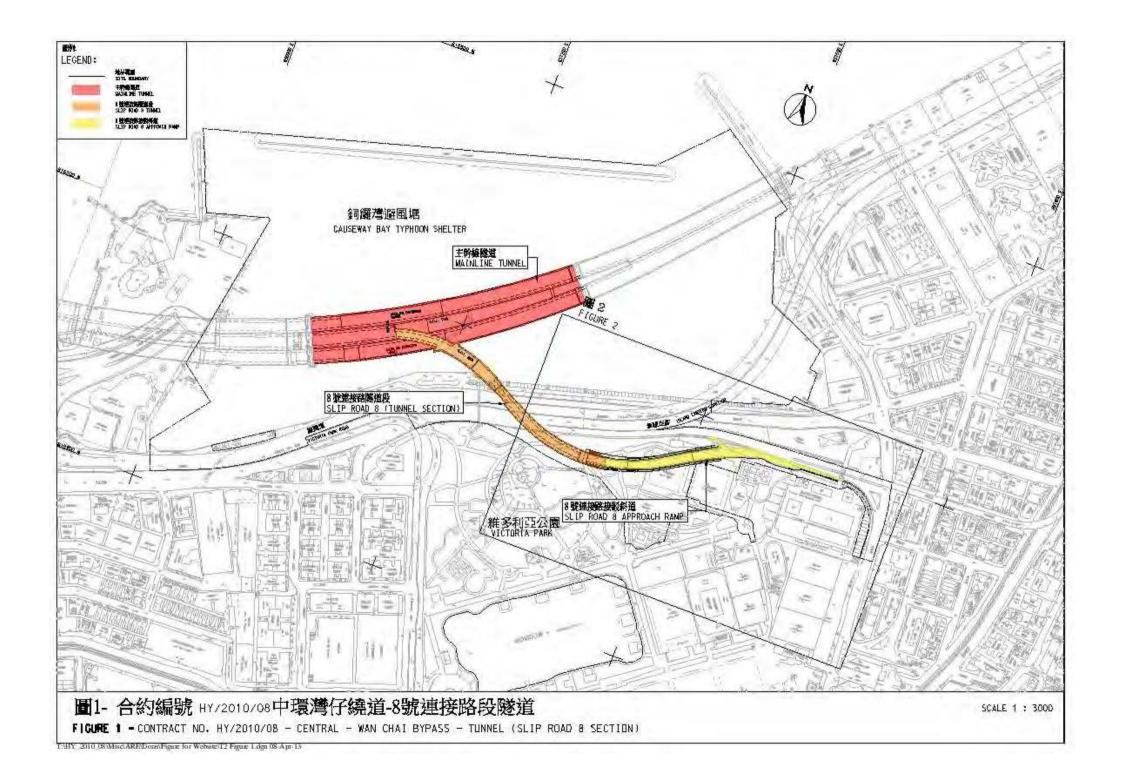
工程項目名稱: 灣仔發展計劃第二期 - 中環灣仔繞道-灣仔西段(合約編號:HK/2012/08)-海事工

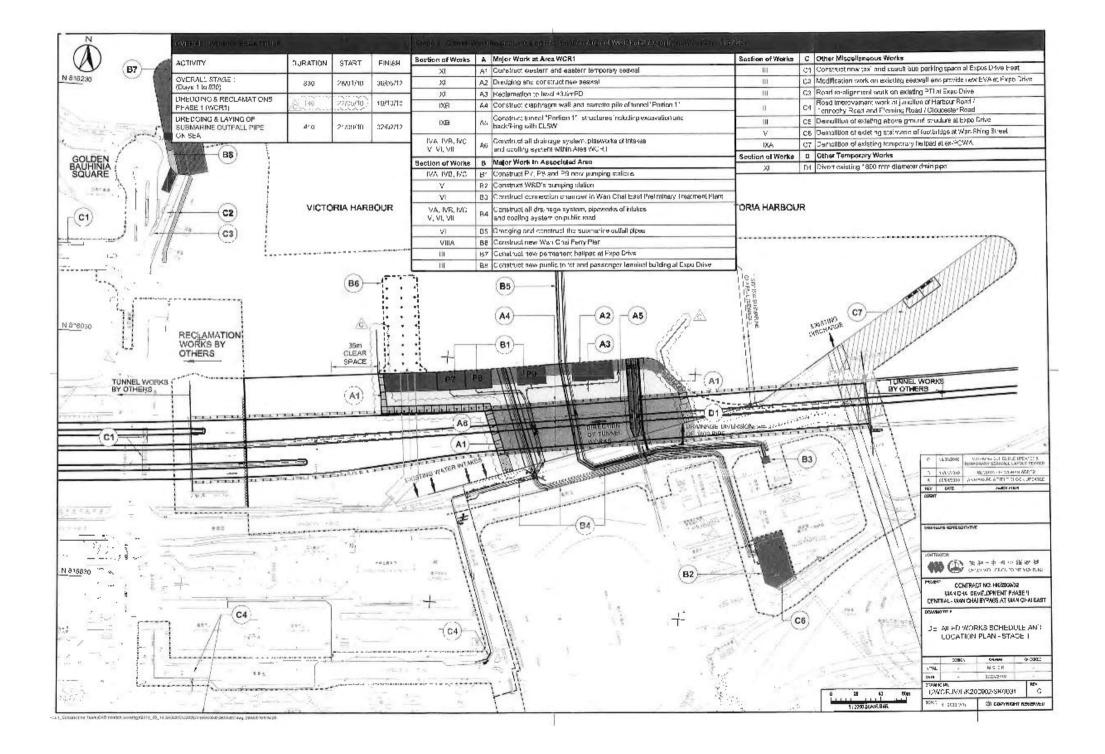
Environmental Permit No.: FEP-08/356/2009 環境許可證編號 : FEP-08/356/2009 Figure 1b: General Layout of the Project

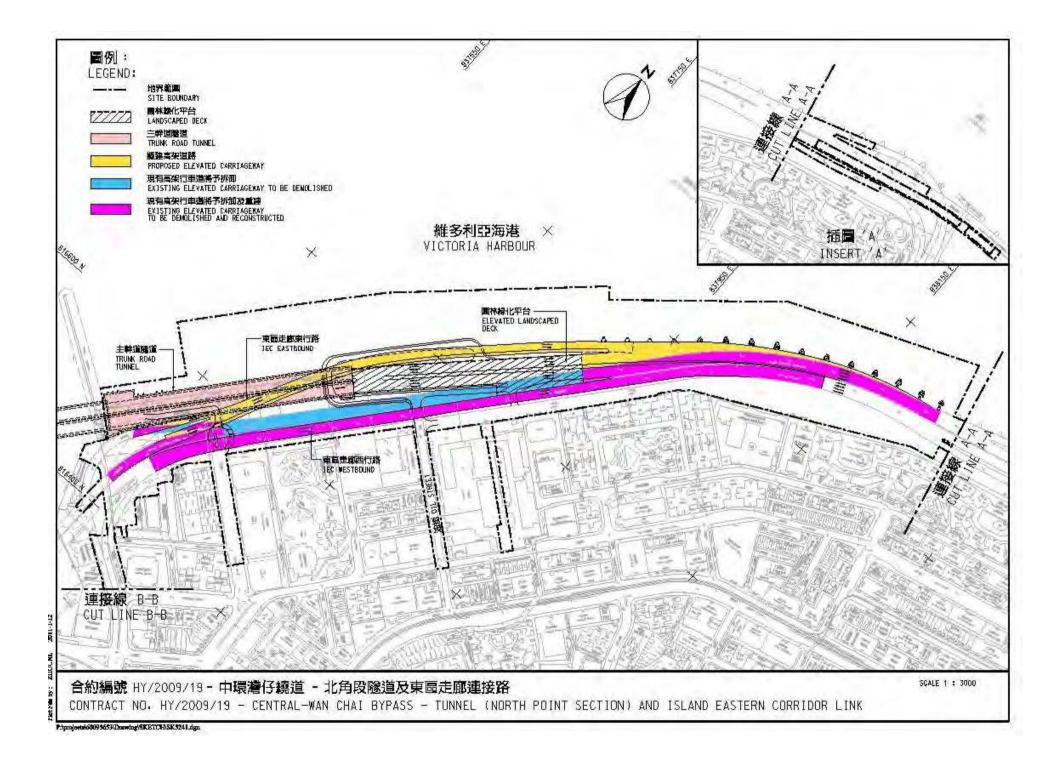
1b: 工程項目佈局圖

(This figure was prepared based on Figure 1b of Application for Further Environmental Permit (Application No.: FEP 172/2016)) (本圖是根據申請新的環境許可證 (申請書編號 FEP-172/2016) 圖 1b 編製)





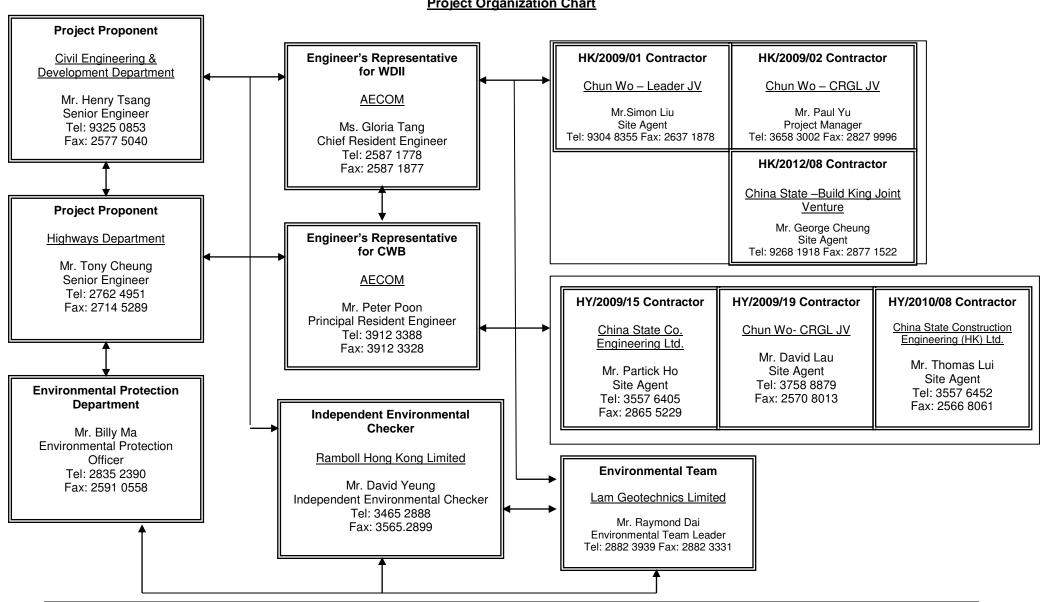




# Figure 2.2

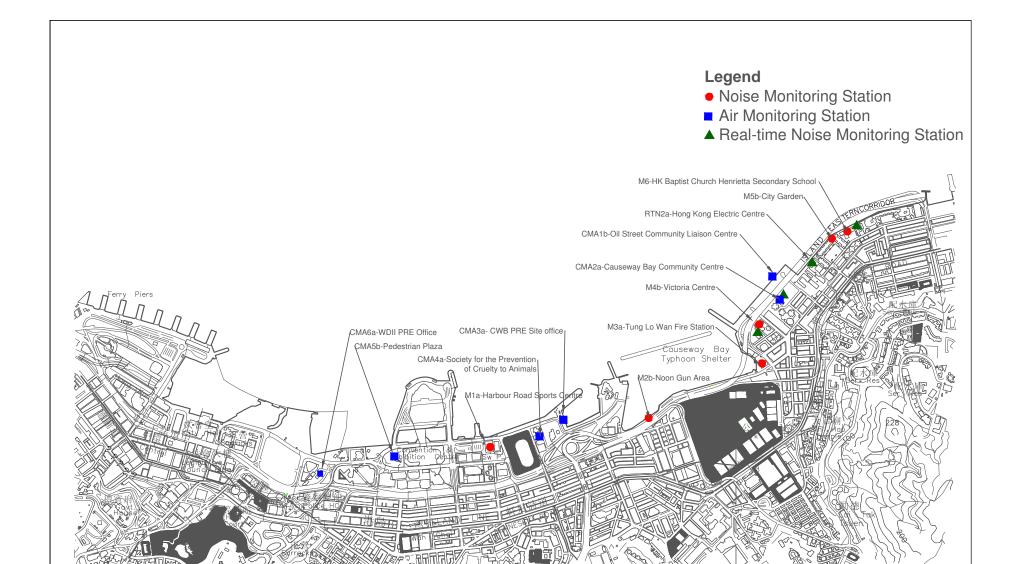
**Project Organization Chart** 

### **Project Organization Chart**

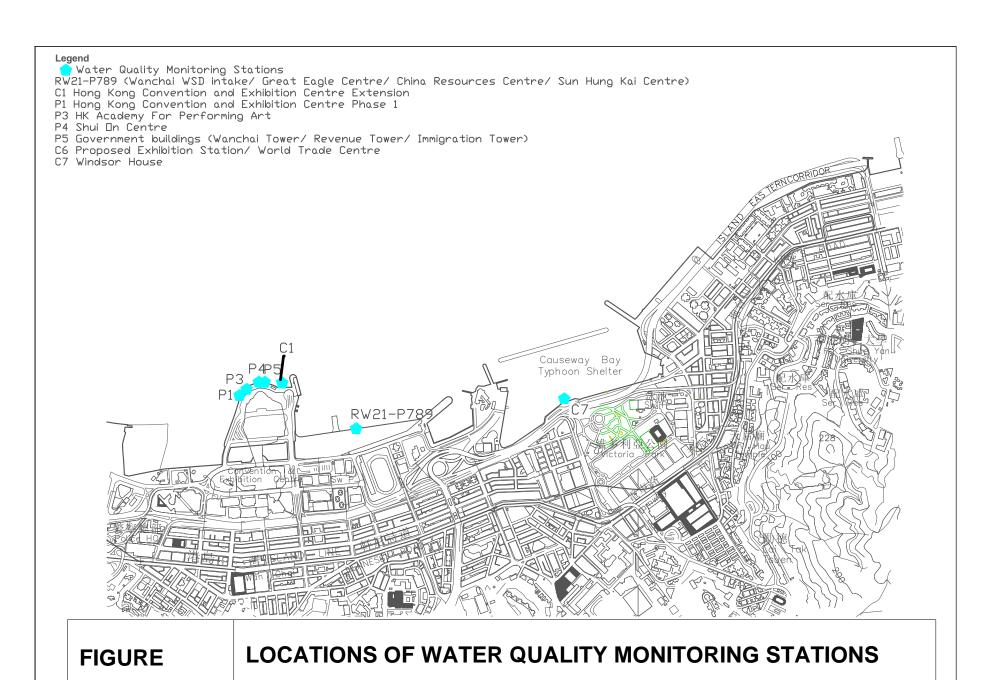


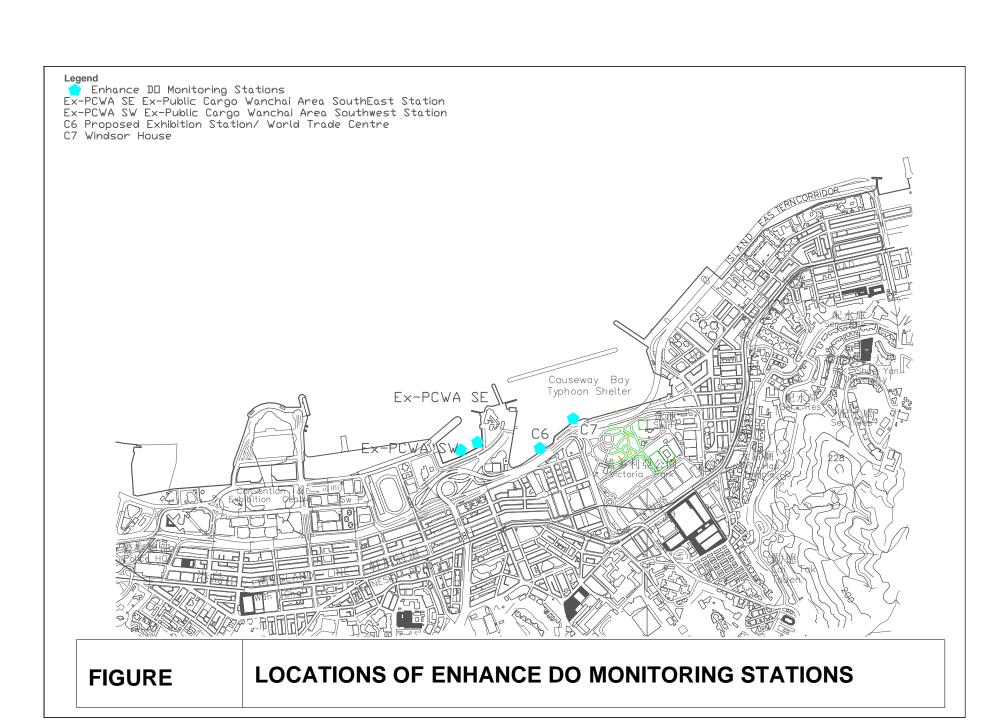
# Figure 3.1

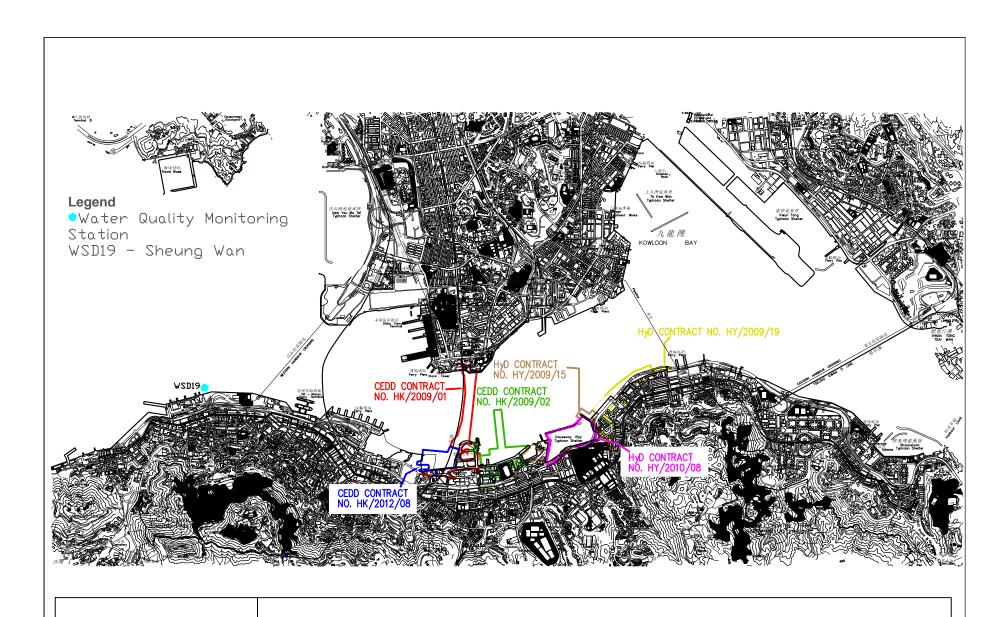
**Locations of Monitoring Stations** 



LOCATIONS OF AIR QUALITY AND NOISE MONITORING STATIONS

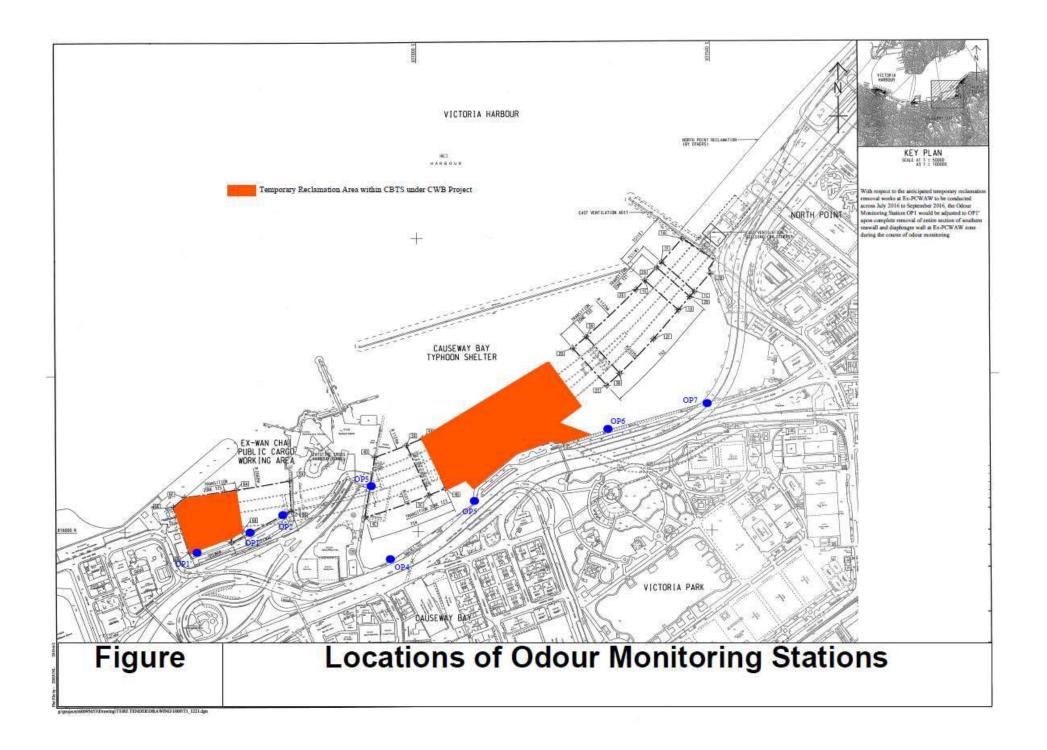






**FIGURE** 

**LOCATIONS OF WATER QUALITY MONITORING STATIONS** 



# Appendix 2.1

**Environmental Mitigation Implementation Schedule** 

Environmental Mitigation Implementation Schedule

# Implementation Schedule for Air Quality Control

| EIA Ref     | Environmental Protection Measures / Mitigation Measures  | Location / Timing               | Implementation | Implementation<br>Stages* |   |   |     | Relevant Legislation |
|-------------|--|---------------------------------|----------------|---------------------------|---|---|-----|----------------------|
|             |  |                                 | Agent          | Des                       | C | 0 | Dec | and Guidelines       |
| Constructio | ****   |                                 |                |                           |   |   |     |                      |
| For the Who | y .  |                                 |                |                           |   |   |     |                      |
| S3.6.5      | Four times a day watering of the work site with active operations.   | Work site / during construction | Contractor     |                           | V |   |     | EIAO-TM              |
| S3.8.1      | Implementation of dust suppression measures stipulated in Air Pollution Control (Construction Dust) Regulation. The following mitigation measures, good site practices and a comprehensive dust monitoring and audit programme are recommended to minimise cumulative dust impacts.  Strictly limit the truck speed on site to below 10 km per hour and water spraying to keep the haul roads in wet condition;  Watering during excavation and material handling;  Provision of vehicle wheel and body washing facilities at the exit points of the site, combined with cleaning of public roads where necessary; and  Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations. | Work site / during construction | Contractor     |                           | ٧ |   |     |                      |

Appendix 3.1

Contract no. HK/2015/01

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 3)

| EIA Ref     | Environmental Protection Measures / Mitigation Measures  | Location / Timing   | Implementation    | Implementation<br>Stages* |   |   |     | Relevant Legislation |
|-------------|--|---|-------------------|---------------------------|---|---|-----|----------------------|
| 22.7 1107   | 221 TO STATE OF THE STATE OF TH |   | Agent             | Des                       | C | 0 | Dec | and Guidelines       |
|             |  |   |                   |                           |   |   |     | T                    |
| 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<br>CBTS/implementation of<br>harbour-front<br>enhancement                             | CEDD <u>'</u>     |                           | V |   |     | 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<br>shoreline<br>seawall/implementation<br>of harbour-front<br>enhancement | CEDD <sup>2</sup> |                           | V |   |     | EIAO-TM              |
| Operation I | Phase  |   | I                 |                           | 1 | 1 |     | I                    |
| For the Who | ole Project  |   |                   |                           |   |   |     |                      |

 $<sup>^{\</sup>rm 1}$  CEDD will identify an implementation agent.

 $<sup>^{2}</sup>$  CEDD will identify an implementation agent.

Monthly EM&A Report

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

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

Appendix 3.1

Contract no. HK/2015/01

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 3)

Monthly EM&A Report

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

| EIA Ref      | Environmental Protection Measures / Mitigation Measures | Location / Timing Implementatio |       | In  | nplem<br>Sta | entati<br>ges* | on  | Relevant Legislation |
|--------------|---|---------------------------------|-------|-----|--------------|----------------|-----|----------------------|
|              |   |                                 | Agent | Des | C            | О              | Dec | and Guidelines       |
| Construction | n Phase   |                                 |       |     |              |                |     |                      |
| For the Who  | ole Project   |                                 |       |     |              |                |     |                      |

Wan Chai Development Phase II and Central-Wanchai Bypass - Sampling, Field Measurement and Testing Works (Stage 3)

| Environmental Protection Measures / Mitigation Measures  | Location / Timing   | Implementation<br>Agent   | Implementation<br>Stages*   |  |   |   | Relevant Legislation  |  |  |  |
|--|---|---|---|--|---|---|---|--|--|--|
|  |   |   | Des   | C  | o   | Dec   | and Guidelines  |  |  |  |
| Good Site Practice:  | Work Sites / During<br>Construction   | Contractor  |   | √  |   |   | EIAO-TM, NCO  |  |  |  |
| <ul> <li>Only well-maintained plant shall be operated on-site and<br/>plant shall be serviced regularly during the construction<br/>program.</li> </ul>  |   | Constitution  |   |  |   |   |   |  |  |  |
| <ul> <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> </ul> |   |   |   |  |   |   |   |  |  |  |
|  |   |   |   |  |   |   |   |  |  |  |
| <ul> <li>Machines and plant (such as trucks) that may be in<br/>intermittent use shall be shut down between works periods<br/>or shall be throttled down to a minimum.</li> </ul>  |   |   |   |  |   |   |   |  |  |  |
| <ul> <li>Plant known to emit noise strongly in one direction shall,<br/>wherever possible, be orientated so that the noise is<br/>directed away from the nearby NSRs.</li> </ul>   |   |   |   |  |   |   |   |  |  |  |
| Material stockpiles and other structures shall be effectively utilized, wherever practicable, in screening noise from onsite construction activities.  |   |   |   |  |   |   |   |  |  |  |
|  | <ul> <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-</li> </ul> | <ul> <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-</li> </ul> | <ul> <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-</li> </ul> | Good Site Practice:  Only well-maintained plant shall be operated on-site and plant shall be serviced regularly during the construction program.  Silencers or mufflers on construction equipment shall be utilized and shall be properly maintained during the construction program.  Mobile plant, if any, shall be sited as far away from NSRs as possible.  Machines and plant (such as trucks) that may be in intermittent use shall be shut down between works periods or shall be throttled down to a minimum.  Plant known to emit noise strongly in one direction shall, wherever possible, be orientated so that the noise is directed away from the nearby NSRs.  Material stockpiles and other structures shall be effectively utilized, wherever practicable, in screening noise from on- | Only well-maintained plant shall be operated on-site and plant shall be serviced regularly during the construction program.  Silencers or mufflers on construction equipment shall be utilized and shall be properly maintained during the construction program.  Mobile plant, if any, shall be sited as far away from NSRs as possible.  Machines and plant (such as trucks) that may be in intermittent use shall be shut down between works periods or shall be throttled down to a minimum.  Plant known to emit noise strongly in one direction shall, wherever possible, be orientated so that the noise is directed away from the nearby NSRs.  Material stockpiles and other structures shall be effectively utilized, wherever practicable, in screening noise from on- | Only well-maintained plant shall be operated on-site and plant shall be serviced regularly during the construction program.  Silencers or mufflers on construction equipment shall be utilized and shall be properly maintained during the construction program.  Mobile plant, if any, shall be sited as far away from NSRs as possible.  Machines and plant (such as trucks) that may be in intermittent use shall be shut down between works periods or shall be throttled down to a minimum.  Plant known to emit noise strongly in one direction shall, wherever possible, be orientated so that the noise is directed away from the nearby NSRs.  Material stockpiles and other structures shall be effectively utilized, wherever practicable, in screening noise from on- | Only well-maintained plant shall be operated on-site and plant shall be serviced regularly during the construction program.  Silencers or mufflers on construction equipment shall be utilized and shall be properly maintained during the construction program.  Mobile plant, if any, shall be sited as far away from NSRs as possible.  Machines and plant (such as trucks) that may be in intermittent use shall be shut down between works periods or shall be throttled down to a minimum.  Plant known to emit noise strongly in one direction shall, wherever possible, be orientated so that the noise is directed away from the nearby NSRs.  Material stockpiles and other structures shall be effectively utilized, wherever practicable, in screening noise from on- |  |  |  |

Appendix 3.1

Contract no. HK/2015/01

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 3)

For DP1 - CWB (Within the Project Boundary)

| EIA Ref            | Environmental Protection Measures / Mitigation Measures   | Location / Timing                   | Implementation | In  | nplem<br>Sta | entati<br>ges* | on  | Relevant Legislation |
|--------------------|---|-------------------------------------|----------------|-----|--------------|----------------|-----|----------------------|
| DIA KCI            | Environmental Proceedin Measures / Mitagaton Measures   |                                     | Agent          | Des | С            | 0              | Dec | and Guidelines       |
| S4.8.5 S4.8.5      | Use of quiet powered mechanical equipment, movable noise barrier and temporary noise barrier for the following tasks:  Slip road 8 tunnel  Construction of diaphragm wall and substructures of the tunnel approach ramp  Excavation  Construction of slabs  Backfill  Demolition and construction of substructures for the IEC  Demolition works of existing piers and crossheads of the marine section of the existing IEC  Use of PME grouping for the following tasks:  At-grade road construction  Substructure for IECL connection | Work Sites / During<br>Construction | Contractor     |     | √ ·          |                |     | EIAO-TM, NCO         |
| For DP2 -          | WDII Major Roads (Road P2)  |                                     |                |     |              |                |     |                      |
| S4.8.3 –<br>S4.8.4 | Use of quiet powered mechanical equipment, movable noise barrier and temporary noise barrier for the following tasks:  Temporary road diversion Resurfacing At-grade roadwork   | Work Sites / During<br>Construction | Contractor     |     | <b>√</b>     |                |     | EIAO-TM, NCO         |
| For DP3 - I        | Reclamation Works   |                                     |                |     |              |                |     |                      |
| S4.8.3 –<br>S4.8.4 | Use of quiet powered mechanical equipment for the following task:  Filling behind seawall Seawall construction  | Work Sites / During<br>Construction | Contractor     |     | 1            |                |     | EIAO-TM, NCO         |

Monthly EM&A Report

| EIA Ref              | Environmental Protection Measures / Mitigation Measures   | Location / Timing                   | Implementation | Implementation<br>Stages* |   |   |     | Relevant Legislation |
|----------------------|---|-------------------------------------|----------------|---------------------------|---|---|-----|----------------------|
| LITTE                | Environmental Protection Wedsures / Minigation Wedsures   |                                     | Agent          | Des                       | С | 0 | Dec | and Guidelines       |
| For DP5 –            | Wan Chai East Sewage Outfall  |                                     |                |                           |   |   |     |                      |
| S4.8.3 –<br>S4.8.4   | Use of quiet powered mechanical equipment for the following tasks:  • Submarine pipelines (marine section)                                  | Work Sites / During<br>Construction | Contractor     |                           | 1 |   |     | EIAO-TM, NCO         |
|                      | Use of quiet powered mechanical equipment and movable noise barrier for the following tasks:  Installation of a new pipeline (land section) |                                     |                |                           |   |   |     |                      |
| For DP6 -            | Cross-Harbour Water Mains from Wan Chai to Tsim Sha Tsui  |                                     |                |                           |   |   |     |                      |
| \$4.8.3 –<br>\$4.8.4 | Use of quiet powered mechanical equipment for the following tasks:  • Submarine pipelines (marine section)  •                               | Work Sites / During<br>Construction | Contractor     |                           | N |   |     | EIAO-TM, NCO         |

Appendix 3.1

Contract no. HK/2015/01

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 3)

| EIA Ref     | Environmental Protection Measures / Mitigation Measures | Location / Timing | Implementation<br>Agent | In  |   | entati<br>ges* | Relevant Legislation |                |
|-------------|---|-------------------|-------------------------|-----|---|----------------|----------------------|----------------|
|             |   |                   |                         | Des | C | 0              | Dec                  | and Guidelines |
|             |   |                   |                         |     |   |                |                      |                |
|             |   |                   |                         |     |   |                |                      |                |
|             |   |                   |                         |     |   |                |                      |                |
|             |   |                   |                         |     |   |                |                      |                |
|             |   |                   |                         |     |   |                |                      |                |
|             |   |                   |                         |     |   |                |                      |                |
|             |   |                   |                         |     |   |                |                      |                |
|             |   |                   |                         |     |   |                |                      |                |
|             |   |                   |                         |     |   |                |                      |                |
|             |   |                   |                         |     |   |                |                      |                |
| Operation 1 |   |                   |                         |     |   |                |                      |                |
| For DP1 - 0 | CWB (Within the Project Boundary)                       |                   |                         |     |   |                |                      |                |

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

Appendix 3.1

Contract no. HK/2015/01

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 3)

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

<sup>\*</sup> Des - Design, C - Construction, O - Operation, and Dec - Decommissioning

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

Table A13.3 Implementation Schedule for Water Quality Control

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

Appendix 3.1

Contract no. HK/2015/01

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 3)

| EIA Ref             | Environmental Pro   | Environmental Protection Measures / Mitigation Measures        |   | Location /  | Implementation                                      | In  | nplem<br>Sta | entat<br>ges* | Relevant Legislation |               |               |                |  |  |  |
|---------------------|---|--|---|---|---|---|--------------|---------------|----------------------|---------------|---------------|----------------|--|--|--|
|                     |   |  |   |   |   | Timing                                    | Agent        | Des           | C                    | O             | Dec           | and Guidelines |  |  |  |
| S5.8                | The water body behind the temporary reclamations within the Causeway Bay typhoon shelter shall not be fully enclosed.   |  |   | Work site /<br>During the<br>construction<br>period | Contractor  |   | 1            |               |                      | EIAO-TM, WPCO |               |                |  |  |  |
| S5.8                | within the tempor<br>impermeable barrier  | sure, to avoid the according embayment been suspended from a f | tween C<br>floating l   | CRIII and<br>boom on the                            | HKCEC1, an water surface                            | Work site /<br>During the<br>construction | Contractor   |               | √                    |               |               | EIAO-TM, WPCO  |  |  |  |
|                     | and extending down to the seabed, will be erected by the contractor before the HKCEC1 commences. The barrier will channel the stormwater discharge flows from Culvert L to the outside of the embayment. The contractor will maintain this barrier until the reclamation works in HKCEC2W are carried out and the new Culvert L extension is constructed. |  |   | period  |   |   |              |               |                      |               |               |                |  |  |  |
| S5.8,<br>Figure 5.3 | The total dredging rates in each of the marine works zones shall not be more than the maximum production rates stated in the table below. These are the production rates without considering the effect of silt curtain.  |  |   |   | Work site /<br>During the<br>construction<br>period | Contractor                                |              | 1             |                      |               | EIAO-TM, WPCO |                |  |  |  |
|                     | Reclama   | tion Area  | Maximum Dredging Rate  m³ per day (for 16 hrs per day)  Maximum Dredging Rate (m² per week) |   | Dredging<br>Rate<br>(m³ per                         |   |              |               |                      |               |               |                |  |  |  |
|                     | Dredging along seawall or breakwater  |  |   |   |   |   |              |               |                      |               |               |                |  |  |  |
|                     | North Point Shoreline Zone (NPR) 6,000 375 42,000   |  |   |   |   |   |              |               |                      |               |               |                |  |  |  |
|                     | Causeway Bay  | TBW  | 1,500   | 94  | 10,500  |   |              |               |                      |               |               |                |  |  |  |
|                     | Shoreline Zone  |  |   |   |   |   |              | 1             | 1                    |               |               |                |  |  |  |

| EIA Ref             | Environmental Protection Measures / Mitigation Measures   |  |   | Location /  | Implementation | In  | nplem<br>Sta | entati<br>ges* | Relevant Legislation |                |
|---------------------|---|--|---|---|----------------|-----|--------------|----------------|----------------------|----------------|
| 22.7.40.            |   | inguion nicusures  |   | Timing  | Agent          | Des | C            | 0              | Dec                  | and Guidelines |
|                     | Wan Chai Shoreline Zone (WCR) HKCEC Shoreline Zone HKCEC Stage 1 & 3 (HKCEC) HKCEC Stage 2 Cross Harbour Water Mains Wan Chai East Submarine Sewage Pipeline  Note: 1,500 m³ per day shall be applie  | 6,000 375<br>1,500 94<br>6,000 375<br>1,500 94<br>1,500 94<br>2d for construction of | 42,000<br>10,500<br>42,000<br>10,500<br>10,500<br>f the western |   |                |     |              |                |                      |                |
| S5.8,<br>Figure 5.3 | seawall of WCR1.  Dredging along the seawall at WCR1 1,500m <sup>3</sup> per day for construction of the proximity of the WSD intake), followed b western seawall (above high water mark much as possible from further dredging at                                  | Work site /<br>During the<br>construction<br>period                                  | Contractor  |   | √              |     |              | EIAO-TM, WPCO  |                      |                |
| S5.8,<br>Figure 5.3 | For dredging within the Causeway Bay<br>partially constructed to protect the nea<br>dredging activities. For example, at To<br>seawalls shall be constructed first (abo<br>seawater intakes at the inner water would<br>the remaining dredging activities along the | Work site /<br>During the<br>construction<br>period                                  | Contractor  |   | <b>V</b>       |     |              | EIAO-TM, WPCO  |                      |                |
| S5.8,<br>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.   |  |   |   | Contractor     |     | V            |                |                      | EIAO-TM, WPCO  |
| S5.8,<br>Figure 5.3 | 2009 with concurrent dredging activities at Cooling water   |  | n Ho, Quarry<br>South   | Work site /<br>During the<br>construction<br>period | Contractor     |     | V            |                |                      | EIAO-TM, WPCO  |

Appendix 3.1

Contract no. HK/2015/01

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 3)

| EIA Ref | Environmental Protection Measures / Mitigation Measures  | Location /   | Implementation                                      | In         |     | entati<br>ges* | Relevant Legislation |     |                                   |
|---------|--|--|---|------------|-----|----------------|----------------------|-----|-----------------------------------|
|         |  | J  | Timing  | Agent      | Des | C              | О                    | Dec | and Guidelines                    |
|         | TBW, NP and Water Mains Zone  Scenario 2B in late 2009/2010 with concurrent dredging activities at Sewage Pipelines Zone and TCBR. | Convention and Exhibition Centre Phase I, Telecom House / HK Academy for Performing Arts / Shun On Centre, Wan Chai Tower / Revenue Tower / Immigration Tower and Sun Hung Kai Centre WSD saltwater intakes at Sheung Wan, Wan Chai Cooling water intakes for Queensway Government Offices, Excelsior Hotel, World Trade Centre and Windsor House. |   |            |     |                |                      |     |                                   |
|         | Scenario 2C in 2011 with concurrent dredging activities at HKCEC and TCBR.   | WSD saltwater intakes at Sheung Wan and<br>Reprovisioned WSD Wan Chai saltwater intake.<br>Cooling water intakes for MTR South, Excelsior<br>Hotel & World Trade Centre and reprovisioned<br>Windsor House.  |   |            |     |                |                      |     |                                   |
| S5.8    | spillage and sealed ti<br>contaminated mud, clos   | used, shall be designed and maintained to avoid<br>ghtly while being lifted. For dredging of any<br>sed watertight grabs must be used;   | Work site /<br>During the<br>construction<br>period | Contractor |     | V              |                      |     | ProPECC PN 1/94;<br>WPCO (TM-DSS) |
|         | <ul> <li>all vessels shall be sized<br/>vessels and the seabe<br/>turbidity is not gene<br/>propeller wash;</li> </ul>             |  |   |            |     |                |                      |     |                                   |
|         | all hopper barges and<br>their bottom openings t   |  |   |            |     |                |                      |     |                                   |
|         |  | shall not cause foam, oil, grease, scum, litter or tter to be present on the water within the site or  |   |            |     |                |                      |     |                                   |
|         | dredged material into the  | noppers shall be controlled to prevent splashing of<br>the surrounding water. Barges or hoppers shall not<br>that will cause the overflow of materials or polluted<br>transportation; and  |   |            |     |                |                      |     |                                   |

| EIA Ref | Environmental Protection Measures / Mitigation Measures   | Location /<br>Timing                                | Implementation<br>Agent | In  |     | entati<br>ges* | Relevant Legislation |                |
|---------|---|---|-------------------------|-----|-----|----------------|----------------------|----------------|
|         |   |   |                         | Des | C   | 0              | Dec                  | and Guidelines |
|         | before commencement of the reclamation works, the holder of<br>Environmental Permit has to submit plans showing the phased<br>construction of the reclamation, design and operation of the silt curtain.  |   |                         |     |     |                |                      |                |
| S5.8    | Silt screens are recommended to be deployed at the seawater intakes during the reclamation works period. Installation of silt screens at the seawater intake points may cause a potential for accumulation and trapping of pollutants, floating debris and refuse behind the silt screens and may lead to potential water quality deterioration at the seawater intake points. Major sources of pollutants and floating refuse include the runoff and storm water discharges from the nearby coastal areas. As a mitigation measure to avoid the pollutant and refuse entrapment problems and to ensure that the impact monitoring results are representative, regular maintenance of the silt screens and refuse collection shall be performed at the monitoring stations at regular intervals on a daily basis. The Contractor shall be responsible for keeping the water behind the silt screen free from floating rubbish and debris during the impact monitoring period. | Work site /<br>During the<br>construction<br>period | Contractor              |     | √ · |                |                      | EIAO-TM, WPCO  |

Appendix 3.1

Contract no. HK/2015/01 Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 3)

| EIA Ref | Environmental Protection Measures / Mitigation Measures  | Location /   | Implementation | In  |   | entati<br>ges* | Relevant Legislation |                |
|---------|--|--|----------------|-----|---|----------------|----------------------|----------------|
|         |  | Timing   | Agent          | Des | C | o              | Dec                  | and Guidelines |
| \$5.8   | Dredging of contaminated mud is recommended as a mitigation measures for control of operational odour impact from the Causeway Bay typhoon shelter. In recognition of the potential impacts caused by dredging activities close to the seawater intakes, only I small close grab dredger shall be operated within the typhoon shelter (for the dredging to mitigate odour impact) at any time to minimize the potential impact. Double silt curtains shall be deployed to fully enclose the closed grab dredger during the dredging operation. In addition, an impermeable barrier, suspended from a floating boom on the water surface and extended down to the seabed, shall be erected to isolate the adjacent intakes as much as possible from dredging activities. For example, if dredging is to be carried out at the southwest corner of the typhoon shelter, physical barriers shall be erected to west of the cooling water intake for Excelsior Hotel so that the intake would be shielded from most of the SS generated from the dredging operation to the west of the intake. For area in close proximity of the cooling water intake point, the dredging rate shall be reduced as much as practicable. Site audit and water quality monitoring shall be carried out at the seawater intakes during the dredging operations. Daily monitoring of SS at the cooling water intake shall be carried out, and 24 hour monitoring of turbidity at the intakes shall be implemented during the dredging activities. If the monitoring results indicate that the dredging operation has caused significant changes in water quality conditions at the seawater intakes, appropriate actions shall be taken to stop the dredging and mitigation measures such as slowing down the dredging rate shall be implemented. | Causeway Bay typhoon shelter/Imple mentation of harbour-front enhancement. | CEDD3_         |     | 1 |                |                      | WPCO           |

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

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

Appendix 3.1

Contract no. HK/2015/01

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 3)

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

Monthly EM&A Report

| EIA Ref     | Environmental Protection Measures / Mitigation Measures   | Location /   | Implementation      | In    |     | entati<br>ges* | on  | Relevant Legislation |
|-------------|---|--|---------------------|-------|-----|----------------|-----|----------------------|
|             |   | Timing   | Agent               | Des   | C   | o              | Dec | and Guidelines       |
| \$5.8       | Storm Water Discharges  Minimum distances of 100 m shall be maintained between the existing or planned stormwater discharges and the existing or planned WSD flushing water intakes.  | Work site and<br>adjacent water<br>/ During the<br>design and<br>construction<br>period. | Contractor          | \<br> | √ · |                |     | WPCO                 |
| Operation l | Phase   | •  | •                   |       |     |                |     | •                    |
|             | (within the Project Boundary)   |  | -                   |       |     |                | ,   |                      |
| \$5.8       | For the operation of CWB, a surface water drainage system would be provided to collect road runoff. The following operation stage mitigation measures are recommended to ensure road runoff would comply with the TM under the WPCO:  The drainage from tunnel sections shall be directed through petrol interceptors to remove oil and grease before being discharged to the nearby foul water manholes. | CWB/During<br>design and<br>operational<br>period  | HyD/TD <sup>3</sup> | V     |     | 1              |     | WPCO                 |
|             | Petrol interceptors shall be regularly cleaned and maintained in good working condition.  |  |                     |       |     |                |     |                      |
|             | Oily contents of the petrol interceptors shall be properly handled and disposed of, in compliance with the requirements of the Waste Disposal Ordinance.  |  |                     |       |     |                |     |                      |
|             | Sewage arising from ancillary facilities of CWB (for examples, car park,  |  |                     |       |     |                |     |                      |

Appendix 3.1

Contract no. HK/2015/01

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 3)

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

<sup>\*</sup> Des - Design, C - Construction, O - Operation, and Dec - Decommissioning

 $<sup>^{3}\,\</sup>mathrm{if}$  employ Management, Operation and Maintenance (MOM) Contract

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 3)

Table A13.4 Implementation Schedule for Waste Management

| EIA Ref      | Environmental Protection Measures / Mitigation Measures  | Location / Timing                          | Implementation | In  |   | entati<br>ges* | on  | Relevant Legislation |
|--------------|--|--|----------------|-----|---|----------------|-----|----------------------|
|              |  |  | Agent          | Des | C | O              | Dec | and Guidelines       |
| Construction | on Phase   |  |                |     |   |                |     |                      |
| For DP3 -    | Reclamation Works  |  |                |     |   |                |     |                      |
|              | Marine Sediments   | Work site / During the construction period | Contractor     |     | V |                |     | ETWB TCW No. 34/2002 |
| \$6.7.2      | The dredged marine sediments would be loaded onto barges, transported to and disposed of at the designated disposal sites at South of Cheung Chau, East of Ninepin, East of Tung Lung Chau, South of Tsing Yi or East of Sha Chau to be allocated by the MFC depending on their level of contamination or at other disposal sites after consultation with the MFC and EPD. In accordance with the ETWB TCW No. 34/2002, the contaminated material must be dredged and transported with great care. The mitigation measures recommended in Section 5 of the EIA Report shall be incorporated. The dredged contaminated sediment must be effectively isolated from the environment upon final disposal and shall be disposed of at the Type 2 confined marine disposal contaminated mud pit. |  |                |     |   |                |     |                      |
| S6.7.3       | Based on the biological screening results, the Category H (>10xLCEL) sediment which failed the biological testing would require Type 3 special disposal. The volume of Category H sediment from the Causeway Bay typhoon shelter which would require special disposal arrangements is estimated to be approximately 0.05 Mm³. A feasible containment method is proposed whereby the dredged sediments are sealed in geosynthetic containers and, at the disposal site, the containers would be dropped into the designated contaminated mud pit where they would be covered by further mud disposal and later by the mud pit capping, thereby meeting the requirements for fully confined mud disposal.  |  |                |     |   |                |     |                      |

Appendix 3.1

Contract no. HK/2015/01

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 3)

| EIA Ref | Environmental Protection Measures / Mitigation Measures  | Location / Timing | Implementation | In  | nplem<br>Sta | entati<br>ges* | on  | Relevant Legislation |
|---------|--|-------------------|----------------|-----|--------------|----------------|-----|----------------------|
|         |  |                   | Agent          | Des | C            | 0              | Dec | and Guidelines       |
| S6.7.5  | It will be the responsibility of the Contractor to satisfy the appropriate authorities that the contamination levels of the marine sediment to be dredged have been analysed and recorded. According to the ETWB TCW No. 34/2002, this will involve the submission of a formal Sediment Quality Report to the DEP, at least 3 months prior to the dredging contract being tendered   |                   |                |     |              |                |     |                      |
| S6.7.6  | During transportation and disposal of the dredged marine sediments requiring Type 1 and Type 2 disposal, the following measures shall be taken to minimise potential impacts on water quality:  Bottom opening of barges shall be fitted with tight fitting seals to prevent leakage of material. Excess material shall be cleaned from the decks and exposed fittings of barges and hopper dredgers before the vessel is moved. |                   |                |     |              |                |     |                      |

Monthly EM&A Report

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

Appendix 3.1

Contract no. HK/2015/01

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 3)

| EIA Ref | Environmental Protection Measures / Mitigation Measures  | Location / Timing                          | Implementation | In  |   | entati<br>ges* | on  | Relevant Legislation                  |
|---------|--|--|----------------|-----|---|----------------|-----|---------------------------------------|
|         |  | g  | Agent          | Des | C | О              | Dec | and Guidelines                        |
| \$6.7.7 | Recommendations for good site practices during the construction activities include:  nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site;  training of site personnel in proper waste management and chemical waste handling procedures;  provision of sufficient waste disposal points and regular collection for disposal;  appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers;  regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors; and  a recording system for the amount of wastes generated, recycled and disposed of (including the disposal sites). | Work site / During the construction period | Contractor     |     | ٧ |                |     | Waste Disposal<br>Ordinance (Cap.354) |

| EIA Ref | Environmental Protection Measures / Mitigation Measures   | Location / Timing  | Location / Timing |     | In |   | entati<br>ges* | Relevant Legislation<br>and Guidelines |
|---------|---|--|-------------------|-----|----|---|----------------|--|
|         |   |  | Agent             | Des | C  | О | Dec            |  |
| S6.7.8  | Waste Reduction Measures  Waste reduction is best achieved at the planning and design stage, as well as by ensuring the implementation of good site practices. Recommendations to achieve waste reduction include:  • segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal;  • to encourage collection of aluminium cans, PET bottles and paper, separate labelled bins shall be provided to segregate these wastes from other general refuse generated by the work force;  • any unused chemicals or those with remaining functional capacity shall be recycled;  • use of reusable non-timber formwork, such as in casting the tunnel box sections, to reduce the amount of C&D material.  • prior to disposal of C&D waste, it is recommended that wood, steel and other metals shall be separated for re-use and / or recycling to minimise the quantity of waste to be disposed of to landfill;  • proper storage and site practices to minimise the potential for damage or contamination of construction materials; and  • plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste. | Work site / During planning and design stage, and construction stage | Contractor        | 1   | 7  |   |                |  |

Appendix 3.1

Contract no. HK/2015/01

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 3)

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

| EIA Ref   | Environmental Protection Measures / Mitigation Measures   | Location / Timing                          | Implementation  | In  |   | entati<br>ges* | on  | Relevant Legislation |
|-----------|---|--|---|-----|---|----------------|-----|----------------------|
| 22.7 1107 | 23. To office and 12 constants of 12 constants  | 200mion, 1mmg                              | Agent   | Des | C | О              | Dec | and Guidelines       |
| S6.7.13   | In order to monitor the disposal of public fill and C&D waste at public filling facilities and landfills, respectively, and to control fly tipping, a trip-ticket system shall be included as one of the contractual requirements and implemented by the Environmental Team undertaking the environmental monitoring and audit work. An Independent Environment Checker shall be responsible for auditing the results of the system.  | Work site / During the construction period | Contractor and<br>Independent<br>Environmental<br>Checker |     | 1 |                |     | ETWB TCW No. 31/2004 |
| S6.7.14   | Bentonite Slurry  The disposal of residual used bentonite slurry shall follow the good practice guidelines stated in ProPECC PN 1/94 "Construction Site Drainage" and listed as follows:  If the disposal of a certain residual quantity cannot be avoided, the used slurry may be disposed of at the marine spoil grounds subject to obtaining a marine dumping licence from EPD on a case-by-case basis.  If the used bentonite slurry is intended to be disposed of through the public drainage system, it shall be treated to the respective effluent standards applicable to foul sewers, storm drains or the receiving waters as set out in the | Work site / During the construction period | Contractor  |     | √ |                |     | ProPECC PN 1/94      |
|           | Technical Memorandum of Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters.  If the used bentonite slurry is intended to be disposed to public fill reception facilities, it will be mixed with dry soil on site before disposal.   |  |   |     |   |                |     |                      |

<sup>\*</sup> Des - Design, C - Construction, O – Operation, and Dec - Decommissioning

Appendix 3.1

Contract no. HK/2015/01

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 3)

Table A13.5 Implementation Schedule for Land Contamination

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

Monthly EM&A Report

- Sampling, Field Measurement and Testing Works (Stage 3)

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

Appendix 3.1

Contract no. HK/2015/01

Wan Chai Development Phase II and Central-Wanchai Bypass

 $\underline{\text{-Sampling}, Field Measurement and Testing Works (Stage 3)}\\$ 

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

| EIA Ref | Environmental Protection Measures / Mitigation Measures   | Location / Timing | Implementation | In  | nplem<br>Sta | entati<br>ges* | on  | Relevant Legislation |  |
|---------|---|-------------------|----------------|-----|--------------|----------------|-----|----------------------|--|
|         | 8   |                   | Agent          | Des | C            | 0              | Dec | and Guidelines       |  |
|         | Water Quality Mitigation Measures  Stockpile of untreated soil shall be covered as far as practicable to prevent the contaminated material from leaching out. The leachate shall be discharged following the requirements of WPCO.  Waste Mitigation Measures  Treated oversize materials will be used as filling material for backfilling within the site. Sorted materials of size smaller than 5 cm will be collected and transferred to the mixing plant for further decontamination treatment. |                   |                |     |              |                |     |                      |  |
|         | Stabilized soils shall be broken into suitable size for backfilling or reuse on site.  A high standard of housekeeping shall be maintained within the mixing plant area.  If necessary, there shall be clear and separated areas for stockpiling of untreated and treated materials.  |                   |                |     |              |                |     |                      |  |

<sup>\*</sup> Des - Design, C - Construction, O - Operation, and Dec - Decommissioning

Appendix 3.1

Contract no. HK/2015/01

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 3)

Monthly EM&A Report

#### Table A13.6 Implementation Schedule for Marine Ecology

| EIA Ref      | Environmental Protection Measures / Mitigation Measures  | Location / Timing   | Implementation | In  | nplem<br>Sta | entati<br>ges* | on  | Relevant Legislation   |
|--------------|--|---|----------------|-----|--------------|----------------|-----|--|
| 22.7.10.7    | Zaria omiteriali i i otecino i izensures / i i inguistra   | 200mion, 1mmg   | Agent          | Des | C            | 0              | Dec | and Guidelines   |
| Construction | on Phase   |   |                |     |              |                |     |  |
| For the Wh   | ole Project - Schedule 3 DP  |   |                |     |              |                |     |  |
| S.9.7.2      | Alternative design of the Trunk Road constructed in tunnel shall be adopted to avoid permanent reclamation in CBTS and ex-PWCA Basin.  | -   | CEDD/HyD       | 1   |              |                |     | EIAO TM Annex 16<br>(Section 8.4) & EIAO<br>Guidance Note No.<br>3/2002. |
| For DP3 -    | Reclamation Works  |   |                |     |              |                |     |  |
| S.9.7.3      | Translocation of those potentially affected coral colonies to the nearby suitable habitats such as Junk Bay is recommended. A detailed translocation plan (including translocation methodology, monitoring of transplanted corals, etc.) should be drafted and approval by AFCD during the detailed design stage of the Project. | Ex-PCWA Basin and<br>along seawall next to a<br>public pier which is about<br>250 m away from the<br>CBTS | CEDD/HyD       | 1   |              |                |     | EIAO TM Annex 16<br>(Section 8.4) & EIAO<br>Guidance Note No.<br>3/2002. |

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

Appendix 3.1

Contract no. HK/2015/01

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 3)

| EIA Ref | Environmental Protection Measures / Mitigation Measures  | Location / Timing                     | Implementation | Ir  | nplem<br>Sta |   | on  | Relevant Legislation   |
|---------|--|---------------------------------------|----------------|-----|--------------|---|-----|--|
|         |  |                                       | Agent          | Des | C            | o | Dec | and Guidelines   |
| S.9.7.6 | To minimize potential disturbance impacts on the foraging ardeid population in the CBTS, particularly in the area near the A King Shipyard, appropriate mitigation measures shall be adopted particularly during the construction phase. The following measures are recommended:  • Use of Quiet Mechanical Plant during the construction phase shall be adopted wherever possible.  • Adoption of multiple-phase construction schedule.  • General measures to reduce noise generated during the construction phase (see noise impact assessment) shall be effectively implemented. | Work site / during construction phase | Contractor     |     | √            |   |     | EIAO TM Annex 16<br>(Section 8.4) & EIAO<br>Guidance Note No.<br>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     |     | <b>√</b>     |   |     | EIAO TM Annex 16<br>(Section 8.4) & EIAO<br>Guidance Note No.<br>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<br>(Section 8.4) & EIAO<br>Guidance Note No.<br>3/2002. |

<sup>\*</sup>Des - Design, C - Construction, O - Operation, and Dec - Decommissioning

Table A13.7 Implementation Schedule for Landscape and Visual

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

Appendix 3.1

Contract no. HK/2015/01

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 3)

| EIA Ref                                  | Envir    | onmental Protection Measures / Mitigation Measures   | Location / Timing                        | Implementation<br>Agent | In  | Implementation I<br>Stages* |   |     | Relevant Legislation and Guidelines |
|--|----------|--|--|-------------------------|-----|-----------------------------|---|-----|-------------------------------------|
|  |          |  |  |                         | Des | C                           | О | Dec |                                     |
| Table 10.5                               | CM6      | Erection of decorative screen hoarding compatible with the surrounding setting.  | Work site / During<br>Construction Phase | Contractor              |     | V                           |   |     | EIAO TM                             |
| For DP2 - WD                             | II Majo  | r Roads (Road P2)  |  |                         |     |                             |   |     |                                     |
| Table 10.5                               | CM1      | Topsoil, where identified, shall be stripped and stored for<br>re-use in the construction of the soft landscape works,<br>where practical. | Work site / During<br>Construction Phase | Contractor              | 1   | 1                           |   |     | EIAO TM                             |
| Table 10.5                               | CM2      | Existing trees to be retained on site shall be carefully protected during construction.  | Work site / During<br>Construction Phase | Contractor              | 1   | V                           |   |     | EIAO TM                             |
| Table 10.5                               | CM3      | Trees unavoidably affected by the works shall be transplanted where practical.   | Work site / During<br>Construction Phase | Contractor              | 1   | V                           |   |     | EIAO TM                             |
| Table 10.5                               | CM4      | Compensatory tree planting shall be provided to compensate for felled trees.   | Work site / During<br>Construction Phase | Contractor              | 1   | <b>V</b>                    |   |     | EIAO TM                             |
| Table 10.5                               | CM5      | Control of night-time lighting.  | Work site / During<br>Construction Phase | Contractor              |     | 1                           |   |     | EIAO TM                             |
| Table 10.5                               | CM6      | Erection of decorative screen hoarding compatible with the surrounding setting.  | Work site / During<br>Construction Phase | Contractor              |     | <b>V</b>                    |   |     | EIAO TM                             |
| For DP3 - Rec                            | lamatio  | n Works  |  |                         |     |                             |   |     |                                     |
| Table 10.5                               | CM5      | Control of night-time lighting.  | Work site / During<br>Construction Phase | Contractor              |     | √                           |   |     | EIAO TM                             |
| Table 10.5                               | CM6      | Erection of decorative screen hoarding compatible with the surrounding setting.  | Work site / During<br>Construction Phase | Contractor              |     | V                           |   |     | EIAO TM                             |
| For DP5 - Wa                             | n Chai I | East Sewage Outfall  |  |                         |     |                             |   |     |                                     |
| Refer to EIA-<br>058/2001<br>Table 10.13 | CM2      | Minimisation of works areas.   | Work site / During<br>Construction Phase | Contractor              |     | 1                           |   |     | EIAO TM                             |
| Refer to EIA-<br>058/2001<br>Table 10.13 | CM3      | Erection of decorative hoardings.  | Work site / During<br>Construction Phase | Contractor              |     | V                           |   |     | EIAO TM                             |

Monthly EM&A Report

- Sampling, Field Measurement and Testing Works (Stage 3)

| EIA Ref                                  | Envir   | onmental Protection Measures / Mitigation Measures  | Location / Timing  | Implementation<br>Agent | In  | nplem<br>Sta | entati<br>ges* | on  | Relevant Legislation and Guidelines |
|--|---------|---|--|-------------------------|-----|--------------|----------------|-----|-------------------------------------|
|  |         |   |  |                         | Des | C            | О              | Dec |                                     |
| Refer to EIA-<br>058/2001<br>Table 10.13 | CM4     | Control night-time lighting.  | Work site / During<br>Construction Phase                   | Contractor              |     | √            |                |     | EIAO TM                             |
| Refer to EIA-<br>058/2001                | CM5     | Minimisation of disruption to public by effective programming of the works.   | Work site / During<br>Construction Phase                   | Contractor              |     | √            |                |     | EIAO TM                             |
| Table 10.13                              |         | programming of the works.   | Construction i mase  |                         |     |              |                |     |                                     |
| For DP6 - Cro                            | ss-Harb | our Water Mains from Wan Chai to Tsim Sha Tsui  |  |                         |     |              |                |     |                                     |
| Refer to EIA-<br>058/2001<br>Table 10.13 | CM2     | Minimisation of works areas.  | Work site / During<br>Construction Phase                   | Contractor              |     | <b>V</b>     |                |     | EIAO TM                             |
| Refer to EIA-<br>058/2001<br>Table 10.13 | CM3     | Erection of decorative hoardings.   | Work site / During<br>Construction Phase                   | Contractor              |     | V            |                |     | EIAO TM                             |
| Refer to EIA-<br>058/2001<br>Table 10.13 | CM4     | Control night-time lighting.  | Work site / During<br>Construction Phase                   | Contractor              |     | V            |                |     | EIAO TM                             |
| Refer to EIA-<br>058/2001<br>Table 10.13 | CM5     | Minimisation of disruption to public by effective programming of the works.   | Work site / During<br>Construction Phase                   | Contractor              |     | 1            |                |     | EIAO TM                             |
| Operation Pha                            | se      |   |  |                         |     |              |                |     |                                     |
|  | Project | - Schedule 3 DP   |  |                         |     |              |                |     |                                     |
| Table 10.6,<br>Figure 10.5.1-<br>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<br>Design Stage and<br>Operation Phases | CEDD/HyD                | 1   | V            | V              |     | ETWB TCW 2/2004                     |
| Table 10.6,<br>Figure 10.5.1-<br>10.5.5  | OM2     | Shrub and Climbing Plants to soften proposed structures.  | Work site / During<br>Design Stage and<br>Operation Phases | CEDD/HyD                | 1   | V            | V              |     | ETWB TCW 2/2004                     |

Appendix 3.1

Contract no. HK/2015/01

Wan Chai Development Phase II and Central-Wanchai Bypass

- Sampling, Field Measurement and Testing Works (Stage 3)

| EIA Ref        | Enviro   | onmental Protection Measures / Mitigation Measures         | Location / Timing  | Implementation<br>Agent   | In  | nplem<br>Sta | entati<br>ges* | on  | Relevant Legislation<br>and Guidelines |
|----------------|----------|--|--------------------|---------------------------|-----|--------------|----------------|-----|--|
|                |          |  |                    |                           | Des | C            | 0              | Dec |  |
| Table 10.6,    | OM3      | Buffer Tree and Shrub Planting to screen proposed roads    | Work site / During | CEDD/HyD/                 | √   | <b>√</b>     | <b>V</b>       |     | ETWB TCW 2/2004                        |
| Figure 10.5.1- |          | and associated structures.                                 | Design Stage and   |                           |     |              |                |     |  |
| 10.5.5         |          |  | Operation Phases   |                           |     |              |                |     |  |
| Table 10.6,    | OM4      | Aesthetic design of proposed waterfront promenade.         | Work site / During | $CEDD_{\underline{}}^{4}$ | √   |              |                |     | ETWB TCW 2/2004                        |
| Figure 10.5.1- |          |  | Design Stage and   | _                         |     |              |                |     |  |
| 10.5.5         |          |  | Operation Phases   |                           |     |              |                |     |  |
| Table 10.6,    | OM5      | Aesthetic streetscape design.                              | Work site / During | CEDD/HyD                  | √   | √            | √              |     | ETWB TCW 2/2004                        |
| Figure 10.5.1- |          |  | Design Stage and   | -                         |     |              |                |     |  |
| 10.5.5         |          |  | Operation Phases   |                           |     |              |                |     |  |
| Table 10.6,    | OM6      | Aesthetic design of roadside amenity areas.                | Work site / During | CEDD/HyD                  | √   |              | <b>√</b>       |     | ETWB TCW 2/2004                        |
| Figure 10.5.1- |          |  | Design Stage and   |                           |     |              |                |     |  |
| 10.5.5         |          |  | Operation Phases   |                           |     |              |                |     |  |
| For DP1 - CW   | B (Withi | n the Project Boundary)                                    |                    |                           |     |              |                |     |  |
| Table 10.6,    | OM1      | Aesthetic design of buildings and road-related structures, | Work site / During | HyD                       |     |              |                |     | ETWB TCW 2/2004                        |
| Figure 10.5.1- |          | including viaducts, vent buildings, subways, footbridges   | Design Stage and   |                           |     |              |                |     |  |
| 10.5.5         |          | and noise barriers and enclosure.                          | Operation Phases   |                           |     |              |                |     |  |
| Table 10.6,    | OM2      | Shrub and Climbing Plants to soften proposed structures    | Work site / During | HyD                       | √   |              |                |     | ETWB TCW 2/2004                        |
| Figure 10.5.1- |          |  | Design Stage and   |                           |     |              |                |     |  |
| 10.5.5         |          |  | Operation Phases   |                           |     |              |                |     |  |
| Table 10.6,    | OM3      | Buffer Tree and Shrub Planting to screen proposed roads    | Work site / During | HyD                       | √   |              |                |     | ETWB TCW 2/2004                        |
| Figure 10.5.1- |          | and associated structures.                                 | Design Stage and   |                           |     |              |                |     |  |
| 10.5.5         |          |  | Operation Phases   |                           |     |              |                |     |  |
| Table 10.6,    | OM5      | Aesthetic streetscape design.                              | Work site / During | HyD                       | √   | $\checkmark$ | <b>√</b>       |     | ETWB TCW 2/2004                        |
| Figure 10.5.1- |          |  | Design Stage and   |                           |     |              |                |     |  |
| 10.5.5         |          |  | Operation Phases   |                           |     |              |                |     |  |
| Table 10.6,    | OM6      | Aesthetic design of roadside amenity areas.                | Work site / During | HyD                       | √   | $\checkmark$ | <b>√</b>       |     | ETWB TCW 2/2004                        |
| Figure 10.5.1- |          |  | Design Stage and   |                           |     |              |                |     |  |
| 10.5.5         |          |  | Operation Phases   |                           |     |              |                |     |  |

<sup>&</sup>lt;sup>4</sup> CEDD will identify an implementation agent

| EIA Ref                                 | Envir   | onmental Protection Measures / Mitigation Measures  | Location / Timing  | Implementation<br>Agent | In  |   |   | Relevant Legislation and Guidelines |                 |
|---|---------|---|--|-------------------------|-----|---|---|-------------------------------------|-----------------|
|   |         |   |  |                         | Des | С | О | Dec                                 |                 |
| Table 10.6,<br>Figure 10.5.1-<br>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<br>Design Stage and<br>Operation Phases | CEDD/HyD                |     | 1 | V |                                     | ETWB TCW 2/2004 |
| Table 10.6,<br>Figure 10.5.1-<br>10.5.5 | OM3     | Buffer Tree and Shrub Planting to screen proposed roads and associated structures.  | Work site / During<br>Design Stage and<br>Operation Phases | CEDD/HyD                |     | 1 | V |                                     | ETWB TCW 2/2004 |
| Table 10.6,<br>Figure 10.5.1-<br>10.5.5 | OM5     | Aesthetic streetscape design.   | Work site / During<br>Design Stage and<br>Operation Phases | CEDD/HyD                |     | 1 | V |                                     | ETWB TCW 2/2004 |
| Table 10.6,<br>Figure 10.5.1-<br>10.5.5 | OM6     | Aesthetic design of roadside amenity areas  | Work site / During<br>Design Stage and<br>Operation Phases | CEDD/HyD                |     | 1 | 1 |                                     | ETWB TCW 2/2004 |
| For DP3 - Reci                          | lamatio | n Works   |  |                         |     |   |   |                                     |                 |
| Table 10.6,<br>Figure 10.5.1-<br>10.5.5 | OM4     | Aesthetic design of proposed waterfront promenade.  | Work site / During<br>Design Stage and<br>Operation Phases | CEDD <u>⁵</u>           | √   | V | √ |                                     | ETWB TCW 2/2004 |

<sup>\*</sup>Des - Design, C - Construction, O - Operation, and Dec - Decommissioning

 $<sup>^{\</sup>rm 5}$  CEDD will identify an implementation agent

## Appendix 3.1

Action and Limit Level



## **Action and Limit Level**

Action and Limit Level for Noise Monitoring

| Time Period                            | Period Action 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

| riodori dira zinint zororiori in quanty monitoring |  |             |   |             |  |
|--|--|-------------|---|-------------|--|
| Monitoring Location                                | 1-hour TSP Level in $\mu$ g/m <sup>3</sup> |             | 24-hour TSP Level in $\mu$ g/m <sup>3</sup> |             |  |
|  | 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 |       |  |
|--------------------------|------------|-------|------------|-------|--|
| Parameters               | Action     | Limit | Action     | Limit |  |
| WSD Salt Water Intake    |            |       |            |       |  |
| SS in mg L <sup>-1</sup> | 13.00      | 14.43 | 16.26      | 19.74 |  |
| Turbidity in NTU         | 8.04       | 9.49  | 10.01      | 11.54 |  |
| DO in mg/L               | 3.66       | 3.28  | 3.17       | 2.63  |  |
| Cooling Water Intake     |            |       |            |       |  |
| SS in mg L <sup>-1</sup> | 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 Enhance DO Monitoring

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

#### Action and Limit Levels for Odour Patrol

| Parameters   | Action  | Limit  |
|--|---|--|
| Odour Nuisance<br>(from odour intensity<br>analysis or odour patrol) | <ul> <li>When two documented<br/>complaint are received; or</li> <li>Odour Intensity of 2 is<br/>measured from odour<br/>intensity analysis.</li> </ul> | <ul> <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> |

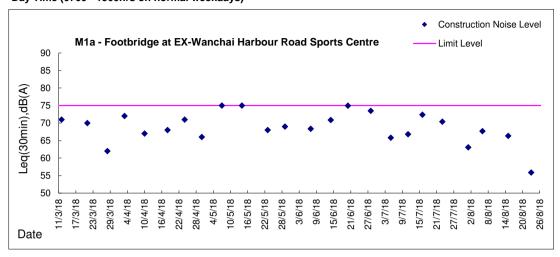
<sup>-</sup> Action and Limit Level for the wet season are applied after the EPD approval of Updated EM&A Manual on 29 April 2011.

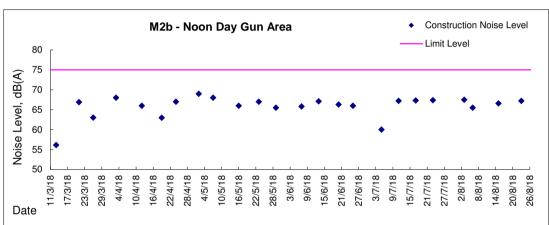
## Appendix 4.1

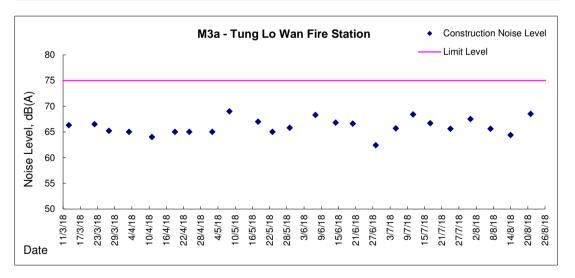
Noise Monitoring Graphical Presentations



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

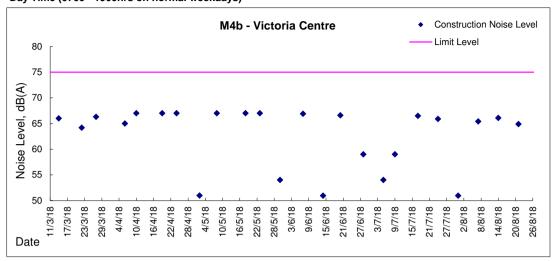


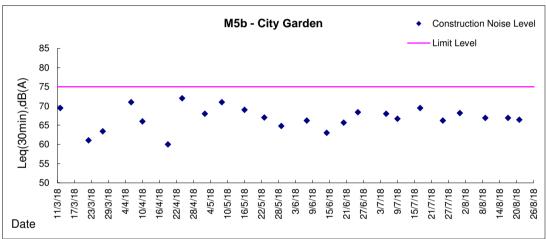


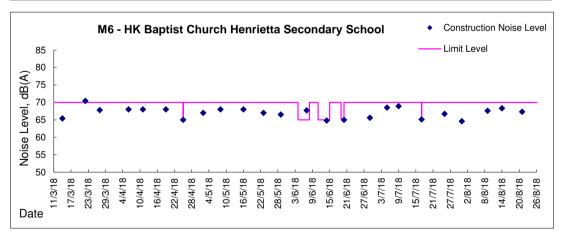




Graphic Presentation of Noise Monitoring Result Day Time (0700 - 1900hrs on normal weekdays)



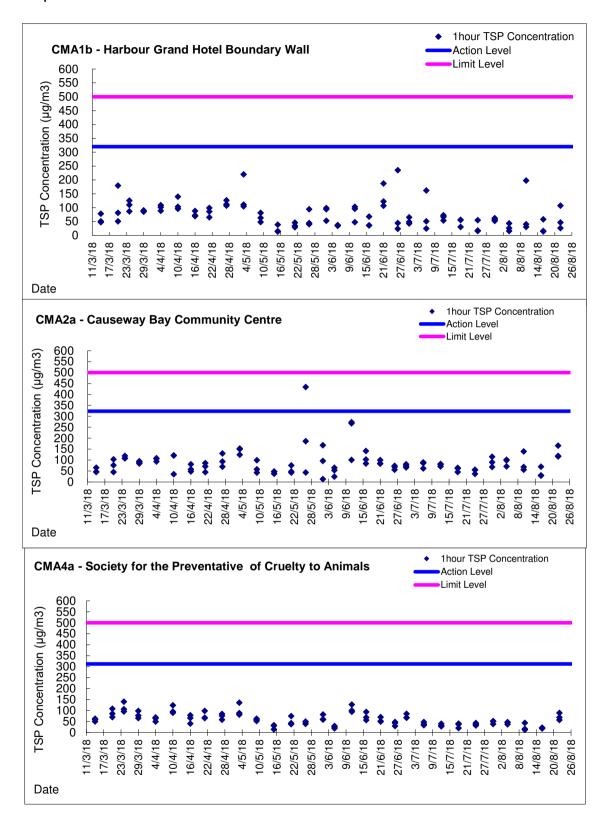




# Appendix 4.2 Air Quality Monitoring Graphical Presentations

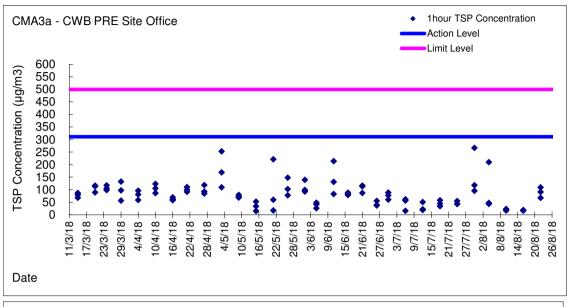


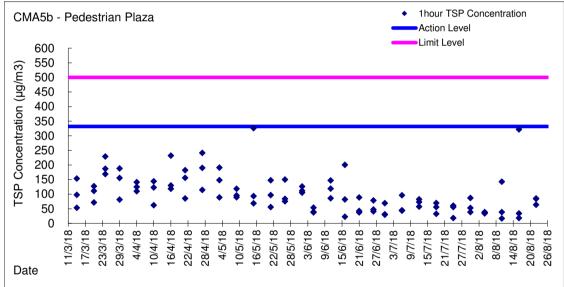
**Graphic Presentation of 1 hour TSP Result** 

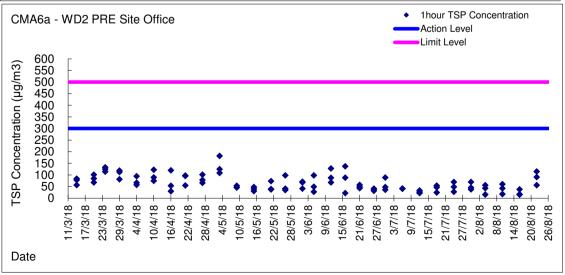




#### **Graphic Presentation of 1 hour TSP Result**

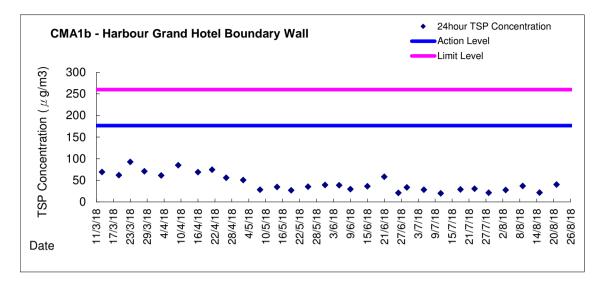


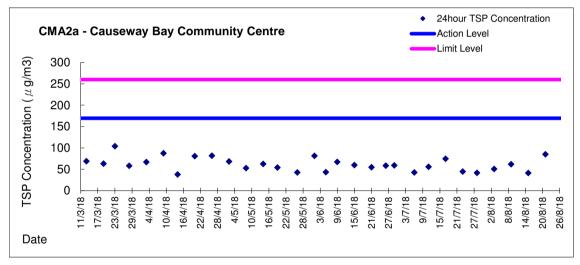


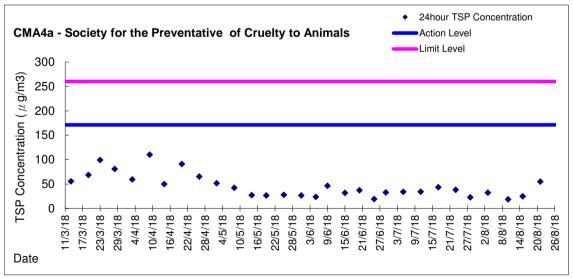




**Graphic Presentation of 24 hour TSP Result** 

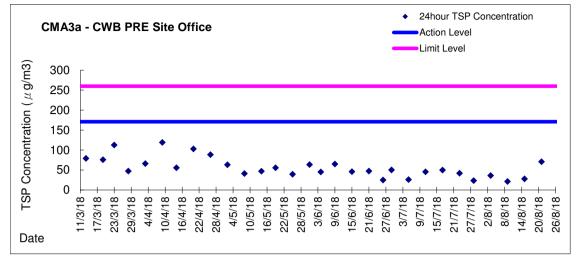


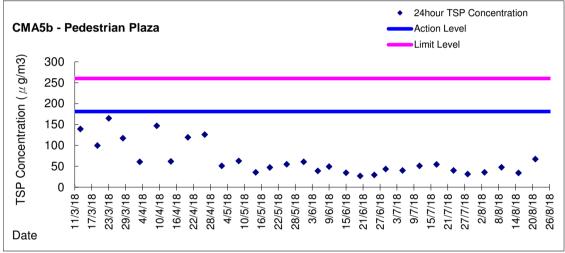


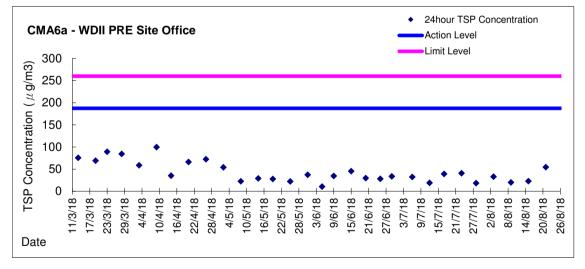




**Graphic Presentation of 24 hour TSP Result** 





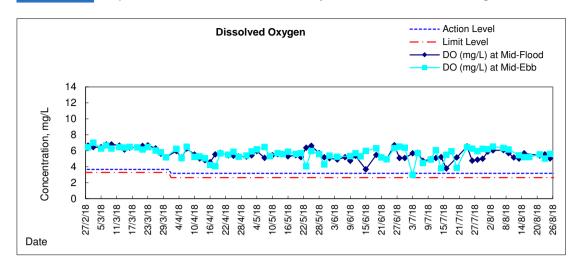


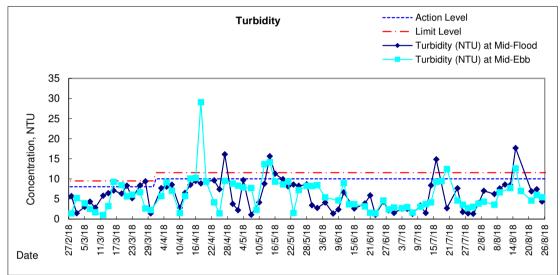
## Appendix 4.3

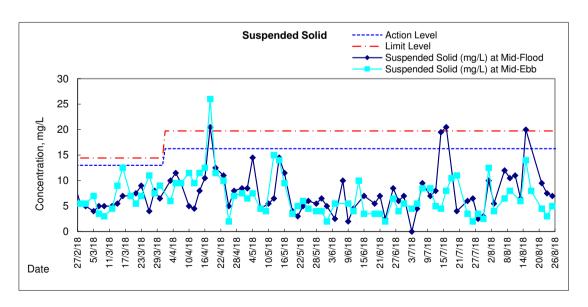
Water Quality Monitoring Graphical Presentations



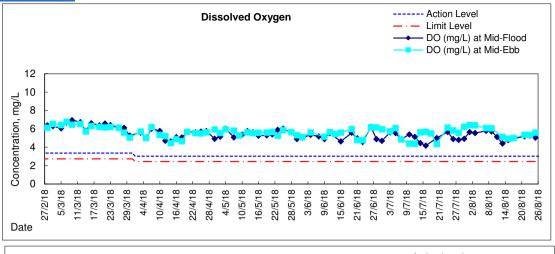
## Graphic Presentation of Water Quality Result of WSD19 - Sheung Wan

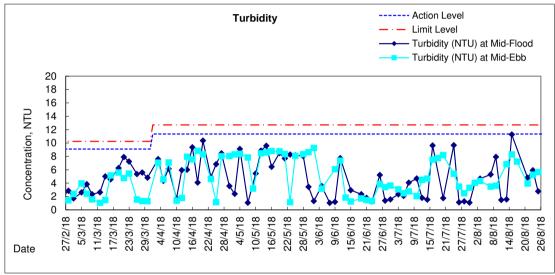


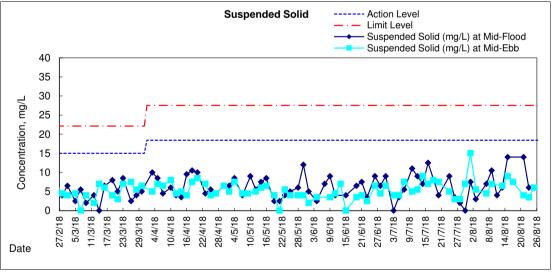




## Graphic Presentation of Water Quality Result of C1 - HKCEC

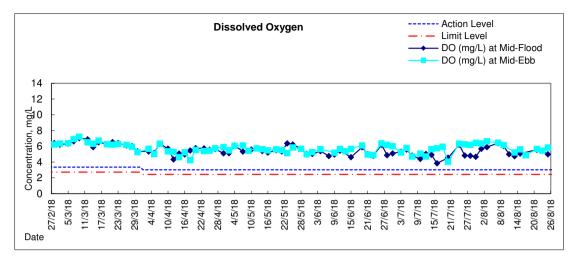


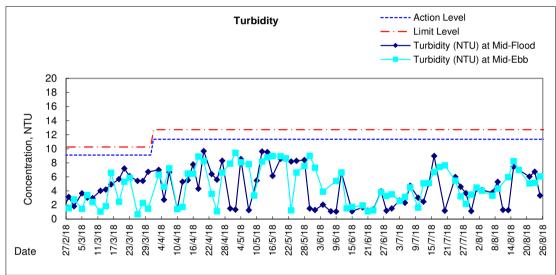


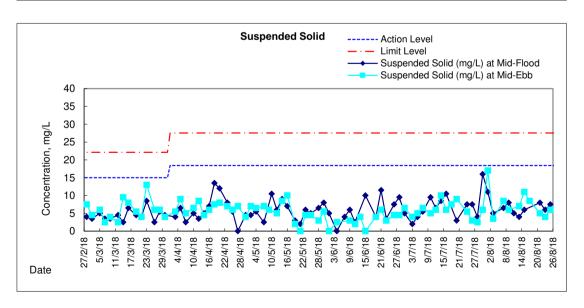




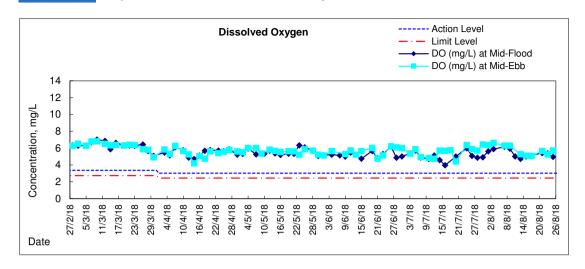
#### Graphic Presentation of Water Quality Result of P1 - HKCEC Phase I

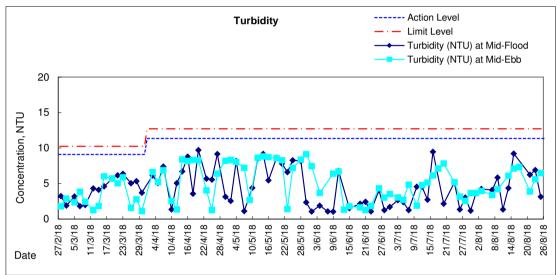


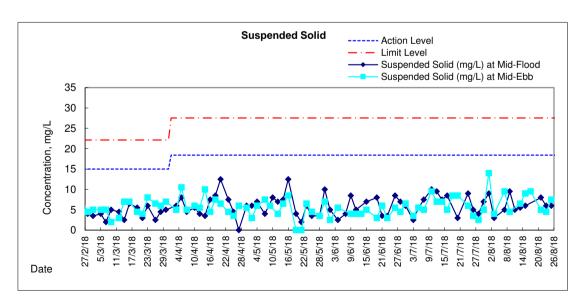




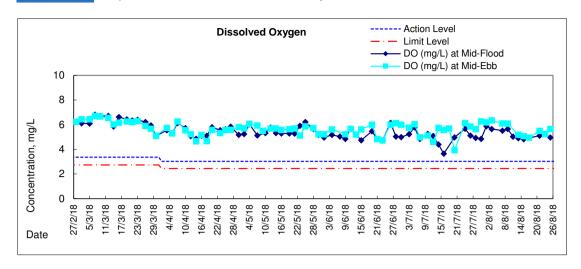
## Graphic Presentation of Water Quality Result of P3 - APA

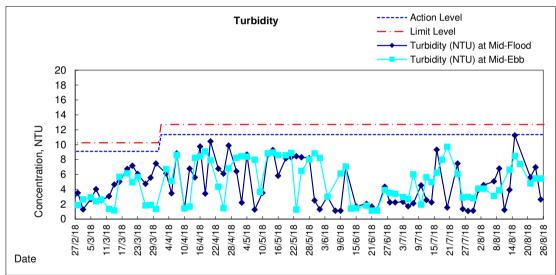


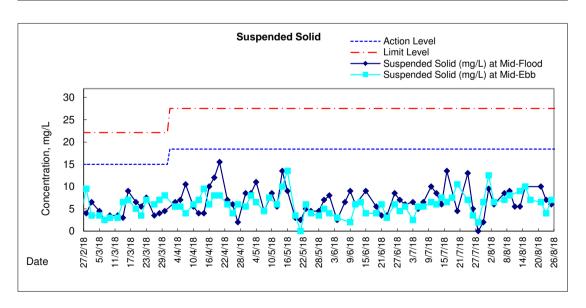




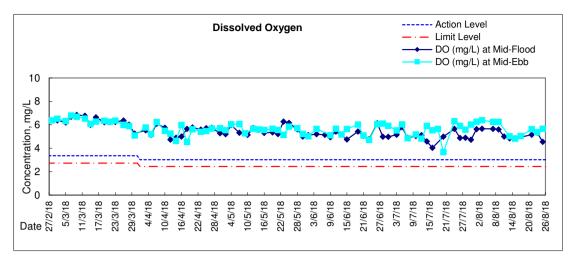
#### Graphic Presentation of Water Quality Result of P5 - WCT / RT / IT

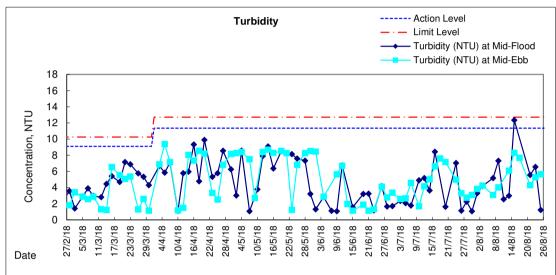


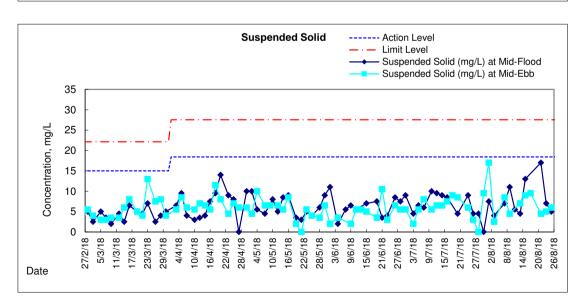




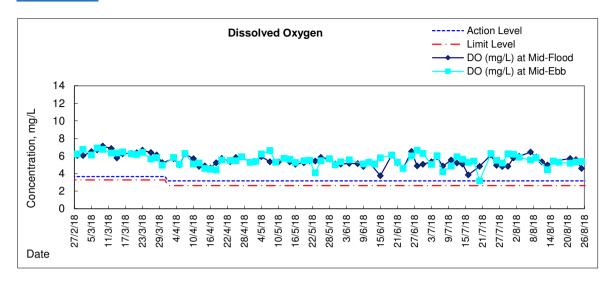
#### Graphic Presentation of Water Quality Result of P4 - SOC

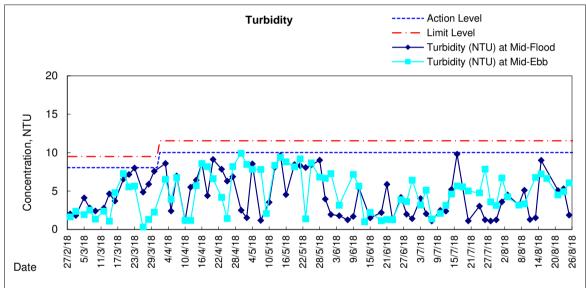


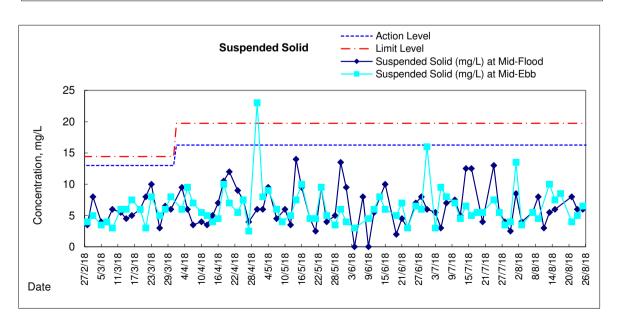




## Graphic Presentation of Water Quality Result of RW21-P789 - GEC/CRC/SHK

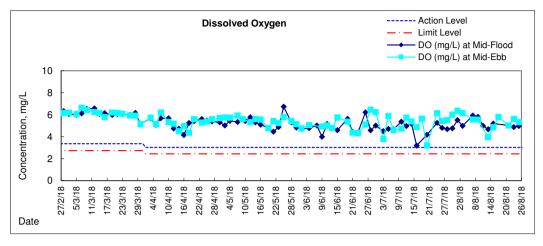


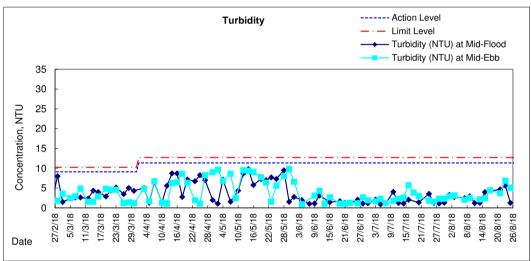


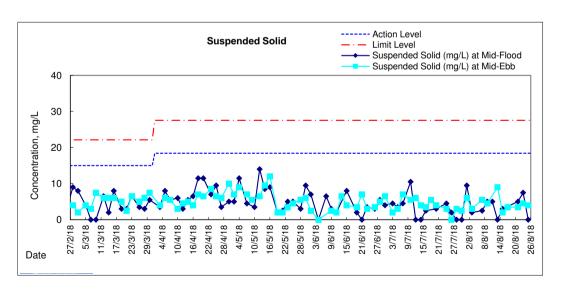




#### Graphic Presentation of Water Quality Result of C7 - Windsor House







## Appendix 5.1

**Event Action Plans** 

#### **Event/Action Plan for Construction Noise**

| EVENT                       |  | ACTION  |  |   |  |
|-----------------------------|--|---|--|---|--|
|                             | ET   | IEC   | ER   | CONTRACTOR  |  |
| Action Level being exceeded | <ol> <li>Notify ER, IEC and Contractor;</li> <li>Carry out investigation;</li> <li>Report the results of investigation to the IEC, ER and Contractor;</li> <li>Discuss with the IEC and Contractor on remedial measures required;</li> <li>Increase monitoring frequency to check mitigation effectiveness.</li> <li>(The above actions should be taken within 2 working days after the exceedance is identified)</li> </ol> | 1. Review the investigation results submitted by the ET; 2. Review the proposed remedial measures by the Contractor and advise the ER accordingly; 3. Advise the ER on the effectiveness of the proposed remedial measures.  (The above actions should be taken within 2 working days after the exceedance is identified) | <ol> <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>Supervise the implementation of remedial measures.</li> <li>(The above actions should be taken within 2 working days after the exceedance is identified)</li> </ol> | Submit noise mitigation proposals to IEC and ER;     Implement noise mitigation proposals.     (The above actions should be taken within 2 working days after the exceedance is identified) |  |

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



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

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

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

## **Event and Action Plan for Odour Patrol**

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

Appendix 6.1

Complaints Log

## **Environmental Complaints Log**

| Complaint<br>Log No. | Date of Complaint | Received From and Received By   | Location of Complainant   | Nature of Complaint  | Out  | tcome   | Status |
|----------------------|-------------------|---|---|--|--|---|--------|
| 100321a              | 21/3/2010         | ICC Case no.<br>1-224618029,<br>Ms. Tsang   | Location near Tin Hau   | Complaint regarding the loud noise and dark smoke in the course of dredging works on 21 March 2010 (Sunday). | 1)   | A valid Construction Noise Permit no. GW-RS0119-10 was granted from EPD since 18 <sup>th</sup> Feb. 2010 for the dredging works which carry out at area for North Point Reclamation.  | Closed |
|                      |                   |   |   |  | 2)   | Officer from Marine Department, Police and EPD's officer attended the scene for inspection and investigation.   |        |
|                      |                   |   |   |  | 3)   | The Contractor (CHEC-CRBC JV) strictly comply all the conditions in CNP and take all mitigation measures in order to minimize the potential impacts to surrounding sensitive receivers. A formal letter was issued out by CHEC-CRBC JV and to explain the status of the recent construction activities.                             |        |
|                      |                   |   |   |  | 4)   | No limit level exceedance was recorded on the noise measurement during day time and evening time noise measurement on 23 March 2010. Additional restrict hours noise monitoring at Causeway Bay Community and City Garden was conducted on 5 April 2010 (Public Holiday). No limit level exceedance was recorded in the monitoring. |        |
|                      |                   |   |   |  | 5)   | No further complaints were received from Mr. Tsang in the reporting month. The complaint is considered closed.  |        |
| 100321b              | 21/3/2010         | breakwater of the Causeway Bay Typhoon Shelter 21/3/2010 (Sunday) until 222 hours and between 1920-1940 | regarding loud noises emanated<br>from dredging activities on<br>21/3/2010 (Sunday) until 2220<br>hours and between 1920-1946<br>hours in the evening of 22 March |  | 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. | Closed  |        |
|                      |                   |   |   | 2010(Monday).  | 2)   | Officer from Marine Department, Police and EPD's officer attended the scene for inspection and investigation.   |        |
|                      |                   |   |   |  | 3)   | No limit level exceedance was recorded on the noise measurement during day time and evening time noise measurement on 23 March 2010. Additional restrict hours noise monitoring at Causeway Bay Community and City Garden was conducted on 5 April 2010 (Public Holiday). No limit level exceedance was recorded in the monitoring. |        |
|                      |                   |   |   |  | 4)   | No further complaints were received in the reporting month. The complaint is considered closed.   |        |

| am | Lam Gootochnic |
|----|----------------|
| -  | Lam Geotechnic |

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



| Complaint<br>Log No. | Date of Complaint       | Received From and Received By   | Location of Complainant     | Nature of Complaint   | Out  | tcome   | Status   |  |
|----------------------|-------------------------|---|-----------------------------|---|--|---|--|--|
| 101108               | 8/11/2010               | 8/11/2010 Mr. Nip received by ICC (CC Case)                                   | Sai Wan Ho                  | Visual concern around the seaside silt screen outside the WSD freshwater intake pump at Sai Wan Ho (Monitoring station ref no WSD15)                  | 1)   | Contractor for HY/2009/11has been regular checked of condition and removal of trapped rubbish before the dismantling of the floating silt screen to be replaced by wall mount silt screen.  | Closed   |  |
|                      |                         |   |                             | Station fer no w3D13)   | 2)   | Follow-up action had been immediately carried out to check and clear the floating refuse around the seaside silt screen after receipt of the complaint.   |  |  |
|                      |                         |   |                             | 3)  | Removal of seaside silt screen outside the WSD freshwater intake (WSD15) by contractor HY/2009/11 was checked and confirmed dated 9 November 2010. Silt screen has been deployed into the existing steel frame at WSD15 for the protection of WSD salt water intake. |   |  |  |
| 101110               | 10/11/2010              | Mr. Wong,<br>Harbour Heights<br>(Management)<br>Ltd.                          | Harbour Heights             | Management office received<br>their resident complained on the<br>noise nuisance from the power<br>mechanical equipment during<br>the 0700 to 2200hrs |  | Contractor for HY/2009/11 was granted valid Construction Noise Permit no. GW-RS0870-10 for their dredging works during evening time. Contractor has implemented mitigation measures to reduce the working hour not later than 2230.                       | Closed   |  |
|                      |                         |   |                             | 2)  | No noise exceedance was recorded at noise monitoring station at Victoria Centre on 4 and 10 November 2010 during daytime and evening time period.  |   |  |  |
|                      |                         |   |                             |   |  | 3)  | It is considered as invalid complaint. No further complaints were received in the reporting month. The complaint is considered closed. |  |
| 101203               | 3/12/2010,<br>01:45a.m. | The resident of<br>Block 11, City<br>Garden by ICC<br>referral from<br>Marine | North Point                 | Bad odour was generated from<br>the dredging plant off North<br>Point   | 1)   | The first investigation was carried out by Marine Department patrol in the morning on 3 Dec 2010 at around 10:00 and revealed that a few working barges were anchoring in the vicinity without carrying out dredging work.                                | Closed   |  |
|                      |                         | Department  |                             |   | 2)   | A further specific investigation inspection on contractor's backhoe barge in the vicinity of City Garden was jointly conducted with Engineer Representatives (AECOM/RSS), and ET on 8 Dec 2010 at 11:30. No bad odour was noted during the investigation. |  |  |
|                      |                         |   |                             |   | 3)   | Routine dredging operation of the backhoe barge was performed during the jointed investigation inspection and it was revealed that no bad odour was attributed by the dredged materials inspected.  |  |  |
| 101206               | 6/12/2010               | Ms Lui, the resident of 27/F, Block 10, City                                  | City Garden, North<br>Point | Two barges were generating noise at 22:00 on 6 December 2010 in which the noise from  | 1)   | ET confirmed the following information with resident site staff on the complaint:  • It was referred to the filling operation at North Point  | Closed   |  |



| Complaint<br>Log No. | Date of Complaint | Received From and Received By   | Location of Complainant | Nature of Complaint  | Outcome   | Status |
|----------------------|-------------------|---|-------------------------|--|---|--------|
|                      |                   | Garden by ICC (ICC case: 1-266039336)   |                         | filling operation was louder than the traffic noise & visual impact was generated due to the spotlight pointing directly to the complainant flat, suspected the filling operation was part of Wanchai Development Phase II;  Complainant also raised the same complaint to District Councillor, Mr. Hui on 7 Dec 2010 regarding the night-time noise and suspected earlier start of work at 06:30. Complaint also requested for limiting the plant operating hours from 09:00-21:00. | Reclamation of Central Wan Chai Bypass site area instead of part of Wanchai Development Phase II;  • Two derrick barges were in operation at the time of complaint for placing 400 rockfill onto the excavation trench and for levelling the formation level to receive the pre-cast caisson seawall;  • Flood light on the control mast of derrick barge have no lighting shields for the prevention of glare of flood lights;  • No starting work on 7 Dec 2010 at 0630hours.  2) PME used in restricted hours were checked and confirmed compliant with valid CNP no. GW-RS0870-10. The noise level recorded on 6 Dec 2010 was complied with the noise criteria during restricted hour;  3) It was found that the occasional noise nuisance might be caused by the hitting or scratching onto the rock surface during loading down the grab onto the Grade 400 rockfill;  4) The absence of the lighting shields at flood light results in visual glare to the complainant at night-time.  5) Contractor was advised to minimize the finishing time of placing Grade 400 rockfill at 2100hrs and switch off all unnecessary flood lights apart from the light for the safety and security purpose;  6) No further complaint was received after implementation of proposed measures |        |
| 110415               | 15/04/2011        | The resident, Mr<br>Law at Victoria<br>Centre by ICC<br>(ICC#1-<br>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.   | <ol> <li>The concerned stockpile was a working stockpile under Contract HY/209/15 and was covered at night time after work.</li> <li>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.</li> <li>It is considered invalid but preventive actions can be taken because the stockpile is relatively large and easily visible by complainant.</li> <li>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</li> <li>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.</li> </ol>  | Closed |



| Complaint<br>Log No. | Date of<br>Complaint  | Received From and Received By   | Location of Complainant | Nature of Complaint   | Out  | come   | Status |
|----------------------|---|---|-------------------------|---|--|--|--------|
| 110419               | 19/04/2011  | Ms Chiu at<br>Victoria Centre at<br>Victoria Centre by<br>ICC (ICC# 1-<br>272874759)  | North Point             | The episode of night noise on 19/4/11 and 20/4/11 at 2:50 am and the noise lasted for 30 minutes per night.   | ''   | According to the RSS's record, there was no construction works undertaken under the EP-356/2009 during the concern time period.  There was no abnormal real-time noise monitoring data recorded in RTN1 - FEHD Hong Kong Transport Section   | Closed |
|                      |   |   |                         | 3)  | Whitefield Depot which is next to the Victoria Centre.  It is considered as invalid complaint under this Project.  |  |        |
| 110617               | Victoria Centre Management Office  Will Law Hoff Hoff Hoff Green Generating from the discharg point — Channel T at Watso Road in part of the site area wa | An odour nuisance suspected generating from the discharge point - Channel T at Watson | ''                      | 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.  | Closed   |  |        |
|                      |   | related to CWB under Contract 2   | 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.  |  |  |        |
|                      |   |   | 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. |  |  |        |
|                      |   |   |                         | 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. |  |        |
|                      |   |   |                         |   | 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. |        |



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



| Complaint<br>Log No. | Date of Complaint   | Received From and Received By   | Location of Complainant   | Nature of Complaint   | Out  | come  | Status |
|----------------------|---|---|---|---|--|---|--------|
|                      |   |   |   |   |  | so as to prevent recurrent by barge defect  |        |
| 110723a              | Victoria Centre by ICC no. 1-303887687  Department published a notic in their Management Office about construction works will be conducted from 0700 hours 2300 hours during July December 2011 including the conduction of the conducted from 2011 including the conducted from 2011 | Saturday, Sunday and public   | 1) 2) 3)  | It was referred by AECOM to ET on 28 July 2011  RSS confirmed that the notice was prepared by Victoria Centre's Management office to their resident and the advice was only given on the extension construction works (for Contract HY/2009/15) to 7am-9pm from Monday to Saturday except Public Holidays and Sundays.  As a mitigation measure to minimize the noise nuisance in the vicinity of the residents, rock breaking activities will be |  |   |        |
|                      |   | 4)  | started at 8am and is expected to be completed by mid-August 2011.  No noise exceedance was recorded at construction noise monitoring station at Victoria Centre on 19 and 25 July 2011 during daytime while breaking and excavation works were undertaken during monitoring. | Closed  |  |   |        |
|                      |   |   |   |   | 5)   | In conclusion, it was related to the construction works under Contract HY/2009/15 and mitigation measure was provided. The complainant was satisfied with the arrangement and no further complaint was received after proposed measures.  |        |
| 110723b              | 23/07/2011  | Ms. Yau at Block  | North Point   | Reclamation work was conducted at Causeway Bay  | 1)   | It was referred by AECOM to ET on 8 August 2011   |        |
|                      |   | 2, Victoria Centre<br>by ICC no. 1-<br>304013959                                  |   | conducted at Causeway Bay<br>Typhoon Shelter at 7am on 23<br>July 2011. She complained that<br>the works shall be started later<br>to minimize the noise nuisance   | 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   |        |
|                      |   |   | to the vicinity of the residents in early morning   | 3)  | As a mitigation measure to minimize the noise nuisance in<br>the vicinity of the residents, rock breaking activities will be<br>started at 8am and is expected to be completed by mid-<br>August 2011. | Closed  |        |
|                      |   |   | 4)  | In conclusion, it was related to the construction works under Contract HY/2009/15 and mitigation measure was provided. The complainant was satisfied with the arrangement and no further complaint was received after proposed measures.  |  |   |        |
| 110727a              | 27/07/2011  | Mr. Law from<br>Victoria Centre<br>Management<br>Office by ICC no.<br>1-304616162 | North Point   | It was complained by Mr. Law from Victoria Centre Management Office on 27 July 2011 regarding construction noise generated by the construction operations of  | 1) 2) 3)   | It was referred by AECOM to ET on 28 July 2011  RSS confirmed to start the rock breaking activities for Contract HY/2009/15 at 8am as a mitigation measure to minimize the noise nuisance in the vicinity of the residents.  No noise exceedance was recorded at construction noise | Closed |



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



| Complaint<br>Log No. | Date of Complaint                 | Received From and Received By   | Location of Complainant | Nature of Complaint  | Out   | tcome   | Status |
|----------------------|-----------------------------------|---|-------------------------|--|---|---|--------|
|                      |                                   |   |                         |  |   | away from the coastline as far as practicable. Any loose material placed which needed to be placed near the coastline shall be properly compacted or covered as appropriate. To avoid any further environmental deficiency, Contractors shall ensure all necessary environmental mitigation measures will not be missing during site area handover. |        |
| 110826               | and a nuisance generated from the | Construction noise and vibration nuisance generated from the works at Convention Avenue and inside the HKCFC1 |                         | Confirmed with the Resident Site Staff that the construction works were referred to the Contractor HK/2009/01.   |   |   |        |
|                      |                                   |   | 2)                      | The Excavator mounted breaker at Convention Avenue and Drilling rig at HKCEC1 reclamation area were the dominant construction noise source during this period. |   |   |        |
|                      |                                   |   | 3)                      | The drilling rig at HKCEC1 reclamation area and excavator mounted breaker at Convention Avenue were then temporary suspended after received the complaint.     |   |   |        |
|                      |                                   |   |                         | 4)   | Investigation revealed that the erected noise barrier (4m cantilevered movable noise barrier for the drilling rig and 1m movable noise barrier for the excavator mounted breaker) were not located close to the plants to provide adequate noise screening. | Closed  |        |
|                      |                                   |   |                         |  | 5)  | Contractor was advised to avoid concurrent operation of construction plants at site. Further enhancement of movable noise barriers at HKCEC1 and providing noise enclosure for the excavator mounted breaker at Convention Avenue are needed.   |        |
|                      |                                   |   |                         |  | 6)  | Further site investigation and checking on 31 August and 7 September 2011 revealed that the implemented noise mitigation measures were in proper and minimize the noise impact.   |        |
| 110826A              | 26/08/2011                        | A complaint letter from Mr.   | North Point             | Harbor front adjacent to their cooling water intake suction which caused 3 times of  | 1)  | It was referred by AECOM to ET on 29 August 2011.<br>Confirmed with the Resident Site Staff that the  | Closed |
|                      |                                   | Au of Cayley<br>Property of City  |                         | system breakdown of the sea<br>water pump on 9, 22 and 25  |   | <ul> <li>construction works were referred to the Contractors<br/>HY/2009/11 and HY/2009/19.</li> </ul>  |        |
|                      |                                   | Garden  |                         | August 2011.   |   | The pump is located on the site area of HY/2009/19  |        |
|                      |                                   |   |                         |  |   | <ul> <li>A temporary garbage defender was installed on 23<br/>July 2011 by HY/2009/11 and the shape of the<br/>defender was adjusted on 8 August 2011 in order to<br/>excluse the outfall.</li> </ul>   |        |
|                      |                                   |   |                         |  |   | <ul> <li>An ad hoc inspection of the effectiveness of garbage<br/>defender was conducted with RSS (CWB project</li> </ul>   |        |

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

| Complaint Log No. | Date of<br>Complaint | Received From and Received By  | Location of Complainant | Nature of Complaint   | Outcome   | Status |
|-------------------|----------------------|--|-------------------------|---|---|--------|
|                   |                      |  |                         |   | at the site. However, the polluted fumes and exhausted from the excavator was caused due to insufficient maintenance of the plant after using at site.  3) After receiving the complaint, the excavator was then removal off-site for checking and maintenance works on 17 October 2011.  4) Contractor was reminded to enhance regular checking and maintenance to all plants at site.  5) RSS has replied to the complainant on the arrangement of the measures taken on 17 October 2011. Complainant was satisfied with the response and follow-up action taken by the Contractor.   |        |
| 111104            | 04/11/2011           | Mr. Liu from<br>LCSD<br>complained via<br>Contractor<br>Complaint<br>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. | <ol> <li>ET confirmed with the Resident Site Staff that         <ul> <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> </li> <li>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.</li> </ol> | 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   | 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   | Closed |

| Date of Complaint | Received From and Received By | Location of Complainant   | Nature of Complaint   | Out  | come   | Status                                 |
|-------------------|-------------------------------|---------------------------|---|--|--|--|
|                   |                               |                           |   | 2)   | CNP was checked by the police officer.  ET confirmed with the Resident Site Staff that same issue was also raised out by RSS at about 7:00a.m on the same day. Besides, it was confirmed that there is no valid Construction Noise Permit for the conducted construction works in the period between 2300 and 0700.  |  |
|                   |                               |                           |   | 3)   | Due to insufficient communication between Contractor HK/2009/01 and their Korean Sub-contractor, Korean Sub-contractor had not notified to Contractor before carrying out the inspection of the BC cutter, hoists and bentonite pipes at about 6:00a.m to ensure no damages and all the pipe joints should be tightened and in good position.  |  |
|                   |                               |                           |   | 4)   | Contractor was advised to enhance the communication between Contractor and sub-contractor and provide sufficient environmental training to all foreman and operators on restricted hour operation. Futhermore, Construction Noise Permit should be checked and in place for the construction works during restricted hour  |  |
|                   |                               |                           |   | 5)   | This complaint was considered in relation to the conducted construction works during restricted hours without valid Construction Noise Permit. No more construction works were conducted during night time period. The construction works will be conducted in accordance with the time period stated in valid CNP. This complaint will be kept in view of any follow-up action from the relevant government activities.   |  |
| 05/04/2012        | N/A                           | North Point               | noise from construction sites of CBTS was observed daily before | 2)   | RSS notified ET on 5 April 2012. ET confirmed with the Resident Site Staff that no piling works were performed during the concerned period. After reviewing the results of noise monitoring (M2b and M3a), no exceedance was recorded during daytime period and the noise level was below 75dB(A). Site inspection for HY/2009/15 was conducted on 10 April 2012. The condition of noise mitigation measures around CBTS was found satisfactory. RSS confirmed that no pilings were performed during the concerned period. The major works included drilling, diaphragm wall construction and excavations.  HyD made a reply to the complainant on 16 April 2012 via | Closed                                 |
|                   | Complaint                     | Complaint and Received By | Complaint and Received By Complainant                           | O5/04/2012  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 | Complaint and Received By Complainant  2)  3)  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.   | CNP was checked by the police officer. |

| Complaint<br>Log No. | Date of Complaint | Received From and Received By        | Location of Complainant | Nature of Complaint  | Outcome  | Status |
|----------------------|-------------------|--------------------------------------|-------------------------|--|--|--------|
| ,                    | ·                 |                                      |                         |  | from the above works, the Contractor had erected temporary noise barriers and provided noise blankets on plants. RSS would continue to work with the Contractor on the effectiveness of the environmental mitigation measures implemented on site. No further complaint was received after the response. |        |
| 130308               | 06/03/2013        | ICC Case#1-<br>407181502             | Tin Hau                 | A complaint regarding the dropping of fine rock material into surrounding waterbody was observed during rock breaking operation with two excavators in active operation at the Eastern Breakwater of Causeway Bay Typhoon Shelter near the North Point lighthouse. | 1) RSS notified ET on 8 March 2013   | Closed |
| 140612               | 12/06/2014        | EPD ref:<br>EP/860/F2/24<br>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.   | letter from EPD (ref: EP/860/F2/24 Annex IV) was received by ET on 13 June 2014.   | Closed |

| Complaint<br>Log No. | Date of Complaint | Received From and Received By | Location of Complainant                  | Nature of Complaint   | Out | come  | Status   |
|----------------------|-------------------|-------------------------------|--|---|-----|---|--|
|                      | ·                 |                               | •  |   | 3)  | the dispersion was observed partly extended beyond the outermost layer silt curtain at 1000hrs. Immediate follow up action was requested. It is considered that Contractor's mitigation measures would require further review on the effectiveness to avoid seepage of muddy dispersion such as regular diver inspection check and daily visual checking of silt curtains. Additional silt curtain at marine access zone was installed by Contractor on 12 June 2014 and the double layer silt curtain were generally in order. Follow-up inspection was further conducted on 16 June 2014.   |  |
| 140723               | 21/07/2014        | ICC Case Ref:                 | Works area opposite to                   | The complaint is regarding to   | 1)  | case was submitted to EPA via email on 18 June 2014.  Construction noise impact referred by RSS was received  | Final report   |
| 140/23               | 21/07/2014        | 2-341537112                   | Works area opposite to Ngan Tao Building | 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. | 3)  | 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.  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 | (Issue1) issued on 31 July 2014.  Further to complainant follow-up, Final report (Issue2) Issued on 12 Aug 2014. |
|                      |                   |                               |  |   | 4)  | It was considered the condition of CNP GW-RS0592-14 was not fulfilled by the Contractor of HY/2009/15. "From 00:25hrs to 00:57hrs on 21 July 2014, the PME(s) (1 no. of Derrick Lighter) on-site could not follow with any given PME grouping requirement(s) as stated in condition 3.a. and condition 3.d. in no. GW-RS0592-14."   |  |



| Complaint<br>Log No. | Date of Complaint | Received From and Received By   | Location of Complainant  | Nature of Complaint  | Outcome   | Status  |
|----------------------|-------------------|---|--|--|---|---|
|                      |                   |   |  |  | Notwithstanding the above, according to the site recorded provided by the RSS, the derrick lighter was found malfunction at around 23:00hrs on 20 July 2014 while the diaphragm wall cutting procedure was incomplete. Under safety and navigation consideration, the completion of diaphragm wall removal was necessary and of imminent need.  5) The Contractor of HY/2009/15 was advised to review the construction sequence and emergency response procedure for construction activities during restricted hours and night time period to allow for sufficient buffer time for work completion such that the Construction Noise Permit would be followed. Furthermore, the Contractor of HY/2009/15 was suggested to conduct throughout checking of PME used on site prior to work commencement to minimize the potential malfunctioning of PME during the course of work which affect the duration of works. |   |
| 141016               | 14/10/2014        | EPD Ref.:<br>EP860/E2/24<br>Annex IV<br>ICC complaint<br>received by ET on<br>10 October 2014 | Work site next to new<br>Wan Chai Ferry Pier<br>and opposite to Wan<br>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. | 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). 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.   | Interim<br>investigation<br>report<br>submitted to<br>EPD on 23<br>October<br>2014.                 |
|                      |                   |   |  |  | 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.  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.  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.  | Updated interim investigatio n with supplement ary information submitted to EPD on 17 November 2014 |

| Complaint Log No. | Date of<br>Complaint | Received From and Received By | Location of Complainant | Nature of Complaint | Outcome  | Status                                 |
|-------------------|----------------------|-------------------------------|-------------------------|---------------------|--|--|
|                   |                      |                               |                         |                     | From 23:00 hrs to 06:00hrs, panel replacement works was conducted under Contractor of HK/2009/02 at the Temporary Covered Walkway.   | advised no<br>further<br>comment       |
|                   |                      |                               |                         |                     | Total one scissor platform and two hand held drills (battery) were in operation.   | on the<br>updated<br>interim           |
|                   |                      |                               |                         |                     | 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.   | report and case closed on 27 Nov 2014. |
|                   |                      |                               |                         |                     | 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. |  |
|                   |                      |                               |                         |                     | 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.  |  |
|                   |                      |                               |                         |                     | 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.  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.                                 |  |
|                   |                      |                               |                         |                     | In view of the above findings, no direct information associated with the noise concern was considered available.   |  |
|                   |                      |                               |                         |                     |  |  |

| Complaint<br>Log No. | Date of Complaint | Received From and Received By               | Location of Complainant   | Nature of Complaint  | Outcome  | Status   |
|----------------------|-------------------|---|---|--|--|--|
| 141110               | 07/11/2014        | EPD Ref.:<br>H05/RS/000278<br>15-14         | Construction site at old Wan Chai Ferry Pier  | Malodour of construction plant exhaust from the construction site at old Wan Chai Ferry Pier | 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).   | Interim investigation report                   |
|                      |                   | EPD complaint received by ET on 10 November |   | was scented that affecting the swimmers at Wan Chai Swimming Pool.                           | 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.  | submitted to<br>EPD on 17<br>November<br>2014. |
|                      |                   | 2014  |   |  | ET confirmed with the Resident Site Staff that   |  |
|                      |                   |   | ELS works was conducted on 7 November 2014 during daytime at Portion 2 (Area oppsite to WanChai Swimming Pool). | EPD advised no comment on the interim  |  |  |
| 1                    |                   |   |   |  | 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.  | report and<br>case closed<br>on 1 Dec<br>2014. |
|                      |                   |   |   |  | 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.  |  |
|                      |                   |   |   |  | Dredging works was conducted on 7 November 2014 during daytime at WCR3 (East of old Wan Chai Ferry Pier)   |  |
|                      |                   |   |   |  | Total 1 no .of dredger, 1 no. of hopper and 1 no. of tug boat were operated.   |  |
|                      |                   |   |   |  | 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. |  |
|                      |                   |   |   |  | Follow-up inspection was conducted during weekly environmental inspection on 13 November 2014, no dark smoke emission was observed from the PMEs operating onsite. 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.   |  |

| Complaint Log No. | Date of<br>Complaint | Received From and Received By  | Location of Complainant                      | Nature of Complaint   | Outcome  | Status  |
|-------------------|----------------------|--|--|---|--|---|
|                   |                      |  |  |   | 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 The interim report would be submitted to EPD on 17 November 2014.  |   |
| 141113            | 12/11/2014           | EPD Ref.:<br>H05/RS/000282<br>53-14<br>EPD complaint<br>received by ET<br>on 13 November<br>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. | 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 thatMalodour 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)  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.  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.  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.  Follow-up inspection was conducted during weekly environmental inspection on 13 November 2014, no dark smoke emission was observed from the PMEs operating onsite 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. | Interim investigation report submitted to EPD on 19 November 2014.  EPD advised no comment on the interim report and case closed on 8 Dec 2014. |



| Complaint<br>Log No. | Date of Complaint | Received From and Received By   | Location of Complainant   | Nature of Complaint  | Outcome  | Status  |
|----------------------|-------------------|---|---|--|--|---|
| 141121               | Not Specified     | EPD Ref:<br>H08/RS/28263-14<br>EPD complaint<br>information and<br>findings was<br>received by ET<br>via email on 21<br>Nov 2014  | Causeway Bay<br>Typhoon Shelter   | Resident in Hing Fat Street complaining about loud noise from dredging work in CBTS up to 10pm at night.             | 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.  EPD investigation found that the operation of a derrick barge is covered by CNP no. GW-RS0701-14.  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.  | Complaint case handled by EPD and relevant investigation findings was sent to ET on 21 November 2014  |
| 150127               | 21 Jan<br>2015    | EPD complaint (EPD Ref.: H05/RS/00001 725-15) 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 | A portion of Hung<br>Hing Road<br>immediately to the<br>east of Marsh Road<br>near SPCA | Construction dust and grit was emitted from the construction site to the carriageway causing nuisance to the public. | 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.  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 include works at TPCWAW; reclamation/backfilling works at TPCWAW.  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  According to the relevant site records, breaking of seawall blocks and D-wall, concreting, grouting and drilling works and reclamation/backfilling works were | 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. |

| Complaint<br>Log No. | Date of Complaint | Received From and Received By                      | Location of Complainant  | Nature of Complaint  | Outcome   | Status  |
|----------------------|-------------------|--|--|--|---|---|
|                      |                   |  |  |  | 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.   |   |
|                      |                   |  |  |  | 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.   |   |
|                      |                   |  |  |  | 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. |   |
|                      |                   |  |  |  | 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.   |   |
| 150622               | 18 June<br>2015   | EPD<br>Ref.:H05/RS/<br>00015054-15<br>dated 8 June | A mooring location<br>near shore and at<br>location outside<br>Wan Chai Sports | Dark smoke and malodour<br>emission was observed<br>from a hopper barge<br>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<br>submitted to<br>EPD on 29<br>June 2015<br>and EPD |

| Complaint<br>Log No. | Date of Complaint | Received From and Received By | Location of Complainant | Nature of Complaint   | Outcome   | Status  |
|----------------------|-------------------|-------------------------------|-------------------------|---|---|---|
|                      |                   | 2015                          | Ground                  | other construction plants<br>under operation from the<br>reclamation construction<br>site | 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.  ET confirmed with the Resident Site Staff that reinforced   | advised no comment on 20 July 2016 on the interim report submitted and case closed. |
|                      |                   |                               |                         |   | 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 & 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 & 4 for transportation of the excavated material away from site.  |   |
|                      |                   |                               |                         |   | 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 & 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 & 4 for transportation of the excavated material from Portions 3 & 4 away from site on 15 June 2015,17 June 2015 and 19 June 2015 respectively. |   |

| Complaint<br>Log No. | Date of Complaint | Received From and Received By                               | Location of Complainant                               | Nature of Complaint           | Outcome   | Status   |
|----------------------|-------------------|---|---|-------------------------------|---|--|
|                      |                   |   |   |                               | environmental inspection on 25 June 2015, no dark smoke and malodour emission was observed from the PMEs 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 PMEs deployed on site to ensure only well maintained PMEs are used to avoid potential dark smoke and maldour emission affecting nearby public.   |  |
| 150723               | 20 July<br>2015   | EPD<br>Ref.:H05/RS/<br>00018040-15<br>dated 23 July<br>2015 | Ex-Wanchai Ferry<br>Pier near 720 & &<br>722 Bus stop | Malodour from marine sediment | 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).  The complainant reported that malodour from marine sediment was scented at ex-Wanchai ferry pier near route 720 & 722 bus stop. (Contract HK/2009/02).  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.  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. 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. | 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. |



| Complaint<br>Log No. | Date of Complaint | Received From and Received By  | Location of Complainant           | Nature of Complaint  | Outcome   | Status   |
|----------------------|-------------------|--|-----------------------------------|--|---|--|
|                      |                   |  |                                   |  | 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<br>2015   | EPD Ref.: H05/RS/0002 2241-15 dated 04 September 2015 received by ET on 4 September 2015 | East of New<br>WanChai Ferry Pier | Dropping of excavated material from land to sea during laoding of material | 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)  ET confirmed with the Resident Site Staff that transferring of C&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.  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.  According to the relevant site records under Contract HK/2009/02, transferring of C&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&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 | 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 |

| lam |       |
|-----|-------|
| ann | Lam ( |

| Complaint<br>Log No. | Date of Complaint | Received From and Received By   | Location of Complainant          | Nature of Complaint   | Outcome  | Status  |
|----------------------|-------------------|---|----------------------------------|---|--|---|
|                      |                   |   |                                  |   | 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&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.  The Contractor was reminded to maintain the handling procedure for C&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.   |   |
| 150904               | 02 Sept<br>2015   | EPD Ref.: H04/RS/0002 2385-15 dated 04 September 2015 received by ET on 04 September 2015 | Location outside<br>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. | 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&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.  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. | Interim report submitted to EPD on 14 September 2015.  2nd interim report submitted to EPD on 17 Dec 2015  3rd interim report submitted to EPD on 31 Dec 2015 |

| Complaint<br>Log No. | Date of Complaint | Received From and Received By | Location of Complainant | Nature of Complaint | Outcome   | Status |
|----------------------|-------------------|-------------------------------|-------------------------|---------------------|---|--------|
|                      |                   |                               |                         |                     | 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. 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. 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. |        |
|                      |                   |                               |                         |                     | 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.   |        |
|                      |                   |                               |                         |                     | 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.  |        |
|                      |                   |                               |                         |                     | 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.  |        |

| Complaint<br>Log No. | Date of<br>Complaint | Received From and Received By  | Location of Complainant  | Nature of Complaint  | Outcome   | Status  |
|----------------------|----------------------|--|--|--|---|---|
|                      |                      |  |  |  | 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.  |   |
|                      |                      |  |  |  | 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. |   |
|                      |                      |  |  |  | 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.  |   |
|                      |                      |  |  |  | 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.  |   |
| 150917               | 17 Sep 2015          | A public<br>complaint<br>regarding water<br>quality referred<br>by EPD was | Central and Wan<br>Chai Reclamation<br>coastline (between<br>LUNG WUI ROAD to<br>LUNG WO ROAD, | Silt from Central and Wan<br>Chai Reclamation was spotted<br>along the coastline (between<br>LUNG WUI ROAD to LUNG<br>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<br>investigation<br>report<br>submitted to<br>EPD on 25 |



| Complaint<br>Log No. | Date of Complaint | Received From and Received By   | Location of Complainant  | Nature of Complaint   | Outcome   | Status   |
|----------------------|-------------------|---|--|---|---|--|
|                      |                   | received by ET<br>on 17<br>September<br>2015  | Central & Wan Chai,<br>Hong Kong)  | Chai, Hong Kong)  | 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.  | September<br>2015. EPD<br>advised no<br>comment on<br>14 October<br>2015 and case<br>closed. |
|                      |                   |   |  |   | 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.  |  |
| 151015               | 11 Oct 2015       | A public<br>complaint<br>regarding direct<br>discharge of<br>muddy effluent<br>referred by RSS<br>was received by<br>ET on 14<br>October 2015 | Seafront opposite to<br>Watson Road<br>adjacent to Eastern<br>Breakwater | Pink fluid was observed<br>discharged into marine waters<br>at seafront opposite to Watson<br>Road adjacent to the Eastern<br>Breakwater on 11 October<br>2015. | 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. | HyD will<br>consolidate all<br>input from<br>relevant parties<br>to form a reply<br>to ICC.  |
|                      |                   |   |  |   | 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.  Based on the above, no direct information indicating the pink               |  |



| Complaint<br>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.  | 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 GW-RS1121-15 for the concerned construction works was in place.  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.   | 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<br>November<br>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<br>HKCEC and seafront<br>outside Lung Wo<br>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 | 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.  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 | 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<br>Log No.     | Date of Complaint | Received From and Received By  | Location of Complainant                                 | Nature of Complaint                          | Outcome  | Status  |
|--------------------------|-------------------|--|---|--|--|---|
|                          |                   |  |   |  | 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.  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. |   |
| 160413<br>(HK20120<br>8) | 13 April<br>2016  | A public complaint referred by EPD was received by ET on 13 April 2016 (EPD Ref.: H05/RS/00008 367-16 dated 13 April 2016) | Outside the Hong<br>Kong Academy for<br>Performing Arts | Muddy water discharge from construction site | 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. 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. Protection measure including provision of sandbag bunding along the side of the landing barge was implemented by the Contractor of HK/2012/08.  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  | Interim investigation report was submitted to the EPD on 21 April 2016.  EPD advised no further comment on 6 June 2016 on the interim report submitted and case closed. |

| Complaint<br>Log No. | Date of Complaint | Received From and Received By   | Location of Complainant                                 | Nature of Complaint  | Outcome  | Status   |
|----------------------|-------------------|---|---|--|--|--|
|                      |                   |   |   |  | 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.   |  |
|                      |                   |   |   |  | 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. |  |
|                      |                   |   |   |  | 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.  |  |
| 160706               | 30 June<br>2016   | A public<br>complaint<br>referred by<br>EPD was<br>received by ET<br>on 06 July | Construction area<br>near Royal Hong<br>Kong Yacht Club | Derrick barge moored near<br>Royal Hong Kong Yacht<br>Club emitted dark smoke<br>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<br>report was<br>submitted to<br>EPD on 14<br>July 2016. |



| Complaint<br>Log No. | Date of Complaint | Received From and Received By                   | Location of Complainant | Nature of Complaint | Outcome   | Status   |
|----------------------|-------------------|---|-------------------------|---------------------|---|--|
|                      |                   | 2016 (Case<br>Ref:.<br>H05/RS/00016<br>226-16), |                         |                     | 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.  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. | EPD advised no further comment on 20 September 2016 on the interim report submitted and case closed. |



| Complaint<br>Log No. | Date of<br>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/00012 592-16) | East of Temporary<br>Reclamation Zone<br>TS3, Causeway Bay<br>Typhoon Shelter | Muddy water was observed at Causeway Bay Typhoon Shelter | 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.  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 Shelther 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.  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 | 2016 on the interim report submitted and case closed. |

| Complaint<br>Log No. | Date of Complaint | Received From and Received By | Location of Complainant | Nature of Complaint | Outcome  | Status |
|----------------------|-------------------|-------------------------------|-------------------------|---------------------|--|--------|
|                      |                   |                               |                         |                     | 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.  |        |
|                      |                   |                               |                         |                     | 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 filing works at the Temporary Reclamation Zone TS3 was observed completed. No contaminated discharge and no contaminated surface runoff was found. |        |
|                      |                   |                               |                         |                     | 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.  |        |



| Complaint<br>Log No. | Date of Complaint | Received From and Received By  | Location of Complainant      | Nature of Complaint  | Outcome  | Status  |
|----------------------|-------------------|--|------------------------------|--|--|---|
| 180625               | 5 June<br>2018    | An EPD complaint was referred to the ET on 25 June 2018 (CASE Ref: H05/RS/00001 5459-18) | Site outside Lung<br>Wo Road | Muddy water discharge was found at the site outside Lung Wo Road on 5 June 2018 afternoon. | An EPD complaint was referred to the ET on 25 June 2018 (CASE Ref: H05/RS/000015459-18). The complainant reported that muddy water discharge was found at the site outside Lung Wo Road on 5 June 2018 afternoon. ET confirmed with the Resident Site Staff that installation of metal formwork at seawall was carried out on 5 June 2018 afternoon and mitigation measure including placing rock fill material on slope surface was implemented at the concerned location to reduce surface runoff.  Follow up site inspection was conducted by the Environmental Team on 26 June 2018, no muddy water discharge or surface runoff related water quality impact was observed at construction area under HK/2012/08 near the concerned area  Nevertheless, in view of the public concern, the Contractor of HK/2012/08 was reminded to provide addition tarpaulin covering to the slope surface along the seawall around the concerned location to reduce the potential surface runoff and maintain regular checking on the embankment condition to ensure no gap / void to avoid potential seepage / surface runoff to nearby water | The interim report will be submitted to EPD on 4 July 2018. |



| Complaint<br>Log No. | Date of Complaint | Received From and Received By  | Location of Complainant              | Nature of Complaint   | Outcome  | Status  |
|----------------------|-------------------|--|--------------------------------------|---|--|---|
| 180625               | 11 June<br>2018   | An EPD complaint was referred to the ET on 25 June 2018 (CASE Ref: H05/RS/00015 954-18). | Construction Site near Wan Chai Pier | Construction dust and muddy water discharge was found at the site near Wan Chai Pier on 11 June 2018 afternoon. | ET confirmed with the Resident Site Staff that marine construction activity of removal of TWCR4 and stockpile of fill material at WCR3 Area were conducted under the Contractor of HK/2009/02 on 11 June 2018 afternoon. The Contractor of HK/2009/02 reported that double silt curtain was in place as mitigation measures during the marine activity and regular spraying water was provided as dust mitigation measures at WCR3 Area. Follow-up inspection was conducted on 28 June 2018, excavation works was observed at WCR3 Area and mitigation measures including watering during excavation was generally in place. Other dust mitigation measure includes covering the stockpile material and watering the dusty surface and haul road were generally in place. No particular dust impact was observed. No muddy water discharge or surface runoff related water quality monitoring impact was observed at Contract HK/2009/02 site area. Mitigation measures for marine activity includes providing double layers of silt curtain to enclose the marine activity area was generally in place and additional tarpaulin was provided to cover the temporary cut slope to avoid the potential surface runoff. In view of the public concern, the Contractor of HK/2009/02 was reminded to keep review the performance of dust mitigation measures including watering during excavation and material handling, covering the stockpile material and watering the dusty surface and haul road to avoid potential dust impact and minimize any potential dust impact to the surroundings. The Contractor of HK/2009/02 was also reminded to maintain regular checking on the embankment, silt curtain and tarpaulin condition to ensure no gap / void to avoid potential water quality related impact. | The interim report will be submitted to EPD on 4 July 2018. |

### Appendix 7.1

**Construction Programme of Individual Contracts** 

| S4C-0900B               | Outstanding Works - Rectification w                                     | orks of the features (incorrect levels) on top of P7                | 45         | 45      | 06-Jul-18*                 | 20-Aug-18   | 209         | Calendar Day              | Outstanding Works - Rept   |
|-------------------------|---|---|------------|---------|----------------------------|-------------|-------------|---------------------------|--|
| S4C-0900C1              | Submission for Raise Vent Shaft an                                      | nd Water Meter Room   | 60         | 15      | 05-Feb-18 A                | 06-Jul-18   | -338        | HK Working Day            | Submission for Raise Vent Shaft and Water Meter Room, Submission for Raise Vent \$1  |
| S4C-0900C2              | Raise Vent Shaft and Water Meter  | Room Structure  | 60         | 60      | 13-Jul-18                  | 13-Sep-18   | -338        | HK Working Day            |  |
| Section 5 of the        | Works - WSD Salt Water Pu   | mping System  |            |         |                            |             |             |                           |  |
| WSD Salt Water Po       | umping Station  |   |            |         |                            |             |             |                           |  |
| Outstanding Works       | s   |   |            |         |                            |             |             |                           |  |
| S5-OUT-1000             | Carry out defect rectification works a                                  | at the front yard of WSD Pump station                               | 10         | 0       | 20-Apr-18 A                | 30-May-18 A |             | Calendar Day              | Carry out defect rectifica <mark>tion</mark> works at the front yard of WSD Pump station   |
| Section 8A of the       | e Works - Reprovisioning o  | f Wan Chai Ferry Pier in Area 8                                     |            |         |                            |             |             |                           |  |
| <b>Outstanding Work</b> | ks in Section 8A  |   |            |         |                            |             |             |                           |  |
| S8A-OUT-1040            | Relocation of fire hydrant near Ferry                                   | / Pier  | 8          | 0       | 09-Mar-18 A                | 23-Jun-18 A |             | HK Working Day            | Relocation of fire hydrant near Ferry Pier   |
| S8A-OUT-1060            | Reinstatement works of the flooring                                     | inside the rooms under staircase ST-01 of the Ferry Pier            | 12         | 0       | 28-Dec-17 A                | 29-Jan-18 A |             | HK Working Day            |  |
| S8A-OUT-1070            | Reinstatement works of the flooring                                     | under the temporary covered walkway                                 | 6          | 0       | 05-Jan-18 A                | 26-Jan-18 A |             | HK Working Day            |  |
| Section 9B of the       | e Works - CWB Tunnel Stru   | cture (CH3400 - CH3796)   |            |         |                            |             |             |                           |  |
| Tunnel Portion 1 (      | (CH3500-CH3630)   |   |            |         |                            |             |             |                           |  |
| CWB Structural Wo       | orks  |   |            |         |                            |             |             |                           |  |
| Outstanding Works       | s ,   |   |            |         |                            |             |             |                           |  |
| S9B-T1-OUT-1040         | TB1 - Rectification works against wa                                    | ater leakage for tunnel side walls                                  | 25         | 5       | 28-Sep-17 A                | 24-Jun-18   | -228        | Calendar Day              | TB1 - Rectification works against water leakage for turinel side walls, TB1 - Rectification works against water leakage for turinel side walls, TB1 - Rectification works against water leakage for turinel side walls, TB1 - Rectification works against water leakage for turinel side walls, TB1 - Rectification works against water leakage for turinel side walls, TB1 - Rectification works against water leakage for turinel side walls, TB1 - Rectification works against water leakage for turinel side walls, TB1 - Rectification works against water leakage for turinel side walls, TB1 - Rectification works against water leakage for turinel side walls, TB1 - Rectification works against water leakage for turinel side walls, TB1 - Rectification works against water leakage for turinel side walls, TB1 - Rectification works against water leakage for turinel side walls, TB1 - Rectification works against water leakage for turinel side walls, TB1 - Rectification works against water leakage for turinel side walls, TB1 - Rectification works against water leakage for turinel side walls, TB1 - Rectification works against water leakage for turinel side walls, TB1 - Rectification works against water leakage for turinel side walls, TB1 - Rectification works against water leakage for turinel side water leakage |
| S9B-T1-OUT-1045         | TB1 - Carry out CCTV inspection fo                                      | r the drainage system   | 27         | 27      | 14-May-18 A                | 16-Jul-18   | 243         | Calendar Day              | TB1 - Carry out CCTV inspection for the drainage system  |
| Tunnel Portion 2 (      | (CH3425-CH3500)   |   |            |         |                            |             |             |                           |  |
| CWB Structural Wo       |   |   |            |         |                            |             |             |                           |  |
| S9B-T2-6025             |   | nel top slab inside the access shaft in Tunnel Portion 2            | 6          | 0       | 11-Oct-17 A                | 14-Nov-17 A |             | HK Working Day            |  |
| S9B-T2-6035             | Cut down the access shaft to 1.5 m                                      | netres below final formation level and backfill in Tunnel Portion 2 | 9          | 0       | 19-Oct-17 A                | 14-Nov-17 A |             | HK Working Day            |  |
| Outstanding Works       |   | otav la alzaga fav tummal sida vvalla                               | 25         |         | 20 Can 17 A                | 24 km 40    | 220         | Colondor Doy              | TB2 - Rectification works against water leakage for tunnel side walls, TB2 - Rectification works against v   |
| S9B-T2-OUT-1040         | TB2 - Rectification works against wa TB2 - Carry out CCTV inspection fo | •   | 25         | 5<br>27 | 28-Sep-17 A<br>14-May-18 A | 24-Jun-18   | -228<br>243 | Calendar Day Calendar Day | TB2 - Recultication works against water leakage for turner side walls, Tb2 - Recultication works against water leakage for turner side walls, Tb2 - Recultication works against water leakage for turner side walls, Tb2 - Recultication works against water leakage for turner side walls, Tb2 - Recultication works against water leakage for turner side walls, Tb2 - Recultication works against water leakage for turner side walls, Tb2 - Recultication works against water leakage for turner side walls, Tb2 - Recultication works against water leakage for turner side walls, Tb2 - Recultication works against water leakage for turner side walls, Tb2 - Recultication works against water leakage for turner side walls, Tb2 - Recultication works against water leakage for turner side walls, Tb2 - Recultication works against water leakage for turner side walls, Tb2 - Recultication works against water leakage for the properties of the prop |
|                         | & Tunnel Portion 4 (CH3630-CH3  | <u> </u>  | 21         |         | 14-Iviay-16 A              | 16-Jul-18   | 243         | Calelidal Day             | 122 Saily Ou COV Inspection in the Chambridge System   |
| CWB Structural Wo       | •   | 3790)   |            |         |                            |             |             |                           |  |
| TP3 & 4 Outstandin      |   |   |            |         |                            |             |             |                           |  |
|                         | 0 TP3 & 4 - Carry out defects rectifica                                 | tion works  | 25         | 5       | 10-Jun-16 A                | 24-Jun-18   | -228        | Calendar Day              | TP3 & 4 - Carry out defects rectification works, TP3 & 4 - Carry out defects rectification works   |
|                         | 5 TB3 & 4 - Carry out CCTV inspectio                                    |   | 27         | 27      | 14-May-18 A                | 16-Jul-18   | -250        | Calendar Day              | TB3 & 4 - Carry out CCTV inspection for the drainage system, TB3 & 4 -   |
|                         | , , , , ,   | 3 ,   |            |         | , ,                        |             |             | , [                       |  |
| ◆ Milestone             | e   |   |            |         |                            |             |             |                           | Date Revision Checked Ap   |
| Critical Mi             | ileatones   |   |            |         |                            |             |             |                           |  |
|                         |   | CHUN WO - CRGL  |            |         | CEDD                       | CONTR       | RACT        | NO. HK/2                  | 009/02   |
| CurrentW                | Vorks   |   |            |         |                            |             |             |                           |  |
| Critical W              | /orks   | JOINT VENTURE   | WD II - Co | entr    | ral Wand                   | chai By     | pass        | at Wan C                  | hai East (Contract 2)  |
| Remainin                | ng Level of Effort  |   |            |         |                            |             | •           |                           |  |
|                         |   |   | 3-IVIUN    | 110     | KULLII                     | NG PRU      | JGRA        | awiw⊏ (dat                | a date 20-Jun-18)  |
|                         |   |   |            |         |                            |             |             |                           |  |
|                         |   |   |            |         |                            |             |             |                           |  |
|                         |   |   |            |         |                            |             |             |                           |  |

| 2018 July August September   |
|--|
| O1         08         15         22         29         05         12         19         26         02         09 |
|  |
|  |
| Carry out defects identification and rectification works, TP5 - Carry out defects identification and rectificat  |
| ucts and drainage pipes  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
| WCR4 Mass Concrete Coping for Blockwork Seawall, WCR4 Mass Concrete Coping for Blockwork                         |
|  |
| Drainage at Tunnel Portion 2, Drainage at Tunnel Portion 2   |
| Completion of Tunnel Portion 2 Drainage  |
|  |
|  |
|  |
| Temp D-Wall - Bulk Reclamation to +1.50 mPD (6,800m3 @ 500m3/day), Works within Temp D-Wall - I                  |
|  |
| (10.000 out of 32,000 m3 @ 800 m3/day)   |
| e temp seawall to form marine entrance to temp reclamation zone (400 out of 886 nos. @ 30 nos./day)              |
| 10 Hardcore and Blinding at Base, 400 Hardcore and Blinding at Base  |
| Installation of remaining Breakwater, Installation of remaining Breakwater                                       |
| Remove remaining temporary reclamation by barge (22.000 out of 32,000 m  |
| Remove soil behind existing seawall at east of Type 8 (2000m3@500  |
| Remove remaining temporary seawall by barge (486 nos. @ 30 nos./day), Rer  |
| Complete removal of reclamation on diaphragm wall, Complete removal of reclamation on diaphragm v                |
| Carry out ech sounding to dredged seabed level, Carry out echo sounding to dredged seabed level.                 |
|  |
|  |
| Remove part of temporary reclamation from +4mPD to 6mPD (10,000 m3@1000m3/day)                                   |
| Remove part of temp seawall blocks as entrance to TWCF4 by   |
| Install emaining Breakwater, Install remaining Breakwater  |
| Remove remaining temporary reclamation from +4mFD to   |
| Remove soil behind existing seawall (5,000 m3@1)000r   |
| Remove 2 sections of existing seawa  |
| Rémove remaining témporary seawall   |
| rks within Temp D-Wall - Place Type A Rock fill, Geotextile and Filter-6.0mPD to -3.0mPD                         |
| tks within Temp D-Wall - Place Sorted Public Fill -6.0mPD to -3.0mPD (4,500m3@600m3/d), Works with               |
| AS WILLIAM TEMP D-Wall - Place Softed Fublic Fill -0.011FD (0.5011FD (4.5001[15]@0001[15]d), Wolfs William       |
| Works within Temp D-Wall + Cut do  |
| vvoirs within terrip b- Vall Cut ut  |
|  |
| Excavation and dredging between Temp Seawall & D-Wall to Te  |
| Excavation and dredging between Temp Seawall & D-Wall to Te  |
| Remove western part of the Temp Seawall to form marine er tran   |
| Remove remaining Temp Se awall by ba   |
| Remove all temporary reclamation (C  |
| Works butside fem  |
| w  |
|  |
|  |
| Date Revision Checked Approv   |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |
|  |

# CEDD CONTRACT HK/2009/02

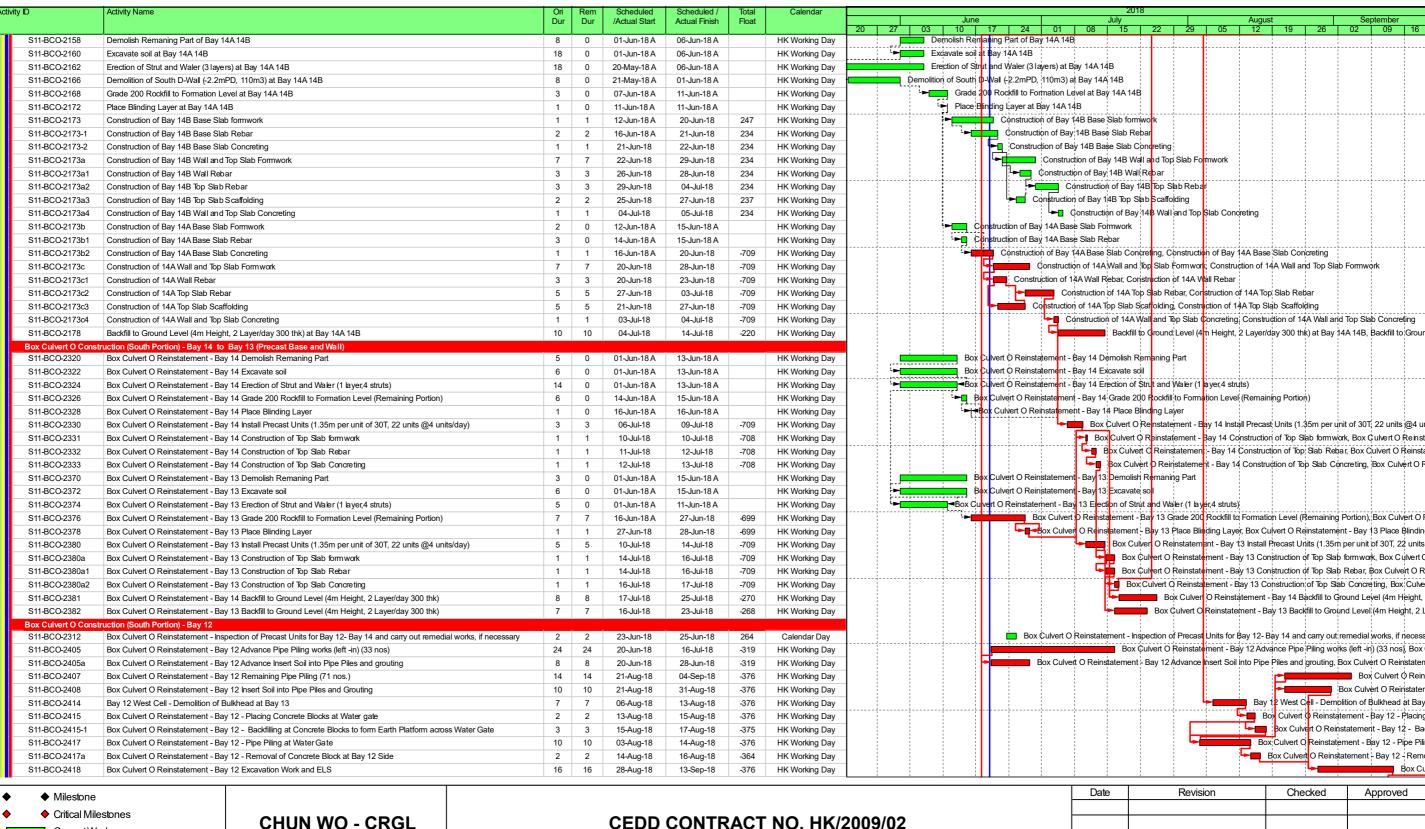
| tivity ID                  | Activity Name   | Ori | Rem | Scheduled     | Scheduled /   | Total       | Calendar        | hima  | 2                   | 2018                 | August  |                       | Contember                   |
|----------------------------|---|-----|-----|---------------|---------------|-------------|-----------------|---|---------------------|----------------------|---|-----------------------|-----------------------------|
|                            |   | Dur | Dur | /Actual Start | Actual Finish | Float       |                 | June           20         27         03         10         17         24         01 | July<br>08 15       | 22   29              | August 12   | 19   26               | September 02 09 1           |
| S11-RTC-3580               | Works outside Temp D-Wall - Construct the remaining part of Type 7 seawal   | 51  | 51  | 19-Sep-18     | 14-Nov-18     | -685        | HK Working Day  |   |                     |                      |   |                       |                             |
| S11-RTC-3596               | Removal of the sheet piles adjacent to the Type 7 seawall at the west side  | 13  | 13  | 18-Jul-18     | 31-Jul-18     | -250        | HK Working Day  |   | <b>└</b> -■         | F                    | Removal of the sheet pile                         | s adjacent to the Ty  | ρe 7 seavall at th          |
| <b>Temporary Works</b>     | at North West corner of Tunnel Portion 3 and 4  |     |     |               |               |             |                 |   |                     |                      |   |                       |                             |
| S11-TW-1230                | Tie back SP Wall - Install brackets and waling to sheet pile wall (2nos.@4 days/no.)  | 6   | 0   | 18-May-18 A   | 08-Jun-18 A   |             | HK Working Day  | Tie back SP Wall - Install brackets and w   |                     |                      | days/no.)   |                       |                             |
| S11-TW-1240                | Tie back SP Wall - Install tie back (4nos. @1no./day)   | 4   | 0   | 08-Jun-18 A   | 14-Jun-18 A   |             | HK Working Day  | Tie back SP Wall - Install tie bac  | к (4nos. @1nd       | ./day)               |   |                       |                             |
| Removal of Tempo           | orary D-Wall CH 3630 to CH 3710   |     |     | ,             |               |             |                 |   |                     |                      |   |                       |                             |
| S11-RTC-3341b              | Preparation for D-Wall Cutting - Remaining Coring inside D Wall (72 nos.for lifting, 3 machine@1no./machine/day)  | 24  | 0   | 30-Aug-17 A   | 22-May-18 A   |             | HK Working Day  | Preparation for D-Wall Cutting - Remaining Coing inside D Wal                       | (72 nos.for lift    | ing, 3 machine@1n    | no./machine/day)                                  |                       |                             |
| S11-RTC-3345               | Preparation for D-Wall Cutting - Advance Coring within tunnel cofferdam (37 nos., 3 machines@1no./machine/day)  | 23  | 0   | 02-May-18 A   | 22-May-18 A   |             | HK Working Day  | Preparation for D-Wall Cutting - Advance Coring within tunnel or                    | fferdam (37 n       | os., 3 machines@1    | no:/machine/day)                                  |                       |                             |
| S11-RTC-3348               | Filling water inside cofferdam up to -2mPD (2 pumps)  | 6   | 6   | 28-Jun-18     | 05-Jul-18     | -688        | HK Working Day  | <b>→</b>  | ıng water insid     | e cofferdam up to -2 | 2mPD (2 pumps), Filling                           | water inside cofferd  | arn up to 2mPD              |
| S11-RTC-3349               | Filling water inside cofferdam up to +2mPD  | 1   | 1   | 04-Aug-18     | 06-Aug-18     | -718        | HK Working Day  |   |                     |                      | Filling water inside                              | e cofferdam up to +?  | راماری<br>کmPD, Filling wat |
| S11-RTC-3355               | Remaining D-Wall Coring underwater (37 nos. at 3nos./day)   | 13  | 13  | 06-Aug-18     | 18-Aug-18     | -718        | HK Working Day  |   |                     |                      | <u></u>   | Remaining D-Wall C    | oing underwate              |
| S11-RTC-3385               | Cutting Temporary D-Wall (18 vertical cuts; 2 machines@ 1cut/machine/day)   | 18  | 18  | 14-Aug-18     | 01-Sep-18     | -718        | HK Working Day  |   |                     |                      | <b>-</b>  | C                     | uting Teniporar             |
| S11-RTC-3394               | Cutting Temp D-Wall (36 horizontal cuts; 2 machines@ 1cut/machine/day) to original seabed level   | 25  | 25  | 18-Aug-18     | 13-Sep-18     | -718        | HK Working Day  |   |                     |                      |   |                       | C                           |
| S11-RTC-3398               | Removal of Temp D-Wall blocks   | 0   | 0   | 13-Sep-18     | 13-Sep-18     | -718        | HK Working Day  |   |                     | 1 1                  |   |                       |                             |
|                            | Flyover Reinstatement   |     |     |               |               |             | 3 7             |   |                     |                      |   |                       |                             |
|                            | lyover - Road Works and Street Furniture  |     |     |               |               |             |                 |   |                     |                      |   |                       |                             |
| S11-HH-4082                | Reinstatement of HHR Flyover - MJ Installation at Bay 3   | 6   | 0   | 10-Oct-17 A   | 16-Oct-17 A   |             | Calendar Day    |   |                     |                      |   |                       |                             |
| Reinstatement of E         |   |     |     |               |               |             |                 | <del> </del>  |                     |                      |   |                       |                             |
| S11-BCO-2016               | Box Culvert O Reinstatement - Design of Box Culvert 'O' by designer and reviewed by CW-CRGLJV   | 45  | 12  | 18-Aug-17 A   | 03-Jul-18     | 235         | HK Working Day  | Box   | :<br>Culvert O Rein | statement - Design   | of Box Culvert 'O' by des                         | igner and reviewed    | by CW-CRGLJN                |
| S11-BCO-2010               | Box Culvert O Reinstatement - Design Submission of Box Culvert 'O' for comment and approval by AECOM  | 35  | 12  | 25-Oct-17 A   | 03-Jul-18     | 236         | HK Working Day  |   |                     |                      | Submission of Box Culve                           |                       | -                           |
| S11-BCO-2022               | Box Culvert O Reinstatement - Precast Units Fabrication and Delivery (Total = 66 units @1.5no/day + 20d delivery)   | 64  | 16  | 19-Apr-18 A   | 07-Jul-18     | 232         | HK Working Day  |   | i                   | ; ; •                | ecast Units Fabrication a                         | i i                   | .;                          |
| S11-BCO-2050a              | Box Culvert O Reinstatement - Carry out inspection and defect rectification to Bay 18-19 at the north   | 1   | 1   | 20-Jun-18     | 20-Jun-18     | -678        | HK Working Day  |   |                     | 1 1                  | defect rectification to Bay                       | ! * 1                 |                             |
| S11-BCO-2060a              | Box Culvert O Reinstatement - Final inspection of Bay 13-19   | 2   | 2   | 26-Jul-18     | 28-Jul-18     | -712        | HK Working Day  | 24, 48,000  | inchi (Cany)        |                      | Culvert O Reinstatement                           |                       |                             |
| S11-BCO-2000a              | Box Culvert O Reinstatement - Diversion of flow to reinstated box culvert   | 1   | 1   | 03-Aug-18     | 04-Aug-18     | -712        | HK Working Day  |   |                     | ;                    | Box Culvert O Reins                               | 1 ' 1                 |                             |
| S11-BCO-2070a              | Box Culvert O Reinstatement - Reinstate the opening of box culvert Bay 12   | 80  | 80  |               | 30-Oct-18     | -360        | HK Working Day  |   | :                   |                      | Box Odilivert O regins                            | tatement - Diversion  | of now to learns            |
|                            | 1 0   | 00  | 80  | 04-Aug-18     | 30-Ou-16      | -300        | HK WOIKING Day  |   |                     |                      |   | 1 1                   | 1                           |
| S11-BCO-2096               | Instruction (Tunnel Section) - Bay 15A and Bay 16A  Box Culvert O Reinstatement - Backfill above Bay 15A and Bay 16A inside tunnel section in dry and break up D-Wall | 20  | 20  | 15-May-18 A   | 11-Jul-18     | -257        | HK Working Day  |   | Box Culv            | ert O Reinstatemen   | nt - Backfill above Bay 15                        | A and Rav 16A insid   | te tunnel section           |
|                            | nstruction (Outfall Section) - Bay 17A and 17B (Insitu)   | 20  | 20  | 13-Iviay-10 A | 11-301-10     | -231        | TIK Working Day |   |                     |                      |   |                       |                             |
| S11-BCO-2116               | Insert Soil into Pipe Piles and grouting at Bay 17A 17B (154 no., 6 no. per day)  | 14  | 0   | 02-May-18 A   | 21-May-18 A   | 1           | HK Working Day  | Insert Soil into Pipe Piles and grouting at Bay 17A 17B (154 no. 6                  | ino, per day)       |                      |   |                       |                             |
| S11-BCO-2118               | Demolish Remaning Part of Bay 17A  Demolish Remaning Part of Bay 17A  | 6   | 0   | 21-May-18 A   | 20-Jun-18 A   |             | HK Working Day  | Demoish Remaning Pa   |                     |                      |   |                       |                             |
| S11-BCO-2110               | Excavate soil at Bay 17A 17B  | 6   | 0   | 16-Apr-18 A   | 20-Jun-18 A   |             | HK Working Day  | Excavate soil at Bay 17/  | 7                   |                      |   |                       |                             |
| S11-BCO-2122               | Erection of Strut and Waler (1 layer, 3 Struts) at Bay 17A, 17B   | 8   | 0   | -             | 11-Jun-18 A   |             |                 | ✓ Erection of Strut and Waler (1 layer  | ;                   | , 17Δ 17R            |   |                       | İ                           |
| S11-BCO-2124               | Demolition of Bulkhead Wall at Bay 18   | 8   | 0   | 18-Apr-18 A   |               |             | HK Working Day  | Demolition of Bulkhead  |                     |                      |   |                       |                             |
|                            | ·   | 6   | -   | 05-Jun-18 A   | 20-Jun-18 A   |             | HK Working Day  | Demolition of North D-Wa  | ; 1                 | 10m2) at Poy 174     |   |                       |                             |
| S11-BCO-2126               | Demolition of North D-Wall (-2.2mPD, 110m3) at Bay 17A  | -   | 0   | 19-May-18 A   | 19-Jun-18 A   | 740         | HK Working Day  |   |                     | 1 7                  | B, Grade 200 Rockfill to F                        | Formation Layed at F  | 17A 17B                     |
| S11-BCO-2128               | Grade 200 Rockfill to Formation Level at Bay 17A, 17B   | 3   | 3   | 20-Jun-18 A   | 22-Jun-18     | -718        | HK Working Day  |   |                     | 1 1                  | 1 1 1   | Ulliaujii Level at B  | ay 174, 176                 |
| S11-BCO-2131               | Place Blinding Layer at Bay 17A, 17B  | 1   | 1   | 22-Jun-18     | 23-Jun-18     | -718        | HK Working Day  |   |                     | :   T                | Layer at Bay 17A, 17B<br>estruction of Bay 17A Ba | 01-16                 |                             |
| S11-BCO-2132               | Construction of Bay 17A Base Slab formwork  | 1   | 1   | 23-Jun-18     | 25-Jun-18     | -718        | HK Working Day  |   |                     |                      | Repar, Construction of B                          |                       | <del> </del>                |
| S11-BCO-2132-1             | Construction of Bay 17A Base Slab Rebar   | 2   | 2   | 03-Jul-18     | 05-Jul-18     | -718        | HK Working Day  |   |                     |                      |   |                       | 1                           |
| S11-BCO-2132-2             | Construction of Bay 17A Base Slab Concreting  | 1   | 1   | 06-Jul-18     | 07-Jul-18     | -718        | HK Working Day  |   |                     | 1 1 1                | b Concreting, Constructi                          | 1.7                   | 1                           |
| S11-BCO-2132a              | Construction of Bay 17A Wall and Top Slab formwork  | 8   | 8   | 06-Jul-18     | 14-Jul-18     | -718        | HK Working Day  |   |                     | 1 1 1                | Wall and Top Slab form                            | 1 1                   | - 1                         |
| S11-BCO-2132a1             | Construction of Bay 17A Wall Rebar  | 3   | 3   | 06-Jul-18     | 10-Jul-18     | -718        | HK Working Day  |   | <b>-</b> 1 : 1      |                      | Rebar, Construction of I                          | * : :                 | :                           |
| S11-BCO-2132a2             | ·   | 4   | 4   | 13-Jul-18     | 18-Jul-18     | -718        | HK Working Day  |   |                     | Construction of Bay  | y 17A Slab Rebar, Cons                            | truction of Bay 17A   | Slab Rebar                  |
| S11-BCO-2132a3             | Construction of Bay 17A Top Slab Scaffolding  | 2   | 2   | 07-Jul-18     | 10-Jul-18     | -714        | HK Working Day  |   |                     |                      | Slab Scaffolding, Constru                         |                       |                             |
| S11-BCO-2132a4             | Construction of Bay 17A Wall and Top Slab Concreting  | 1   | 1   | 18-Jul-18     | 19-Jul-18     | -718        | HK Working Day  |   |                     |                      | ay 17A Wall and Top Slal                          | : :                   | :                           |
| S11-BCO-2132b              | Construction of Bay 17B Base Slab formwork  | 4   | 4   | 28-Jun-18     | 03-Jul-18     | -688        | HK Working Day  |   | , ,                 | 1 1                  | mvork, Construction of E                          |                       | ərmwark                     |
| S11-BCO-2132b1             | Construction of Bay 17B Base Slab Rebar   | 2   | 2   | 29-Jun-18     | 30-Jun-18     | -688        | HK Working Day  | l : : : : : :   : : : :   | 1 1                 | ; ;                  | Construction of Bay 17E                           |                       |                             |
| S11-BCO-2132b2             | Construction of Bay 17B Base Slab Concreting  | 1   | 1   | 30-Jun-18     | 03-Jul-18     | -688        | HK Working Day  | Cons  |                     | '                    | ndreting, Construction of                         |                       | Concreting                  |
| S11-BCO-2132c              | Construction of Bay 17A Inspection Manhole  | 5   | 5   | 20-Jul-18     | 26-Jul-18     | 213         | HK Working Day  |   |                     |                      | ction of Bay 17A Inspecti                         |                       |                             |
| S11-BCO-2134               | Construction of Bay 17B Wall and Top Slab formwork  | 5   | 5   | 04-Jul-18     | 10-Jul-18     | -685        | HK Working Day  |   | Construction        | on of Eay 17B Wall   | ar d Top Slab formwork,                           | Construction of Bay   | 17B Wall and T              |
| S11-BCO-2134-1             | Construction of Bay 17B Wall Rebar  | 3   | 3   | 04-Jul-18     | 07-Jul-18     | -685        | HK Working Day  |   | Construction of     | fBay 7B Wall Reb     | bar, Construction of Bay                          | 17B Wall Rebar        | !                           |
| S11-BCO-2134-2             | Construction of Bay 17B Top Slab Rebar  | 3   | 3   | 11-Jul-18     | 13-Jul-18     | -688        | HK Working Day  |   | Const               | ruction of Bay 17B   | Top Slab Rebar, Constru                           | ction of Bay 17B Tor  | Slab Rebar                  |
| S11-BCO-2134-3             | Construction of Bay 17B Top Slab Scaffolding  | 2   | 2   | 05-Jul-18     | 07-Jul-18     | -688        | HK Working Day  |   | Construction of     | fBay 7B Top Slab     | Scaffolding, Constructio                          | n of Bay 17B Top SI   | ab Scaffolding              |
| S11-BCO-2134-4             | Construction of Bay 17B Wall and Top Slab Concreting  | 1   | 1   | 13-Jul-18     | 14-Jul-18     | -688        | HK Working Day  |   | Cons                | struction of Bay 17B | Wall and Top Slab Cond                            | creting, Construction | of Bay 17B Wa               |
| S11-BCO-2136               | Mobilisation of Crane at Bay 17A 17B  | 2   | 2   | 14-Jul-18     | 17-Jul-18     | -229        | HK Working Day  |   | <b>—</b> ;          | i i i                | e at Bay 17A 17B, Mobil                           | - i i                 | i i                         |
| S11-BCO-2137               | Backfill to Ground Level (4m Height, 2 Layer/day 300 thk) at Bay 17A  | 7   | 7   | 17-Jul-18     | 24-Jul-18     | -229        | HK Working Day  |   | <b>4</b>            | : :                  | Ground Level (4m Heigh                            |                       | - !                         |
|                            | nstruction - Bay 14A, 14B (Insitu)  |     |     |               |               |             |                 |   | -                   |                      |   |                       |                             |
|                            |   |     |     |               |               | <del></del> |                 |   |                     |                      | <u> </u>  |                       |                             |
| ▲ M:1==4:···               |   |     |     |               |               |             |                 | I   | Date                | Revi                 | rision  | Checked               | Approve                     |
| <ul><li>Mileston</li></ul> | e   |     |     |               |               |             |                 | F   |                     | 1 (5 )               |   |                       |                             |
| Critical M                 | lilestones CLUINI MO CDCI   |     |     | 0=DD          | 00NT          |             |                 |   |                     |                      |   |                       |                             |

CurrentWorks
Critical Works
Remaining Level of Effort

CHUN WO - CRGL JOINT VENTURE CEDD CONTRACT NO. HK/2009/02 WD II - Central Wanchai Bypass at Wan Chai East (Contract 2) 3-MONTH ROLLING PROGRAMME (data date 20-Jun-18)

| Dale | I VEVISIOI I | Checked | Apploved |
|------|--------------|---------|----------|
|      |              |         |          |
|      |              |         |          |
|      |              |         |          |
|      |              |         |          |
|      |              |         |          |
|      |              |         |          |
|      |              |         |          |
|      |              |         |          |
|      |              |         |          |

Page 4 of 5 CEDD CONTRACT HK/2009/02



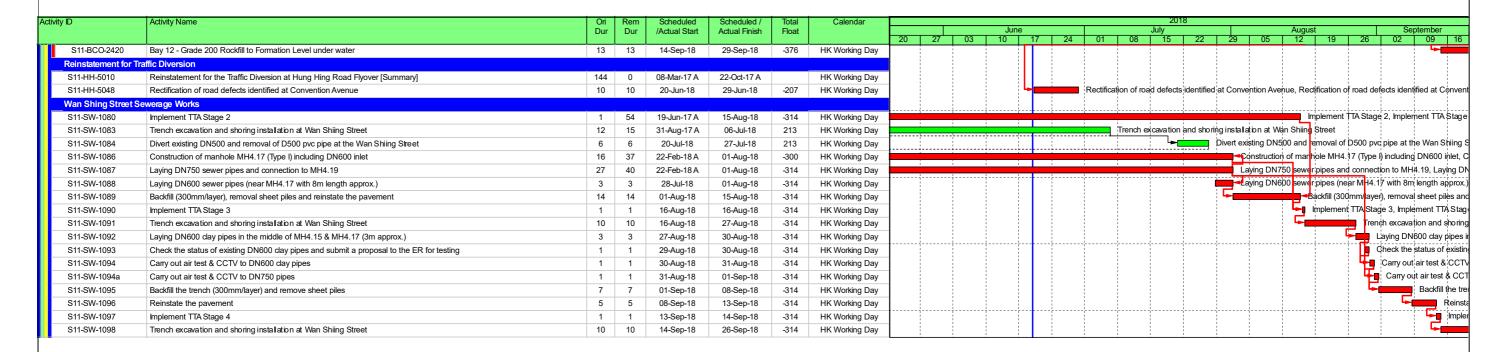
Current Works Critical Works

Remaining Level of Effort

**JOINT VENTURE** 

WD II - Central Wanchai Bypass at Wan Chai East (Contract 2) 3-MONTH ROLLING PROGRAMME (data date 20-Jun-18)

| <br> | 0 | , ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, |
|------|---|---|
|      |   |   |
|      |   |   |
|      |   |   |
|      |   |   |
|      |   |   |
|      |   |   |
|      |   |   |
|      |   |   |



♦ Milestone
 ♦ Critical Milestones
 Current Works
 Critical Works
 Remaining Level of Effort

CHUN WO - CRGL JOINT VENTURE CEDD CONTRACT NO. HK/2009/02
WD II - Central Wanchai Bypass at Wan Chai East (Contract 2)
3-MONTH ROLLING PROGRAMME (data date 20-Jun-18)

| Date | Revision | Checked | Approved |
|------|----------|---------|----------|
|      |          |         |          |
|      |          |         |          |
|      |          |         |          |
|      |          |         |          |
|      |          |         |          |
|      |          |         |          |
|      |          |         |          |
|      |          |         |          |

| byly ID      | Activity Name  | Remaining Dur        | Early Start     | Early Finish | Arthurby S.            |               |             |              | Centr         | Wan  | D Con<br>Chai I<br>an Cha | Develo<br>ai Byp | opme | nt Ph | ase II | i Wes | t   |     |        |        |     |      |             | Pa            | ge:1/7 |     |     |
|--------------|--|----------------------|-----------------|--------------|------------------------|---------------|-------------|--------------|---------------|------|---------------------------|------------------|------|-------|--------|-------|-----|-----|--------|--------|-----|------|-------------|---------------|--------|-----|-----|
| 1.000        | Revised Works Programme Rev.12.0(DD 20 No  | CALADA CALADA CALADA | SECONDARY CO.   | and their    | Activity %<br>Complete | Jan           | Feb         | Mar          | Арг           | May  | Jun 20                    |                  | Aug  | Sep   | Oct    | Nov   | Dec | Jan | Feb    | Mar    | Apr |      | 2019<br>Jun | Jul           | Aug    | Sep | Oct |
|              | nd Milestone Dates   | vember 20            | 17)             | West of      |                        |               |             |              |               |      |                           |                  |      |       |        |       |     |     |        |        |     |      | 10          |               |        |     |     |
|              | Norks Completion (Included Not Granted EOT Enti  | Hement of T          | he Contractor)  |              |                        |               |             |              |               |      |                           |                  |      |       |        |       |     |     |        |        |     |      |             |               |        |     |     |
| KD10840      | Completion of Section IIIA   | n                    | ine contractory | 08-Sep-18*   | 0%                     |               |             |              |               |      |                           |                  |      |       |        |       |     |     |        |        |     |      |             |               |        |     |     |
| KD10860      | Complection of Section IV  | 0                    |                 | 30-Aug-18*   | 0%                     |               |             |              |               |      |                           |                  |      |       |        |       |     |     |        |        |     |      |             |               |        |     |     |
| KD10880      | Completion of Section V  | 0                    |                 | 26-Sep-18*   | 0%                     |               |             |              |               |      |                           |                  |      |       |        |       |     |     |        |        |     |      |             |               |        |     |     |
| KD11010      | Completion of Section VII  | 0                    |                 | 14-Sep-18*   | 0%                     |               |             |              |               |      |                           |                  |      |       |        |       |     |     |        |        |     |      |             |               |        |     |     |
| KD11020      | Completion of Section VIII   | 0                    |                 | 21-Sep-18*   | 0%                     |               |             |              |               |      |                           |                  |      |       |        |       | 1   |     |        |        |     |      |             |               |        |     |     |
| KD11040      | Completion of Section IX   | 0                    |                 | 21-Sep-19*   | 0%                     |               |             |              |               |      |                           |                  |      |       |        |       |     |     |        |        |     |      |             |               |        |     |     |
| KD11060      | Completion of Section X  | 0                    |                 | 21-Sep-18*   | 0%                     |               |             |              |               |      |                           |                  |      |       |        |       |     |     |        |        |     |      |             |               |        | •   |     |
| Planned Sec  | tions of Works Completion  |                      |                 | Here are     |                        | -             |             |              | 4             |      |                           |                  |      |       |        |       |     |     |        |        |     |      |             | ++11144111114 |        |     |     |
| KD10080      | Planned Section IIIA Completion - Road A2,A4, A5   | 0                    |                 | 08-Sep-18    | 0%                     |               |             |              |               |      |                           |                  |      |       |        |       |     |     |        |        |     |      |             |               |        |     |     |
| KD10100      | Planned Section IV Completion - Slip Road 3  | 0                    |                 | 30-Aug-18    | 0%                     |               |             |              |               |      |                           |                  |      |       |        |       |     |     |        |        |     |      |             |               |        |     |     |
| KD10140      | Planned Section V Completion - Remaining At-Grade Road   | 0                    |                 | 26-Sep-18    | 0%                     |               |             |              |               |      |                           |                  |      | _     |        |       |     |     |        |        |     |      |             | 1             |        |     |     |
| KD10280      | Planned Section VII Completion - Remainder Works   | 0                    |                 | 14-Sep-18    | 0%                     | 1             |             |              |               |      |                           |                  |      |       |        |       |     |     |        |        |     |      |             |               |        |     |     |
| KD10300      | Planned Section VIII Completion - Landscape Softwork   | 0                    |                 | 21-Sep-18    | 0%                     | -             |             |              |               |      |                           |                  |      |       |        |       |     |     |        |        |     |      |             |               |        |     |     |
| KD10320      | Planned Section IX Completion - Establishment Works  | 0                    |                 | 21-Sep-19    | 0%                     |               |             | 1            |               |      |                           |                  |      |       |        |       |     |     |        |        |     |      | -           |               |        |     |     |
| KD10340      | Planned Section X Completion - Tree Protection &<br>Preservation                               | 0                    |                 | 21-Sep-18    | 0%                     |               |             |              |               |      |                           |                  |      | ٠     |        |       |     |     |        |        |     |      |             |               |        | •   |     |
|              | d Reclamation  Construction  |                      |                 |              |                        |               |             |              |               |      |                           |                  |      |       |        |       |     |     |        |        |     |      |             |               |        |     |     |
| Zone CRIII   |  |                      |                 |              | 100                    |               |             |              |               |      |                           |                  |      |       |        |       | -   |     |        |        |     |      |             | -             |        |     |     |
| Seawall Cons | struction - Zone CRIII   |                      |                 |              |                        |               |             |              |               |      |                           |                  | -    |       |        |       |     | Ī   |        |        |     |      |             |               |        |     |     |
| Zone CRIII S | eawall- 2nd Stage  |                      |                 |              |                        |               |             |              |               |      |                           |                  |      |       |        |       |     | İ   | 1      |        |     |      |             | 1             |        |     |     |
| Seawort 2 S  |  |                      |                 |              |                        |               |             |              |               |      |                           |                  |      |       |        |       |     | 1   | i      |        |     |      |             | - 1           |        |     |     |
| MAR21371     | Zone CRIII - seawall 2 & 12 - Backfilling remaining portion<br>(type A, geotextile and filter) | 0                    | 19-Jan-18 A     | 27-Jan-18 A  | 100%                   | -             |             |              |               |      |                           |                  | 1    |       |        |       |     | 1   |        |        |     |      |             |               |        |     |     |
| Zone D       |  |                      |                 |              |                        |               |             |              |               |      |                           |                  |      |       |        |       |     | 1   |        |        |     |      | - 1         |               |        |     |     |
| Seawall Cons | truction - Zone D  |                      |                 |              |                        |               |             |              |               |      |                           |                  |      |       |        |       |     |     |        |        | i   |      |             |               |        |     |     |
| Seawall 10 & | 11   |                      |                 |              |                        |               |             |              |               |      |                           |                  |      |       |        |       |     | į   |        |        |     |      |             |               |        |     |     |
| MAR20630     | Zone D - Seawall 10 & 11; Install remaining seawall block                                      | 14                   | 20-Feb-18*      | 05-Mar-18    | 0%                     |               | -           | _            |               |      |                           |                  |      |       |        |       |     | 1   |        |        |     |      |             |               |        |     |     |
| MAR20650     | Zone D - Seawall 10 & 11: Backfill Type A  | 7                    | 06-Mar-18       | 12-Mar-18    | 0%                     |               |             |              |               |      |                           |                  |      |       |        |       |     |     |        |        |     |      |             |               |        |     |     |
| MAR20670     | Zone D - Seawall 10 & 11: Lay geotextile and filter  | 7                    | 13-Mar-18       | 19-Mar-18    | 0%                     |               |             | -            |               |      |                           |                  |      |       |        |       |     |     |        |        |     |      |             |               |        |     |     |
|              | ection Completion  |                      |                 |              |                        |               |             |              |               |      |                           |                  |      |       |        |       |     |     |        | Ī      |     |      |             |               |        |     |     |
| Construction | Road A2, A4 & A5   |                      |                 |              |                        |               |             |              |               |      |                           |                  | 1    |       |        |       |     |     |        |        |     |      |             |               |        |     |     |
|              |  |                      |                 |              |                        |               |             |              |               |      |                           |                  |      |       |        |       |     |     |        |        |     |      |             | 1             |        |     |     |
| NOOLWOLK &   | Utilities - Section 1 (L1806 - L1801)  |                      |                 |              |                        |               |             |              |               |      |                           |                  |      |       |        |       |     |     |        |        |     | İ    |             |               |        |     |     |
| ata Date:    | Current Milestone     Actual Work  |                      |                 |              | 6372                   | 9 5           | September 1 | 050          | 3.53          |      |                           |                  |      |       |        |       |     |     | Dat    |        |     | Chec | ked         |               | Approv | ed  |     |
| )-Feb-18     | Critical Remaining Work  Remaining Work  Remaining Level of Effort                             |                      |                 |              | Up<br>(Ref             | dated<br>to R | d Wo        | orks<br>2 as | Prog<br>of 20 | Feb. | e Reurary                 | v.12<br>2018     | 3)   |       |        |       |     |     | 20-Feb | -18 1: | 2   |      |             |               |        |     |     |

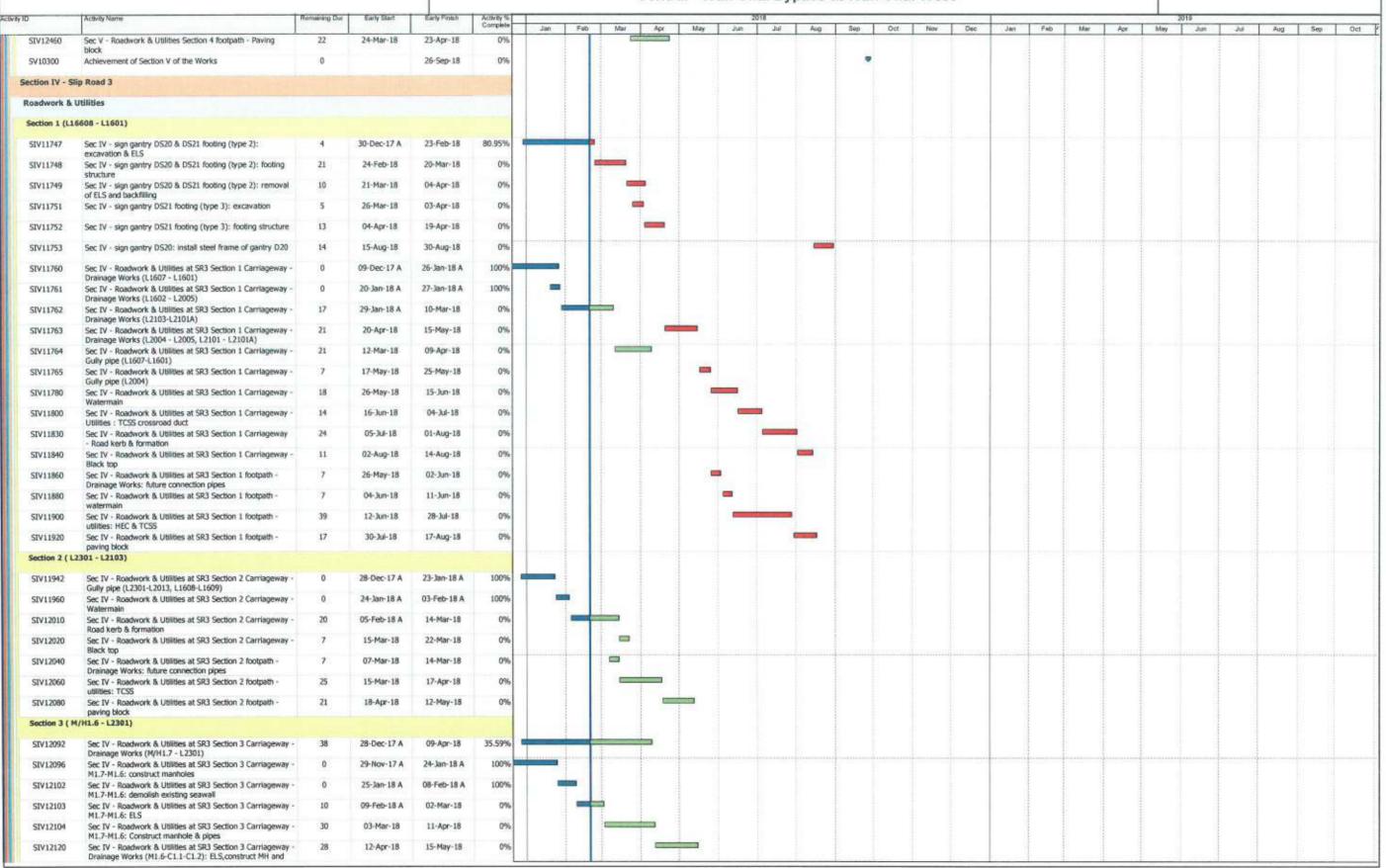
Page: 2/7

| rity ID     | Activity Name   | Remaining Dur | Early Start | Early Finish | Activity %<br>Complete |       |        |     | 4   |     | 2018 |        |          |     | _   |     |     |     |     |     |     | 2019 |     |     |     |     |
|-------------|---|---------------|-------------|--------------|------------------------|-------|--------|-----|-----|-----|------|--------|----------|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|
| SIIIA10279c | Sec III A - section 1 carriageway - sewerage pipe from M/H  | 0             | 02-Jan-18 A | 03-Feb-18 A  | 100%                   | Jan 1 | eb Mar | Apr | May | Jun | Jul  | Aug    | Sep      | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun  | lut | Aug | Sep | Oct |
| SIIIA10293  | 8C to F88 (night time): construct sewerage pipe<br>Sec III A - section 1 carriageway - sewerage pipe from M/H<br>F8B - F8A (night time) | 6             | 05-Feb-18 A | 26-Feb-18    | 0%                     | -     | -      |     |     |     |      |        |          |     |     |     |     |     |     |     |     |      |     |     |     |     |
| SIIIA10294  | Sec III A - section 1 carriageway - sewerage pipe from M/H<br>FSA - F8  | 8             | 17-Jan-18 A | 28-Feb-18    | 27.27%                 |       |        |     |     |     |      |        |          |     |     |     |     |     |     |     |     |      |     |     |     |     |
| SIIIA10295  | Sec III A - carriageway - works prrior TTA stage 5:<br>excavation and duct laying of TCSS and public lighting                           | 7             | 18-Jan-18 A | 27-Feb-18    | 0%                     |       | -      |     |     |     |      |        |          |     |     |     |     |     |     |     |     |      |     |     |     |     |
| SIIIA10298  | Sec III A - section 1 carriageway - works prifor TTA stage<br>5: road kerb  | 5             | 28-Feb-18   | 05-Mar-18    | 0%                     |       | -      |     |     |     |      |        |          |     |     |     |     |     |     |     |     |      |     |     |     |     |
| SIIIA10301  | Sec III A - section 1 carriageway - works pririor TTA stage<br>S: road formation  | 2             | 06-Mar-18   | 07-Mar-18    | 0%                     |       | 1      |     |     |     |      |        |          |     |     |     |     |     |     |     |     |      |     |     |     |     |
| SIIIA10302  | Sec III A - section 1 carriageway - works prilor TTA stage<br>5: laying asphalt   | 5             | 08-Mar-18   | 13-Mar-18    | 0%                     |       | •      |     |     |     |      |        |          |     |     |     |     |     |     |     |     |      |     |     |     |     |
| SIIIA10303  | Sec III A - section 1 carriageway - works prrior TTA stage<br>5: road marking & preparation works                                       | 3             | 14-Mar-18   | 16-Mar-18    | 0%                     |       |        |     |     |     |      |        |          |     |     |     |     |     |     |     |     |      |     |     |     |     |
| SIIIA10310  | Sec III A - section 1 carriageway - TTA stage 5:<br>Implementation of TTA Stage 5   | 1             | 17-Mar-18   | 17-Mar-18    | 0%                     |       | T      |     |     |     |      |        |          |     |     |     |     |     |     |     |     |      |     |     |     |     |
| SIIIA10310a | Sec III A - section 1 carriageway - TTA stage 5; remaining sewerage pipe for M/H F8A - M/H F8   | 12            | 19-Mar-18   | 04-Apr-18    | 0%                     |       | .=     | -   |     |     |      |        |          |     |     |     |     |     |     |     |     |      |     |     |     |     |
| SIIIA10310b | Sec III A - section 1 carriageway - TTA stage 5: remaining<br>sewerage pipe for M/H F8A - M/H F8B                                       | 18            | 06-Apr-18   | 26-Apr-18    | 0%                     |       | 1      |     | •   |     |      | emmon. | ******** |     |     |     |     |     |     |     |     |      |     |     |     |     |
| SIIIA10310c | Sec III A - section 1 carriageway - TTA stage 5: SR1<br>at-grade road- remove sheetbile at U-trough west                                | 5             | 19-Mar-18   | 23-Mar-18    | 0%                     |       | -      | 4   |     |     |      |        |          |     |     |     |     |     |     |     |     |      |     |     |     |     |
| 5IIIA10310d |   | 21            | 24-Mar-18   | 21-Apr-18    | 0%                     |       | 1      |     |     |     |      |        |          |     |     |     |     |     |     |     |     |      |     |     |     |     |
| SIIIA10310e | Sec III A - section 1 carriageway - TTA stage 5: SR1<br>at-grade road -construct upstand wall above Dwall                               | 25            | 23-Apr-18   | 23-May-18    | 0%                     |       |        | 1   |     |     |      |        |          |     |     |     |     |     |     |     |     |      |     |     |     |     |
| SIIIA10310f | Sec III A - section 1 carriageway - TTA stage 5: SR1<br>at-grade road - roadside barrier  | 14            | 24-May-18   | 08-Jun-18    | 0%                     |       |        |     | -   |     |      |        |          |     |     |     |     |     |     |     |     |      |     |     |     |     |
| SIIIA10310g | Sec III A - section 1 carriageway - TTA stage 5: SR1<br>at-grade road - road formation  | 7             | 09-Jun-18   | 16-Jun-18    | 0%                     |       |        |     |     | -   |      |        |          |     |     |     |     |     |     |     |     |      |     |     |     |     |
| SIIIA10310h | Sec III A - section 1 carriageway - TTA stage 5: SR1<br>at-grade road - laying asphalt with transition slab                             | 14            | 19-Jun-18   | 05-Jul-18    | 0%                     |       | 1      |     |     |     | -    |        |          |     |     |     |     |     |     |     |     |      |     |     |     |     |
| SIIIA10312  | Sec III A - roadwork and utilities section 1 carriageway -<br>Drainage works (L2202 - L2201)  | 15            | 19-Mar-18   | 09-Apr-18    | 0%                     |       | -      |     |     |     |      |        |          |     |     |     |     |     |     |     |     |      |     |     |     |     |
| SIIIA10312a | Sec III A - roadwork and utilities section 1 carriageway -<br>Drainage works (L1805 - L1801)  | 15            | 10-Apr-18   | 26-Apr-18    | 0%                     |       |        | -   | •   |     |      |        |          |     |     |     |     |     |     |     |     |      |     |     |     |     |
| SIIIA10312b | Sec III A - roadwork and utilities section 1 carriageway -<br>Drainage works (L1805-1807)   | 12            | 27-Apr-18   | 11-May-18    | 0%                     |       |        |     |     |     |      |        |          |     |     |     |     |     |     |     |     |      |     |     |     |     |
| SIIIA10313  | Sec III A - roadwork and utilities section 1 carriageway -<br>gully pipe (L1807 - L1801)  | 14            | 07-May-18   | 23-May-18    | 0%                     |       | T      |     |     |     |      |        |          |     |     |     |     |     |     |     |     |      |     |     |     |     |
| SIIIA10320  | Sec III A - roadwork and utilities section 1 carriageway -<br>fresh watermain   | 7             | 24-May-18   | 31-May-18    | 0%                     |       |        |     | •   |     |      |        |          |     |     |     |     |     |     |     |     |      |     |     |     |     |
| SIIIA10340  | Sec III A - roadwork and utilities section 1 carriageway -<br>utilities: HEC (80m) along carriageway                                    | 14            | 01-Jun-18   | 16-Jun-18    | 0%                     |       |        |     |     |     |      |        |          |     |     |     |     |     |     |     |     |      |     |     |     |     |
| SIIIA10360  | Sec III A - roadwork and utilities section 1 carriageway -<br>road kerb & formation   | 14            | 19-Jun-18   | 05-Jul-18    | 0%                     |       |        | i   |     | -   |      |        |          |     |     |     |     |     |     |     |     |      | 1   |     |     |     |
| SIIIA10400  | Sec III A - roadwork and utilities section 1 carriageway -<br>black top   | 7             | 06-Jul-18   | 13-Jul-18    | 0%                     |       | 1      |     |     |     | -    |        |          |     |     |     |     |     |     |     |     |      |     |     |     |     |
| SIIIA10420  | Sec III A - Implementation of TTA Stage 7P (Closure of<br>U-turn at Expo Drive)   | 1             | 14-Jul-18   | 14-Jul-18    | 0%                     |       |        |     |     |     | - 1  |        |          |     |     |     |     |     |     |     |     |      |     |     |     |     |
| SIIIA10440  | Sec III A - roadwork and utilities section 1 carriageway :<br>breaking existing asphalt   | 10            | 16-Jul-18   | 26-Jul-18    | 0%                     |       |        |     |     |     |      |        |          |     |     |     |     |     |     |     |     |      |     |     |     |     |
| SIIIA10460  | Sec III A - roadwork and utilities section 1 carriageway: road<br>kerb and formation  | 14            | 27-Jul-18   | 11-Aug-18    | 0%                     |       |        |     |     |     |      |        |          |     |     |     | 3   |     |     |     |     |      |     |     |     |     |
| SIIIA10480  | Sec III A - roadwork and utilities section 1 carriageway :<br>black top   | 10            | 13-Aug-18   | 23-Aug-18    | 0%                     | i     |        |     |     |     |      |        |          |     |     |     |     |     |     |     |     |      |     |     |     |     |
| SIIIA10500  | Sec III A - roadwork and utilities section 1 carriageway :<br>roadmarking and road furniture  | 14            | 24-Aug-18   | 08-Sep-18    | 0%                     |       |        |     |     |     |      |        |          |     |     |     |     |     |     |     |     |      |     |     |     |     |
|             | Utilities - Section 2 (L1810 - L1807)   |               |             |              | 18.900                 |       |        |     |     |     |      |        |          |     |     |     |     |     |     |     |     |      |     |     |     |     |
| SIIIA12590  | Sec III A - roadwork and utilities section 2 carriageway -<br>black top   | 0             | 20-Jan-18 A | 27-Jan-18 A  | 100%                   | -     | 1      | 1   |     |     |      |        |          |     |     |     |     |     |     |     |     |      |     |     |     |     |
| Roadwork &  | Utilities - Section 3 (L1808 - L1102)   |               |             |              |                        |       |        | 1   |     |     |      |        |          |     |     |     |     | İ   |     |     |     |      |     |     |     |     |
| SIIIA12770  | Sec III A - roadwork and utilities section 3 carriageway -<br>utilities: HEC ducting (60m) & crossroad duct (PCCW & HGC)                | 0             | 20-Jan-18 A | 07-Feb-18 A  | 100%                   |       |        | 1   |     |     |      |        |          |     |     |     |     |     |     |     |     |      |     |     |     |     |
| SIIIA12790  | Sec III A - roadwork and utilities section 3 carriageway -<br>road kerb & formation   | 17            | 08-Feb-18 A | 10-Mar-18    | 0%                     |       |        | 1   |     |     |      |        |          |     |     |     |     |     |     |     |     |      |     |     |     |     |
| SIIIA12810  | Sec III A - roadwork and utilities section 3 carriageway -<br>black top   | 7             | 12-Mar-18   | 19-Mar-18    | 0%                     |       |        |     |     |     |      |        |          |     |     |     |     |     |     |     |     |      |     |     |     |     |
| Roadwork &  | Utilities - Section 6 (L1102 - L1411)   |               |             |              |                        |       |        | 1   |     |     |      |        |          |     |     |     |     |     |     |     |     |      |     |     |     |     |
| SIIIA13399  | Sec III A - roadwork and utilities section 6 carriageway -<br>gully pipe (L1101 -L1102)   | 0             | 12-Jan-18 A | 26-3an-18 A  | 100%                   |       |        | 1   |     |     |      |        |          |     |     |     |     |     |     |     |     |      |     |     |     |     |
| SIIIA13444  | Sec III A - roadwork and utilities section 6 carriageway -<br>watermain (road crossing)   | 0             | 27-Jan-18 A | 03-Feb-18 A  | 100%                   | -     |        |     |     |     |      |        |          |     |     |     |     |     |     |     |     |      |     |     |     |     |
| SIIIA13445  | Sec III A - roadwork and utilities section 6 carriageway -<br>utilities: crossed duct(HEC , MGC, PCCW)                                  | 13            | 05-Feb-18 A | 06-Mar-18    | 0%                     |       |        |     |     |     |      |        |          |     |     |     |     |     |     |     |     |      |     |     |     |     |

Page: 3 / 7

| N/ID           | Activity Name  | Remaining Dur                          | Early Start | Early Finish | Activity % I           |     |     |     |   |     | raii Cii | 018     |     |        |           |            |     |     |           |     |     |     | 50.05       |     |     |     |             |
|----------------|--|--|-------------|--------------|------------------------|-----|-----|-----|---|-----|----------|---------|-----|--------|-----------|------------|-----|-----|-----------|-----|-----|-----|-------------|-----|-----|-----|-------------|
|                | Statement  | V1000000000000000000000000000000000000 |             | SOURCE SOUR  | Activity %<br>Complete | Jan | Feb | Mac | Apr                                     | May | Jun      | -       | Aug | Sep    | Oct       | Nov        | Dec | Ján | Feb       | Mar | Apr | May | 2019<br>Jun | Jul | Aug | Sep | 00          |
| SIIIA13450     | Sec III A - roadwork and utilities section 6 carniageway -<br>road kerb & formation  | 18                                     | 07-Mar-18   | 27-Mar-18    | 0%                     |     |     |     |   |     |          |         |     |        |           | 1          | 7   |     |           |     |     |     |             |     |     |     |             |
| SIIIA13470     | Sec III A - roadwork and utilities section 6 carriageway -<br>black top  | 7                                      | 28-Mar-18   | 09-Apr-18    | 0%                     |     | 1   |     |   |     |          |         |     |        |           |            |     | 1   |           | 1   |     |     |             |     |     |     |             |
| SIIIA13570     | Achievement of Section IIIA of the Works   | 0                                      |             | 08-Sep-18    | 0%                     |     |     |     |   |     |          |         |     |        |           |            |     |     |           |     |     | I   |             |     |     |     |             |
| Section V - Re | maining At-Grade Road & Road P2  |  |             |              | 1                      |     |     |     |   |     |          |         |     |        |           |            |     |     |           |     |     | 1   |             |     |     |     |             |
| Roadwork &     | Utilities  |  |             |              | -                      |     |     |     |   |     |          |         |     |        |           |            |     |     |           |     | 1   |     |             |     |     |     |             |
| Section 1 (L1  | 504 - L1900)   |  |             |              |                        |     |     |     |   |     |          |         |     | 1      |           |            |     | -   |           |     |     |     |             |     |     |     |             |
| SV12456        | Sec V-Roadwork & Utilities Section 1 - implementation of   | 0                                      | 20-Feb-18*  | 20-Feb-18    | 0%                     |     |     |     |   |     |          |         |     |        |           |            |     |     |           |     |     |     |             |     |     |     |             |
| SV12460        | TTA stage 5E (dosure of slow lane at northbound of Expo<br>Sec V - Roadwork & Utilities Section 1 - drinage works          | 15                                     | 20-Feb-18   | 08-Mar-18    | 0%                     |     |     |     |   |     |          |         |     |        |           |            |     |     |           |     |     |     |             |     |     |     |             |
| SV12462        | (L1902 - L1900)<br>Sec V - Roadwork & Utilities Section 1 - guilly pipe (L1902 -   | 6                                      | 09-Mar-18   | 15-Mar-18    | 0%                     |     |     |     |   |     |          |         |     | 1      |           |            |     |     |           | į.  |     |     |             |     |     |     |             |
| SV12464        | L1900) Sec V - Roadwork & Utilities Section 1 - temp. reinstatement  | 14                                     | 16-Mar-18   | 04-Apr-18    | 0%                     |     |     |     |   |     |          |         |     |        |           |            |     |     |           | 1   |     |     |             |     |     |     |             |
|                | to match with existing Expo Drive  |  |             |              |                        |     |     | ļ   |   | ļ   |          | (16-cp) |     | i<br>i |           |            |     |     | ļ.,,,,,,, | į   |     | ļ   |             |     |     |     | 117 1000000 |
| SV12466        | Sec V - Section 1 - Modification to 2nd stage ITA (V.O. 50) :<br>closure of northbound and maintain one lane at southbound | 1                                      | 14-Jul-18   | 14-Jul-18    | 0%                     |     |     |     |   |     |          |         |     |        |           |            |     |     |           |     |     |     |             |     |     |     |             |
| 5V12468        | Sec V - Roadwork & Utilities Section 1 Carriageway -<br>breaking existing asphalt  | 7                                      | 16-Jul-18   | 23-Jul-18    | 0%                     |     |     |     |   |     |          | -       |     |        |           |            |     |     |           |     |     |     |             |     |     |     |             |
| SV12490        | Sec V - Roadwork & Utilities Section 1 Carriageway - Road<br>kerb & formation  | 10                                     | 24-Jul-18   | 03-Aug-18    | 0%                     |     |     |     |   |     |          |         |     |        |           |            |     |     |           |     |     | -   |             |     |     |     |             |
| SV12520        | Sec V - Roadwork & Utilities Section 1 Carriageway - Black<br>top  | 7                                      | 04-Aug-18   | 11-Aug-18    | 0%                     |     | 1   |     |   |     |          |         |     |        |           |            |     |     |           |     |     |     |             |     |     |     |             |
| SV12522        | Sec V - Section 1 - Implementation of TTA for road dosure<br>of northbound and southbound of Expo Drive                    | 3                                      | 13-Aug-18   | 15-Aug-18    | 0%                     |     |     |     |   |     |          |         | a   |        |           |            |     |     | 1         |     |     |     |             |     |     |     |             |
| SV12524        | Sec V - Section 1 - Northbound & Southbound of Expo Drive :<br>breaking asphalt  | 14                                     | 16-Aug-18   | 31-Aug-18    | 0%                     |     |     |     |   |     |          |         |     |        |           |            |     |     |           |     |     | ì   |             |     |     |     |             |
| SV12526        | Sec V - Section 1 - Northbound & Southbound of Expo Drive :<br>road kerb & formation                                       | 14                                     | 01-Sep-18   | 17-Sep-18    | 0%                     |     |     |     |   |     |          |         |     |        |           |            |     |     |           |     |     |     |             |     |     |     |             |
| SV12528        | Sec V - Section 1 - Northbound & Southbound of Expo Drive :  | 7                                      | 18-Sep-18   | 26-Sep-18    | 0%                     |     | 0   |     |   |     |          |         |     |        |           |            |     | 1   | 1         |     |     |     |             |     |     |     |             |
| SV12570        | Sec V - Roadwork & Utilities Section 1 footpath -  | 12                                     | 29-Dec-17 A | 05-Mar-18    | 60%                    | -   |     | -   |   |     |          |         |     |        |           |            |     |     |           |     |     |     |             |     |     |     |             |
| SV12580        | utilities:TCSS<br>Sec V - Roadwork & Utilities Section I footpath - paving   | 29                                     | 06-Mar-18   | 12-Apr-18    | 0%                     |     |     |     | _                                       |     |          |         |     |        |           |            |     |     |           |     |     |     |             |     |     |     |             |
| Section 2 ( L1 | block<br>510 - L1504)  |  |             |              |                        | -   |     | -   |   | -   |          |         |     |        |           |            |     | -   |           |     | -   |     |             |     |     |     |             |
| SV12624        | Sec V - Roadwork & Utilities Section 1 Carriageway - road  | 0                                      | 04-Jan-18 A | 30-Jan-18 A  | 100%                   |     | i I |     |   |     |          |         |     |        |           |            |     |     |           |     |     |     |             |     |     |     |             |
| SV12626        | kerb & formation<br>Sec V - Roadwork & Utilities Section 1 Carriageway - black   | 13                                     | 31-Jan-18 A | 06-Mar-18    | 0%                     |     |     | _   |   |     |          |         |     |        |           |            |     |     |           |     |     |     |             |     |     |     |             |
|                | top  |  |             |              | 555                    |     |     | I   |   |     |          |         |     |        |           |            |     |     |           |     |     |     |             |     |     |     |             |
| SV12692        | Sec. V - Roadwork & Utilities Section 2 footpath - U channel   | 11                                     | 17-Jan-18 A | 03-Mar-18    | 21.43%                 |     |     |     |   |     |          |         |     |        |           |            |     |     |           |     |     |     |             |     |     |     |             |
| SV12695        | Sec V - Roadwork & Utilities Section 2 footpath - Watermain  | 13                                     | 05-Mar-18   | 19-Mar-18    | 0%                     |     |     |     |   |     |          |         |     |        |           |            |     |     |           |     |     |     |             |     |     |     |             |
| SV12700        | Sec V - Roadwork & Utilities Section 2 footpath - utilities:<br>TCSS   | 16                                     | 20-Mar-18   | 11-Apr-18    | 0%                     |     |     | -   |   |     |          |         |     |        |           |            |     |     |           |     | Ĩ   |     |             |     |     |     |             |
| SV12740        | Sec V - Roadwork & Utilities Section 2 footpath - paving<br>block  | 18                                     | 12-Apr-18   | 03-May-18    | 0%                     |     |     |     |   |     |          |         |     |        |           |            |     |     |           |     |     |     |             |     |     |     |             |
| Section 3 ( Ca | Ilvert L - L1510)  |  |             |              |                        |     |     |     |   |     |          |         |     |        |           |            |     |     |           |     |     |     |             |     |     |     |             |
| SIV12860       | Sec V - Roadwork & Utilities Section 3 footpath - Utilities:<br>TCSS, HGC, PCCW)   | 30                                     | 16-Jan-18 A | 26-Mar-18    | 11.76%                 |     |     | -   |   |     |          |         |     |        |           |            |     |     | 1         |     | ĺ   |     |             |     |     |     |             |
| SIV12880       | Sec V - Roadwork & Utilities Section 3 footpath - Paving block   | 21                                     | 27-Mar-18   | 24-Apr-18    | 0%                     |     |     |     | _                                       |     |          |         |     |        |           |            |     |     |           |     |     |     |             |     |     |     |             |
| Section 4 (K1  | 106 - Culvert L)   |  |             |              |                        | (   |     |     |   |     |          |         |     |        | ć         |            | Ť   |     |           |     |     |     | ļ           |     |     |     | -           |
| SIV12282       | Sec V - Roadwork & Utilities Section 4 Carriageway -   | 10                                     | 20-Feb-18   | 02-Mar-18    | 0%                     |     |     | ò   |   |     |          |         |     | İ      |           |            |     |     | 1         |     |     |     |             |     |     |     |             |
| SIV12300       | Drainage Works (L1311 - Culvert L, L1201 - Culvert L)<br>Sec V - Roadwork & Utilities Section 4 Carriageway - Gully        | 7                                      | 03-Mar-18   | 10-Mar-18    | 0%                     |     |     |     |   |     |          |         |     |        |           |            |     |     |           |     |     |     |             |     |     |     |             |
| SIV12302       | pipe (L1301 - Culvert L, L1201 - Culvert L)<br>Sec V - Roadwork & Utilities Section 4 Carriageway -                        | 6                                      | 12-Mar-18   | 17-Mar-18    | 0%                     |     |     |     |   |     |          |         |     |        |           |            |     |     |           |     | -   |     |             |     |     |     |             |
| SIV12305       | watermain<br>Sec V - Roadwork & Utilities Section 4 Carriageway - utilities  | 7                                      | 19-Mar-18   | 26-Mar-18    | 0%                     |     |     |     |   |     |          |         |     |        |           |            |     |     |           |     |     |     |             |     |     |     |             |
| SIV12310       | : cross road duct<br>Sec V - Roadwork & Utilities Section 4 Carriageway - Road   | 15                                     | 27-Mar-18   | 17-Apr-18    | 0%                     |     |     | 1   | *************************************** |     | J        |         |     |        | 0-1111111 | ļ.,,,,,,,, | ļ   |     | ļ         |     | ļ   |     | ļ           |     |     |     |             |
|                | kerb & formation : between culvert K and culvert L<br>Sec V - Roadwork & Utilities Section 4 Carriageway - Black           |  |             |              | 0.0000                 |     |     |     |   |     |          |         |     |        |           |            |     |     | 1         |     |     |     |             |     |     |     |             |
| SIV12320       | top : between culvert K and culvert L  | 10                                     | 18-Apr-18   | 28-Apr-18    | 0%                     |     |     |     | _                                       |     |          |         |     |        |           |            |     |     |           |     |     |     |             |     |     |     |             |
| SIV12340       | Sec V - Roadwork & Utilities Section 4 Carriageway - Black<br>top : at west of culvert K                                   | 7                                      | 20-Feb-18   | 27-Feb-18    | 0%                     |     |     |     |   | 1   |          |         |     |        |           |            |     |     |           |     |     |     |             |     |     |     |             |
| SIV12422       | Sec V - Roadwork & Utilities Section 4 footpath - Utilities :<br>TCSS  | 20                                     | 20-Feb-18   | 14-Mar-18    | 0%                     |     | F   |     |   |     |          |         |     |        |           |            |     |     | -         |     |     |     |             |     |     |     |             |
| SIV12440       | Sec V - Roadwork & Utilities Section 4 footpath - Utilities ;<br>HGC & PCCW  | 8                                      | 15-Mar-18   | 23-Mar-18    | 0%                     |     |     | -   |   |     |          |         |     |        |           |            |     |     |           |     |     |     |             |     |     |     |             |

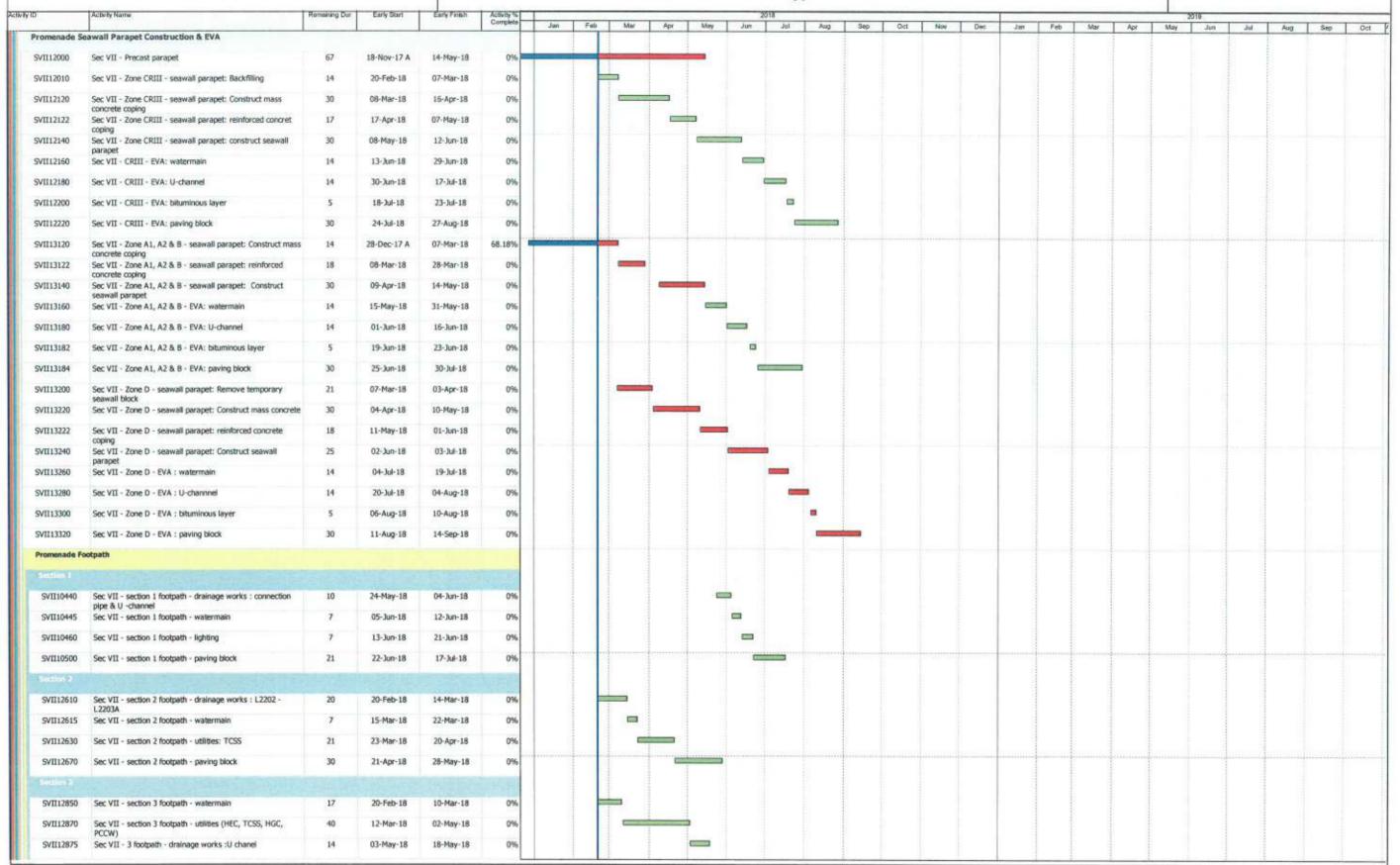
Page: 4/7



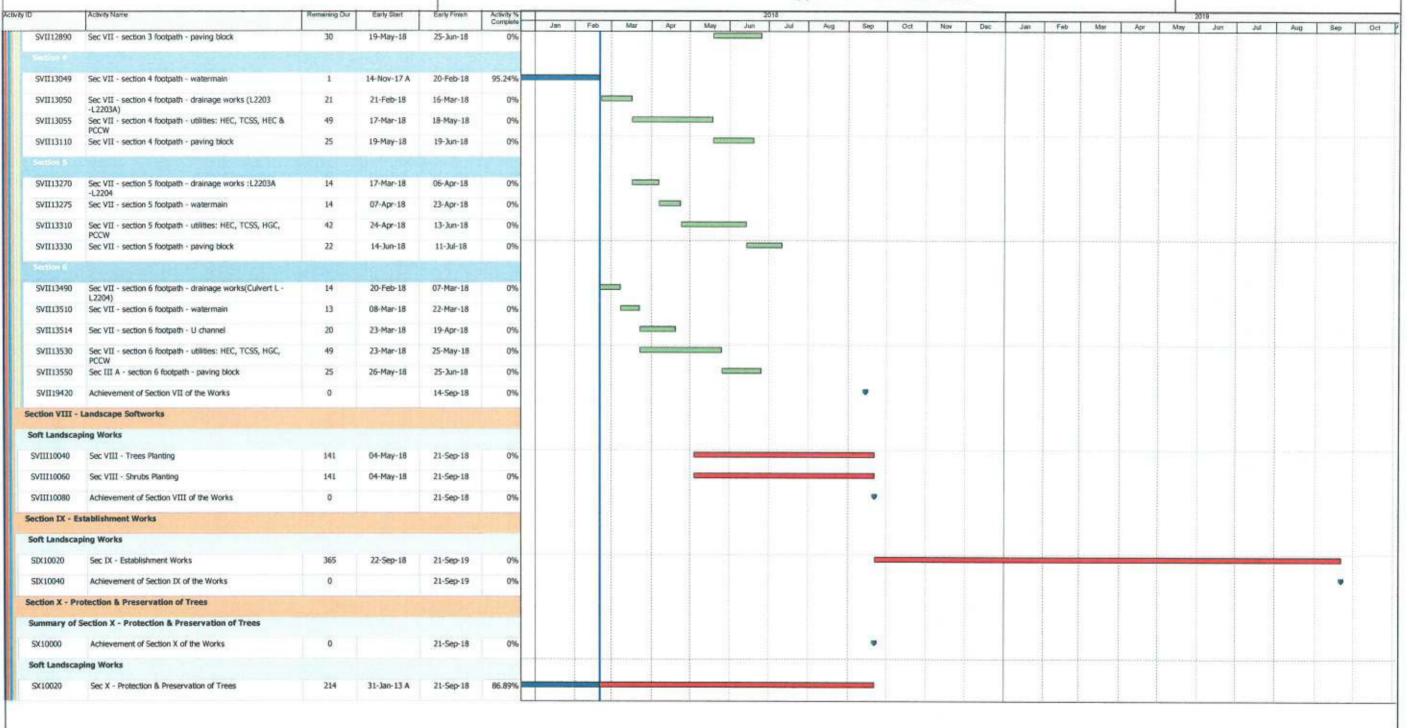
| m | 202020 |     |     | 790 |
|---|--------|-----|-----|-----|
|   | ane    | - n | - 8 | 1   |
|   | age    |     | Ŧ.  |     |

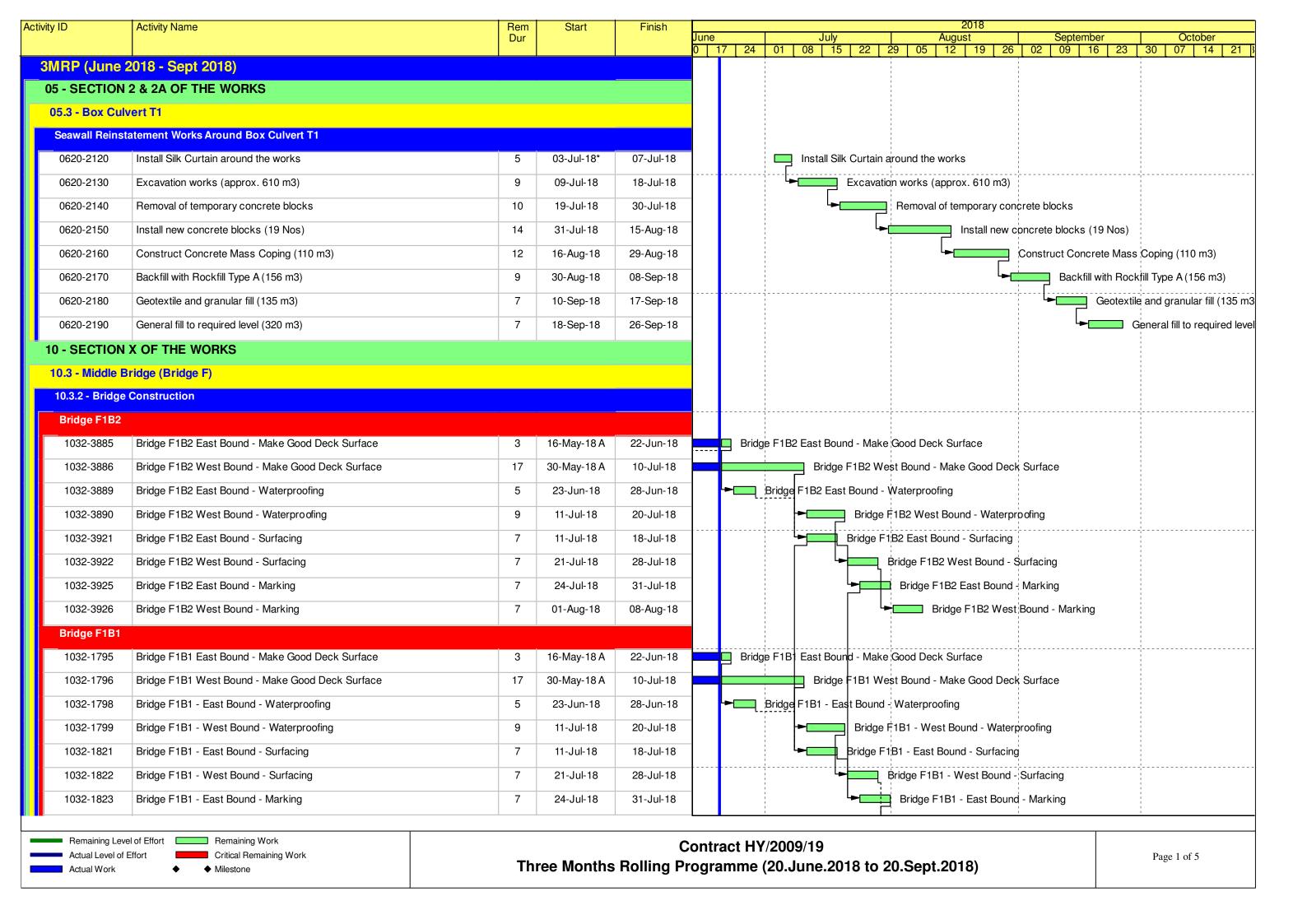
| Vity ID  | Activity Name   | Remaining Dur | Early Start    | Early Finish | Central - Wan Chai Bypass at Wan Chai West |  |      |       |         |    |  |  |
|--|---|---------------|----------------|--------------|--|--|------|-------|---------|----|--|--|
| W188   | -200000017  | - July        | 11.5-822.25807 | Sally railed | Activity %<br>Complete                     | 2018 2018<br>1 Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May |      | Jul / | Aug Sep | 00 |  |  |
| SIV12121   | Sec IV - Roadwork & Utilities at SR3 Section 3 Carriageway -<br>Drainage Works (M1.6-C1.1-C1.2): Backfilling & shift lane | 6             | 16-May-18      | 23-May-18    | 0%   |  | 4411 | -     | sep     | 0  |  |  |
| SIV12122   | Sec IV - Roadwork & Utilities at SR3 Section 3 Carriageway -<br>Drainage Works (M1.6-C1.1-C1.2): Construct MH C1.2        | 5             | 24-May-18      | 29-May-18    | 0%   |  |      |       |         |    |  |  |
| SIV12140   | Sec IV - Roadwork & Utilities at SR3 Section 3 Carriageway -<br>Gully pipe (M/H 1.7 - L2301)                              | 32            | 10-Apr-18      | 17-May-18    | 0%   |  | 1    |       |         |    |  |  |
| STV12150   | Sec IV - Roadwork & Utilities at SR3 Section 3 Carriageway -  | 14            | 18-May-18      | 04-Jun-18    | 0%   |  |      | 1     |         |    |  |  |
| SIV12155   | Road kerb<br>Sec IV - Roadwork & Utilities at SR3 Section 3 Carriageway -<br>formation                                    | 10            | 05-Jun-18      | 15-Jun-18    | 0%   |  |      |       |         |    |  |  |
| STV12160   | Sec TV - Roadwork & Utilities at SR3 Section 3 Carriageway - Black top  | 7             | 16-Jun-18      | 25-Jun-18    | 0%   |  |      |       |         |    |  |  |
| SIV12170   | Sec IV - Roadwork & Utilities at SR3 Section 3 footpath -<br>Utilities: TCSS  | 21            | 10-May-18      | 04-Jun-18    | 0%   |  | 1    |       |         |    |  |  |
| SIV12180   | Sec IV - Roadwork & Utilities at SR3 Section 3 footpath - U<br>channel  | 10            | 05-Jun-18      | 15-Jun-18    | 0%   |  |      |       |         |    |  |  |
| SIV12220   | Sec IV - Roadwork & Utilities at SR3 Section 3 footpath -<br>Paving block   | 25            | 16-Jun-18      | 17-Jul-18    | 0%   |  |      |       |         |    |  |  |
| SIV12222   | Achievement of Section IV of the Works  | 0             |                | 30-Aug-18    | 0%   |  |      |       |         |    |  |  |
| Section VII - Re   | emainder Works  |               |                |              |  |  |      |       |         | _  |  |  |
| Road & Draina  | ge Works (Culvert L - M/H1.7, Adjacent to SR3)  |               |                |              |  |  |      |       |         |    |  |  |
| SVII11600  | Sec IV - Roadwork & Utilities at SR3 Section 4 Carriageway -<br>Drainage Works (Culvert L -MH1.7)                         | 48            | 08-Jan-18 A    | 20-Apr-18    | 18.64%                                     |  |      |       |         |    |  |  |
| SVII11620  | Sec IV - Roadwork & Utilities at SR3 Section 4 Carriageway :<br>traffic diversion at Lung King Street                     | 3             | 21-Apr-18      | 24-Apr-18    | 0%   |  |      |       |         |    |  |  |
| SVII11640  | Sec IV - Roadwork & Utilities at SR3 Section 4 Carriageway -<br>Gully pipe (Culvert L -MH1.7)                             | 27            | 25-Apr-18      | 28-May-18    | 0%   |  |      |       |         |    |  |  |
| SVII11650  | Sec IV - Roadwork & Utilities at SR3 Section 4 Carriageway -<br>TCSS duct   | 7             | 29-May-18      | 05-Jun-18    | 0%   |  |      |       |         |    |  |  |
| SVII11654  | Sec IV - Roadwork & Utilities at SR3 Section 4 Carriageway - road kerb & formation  | 14            | 06-Jun-18      | 22-Jun-18    | 0%   |  |      |       |         |    |  |  |
| SVII11660  | Sec IV - Roadwork & Utilities at SR3 Section 4 Carriageway - Black top  | 6             | 23-Jun-18      | 29-Jun-18    | 0%   |  |      |       |         |    |  |  |
| SVII11680  | Sec IV - Roadwork & Utilities at SR3 Section 4 footpath - U<br>channel  | 14            | 29-May-18      | 13-Jun-18    | 0%   |  |      |       |         |    |  |  |
| SVII11700  | Sec TV - Roadwork & Utilities at SR3 Section 4 footpath - utilities: TCSS   | 14            | 14-Jun-18      | 30-Jun-18    | 0%   |  |      |       |         |    |  |  |
| SVII11720  | Sec TV - Roadwork & Utilities at SR3 Section 4 footpath -<br>paving block   | 14            | 03-Jul-18      | 18-Jul-18    | 0%   |  |      |       |         |    |  |  |
| Retaining Wall   | RW5 Construction  |               |                |              |  |  |      |       |         |    |  |  |
| SVII10660  | Sec VII - Retaining Wall RW5 (bay 1) - construct base slab<br>and wall  | 22            | 20-Mar-18      | 18-Apr-18    | 0%   |  |      |       |         |    |  |  |
| SVII10680  | Sec VII - Retaining wall RW5 (bay 2) - construct base slab<br>and wall  | 22            | 19-Apr-18      | 15-May-18    | 0%   |  |      |       |         |    |  |  |
| SVII10800  | Sec VII - Retaining wall RW5 (bay 3) - construct base slab<br>and wall  | 22            | 20-Mar-18      | 18-Apr-18    | 0%   |  |      |       |         |    |  |  |
| SVII10820  | Sec VII - Retaining wall RW5 (bay 4) - construct base slab<br>and wall  | 22            | 19-Apr-18      | 15-May-18    | 0%   |  |      |       |         |    |  |  |
| SVII10860  | Sec VII - Retaining wall RW5 - curing, removal formwork   | 8             | 16-May-18      | 25-May-18    | 0%   |  |      |       |         |    |  |  |
| Landing Steps  | Construction  |               |                |              |  |  |      |       |         |    |  |  |
| Landing Steps  | BSW13   |               |                |              |  |  |      |       |         |    |  |  |
| SVII10900  | Sec VII - Landing steps (8SW13) - install vertical fender /<br>step fender  | 15            | 15-May-18      | 01-Jun-18    | 0%   |  | 1    |       |         |    |  |  |
| SVII10920  | Sec VII - Landing steps (BSW13) - install s.s. handrail /   | 25            | 02-Jun-18      | 03-Jul-18    | 0%   |  |      |       |         |    |  |  |
| Landing Steps  | tactile / sign board / bollard<br>BSW4  |               |                |              |  |  |      | 3     |         |    |  |  |
| SVII10980  | Sec VII - Landing steps (BSW4) - install vertical fender / step   | 15            | 20-Jun-18      | 07-Jul-18    | 0%   |  |      |       |         |    |  |  |
| SVII11000  | fender Sec VII - Landing steps (BSW4) - install s.s. handrail / tactile   | 25            | 09-Jul-18      | 06-Aug-18    | 0%   |  |      |       |         |    |  |  |
| Landing Steps  | / sign board / boliard<br>BSWS  |               |                |              |  |  |      |       |         |    |  |  |
| SVII11060  | Sec VII - Landing steps (BSW5) - install vertical fender / step   | 15            | 25-Jul-18      | 10-Aug-18    | 0%   |  |      |       |         |    |  |  |
| SVII11080  | fender<br>Sec VII - Landing steps (BSW5) - install s.s. handrail / tactile  | 25            | 11-Aug-18      | 08-Sep-18    | 0%   |  |      |       |         |    |  |  |
| Landing Steps  | / sign board / bollard<br>BSW9  |               |                |              |  |  | 1    | İ     |         |    |  |  |
| SVII11140  | Sec VII - Landing steps (BSW9) - install vertical fender / step   | 15            | 13-Jun-18      | 30-Jun-18    | 0%   |  |      |       |         |    |  |  |
| SVII11160  | fender<br>Sec VII - Landing steps (BSW9) - install s.s. handrail / factile  | 25            | 03-Jul-18      | 31-Jul-18    | 0%   |  |      | 3     |         |    |  |  |
| STATE OF STA | / sign board / bollard  | :##C:         | and 40         | 24 AM 10     | 0,6  |  |      | 1     |         |    |  |  |

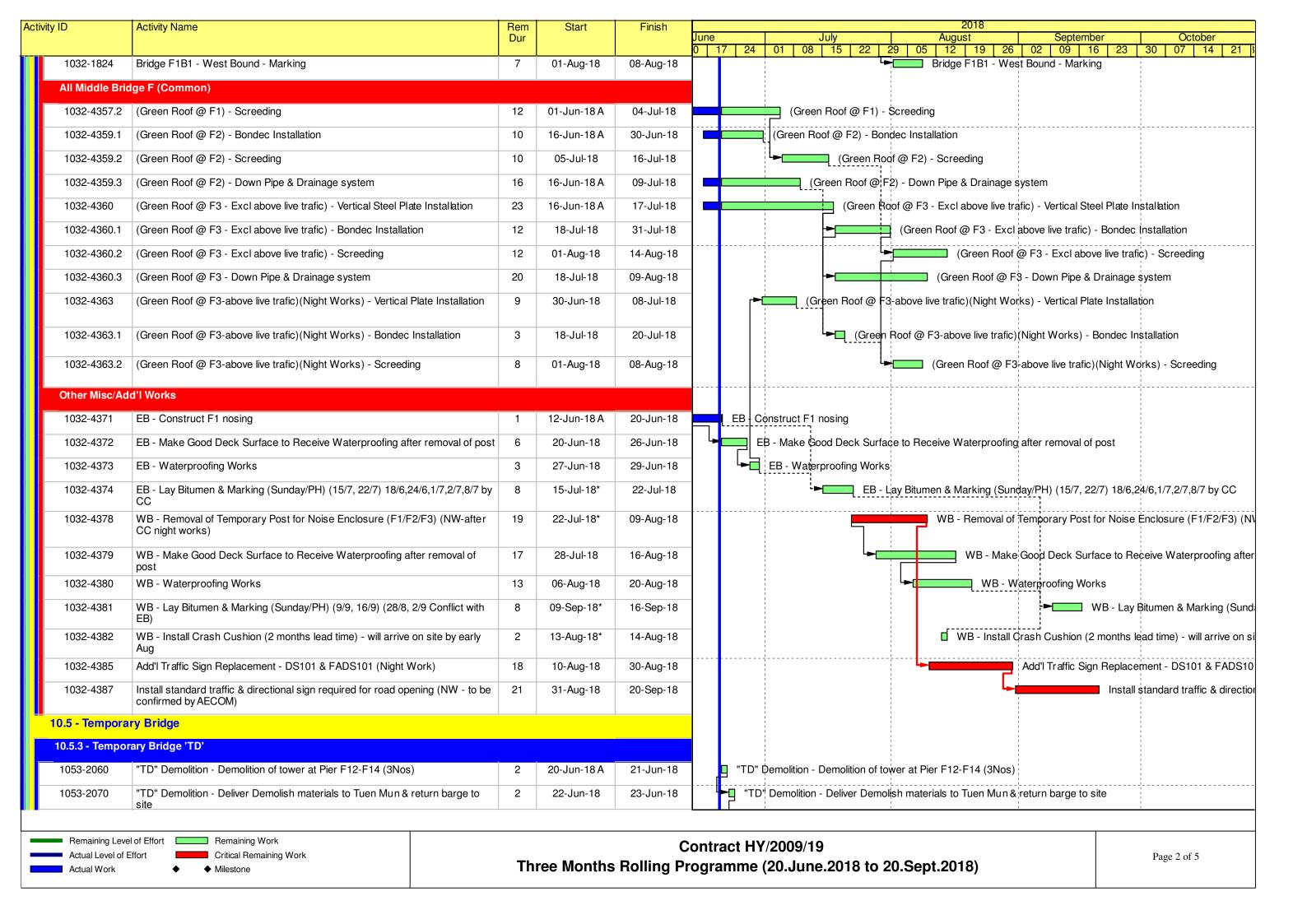
Page: 6/7

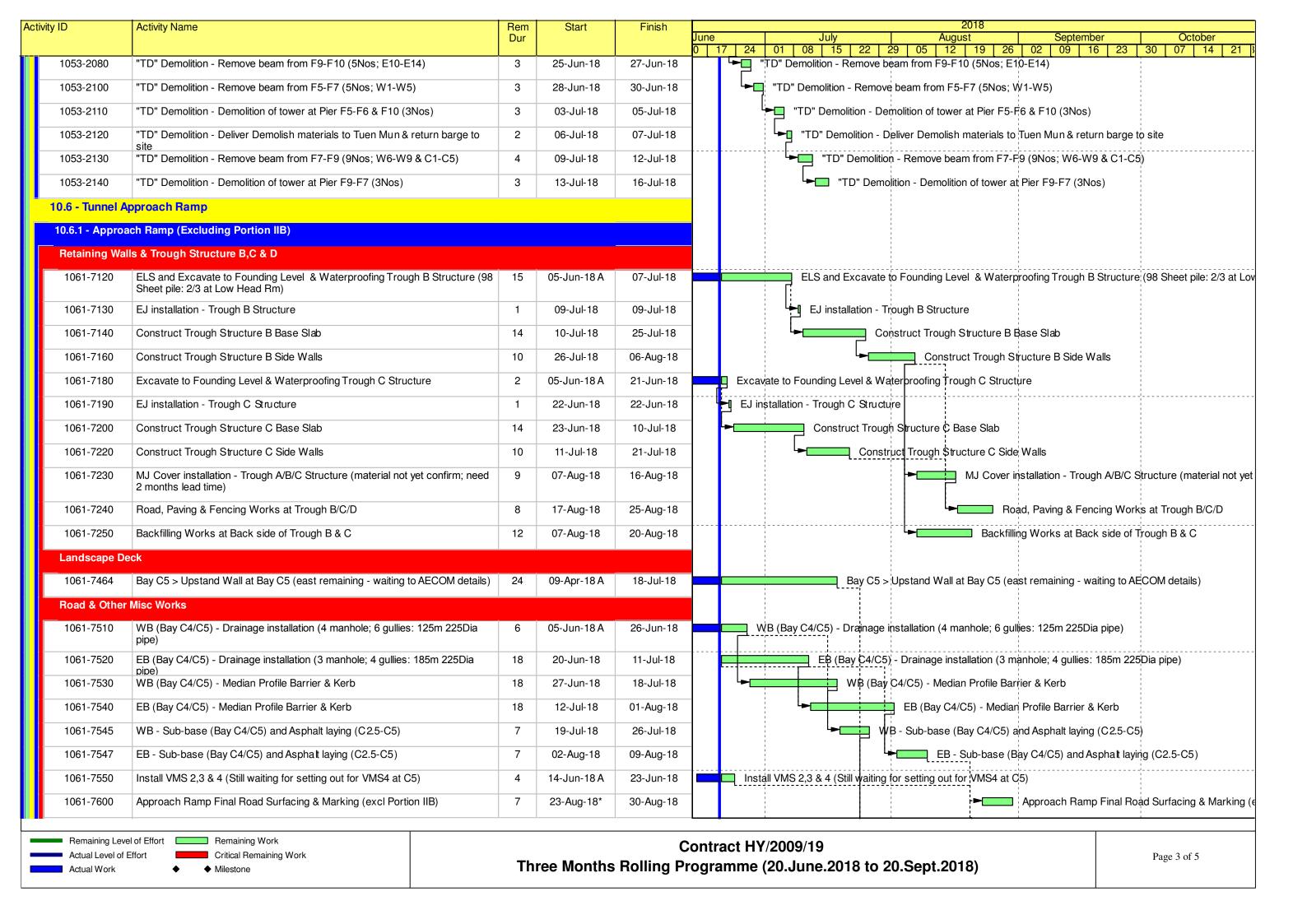


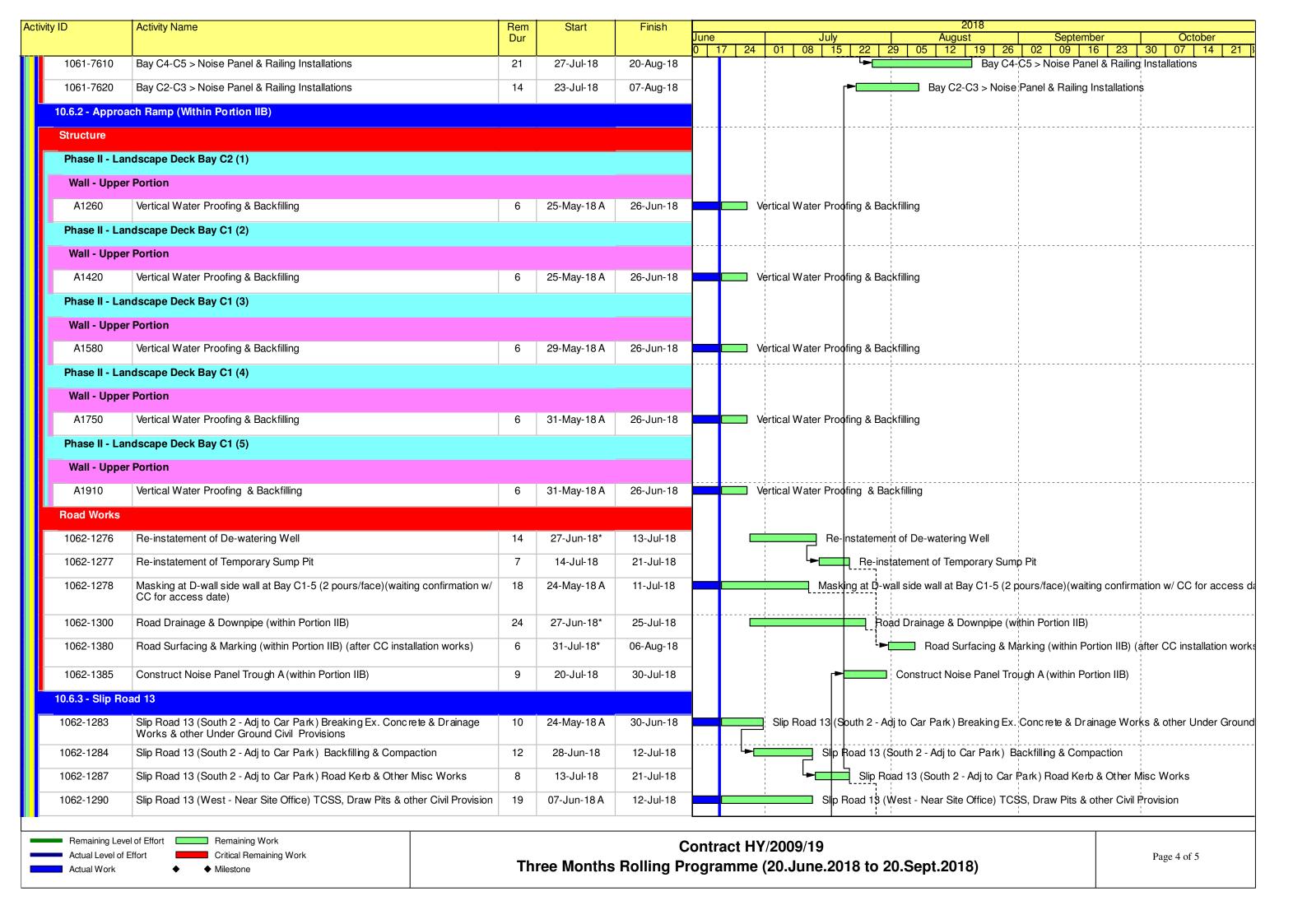
Page:7/7

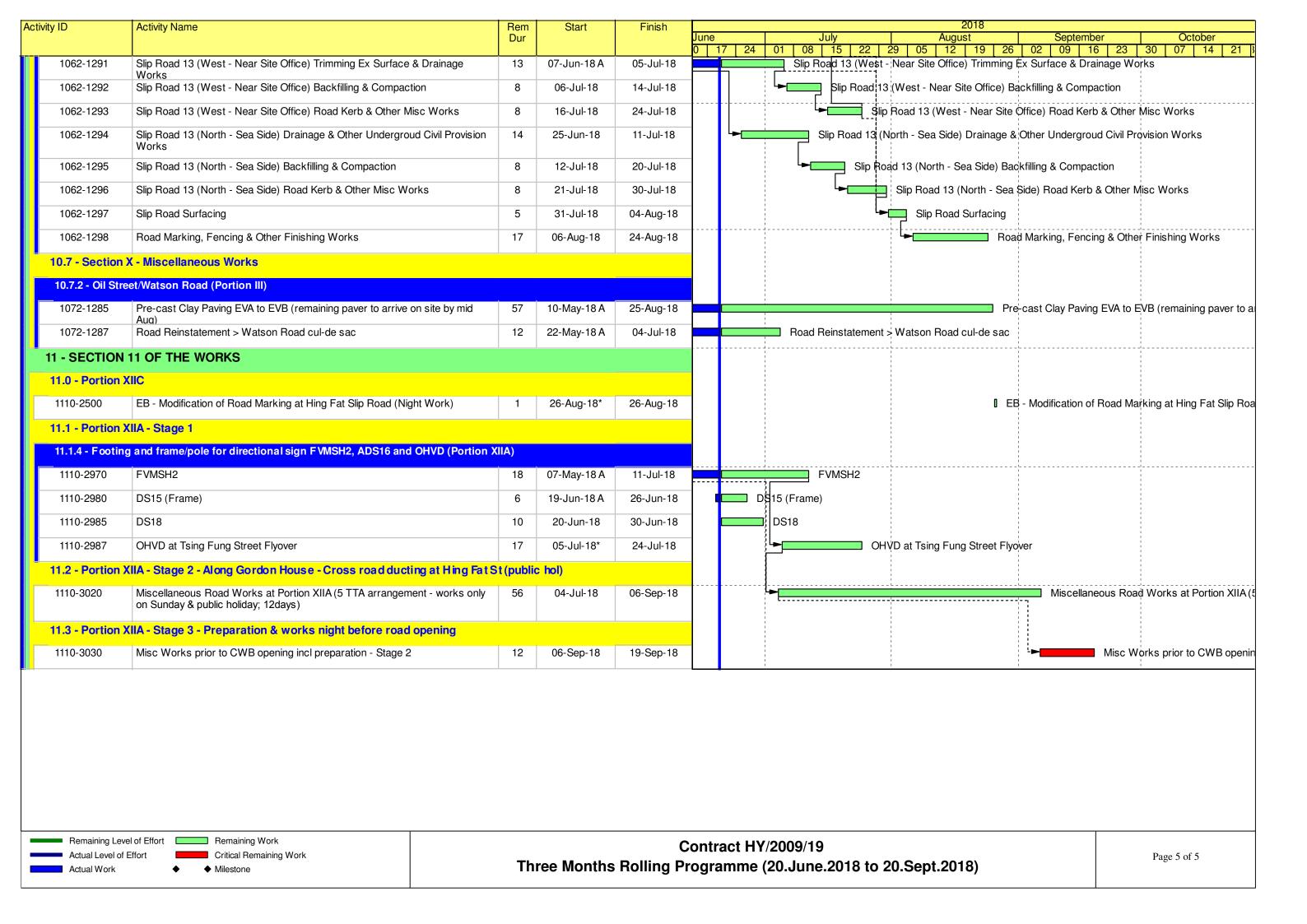


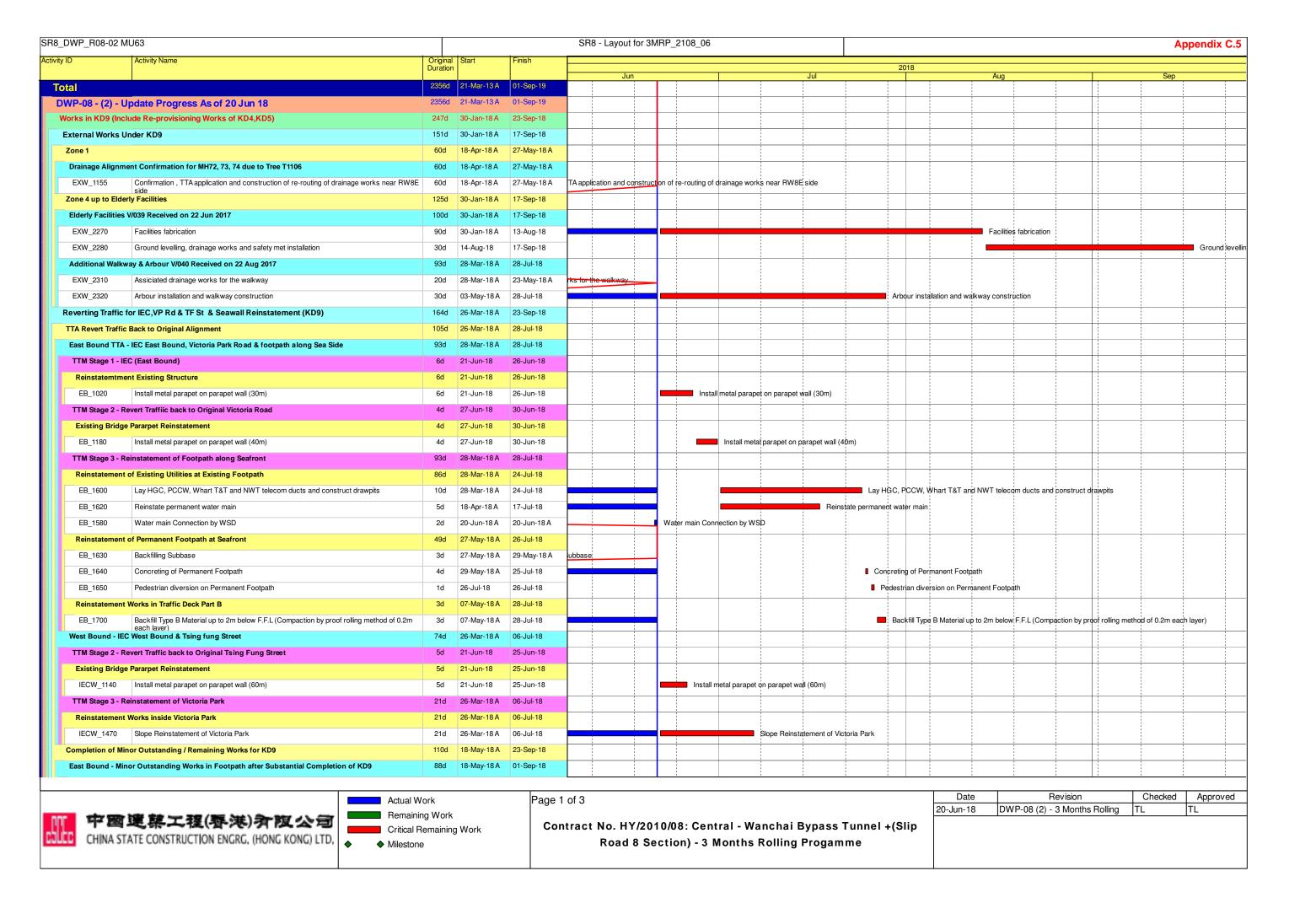


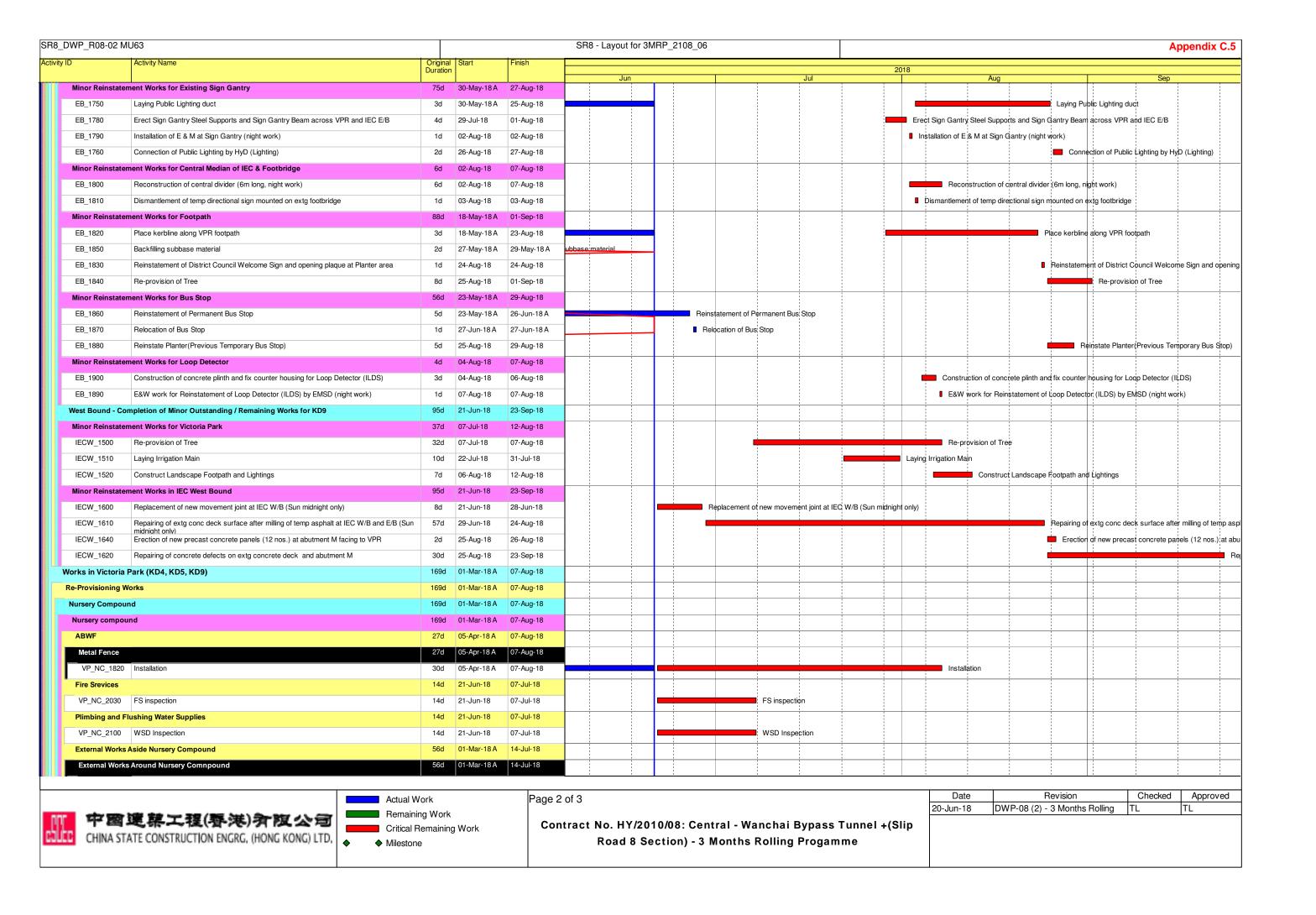


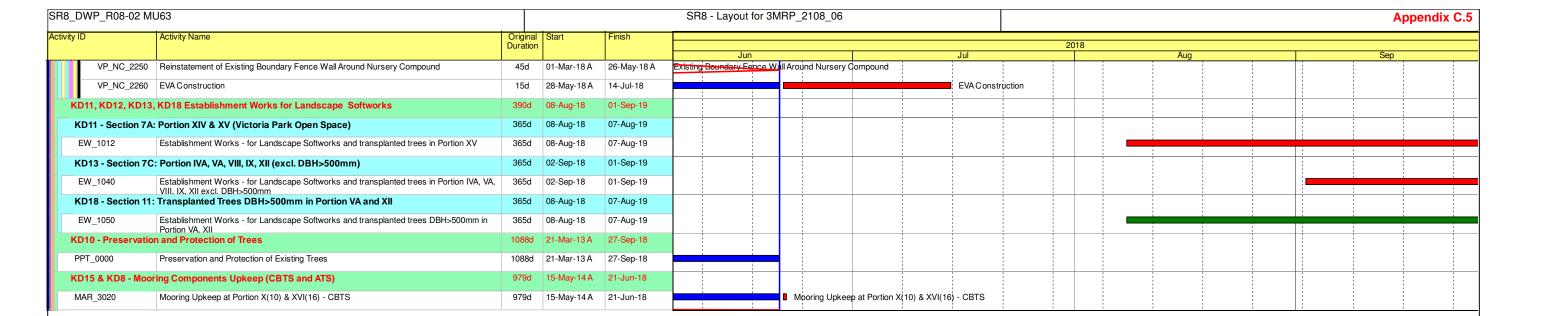


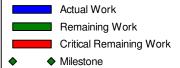












Page 3 of 3

| Contract No. HY/2010/08: Central - Wanchai Bypass Tunnel +(Slip |
|---|
| Road 8 Section) - 3 Months Rolling Progamme                     |

| Date      | Revision                      | Checked | Approved |
|-----------|-------------------------------|---------|----------|
| 20-Jun-18 | DWP-08 (2) - 3 Months Rolling | TL      | TL       |
|           |                               | ,       |          |
|           |                               |         |          |
|           |                               |         |          |
|           |                               |         |          |