



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 ENVIRONMENTAL PERMIT NOS. FEP-02/356/2009,
FEP-03/356/2009, FEP-04/356/2009
FEP-06/356/2009 AND FEP-07/356/2009**

**QUARTERLY ENVIRONMENTAL MONITORING
AND AUDIT REPORT**

- DECEMBER 2015 TO FEBRUARY 2016 -

CLIENTS:

**Civil Engineering and Development
Department**

and

Highways Department

PREPARED BY:

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DATE:

30 March 2016

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30 March 2016

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

By Post and Fax (2691 2649)

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)**

**Quarterly EM&A Report (December 2015 to February 2016) for
EP-356/2009, FEP-02/356/2009, FEP-03/356/2009, FEP-04/356/2009,
FEP-06/356/2009 and FEP-07/356/2009**

Reference is made to the Environmental Team's submission of the captioned Quarterly Environmental Monitoring and Audit (EM&A) Report for December 2015 to February 2016 received by e-mail on 30 March 2016.

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.

c.c.

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HyD
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EXECUTIVE SUMMARY

This is the Quarterly Environmental Monitoring and Audit (EM&A) Report – December 2015 to February 2016 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 28th November 2015 to 26th February 2016.

- ii. The implementation of the Environmental Monitoring and Audit Programme for the Wan Chai Development phase II and Central-Wan Chai Bypass Project has been taken over by the Lam Geotechnics Limited (LGL) under Contract HK/2015/01 – Wan Chai Development Phase II and Central Wanchai Bypass – Sampling, Field Measurement and Testing Works (Stage 3) from 27 December 2015 in continuation of the previous Environmental Team employed under Contact HK/2011/07 – Wan Chai Development Phase II and Central Wanchai Bypass – Sampling, Field Measurement and Testing Works (Stage 2).

Construction Activities for the Reported Period

- iii. Contract no HK/2009/01 was commenced on 23 July 2010. During this reporting period, the principal work activities for Contract no. HK/2009/01 are summarized as below:

Table I Principal Work Activities for Contract no. HK/2009/01

December 2015	January 2016	February 2016
• Nil	• Nil	• Nil

- iv. 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

December 2015	January 2016	February 2016
• Reclamation works was completed	• Nil	<ul style="list-style-type: none"> • Placing berm block in front of seawall • Inspection / Trimming of rockfill profile in front of seawall

- v. Contract no. HY/2009/15 was commenced on 10 November 2010. During this reporting period, the principal work activities for Contract no. HY/2009/15 are summarized as below:

Table III Principal Work Activities for Contract no. HY/2009/15

December 2015	January 2016	February 2016
• Reinstatement of vertical seawall at TPCWAE	• Reinstatement of vertical seawall at TPCWAE	• Reinstatement of vertical seawall at TPCWAE

- vi. 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

December 2015	January 2016	February 2016
• Nil	• Nil	• Nil

- vii. 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

December 2015	January 2016	February 2016
<ul style="list-style-type: none"> • Construction of culvert • Construction of dry dock • Trimming of rock bedding 	<ul style="list-style-type: none"> • Construction of culvert • Construction of dry dock • Trimming of rock bedding 	<ul style="list-style-type: none"> • Construction of culvert • Construction of dry dock • Trimming of rock bedding • Installation of seawall blocks

- viii. 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

December 2015	January 2016	February 2016
• Diversion pipe maintenance	• Diversion pipe maintenance	• Diversion pipe maintenance

Noise Monitoring

- ix. 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. Investigation found that exceedances were not related to the Project.
- x. Four limit level exceedances were recorded at noise monitoring station M1a – Harbour Road Sports Center on 01, 08, 15 and 23 December 2015 in December reporting month. The exceedances were concluded as non-project related.
- xi. Two limit level exceedances were recorded at noise monitoring station M6 – HK Baptist Church Henrietta Secondary School on 11 and 16 December 2015 in December reporting month. The exceedances were concluded as non-project related.
- xii. Two limit level exceedances were recorded at noise monitoring station M1a – Harbour Road Sports Center on 12 and 19 January 2016 in January reporting month. The exceedances were concluded as non-project related.
- xiii. Two limit level exceedances were recorded at noise monitoring station M1a – Harbour Road Sports Center on 16 and 23 February 2016 in February reporting month. The exceedances were concluded as non-project related.

Real-time Noise Monitoring

- xiv. 24-hour real time noise monitoring was conducted at RTN2a – Hong Kong Electric Centre. No project related limit level exceedance was recorded in December reporting month.
- xv. As the land-based piling and filling works under DP3 at Tin Hau had been completed on 3 September 2012 and the marine piling works at North Point has been completed on 4 March 2013 as confirmed by RSS, the reporting of real-time noise monitoring results for RTN1 - FEHD Hong Kong Transport Section Whitfield Depot and RTN2a – Hong Kong Electric Centre was excluded from EP-356/2009 from November 2012 and January 2016 respectively while the reporting of the real-time noise monitoring result under EP-364/2009/D for the above monitoring stations would be continued

Air Quality Monitoring

- i. Due to interruption of electricity supply, the 24hr TSP was rescheduled as follows:
24hr TSP at CMA5b was rescheduled from 2 December 2015 to 3 December 2015 in December reporting month.
24hr TSP at CMA5b was rescheduled from 9 and 21 January 2016 to 11 and 22 January 2016 respectively in January reporting month.
24hr TSP at CMA6a was rescheduled from 27 January 2016 to 28 January 2016 in February reporting month.
24hr TSP at CMA1b was rescheduled from 1 and 11 February 2016 to 2 and 12 February 2016 respectively in February reporting month.
- ii. No action or limit level exceedance for TSP monitoring was recorded in this reporting quarter.
- iii. The location ID of air monitoring station CMA1b was updated as Oil Street Site Office in April 2013.
- iv. 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.
- v. 1hr and 24hr TSP monitoring were conducted at CMA1b, CMA2a, CMA3a, CMA4a, CMA5b and CMA6a in the reporting period.

Water Quality Monitoring

- vi. Due to blockage of access to Water Quality Monitoring Station C7 by obstruction of electric circuit box, water quality monitoring at water quality monitoring station C7 was cancelled on 5 February 2016 during flood tide.
- vii. 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.
- viii. 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.
- ix. 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.

- x. There were 6 action level and 7 limit level of turbidity exceedances, and 1 action level and no limit level of suspended solid exceedances recorded in December reporting month. Investigation found that the turbidity exceedances and suspended solid exceedances recorded in December reporting month were not related to Project works.
- xi. There were 12 action level and 1 limit level of turbidity exceedances recorded in January reporting month. Investigation found that the turbidity exceedances recorded in January reporting month were not related to Project works.
- xii. There were 24 action level and 11 limit level of turbidity exceedances recorded in February reporting month. Investigation found that the turbidity exceedances recorded in February reporting month were not related to Project works.
- xiii. Enhanced DO monitoring at 2 monitoring stations in Causeway Bay Typhoon Shelter and Ex-Public Cargo Works Area was conducted three days per week during the reporting period.
- xiv. There was no action level and 1 limit level exceedances of enhanced dissolved oxygen recorded in December reporting month. Investigation found that the exceedance was not related to Project works.
- xv. There was no action level and 2 limit level exceedances recorded for enhanced dissolved oxygen monitoring in January reporting month. Investigation found that the exceedance was not related to Project works.
- xvi. There was no action level and 2 limit level exceedances recorded for enhanced dissolved oxygen monitoring in February reporting month. Investigation found that the exceedance was not related to Project works.

Complaints, Notifications of Summons and Successful Prosecutions

- xvii. No environmental complaint was received in this reporting quarter.
- xviii. Referring to the complaint case regarding the illegal disposal of construction waste referred by EPD was received by ET on 17 November 2015, the updated 2nd and 3rd interim investigation report were submitted to the EPD on 17 December 2015 and 31 December 2015 respectively. In response to the complaint concern, additional water quality monitoring and additional site inspections have been conducted by the ET and the investigation findings were included in the interim investigation reports separately submitted to the EPD. In addition, the ET and IEC have conducted checking on the waste disposal records and site construction records with the CWB RSS team to confirm the key construction activities during the concerned period and the quantities of inert C&D material disposed. Upon further review on relevant records and follow up inspections on the implementation of site measures, the final investigation would be issued.

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 and FEP-07/356/2009 to implement the Environmental Monitoring and Audit (EM&A) programme as stipulated in the EM&A Manual of the approved Environmental Impact Assessment (EIA) Report for Wan Chai Development phase II and Central-Wan Chai Bypass (Register No.: AEIAR-125/2008) and in the EM&A Manual of the approved EIA Report for Central-Wan Chai Bypass and Island Eastern Corridor Link (Register No. AEIAR-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 [28 November 2015 to 27 February 2016](#).

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
 - Re-provisioning / protection of the existing facilities and structures affected by the land formation works mentioned above

- Extension, modification, re-provisioning or protection of existing storm water drainage outfalls, sewerage outfalls and watermains affected by the revised land use and land formation works mentioned above
- Upgrading of hinterland storm water drainage system and sewerage system, which would be rendered insufficient by the land formation works mentioned above
- Provision of the ground level roads, flyovers, footbridges, necessary transport facilities and the associated utility services
- Construction of the new waterfront promenade, landscape works and the associated utility services
- The Trunk Road (i.e. CWB) within the study area and the associated slip roads for connection to the Trunk Road.

2.2.4. The project also contains various Schedule 2 DPs that, under the EIAO, require Environmental Permits (EPs) to be granted by the DEP before they may be either constructed or operated. **Table 2.1** summarises the five individual DPs under this Project. **Figure 2.1** shows the locations of these Schedule 2 DPs.

Table 2.1 Schedule 2 Designated Projects under this Project

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

2.3 Division of the Project Responsibility

2.3.1 Due to the multi-contract nature of the Project, the status of permits and/or licences under the individual contract(s) are presented as below:

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

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

Contract no. HY/2009/11 – Wan Chai Development Phase II – Central – Wan Chai Bypass - North Point Reclamation

- 2.3.3 The construction works were completed and the FEP-01/356/2009 was surrendered by the Contractor on 22 October 2012.
- 2.3.4 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.
- 2.3.5 The details of individual contracts are summarized in **Table 2.2**.

Table 2.2 Details of Individual Contracts under the Project

Contract No.	Contract Title	Associated DP(s)	Construction Commencement Date
HK/2009/01	Wan Chai Development Phase II – Central –Wanchai Bypass at Hong Kong Convention and Exhibition Centre	DP3, DP6	23 July 2010
		DP1, DP2	25 August 2011
HK/2009/02	Wan Chai Development Phase II – Central – Wan Chai Bypass at WanChai East	DP3, DP5	5 July 2010
		DP1	26 April 2011
HY/2009/11	Wan Chai Development Phase II and Central – Wan Chai Bypass – North Point Reclamation	DP3	17 March 2010 (Completed)
HY/2009/15	Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section)	DP3	10 November 2010
		DP1	13 July 2011
HK/2010/06	Wan Chai Development Phase II-Central-Wan Chai Bypass over MTR Tsuen Wan Line	DP3	22 March 2011 (Completed)
04/HY/2006	Reconstruction of Bus Terminus near Man Yiu Street and Man Kwong Street	DP1	September 2010 (Completed)
HY/2009/17	Central - Wan Chai Bypass (CWB) at FEHD Whitfield Depot - Advanced piling works.	DP1	5 October 2010 (Completed)
HY/2009/18	Central - Wan Chai Bypass (CWB) – Central Interchange	DP1	10 March 2014
HY/2009/19	Central - Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link	DP1	24 March 2011
HK/2012/08	Wan Chai Development Phase II Central-Wan Chai Bypass at Wan Chai West	DP1,DP2, DP3	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 **Figure 2.2**. Key personnel and contact particulars are summarized in **Table 2.3**:

Table 2.3 Contact Details of Key Personnel

Party	Role	Post	Name	Contact No.	Contact Fax
AECOM	Engineer's Representative for WDII	Principal Resident Engineer	Mr. Frankie Fan	2587 1778	2587 1877
	Engineer's Representative for CWB	Principal Resident Engineer	Mr. Peter Poon	3912 3388	3912 3010
Chun Wo – Leader Joint Venture	Contractor under Contract no. HK/2009/01	Project Manager	Mr. Simon Liu	9304 8355	2587 1878
		Site Agent	Mr. Andy Yu	9648 4896	
		Engineer Manager	Mr. Terry Wong	9757 9846	
		Construction Manager	Mr. Wyman Wong	9627 2467	
		Construction Manager	Mr. Kenneth Chan	9160 3850	
		Environmental Officer	Ms. Wendy Ng	9803 0057	
		Assistant Environmental Engineer	Miss. Connie Chan	6157 7057	
Chun Wo – CRGL Joint Venture	Contractor under Contract no. HK/2009/02	Project Manager	Mr. Paul Yu	3658 3085	2827 9996
		Quality & Environmental Manager	Mr. C.P. Ho	9191 8856	
China State Construction Engineering (HK) Ltd.	Contractor under Contract no. HY/2009/15	Project Director	Chris Leung	3557 6393	2566 2192
		Site Manager	Y Huo	3557 6368	
		Contractor's Representative	Rex Lau	3557 6405	
		Contractor's Representative	Gene Cheung	3557 6395	
		Environmental Officer	Andy Mak	3557 6347	
Chun Wo -	Contractor	Project Manager	Rayland Lee	3758 6788	2570 8013

Party	Role	Post	Name	Contact No.	Contact Fax
CRGL - MBEC_Joint Venture	under Contract no. HY/2009/19	Site Agent	David Lau	3758 8879	
		Environmental Manager / Environmental Officer	Eric Fong	6191 9337	
		Construction Manager (Marine)	M.H. Isa	9884 0810	
		Construction Manager (Land)	Andy Chan	9879 4325	
		Construction Manager (Land)	Bear Ding	6483 6198	
		Operation Manager (Land)	Yung Kwok Wah	9834 1010	
China State-Leader JV	Contractor under Contract no. HK/2012/08	Project Director	C. N. Lai	9106 5806	2877 1522
		Project Manager	Eddie Chung	9189 8118	
		Site Agent	Keith Tse	9037 1839	
		Environmental Officer	James Ma	9130 9549	
		Environmental Supervisor	Y. L. Ho	9856 5669	
China State	Contractor under Contract no. HY/2010/08	Project Director	Chris Leung	3467 4299	2566 8061
		Project Manager	Chan Ying Lun	3418 3001	
		Site Agent	Dave Chan	3467 4277	
		Environmental Officer	Gabriel Wong	35576466	
		Environmental Supervisor	Desmond Ho Tsz Ho	3557 6466	
Ramboll Environ Hong Kong Limited	Independent Environmental Checker (IEC)	Independent Environmental Checker (IEC)	Mr. David Yeung	34652888	34652899
Lam Geotechnics Limited	Environmental Team (ET)	Environmental Team Leader (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/2009/01 are summarized in **Table 2.4**.

Table 2.4 Principal Work Activities for Contract no. HK/2009/01

December 2015	January 2016	February 2016
• Nil	• Nil	• Nil

2.5.2. 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

December 2015	January 2016	February 2016
• Reclamation works was completed	• Nil	<ul style="list-style-type: none"> • Placing berm block in front of seawall • Inspection / Trimming of rockfill profile in front of seawall

2.5.3. Major construction activities for Contract no. HY/2009/15 was commenced on 10 November 2010. During this reporting period, the principal work activities for Contract no. HY/2009/15 are summarized as below:

Table 2.6 Principal Work Activities for Contract no. HY/2009/15

December 2015	January 2016	February 2016
• Reinstatement of vertical seawall at TPCWAE	• Reinstatement of vertical seawall at TPCWAE	• Reinstatement of vertical seawall at TPCWAE

2.5.4. 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

December 2015	January 2016	February 2016
• Nil	• Nil	• Nil

2.5.5. 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

December 2015	January 2016	February 2016
<ul style="list-style-type: none"> • Construction of culvert • Construction of dry dock • Trimming of rock bedding 	<ul style="list-style-type: none"> • Construction of culvert • Construction of dry dock • Trimming of rock bedding 	<ul style="list-style-type: none"> • Construction of culvert • Construction of dry dock • Trimming of rock bedding • Installation of seawall blocks

2.5.6. 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

December 2015	January 2016	February 2016
<ul style="list-style-type: none">• Diversion pipe maintenance	<ul style="list-style-type: none">• Diversion pipe maintenance	<ul style="list-style-type: none">• Diversion pipe maintenance

2.5.7. 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	Harbour Road Sports Centre
M2b	Noon Gun Area
M3a	Tung Lo Wan Fire Station
M4b	Victoria Centre
M5b	City Garden
M6	HK Baptist Church Henrietta Secondary School

REAL TIME NOISE MONITORING STATIONS

- 3.1.2. As the land-based piling and filling works under DP3 at Tin Hau had been completed on 3 September 2012 and the marine piling works at North Point has been completed on 4 March 2013 as confirmed by RSS, the reporting of real-time noise monitoring results for RTN1 - FEHD Hong Kong Transport Section Whitfield Depot and RTN2a – Hong Kong Electric Centre was excluded from EP-356/2009 from November 2012 and January 2016 respectively while the reporting of the real-time noise monitoring result under EP-364/2009/D for the above monitoring stations would be continued.

NOISE MONITORING PARAMETERS, FREQUENCY AND DURATION

- 3.1.3. The construction noise level shall be measured in terms of the A-weighted equivalent continuous sound pressure level (L_{eq}). $L_{eq(30\text{ minutes})}$ shall be used as the monitoring parameter for the time period between 0700 and 1900 hours on normal weekdays. For all other time periods, $L_{eq(5\text{ minutes})}$ shall be employed for comparison with the Noise Control Ordinance (NCO) criteria. Supplementary information for data auditing, statistical results such as L10 and L90 shall also be obtained for reference.
- 3.1.4. 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.

- 3.1.5. 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.
- 3.1.6. 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:
- 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

- 3.1.7. As referred to in the Technical Memorandum TM 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.
- 3.1.8. 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 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 **Figure 3.1** 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 **Appendix 3.1**.

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 Intake			
WSD19	Sheung Wan	833415.0	816771.0
Cooling Water Intake			
C1	HKCEC Extension	835885.6	816223.0

Station Ref.	Location	Easting	Northing
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 (Wanchai Tower / Revenue Tower / Immigration Tower)	835895.2	816215.2
Cooling Water Intake / WSD Salt Water Intake			
RW21-P789	Great Eagle Centre/ Sun Hung Kai Centre/ WSD Wanchai salt water 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 temporarily suspended since 8 Feb 2012, and WSD9 and WSD17 was implemented with respect to HK/2009/02 from 8 Feb 2012 onwards.
 - C8 and C9 were implemented with respect to HY/2009/19 from 28 Jan 2012.
 - C8 & C9 were 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 March 2014
 - WSD9 and WSD17 water quality monitoring station was temporarily suspended since 8 September 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

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

Notes:

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 south-western and south-eastern corners of the ex-Wan Chai Public Cargo Working Area. The proposed water quality monitoring stations of the Project are shown in **Table 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

Remarks:

1. Enhanced DO monitoring at Windsor House Cooling (Station Ref: C7) was temporarily suspended since 22 October 2014 with respect to the formation of temporary reclamation zone TS3 and to be resumed upon removal of the respective temporary reclamation zone.
 2. Enhanced DO monitoring at Monitoring station at Ex-PCWAE was temporarily suspended from 31 August 2015 with respect to seawall reinstatement works and formation of active works area, to be resumed upon completion of seawall reinstatement works
- 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 turbidity at the cooling water intakes (C6 and C7) shall be established by setting up a continuous water quality monitoring station in front of the intakes during the dredging activities. The monitoring system include the turbidity sensor and data logger which is capable of data capturing at every 5 minutes. The data shall be downloaded daily and compared with the Action and Limit level determined during the baseline water quality monitoring at the cooling water intake locations.

ADDITIONAL DISSOLVED OXYGEN MONITORING FOR CULVERT L WATER DISCHARGE FLOW

- 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 [Figure 2.1](#) and [Figure 3.1](#). 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.

4.1. Noise Monitoring Results

Contract no. HK/2009/01 - Wan Chai Development Phase II – Central –Wanchai Bypass at HKCEC and Contract no. HK/2009/02 - Wan Chai Development Phase II – Central – Wan Chai Bypass at WanChai East

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/2009/01 and HK/2009/02

Station	Description
M1a	Harbour Road Sports Centre

4.1.2. Four limit level exceedances were recorded at M1a- Harbour Road Sports Centre on 01, 08, 15 and 23 December 2015 in December reporting month.

4.1.3. Breaking works at Ex- Wan Chai Swimming Pool (adjacent to Harbour Road Sports Centre directly opposite to the monitoring station) under non WDII-CWB Contractor was observed as the major noise contribution during monitoring on 01, 08, 15 and 23 December 2015. As such, the exceedance was considered as non-Project related.

4.1.4. Two limit level exceedances were recorded at M1a- Harbour Road Sports Centre on 12 and 19 January 2016 in October reporting month.

4.1.5. Breaking and piling works at Ex- Wan Chai Swimming Pool (adjacent to Harbour Road Sports Centre directly opposite to the monitoring station) under non WDII-CWB Contractor was observed as the major noise contribution during monitoring on 12 and 19 January 2016. As such, the exceedance was considered as non-Project related.

4.1.6. Two limit level exceedances were recorded at M1a- Harbour Road Sports Centre on 16 and 23 February 2016 in February reporting month.

- 4.1.7. Piling works and operation of multiple air compressors at Ex- Wan Chai Swimming Pool (adjacent to Harbour Road Sports Centre directly opposite to the monitoring station) under non WDII-CWB Contractor was observed as the major noise contribution during monitoring on 16 and 23 February 2016. As such, the exceedance was considered as non-Project related.

Noise monitoring results measured in this reporting period are reviewed and summarized. Details of graphical presentation can be referred in **Appendix 4.1**.

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

- 4.1.8. The noise monitoring for HY/2009/15 was commenced on 10 November 2010. The proposed division of noise monitoring stations are summarized in **Table 4.2** below.

Table 4.2 Noise Monitoring Station for Contract nos. HY/2009/15

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

- 4.1.9. No action or limit level exceedance was recorded in this report quarter.

Noise monitoring results measured in this reporting period are reviewed and summarized. Details of graphical presentation can be referred in **Appendix 4.1**.

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

- 4.1.10. 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.

- 4.1.11. 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

- 4.1.12. Two limit level exceedances were recorded at monitoring station M6 - HK Baptist Church Henrietta Secondary School on 11 and 16 December 2015 in December reporting month.

- 4.1.13. Major traffic noise observed during monitoring was considered as the major noise contribution. As such, the limit level exceedances were concluded as non-project related.
- 4.1.14. No action or limit level exceedance was recorded in January reporting month.
- 4.1.15. No action or limit level exceedance was recorded in February reporting month.
- 4.1.16. Noise monitoring results measured in this reporting period are reviewed and summarized. Details of graphical presentation can be referred in [Appendix 4.1](#).

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

- 4.1.17. 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
M3a	Tung Lo Wan Fire Station

- 4.1.18. No action or limit level exceedance was recorded in the reporting quarter.
- 4.1.19. Noise monitoring results measured in this reporting period are reviewed and summarized. Details of noise monitoring results and graphical presentation can be referred in [Appendix 4.1](#).

4.2. Real Time Noise Monitoring Results

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

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

4.2.4 Real-time noise monitoring at FEHD Hong Kong Transport Section Whitfield Depot commenced external wall renovation since 1 June 2012

Table 4.5 Real Time Noise Monitoring Station for Contract no. HY/2009/19

District	Station	Description
North Point	RTN2a	Electric Centre

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

4.2.1 Limit level exceedance was recorded at RTN2a-Electric Centre on 15 December 2015 during daytime in December reporting month. On 15 December 2015, concreting was undertaken by Contract HY/2009/19 while steel bar cutting works by saw cutter for Hong Kong Electric Centre was conducted at the roof top by non-CWB Contractor immediately next to the noise monitoring station and was considered as major noise contribution. As such, the exceedance was considered as non-Project related.

4.3. Air Monitoring Results

4.3.1. 1hr and 24hr TSP monitoring were conducted at CMA1b, CMA2a, CMA3a, CMA4a, CMA5b and CMA6a in the reporting period.

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

4.3.2. Air monitoring was commenced on 1 April 2011 in response to the commencement of the land-filling work for Contract no. HK/2009/01. The proposed division of air monitoring stations are summarized in **Table 4.6** below.

Table 4.6 Air Monitoring Stations for Contract no. HK/2009/01

Station	Description
CMA5b	Pedestrian Plaza
CMA6a	WDII PRE Site Office *

4.3.3. No action or limit exceedance was recorded in this reporting quarter.

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

4.3.4. 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 4.7** below.

Table 4.7 Air Monitoring Station for Contract no. HK/2009/02

Station	Description
CMA4a	Society for the Prevention of Cruelty to Animals

4.3.5. No action or limit level exceedance was recorded in March, April and May reporting month.

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

4.3.6. Air monitoring was commenced on 15 March 2011 for the land filling work for Contract no. HY/2009/15. The proposed division of air monitoring stations are summarized in **Table 4.8** below.

Table 4.8 Air Monitoring Station for Contract no. HY/2009/15

Station	Description
CMA3a	CWB PRE Site Office

4.3.7. No action or limit exceedance was recorded in this reporting quarter.

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

4.3.8. 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.

4.3.9. The proposed division of air monitoring stations is summarized in **Table 4.9** below.

Table 4.9 Air Monitoring Stations for Contract no. HY/2009/19

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

4.3.10. No action or limit exceedance was recorded in this reporting quarter.

4.4 Water Monitoring Results

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

4.4.1. Water quality monitoring for Contract no. HK/2009/01 was commenced on 23 July 2010. The proposed division of water monitoring stations is summarized in **Table 4.10** below.

4.4.2. Water quality monitoring station RW21-P789 has been implemented with respect to HK/2009/02 started on 29 July 2013.

Table 4.10 Water Monitoring Stations for Contract no. HK/2009/01

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

- 4.4.3. There was one limit level turbidity exceedance recorded at C1 on 26 December 2015 in the reporting month.
- 4.4.4. After checking with the contractor, no marine activity was conducted on 26 December 2015. In view of no marine activity was conducted and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.
- 4.4.5. No action or limit level exceedances recorded in January reporting month.
- 4.4.6. There were 3 action level and 1 limit level turbidity exceedances recorded at C1 on 29 January 2016, 1, 3 and 11 February 2016 in February reporting month.
- 4.4.7. After checking with the contractor, no marine construction activity was conducted on 29 January 2016, 1, 3 and 11 February 2016. In view of no marine activity conducted, it was considered that the exceedances were not project related.

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

- 4.4.8. 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 4.11** below.

Table 4.11 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

- 4.4.9. There were one action and one limit level of turbidity exceedances recorded at RW21-P789 on 30 November 2015 and 18 December 2015 in December reporting month.
- 4.4.10. After checking with the contractor, no marine construction activity was conducted on 30 November 2015 and 18 December 2015. The installed silt screen was generally in order. In view of no marine activity conducted and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedances were not project related.
- 4.4.11. There was one limit level turbidity exceedances recorded at C1 on 26 December 2015 in December reporting month.

- 4.4.12. After checking with the contractor, no marine activity was conducted on 26 December 2015 while the location of the construction area was located at downstream of C1 monitoring station. In view of no marine activity was conducted and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.
- 4.4.13. There were 5 action level turbidity exceedances recorded at RW21-P789 on 30 December 2015, 15, 20, 22 and 25 January 2016 in January reporting month.
- 4.4.14. After checking with the contractor, no marine construction activity was conducted on 30 December 2015, 15, 20, 22 and 25 January 2016. The installed silt screen was generally in order. In view of no marine activity conducted and no exceedance was recorded during the subsequent monitoring on 2 January 2016 ebb tide, 18 January 2016 flood tide, 20 January 2016 ebb tide, 22 January 2016 ebb tide and 27 January 2016 ebb tide, it was considered that the exceedances were not project related.
- 4.4.15. There were 7 action level and 2 limit level turbidity exceedances recorded at RW21-P789 on 27 and 29 January 2016, 1, 3, 5, 11 and 13 February 2016 in February reporting month.
- 4.4.16. After checking with the contractor, despite placing berm block was conducted on 1 February 2016, contractor mitigation measure including the use of silt curtain was in place. The installed silt screen was generally in order. In view of the above, it was considered that the exceedance was not project related.
- 4.4.17. No marine construction activity was conducted on 27 and 29 January 2016, 3, 5, 11 and 13 February 2016. The installed silt screen was generally in order. In view of no marine activity conducted, it was considered that the exceedances were not project related.
- 4.4.18. There were 3 action level and 1 limit level turbidity exceedances recorded at C1 on 29 January 2016, 1, 3 and 11 February 2016 in February reporting month.
- 4.4.19. After checking with the contractor, despite placing berm block was conducted on 1 February 2016, contractor mitigation measure including the use of silt curtain was in place. The installed silt screen was generally in order. In view of the above and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.
- 4.4.20. No marine construction activity was conducted on 29 January 2016, 3 and 11 February 2016. The installed silt screen was generally in order. In view of no marine activity conducted, it was considered that the exceedances were not project related.

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

- 4.4.21. Water monitoring for Contract no. HK/2012/08 was commenced on 5 March 2013. The proposed division of water monitoring stations are summarized in **Table 4.12** below.

Table 4.12 Water Monitoring Stations for Contract no. HK/2012/08

Station Ref.	Location	Easting	Northing
WSD Salt Water Intake			
WSD19	Sheung Wan	833415.0	816771.0
Cooling Water Intake			
P1	HKCEC Phase I	835774.7	816179.4
P3	The Academy of performing Arts	835824.6	816212.0
P4	Shui on Centre	835865.6	816220.0
P5	Government Buildings (Wanchai Tower / Revenue Tower / Immigration Tower)	835895.2	816215.2

- 4.4.22. There were 5 action level and 4 limit level of turbidity exceedances recorded at WSD19 on 30 November 2015, 2, 7, 16, 18, 23 and 26 December 2016 in December reporting month.
- 4.4.23. After checking with contractor, despite trimming of grade 400 rock bedding was conducted near Zone A1 on 30 November 2015, 2 and 23 December 2015, contractor mitigation measures including the use of localized silt curtain was generally in place. In view of the above, the exceedances were considered not project related.
- 4.4.24. Despite installation of slotted panels was conducted near Zone A2 on 7 December 2015, constructor mitigation measures including the use of localized silt curtain was generally in place. In view of the above and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.
- 4.4.25. No marine construction activity was conducted on 16, 18 and 26 December 2015. In view of no marine activity conducted, it was considered that the exceedances were not project related.
- 4.4.26. There was one limit level turbidity exceedance recorded at monitoring station P5 on 7 December 2015 in December reporting month.
- 4.4.27. After checking with contractor, despite installation of slotted panels was conducted near Zone A2 on 7 December 2015, contractor mitigation measures including the use of localized silt curtain was generally in place. In view of no turbidity exceedance recorded at the monitoring stations located between construction area and P5 monitoring station and no turbidity exceedance was recorded on the subsequent monitoring, it was considered that the turbidity was not project related.
- 4.4.28. There was one action level suspended solid exceedance recorded at monitoring station P5 on 7 December 2015 in December reporting month.
- 4.4.29. After checking with contractor, despite installation of slotted panels was conducted near Zone A2 on 7 December 2015, contractor mitigation measures including the use of localized silt curtain was generally in place. In view of no suspended solid exceedance recorded at the monitoring stations located between construction area and P5 monitoring station and no

- suspended solid exceedance was recorded on the subsequent monitoring, it was considered that suspended solid exceedance was not project related.
- 4.4.30. There were 5 action level turbidity exceedances recorded at WSD19 on 28 and 30 December 2015, 18, 20 and 25 January 2016 in January reporting month.
- 4.4.31. After checking with contractor, despite trimming of grade 400 rock mound was conducted near Zone D on 28 December 2015, 18, 20 and 25 January 2016, contractor mitigation measures including the use of localized silt curtain was generally in place. In view of the above, and no exceedance was recorded during the subsequent monitoring on 30 December 2015 ebb tide, 18 January 2016 ebb tide, 20 January 2016 ebb tide and 27 January 2016 ebb tide, the exceedances were considered not project related.
- 4.4.32. Despite trimming of armour rocks was conducted near Zone B/A2 on 30 December 2015, contractor mitigation measures including the use of localized silt curtain was generally in place. In view of the above and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.
- 4.4.33. There were 9 action level and 3 limit level turbidity exceedances recorded at WSD19 on 27 and 29 January 2016, 1, 3, 5, 11, 13, 15 and 24 February 2016 in February reporting month.
- 4.4.34. After checking with contractor, despite installation of seawall blocks was conducted near Zone D on 27 and 29 January 2016, 3, 13, and 15 February 2016, contractor mitigation measures including the use of localized silt curtain was in place. In view of the above, it was considered that the exceedances were not project related.
- 4.4.35. Despite trimming of grade 400 rock mound was conducted near Zone D on 1 and 24 February 2016, contractor mitigation measures including the use of localized silt curtain was generally in place. In view of the above, it was considered that the exceedances were not project related.
- 4.4.36. Despite placing of levelling stones was conducted near Zone D on 5 February 2016, contractor mitigation measures including the use of localized silt curtain was generally in place. In view of the above and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.
- 4.4.37. No marine activity was conducted on 11 February 2016. In view of no marine activity conducted, it was considered that the exceedances were not project related.
- 4.4.38. There were 3 action level and 1 limit level turbidity exceedances recorded at P1 on 27 and 29 January 2016, 1 and 5 February 2016 in February reporting month.
- 4.4.39. After checking with contractor, despite installation of seawall blocks was conducted near Zone D on 27 and 29 January 2016, contractor mitigation measures including the use of localized silt curtain was in place. The construction area was located at downstream of P1 monitoring station during monitoring period. In view of the above, it was considered that the exceedances were not project related.

- 4.4.40. Despite trimming of grade 400 rock mound was conducted near Zone D on 1 February 2016, contractor mitigation measures including the use of localized silt curtain was generally in place. The construction area was located at downstream of P1 monitoring station during monitoring period. In view of the above and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedances were not project related.
- 4.4.41. Despite placing of levelling stones was conducted near Zone D on 5 February 2016, contractor mitigation measures including the use of localized silt curtain was generally in place. The construction area was located at downstream of P1 monitoring station during monitoring period. In view of the above and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.
- 4.4.42. There was 1 action level turbidity exceedance recorded at P3 on 29 January 2016 in February reporting month.
- 4.4.43. Despite installation of seawall blocks was conducted near Zone D on 29 January 2016, contractor mitigation measures including the use of localized silt curtain was in place. The construction area was located at downstream of P3 monitoring station. In view of the above and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.
- 4.4.44. There were 2 limit level turbidity exceedances recorded at P4 on 27 and 29 January 2016 in February reporting month.
- 4.4.45. After checking with contractor, despite installation of seawall blocks was conducted near Zone D on 27 and 29 January 2016, contractor mitigation measures including the use of localized silt curtain was in place. The construction area was located at downstream of P4 monitoring station during monitoring period. In view of the above, it was considered that the exceedances were not project related.
- 4.4.46. There were 2 limit level turbidity exceedances recorded at P5 on 27 and 29 January 2016 in February reporting month.
- 4.4.47. After checking with contractor, despite installation of seawall blocks was conducted near Zone D on 27 and 29 January 2016, contractor mitigation measures including the use of localized silt curtain was in place. The construction area was located at downstream of P5 monitoring station during monitoring period. In view of the above, it was considered that the exceedances were not project related.

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

- 4.4.48. Due to the commencement of the maintenance dredging on 10 November 2010, water quality monitoring for Contract no. HY/2009/15 was commenced on 9 November 2010. The proposed division of water monitoring stations is summarized in **Table 4.13** and **Table 4.14** below.

Table 4.13 Water Monitoring Stations for Contract no. HY/2009/15

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

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

Table 4.14 Enhance Dissolved Oxygen Monitoring Stations for Contract no. HY/2009/15

Station Ref.	Location
C6	Excelsior Hotel
Ex-WPCWA SW	South-western of the ex-Wan Chai Public Cargo Working Area

Remarks:

- Enhanced DO monitoring at Windsor House Cooling (Station Ref: C7) was temporarily suspended since 22 October 2014 with respect to the formation of temporary reclamation zone TS3 and to be resumed upon removal of the respective temporary reclamation zone.
- Enhanced DO monitoring at Monitoring station at Ex-PCWAE was temporarily suspended from 31 August 2015 with respect to seawall reinstatement works and formation of active works area, to be resumed upon completion of seawall reinstatement works

- 4.4.49. There was one limit level DO exceedance was recorded at Ex-WPCWA SW on 21 December 2015 in December reporting month.
- 4.4.50. After checking with contractor, despite seawall reinstatement works was conducted at TPCWAE on 21 December 2015, contractor mitigation measures including the use of silt curtain was generally in order while upstream discharge from nearby culvert was noted. In view of the above and no exceedance was recorded on the subsequent monitoring, the exceedance was considered not related to Project works.
- 4.4.51. There were 2 limit level DO exceedances recorded at Ex-WPCWA SW on 2 January 2016 in January reporting month.
- 4.4.52. After checking with contractor, despite seawall reinstatement works was conducted at TPCWAE on 2 January 2016, contractor mitigation measures including the use of silt curtain was generally in order while upstream discharge from nearby culvert was noted. In view of the above, the exceedance was considered not related to Project works. The DO level has returned to normal level on 4 January 2016 flood tide.
- 4.4.53. There were 2 action level and 1 limit level turbidity exceedances recorded at C7 on 30 December 2015, 4 and 22 January 2016 in January reporting month.
- 4.4.54. After checking with contractor, no marine construction activities was conducted at Causeway Bay Typhoon Shelter on 30 December 2015, 4 and 22 January 2016. In view of no marine construction activities was conducted and no exceedance was recorded during the subsequent monitoring on 30 December 2015 flood tide, 4 January 2016 ebb tide and 22 January 2016 ebb tide, it was considered that the exceedance was not project related.

- 4.4.55. There were 2 limit level DO exceedances recorded at Ex-WPCWA SW on 11 and 24 February 2016 in February reporting month.
- 4.4.56. After checking with contractor, no marine activity was conducted at TPCWAE on 11 and 24 February 2016, while upstream discharge from nearby culvert was noted. In view of no marine activity was conducted and no exceedance was recorded on the subsequent monitoring, the exceedances were considered not related to Project works.
- 4.4.57. There was 1 action level turbidity exceedance recorded at C7 on 1 February 2016 in February reporting month.
- 4.4.58. After checking with contractor, no marine construction activity was conducted at Causeway Bay Typhoon Shelter on 1 February 2016. In view of no marine construction activities was conducted and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.

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

- 4.4.59. The proposed division of water quality monitoring stations are summarized in **Table 4.15** and **Table 4.16** below:

Table 4.15 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

Table 4.16 Enhance Dissolved Oxygen Monitoring Stations for Contract no. HY/2010/08

Station Ref.	Location
C6	Excelsior Hotel

Remarks:

- 1. Enhanced DO monitoring at Windsor House Cooling (Station Ref: C7) was temporarily suspended since 22 October 2014 with respect to the formation of temporary reclamation zone TS3 and to be resumed upon removal of the respective temporary reclamation zone.
- 4.4.60. No action or limit level exceedance was recorded in December reporting month.
- 4.4.61. There were 2 action and 1 limit level turbidity exceedances recorded at C7 on 30 December 2015, 4 and 22 January 2016 in January reporting month.
- 4.4.62. After checking with contractor, no marine construction activities was conducted on 30 December 2015, 4 and 22 January 2016. The installed silt screen was in place. In view of no marine construction activities was conducted and no exceedance was recorded during the subsequent monitoring on 30 December 2015 flood tide, 4 January 2016 ebb tide and 22 January 2016 ebb tide, it was considered that the exceedance was not project related.
- 4.4.63. There was 1 action level turbidity exceedance recorded at C7 on 1 February 2016 in February reporting month.

- 4.4.64. After checking with contractor, no marine construction activity was conducted on 1 February 2016, and the installed silt screen was in place. In view of no marine construction activities was conducted and no exceedance was recorded on the subsequent monitoring, it was considered that the exceedance was not project related.

4.5 Waste Monitoring Results

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

- 4.5.1. No Inert C&D waste and non-inert C&D waste was disposed of for the site works in this reporting period. Details of the waste flow table are summarized in **Table 4.17**.

Table 4.17 Details of Waste Disposal for Contract no. HK/2009/01

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

- 4.5.2. There were 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.

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

4.5.3. No Inert and 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 4.18**.

Table 4.18 Details of Waste Disposal for Contract no. HK/2009/02

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

4.5.4. 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.

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

4.5.5. No inert and 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. HY/2009/15

Waste Type	Quantity this quarter	Cumulative Quantity-to-Date	Disposal / Dumping Grounds	Remarks
Inert C&D materials disposed, m ³	NIL	141579.2	Tuen Mun Area 38	NIL
	NIL	65216	TKO137 FB	NIL
Inert C&D materials recycled, m ³	NIL	304	Ex-PCWA	NIL
	NIL	111.9	TS4	NIL
Non-inert C&D materials disposed, m ³	NIL	252.2	SENT Landfill	NIL
Non-inert C&D materials recycled, kg	NIL	299361.5	N/A	NIL

Waste Type	Quantity this quarter	Cumulative Quantity-to-Date	Disposal / Dumping Grounds	Remarks
Chemical waste disposed, kg	NIL	8,200	N/A	NIL
Marine Sediment (Type 1 – Open Sea Disposal) , m ³	NIL	156909 (Bulk Volume)	South of Cheung Chau	Dredging from TCBR1E / TCBR1W / TCBR2/ TCBR3 / TCBR4 / Maintenance dredging
Marine Sediment (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal) , m ³	NIL	322796 (Bulk Volume)	East of Sha Chau	Dredging from TCBR1E / TCBR1W / TCBR2/ TCBR3 / TCBR4 / Maintenance dredging
Marine Sediment (Type 3 – Special Treatment / Disposal contained in Geosynthetic Containers)	NIL	12640 (Bulk Volume)	East of Sha Chau	Dredging from TCBR1W / Maintenance dredging
Marine Sediment (Type 2 – Confined Marine Disposal), m ³	NIL (Bulk Volume)	9350 (Bulk Volume)	East of Sha Chau	Dredging from Eastern Breakwater of CBTS
Marine Sediment (Type 1 – Open Sea Disposal) , m ³	NIL (Bulk Volume)	600 (Bulk Volume)	East Sha Chau / South of The Brothers	Dredging from Phase 3 Mooring Re-arrangement
Marine Sediment (Type 2– Confined Marine Disposal) , m ³	NIL (Bulk Volume)	14,780 (Bulk Volume)	South of The Brothers	Dredging from Phase 3 Mooring Re-arrangement
Marine Sediment (Type 3 – Special Treatment / Disposal contained in Geosynthetic Containers) , m ³	NIL (Bulk Volume)	2,760 (Bulk Volume)	South of The Brothers	Dredging from Phase 3 Mooring Re-arrangement

4.5.6. 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 in this reporting quarter.

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

4.5.7. 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 4.20**.

Table 4.20 Details of Waste Disposal for Contract no. HY/2009/19

Waste Type	Quantity this month	Cumulative Quantity-to-Date	Disposal / Dumping Grounds
Inert C&D materials disposed, m ³	NIL	355921.04	TM38
Inert C&D materials recycled,	NIL	59367	N/A

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

- 4.5.8. There were no marine sediments Type1- Open Sea Disposal and there were 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

- 4.5.9. No Inert and non-inert C&D waste was 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. HK/2012/08

Waste Type	Quantity this month	Cumulative Quantity-to-Date	Disposal / Dumping Grounds
Inert C&D materials disposed, m ³	NIL	4131	TM38
Inert C&D materials recycled, m ³	NIL	NIL	N/A
Non-inert C&D materials disposed, m ³ *	NIL	315	N/A
Non-inert C&D materials recycled, kg	NIL	NIL	N/A
Chemical waste disposed, L	NIL	NIL	N/A
Marine Sediment (Type 1 – Open Sea Disposal), m ³ *	NIL (Bulk volume)	31759 (Bulk volume)	South of Cheung Chau
Marine Sediment (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal), m ³ *	NIL (Bulk volume)	108485 (Bulk volume)	South of The Brothers (from 27 Aug 2013 onwards)

4.5.10. No Marine Sediment (Type 1 – Open Sea Disposal) and no marine sediment Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal generated disposed in this reporting quarter.

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

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

Table 4.22 Details of Waste Disposal for Contract no. HY/2010/08

Waste Type	Quantity this month	Cumulative Quantity-to-Date	Disposal / Dumping Grounds
Inert C&D materials disposed, m ³	NIL	267600.2	N/A
Inert C&D materials recycled, m ³	NIL	NIL	N/A
Non-inert C&D materials disposed, m ³	NIL	NIL	N/A
Non-inert C&D materials recycled, kg	NIL	NIL	N/A
Chemical waste disposed, L	NIL	NIL	N/A
Marine Sediment (Type 1 – Open Sea Disposal)	NIL	55290	South Cheung Chau
Marine Sediment (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine disposal)	NIL	27760	Brothers Island
Marine Sediment (Type 3 – Special Treatment)	NIL	7780	Brothers Island

4.5.12. There was no Marine Sediment (Type 1 – Open Sea Disposal), Marine Sediment (Type 3 – Special Treatment) and marine sediment Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal disposed in this reporting quarter.

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

5.1.1 Four limit level exceedances were recorded at noise monitoring station M1a – Harbour Road Sports Center on 01, 08, 15 and 23 December 2015 in December reporting month. The exceedances were concluded as non-project related.

5.1.2 Two limit level exceedances were recorded at noise monitoring station M6 – HK Baptist Church Henrietta Secondary School on 11 and 16 December 2015 in December reporting month. The exceedances were concluded as non-project related.

5.1.3 Two limit level exceedances were recorded at noise monitoring station M1a – Harbour Road Sports Center on 12 and 19 January 2016 in January reporting month. The exceedances were concluded as non-project related.

5.1.4 Two limit level exceedances were recorded at noise monitoring station M1a – Harbour Road Sports Center on 16 and 23 February 2016 in February reporting month. The exceedances were concluded as non-project related.

5.1.5 Noise monitoring results measured in this reporting period are reviewed and summarized. Details of graphical presentation can be referred in **Appendix 4.1.**

5.2. Real-time Noise Monitoring

5.2.1 Limit level exceedance was recorded at RTN2a-Electric Centre on 15 December 2015 during daytime in December reporting month. On 15 December 2015, concreting was undertaken by Contract HY/2009/19 while steel bar cutting works by saw cutter for Hong Kong Electric Centre was conducted at the roof top by non-CWB Contractor immediately next to the noise monitoring station and was considered as major noise contribution. As such, the exceedance was considered as non-Project related.

5.2.2 Details of real time noise monitoring results and graphical presentation can be referred to **Appendix 4.2**

5.3. Air Monitoring

5.3.1 No action or limit level exceedance was recorded in this reporting quarter.

5.4. Water Quality Monitoring

- 5.4.1 There were 6 action level and 7 limit level of turbidity exceedances, and 1 action level and no limit level of suspended solid exceedances recorded in December reporting month. Investigation found that the turbidity exceedances and suspended solid exceedances recorded in December reporting month were not related to Project works.
- 5.4.2 There were 12 action level and 1 limit level of turbidity exceedances recorded in January reporting month. Investigation found that the turbidity exceedances recorded in January reporting month were not related to Project works.
- 5.4.3 There were 24 action level and 11 limit level of turbidity exceedances recorded in February reporting month. Investigation found that the turbidity exceedances recorded in February reporting month were not related to Project works.
- 5.4.4 There was no action level and 1 limit level exceedances of enhanced dissolved oxygen recorded in December reporting month. Investigation found that the exceedance was not related to Project works.
- 5.4.5 There was no action level and 2 limit level exceedances recorded for enhanced dissolved oxygen monitoring in January reporting month. Investigation found that the exceedance was not related to Project works.
- 5.4.6 There was no action level and 2 limit level exceedances recorded for enhanced dissolved oxygen monitoring in February reporting month. Investigation found that the exceedance was not related to Project works.

5.5. Site Audit

- 5.5.1. 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 noted.

5.6. Review of the Reasons for and the Implications of Non-compliance

- 5.6.1 There was no non-compliance from the site audits in the reporting period.

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

- 5.7.1 There was no particular action taken since no project-related non-compliance was recorded from the site audits in September reporting month.
- 5.7.2 There was no particular action taken since no project-related non-compliance was recorded from site audit in November reporting month.

6. COMPLAINTS, NOTIFICATION OF SUMMONS AND PROSECUTION

- 6.0.1. No environmental complaint was received in this reporting quarter.
- 6.0.2. Referring to the complaint case regarding the illegal disposal of construction waste referred by EPD was received by ET on 17 November 2015, the updated 2nd and 3rd interim investigation report were submitted to the EPD on 17 December 2015 and 31 December 2015 respectively. In response to the complaint concern, additional water quality monitoring and additional site inspections have been conducted by the ET and the investigation findings were included in the interim investigation reports separately submitted to the EPD. In addition, the ET and IEC have conducted checking on the waste disposal records and site construction records with the CWB RSS team to confirm the key construction activities during the concerned period and the quantities of inert C&D material disposed. Upon further review on relevant records and follow up inspections on the implementation of site measures, the final investigation would be issued.
- 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 November 2015	44
December 2015 – January 2016	0
Project-to-Date	44

Table 6.2 Cumulative Statistics on Successful Prosecutions

Environmental Parameters	Cumulative No. Brought Forward	No. of Successful Prosecutions this quarter (Offence Date)	Cumulative No. Project-to-Date
Air	-	0	0
Noise	-	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 caisson seawall installation, structural works for tunnel construction, road works and drainage works and P1 landscaping works were performed in this reporting quarter. 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 tunnel works, ELS works and road works at Wan Chai East and caisson installation, D-wall construction and ELS works at Wan Chai West. The major construction activities under Central-Wan Chai Bypass and Island Eastern Corridor Link Projects were bridge construction and road works at Central Interchange, Tunnel works at Ex-PCWAW, ELS works and retaining wall construction at Victoria Park; D- wall construction, ELS works and tunnel works at TS3; IEC removal works, piling and tunnel works at North Point area in the reporting month. In addition, other non-Wan Chai Development Phase II, Central-Wan Chai Bypass and Island Eastern Corridor Link projects was observed undertaken at Wan Chai North 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.

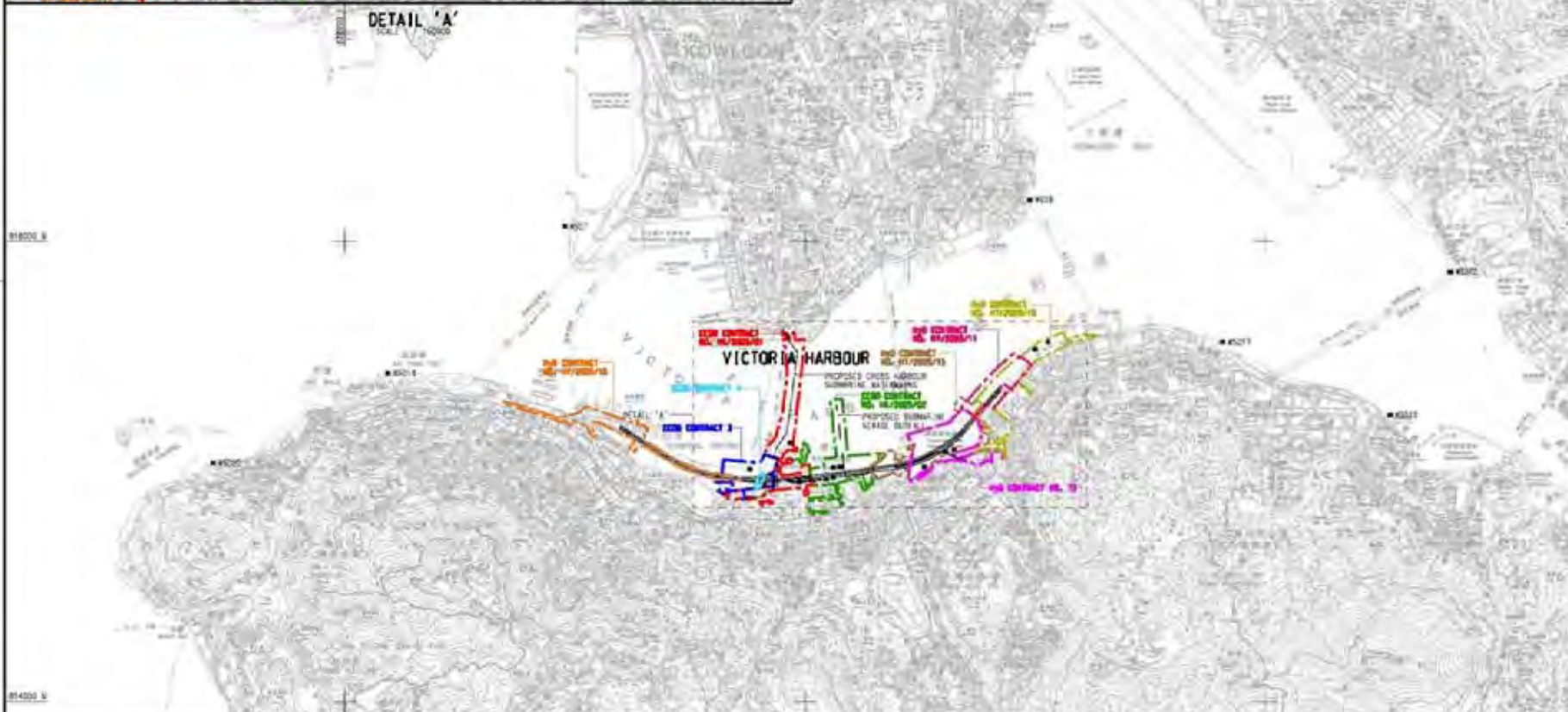
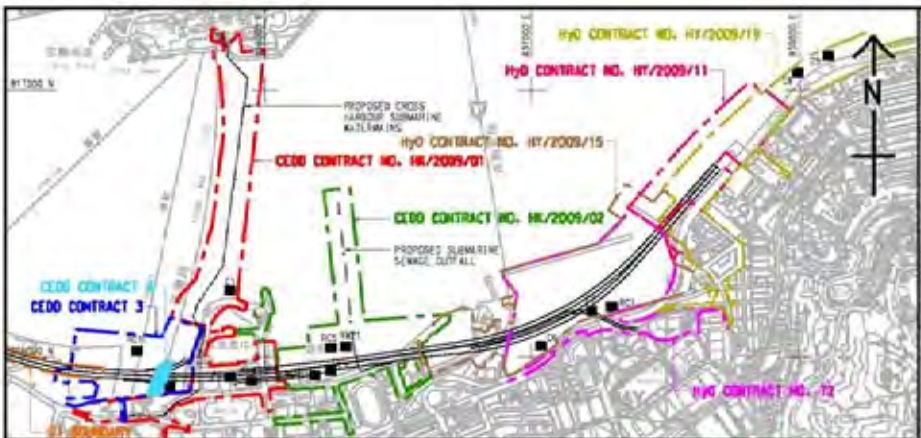
8. CONCLUSION

- 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. No non-compliance was noted and no prosecution was received during in this reporting quarter.
- 8.0.3. The construction programmes of individual contracts are provided in **Appendix 8.1.**



Figure 2.1

Project Layout



- LEGEND:**
- WATER QUALITY MONITORING STATIONS
- COOLING WATER INTAKES**
- 01 HONG KONG CONVENTION AND EXHIBITION CENTRE EXTENSION
 - 02 TELECOM HONG KONG ACADEMY 1.01 PERFORMANCE ARTS / SAITLWAY CENTRE
 - 03 HONG KONG CONVENTION AND EXHIBITION CENTRE PHASE 1
 - 04 NEW EXHIBITION TOWER AND GREAT EXHIBITION CENTRE
 - 05 SUN HANG KAI CENTRE
 - 06 PROPOSED EXHIBITION STATION / WORLD TRADE CENTRE
 - 07 WINDSOR HOUSE
 - 08 CITY SQUARE
 - 09 PROVIDENT CENTRE
 - 102 PROPOSED HERPA EXTENSION
 - 103 SUN HANG KAI CENTRE / REPRODUCTION
 - 107 WINDSOR HOUSE / TEMPORARY REPRODUCTION
- WSD SALT WATER INTAKE**
- #201 WAN CHAI
 - #401 WAN CHAI (REPRODUCTION)
 - #501 CANTON BAY
 - #601 SA. BAY
 - #620 CHA KAO LINC
 - #621 SA. BAY (2)
 - #622 SCARLET BAY
 - #623 SHEUNG WAN
 - #624 KENNEDY TOWN

DESIGNATED PROJECT'S TOP	WORK CONTRACT	DESIGNATED PROJECT NUMBER	COMPLETION (APPROXIMATE)
SP1 - CENTRAL WAN CHAI STYASS WORKS INCLUDING 15 ROAD TUNNEL AND SLOPE ROADS	CEDD CONTRACT NO. HK/2009/01	SP1 - SP3 - SP6	APRIL 2010
SP2 - ROAD P2 AND OTHER ROADS (PRIMARY + DISTRICT DISTRIBUTION ROADS)	CEDD CONTRACT NO. HK/2009/02	SP1 - SP3 - SP5	APRIL 2010
SP3 - PERMANENT AND TEMPORARY ROADWAY WORKS INCLUDING ASSOCIATED DRAINAGE WORKS IN WAN CHAI DEVELOPMENT PHASE 1T - WSD1T AREA	CEDD CONTRACT 3	SP1 - SP3	END 2011
SP4 - TEMPORARY BRIDGE-SHELTER 1 (SP4 NOT TO BE IMPLEMENTED)	CEDD CONTRACT 4	SP1 - SP3	END 2011
SP5 - WAN CHAI EAST SEWAGE DUCT/FALL	CEDD CONTRACT 5	SP3	2010
SP6 - DISCREET FOR THE CROSS-HARBOUR WATER MAINS	HYD CONTRACT NO. HY/2009/11	SP3	18 AUGUST 2010
	HYD CONTRACT NO. HY/2009/15	SP1 - SP3	SEPTEMBER 2010
	HYD CONTRACT NO. HY/2009/16	SP1	OCTOBER 2010
	HYD CONTRACT NO. HY/2009/18	SP1	NOVEMBER 2010
	HYD CONTRACT 12	SP1 - SP3	MID 2010



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

WAN CHAI DEVELOPMENT PHASE II

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

LOCATIONS OF WATER QUALITY MONITORING STATIONS

AECOM

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

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

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NOTES:

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

LEGEND:

[Dotted pattern]	PORTION NPR1	[Cross-hatch pattern]	PORTION NPR4
[Diagonal lines /]	PORTION NPR2	[Diagonal lines \]	PORTION NPR5
[Diagonal lines /]	PORTION NPR3	[Diagonal lines \]	PORTION NPR6
[Dotted pattern]	PORTION NPR4	[Diagonal lines /]	PORTION NPR7
[Dotted pattern]	PORTION NPR5	[Diagonal lines /]	PORTION NPR8
[Dotted pattern]	PORTION NPR6	[Diagonal lines /]	PORTION NPR9

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

Highways Department 路政署
Major Works Project Management Office

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

PORTION OF SITE
SHEET 1 OF 2

AECOM

DRGNO.	60095653/NP/1651B
DESIGNED BY	TTF
CHECKED BY	CJH
DATE	AT 17 1000
SCALE	AS SHOWN
WORKING DRAWING	
COPYRIGHT RESERVED	



LOCATION PLAN
SCALE 1 : 5000

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

- LEGEND:
- CONTRACT BOUNDARY
 - [Hatched Box] WORKING RESTRICTION ZONE
 - [Cross-hatched Box] NAVIGATION AND WORKING RESTRICTION ZONE
 - [Dotted Box] WORKING BARGE, NAVIGATION AND WORKING RESTRICTION ZONE

TENDER ADDENDUM NO. 4	2009/09/25
TENDER ADDENDUM NO. 1	2009/09/25
TENDER DRAWING	2009/09/25

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

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

AECOM

DRGNO. 圖號	60041297/C1/100/1010B
DATE 日期	06/2009/01
SCALE 比例	AS 1:8000
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INSET 'A'
SCALE 1:1000

CENTRAL DISTRICT



EIA-141/2007
DP3

HKCEC (Western Part)

HKCEC (Middle Part)

HKCEC (Eastern Part)

INT	COORDINATES	
	EASTING	NORTHING
C41	835986.526	818105.708
C42	835979.417	818104.468
C43	835963.943	818079.706
C44	835963.543	818086.581
C45	835964.818	818085.528
C46	835965.504	818085.514
C46	835955.757	818081.208
C47	835954.956	818082.441
C48	835960.846	818075.887
C49	835961.347	818073.238
C50	835956.828	818066.814
C51	835948.478	818080.846
C52	835975.226	818089.224
C53	835971.504	818077.897
C54	835975.827	818084.764
C55	835973.745	818079.883
C56	835991.071	818078.764
C56-1	835995.679	818078.873
C56-2	835982.468	818078.765
C56-3	835987.248	818182.758
C57	835983.463	818181.878
C58	835978.496	818077.198
C59	835978.574	818081.818
C60	835978.507	818120.164
C61	835990.881	818184.524
C62	835923.434	818171.812
C63	835973.504	818280.788
C64	835975.818	818276.307

INT	COORDINATES	
	EASTING	NORTHING
C65	836028.933	818413.438
C66	836034.030	818413.614
C67	836022.816	818413.240
C68	836019.515	818413.882
C69	836021.110	818414.000
C70	836027.289	818413.880
C71	836041.050	818413.270
C72	836048.415	818407.187
C72-1	835555.589	818106.587
C73	836047.435	818385.890
C74	836049.797	818374.107
C75	836024.185	818382.148
C76	836038.298	818388.000
C77	836048.906	818382.888
C78	836048.439	818374.038
C79	836042.430	818351.015
C80	836024.635	818328.880
C81	836028.417	818308.182
C82	836024.882	818378.148
C83	836107.025	818324.084
C84	836098.473	818322.444
C85	836082.342	818348.714
C86	836084.499	818348.925
C87	836084.196	818348.388
C88	836082.512	818348.142
C89	836078.987	818345.898
C90	836077.430	818347.198

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



KEY PLAN
SCALE 1:10000

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

INT	COORDINATES	
	EASTING	NORTHING
C1	836875.205	818222.551
C2	836875.207	818222.553
C3	836874.561	818224.825
C4	836871.020	818231.014
C5	836882.492	818229.522
C6	836881.584	818218.612
C7	836886.545	818215.197
C8	836886.191	818217.147
C9	836886.433	818232.241
C10	836891.082	818207.050
C11	836885.389	818208.075
C12	836871.486	818208.107
C13	836923.460	818204.817
C14	836886.433	818217.122
C15	836874.285	818208.500
C16	836875.195	818205.525
C17	836888.138	818204.441
C18	836846.085	818208.816
C19	836871.421	818205.587
C20	836902.537	818220.881
C21	836875.295	818217.484
C22	836873.182	818218.442
C23	836867.086	818209.074
C24	836876.984	818221.670
C25	836875.280	818220.251
C26	836881.447	818212.286
C27	836904.025	818243.836
C28	836905.218	818244.445
C29	836901.523	818236.180
C30	836883.781	818208.487
C31	836831.216	818228.470
C32	836824.142	818225.117
C33	836821.081	818216.482
C34	836826.290	818224.700
C35	836827.428	818223.056
C36	836808.187	818218.280
C37	836824.812	818208.093
C38	836824.747	818207.285
C39	836828.850	818219.134
C40	836819.190	818208.037
C41	836828.810	818207.285
C42	836818.906	818208.080
C43	836825.682	818215.512

C	TENDER ADDENDUM NO.4	SHEN JYL DEP C8
B	TENDER ADDENDUM NO.2	SHEN JYL DEP C8
A	TENDER ADDENDUM NO.1	SHEN JYL DEP C8
-	TENDER DRAWING	SHEN JYL DEP C8
20	2009	SEP 08

土木工程師學會
Civil Engineering and
Development Department

WAN CHAI DEVELOPMENT PHASE II

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

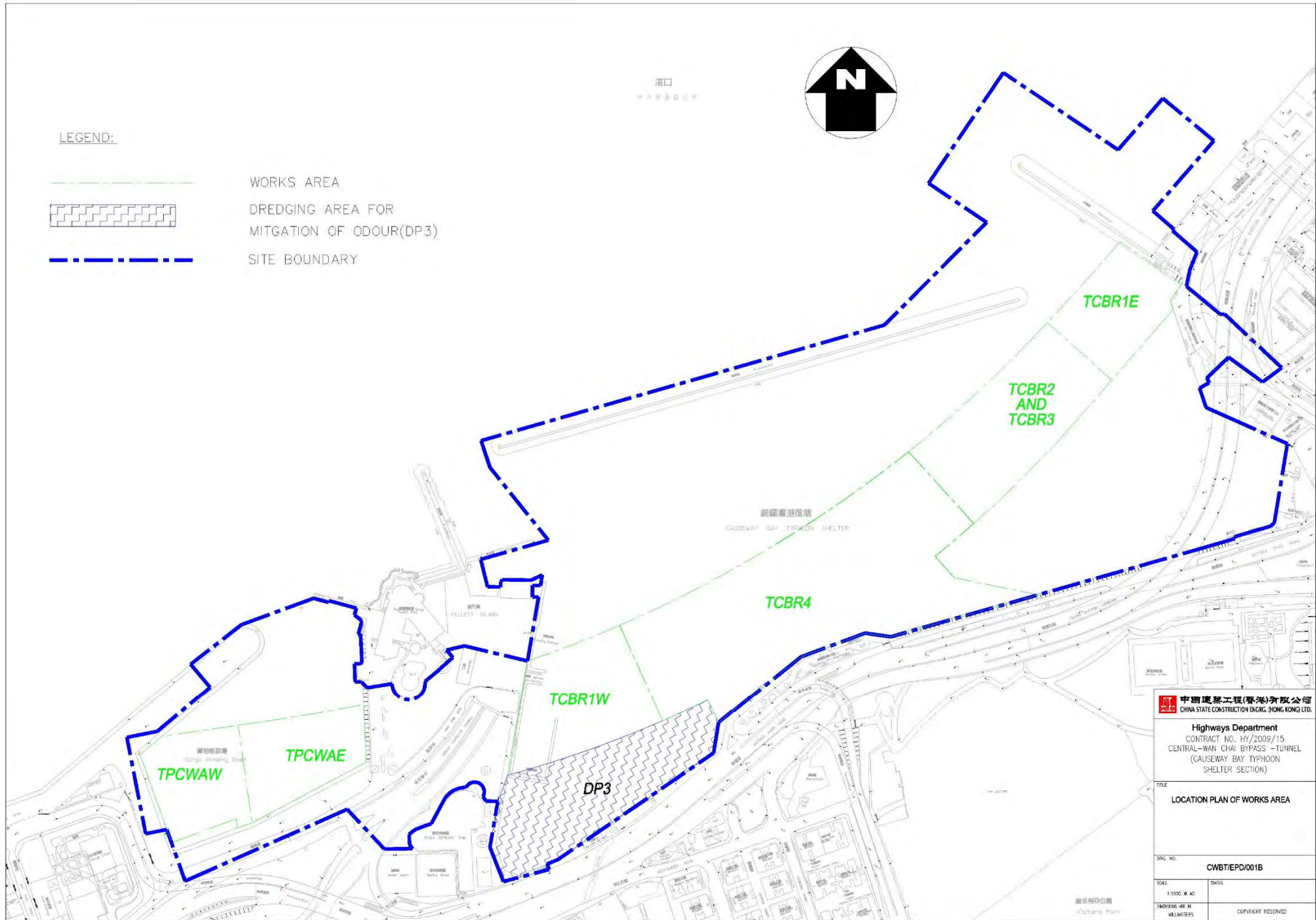
SITE BOUNDARY
SETTING OUT PLAN
(Contract no. Hk/2009/01)

AECOM

DRGNO.
圖號: 60041297/C1/100/1006C

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

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

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

TITLE
LOCATION PLAN OF WORKS AREA

DRG. NO.
CWBT/EPD/001B

SCALE
1:1000 @ A0

DATE
MAY 2010

PROJECT NO.
MTR/09/01

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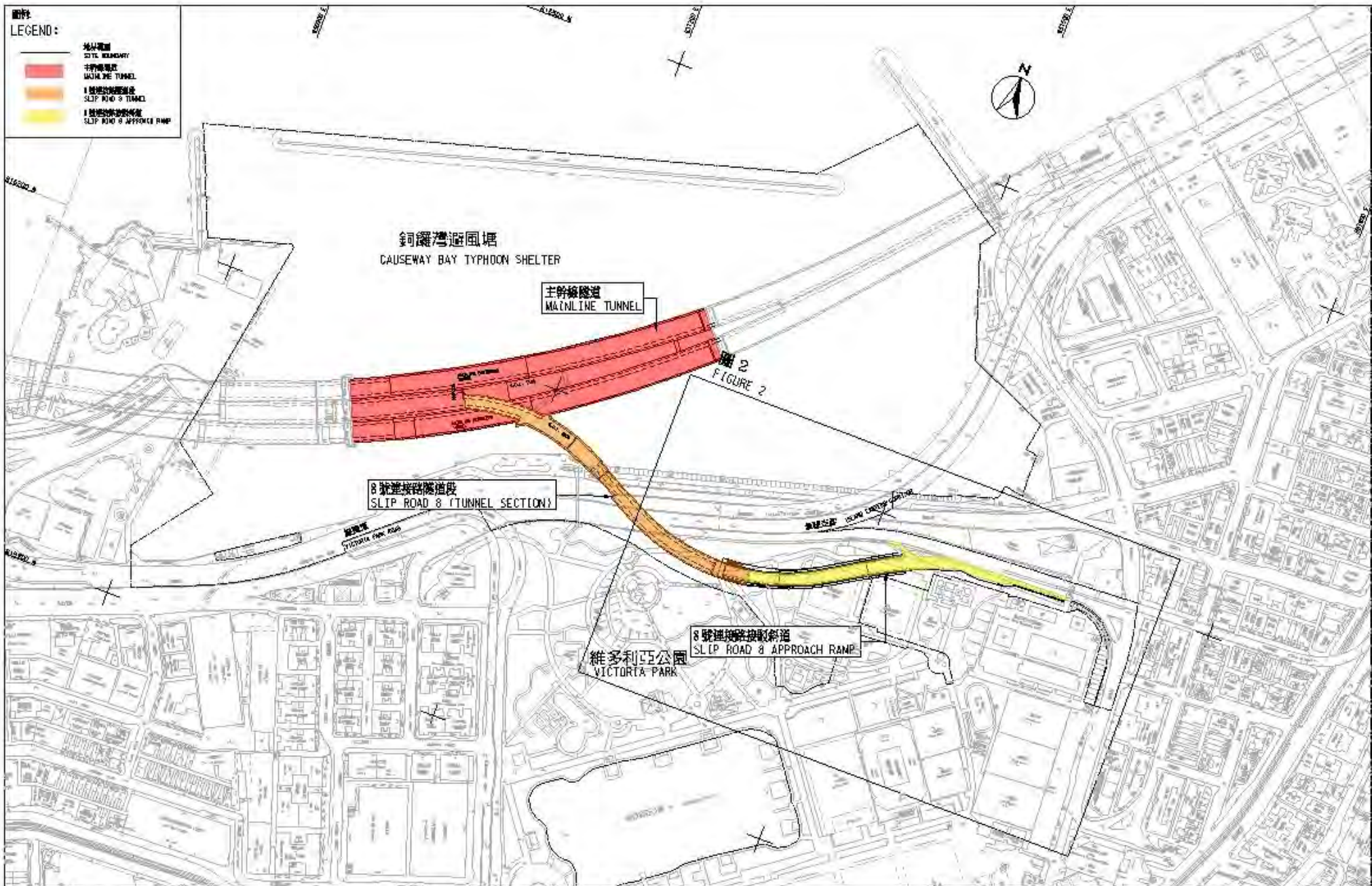


圖1- 合約編號 HY/2010/08 中環灣仔繞道-8號連接路段隧道

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

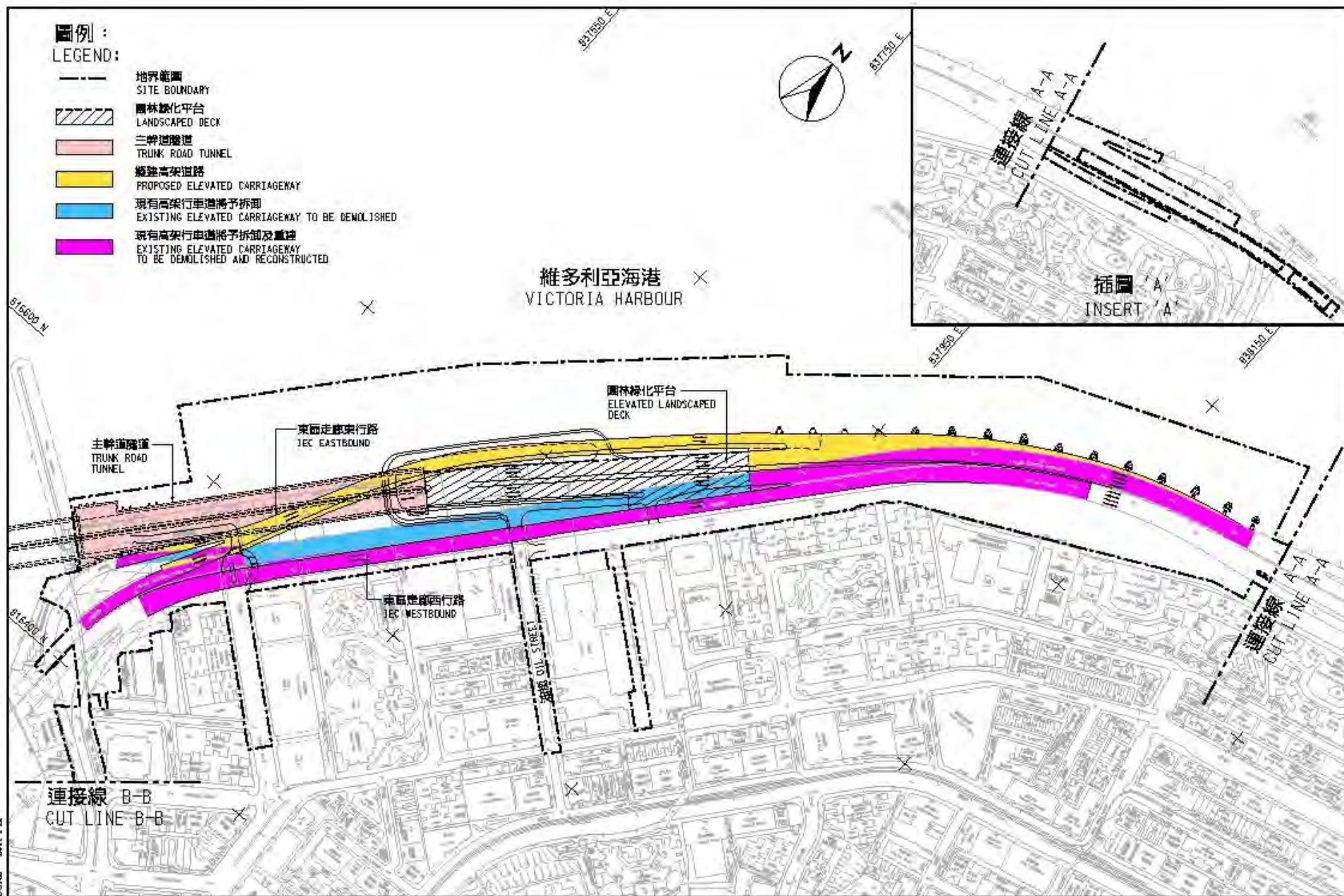
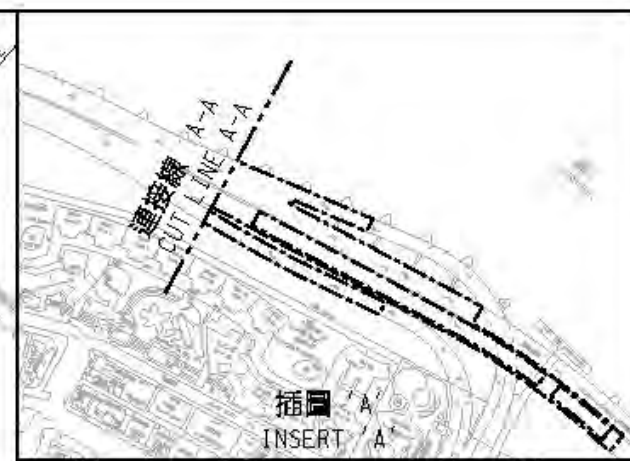
SCALE 1 : 3000

圖例：
LEGEND:

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



維多利亞海港
VICTORIA HARBOUR



合約編號 HY/2009/19 - 中環灣仔繞道 - 北角段隧道及東區走廊連接路

CONTRACT NO. HY/2009/19 - CENTRAL-WAN CHAI BYPASS - TUNNEL (NORTH POINT SECTION) AND ISLAND EASTERN CORRIDOR LINK

SCALE 1 : 3000



Figure 2.2

Project Organization Chart



Project Organization Chart

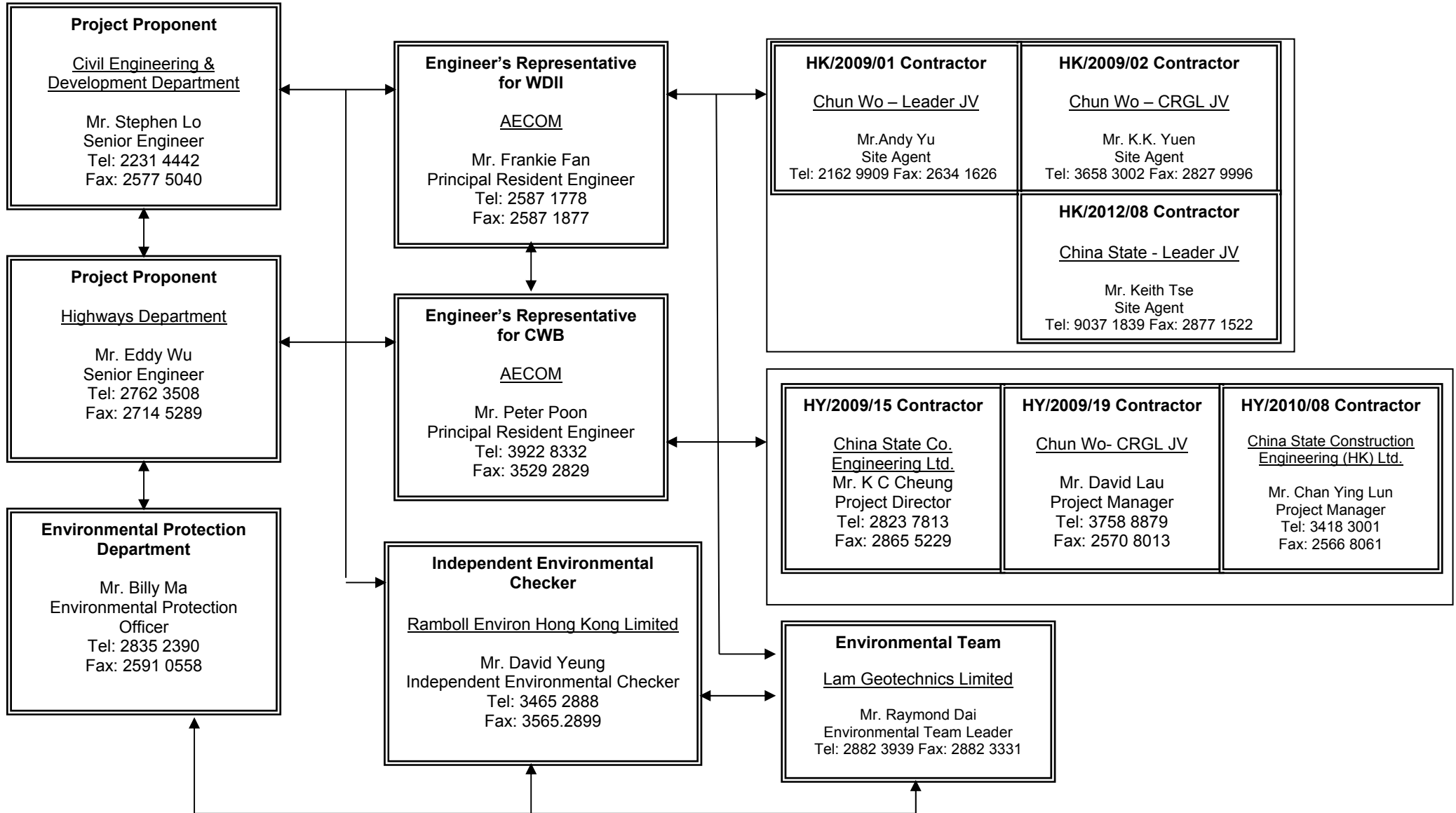


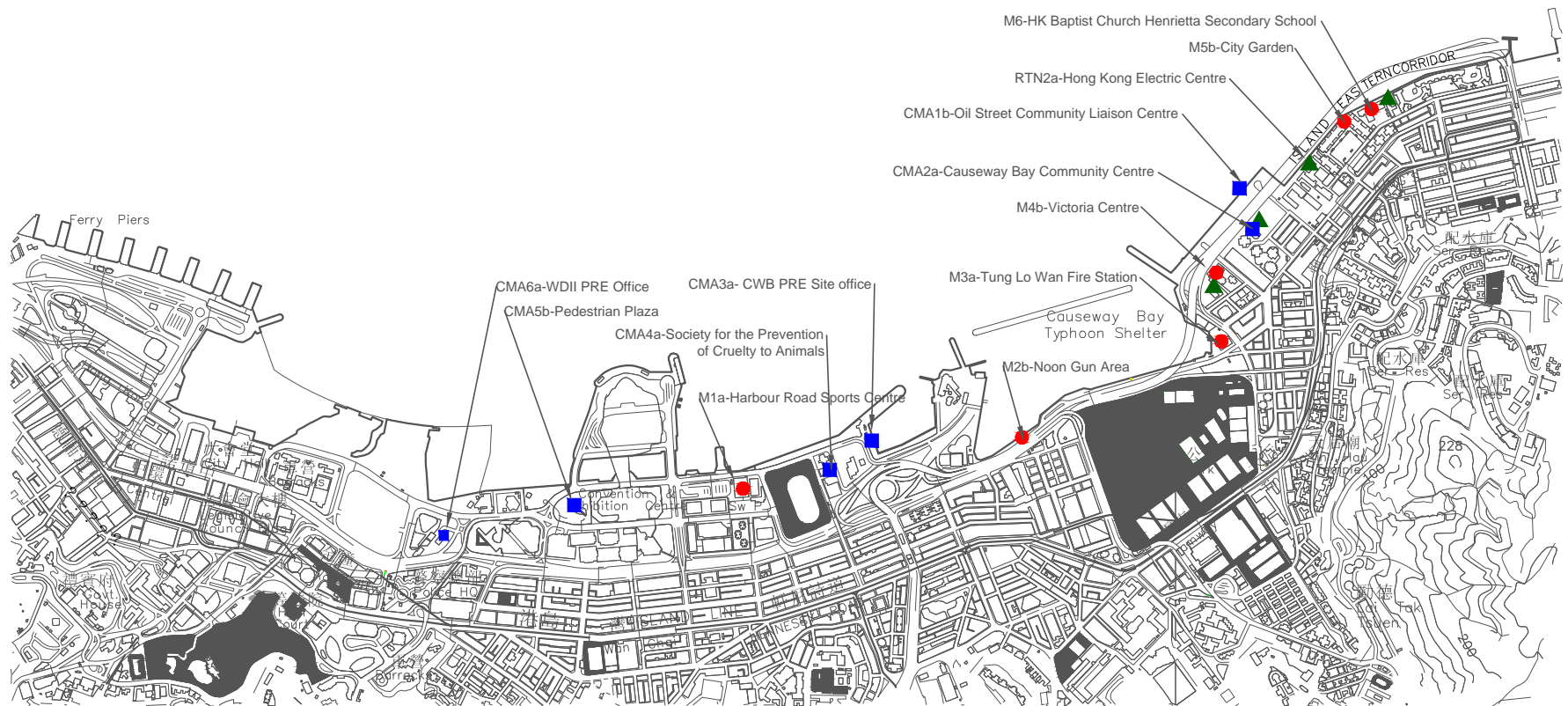


Figure 3.1

Locations of Monitoring Stations

Legend

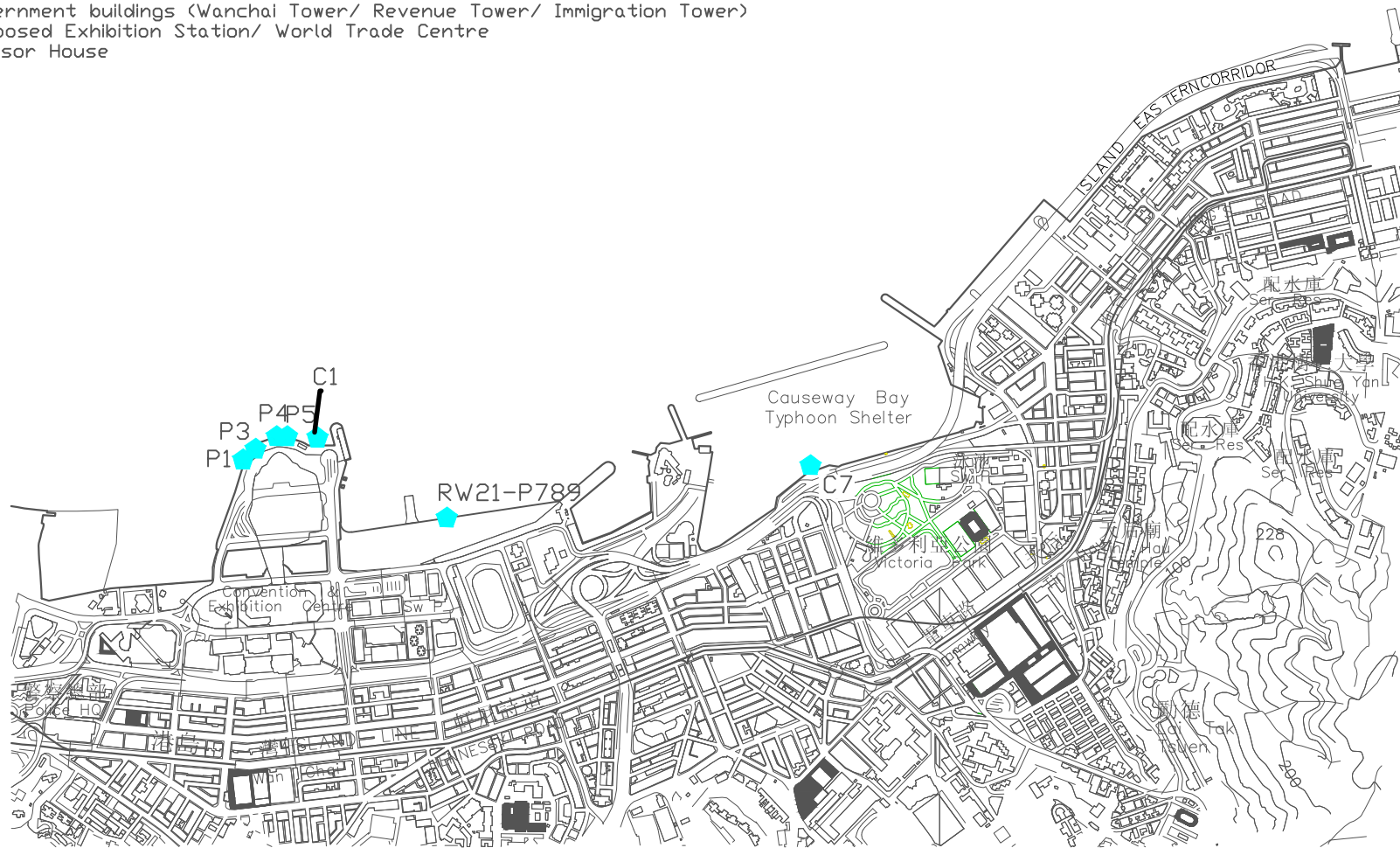
- Noise Monitoring Station
- Air Monitoring Station
- ▲ Real-time Noise Monitoring Station



LOCATIONS OF AIR QUALITY AND NOISE MONITORING STATIONS

Legend

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

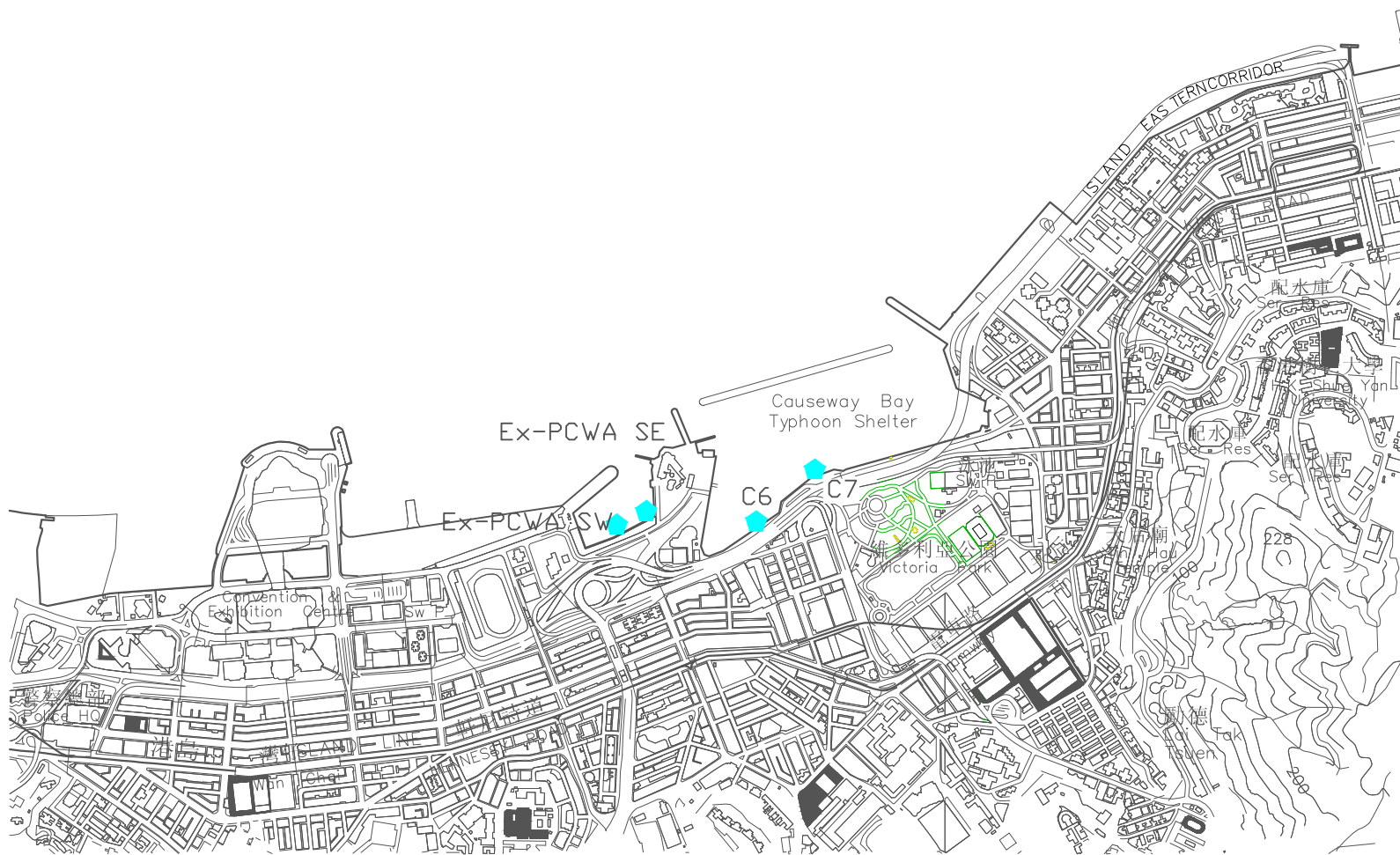


FIGURE

LOCATIONS OF WATER QUALITY MONITORING STATIONS

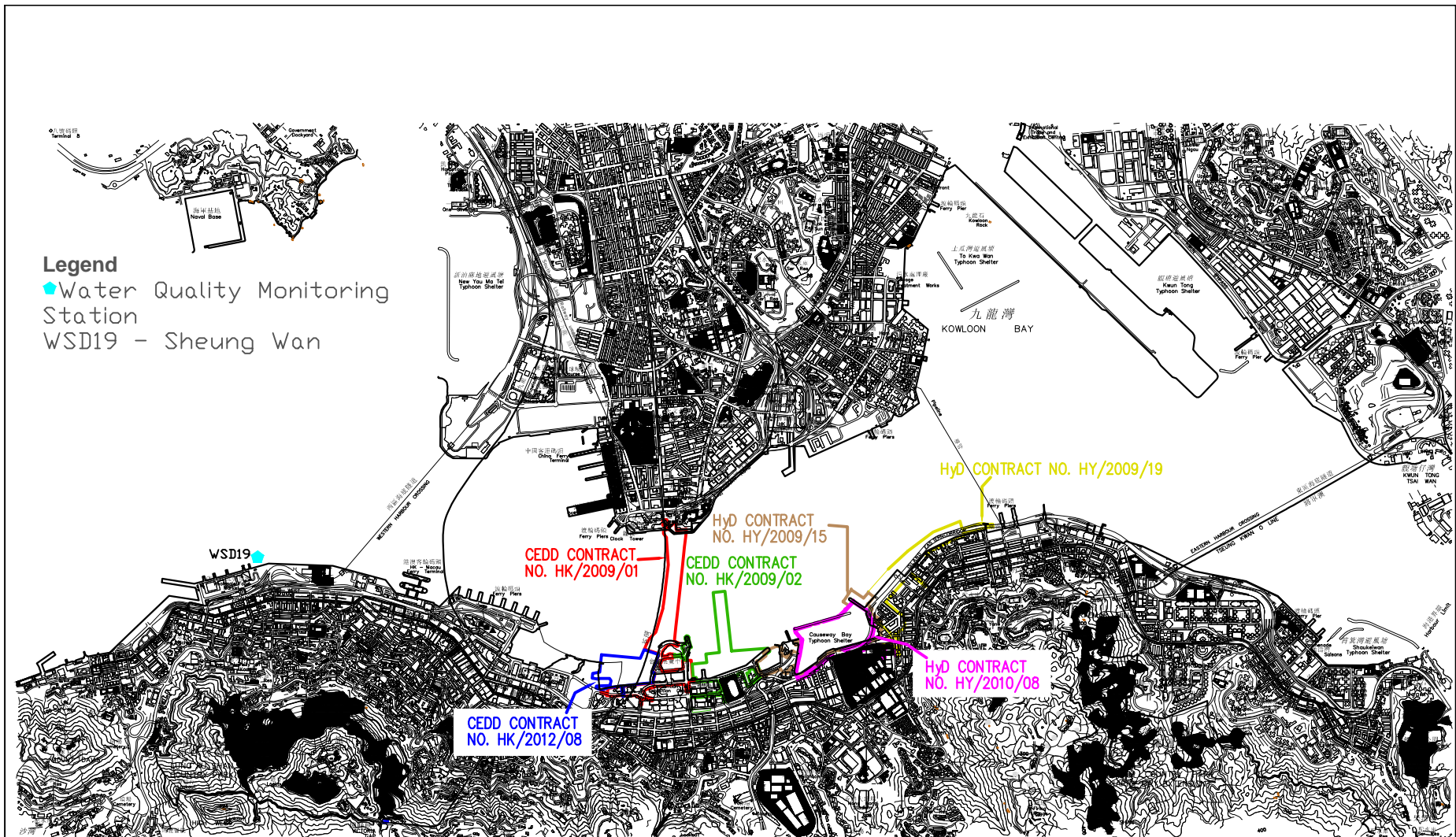
Legend

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



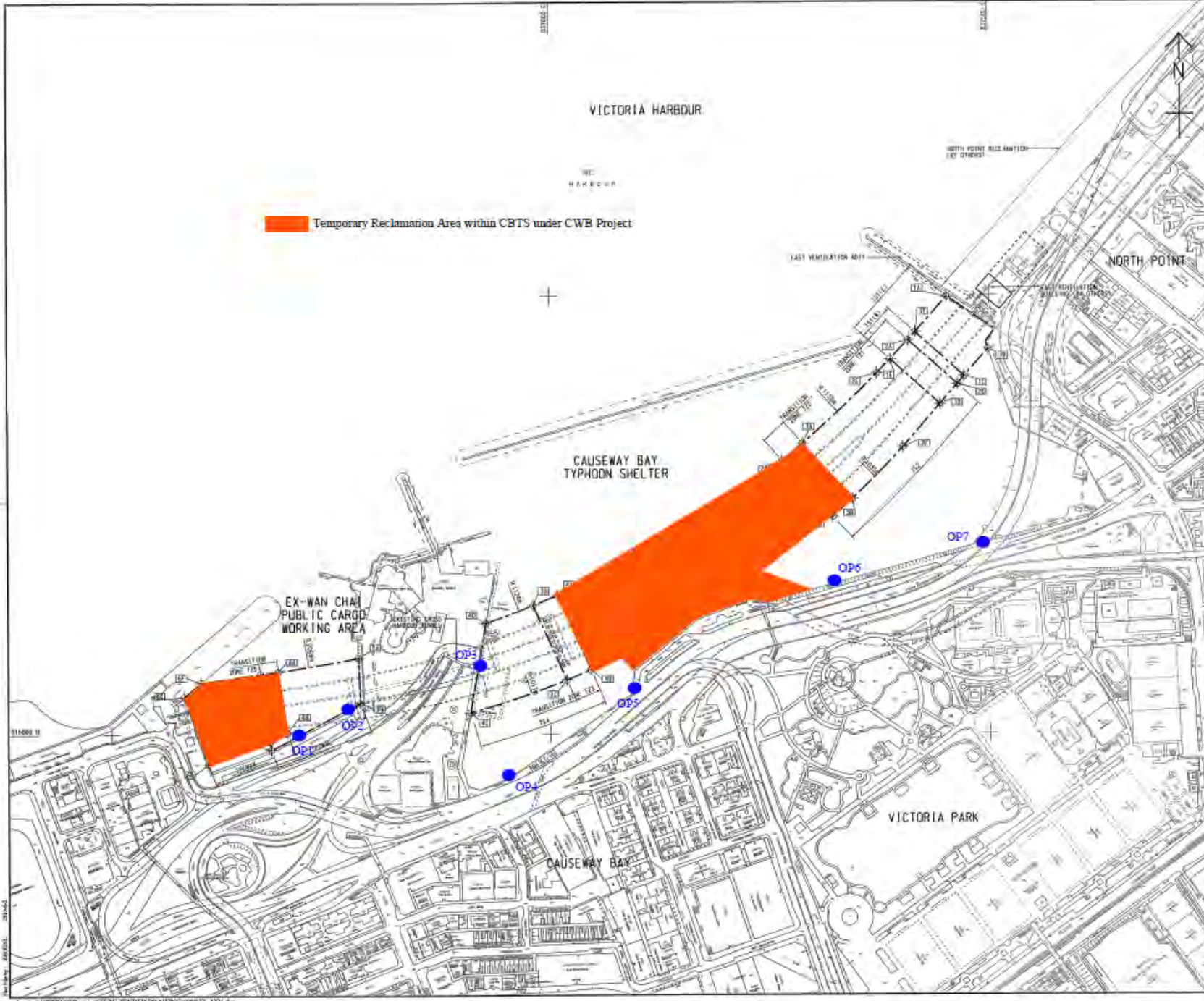
FIGURE


LOCATIONS OF ENHANCE DO MONITORING STATIONS



FIGURE

LOCATIONS OF WATER QUALITY MONITORING STATIONS



 Temporary Reclamation Area within CBTS under CWB Project



KEY PLAN
SCALE AS 1 : 5000
AS 1 : 10000

Remarks:
 1. With respect to the temporary reclamation undertaken within Ex-PCWAW area, the odour monitoring station OP1 is finely adjusted to temporary embayment area at the Enhance DO monitoring station to monitor for the potential odour nuisance in the area.
 2. With respect to the temporary reclamation undertaken within CBTS, the odour monitoring station OP6 was finely adjusted to east of temporary reclamation zone for odour monitoring



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 Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
Construction Phase								
<i>For the Whole Project</i>								
S3.6.5	Four times a day watering of the work site with active operations.	Work site / during construction	Contractor		√			EIAO-TM
S3.8.1	Implementation of dust suppression measures stipulated in Air Pollution Control (Construction Dust) Regulation. The following mitigation measures, good site practices and a comprehensive dust monitoring and audit programme are recommended to minimise cumulative dust impacts. <ul style="list-style-type: none"> 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		√			

Appendix 2.1

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S3.5.6	For the dredging activities carried out in the vicinity of Police Officers' Club, the dredging operation will be restricted to only 1 small close grab dredger to minimise the odour impact during the dredging activity. The dredging rate should be reduced as much as practicable for the area in close proximity to the Police Officers' Club. The sediments contain highly contaminated mud which may be disposed with the use of geosynthetic containers (details shall refer to Section 6), grab dredger has to be used for filling up the geosynthetic containers on barges. the dredging rate for the removal of the sediments at the south-west corner of the typhoon shelter shall be slowed down or restricted to specific non-popular hours in weekdays when it is necessary during construction.	Corner of CBTS/implementation of harbour-front enhancement	CEDD ¹		√			EIAO-TM
S3.8.8	Carry out dredging at the corner of CBTS to remove the sediment and clean the slime attached on the CBTS shoreline seawall	Corner of CBTS & CBTS shoreline seawall/implementation of harbour-front enhancement	CEDD ²		√			EIAO-TM
Operation Phase								
<i>For the Whole Project</i>								

¹ CEDD will identify an implementation agent.

² CEDD will identify an implementation agent.

Appendix 2.1

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

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

Appendix 2.1

Table A13.2 Implementation Schedule for Noise Control

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

Appendix 2.1

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S4.9.4	<p>Good Site Practice:</p> <ul style="list-style-type: none"> 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-site construction activities. 	Work Sites / During Construction	Contractor		√			EIAO-TM, NCO
<i>For DP1 – CWB (Within the Project Boundary)</i>								

Appendix 2.1

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

Appendix 2.1

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

Appendix 2.1

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

Appendix 2.1

Table A13.3 Implementation Schedule for Water Quality Control

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
Construction Phase								
<i>For DP3 – Reclamation Works, DP5 (Wan Chai East Sewage Outfall), DP6 (Cross-Harbour Water Mains from Wan Chai to Tsim Sha Tsui), DP1 – CWB (within the Project Boundary)</i>								
S5.8	A phased reclamation approach is planned for the WDII. Containment of fill within each of the reclamation phases by seawalls is proposed, with the seawall constructed first (above high water mark) with filling carried out behind the completed seawalls. Any gaps that may need to be provided for marine access will be shielded by silt curtains to control sediment plume dispersion away from the site. Filling for seawall construction should be carried out behind the silt curtain	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO
S5.8	Dredging shall be carried out by closed grab dredger for the following works: <ul style="list-style-type: none"> Seawall construction in all the reclamation areas; Construction of the CWB Tunnel Construction of the proposed WSD water mains; and Construction of the proposed Wan Chai East sewage outfall pipelines. 	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO
S5.8, Figure 5.3	Dredging for the Wan Chai East sewage outfall pipelines shall not be carried out concurrently with the following activities: <ul style="list-style-type: none"> Dredging along the proposed cross-harbour water mains; Dredging along the seawall in the Wan Chai Reclamation (WCR) zone (area between HKCEC Extension and PCWA). 	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO

Appendix 2.1

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines																								
				Des	C	O	Dec																									
S5.8	The water body behind the temporary reclamations within the Causeway Bay typhoon shelter shall not be fully enclosed.	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO																								
S5.8	As a mitigation measure, to avoid the accumulation of water borne pollutants within the temporary embayment between CR111 and HKCEC1, an impermeable barrier, suspended from a floating boom on the water surface and extending down to the seabed, will be erected by the contractor before the HKCEC1 commences. The barrier will channel the stormwater discharge flows from Culvert L to the outside of the embayment. The contractor will maintain this barrier until the reclamation works in HKCEC2W are carried out and the new Culvert L extension is constructed.	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO																								
S5.8, Figure 5.3	The total dredging rates in each of the marine works zones shall not be more than the maximum production rates stated in the table below. These are the production rates without considering the effect of silt curtain.	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO																								
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2">Reclamation Area</th> <th colspan="2">Maximum Dredging Rate</th> <th rowspan="2">Maximum Dredging Rate (m³ per week)</th> </tr> <tr> <th>m³ per day</th> <th>m³ per hour (for 16 hrs per day)</th> </tr> </thead> <tbody> <tr> <td colspan="4">Dredging along seawall or breakwater</td> </tr> <tr> <td>North Point Shoreline Zone (NPR)</td> <td>6,000</td> <td>375</td> <td>42,000</td> </tr> <tr> <td>Causeway Bay</td> <td>1,500</td> <td>94</td> <td>10,500</td> </tr> <tr> <td>Shoreline Zone</td> <td>6,000</td> <td>375</td> <td>42,000</td> </tr> <tr> <td>PCWA Zone</td> <td>5,000</td> <td>313</td> <td>35,000</td> </tr> </tbody> </table>		Reclamation Area	Maximum Dredging Rate		Maximum Dredging Rate (m ³ per week)	m ³ per day	m ³ per hour (for 16 hrs per day)	Dredging along seawall or breakwater				North Point Shoreline Zone (NPR)	6,000	375	42,000	Causeway Bay	1,500	94	10,500	Shoreline Zone	6,000	375	42,000	PCWA Zone	5,000	313	35,000					
Reclamation Area	Maximum Dredging Rate		Maximum Dredging Rate (m ³ per week)																													
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Appendix 2.1

EIA Ref	Environmental Protection Measures / Mitigation Measures				Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines																			
							Des	C	O	Dec																				
	<table border="1"> <tr> <td>Wan Chai Shoreline Zone (WCR)</td> <td>6,000</td> <td>375</td> <td>42,000</td> </tr> <tr> <td>HKCEC Shoreline Zone (HKCEC)</td> <td colspan="2">HKCEC Stage 1 & 3</td> <td>10,500</td> </tr> <tr> <td></td> <td colspan="2">HKCEC Stage 2</td> <td>42,000</td> </tr> <tr> <td>Cross Harbour Water Mains</td> <td>1,500</td> <td>94</td> <td>10,500</td> </tr> <tr> <td>Wan Chai East Submarine Sewage Pipeline</td> <td>1,500</td> <td>94</td> <td>10,500</td> </tr> </table> <p>Note: 1,500 m³ per day shall be applied for construction of the western seawall of WCR1.</p>				Wan Chai Shoreline Zone (WCR)	6,000	375	42,000	HKCEC Shoreline Zone (HKCEC)	HKCEC Stage 1 & 3		10,500		HKCEC Stage 2		42,000	Cross Harbour Water Mains	1,500	94	10,500	Wan Chai East Submarine Sewage Pipeline	1,500	94	10,500						
Wan Chai Shoreline Zone (WCR)	6,000	375	42,000																											
HKCEC Shoreline Zone (HKCEC)	HKCEC Stage 1 & 3		10,500																											
	HKCEC Stage 2		42,000																											
Cross Harbour Water Mains	1,500	94	10,500																											
Wan Chai East Submarine Sewage Pipeline	1,500	94	10,500																											
S5.8, Figure 5.3	Dredging along the seawall at WCR1 shall be undertaken initially at 1,500m ³ per day for construction of the western seawall (which is in close proximity of the WSD intake), followed by partial seawall construction at the western seawall (above high water mark) to protect the adjacent intakes as much as possible from further dredging activities.				Work site / During the construction period	Contractor		√			EIAO-TM, WPCO																			
S5.8, Figure 5.3	For dredging within the Causeway Bay typhoon shelter, seawall shall be partially constructed to protect the nearby seawater intakes from further dredging activities. For example, at TCBR1W, the southern and eastern seawalls shall be constructed first (above high water mark) so that the seawater intakes at the inner water would be protected from the impacts from the remaining dredging activities along the northern boundary.				Work site / During the construction period	Contractor		√			EIAO-TM, WPCO																			
S5.8, Figure 5.3	Silt curtains shall be deployed around the closed grab dredgers during seawall dredging and seawall trench filling in the areas of HKCEC, WCR, TCBR and NP.				Work site / During the construction period	Contractor		√			EIAO-TM, WPCO																			
S5.8, Figure 5.3	Silt screens shall be applied to seawater intakes at interim construction stages as stated below:				Work site / During the construction period	Contractor		√			EIAO-TM, WPCO																			
	<table border="1"> <tr> <th>Interim Construction Stage</th> <th>Location of Applications</th> </tr> <tr> <td>Scenario 2A in early 2009 with concurrent dredging activities at HKCEC, WCR, TPCWA,</td> <td>WSD saltwater intakes at Sai Wan Ho, Quarry Bay, Sheung Wan, Wan Chai, Kowloon South Cooling water intakes for Hong Kong Convention and Exhibition Centre Extension, Hong Kong</td> </tr> </table>		Interim Construction Stage	Location of Applications								Scenario 2A in early 2009 with concurrent dredging activities at HKCEC, WCR, TPCWA,	WSD saltwater intakes at Sai Wan Ho, Quarry Bay, Sheung Wan, Wan Chai, Kowloon South Cooling water intakes for Hong Kong Convention and Exhibition Centre Extension, Hong Kong																	
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Appendix 2.1

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

Appendix 2.1

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
	<ul style="list-style-type: none"> before commencement of the reclamation works, the holder of Environmental Permit has to submit plans showing the phased construction of the reclamation, design and operation of the silt curtain. 							
S5.8	<p>Silt screens are recommended to be deployed at the seawater intakes during the reclamation works period. Installation of silt screens at the seawater intake points may cause a potential for accumulation and trapping of pollutants, floating debris and refuse behind the silt screens and may lead to potential water quality deterioration at the seawater intake points. Major sources of pollutants and floating refuse include the runoff and storm water discharges from the nearby coastal areas. As a mitigation measure to avoid the pollutant and refuse entrapment problems and to ensure that the impact monitoring results are representative, regular maintenance of the silt screens and refuse collection shall be performed at the monitoring stations at regular intervals on a daily basis. The Contractor shall be responsible for keeping the water behind the silt screen free from floating rubbish and debris during the impact monitoring period.</p>	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO

Appendix 2.1

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S5.8	<p>Dredging of contaminated mud is recommended as a mitigation measures for control of operational odour impact from the Causeway Bay typhoon shelter. In recognition of the potential impacts caused by dredging activities close to the seawater intakes, only 1 small close grab dredger shall be operated within the typhoon shelter (for the dredging to mitigate odour impact) at any time to minimize the potential impact. Double silt curtains shall be deployed to fully enclose the closed grab dredger during the dredging operation. In addition, an impermeable barrier, suspended from a floating boom on the water surface and extended down to the seabed, shall be erected to isolate the adjacent intakes as much as possible from dredging activities. For example, if dredging is to be carried out at the southwest corner of the typhoon shelter, physical barriers shall be erected to west of the cooling water intake for Excelsior Hotel so that the intake would be shielded from most of the SS generated from the dredging operation to the west of the intake. For area in close proximity of the cooling water intake point, the dredging rate shall be reduced as much as practicable. Site audit and water quality monitoring shall be carried out at the seawater intakes during the dredging operations. Daily monitoring of SS at the cooling water intake shall be carried out, and 24 hour monitoring of turbidity at the intakes shall be implemented during the dredging activities. If the monitoring results indicate that the dredging operation has caused significant changes in water quality conditions at the seawater intakes, appropriate actions shall be taken to stop the dredging and mitigation measures such as slowing down the dredging rate shall be implemented.</p>	Causeway Bay typhoon shelter/Implementation of harbour-front enhancement.	CEDD ³		√			WPCO

Appendix 2.1

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines	
				Des	C	O	Dec		
For the Whole Project									
S5.8	<ul style="list-style-type: none"> Construction Runoff and Drainage use of sediment traps, wheel washing facilities for vehicles leaving the site, and adequate maintenance of drainage systems to prevent flooding and overflow; Permanent drainage channels shall incorporate sediment basins or traps and baffles to enhance deposition rates. The design of efficient silt removal facilities shall be based on the guidelines in Appendix A1 of ProPECC PN 1/94; a sediment tank constructed from pre-formed individual cells of approximately 6 - 8 m3 capacity can be used for settling ground water prior to disposal; oil interceptors shall be provided in the drainage system for the tunnels and regularly cleaned to prevent the release of oils and grease into the storm water drainage system after accidental spillages. The interceptor shall have a bypass to prevent flushing during periods of heavy rain; precautions and actions to be taken when a rainstorm is imminent or forecast, and during or after rainstorms. Particular attention shall be paid to the control of any silty surface runoff during storm events; on-site drainage system shall be installed prior to the commencement of other construction activities. Sediment traps shall be installed in order to minimise the sediment loading of the effluent prior to discharge; All temporary and permanent drainage pipes and culverts provided to facilitate runoff discharge shall be adequately designed for the controlled release of storm flows. All sediment control measures shall be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rain storms. The temporarily diverted drainage shall be reinstated to its original condition when the construction work is finished or the temporary diversion is no longer 	<ul style="list-style-type: none"> Work site / During the construction period 	Contractor		√				ProPECC PN 1/94; WPCO (TM-DSS)

³ CEDD will identify an implementation agent.

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
	<p>required.</p> <ul style="list-style-type: none"> All fuel tanks and store areas shall be provided with locks and be sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity. 							
	<ul style="list-style-type: none"> Minimum distances of 100 m shall be maintained between the storm water discharges and the existing or planned WSD flushing water intakes during construction phase. 							
S5.8	<p><i>Sewage from Construction Work Force</i></p> <p>Construction work force sewage discharges on site shall be connected to the existing trunk sewer or sewage treatment facilities. The construction sewage shall be handled by portable chemical toilets prior to the commission of the on-site sewer system. Appropriate numbers of portable toilets shall be provided by a licensed contractor to serve the large number of construction workers over the construction site. The Contractor shall also be responsible for waste disposal and maintenance practices.</p>	Work site / During the construction period	Contractor		√			ProPECC PN 1/94; WPCO (TM-DSS)
S5.8	<p><i>Floating Debris and Refuse</i></p> <p>Collection and removal of floating refuse shall be performed at regular intervals on a daily basis. The contractor shall be responsible for keeping the water within the site boundary and the neighbouring water free from rubbish.</p>	Work site and adjacent water / During the construction period.	Contractor		√			WPCO

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S5.8	<p><i>Storm Water Discharges</i></p> <p>Minimum distances of 100 m shall be maintained between the existing or planned stormwater discharges and the existing or planned WSD flushing water intakes.</p>	Work site and adjacent water / During the design and construction period.	Contractor	√	√			WPCO
Operation Phase								
<i>DPI – CWB (within the Project Boundary)</i>								
S5.8	<p>For the operation of CWB, a surface water drainage system would be provided to collect road runoff. The following operation stage mitigation measures are recommended to ensure road runoff would comply with the TM under the WPCO:</p> <ul style="list-style-type: none"> 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. 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, 	CWB/During design and operational period	HyD/TD ³	√		√		WPCO

Appendix 2.1

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
	<p>control room, ventilation and administration buildings and tunnel portals) shall be connected to public sewerage system. Sufficient capacity in public sewerage shall be made available to the proposed facilities.</p> <ul style="list-style-type: none"> Road drainage shall also be provided with adequately designed silt trap to minimize discharge of silty runoff. The design of the operational stage mitigation measures for CWB shall take into account the guidelines published in ProPECC PN 5/93 "Drainage Plans subject to Comment by the EPD." All operational discharges from the CWB into drainage or sewerage systems are required to be licensed by EPD under the WPCO. 							

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

³ if employ Management, Operation and Maintenance (MOM) Contract

Appendix 2.1

Table A13.4 Implementation Schedule for Waste Management

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
Construction Phase								
<i>For DP3 – Reclamation Works</i>								
	<i>Marine Sediments</i>							
S6.7.2	The dredged marine sediments would be loaded onto barges, transported to and disposed of at the designated disposal sites at South of Cheung Chau, East of Ninepin, East of Tung Lung Chau, South of Tsing Yi or East of Sha Chau to be allocated by the MFC depending on their level of contamination or at other disposal sites after consultation with the MFC and EPD. In accordance with the ETWB TCW No. 34/2002, the contaminated material must be dredged and transported with great care. The mitigation measures recommended in Section 5 of the EIA Report shall be incorporated. The dredged contaminated sediment must be effectively isolated from the environment upon final disposal and shall be disposed of at the Type 2 confined marine disposal contaminated mud pit.	Work site / During the construction period	Contractor		√			ETWB TCW No. 34/2002
S6.7.3	Based on the biological screening results, the Category H (>10xLCEL) sediment which failed the biological testing would require Type 3 special disposal. The volume of Category H sediment from the Causeway Bay typhoon shelter which would require special disposal arrangements is estimated to be approximately 0.05 Mm ³ . 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 2.1

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S6.7.5	It will be the responsibility of the Contractor to satisfy the appropriate authorities that the contamination levels of the marine sediment to be dredged have been analysed and recorded. According to the ETWB TCW No. 34/2002, this will involve the submission of a formal Sediment Quality Report to the DEP, at least 3 months prior to the dredging contract being tendered							
S6.7.6	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: <ul style="list-style-type: none"> 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. 							

Appendix 2.1

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

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S6.7.7	<p>Good Site Practices Recommendations for good site practices during the construction activities include:</p> <ul style="list-style-type: none"> 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		√			Waste Disposal Ordinance (Cap.354)

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S6.7.8	<p><i>Waste Reduction Measures</i></p> <p>Waste reduction is best achieved at the planning and design stage, as well as by ensuring the implementation of good site practices. Recommendations to achieve waste reduction include:</p> <ul style="list-style-type: none"> • 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	√	√			

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EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S6.7.10	<p><i>General Refuse</i></p> <p>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.</p> <p>A collection area shall be provided where wastes can be stored and loaded prior to removal from site. An enclosed and covered area is recommended to reduce the occurrence of 'wind blow' light material.</p>	Work site / During the construction period	Contractor		√			Public Health and Municipal Services Ordinance (Cap. 132)
S6.7.11	<p><i>Chemical Wastes</i></p> <p>After use, chemical wastes (for example, cleaning fluids, solvents, lubrication oil and fuel) shall be handled according to the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. Spent chemicals shall be collected by a licensed collector for disposal at the CWTF or other licensed facility in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.</p>	Work site / During the construction period	Contractor		√			Waste Disposal (Chemical Waste) (General) Regulation Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes
S6.7.12	<p><i>Construction and Demolition Material</i></p> <p>C&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.</p>	Work site / During the construction period	Contractor		√			ETWB TCW No. 33/2002, 31/2004, 19/2005

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EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S6.7.13	In order to monitor the disposal of public fill and C&D waste at public filling facilities and landfills, respectively, and to control fly tipping, a trip-ticket system shall be included as one of the contractual requirements and implemented by the Environmental Team undertaking the environmental monitoring and audit work. An Independent Environment Checker shall be responsible for auditing the results of the system.	Work site / During the construction period	Contractor and Independent Environmental Checker		√			ETWB TCW No. 31/2004
S6.7.14	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: <ul style="list-style-type: none"> If the disposal of a certain residual quantity cannot be avoided, the used slurry may be disposed of at the marine spoil grounds subject to obtaining a marine dumping licence from EPD on a case-by-case basis. If the used bentonite slurry is intended to be disposed of through the public drainage system, it shall be treated to the respective effluent standards applicable to foul sewers, storm drains or the receiving waters as set out in the Technical Memorandum of Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters. If the used bentonite slurry is intended to be disposed to public fill reception facilities, it will be mixed with dry soil on site before disposal. 	Work site / During the construction period	Contractor		√			ProPECC PN 1/94

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

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Table A13.5 Implementation Schedule for Land Contamination

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
Construction Phase								
<i>For the Whole Project</i>								
S.12.6	<ul style="list-style-type: none"> The contaminated site shall be cleaned up before commencement of site clearance and construction work at the concerned area which may disturb the ground. 	A King Marine / Before commencement of construction activities at A King Marine.	Project proponent for the re-provisioned Tin Hau Temple	√				<i>"Guidance Notes for Investigation and Remediation of Contaminated Sites of Petrol Filling Stations, Boatyards, and Car Repair/Dismantling Workshops"</i> 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: <ul style="list-style-type: none"> Excavation profiles must be properly designed and executed; In case the soil to be excavated is situated beneath the groundwater table, it may be necessary to lower the groundwater table by installing well points or similar means; Quantities of soil to be excavated must be estimated; It maybe necessary to split quantities of soil according to soil type, degree and nature of contamination. Temporary storage of soil at intermediate depot or on-site 	A King Marine / During soil remediation works	Contractor	√				Air Pollution Control Ordinance Noise Control Ordinance Waste Disposal Ordinance Waste Disposal (Chemical Waste) (General) Regulation

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EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
	maybe required. The storage site shall include protection facilities for leaching into the ground. eg. Liner maybe required.							
	<ul style="list-style-type: none"> 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. <p>The following environmental mitigation measures shall be strictly followed during the operation and/or maintenance of the CS/S facilities:</p>							Water Pollution Control Ordinance

Appendix 2.1

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

Appendix 2.1

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
	<p><u>Water Quality Mitigation Measures</u></p> <ul style="list-style-type: none"> 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. <p><u>Waste Mitigation Measures</u></p> <ul style="list-style-type: none"> Treated oversize materials will be used as filling material for backfilling within the site. Sorted materials of size smaller than 5 cm will be collected and transferred to the mixing plant for further decontamination treatment. Stabilized soils shall be broken into suitable size for backfilling or reuse on site. A high standard of housekeeping shall be maintained within the mixing plant area. If necessary, there shall be clear and separated areas for stockpiling of untreated and treated materials. 							

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

Table A13.6 Implementation Schedule for Marine Ecology

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

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S.9.7.4	<p>During dredging and filling operations, a number of mitigation measures to control water quality shall be adopted to confine sediment plume within reclamation area and protect marine fauna in proximity to the reclamation. The mitigation measures include the following:</p> <ul style="list-style-type: none"> • Installation of silt curtains during dredging activities • Use of tightly-closed grab dredger • Reduction of dredging rate • Control of grab descending speed • Construction of leading edges of seawall in the early stages of the reclamation works 	Work site / during construction phase	Contractor		√			EIAO TM Annex 16 (Section 8.4) & EIAO Guidance Note No. 3/2002.
	<ul style="list-style-type: none"> • Adoption of multiple-phase construction schedule 							

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EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S.9.7.6	<p>To minimize potential disturbance impacts on the foraging ardeid population in the CBTS, particularly in the area near the A King Shipyard, appropriate mitigation measures shall be adopted particularly during the construction phase. The following measures are recommended:</p> <ul style="list-style-type: none"> • 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 (Section 8.4) & EIAO Guidance Note No. 3/2002.
S.9.7.7	Seawalls shall be constructed in advance around the reclamation areas within the area of the CBTS to screen adjacent feeding ground from construction phase activities, reduce noise disturbance to the associated seabirds and also to restrict access to this habitat adjacent to works areas by ship traffic.	Work site / during construction phase	Contractor		√			EIAO TM Annex 16 (Section 8.4) & EIAO Guidance Note No. 3/2002.
S.9.7.8	Loss of artificial seawall habitats shall be reinstated by the construction of about 1 km vertical wave absorbing seawall along the coastlines of the new reclamation around the HKCEC and at North Point. The new seawalls are expected to provide large area of hard substrata for settlement and recruitment of intertidal fauna similar to those previously recorded from existing intertidal habitats.	Work site / during construction phase	Contractor		√			EIAO TM Annex 16 (Section 8.4) & EIAO Guidance Note No. 3/2002.

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

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Table A13.7 Implementation Schedule for Landscape and Visual

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

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

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EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
Refer to EIA-058/2001 Table 10.13	CM4 Control night-time lighting.	Work site / During Construction Phase	Contractor		√			EIAO TM
Refer to EIA-058/2001 Table 10.13	CM5 Minimisation of disruption to public by effective programming of the works.	Work site / During Construction Phase	Contractor		√			EIAO TM
For DP6 – Cross-Harbour Water Mains from Wan Chai to Tsim Sha Tsui								
Refer to EIA-058/2001 Table 10.13	CM2 Minimisation of works areas.	Work site / During Construction Phase	Contractor		√			EIAO TM
Refer to EIA-058/2001 Table 10.13	CM3 Erection of decorative hoardings.	Work site / During Construction Phase	Contractor		√			EIAO TM
Refer to EIA-058/2001 Table 10.13	CM4 Control night-time lighting.	Work site / During Construction Phase	Contractor		√			EIAO TM
Refer to EIA-058/2001 Table 10.13	CM5 Minimisation of disruption to public by effective programming of the works.	Work site / During Construction Phase	Contractor		√			EIAO TM
Operation Phase								
For the Whole Project - Schedule 3 DP								
Table 10.6, Figure 10.5.1-10.5.5	OM1 Aesthetic design of buildings and road-related structures, including viaducts, vent buildings, subways, footbridges and noise barriers and enclosure.	Work site / During Design Stage and Operation Phases	CEDD/HyD	√	√	√		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1-10.5.5	OM2 Shrub and Climbing Plants to soften proposed structures.	Work site / During Design Stage and Operation Phases	CEDD/HyD	√	√	√		ETWB TCW 2/2004

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EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
Table 10.6, Figure 10.5.1-10.5.5	OM3 Buffer Tree and Shrub Planting to screen proposed roads and associated structures.	Work site / During Design Stage and Operation Phases	CEDD/HyD/	√	√	√		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1-10.5.5	OM4 Aesthetic design of proposed waterfront promenade.	Work site / During Design Stage and Operation Phases	CEDD ⁴	√	√	√		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1-10.5.5	OM5 Aesthetic streetscape design.	Work site / During Design Stage and Operation Phases	CEDD/HyD	√	√	√		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1-10.5.5	OM6 Aesthetic design of roadside amenity areas.	Work site / During Design Stage and Operation Phases	CEDD/HyD	√	√	√		ETWB TCW 2/2004
For DP1 – CWB (Within the Project Boundary)								
Table 10.6, Figure 10.5.1-10.5.5	OM1 Aesthetic design of buildings and road-related structures, including viaducts, vent buildings, subways, footbridges and noise barriers and enclosure.	Work site / During Design Stage and Operation Phases	HyD	√	√	√		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1-10.5.5	OM2 Shrub and Climbing Plants to soften proposed structures	Work site / During Design Stage and Operation Phases	HyD	√	√	√		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1-10.5.5	OM3 Buffer Tree and Shrub Planting to screen proposed roads and associated structures.	Work site / During Design Stage and Operation Phases	HyD	√	√	√		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1-10.5.5	OM5 Aesthetic streetscape design.	Work site / During Design Stage and Operation Phases	HyD	√	√	√		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1-10.5.5	OM6 Aesthetic design of roadside amenity areas.	Work site / During Design Stage and Operation Phases	HyD	√	√	√		ETWB TCW 2/2004
For DP2 – WDII Major Roads (Road P2)								

⁴ CEDD will identify an implementation agent

Appendix 2.1

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
Table 10.6, Figure 10.5.1-10.5.5	OM1 Aesthetic design of buildings and road-related structures, including viaducts, vent buildings, subways, footbridges and noise barriers and enclosure.	Work site / During Design Stage and Operation Phases	CEDD/HyD		√	√		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1-10.5.5	OM3 Buffer Tree and Shrub Planting to screen proposed roads and associated structures.	Work site / During Design Stage and Operation Phases	CEDD/HyD		√	√		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1-10.5.5	OM5 Aesthetic streetscape design.	Work site / During Design Stage and Operation Phases	CEDD/HyD		√	√		ETWB TCW 2/2004
Table 10.6, Figure 10.5.1-10.5.5	OM6 Aesthetic design of roadside amenity areas	Work site / During Design Stage and Operation Phases	CEDD/HyD		√	√		ETWB TCW 2/2004
For DP3 – Reclamation Works								
Table 10.6, Figure 10.5.1-10.5.5	OM4 Aesthetic design of proposed waterfront promenade.	Work site / During Design Stage and Operation Phases	CEDD ⁵	√	√	√		ETWB TCW 2/2004

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

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

Note 1:

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

Action and Limit Level for Air Quality Monitoring

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

Action and Limit Level for Water Quality Monitoring

Parameters	Dry Season		Wet Season	
	Action	Limit	Action	Limit
WSD Salt Water Intake				
SS in mg L^{-1}	13.00	14.43	16.26	19.74
Turbidity in NTU	8.04	9.49	10.01	11.54
DO in mg/L	3.66	3.28	3.17	2.63
Cooling Water Intake				
SS in mg L^{-1}	15.00	22.13	18.42	27.54
Turbidity in NTU	9.10	10.25	11.35	12.71
DO in mg/L	3.36	2.73	3.02	2.44

Remarks:

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

Action and Limit Level for Enhance DO Monitoring

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

Action and Limit Levels for Odour Patrol

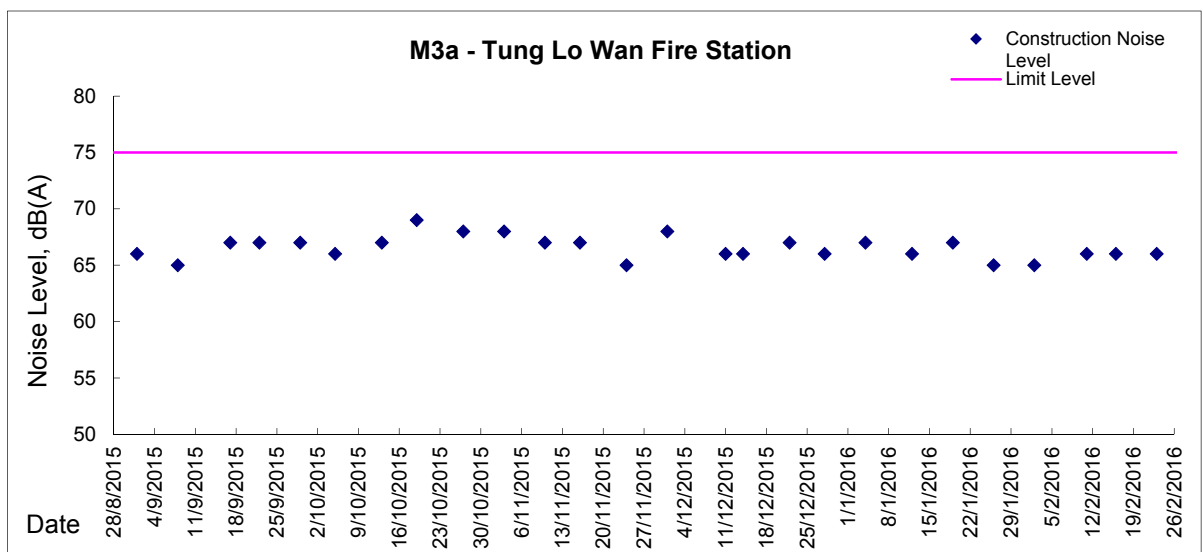
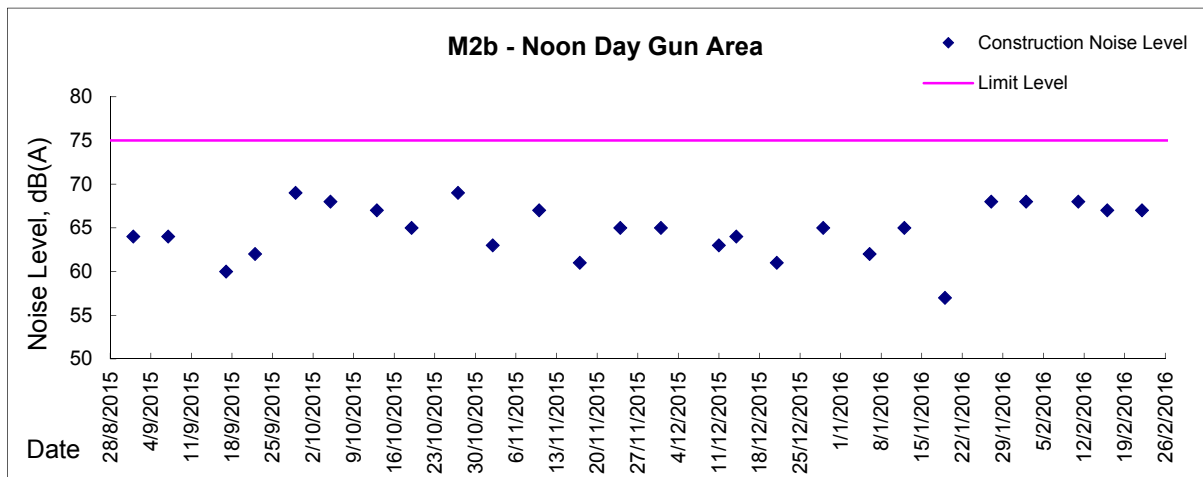
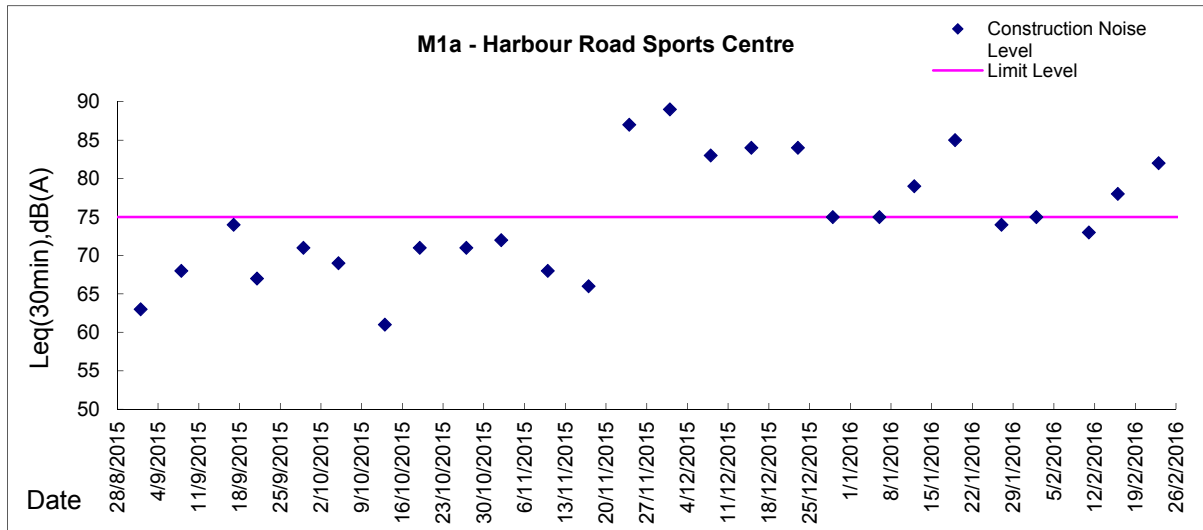
Parameters	Action	Limit
Odour Nuisance (from odour intensity analysis or odour patrol)	<ul style="list-style-type: none"> • When two documented complaint are received; or • Odour Intensity of 2 is measured from odour intensity analysis. 	<ul style="list-style-type: none"> • Five or more consecutive genuine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



Appendix 4.1

Noise Monitoring Graphical Presentations

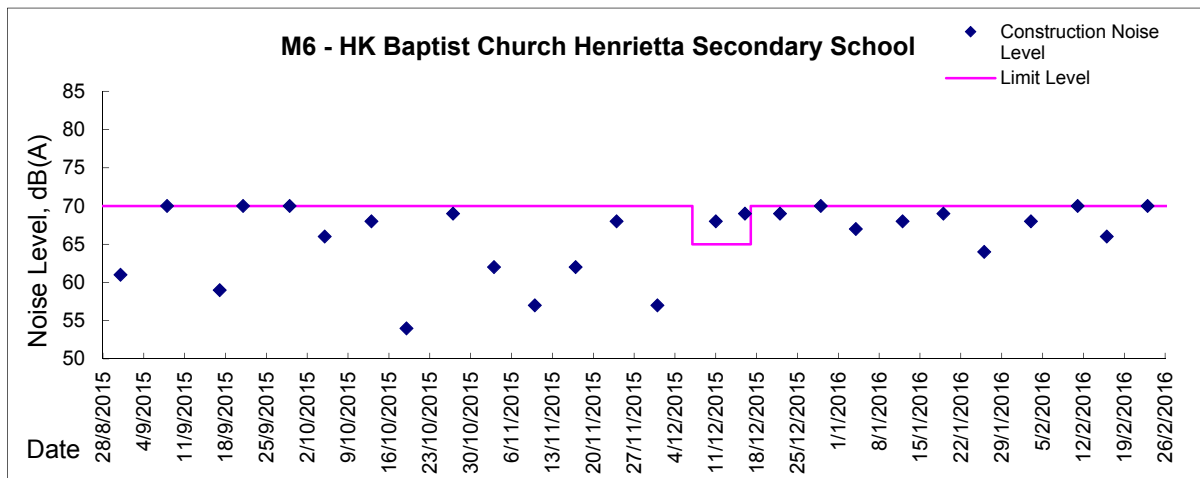
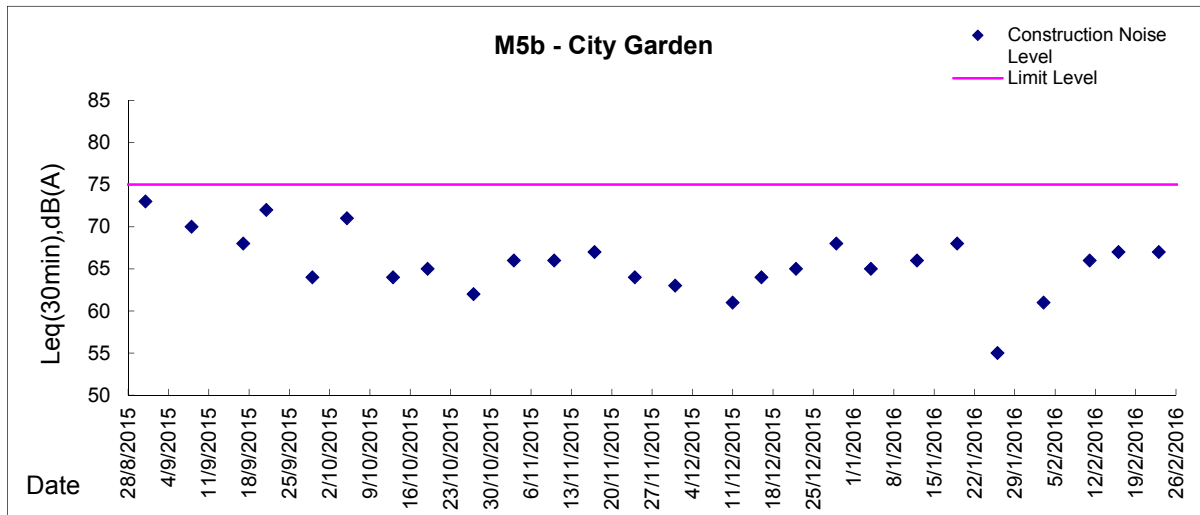
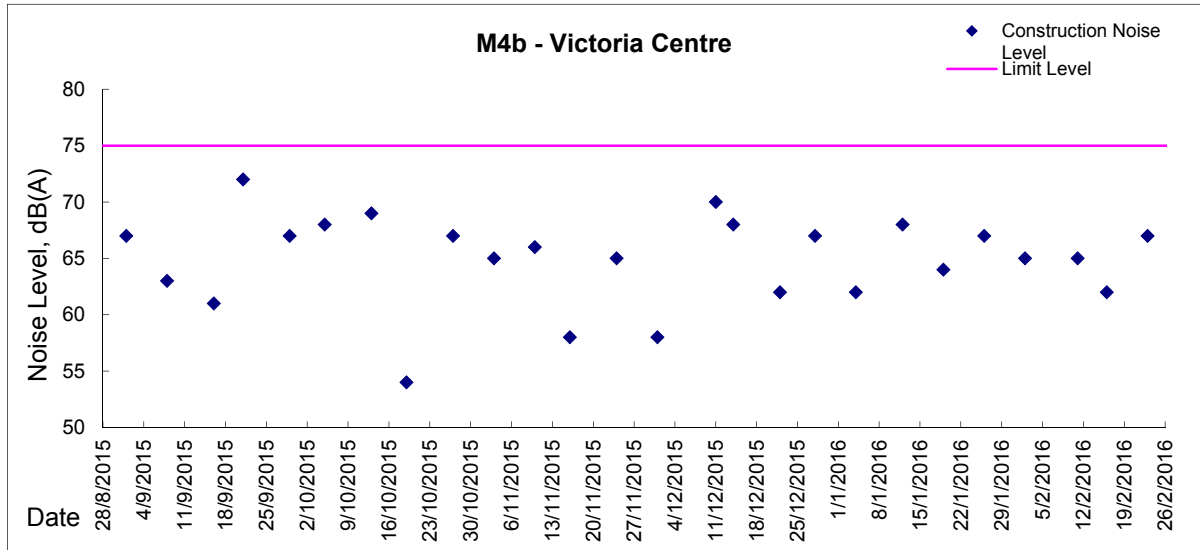
Graphic Presentation of Noise Monitoring Result
Day Time (0700 - 1900hrs on normal weekdays)





Graphic Presentation of Noise Monitoring Result

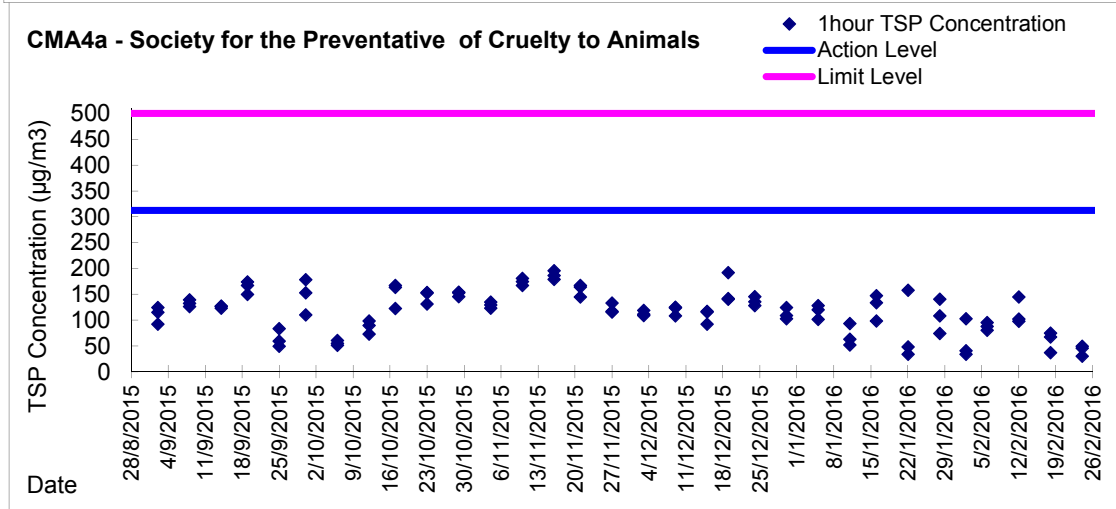
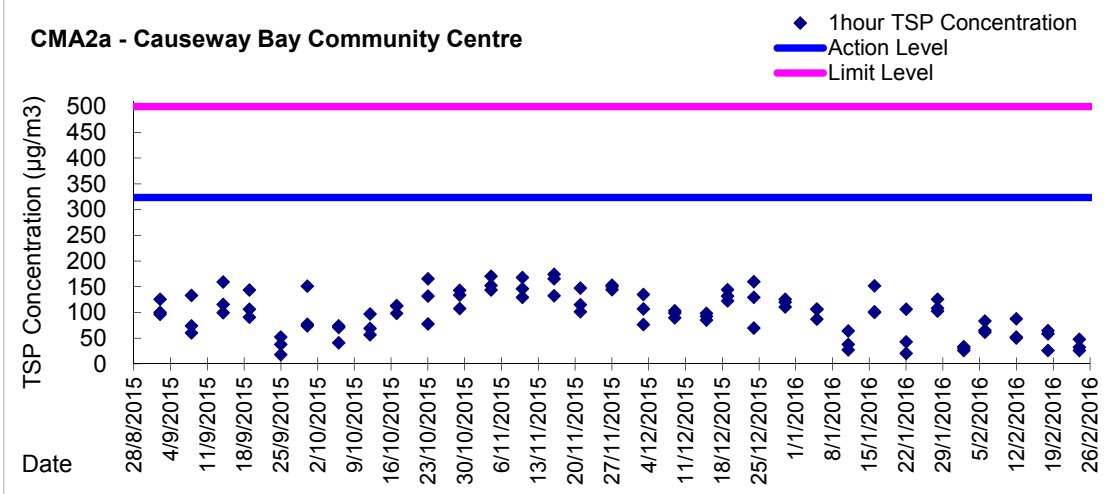
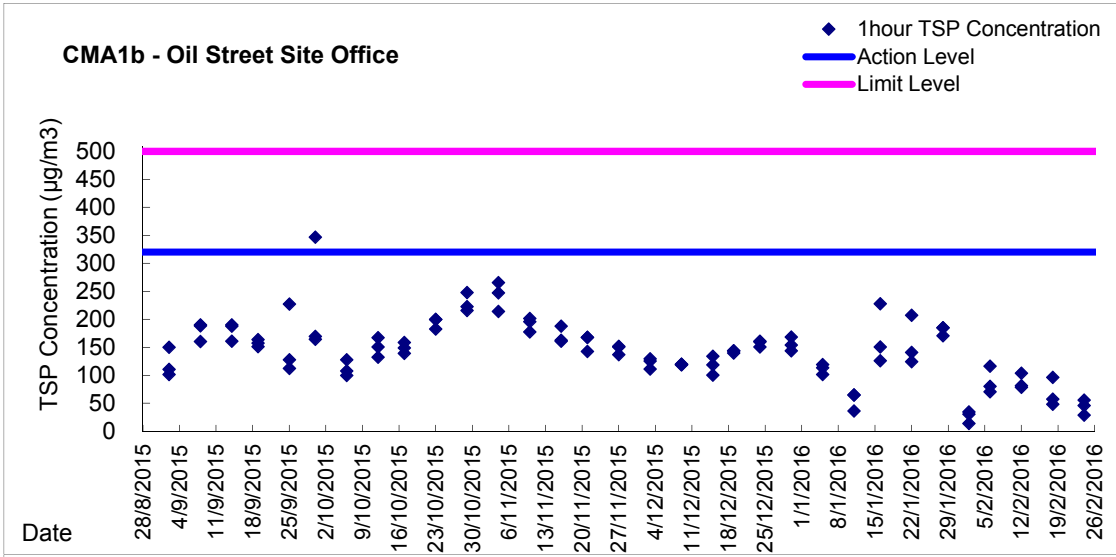
Day Time (0700 - 1900hrs on normal weekdays)



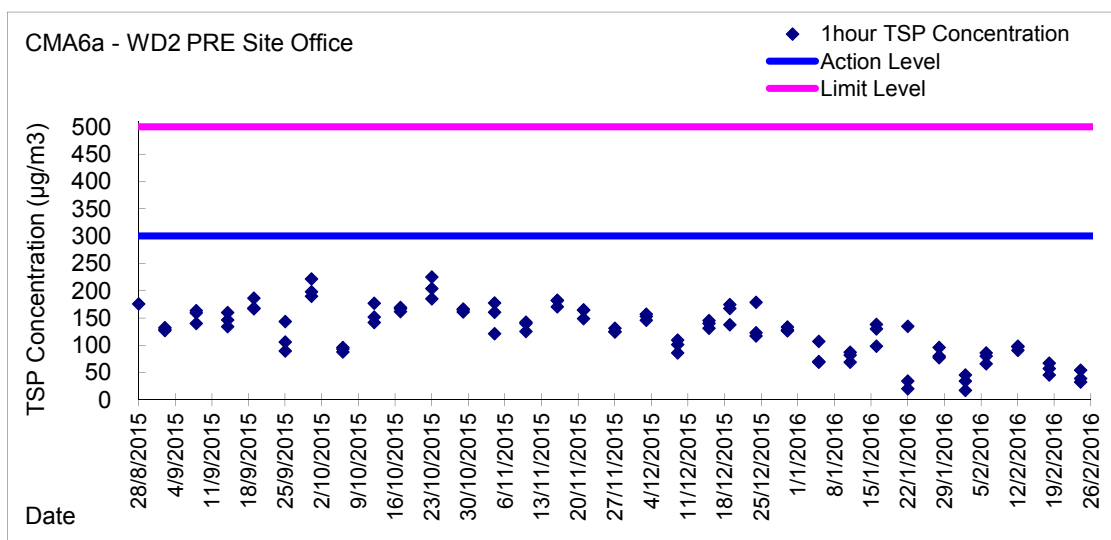
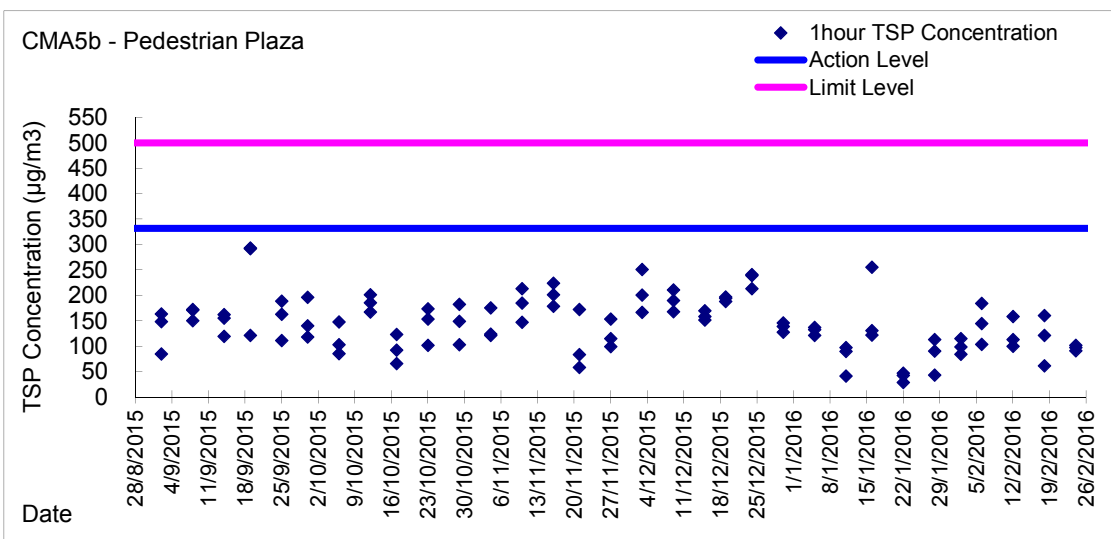
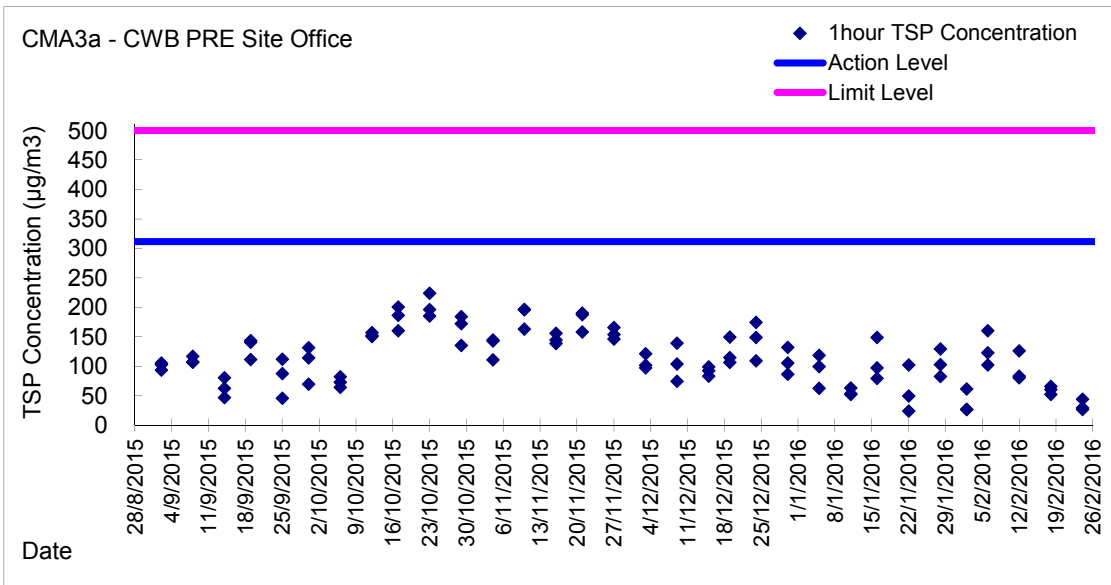


Appendix 4.2
Air Quality Monitoring Graphical Presentations

Graphic Presentation of 1 hour TSP Result

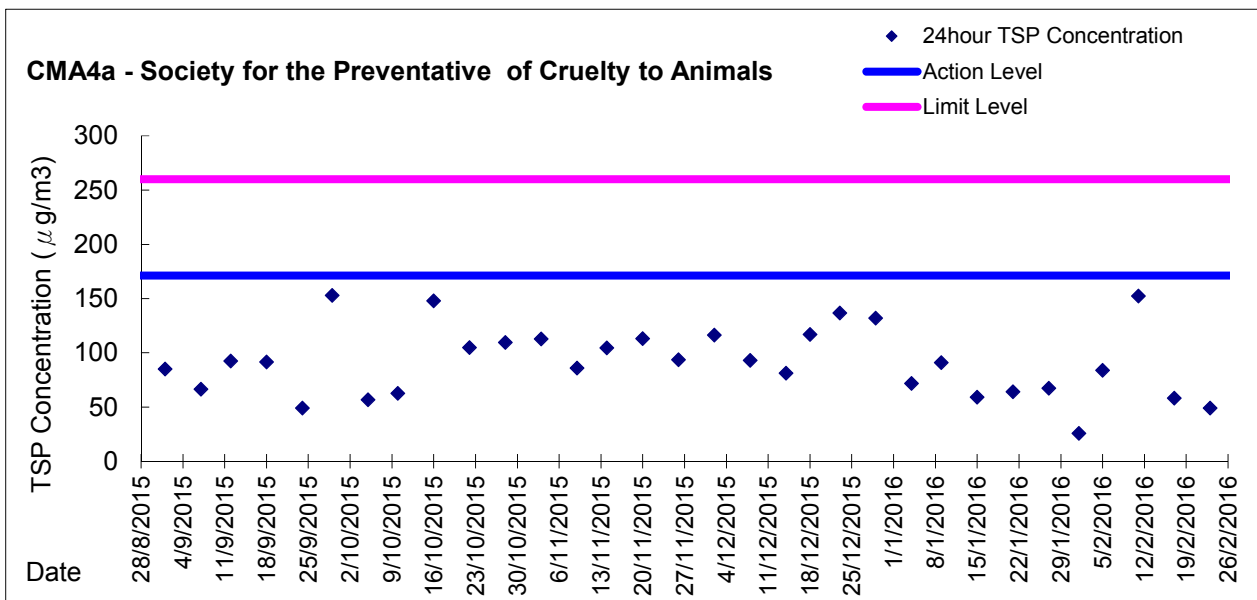
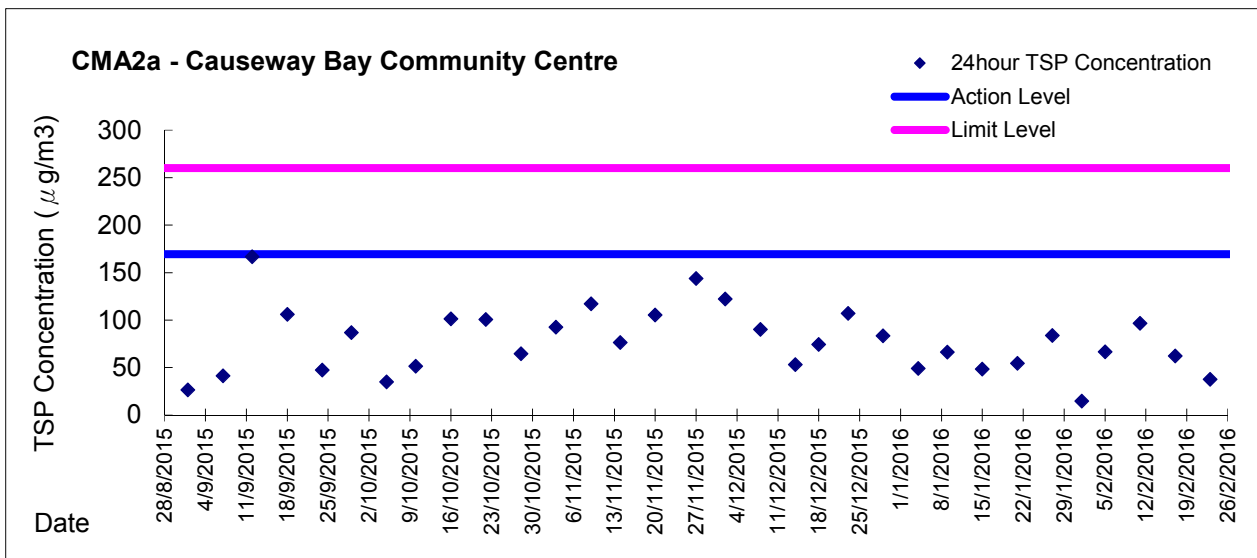
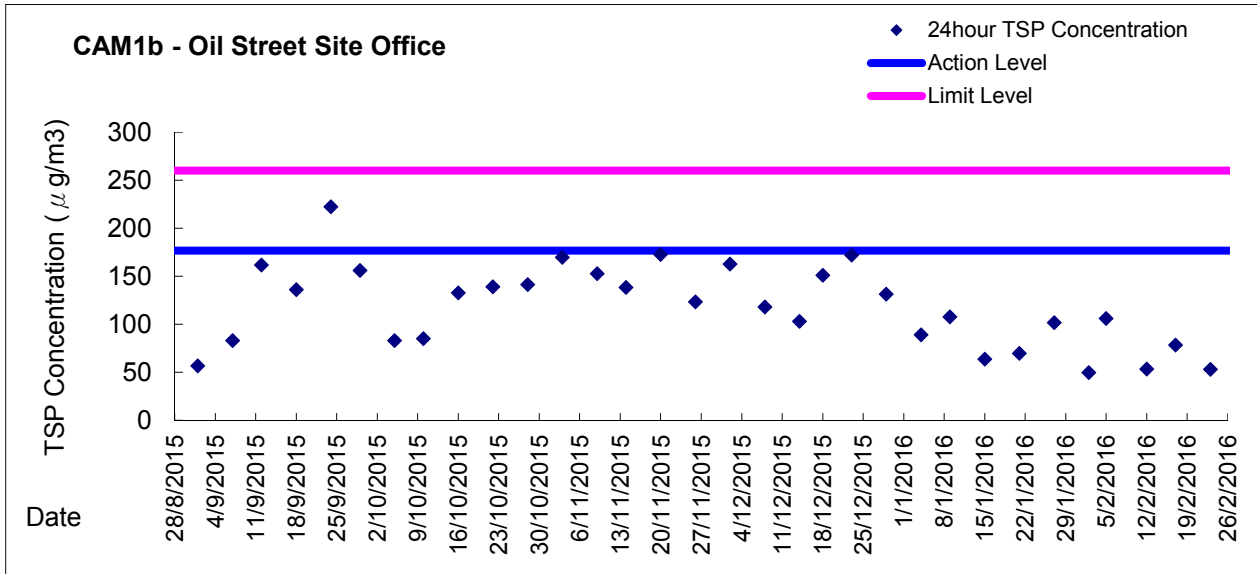


Graphic Presentation of 1 hour TSP Result



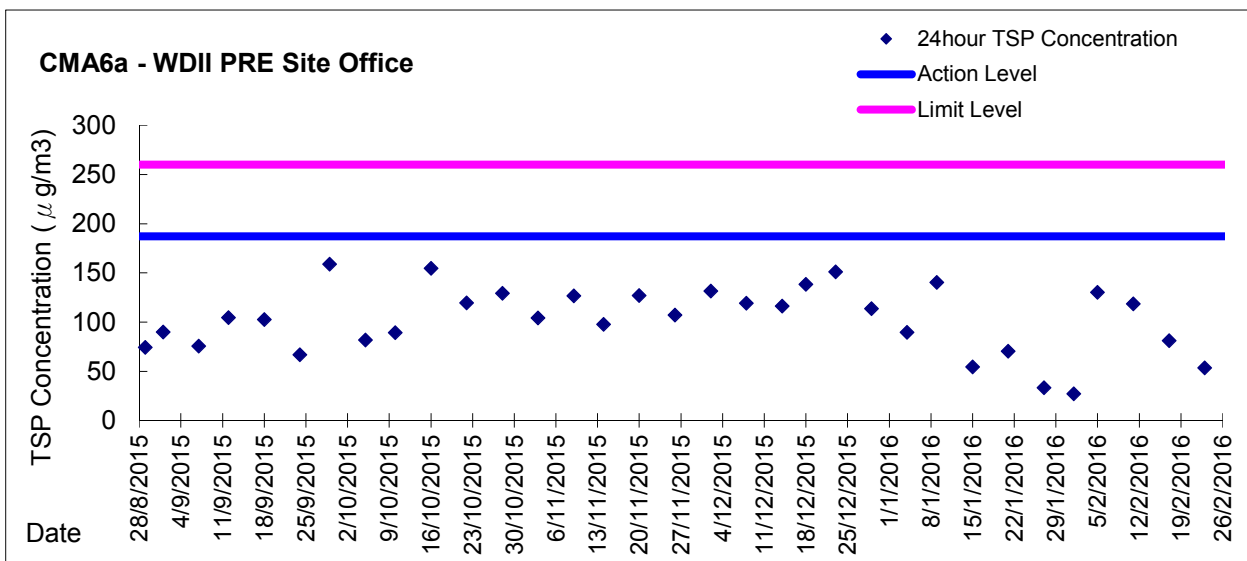
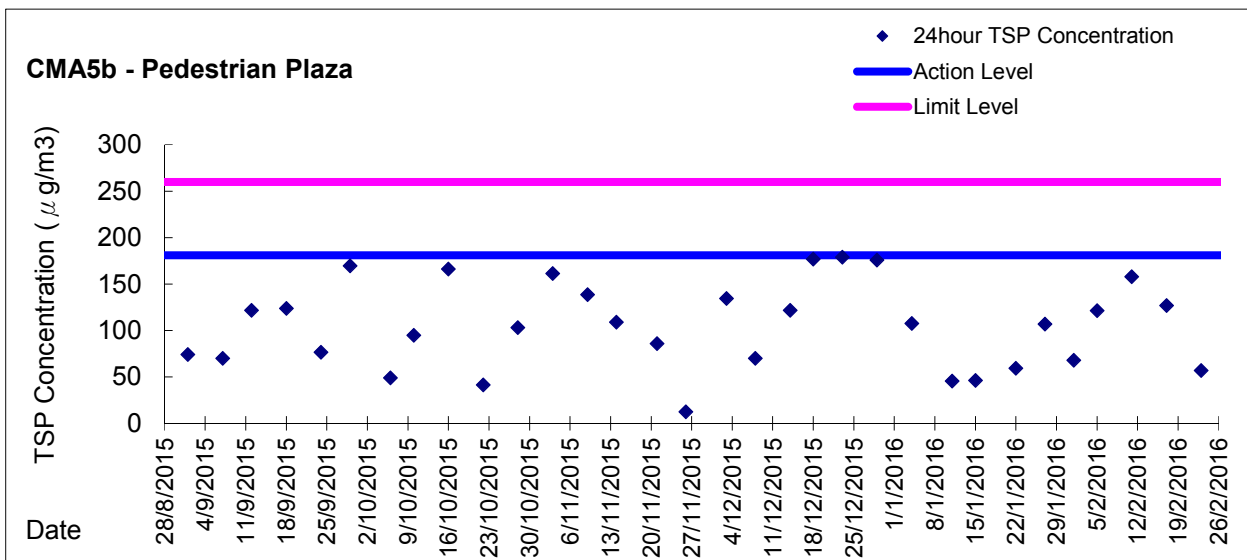
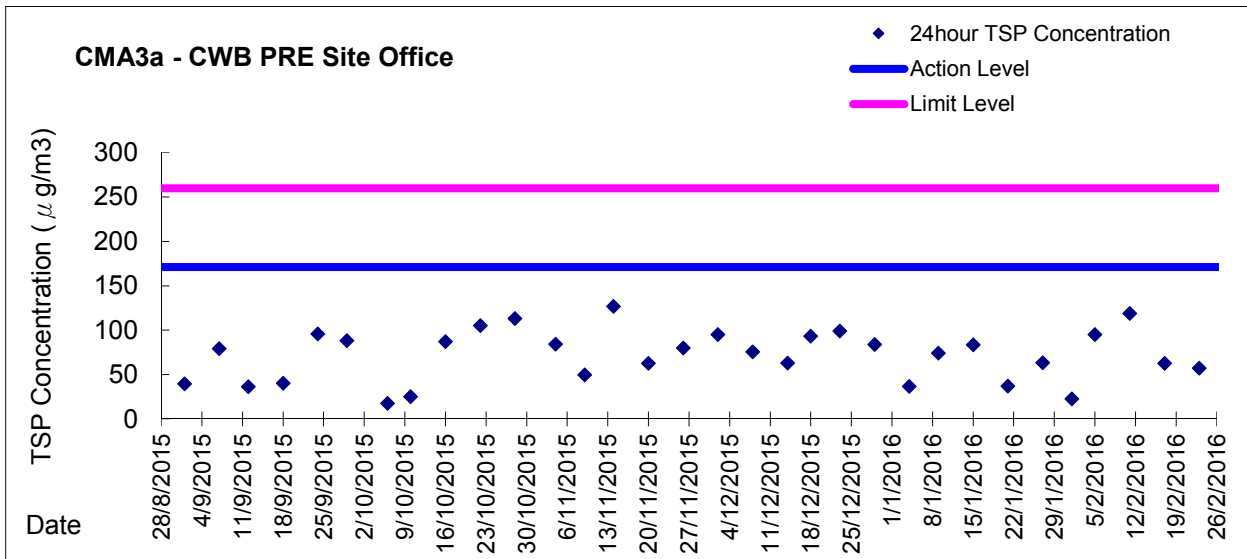


Graphic Presentation of 24 hour TSP Result





Graphic Presentation of 24 hour TSP Result



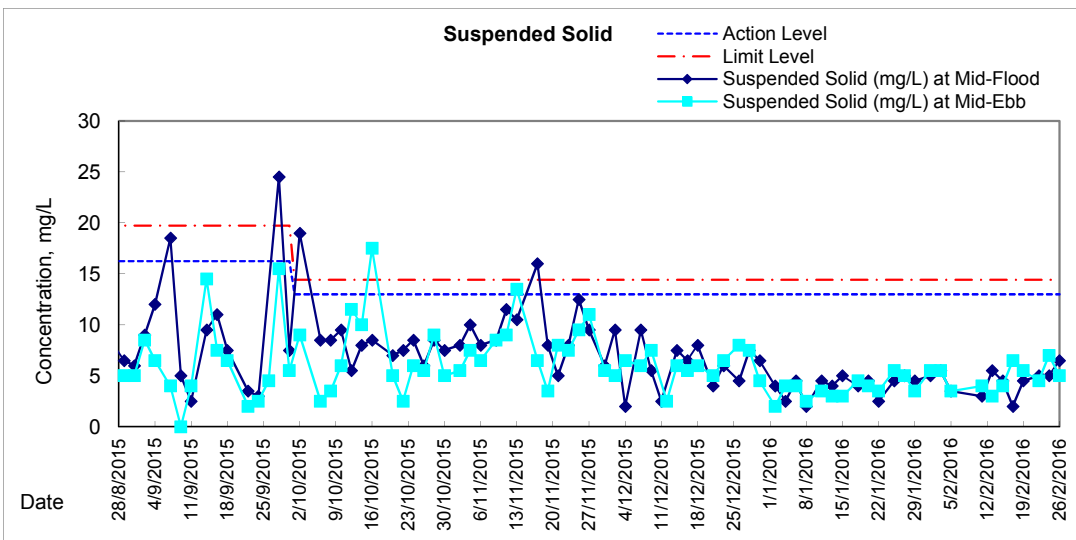
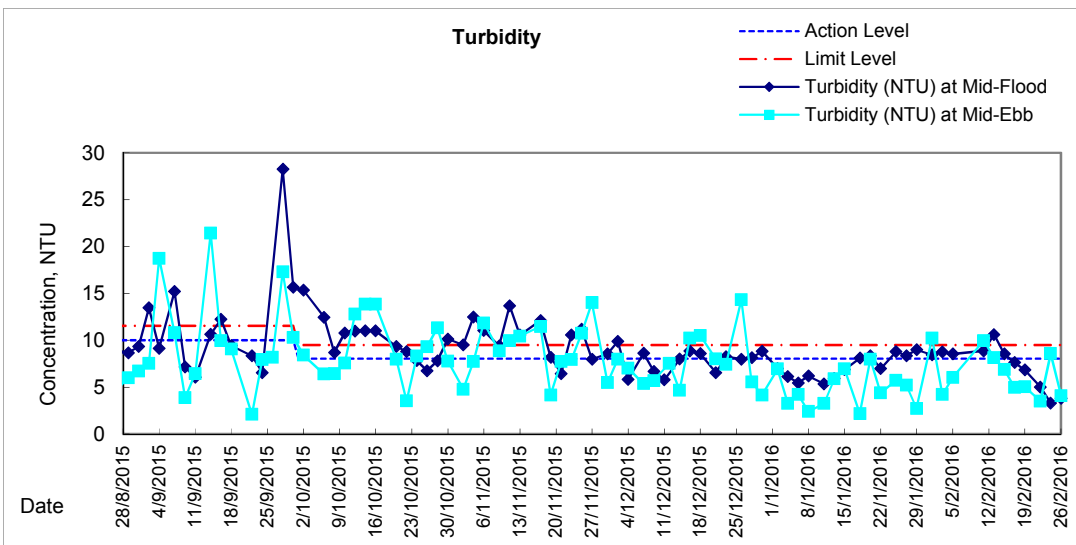
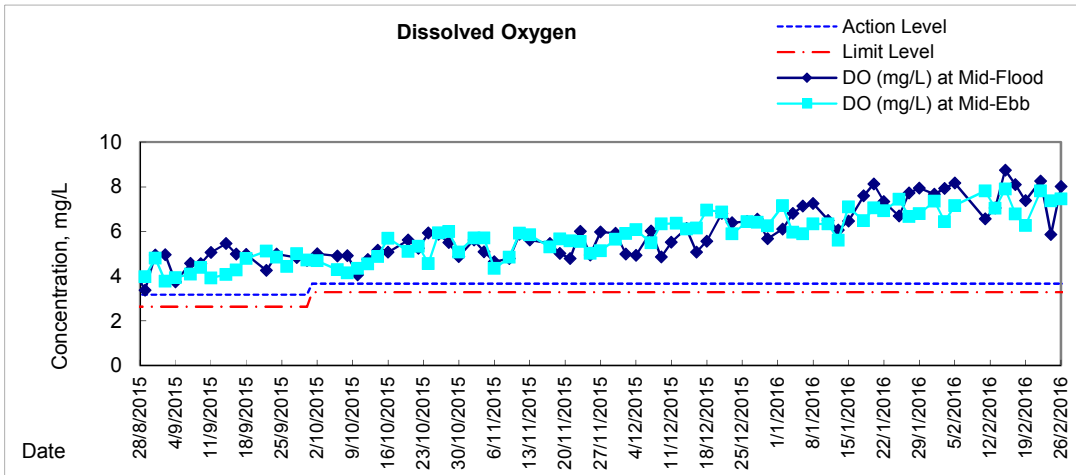


Appendix 4.3

Water Quality Monitoring Graphical Presentations

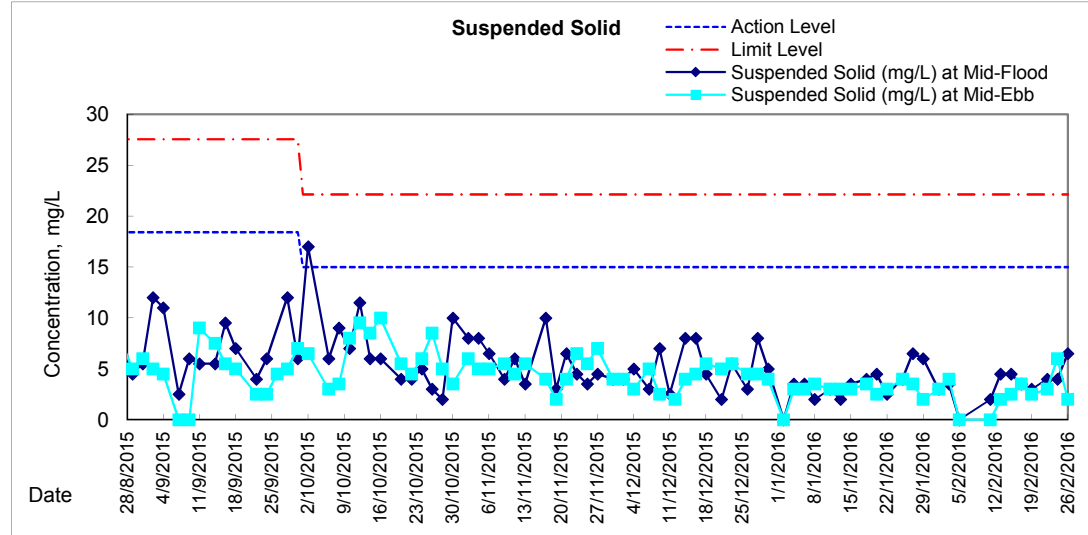
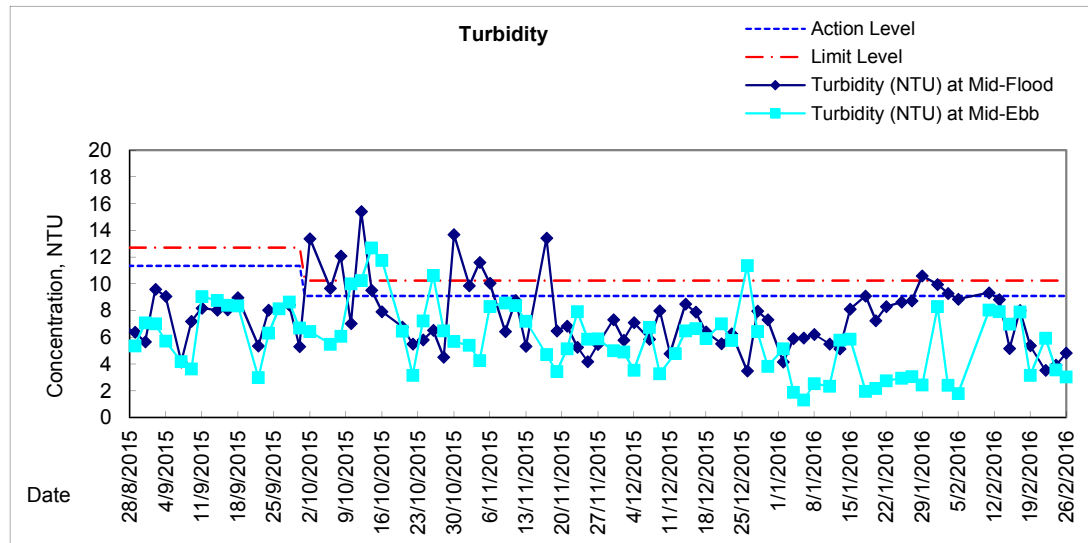
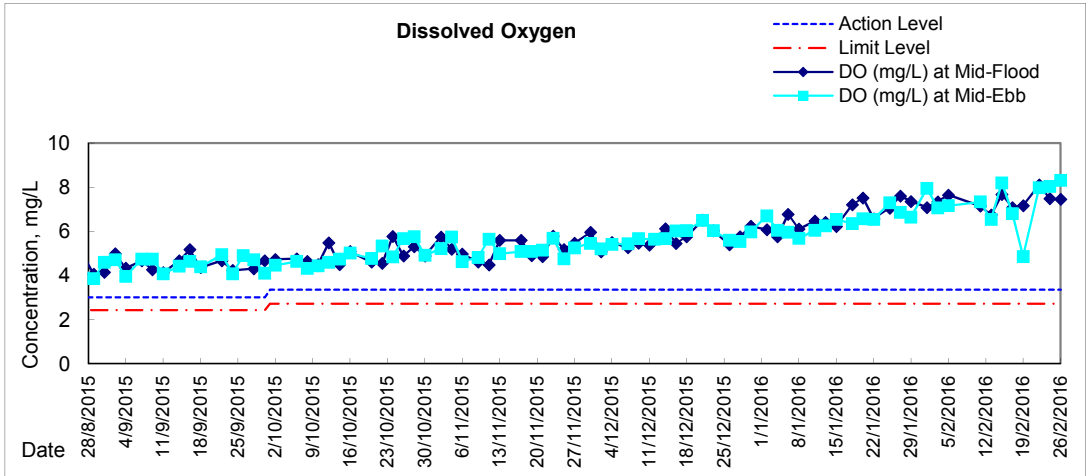


Graphic Presentation of Water Quality Result of WSD19 - Sheung Wan



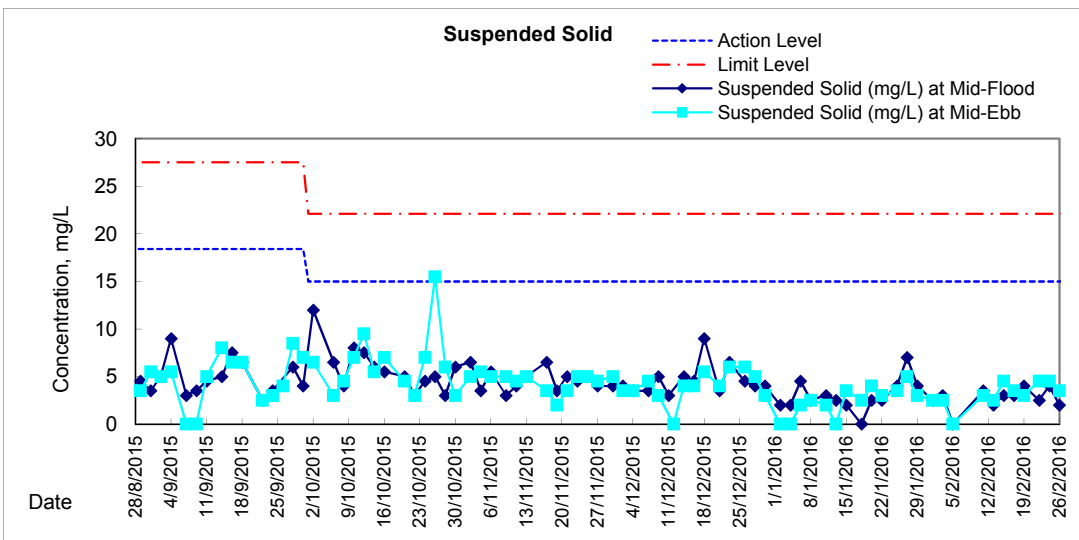
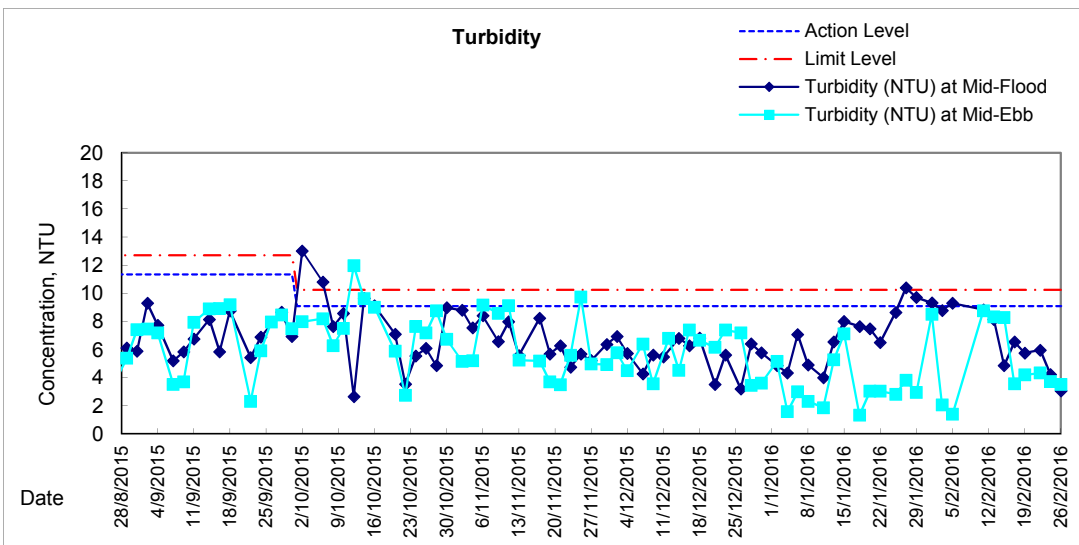
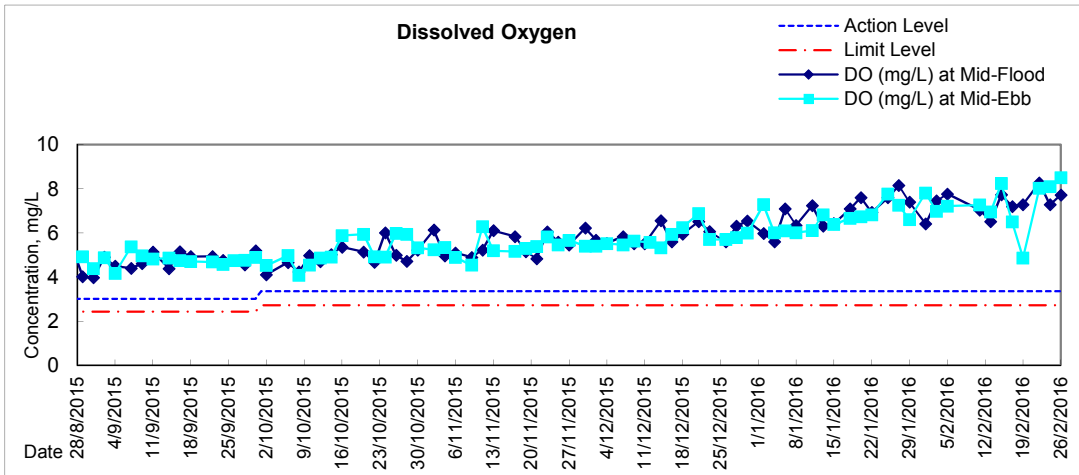


Graphic Presentation of Water Quality Result of C1 - HKCEC



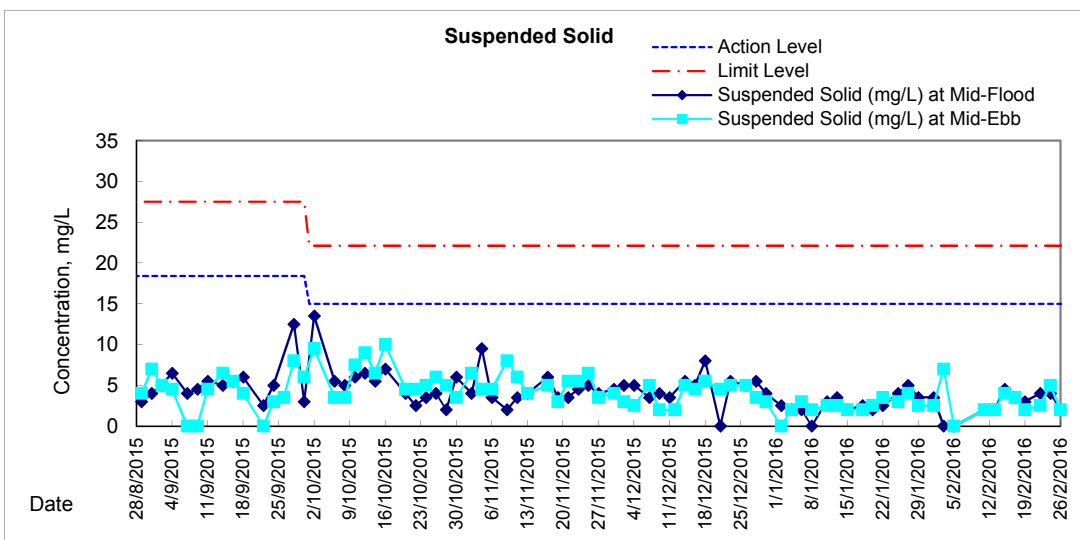
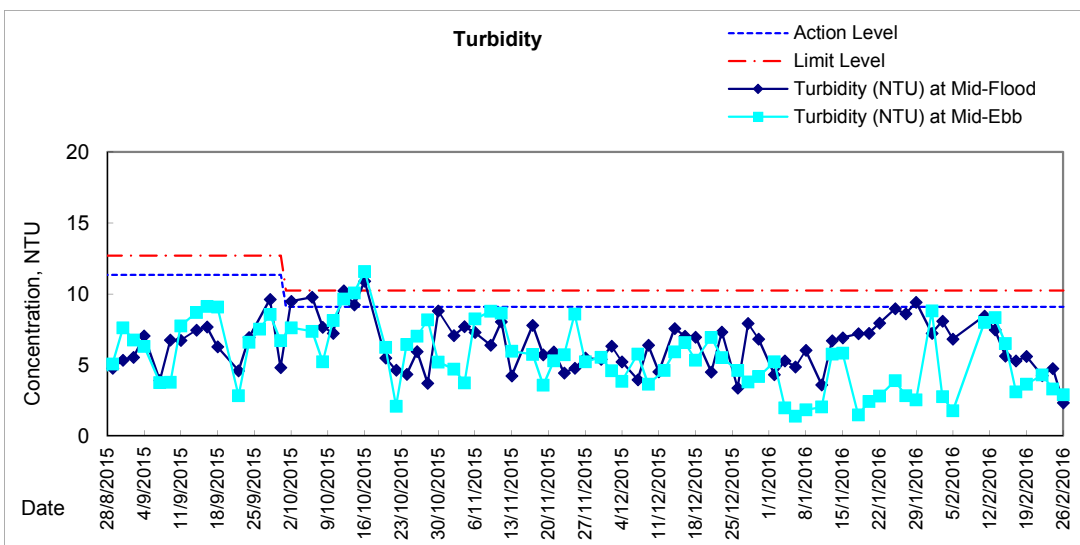
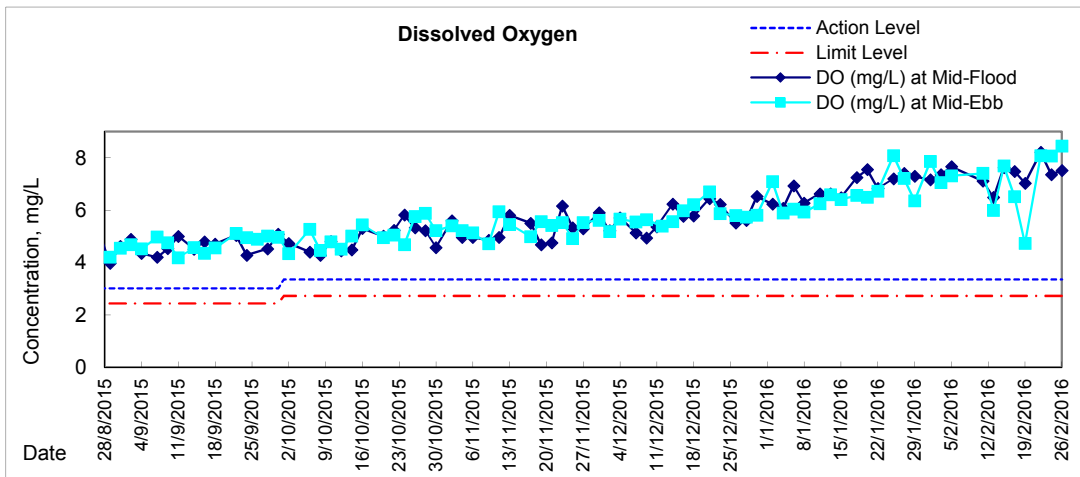


Graphic Presentation of Water Quality Result of P1 - HKCEC Phase I



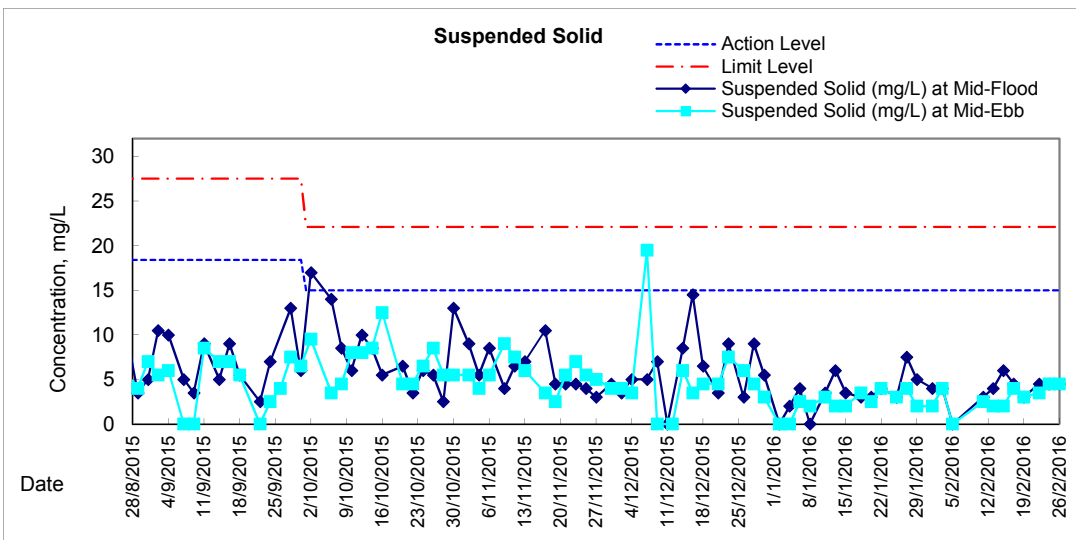
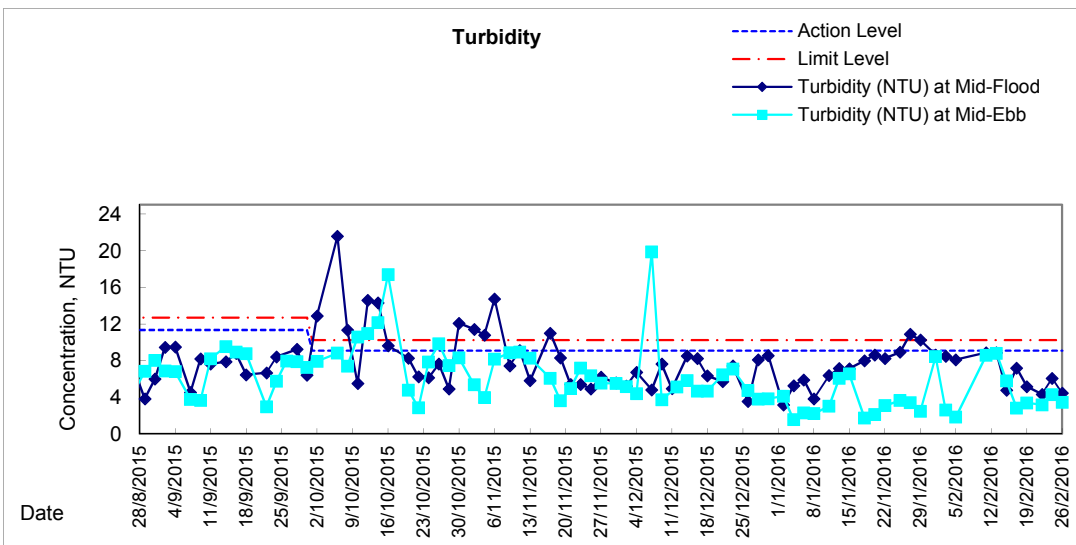
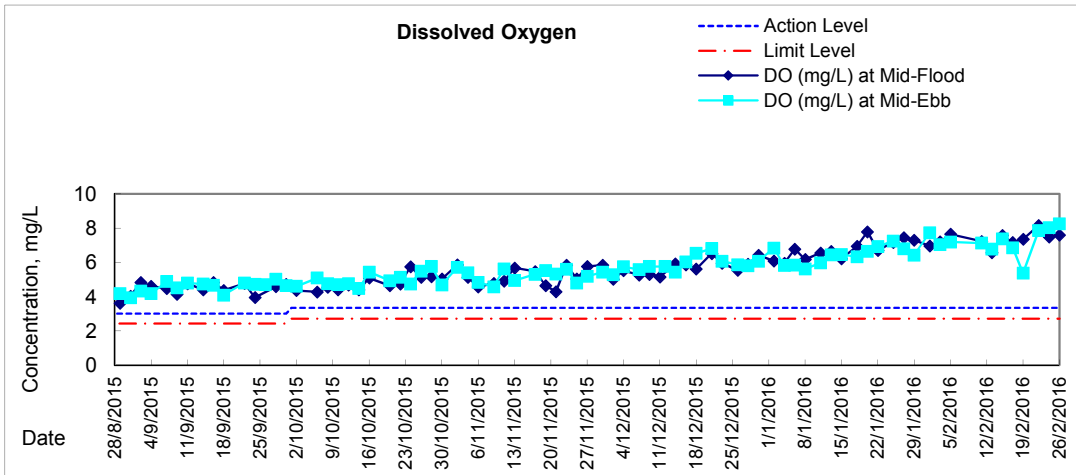


Graphic Presentation of Water Quality Result of P3 - APA



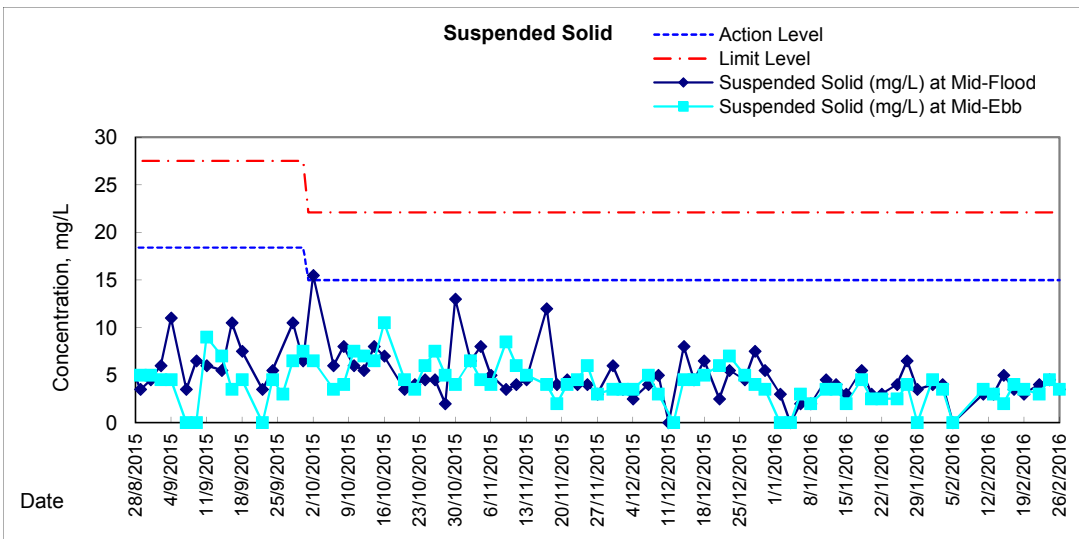
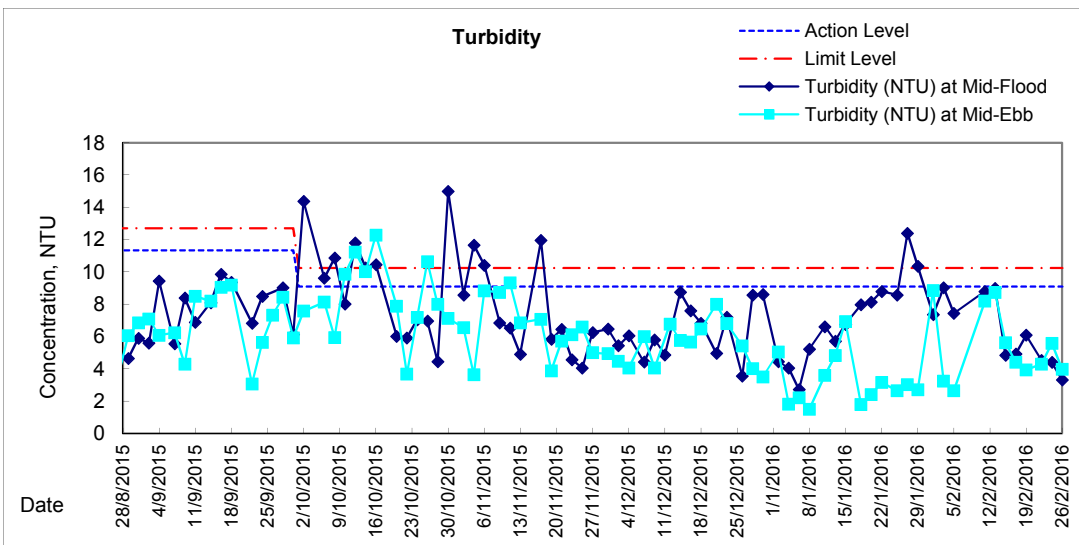
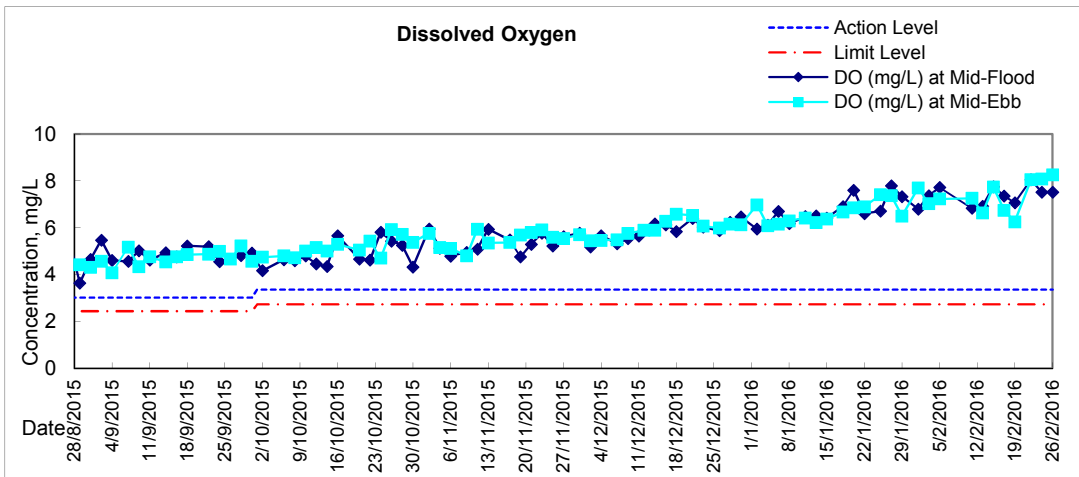


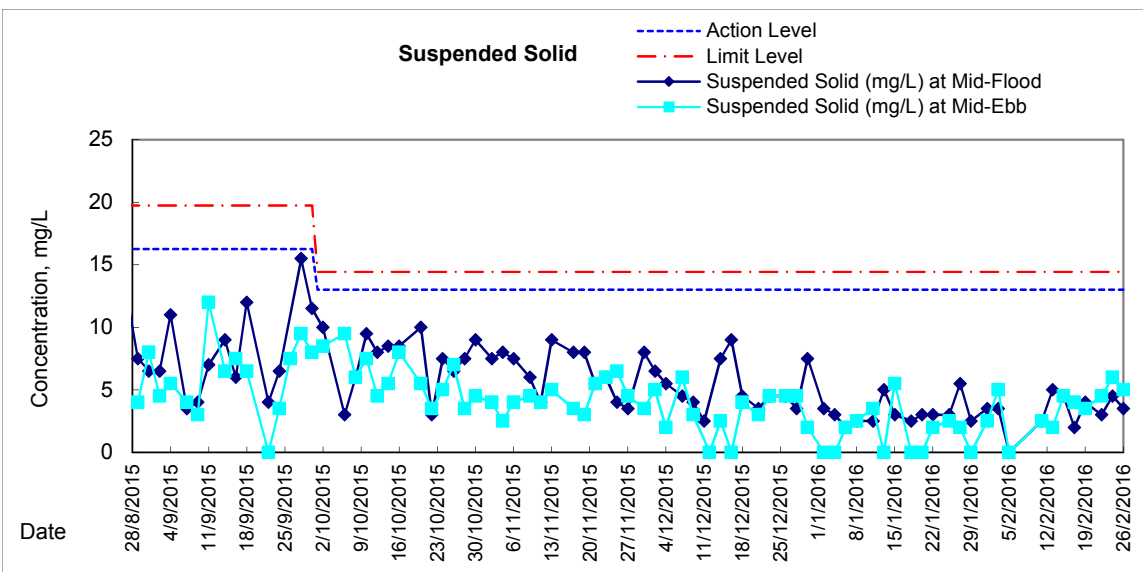
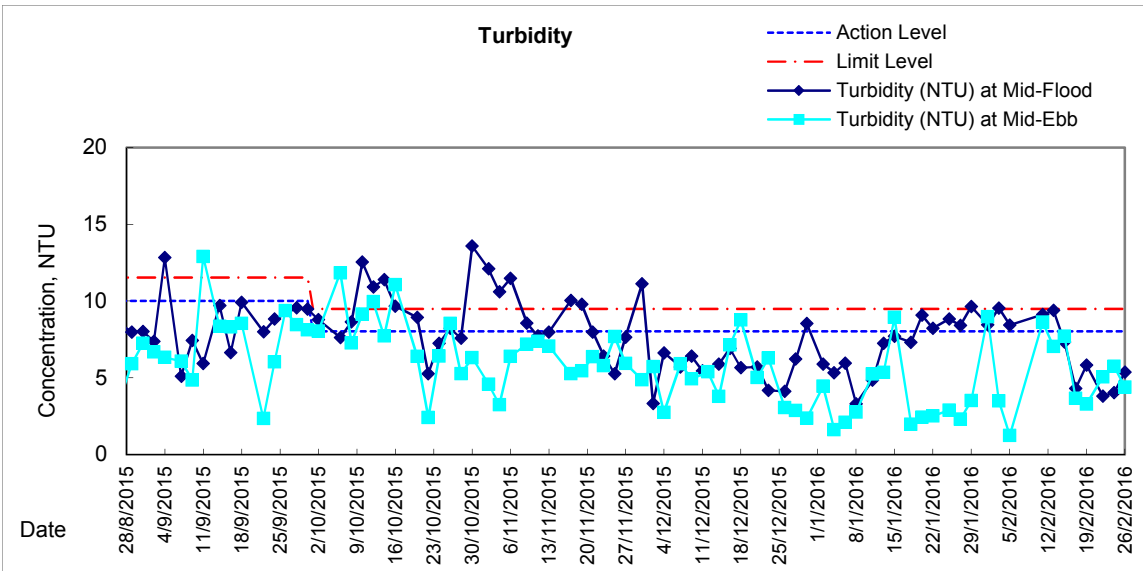
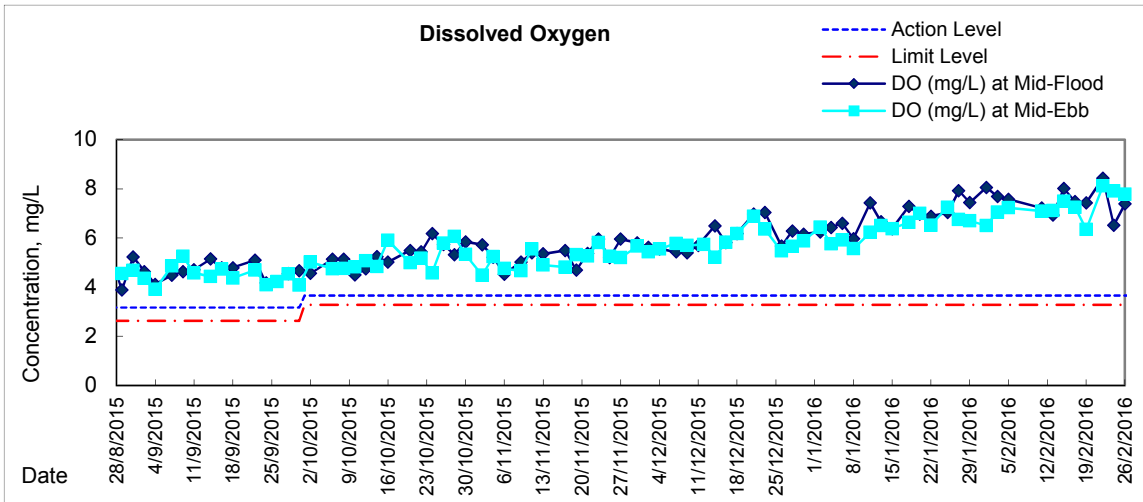
Graphic Presentation of Water Quality Result of P5 - WCT / RT / IT





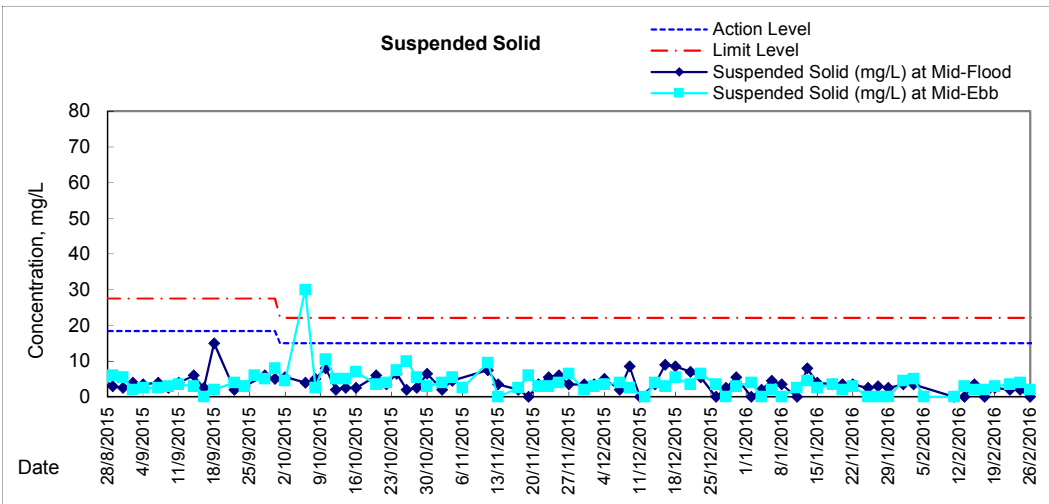
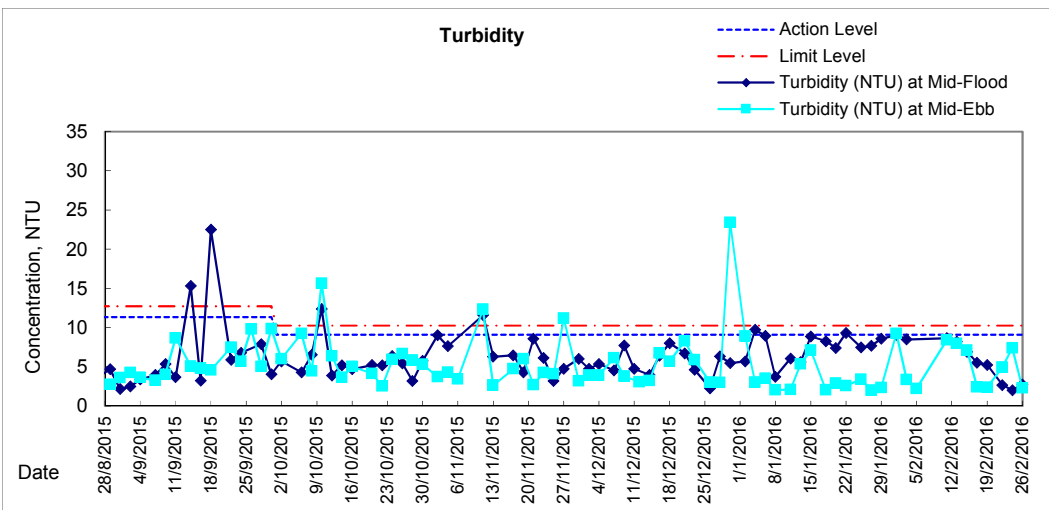
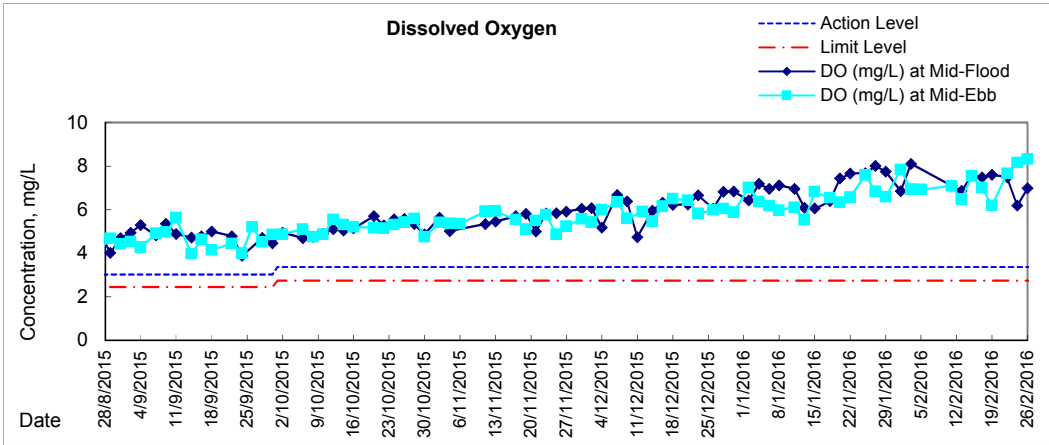
Graphic Presentation of Water Quality Result of P4 - SOC



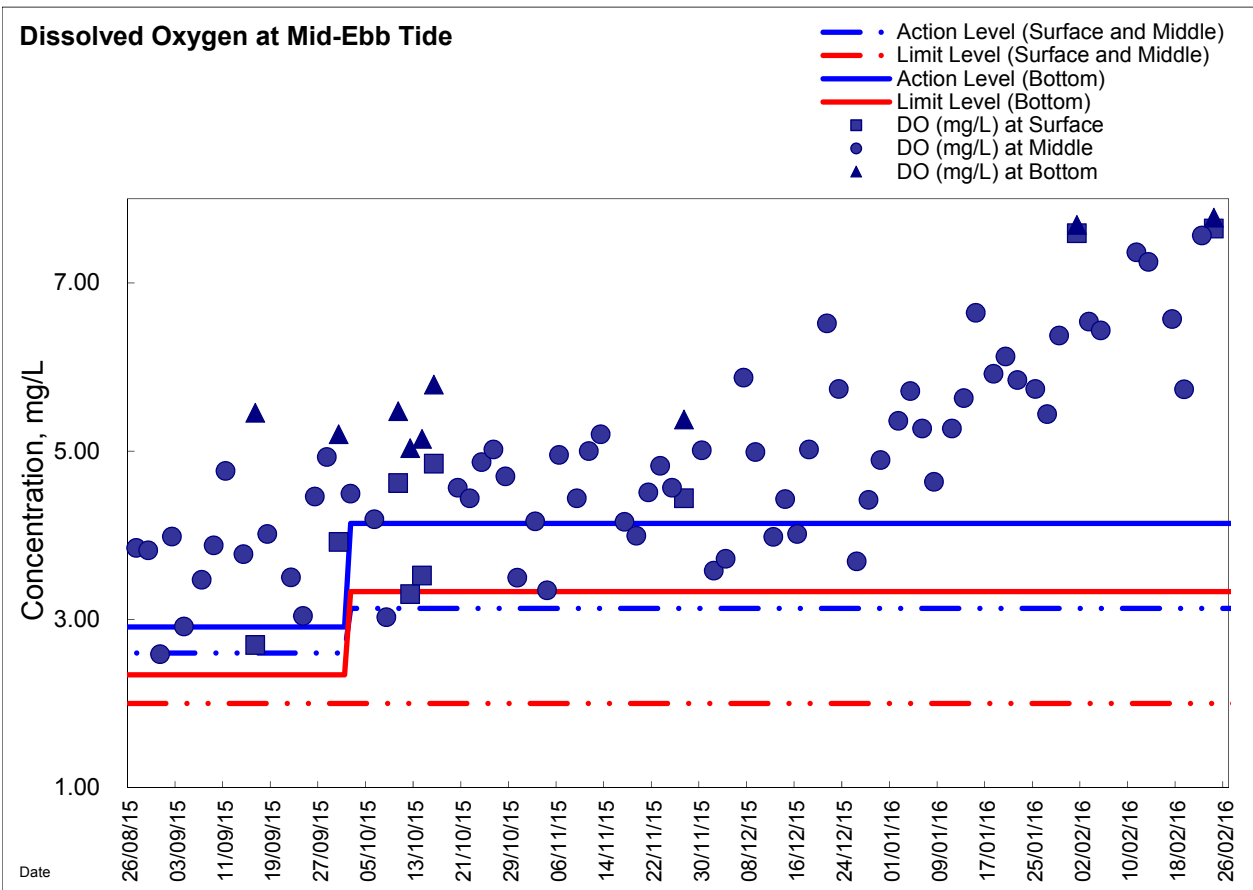
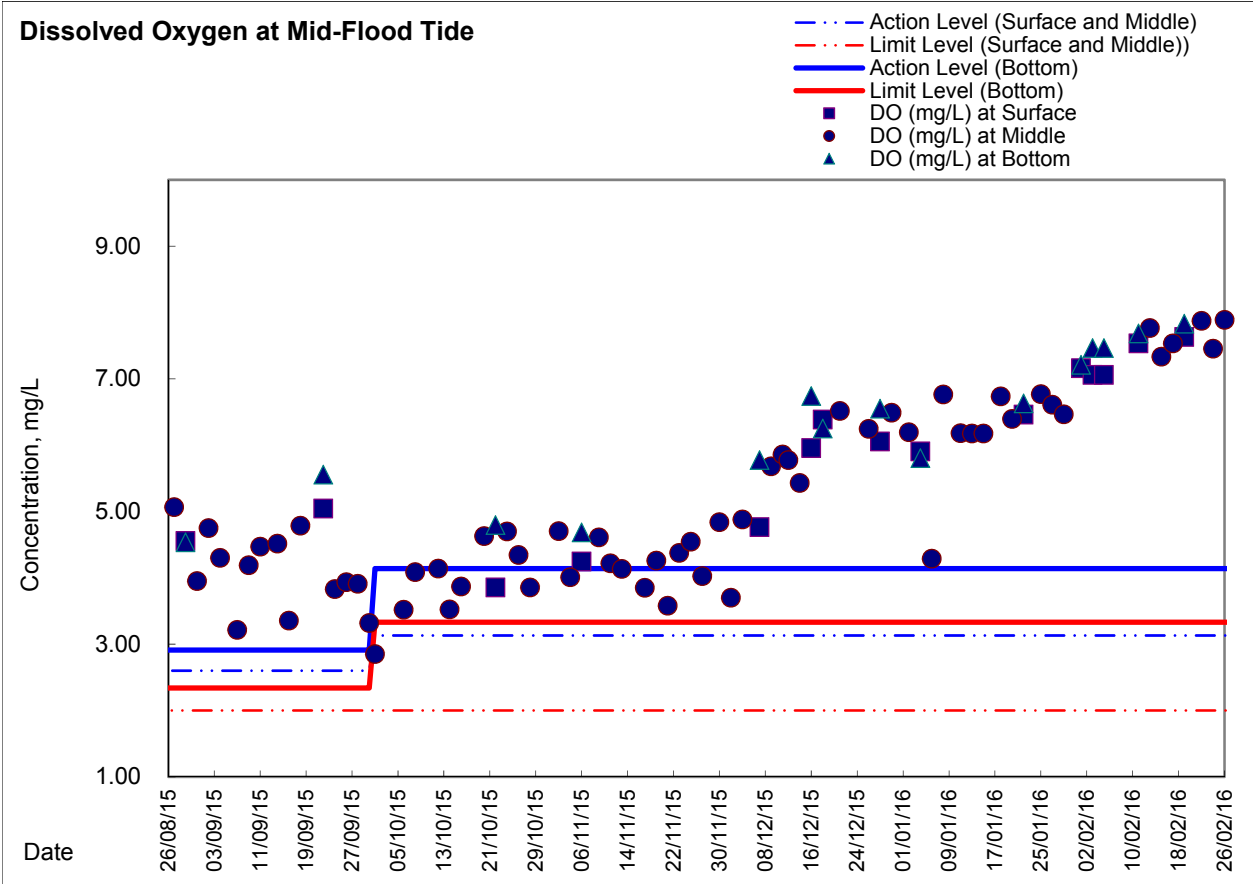




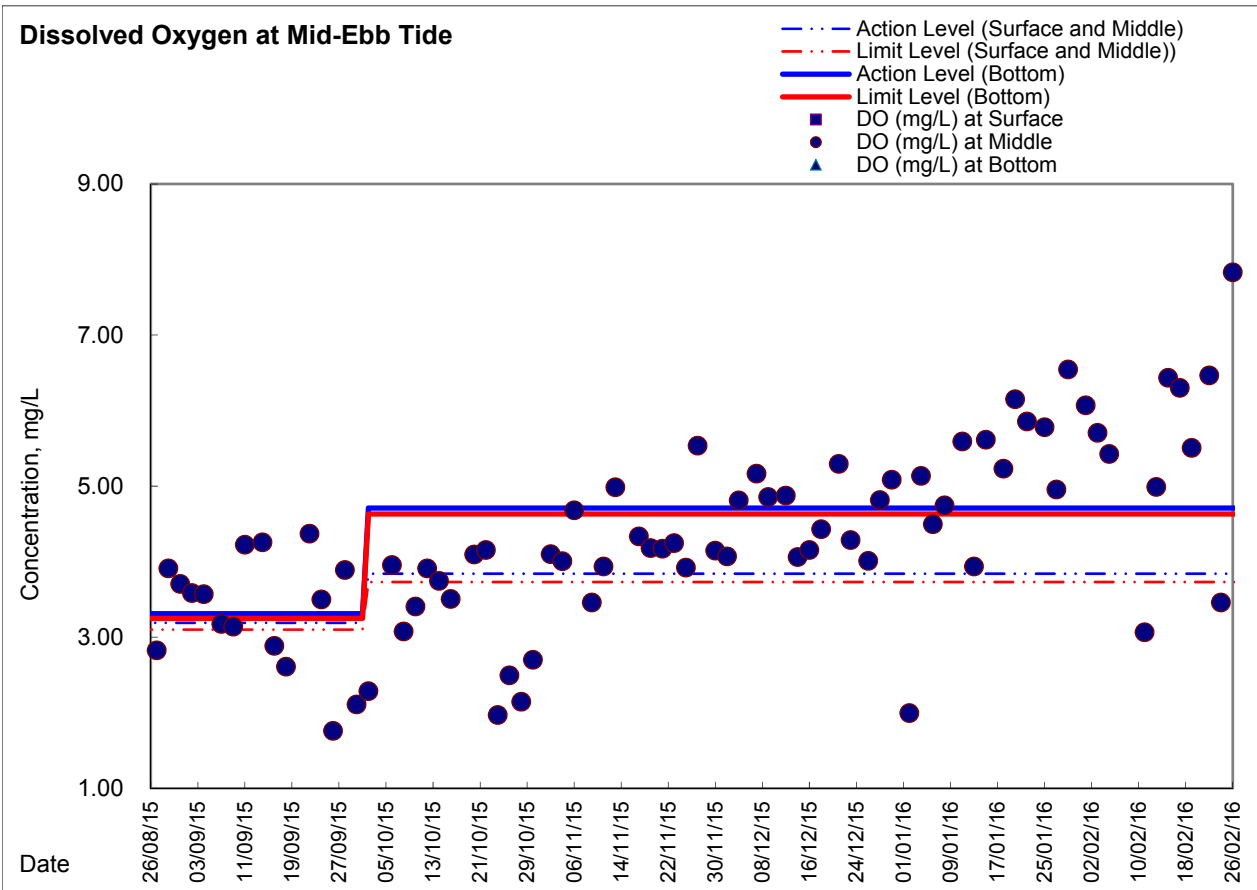
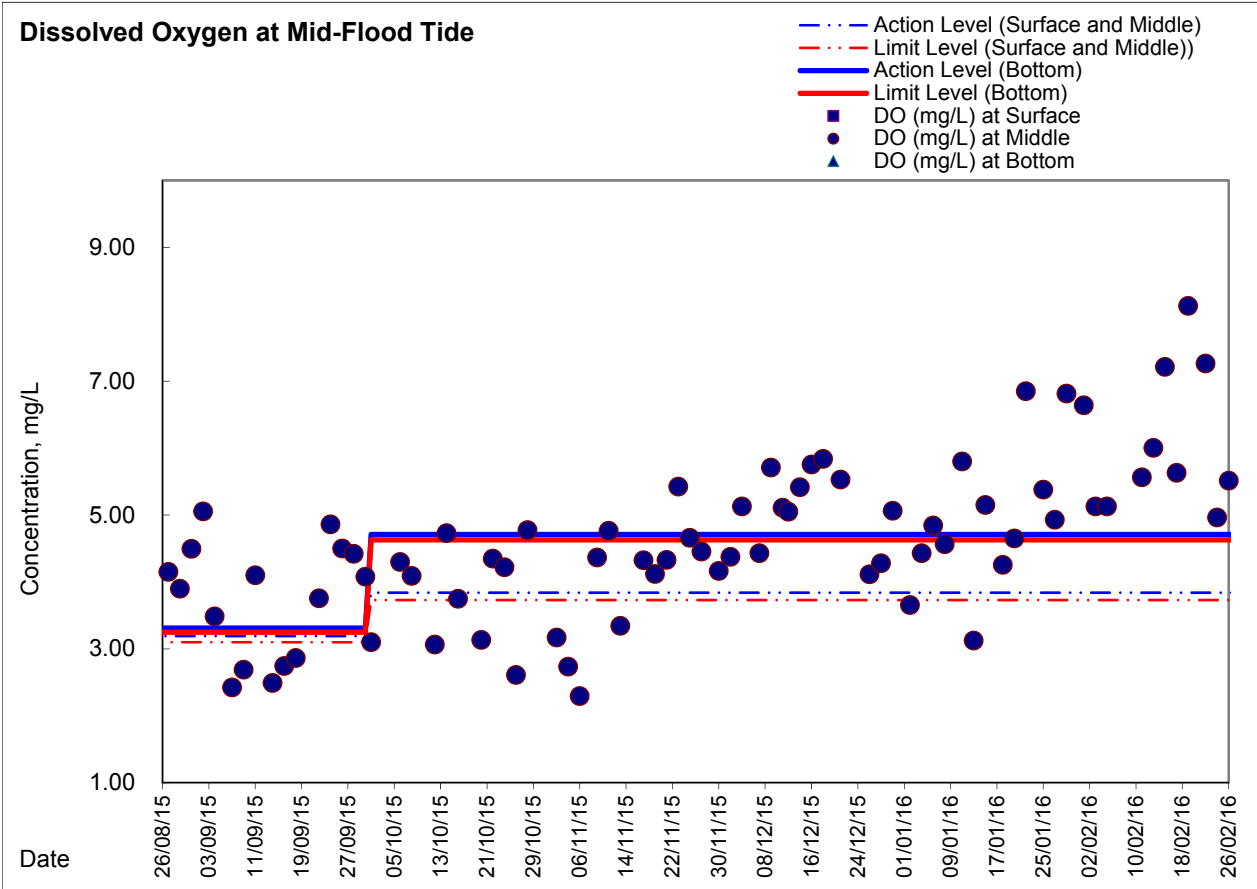
Graphic Presentation of Water Quality Result of C7 - Windsor House



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



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



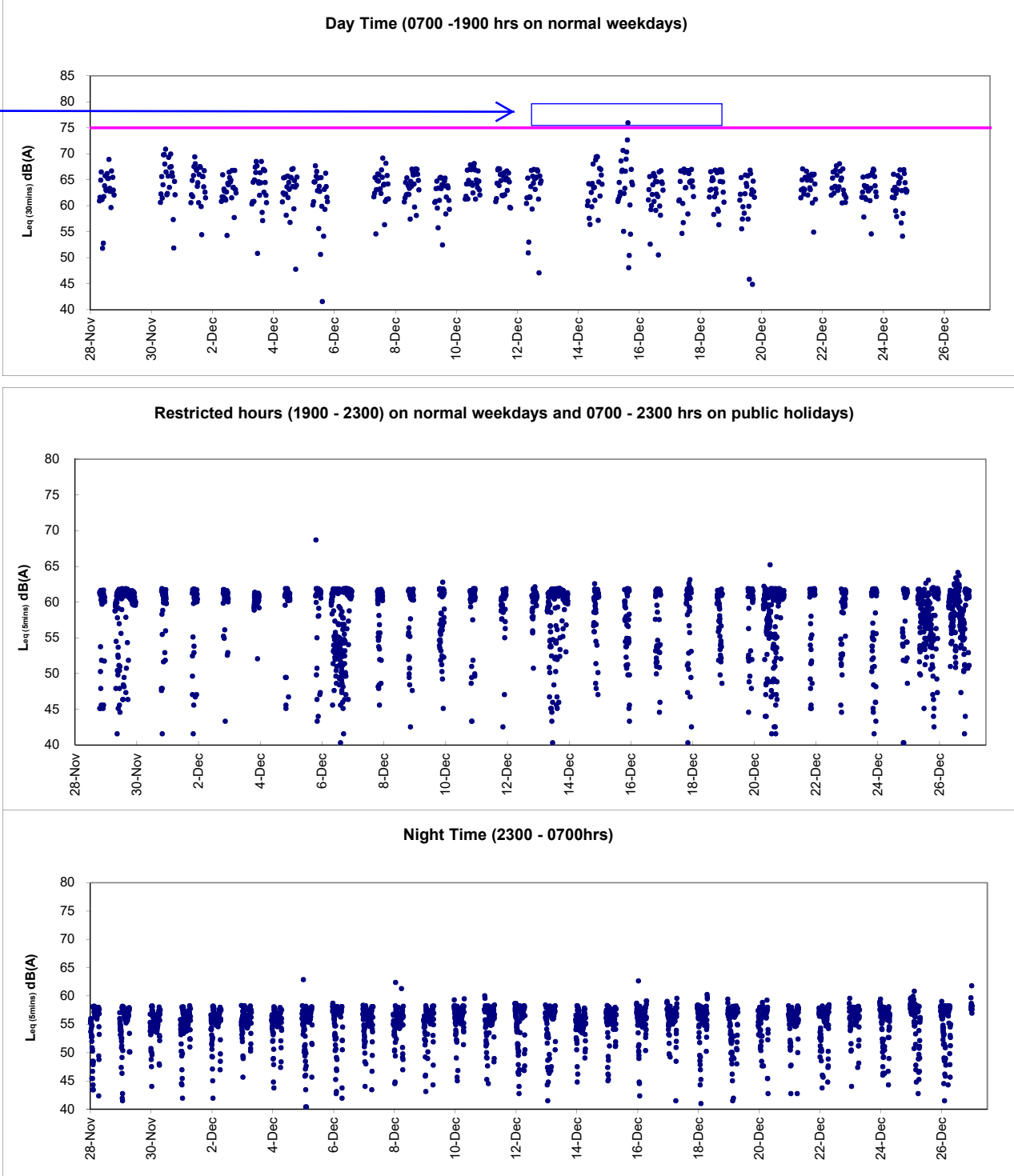


Appendix 4.4

Real-time Noise Monitoring Results and Graphical Presentations



Graphic Presentation of Real Time Noise Monitoring Result (RTN2a- Hong Kong Electric Centre)



After checking with Contractor of HY/2009/19, on 15 December 2015, concreting was undertaken by Contract HY/2009/19 while steel bar cutting works for Hong Kong Electric Centre was conducted at the roof top by non-CWB Contractor immediately next to the noise monitoring station. In view of the mitigation measures implemented and the non-CWB works conducted next to the monitoring station as major noise contribution, the exceedance was considered as non-Project related.



Appendix 5.1

Event Action Plans



Event/Action Plan for Construction Noise

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



EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
Limit Level being exceeded	<ol style="list-style-type: none"> 1. Inform IEC, ER, Contractor and EPD; 2. Repeat measurements to confirm findings; 3. Increase monitoring frequency; 4. Identify source and investigate the cause of exceedance; 5. Carry out analysis of Contractor's working procedures; 6. Discuss with the IEC, Contractor and ER on remedial measures required; 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; 8. If exceedance stops, cease additional monitoring. (The above actions should be taken within 2 working days after the exceedance is identified) 	<ol style="list-style-type: none"> 1. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 2. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly. (The above actions should be taken within 2 working days after the exceedance is identified) 	<ol style="list-style-type: none"> 1. Confirm receipt of notification 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; 5. If exceedance continues, consider stopping the Contractor to continue working on that portion of work which causes the exceedance until the exceedance is abated. (The above actions should be taken within 2 working days after the exceedance is identified) 	<ol style="list-style-type: none"> 1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC and ER within 3 working days of notification; 3. Implement the agreed proposals; 4. Submit further proposal if problem still not under control; 5. Stop the relevant portion of works as instructed by the ER until the exceedance is abated. (The above actions should be taken within 2 working days after the exceedance is identified)



Event / Action Plan for Construction Air Quality

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
ACTION LEVEL				
1. Exceedance for one sample	<ol style="list-style-type: none"> 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)	<ol style="list-style-type: none"> 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)	<ol style="list-style-type: none"> Notify Contractor. (The above actions should be taken within 2 working days after the exceedance is identified)	<ol style="list-style-type: none"> 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	<ol style="list-style-type: none"> 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)	<ol style="list-style-type: none"> 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)	<ol style="list-style-type: none"> 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)	<ol style="list-style-type: none"> 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				
1. Exceedance for one sample	<ol style="list-style-type: none"> 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)	<ol style="list-style-type: none"> 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)	<ol style="list-style-type: none"> 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)	<ol style="list-style-type: none"> 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)
2. Exceedance for two or more consecutive samples	<ol style="list-style-type: none"> 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)	<ol style="list-style-type: none"> 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. 	<ol style="list-style-type: none"> 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)	<ol style="list-style-type: none"> 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 Plan for Marine Water Quality

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



EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
Limit level being exceeded by one sampling day	<p>Repeat in-situ measurement to confirm findings; 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)</p>	<p>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)</p>	<p>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)</p>	<p>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)</p>
Limit level being exceeded by more than one consecutive sampling days	<p>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)</p>	<p>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)</p>	<p>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)</p>	<p>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 3 working 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)</p>



Event and Action Plan for Odour Patrol

Event	ACTION	
	Person-in-charge of Odour Monitoring	Implementation Agent Identified by CEDD
Action Level		
Exceedance of Action Level	1. Identify source/reason of exceedance; 2. Repeat odour patrol to confirm finding.	1. Carry out investigation to identify the source/reason of exceedance; 2. Rectify any unacceptable practice 3. Implement more mitigation measures if necessary; 4. Inform EPD or MD if exceedance is considered to be caused by expedient connections or floating debris.
Limit Level		
Exceedance of Limit Level	1. Identify source / reason of exceedance; 2. Repeat odour patrol to confirm findings; 3. Increase odour patrol frequency; 4. If exceedance stops, cease additional odour patrol.	1. Carry out investigation to identify the source/reason of exceedance. Investigation shall be completed within 2 weeks; 2. Rectify any unacceptable practice; 3. Formulate remedial actions; 4. Ensure remedial actions properly implemented; 5. If exceedance continues, consider what more/enhanced mitigation measures shall be implemented; 6. Inform EPD or MD if exceedance is considered to be caused by expedient connections or floating debris.



Appendix 6.1

Complaints Log

**Environmental Complaints Log**

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
100321a	21/3/2010	ICC Case no. 1-224618029, Ms. Tsang	Location near Tin Hau	Complaint regarding the loud noise and dark smoke in the course of dredging works on 21 March 2010 (Sunday).	<ol style="list-style-type: none">1) A valid Construction Noise Permit no. GW-RS0119-10 was granted from EPD since 18th Feb. 2010 for the dredging works which carry out at area for North Point Reclamation.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.	Closed
100321b	21/3/2010	Unknown	Near the eastern breakwater of the Causeway Bay Typhoon Shelter	A public complaint and enquiry regarding loud noises emanated from dredging activities on 21/3/2010 (Sunday) until 2220 hours and between 1920-1946 hours in the evening of 22 March 2010(Monday).	<ol style="list-style-type: none">1) A valid Construction Noise Permit no. GW-RS0119-10 was granted from EPD since 18th 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.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.	Closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
100504	4/5/2010	Public complainant received by ICC (ICC case: 1-233384048)	Watson Road	Complaint on the noise nuisance due to the large scale of dredging machine (face to Island East Corridor) in particular the hours 1900 to 0800 and request to reduce the noise level.	<ol style="list-style-type: none">1) Contractor for HY/2009/11 was granted valid Construction Noise Permit no. GW-RS0119-10 for their dredging works. Contractor has implemented mitigation measures to reduce the working hour not later than 2230.2) According to RSS 's record, no more daytime and night time dredging since the departure of the split hopper barge from the workplace on 29 April 2010 at 1900 hrs to 5 May 2010.3) No further complaints were received in the reporting month. The complaint is considered closed.	Closed
100731	31/7/2010	Mr. Lee received by ICC (CC Case: 1-250702681)	Oil Street to Watson Road	Complaint on the noise nuisance due to the dredging works. Three construction plants were operated concurrently.	<ol style="list-style-type: none">1) Contractor for HY/2009/11 was granted valid Construction Noise Permit no. GW-RS0371-10 for their dredging works.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.	Closed
100812	12/8/2010	Mr. Wong, Harbour Heights (Management) Ltd.	Harbour Heights	Management office received their resident complained on the noise nuisance from the dredging works at the marine works area adjacent to the Harbour Height during the period from 0700 to 2200.	<ol style="list-style-type: none">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 2230.2) 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.	Closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
101108	8/11/2010	Mr. Nip received by ICC (CC Case)	Sai Wan Ho	Visual concern around the seaside silt screen outside the WSD freshwater intake pump at Sai Wan Ho (Monitoring station ref no.. WSD15)	<ol style="list-style-type: none">1) Contractor for HY/2009/11 has been regular checked of condition and removal of trapped rubbish before the dismantling of the floating silt screen to be replaced by wall mount silt screen.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.	Closed
101110	10/11/2010	Mr. Wong, Harbour Heights (Management) Ltd.	Harbour Heights	Management office received their resident complained on the noise nuisance from the power mechanical equipment during the 0700 to 2200hrs	<ol style="list-style-type: none">1) Contractor for HY/2009/11 was granted valid Construction Noise Permit no. GW-RS0870-10 for their dredging works during evening time. Contractor has implemented mitigation measures to reduce the working hour not later than 2230.2) 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.	Closed
101203	3/12/2010, 01:45a.m.	The resident of Block 11, City Garden by ICC referral from Marine Department	North Point	Bad odour was generated from the dredging plant off North Point	<ol style="list-style-type: none">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.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.	Closed
101206	6/12/2010	Ms Lui, the resident of 27/F, Block 10, City	City Garden, North Point	Two barges were generating noise at 22:00 on 6 December 2010 in which the noise from	<ol style="list-style-type: none">1) ET confirmed the following information with resident site staff on the complaint:<ul style="list-style-type: none">• It was referred to the filling operation at North Point	Closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
		Garden by ICC (ICC case: 1-266039336)		<p>filling operation was louder than the traffic noise & visual impact was generated due to the spot-light pointing directly to the complainant flat, suspected the filling operation was part of Wanchai Development Phase II;</p> <p>Complainant also raised the same complaint to District Councillor, Mr. Hui on 7 Dec 2010 regarding the night-time noise and suspected earlier start of work at 06:30. Complaint also requested for limiting the plant operating hours from 09:00-21:00.</p>	<p>Reclamation of Central Wan Chai Bypass site area instead of part of Wanchai Development Phase II;</p> <ul style="list-style-type: none"> • 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. <p>2) PME used in restricted hours were checked and confirmed compliant with valid CNP no. GW-RS0870-10. The noise level recorded on 6 Dec 2010 was complied with the noise criteria during restricted hour;</p> <p>3) It was found that the occasional noise nuisance might be caused by the hitting or scratching onto the rock surface during loading down the grab onto the Grade 400 rockfill;</p> <p>4) The absence of the lighting shields at flood light results in visual glare to the complainant at night-time.</p> <p>5) Contractor was advised to minimize the finishing time of placing Grade 400 rockfill at 2100hrs and switch off all unnecessary flood lights apart from the light for the safety and security purpose;</p> <p>6) No further complaint was received after implementation of proposed measures</p>	
110415	15/04/2011	The resident, Mr Law at Victoria Centre by ICC (ICC#1-281451236)	North Point	A dust generation and a concern of mosquitoes breeding complaint in which suspected the filling operation was part of North Point Reclamation.	<p>1) The concerned stockpile was a working stockpile under Contract HY/209/15 and was covered at night time after work.</p> <p>2) Water spraying on the haul road and potential dust generating material at least 4 times a day was conducted by contractor that complies with the requirement.</p> <p>3) It is considered invalid but preventive actions can be taken because the stockpile is relatively large and easily visible by complainant.</p> <p>4) It was recommended that increasing the frequency of water spraying shall be conducted to all potential dust generating materials and activities. Besides, Contractor should consider to cover the idle part of the stockpile</p> <p>5) The concern of mosquitoes breeding is out the scope of EM&A, the follow-up action is not reported in this monthly EM&A report.</p>	Closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
110419	19/04/2011	Ms Chiu at Victoria Centre at Victoria Centre by ICC (ICC# 1-272874759)	North Point	The episode of night noise on 19/4/11 and 20/4/11 at 2:50 am and the noise lasted for 30 minutes per night.	<ol style="list-style-type: none">1) According to the RSS's record, there was no construction works undertaken under the EP-356/2009 during the concern time period.2) There was no abnormal real-time noise monitoring data recorded in RTN1 - FEHD Hong Kong Transport Section Whitefield Depot which is next to the Victoria Centre.3) It is considered as invalid complaint under this Project.	Closed
110617	9/06/2011	Mr. Law from Victoria Centre Management Office	North Point	An odour nuisance suspected generating from the discharge point – Channel T at Watson Road in part of the site area was related to CWB under Contract no. HY/2009/11	<ol style="list-style-type: none">1) The complaint was received by ET on 13 Jun 2011. During the weekly site inspection on 7 and 17 June 2011, there was no any odour impact detected in the site area.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.	Closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
110709	09/07/2011	Mr. Au from City Garden Management Office	North Point	A complaint letter to Contractor HY/2009/11 was raised by Cayley Property Management Limit on 9 July 2011 regarding a series of pump breakdown events at seawater intake of City Garden on 4, 6, 7 and 8 July 2011. A lot of rubbish such as plastic bags, nylon bags, nylon-wire mesh was observed sucking from the seawater intake at the seawater front of Block 7 of City Garden affecting the operation of seawater pump plant.	<ol style="list-style-type: none">1) Contractor conducted formation works for installation of caisson seawall at C27, C28, C29 and C30 on 4, 6, 7 and 8 July 2011 and no dredging work was conducted during this time period2) 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.3) Moreover, it has been reported several times that discharged from outfall pipeline outside the site boundary near the intake of the pump maybe considered as another source of rubbish generation.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.	Closed
110710	09/07/2011	Complainant by ICC (ICC no. 1-301520309)	North Point	It was received at 00:56 on 10 July 2011. There was complained a derrick barge unloading rockfill material off the shore facing the Harbour Grant HK Hotel causing noise nuisance.	<ol style="list-style-type: none">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 2011.2) 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	Closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					so as to prevent recurrent by barge defect	
110723a	23/07/2011	Ms. Law at Victoria Centre by ICC no. 1-303887687	North Point	She concerned that Highways Department published a notice in their Management Office about construction works will be conducted from 0700 hours to 2300 hours during July to December 2011 including Saturday, Sunday and public holiday.	<ol style="list-style-type: none"> 1) It was referred by AECOM to ET on 28 July 2011 2) RSS confirmed that the notice was prepared by Victoria Centre's Management office to their resident and the advice was only given on the extension construction works (for Contract HY/2009/15) to 7am-9pm from Monday to Saturday except Public Holidays and Sundays. 3) As a mitigation measure to minimize the noise nuisance in the vicinity of the residents, rock breaking activities will be started at 8am and is expected to be completed by mid-August 2011. 4) No noise exceedance was recorded at construction noise monitoring station at Victoria Centre on 19 and 25 July 2011 during daytime while breaking and excavation works were undertaken during monitoring. 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. 	Closed
110723b	23/07/2011	Ms. Yau at Block 2, Victoria Centre by ICC no. 1-304013959	North Point	Reclamation work was conducted at Causeway Bay Typhoon Shelter at 7am on 23 July 2011. She complained that the works shall be started later to minimize the noise nuisance to the vicinity of the residents in early morning	<ol style="list-style-type: none"> 1) It was referred by AECOM to ET on 8 August 2011 2) With reference to the construction noise monitoring at Vitoria Centre, no exceedance was recorded on 19 and 25 July 2011 during daytime while breaking and excavation works were undertaken during monitoring 3) As a mitigation measure to minimize the noise nuisance in the vicinity of the residents, rock breaking activities will be started at 8am and is expected to be completed by mid-August 2011. 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. 	Closed
110727a	27/07/2011	Mr. Law from Victoria Centre Management Office by ICC no. 1-304616162	North Point	It was complained by Mr. Law from Victoria Centre Management Office on 27 July 2011 regarding construction noise generated by the construction operations of	<ol style="list-style-type: none"> 1) It was referred by AECOM to ET on 28 July 2011 2) RSS confirmed to start the rock breaking activities for Contract HY/2009/15 at 8am as a mitigation measure to minimize the noise nuisance in the vicinity of the residents. 3) No noise exceedance was recorded at construction noise 	Closed



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



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					away from the coastline as far as practicable. Any loose material placed which needed to be placed near the coastline shall be properly compacted or covered as appropriate. To avoid any further environmental deficiency, Contractors shall ensure all necessary environmental mitigation measures will not be missing during site area handover.	
110826	26/08/2011	Grand Hyatt and a complainant by ICC	Wan Chai	Construction noise and vibration nuisance generated from the works at Convention Avenue and inside the HKCEC1 reclamation area.	<ol style="list-style-type: none">1) 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.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.	Closed
110826A	26/08/2011	A complaint letter from Mr. Au of Cayley Property of City Garden	North Point	Harbor front adjacent to their cooling water intake suction which caused 3 times of system breakdown of the sea water pump on 9, 22 and 25 August 2011.	<ol style="list-style-type: none">1) It was referred by AECOM to ET on 29 August 2011. Confirmed with the Resident Site Staff that the<ul style="list-style-type: none">• construction works were referred to the Contractors HY/2009/11 and HY/2009/19.• The pump is located on the site area of HY/2009/19• A temporary garbage defender was installed on 23 July 2011 by HY/2009/11 and the shape of the defender was adjusted on 8 August 2011 in order to exclude the outfall.• An ad hoc inspection of the effectiveness of garbage defender was conducted with RSS (CWB project	Closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>team), contractor of HY/200911 and HY/2009/19 and ICon 29 August 2011. Inspection report of it was submitted to RSS on 19 September 2011.</p> <ul style="list-style-type: none">• Daily cleaning near the water intake was conducted twice a day by contractor HY/2009/19.• In response to City Garden request, the contractors have set up the temporary garbage defender in function and collect the floating refuses, but cannot eliminate all refuses, in particular the refuse coming from the seabed <p>2) According to the complaint letter from Cayley Property, the outcomes of the preventive measures were not complying with their expectation.</p> <p>3) During on-site inspection, floating refuses observed occasionally outside the garbage defender. No conclusion could be made for the source of these floating refuses. On the other hand, some of the refuses were observed floating behind the garbage defender during investigation.</p> <p>4) All daily cleaning actions had been taken by contractor to minimize floating refuse inside the construction site.</p> <p>5) It was noted that the cooling water intake was accessible to the public. As such, fish breeding and fishing activities were observed even though a notice has already hoisted. Also, tripping of rubbish by the passers-by could result in a lot of rubbish accumulated around the intake point.</p> <p>6) Referring to the record provided by CPML, there were a lot of nylon/ plastic bags and nylon wire mesh that matched those rubbishes generated from the public activities.</p> <p>7) Contractors have fulfilled the requirement of site cleanliness and no exceedance was recorded during Water Quality Monitoring. It is considered the cause of this complaint is not related to project and environmental issue in this project as well. No more complaint received after ad-hoc inspection</p>	
111014	14/10/2011	The complainant, Ms. Tam complained via hotline 1823	Wan Chai	The polluted fumes and exhaust from the excavation by sub-contractor of CEDD on pedestrian way outside no.25 Harbour Road (in front of the Harbour Centre)	<p>1) RSS notified ET to carry out investigation on 17 October 2011.</p> <p>2) ET confirmed with the Resident Site Staff that the location of the excavator was within site area of Contract no. HK/2009/02 undertaking the water cooling main re-provision works along the Harbour Road. The plants including the excavator have been checked before using</p>	Closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>at the site. However, the polluted fumes and exhausted from the excavator was caused due to insufficient maintenance of the plant after using at site.</p> <p>3) After receiving the complaint, the excavator was then removal off-site for checking and maintenance works on 17 October 2011.</p> <p>4) Contractor was reminded to enhance regular checking and maintenance to all plants at site.</p> <p>5) RSS has replied to the complainant on the arrangement of the measures taken on 17 October 2011. Complainant was satisfied with the response and follow-up action taken by the Contractor.</p>	
111104	04/11/2011	Mr. Liu from LCS D complained via Contractor Complaint Hotline	Wan Chai	Complain about a tree near the site of pipe installation works outside Wan Chai Swimming Pool at Harbour Road, the status is not healthy and roof ball of two trees inside the site near Renaissance Hong Kong Harbour View Hotel at Convention Avenue were half cut.	<p>1) ET confirmed with the Resident Site Staff that</p> <ul style="list-style-type: none">• A tree near the site of pipe installation works outside Wan Chai Swimming Pool at Harbour Road is the Tree no. TA1122 under Contract no. HK/2009/02. Leaves of a branch of this tree were shrivelled.• Two trees inside the site near Renaissance Hong Kong Harbour View Hotel at Convention Avenue are the tree nos. A160 and A161 under Contract no. HK/2009/01. Part of roof ball of these two trees was covered by the metal plate. <p>2) Independent Tree Specialists for these two inspected the trees. Contractor HK/2009/01 has taken the measure as recommend downgrading the soil level around the trunk base. Reinstating of the ground works will be conducted in mid-December 2011. For the tree no. TA1122 under Contract no. HK/2009/02, the brown leaves were removed and fenced the tree with orange net is provided to prevent damage of tree trunk by construction works. The distance between the tree and the edge of the trench is kept approximate 2m. Two Contractors were reminded to carry out regular watering to the trees within their site area.</p>	Waiting RSS respond
111106	06/11/2011	Police officer	Wan Chai	Construction noise generated from the site at about 6:30 a.m on 6 November 2011 and require to stop the machine operation	<p>1) According to the information reported by Contractor, one BC cutter and hoist were operated for Diaphragm Wall construction of Shatin-Central Link to inspect bentonite pipes and ensure no damages and all the joints are tightened in good position. Then, the subcontractor for Diaphragm wall, SAMBO Korean foreman stopped the engine of the BC cutter immediately. The police officer recorded the details and HKID number of the foreman and then left. Due to the different language communication between the police officer and the Korean foreman, no</p>	Keep in view for three months from the date of complaint received



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					<p>CNP was checked by the police officer.</p> <p>2) 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.</p> <p>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.</p> <p>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. Furthermore, Construction Noise Permit should be checked and in place for the construction works during restricted hour</p> <p>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.</p>	
120405	05/04/2012	N/A	North Point	A complaint regarding excessive noise from construction sites of CBTS was observed daily before 7:30am except on public holidays, and the noise source was mainly from piling works. The complainant requested that construction works should start after 8:30am to avoid nuisance to nearby residents and a speedy follow-up and reply.	<p>1) RSS notified ET on 5 April 2012.</p> <p>2) ET confirmed with the Resident Site Staff that no piling works were performed during the concerned period.</p> <p>3) 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.</p> <p>4) HyD made a reply to the complainant on 16 April 2012 via 1823. HyD replied that the current works at CBTS were drilling, diaphragm wall construction and deep excavations. In order to minimize the noise generated</p>	Closed



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					from the above works, the Contractor had erected temporary noise barriers and provided noise blankets on plants. RSS would continue to work with the Contractor on the effectiveness of the environmental mitigation measures implemented on site. No further complaint was received after the response.	
130308	06/03/2013	ICC Case#1-407181502	Tin Hau	A complaint regarding the dropping of fine rock material into surrounding waterbody was observed during rock breaking operation with two excavators in active operation at the Eastern Breakwater of Causeway Bay Typhoon Shelter near the North Point lighthouse.	<p>1) RSS notified ET on 8 March 2013</p> <p>2) ET confirmed with RSS that excavation works, installation of buoy, flashing light and silt curtain and dredging works were undertaken at Eastern Breakwater during the concerned period on 6 March 2013. One backhoe equipped with breaker and one derrick barge were confirmed in operation while another backhoe was at idle during the concerned period on 6 March 2013.</p> <p>3) Reviewing the photo record provided by RSS, the condition of the silt curtain deployed around the Eastern Breakwater on 6 March 2013 was found to be in good condition. It is considered that the silt curtain was properly in place during the concerned period and the concerned act of dropping of fine rock material was confined within the silt curtain boundary without adverse impact to the nearby water quality.</p> <p>Further follow up was conducted on 12 March 2013 during weekly environmental audit inspection, the silt curtain deployed around the concerned area was found to be maintained in good condition and the water quality at the concerned work area was generally satisfactory. No violation of the Environmental Permit condition was found.</p> <p>The contractor was advised and committed to implement preventive measures to minimize the potential impact of work including conducting regular diver check to ensure the integrity and the extend of silt curtain deployment and to provide adequate back up stock of silt curtain for emergency use.</p>	Closed
140612	12/06/2014	EPD ref: EP/860/F2/24 Annex IV	Wan Chai	The complaint is regarding to the water quality of the waterfront outside the Hong Kong Academy for Performing Arts Theatre Block, where a large piece of muddy water was found.	<p>1) WSII RSS team notified ET on 12 June 2014; Notification letter from EPD (ref: EP/860/F2/24 Annex IV) was received by ET on 13 June 2014.</p> <p>2) ET confirmed with RSS that neither marine construction works nor barge operation was conducted at the concerned location during the time of complaint. With respect to the complaint case, muddy dispersion was observed at HKCEC2W works area on 12 June 2014, and</p>	Interim Report was submitted to EPD on 20 June 2014.



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



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					<p>Notwithstanding the above, according to the site recorded provided by the RSS, the derrick lighter was found malfunction at around 23:00hrs on 20 July 2014 while the diaphragm wall cutting procedure was incomplete. Under safety and navigation consideration, the completion of diaphragm wall removal was necessary and of imminent need.</p> <p>5) The Contractor of HY/2009/15 was advised to review the construction sequence and emergency response procedure for construction activities during restricted hours and night time period to allow for sufficient buffer time for work completion such that the Construction Noise Permit would be followed. Furthermore, the Contractor of HY/2009/15 was suggested to conduct throughout checking of PME used on site prior to work commencement to minimize the potential malfunctioning of PME during the course of work which affect the duration of works.</p>	
141016	14/10/2014	<p>EPD Ref.: EP860/E2/24 Annex IV</p> <p>ICC complaint received by ET on 10 October 2014</p>	Work site next to new Wan Chai Ferry Pier and opposite to Wan Chai Sports Ground.	Construction noise like piling works was heard on 14 October 2014 night until 23:45 hrs. It was suspected that the noise was emanated from the work site next to new Wan Chai Ferry Pier and opposite to Wan Chai Sports Ground.	<p>A public complaint regarding construction noise impact referred by EPD was received by ET on 16 October 2014 (EPD Ref.: EP860/E2/24 Annex IV dated 16 October 2014).</p> <p>The complainant reported that construction noise like piling works was heard on 14 October 2014 night until 23:45 hrs. It was suspected that the noise was emanated from the work site next to new Wan Chai Ferry Pier and opposite to Wan Chai Sports Ground.</p> <p>ET confirmed with the Resident Site Staff that From 19:00hrs to 23:00hrs on 14 October 2014, dredging works was conducted under Contractor of HK/2009/02 at WCR3 Area.</p> <p>Total one grab dredger was in operation. Mitigation measures including provision of steel sheeting screening to the power generation part of the grab dredger was implemented by the Contractor of HK/2009/02.</p> <p>From 23:00 hrs to 05:00 hrs, dredging works was conducted under Contractor of HK/2009/02 at WCR3 Area.</p> <p>Total one grab dredger was in operation. Mitigation measures including provision of steel sheeting screening to the power generation part of the grab dredger was implemented by the Contractor of HK/2009/02.</p>	<p>Interim investigation report submitted to EPD on 23 October 2014.</p> <p>Updated interim investigation with supplementary information submitted to EPD on 17 November 2014</p>



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



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



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



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



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



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		2015	Ground	other construction plants under operation from the reclamation construction site	<p>moored near shore and other construction plants under operation from the reclamation construction site with Contract no. HK/2009/02 at location outside Wan Chai Sports Ground caused air pollution. The complainant alleged that the said situation had been observed for a prolonged period.</p> <p>ET confirmed with the Resident Site Staff that reinforced bar fixing and concreting work (on 17 June 2015 only) were conducted at Portion 2 from 15 June 2015 to 19 June 2015. Total 3 nos. of mobile crane were in operation. On 17 June 2015, one no. of concrete pump truck and two nos. of concrete mixer were in operation. Excavation and Lateral Support was conducted at Portions 3 & 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.</p> <p>According to the relevant site records under Contract HK/2009/02, from 15 June 2015 to 19 June 2015, reinforced bar fixing and concreting work (on 17 June 2015 only) were conducted at Portion 2 and total 3 nos. of mobile crane, one no. of concrete pump truck (on 17 June 2015 only) and two nos. of concrete mixer (on 17 June 2015 only) were in operation; excavation and lateral support was conducted at Portions 3 & 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.</p> <p>Follow-up inspection was conducted during weekly</p>	



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					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 2015	EPD Ref.:H05/RS/00018040-15 dated 23 July 2015	Ex-Wanchai Ferry Pier near 720 & 722 Bus stop	Malodour from marine sediment	<p>A public complaint regarding malodour referred by EPD was received by ET on 23 July 2015 (EPD Ref.: H05/RS/00018040-15 dated 23 July 2015).</p> <p>The complainant reported that malodour from marine sediment was scented at ex-Wanchai ferry pier near route 720 & 722 bus stop. (Contract HK/2009/02).</p> <p>ET confirmed with the Resident Site Staff that Rockfill placing works was conducted by one derrick barge at the concerned location (WCR3) under Contract HK/2009/02 on 20 July 2015. No marine sediment was stored or placed on site at the concerned location under Contract HK/2009/02 on 20 July 2015.</p> <p>According to the relevant site records under Contract HK/2009/02, rockfill placing works was conducted by one derrick barge at WCR3 area on 20 July 2015 and no marine sediment was stored or placed on site at the concerned location on the concerned date.</p> <p>Follow-up inspection was conducted during weekly environmental inspection on 29 July 2015. No marine sediment was observed stored or placed at the concerned location while it was noted that a culvert outfall with potential odour concern is located adjacent to the concerned location.</p>	Interim report submitted to EPD on 30 July 2015.



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



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



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



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



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



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					fluid was originated from the worksarea under HY/2009/19 was considered available. Nevertheless, the Contractor was reminded that paints stored on site shall be properly labelled and stored in sealed container at weather proof location to avoid potential spillage.	
151028	26 Oct 2015	A public complaint regarding construction noise impact referred by EPD was received by ET on 28 October 2015 (EPD Ref:H05/RS/00 027330-15 Dated 28 October 2015)	Construction Site next to ex-Wan Chai Ferry Pier	Operation of grab dredger at construction site near the ex-Wan Chai Ferry Pier from around 0100 to 0400 hours on 26 October 2015 caused noise nuisance.	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
151116	13 November 2015	A public complaint regarding water quality referred by EPD was received by ET on 16 November 2015 (EPD Ref: H05/RS/000291 26-15)	Construction Site at HKCEC and seafront outside Lung Wo Road	Muddy water was discharged from the construction site at HKCEC and dispersed to seafront outside Lung Wo Road on 13 November 2015 afternoon. The complainant also alleged that the deployment of the silt curtain did not follow the design requirement under the environmental permit that the curtain should be hanged to seabed level	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.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>the required silt curtain deployment for safeguarding the water quality in the area. To clarify for the current silt curtain arrangement, the Contractor was advised to submit an updated silt curtain deployment plan with respect to the latest silt curtain arrangement for the current construction stage. In addition, contaminated discharge at Culvert L originating from upstream locations was intermittently observed based on previous site records. Nevertheless, in view of the public concern, the Contractor was reminded to conduct regular checking on the condition and maintenance for the silt curtain deployed on site to ensure the effectiveness of the mitigation measure.</p> <p>A joint meeting for the complaint was held amongst the EPD, WDII RSS team, the ET and the Contractor of HK/2012/08 on 24 November 2015 and a joint silt curtain diver inspection check amongst EPD, ET, IEC, WDII RSS and the Contractor was conducted on 27 November 2015 to confirm the silt curtain condition and the silt curtain deployed at the HKCEC2 water channel was found generally in order.</p>	
151117	Not specified	EPD complaint received by ET on 17 Novmeber 2015	Causeway Bay Typhoon Shelter	Improper handling or bentonite and marine sediment generated from construction works and contaminated discharge from water treatment plant into Victoria Harbour	<p>A public complaint regarding illegal disposal of construction waste referred by EPD was received by ET on 17 November 2015. The complainant reported that over 10,000 m3 of bentonite after usage for construction of diaphragm wall was disposed of at Victoria Harbour.</p> <p>The Contractor recently deployed mobile crane to transfer the bentonite from mud pit on to works barge. The bentonite was then mixed with soil and transported to the Public Fill. During the course, seepage of slurry through grab generated drop off to marine waters and the soil mixing generated dust impact to nearby yacht club, typhoon shelter and affect nearby public and boats.</p> <p>Disposal of dredged marine sediment was not carried out in accordance with the Management of Dredged/Excavated Sediment. Instead the marine sediment was covered by sand and soil and transported to the Public Fill.</p> <p>White or greyish effluent was discharged directly into Victoria Harbour marine waters from wastewater treatment plant on construction site.</p>	<p>Interim investigation report submitted to EPD on 24 November 2015.</p> <p>2nd interim investigation report submitted to EPD on 17 December 2015.</p> <p>3rd interim investigation report submitted to EPD on 31 December 2015.</p> <p>Final</p>

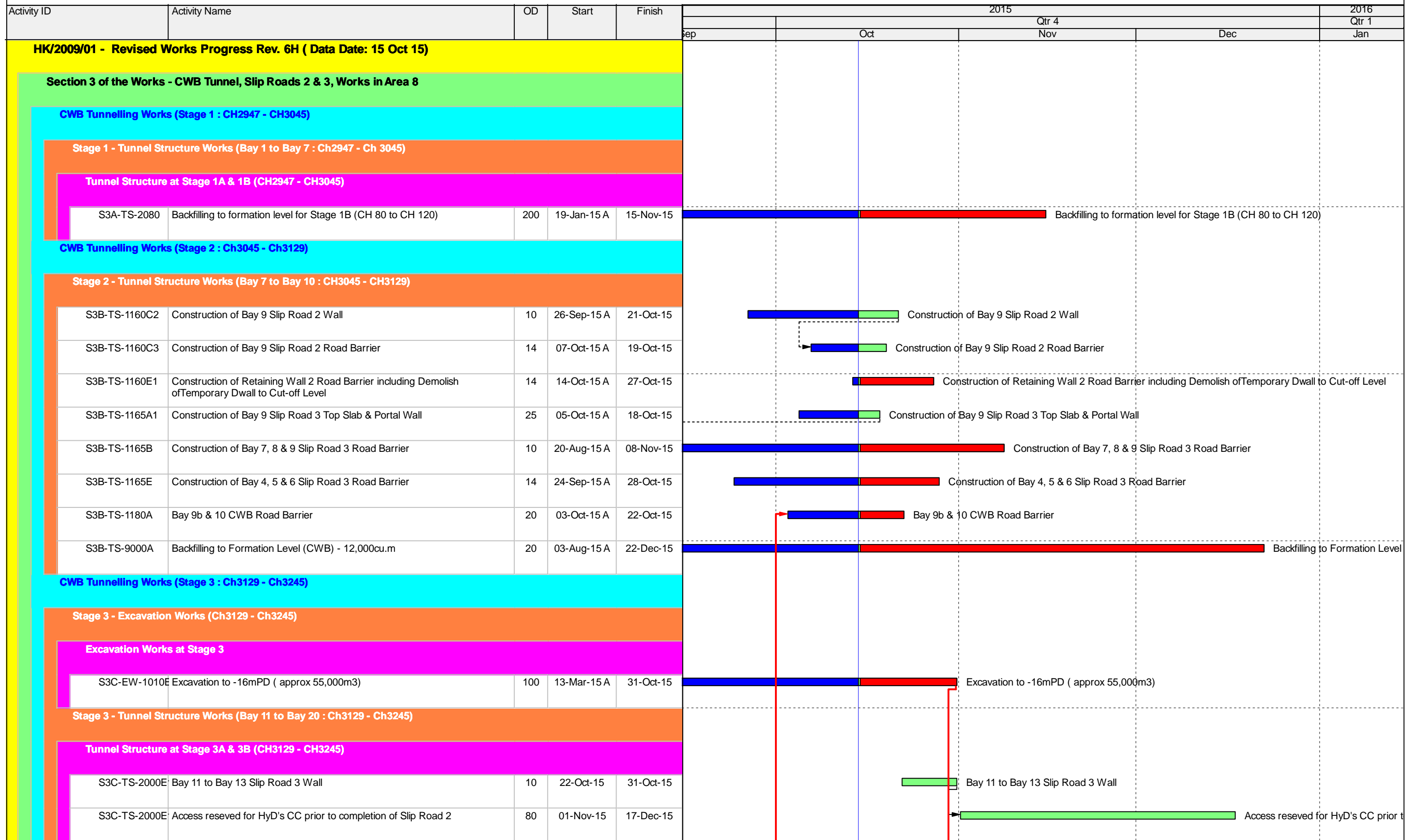


Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					In response to the complaint concern, additional water quality monitoring and additional site inspections have been conducted by the ET and the investigation findings were included in the interim investigation reports separately submitted to the EPD. In addition, the ET and IEC have conducted checking on the waste disposal records and site construction records with the CWB RSS team to confirm the key construction activities during the concerned period and the quantities of inert C&D material disposed. Upon further review on relevant records and follow up inspections on the implementation of site measures, the final investigation would be issued.	investigation report to be submitted in January 2016.



Appendix 7.1

Construction Programme of Individual Contracts



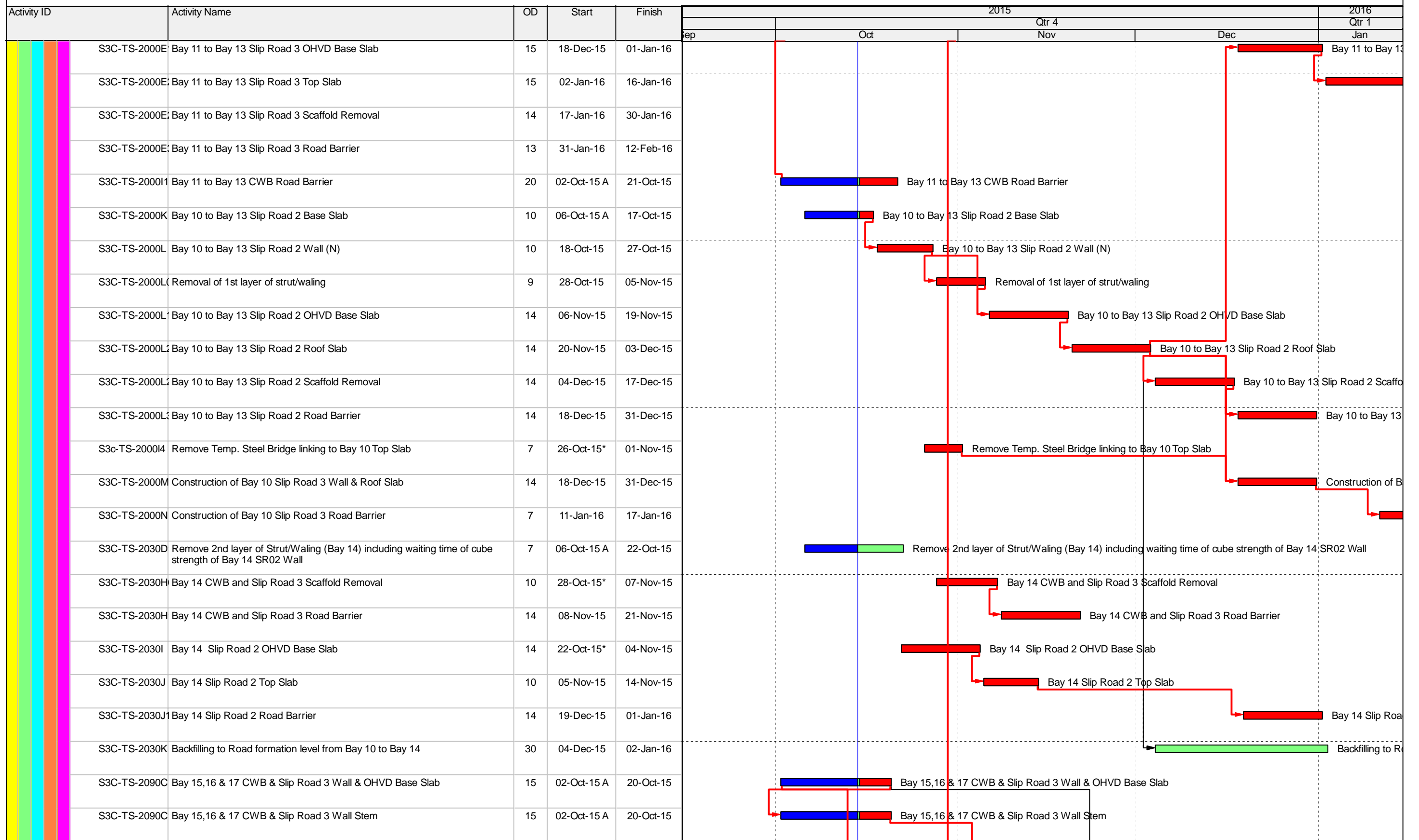
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 Critical Remaining Work	
 Milestone	

CEDD CONTRACT NO. HK/2009/01

Wan Chai Development Phase II - Central-Wan Chai Bypass at HKCEC (Contract 1)

WORKS PROGRAMME Rev.4 - 3 Month Programme starting from 15-Oct-15

Date	Revision	Checked	Appro...
15-Sep-15	Program 6H 15 Sep 2015		
15-Oct-15	Progress Updated on 15 Oct 2015		



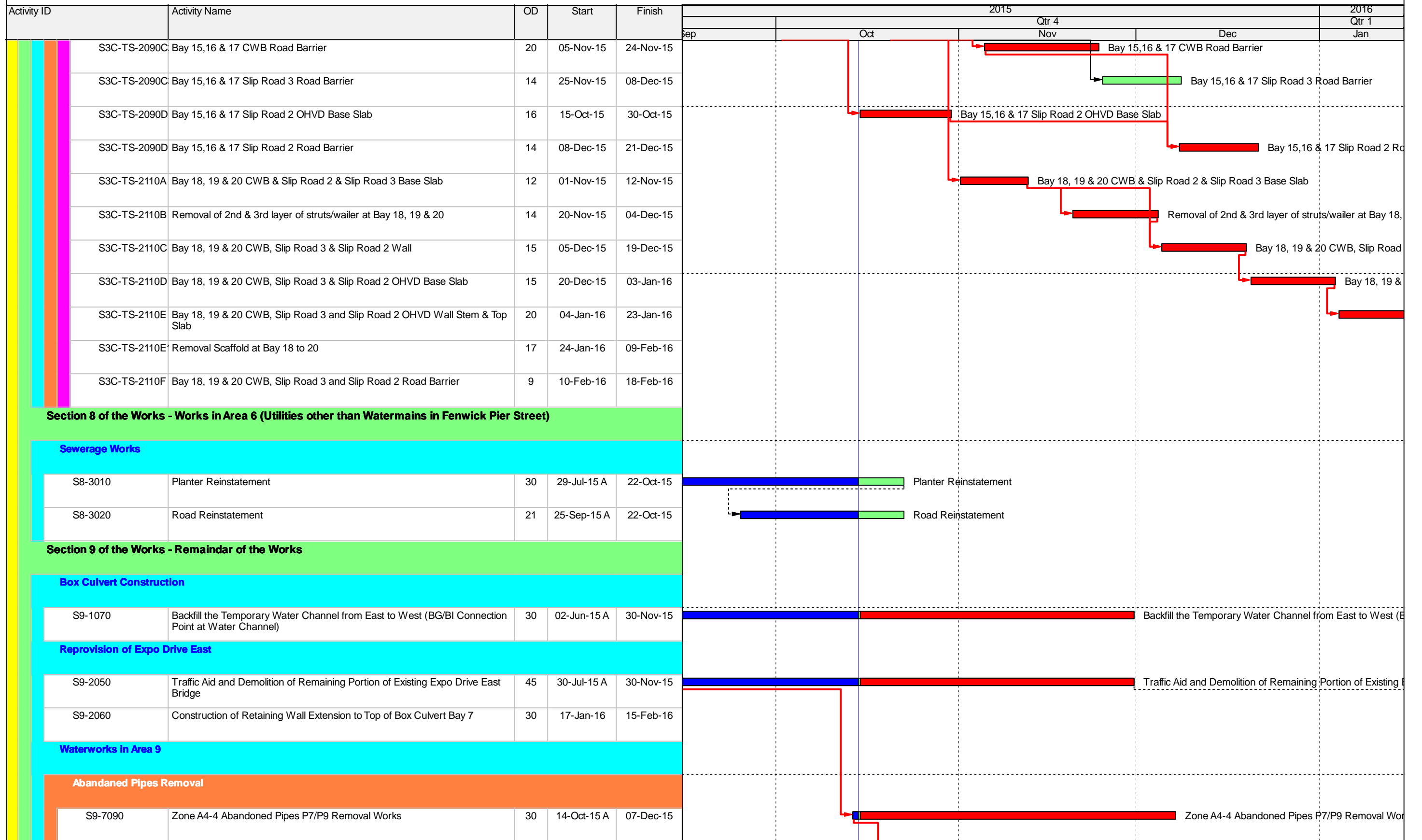
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Critical Remaining Work	
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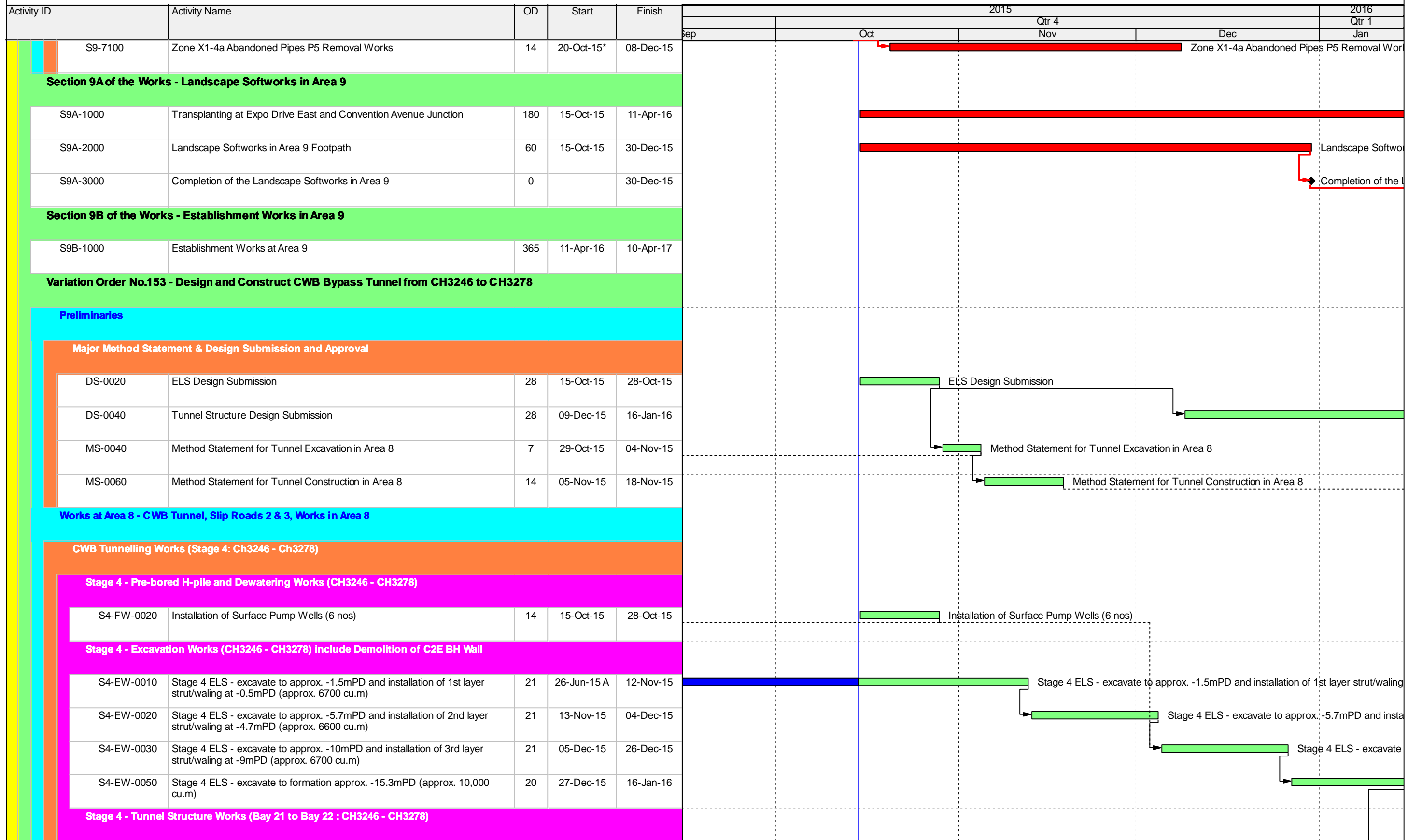
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CEDD CONTRACT NO. HK/2009/01

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15-Sep-15	Program 6H 15 Sep 2015		
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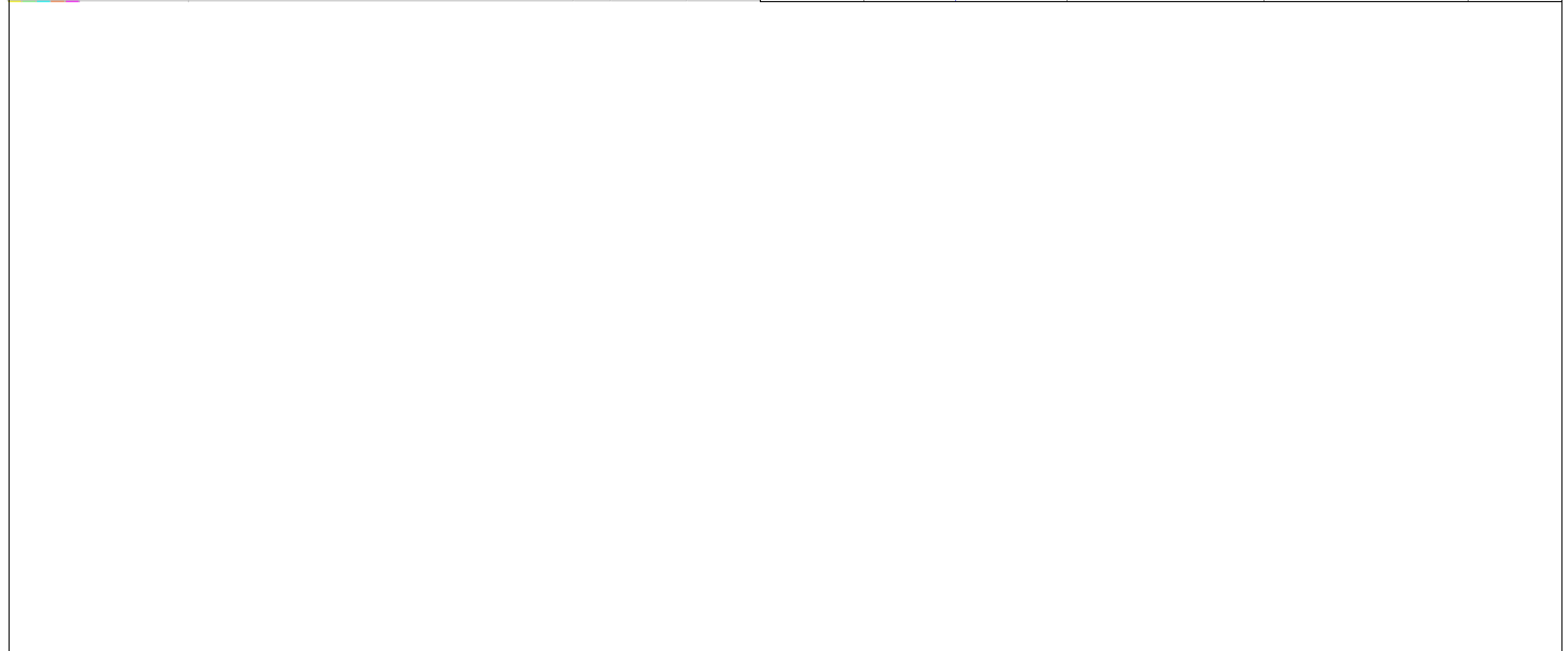
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WORKS PROGRAMME Rev.4 - 3 Month Programme starting from 15-Oct-15

Date	Revision	Checked	Appro...
15-Sep-15	Program 6H 15 Sep 2015		
15-Oct-15	Progress Updated on 15 Oct 2015		

Activity ID	Activity Name	OD	Start	Finish	2015				2016
					Qtr 4				Qtr 1
					Sep	Oct	Nov	Dec	Jan
S4-TS-0005	Pile Head Fabrication	15	11-Jan-16	24-Jan-16					
S4-TS-0010	Bay 21 Base Slab	10	25-Jan-16	03-Feb-16					
S4-TS-0020	Bay 22 Base Slab	10	28-Jan-16	06-Feb-16					
S4-TS-0030	Removal of 2nd and 3rd layer of Strut/Waling	28	07-Feb-16	06-Mar-16					
S4-TS-0040	Bay 21 & 22 Wall	15	07-Mar-16	22-Mar-16					
S4-TS-0050	Bay 21 & 22 Wall & OHVD Base Slab	15	23-Mar-16	06-Apr-16					
S4-TS-0060	Bay 21 & 22 OHVD Wall Stem and Top Slab	15	07-Apr-16	22-Apr-16					



Remaining Work
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Actual Work

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Critical Remaining Work

Milestone

CEDD CONTRACT NO. HK/2009/01
 Wan Chai Development Phase II - Central-Wan Chai Bypass at HKCEC (Contract 1)
WORKS PROGRAMME Rev.4 - 3 Month Programme starting from 15-Oct-15

Date	Revision	Checked	Appro...
15-Sep-15	Program 6H 15 Sep 2015		
15-Oct-15	Progress Updated on 15 Oct 2015		

Activity ID	Activity Name	OD	Start	Finish	2015				2016					
									Qtr 1		Qtr 2			
									Jan	Feb	Mar	Apr		
HK/2009/01 - Revised Works Progress Rev. 6H (Data Date: 20 Jan 16)														
Section 3 of the Works - CWB Tunnel, Slip Roads 2 & 3, Works in Area 8														
CWB Tunnelling Works (Stage 1 : CH2947 - CH3045)														
Stage 1 - Tunnel Structure Works (Bay 1 to Bay 7 : Ch2947 - Ch 3045)														
Tunnel Structure at Stage 1A & 1B (CH2947 - CH3045)														
S3A-TS-2080	Backfilling to formation level for Stage 1B (CH 80 to CH 120)	200d	19/01/15 A	05/02/16	[Gantt Bar: Blue from Jan 19 to Feb 05]				Backfilling to formation level for Stage 1B (CH 80 to CH 120)					
CWB Tunnelling Works (Stage 2 : Ch3045 - Ch3129)														
Stage 2 - Tunnel Structure Works (Bay 7 to Bay 10 : CH3045 - CH3129)														
S3B-TS-9000A	Backfilling to Formation Level (CWB) - 12,000cu.m	20d	29/12/15 A	05/02/16	[Gantt Bar: Blue from Dec 29 to Feb 05]				Backfilling to Formation Level (CWB) - 12,000cu.m					
CWB Tunnelling Works (Stage 3 : Ch3129 - Ch3245)														
Stage 3 - Tunnel Structure Works (Bay 11 to Bay 20 : Ch3129 - Ch3245)														
Tunnel Structure at Stage 3A & 3B (CH3129 - CH3245)														
S3C-TS-2000E	Bay 10 to Bay 13 Slip Road 3 Top Slab	15d	25/12/15 A	22/01/16	[Gantt Bar: Blue from Dec 25 to Jan 22]				Bay 10 to Bay 13 Slip Road 3 Top Slab					
S3C-TS-2000E	Bay 10 to Bay 13 Slip Road 3 Scaffold Removal	14d	23/01/16	05/02/16	[Gantt Bar: Green from Jan 23 to Feb 05]				Bay 10 to Bay 13 Slip Road 3 Scaffold Removal					
S3C-TS-2000E	Bay 10 to Bay 13 Slip Road 3 Road Barrier	13d	06/02/16	18/02/16	[Gantt Bar: Green from Feb 06 to Feb 18]				Bay 10 to Bay 13 Slip Road 3 Road Barrier					
S3C-TS-2000L	Removal of 1st layer of strut/waling	9d	04/12/15 A	05/02/16	[Gantt Bar: Blue from Dec 04 to Feb 05]				Removal of 1st layer of strut/waling					
S3C-TS-2000N	Construction of Bay 10 Slip Road 3 Road Barrier	7d	28/01/16	18/02/16	[Gantt Bar: Red from Jan 28 to Feb 18]				Construction of Bay 10 Slip Road 3 Road Barrier					
S3C-TS-2030H	Bay 14 CWB and Slip Road 3 Road Barrier	14d	19/11/15 A	18/02/16	[Gantt Bar: Blue from Nov 19 to Feb 18]				Bay 14 CWB and Slip Road 3 Road Barrier					
S3C-TS-2030K	Backfilling to Road formation level from Bay 10 to Bay 14	30d	12/01/16 A	05/02/16	[Gantt Bar: Blue from Jan 12 to Feb 05]				Backfilling to Road formation level from Bay 10 to Bay 14					
S3C-TS-2090C	Bay 15,16 & 17 Slip Road 3 Road Barrier	14d	25/01/16*	10/02/16	[Gantt Bar: Red from Jan 25 to Feb 10]				Bay 15,16 & 17 Slip Road 3 Road Barrier					
S3C-TS-2090D	Bay 15,16 & 17 Slip Road 2 Road Barrier	14d	25/01/16*	10/02/16	[Gantt Bar: Red from Jan 25 to Feb 10]				Bay 15,16 & 17 Slip Road 2 Road Barrier					
S3C-TS-2110E	Removal Scaffold at Bay 18 to 20	17d	13/01/16 A	05/02/16	[Gantt Bar: Blue from Jan 13 to Feb 05]				Removal Scaffold at Bay 18 to 20					
S3C-TS-2110F	Bay 18, 19 & 20 CWB, Slip Road 3 and Slip Road 2 Road Barrier	9d	06/02/16	14/02/16	[Gantt Bar: Red from Feb 06 to Feb 14]				Bay 18, 19 & 20 CWB, Slip Road 3 and Slip Road 2 Road Barrier					
S3C-TS-2150	Backfilling up to Future Road Formation for Bay 19 - Bay20	32d	06/04/16	07/05/16	[Gantt Bar: Red from Apr 06 to May 07]				Backfilling up to Future Road Formation for Bay 19 - Bay20					

■ Remaining Work ■ Summa...
■ Actual Work
■ Summary Bar
■ Critical Remaining Work
◆ Milestone

CEDD CONTRACT NO. HK/2009/01
 Wan Chai Development Phase II - Central-Wan Chai Bypass at HKCEC (Contract 1)
WORKS PROGRAMME Rev.4 - 3 Month Programme starting from 20/01/16

Date	Revision	Checked	Appro...
15-Sep-15	Master Programme 6H		
20/01/16	Progress Updated on 20 Jan 2016		

Activity ID	Activity Name	OD	Start	Finish	2015				2016			
									Qtr 1		Qtr 2	
									Jan	Feb	Mar	Apr
Section 8 of the Works - Works in Area 6 (Utilities other than Watermains in Fenwick Pier Street)												
Sewerage Works												
S8-3010	Planter Reinstatement	30d	29/07/15 A	05/02/16	[Actual Work]				Planter Reinstatement			
S8-3020	Road Reinstatement	21d	25/09/15 A	05/02/16	[Actual Work]				Road Reinstatement			
Section 9 of the Works - Remaindar of the Works												
Box Culvert Construction												
S9-1070	Backfill the Temporary Water Channel from East to West (BG/BI Connection Point at Water Channel)	30d	02/06/15 A	05/02/16	[Actual Work]				Backfill the Temporary Water Channel from East to West (BG/BI Connection Point at Water Channel)			
Reprovision of Expo Drive East												
S9-2060	Construction of Retaining Wall Extension to Top of Box Culvert Bay 7	30d	01/02/16*	01/03/16					[Critical Remaining Work]			
Waterworks in Area 9												
Abandoned Pipes Removal												
S9-7090	Zone A4-4 Abandoned Pipes P7/P9 Removal Works	30d	14/10/15 A	01/02/16	[Actual Work]				Zone A4-4 Abandoned Pipes P7/P9 Removal Works			
S9-7100	Zone X1-4a Abandoned Pipes P5 Removal Works/ grouting	14d	27/10/15 A	05/02/16	[Actual Work]				Zone X1-4a Abandoned Pipes P5 Removal Works/ grouting			
Variation Order No.153 - Design and Construct CWB Bypass Tunnel from CH3246 to CH3278												
Works at Area 8 - CWB Tunnel, Slip Roads 2 & 3, Works in Area 8												
CWB Tunnelling Works (Stage 4: Ch3246 - Ch3278)												
Stage 4 - Tunnel Structure Works (Bay 21 to Bay 22 : CH3246 - CH3278)												
S4-TS-0005	Pile Head Fabrication	15d	18/01/16 A	23/01/16	[Actual Work]				Pile Head Fabrication			
S4-TS-0010	Bay 21 Base Slab	10d	18/01/16 A	28/01/16	[Actual Work]				Bay 21 Base Slab			
S4-TS-0020	Bay 22 Base Slab	10d	21/01/16	04/02/16	[Actual Work]				Bay 22 Base Slab			
S4-TS-0030	Removal of 3rd and 4th layer of Strut/Waling	28d	05/02/16	04/03/16	[Actual Work]				Removal of 3rd and 4th layer of Strut/Waling			
S4-TS-0040	Bay 21 & 22 Wall	15d	05/03/16	20/03/16	[Actual Work]				Bay 21 & 22 Wall			
S4-TS-0050	Bay 21 & 22 Wall & OHVD Base Slab	15d	21/03/16	04/04/16	[Actual Work]				Bay 21 & 22 Wall & OHVD Base Slab			
S4-TS-0060	Bay 21 & 22 OHVD Wall Stem and Top Slab	15d	05/04/16	20/04/16	[Actual Work]				Bay 21 & 22 OHVD Wall Stem and Top Slab			

█ Remaining Work █ Summa...
█ Actual Work
█ Summary Bar
█ Critical Remaining Work
◆ Milestone

CEDD CONTRACT NO. HK/2009/01
 Wan Chai Development Phase II - Central-Wan Chai Bypass at HKCEC (Contract 1)
WORKS PROGRAMME Rev.4 - 3 Month Programme starting from 20/01/16

Date	Revision	Checked	Appro...
15-Sep-15	Master Programme 6H		
20/01/16	Progress Updated on 20 Jan 2016		

Activity ID	Activity Name	emair Juratio	Early Start	Early Finish	Late Start	Late Finish	Total Float	2015												2016					
								October			November				December					January					
								11	18	25	01	08	15	22	29	06	13	20	27	03	10	17	24		
3MRP - Oct 2015 to Jan 2016																									
02 - PRE-CONSTRUCTION WORKS																									
02.3 - Method Statement / Shop Drawings																									
0230-1380	MS Landscape Deck Structure - Submission	23	20-Oct-15	11-Nov-15	08-Oct-16	31-Oct-16	355	MS Landscape Deck Structure - Submission																	
0230-1390	MS Landscape Deck Structure - ER Review & Comment	28	12-Nov-15	09-Dec-15	31-Oct-16	28-Nov-16	355	MS Landscape Deck Structure - ER Review & Comment																	
0230-1400	MS Landscape Deck Structure - Resubmission	28	10-Dec-15	06-Jan-16	28-Nov-16	26-Dec-16	355	MS Landscape Deck Struc																	
0230-1611	MS Noise Semi Enclosure - Submission	6	20-Oct-15	25-Oct-15	13-Jan-16	18-Jan-16	85	MS Noise Semi Enclosure - Submission																	
0230-1612	MS Noise Semi Enclosure - ER Review / Comment	28	26-Oct-15	22-Nov-15	19-Jan-16	15-Feb-16	85	MS Noise Semi Enclosure - ER Review / Comment																	
0230-1613	MS Noise Semi Enclosure - Resubmission	28	23-Nov-15	20-Dec-15	16-Feb-16	14-Mar-16	85	MS Noise Semi Enclosure - Resubmission																	
0230-1614	MS Noise Semi Enclosure - No Adverse Comment	28	21-Dec-15	17-Jan-16	15-Mar-16	11-Apr-16	85	MS Noise S																	
0230-1690	MS Approach Ramp - ER Approval	14	20-Oct-15	02-Nov-15	25-Mar-16	07-Apr-16	157	MS Approach Ramp - ER Approval																	
0230-2330	MS for Connection of EVB and EVA - Submission	10	20-Oct-15	29-Oct-15	10-Nov-15	19-Nov-15	21	MS for Connection of EVB and EVA - Submission																	
0230-2340	MS for Connection of EVB and EVA - ER Review & Comment	12	30-Oct-15	10-Nov-15	20-Nov-15	01-Dec-15	21	MS for Connection of EVB and EVA - ER Review & Comment																	
0230-2350	MS for Connection of EVB and EVA - Resubmission	6	11-Nov-15	16-Nov-15	02-Dec-15	07-Dec-15	21	MS for Connection of EVB and EVA - Resubmission																	
0230-2360	MS for Connection of EVB and EVA - ER No Adverse Comment	10	17-Nov-15	26-Nov-15	08-Dec-15	17-Dec-15	21	MS for Connection of EVB and EVA - ER No Adverse Comment																	
0240-2370	MS for erection of Beams at Pier 17-21 - Submission	28	20-Oct-15	16-Nov-15	01-Jan-16	28-Jan-16	73	MS for erection of Beams at Pier 17-21 - Submission																	
0240-2380	MS for erection of Beams at Pier 17-21 - ER Review / Comment	28	17-Nov-15	14-Dec-15	29-Jan-16	25-Feb-16	73	MS for erection of Beams at Pier 17-21 - ER Review / Comm																	
0240-2390	MS for erection of Beams at Pier 17-21 - Resubmission	28	15-Dec-15	11-Jan-16	26-Feb-16	24-Mar-16	73	MS for erection of B																	
0240-2400	MS for erection of Segment at W/B Bridge by LG - Submission	5	20-Oct-15	24-Oct-15	22-Oct-15	26-Oct-15	2	MS for erection of Segment at W/B Bridge by LG - Submission																	
0240-2410	MS for erection of Segment at W/B Bridge by LG - ER Review / Comment	5	25-Oct-15	29-Oct-15	27-Oct-15	31-Oct-15	2	MS for erection of Segment at W/B Bridge by LG - ER Review / Comment																	
0240-2420	MS for erection of Segment at W/B Bridge by LG - Resubmission	5	30-Oct-15	03-Nov-15	01-Nov-15	05-Nov-15	2	MS for erection of Segment at W/B Bridge by LG - Resubmission																	
0240-2430	MS for erection of Segment at W/B Bridge by LG - No Adverse Comment	5	04-Nov-15	08-Nov-15	06-Nov-15	10-Nov-15	2	MS for erection of Segment at W/B Bridge by LG - No Adverse Comment																	
0240-2440	MS for trial erection of green roof - Submission	15	20-Oct-15	03-Nov-15	08-Mar-16	22-Mar-16	140	MS for trial erection of green roof - Submission																	
0240-2450	MS for for trial erection of green roof - ER Review / Comment	15	04-Nov-15	18-Nov-15	23-Mar-16	06-Apr-16	140	MS for for trial erection of green roof - ER Review / Comment																	
0240-2460	MS for for trial erection of green roof - Resubmission	15	19-Nov-15	03-Dec-15	07-Apr-16	21-Apr-16	140	MS for for trial erection of green roof - Resubmission																	
0240-2470	MS for for trial erection of green roof - No Adverse Comment	15	04-Dec-15	18-Dec-15	22-Apr-16	06-May-16	140	MS for for trial erection of green roof - No Adverse Co																	
02.4 - Contractor's Design and Build Items																									
0240-1180	HGHK Permanent Carpark Design - ER/HGHK Review and Comment	15	20-Oct-15	03-Nov-15	30-Oct-15	13-Nov-15	10	HGHK Permanent Carpark Design - ER/HGHK Review and Comment																	
0240-1190	HGHK Permanent Carpark Design - Resubmission	50	04-Nov-15	23-Dec-15	14-Nov-15	02-Jan-16	10	HGHK Permanent Carpark Design - Resubmis																	
0240-1270	Landscaping Design - Submission	28	20-Oct-15	16-Nov-15	12-Oct-17	08-Nov-17	723	Landscaping Design - Submission																	
0240-1280	Landscaping Design - ER Review/Resubmission	28	17-Nov-15	14-Dec-15	09-Nov-17	06-Dec-17	723	Landscaping Design - ER Review/Resubmission																	
0240-1290	Landscaping Design - ER Approval	28	15-Dec-15	11-Jan-16	07-Dec-17	03-Jan-18	723	Landscaping Desig																	
0240-1630	Green Wall Minimum 2 years Establishment	488	20-Oct-15	03-Jun-17	18-Nov-16	05-Jul-18	326																		
02.5 - Bridge Segment/Beam Off-site Precasting																									
0250-3580	Bridge F1C Pier 36 T-span Segment Off-site Casting (13 nos.)	12	20-Oct-15	04-Nov-15	19-Jan-16	02-Feb-16	76	Bridge F1C Pier 36 T-span Segment Off-site Casting (13 nos.)																	
0250-3720	Bridge F3C Pier 41 T-span Segment Off-site Casting (13 nos.)	15	20-Oct-15	06-Nov-15	22-Mar-16	11-Apr-16	126	Bridge F3C Pier 41 T-span Segment Off-site Casting (13 nos.)																	
0250-3740	Bridge F3C Pier 42 T-span Segment Off-site Casting (11 nos.)	3	20-Oct-15	23-Oct-15	26-Apr-16	28-Apr-16	153	Bridge F3C Pier 42 T-span Segment Off-site Casting (11 nos.)																	
0250-3760	Bridge F3C Pier 40 End-span Segment Off-site Casting (5 nos.)	0	20-Oct-15	20-Oct-15	25-Apr-16	25-Apr-16		e F3C Pier 40 End-span Segment Off-site Casting (5 nos.)																	
0250-3860	Bridge F1B2 - Abut D12 Segment - 6 nos. (S2)	19	23-Oct-15	14-Nov-15	07-Nov-16	28-Nov-16	312	Bridge F1B2 - Abut D12 Segment - 6 nos. (S2)																	
0250-3880	Bridge F1B2 - Pier F1B2 Segment - 13 nos. (S1)	40	20-Oct-15	05-Dec-15	24-Dec-16	10-Feb-17	356	Bridge F1B2 - Pier F1B2 Segment - 13 nos. (S1)																	
0250-3900	Bridge F1B2 - Pier F2B2 Segment - 11 nos. (S1)	28	14-Dec-15	16-Jan-16	18-Feb-17	22-Mar-17	356	Bridge F1B2																	
0250-3920	Bridge F1B2 - Pier F3B2 Segment - 6 nos. (S2)	19	21-Nov-15	14-Dec-15	06-Dec-16	27-Dec-16	312	Bridge F1B2 - Pier F3B2 Segment - 6 nos. (S2)																	
0250-3940	Bridge F2B - Pier F3B2 Segment - 5 nos. (S2)	16	21-Dec-15	11-Jan-16	04-Jan-17	21-Jan-17	312	Bridge F2B - Pier F3																	

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

Contract HY/2009/19
Three Months Rolling Programme (20 Oct 2015 to 19 Jan 2016)

Activity ID	Activity Name	emairir Juratio	Early Start	Early Finish	Late Start	Late Finish	Total Float	2015												2016			
								October			November				December					January			
								11	18	25	01	08	15	22	29	06	13	20	27	03	10	17	24
02.6 - Fabrication & Delivery of Noise Enclosure																							
0260-5000	Int. Noise Enclosure Main + Sub Frames Fab / Del	68	20-Oct-15	09-Jan-16	16-Jan-16	11-Apr-16	74													Int. Noise Enclosure M			
0260-5010	Int. Noise Enclosure Noise Panel Fab / Del	10	20-Oct-15	31-Oct-15	30-Mar-16	11-Apr-16	131													Int. Noise Enclosure Noise Panel Fab / Del			
03 - PRELIMINARY WORKS																							
03.3 - Interface Works																							
0261-1000	Constr. of DN75 Storm Drain (Oil street) - ELS and Excavation	0	20-Oct-15	20-Oct-15	23-Oct-15	23-Oct-15														Storm Drain (Oil street) - ELS and Excavation			
0261-1010	Constr. of DN75 Storm Drain (Oil street) - Casting of Blinding Layer	0	20-Oct-15	20-Oct-15	23-Oct-15	23-Oct-15														Storm Drain (Oil street) - Casting of Blinding Layer			
0261-1020	Constr. of DN75 Storm Drain (Oil street) - Pipe Laying + Air test	0	20-Oct-15	20-Oct-15	23-Oct-15	23-Oct-15														of DN75 Storm Drain (Oil street) - Pipe Laying + Air test			
0261-1030	Constr. of DN75 Storm Drain (Oil street) - Constr. of Manhole 1-56 (Lower portion)	0	20-Oct-15	20-Oct-15	23-Oct-15	23-Oct-15														onstr. of DN75 Storm Drain (Oil street) - Constr. of Manhole 1-56 (Lower portion)			
0261-1040	Constr. of DN75 Storm Drain (Oil street) - Constr. of Manhole 1-56 (Upper portion)	0	20-Oct-15	20-Oct-15	23-Oct-15	23-Oct-15														Constr. of DN75 Storm Drain (Oil street) - Constr. of Manhole 1-56 (Upper portion)			
0261-1050	Constr. of DN75 Storm Drain (Oil street) - Concreting Pipeline intersection	0	20-Oct-15	20-Oct-15	23-Oct-15	23-Oct-15														Constr. of DN75 Storm Drain (Oil street) - Concreting Pipeline intersection			
0261-1060	Constr. of DN75 Storm Drain (Oil street) - Trench Backfilling	0	20-Oct-15	20-Oct-15	23-Oct-15	23-Oct-15														Constr. of DN75 Storm Drain (Oil street) - Trench Backfilling			
0261-1070	Constr. of DN75 Storm Drain (Oil street) - Removing ELS	2	20-Oct-15	22-Oct-15	23-Oct-15	24-Oct-15	2													Constr. of DN75 Storm Drain (Oil street) - Removing ELS			
0261-1080	Constr. of DN75 Storm Drain (Oil street) - Pavement Reinstatement	3	23-Oct-15	26-Oct-15	26-Oct-15	28-Oct-15	2													Constr. of DN75 Storm Drain (Oil street) - Pavement Reinstatement			
0261-1090	Complete Drainage work at Oil Street	0		28-Oct-15		28-Oct-15	0													Complete Drainage work at Oil Street			
05 - SECTION 2 & 2A OF THE WORKS																							
05.1 - Cut & Cover Tunnel Ch 4855-4932 (APS Footprint)																							
05.1.3 - APS & Tunnel Structure																							
0513-3060	APS Basement (Bay 21-South) - Staircase Landing 8 > Staircase Landing 12	20	20-Oct-15	12-Nov-15	20-Oct-15	12-Nov-15	0													APS Basement (Bay 21-South) - Staircase Landing 8 > Staircase Landing 12			
0513-3080	Tunnel Level - South Side Additional Beam at Bay 21	5	07-Nov-15	12-Nov-15	07-Nov-15	12-Nov-15	0													Tunnel Level - South Side Additional Beam at Bay 21			
0513-3081	Remedial Works - Concrete defect on partition wall	0	20-Oct-15	20-Oct-15	16-Nov-15	16-Nov-15														Remedial Works - Concrete defect on partition wall			
0513-3082	Remedial Works - Panel installation	3	13-Nov-15	16-Nov-15	13-Nov-15	16-Nov-15	0													Remedial Works - Panel installation			
0513-3083	Remedial Works - Trapped gullies	0	20-Oct-15	20-Oct-15	16-Nov-15	16-Nov-15														Remedial Works - Trapped gullies			
0513-3084	Remedial Works - Water seepage on soffit, diaphragm wall and floor slab	0	20-Oct-15	20-Oct-15	16-Nov-15	16-Nov-15														Remedial Works - Water seepage on soffit, diaphragm wall and floor slab			
0513-3085	Remedial Works - Concrete defect on completed staircase	3	20-Oct-15	23-Oct-15	13-Nov-15	16-Nov-15	20													Remedial Works - Concrete defect on completed staircase			
0513-3086	Remedial Works - Cleaning of 150mm & 50mm dia. Cross rd. ducts & Pipes	0	20-Oct-15	20-Oct-15	16-Nov-15	16-Nov-15														Remedial Works - Cleaning of 150mm & 50mm dia. Cross rd. ducts & Pipes			
0513-3087	Remedial Works - Concrete defect on walls and slabs at pump sump E & Tunnel	0	20-Oct-15	20-Oct-15	16-Nov-15	16-Nov-15														Remedial Works - Concrete defect on walls and slabs at pump sump E & Tunnel			
0513-3580	Completion of Outstanding Works at APS & Tunnel	0		16-Nov-15		16-Nov-15	0													Completion of Outstanding Works at APS & Tunnel			
05.1.5 - EVB Sub-structure & Tunnel																							
0515-1120	EVB Basement - Col/Partition Wall (Reb. Fix) > Zone 1A : GL1-2/A-E, 2-3/B-E, 3-6/C-F, 4-6/F-I	4	20-Oct-15	24-Oct-15	20-Oct-15	24-Oct-15	0													EVB Basement - Col/Partition Wall (Reb. Fix) > Zone 1A : GL1-2/A-E, 2-3/B-E, 3-6/C-F, 4-6/F-I			
0515-1140	EVB Basement - Col/Partition Wall (Fwk) > Zone 1A to Mezz (-1.40) Soffit	7	20-Oct-15	28-Oct-15	20-Oct-15	28-Oct-15	0													EVB Basement - Col/Partition Wall (Fwk) > Zone 1A to Mezz (-1.40) Soffit			
0515-1160	EVB Basement - Col/Partition Wall (Conc) > Zone 1A to Mezz (-1.40) Soffit	2	29-Oct-15	30-Oct-15	13-Nov-15	14-Nov-15	13													EVB Basement - Col/Partition Wall (Conc) > Zone 1A to Mezz (-1.40) Soffit			
0515-1180	EVB Basement - Mezz Slab & Beam (Lv -1.4) - (Falsework/Fwk) > Zone 1A	10	20-Oct-15	31-Oct-15	04-Nov-15	14-Nov-15	12													EVB Basement - Mezz Slab & Beam (Lv -1.4) - (Falsework/Fwk) > Zone 1A			
0515-1200	EVB Basement - Mezz Slab & Beam (Lv -1.4) - (Reb. Fix) > Zone 1A	6	02-Nov-15	07-Nov-15	16-Nov-15	21-Nov-15	12													EVB Basement - Mezz Slab & Beam (Lv -1.4) - (Reb. Fix) > Zone 1A			
0515-1220	EVB Basement - Mezz Slab & Beam (Lv -1.4) - (Conc) > Zone 1A	2	09-Nov-15	10-Nov-15	23-Nov-15	24-Nov-15	12													EVB Basement - Mezz Slab & Beam (Lv -1.4) - (Conc) > Zone 1A			
0515-1240	EVB Basement - Col/Partition Wall (Reb. Fix) > Zone 2A : GL1-6/A-D (incl ST-04)	8	20-Oct-15	29-Oct-15	23-Oct-15	31-Oct-15	2													EVB Basement - Col/Partition Wall (Reb. Fix) > Zone 2A : GL1-6/A-D (incl ST-04)			
0515-1260	EVB Basement - Col/Partition Wall (Fwk) > Zone 2A to Roof Soffit	12	29-Oct-15	11-Nov-15	29-Oct-15	11-Nov-15	0													EVB Basement - Col/Partition Wall (Fwk) > Zone 2A to Roof Soffit			
0515-1280	EVB Basement - Col/Partition Wall (Conc) > Zone 2A to Roof Soffit	2	12-Nov-15	13-Nov-15	12-Nov-15	13-Nov-15	0													EVB Basement - Col/Partition Wall (Conc) > Zone 2A to Roof Soffit			
0515-1300	EVB Basement - Mezz Slab & Beam (Lv +2.65) - (Falsework/Fwk) > Zone 2A	6	14-Nov-15	20-Nov-15	14-Nov-15	20-Nov-15	0													EVB Basement - Mezz Slab & Beam (Lv +2.65) - (Falsework/Fwk) > Zone 2A			
0515-1320	EVB Basement - Mezz Slab & Beam (Lv +2.65) - (Reb. Fix) > Zone 2A	3	21-Nov-15	24-Nov-15	21-Nov-15	24-Nov-15	0													EVB Basement - Mezz Slab & Beam (Lv +2.65) - (Reb. Fix) > Zone 2A			
0515-1340	EVB Basement - Mezz Slab & Beam (Lv +2.65) - (Conc) > Zone 2A	1	25-Nov-15	25-Nov-15	25-Nov-15	25-Nov-15	0													EVB Basement - Mezz Slab & Beam (Lv +2.65) - (Conc) > Zone 2A			
0515-1360	EVB Basement - Col/Partition Wall (Reb. Fix) > Zone 3A : GL1-6/E-H	4	20-Oct-15	24-Oct-15	23-Oct-15	27-Oct-15	2													EVB Basement - Col/Partition Wall (Reb. Fix) > Zone 3A : GL1-6/E-H			
0515-1380	EVB Basement - Col/Partition Wall (Fwk) > Zone 3A to Roof Soffit	8	26-Oct-15	03-Nov-15	28-Oct-15	05-Nov-15	2													EVB Basement - Col/Partition Wall (Fwk) > Zone 3A to Roof Soffit			

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

Contract HY/2009/19
Three Months Rolling Programme (20 Oct 2015 to 19 Jan 2016)

Activity ID	Activity Name	emairir Juratio	Early Start	Early Finish	Late Start	Late Finish	Total Float	2015												2016			
								October			November				December					January			
								11	18	25	01	08	15	22	29	06	13	20	27	03	10	17	24
0700-1130	Grd. Beam - (GL > F-G) - Tie Beam Construction	0	20-Oct-15	20-Oct-15	20-Oct-15	20-Oct-15	1	Grd. Beam - (GL > F-G) - Tie Beam Construction															
0700-1140	Grd. Beam - (GL > F-G) - Backfill	3	20-Oct-15	23-Oct-15	22-Oct-15	24-Oct-15	1	Grd. Beam - (GL > F-G) - Backfill															
0700-1150	Grd. Beam - (GL > F-G) - (Part A) - Blinding Layer Casting	1	24-Oct-15	24-Oct-15	26-Oct-15	26-Oct-15	1	Grd. Beam - (GL > F-G) - (Part A) - Blinding Layer Casting															
0700-1160	Grd. Beam - (GL > F-G) - (Part A) - H-Pile Trimming / Cutting Casing	1	26-Oct-15	26-Oct-15	27-Oct-15	27-Oct-15	1	Grd. Beam - (GL > F-G) - (Part A) - H-Pile Trimming / Cutting Casing															
0700-1170	Grd. Beam - (GL > F-G) - (Part A) - Capping Plate Welding / U Bars Welding	1	27-Oct-15	27-Oct-15	28-Oct-15	28-Oct-15	1	Grd. Beam - (GL > F-G) - (Part A) - Capping Plate Welding / U Bars Welding															
0700-1180	Grd. Beam - (GL > F-G) - (Part A) - Reinforcement Fixing	3	28-Oct-15	30-Oct-15	29-Oct-15	31-Oct-15	1	Grd. Beam - (GL > F-G) - (Part A) - Reinforcement Fixing															
0700-1190	Grd. Beam - (GL > F-G) - (Part A) - Formworks Erection	2	31-Oct-15	02-Nov-15	02-Nov-15	03-Nov-15	1	Grd. Beam - (GL > F-G) - (Part A) - Formworks Erection															
0700-1200	Grd. Beam - (GL > F-G) - (Part A) - Concreting	1	03-Nov-15	03-Nov-15	04-Nov-15	04-Nov-15	1	Grd. Beam - (GL > F-G) - (Part A) - Concreting															
0700-1210	Grd. Beam - (GL > F-G) - (Part A) - Formwork Removal	1	04-Nov-15	04-Nov-15	05-Nov-15	05-Nov-15	1	Grd. Beam - (GL > F-G) - (Part A) - Formwork Removal															
0700-1220	Grd. Beam - (GL > F-G) - (Part B) - Blinding Layer Casting	0	20-Oct-15	20-Oct-15	29-Oct-15	29-Oct-15		Beam - (GL > F-G) - (Part B) - Blinding Layer Casting															
0700-1230	Grd. Beam - (GL > F-G) - (Part B) - H-Pile Trimming / Cutting Casing	0	20-Oct-15	20-Oct-15	29-Oct-15	29-Oct-15		Grd. Beam - (GL > F-G) - (Part B) - H-Pile Trimming / Cutting Casing															
0700-1240	Grd. Beam - (GL > F-G) - (Part B) - Capping Plate Welding / U Bars Welding	0	20-Oct-15	20-Oct-15	29-Oct-15	29-Oct-15		Grd. Beam - (GL > F-G) - (Part B) - Capping Plate Welding / U Bars Welding															
0700-1250	Grd. Beam - (GL > F-G) - (Part B) - Reinforcement Fixing	0	20-Oct-15	20-Oct-15	29-Oct-15	29-Oct-15		Grd. Beam - (GL > F-G) - (Part B) - Reinforcement Fixing															
0700-1260	Grd. Beam - (GL > F-G) - (Part B) - Formworks Erection	2	20-Oct-15	22-Oct-15	29-Oct-15	30-Oct-15	7	Grd. Beam - (GL > F-G) - (Part B) - Formworks Erection															
0700-1270	Grd. Beam - (GL > F-G) - (Part B) - Concreting	1	23-Oct-15	23-Oct-15	31-Oct-15	31-Oct-15	7	Grd. Beam - (GL > F-G) - (Part B) - Concreting															
0700-1280	Grd. Beam - (GL > F-G) - (Part B) - Formwork Removal	1	24-Oct-15	24-Oct-15	02-Nov-15	02-Nov-15	7	Grd. Beam - (GL > F-G) - (Part B) - Formwork Removal															
0700-1290	Grd. Beam - (GL > K-L) - Backfill	0	20-Oct-15	20-Oct-15	27-Oct-15	27-Oct-15		Beam - (GL > K-L) - Backfill															
0700-1300	Grd. Beam - (GL > K-L) - Removal of existing Sheet Pile	0	20-Oct-15	20-Oct-15	27-Oct-15	27-Oct-15		Beam - (GL > K-L) - Removal of existing Sheet Pile															
0700-1310	Grd. Beam - (GL > K-L) - Blinding Layer Casting	0	20-Oct-15	20-Oct-15	27-Oct-15	27-Oct-15		Beam - (GL > K-L) - Blinding Layer Casting															
0700-1320	Grd. Beam - (GL > K-L) - H-Pile Trimming / Cutting Casing	0	20-Oct-15	20-Oct-15	27-Oct-15	27-Oct-15		Grd. Beam - (GL > K-L) - H-Pile Trimming / Cutting Casing															
0700-1330	Grd. Beam - (GL > K-L) - Capping Plate Welding / U Bars Welding	0	20-Oct-15	20-Oct-15	27-Oct-15	27-Oct-15		Grd. Beam - (GL > K-L) - Capping Plate Welding / U Bars Welding															
0700-1340	Grd. Beam - (GL > K-L) - Reinforcement Fixing	1	20-Oct-15	20-Oct-15	27-Oct-15	27-Oct-15	5	Grd. Beam - (GL > K-L) - Reinforcement Fixing															
0700-1350	Grd. Beam - (GL > K-L) - Formworks Erection	3	22-Oct-15	24-Oct-15	28-Oct-15	30-Oct-15	5	Grd. Beam - (GL > K-L) - Formworks Erection															
0700-1360	Grd. Beam - (GL > K-L) - Concreting	1	26-Oct-15	26-Oct-15	31-Oct-15	31-Oct-15	5	Grd. Beam - (GL > K-L) - Concreting															
0700-1370	Grd. Beam - (GL > K-L) - Formwork Removal	1	27-Oct-15	27-Oct-15	02-Nov-15	02-Nov-15	5	Grd. Beam - (GL > K-L) - Formwork Removal															
0700-1380	Storm Water Drain at Portion VB	5	21-Nov-15	26-Nov-15	02-Dec-15	07-Dec-15	9	Storm Water Drain at Portion VB															
0700-1390	Install Irrigation Watermain within Portion V	5	21-Nov-15	26-Nov-15	08-Dec-15	12-Dec-15	14	Install Irrigation Watermain within Portion V															
0700-1400	Construction of pile cap for PC21	0	20-Oct-15	20-Oct-15	24-Dec-16	24-Dec-16		Construction of pile cap for PC21															
0700-1410	Construction of pile cap for PC22	0	20-Oct-15	20-Oct-15	24-Dec-16	24-Dec-16		Construction of pile cap for PC22															
0700-1420	Construction of Column for Landscape Dect at PC21 & 22 up to Gnd Level	18	10-Nov-15	30-Nov-15	24-Dec-16	13-Jan-17	339	Construction of Column for Landscape Dect at PC21 & 22 up to Gnd Level															
0700-1430	Install underground drainage at Portion VB	7	21-Nov-15	28-Nov-15	30-Nov-15	07-Dec-15	7	Install underground drainage at Portion VB															
0700-1440	Construct Road Pavement Between P31-32 within Porion VB incl sub-base	21	04-Dec-15	29-Dec-15	08-Dec-15	02-Jan-16	3	Construct Road Pavement Between P31-32 within Porion VB incl sub-base															
0700-1450	Remove Temp Container/Storage within Admin Area	9	30-Nov-15	09-Dec-15	22-Dec-15	02-Jan-16	19	Remove Temp Container/Storage within Admin Area															
0700-1460	Erect Temporary/Removable Hoarding along portion VB	9	30-Dec-15	09-Jan-16	04-Jan-16	13-Jan-16	3	Erect Temporary/Removable Hoarding along portion VB															
A1540	Modify Temporary Support of Pier obstructing construction of ADB along Portion VB	25	05-Nov-15	03-Dec-15	11-Oct-19	08-Nov-19	1179	Modify Temporary Support of Pier obstructing construction of ADB along Portion VB															
08 - SECTION 5 WORK																							
08.1 - Retaining Wall 'F' Substructure																							
0810-1650	Retaining Wall F > Temp Excav Support/Open cut Excav works	18	20-Oct-15	10-Nov-15	08-Jun-16	29-Jun-16	190	Retaining Wall F > Temp Excav Support/Open cut Excav works															
0810-1660	Retaining Wall F > Excavation Works for Pile caps	21	28-Oct-15	20-Nov-15	16-Jun-16	11-Jul-16	190	Retaining Wall F > Excavation Works for Pile caps															
0810-1670	Construction of pile cap for Retaining Wall F @ PC8	21	30-Oct-15	23-Nov-15	18-Jun-16	13-Jul-16	190	Construction of pile cap for Retaining Wall F @ PC8															
0810-1680	Construction of pile cap for Retaining Wall F @ PC9	0	09-Nov-15	09-Nov-15	28-Jun-16	28-Jun-16		Construction of pile cap for Retaining Wall F @ PC9															
0810-1700	Construction of pile cap for Retaining Wall F @ PC10	0	09-Nov-15	09-Nov-15	28-Jun-16	28-Jun-16		Construction of pile cap for Retaining Wall F @ PC10															
0810-1720	Construction of pile cap for Retaining Wall F @ PC11	0	09-Nov-15	09-Nov-15	28-Jun-16	28-Jun-16		Construction of pile cap for Retaining Wall F @ PC11															

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

Contract HY/2009/19
Three Months Rolling Programme (20 Oct 2015 to 19 Jan 2016)

Activity ID	Activity Name	emainir Juratio	Early Start	Early Finish	Late Start	Late Finish	Total Float	2015												2016			
								October			November						December			January			
								11	18	25	01	08	15	22	29	06	13	20	27	03	10	17	24
10.7.1 - TTM Stages																							
1071-1240	TTM Stage 5 - TMLG Consultation and Endorsement	37	20-Oct-15	25-Nov-15	21-Oct-15	26-Nov-15	1	TTM Stage 5 - TMLG Consultation and Endorsement															
1071-1260	TTM Stage 5 - TTM Enabling Works	1	26-Nov-15	26-Nov-15	27-Nov-15	27-Nov-15	1	TTM Stage 5 - TTM Enabling Works															
1071-1280	TTM Stage 5 - Hing Fat Slip Road Divert 1 Lane through 'Bridge From Pier E4 to Pier E2' to Release "TA2"	0		26-Nov-15		27-Nov-15	1	TTM Stage 5 - Hing Fat Slip Road Divert 1 Lane through 'Bridge From Pier E4 to Pier															
11 - SECTION 11 OF THE WORKS																							
11.2 - Roadworks																							
1110-2710	Watermains at Portion XIIA - Stage 3 (parking Meters)	0	20-Oct-15	20-Oct-15	16-Nov-15	16-Nov-15		Watermains at Portion XIIA - Stage 3 (parking Meters)															
1110-2720	Watermains at Portion XIIA - Stage 4 (parking Meters)	0	20-Oct-15	20-Oct-15	16-Nov-15	16-Nov-15		Watermains at Portion XIIA - Stage 4 (parking Meters)															
1110-2730	Watermains at Portion XIIA - Stage 5 (parking Meters)	3	20-Oct-15	23-Oct-15	16-Nov-15	18-Nov-15	22	Watermains at Portion XIIA - Stage 5 (parking Meters)															
1110-2740	Watermains at Portion XIIA - Stage 6 (King Ming Rd. junction)	0	20-Oct-15	20-Oct-15	17-Nov-15	17-Nov-15		Watermains at Portion XIIA - Stage 6 (King Ming Rd. junction)															
1110-2750	Watermains at Portion XIIA - Stage 7 (King Ming Rd. junction & connection pt.)	0	20-Oct-15	20-Oct-15	17-Nov-15	17-Nov-15		Watermains at Portion XIIA - Stage 7 (King Ming Rd. junction & connection pt.)															
1110-2760	Watermains at Portion XIIA - Stage 8 (Run-in/out to carpark at Victoria Ctr.)	2	22-Oct-15	23-Oct-15	17-Nov-15	18-Nov-15	22	Watermains at Portion XIIA - Stage 8 (Run-in/out to carpark at Victoria Ctr.)															
1110-2770	Watermains at Portion XIIA - Stage 9 (Run-in/out to carpark at Victoria Ctr.)	13	24-Oct-15	07-Nov-15	19-Nov-15	03-Dec-15	22	Watermains at Portion XIIA - Stage 9 (Run-in/out to carpark at Victoria Ctr.)															
1110-2780	Watermains at Portion XIIA - Stage 10 (motor cycle parking)	13	24-Oct-15	07-Nov-15	19-Nov-15	03-Dec-15	22	Watermains at Portion XIIA - Stage 10 (motor cycle parking)															
1110-2790	Watermains at Portion XIIA - Stage 11 (motor cycle parking)	12	09-Nov-15	21-Nov-15	04-Dec-15	17-Dec-15	22	Watermains at Portion XIIA - Stage 11 (motor cycle parking)															
1110-2800	Watermains at Portion XIIA - Testing & commissioning of Watermains	4	23-Nov-15	26-Nov-15	18-Dec-15	22-Dec-15	22	Watermains at Portion XIIA - Testing & commissioning of Watermains															
1110-2810	Watermains at Portion XIIA - Reinstatement of Pavement at connection Pt.	4	27-Nov-15	01-Dec-15	23-Dec-15	28-Dec-15	22	Watermains at Portion XIIA - Reinstatement of Pavement at connection Pt.															

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

Contract HY/2009/19
Three Months Rolling Programme (20 Oct 2015 to 19 Jan 2016)

Activity ID	Activity Name	Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	2016																		
								February						March						April						May
								7	24	31	07	14	21	28	06	13	20	27	03	10	17	24	01			
3MRP - Jan 2015 to Apr 2016																										
02 - PRE-CONSTRUCTION WORKS																										
02.3 - Method Statement / Shop Drawings																										
0230-1380	MS Landscape Deck Structure - Submission	21	20-Jan-16	09-Feb-16	24-May-17	13-Jun-17	490															MS Landscape Deck Structure - Submission				
0230-1390	MS Landscape Deck Structure - ER Review & Comment	28	10-Feb-16	08-Mar-16	14-Jun-17	11-Jul-17	490															MS Landscape Deck Structure - ER Review & Comment				
0230-1400	MS Landscape Deck Structure - Resubmission	28	09-Mar-16	05-Apr-16	12-Jul-17	08-Aug-17	490															MS Landscape Deck Structure - Resubmission				
0230-1410	MS Landscape Deck Structure - ER Approval	28	06-Apr-16	03-May-16	09-Aug-17	05-Sep-17	490															MS Landscape Deck Structure - ER Approval				
0230-1611	MS Noise Semi Enclosure - Submission	0	20-Jan-16	20-Jan-16	05-Feb-16	05-Feb-16	0															MS Noise Semi Enclosure - Submission				
0230-1612	MS Noise Semi Enclosure - ER Review / Comment	5	20-Jan-16	24-Jan-16	05-Feb-16	09-Feb-16	16															MS Noise Semi Enclosure - ER Review / Comment				
0230-1613	MS Noise Semi Enclosure - Resubmission	10	25-Jan-16	03-Feb-16	10-Feb-16	19-Feb-16	16															MS Noise Semi Enclosure - Resubmission				
0230-1614	MS Noise Semi Enclosure - No Adverse Comment	10	04-Feb-16	13-Feb-16	20-Feb-16	29-Feb-16	16															MS Noise Semi Enclosure - No Adverse Comment				
0230-1690	MS Approach Ramp - ER Approval	13	20-Jan-16	01-Feb-16	12-May-16	24-May-16	113															MS Approach Ramp - ER Approval				
0230-2340	MS for Connection of EVB and EVA - ER Review & Comment	0	20-Jan-16	20-Jan-16	29-Jan-16	29-Jan-16	0															MS for Connection of EVB and EVA - ER Review & Comment				
0230-2350	MS for Connection of EVB and EVA - Resubmission	0	20-Jan-16	20-Jan-16	29-Jan-16	29-Jan-16	0															MS for Connection of EVB and EVA - Resubmission				
0230-2360	MS for Connection of EVB and EVA - ER No Adverse Comment	6	20-Jan-16	25-Jan-16	29-Jan-16	04-Feb-16	10															MS for Connection of EVB and EVA - ER No Adverse Comment				
0240-2370	MS for erection of Beams at Pier 17-21 - Submission	0	20-Jan-16	20-Jan-16	20-Feb-16	20-Feb-16	0															MS for erection of Beams at Pier 17-21 - Submission				
0240-2380	MS for erection of Beams at Pier 17-21 - ER Review / Comment	14	20-Jan-16	02-Feb-16	20-Feb-16	04-Mar-16	31															MS for erection of Beams at Pier 17-21 - ER Review / Comment				
0240-2390	MS for erection of Beams at Pier 17-21 - Resubmission	28	03-Feb-16	01-Mar-16	05-Mar-16	01-Apr-16	31															MS for erection of Beams at Pier 17-21 - Resubmission				
0240-2391	MS for erection of Beams at Pier 17-21 - No Adverse Comment	28	02-Mar-16	29-Mar-16	02-Apr-16	29-Apr-16	31															MS for erection of Beams at Pier 17-21 - No Adverse Comment				
0240-2440	MS for trial erection of green roof - Submission	8	20-Jan-16	27-Jan-16	20-Mar-16	27-Mar-16	61															MS for trial erection of green roof - Submission				
0240-2450	MS for for trial erection of green roof - ER Review / Comment	15	27-Jan-16	11-Feb-16	28-Mar-16	11-Apr-16	61															MS for for trial erection of green roof - ER Review / Comment				
0240-2460	MS for for trial erection of green roof - Resubmission	15	11-Feb-16	26-Feb-16	12-Apr-16	26-Apr-16	61															MS for for trial erection of green roof - Resubmission				
0240-2470	MS for for trial erection of green roof - No Adverse Comment	15	26-Feb-16	12-Mar-16	27-Apr-16	11-May-16	61															MS for for trial erection of green roof - No Adverse Comment				
0240-2482	MS for Erection of LG-B at Pier 29 & 30 - Resubmission	0	20-Jan-16	20-Jan-16	28-Jan-16	28-Jan-16	0															MS for Erection of LG-B at Pier 29 & 30 - Resubmission				
0240-2487	MS for Erection of LG-B at Pier 29 & 30 - No Adverse Comment	2	20-Jan-16	21-Jan-16	28-Jan-16	29-Jan-16	8															MS for Erection of LG-B at Pier 29 & 30 - No Adverse Comment				
02.4 - Contractor's Design and Build Items																										
0240-1180	HGHK Permanent Carpark Design - ER/HGHK Review and Comment	0	20-Jan-16	20-Jan-16	04-Mar-16	04-Mar-16	0															HGHK Permanent Carpark Design - ER/HGHK Review and Comment				
0240-1190	HGHK Permanent Carpark Design - Resubmission	0	20-Jan-16	20-Jan-16	04-Mar-16	04-Mar-16	0															HGHK Permanent Carpark Design - Resubmission				
0240-1200	HGHK Permanent Carpark Design - ER/HGHK Approval	60	20-Jan-16	19-Mar-16	04-Mar-16	02-May-16	44															HGHK Permanent Carpark Design - ER/HGHK Approval				
0240-1270	Landscaping Design - Submission	28	20-Jan-16	16-Feb-16	17-Oct-17	13-Nov-17	636															Landscaping Design - Submission				
0240-1280	Landscaping Design - ER Review/Resubmission	28	17-Feb-16	15-Mar-16	14-Nov-17	11-Dec-17	636															Landscaping Design - ER Review/Resubmission				
0240-1290	Landscaping Design - ER Approval	28	16-Mar-16	12-Apr-16	12-Dec-17	08-Jan-18	636															Landscaping Design - ER Approval				
0240-1630	Green Wall Minimum 2 years Establishment	367	20-Jan-16	07-Apr-17	19-Apr-17	10-Jul-18	374															Green Wall Minimum 2 years Establishment				
02.5 - Bridge Segment/Beam Off-site Precasting																										
0250-3860	Bridge F1B2 - Abut D12 Segment - 6 nos. (S2)	19	20-Jan-16	13-Feb-16	11-Nov-16	02-Dec-16	243															Bridge F1B2 - Abut D12 Segment - 6 nos. (S2)				
0250-3880	Bridge F1B2 - Pier F1B2 Segment - 13 nos. (S1)	40	20-Jan-16	09-Mar-16	29-Dec-16	15-Feb-17	284															Bridge F1B2 - Pier F1B2 Segment - 13 nos. (S1)				
0250-3900	Bridge F1B2 - Pier F2B2 Segment - 11 nos. (S1)	28	17-Mar-16	21-Apr-16	23-Feb-17	27-Mar-17	284															Bridge F1B2 - Pier F2B2 Segment - 11 nos. (S1)				
0250-3920	Bridge F1B2 - Pier F3B2 Segment - 6 nos. (S2)	19	22-Feb-16	14-Mar-16	10-Dec-16	31-Dec-16	243															Bridge F1B2 - Pier F3B2 Segment - 6 nos. (S2)				
0250-3940	Bridge F2B - Pier F3B2 Segment - 5 nos. (S2)	16	22-Mar-16	12-Apr-16	09-Jan-17	26-Jan-17	243															Bridge F2B - Pier F3B2 Segment - 5 nos. (S2)				
02.6 - Fabrication & Delivery of Noise Enclosure																										
0260-5000	Int. Noise Enclosure Main + Sub Frames Fab / Del	10	20-Jan-16	30-Jan-16	18-Feb-16	29-Feb-16	22															Int. Noise Enclosure Main + Sub Frames Fab / Del				
0260-5010	Int. Noise Enclosure Noise Panel Fab / Del	10	20-Jan-16	30-Jan-16	18-Feb-16	29-Feb-16	22															Int. Noise Enclosure Noise Panel Fab / Del				
05 - SECTION 2 & 2A OF THE WORKS																										
05.1 - Cut & Cover Tunnel Ch 4855-4932 (APS Footprint)																										
05.1.5 - EVB Sub-structure & Tunnel																										
1051-3560	Connection to EVA (C19) - Install Pipe Pile (45nos)	9	20-Jan-16	29-Jan-16	20-Jan-16	29-Jan-16	0															Connection to EVA (C19) - Install Pipe Pile (45nos)				
1051-3570	Connection to EVA (C19) - Place sand in the pipe pile	1	29-Jan-16	30-Jan-16	29-Jan-16	30-Jan-16	0															Connection to EVA (C19) - Place sand in the pipe pile				
1051-3580	Connection to EVA (C19) - Extract the pipe pile	3	30-Jan-16	03-Feb-16	30-Jan-16	03-Feb-16	0															Connection to EVA (C19) - Extract the pipe pile				
1051-3590	Connection to EVA (C19) - Install sheet pile in pipe pile	2	03-Feb-16	05-Feb-16	03-Feb-16	05-Feb-16	0															Connection to EVA (C19) - Install sheet pile in pipe pile				

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- Milestone

Contract HY/2009/19
Three Months Rolling Programme (20 Jan 2015 to 19 Apr 2016)

Activity ID	Activity Name	Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	2016																														
								February						March						April						May												
								7	14	21	28	5	12	19	26	1	8	15	22	29	5	12	19	26	2	9	16	23	30	6	13	20	27	3	10	17	24	31
1051-3600	Connection to EVA (C19) - Install grout tube	6	05-Feb-16	16-Feb-16	05-Feb-16	16-Feb-16	0	Connection to EVA (C19) - Install grout tube																														
1051-3603	Connection to EVA (C19) - Grouting	3	16-Feb-16	19-Feb-16	16-Feb-16	19-Feb-16	0	Connection to EVA (C19) - Grouting																														
1051-3605	Connection to EVA (C19) - Excavate the rock fill	3	30-Jan-16	03-Feb-16	06-Feb-16	13-Feb-16	6	Connection to EVA (C19) - Excavate the rock fill																														
1051-3606	Connection to EVA (C19) - Place mass concrete block	5	03-Feb-16	12-Feb-16	13-Feb-16	19-Feb-16	6	Connection to EVA (C19) - Place mass concrete block																														
1051-3611	Connection to EVA (C19) - Erection of working platform	1	19-Feb-16	20-Feb-16	19-Feb-16	20-Feb-16	0	Connection to EVA (C19) - Erection of working platform																														
1051-3621	Connection to EVA (C19) - Drill dewatering hole at area A and B	1	20-Feb-16	22-Feb-16	20-Feb-16	22-Feb-16	0	Connection to EVA (C19) - Drill dewatering hole at area A and B																														
1051-3631	Connection to EVA (C19) - Drill 3 holes at top of each area and investigate	1	20-Feb-16	22-Feb-16	20-Feb-16	22-Feb-16	0	Connection to EVA (C19) - Drill 3 holes at top of each area and investigate																														
1051-3641	Connection to EVA (C19) - Drill 3 holes at middle of each area and investigate	1	20-Feb-16	22-Feb-16	20-Feb-16	22-Feb-16	0	Connection to EVA (C19) - Drill 3 holes at middle of each area and investigate																														
1051-3651	Connection to EVA (C19) - Drill 3 holes at bottom of each area and investigate	1	20-Feb-16	22-Feb-16	20-Feb-16	22-Feb-16	0	Connection to EVA (C19) - Drill 3 holes at bottom of each area and investigate																														
1051-3661	Connection to EVA (C19) - Core hole for saw cut	3	22-Feb-16	25-Feb-16	22-Feb-16	25-Feb-16	0	Connection to EVA (C19) - Core hole for saw cut																														
1051-3671	Connection to EVA (C19) - Saw cut the bulkhead wall	5	25-Feb-16	02-Mar-16	25-Feb-16	02-Mar-16	0	Connection to EVA (C19) - Saw cut the bulkhead wall																														
1051-3681	Connection to EVA (C19) - Remove the broken concrete	1	02-Mar-16	03-Mar-16	02-Mar-16	03-Mar-16	0	Connection to EVA (C19) - Remove the broken concrete																														
1051-3691	Connection to EVA (C19) - Re-bar fixing	2	03-Mar-16	05-Mar-16	03-Mar-16	05-Mar-16	0	Connection to EVA (C19) - Re-bar fixing																														
1051-3701	Connection to EVA (C19) - Erection of formwork	2	05-Mar-16	08-Mar-16	05-Mar-16	08-Mar-16	0	Connection to EVA (C19) - Erection of formwork																														
1051-3711	Connection to EVA (C19) - Concreting	1	08-Mar-16	09-Mar-16	08-Mar-16	09-Mar-16	0	Connection to EVA (C19) - Concreting																														
1051-3721	Connection to EVA (C19) - Removal of formwork	1	09-Mar-16	10-Mar-16	09-Mar-16	10-Mar-16	0	Connection to EVA (C19) - Removal of formwork																														
1051-3731	Connection to EVA (C19) - Erection of falsework	2	10-Mar-16	12-Mar-16	10-Mar-16	12-Mar-16	0	Connection to EVA (C19) - Erection of falsework																														
1051-3741	Connection to EVA (C19) - Rebar fixing	2	12-Mar-16	15-Mar-16	12-Mar-16	15-Mar-16	0	Connection to EVA (C19) - Rebar fixing																														
1051-3751	Connection to EVA (C19) - Erection of formwork	2	15-Mar-16	17-Mar-16	15-Mar-16	17-Mar-16	0	Connection to EVA (C19) - Erection of formwork																														
1051-3761	Connection to EVA (C19) - Concreting	1	17-Mar-16	18-Mar-16	17-Mar-16	18-Mar-16	0	Connection to EVA (C19) - Concreting																														
1051-3771	Connection to EVA (C19) - Removal of formwork	1	18-Mar-16	19-Mar-16	18-Mar-16	19-Mar-16	0	Connection to EVA (C19) - Removal of formwork																														
1051-3781	Connection to EVA (C19) - Erection of falsework	2	19-Mar-16	22-Mar-16	19-Mar-16	22-Mar-16	0	Connection to EVA (C19) - Erection of falsework																														
1051-3791	Connection to EVA (C19) - Erection of soffit	2	22-Mar-16	24-Mar-16	22-Mar-16	24-Mar-16	0	Connection to EVA (C19) - Erection of soffit																														
1051-3801	Connection to EVA (C19) - Rebar fixing	2	24-Mar-16	29-Mar-16	24-Mar-16	29-Mar-16	0	Connection to EVA (C19) - Rebar fixing																														
1051-3811	Connection to EVA (C19) - Erection of formwork	2	29-Mar-16	31-Mar-16	29-Mar-16	31-Mar-16	0	Connection to EVA (C19) - Erection of formwork																														
1051-3821	Connection to EVA (C19) - Concreting	1	31-Mar-16	01-Apr-16	31-Mar-16	01-Apr-16	0	Connection to EVA (C19) - Concreting																														
1051-3831	Connection to EVA (C19) - Removal of formwork	1	01-Apr-16	02-Apr-16	01-Apr-16	02-Apr-16	0	Connection to EVA (C19) - Removal of formwork																														
1051-3832	Complete EVB Outstanding Works (Final)	0		02-Apr-16		02-Apr-16	0	◆ Complete EVB Outstanding Works (Final)																														
1080-1200	Removal of TA2 (Pier 21-23) -Deck Removal - (TA21-TA22)	0	20-Jan-16	20-Jan-16	31-Mar-16	31-Mar-16		Removal of TA2 (Pier 21-23) -Deck Removal - (TA21-TA22)																														
1080-1210	Removal of TA2 (Pier 21-23) -Tower Removal - (TA21)	1	20-Jan-16	20-Jan-16	31-Mar-16	01-Apr-16	57	Removal of TA2 (Pier 21-23) -Tower Removal - (TA21)																														
1080-1220	Removal of TA2 (Pier 21-23) -Tower Removal - (TA22)	1	21-Jan-16	21-Jan-16	01-Apr-16	02-Apr-16	57	Removal of TA2 (Pier 21-23) -Tower Removal - (TA22)																														
1080-1230	Reinstatement of Slab @ TA24	6	20-Jan-16	26-Jan-16	30-Jan-16	05-Feb-16	9	Reinstatement of Slab @ TA24																														
1080-1240	Reinstatement of Slab @ TA23	9	20-Jan-16	29-Jan-16	27-Jan-16	05-Feb-16	6	Reinstatement of Slab @ TA23																														
1080-1250	Reinstatement of Slab @ TA25	7	20-Jan-16	27-Jan-16	29-Jan-16	05-Feb-16	8	Reinstatement of Slab @ TA25																														
1080-1260	Reinstatement of Slab @ TA26	7	20-Jan-16	27-Jan-16	29-Jan-16	05-Feb-16	8	Reinstatement of Slab @ TA26																														
1080-1270	Reinstatement of Slab @ TA27	7	20-Jan-16	27-Jan-16	29-Jan-16	05-Feb-16	8	Reinstatement of Slab @ TA27																														
1080-1290	EVB Works - Slab at +0.75Mpd - (G.L 5.5-6/C-E) (Part 2)	0	20-Jan-16	20-Jan-16	21-Jan-16	21-Jan-16		EVB Works - Slab at +0.75Mpd - (G.L 5.5-6/C-E) (Part 2)																														
1080-1320	EVB Works - Slab at +3.4Mpd - (G.L 1-3/C-E) (Part 5)	4	20-Jan-16	23-Jan-16	02-Feb-16	05-Feb-16	11	EVB Works - Slab at +3.4Mpd - (G.L 1-3/C-E) (Part 5)																														
1080-1330	EVB Works - Walls at +0.0Mpd - (G.L 4-5/A-B) (Part 6)	0	20-Jan-16	20-Jan-16	21-Jan-16	21-Jan-16		EVB Works - Walls at +0.0Mpd - (G.L 4-5/A-B) (Part 6)																														
1080-1350	EVB Works - Slab & Wall at +4.2Mpd - (G.L 5-6/A-E) (Part 8)	4	20-Jan-16	23-Jan-16	02-Feb-16	05-Feb-16	11	EVB Works - Slab & Wall at +4.2Mpd - (G.L 5-6/A-E) (Part 8)																														
1080-1370	EVB Works - In-Situ Watertank - Upper Part (Part 10)	0	20-Jan-16	20-Jan-16	21-Jan-16	21-Jan-16		EVB Works - In-Situ Watertank - Upper Part (Part 10)																														
1080-1380	EVB Works - Slab at +3.4Mpd - (G.L 1-3/A-C) (Part 11)	4	20-Jan-16	23-Jan-16	02-Feb-16	05-Feb-16	11	EVB Works - Slab at +3.4Mpd - (G.L 1-3/A-C) (Part 11)																														
1080-1390	EVB Works - Slab at -2.8Mpd - (G.L 6-7/A) (Part 12)	0	20-Jan-16	20-Jan-16	13-Nov-19	13-Nov-19		EVB Works - Slab at -2.8Mpd - (G.L 6-7/A) (Part 12)																														
1080-1400	EVB Works - Walls at +0.0Mpd - (G.L 4-6/L-N) (Part 13)	0	23-Jan-16	23-Jan-16	13-Nov-19	13-Nov-19		EVB Works - Walls at +0.0Mpd - (G.L 4-6/L-N) (Part 13)																														
1080-1410	EVB Works - Pre - Cast Watertank - Upper Part (Part 14)	0	20-Jan-16	20-Jan-16	21-Jan-16	21-Jan-16		EVB Works - Pre - Cast Watertank - Upper Part (Part 14)																														
1080-1420	EVB Works - Slab at +2.4Mpd - (G.L 4-6/A-C) (Part 15)	14	20-Jan-16	04-Feb-16	27-Jan-16	15-Feb-16	6	EVB Works - Slab at +2.4Mpd - (G.L 4-6/A-C) (Part 15)																														
1080-1451	D-Wall Weak Seam rectification works	0	20-Jan-16	20-Jan-16	19-Jan-16	19-Jan-16	0	D-Wall Weak Seam rectification works																														

- █ Remaining Level of Effort
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- █ Remaining Work
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- ◆ Milestone

Contract HY/2009/19
Three Months Rolling Programme (20 Jan 2015 to 19 Apr 2016)

Activity ID	Activity Name	emairir Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	2016																			
								February					March					April					May				
								7	14	21	28	06	13	20	27	04	11	18	25	02	09	16	23	30	06		
0630-2365	Underground drainage (Pier 29) - Concreting (for Catchpit)	1	22-Jan-16	22-Jan-16	11-Apr-16	11-Apr-16	62	█ Underground drainage (Pier 29) - Concreting (for Catchpit)																			
0630-2367	Underground drainage (Pier 29) - Formwork Removal	1	23-Jan-16	23-Jan-16	12-Apr-16	12-Apr-16	62	█ Underground drainage (Pier 29) - Formwork Removal																			
0630-2369	Underground drainage (Pier 29) - Excavation	1	25-Jan-16	25-Jan-16	13-Apr-16	13-Apr-16	62	█ Underground drainage (Pier 29) - Excavation																			
0630-2371	Underground drainage (Pier 29) - Bedding	2	26-Jan-16	27-Jan-16	14-Apr-16	15-Apr-16	62	█ Underground drainage (Pier 29) - Bedding																			
0630-2373	Underground drainage (Pier 29) - Connection of Concrete Pipe	2	28-Jan-16	29-Jan-16	16-Apr-16	18-Apr-16	62	█ Underground drainage (Pier 29) - Connection of Concrete Pipe																			
0630-2375	Underground drainage (Pier 29) - Backfill	3	30-Jan-16	02-Feb-16	19-Apr-16	21-Apr-16	62	█ Underground drainage (Pier 29) - Backfill																			
0650-1000	Construct Road Pavement Between P31-32 within Porion VB incl sub-base	7	20-Jan-16	27-Jan-16	14-Apr-16	21-Apr-16	67	█ Construct Road Pavement Between P31-32 within Porion VB incl sub-base																			
0650-1110	Modify Temporary Support of Pier obstructing construction of ADB along Portion VB	15	20-Jan-16	05-Feb-16	05-Apr-16	21-Apr-16	59	█ Modify Temporary Support of Pier obstructing construction of ADB along Portion VB																			
0650-1111	Reconstruction of Special Hoarding after segment erection @ D12	12	16-Feb-16	29-Feb-16	08-Mar-16	21-Mar-16	18	█ Reconstruction of Special Hoarding after segment erection @ D12																			
Admin Building - Add'l Excavation																											
630-3090	ADB(Pier29-30) West Basement (GL > 3-6/C-F) - 1st Layer Excav Approx. +2.5mPD	7	20-Jan-16	27-Jan-16	20-Jan-16	27-Jan-16	0	█ ADB(Pier29-30) West Basement (GL > 3-6/C-F) - 1st Layer Excav Approx. +2.5mPD																			
630-3091	ADB(Pier29-30) West Basement (GL > 3-6/C-F) - Install Strut and Waling Support	9	28-Jan-16	06-Feb-16	28-Jan-16	06-Feb-16	0	█ ADB(Pier29-30) West Basement (GL > 3-6/C-F) - Install Strut and Waling Support																			
630-3092	ADB(Pier29-30) West Basement (GL > 3-6/C-F) - 2nd Layer Excav to Ground Beam Formation level + blin	13	15-Feb-16	29-Feb-16	15-Feb-16	29-Feb-16	0	█ ADB(Pier29-30) West Basement (GL > 3-6/C-F) - 2nd Layer Excav to Ground Beam Fo																			
630-3110	ADB(Pier29-30) West Basement (GL > 3-6/C-F) - Install Pipe Pile wall - Sumpit Area	7	01-Mar-16	08-Mar-16	01-Mar-16	08-Mar-16	0	█ ADB(Pier29-30) West Basement (GL > 3-6/C-F) - Install Pipe Pile wall - Surr																			
630-3115	ADB(Pier29-30) West Basement (GL > 3-6/C-F) - Chemical Grouting to Pipe Pile Wall - Sumpit Area	5	05-Mar-16	10-Mar-16	05-Mar-16	10-Mar-16	0	█ ADB(Pier29-30) West Basement (GL > 3-6/C-F) - Chemical Grouting to Pi																			
630-3116	ADB(Pier29-30) West Basement (GL > 3-6/C-F) - Excav to -1.0mPD - Sumpit Area	3	08-Mar-16	10-Mar-16	08-Mar-16	10-Mar-16	0	█ ADB(Pier29-30) West Basement (GL > 3-6/C-F) - Excav to -1.0mPD - Sur																			
630-3120	ADB(Pier29-30) West Basement (GL > 3-6/C-F) - Install Strut and Waling Support	3	11-Mar-16	14-Mar-16	11-Mar-16	14-Mar-16	0	█ ADB(Pier29-30) West Basement (GL > 3-6/C-F) - Install Strut and W																			
630-3220	ADB(Pier29-30) West Basement (GL > 3-6/C-F) - Excav to Formation level - (Sump Pits)	5	15-Mar-16	19-Mar-16	15-Mar-16	19-Mar-16	0	█ ADB(Pier29-30) West Basement (GL > 3-6/C-F) - Excav to Fo																			
630-3340	ADB (Pier29-30)West Basement (GL > 3-6/C-F) - Cast Blinding to Sump Pits	1	21-Mar-16	21-Mar-16	21-Mar-16	21-Mar-16	0	█ ADB (Pier29-30)West Basement (GL > 3-6/C-F) - Cast Blin																			
630-3360	ADB(Pier29-30) Basement Complete Add'l Excavation & Blinding	0		21-Mar-16		21-Mar-16	0	◆ ADB(Pier29-30) Basement Complete Add'l Excavation & B																			
630-3362	ADB(Pier29) - (GL > 1-6/A-C) - Excav Temporary Backfill of Ground Beams	5	20-Jan-16	25-Jan-16	15-Feb-16	19-Feb-16	19	█ ADB(Pier29) - (GL > 1-6/A-C) - Excav Temporary Backfill of Ground Beams																			
630-3364	ADB(Pier29) - (GL > 1-6/A-C) - Compaction of Ground level + Blinding	6	26-Jan-16	01-Feb-16	08-Mar-16	14-Mar-16	33	█ ADB(Pier29) - (GL > 1-6/A-C) - Compaction of Ground level + Blinding																			
630-3366	ADB(Pier29) - (GL > 1-6/F-N) - Excav Temporary Backfill of Ground Beams - Part 1 (before CNY)	10	26-Jan-16	05-Feb-16	20-Feb-16	02-Mar-16	19	█ ADB(Pier29) - (GL > 1-6/F-N) - Excav Temporary Backfill of Ground Beams - Part 1 (before CNY)																			
630-3368	ADB(Pier30-32) - (GL > 1-6/F-N) - Complete Excav Temporary Backfill - Part 2 (after CNY)	6	15-Feb-16	20-Feb-16	08-Mar-16	14-Mar-16	19	█ ADB(Pier30-32) - (GL > 1-6/F-N) - Complete Excav Temporary Backfill - Part 2 (after CNY)																			
630-3370	ADB(Pier30-32) - (GL > 1-6/F-N) - Compaction of Ground level + Blinding	6	22-Feb-16	27-Feb-16	15-Mar-16	21-Mar-16	19	█ ADB(Pier30-32) - (GL > 1-6/F-N) - Compaction of Ground level + Blinding																			
630-3372	ADB(Pier29-30) - (GL > 1-2.0/C-F) - Compaction of Ground level + Blinding	6	19-Feb-16	25-Feb-16	15-Mar-16	21-Mar-16	21	█ ADB(Pier29-30) - (GL > 1-2.0/C-F) - Compaction of Ground level + Blinding																			
07 - SECTION 4 & 4A OF THE WORKS																											
07.1 EBV Ground Level																											
0710-0900	WaterProofing (N46-64/S48-67) for East Vent Bldg	5	02-Apr-16	09-Apr-16	02-Apr-16	09-Apr-16	0	█ WaterProofing (N46-64/S48-67)																			
0710-1000	Backfill (N46-64/S48-67) for East Vent Bldg	12	07-Apr-16	21-Apr-16	07-Apr-16	21-Apr-16	0	█ Backfill (N46-64/																			
08 - SECTION 5 WORK																											
08.1 - Retaining Wall 'F' Substructure																											
0810-1760	Construction of pile cap for Retaining Wall F @ PC13	21	16-Feb-16	10-Mar-16	14-Mar-16	09-Apr-16	23	█ Construction of pile cap for Retaining Wall F @ PC13																			
0810-1780	Backfill of Retaining Wall F Pile Caps	7	11-Mar-16	18-Mar-16	28-Feb-17	07-Mar-17	293	█ Backfill of Retaining Wall F Pile Caps																			
0820-1000	low wall bet C4-13/14	5	16-Feb-16	20-Feb-16	14-Mar-16	18-Mar-16	23	█ low wall bet C4-13/14																			
0820-1010	low wall bet C5-11/12	7	16-Feb-16	23-Feb-16	14-Mar-16	21-Mar-16	23	█ low wall bet C5-11/12																			
10 - SECTION X OF THE WORKS																											
10.1 - E/B Bridges (Bridge D, E and F)																											
10.1.1 - Marine Pier Construction																											
Pier F01 to F02																											
1011-8600	F1B Pier/Column Construction	12	21-Jan-16	03-Feb-16	17-Mar-16	01-Apr-16	45	█ F1B Pier/Column Construction																			
1011-8620	F1B Crosshead Construction	18	04-Feb-16	27-Feb-16	02-Apr-16	23-Apr-16	45	█ F1B Crosshead Construction																			
1011-8640	Bearing installation pier F1B & F2B	12	29-Feb-16	12-Mar-16	25-Apr-16	07-May-16	45	█ Bearing installation pier F1B & F2B																			
10.2 - W/B Bridges (Bridge C and F)																											
10.2.1 - Pier Construction																											
Pier 38 to 43																											
1021-1841	Pier 38 (F3C) - Drill holes for steel rod (24nos 30mm dim)	0	20-Jan-16	20-Jan-16	05-Feb-16	05-Feb-16		█ Pier 38 (F3C) - Drill holes for steel rod (24nos 30mm dim)																			
1021-1842	Pier 38 (F3C) - Erection of UC at the bottom layer (305x305x158UC)	0	20-Jan-16	20-Jan-16	06-Feb-16	06-Feb-16		█ Pier 38 (F3C) - Erection of UC at the bottom layer (305x305x158UC)																			
1021-1843	Pier 38 (F3C) - Erection of UC at the 2nd layer (254x124 UB)	0	20-Jan-16	20-Jan-16	06-Feb-16	06-Feb-16		█ Pier 38 (F3C) - Erection of UC at the 2nd layer (254x124 UB)																			
1021-1844	Pier 38 (F3C) - Erection of Scaffolding	3	20-Jan-16	22-Jan-16	06-Feb-16	12-Feb-16	15	█ Pier 38 (F3C) - Erection of Scaffolding																			

- █ Remaining Level of Effort ◆ ◆ Milestone
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Contract HY/2009/19
Three Months Rolling Programme (20 Jan 2015 to 19 Apr 2016)

Activity ID	Activity Name	emairir Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	2016																		
								February						March						April						May
								7	14	21	28	06	13	13	20	27	04	11	18	24	01	08	15	22	29	05
1021-1845	Pier 38 (F3C) - Place bottom formwork for working platform	4	23-Jan-16	27-Jan-16	13-Feb-16	17-Feb-16	15	Pier 38 (F3C) - Place bottom formwork for working platform																		
1021-1846	Pier 38 (F3C) - Fixing Reinforcement for Crosshead Bottom Layer	2	28-Jan-16	29-Jan-16	18-Feb-16	19-Feb-16	15	Pier 38 (F3C) - Fixing Reinforcement for Crosshead Bottom Layer																		
1021-1847	Pier 38 (F3C) - Installation of case-in items	3	30-Jan-16	02-Feb-16	20-Feb-16	23-Feb-16	15	Pier 38 (F3C) - Installation of case-in items																		
1021-1848	Pier 38 (F3C) - Fixing Reinforcement for Crosshead Upper Layer	2	03-Feb-16	04-Feb-16	24-Feb-16	25-Feb-16	15	Pier 38 (F3C) - Fixing Reinforcement for Crosshead Upper Layer																		
1021-1849	Pier 38 (F3C) - Installation of tie-bolts	2	05-Feb-16	06-Feb-16	26-Feb-16	27-Feb-16	15	Pier 38 (F3C) - Installation of tie-bolts																		
1021-1850	Pier 38 (F3C) - Pouring concrete for crosshead	1	12-Feb-16	12-Feb-16	01-Mar-16	01-Mar-16	15	Pier 38 (F3C) - Pouring concrete for crosshead																		
1021-1851	Pier 38 (F3C) - Remove formwork and prepare construction joint	2	13-Feb-16	15-Feb-16	02-Mar-16	03-Mar-16	15	Pier 38 (F3C) - Remove formwork and prepare construction joint																		
1021-1852	Pier 38 (F3C) - Remove formwork and scaffolding	2	18-Feb-16	19-Feb-16	09-Mar-16	10-Mar-16	17	Pier 38 (F3C) - Remove formwork and scaffolding																		
1021-1853	Pier 38 (F3C) - Remove structural steel of falsework	3	20-Feb-16	23-Feb-16	11-Mar-16	14-Mar-16	17	Pier 38 (F3C) - Remove structural steel of falsework																		
1021-1880	Pier 38 (F3C) Install Bearing	9	16-Feb-16	25-Feb-16	04-Mar-16	14-Mar-16	15	Pier 38 (F3C) Install Bearing																		
1021-1921	Pier 39 (F4C) - Drill holes for steel rod (24nos 30mm dim)	0	20-Jan-16	20-Jan-16	05-Feb-16	05-Feb-16		holes for steel rod (24nos 30mm dim)																		
1021-1922	Pier 39 (F4C) - Erection of UC at the bottom layer (305x305x158UC)	0	20-Jan-16	20-Jan-16	11-Feb-16	11-Feb-16		Erection of UC at the bottom layer (305x305x158UC)																		
1021-1923	Pier 39 (F4C) - Erection of UC at the 2nd layer (254x124 UB)	4	20-Jan-16	23-Jan-16	11-Feb-16	15-Feb-16	16	Pier 39 (F4C) - Erection of UC at the 2nd layer (254x124 UB)																		
1021-1924	Pier 39 (F4C) - Erection of Scaffolding	3	25-Jan-16	27-Jan-16	16-Feb-16	18-Feb-16	16	Pier 39 (F4C) - Erection of Scaffolding																		
1021-1925	Pier 39 (F4C) - Place bottom formwork for working platform	5	28-Jan-16	02-Feb-16	19-Feb-16	24-Feb-16	16	Pier 39 (F4C) - Place bottom formwork for working platform																		
1021-1926	Pier 39 (F4C) - Fixing Reinforcement for Crosshead Bottom Layer	2	03-Feb-16	04-Feb-16	25-Feb-16	26-Feb-16	16	Pier 39 (F4C) - Fixing Reinforcement for Crosshead Bottom Layer																		
1021-1927	Pier 39 (F4C) - Installation of case-in items	3	05-Feb-16	11-Feb-16	27-Feb-16	01-Mar-16	16	Pier 39 (F4C) - Installation of case-in items																		
1021-1928	Pier 39 (F4C) - Fixing Reinforcement for Crosshead Upper Layer	2	12-Feb-16	13-Feb-16	02-Mar-16	03-Mar-16	16	Pier 39 (F4C) - Fixing Reinforcement for Crosshead Upper Layer																		
1021-1929	Pier 39 (F4C) - Installation of tie-bolts	2	15-Feb-16	16-Feb-16	04-Mar-16	05-Mar-16	16	Pier 39 (F4C) - Installation of tie-bolts																		
1021-1930	Pier 39 (F4C) - Pouring concrete for crosshead	1	17-Feb-16	17-Feb-16	07-Mar-16	07-Mar-16	16	Pier 39 (F4C) - Pouring concrete for crosshead																		
1021-1931	Pier 39 (F4C) - Remove formwork and prepare construction joint	3	18-Feb-16	20-Feb-16	08-Mar-16	10-Mar-16	16	Pier 39 (F4C) - Remove formwork and prepare construction joint																		
1021-1932	Pier 39 (F4C) - Remove formwork and scaffolding	3	22-Feb-16	24-Feb-16	12-Mar-16	15-Mar-16	17	Pier 39 (F4C) - Remove formwork and scaffolding																		
1021-1933	Pier 39 (F4C) - Remove structural steel of falsework	5	25-Feb-16	01-Mar-16	16-Mar-16	21-Mar-16	17	Pier 39 (F4C) - Remove structural steel of falsework																		
1021-1960	Pier 39 (F4C) Install Bearing	9	22-Feb-16	02-Mar-16	11-Mar-16	21-Mar-16	16	Pier 39 (F4C) Install Bearing																		
1021-2001	Pier 40 (F5C) - Drill holes for steel rod (24nos 30mm dim)	3	20-Jan-16	22-Jan-16	05-Feb-16	11-Feb-16	14	Pier 40 (F5C) - Drill holes for steel rod (24nos 30mm dim)																		
1021-2002	Pier 40 (F5C) - Erection of UC at the bottom layer (305x305x158UC)	4	23-Jan-16	27-Jan-16	12-Feb-16	16-Feb-16	14	Pier 40 (F5C) - Erection of UC at the bottom layer (305x305x158UC)																		
1021-2003	Pier 40 (F5C) - Erection of UC at the 2nd layer (254x124 UB)	3	28-Jan-16	30-Jan-16	17-Feb-16	19-Feb-16	14	Pier 40 (F5C) - Erection of UC at the 2nd layer (254x124 UB)																		
1021-2004	Pier 40 (F5C) - Erection of Scaffolding	4	01-Feb-16	04-Feb-16	20-Feb-16	24-Feb-16	14	Pier 40 (F5C) - Erection of Scaffolding																		
1021-2005	Pier 40 (F5C) - Place bottom formwork for working platform	4	05-Feb-16	12-Feb-16	25-Feb-16	29-Feb-16	14	Pier 40 (F5C) - Place bottom formwork for working platform																		
1021-2006	Pier 40 (F5C) - Fixing Reinforcement for Crosshead Bottom Layer	11	13-Feb-16	25-Feb-16	01-Mar-16	12-Mar-16	14	Pier 40 (F5C) - Fixing Reinforcement for Crosshead Bottom Layer																		
1021-2007	Pier 40 (F5C) - Installation of case-in items	2	26-Feb-16	27-Feb-16	14-Mar-16	15-Mar-16	14	Pier 40 (F5C) - Installation of case-in items																		
1021-2008	Pier 40 (F5C) - Fixing Reinforcement for Crosshead Upper Layer	3	29-Feb-16	02-Mar-16	16-Mar-16	18-Mar-16	14	Pier 40 (F5C) - Fixing Reinforcement for Crosshead Upper Layer																		
1021-2009	Pier 40 (F5C) - Installation of tie-bolts	2	03-Mar-16	04-Mar-16	19-Mar-16	21-Mar-16	14	Pier 40 (F5C) - Installation of tie-bolts																		
1021-2010	Pier 40 (F5C) - Pouring concrete for crosshead	1	05-Mar-16	05-Mar-16	22-Mar-16	22-Mar-16	14	Pier 40 (F5C) - Pouring concrete for crosshead																		
1021-2011	Pier 40 (F5C) - Remove formwork and prepare construction joint	3	07-Mar-16	09-Mar-16	23-Mar-16	26-Mar-16	14	Pier 40 (F5C) - Remove formwork and prepare construction joint																		
1021-2012	Pier 40 (F5C) - Remove formwork and scaffolding	3	12-Mar-16	15-Mar-16	01-Apr-16	05-Apr-16	15	Pier 40 (F5C) - Remove formwork and scaffolding																		
1021-2013	Pier 40 (F5C) - Remove structural steel of falsework	3	16-Mar-16	18-Mar-16	06-Apr-16	08-Apr-16	15	Pier 40 (F5C) - Remove structural steel of falsework																		
1021-2040	Pier 40 (F5C) Install Bearing	9	10-Mar-16	19-Mar-16	29-Mar-16	08-Apr-16	14	Pier 40 (F5C) Install Bearing																		
1021-2081	Pier 41 (F6C) - Drill holes for steel rod (24nos 30mm dim)	3	01-Feb-16	03-Feb-16	09-Mar-16	11-Mar-16	29	Pier 41 (F6C) - Drill holes for steel rod (24nos 30mm dim)																		
1021-2082	Pier 41 (F6C) - Erection of UC at the bottom layer (305x305x158UC)	4	04-Feb-16	11-Feb-16	12-Mar-16	16-Mar-16	29	Pier 41 (F6C) - Erection of UC at the bottom layer (305x305x158UC)																		
1021-2083	Pier 41 (F6C) - Erection of UC at the 2nd layer (254x124 UB)	4	12-Feb-16	16-Feb-16	17-Mar-16	21-Mar-16	29	Pier 41 (F6C) - Erection of UC at the 2nd layer (254x124 UB)																		
1021-2084	Pier 41 (F6C) - Erection of Scaffolding	6	17-Feb-16	23-Feb-16	22-Mar-16	30-Mar-16	29	Pier 41 (F6C) - Erection of Scaffolding																		
1021-2085	Pier 41 (F6C) - Place bottom formwork for working platform	4	24-Feb-16	27-Feb-16	31-Mar-16	05-Apr-16	29	Pier 41 (F6C) - Place bottom formwork for working platform																		
1021-2086	Pier 41 (F6C) - Fixing Reinforcement for Crosshead Bottom Layer	2	29-Feb-16	01-Mar-16	06-Apr-16	07-Apr-16	29	Pier 41 (F6C) - Fixing Reinforcement for Crosshead Bottom Layer																		
1021-2087	Pier 41 (F6C) - Installation of case-in items	3	02-Mar-16	04-Mar-16	08-Apr-16	11-Apr-16	29	Pier 41 (F6C) - Installation of case-in items																		
1021-2088	Pier 41 (F6C) - Fixing Reinforcement for Crosshead Upper Layer	2	05-Mar-16	07-Mar-16	12-Apr-16	13-Apr-16	29	Pier 41 (F6C) - Fixing Reinforcement for Crosshead Upper Layer																		
1021-2089	Pier 41 (F6C) - Installation of tie-bolts	2	08-Mar-16	09-Mar-16	14-Apr-16	15-Apr-16	29	Pier 41 (F6C) - Installation of tie-bolts																		

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

◆ Milestone

Contract HY/2009/19
Three Months Rolling Programme (20 Jan 2015 to 19 Apr 2016)

Activity ID	Activity Name	Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	2016																
								February					March					April					May	
								7	14	21	28	06	13	20	27	03	10	17	24	01				
1022-2582	Bridge C3 - Erect End Span at Pier 28 (5 nos) > By LG2	7	02-Feb-16	12-Feb-16	02-Feb-16	12-Feb-16	0	Bridge C3 - Erect End Span at Pier 28 (5 nos) > By LG2																
1022-2583	Bridge C3 - Stitching at midspan between Pier 27 and 28	2	13-Feb-16	15-Feb-16	13-Feb-16	15-Feb-16	0	Bridge C3 - Stitching at midspan between Pier 27 and 28																
1022-2584	Launch LG2 at Pier 26 to 25	2	16-Feb-16	17-Feb-16	16-Feb-16	17-Feb-16	0	Launch LG2 at Pier 26 to 25																
1022-2585	Bridge C3 - Erect T-span at Pier 26 (12 nos) > By LG2	3	18-Feb-16	20-Feb-16	18-Feb-16	20-Feb-16	0	Bridge C3 - Erect T-span at Pier 26 (12 nos) > By LG2																
1022-2586	Bridge C3 - Stitching at midspan between Pier 26 and 27	2	22-Feb-16	23-Feb-16	10-Mar-16	11-Mar-16	15	Bridge C3 - Stitching at midspan between Pier 26 and 27																
1022-2588	Bridge C3 - Erect End Segment at Pier 25 Eastside (4 nos) > By LG2	7	18-Feb-16	25-Feb-16	18-Feb-16	25-Feb-16	0	Bridge C3 - Erect End Segment at Pier 25 Eastside (4 nos) > By LG2																
1022-2590	Bridge C3 - Stitching at midspan between Pier 25 and 26	2	26-Feb-16	27-Feb-16	04-Mar-16	05-Mar-16	6	Bridge C3 - Stitching at midspan between Pier 25 and 26																
1022-2620	Bridge C3 - Erect Pier Segment at Pier 26 (1no) > by 400T Crane	6	27-Jan-16	02-Feb-16	30-Jan-16	05-Feb-16	3	Bridge C3 - Erect Pier Segment at Pier 26 (1no) > by 400T Crane																
1022-2642	Bridge C3 - Erect Pier Segment at Pier 25 (2 nos) > by 400T Crane	7	29-Jan-16	05-Feb-16	01-Feb-16	11-Feb-16	2	Bridge C3 - Erect Pier Segment at Pier 25 (2 nos) > by 400T Crane																
1022-2644	Bridge C3 - Erect falsework for End Span at Pier 25 - Eastside	5	06-Feb-16	15-Feb-16	12-Feb-16	17-Feb-16	2	Bridge C3 - Erect falsework for End Span at Pier 25 - Eastside																
1022-2740	Bridge C3 - External Stressing	10	29-Feb-16	10-Mar-16	12-Mar-16	23-Mar-16	11	Bridge C3 - External Stressing																
1022-2760	Bridge C3 - Construct North Parapet (83m)	18	11-Mar-16	02-Apr-16	17-Jun-16	08-Jul-16	80	Bridge C3 - Construct North Parapet (83m)																
1022-2780	Bridge C3 - Construct South Parapet (83m)	18	11-Mar-16	02-Apr-16	17-Jun-16	08-Jul-16	80	Bridge C3 - Construct South Parapet (83m)																
1022-4110	Bridge C3 - Construct Int. Single Noise Encl. Bridge C3 (83m)	24	05-Apr-16	02-May-16	09-Jul-16	05-Aug-16	80	Bridge C3 - Construct Int. Single Noise Encl. Bridge C3 (83m)																
Bridge C4																								
1022-3861	Bridge C4 - Construct South Parapet (108m)	23	20-Jan-16	18-Feb-16	30-Jan-16	29-Feb-16	9	Bridge C4 - Construct South Parapet (108m)																
1022-3862	Bridge C4 - Construct North Parapet (108m)	23	20-Jan-16	18-Feb-16	30-Jan-16	29-Feb-16	9	Bridge C4 - Construct North Parapet (108m)																
1022-3863	Bridge C4 - Construct Int. Single Noise Encl. Bridge C4 (108m) - Stage 1 (sides)	20	19-Feb-16	12-Mar-16	01-Mar-16	23-Mar-16	9	Bridge C4 - Construct Int. Single Noise Encl. Bridge C4 (108m) - Stage 1 (sides)																
1022-3864	Bridge C4 - Construct Int. Single Noise Encl. Bridge C4 (108m) - Stage 2 (arch)	24	19-Feb-16	17-Mar-16	15-Jul-16	11-Aug-16	121	Bridge C4 - Construct Int. Single Noise Encl. Bridge C4 (108m) - Stage 2 (arch)																
1022-3865	Bridge C4 - Deck Road Waterproofing, Surfacing & Marking	7	21-Mar-16	30-Mar-16	15-Aug-16	22-Aug-16	121	Bridge C4 - Deck Road Waterproofing, Surfacing & Marking																
Bridge C5																								
1022-3901	Pier 33 - T Span Erection (5 pairs)	0	20-Jan-16	20-Jan-16	20-Jan-16	20-Jan-16		Pier 33 - T Span Erection (5 pairs)																
1022-3903	LG-A Launching - Deactivate MS at P31 and Relocate to P34 by Engage RL at P30-31	3	20-Jan-16	22-Jan-16	20-Jan-16	22-Jan-16	0	LG-A Launching - Deactivate MS at P31 and Relocate to P34 by Engage RL at P30-31																
1022-3905	Pier 33 - P32-33 End Span - Hanging Segments	2	23-Jan-16	25-Jan-16	23-Jan-16	25-Jan-16	0	Pier 33 - P32-33 End Span - Hanging Segments																
1022-3907	Pier 33 - P32-33 End Span - Erect Segments	1	26-Jan-16	26-Jan-16	26-Jan-16	26-Jan-16	0	Pier 33 - P32-33 End Span - Erect Segments																
1022-3909	Pier 33 - P32-33 End Span - Stitching	3	27-Jan-16	29-Jan-16	27-Jan-16	29-Jan-16	0	Pier 33 - P32-33 End Span - Stitching																
1022-3911	Pier 33 - P32-33 End Span - Formwork Fixing for and Grouting for Bearing	3	27-Jan-16	29-Jan-16	27-Jan-16	29-Jan-16	0	Pier 33 - P32-33 End Span - Formwork Fixing for and Grouting for Bearing																
1022-3913	Pier 33 - P32-33 End Span - Prestress Span Tendons	1	30-Jan-16	30-Jan-16	30-Jan-16	30-Jan-16	0	Pier 33 - P32-33 End Span - Prestress Span Tendons																
1022-3915	Pier 33 - P32-33 End Span - Remove Hanger Bar & Hanger Beam & Stitching Formwork	1	01-Feb-16	01-Feb-16	19-Feb-16	19-Feb-16	13	Pier 33 - P32-33 End Span - Remove Hanger Bar & Hanger Beam & Stitching Formwork																
1022-3917	Pier 34 - T Span Erection (4 pairs)	2	27-Jan-16	28-Jan-16	28-Jan-16	29-Jan-16	1	Pier 34 - T Span Erection (4 pairs)																
1022-3919	Bridge C5 T Span Stitching - Install Clamping Beam and Adjust T span (P33-P34)	1	30-Jan-16	30-Jan-16	30-Jan-16	30-Jan-16	0	Bridge C5 T Span Stitching - Install Clamping Beam and Adjust T span (P33-P34)																
1022-3921	Bridge C5 T Span Stitching - Stitching (P33-P34)	2	01-Feb-16	02-Feb-16	01-Feb-16	02-Feb-16	0	Bridge C5 T Span Stitching - Stitching (P33-P34)																
1022-3923	Bridge C5 T Span Stitching - Prestress Span Tendons (P33-P34)	1	03-Feb-16	03-Feb-16	03-Feb-16	03-Feb-16	0	Bridge C5 T Span Stitching - Prestress Span Tendons (P33-P34)																
1022-3924	Abut. D12 (MJ Left) - End Span Erection - Hanging Segments	2	12-Feb-16	13-Feb-16	12-Feb-16	13-Feb-16	0	Abut. D12 (MJ Left) - End Span Erection - Hanging Segments																
1022-3927	Abut. D12 (MJ Left) - End Span Erection - Erect Segments	1	15-Feb-16	15-Feb-16	15-Feb-16	15-Feb-16	0	Abut. D12 (MJ Left) - End Span Erection - Erect Segments																
1022-3930	Abut. D12 (MJ Left) - End Span Erection - Stitching	3	16-Feb-16	18-Feb-16	16-Feb-16	18-Feb-16	0	Abut. D12 (MJ Left) - End Span Erection - Stitching																
1022-3933	Abut. D12 (MJ Left) - End Span Erection - Formwork Fixing for and Grouting for Bearing	3	16-Feb-16	18-Feb-16	16-Feb-16	18-Feb-16	0	Abut. D12 (MJ Left) - End Span Erection - Formwork Fixing for and Grouting for Bearing																
1022-3936	Abut. D12 (MJ Left) - End Span Erection - Prestress Span Tendons	1	19-Feb-16	19-Feb-16	19-Feb-16	19-Feb-16	0	Abut. D12 (MJ Left) - End Span Erection - Prestress Span Tendons																
1022-3939	Abut. D12 (MJ Left) - End Span Erection - Remove Hanger Bar & Hanger Beam & Stitching Formwork	1	20-Feb-16	20-Feb-16	20-Feb-16	20-Feb-16	0	Abut. D12 (MJ Left) - End Span Erection - Remove Hanger Bar & Hanger Beam & Stitching Formwork																
1022-3942	Prestress External Tendon of Bridge C5	12	20-Feb-16	04-Mar-16	20-Feb-16	04-Mar-16	0	Prestress External Tendon of Bridge C5																
1022-3950	Bridge C5 - Construct North Parapet (75m)	16	05-Mar-16	23-Mar-16	05-Mar-16	23-Mar-16	0	Bridge C5 - Construct North Parapet (75m)																
1022-3951	Bridge C5 - Construct South Parapet (75m)	16	05-Mar-16	23-Mar-16	05-Mar-16	23-Mar-16	0	Bridge C5 - Construct South Parapet (75m)																
1022-3952	Bridge C5 - Construct Int. Single Noise Encl. Bridge C5 (75m) - Stage 1	18	24-Mar-16	16-Apr-16	24-Mar-16	16-Apr-16	0	Bridge C5 - Construct Int. Single Noise Encl. Bridge C5 (75m) - Stage 1																
1022-3953	Bridge C5 - Construct Int. Single Noise Encl. Bridge C5 (75m) - Stage 2	18	24-Mar-16	16-Apr-16	24-Mar-16	16-Apr-16	0	Bridge C5 - Construct Int. Single Noise Encl. Bridge C5 (75m) - Stage 2																
1022-3954	Bridge C5 - Deck Road Waterproofing, Surfacing & Marking	7	18-Apr-16	25-Apr-16	15-Aug-16	22-Aug-16	100	Bridge C5 - Deck Road Waterproofing, Surfacing & Marking																
Bridge F1C																								
1022.1-3955	LG-A Launching - Deactivate MS at P32 and Relocate to D12 by Engage RL at P31-32	2	02-Feb-16	03-Feb-16	02-Feb-16	03-Feb-16	0	LG-A Launching - Deactivate MS at P32 and Relocate to D12 by Engage RL at P31-32																
1022.1-3965	LG-A Launching - Deactivate the MS at P33 and Engage FL at F1C/Pier36	3	04-Feb-16	06-Feb-16	04-Feb-16	06-Feb-16	0	LG-A Launching - Deactivate the MS at P33 and Engage FL at F1C/Pier36																

- █ Remaining Level of Effort
- █ Actual Level of Effort
- █ Actual Work
- █ Remaining Work
- █ Critical Remaining Work

◆ Milestone

Contract HY/2009/19
Three Months Rolling Programme (20 Jan 2015 to 19 Apr 2016)

Activity ID	Activity Name	Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float	2016															
								February			March			April			May						
								7	24	31	07	14	21	28	06	13	20	27	03	10	17	24	01
1022.1-4309	Pier 40 - Install Pier Segment - Install the Tie & Packing System	1	16-Apr-16	16-Apr-16	16-Apr-16	16-Apr-16	0																
1022.1-4312	Pier 40 - Install Pier Segment - Install MS at F5C/Pier40 (Right)	1	18-Apr-16	18-Apr-16	18-Apr-16	18-Apr-16	0																
1022.1-4315	Pier 39(MJ Right) - T Span Erection (6 pairs)	3	12-Apr-16	14-Apr-16	12-Apr-16	14-Apr-16	0																
1022.1-4318	Pier 39(MJ Right) - End Span Erection - Hanging Segments	2	15-Apr-16	16-Apr-16	15-Apr-16	16-Apr-16	0																
1022.1-4321	Pier 39(MJ Right) - End Span Erection	1	18-Apr-16	18-Apr-16	18-Apr-16	18-Apr-16	0																
1022.1-4324	Pier 39(MJ Right) - End Span Erection - Stitching	3	19-Apr-16	21-Apr-16	20-Jun-16	22-Jun-16	52																
1022.1-4327	Pier 39(MJ Right) - End Span Erection - Formwork Fixing for and Grouting for Bearing	3	19-Apr-16	21-Apr-16	20-Jun-16	22-Jun-16	52																
1022.1-4330	Pier 39(MJ Right) - End Span Erection - Prestress Span Tendons	1	22-Apr-16	22-Apr-16	23-Jun-16	23-Jun-16	52																
1022.1-4333	Pier 39(MJ Right) - End Span Erection - Remove Hanger Bar & Hanger Beam & Stitching Formwork	1	23-Apr-16	23-Apr-16	24-Jun-16	24-Jun-16	52																
1022.1-4336	Pier 40(MJ Left) - End Span Erection - Hanging Segments	2	19-Apr-16	20-Apr-16	19-Apr-16	20-Apr-16	0																
1022.1-4339	Pier 40(MJ Left) - End Span Erection - Erect Segments	1	21-Apr-16	21-Apr-16	21-Apr-16	21-Apr-16	0																
1022.1-4342	Pier 40(MJ Left) - End Span Erection - Stitching	3	22-Apr-16	25-Apr-16	22-Apr-16	25-Apr-16	0																
1022.1-4345	Pier 40(MJ Left) - End Span Erection - Formwork Fixing for and Grouting for Bearing	3	22-Apr-16	25-Apr-16	22-Apr-16	25-Apr-16	0																
1022.1-4348	Pier 40(MJ Left) - End Span Erection - Prestress Span Tendons	1	26-Apr-16	26-Apr-16	26-Apr-16	26-Apr-16	0																
1022.1-4351	Pier 40(MJ Left) - End Span Erection - Remove Hanger Bar & Hanger Beam & Stitching Formwork	1	27-Apr-16	27-Apr-16	27-Apr-16	27-Apr-16	0																
1022.1-4354	LG-A Launching - Deactivate the MS at F3C/Pier37 and Engage FL at F6C/Pier41	3	28-Apr-16	30-Apr-16	28-Apr-16	30-Apr-16	0																
Bridge F3C																							
1022.1-4370	Pier 41 - Install Pier Segment - Place Pier Segment	1	02-May-16	02-May-16	02-May-16	02-May-16	0																
10.3 - Middle Bridge (Bridge F)																							
10.3.1 - Pier Construction																							
Abutment D12																							
1031-1920	Complete ABUT D12 at Middle Bridge	20	19-Feb-16	12-Mar-16	15-Apr-16	07-May-16	45																
10.6 - Tunnel Approach Ramp																							
10.6.1 - Approach Ramp (Excluding Portion IIB)																							
Bored Piles																							
1061-1120	Bored Piles Testing Approach Ramp (112 nos)	60	20-Jan-16	05-Apr-16	20-Aug-16	01-Nov-16	175																
1061-3980	Pre Bored H-Pile > Pile Ramp - BN14 A	3	20-Jan-16	22-Jan-16	19-Dec-16	21-Dec-16	275																
1061-3981	Pre Bored H-Pile > Pile Ramp - BN14 A - (H-Pile + Grouting)	1	23-Jan-16	23-Jan-16	26-Dec-16	26-Dec-16	278																
1061-4000	Pre Bored H-Pile > Pile Ramp - BN14 B	3	23-Jan-16	26-Jan-16	22-Dec-16	24-Dec-16	275																
1061-4001	Pre Bored H-Pile > Pile Ramp - BN14 B - (H-Pile + Grouting)	1	27-Jan-16	27-Jan-16	26-Dec-16	26-Dec-16	275																
1061-40221	Pre Bored H-Pile > Pile Ramp - BN15 A - (H-Pile + Grouting)	0	20-Jan-16	20-Jan-16	22-Jan-16	22-Jan-16																	
1061-4041	Pre Bored H-Pile > Pile Ramp - BN15 B - (H-Pile + Grouting)	0	20-Jan-16	20-Jan-16	26-Dec-16	26-Dec-16																	
1061-4061	Pre Bored H-Pile > Pile Ramp - BN16 A - (H-Pile + Grouting)	0	20-Jan-16	20-Jan-16	26-Dec-16	26-Dec-16																	
1061-4081	Pre Bored H-Pile > Pile Ramp - BN16 B - (H-Pile + Grouting)	0	20-Jan-16	20-Jan-16	26-Dec-16	26-Dec-16																	
1061-4101	Pre Bored H-Pile > Pile Ramp - BM07 A - (H-Pile + Grouting)	0	20-Jan-16	20-Jan-16	22-Jan-16	22-Jan-16																	
1061-4120	Pre Bored H-Pile > Pile Ramp - BM07 B	0	20-Jan-16	20-Jan-16	22-Jan-16	22-Jan-16																	
1061-4121	Pre Bored H-Pile > Pile Ramp - BM07 B - (H-Pile + Grouting)	0	20-Jan-16	20-Jan-16	22-Jan-16	22-Jan-16																	
1061-4141	Pre Bored H-Pile > Pile Ramp - BM08 A - (H-Pile + Grouting)	0	20-Jan-16	20-Jan-16	22-Jan-16	22-Jan-16																	
1061-4161	Pre Bored H-Pile > Pile Ramp - BM08 B - (H-Pile + Grouting)	0	20-Jan-16	20-Jan-16	26-Jan-16	26-Jan-16																	
1061-4180	Pre Bored H-Pile > Pile Ramp - BM06 A	0	20-Jan-16	20-Jan-16	26-Jan-16	26-Jan-16																	
1061-4181	Pre Bored H-Pile > Pile Ramp - BM06 A - (H-Pile + Grouting)	0	20-Jan-16	20-Jan-16	26-Jan-16	26-Jan-16																	
1061-4201	Pre Bored H-Pile > Pile Ramp - BM06 B - (H-Pile + Grouting)	0	20-Jan-16	20-Jan-16	26-Jan-16	26-Jan-16																	
1061-4220	Pre Bored H-Pile > Pile Ramp - BM05 A	3	20-Jan-16	22-Jan-16	17-Oct-16	19-Oct-16	221																
1061-4221	Pre Bored H-Pile > Pile Ramp - BM05 A - (H-Pile + Grouting)	1	23-Jan-16	23-Jan-16	26-Dec-16	26-Dec-16	278																
1061-4240	Pre Bored H-Pile > Pile Ramp - BM05 B	3	23-Jan-16	26-Jan-16	20-Oct-16	22-Oct-16	221																
1061-4241	Pre Bored H-Pile > Pile Ramp - BM05 B - (H-Pile + Grouting)	1	27-Jan-16	27-Jan-16	26-Dec-16	26-Dec-16	275																
1061-4260	Pre Bored H-Pile > Pile Ramp - BM04 A	3	27-Jan-16	29-Jan-16	24-Oct-16	26-Oct-16	221																
1061-4261	Pre Bored H-Pile > Pile Ramp - BM04 A - (H-Pile + Grouting)	1	30-Jan-16	30-Jan-16	26-Dec-16	26-Dec-16	272																
1061-4280	Pre Bored H-Pile > Pile Ramp - BM04 B	3	30-Jan-16	02-Feb-16	27-Oct-16	29-Oct-16	221																

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

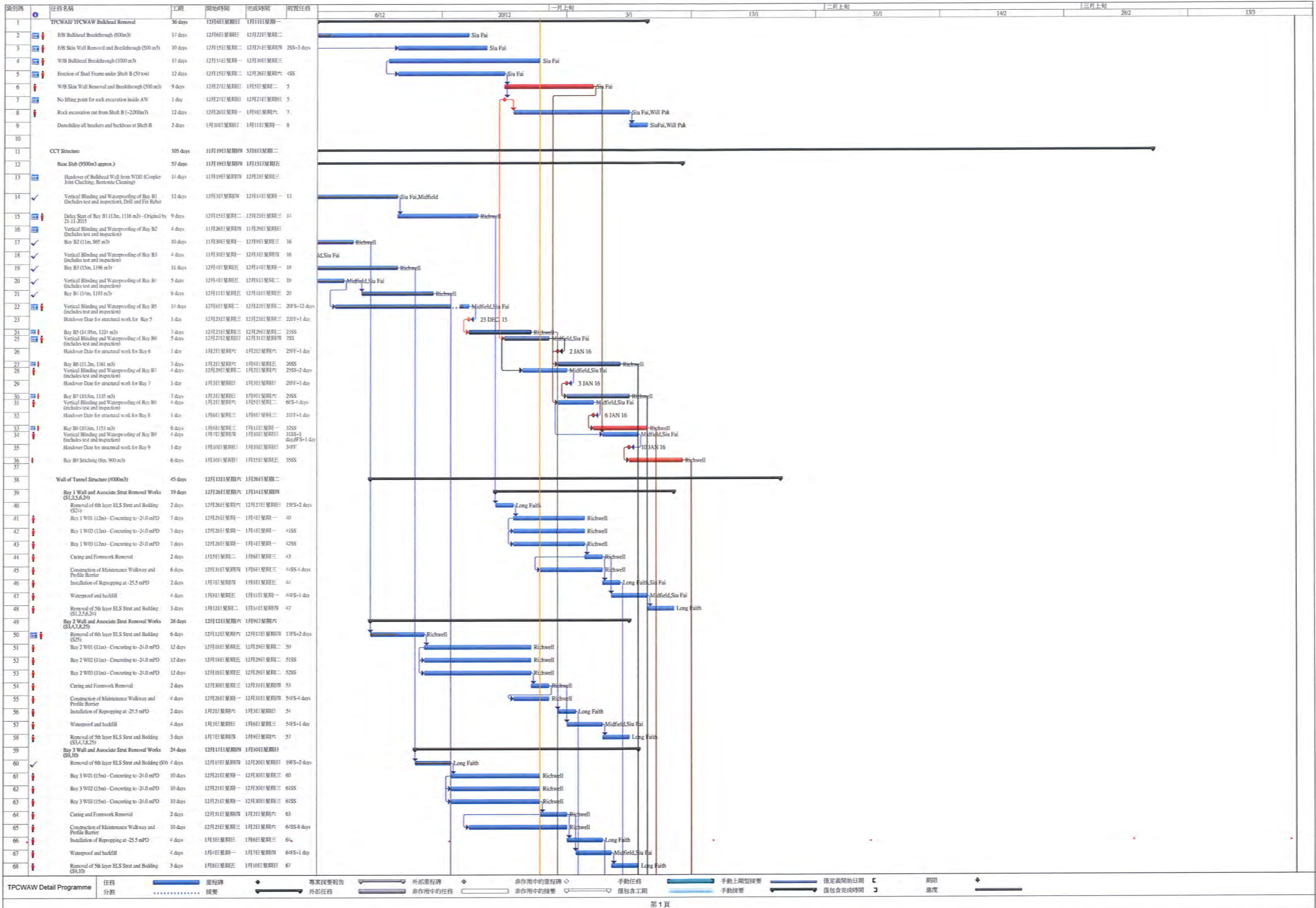
◆ Milestone

Contract HY/2009/19
Three Months Rolling Programme (20 Jan 2015 to 19 Apr 2016)

Activity ID	Activity Name	emairir Jurator	Early Start	Early Finish	Late Start	Late Finish	Total Float	2016															
								February				March				April				May			
								7	14	21	28	7	14	21	28	7	14	21	28	7	14	21	28
1061-1340	Drive Sheet Pile for Trough A (excl IIB) - Appr. Ramp > (CH5331.984 - CH5301.68) S-Side	12	20-Feb-16	05-Mar-16	21-Jun-16	05-Jul-16	99	Drive Sheet Pile for Trough A (excl IIB) - Appr. Ramp > (CH5331.984 - CH5301.68) S-Side															
1061-1360	Drive Sheet Pile for Trough A (excl IIB) - Appr. Ramp > (CH5301.68 - CH5271.6) S-Side	12	05-Mar-16	19-Mar-16	06-Jul-16	19-Jul-16	99	Drive Sheet Pile for Trough A (excl IIB) - Appr. Ramp > (CH5301.68 - CH5271.6) S-Side															
1061-1380	Drive Sheet Pile for Trough A (excl IIB) - Appr. Ramp > (CH5271.6 - CH5241.07) S-Side	12	19-Mar-16	06-Apr-16	20-Jul-16	02-Aug-16	99	Drive Sheet Pile for Trough A (excl IIB) - Appr. Ramp > (CH5271.6 - CH5241.07) S-Side															
1061-1390	Install H-Pile King Post	14	26-Jan-16	13-Feb-16	05-Jul-16	20-Jul-16	130	Install H-Pile King Post															
1061-1395	Sheet Piles Toe Grouting / Grout Curtain Pier D10 - D07	40	26-Feb-16	16-Apr-16	20-Jun-16	05-Aug-16	93	Sheet Piles Toe Grouting / Grout Curtain Pier D10 - D07															
1061-1397	Install recharge well/observation well/piezometer	13	01-Apr-16	18-Apr-16	21-Jul-16	04-Aug-16	91	Install recharge well/observation well/piezometer															
1061-1400	Install Dewatering System & Monitoring Points (excl IIB) - Appr. Ramp > Pier D07-D10	13	01-Apr-16	18-Apr-16	21-Jul-16	04-Aug-16	91	Install Dewatering System & Monitoring Points (excl IIB) - Appr. Ramp > Pier D07-D10															
1061-1455	Pumping test	12	18-Apr-16	02-May-16	06-Aug-16	19-Aug-16	92	Pumping test															
Structure																							
1061-1850	Move Stock Piles of Cages/Materials to Other Location - Complete	0		23-Jan-16		23-Jan-16	0	◆ Move Stock Piles of Cages/Materials to Other Location - Complete															
1061-1860	Construct Retaining Wall E Pile Cap (7 nos)	28	25-Jan-16	29-Feb-16	24-Oct-16	24-Nov-16	223	Construct Retaining Wall E Pile Cap (7 nos)															
1061-1900	Construct Retaining Wall E Bay 1 & Portion of Wall F	18	01-Mar-16	21-Mar-16	25-Nov-16	15-Dec-16	223	Construct Retaining Wall E Bay 1 & Portion of Wall F															
1061-1920	Construct Retaining Wall E Bay 2 & Portion of Wall F	18	22-Mar-16	14-Apr-16	16-Dec-16	05-Jan-17	223	Construct Retaining Wall E Bay 2 & Portion of Wall F															
1061-1940	Construct Retaining Wall E Bay 3 & Portion of Wall F	18	01-Mar-16	21-Mar-16	16-Dec-16	05-Jan-17	241	Construct Retaining Wall E Bay 3 & Portion of Wall F															
Landscape Deck																							
1061-1880	Construct LD Middle Pile Cap (7nos)	24	01-Mar-16	30-Mar-16	09-Dec-16	05-Jan-17	235	Construct LD Middle Pile Cap (7nos)															
11 - SECTION 11 OF THE WORKS																							
11.2 - Roadworks																							
1110-2790	Watermains at Portion XIIA - Stage 11 (motor cycle parking)	0	20-Jan-16	20-Jan-16	19-Jan-16	19-Jan-16	0	Watermains at Portion XIIA - Stage 11 (motor cycle parking)															
1110-2800	Watermains at Portion XIIA - Testing & commissioning of Watermains	4	20-Jan-16	23-Jan-16	20-Jan-16	23-Jan-16	0	Watermains at Portion XIIA - Testing & commissioning of Watermains															
1110-2810	Watermains at Portion XIIA - Reinstatement of Pavement at connection Pt.	4	25-Jan-16	28-Jan-16	25-Jan-16	28-Jan-16	0	Watermains at Portion XIIA - Reinstatement of Pavement at connection Pt.															

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

Contract HY/2009/19
Three Months Rolling Programme (20 Jan 2015 to 19 Apr 2016)



TPCWAW Detail Programme

任務 分割 里程碑 摘要

專家提要報告 外部任務 非作用中的任務 非作用中的摘要

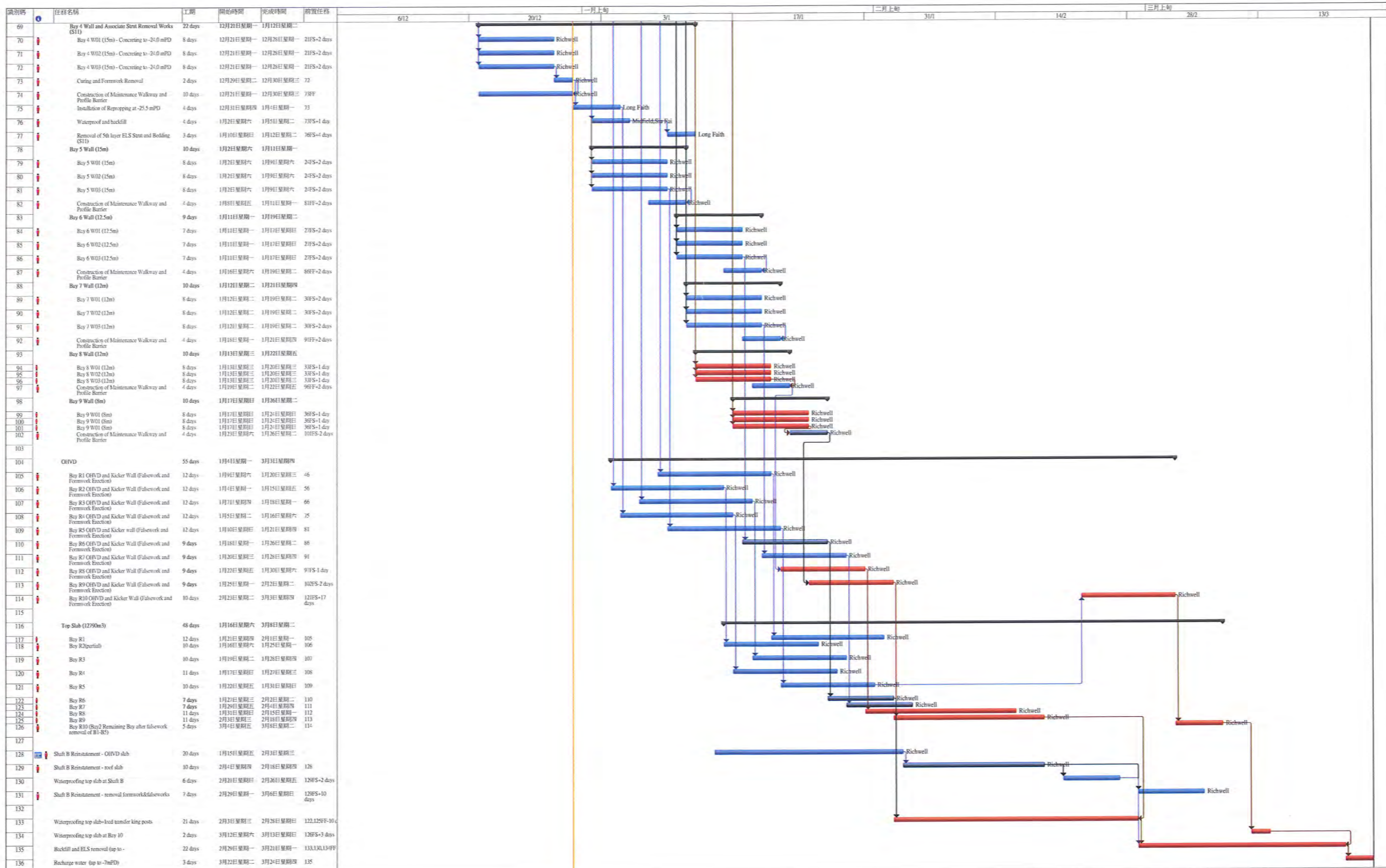
外部里程碑 非作用中的里程碑 非作用中的摘要

手動任務 手動里程碑 手動摘要

僅包含工期 僅包含完成時間

期限 進度

第 1 頁



Activity ID	Activity Name	OD	Start	Finish	Calendar	2015					
						Apr 64	May 65	Jun 66	Jul 67	Aug 68	
Wan Chai Development Phase II - Central - Wan Chai Bypass at Wan Chai East (dd 9-Apr-15)											
Programme Milestones (Revised up to EOTO No.10 Issued on 29-Nov-13)											
Contractual Completion Dates											
Soft Landscaping & Establishment Key Dates											
KDC0140	Section 8C Works (1473 days) - Landscape Softworks in Area 8 (10-Feb-14)	0		20-Apr-15*	Calendar Day						
KDC0150	Section 8D Works (1838 days) - Establishment Works in Area 8 (10-Feb-15)	0		20-Apr-15*	Calendar Day						
Forecast Completion Dates											
KDF0110	Section 7 Works (831 days) - Box Culvert N1 & Works at Area 7	0	04-May-15	04-May-15	Calendar Day						
Possession of Site											
PS0090	Possession of Portion 9 - Western Bulkhead (By HK/2009/01)	0	07-May-15*	07-May-15	Calendar Day						
Preliminaries											
Interface with Others											
PRE0950	Permanent Diversion of Box Culvert M by HK/2009/01	0	20-Apr-15	20-Apr-15*	Calendar Day						
Critical Submission & Approval											
PRE-SUB-1000B	Temp Covered Walkway Capping Beam - Design Approval by AECOM	30	19-Jun-13 A	27-Apr-15	Calendar Day						
PRE-SUB-1010B	Temp Covered Walkway Cover System (PS30.5) - Design Approval by AECOM	30	12-Jun-14 A	27-Apr-15	Calendar Day						
CSD for CWB Tunnel											
PRE-CSD-2030B	Tunnel Portion 2 - Redesigned CWB Tunnel Structure Design Submission Approval by AECO	60	16-Nov-13 A	20-May-15	Calendar Day						
PRE-CSD-3000B	Tunnel Portion 3&4 - Redesigned Temp D-Wall Submission Approval by AECOM & GEO	30	08-Jun-13 A	30-Apr-15	Calendar Day						
PRE-CSD-3010B	Tunnel Portion 3&4 - ELS Submission Approval by AECOM & GEO	60	17-Jan-14 A	20-May-15	Calendar Day						
PRE-CSD-5000B	Tunnel Portion 5 - Temp D-Wall Submission Approval by AECOM & GEO	60	15-Aug-13 A	20-May-15	Calendar Day						
PRE-CSD-5010B	Tunnel Portion 5 - ELS Submission Approval by AECOM & GEO	60	09-Apr-15 A	19-Jun-15	Calendar Day						
PRE-CSD-6010B	Tunnel Portion 6 - ELS Submission Approval by AECOM & GEO	60	09-Apr-15 A	19-Jun-15	Calendar Day						
Critical Procurement & Site Delivery											
PRE-PRO-1100B	GRP Roof Panel for Temp Covered Walkway (Type 2)	60	15-Jun-14 A	11-May-15	Calendar Day						
Section 3 of the Works - Reprovisioning of Government Helipad and Public Toilet											
Outstanding Works											
S3-0070-1499	Reinstatement of armour rock, retaining walls & new covered walkway along Expo Drive East	254	11-Aug-12 A	20-May-15	HK Working						
Section 7 of the Works - Box Culvert N1 & Flood Relief System											
Transformer Building for Dining Services at Ferry Pier (VO116)											
ABWF Works											
S7-TB-3100	Landscaping Works	30	21-Apr-15	20-May-15	Calendar Day						
E&M Works											
S7-TB-4100	22kV Cable across HHR to Transformer Building by HEC	45	29-Oct-14 A	22-Apr-15	Calendar Day						
S7-TB-4300	Transformer Installation by HEC	30	10-Apr-15 A	30-Apr-15	Calendar Day						
S7-TB-4400	Energization of Transformer	7	01-May-15	07-May-15	Calendar Day						
Overall Testing & Commissioning											
S7-TB-9000	WSD Inspection & Water Cert Approval	14	25-Mar-15 A	04-May-15	Calendar Day						
S7-TB-9100	FSD Inspection & Fire Cert Approval	14	25-Mar-15 A	04-May-15	Calendar Day						
Section 8A of the Works - Reprovisioning of Wan Chai Ferry Pier in Area 8											
ABWF & E&M Installation											
Roof											
Works in Area 8 - ABWF Works at Observation Deck of Ferry Pier											
S8B-FP-01100	Roof Finishes & Misc. ABWF Installation	120	28-Oct-13 A	30-Apr-15	Calendar Day						
Section 9B of the Works - CWB Tunnel Structure (CH3400 - CH3796)											
Tunnel Portion 1 (CH3500-CH3630)											
CWB Structural Works											
Bay 6 (For OHVD Base Slab & Side Wall, Combined to Bay 5)											
Wall											
S9B-T1-B6-1120	Wall (Middle Late Cast) - Rebar Fixing	4	15-May-15	19-May-15	HK Working						
S9B-T1-B6-1130A	Wall (Middle Late Cast) - Formwork	3	20-May-15	22-May-15	HK Working						
S9B-T1-B6-1130B	Wall (Middle Late Cast) - Concrete	1	23-May-15	23-May-15	HK Working						
S9B-T1-B6-1140	Wall (Middle Late Cast) - Curing & Formwork Removal	3	24-May-15	26-May-15	Calendar Day						
Tunnel Portion 2 (CH3425-CH3500)											
CWB Structural Works											
S9B-T2-5030	Bulk Head Demolition between TP1 & TP2 @ CH3500 (By Wirecut & Sawcut & Robot)	21	13-Apr-15 A	14-May-15	HK Working						
S9B-T2-5040	Dismantle the working platform	2	15-May-15	16-May-15	HK Working						
S9B-T2-5050	Strut S4 (Gridline 9B to Gridline 10) Removal	2	18-May-15	19-May-15	HK Working						
Bay 1											
S9B-T2-B1-3110	Wall (South) - Formwork & Concrete	3	20-Apr-15 A	22-Apr-15	HK Working						
S9B-T2-B1-3120	Wall (North) - Formwork & Concrete	3	20-Apr-15 A	22-Apr-15	HK Working						
S9B-T2-B1-3140	Wall (South) - Curing & Formwork Removal	3	23-Apr-15	25-Apr-15	Calendar Day						
S9B-T2-B1-3150	Wall (North) - Curing & Formwork Removal	3	23-Apr-15	25-Apr-15	Calendar Day						
S9B-T2-B1-3160	OHVD Base Slab - Scaffolding Erection	9	18-Apr-15 A	28-Apr-15	HK Working						
S9B-T2-B1-3170	OHVD Base Slab - Waterproofing to Upper Side Wall	4	29-Apr-15	04-May-15	HK Working						
S9B-T2-B1-3180	OHVD Base Slab - Formwork	10	05-May-15	15-May-15	HK Working						
S9B-T2-B1-3190	OHVD Base Slab - Rebar Fixing	4	16-May-15	20-May-15	HK Working						
S9B-T2-B1-3200	OHVD Base Slab - Concrete, Curing & Formwork Dismantling	14	21-May-15	03-Jun-15	Calendar Day						
S9B-T2-B1-3210	OHVD Hanger Wall - Formwork, Rebar & Concrete	3	26-May-15	28-May-15	HK Working						



CHUN WO - CRGL JOINT VENTURE

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

CEDD CONTRACT NO. HK/2009/02
Wan Chai Development Phase II - Central-Wan Chai Bypass at Wan Chai East (Contract 2)
3-MONTH ROLLING PROGRAMME (dd 20-Apr-15)

Date	Revision	Checked	Approved
20-Apr-15	3MRP		
20-Sep-14	Revised WP		

Activity ID	Activity Name	OD	Start	Finish	Calendar	2015				
						Apr 64	May 65	Jun 66	Jul 67	Aug 68
S9B-T2-B1-3220	Roof - Scaffolding Erection for Roof	7	04-Jun-15	11-Jun-15	HK Working					
S9B-T2-B1-3230	Roof - Formwork	9	12-Jun-15	23-Jun-15	HK Working					
S9B-T2-B1-3240	Roof - Rebar Fixing	10	24-Jun-15	06-Jul-15	HK Working					
S9B-T2-B1-3250	Roof - Concrete & Curing	15	07-Jul-15	21-Jul-15	Calendar Day					
Bay 2										
S9B-T2-B2-3060	Wall (South) - Formwork & Concrete	3	27-Apr-15	29-Apr-15	HK Working					
S9B-T2-B2-3070	Wall (North) - Formwork & Concrete	3	27-Apr-15	29-Apr-15	HK Working					
S9B-T2-B2-3090	Wall (South) - Curing & Formwork Removal	3	30-Apr-15	02-May-15	Calendar Day					
S9B-T2-B2-3100	Wall (North) - Curing & Formwork Removal	3	30-Apr-15	02-May-15	Calendar Day					
S9B-T2-B2-3110	OHVD Base Slab - Scaffolding Erection	9	04-May-15	13-May-15	HK Working					
S9B-T2-B2-3120	OHVD Base Slab - Waterproofing to Upper Side Wall	4	14-May-15	18-May-15	HK Working					
S9B-T2-B2-3130	OHVD Base Slab - Formwork	10	19-May-15	30-May-15	HK Working					
S9B-T2-B2-3140	OHVD Base Slab - Rebar Fixing	4	01-Jun-15	04-Jun-15	HK Working					
S9B-T2-B2-3150	OHVD Base Slab - Concrete, Curing & Formwork Dismantling	14	05-Jun-15	18-Jun-15	Calendar Day					
S9B-T2-B2-3160	OHVD Hanger Wall - Formwork, Rebar & Concrete	3	08-Jun-15	10-Jun-15	HK Working					
S9B-T2-B2-3170	Roof - Scaffolding Erection for Roof	7	19-Jun-15	27-Jun-15	HK Working					
S9B-T2-B2-3180	Roof - Formwork	9	29-Jun-15	09-Jul-15	HK Working					
S9B-T2-B2-3190	Roof - Rebar Fixing	10	10-Jul-15	21-Jul-15	HK Working					
Bay 3										
S9B-T2-B3-3060	Wall (South) - Formwork & Concrete	3	04-May-15	06-May-15	HK Working					
S9B-T2-B3-3070	Wall (North) - Formwork & Concrete	3	04-May-15	06-May-15	HK Working					
S9B-T2-B3-3080	Wall (Middle) - Curing & Formwork Removal	3	20-Apr-15 A	22-Apr-15	Calendar Day					
S9B-T2-B3-3090	Wall (South) - Curing & Formwork Removal	3	07-May-15	09-May-15	Calendar Day					
S9B-T2-B3-3100	Wall (North) - Curing & Formwork Removal	3	07-May-15	09-May-15	Calendar Day					
S9B-T2-B3-3110	OHVD Base Slab - Scaffolding Erection	9	14-May-15	23-May-15	HK Working					
S9B-T2-B3-3120	OHVD Base Slab - Waterproofing to Upper Side Wall	4	26-May-15	29-May-15	HK Working					
S9B-T2-B3-3130	OHVD Base Slab - Formwork	10	30-May-15	10-Jun-15	HK Working					
S9B-T2-B3-3140	OHVD Base Slab - Rebar Fixing	4	11-Jun-15	15-Jun-15	HK Working					
S9B-T2-B3-3150	OHVD Base Slab - Concrete, Curing & Formwork Dismantling	14	16-Jun-15	29-Jun-15	Calendar Day					
S9B-T2-B3-3160	OHVD Hanger Wall - Formwork, Rebar & Concrete	3	19-Jun-15	23-Jun-15	HK Working					
S9B-T2-B3-3170	Roof - Scaffolding Erection for Roof	7	30-Jun-15	08-Jul-15	HK Working					
S9B-T2-B3-3180	Roof - Formwork	9	09-Jul-15	18-Jul-15	HK Working					
Bay 4										
S9B-T2-B4-3040	Wall (North) - Rebar Fixing	3	21-Apr-15	23-Apr-15	HK Working					
S9B-T2-B4-3050	Wall (Middle) - Formwork & Concrete	3	23-Apr-15	25-Apr-15	HK Working					
S9B-T2-B4-3060	Wall (South) - Formwork & Concrete	3	11-May-15	13-May-15	HK Working					
S9B-T2-B4-3070	Wall (North) - Formwork & Concrete	3	11-May-15	13-May-15	HK Working					
S9B-T2-B4-3080	Wall (Middle) - Curing & Formwork Removal	3	26-Apr-15	28-Apr-15	Calendar Day					
S9B-T2-B4-3090	Wall (South) - Curing & Formwork Removal	3	14-May-15	16-May-15	Calendar Day					
S9B-T2-B4-3100	Wall (North) - Curing & Formwork Removal	3	14-May-15	16-May-15	Calendar Day					
S9B-T2-B4-3110	OHVD Base Slab - Scaffolding Erection	9	26-May-15	04-Jun-15	HK Working					
S9B-T2-B4-3120	OHVD Base Slab - Waterproofing to Upper Side Wall	4	05-Jun-15	09-Jun-15	HK Working					
S9B-T2-B4-3130	OHVD Base Slab - Formwork	10	10-Jun-15	22-Jun-15	HK Working					
S9B-T2-B4-3140	OHVD Base Slab - Rebar Fixing	4	23-Jun-15	26-Jun-15	HK Working					
S9B-T2-B4-3150	OHVD Base Slab - Concrete, Curing & Formwork Dismantling	14	27-Jun-15	10-Jul-15	Calendar Day					
S9B-T2-B4-3160	OHVD Hanger Wall - Formwork, Rebar & Concrete	3	30-Jun-15	03-Jul-15	HK Working					
S9B-T2-B4-3170	Roof - Scaffolding Erection for Roof	7	11-Jul-15	18-Jul-15	HK Working					
Bay 5										
S9B-T2-B5-3010	Wall (Middle) - Rebar Fixing	4	21-Apr-15	24-Apr-15	HK Working					
S9B-T2-B5-3030	Wall (South) - Rebar Fixing	3	21-Apr-15	23-Apr-15	HK Working					
S9B-T2-B5-3040	Wall (North) - Rebar Fixing	3	21-Apr-15	23-Apr-15	HK Working					
S9B-T2-B5-3050	Wall (Middle) - Formwork & Concrete	3	29-Apr-15	02-May-15	HK Working					
S9B-T2-B5-3060	Wall (South) - Formwork & Concrete	3	18-May-15	20-May-15	HK Working					
S9B-T2-B5-3070	Wall (North) - Formwork & Concrete	3	18-May-15	20-May-15	HK Working					
S9B-T2-B5-3080	Wall (Middle) - Curing & Formwork Removal	3	03-May-15	05-May-15	Calendar Day					
S9B-T2-B5-3090	Wall (South) - Curing & Formwork Removal	3	21-May-15	23-May-15	Calendar Day					
S9B-T2-B5-3100	Wall (North) - Curing & Formwork Removal	3	21-May-15	23-May-15	Calendar Day					
S9B-T2-B5-3110	OHVD Base Slab - Scaffolding Erection	9	05-Jun-15	15-Jun-15	HK Working					
S9B-T2-B5-3120	OHVD Base Slab - Waterproofing to Upper Side Wall	4	16-Jun-15	19-Jun-15	HK Working					
S9B-T2-B5-3130	OHVD Base Slab - Formwork	10	22-Jun-15	03-Jul-15	HK Working					
S9B-T2-B5-3140	OHVD Base Slab - Rebar Fixing	4	04-Jul-15	08-Jul-15	HK Working					
S9B-T2-B5-3150	OHVD Base Slab - Concrete, Curing & Formwork Dismantling	14	09-Jul-15	22-Jul-15	Calendar Day					
S9B-T2-B5-3160	OHVD Hanger Wall - Formwork, Rebar & Concrete	3	13-Jul-15	15-Jul-15	HK Working					
Bay 6										
S9B-T2-B6-1010	Base Slab - Waterproofing	4	15-May-15	19-May-15	HK Working					
S9B-T2-B6-1020	Base Slab - Formwork & Rebar Fixing	14	20-May-15	05-Jun-15	HK Working					
S9B-T2-B6-1030	Base Slab - Concrete & Curing	5	06-Jun-15	10-Jun-15	Calendar Day					
S9B-T2-B6-3000	Wall (South) - Waterproofing	4	11-Jun-15	15-Jun-15	HK Working					
S9B-T2-B6-3010	Wall (Middle) - Rebar Fixing	4	11-Jun-15	15-Jun-15	HK Working					
S9B-T2-B6-3020	Wall (North) - Waterproofing	4	11-Jun-15	15-Jun-15	HK Working					

Activity ID	Activity Name	OD	Start	Finish	Calendar	2015					
						Apr 64	May 65	Jun 66	Jul 67	Aug 68	
S9B-T2-B6-3030	Wall (South) - Rebar Fixing	3	16-Jun-15	18-Jun-15	HK Working						Wall (South) - Rebar Fixing
S9B-T2-B6-3040	Wall (North) - Rebar Fixing	3	16-Jun-15	18-Jun-15	HK Working						Wall (North) - Rebar Fixing
S9B-T2-B6-3050	Wall (Middle) - Formwork & Concrete	3	16-Jun-15	18-Jun-15	HK Working						Wall (Middle) - Formwork & Concrete
S9B-T2-B6-3060	Wall (South) - Formwork & Concrete	3	19-Jun-15	23-Jun-15	HK Working						Wall (South) - Formwork & Concrete
S9B-T2-B6-3070	Wall (North) - Formwork & Concrete	3	19-Jun-15	23-Jun-15	HK Working						Wall (North) - Formwork & Concrete
S9B-T2-B6-3080	Wall (Middle) - Curing & Formwork Removal	3	19-Jun-15	21-Jun-15	Calendar Day						Wall (Middle) - Curing & Formwork Removal
S9B-T2-B6-3090	Wall (South) - Curing & Formwork Removal	3	24-Jun-15	26-Jun-15	Calendar Day						Wall (South) - Curing & Formwork Removal
S9B-T2-B6-3100	Wall (North) - Curing & Formwork Removal	3	24-Jun-15	26-Jun-15	Calendar Day						Wall (North) - Curing & Formwork Removal
S9B-T2-B6-3110	OHVD Base Slab - Scaffolding Erection	9	27-Jun-15	08-Jul-15	HK Working						OHVD Base Slab - Scaffolding Erection
S9B-T2-B6-3120	OHVD Base Slab - Waterproofing to Upper Side Wall	4	09-Jul-15	13-Jul-15	HK Working						OHVD Base Slab - Waterproofing to Upper Side
S9B-T2-B6-3130	OHVD Base Slab - Formwork	10	14-Jul-15	24-Jul-15	HK Working						OHVD Base Slab - Formwork
Tunnel Portion 3 & Tunnel Portion 4 (CH3630-CH3790)		269	11-Mar-15 A	19-Jan-16	HK Working						
Foundation		7	18-Apr-15 A	25-Apr-15	HK Working						
Stage 4 - Southern Wall after HHR Flyover Diversion (Stage 2) (P132-P143)		7	18-Apr-15 A	25-Apr-15	HK Working						
S9B-T34-1700	Tunnel Portion 3 & 4 Pumping test	7	18-Apr-15 A	25-Apr-15	HK Working						Tunnel Portion 3 & 4 Pumping test
CWB Structural Works		250	11-Mar-15 A	19-Jan-16	HK Working						
S9B-T34-2000B	Tunnel Portion 3 & 4 Excavation (200,000m3 soil @800m3/d) & ELS	250	11-Mar-15 A	19-Jan-16	HK Working						
Section 10 Works - CWB Tunnel Structure (CH3246 - CH3400)		90	07-May-15	22-Aug-15	HK Working						
Tunnel Portion 6 (CH3246-CH3280)		90	07-May-15	22-Aug-15	HK Working						
S10-T6-1020	Tunnel Portion 6 Bored Pile - 13nr. (2 sets @ 14d/pile)	90	07-May-15	22-Aug-15	HK Working						
Section 11 of the Works - Remainder of Works		194	13-Feb-15 A	30-Sep-15	Calendar Day						
Marine Works at WCR3		194	13-Feb-15 A	30-Sep-15	Calendar Day						
S11-R3-1210B	Air lifting for removal of sunken objects (VO203)	138	13-Feb-15 A	30-Jun-15	Calendar Day						Air lifting for removal of sunken objects (VO203)
S11-R3-1210C	Removal of sunken objects	92	01-Jul-15	30-Sep-15	Calendar Day						
Soft Landscaping & Establishment Works		2375	24-Feb-10 A	29-Aug-16	Calendar Day						
Section 8D of the Works - Establishment Works in Area 8		365	21-Apr-15	19-Apr-16	Calendar Day						
S8D-0010	Carry out establishment work on new ferry pier	365	21-Apr-15	19-Apr-16	Calendar Day						
Section 12 of the Works - Protection and Preservation of Existing Trees		2375	24-Feb-10 A	29-Aug-16	Calendar Day						
S12-0010	Protection and preservation of existing trees	2375	24-Feb-10 A	29-Aug-16	Calendar Day						
SUMMARY PROGRAMME		947	07-May-13 A	08-May-16	Calendar Day						
CWB Tunnel Construction & Remaining Works (Section 9A, 9B, 10 & 11)		480	30-Aug-14 A	08-May-16	Calendar Day						
CWB Tunnel Works in WCR2		261	19-Jan-15 A	26-Sep-15	Calendar Day						
SUM-CWB-23000	CWB Tunnel Portion 2 Construction	261	19-Jan-15 A	26-Sep-15	Calendar Day						
CWB Tunnel Works in WCR3		358	30-Aug-14 A	08-May-16	Calendar Day						
SUM-CWB-30000	Reclamation at WCR3 & Ferry Pier Demolition (Except Water Channel Maintained for HK/200)	209	30-Aug-14 A	08-May-16	Calendar Day						
SUM-CWB-35000B	Foundation for Tunnel Portion 6 - Bored Pile	108	07-May-15	22-Aug-15	Calendar Day						
CWB Tunnel Works in WCR4/TWCR4		249	11-Mar-15 A	19-Jan-16	Calendar Day						
SUM-CWB-42000	Pump Test & Excavation for Tunnel Portion 3&4	249	11-Mar-15 A	19-Jan-16	Calendar Day						
Reprovisioning of Existing Facilities (Section 3, 4A, 4B, 4C, 5, 6, 7, 8A & 8B)		754	07-May-13 A	04-May-15	Calendar Day						
Reprovisioning of Box Culvert N (Section 7)		249	08-Oct-14 A	04-May-15	Calendar Day						
SUM-FAC-52000	VO116 - New Transformer Building to Ferry Pier	249	08-Oct-14 A	04-May-15	Calendar Day						VO116 - New Transformer Building to Ferry Pier
Reprovisioning of Wan Chai Ferry Pier & Covered Walkway (Section 8A & 8B)		150	07-May-13 A	30-Apr-15	Calendar Day						
SUM-FAC-65000	ABWF Works on Observation Deck under Section 8B	150	07-May-13 A	30-Apr-15	Calendar Day						ABWF Works on Observation Deck under Section 8B



CHUN WO - CRGL JOINT VENTURE

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

CEDD CONTRACT NO. HK/2009/02
Wan Chai Development Phase II - Central-Wan Chai Bypass at Wan Chai East (Contract 2)
3-MONTH ROLLING PROGRAMME (dd 20-Apr-15)

Date	Revision	Checked	Approved
20-Apr-15	3MRP		
20-Sep-14	Revised WP		

Activity ID	Activity Name	Original Duration	Start	Finish	2015		2016		
					Dec	Jan	Feb	Mar	
DWP-06 (A) - Three Months Rolling Programme_updated up to 20-Dec-15									
Key Dates									
Site Possession Dates									
IECM	Instruction to proceed with Section 8 (IEC Abutment M)- subject to excision 945d	0	20-Dec-15*		◆ Instruction to proceed with Section 8 (IEC Abutment M)- subject to excision 945d				
Handover Dates (Contractual Date up to EOT-08)									
HXVC	Handover of Portion XV	0	20-Dec-15*		◆ Handover of Portion XV				
HVIC	Handover of Portion VI	0	20-Dec-15*		◆ Handover of Portion VI				
HVIIC	Handover of Portion VII	0	20-Dec-15*		◆ Handover of Portion VII				
HIIIC	Handover of Portion III	0	06-Jan-16*			◆ Handover of Portion III			
Handover Dates (Programmed Date)									
HXV	Handover of Portion XV	0	20-Dec-15		◆ Handover of Portion XV				
HVI	Handover of Portion VI	0	16-Jan-16			◆ Handover of Portion VI			
HVII	Handover of Portion VII	0	16-Jan-16			◆ Handover of Portion VII			
HIII	Handover of Portion III	0	17-Jan-16			◆ Handover of Portion III			
Stage / Section Completion of Works (Contractual Date up to EOT-08)									
KD15C	KD15 - Completion of Section 9 of the Works (994d)	0	20-Dec-15*		◆ KD15 - Completion of Section 9 of the Works (994d)				
KD02C	KD2 - Achievement of Stage 2 (994d) (Plus 5 day EOT)	0	20-Dec-15*		◆ KD2 - Achievement of Stage 2 (994d) (Plus 5 day EOT)				
Stage / Section Completion of Works (Programmed Date)									
KD5	KD5 - Completion of Section 2 of the Works (849d)	0	20-Dec-15		◆ KD5 - Completion of Section 2 of the Works (849d)				
KD15	KD15 - Completion of Section 9 of the Works (994d)	0	20-Dec-15		◆ KD15 - Completion of Section 9 of the Works (994d)				
Works in TS3									
Works in TS3-East									
Cut & Cover Tunnel Structure									
TS3-East CCT - Ch.4500.000 to Ch.4582.140									
TS3 East CCT - Walls + Removal of Struts 7 & 8									
TS3E_6720	CCT Walls - Bay 8	10	08-Dec-15 A	21-Dec-15 A	█ CCT Walls - Bay 8				
TS3-East CCT - OHVD Cast In-Situ									
TS3E_6870	TS3(E) Cast OHVD in situ - Bay 2	10	08-Dec-15 A	24-Dec-15 A	█ TS3(E) Cast OHVD in situ - Bay 2				
TS3E_6860	TS3(E) Cast OHVD in situ - Bay 1	10	10-Dec-15 A	20-Dec-15 A	█ TS3(E) Cast OHVD in situ - Bay 1				
TS3E_6930	TS3(E) Cast OHVD in situ - Bay 8	10	21-Dec-15 A	08-Jan-16	█ TS3(E) Cast OHVD in situ - Bay 8				
TS3E_6920	TS3(E) Cast OHVD in situ - Bay 7	10	23-Dec-15 A	29-Dec-15	█ TS3(E) Cast OHVD in situ - Bay 7				
TS3 East CCT - Roof Slab									
TS3E_6770	CCT Roof Slab - Bay 5	10	07-Dec-15 A	20-Dec-15 A	█ CCT Roof Slab - Bay 5				
TS3E_6780	CCT Roof Slab - Bay 6	10	12-Dec-15 A	25-Dec-15 A	█ CCT Roof Slab - Bay 6				
TS3E_6730	CCT Roof Slab - Bay 1	10	26-Dec-15 A	29-Dec-15	█ CCT Roof Slab - Bay 1				
TS3E_6740	CCT Roof Slab - Bay 2	10	28-Dec-15 A	04-Jan-16	█ CCT Roof Slab - Bay 2				
TS3E_6790	CCT Roof Slab - Bay 7	10	30-Dec-15	08-Jan-16	█ CCT Roof Slab - Bay 7				
TS3E_6800	CCT Roof Slab - Bay 8	10	09-Jan-16	18-Jan-16	█ CCT Roof Slab - Bay 8				
TS3 East CCT - Roof Slab Waterproofing + Screeding									
TS3E_6810	TS3(E) Waterproofing to Roof Slab - Bay 1 to Bay 4	12	24-Dec-15	04-Jan-16	█ TS3(E) Waterproofing to Roof Slab - Bay 1 to Bay 4				
TS3E_6840	TS3(E) Screeding - Bay 1 to Bay 4	12	28-Dec-15	08-Jan-16	█ TS3(E) Screeding - Bay 1 to Bay 4				
TS3E_6820	TS3(E) Waterproofing to Roof Slab - Bay 6 to Bay 8	12	11-Jan-16	22-Jan-16	█ TS3(E) Waterproofing to Roof Slab - Bay 6 to Bay 8				
TS3E_6850	TS3(E) Screeding - Bay 6 to Bay 8	12	13-Jan-16	24-Jan-16	█ TS3(E) Screeding - Bay 6 to Bay 8				
TS3 East - Cable Trough									
TS3E_6940	TS3(E) Cable Trough Bay 1-8	27	12-Jan-16	07-Feb-16	█ TS3(E) Cable Trough Bay 1-8				
TS3 East - Cross Passage CP32 (CH4552 Westbound)									
TS3E_6830	CP32 - Baase Slab	5	05-Jan-16	09-Jan-16	█ CP32 - Baase Slab				
TS3E_6950	CP32 - Wall	6	10-Jan-16	15-Jan-16	█ CP32 - Wall				
TS3E_6960	CP32 - Roof Slab	8	16-Jan-16	23-Jan-16	█ CP32 - Roof Slab				

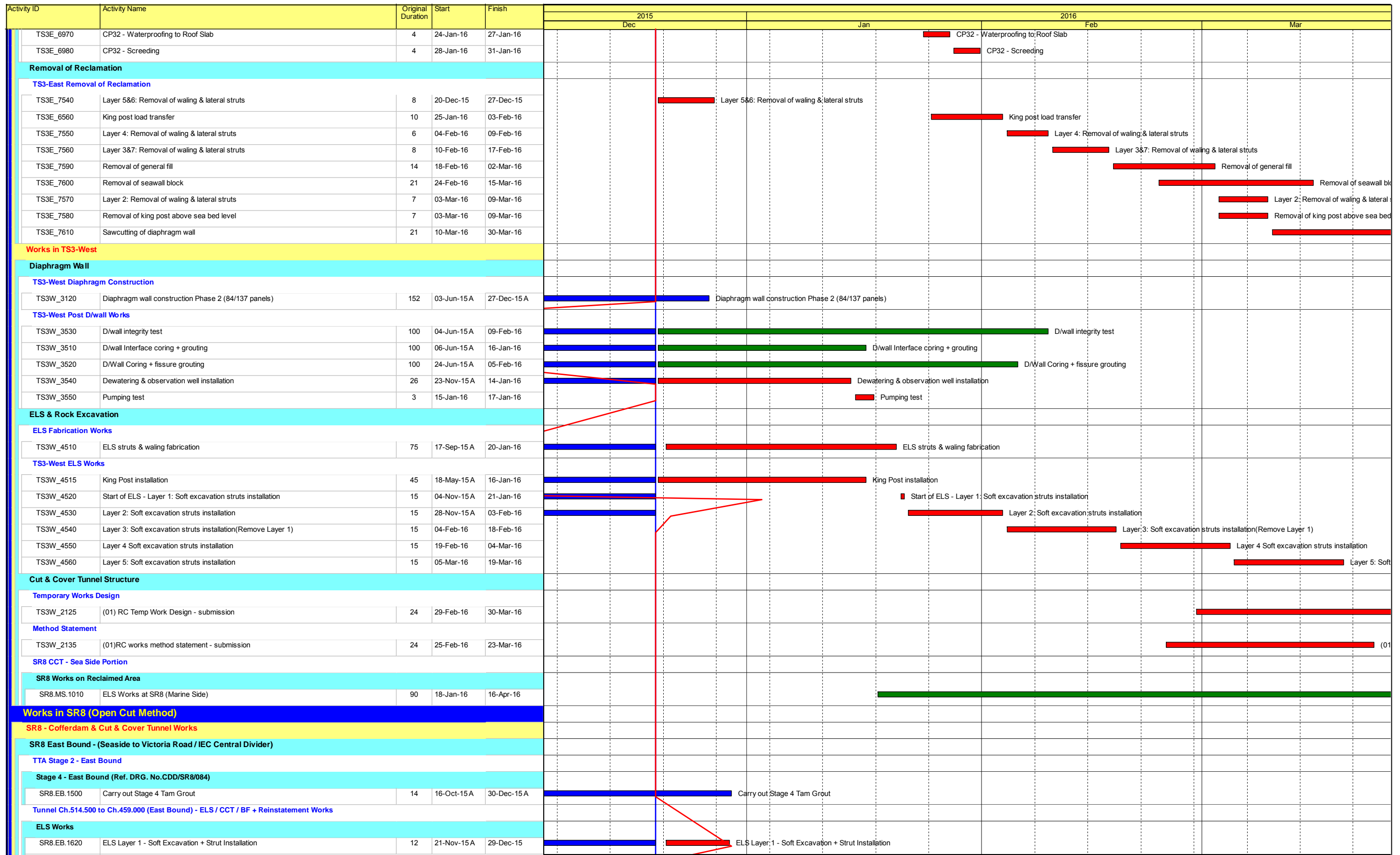


- █ Actual Work
- █ Remaining Work
- █ Critical Remaining Work
- ◆ Milestone

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

Date	Revision	Checked	Approved
20-Dec-15	Updated to 20th Dec 2015	DML/WC	



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

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

Date	Revision	Checked	Approved
20-Dec-15	Updated to 20th Dec 2015	DML/WC	

Activity ID	Activity Name	Original Duration	Start	Finish	2015			2016				
					Dec	Jan	Feb	Mar	Apr	May		
SR8.EB.1621	ELS Layer 2 - Soft Excavation + Strut Installation	12	30-Dec-15	13-Jan-16								
SR8.EB.1622	ELS Layer 3 - Soft Excavation + Strut Installation	12	14-Jan-16	27-Jan-16								
SR8.EB.1623	ELS Layer 4 - Soft Excavation + Strut Installation	12	28-Jan-16	13-Feb-16								
SR8.EB.1624	ELS Layer 5 - Soft Excavation + Strut Installation	12	15-Feb-16	27-Feb-16								
SR8.EB.1625	ELS Layer 6 - Soft Excavation + Strut Installation	12	29-Feb-16	12-Mar-16								
Structural Works												
Blinding + Waterproofing												
SR8.EB.1630	Blinding for Bay 1 to Bay 4	4	12-Mar-16	17-Mar-16								
SR8.EB.1670	Waterproofing - Bay 1 to Bay 4	4	17-Mar-16	21-Mar-16								
SR8 West Bound - Ch. 459.000 to 385.000 (Victoria Road / IEC Central Divider)												
Tunnel Ch.459.000 to 385.000 (West Bound) - ELS / CCT / BF+Reinstatement Works												
West Bound - ELS												
SR8.WB.5080	ELS Layer 1 - Soft Excavation + Strut Installation	12	21-Nov-15 A	28-Jan-16 A								
SR8.WB.5130	ELS Layer 2 - Soft Excavation + Strut Installation	12	30-Nov-15 A	24-Dec-15								
SR8.WB.5140	ELS Layer 3 - Soft Excavation + Strut Installation	12	28-Dec-15	11-Jan-16								
SR8.WB.5150	ELS Layer 4 - Soft Excavation + Strut Installation	12	12-Jan-16	25-Jan-16								
SR8.WB.5160	ELS Layer 5 - Soft Excavation + Strut Installation	12	26-Jan-16	11-Feb-16								
West Bound - CCT Structural Works												
Blinding + Waterproofing												
SR8.WB.5090	Blinding for Bay 1 to Bay 8	9	11-Feb-16	22-Feb-16								
SR8.WB.5230	Waterproofing - Bay 1 to Bay 8	9	23-Feb-16	03-Mar-16								
Base Slab + Drainage												
SR8.WB.5180	Base Slab - Bay 1	8	04-Mar-16	12-Mar-16								
SR8.WB.5270	Base Slab - Bay 5	8	09-Mar-16	17-Mar-16								
SR8.WB.5240	Base Slab - Bay 2	8	14-Mar-16	22-Mar-16								
SR8.WB.5280	Base Slab - Bay 6	8	18-Mar-16	30-Mar-16								
SR8 Ch.385.000 to Ch.317.500 - (Inside Victoria Park to Tunnel Portal)												
SR8 Tunnel - ELS / CCT / BF Works (7 Bays Ch. 385.000 to Ch.317.500)												
Portal Structure												
Base Slab + Drainage												
SR8.VP.5160	Base Slab - Bay 7	8	21-Dec-15	31-Dec-15								
Wall + Removal of Strut												
SR8.VP.5170	Wall - Bay 1	10	21-Oct-15 A	30-Dec-15 A								
SR8.VP.5210	Wall - Bay 5	10	08-Dec-15 A	11-Jan-16								
SR8.VP.5220	Wall - Bay 6	10	08-Dec-15 A	12-Jan-16								
SR8.VP.5230	Wall - Bay 7	10	12-Jan-16	22-Jan-16								
Roof Slab												
SR8.VP.5280	Roof Slab - Bay 5	10	15-Dec-15 A	21-Jan-16								
SR8.VP.5290	Roof Slab - Bay 6	10	22-Jan-16	02-Feb-16								
SR8.VP.5300	Roof Slab - Bay 7	10	03-Feb-16	17-Feb-16								
Gallery for EP01												
SR8.VP.5310	Wall - Bay 1 to Bay 7	49	24-Dec-15	25-Feb-16								
SR8.VP.5320	Roof Slab - Bay 1 to Bay 7	70	13-Jan-16	11-Apr-16								
Roof Slab Waterproofing + Screeding												
SR8.VP.5330	Waterproofing to Roof Slab - Bay 1 to Bay 7	7	18-Feb-16	25-Feb-16								
SR8.VP.5340	Screeding - Bay 1 to Bay 7	7	26-Feb-16	04-Mar-16								
Pump Sump E												
SR8.VP.5380	Fill Up Void Up to Portal Base Slab Bottom	7	21-Dec-15	30-Dec-15								
SR8.VP.5390	Wall Up to Portal Roof Bottom	10	31-Dec-15	12-Jan-16								
SR8.VP.5400	Wall + Roof Slab	14	13-Jan-16	28-Jan-16								

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

Date	Revision	Checked	Approved
20-Dec-15	Updated to 20th Dec 2015	DML/WC	

Activity ID	Activity Name	Original Duration	Start	Finish	2015				2016											
					Dec	Jan	Feb	Mar	Dec	Jan	Feb	Mar								
SR8.VP.5440	Slab for Pump Room	21	13-Jan-16	05-Feb-16																
SR8.VP.5410	Access Chamber above Roof	14	29-Jan-16	17-Feb-16																
SR8.VP.5450	Slab for Elec. Room	21	29-Jan-16	25-Feb-16																
SR8.VP.5420	Backfill to Ground Level	10	05-Mar-16	16-Mar-16																
SR8.VP.5430	Construct Two Discharge Manholes	10	17-Mar-16	31-Mar-16																
Backfill & Reinstatement Works Including Removal of Struttingss																				
SR8.VP.5050	Layer 3&2: Removal of Waling & Struts	7	02-Jan-16	09-Jan-16																
SR8.VP.5350	Layer 1: Removal of Waling & Struts	7	16-Mar-16	24-Mar-16																
SR8 Ch 317.500 to Ch 210.000 - U-Structure & Slab (Victoria Park)																				
Excavation and Lateral Support																				
SR8_2320	Remove Temporary Access to Bowling Green at Bay 3(CH230 to CH240) After Completion of BG & Pavilion	7	21-Dec-15	30-Dec-15																
RC CCT & Backfill Ch317.5000 to Ch240.000																				
Structure																				
Wall																				
SR8_2120	Drainage Works	21	22-Feb-16	16-Mar-16																
Utility Through																				
SR8_2050	Utility Trough	48	21-Dec-15	20-Feb-16																
Backfill & Reinstatement Works Including Removal of Struts																				
SR8_1920	SR8 U structure - Backfilling & Compaction + Removal of Struts & Sheet Pile	60	22-Feb-16	05-May-16																
SR8_1920.10	Backfill and Compaction to North side and South side of U- Structure & Remove Struts by layer	60	22-Feb-16	05-May-16																
SR8 Structural Slab Ch.240.000 to Ch.210.000																				
SR8_2090B	Wall Stern - Bay 3	7	31-Dec-15	08-Jan-16																
Tsing Fung St - RW & Subway Extension & Toe Wall at Hing Fat St																				
Ret. Wall & TF Subway Extension (Portion V)																				
Retaining Wall RW8C at Tsing Fung Street (Portion V)																				
VP_1770	Install Steel Railing on Top of RW8C	14	20-May-15 A	11-Jan-16																
VP_1390	Demolish Top Portion of Existing Wall Head and Kerb	18	05-Jun-15 A	25-Jan-16																
VP_1400	Road Formation - Subbase + Kerb + U-shape Channel	48	25-Jan-16	24-Mar-16																
Retaining Wall + Toe Wall at Hing Fat Street																				
Subway Extension at Tsing Fung Street (Portion VIII)																				
VP_1375.50	TFS Subway extension - install Railing	8	05-Feb-16	13-Feb-16																
East Side																				
VP_1375.60.40	TFS Subway extension - Walls	18	21-Dec-15 A	11-Jan-16																
VP_1375.60.50	TFS Subway extension - Roof Slab	21	12-Jan-16	04-Feb-16																
RC Works - Toe Wall (RW8E)																				
VP_6160	Sheet Piling and Excavation to Formation level	45	21-Dec-15	17-Feb-16																
VP_6180	Blinding layer	36	10-Mar-16	25-Apr-16																
Protection Works for IEC Abutment M																				
TTA (Submissions, Approvals and Implementation)																				
ABUTM_0910	Preparation and submission	36	20-Dec-15	24-Jan-16																
ABUTM_0915	TMLG - review and approval	24	25-Jan-16	24-Feb-16																
ABUTM_0920	TTA drawing endorsement	0		24-Feb-16																
ABUTM_0925	Apply and receive RWA	12	25-Feb-16	09-Mar-16																
ABUTM_0930	Trial Run	1	10-Mar-16	10-Mar-16																
ABUTM_0935	Implement TTA for site access and piling works	1	11-Mar-16	11-Mar-16																
Design Submissions																				
ABUTM_0945	Prepare Shop Drawings for Temporary Works	24	20-Dec-15	12-Jan-16																
ABUTM_0955	Engineer's Review and Approval - Temp Works	24	12-Jan-16	12-Feb-16																
ABUTM_0965	Prepare Shop Drawings for Permanent Works	24	12-Jan-16	12-Feb-16																
ABUTM_0975	Engineer's Review and Approval - Permament Works	24	12-Feb-16	11-Mar-16																

Activity ID	Activity Name	Original Duration	Start	Finish	2015			2016		
					Dec	Jan	Feb	Mar		
Method Statement										
ABUTM_0900	(01)Protection works method statement - submission	24	13-Jan-16	05-Feb-16						
ABUTM_0940	(01)Protection works method statement - review and approval by AECOM	24	05-Feb-16	04-Mar-16						
Protection Works										
ABUTM_1060	Implement TTA for site access and piling works	0	21-Dec-15							
ABUTM_1000	Instruction to proceed with works received (945d)	0	21-Dec-15							
ABUTM_1020	Pre Bored H-pile at Victoria Rd - mobilization, set up + piling	30	12-Mar-16	20-Apr-16						
Works in Victoria Park										
Re-Provisioning Works										
VP_1560	KD5 - Completion of Section 2 of Works (BG & Pavilion)	0		20-Dec-15						
Establishment Works for Landscape Softworks										
KD11 - Section 7A: Portion XIV & XV (Victoria Park Open Space)										
EW_1000	Establishment Works - for Landscape Softworks and transplanted trees in Portion XIV & XV	901	23-Feb-15 A	13-Feb-18						
KD12 - Section 7B: Portion VI & VII (Reprov. Bowling Green Area)										
EW_1010	Establishment Works - for Landscape Softworks and transplanted trees in Portion VI & VII	365	03-Dec-15 A	02-Dec-16						
Preservation and Protection of Trees										
PPT_0000	Preservation and Protection of Existing Trees	1088	21-Mar-13 A	20-Nov-16						
Mooring Components Upkeep (CBTS and ATS)										
MAR_2000	Mooring Upkeep at Portion XIX(19) & XX(20) - ATS (if instructed by Engineer)	1399	21-Mar-13 A	17-Jan-17						
MAR_3020	Mooring Upkeep at Portion X(10) & XVI(16) - CBTS	979	15-May-14 A	21-Jan-17						
MAR_1000	Mooring Upkeep at Portion III (3) - CBTS	574	15-May-14 A	20-Dec-15						
MAR_1010	Completion of KD 15 - Section 9 (Works in Portion III)	0		20-Dec-15						
Works for Public Works Regional Laboratory (North Lantau)										
Maintenance and Upkeep of New PWRL (Portion XVII)										
PWRL_1050	Maintenance/ Upkeep of New PWRL	1301	19-Jul-13 A	21-Nov-17						



Activity ID	Activity Name	Remaining Dur	Early Start	Early Finish	2015				2016					
					Dec	Jan	Feb	Mar	Dec	Jan	Feb	Mar		
HK/2012/08 Three Months Rolling Programme (Dec 2015 to Feb 2016)														
Dredging and Reclamation														
Marine Work Construction														
Zone A1														
Seawall Construction - Zone A1														
MAR10310	Zone A1 - seawall - Type 3 - fill rock mound	8	08-Jan-16	15-Jan-16										
MAR10312	Zone A1 - seawall - Type 3 - lay toe block and leveling stone	8	16-Jan-16	23-Jan-16										
MAR10320	Zone A1 - seawall - install block seawall type 3	8	24-Jan-16	31-Jan-16										
MAR10340	Zone A1 - seawall - place type A behind seawall Type 3	6	01-Feb-16	06-Feb-16										
MAR10345	Zone A1 - seawall - lay geotextile and filter behind seawall Type 3	4	13-Feb-16	17-Feb-16										
Zone C														
Dredging - Zone C														
MAR11520	Zone C - Cut existing pipe pile (2 nos.)	30	17-Dec-15	23-Jan-16										
Zone D														
Seawall Construction - Zone D														
Seawall 10 & 11														
MAR20582	Zone D - fill rock mound for Seawall 10 & 11	6	30-Nov-15	05-Dec-15										
MAR20584	Zone D - lay toe block and level stone for Seawall 10 & 11	6	07-Dec-15	12-Dec-15										
MAR20605	Zone D - Install block seawall 10	14	14-Dec-15	31-Dec-15										
MAR20610	Zone D - Install block seawall 11	14	15-Dec-15	02-Jan-16										
Filling - Zone D														
Filling at North														
MAR12160	Zone D - Sorted Public Fill up to +2.5mPD (north area)	12	04-Jan-16	16-Jan-16										
MAR12180	Zone D - Sorted & Compacted Public Fill from +2.5 to +4mPD (north area)	12	07-Jan-16	20-Jan-16										
Others - Landing Steps														
MAR21400	Zone D - [summary] landing steps at seawall 9	70	30-Nov-15	27-Feb-16										
Works for Section Completion														
Construction														
Section II - MVB Structure														
MVB Substructure - ELS & Structural Works for Portion A														
MVB Substructure - Structural Works for Portion A														
SII11140	Sec II - MVB A - Remove Strut SL7 and SL6	5	30-Nov-15	04-Dec-15										
SII11160	Sec II - MVB A - Construct B3/F top slab, column and wall	53	10-Nov-15 A	02-Feb-16										
SII11180	Sec II - MVB A - Remove Strut SL5 and SL4	5	30-Nov-15	04-Dec-15										
SII11200	Sec II - MVB A - Construct 2/F top slab, column and wall	57	03-Feb-16	19-Apr-16										

Data Date: 30-Nov-15

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

Works Programme for non-CRIII Zones? Dec 2015 to Feb 2016)

Date	Revision	Checked	Approved
29-Dec-15			



Activity ID	Activity Name	Remaining Dur	Early Start	Early Finish	2015				2016			
					Dec	Jan	Feb	Mar	Jan	Feb	Mar	
SII11220	Sec II - MVB A - Remove Strut SL3 and SL2	5	30-Nov-15	04-Dec-15								
SII11280	Sec II - MVB A: Remove Strut SL1	5	30-Nov-15	04-Dec-15								
MVB Substructure - ELS & Structural Works for Portion B												
MVB Substructure - Structural Works for Portion B												
SII11780	Sec II - MVB B: Construct B3/F base slab	6	29-Sep-15 A	05-Dec-15								
SII11800	Sec II - MVB B: Construct B3/F wall, colum & base slab	64	07-Dec-15	27-Feb-16								
SII11820	Sec II - MVB B: remove strut SL8, SL7	5	30-Nov-15	04-Dec-15								
SII11860	Sec II - MVB B: Remove Strut SL6 & SL5	5	30-Nov-15	04-Dec-15								
SII11900	Sec II - MVB B: Remove Strut SL4 & SL3	5	30-Nov-15	04-Dec-15								
SII11940	Sec II - MVB B: Remove Strut SL2	4	30-Nov-15	03-Dec-15								
MVB Substructure - Piling Works												
MVB C - Prebored H Piles												
SII10400	Sec II - MVB C - construct prebored H-piles	37	20-Nov-15 A	14-Jan-16								
MVB Substructure - Diaphragm Wall for Portion C												
MVB C - Pumping Test Preparation/ Pumping Test												
SII10660	Sec II - MVB C - sheetpile wall installation	30	15-Jan-16	24-Feb-16								
SII10680	Sec II - MVB C - Precaution grout / fissure grout	35	17-Feb-16	28-Mar-16								
Section II A - CWB Tunnel & Slip Road Structures and Facilities												
CWB A2(2)												
CWB A2 (2) - Dwall & Piling												
SIIA15320	Sec II A - CWB A2 : construct Temp DWall (1.2m thk)	22	06-Oct-15 A	24-Dec-15								
SIIA15360	Sec II A - CWB A2 : construct pre-bored H-pile	57	16-Nov-15 A	06-Feb-16								
SIIA15400	Sec II A - CWB A2 : Dwall sonic test	40	03-Dec-15	21-Jan-16								
SIIA15420	Sec II A - CWB A2 Loading Test for Prebored H-pile	15	30-Nov-15	16-Dec-15								
CWB A2 (2) - Pumping Test Preparation/ Pumping Test												
CWB A2 - Pumping Test Preparation												
SIIA15440	Sec II A - CWB A2 : Install dewatering/ recharging/ observation well	30	17-Dec-15	23-Jan-16								
CWB A2 & B - Pumping Test												
SIIA15460	Sec II A - CWB A2 : Pumping Test	10	13-Feb-16	24-Feb-16								
CWB A2 (2) - ELS & Tunnel Structure												
CWB A2 - ELS												
SIIA12440	Sec II A - CWB A2 : shoring & excavation	31	13-Feb-16	19-Mar-16								
SIIA12445	Sec II A - CWB A2 : demolition of temp bulk head wall at west end	30	15-Feb-16	19-Mar-16								
SIIA12448	Sec IIA - CWB A2 : demolition of temp bulk head wall at East end	30	15-Feb-16	19-Mar-16								
CWB B (& A2(1))												
CWB B - Dwall & Piling												
SIIA11560	Sec II A - CWB B: Concrete Plug (MTR TWL)	15	15-Jun-15 A	16-Dec-15								
CWB B - ELS & Tunnel Structure												
CWB B - ELS												
SIIA13520	Sec II A - CWB B: Shoring & Excavation	26	22-Oct-15 A	31-Dec-15								



Activity ID	Activity Name	Remaining Dur	Early Start	Early Finish	2015				2016			
					Dec	Jan	Feb	Mar	Jan	Feb	Mar	
SIIA13540	Sec II A - CWB B: Demolish Sheetpile Bulkhead wall at Concrete Plug	35	30-Nov-15	12-Jan-16								
CWB B - Tunnel Structure												
SIIA13560	Sec II A - CWB B: base, wall, OHVD & roof (bay 1)	45	02-Jan-16	29-Feb-16								
SIIA13600	Sec II A - CWB B: base, wall, OHVD & roof (bay 2)	45	20-Jan-16	17-Mar-16								
SIIA13660	Sec II A - CWB B: base, wall, OHVD & roof (bay 3)	45	20-Jan-16	17-Mar-16								
CWB C (W)												
CWB C(W) - Dwall Construction												
SIIA11960	Sec II A - CWB CW: Concrete Plug (MTR TWL)	14	16-Jun-15 A	15-Dec-15								
SIIA11980	Sec II A - CWB CW: D-wall contact grout / fissure grout	21	21-Aug-15 A	23-Dec-15								
SIIA12000	Sec II A - CWB CW: Dwall sonic test / interface core	19	17-Aug-15 A	21-Dec-15								
CWB C(W) - Pumping Test Preparation/ Pumping Test												
SIIA12020	Sec II A - CWB CW: Install dewatering/ recharging/ observation wells	40	30-Nov-15	18-Jan-16								
SIIA12040	Sec II A - CWB CW: Pumping Test	8	19-Jan-16	26-Jan-16								
CWB C(W) - ELS & Tunnel Structure												
CWB C(W) - ELS												
SIIA12080	Sec II A - CWB CW: Shoring & Excavation	26	30-Nov-15	31-Dec-15								
SIIA12120	Sec II A - CWB CW: Demolish Sheetpile Bulkhead at Concrete Plug	26	30-Nov-15	31-Dec-15								
CWB C(W) - Tunnel Structure												
SIIA12140	Sec II A - CWB CW: base, wall, OHVD & roof (bay 1)	45	02-Jan-16	29-Feb-16								
SIIA12180	Sec II A - CWB CW: base, wall, OHVD & roof (bay 2)	45	14-Jan-16	11-Mar-16								
CWB C (E)												
CWB C(E) & Enabling Work - Dwall Construction												
SCL Enabling Work - Dwall Construction												
SIIA13085	Sec II A - CWB CE: Cut existing pipe piles (2 nos.)	30	30-Nov-15	06-Jan-16								
SIIA15520	Sec II - SCL Enabling Works - construct Dwall - Remaining [7 panels]	76	18-Feb-15 A	05-Mar-16								
CWB C(E) - Pumping Test Preparation/ Pumping Test												
SIIA13060	Sec II A - CWB CE: Grout curtain for Dwall	45	25-Jan-16	22-Mar-16								
SIIA13080	Sec II A - CWB CE: Dwall sonic test / interface core	45	25-Jan-16	22-Mar-16								
CWB C(E) - ELS & Tunnel Structure												
CWB C(E) - ELS												
SIIA13160	Sec II A - CWB CE: Shoring & Excavation(Uppn Completion of MVB Structure - B2 Slab)	45	30-Nov-15	23-Jan-16								
SIIA13170	Sec II A - CWB CE: Demolish Bulkhead at East End (adj. to bay 1)	26	22-Dec-15	23-Jan-16								
SIIA13180	Sec II A - CWB CE: Demolish Bulkhead at MVB (adj. to bay 3)	30	17-Dec-15	23-Jan-16								
CWB C(E) - Tunnel Structure												
SIIA13220	Sec II A - CWB CE: base, wall, OHVD & roof (bay 1)	45	25-Jan-16	22-Mar-16								
SIIA13260	Sec II A - CWB CE: base, wall, OHVD & roof (bay 2)	45	17-Feb-16	13-Apr-16								
SIIA13280	Sec II A - CWB CE: base, wall, OHVD & roof (bay 3)	45	17-Feb-16	13-Apr-16								
CWB C - Exhaust Duct												
CWB C - Exhaust Duct Piling												
SIIA12840	Sec II A - Exhaust Duct at Slip Rd3: Prebored H-pile	32	30-Nov-15	08-Jan-16								



Activity ID	Activity Name	Remaining Dur	Early Start	Early Finish	2015				2016			
					Dec	Jan	Feb	Mar	Jan	Feb	Mar	
SIIA12860	Sec II A - Exhaust Duct at Slip Rd3: Loading Test	21	09-Jan-16	02-Feb-16								
CWB C - Exhaust Duct Temp Work & ELS												
SIIA12880	Sec II A - Exhaust Duct at Slip Rd3: Temp. Sheetpiling	30	09-Jan-16	18-Feb-16								
SIIA12900	Sec II A - Exhaust Duct at Slip Rd3: Excavation & Shoring	35	19-Feb-16	30-Mar-16								
CWB D - Slip Road 1												
CWB D - Slip Road 1 - Dwall Construction & Piling												
SIIA12340	Sec II A - CWB SR1: Concrete Plug (MTR TWL)	32	12-Aug-15 A	08-Jan-16								
CWB D - Slip Road 1 - Pumping Test Preparation/ Pumping Test												
SIIA12360	Sec II A - CWB SR1: Grout curtain / contact grout for Dwall	60	30-Nov-15	16-Feb-16								
SIIA12380	Sec II A - CWB SR1: Dwall sonic test / interface core	60	30-Nov-15	16-Feb-16								
SIIA12400	Sec II A - CWB SR1: Install dewatering/ recharging/ observation wells	45	31-Dec-15	27-Feb-16								
CWB D - Slip Road 1 - ELS & Tunnel Structure												
CWB D - Slip Road 1 - ELS												
SIIA12460	Sec II A - CWB SR1: Shoring & Excavation	37	30-Nov-15	14-Jan-16								
CWB D - Slip Road 1 - Tunnel Structure												
SIIA12480	Sec II A - CWB SR1: Demolish Sheetpile Bulkhead at Concrete Plug	45	30-Nov-15	23-Jan-16								
SIIA12500	Sec II A - CWB SR1: base, wall & roof (bay 1)	40	15-Jan-16	07-Mar-16								
SIIA12520	Sec II A - CWB SR1: base, wall & roof (bay 2)	40	27-Jan-16	18-Mar-16								
SIIA12540	Sec II A - CWB SR1: base, wall & roof (bay 3)	40	13-Feb-16	30-Mar-16								
SIIA12560	Sec II A - CWB SR1: base, wall & roof (bay 4)	40	25-Feb-16	15-Apr-16								
CWB D - Slip Road 1 - Trough / Retaining Wall												
CWB D - Slip Road 1 - Trough/Retaining Wall Temp Work & ELS												
SIIA12740	Sec II A - CWB SR1 Trough & RW: Preboring for installing Sheetpile	14	29-Jan-16	19-Feb-16								
SIIA12760	Sec II A - CWB SR1 Trough & RW: install sheetpile	21	20-Feb-16	15-Mar-16								
Section III - Road D11 & Part of Road P2, Area 4, Implement 1st Stage ITA												
Roadwork & Utilities												
General												
SIII10485	Sec III - 1st Stage of Interim Traffic Arrangement - miscellaneous works	16	19-Jan-16	05-Feb-16								
Section III A - Road A2, A4, A5, Area 11; Implement 2nd Stage ITA												
Roadwork & Utilities at A1												
SIIIA10260	Sec III A - roadwork and utilities (Zone A1) - Backfill to pavement founding level	70	18-Feb-16	16-May-16								
Section VI A - Box Culvert La, L1 & FRP-L Construction												
Sec VI C - Box Culvert La bay 4 (North)												
CUL11660	Sec VI C - Culvert L - bay 4 - backfill	30	30-Nov-15	06-Jan-16								
Box Culvert L1 & FRP-L Construction (Bay 5 - Bay 7)												
Box Culvert L1 & FRP-L - Bay 5 to 7 Structure												
Box Culvert L1 & FRP-L - Precast Unit Fabrication (Box Structure)												
CUL10872	Sec VI C - Culvert L - bay 4b - Construct precast culvert units with Bulkhead	11	29-Jun-15 A	11-Dec-15								
CUL10873	Sec VI C - Culvert L - bay 4b, 5-7 - dismantle formwork and curing for precast culvert units	12	12-Dec-15	28-Dec-15								
Box Culvert L1 & FRP-L - Bay 5 & 6 Backfill & Others												



Activity ID	Activity Name	Remaining Dur	Early Start	Early Finish	2015				2016			
					Dec	Jan	Feb	Mar	Dec	Jan	Feb	Mar
CUL10878	Sec VI C - Culvert L - bay 5, 6 - backfill to +4.0mPD	30	22-Oct-15 A	06-Jan-16	[Red bar from Dec 22 to Jan 6]							
CUL10879	Sec VI C - Culvert L - bay 5, 6 - trim to formation level and handover Area 6	10	07-Jan-16	18-Jan-16	[Red bar from Jan 7 to Jan 18]							
Box Culvert L1 & FRP-L - Bay 7 Backfill & Others												
CUL11785	Sec VI C - Culvert L - bay 7 - Diversion of flow from temp channel into Cul L	5	15-Feb-16*	19-Feb-16	[Green bar from Feb 15 to Feb 19]							
CUL11800	Sec VI C - Culvert L - bay 7 - backfill to +4.0mPD	35	20-Feb-16	31-Mar-16	[Green bar from Feb 20 to Mar 31]							
Box Culvert L1 & FRP-L - Bay 12 to 13												
Box Culvert L1 & FRP-L - Bay 12 to 13 Piling												
CUL12356	Culvert L - bay 13 - construct pre-bored H-pile (PC10 & PC11)	30	01-Dec-15*	07-Jan-16	[Red bar from Dec 1 to Jan 7]							
Box Culvert L1 & FRP-L - Bay 12 to 13 Temp Work & ELS												
CUL12480	Culvert L - bay 12 & 13 - pile head treatment and construct pile cap PC9, PC10 & PC11	30	08-Jan-16	17-Feb-16	[Green bar from Jan 8 to Feb 17]							
Box Culvert L1 & FRP-L - Bay 12 to 13 Structure												
CUL12545	Culvert L - bay 12 & 13 - Construct Precast Units (off site)	45	08-Dec-15*	01-Feb-16	[Green bar from Dec 8 to Feb 1]							
CUL12548	Culvert L - bay 12 & 13 - Deliver and Install Precast Units	7	18-Feb-16	25-Feb-16	[Green bar from Feb 18 to Feb 25]							
Section VI C - Area 3, 6, 8A & 8C												
Area 8A & 8C - Seawall Modification												
Modification of Seawall												
Modification of Seawall - Zone 1 & 2												
PRS10060	Sec VIC - Working Platform & P7 to P17, P18, P18A, P23, P24, P32 -P34 & P32A-P34A (DTH)	10	30-Nov-15	10-Dec-15	[Red bar from Nov 30 to Dec 10]							
PRS10080	Sec VIC - Working Platform & P59, P59A, P60, P60A, P61, P61A, P62, P62A, P63-P66 (DTH)	39	21-Dec-15	06-Feb-16	[Red bar from Dec 21 to Feb 6]							
PRS10085	Sec VIC - Curtain Grout (DTH)	49	11-Dec-15	15-Feb-16	[Red bar from Dec 11 to Feb 15]							
Modification of Seawall - Zone 4												
PRS10160	Sec VIC - Working Platform (Zone 4)	8	30-Nov-15	08-Dec-15	[Red bar from Nov 30 to Dec 8]							
PRS10180	Sec VIC - Pipe Pile P63 to P68 & P64A (Zone 4)	10	09-Dec-15	19-Dec-15	[Red bar from Dec 9 to Dec 19]							
Area 8A - MTR Pump Room Clearance & Handover												
PRS-1060	Sec VI C - Clearance of pump house for Handover	5	04-Feb-16	15-Feb-16	[Red bar from Feb 4 to Feb 15]							
Area 6 - Box Culvert bay 5-6												
SVIC10020	Sec VI C - backfill to formation level at Area 6	30	30-Nov-15	06-Jan-16	[Red bar from Nov 30 to Jan 6]							
SVIC10040	Sec VI C - U-Channel and ug utilities at Area 6	18	07-Jan-16	27-Jan-16	[Red bar from Jan 7 to Jan 27]							
Area 3 - Box Culvert bay 4 and Roadwork												
SVIC10240	Sec VI C - reinstate and compact sub-base above Culvert L Bay 4 in Area 3	7	07-Jan-16	14-Jan-16	[Red bar from Jan 7 to Jan 14]							
SVIC10260	Sec VI C - reinstate road kerb in Area 3	6	07-Jan-16	13-Jan-16	[Red bar from Jan 7 to Jan 13]							
SVIC10280	Sec VI C - reinstate flexible pavement in Area 3	6	14-Jan-16	20-Jan-16	[Red bar from Jan 14 to Jan 20]							
SVIC10300	Sec VI C - reinstate footpath in Area 3	5	21-Jan-16	26-Jan-16	[Red bar from Jan 21 to Jan 26]							
SVIC10320	Sec VI C - reinstate traffic sign and road marking in Area 3	1	26-Jan-16	26-Jan-16	[Red bar on Jan 26]							
Section VI D - Area 8B & 10												
WDII Box 1 Construction												
WDII Box 1 Submission and Approval / Material Procurement												
PCU60410	Sec VI D - WD II Box 1 - Prepare Subcontract for Box 1 structure	29	02-Jan-16*	04-Feb-16	[Red bar from Jan 2 to Feb 4]							
WDII Box 1 Existing Pile Head and Dry Dock												
WD-C3030	Sec VI D - form dry dock / waterproofing for Box 1 structure	26	15-Oct-15 A	31-Dec-15	[Red bar from Oct 15 to Dec 31]							

