



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-364/2009/D,
FURTHER ENVIRONMENTAL PERMIT NOS. FEP-01/364/2009,
FEP-02/364/2009, FEP-05/364/2009/A, FEP-06/364/2009/A, FEP-
07/364/2009/D, FEP-09/364/2009/B, FEP-10/364/2009/B AND
FEP-11/364/2009/B**

MONTHLY ENVIRONMENTAL MONITORING & AUDIT REPORT

- OCTOBER 2016 -

CLIENTS:

**Civil Engineering and Development
Department**

and

Highways Department

PREPARED BY:

Lam Geotechnics Limited

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

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

CERTIFIED BY:

Raymond Dai
Environmental Team Leader

DATE:

11 November 2016

Ref.: AACWBIECEM00_0_8725L.16

11 November 2016

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

By Post and Fax (2691 2649)

Attention: Mr. Conrad Ng

Dear Mr. Ng,

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

**Monthly Environmental Monitoring and Audit Report (October 2016)
for EP-364/2009/D, FEP-01/364/2009, FEP-02/364/2009, FEP-
05/364/2009/A, FEP-06/364/2009/A, FEP-07/364/2009/D, FEP-
09/364/2009/B, FEP-10/364/2009/B & FEP-11/364/2009/B**

Reference is made to the Environmental Team's submission of the captioned Monthly Environmental Monitoring and Audit (EM&A) Report for October 2016 received by e-mail on 11 November 2016 for our review and comment.

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

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

Yours sincerely,



David Yeung
Independent Environmental Checker

c.c.	HyD	Attn: Mr. Eddy Wu	by fax: 2714 5289
	CEDD	Attn: Mr. Stephen Lo	by fax: 2577 5040
	Lam	Attn: Mr. Raymond Dai	by fax: 2882 3331
	AECOM	Attn: Mr. Francis Leong/ Stephen Lai	by fax: 2691 2649

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EXECUTIVE SUMMARY

- i. This is the Environmental Monitoring and Audit (EM&A) Monthly Report – October 2016 specific for Environmental Permit no. EP-364/2009/D, Further Environmental Permit nos. FEP-01/364/2009, FEP-02-364/2009, FEP-05/364/2009/A, FEP-06/364/2009/A FEP-07/364/2009/D, FEP-09/364/2009/B, FEP-10/364/2009/B and FEP-11/364/2009/B. The EM&A report is prepared by the Environmental Team (ET) employed under Contract No. HK/2015/01 – Wan Chai Development Phase II and Central Wanchai Bypass – Sampling, Field Measurement and Testing Works (Stage 3). This report presents the environmental monitoring findings and information recorded during the period of 27 September 2016 to 26 October 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).

- iii. In the reporting month, the principal work activities of individual contracts are included as follows:

Contract no. HY/2009/18 - Central - Wan Chai Bypass (CWB) - Central Interchange under FEP-05/364/2009/A

- Drainage works
- Road works
- Landscaping works
- Modification and Construction of Sign Gantries / Traffic Signs
- Maintenance works

Contract no. HK/2009/01 - Wan Chai Development Phase II - Central - Wan Chai Bypass at Hong Kong Convention and Exhibition Centre - Tunnel Works under FEP-02/364/2009

- Reinstatement of outfall
- Road and Drain works

Contract no. HK/2009/02 - Wan Chai Development Phase II - Central - Wan Chai Bypass at Wan Chai East (CWB Tunnel) under FEP-01/364/2009

- Waterproofing layer at tunnel top slab
- Protective screeding at tunnel top slab
- Removal of ELS S3
- Load transfer
- Backfilling work
- ELS S2 layer installation
- Excavation work
- Removal of bulkhead wall

- Strain gauges
- 100% of ex-WSD salt water pumping station superstructure
- Demolition of ex-WSD salt water pumping station

Contract no. HY/2009/15 - Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section) under FEP-06/364/2009/A

- Remedial works inside tunnel structure at Mined Tunnel, TS4, TPCWAE and TPCWAW

Contract no. HY/2009/19 - Central - Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link under FEP-07/364/2009/D

- Approach ramp sheet piling, pre-bored piling and top soil removal works
- Bridge construction
- Hing Fat Street modification works
- EVB waterproofing & back filling works
- Pier 22 to 28 Tie Beam construction

Contract no. HK/2012/08 – Wan Chai Development Phase II – Central- Wan Chai Bypass at Wan Chai West under FEP-09/364/2009B

- Grouting
- Construction of MVB and CWB Tunnel and Slip Road 1
- Construction of concrete plug
- Excavation and lateral support installation for CWB tunnel, Slip Road 1, Plant Room and Exhaust Duct

Contract no. HY/2010/08 –Central - Wan Chai Bypass (CWB) –Tunnel (Slip Road 8) under FEP-10/364/2009B

- Tree protection works next to existing BGO,
- Drainage improvement works,
- Excavation and Lateral Support for U-structure,
- Grouting works,
- Utility diversion works,
- Retaining wall works,
- ELS works,
- Construction works for subway extension

Contract no. HY/2011/08 –Central - Wan Chai Bypass (CWB) –Tunnel Buildings, Systems and Fittings, and Works Associated with Tunnel Commissioning under FEP-11/364/2009B

- Construction of Ventilation Buildings, inclusive of Administration Building, East Ventilation Shaft/Building, West Ventilation Building
- Construction of Tunnel Thermal Barrier
- Installation of Electricals and Mechanicals
- Installation of Tunnel Features

Noise Monitoring

- iv. Noise monitoring during daytime was conducted at M1a - Harbour Road Sports Center; M2b - Noon-day gun area; M3a - Tung Lo Wan Fire Station; M4b - Victoria Center; M5b - City Garden, M6 - HK Baptist Church Henrietta Secondary School, M7e and M7w – International Financial Centre East Podium and International Finance Centre West Podium and M8 – City Hall on weekly basis in the reporting month.
- v. With respect to the shift in major construction site portions at Wan Chai North, the noise monitoring station M1a – Harbour Road Sports Centre was finely adjusted from East of Harbour Road Sports Centre to West of Harbour Road Sports Centre on 21 June 2016.
- vi. Two limit level exceedances were recorded on 11 and 19 October 2016 at M1a- Harbour Road Sports Centre in the October reporting month. The exceedances were concluded as non-Project related.
- vii. 24-hour real time noise monitoring was conducted at RTN1 - FEHD Hong Kong Transport Section Whitfield Depot for construction activities at IEC bridge deck. No limit level exceedance was recorded in the reporting month.
- viii. 24-hour real time noise monitoring was conducted at RTN2a – Hong Kong Electric Centre. No project related exceedance was recorded in the reporting month.
- ix. 24-hour real time noise monitoring was conducted at RTN3 – Yu Lee Mo Fan Memorial School. No project related exceedance was recorded in the reporting month.
- x. 24-hour real time noise monitoring was conducted at RTN4 – Causeway Bay Community Centre. No limit level exceedance was recorded in the reporting month.

Air Quality Monitoring

- xi. 1-hour and 24-hour Total Suspended Particulates (TSP) monitoring were conducted at CMA1b – Oil Street Site Office; CMA2a - Causeway Bay Community Center; CMA3a - CWB PRE Site Office Area; CMA4a – Society for the Prevention of Cruelty to Animals; CMA5b - Pedestrian Plaza; MA1e and MA1w – International Finance Centre eastern and western podium on every six days basis.
- xii. Due to interruption of electricity supply, the following TSP monitoring were rescheduled :-
The 24hr TSP monitoring at air quality monitoring station CMA1b was rescheduled from 05 and 11 October 2016 to 06 and 12 October 2016 respectively.
The 24hr TSP monitoring at air quality monitoring station MA1e was rescheduled from 15 October 2016 to 17 October 2016.

Complaints, Notifications of Summons and Successful Prosecutions

- xiii. One environmental complaint was received in the reporting month.
- xiv. A public complaint referred by EPD was received by ET on 07 October 2016 (Case Ref.: H08/RS/00024768-16). The complainant reported that construction work at the construction site in Causeway Bay Typhoon Shelter area was found after 1900hrs on 28 September 2016 and 04 October 2016 that caused noise nuisance. The complainant also reported that there were 5 concrete lorry mixers operating at the above site after 1900hrs on 04 October 2016.

ET confirmed with the Resident Site Staff that concreting for tunnel structure in TS3 (W) was conducted from 1900hrs to 2300hrs on 28 September 2016. One concrete pump and two concrete lorry mixers were in operation. One no. of concrete lorry mixer was located at the East of TS3 (W) and one no. of concrete lorry mixer was located at the west of TS3 (W). Concreting for tunnel structure in TS3 (W) was conducted from 1900hrs to 2300hrs on 04 October 2016. One concrete pump and two concrete lorry mixers were in operation. One no. of concrete lorry mixer was located at the East of TS3 (W) and one no. of concrete lorry mixer was located at the west of TS3 (W).

Based on the site records confirmed by RSS, concreting for tunnel structure in TS3 (W) was conducted from 1900hrs to 2300hrs on 28 September 2016 and from 1900hrs to 2300hrs on 04 October 2016 and total one concrete pump and two concrete lorry mixers were in operation during the above concerned periods. One no. of concrete lorry mixer was located at the East of TS3 (W) and one no. of concrete lorry mixer was located at the west of TS3(W) during the above concerned periods and relevant Construction Noise Permit GW-RS0434-16 and GW-RS0407-16 were in place for the construction works conducted during the above concerned periods.

Nevertheless, in view of the public concern, the Contractor of HY/2010/08 was reminded to maintain the site control system for construction works carried out during restricted hours to ensure the PMEs deployed are in compliance with relevant Construction Noise Permit. The Contractor of HY/2010/08 was also reminded to maintain regular maintenance of the plant and equipment deployed to avoid potential nuisance to the nearby public.

Site Inspections and Audit

- i. The Environmental Team (ET) conducted weekly site inspections for Contract no. HY/2009/15, HY/2009/18, HY/2009/19, HY/2010/08, HK/2009/01, HK/2009/02, HK/2012/08 and HY/2011/08 in this reporting period.
- ii. Construction of bored pile E3B under HY/2009/17 was confirmed completed and the respective work area under FEP-03/364/2009 was handover and inspected under HY/2009/19 from 19 Dec 2012 onwards.
- iii. Construction works under HK/2010/06 was confirmed completed and the respective work area under FEP-08/364/2009/A was handover and inspected under HK/2012/08 from 22 Sep 2014 onwards.
- iv. The Contractors rectified major observations and recommendations made during the audit sessions. No non-conformance was identified during the site inspections.

Future Key Issues

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

Contract no. HY/2009/18 – Central – Wan Chai Bypass (CWB) – Central Interchange under FEP-05/364/2009/A

- Drainage works
- Road works
- Landscaping works
- Modification and Construction of Sign Gantries / Traffic Signs
- Maintenance works

Contract no. HK/2009/01 – Wan Chai Development Phase II – Central – Wan Chai Bypass at Hong Kong Convention and Exhibition Centre – Tunnel Works under FEP-02/364/2009

- Reinstatement of outfall
- Road and Drain works

Contract no. HK/2009/02 – Wan Chai Development Phase II – Central – Wan Chai Bypass at Wan Chai East (CWB Tunnel) under FEP-01/364/2009

- Concreting of protective screeding on tunnel top slab
- Removal works for ELS S2 layer.
- Waterproofing layer at tunnel top slab
- Tunnel backfilling & filling of seawall bedding
- Remedial work of tunnel wall, base slab, OHVD slab and top slab
- General cleaning of OHVD & tunnel base slab, carrier drain and cross road duct.
- Breakthrough of Bulkhead wall works
- Excavation work
- Strut installation
- Breaking pile head and concreting blinding layer.
- Demolition of the sub-structure of ex-WSD Salt Water Pumping Station
- Removal of EVA bridge between Portion 1 and 2

Contract no. HY/2009/15 – Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section) under FEP-06/364/2009/A

- Remedial works inside tunnel structure at Mined Tunnel, TS4, TPCWAE and TPCWAW

Contract no. HY/2009/19 – Central – Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link under FEP-07/364/2009/D

- Approach ramp sheet piling, pre-bored piling and top soil removal works
- Hing Fat Street modification works
- Pier 22 backfilling
- Bridge Demolition
- Oil Street drainage works
- Excavation / Construction of retaining wall
- Hotel Carpark Reinstatement

Contract no. HK/2012/08 – Wan Chai Development Phase II – Central- Wan Chai Bypass at Wan Chai West under FEP-09/364/2009/B

- Grouting
- Construction of MVB and CWB Tunnel and Slip Road 1
- Construction of concrete plug
- Excavation and lateral support installation for CWB tunnel, Slip Road 1, Plant Room and Exhaust Duct

Contract no. HY/2010/08 –Central - Wan Chai Bypass (CWB) –Tunnel (Slip Road 8) under FEP-10/364/2009

- Tree protection works next to existing BGO
- Drainage improvement works
- Excavation and Lateral Support for U-structure
- Grouting works
- Utility diversion works
- Retaining wall works
- ELS works
- Construction works for subway extension

Contract no. HY/2011/08 – Central - Wan Chai Bypass (CWB) –Tunnel Buildings, Systems and Fittings, and Works Associated with Tunnel Commissioning under FEP-11/364/2009B

- Construction of Ventilation Buildings, inclusive of Administration Building, East Ventilation Shaft/Building, West Ventilation Building
- Construction of Tunnel Thermal Barrier
- Installation of Electricals and Mechanicals
- Installation of Tunnel Features

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-364/2009/D and Further Environmental permit nos. FEP-01/364/2009, FEP-02/364/2009, FEP-05/364/2009/A, FEP-06/364/2009/A, FEP-07/364/2009/D, FEP-09/364/2009/B, FEP-10/364/2009B and FEP-11/364/2009B to implement the Environmental Monitoring and Audit (EM&A) programme as stipulated in the EM&A Manual of the approved Environmental Impact Assessment (EIA) Report for Wan Chai Development phase II and Central-Wan Chai Bypass (Register No.: AEIAR-125/2008) and in the EM&A Manual of the approved EIA Report for Central-Wan Chai Bypass and Island Eastern Corridor Link (Register No. AEIAR-041/2001).

1.1.2. This report presents the environmental monitoring and auditing work carried out in accordance to the Section 10.3 of EM&A Manual and “*Environmental Monitoring and Audit Requirements*” under Particular Specification Section 27.

1.1.3. This report documents the finding of EM&A works for Environmental Permit (EP) no. EP-364/2009/D, Further Environmental Permit (FEP) nos. FEP-01-364/2009, FEP-02/364/2009, FEP-05/364/2009/A, FEP-06/364/2009/A, FEP-07/364/2009/D, FEP-09/364/2009/B, FEP-10/364/2009/B and FEP-11/364/2009/B during the period 27 September 2016 to 26 October 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 ***Status of Regulatory Compliance*** – summarizes the status of valid Environmental Permits / Licenses during the reporting period.

Section 4 ***Monitoring Requirements*** – summarizes all monitoring parameters, monitoring methodology and equipment, monitoring locations, monitoring frequency, criteria and respective event and action plan and monitoring programmes.

Section 5 ***Monitoring Results*** – summarizes the monitoring results obtained in the reporting period.

Section 6 ***Compliance Audit*** – summarizes the auditing of monitoring results, all exceedances environmental parameters.

- Section 7** ***Cumulative Construction Impact due to the Concurrent Projects*** – summarizes the relevant cumulative construction impact due to the concurrent activities of the concurrent Projects.
- Section 8** ***Environmental Site Audit*** – summarizes the findings of weekly site inspections undertaken within the reporting period, with a review of any relevant follow-up actions within the reporting period.
- Section 9** ***Complaints, Notification of summons and Prosecution*** – summarizes the cumulative statistics on complaints, notification of summons and prosecution
- Section 10** ***Conclusion***

2 PROJECT BACKGROUND

2.1 Background

- 2.1.1. “Wan Chai Development phase II and Central-Wan Chai Bypass” and “Central-Wan Chai Bypass and Island Eastern Corridor Link” (hereafter called “the Project”) are Designated 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. Design and Construction of Central – Wan Chai Bypass and Island Eastern Corridor Link under the Project involves the construction and operation of a trunk road and its road tunnel more than 800m in length between portals that is shown at Figure 2.1.
- 2.2.2. The study area encompasses existing developments from Central to North Point. The scope of the Central-Wanchai Bypass (CWB) and Island Eastern Corridor Link (IECL) includes:
- A dual three-lane trunk road, approximately 4.5 km in length, and tunnel approximately 3.7 km in length defined from the connection with the existing Rumsey Street Flyover in Central, through to a connection with the existing Island Eastern Corridor to the east of the Causeway Bay Typhoon Shelter (CBTS);
 - The Central Interchange near the Rumsey Street Flyover to provide road connections to the Central area;
 - Tunnel control buildings and ventilation buildings;
 - Slip roads to connect the CWB to the local road system in the Wan Chai North and Causeway Bay area;
 - Associated road lighting, road signing, traffic control and surveillance system; and
 - Other associated works.

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

Table 2.1 Schedule 2 Designated Projects under this Project

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

2.3 Division of the Project Responsibility

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

2.3.2. The details of individual contracts are summarized in **Table 2.2**.

Table 2.2 Details of Individual Contracts under the Project

Contract No.	Contract Title	Associated DP(s)	Construction Commencement Date
HY/2009/17	Central – Wan Chai Bypass (CWB) at FEHD Whitfield Depot – Advanced piling works.	DP1	5 October 2010 (Completed)
HY/2009/18	Central – Wan Chai Bypass (CWB) – Central Interchange	DP1	21 April 2011
04/HY/2006	Reconstruction of Bus Terminus near Man Yiu Street and Man Kwong Street	DP1	September 2010 (Completed)
HK/2009/01	Wan Chai Development Phase II – Central – Wan Chai Bypass at Hong Kong Convention and Exhibition Centre – Tunnel Works	DP1, DP2	25 August 2011

Contract No.	Contract Title	Associated DP(s)	Construction Commencement Date
HK/2009/02	Wan Chai Development Phase II – Central – Wan Chai Bypass at Wan Chai East(CWB Tunnel)	DP1	26 April 2011
HY/2009/15	Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section)	DP1,DP3	13 July 2011
HY/2009/19	Central – Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link	DP1	24 March 2011
HK/2010/06	Wan Chai Development Phase II- Central-Wan Chai Bypass over MTR Tsuen Wan Line	DP3	22 March 2011 (Completed)
HK/2012/08	Wan Chai Development Phase II- Central-Wan Chai Bypass at Wan Chai West	DP1,DP2, DP3	10 March 2014
HY/2010/08	Central- Wanchai Bypass Tunnel – Tunnel (Slip Road 8)	DP1, DP2, DP3	21 March 2013
HY/2011/08	Central - Wan Chai Bypass (CWB) – Tunnel Buildings, Systems and Fittings, and Works Associated with Tunnel Commissioning	DP1	8 October 2014

2.4 Project Organization and Contact Personnel

2.4.1. Civil Engineering and Development Department and Highways Department are the overall project controllers for the Wan Chai Development Phase II and Central-Wan Chai Bypass respectively. For the construction phase of the Project, Project Engineer, Contractor(s), Environmental Team and Independent Environmental Checker are appointed to manage and control environmental issues.

2.4.2. The proposed project organization and lines of communication with respect to environmental protection works are shown in **Figure 2.2**. Key personnel and contact particulars are summarized in **Table 2.3**:

Table 2.3 Contact Details of Key Personnel

Party	Role	Post	Name	Contact No.	Contact Fax
AECOM	Engineer's Representative for WDII	Principal Resident Engineer	Mr. Frankie Fan	2587 1778	2587 1877
	Engineer's Representative for CWB	Principal Resident Engineer	Mr. Peter Poon	3912 3388	3912 3010
Chun Wo – Leader Joint Venture	Contractor under Contract no. HK/2009/01	Project Manager	Mr. Simon Liu	2162 9909	2634 1626
		Site Agent	Mr. Andy Yu	9648 4896	
		Construction Manager	Mr. Terry Wong	9757 9846	
		Construction Manager	Mr. Wyman Wong	9627 2467	

Party	Role	Post	Name	Contact No.	Contact Fax
		Construction Manager	Mr. Terry Tsang	6683 9394	
		Environmental Officer	Ms. Wendy Ng	9803 0057	
		Assistant Environmental Engineer	Ms. Connie Chan	6157 7057	
Chun Wo – CRGL Joint Venture	Contractor under Contract no. HK/2009/02	Site Agent	Mr. K.K. Yuen	3658-3002	2827 9996
		Project Manager	Mr. Paul Yu	3658 3085	
		Environmental Officer	Mr. C.P. Ho	9191 8856	
Chun Wo - CRGL - MBEC Joint Venture	Contractor under Contract no. HY/2009/19	Project Manager	Mr. Rayland Lee	3758 8879	2570 8013
		Deputy Project Manager	Mr. William Luk	9456 9819	
		Site Agent	Mr. David Lau		
		Deputy Site Agent	Mr. Eric Fong	6191 9337	
		Environmental Manager / Environmental Officer	Mr. M.H. Isa	3757 8218	
		Assistant Environmental Officer	Mr. Tom Ding	3757 8217	
Leighton Contractors (Asia) Limited	Contractor under Contract no. HY/2009/18	Site Agent	Mr. Jimmy Chu	2214 7700	2140 6799
		Environmental Officer	Mr. Chris Chan	2823 1161	
		Assistant Environmental Engineer	Mr. Christy So	3937 1065	
China State Construction Engineering (HK) Ltd.	Contractor under Contract no. HY/2009/15	Project Director	Mr. Chris Leung	3557 6393	2865 5229
		Site Manager	Mr. Y. Huo	3557 6368	2566 2192
		Contractor's Representative	Mr. Rex Chan	3557 6371	
		Environmental Officer	Mr. Andy Mak	3557 6215	
		Environmental Supervisor	Mr. Harry Wong	3557 6348	
China State-Leader JV	Contractor under Contract no. HK/2012/08	Project Director	Mr. C.N. Lai	9137 1811	2877 1522
		Project Manager	Mr. Eddie Chung	9193 8871	
		Site Agent	Mr. Keith Tse	9095 7922	
		Environmental Officer	Mr. James MA	9130 9549	

Party	Role	Post	Name	Contact No.	Contact Fax
		Environmental Supervisor	Mr. Y.L. Ho	6050 4919	
China State	Contractor under Contract no.HY/2010/08	Project Director	Cheung Kit Cheung	3557 6399	2566 8061
		Project Manager	Chan Ying Lun	9812 0592	
		Deputy Project Manager	Chris Leung	3467 4299	
		Site Agent	Mr. Andrew Wong	3467 4277	
		Environmental Officer	Mr. Gabriel Wong	3557 6464	
		Environmental Supervisor	Mr. Louis Lam Tsz Kwan	3557 6470	
Leighton Joint Venture	Contractor under Contract no. HY/2011/08	Project Manager	Paul Evans	2823 1111	21406799
		Site Agent	Colman Wong	9730 0806	
		Environmental Officer	Malcolm Leung	3973 0850	
		Environmental Supervisor	Christy So	3973 1065	
Ramboll Environ Hong Kong Limited	Independent Environmental Checker (IEC)	Independent Environmental Checker (IEC)	Mr. David Yeung	3465 2888	3465 2899
Lam Geotechnics Limited	Environmental Team (ET)	Environmental Team Leader (ETL)	Mr. Raymond Dai	2882 3939	2882 3331

2.4.3. In this reporting month, the principal work activities of individual contracts are included as follows:

Contract no. HY/2009/18 - Central - Wan Chai Bypass (CWB) - Central Interchange under FEP-05/364/2009/A

- Drainage works
- Road works
- Landscaping works
- Modification and Construction of Sign Gantries / Traffic Signs
- Maintenance works

Contract no. HK/2009/01 - Wan Chai Development Phase II - Central - Wan Chai Bypass at Hong Kong Convention and Exhibition Centre - Tunnel Works under FEP-02/364/2009

- Reinstatement of outfall
- Road and Drain works

Contract no. HK/2009/02 - Wan Chai Development Phase II - Central - Wan Chai Bypass at Wan Chai East (CWB Tunnel) under FEP-01/364/2009

- Waterproofing layer at tunnel top slab
- Protective screeding at tunnel top slab
- Removal of ELS S3
- Load transfer
- Backfilling work
- ELS S2 layer installation
- Excavation work
- Removal of bulkhead wall
- Strain gauges
- 100% of ex-WSD salt water pumping station superstructure
- Demolition of ex-WSD salt water pumping station

Contract no. HY/2009/15 - Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section) under FEP-06/364/2009/A

- Remedial works inside tunnel structure at Mined Tunnel, TS4, TPCWAE and TPCWAW

Contract no. HY/2009/19 - Central - Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link under FEP-07/364/2009/D

- Approach ramp sheet piling, pre-bored piling and top soil removal works
- Bridge construction
- Hing Fat Street modification works
- EVB waterproofing & back filling works
- Pier 22 to 28 Tie Beam construction

Contract no. HK/2012/08 – Wan Chai Development Phase II – Central- Wan Chai Bypass at Wan Chai West under FEP-09/364/2009B

- Grouting
- Construction of MVB and CWB Tunnel and Slip Road 1
- Construction of concrete plug
- Excavation and lateral support installation for CWB tunnel, Slip Road 1, Plant Room and Exhaust Duct

Contract no. HY/2010/08 –Central - Wan Chai Bypass (CWB) –Tunnel (Slip Road 8) under FEP-10/364/2009B

- Tree protection works next to existing BGO,
- Drainage improvement works,
- Excavation and Lateral Support for U-structure,
- Grouting works,
- Utility diversion works,
- Retaining wall works,
- ELS works,
- Construction works for subway extension

Contract no. HY/2011/08 –Central - Wan Chai Bypass (CWB) –Tunnel Buildings, Systems and Fittings, and Works Associated with Tunnel Commissioning under FEP-11/364/2009B

- Construction of Ventilation Buildings, inclusive of Administration Building, East Ventilation Shaft/Building, West Ventilation Building
- Construction of Tunnel Thermal Barrier
- Installation of Electricals and Mechanicals
- Installation of Tunnel Features

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

Contract no. HY/2009/18 – Central – Wan Chai Bypass (CWB) – Central Interchange under FEP-05/364/2009/A

- Drainage works
- Road works
- Landscaping works
- Modification and Construction of Sign Gantries / Traffic Signs
- Maintenance works

Contract no. HK/2009/01 – Wan Chai Development Phase II – Central – Wan Chai Bypass at Hong Kong Convention and Exhibition Centre – Tunnel Works under FEP-02/364/2009

- Reinstatement of outfall
- Road and Drain works

Contract no. HK/2009/02 – Wan Chai Development Phase II – Central – Wan Chai Bypass at Wan Chai East (CWB Tunnel) under FEP-01/364/2009

- Concreting of protective screeding on tunnel top slab
- Removal works for ELS S2 layer.
- Waterproofing layer at tunnel top slab
- Tunnel backfilling & filling of seawall bedding
- Remedial work of tunnel wall, base slab, OHVD slab and top slab
- General cleaning of OHVD & tunnel base slab, carrier drain and cross road duct.
- Breakthrough of Bulkhead wall works
- Excavation work
- Strut installation
- Breaking pile head and concreting blinding layer.
- Demolition of the sub-structure of ex-WSD Salt Water Pumping Station
- Removal of EVA bridge between Portion 1 and 2

Contract no. HY/2009/15 – Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section) under FEP-06/364/2009/A

- Remedial works inside tunnel structure at Mined Tunnel, TS4, TPCWAE and TPCWAW

Contract no. HY/2009/19 – Central – Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link under FEP-07/364/2009/D

- Approach ramp sheet piling, pre-bored piling and top soil removal works
- Hing Fat Street modification works
- Pier 22 backfilling
- Bridge Demolition
- Oil Street drainage works
- Excavation / Construction of retaining wall
- Hotel Carpark Reinstatement

Contract no. HK/2012/08 – Wan Chai Development Phase II – Central- Wan Chai Bypass at Wan Chai West under FEP-09/364/2009/B

- Grouting
- Construction of MVB and CWB Tunnel and Slip Road 1
- Construction of concrete plug
- Excavation and lateral support installation for CWB tunnel, Slip Road 1, Plant Room and Exhaust Duct

Contract no. HY/2010/08 –Central - Wan Chai Bypass (CWB) –Tunnel (Slip Road 8) under FEP-10/364/2009

- Tree protection works next to existing BGO
- Drainage improvement works
- Excavation and Lateral Support for U-structure
- Grouting works
- Utility diversion works
- Retaining wall works
- ELS works
- Construction works for subway extension

Contract no. HY/2011/08 – Central - Wan Chai Bypass (CWB) –Tunnel Buildings, Systems and Fittings, and Works Associated with Tunnel Commissioning under FEP-11/364/2009B

- Construction of Ventilation Buildings, inclusive of Administration Building, East Ventilation Shaft/Building, West Ventilation Building
- Construction of Tunnel Thermal Barrier
- Installation of Electricals and Mechanicals
- Installation of Tunnel Features

3 STATUS OF REGULATORY COMPLIANCE

3.1 Status of Environmental Licensing and Permitting under the Project

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

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

Permits and/or Licences	Reference No.	Issued Date	Status
Environmental Permit	EP-356/2009	30 Jul 2009	Valid
Environmental Permit	EP-364/2009	17 Aug 2009	Superseded
Environmental Permit	EP-364/2009/A	4 Aug 2010	Superseded
Environmental Permit	EP-364/2009/B	20 Sep 2012	Superseded
Environmental Permit	EP-364/2009/C	11 Jul 2014	Superseded
Environmental Permit	EP-364/2009/D	24 Nov 2015	Valid
Environmental Permit	EP-376/2009	13 Nov 2010	Valid
Further Environmental Permit	FEP-01/356/2009	18 Feb 2010	Surrendered
Further Environmental Permit	FEP-02/356/2009	24 Mar 2010	Valid
Further Environmental Permit	FEP-03/356/2009	24 Mar 2010	Valid
Further Environmental Permit	FEP-04/356/2009	15 Nov 2010	Valid
Further Environmental Permit	FEP-05/356/2009	24 Mar 2011	Surrendered
Further Environmental Permit	FEP-06/356/2009	5 March 2013	Valid
Further Environmental Permit	FEP-07/356/2009	26 July 2013	Valid
Further Environmental Permit	FEP-01/364/2009	24 Mar 2010	Valid
Further Environmental Permit	FEP-02/364/2009	21 Apr 2010	Valid
Further Environmental Permit	FEP-03/364/2009	12 July 2010	Surrendered
Further Environmental Permit	FEP-04/364/2009/A	14 Oct 2010	Surrendered
Further Environmental Permit	FEP-05/364/2009/A	15 Nov 2010	Valid
Further Environmental Permit	FEP-06/364/2009/A	22 Nov 2010	Valid
Further Environmental Permit	FEP-07/364/2009/A	25 Feb 2011	Superseded
Further Environmental Permit	FEP-07/364/2009/D	24 Nov 2015	Valid
Further Environmental Permit	FEP-08/364/2009/A	15 June 2012	Surrendered

Further Environmental Permit	FEP-09/364/2009/B	5 March 2013	Valid
Further Environmental Permit	FEP-10/364/2009/B	26 July 2013	Valid
Further Environmental Permit	FEP-11/364/2009/B	2 May 2014	Valid

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

Contract no. HY/2009/17 – Central – Wan Chai Bypass (CWB) at FEHD Whitfield Depot – Advanced piling works under FEP-03/364/2009

- 3.1.3. The construction works was completed and the FEP-03/364/2009 was surrendered by the Contractor on 28 March 2013.

Contract no. 04/HY/2006 – Reconstruction of Bus Terminus near Man Yiu Street and Man Kwong Street under FEP-04/364/2009/A

- 3.1.4. The construction works was completed, and the FEP-04/HY/2006 was surrendered by the Contractor on 11 February 2011.

Contract no. HK/2010/06 - Wan Chai Development Phase II - Central - Wan Chai Bypass over MTR Tsuen Wan Line under FEP-08/364/2009/A

- 3.1.5. The construction works was completed, and the FEP-08/364/2009/A was surrendered by the Contractor on 3 October 2014.

Contract no. HK/2009/01 – Wan Chai Development Phase II – Central – Wan Chai Bypass at Hong Kong Convention and Exhibition Centre – Tunnel Works under FEP-02/364/2009

- 3.1.6. Summary of the current status on licences and/or permits on environmental protection pertinent and submission under FEP-02/364/2009 for contract no. HK/2009/01 are shown in **Table 3.2** and **Table 3.3**.

Table 3.2 Cumulative Summary of Valid Licences and Permits under Contract no. HK/2009/01

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
Further Environmental Permit	FEP-02/356/2009	24 Mar 2010	N/A	Valid
	FEP-02/364/2009	21 Apr 2010	N/A	Valid
Notification of Works Under APCO	313088	06 Jan 2010	N/A	Valid
Construction Noise Permit (CNP) for non-pilling equipment	GW-RS0384-16	19 Apr 2016	22 Apr 2016 to 19 Oct 2016	Expired
	GW-RS0435-16	03 May 2016	08 May 2016 to 07 Nov 2016	Valid
	GW-RS0482-16	17 May 2016	19 May 2016 to 18 Nov 2016	Valid
	GW-RS0486-16	17 May 2016	19 May 2016 to 18 Nov 2016	Valid
	GW-RS0488-16	17 May 2016	19 May 2016 to 18 Nov 2016	Valid
	GW-RS0492-16	20 May 2016	23 May 2016 to 22 Nov 2016	Valid
	GW-RS0493-16	20 May 2016	23 May 2016 to 22 Nov 2016	Valid
	GW-RS0495-16	20 May 2016	19 May 2016 to 18 Nov 2016	Valid
	GW-RS0546-16	27 May 2016	30 May 2016 to 26 Nov 2016	Cancelled
	GW-RS0592-16	13 Jun 2016	15 Jun 2016 to 12 Dec 2016	Valid
	GW-RS0636-16	20 Jun 2016	21 Jun 2016 to 19 Dec 2016	Valid
	GW-RS0822-16	28 Jul 2016	7 Aug 2016 to 31 Jan 2017	Cancelled
	GW-RS1004-16	28 Sep 2016	29 Sep 2016 to 27 Mar 2017	Valid

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
	GW-RS1079-16	27 Oct 2016	27 Oct 2016 to 20 Apr 2017	Valid
Discharge License	WT00024952-2016	06 Jul 2016	31 Jul 2021	Valid
	WT00021138-2015	17 Mar 2014	31 Mar 2020	Valid
Billing account under Waste Disposal Ordinance	7010069	21 Jan 2010	N/A	Valid
Registration as a Chemical Waste Producer	WPN5213-134-C3585-01	21 Jan 2010	N/A	Valid

Table 3.3 Summary of submission status under FEP-02/364/2009

EP Condition	Submission	Date of Submission
Condition 2.7 & 2.8	Works Schedule and Location Plan	18 May 2011
Condition 2.6	Environmental Management Organization Chart	18 May 2011
Condition 1.12	Commencement Date of Works	20 Jun 2011
Condition 2.9	Noise Management Plan	10 Jun 2011
Condition 2.11	Landscape Plan (Rev.4)	8 July 2015

Contract no. HK/2009/02 – Wan Chai Development Phase II – Central – Wan Chai Bypass at Wan Chai East (CWB Tunnel) under FEP-01/364/2009

- 3.1.7. Summary of the current status on licences and/or permits on environmental protection pertinent and submission under FEP-01/364/2009 for contract no. HK/2009/02 are shown in **Table 3.4** and **Table 3.5**.

Table 3.4 Cumulative Summary of Valid Licences and Permits under Contract no. HK/2009/02

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
Further Environmental Permit	FEP-03/356/2009	24 Mar 2010	N/A	Valid
	FEP-01/364/2009	24 Mar 2010	N/A	Valid
Notification of Works Under APCO	313962	2 Feb 2010	N/A	Valid
Construction Noise Permit (CNP) for non-pilling equipment	GW-RS0390-16	22 Apr 2016	27 Apr 2016 to 26 Oct 2016	Cancelled
	GW-RS0399-16	27 Apr 2016	27 Apr 2016 to 26 Oct 2016	Cancelled
	GW-RS0403-16	27 Apr 2016	30 Apr 2016 to 24 Sep 2016	Cancelled
	GW-RS0516-16	20 May 2016	23 May 2016 to 22 Nov 2016	Cancelled
	GW-RS0593-16	13 Jun 2016	15 Jun 2016 to 12 Dec 2016	Valid
	GW-RS0803-16	28 Jul 2016	30 Jul 2016 to 27 Jan 2017	Cancelled
	GW-RS0926-16	05 Sep 2016	07 Sep 2016 to 04 Mar 2017	Valid
	GW-RS0985-16	19 Sep 2016	20 Sep 2016 to 18 Mar 2017	Valid
	GW-RS1047-16	13 Oct 2016	26 Oct 2016 to 25 Apr 2017	Valid
Water Discharge License	WT00022295-2015	12 Aug 2015	31 July 2020	Valid
	WT00025276-2016	19 Sep 2016	31 July 2021	Valid
Billing Account under Waste Disposal Ordinance (Land)	7010255	10 Feb 2010	N/A	Valid

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
Registration as Chemical Waste Producer (Wan Chai)	WPN5213-135- C3593-01	10 Mar 2010	N/A	Valid
Registration as Chemical Waste Producer (TKO 137)	WPN5213-839- C3593-02	22 Sep 2010	N/A	Valid
Dumping Permit (Type 1 – Open Sea Disposal)	EP/MD/17-041	23 Jun 2017	01 Jul 2016 to 31 Dec 2016	Valid

Table 3.5 Summary of submission status under FEP-01/364/2009

EP Condition	Submission	Date of Submission
Condition 2.7 and 2.8	Works Schedule and Location Plan	14 Jun 2011
Condition 2.6	Environmental Management Organization Chart	14 Jun 2011
Condition 1.12	Commencement Date of Works	21 Jun 2011
Condition 2.11	Landscape Plan (Revision B)	20 Nov 2012
Condition 2.9	Noise Management Plan (Revision B)	13 Jan 2012

Contract no. HY/2009/18 – Central – Wan Chai Bypass (CWB) – Central Interchange under FEP-05/364/2009/A

- 3.1.8. Summary of the current status on licences and/or permits on environmental protection pertinent and submission under FEP-05/364/2009A for contract no. HY/2009/18 are shown in **Table 3.6** and **Table 3.7**.

Table 3.6 Cumulative Summary of Valid Licences and Permits under Contract no. HY/2009/18

Permit / Licence / Notification / Approval	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
Further Environmental Permit	FEP-05/364/2009/A	15 Nov 2010	Permit issued	Valid
Notification of Works Under APCO	322293	07 Oct 2010	Notified	Valid
Construction Noise Permit (CNP) for non-piling equipment	GW-RS0335-16	07 Apr 2016	08 Apr 2016 to 30 Sep 2016	Cancelled
	GW-RS0438-16	03 May 2016	05 May 2016 to 30 Sep 2016	Cancelled
	GW-RS0564-16	06 Jun 2016	08 Jun 2016 to 31 Oct 2016	Cancelled
	GW-RS0577-16	06 Jun 2016	08 Jun 2016 to 31 Oct 2016	Cancelled
	GW-RS0669-16	24 Jun 2016	01 Jul 2016 to 31 Dec 2016	Valid
	GW-RS0700-16	04 Jul 2016	06 Jul 2016 to 31 Oct 2016	Cancelled
	GW-RS0705-16	04 Jul 2016	06 Jul 2016 to 31 Oct 2016	Cancelled
	GW-RS0762-16	14 Jul 2016	16 Jul 2016 to 31 Oct 2016	Valid
	GW-RS0847-16	15 Aug 2016	17 Aug 2016 to 30 Nov 2016	Valid
	GW-RS0874-16	23 Aug 2016	25 Aug 2016 to 30 Nov 2016	Valid
Discharge Licenses	WT00013967-2012	17 Sep 2012	30 Sep 2017	Cancelled
	WT00014966-2013	08 Jan 2013	31 Jan 2018	Cancelled
	WT00020725-2015	14 Jan 2015	30 Jul 2017	Valid
	WT00024255-2016	18 May 2016	31 Jan 2021	Valid
Registration as a Chemical Waste Producer	WPN: 8335-121-L1048-04	17 Dec 2010	N/A	Registration completed
Billing Account under Waste Disposal Ordinance (Land)	Account No.: 7011587	11 Oct 2010	Account approved	Valid

Table 3.7 Summary of submission status under FEP-05/364/2009/A

EP Condition	Submission	Date of Submission
Condition 2.9	Noise Management Plan	01 March 2011
Condition 2.10	Landscape Plan (Rev. 6)	19 May 2014

Contract no. HY/2009/15 – Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section) under FEP-06/364/2009/A

3.1.9. Summary of the current status on licences and/or permits on environmental protection pertinent and submission under FEP-06/364/2009/A for contract no. HY/2009/15 are shown in **Table 3.8** and **Table 3.9**.

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

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
Further Environmental Permit	FEP-06/364/2009/A	22 Nov 2010	N/A	Valid
	FEP-04/356/2009	22 Nov 2010	N/A	Valid
Notification of Works Under APCO	321822	24 Sep 2010	N/A	Valid
Construction Noise Permit (CNP) for non-piling equipment	GW-RS0553-16	30 May 2016	30 May 2016 to 24 Nov 2016	Valid
	GW-RS0884-16	23 Aug 2016	08 Sep 2016 to 07 Mar 2017	Valid
	GW-RS0886-16	23 Aug 2016	09 Sep 2016 to 08 Mar 2017	Valid
	GW-RS0889-16	23 Aug 2016	11 Sep 2016 to 10 Mar 2017	Valid
Registration as a Chemical Waste Producer	WPN: 5213-147-C1169-35	15 Nov 2010	N/A	Valid
Billing Account under Waste Disposal Ordinance	7011553	30 Sep 2010	N/A	Valid
Billing Account under Waste Disposal Ordinance (Disposal by Vessel)	7011761	13 Jul 2016	24 Oct 2016 to 16 Jan 2017	Valid
Water Discharge Licence (Discharge at TPCWAW)	WT00020601-2014	18 Mar 2015	18 Mar 2015 to 31 Mar 2017	Valid
Water Discharge Licence (Discharge at TPCWAE)	WT00024951-2016	8 Jul 2016	8 Jul 2016 to 31 Dec 2017	Valid

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
Water Discharge Licence(Discharge at TS1)	WT00024874-2016	20 Jul 2016	20 Jul 2016 to 31 Mar 2021	Valid

Table 3.9 Summary of submission status under FEP-06/364/2009/A

EP Condition	Submission	Date of Submission
Condition 2.6	Management Organization of Main Construction Companies	11 Mar 2011
	Amendment for Management Organization of Main Construction Companies	16 May 2011
Condition 2.7	Works Schedule	15 Mar 2011
Condition 2.8	Location Plan	15 Mar 2011
Condition 2.9	Noise Management Plan	6 May 2011
Condition 2.10	Landscape Plan (Rev.3)	30 Jan 2015

Contract no. HY/2009/19 – Central – Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link under FEP-07/364/2009/D

3.1.10. The current status on licences and/or permits on environmental protection pertinent and submission under FEP-07/364/2009/D for contract no. HY/2009/19 are shown in **Table 3.10** and **Table 3.11**.

Table 3.10 Cumulative Summary of Valid Licences and Permits under Contract no. HY/2009/19

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
Further Environmental Permit	FEP-07/364/2009/A	25 Feb 2011	N/A	Superseded
	FEP-07/364/2009/D	24 Nov 2015	N/A	Valid
Notification of Works Under APCO	326160	24 Jan 2011	N/A	Valid
Registration as a Waste Producer	7012306	10 Feb 2011	N/A	Valid
Registration as Chemical Waste Producer	5213-151-C3654-01	24 Mar 2011	N/A	Valid
Application for Vessel Disposal	7012306	21 July 2011	N/A	Valid
Construction Noise Permits (CNP) for non-piling equipment	GW-RS0330-16	05 Apr 2016	05 Apr 2016 to 04 Oct 2016	Cancelled
	GW-RS0614-16	16 Jun 2016	16 Jun 2016 to 15 Dec 2016	Cancelled
	GW-RS0506-16	20 May 2016	23 May 2016 to 18 Nov 2016	Valid
	GW-RS0551-16	01 Jun 2016	18 Jun 2016 to 17 Dec 2016	Valid
	GW-RS0851-16	09 Aug 2016	09 Aug 2016 to 08 Feb 2017	Valid
	GW-RS0987-16	22 Sep 2016	25 Sep 2016 to 02 Oct 2016	Expired
Water Discharge License	WT00010093-2011	17 Aug 2012	30 Sep 2016	Valid
	WT00010865-2011	03 Nov 2011	30 Nov 2016	Cancelled
Dumping Permit (Approach Ramp) (Type 1 – Open Sea Disposal)	EP/MD/17-078	01 Oct 2016	31 Mar 2017	Valid
Dumping Permit (Approach Ramp) (Type 2 – Confined Marine Disposal)	EP/MD/17-079	01 Oct 2016	31 Oct 2016	Valid

Table 3.11 Summary of submission status under FEP-07/364/2009/D

EP Condition	Submission	Date of Submission
Condition 2.13	Landscape Plan (Rev.4)	22 March 2016
Condition 2.9	Noise Management Plan (Rev.4)	15 February 2016

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

3.1.11. The current status on licences and/or permits on environmental protection pertinent and submission under FEP-09/364/2009/B for contract no. HK/2012/08 showed in **Table 3.12 and Table 3.13**.

Table 3.12 Cumulative Summary of Valid Licences and Permits under Contract no. HK/2012/08

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
Further Environmental Permit	FEP-09/364/2009/B	5 March 2013	N/A	Valid
	FEP-06/356/2009	5 March 2013	N/A	Valid
Notification of Works Under APCO	355439	4 Feb 2013	N/A	Valid
Registration as a Chemical Waste Producer	5213-134-C3790-01	8 Mar 2013	N/A	Valid
Billing Account under Waste Disposal Ordinance	7016883	18 Feb 2013	18 Jul 2017	Valid
Construction Noise Permit (CNP) for non-piling equipment	GW-RS0386-16	20 Apr 2016	22 Apr 2016 to 19 Oct 2016	Cancelled
	GW-RS0583-16	10 Jun 2016	11 Jun 2016 to 09 Dec 2016	Cancelled
	GW-RS00739-16	12 Jul 2016	14 Jul 2016 to 12 Jan 2017	Valid
	GW-RS0902-16	24 Aug 2016	26 Aug 2016 to 25 Feb 2017	Valid
	GW-RS0749-16	12 Jul 2016	14 Jul 2016 to 12 Jan 2017	Cancelled
Water Discharge Licence	WT00018223-2014	28 Jan 2014	31 Jan 2019	Cancelled
	WT00020594-2014	22 Dec 2014	31 Jan 2019	Valid

Table 3.13 Summary of submission status under FEP-09/364/2009/B

EP Condition	Submission	Date of Submission
Condition 2.9	Noise Management Plan (Rev.2)	9 July 2013
Condition 2.14	Landscape Plan (Rev.4)	24 August 2015

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

3.1.12. The current status on licences and/or permits on environmental protection pertinent and submission under FEP-10/364/2009/B for contract no. HK/2012/08 showed in **Table 3.14 and Table 3.15**.

Table 3.14 Cumulative Summary of Valid Licences and Permits under Contract no. HY/2010/08

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
Further Environmental Permit	FEP-10/364/2009/B	26 Jul 2013	NA	Valid
	FEP-07/356/2009	26 Jul 2013	NA	Valid
Notification of Works Under APCO	357176	2013-04-02	NIL	Valid
Registration as a Chemical Waste Producer	WPN5213-147-C1169-44	2013-03-27	NIL	Valid
Billing Account under Waste Disposal Ordinance	7017170	2013-03-27	NIL	Valid
Water Discharge License	WT0001651-2013	2013-07-09	2018-07-28	Cancelled
	WT00020468-2014	2014-12-03	2018-07-31	Valid
Construction Noise Permit (CNP) for non-piling equipment	GW-RS0357-16	22 Apr 2016	22 Apr 2016 to 21 Oct 2016	Expired
	GW-RS0362-16	22 Apr 2016	22 Apr 2016 to 21 Oct 2016	Cancelled
	GW-RS0407-16	20 Apr 2016	20 Apr 2016 to 19 Oct 2016	Expired
	GW-RS0434-16	05 May 2016	24 May 2016 to 23 Nov 2016	Valid
	GW-RS0442-16	06 May 2016	16 May 2016 to 15 Nov 2016	Cancelled
	GW-RS0531-16	06 Jun 2016	06 Jun 2016 to 05 Dec 2016	Valid
	GW-RW0240-16	04 May 2016	04 May 2016 to 28 Oct 2016	Cancelled

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
	GW-RS0533-16	26 May 2016	26 May 2016 to 23 Nov 2016	Valid
	GW-RS0779-16	14 Jul 2016	14 Jul 2016 to 13 Jan 2017	Valid
	GW-RS0838-16	03 Aug 2016	03 Aug 2016 to 31 Aug 2016	Cancelled
	GW-RS0869-16	20 Aug 2016	20 Aug 2016 to 30 Dec 2016	Valid
	GW-RS0888-16	23 Aug 2016	02 Sep 2015 to 28 Feb 2017	Cancelled
	GW-RS0930-16	17 Sep 2016	17 Sep 2016 to 17 Mar 2017	Valid
	GW-RS0969-16	19 Sep 2016	19 Sep 2016 to 18 Mar 2017	Valid
	GW-RS0971-16	19 Sep 2016	22 Oct 2016 to 20 Apr 2017	Valid
	GW-RS0977-16	21 Sep 2016	15 Nov 2016 to 14 May 2017	Valid

Table 3.15 Summary of submission status under FEP-10/364/2009/B

EP Condition	Submission	Date of Submission
Condition 2.9	Noise Management Plan (Rev.3)	03 January 2014
Condition 2.14	Landscape Plan (Rev.2)	19 May 2014
Condition 2.16	Additional Mitigation Plan (Rev.2)	18 February 2015

Contract no. HY/2011/08 –Central - Wan Chai Bypass (CWB) –Tunnel Buildings, Systems and Fittings, and Works Associated with Tunnel Commissioning under FEP-11/364/2009/B

3.1.13. The current status on licenses and/or permits on environmental protection pertinent and submission under FEP-11/364/2009/B for contract no. HY/2011/08 showed in **Table 3.16 and Table 3.17**.

Table 3.16 Cumulative Summary of Valid Licences and Permits under Contract no. HY/2011/08

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
Further Environmental Permit	FEP-11/364/2009/B	2 May 2014	N/A	Valid
Notification of Works Under APCO	LCAC-EN-LE-00017	7 Mar 2014	N/A	Valid
Registration as a Chemical Waste Producer	5213-121-L2837-01	19 Apr 2016	N/A	Registered
	5213-151-L2837-02	24 May 2016	N/A	Registered
	5213-134-L2898-01	16 Nov 2015	N/A	Registered
Billing Account under Waste Disposal Ordinance	7019640	27 Mar 2014	N/A	Valid
Construction Noise Permit (CNP) for non-piling equipment	GW-RS0222-16	8 Mar 2016	9 Mar 2016 to 31 Aug 2016	Expired
	GW-RS0284-16	23 Mar 2016	24 Mar 2016 to 31 Aug 2016	Expired
	GW-RS0419-16	29 Apr 2016	1 May 2016 to 31 Oct 2016	Valid
	GW-RS0520-16	24 May 2016	01 Jun 2016 to 30 Nov 2016	Valid
	GW-RS0538-16	24 May 2016	01 Jun 2016 to 30 Nov 2016	Valid
	GW-RS0626-16	22 Jun 2016	1 Jul 2016 to 31 Dec 2016	Valid
	GW-RS0645-16	22 Jun 2016	1 Jul 2016 to 31 Dec 2016	Valid
	GW-RS0801-16	29 Jul 2016	1 Aug 2016 to 31 Jan 2017	Valid
	GW-RS0811-16	28 Jul 2016	1 Aug 2016 to 31 Jan 2017	Valid
	GW-RS0891-16	25 Aug 2016	1 Sep 2016 to 28 Feb 2017	Valid
	GW-RS0892-16	25 Aug 2016	1 Sep 2016 to 28 Feb 2017	Valid
Water Discharge Licence	WT00020242-2014	04 Nov 2014	30 Nov 2019	Cancelled
	WT00022046-2015	15 Jul 2015	31 Jul 2019	Valid
	WT00022753-2015	3 May 2016	30 Apr 2021	Valid
	WT00024561-2016	30 May 2016	31 May 2021	Valid

Table 3.17 Summary of submission status under FEP-11/364/2009/B

EP Condition	Submission	Date of Submission
Condition 2.9	Noise Management Plan (Rev.4)	23 September 2016
Condition 2.14	Landscape Plan (Rev.2)	18 Feb 2015
Condition 2.13	Operational Air Quality Management Plan for West Ventilation Building (Rev.0)	25 Nov 2014
Condition 2.13	Operational Air Quality Management Plan for East Ventilation Building and East Vent Shaft (Rev.0)	18 Feb 2015

4 MONITORING REQUIREMENTS

4.1 Noise Monitoring

NOISE MONITORING STATIONS

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

Table 4.1 Noise Monitoring Stations

Station	Description
M1a	Harbour Road Sports Centre
M2b	Noon-day Gun Area
M3a	Tung Lo Wan Fire Station
M4b	Victoria Centre
M5b	City Garden
M6	HK Baptist Church Henrietta Secondary School
*M7e	International Finance Centre (Eastern End of Podium)
M7w	International Finance Centre (Western End of Podium)
*M8	City Hall

* Remark 1: Location ID has been updated from M7 to M8 for City Hall

* Remark 2: M7e has become a reference station starting from 7 Aug 2012

REAL TIME NOISE MONITORING STATIONS

- 4.1.2. The noise monitoring stations for the Project are listed and shown in **Table 4.2** and **Figure 4.1**. **Appendix 4.1** shows the established Action/Limit Levels for the monitoring works.

Table 4.2 Real Time Noise Monitoring Stations

District	Station	Description
Tin Hau	RTN1	FEHD Hong Kong Transport Section Whitfield Depot
North Point	RTN2a	Hong Kong Electric Centre
North Point	RTN3	Po Leung Kuk Yu Lee Mo Fan Memorial School
Tin Hau	RTN4	Causeway Bay Community Centre

NOISE MONITORING PARAMETERS, FREQUENCY AND DURATION

- 4.1.3. The construction noise level shall be measured in terms of the A-weighted equivalent continuous sound pressure level (L_{eq}). L_{eq} (30 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 minutes) shall be employed for comparison with the Noise Control Ordinance (NCO) criteria. Supplementary information for data auditing, statistical results such as L_{10} and L_{90} shall also be obtained for reference.
- 4.1.4. 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.
- 4.1.5. Real time noise shall be carried out at the designated monitoring stations. The following is an initial guide on the regular monitoring frequency for each station on a 24 - hours 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.
- 4.1.6. If construction works are extended to include works during the hours of 1900 – 0700 as well as public holidays and Sundays, additional weekly impact monitoring shall be carried out during respective restricted hours periods. Applicable permits under NCO shall be obtained by the Contractor.

MONITORING EQUIPMENT

- 4.1.7. 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.
- 4.1.8. 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.
- 4.1.9. The sound level meter shall be checked using an acoustic calibrator generating a known sound pressure level at a known frequency before deployment to the site and during each site visit. Measurements will be accepted as valid only if the calibration level from before and after the noise measurement agree to within 1.0 dB.

4.2 Air Quality Monitoring

AIR QUALITY MONITORING STATIONS

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

Table 4.3 Air Quality Monitoring Stations

Station ID	Monitoring Location	Description
CMA1b	Oil Street Site Office**	North Point (Re-commenced on 14 November 2011)
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
MA1e	International Finance Centre (Eastern End of Podium)	Central
MA1w	International Finance Centre (Western End of Podium)	Central

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

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

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

AIR QUALITY MONITORING PARAMETERS, FREQUENCY AND DURATION

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

SAMPLING PROCEDURE AND MONITORING EQUIPMENT

4.2.5. High volume samplers (HVSs) in compliance with the following specifications shall be used for carrying out the 1-hour and 24-hour TSP monitoring:

- 0.6 – 1.7 m³ per minute adjustable flow range;
- Equipped with a timing / control device with +/- 5 minutes accuracy for 24 hours operation;
- Installed with elapsed-time meter with +/- 2 minutes accuracy for 24 hours operation;
- Capable of providing a minimum exposed area of 406 cm²;
- Flow control accuracy: +/- 2.5% deviation over 24-hour sampling period;
- Equipped with a shelter to protect the filter and sampler;
- Incorporated with an electronic mass flow rate controller or other equivalent devices;
- Equipped with a flow recorder for continuous monitoring;
- Provided with a peaked roof inlet;
- Incorporated with a manometer;
- Able to hold and seal the filter paper to the sampler housing at horizontal position;
- Easily changeable filter; and
- Capable of operating continuously for a 24-hour period.

4.2.6. Initial calibration of dust monitoring equipment shall be conducted upon installation and thereafter at bi-monthly intervals. The transfer standard shall be traceable to the internationally recognized primary standard and be calibrated annually. The concern parties such as IEC shall properly document the calibration data for future reference. All the data should be converted into standard temperature and pressure condition.

LABORATORY MEASUREMENT / ANALYSIS

4.2.7. A clean laboratory with constant temperature and humidity control, and equipped with necessary measuring and conditioning instruments to handle the dust samples collected, shall be available for sample analysis, and equipment calibration and maintenance. The laboratory should be HOKLAS accredited.

4.2.8. Filter paper of size 8" x 10" shall be labelled before sampling. It shall be a clean filter paper with no pinholes, and shall be conditioned in a humidity-controlled chamber for over 24 hours and be pre-weighed before use for the sampling.

4.2.9. After sampling, the filter paper loaded with dust shall be kept in a clean and tightly sealed plastic bag. The filter paper shall then be returned to the laboratory for reconditioning in the humidity controlled chamber followed by accurate weighing by an electronic balance with readout down to 0.1 mg. The balance shall be regularly calibrated against a traceable standard.

4.2.10. All the collected samples shall be kept in a good condition for 6 months before disposal.

4.2.11. Current calibration certificates of equipments are presented in **Appendix 4.2.**

5.0 MONITORING RESULTS

5.0.1. The environmental monitoring will be implemented based on the division of works areas of each designated project managed under different contracts with separate FEP applied by individual contractors. Overall layout showing work areas of various contracts, latest status of work commencement and monitoring stations is shown in **Figure 2.1** and **Figure 4.1**. The monitoring results are presented in according to the Individual Contract(s).

5.0.2. In the reporting month, the concurrent contracts are as follows:

- Contract no. HY/2009/15 – Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section)
- Contract no. HY/2009/18 – Central – Wan Chai Bypass (CWB) – Central Interchange
- Contract no. HY/2009/19 – Central – Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link
- Contract no. HY/2010/08 – Central- Wanchai Bypass Tunnel (Slip Road 8 Section)
- Contract no. HK/2009/01 – Wan Chai Development Phase II – Central – Wan Chai Bypass at Hong Kong Convention and Exhibition Centre
- Contract no. HK/2009/02 - Wan Chai Development Phase II – Central - Wan Chai Bypass at Wan Chai East
- Contract no. HK/2012/08 – Wan Chai Development Phase II – Central – Wan Chai Bypass at Wan Chai West
- Contract no. HY/2011/08 – Central - Wan Chai Bypass (CWB)– Tunnel Buildings, Systems and Fittings, and Works Associated with Tunnel Commissioning

5.0.3. The environment monitoring schedules for reporting month and coming month are presented in **Appendix 5.1**.

5.1 Noise Monitoring Results

- 5.1.1 Monitoring for report of review baseline noise level was performed from 11 April 2011 to 8 June 2011. Then the report was submitted on the 20 June 2011, verified by IEC on 18 July 2011 and was approved by ER by January 2012. The new baseline is used for the noise calculation starting from January 2012.

Contract no. HY/2009/18 – Central – Wan Chai Bypass (CWB) – Central Interchange under FEP-05/364/2009/A

- 5.1.2 Noise monitoring for the Central Interchange works under contract no. HY/2009/18 was commenced on 22 April 2011. The proposed division of noise monitoring stations for Contract no. HY/2009/18 are summarized in **Table 5.1** below:

Table 5.1 Noise Monitoring Stations for Contract no. HY/2009/18

Station	Description
*M7e	International Finance Centre (Eastern End of Podium)
M7w	International Finance Centre (Western End of Podium)
M8	City Hall

* Remark: M7e has become a reference station starting from 7 Aug 2012

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

Contract no. HK/2009/01 – Wan Chai Development Phase II – Central – Wan Chai Bypass at Hong Kong Convention and Exhibition Centre – Tunnel Works under FEP-02/364/2009 and Contract no. HK/2009/02 – Wan Chai Development Phase II – Central – Wan Chai Bypass at Wan Chai East (CWB Tunnel) under FEP-01/364/2009

- 5.1.5 The commencement of construction works for Contract no. HK/2009/01 under FEP-02/364/2009 is on 25 August 2011 and HK/2009/02 under FEP-01/364/2009 is on 26 April 2011. The proposed division of noise monitoring stations are summarized in **Table 5.2** below.

Table 5.2 Noise Monitoring Station for Contract no HK/2009/01 and HK/2009/02

Station	Description
M1a	Harbour Road Sports Centre

- 5.1.6 Two limit level exceedances were recorded on 11 and 19 October 2016 at M1a- Harbour Road Sports Centre in this reporting month.

5.1.7 Operation of drill rig at opposite to the monitoring station under non WDII-CWB Contractor was observed as the major noise contribution during monitoring on 11 and 19 October 2016. As such, the exceedances were considered as non-Project related.

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

Contract no. HY/2009/15 – Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section) under FEP-06/364/2009/A

5.1.9 The commencement of construction works for Contract no. HY/2009/15 under FEP-06/364/2009/A was on 13 July 2011. Noise monitoring was commenced on 13 July 2011. The proposed divisions of noise monitoring stations are summarized in **Table 5.3** below.

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

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

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

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

Contract no. HY/2009/19 – Central – Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link under FEP-07/364/2009/D

5.1.12 Noise monitoring for the tunnel works under contract no. HY/2009/19 was commenced on 24 April 2011. The proposed division of noise monitoring stations are summarized in **Table 5.4** below.

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

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

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

5.1.14 Noise monitoring results measured in this reporting period are reviewed and summarized. Details of noise monitoring results and graphical presentation can be referred in **Appendix 5.2**. Details of the Notification of Exceedance can be referred in **Appendix 6.2**.

Contract no. HY/2010/08 – Central-Wanchai Bypass –Wanchai Bypass Tunnel (Slip Road 8 Section) under FEP-09/364/2009/B

- 5.1.15 The commencement of construction works for Contract no. HY/2010/08 under FEP-10/364/2009/B was on 02 September 2013. Noise monitoring was commenced on 02 September 2013. The proposed divisions of noise monitoring stations are summarized in **Table 5.5** below.

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

Station	Description
M3a	Tung Lo Wan Fire Station

- 5.1.16 No action or limit level exceedance was recorded in this reporting month.
- 5.1.17 Noise monitoring results measured in this reporting period are reviewed and summarized. Details of noise monitoring results and graphical presentation can be referred in **Appendix 5.2.**

Contract no. HY/2011/08 – Central - Wan Chai Bypass (CWB) – Tunnel Buildings, Systems and Fittings, and Works Associated with Tunnel Commissioning

- 5.1.18 Noise monitoring for the Central Interchange works under contract no. HY/2009/18 was commenced on 22 April 2011. The proposed division of noise monitoring stations for Contract no. HY/2011/08 are summarized in **Table 5.6** below:

Table 5.6 Noise Monitoring Stations for Contract no. HY/2011/08

Station	Description
M4b	Victoria Centre
*M7e	International Finance Centre (Eastern End of Podium)
M7w	International Finance Centre (Western End of Podium)
M8	City Hall

* Remark: M7e has become a reference station starting from 7 Aug 2012

- 5.1.19 No action or limit level exceedance was recorded in this reporting month.
- 5.1.20 Noise monitoring results measured in this reporting period are reviewed and summarized. Details of noise monitoring results and graphical presentation can be referred in **Appendix 5.2.**

5.2 Real Time Noise Monitoring Results

- 5.2.1. Real time noise monitoring at RTN4-Causeway Bay Community Centre was commenced on 13 Jan 2013. The baseline noise level of RTN4- Causeway Bay Community Centre has adopted the results from the baseline noise monitoring report for EP/364/2009 in 22 April 2010 in which approved by EPD.
- 5.2.2. Po Leung Kuk Yu Lee Mo Fan Memorial School granted permission for set up on 4 Sep 2012 and real time noise monitoring station RTN3 set up was performed on 14 Sep 2012. Real time noise baseline capturing was conducted during time period without construction work from 21 Sep 2012 to 04 Oct 2012. Real time noise monitoring at RTN3 – Po Leung Kuk Yu Lee Mo Fan Memorial School was commenced since 06 Oct 2012.
- 5.2.3. Real-time noise monitoring station RTN2 previously located at oil Street Community Liaison Centre was relocated to Hong Kong Electric Centre on 5 Oct 2012, which is a representative of the noise sensitive receiver City Garden. The baseline noise level of RTN2a will adopt the results derived from the baseline noise monitoring conducted at Hong Kong Electric Centre from 4 December 2009 to 17 December 2009.
- 5.2.4. Real-time noise monitoring station RTN1-FEHD Whitfield Depot was finely adjusted from 2/F to roof-top at FEHD Whitfield Depot on 24 June 2013 with respect to the commencement of advance works for IEC parapet demolition.

Contract no. HY/2009/19 – Central – Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link under FEP-07/364/2009/D

- 5.2.5. The proposed division of noise monitoring stations are summarized in **Table 5.7** below. Real time noise monitoring for major construction works under contract no. HY/2009/19 was commenced on 24 April 2011.

Table 5.7 Real Time Noise Monitoring Stations for Contract no. HY/2009/19

Location ID	District	Description
RTN1	Tin Hau	FEHD Hong Kong Transport Section Whitfield Depot
RTN2a	North Point	Hong Kong Electric Centre
RTN3	North Point	Po Leung Kuk Yu Lee Mo Fan Memorial School
RTN4	Tin Hau	Causeway Bay Community Centre

** Real time noise monitoring results and graphical presentation during restrict hours and night time period are for information only and noise during CNP period shall be controlled under NCO.*

- 5.2.6. No limit level exceedance was recorded at RTN1-FEHD Hong Kong Transport Section Whitfield Depot was recorded in the reporting month.
- 5.2.7. Limit level exceedances were recorded at RTN2a- Hong Kong Electric Centre on 17, 18, 19, 20, 21, 22, 24, 25 and 26 October 2016 during daytime in the reporting month. After checking with Contractor of HY/2009/19, on 17, 18 (morning), 22, 24, 25 and 26 October 2016, sheet pile driving near existing IEC were conducted and noise mitigation measure including

provision of noise barrier along site boundary were implemented. Non CWB Project building demolition works opposite to the monitoring station were observed in October 2016 as the major noise contribution. On 18(afternoon), 19, 20 and 21 October 2016, no construction activities were conducted under HY/2009/19 while adverse weather condition with rainstorm and gust were recorded during the above monitoring period. In view of the above, the exceedances were considered as non-Project related.

- 5.2.8. Limit level exceedance were recorded at RTN3-Yue Lee Mo Fan Memorial School on 18, 19 and 21 October 2016 during daytime in the reporting month. After checking with the Contractor of HY/2009/19, on 18, 19 and 21 October 2016, no construction activities were conducted under HY/2009/19 while adverse weather condition with rainstorm and gust were recorded during the above monitoring period. In view of the above, the exceedances were considered as non-Project related.
- 5.2.9. No limit level exceedance was recorded at RTN4-Causeway Bay Community Centre in the reporting month.
- 5.2.10. Real time noise monitoring results measured in this reporting period are reviewed and summarized. Details of real time noise monitoring results and graphical presentation can be referred to **Appendix 5.4.**

Contract no. HY/2011/08 – Central - Wan Chai Bypass (CWB) – Tunnel Buildings, Systems and Fittings, and Works Associated with Tunnel Commissioning

- 5.2.11. The proposed division of noise monitoring stations are summarized in **Table 5.8** below. Real time noise monitoring for major construction works under contract no. HY/2011/08 was commenced on 19 March 2015.

Table 5.8 Real Time Noise Monitoring Stations for Contract no. HY/2011/08

Location ID	District	Description
RTN1	Tin Hau	FEHD Hong Kong Transport Section Whitfield Depot
RTN2a	North Point	Hong Kong Electric Centre
RTN4	Tin Hau	Causeway Bay Community Centre

** Real time noise monitoring results and graphical presentation during restrict hours and night time period are for information only and noise during CNP period shall be controlled under NCO.*

- 5.2.12. No limit level exceedance was recorded at RTN1-FEHD Hong Kong Transport Section Whitfield Depot was recorded in the reporting month.
- 5.2.13. Limit level exceedances were recorded at RTN2a- Hong Kong Electric Centre on 17, 18, 19, 20, 21, 22, 24, 25 and 26 October 2016 during daytime in the reporting month. After checking with Contractor of HY/2011/08, on 17, 18, 19, 22, 24, 25 and 26 October 2016, formwork and falsework erection and bar fixing were conducted no major construction noise impact from the above work is considered. Non CWB Project building demolition works opposite to the monitoring station were observed in October 2016 as the major noise contribution. Only site cleaning works was conducted on 20 October 2016 and no construction activities was

conducted on 21 October 2016 under HY/2011/08 while adverse weather condition with rainstorm and gust were recorded during the above monitoring period. In view of the above, the exceedances were considered as non-Project related.

- 5.2.14. No limit level exceedance was recorded at RTN4-Causeway Bay Community Centre in the reporting month.

5.3 Air Quality Monitoring Results

Contract no. HY/2009/18 – Central – Wan Chai Bypass (CWB) – Central Interchange under FEP-05/364/2009/A

- 5.3.1 Air quality monitoring for the Central Interchange works under contract no. HY/2009/18 was commenced on 21 April 2011. The proposed division of air quality monitoring stations are summarized in **Table 5.9** below.

Table 5.9 Air Quality Monitoring Stations for Contract no. HY/2009/18

Station	Description
MA1e	International Finance Centre (Eastern End of Podium)
MA1w	International Finance Centre (Western End of Podium)

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

Contract no. HK/2009/01 – Wan Chai Development Phase II – Central – Wan Chai Bypass at Hong Kong Convention and Exhibition Centre – Tunnel Works under FEP-02/364/2009

- 5.3.4 The commencement of construction works for Contract no. HK/2009/01 under FEP-02/364/2009 is on 25 August 2011. Air quality monitoring was commenced on 25 August 2011. The proposed division of air quality monitoring stations are summarized in **Table 5.10** below.

Table 5.10 Air Quality Monitoring Station for Contract no. HK/2009/01

Station	Description
CMA5b	Pedestrian Plaza

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

Contract no. HK/2009/02 – Wan Chai Development Phase II – Central – Wan Chai Bypass at Wan Chai East (CWB Tunnel) under FEP-01/364/2009

- 5.3.7 The commencement of construction works for HK/2009/02 under FEP-01/364/2009 is on 26 April 2011. The proposed division of air quality monitoring stations are summarized in **Table 5.11** below.

Table 5.11 Air Quality Monitoring Station for Contract no. HK/2009/02

Station	Description
CMA4a	Society for the Prevention of Cruelty to Animals

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

Contract no. HY/2009/15 – Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section) under FEP-06/364/2009/A

- 5.3.10 The commencement of construction works for Contract no. HY/2009/15 under FEP-06/364/2009/A was on 13 July 2011. Air quality monitoring was commenced on 14 July 2011. The proposed division of air quality monitoring stations are summarized in **Table 5.12** below.

Table 5.12 Air Quality Monitoring Station for Contract no. HY/2009/15

Station	Description
CMA3a	CWB PRE Site Office

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

Contract no. HY/2009/19 – Central – Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link under FEP-07/364/2009/D

- 5.3.13 The proposed division of air quality monitoring stations are summarized in **Table 5.13** below. Air quality monitoring for the tunnel works under contract no. HY/2009/19 was commenced on 26 April 2011.

Table 5.13 Air Quality Monitoring Stations for Contract no. HY/2009/19

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

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

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

- 5.3.16 The commencement of construction works for Contract no. HK/2012/08 under FEP-09/364/2009/C was on May 2014. Air quality monitoring was commenced on 25 August 2011. The proposed division of air quality monitoring stations are summarized in **Table 5.14** below.

Table 5.14 Air Quality Monitoring Station for Contract no. HK/2012/08

Station	Description
CMA5b	Pedestrian Plaza

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

Contract no. HY/2010/08 – Central-Wanchai Bypass –Wanchai Bypass Tunnel (Slip Road 8 Section) under FEP-09/364/2009/B

- 5.3.19 The commencement of construction works for Contract no. HY/2010/08 under FEP-09/364/2009/B was on July 2014. Air quality monitoring was commenced on 14 July 2011. The proposed division of air quality monitoring stations are summarized in **Table 5.15** below.

Table 5.15 Air Quality Monitoring Station for Contract no. HY/2010/08

Station	Description
CMA3a	CWB PRE Site Office

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

Contract no. HY/2011/08 – Central - Wan Chai Bypass (CWB) – Tunnel Buildings, Systems and Fittings, and Works Associated with Tunnel Commissioning

- 5.3.21 Air quality monitoring for the Central Interchange works under contract no. HY/2011/08 was commenced on 21 April 2011. The proposed division of air quality monitoring stations are summarized in **Table 5.16** below.

Table 5.16 Air Quality Monitoring Stations for Contract no. HY/2011/08

Station	Description
MA1e	International Finance Centre (Eastern End of Podium)
MA1w	International Finance Centre (Western End of Podium)
CMA1b	Oil Street Site Office
CMA2a	Causeway Bay Community Centre

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

5.4 Waste Monitoring Results

Contract no. HK/2009/01 – Wan Chai Development Phase II – Central – Wan Chai Bypass at Hong Kong Convention and Exhibition Centre – Tunnel Works under FEP-02/364/2009

- 5.4.1. Inert C&D wastes and non-inert C&D wastes were disposed in this reporting month. Details of the waste flow table are summarized in **Table 5.17**.

Table 5.17 Details of Waste Disposal for Contract no. HK/2009/01

Waste Type	Quantity this month	Cumulative-to-Date	Disposal / Dumping Grounds
Inert C&D materials disposed, m³	Nil	107912.13	TKO137, TM38
Inert C&D materials recycled, m³	Nil	98512.03	N/A
Non-inert C&D materials disposed, m³	30.94	5006.44	SENT Landfill
Non-inert C&D materials recycled, kg	200	1285146	N/A
Chemical waste disposed, kg	Nil	10400	N/A
Marine Sediment (Type 1 – Open Sea Disposal), m³	Nil	11527	South of Cheung Chau
Marine Sediment (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal), m³	Nil	16261	East of Cha Chau South Brothers

Contract no. HK/2009/02 – Wan Chai Development Phase II – Central – Wan Chai Bypass at Wan Chai East (CWB Tunnel) under FEP-01/364/2009

- 5.4.2. Inert C&D & non-inert C&D wastes were disposed of in this reporting month. Details of the waste flow table are summarized in **Table 5.18**.

Table 5.18 Details of Waste Disposal for Contract no. HK/2009/02

Waste Type	Quantity this month	Cumulative Quantity-to-Date	Disposal / Dumping Grounds
Inert C&D materials disposed, m ³	6782	508358.412	TKO137 / TM 38
Inert C&D materials recycled, m ³	Nil	46520	N/A
Non-inert C&D materials disposed, m ³	65	3812.317	SENT Landfill
Non-inert C&D materials recycled, m ³	Nil	N/A	N/A
Chemical waste disposed, kg	Nil	17718	N/A
Marine Sediment (Type 1 – Open Sea Disposal) , m ³	7594	38680	South Cheung Chau

Contract no. HY/2009/18 – Central – Wan Chai Bypass (CWB) – Central Interchange under FEP-05/364/2009/A

- 5.4.3. Inert C&D and non-inert C&D waste was disposed of in this reporting month. Details of the waste flow table are summarized in **Table 5.19**.

Table 5.19 Details of Waste Disposal for Contract no. HY/2009/18

Waste Type	Quantity this month	Cumulative-to-Date	Disposal / Dumping Grounds
Inert C&D materials disposed, m ³	95.78	140883.72	T.K.O. 137, TM 38
Inert C&D materials recycled, m ³	Nil	58787.05	N/A
Non-inert C&D materials disposed, m ³	18.48	4203.93	SENT Landfill
Non-inert C&D materials recycled, ton	Nil	878.37	N/A
Chemical waste disposed, kg	Nil	6772	N/A

Contract no. HY/2009/15 – Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section) under FEP-06/364/2009/A

- 5.4.4. Inert & Non-inert C&D wastes were disposed of in this reporting month. Details of the waste flow table are summarized in **Table 5.20**.

Table 5.20 Details of Waste Disposal for Contract no. HY/2009/15

Waste Type	Quantity this month	Cumulative Quantity-to-Date	Disposal / Dumping Grounds
Inert C&D materials disposed, m^3	1079.59 Nil	623910.83 245453.3	Tuen Mun Area 38 TKO137 FB
Inert C&D materials recycled, m^3	Nil	358660.77	HY/2009/11 ex-PCWA TS4 /TS2 WDII Lun Ku Tan WENT HY/2010/08
Non-inert C&D materials disposed, m^3	71.50 Nil	4586.65 1.58	SENT Landfill WENT Landfill
Non-inert C&D materials recycled, m^3	Nil	5496446.2	Xun Xiang Metalware Skylight Recycle (paper)
Chemical waste disposed, kg	Nil	22755	Dunwell Group
Marine Sediment (Type1-Open Sea Disposal (Dedicate Sites) &Type 2 – Confined Marine Disposal), m^3	Nil	5684	South of the Brothers

Contract no. HY/2009/19 – Central – Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link under FEP-07/364/2009/D

- 5.4.5. Inert and Non-inert C&D wastes were disposed of in this reporting month. Details of the waste flow table are summarized in **Table 5.21**.

Table 5.21 Details of Waste Disposal for Contract no. HY/2009/19

Waste Type*	Quantity this month	Cumulative-to-Date	Disposal / Dumping Grounds
Inert C&D materials disposed, ton	Nil	659822.97	N/A
Inert C&D materials recycled, ton	Nil	82349.7	N/A
Non-inert C&D materials disposed, ton	96.6	5250.01	SENT Landfill
Non-inert C&D materials recycled, ton	Nil	560.56	N/A
Chemical waste disposed, kg	Nil	10.02	N/A
Marine Sediment (Tunnel) (Type-1 Open Sea Disposal), m³	Nil	20556	South of Cheung Chau
Marine Sediment (Tunnel) (Type 1- Open Sea Disposal (Dedicated Sites) & Type 2 – Confined Marine Disposal), m³	Nil	30751	East of Sha Chau

Contract no. HK/2012/08 Wan Chai Development Phase II - Central-Wan Chai Bypass at Wan Chai West under FEP-09/364/2009/B

- 5.4.6. No inert and Non-inert C&D wastes were disposed of in this reporting month. Details of the waste flow table are summarized in **Table 5.22**.

Table 5.22 Details of Waste Disposal for Contract no. HK/2012/08

Waste Type*	Quantity this month	Cumulative-to-Date	Disposal / Dumping Grounds
Inert C&D materials disposed, m ³	1568 10152	176792 110197	TKO 137 TM38
Inert C&D materials recycled, m ³	Nil	Nil	N/A
Non-inert C&D materials disposed, m ³	400	2907	SENT
Non-inert C&D materials recycled, m ³	Nil	Nil	N/A
Chemical waste disposed, kg	Nil	Nil	N/A
Marine sediment (Type 1) disposal, m ³	Nil	3145	South of Cheung Chau / East of Sha Chau / South of The Brothers

Remarks: The quantity of inert C&D material disposed, recycled, non-inert C&D material disposed, recycled are reported up to calendar month on 31 October 2016.

Contract no. HY/2010/08 Central – Wan Chai Bypass (CWB) – Tunnel (Slip Road 8) under FEP-10/364/2009/B

- 5.4.7. No inert and Non-inert C&D wastes were disposed of in this reporting month. Details of the waste flow table are summarized in **Table 5.23**.

Table 5.23 Details of Waste Disposal for Contract no. HY/2010/08

Waste Type*	Quantity this month	Cumulative-to-Date	Disposal / Dumping Grounds
Inert C&D materials disposed, m ³	103.9	572880.9	TM 38
	Nil	262656.6	WENT
	Nil	82911.8	SENT
	465.6	71778.1	TKO area 137
Inert C&D materials recycled, m ³	Nil	Nil	N/A
Non-inert C&D materials disposed, m ³	384.6	2754.76	SENT
Non-inert C&D materials recycled, m ³	Nil	Nil	N/A
Chemical waste disposed, kg	Nil	979	N/A
Type 1 – Open Sea Disposal, m ³	Nil	16368.4	East Sha Chau/ South Brothers Island
Type 2 – Confined Marine disposal, m ³	Nil	549.2	East Sha Chau

Contract no. HY/2011/08 Central –Central - Wan Chai Bypass (CWB) –Tunnel Buildings, Systems and Fittings, and Works Associated with Tunnel Commissioning under FEP-11/364/2009B

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

Table 5.24 Details of Waste Disposal for Contract no. HY/2011/08

Waste Type*	Quantity this month	Cumulative-to-Date	Disposal / Dumping Grounds
Inert C&D materials disposed, m ³	46.46	543.67	CWPF & TKO137
Inert C&D materials recycled, m ³	Nil	Nil	N/A
Non-inert C&D materials disposed, m ³	152.48	1117.01	SENT
Non-inert C&D materials recycled, ton	Nil	31.72	N/A
Chemical waste disposed, kg	Nil	3800	N/A

6.0 COMPLIANCE AUDIT

- 6.0.1. The Event Action Plan for construction noise, air qualities are presented in **Appendix 6.1**.

6.1 Noise Monitoring

Contract no. HY/2009/18 – Central – Wan Chai Bypass (CWB) – Central Interchange under FEP-05/364/2009/A

- 6.1.1. No exceedance was recorded in the reporting month.

Contract no. HK/2009/01 – Wan Chai Development Phase II – Central – Wan Chai Bypass at Hong Kong Convention Exhibition Centre – Tunnel Works under FEP-02/364/2009

- 6.1.2. Two limit level exceedances were recorded on 11 and 19 October 2016 at M1a- Harbour Road Sports Centre in this reporting month.

- 6.1.3. Operation of drill rig at opposite to the monitoring station under non WDII-CWB Contractor was observed as the major noise contribution during monitoring on 11 and 19 October 2016. As such, the exceedances were considered as non-Project related.

Contract no. HK/2009/02 – Wan Chai Development Phase II – Central – Wan Chai Bypass at Wan Chai East (CWB Tunnel) under FEP-01/364/2009

- 6.1.4. Two limit level exceedances were recorded on 11 and 19 October 2016 at M1a- Harbour Road Sports Centre in this reporting month.

- 6.1.5. Operation of drill rig at opposite to the monitoring station under non WDII-CWB Contractor was observed as the major noise contribution during monitoring on 11 and 19 October 2016. As such, the exceedances were considered as non-Project related.

Contract no. HY/2009/15 – Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section) under FEP-06/364/2009/A

- 6.1.6. No exceedance was recorded in the reporting month.

Contract no. HY/2009/19 – Central – Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link under FEP-07/364/2009/D

- 6.1.7. No exceedance was recorded in the reporting month.

Contract no. HY/2010/08 – Central-Wanchai Bypass – Tunnel (Slip Road 8 Section) under FEP-10/364/2009/B

- 6.1.8. No exceedance was recorded in the reporting month.



Contract no. HY/2011/08 Central –Central - Wan Chai Bypass (CWB) –Tunnel Buildings, Systems and Fittings, and Works Associated with Tunnel Commissioning under FEP-11/364/2009B

6.1.9. No exceedance was recorded in the reporting month.

Real Time Noise Monitoring

Contract no. HY/2009/19 – Central – Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link under FEP-07/364/2009/D

- 6.1.10. No limit level exceedance was recorded at RTN1-FEHD Hong Kong Transport Section Whitfield Depot was recorded in the reporting month.
- 6.1.11. Limit level exceedances were recorded at RTN2a- Hong Kong Electric Centre on 17, 18, 19, 20, 21, 22, 24, 25 and 26 October 2016 during daytime in the reporting month. After checking with Contractor of HY/2009/19, on 17, 18 (morning), 22, 24, 25 and 26 October 2016, sheet pile driving near existing IEC were conducted and noise mitigation measure including provision of noise barrier along site boundary were implemented. Non CWB Project building demolition works opposite to the monitoring station were observed in October 2016 as the major noise contribution. On 18 (afternoon), 19, 20 and 21 October 2016, no construction activities were conducted under HY/2009/19 while adverse weather condition with rainstorm and gust were recorded during the above monitoring period. In view of the above, the exceedances were considered as non-Project related.
- 6.1.12. Limit level exceedance were recorded at RTN3-Yue Lee Mo Fan Memorial School on 18, 19 and 21 October 2016 during daytime in the reporting month. After checking with the Contractor of HY/2009/19, on 18, 19 and 21 October 2016, no construction activities were conducted under HY/2009/19 while adverse weather condition with rainstorm and gust were recorded during the above monitoring period. In view of the above, the exceedances were considered as non-Project related.
- 6.1.13. No limit level exceedance was recorded at RTN4-Causeway Bay Community Centre in the reporting month.

Contract no. HY/2011/08 Central –Central - Wan Chai Bypass (CWB) –Tunnel Buildings, Systems and Fittings, and Works Associated with Tunnel Commissioning under FEP-11/364/2009B

- 6.1.14. No limit level exceedance was recorded at RTN1-FEHD Hong Kong Transport Section Whitfield Depot was recorded in the reporting month.
- 6.1.15. Limit level exceedances were recorded at RTN2a- Hong Kong Electric Centre on 17, 18, 19, 20, 21, 22, 24, 25 and 26 October 2016 during daytime in the reporting month. After checking with Contractor of HY/2011/08, on 17, 18, 19, 22, 24, 25 and 26 October 2016, formwork and falsework erection and bar fixing were conducted no major construction noise impact from the above work is considered. Non CWB Project building demolition works opposite to the monitoring station were observed in October 2016 as the major noise contribution. Only site cleaning works was conducted on 20 October 2016 and no construction activities was conducted on 21 October 2016 under HY/2011/08 while adverse weather condition with rainstorm and gust were recorded during the above monitoring period. In view of the above, the exceedances were considered as non-Project related.

- 6.1.16. No limit level exceedance was recorded at RTN4-Causeway Bay Community Centre in the reporting month.

6.2 Air Quality Monitoring

Contract no. HY/2009/18 – Central – Wan Chai Bypass (CWB) – Central Interchange under FEP-05/364/2009/A

- 6.2.1. No exceedance was recorded in the reporting month.

Contract no. HK/2009/01 – Wan Chai Development Phase II – Central – Wan Chai Bypass at Hong Kong Convention and Exhibition Centre – Tunnel Works under FEP-02/364/2009

- 6.2.2. No exceedance was recorded in the reporting month.

Contract no. HK/2009/02 – Wan Chai Development Phase II – Central – Wan Chai Bypass at Wan Chai East (CWB Tunnel) under FEP-01/364/2009

- 6.2.3. No exceedance was recorded in the reporting month.

Contract no. HY/2009/15 – Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section) FEP-06/364/2009/A

- 6.2.4. No exceedance was recorded in the reporting month.

Contract no. HY/2009/19 – Central – Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link under FEP-07/364/2009/D

- 6.2.5. No exceedance was recorded in the reporting month.

Contract no. HK/2012/08 Wan Chai Development Phase II - Central-Wan Chai Bypass at Wan Chai West under FEP-09/364/2009/B

- 6.2.6. No exceedance was recorded in the reporting month.

Contract no. HY/2010/08 – Central-Wanchai Bypass – Tunnel (Slip Raod 8 Section) under FEP-10/364/2009/B

- 6.2.7. No exceedance was recorded in the reporting month.

Contract no. HY/2011/08 Central –Central - Wan Chai Bypass (CWB) –Tunnel Buildings, Systems and Fittings, and Works Associated with Tunnel Commissioning under FEP-11/364/2009B

- 6.2.1. No exceedance was recorded in the reporting month.

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

- 6.3.1. There was no non-compliance from the site audits and monitoring in the reporting period. The observations and recommendations made in each individual site audit session were presented in Section 8.

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

- 6.4.1. There was no particular action taken since no non-compliance was recorded from the site audits and monitoring in the reporting period.

7.0 CUMULATIVE CONSTRUCTION IMPACT DUE TO THE CONCURRENT PROJECTS

- 7.0.1. According to Condition 3.4 of the EP-364/2009/D, this section addresses the relevant cumulative construction impact due to the concurrent activities of the current projects including the Central Reclamation Phase III (CRIII), Wan Chai Development Phase II (WDII), Central-WanChai Bypass (CWB), Island Eastern Corridor Link projects (IECL) and Wan Chai Development Phase II – Central – Wan Chai Bypass at Wan Chai East (CWB Tunnel).
- 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. As such, it is considered that there were no cumulative construction impact due to the concurrent activities of the current projects with the Central Reclamation Phase III (CRIII) undertaken by contractor HK12/02 in the reporting month.
- 7.0.3. According to the construction programme of Central-Wanchai Bypass at Wanchai West at the Central Reclamation Phase III area include removal for bulkhead, road works and drainage works were performed in October 2016 reporting month. As no project related exceedance were recorded during the reporting period, cumulative construction impact due to the concurrent activities of the current projects with the Central Reclamation Phase III (CRIII) was considered as insignificant.
- 7.0.4. According to the construction programme of Wan Chai Development Phase II, Central-Wan Chai Bypass and Island Eastern Corridor Link projects, the major construction activities under Wan Chai Development Phase II were culvert reinstatement, road and drains, building demolition and tunnel works at Wan Chai East and tunnel construction and ELS works at Wan Chai West. The major construction activities under Central-Wan Chai Bypass and Island Eastern Corridor Link Projects were road works and ventilation building construction at Central Interchange, temporary reclamation removal works at Ex-PCWAW, ELS works and retaining wall construction at Victoria Park, ELS works and tunnel works at TS3, bridge construction, piling and tunnel works at North Point area in the reporting month. In addition, other non-Wan Chai Development Phase II, Central-Wan Chai Bypass and Island Eastern Corridor Link projects was observed undertaken at Wan Chai North and North Point area.
- 7.0.5. No significant air quality impact from construction activities was anticipated in the reporting month. Besides, no project related exceedance was recorded during the air quality 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.

8.0 ENVIROMENTAL SITE AUDIT

- 8.0.1. During this reporting month, weekly environmental site audits were conducted for Contracts no. HY/2009/15, HY/2009/18, HY/2009/19, HK/2012/08, HK/2009/01, HK/2009/02, HY/2010/08 and HY/2011/08. No non-conformance was identified during the site audits. The Contractors rectified major observations and recommendations made during the audit sessions. No non-conformance was identified during the site inspections.
- 8.0.2. Site inspections for Contract no. HY/2009/15 were carried out during this reporting period. No observation was found in the reporting month.

Table 8.1 Summary of Environmental Inspections for Contract no. HY/2009/15

Item	Date	Observations	Action taken by Contractor	Completion date
161018_1	18 Oct 2016	Oil inside the drainage shall be cleared as chemical waste (EX-PACWA North)	Oil patch was cleaned as chemical waste	Completion as observed on 25 October 2016

- 8.0.3. Site inspections for Contract no. HY/2009/18 were carried out during this reporting period. The results of these inspections and outcomes are summarized in **Table 8.2**.

Table 8.2 Summary of Environmental Inspections for Contract no. HY/2009/18

Item	Date	Observations	Action taken by Contractor	Completion date
161013_1	13 Oct 2016	Watering shall be provided to breaking works at Bridge B)	No further breaking works was observed	Completion as observed on 20 October 2016
161020_1	20 Oct 2016	Contractor shall ensure the waste water treated properly prior to discharge	No further discharge was observed	Completion as observed on 27 October 2016

- 8.0.4. Site inspections for Contract no. HY/2009/19 were carried out during this reporting period. The results of these inspections and outcomes are summarized in **Table 8.3**.

Table 8.3 Summary of Environmental Inspections for Contract no. HY/2009/19

Item	Date	Observations	Action taken by Contractor	Completion date
160928_1	28 Sep 2016	Damage pipe of construction effluent shall be repaired immediately and leaked effluent shall be cleared immediately (Watson Road)	Damage pipe was repaired	Completion as observed on 5 October 2016

- 8.0.5. Site inspections for Contract no. HK/2009/01 was carried out during this reporting period. The results of these inspections and outcomes are summarized in **Table 8.4**.

Table 8.4 Summary of Environmental Inspections for Contract no. HK/2009/01

Item	Date	Observations	Action taken by Contractor	Completion date
161026_01	26 Oct 2016	Road cleaning at Gate V1 was observed. Washed effluent shall be properly collected and treated before discharge and shall not directly washed into existing manhole.	No effluents was observed on the public road and no discharge was further observed in the nearby existing manhole.	Completion as observed on 2 November 2016.

- 8.0.6. Site inspections for Contract no. HK/2009/02 were carried out during this reporting period. The results of these inspections and outcomes are summarized in **Table 8.5**.

Table 8.5 Summary of Environmental Inspections for Contract no. HK/2009/02

Item	Date	Observations	Action taken by Contractor	Completion date
160929_01	29 Sep 2016	Container containing chemical fluid in Portion 3&4 shall be properly handled and stored in a designated storage area.	The concerned chemical container has been removed in Portion 3&4.	Completion as observed on 06 October 2016
161013_01	13 Oct 2016	The dust screen arrangement for the demolition of old WSD Wan Chai Salt Water Pumping Station shall be reviewed and shall follow the alignment arrangement as per the agreed Method Statement.	The concerned wall has been demolished.	Completion as observed on 18 October 2016

- 8.0.7. Site inspection for Contract no. HK/2012/08 were carried out during this reporting period. The results of these inspections and outcomes are summarized in **Table 8.6**.

Table 8.6 Summary of Environmental Inspections for Contract no. HK/2012/08

Item	Date	Observations	Action taken by Contractor	Completion date
161018_01	18 Oct 2016	Drip tray shall be provided for oil container at Zone CE	Oil container was removed.	Completion as observed on 26 October 2016
161018_02	18 Oct 2016	Removal of silt shall be implement along the seawall at Zone 1B to prevent potential surface runoff especially during heavy rainfall. Provision of bunding at the concerned area is recommended for site runoff preventive action.	The silt was removed at the concerned location and provision of bunding was implemented and properly maintained.	Completion as observed on 26 October 2016

- 8.0.8. Site inspections for Contract no. HY/2010/08 were carried out during this reporting period. The results of these inspections and outcomes are summarized in **Table 8.7**.

Table 8.7 Summary of Environmental Inspections for Contract no. HY/2010/08

Item	Date	Observations	Action taken by Contractor	Completion date
161026_1	26 Oct 2016	Contractor shall ensure the waste water treated properly prior to discharge (TS3 South West Corner)	Waste water treatment plant was observed in normal operation and condition	Completion as observed on 2 November 2016

- 8.0.9. Site inspections for Contract no. HY/2011/08 were carried out during this reporting period. No observation was found in the reporting month.

9.0 COMPLAINTS, NOTIFICATION OF SUMMONS AND PROSECUTION

- 9.0.1. One environmental complaint was received in the reporting month.
- 9.0.2. A public complaint referred by EPD was received by ET on 07 October 2016 (Case Ref.: H08/RS/00024768-16). The complainant reported that construction work at the construction site in Causeway Bay Typhoon Shelter area was found after 1900hrs on 28 September 2016 and 04 October 2016 that caused noise nuisance. The complainant also reported that there were 5 concrete lorry mixers operating at the above site after 1900hrs on 04 October 2016.

ET confirmed with the Resident Site Staff that concreting for tunnel structure in TS3 (W) was conducted from 1900hrs to 2300hrs on 28 September 2016. One concrete pump and two concrete lorry mixers were in operation. One no. of concrete lorry mixer was located at the East of TS3 (W) and one no. of concrete lorry mixer was located at the west of TS3 (W). Concreting for tunnel structure in TS3 (W) was conducted from 1900hrs to 2300hrs on 04 October 2016. One concrete pump and two concrete lorry mixers were in operation. One no. of concrete lorry mixer was located at the East of TS3 (W) and one no. of concrete lorry mixer was located at the west of TS3 (W).

Based on the site records confirmed by RSS, concreting for tunnel structure in TS3 (W) was conducted from 1900hrs to 2300hrs on 28 September 2016 and from 1900hrs to 2300hrs on 04 October 2016 and total one concrete pump and two concrete lorry mixers were in operation during the above concerned periods. One no. of concrete lorry mixer was located at the East of TS3 (W) and one no. of concrete lorry mixer was located at the west of TS3(W) during the above concerned periods and relevant Construction Noise Permit GW-RS0434-16 and GW-RS0407-16 were in place for the construction works conducted during the above concerned periods.

Nevertheless, in view of the public concern, the Contractor of HY/2010/08 was reminded to maintain the site control system for construction works carried out during restricted hours to ensure the PMEs deployed are in compliance with relevant Construction Noise Permit. The Contractor of HY/2010/08 was also reminded to maintain regular maintenance of the plant and equipment deployed to avoid potential nuisance to the nearby public.

- 9.0.3. The details of cumulative complaint log and updated summary of complaints are presented in **Appendix 9.1**
- 9.0.4. Cumulative statistic on complaints and successful prosecutions are summarized in **Table 9.1** and **Table 9.2** respectively.

Table 9.1 Cumulative Statistics on Complaints

Reporting Period	No. of Complaints
October 2016	1
September 2010 – September 2016	68
Total	69

Table 9.2 Cumulative Statistics on Successful Prosecutions

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

10 CONCLUSION

10.0.1. The EM&A programme was carried out in accordance with the EM&A Manual requirements, minor alterations to the programme proposed were made in response to changing circumstances.

10.0.2. The scheduled construction activities and the recommended mitigation measures for the coming month are listed in **Table 10.1**. The construction programmes of individual contracts are provided in **Appendix 10.1**.

Table 10.1 Summary of Key Construction Activities of Individual Contract(s) to be commenced in Coming Reporting Month

Contract No.	Key Construction Works	Recommended Mitigation Measures
HY/2009/15	Remedial works inside tunnel structure at Mined Tunnel, TS4, TPCWAE and TPCWAW	- Dust control during dust generating activities and covering for stockpile stored on site. - Provide protection works and adequate drainage system to ensure no direct discharge into public drainage system or the nearby water. - Maintain regular cleaning of floating refuses within construction area.
HY/2009/18	- Drainage works - Road works - Landscaping works - Modification and Construction of Sign Gantries / Traffic Signs - Maintenance works	- Dust control during dust generating activities - Provide protection works to ensure no runoff out of site area or direct discharge into public drainage system.
HY/2009/19	- Approach ramp sheet piling, pre-bored piling and top soil removal works - Hing Fat Street modification works - Pier 22 backfilling - Bridge Demolition - Oil Street drainage works - Excavation / Construction of retaining wall - Hotel Carpark Reinstatement	- Noise level shall be controlled by reducing the breaking operation rate. - Noise barrier shall be implemented - Dust control during dust generating works - Provide protection works and adequate drainage system to ensure no direct discharge into public drainage system or the sea.

HK/2009/01	• Reinstatement of outfall • Road and Drain works	• Provide protection works and adequate drainage system to ensure no direct discharge into public drainage system or the sea. • Dust control during dust generating works • Noise mitigation measures during breaking works
HK/2009/02	• Concreting of protective screeding on tunnel top slab • Removal works for ELS S2 layer. • Waterproofing layer at tunnel top slab • Tunnel backfilling & filling of seawall bedding • Remedial work of tunnel wall, base slab, OHVD slab and top slab • General cleaning of OHVD & tunnel base slab, carrier drain and cross road duct. • Breakthrough of Bulkhead wall works • Excavation work • Strut installation • Breaking pile head and concreting blinding layer. • Demolition of the sub-structure of ex-WSD Salt Water Pumping Station • Removal of EVA bridge between Portion 1 and 2	• Dust control during dust generating works • Proper maintenance boundary surface runoff protection and water treatment facilities to avoid potential runoff related impact. • Provision of protection measures to ensure no runoff out of site area or direct discharge into public drainage system.
HK/2012/08	• Grouting • Construction of MVB and CWB Tunnel • Construction of concrete plug • Excavation and lateral support installation for CWB tunnel	• Dust control during dust generating works • Provide protection works and adequate drainage system to ensure no direct discharge into public drainage system.

HY/2010/08	• Tree protection works next to existing BGO • Drainage improvement works • Excavation and Lateral Support for U-structure • Grouting works • Utility diversion works • Retaining wall works • ELS works • Construction works for subway extension	• Dust control during dust generating works and stockpile stored on site. • Appropriate measures should be taken to ensure adequate protections are provided for trees being transplanted and retained on site. • Provision of protection to ensure no runoff out of site area or direct discharge into public drainage system.
HY/2011/08	• Construction of Ventilation Buildings, inclusive of Administration Building, East Ventilation Shaft/Building, West Ventilation Building • Construction of Tunnel Thermal Barrier • Installation of Electricals and Mechanicals • Installation of Tunnel Features	• Dust control during dust generating works

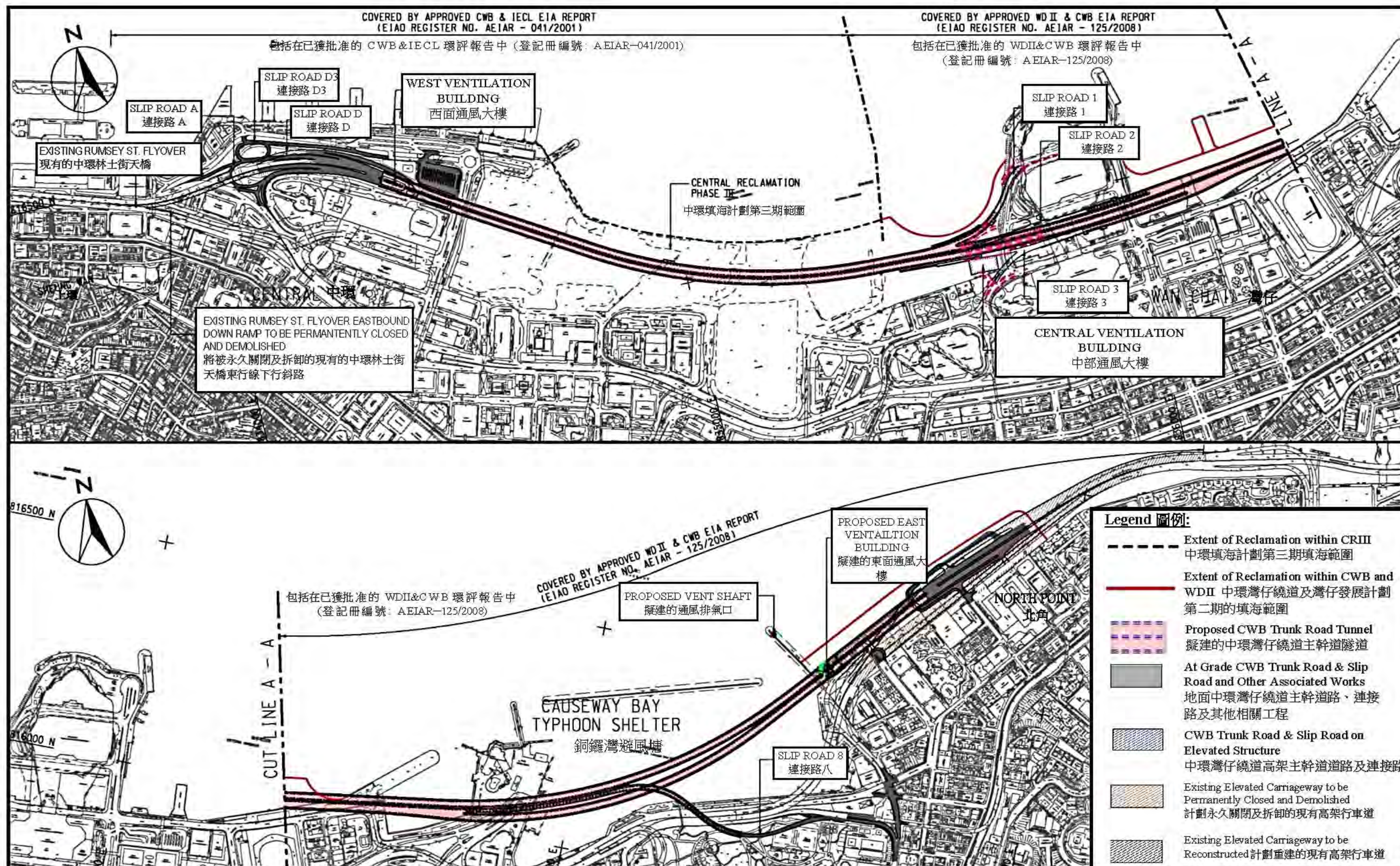
10.0.3. The construction works of Contract no. 04/HY/2006 – Reconstruction of Bus Terminus near Man Yiu Street and Man Kwong Street under FEP-04/364/2009/A was completed, and the FEP was surrendered by the Contractor on 11 February 2011.

10.0.4. The construction works of Contract no. HY/2009/17 - Advance piling works at Whitfield Depot under FEP-03/264/2009 was completed, and the FEP was surrendered by the Contractor and found in order by EPD on 25 April 2013.

10.0.5. The construction works of Contract HK/2010/06 was completed, and the FEP-08/364/2009/A was surrendered by the Contractor on 3 October 2014.

Figure 2.1

Project Layout



Project Title: Central-Wanchai Bypass (CWB) Including Its Road Tunnel and Slip Roads
工程項目名稱: 中環灣仔繞道包括其行車隧道及連接路

Environmental Permit No.: EP-364/2009/D
環境許可證編號: EP-364/2009/D

Figure 1: Location of the Project
圖 1: 工程項目位置

(This figure was prepared based on Figure 1.1 of the Application for Environmental Permit (Application No.: AEP-364/2009))
(本圖是根據環境許可證的申請(申請書編號 AEP-364/2009 圖 1.1 編製))

Figure 2.2

Project Organization Chart



Project Organization Chart

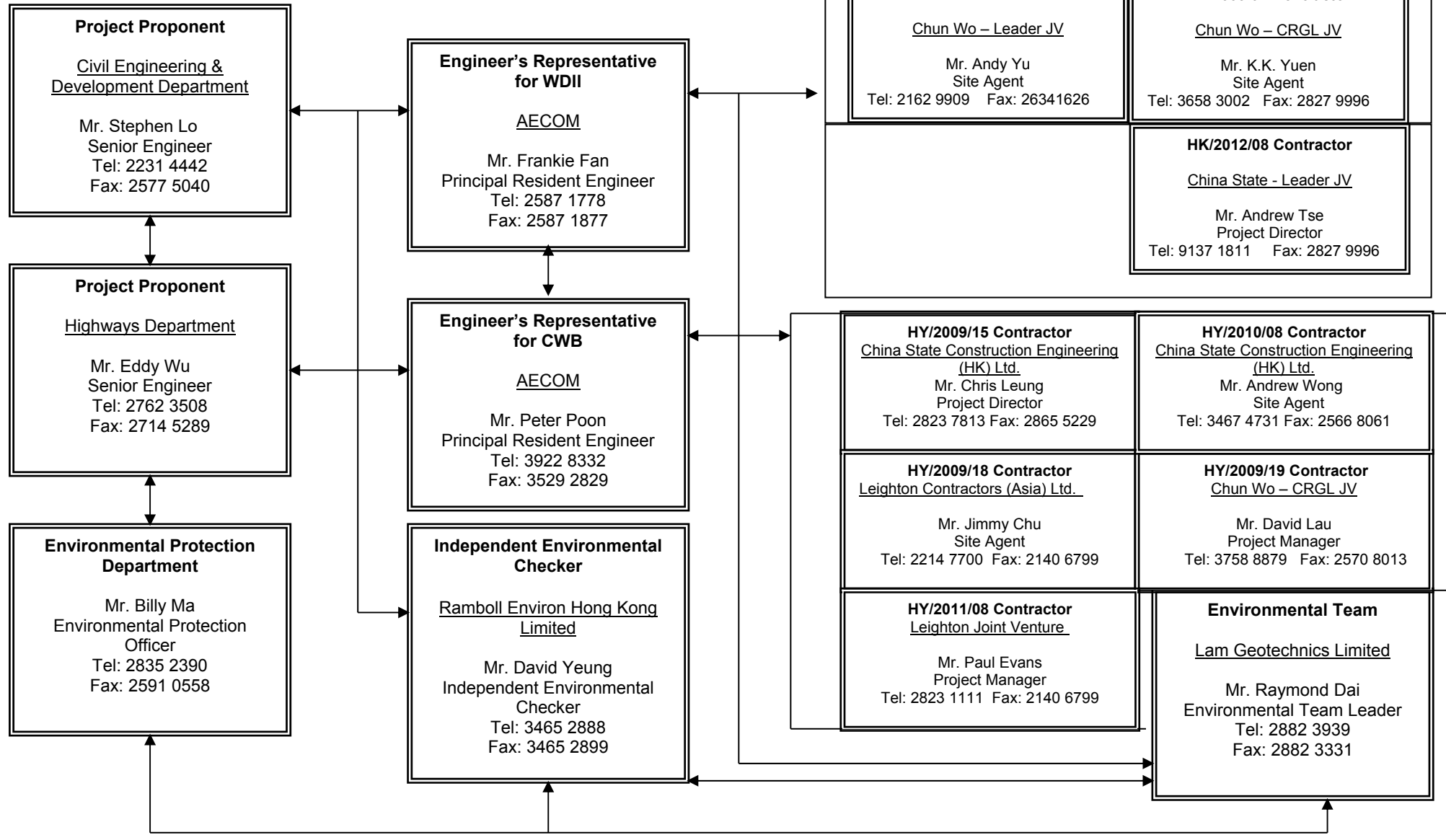
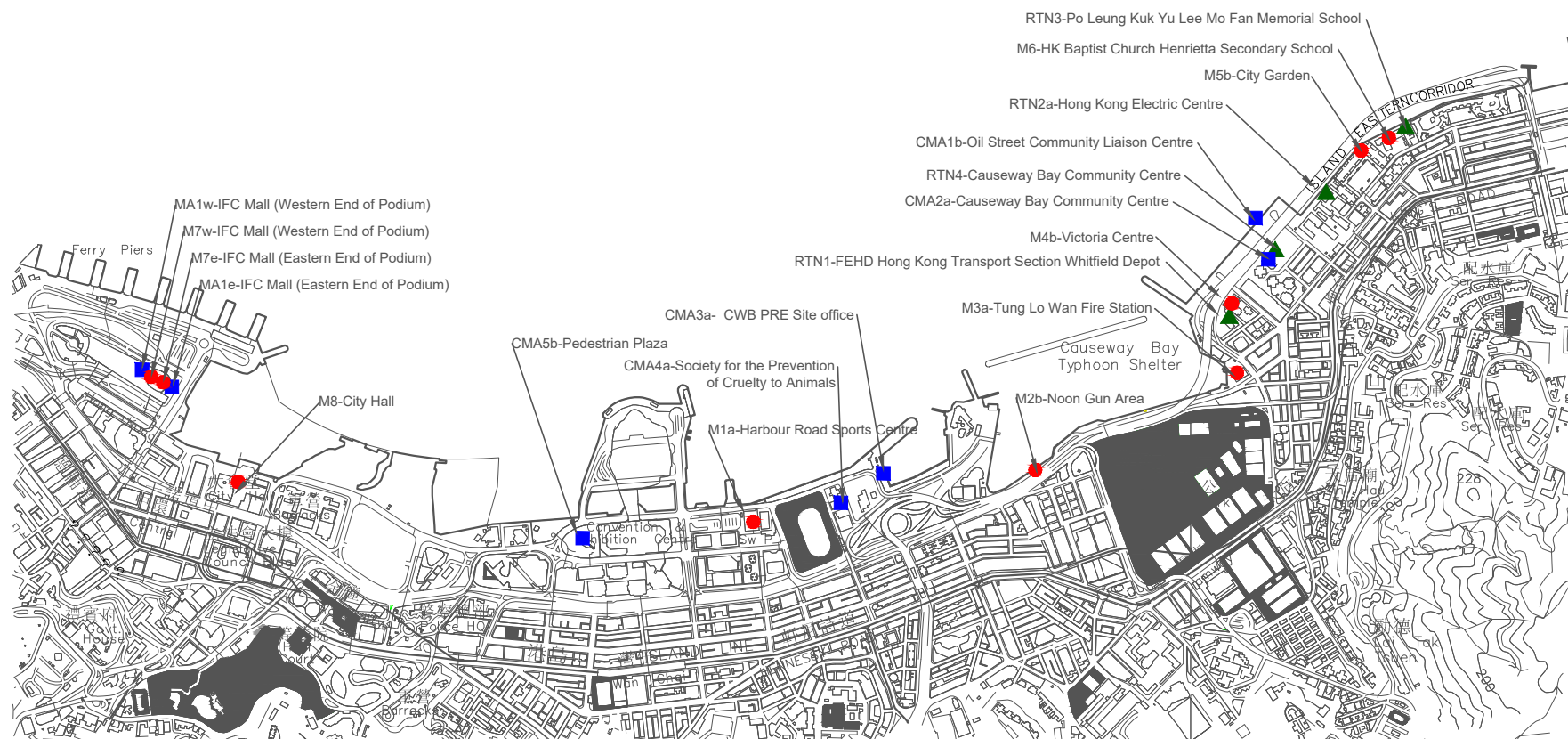


Figure 4.1

Locations of Monitoring Stations

Legend

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



LOCATIONS OF AIR QUALITY AND NOISE MONITORING STATIONS

Appendix 3.1

Environmental Mitigation Implementation Schedule

IMPLEMENTATION SCHEDULE OF THE PROPOSED MITIGATION MEASURES**Table A.1 Implementation Schedule for Air Quality Control**

WDII & CWB EIA Report Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
Construction Phase								
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. - 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		√			
Operational Phase								
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 of Volume 1 of the WDII & CWB EIA Report.	East and Central Ventilation Buildings / During operation of the Trunk Road	HyD			√		
S3.10.2	Air quality monitoring for the operation performance of the East Ventilation Building and associated East Vent Shaft will be conducted.	East Vent Shaft / During operation of the East Ventilation Building and associated East Vent Shaft	HyD			√		EIAO-TM

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

Table A.2 Implementation Schedule for Noise Control

WDII & CWB EIA Report Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
Construction Phase								
S4.9.3	Good Site Practice: - Only well-maintained plant shall be operated on-site and plant shall be serviced regularly during the construction program. - Silencers or mufflers on construction equipment shall be utilized and shall be properly maintained during the construction program. - Mobile plant, if any, shall be sited as far away from NSRs as possible. - Machines and plant (such as trucks) that may be in intermittent use shall be shut down between works periods or shall be throttled down to a minimum. - Plant known to emit noise strongly in one direction shall, wherever possible, be orientated so that the noise is directed away from the nearby NSRs. - Material stockpiles and other structures shall be effectively utilized, wherever practicable, in screening noise from on-site construction activities.	Work Sites / During Construction	Contractor		√			EIAO-TM, NCO
S4.8.1 – S4.8.11	Use of quiet powered mechanical equipment, movable noise barrier and temporary noise barrier for the following tasks: - Slip road 8 tunnel - Construction of diaphragm wall and substructures of the tunnel approach ramp - Excavation - Construction of slabs - Backfill	Work Sites / During Construction	Contractor		√			EIAO-TM, NCO

WDII & CWB EIA Report Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
	- Demolition and construction of substructures for the IEC - Demolition works of existing piers and crossheads of the marine section of the existing IEC Use of PME grouping for the following tasks: - At-grade road construction - Substructure for IECL connection							
Operation Phase								
S4.8.12 – S4.8.23	For Existing NSRs - about 235m length of noise semi-enclosure with transparent panel covering the westbound slip road from the IEC - about 230m length of noise semi-enclosure with transparent panel covering the main carriageways (eastbound and westbound) of the CWB and IEC - about 135m length of 5.5m high cantilevered noise barrier with 4.5m cantilever inclined at 45° with transparent panel on the eastbound slip road to the IEC (amended under EP-364/2009/A) - about 95m length of 5.5m high cantilevered noise barrier with 1m cantilever inclined at 45° with transparent panel on the eastbound slip road to the IEC - about 350m length of 3.5m high vertical noise barrier with transparent panel on the eastbound slip road to the IEC - low noise road surfacing for the trunk road (except tunnel section and beneath the landscaped deck at the eastern portal area)) with speed limit of 70 km/hour	Near North Point / Before commencement of operation of road project	HyD	√	√	√		EIAO-TM

WDII & CWB EIA Report Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
	For Future/Planned NSRs - about 265m length of noise semi-enclosure with transparent panel covering the westbound slip road from the IEC - The openable windows of the temple, if any, should be orientated so as to avoid direct line of sight to the existing Victoria Park Road as far as practicable.	In between the Electric Centre (next to City Garden) and CDA(1) site / Before occupation of Planned NSRs in CDA and CDA(1) sites. Near Causeway Bay Fire Station / During detailed design of the re-provisioned Tin Hau Temple	HyD Project Proponent for the re-provisioned Tin Hau Temple	√ √	√ #			

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

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

Table A.4 Implementation Schedule for Waste Management

WDII & CWB EIA Report Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
Construction Phase								
S6.5.14	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 D9.3.	Work site / During the construction period	Contractor		√			
S6.6.1	Good Site Practices Recommendations for good site practices during the construction activities include: • nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site; • training of site personnel in proper waste management and chemical waste handling procedures; • provision of sufficient waste disposal points and regular collection for disposal; • appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers; • regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors; and • a recording system for the amount of wastes generated, recycled and disposed of (including the disposal sites).	Work site / During the construction period	Contractor		√			Waste Disposal Ordinance (Cap.354)

WDII & CWB EIA Report Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S6.6.2	<i>Waste Reduction Measures</i> Waste reduction is best achieved at the planning and design stage, as well as by ensuring the implementation of good site practices. Recommendations to achieve waste reduction include: • segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal; • to encourage collection of aluminium cans, PET bottles and paper, separate labelled bins shall be provided to segregate these wastes from other general refuse generated by the work force; • any unused chemicals or those with remaining functional capacity shall be recycled; • use of reusable non-timber formwork, such as in casting the tunnel box sections, to reduce the amount of C&D material. • prior to disposal of C&D waste, it is recommended that wood, steel and other metals shall be separated for re-use and / or recycling to minimise the quantity of waste to be disposed of to landfill; • proper storage and site practices to minimise the potential for damage or contamination of construction materials; and • plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste.	Work site / During planning and design stage, and construction stage	Contractor	√	√			

WDII & CWB EIA Report Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S6.6.4	<i>General Refuse</i> General refuse shall be stored in enclosed bins or compaction units separate from C&D material. A licensed waste collector shall be employed by the contractor to remove general refuse from the site, separately from C&D material. A collection area shall be provided where wastes can be stored and loaded prior to removal from site. An enclosed and covered area is recommended to reduce the occurrence of 'wind blow' light material.	Work site / During the construction period	Contractor		√			Public Health and Municipal Services Ordinance (Cap. 132)
S6.6.5	<i>Chemical Wastes</i> After use, chemical wastes (for example, cleaning fluids, solvents, lubrication oil and fuel) shall be handled according to the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. Spent chemicals shall be collected by a licensed collector for disposal at the CWTF or other licensed facility in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.	Work site / During the construction period	Contractor		√			Waste Disposal (Chemical Waste) (General) Regulation Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes
S6.6.6	<i>Construction and Demolition Material</i> C&D material shall be sorted on-site into inert C&D material (that is, public fill) and C&D waste. All the suitable inert C&D material shall be broken down to 250 mm in size for reuse as public fill in the WDII reclamation. C&D waste, such as wood, glass, plastic, steel and other metals shall be reused or recycled and, as a last resort, disposed of to landfill. A suitable area shall be designated to facilitate the sorting process and a temporary stockpiling area will be required for the separated materials.	Work site / During the construction period	Contractor		√			ETWB TCW No. 33/2002, 31/2004, 19/2005

WDII & CWB EIA Report Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S6.6.7	In order to monitor the disposal of public fill and C&D waste at public fill reception 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
S6.6.8	<i>Bentonite Slurry</i> The disposal of residual used bentonite slurry shall follow the good practice guidelines stated in ProPECC PN 1/94 "Construction Site Drainage" and listed as follows: • If the disposal of a certain residual quantity cannot be avoided, the used slurry may be disposed of at the marine spoil grounds subject to obtaining a marine dumping licence from EPD on a case-by-case basis. • If the used bentonite slurry is intended to be disposed of through the public drainage system, it shall be treated to the respective effluent standards applicable to foul sewers, storm drains or the receiving waters as set out in the Technical Memorandum of Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters. • If the used bentonite slurry is intended to be disposed to public fill reception facilities, it will be mixed with dry soil on site before disposal.	Work site / During the construction period	Contractor		√			ProPECC PN 1/94

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

Table A.5 Implementation Schedule for Land Contamination

WDII & CWB EIA Report Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
Construction and Operation Phase								
S.7.1.1	As no potential contaminative land uses were identified within the Study Area, adverse land contamination impacts associated with the construction and operation of the Project is not expected. As such, environmental protection and mitigation measures are considered not necessary and will not be covered in this EM&A Manual.	-	-					-

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

Table A.7 Implementation Schedule for Landscape and Visual

WDII & CWB EIA Report Ref	Environmental Protection Measures / Mitigation Measures		Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
					Des	C	O	Dec	
Construction Phase									
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
Operation Phase									
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	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

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

Appendix 4.1

Action and Limit Level



Action and Limit Level

Action and Limit Level for Noise Monitoring

Time Period	Action Level	Limit Level
07:00 – 19:00 hours on normal weekdays	When one documented complaint is received.	75 dB(A)/ 70 dB(A)/ 65 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
MA1e	325.1	500	173.4	260
MA1w	325.1	500	173.4	260

Appendix 4.2

Copies of Calibration Certificates



CERTIFICATE OF CALIBRATION

Certificate No.: 15CA1203 04-01

Page 1 of 2

Item tested

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

Item submitted by

Customer Name: Lam Geotechnics Limited
Address of Customer: -
Request No.: -
Date of receipt: 03-Dec-2015

Date of test: 04-Dec-2015

Reference equipment used in the calibration

Description:	Model:	Serial No.	Expiry Date:	Traceable to:
Multi function sound calibrator	B&K 4226	2288444	19-Jun-2016	CIGISMEC
Signal generator	DS 360	33873	16-Apr-2016	CEPREI
Signal generator	DS 360	61227	16-Apr-2016	CEPREI

Ambient conditions

Temperature: 22 ± 1 °C
Relative humidity: 50 ± 10 %
Air pressure: 1010 ± 10 hPa

Test specifications

- 1, The Sound Level Meter has been calibrated in accordance with the requirements as specified in BS 7580: Part 1: 1997 and the lab calibration procedure SMTP004-CA-152.
- 2, The electrical tests were performed using an electrical signal substituted for the microphone which was removed and replaced by an equivalent capacitance within a tolerance of $\pm 20\%$.
- 3, The acoustic calibration was performed using an B&K 4226 sound calibrator and corrections was applied for the difference between the free-field and pressure responsess of the Sound Level Meter.

Test results

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

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

Actual Measurement data are documented on worksheets.

Approved Signatory:


Huang Jian Min/Feng Jun Qi

Date: 05-Dec-2015

Company Chop:



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



CERTIFICATE OF CALIBRATION

(Continuation Page)

Certificate No.: 15CA1203 04-01

Page 2 of 2

1, Electrical Tests

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

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

2, Acoustic tests

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

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

3, Response to associated sound calibrator

N/A

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

Calibrated by:

Date:

Fung Chi Yip
04-Dec-2015

- End -

Checked by:

Date:

Lam Tze Wai
05-Dec-2015

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



CERTIFICATE OF CALIBRATION

Certificate No.: 16CA0413 02 Page 1 of 2

Item tested

Description:	Sound Level Meter (Type 1)	Microphone	Preamplifier
Manufacturer:	B & K	B & K	B & K
Type/Model No.:	2250-L	4950	ZC0032
Serial/Equipment No.:	2722310	2698702	13318
Adaptors used:	-	-	-

Item submitted by

Customer Name: Lam Geotechnics Limited
Address of Customer: -
Request No.: -
Date of receipt: 13-Apr-2016

Date of test: 09-May-2016

Reference equipment used in the calibration

Description:	Model:	Serial No.	Expiry Date:	Traceable to:
Multi function sound calibrator	B&K 4226	2288444	19-Jun-2016	CIGISMEC
Signal generator	DS 360	33873	18-Apr-2017	CEPREI
Signal generator	DS 360	61227	18-Apr-2017	CEPREI

Ambient conditions

Temperature: 21 ± 1 °C
Relative humidity: 60 ± 10 %
Air pressure: 1005 ± 5 hPa

Test specifications

- The Sound Level Meter has been calibrated in accordance with the requirements as specified in BS 7580: Part 1: 1997 and the lab calibration procedure SMTP004-CA-152.
- The electrical tests were performed using an electrical signal substituted for the microphone which was removed and replaced by an equivalent capacitance within a tolerance of $\pm 20\%$.
- The acoustic calibration was performed using an B&K 4226 sound calibrator and corrections was applied for the difference between the free-field and pressure responsiveness of the Sound Level Meter.

Test results

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

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

Actual Measurement data are documented on worksheets.

Approved Signatory:


Huang Jian Min/Feng Jun Qi

Date: 10-May-2016

Company Chop:



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



CERTIFICATE OF CALIBRATION

(Continuation Page)

Certificate No.:

16CA0413 02

Page 2 of 2

1, Electrical Tests

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

Test:	Subtest:	Status:	Expanded Uncertainty (dB)	Coverage Factor
Self-generated noise	A	Pass	0.3	
	C	Pass	0.8	
	Lin	Pass	1.6	
Linearity range for Leq	At reference range, Step 5 dB at 4 kHz	Pass	0.3	
	Reference SPL on all other ranges	Pass	0.3	
	2 dB below upper limit of each range	Pass	0.3	
	2 dB above lower limit of each range	Pass	0.3	
Linearity range for SPL	At reference range, Step 5 dB at 4 kHz	Pass	0.3	
	A	Pass	0.3	
Frequency weightings	C	Pass	0.3	
	Lin	Pass	0.3	
Time weightings	Single Burst Fast	Pass	0.3	
	Single Burst Slow	Pass	0.3	
Peak response	Single 100µs rectangular pulse	Pass	0.3	
R.M.S. accuracy	Crest factor of 3	Pass	0.3	
Time weighting I	Single burst 5 ms at 2000 Hz	Pass	0.3	
	Repeated at frequency of 100 Hz	Pass	0.3	
Time averaging	1 ms burst duty factor 1/10 ³ at 4kHz	Pass	0.3	
	1 ms burst duty factor 1/10 ⁴ at 4kHz	Pass	0.3	
Pulse range	Single burst 10 ms at 4 kHz	Pass	0.4	
Sound exposure level	Single burst 10 ms at 4 kHz	Pass	0.4	
Overload indication	SPL	Pass	0.3	
	Leq	Pass	0.4	

2, Acoustic tests

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

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

3, Response to associated sound calibrator

N/A

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

Calibrated by:

Date:

Fung Chi Yip
09-May-2016

- End -

Checked by:

Date:

J.Q. Feng
10-May-2016

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



CERTIFICATE OF CALIBRATION

Certificate No.: 16CA0519 02 Page 1 of 2

Item tested

Description:	Sound Level Meter (Type 1)	Microphone	Preamp
Manufacturer:	B & K	B & K	B & K
Type/Model No.:	2250-L	4950	ZC0032
Serial/Equipment No.:	2722311	2698703	13321
Adaptors used:	-	-	-

Item submitted by

Customer Name: Lam Geotechnics Limited
Address of Customer: -
Request No.: -
Date of receipt: 19-May-2016

Date of test: 21-May-2016

Reference equipment used in the calibration

Description:	Model:	Serial No.	Expiry Date:	Traceable to:
Multi function sound calibrator	B&K 4226	2288444	19-Jun-2016	CIGISMEC
Signal generator	DS 360	33873	18-Apr-2017	CEPREI
Signal generator	DS 360	61227	18-Apr-2017	CEPREI

Ambient conditions

Temperature: 21 ± 1 °C
Relative humidity: 55 ± 10 %
Air pressure: 1005 ± 5 hPa

Test specifications

- 1, The Sound Level Meter has been calibrated in accordance with the requirements as specified in BS 7580: Part 1: 1997 and the lab calibration procedure SMTP004-CA-152.
- 2, The electrical tests were performed using an electrical signal substituted for the microphone which was removed and replaced by an equivalent capacitance within a tolerance of $\pm 20\%$.
- 3, The acoustic calibration was performed using an B&K 4226 sound calibrator and corrections was applied for the difference between the free-field and pressure responsiveness of the Sound Level Meter.

Test results

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

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

Actual Measurement data are documented on worksheets.

Approved Signatory:


Huang Jian Ming / Feng Jun Qi

Date: 23-May-2016

Company Chop:



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



CERTIFICATE OF CALIBRATION

(Continuation Page)

Certificate No.: 16CA0519 02 Page 2 of 2

1, Electrical Tests

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

Test:	Subtest:	Status:	Expanded Uncertainty (dB)	Coverage Factor
Self-generated noise	A	Pass	0.3	
	C	Pass	0.8	
	Lin	Pass	1.6	
Linearity range for Leq	At reference range, Step 5 dB at 4 kHz	Pass	0.3	
	Reference SPL on all other ranges	Pass	0.3	
	2 dB below upper limit of each range	Pass	0.3	
	2 dB above lower limit of each range	Pass	0.3	
Linearity range for SPL	At reference range, Step 5 dB at 4 kHz	Pass	0.3	
	A	Pass	0.3	
	C	Pass	0.3	
	Lin	Pass	0.3	
Time weightings	Single Burst Fast	Pass	0.3	
	Single Burst Slow	Pass	0.3	
Peak response	Single 100 μ s rectangular pulse	Pass	0.3	
R.M.S. accuracy	Crest factor of 3	Pass	0.3	
Time weighting I	Single burst 5 ms at 2000 Hz	Pass	0.3	
	Repeated at frequency of 100 Hz	Pass	0.3	
Time averaging	1 ms burst duty factor 1/10 ³ at 4kHz	Pass	0.3	
	1 ms burst duty factor 1/10 ⁴ at 4kHz	Pass	0.3	
Pulse range	Single burst 10 ms at 4 kHz	Pass	0.4	
Sound exposure level	Single burst 10 ms at 4 kHz	Pass	0.4	
Overload indication	SPL	Pass	0.3	
	Leq	Pass	0.4	

2, Acoustic tests

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

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

3, Response to associated sound calibrator

N/A

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

Calibrated by:

Date: 21-May-2016

Fung Chi Yip

- End -

Checked by:

Date: 23-May-2016

Lam Tze Wai

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



CERTIFICATE OF CALIBRATION

Certificate No.: 16CA0307 02 Page 1 of 2

Item tested

Description:	Sound Level Meter (Type 1)	Microphone	Preamplifier
Manufacturer:	B & K	B & K	B & K
Type/Model No.:	2250-L	4950	ZC0032
Serial/Equipment No.:	2701778	2755097	19556
Adaptors used:	-	-	-

Item submitted by

Customer Name: Lam Geotechnics Ltd.
Address of Customer: -
Request No.: -
Date of receipt: 07-Mar-2016

Date of test: 08-Mar-2016

Reference equipment used in the calibration

Description:	Model:	Serial No.	Expiry Date:	Traceable to:
Multi function sound calibrator	B&K 4226	2288444	19-Jun-2016	CIGISMEC
Signal generator	DS 360	33873	16-Apr-2016	CEPREI
Signal generator	DS 360	61227	16-Apr-2016	CEPREI

Ambient conditions

Temperature: $21 \pm 1^\circ\text{C}$
Relative humidity: $50 \pm 10\%$
Air pressure: $1010 \pm 5\text{ hPa}$

Test specifications

- 1, The Sound Level Meter has been calibrated in accordance with the requirements as specified in BS 7580: Part 1: 1997 and the lab calibration procedure SMTP004-CA-152.
- 2, The electrical tests were performed using an electrical signal substituted for the microphone which was removed and replaced by an equivalent capacitance within a tolerance of $\pm 20\%$.
- 3, The acoustic calibration was performed using an B&K 4226 sound calibrator and corrections was applied for the difference between the free-field and pressure response of the Sound Level Meter.

Test results

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

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

Actual Measurement data are documented on worksheets.

Approved Signatory:


Huang Jian Min/Feng Jun Qi

Date: 09-Mar-2016

Company Chop:



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



CERTIFICATE OF CALIBRATION

(Continuation Page)

Certificate No.: 16CA0307 02 Page 2 of 2

1, Electrical Tests

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

Test:	Subtest:	Status:	Expanded Uncertainty (dB)	Coverage Factor
Self-generated noise	A	Pass	0.3	
	C	Pass	0.8	
	Lin	Pass	1.6	
Linearity range for Leq	At reference range, Step 5 dB at 4 kHz	Pass	0.3	
	Reference SPL on all other ranges	Pass	0.3	
	2 dB below upper limit of each range	Pass	0.3	
	2 dB above lower limit of each range	Pass	0.3	
	At reference range, Step 5 dB at 4 kHz	Pass	0.3	
Linearity range for SPL	A	Pass	0.3	
	C	Pass	0.3	
	Lin	Pass	0.3	
Time weightings	Single Burst Fast	Pass	0.3	
	Single Burst Slow	Pass	0.3	
Peak response	Single 100µs rectangular pulse	Pass	0.3	
R.M.S. accuracy	Crest factor of 3	Pass	0.3	
Time weighting I	Single burst 5 ms at 2000 Hz	Pass	0.3	
	Repeated at frequency of 100 Hz	Pass	0.3	
Time averaging	1 ms burst duty factor 1/10 ³ at 4kHz	Pass	0.3	
	1 ms burst duty factor 1/10 ⁴ at 4kHz	Pass	0.3	
Pulse range	Single burst 10 ms at 4 kHz	Pass	0.4	
Sound exposure level	Single burst 10 ms at 4 kHz	Pass	0.4	
Overload indication	SPL	Pass	0.3	
	Leq	Pass	0.4	

2, Acoustic tests

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

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

3, Response to associated sound calibrator

N/A

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

Calibrated by:

Date:

Fung Chi Yip
08-Mar-2016

- End -

Checked by:

Date:

Lam Tze Wai
09-Mar-2016

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



CERTIFICATE OF CALIBRATION

Certificate No.: 16CA0127 02 Page 1 of 2

Item tested

Description:	Sound Level Meter (Type 1)	Microphone	Preamplifier
Manufacturer:	B & K	B & K	B & K
Type/Model No.:	2250-L	4950	ZC0032
Serial/Equipment No.:	3002695	2940839	18582
Adaptors used:	-	-	-

Item submitted by

Customer Name: Lam Geotechnics Ltd.
Address of Customer: -
Request No.: -
Date of receipt: 27-Jan-2016

Date of test: 28-Jan-2016

Reference equipment used in the calibration

Description:	Model:	Serial No.	Expiry Date:	Traceable to:
Multi function sound calibrator	B&K 4226	2288444	19-Jun-2016	CIGISMEC
Signal generator	DS 360	33873	16-Apr-2016	CEPREI
Signal generator	DS 360	61227	16-Apr-2016	CEPREI

Ambient conditions

Temperature: 21 ± 1 °C
Relative humidity: 60 ± 10 %
Air pressure: 1010 ± 5 hPa

Test specifications

- 1, The Sound Level Meter has been calibrated in accordance with the requirements as specified in BS 7580: Part 1: 1997 and the lab calibration procedure SMTP004-CA-152.
- 2, The electrical tests were performed using an electrical signal substituted for the microphone which was removed and replaced by an equivalent capacitance within a tolerance of $\pm 20\%$.
- 3, The acoustic calibration was performed using an B&K 4226 sound calibrator and corrections was applied for the difference between the free-field and pressure response of the Sound Level Meter.

Test results

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

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

Actual Measurement data are documented on worksheets.

Approved Signatory:

Huang Jian Min/Feng Jun Qi

Date: 29-Jan-2016

Company Chop:



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



CERTIFICATE OF CALIBRATION

(Continuation Page)

Certificate No.: 16CA0127 02

Page 2 of 2

1. Electrical Tests

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

Test:	Subtest:	Status:	Expanded Uncertainty (dB)	Coverage Factor
Self-generated noise	A	Pass	0.3	
	C	Pass	0.8	
	Lin	Pass	1.6	
Linearity range for Leq	At reference range, Step 5 dB at 4 kHz	Pass	0.3	
	Reference SPL on all other ranges	Pass	0.3	
	2 dB below upper limit of each range	Pass	0.3	
	2 dB above lower limit of each range	Pass	0.3	
Linearity range for SPL	At reference range, Step 5 dB at 4 kHz	Pass	0.3	
	A	Pass	0.3	
	C	Pass	0.3	
	Lin	Pass	0.3	
Time weightings	Single Burst Fast	Pass	0.3	
	Single Burst Slow	Pass	0.3	
Peak response	Single 100µs rectangular pulse	Pass	0.3	
R.M.S. accuracy	Crest factor of 3	Pass	0.3	
Time weighting I	Single burst 5 ms at 2000 Hz	Pass	0.3	
	Repeated at frequency of 100 Hz	Pass	0.3	
Time averaging	1 ms burst duty factor 1/10 ³ at 4kHz	Pass	0.3	
	1 ms burst duty factor 1/10 ⁴ at 4kHz	Pass	0.3	
Pulse range	Single burst 10 ms at 4 kHz	Pass	0.4	
Sound exposure level	Single burst 10 ms at 4 kHz	Pass	0.4	
Overload indication	SPL	Pass	0.3	
	Leq	Pass	0.4	

2. Acoustic tests

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

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

3. Response to associated sound calibrator

N/A

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

- End -

Calibrated by:

Fung Chi Yip

Date:

28-Jan-2016

Checked by:

Lam Tze Wai

Date:

29-Jan-2016

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



CERTIFICATE OF CALIBRATION

Certificate No.: 16CA0513 01-02

Page: 1 of 2

Item tested

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

Item submitted by

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

Date of test: 17-May-2016

Reference equipment used in the calibration

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

Ambient conditions

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

Test specifications

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

Test results

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

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

Approved Signatory:


Huang Jian Min/Feng Jun Qi

Date: 18-May-2016

Company Chop:



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



CERTIFICATE OF CALIBRATION

(Continuation Page)

Certificate No.:

16CA0513 01-02

Page: 2 of 2

1, Measured Sound Pressure Level

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

Frequency Shown Hz	Output Sound Pressure Level Setting dB	Measured Output Sound Pressure Level dB	(Output level in dB re 20 μ Pa)
			Estimated Expanded Uncertainty dB
1000	94.00	93.96	0.10

2, Sound Pressure Level Stability - Short Term Fluctuations

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

At 1000 Hz

STF = 0.001 dB

Estimated expanded uncertainty

0.005 dB

3, Actual Output Frequency

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

At 1000 Hz

Actual Frequency = 967.3 Hz

Estimated expanded uncertainty

0.1 Hz

Coverage factor k = 2.2

4, Total Noise and Distortion

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

At 1000 Hz

TND = 0.8 %

Estimated expanded uncertainty

0.7 %

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

Calibrated by:

Date:

Fung Chi Yip
17-May-2016

- End -

Checked by:

Date:

Lam Tze Wai
18-May-2016

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

Calibration Certificate

Certificate Number 2016004065

Customer:

LAM Environmental Services Ltd

Model Number	CAL200	Procedure Number	D0001.8386
Serial Number	13098	Technician	Scott Montgomery
Test Results	Pass	Calibration Date	6 May 2016
Initial Condition	As Manufactured	Calibration Due	
Description	Larson Davis CAL200 Acoustic Calibrator	Temperature	24 °C ± 0.3 °C
		Humidity	37 %RH ± 3 %RH
		Static Pressure	101.0 kPa ± 1 kPa

Evaluation Method The data is acquired by the insert voltage calibration method using the reference microphone's open circuit sensitivity. Data reported in dB re 20 µPa.

Compliance Standards Compliant to Manufacturer Specifications per D0001.8190 and the following standards:
IEC 60942:2003 ANSI S1.40-2006

Issuing lab certifies that the instrument described above meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the SI through the National Institute of Standards and Technology (NIST), or other national measurement institutes, and meets the requirements of ISO/IEC 17025:2005. **Test points marked with a ‡ in the uncertainties column do not fall within this laboratory's scope of accreditation.**

The quality system is registered to ISO 9001:2008.

This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

The uncertainties were computed in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). A coverage factor of approximately 2 sigma (k=2) has been applied to the standard uncertainty to express the expanded uncertainty at approximately 95% confidence level.

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Standards Used

Description	Cal Date	Cal Due	Cal Standard
Agilent 34401A DMM	09/04/2015	09/04/2016	001021
Sound Level Meter / Real Time Analyzer	04/07/2016	04/07/2017	001051
Microphone Calibration System	08/20/2015	08/20/2016	005446
1/2" Preamplifier	10/09/2015	10/09/2016	006506
Larson Davis 1/2" Preamplifier 7-pin LEMO	08/20/2015	08/20/2016	006507
1/2 inch Microphone - RI - 200V	08/17/2015	08/17/2016	006511
Pressure Transducer	05/07/2015	05/07/2016	007310

Larson Davis, a division of PCB Piezotronics, Inc
1681 West 820 North
Provo, UT 84601, United States
716-684-0001



LARSON DAVIS
A PCB PIEZOTRONICS DIV.



CERTIFICATE OF CALIBRATION

Certificate No.: 16CA0805 02 Page 1 of 2

Item tested

Description:	Sound Level Meter (Type 1)	Microphone	Preamp
Manufacturer:	B & K	B & K	B & K
Type/Model No.:	2250-L	4950	ZC0032
Serial/Equipment No.:	3006790	2827240	21213
Adaptors used:	-	-	-

Item submitted by

Customer Name: Lam Geotechnics Ltd.
Address of Customer: -
Request No.: -
Date of receipt: 05-Aug-2016

Date of test: 08-Aug-2016

Reference equipment used in the calibration

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

Ambient conditions

Temperature: $21 \pm 1^\circ\text{C}$
Relative humidity: $60 \pm 10\%$
Air pressure: $1000 \pm 5\text{ hPa}$

Test specifications

- The Sound Level Meter has been calibrated in accordance with the requirements as specified in BS 7580: Part 1: 1997 and the lab calibration procedure SMTP004-CA-152.
- The electrical tests were performed using an electrical signal substituted for the microphone which was removed and replaced by an equivalent capacitance within a tolerance of $\pm 20\%$.
- The acoustic calibration was performed using an B&K 4226 sound calibrator and corrections was applied for the difference between the free-field and pressure response of the Sound Level Meter.

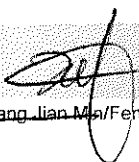
Test results

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

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

Actual Measurement data are documented on worksheets.

Approved Signatory:


Huang Jian Ma/Feng Jun Qi

Date: 09-Aug-2016

Company Chop:



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

**CERTIFICATE OF CALIBRATION**

(Continuation Page)

Certificate No.:

16CA0805 02

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of

2

1, Electrical Tests

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

Test:	Subtest:	Status:	Expanded Uncertainty (dB)	Coverage Factor
Self-generated noise	A	Pass	0.3	
	C	Pass	0.8	
	Lin	Pass	1.6	
Linearity range for Leq	At reference range, Step 5 dB at 4 kHz	Pass	0.3	
	Reference SPL on all other ranges	Pass	0.3	
	2 dB below upper limit of each range	Pass	0.3	
	2 dB above lower limit of each range	Pass	0.3	
Linearity range for SPL	At reference range, Step 5 dB at 4 kHz	Pass	0.3	
Frequency weightings	A	Pass	0.3	
	C	Pass	0.3	
	Lin	Pass	0.3	
Time weightings	Single Burst Fast	Pass	0.3	
	Single Burst Slow	Pass	0.3	
Peak response	Single 100µs rectangular pulse	Pass	0.3	
R.M.S. accuracy	Crest factor of 3	Pass	0.3	
Time weighting I	Single burst 5 ms at 2000 Hz	Pass	0.3	
	Repeated at frequency of 100 Hz	Pass	0.3	
Time averaging	1 ms burst duty factor 1/10 ³ at 4kHz	Pass	0.3	
	1 ms burst duty factor 1/10 ⁴ at 4kHz	Pass	0.3	
Pulse range	Single burst 10 ms at 4 kHz	Pass	0.4	
Sound exposure level	Single burst 10 ms at 4 kHz	Pass	0.4	
Overload indication	SPL	Pass	0.3	
	Leq	Pass	0.4	

2, Acoustic tests

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

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

3, Response to associated sound calibrator

N/A

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

- End -

Calibrated by:

Date:

Fung Chi Yip

08-Aug-2016

Checked by:

Date:

Lam Tze Wai

09-Aug-2016

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

ORIFICE TRANSFER STANDARD CERTIFICATION WORKSHEET TE-5025A

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

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

DATA TABULATION

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

CALCULATIONS

$$Vstd = \text{Diff. Vol}[(Pa - \text{Diff. Hg})/760] (298/Ta)$$

$$Qstd = Vstd/Time$$

$$Va = \text{Diff Vol} [(Pa - \text{Diff Hg})/Pa]$$

$$Qa = Va/Time$$

For subsequent flow rate calculations:

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

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



Calibration Data for High Volume Sampler (TSP Sampler)

Location : CMA1b
Equipment no. : HVS001

Calibration Date : 12-Sep-16
Calibration Due Date : 13-Nov-16

CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition			
Temperature, T _a	302	Kelvin	Pressure, P _a
			1010 mmHg

Orifice Transfer Standard Information					
Equipment No.	Orif002	Slope, m _c	2.10714	Intercept, b _c	-0.05158
Last Calibration Date	20-May-16	$\left(H \times P_a / 1013.3 \times 298 / T_a \right)^{1/2}$ $= m_c \times Q_{std} + b_c$			
Next Calibration Date	20-May-17				

Calibration of TSP						
Calibration Point	Manometer Reading			Q _{std} (m ³ / min.)	Continuous Flow Recorder, W (CFM)	IC (W(P _a /1013.3x298/T _a) ^{1/2} /35.31)
	H (inches of water)					
	(up)	(down)	(difference)	X-axis		Y-axis
1	1.2	1.2	2.4	0.7536	12	11.9008
2	2.2	2.2	4.4	1.0117	20	19.8347
3	3.5	3.5	7.0	1.2697	26	25.7852
4	4.5	4.5	9.0	1.4364	30	29.7521
5	5.5	5.5	11.0	1.5855	34	33.7190

By Linear Regression of Y on X

Slope, m = 25.7206 Intercept, b = -6.9594
Correlation Coefficient* = 0.9984
Calibration Accepted = Yes/No**

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

** Delete as appropriate.

Remarks : As per client's provided information, the equipment reference no. of the calibrated High Volume Sampler has been

re-assigned from EL452 to HVS001 with respect to the update in quality management system.

Calibrated by : Jackey MA
Date : 12-Sep-16

Checked by : Pauline Wong
Date : 12-Sep-16



Calibration Data for High Volume Sampler (TSP Sampler)

Location : CMA2a
Equipment no. : HVS002

Calibration Date : 12-Sep-16
Calibration Due Date : 13-Nov-16

CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition						
Temperature, T_a	302	Kelvin	Pressure, P_a	1010	mmHg	

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

Calibration of TSP						
Calibration Point	Manometer Reading			Q_{std} ($m^3 / min.$) X-axis	Continuous Flow Recorder, W (CFM)	IC ($W(P_a/1013.3 \times 298/T_a)^{1/2}/35.31$) Y-axis
	(up)	(down)	(difference)			
1	1.4	1.4	2.8	0.8120	28	27.7686
2	2.3	2.3	4.6	1.0339	34	33.7190
3	4.3	4.3	8.6	1.4047	44	43.6364
4	4.9	4.9	9.8	1.4979	48	47.6034
5	6.0	6.0	12.0	1.6549	56	55.5372

By Linear Regression of Y on X

Slope, m = 31.4606 Intercept, b = 1.3620

Correlation Coefficient* = 0.9900

Calibration Accepted = Yes/No**

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

** Delete as appropriate.

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

Calibrated by : Jackey MA
Date : 12-Sep-16

Checked by : Pualine Wong
Date : 12-Sep-16



Calibration Data for High Volume Sampler (TSP Sampler)

Location : CMA3a

Calibration Date : 12-Sep-16

Equipment no. : HVS012

Calibration Due Date : 13-Nov-16

CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition			
Temperature, T_a	302	Kelvin	Pressure, P_a
			1010 mmHg

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

Calibration of TSP						
Calibration Point	Manometer Reading			Q _{std}	Continuous Flow	IC
	H (inches of water)			(m ³ / min.)	Recorder, W	(W(P _a /1013.3x298/T _a) ^{1/2} /35.31)
	(up)	(down)	(difference)	X-axis	(CFM)	Y-axis
1	1.2	1.2	2.4	0.7536	24	23.8017
2	1.8	1.8	3.6	0.9175	32	31.7356
3	3.2	3.2	6.4	1.2152	40	39.6695
4	4.2	4.2	8.4	1.3886	45	44.6281
5	5.4	5.4	10.8	1.5712	50	49.5868

By Linear Regression of Y on X

Slope, m = 30.5105 Intercept, b = 2.2112
 Correlation Coefficient* = 0.9943
 Calibration Accepted = Yes/No**

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

** Delete as appropriate.

Remarks : As per client's provided information, the equipment reference no. of the calibrated High Volume Sampler has been

re-assigned from EL333 to HVS012 with respect to the update in quality management system.

Calibrated by : Jackey MA

Checked by : Pauline Wong

Date : 12-Sep-16

Date : 12-Sep-16



Calibration Data for High Volume Sampler (TSP Sampler)

Location : CMA4a
Equipment no. : HVS004

Calibration Date : 12-Sep-16
Calibration Due Date : 13-Nov-16

CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition			
Temperature, T_a	302	Kelvin	Pressure, P_a
			1010 mmHg

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

Calibration of TSP						
Calibration Point	Manometer Reading			Q _{std}	Continuous Flow	IC
	H (inches of water)			(m ³ / min.)	Recorder, W	(W(P _a /1013.3x298/T _a) ^{1/2} /35.31)
	(up)	(down)	(difference)	X-axis	(CFM)	Y-axis
1	1.4	1.4	2.8	0.8120	22	21.8182
2	2.2	2.2	4.4	1.0117	32	31.7356
3	3.4	3.4	6.8	1.2518	44	43.6364
4	4.4	4.4	8.8	1.4207	48	47.6034
5	5.5	5.5	11.0	1.5855	56	55.5372

By Linear Regression of Y on X

Slope, m = 42.7983 Intercept, b = -11.9911
Correlation Coefficient* = 0.9952
Calibration Accepted = Yes/No**

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

** Delete as appropriate.

Remarks : As per client's provided information, the equipment reference no. of the calibrated High Volume Sampler has been

re-assigned from EL390 to HVS004 with respect to the update in quality management system.

Calibrated by : Jackey MA
Date : 12-Sep-16

Checked by : Pauline Wong
Date : 12-Sep-16



Calibration Data for High Volume Sampler (TSP Sampler)

Location : CMA5b
Equipment no. : HVS010

Calibration Date : 12-Sep-16
Calibration Due Date : 13-Nov-16

CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition			
Temperature, T _a	302	Kelvin	Pressure, P _a
			1010 mmHg

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

Calibration of TSP						
Calibration Point	Manometer Reading			Q _{std}	Continuous Flow	IC
	H (inches of water)			(m ³ / min.)	Recorder, W	(W(P _a /1013.3x298/T _a) ^{1/2} /35.31)
	(up)	(down)	(difference)	X-axis	(CFM)	Y-axis
1	1.4	1.4	2.8	0.8120	34	33.7190
2	2.2	2.2	4.4	1.0117	42	41.6529
3	3.4	3.4	6.8	1.2518	50	49.5868
4	4.4	4.4	8.8	1.4207	56	55.5372
5	5.6	5.6	11.2	1.5996	61	60.4959

By Linear Regression of Y on X

Slope, m = 34.0485 Intercept, b = 6.6876
Correlation Coefficient* = 0.9985
Calibration Accepted = Yes/No**

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

** Delete as appropriate.

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

Calibrated by : Jackey MA
Date : 12-Sep-16

Checked by : Pauline Wong
Date : 12-Sep-16



Calibration Data for High Volume Sampler (TSP Sampler)

Location : MA1w
Equipment no. : HVS008

Calibration Date : 12-Sep-16
Calibration Due Date : 13-Nov-16

CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition		HK1610369	
Temperature, T _a	302	Kelvin	Pressure, P _a 1010 mmHg

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

Calibration of TSP						
Calibration Point	Manometer Reading			Q _{std}	Continuous Flow	IC
	H (inches of water)			(m ³ / min.)	Recorder, W	(W(P _a /1013.3x298/T _a) ^{1/2} /35.31)
	(up)	(down)	(difference)	X-axis	(CFM)	Y-axis
1	1.8	1.8	3.6	0.9175	24	23.8017
2	2.6	2.6	5.2	1.0977	32	31.7356
3	4.2	4.2	8.4	1.3886	44	43.6364
4	5.4	5.4	10.8	1.5712	52	51.5703
5	6.6	6.6	13.2	1.7345	58	57.5207

By Linear Regression of Y on X

Slope, m = 41.4475 Intercept, b = -13.9650
Correlation Coefficient* = 0.9997
Calibration Accepted = Yes/No**

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

Remarks : As per client's provided information, the equipment reference no. of the calibrated High Volume Sampler has been re-assigned from EL080 to HVS008 with respect to the update in quality management system.

Calibrated by : Jackey MA
Date : 12-Sep-16

Checked by : Pauline Wong
Date : 12-Sep-16



Calibration Data for High Volume Sampler (TSP Sampler)

Location : MA1e
Equipment no. : HVS007

Calibration Date : 12-Sep-16
Calibration Due Date : 13-Nov-16

CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition			
Temperature, T _a	302	Kelvin	Pressure, P _a
			1010 mmHg

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

Calibration of TSP						
Calibration Point	Manometer Reading			Q _{std}	Continuous Flow	IC
	H (inches of water)			(m ³ / min.)	Recorder, W	(W(P _a /1013.3x298/T _a) ^{1/2} /35.31)
	(up)	(down)	(difference)	X-axis	(CFM)	Y-axis
1	1.4	1.4	2.8	0.8120	19	18.8430
2	2.6	2.6	5.2	1.0977	31	30.7438
3	4.2	4.2	8.4	1.3886	44	43.6364
4	5.4	5.4	10.8	1.5712	54	53.5538
5	6.7	6.7	13.4	1.7474	62	61.4877

By Linear Regression of Y on X

Slope, m = 45.9175 Intercept, b = -19.1135
Correlation Coefficient* = 0.9991
Calibration Accepted = Yes/No**

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

Remarks : As per client's provided information, the equipment reference no. of the calibrated High Volume Sampler has been re-assigned from EL455 to HVS007 with respect to the update in quality management system.

Calibrated by : Jackey MA
Date : 12-Sep-16

Checked by : Pauline Wong
Date : 12-Sep-16

Appendix 5.1

Monitoring Schedules for Reporting Month and Coming Reporting Month

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

Environmental Monitoring Schedule
October 2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	26-Sep	27-Sep	28-Sep	29-Sep	30-Sep	1-Oct
		Noise (daytime)		24hr TSP	1hr TSP	
2-Oct	3-Oct	4-Oct	5-Oct	6-Oct	7-Oct	8-Oct
	Noise (daytime) (M1a,M2b)	Noise (daytime) (M3a,M4b,M5b,M6,M7e M7w,M8)	24hr TSP	24hr TSP (CMA1b) 1hr TSP		
9-Oct	10-Oct	11-Oct	12-Oct	13-Oct	14-Oct	15-Oct
		24hr TSP Noise (daytime) (M1a)	24hr TSP (CMA1b) 1hr TSP Noise (daytime) (M2b,M3a,M4b,M5b,M6)	Noise (daytime) (M7e,M7w,M8)	24hr TSP	
16-Oct	17-Oct	18-Oct	19-Oct	20-Oct	21-Oct	22-Oct
	24hr TSP (MA1e) 1hr TSP Noise (daytime) (M7e,M7w,M8)		Noise (daytime) (M1a,M2b,M3a)	Noise (daytime) (M4b,M5b,M6)	24hr TSP	1hr TSP
23-Oct	24-Oct	25-Oct	26-Oct			
	Noise (daytime) (M1a,M2b,M7e,M7w,M8)	Noise (daytime) (M3a,M4b,M5b,M6)				

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

Tentative Environmental Monitoring Schedule
November 2016

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				27-Oct	28-Oct	29-Oct
				24hr TSP	1hr TSP	
30-Oct	31-Oct	1-Nov	2-Nov	3-Nov	4-Nov	5-Nov
Noise (daytime)	Noise (daytime)	24hr TSP	1hr TSP			
6-Nov	7-Nov	8-Nov	9-Nov	10-Nov	11-Nov	12-Nov
Noise (daytime)	24hr TSP Noise (daytime)	1hr TSP				
13-Nov	14-Nov	15-Nov	16-Nov	17-Nov	18-Nov	19-Nov
24hr TSP Noise (daytime)	1hr TSP Noise (daytime)				24hr TSP	
20-Nov	21-Nov	22-Nov	23-Nov	24-Nov	25-Nov	26-Nov
1hr TSP Noise (daytime)	Noise (daytime)			24hr TSP	1hr TSP	

Appendix 5.2

Noise Monitoring Results and Graphical Presentations



Noise Monitoring Result

Day Time (0700 - 1900hrs on normal weekdays)

Location: M1a - Harbour Road Sports Centre

Date	Time	Weather	Measurement Noise Level			Baseline Level	Construction Noise Level	Limit Level
			Leq	L10	L90	Leq	Leq	Leq
			Unit: dB(A), (30-min)					
27/9/2016	10:25	Fine	75.2	76.0	71.5	72	72	75
3/10/2016	10:15	Fine	74.6	76.0	72.0	72	71	75
11/10/2016	10:30	Fine	80.6	81.5	79.5	72	80	75
19/10/2016	13:30	Cloudy	81.3	82.0	80.0	72	81	75
24/10/2016	10:10	Fine	76.5	79.0	70.0	72	74	75

Location: M2b - Noon-day gun area

Date	Time	Weather	Measurement Noise Level			Baseline Level	Construction Noise Level		Limit Level
			Leq	L10	L90	Leq	Leq	Leq	
			Unit: dB(A), (30-min)						
27/9/2016	11:10	Fine	66.6	67.5	64.5	68	67	75	
3/10/2016	11:00	Fine	67.3	68.5	65.5	68	67	75	
12/10/2016	13:00	Fine	65.0	66.0	63.5	68	65	75	
19/10/2016	10:15	Cloudy	70.2	71.5	67.5	68	67	75	
24/10/2016	10:53	Fine	67.5	68.5	65.0	68	68	75	

Location: M3a - Tung Lo Wan Fire Station

Date	Time	Weather	Measurement Noise Level			Baseline Level	Construction Noise Level	Limit Level
			Leq	L10	L90	Leq	Leq	Leq
			Unit: dB(A), (30-min)					
27/9/2016	13:00	Fine	66.5	67.5	65.5	69	67	75
4/10/2016	10:25	Fine	66.7	68.0	64.5	69	67	75
12/10/2016	13:45	Fine	66.5	67.0	65.5	69	67	75
19/10/2016	11:00	Cloudy	68.5	69.5	65.5	69	69	75
25/10/2016	09:20	Fine	64.0	65.0	62.5	69	64	75

Location: M4b - Victoria Centre

Date	Time	Weather	Measurement Noise Level			Baseline Noise Level	Construction Noise Level		Limit Level
			Leq	L10	L90	Leq	Leq	Leq	
			Unit: dB(A), (30min)						
27/9/2016	13:39	Fine	65.0	66.0	63.5	67		65	75
4/10/2016	11:07	Fine	65.4	67.0	63.5	67		65	75
12/10/2016	14:20	Fine	64.1	65.0	62.5	67		64	75
20/10/2016	08:00	Cloudy	66.0	67.0	65.5	67		66	75
25/10/2016	10:05	Fine	64.8	66.0	63.5	67		65	75

Location: M5b - City Garden

Date	Time	Weather	Measurement Noise Level			Baseline Level	Construction Noise Level	Limit Level
			Leq	L10	L90	Leq	Leq	Leq
			Unit: dB(A), (30min)					
27/9/2016	14:19	Fine	69.4	69.5	68.5	68	64	75
4/10/2016	13:00	Fine	70.2	70.5	69.5	68	66	75
12/10/2016	15:00	Fine	70.0	71.0	68.0	68	66	75
20/10/2016	09:00	Cloudy	70.0	72.0	68.0	68	66	75
25/10/2016	10:45	Fine	71.5	72.5	70.0	68	69	75

Location: M6 - HK Baptist Church Henrietta Secondary School

Date	Time	Weather	Measurement Noise Level			Baseline Level	Construction Noise Level	Limit Level
			Leq	L10	L90	Leq	Leq	Leq
			Unit: dB(A), (30-min)					
27/9/2016	15:00	Fine	70.1	71.0	68.0	71	70	70
4/10/2016	13:40	Fine	70.3	71.0	68.5	71	70	70
12/10/2016	15:37	Fine	68.7	71.0	65.5	71	69	70
20/10/2016	09:40	Cloudy	67.0	68.0	66.5	71	67	70
25/10/2016	11:20	Fine	67.6	68.5	66.0	71	68	70



Noise Monitoring Result

Day Time (0700 - 1900hrs on normal weekdays)

Location: M7e - International Finance Centre (Eastern End of Podium) (Reference Station)

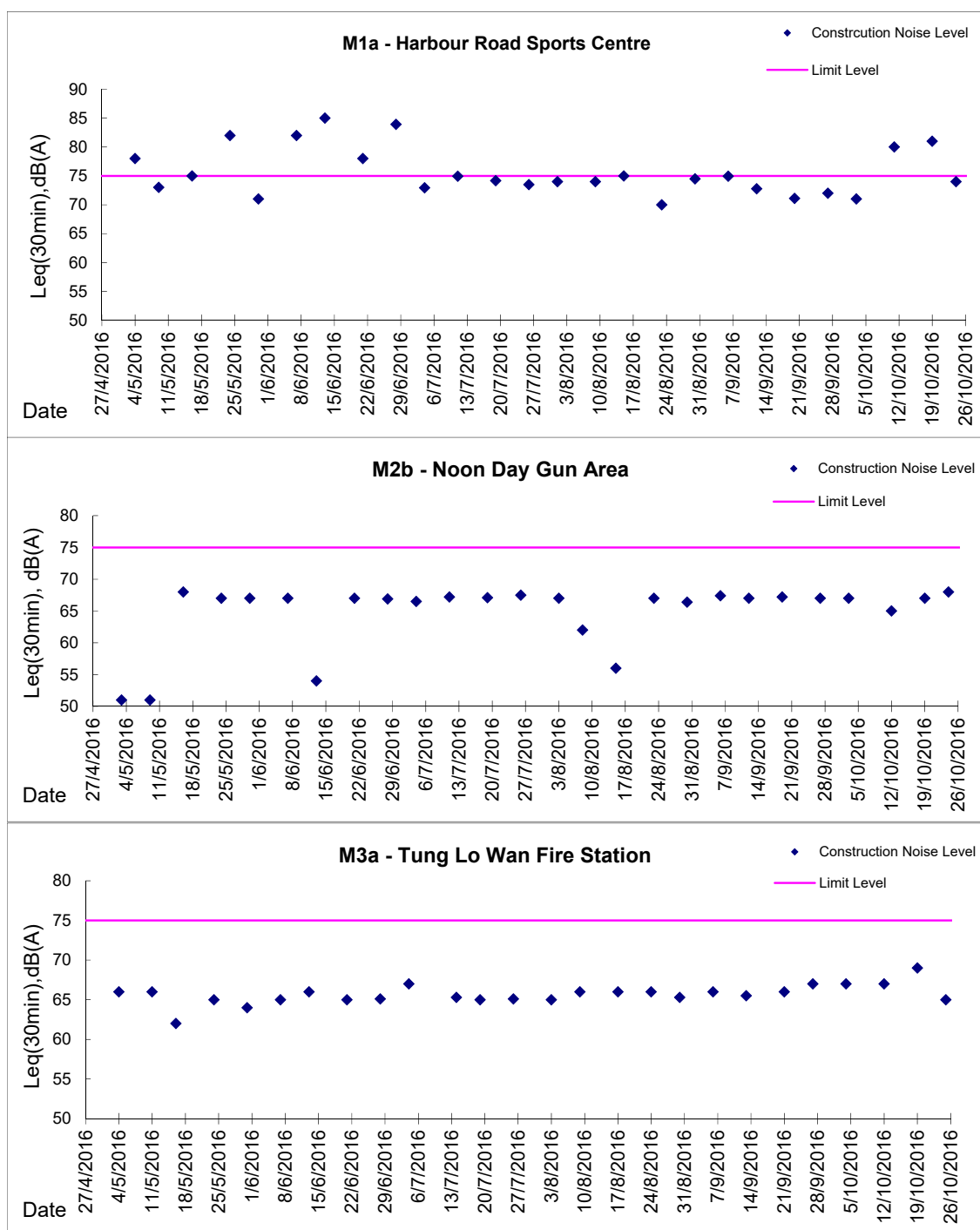
Date	Time	Weather	Measurement Noise Level			Baseline Level	Construction Noise Level	Limit Level
			Leq	L10	L90	Leq	Leq	Leq
			Unit: dB(A), (30-min)					
27/9/2016	08:00	Fine	65.0	66.0	63.5	67	65	N/A
4/10/2016	08:15	Fine	66.2	67.0	64.5	67	66	N/A
14/10/2016	08:00	Fine	66.5	67.5	64.0	67	67	N/A
17/10/2016	08:30	Cloudy	64.5	65.5	63.0	67	65	N/A
24/10/2016	08:00	Fine	66.0	67.5	62.5	67	66	N/A

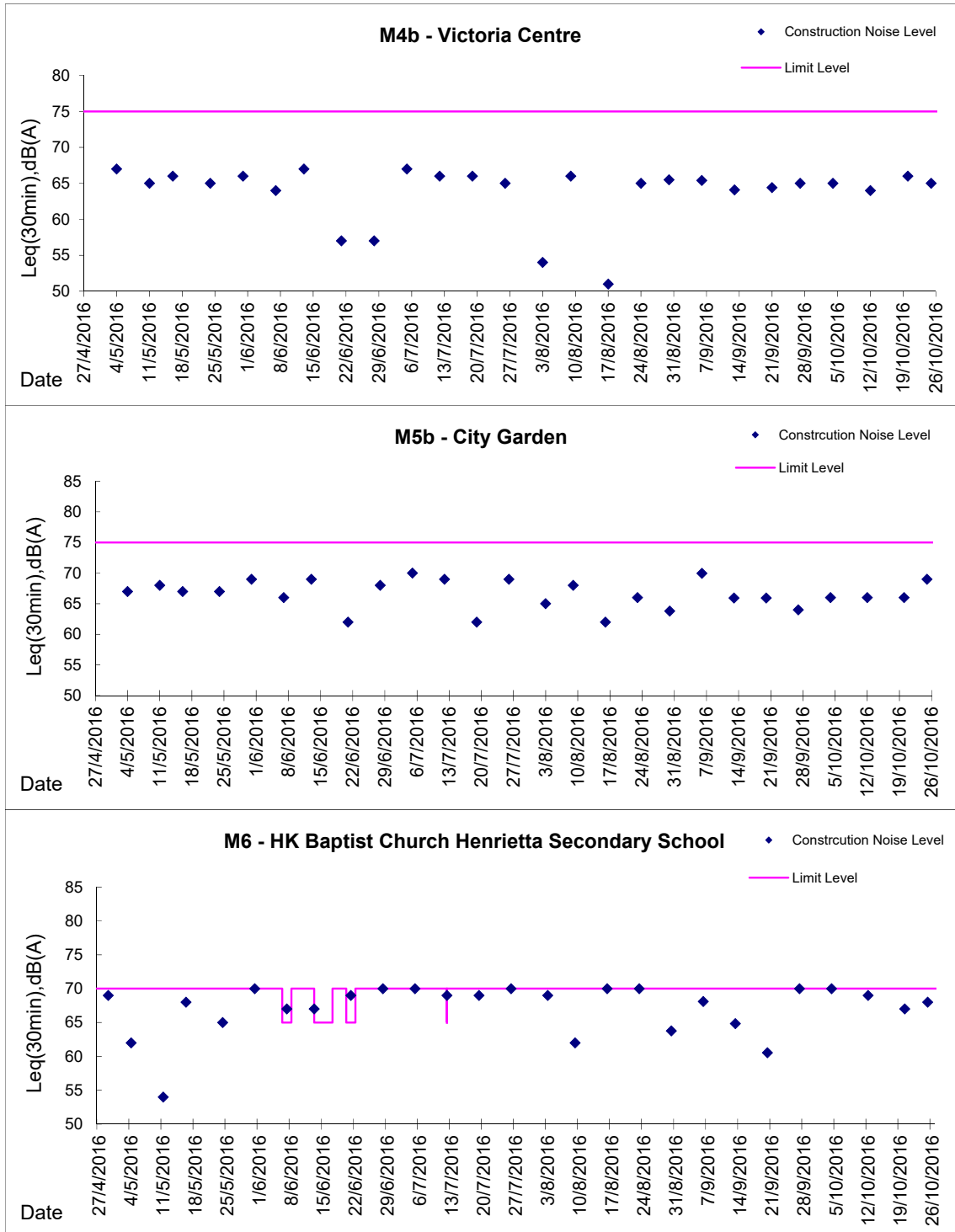
Location: M7w - International Finance Centre (Western End of Podium)

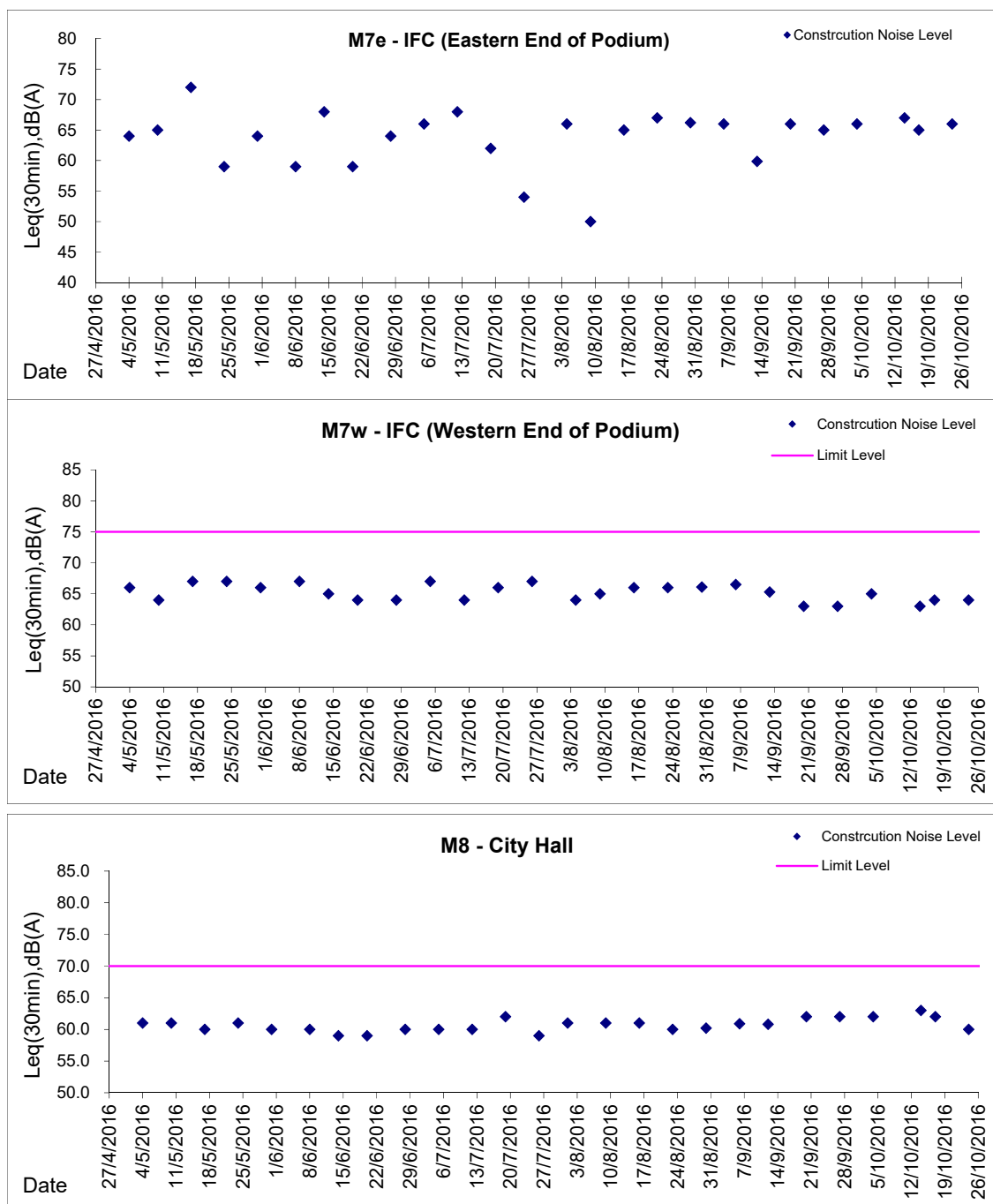
Date	Time	Weather	Measurement Noise Level			Baseline Level	Construction Noise Level	Limit Level
			Leq	L10	L90	Leq	Leq	Leq
			Unit: dB(A), (30-min)					
27/9/2016	08:35	Fine	63.0	65.0	62.0	69	63	75
4/10/2016	08:50	Fine	65.0	66.0	63.5	69	65	75
14/10/2016	08:35	Fine	63.0	64.0	61.5	69	63	75
17/10/2016	09:35	Cloudy	63.5	64.0	61.0	69	64	75
24/10/2016	08:40	Fine	64.0	65.0	62.0	69	64	75

Location: M8 - City Hall

Date	Time	Weather	Measurement Noise Level			Baseline Level	Construction Noise Level	Limit Level
			Leq	L10	L90	Leq	Leq	Leq
			Unit: dB(A), (30-min)					
27/9/2016	09:15	Fine	62.0	63.0	60.0	64	62	70
4/10/2016	09:35	Fine	66.0	67.5	63.0	64	62	70
14/10/2016	09:20	Fine	63.0	64.0	62.0	64	63	70
17/10/2016	11:00	Cloudy	62.0	63.0	59.0	64	62	70
24/10/2016	09:20	Fine	60.4	62.5	56.5	64	60	70

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


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


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


* Remark: M7e - IFC (Eastern End of Podium) is a reference monitoring station

Appendix 5.3

Air Quality Monitoring Results and Graphical Presentations



Location: CMA1b - Oil Street Site Office

Report on 24-hour TSP monitoring

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

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

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, m^3/min			Total Volume, m^3	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
29-Sep-16	8:00	Cloudy	16736	2.8065	3.0024	8833.00	8857.00	24.00	1.83	1.83	1.83	2637	74.3
6-Oct-16	14:02	Rainy	17473	2.8172	2.9116	8865.49	8889.49	24.00	1.83	1.83	1.83	2630	35.9
12-Oct-16	14:02	Cloudy	17517	2.7029	3.0217	8892.49	8916.49	24.00	1.84	1.84	1.84	2647	120.5
15-Oct-16	8:00	Fine	17527	2.7085	2.8926	8916.49	8940.49	24.00	1.83	1.83	1.83	2638	69.8
21-Oct-16	8:00	Rainy	16570	2.8497	2.9950	8943.50	8967.50	24.00	1.82	1.83	1.83	2629	55.3

Remarks: Due to interruption of electricity, the 24hr TSP was rescheduled from 5 and 11 October 2016 to 6 and 12 October 2016 respectively.

Report on 1-hour TSP monitoring

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

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

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, m^3/min			Total Volume, m^3	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
30-Sep-16	8:45	Fine	16726	2.8230	2.8384	8857.00	8858.00	1.00	2.43	2.43	2.43	146	105.6
30-Sep-16	10:45	Fine	17457	2.7968	2.8126	8858.00	8859.00	1.00	2.36	2.36	2.36	141	111.8
30-Sep-16	13:00	Fine	17451	2.7885	2.8318	8859.00	8860.00	1.00	2.39	2.39	2.39	144	301.5
6-Oct-16	9:35	Rainy	17490	2.8239	2.8350	8862.49	8863.49	1.00	1.83	1.83	1.83	110	101.3
6-Oct-16	10:40	Rainy	17491	2.8115	2.8186	8863.49	8864.49	1.00	1.83	1.83	1.83	110	64.8
6-Oct-16	13:00	Rainy	17471	2.8142	2.8218	8864.49	8865.49	1.00	1.83	1.83	1.83	110	69.4
12-Oct-16	9:00	Cloudy	17495	2.8095	2.8253	8889.49	8890.49	1.00	1.84	1.84	1.84	110	143.2
12-Oct-16	10:30	Cloudy	17511	2.7912	2.7985	8890.49	8891.49	1.00	1.84	1.84	1.84	110	66.2
12-Oct-16	13:00	Cloudy	17516	2.6965	2.7046	8891.49	8892.49	1.00	1.84	1.84	1.84	110	73.4
17-Oct-16	8:50	Rainy	16709	2.8926	2.9155	8940.49	8941.49	1.00	1.83	1.83	1.83	110	208.5
17-Oct-16	10:25	Rainy	16702	2.9166	2.9480	8941.49	8942.49	1.00	1.83	1.83	1.83	110	285.8
17-Oct-16	13:00	Rainy	16509	2.8715	2.8959	8942.49	8943.49	1.00	1.83	1.83	1.83	110	222.1
22-Oct-16	8:10	Cloudy	17575	2.7057	2.7130	8967.50	8968.50	1.00	1.83	1.83	1.83	110	66.6
22-Oct-16	9:47	Cloudy	17697	2.7261	2.7321	8968.50	8969.50	1.00	1.83	1.83	1.83	110	54.7
22-Oct-16	10:50	Cloudy	17692	2.7372	2.7510	8969.50	8970.50	1.00	1.83	1.83	1.83	110	125.8



Location: CMA2a - Causeway Bay Community Centre

Report on 24-hour TSP monitoring

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

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

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, m^3/min			Total Volume, m^3	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
29-Sep-16	8:00	Cloudy	16735	2.8159	2.9232	18456.69	18480.69	24.00	1.11	1.11	1.11	1600	67.1
5-Oct-16	8:00	Cloudy	17450	2.8006	2.8883	18483.69	18507.69	24.00	1.11	1.11	1.11	1595	55.0
11-Oct-16	8:00	Cloudy	17631	2.7376	2.8136	18510.69	18534.69	24.00	1.12	1.12	1.12	1607	47.3
15-Oct-16	8:00	Fine	17526	2.7167	2.8870	18537.70	18561.70	24.00	1.11	1.11	1.11	1601	106.4
21-Oct-16	8:00	Rainy	17555	2.6985	2.7739	18584.89	18608.89	24.00	1.11	1.11	1.11	1594	47.3

Report on 1-hour TSP monitoring

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

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

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, m^3/min			Total Volume, m^3	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
30-Sep-16	8:50	Fine	16727	2.8065	2.8254	18480.69	18481.69	1.00	1.11	1.11	1.11	67	282.8
30-Sep-16	10:50	Fine	17458	2.7826	2.7865	18481.69	18482.69	1.00	1.11	1.11	1.11	67	58.4
30-Sep-16	13:00	Fine	17452	2.8014	2.8157	18482.69	18483.69	1.00	1.11	1.11	1.11	67	214.0
6-Oct-16	9:25	Rainy	17489	2.8158	2.8233	18507.69	18508.69	1.00	1.17	1.17	1.17	70	107.0
6-Oct-16	10:27	Rainy	17623	2.7741	2.7805	18508.69	18509.69	1.00	1.17	1.17	1.17	70	91.3
6-Oct-16	13:00	Rainy	17626	2.7380	2.7422	18509.69	18510.69	1.00	1.17	1.17	1.17	70	59.9
12-Oct-16	9:15	Cloudy	17478	2.8269	2.8347	18534.69	18535.69	1.00	1.12	1.12	1.12	67	116.4
12-Oct-16	10:35	Cloudy	17509	2.7884	2.7906	18535.69	18536.69	1.00	1.12	1.12	1.12	67	32.8
12-Oct-16	13:00	Cloudy	17515	2.6937	2.7004	18536.69	18537.69	1.00	1.12	1.12	1.12	67	100.0
17-Oct-16	8:05	Rainy	16710	2.8992	2.9074	18561.70	18562.70	1.00	1.11	1.11	1.11	67	123.0
17-Oct-16	9:10	Rainy	16703	2.9160	2.9270	18562.70	18563.70	1.00	1.11	1.11	1.11	67	165.0
17-Oct-16	13:08	Rainy	16688	2.9064	2.9148	18563.70	18564.70	1.00	1.20	1.20	1.20	72	116.5
22-Oct-16	8:05	Cloudy	17574	2.7039	2.7060	18608.89	18609.89	1.00	1.11	1.11	1.11	67	31.6
22-Oct-16	9:45	Cloudy	17698	2.7342	2.7364	18609.89	18610.89	1.00	1.11	1.11	1.11	67	33.1
22-Oct-16	10:50	Cloudy	17693	2.7603	2.7647	18610.89	18611.89	1.00	1.11	1.11	1.11	67	66.2



Location: CMA3a - CWB PRE Site Office Area

Report on 24-hour TSP monitoring

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

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

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, m^3/min			Total Volume, m^3	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
29-Sep-16	8:00	Cloudy	16739	2.8195	2.9849	5931.60	5955.60	24.00	1.18	1.18	1.18	1700	97.3
5-Oct-16	8:00	Cloudy	17446	2.8072	2.8879	5958.60	5982.60	24.00	1.24	1.24	1.24	1784	45.2
11-Oct-16	8:00	Cloudy	17472	2.8269	2.8978	5985.60	6009.60	24.00	1.25	1.25	1.25	1798	39.4
15-Oct-16	8:00	Fine	17524	2.7343	2.8212	6012.61	6036.61	24.00	1.25	1.24	1.24	1791	48.5
21-Oct-16	8:00	Rainy	15529	2.8335	2.9352	6039.61	6063.61	24.00	1.24	1.24	1.24	1784	57.0

Report on 1-hour TSP monitoring

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

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

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, m^3/min			Total Volume, m^3	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
30-Sep-16	8:30	Fine	16729	2.8230	2.8322	5955.60	5956.60	1.00	1.12	1.12	1.12	67	136.8
30-Sep-16	10:05	Fine	16721	2.8190	2.8289	5956.60	5957.60	1.00	1.12	1.12	1.12	67	147.2
30-Sep-16	13:00	Fine	17453	2.8027	2.8161	5957.60	5958.60	1.00	1.12	1.12	1.12	67	199.3
6-Oct-16	9:10	Rainy	17488	2.8172	2.8208	5982.60	5983.60	1.00	1.24	1.24	1.24	74	48.4
6-Oct-16	10:30	Rainy	17492	2.8124	2.8160	5983.60	5984.60	1.00	1.24	1.24	1.24	74	48.4
6-Oct-16	13:00	Rainy	17470	2.8038	2.8076	5984.60	5985.60	1.00	1.24	1.24	1.24	74	51.1
12-Oct-16	8:40	Cloudy	17477	2.8169	2.8199	6009.60	6010.60	1.00	1.12	1.12	1.12	67	44.5
12-Oct-16	10:05	Cloudy	17484	2.8081	2.8104	6010.60	6011.60	1.00	1.12	1.12	1.12	67	34.1
12-Oct-16	13:00	Cloudy	17513	2.8127	2.8210	6011.60	6012.60	1.00	1.25	1.25	1.25	75	110.7
17-Oct-16	8:35	Rainy	16712	2.9095	2.9160	6036.61	6037.61	1.00	1.24	1.24	1.24	75	87.2
17-Oct-16	10:00	Rainy	16704	2.9213	2.9280	6037.61	6038.61	1.00	1.24	1.24	1.24	75	89.8
17-Oct-16	13:00	Rainy	16699	2.9360	2.9451	6038.61	6039.61	1.00	1.24	1.24	1.24	75	122.0
22-Oct-16	8:25	Cloudy	17577	2.7108	2.7159	6063.61	6064.61	1.00	1.24	1.24	1.24	74	68.5
22-Oct-16	9:30	Cloudy	17720	2.7532	2.7582	6064.61	6065.61	1.00	1.24	1.24	1.24	74	67.2
22-Oct-16	10:50	Cloudy	17690	2.7449	2.7534	6065.61	6066.61	1.00	1.24	1.24	1.24	74	114.2



Location: CMA4a - SPCA

Report on 24-hour TSP monitoring

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

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

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, m^3/min			Total Volume, m^3	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
29-Sep-16	8:00	Cloudy	16740	2.8335	2.9816	22715.26	22739.26	24.00	1.13	1.13	1.13	1625	91.1
5-Oct-16	8:00	Cloudy	17447	2.8060	2.8766	22742.27	22766.27	24.00	1.13	1.13	1.13	1621	43.5
11-Oct-16	8:00	Cloudy	17629	2.7563	2.8101	22769.27	22793.27	24.00	1.13	1.13	1.13	1631	33.0
15-Oct-16	8:00	Fine	17523	2.7413	2.8181	22796.28	22820.28	24.00	1.13	1.13	1.13	1626	47.2
21-Oct-16	8:00	Rainy	17551	2.7119	2.8072	22823.28	22847.28	24.00	1.12	1.13	1.13	1621	58.8

Report on 1-hour TSP monitoring

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

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

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, m^3/min			Total Volume, m^3	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
30-Sep-16	8:35	Fine	16728	2.8113	2.8189	22739.26	22740.26	1.00	1.13	1.13	1.13	68	112.0
30-Sep-16	10:05	Fine	16722	2.8275	2.8366	22740.26	22741.26	1.00	1.15	1.15	1.15	69	131.5
30-Sep-16	13:00	Fine	17454	2.8034	2.8159	22741.26	22742.26	1.00	1.18	1.18	1.18	71	177.2
6-Oct-16	9:05	Rainy	17487	2.8180	2.8219	22766.27	22767.27	1.00	1.13	1.13	1.13	68	57.7
6-Oct-16	10:10	Rainy	17622	2.7686	2.7723	22767.27	22768.27	1.00	1.13	1.13	1.13	68	54.8
6-Oct-16	13:00	Rainy	17625	2.7700	2.7722	22768.27	22769.27	1.00	1.13	1.13	1.13	68	32.6
12-Oct-16	8:45	Cloudy	17476	2.8285	2.8304	22793.28	22794.28	1.00	1.13	1.13	1.13	68	28.0
12-Oct-16	10:10	Cloudy	17483	2.8183	2.8207	22794.28	22795.28	1.00	1.13	1.13	1.13	68	35.3
12-Oct-16	13:00	Cloudy	17512	2.8183	2.8235	22795.28	22796.28	1.00	1.13	1.13	1.13	68	76.5
17-Oct-16	8:05	Rainy	16711	2.9094	2.9156	22820.28	22821.28	1.00	1.13	1.13	1.13	68	91.6
17-Oct-16	9:10	Rainy	16705	2.9185	2.9245	22821.28	22822.28	1.00	1.13	1.13	1.13	68	88.6
17-Oct-16	13:00	Rainy	16689	2.9007	2.9078	22822.28	22823.28	1.00	1.17	1.17	1.17	70	100.9
22-Oct-16	8:25	Cloudy	17576	2.7179	2.7209	22847.28	22848.28	1.00	1.13	1.13	1.13	68	44.4
22-Oct-16	9:35	Cloudy	17719	2.7615	2.7646	22848.28	22849.28	1.00	1.13	1.13	1.13	68	45.9
22-Oct-16	10:50	Cloudy	17691	2.7394	2.7454	22849.28	22850.28	1.00	1.13	1.13	1.13	68	88.7



Location: CMA5b - Pedestrian Plaza

Report on 24-hour TSP monitoring

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

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

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, m^3/min			Total Volume, m^3	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
29-Sep-16	8:00	Cloudy	16742	2.8173	3.0255	7322.77	7346.77	24.00	0.98	0.99	0.98	1415	147.2
5-Oct-16	8:00	Cloudy	17448	2.7919	2.8387	7349.77	7373.77	24.00	0.87	0.87	0.87	1248	37.5
11-Oct-16	8:00	Cloudy	17627	2.7351	2.9089	7376.77	7400.77	24.00	0.99	0.99	0.99	1422	122.2
15-Oct-16	8:00	Fine	17646	2.7520	2.9585	7403.77	7427.77	24.00	0.96	0.95	0.96	1375	150.2
21-Oct-16	8:00	Rainy	17554	2.6961	2.7856	7430.77	7454.77	24.00	0.95	0.95	0.95	1369	65.4

Report on 1-hour TSP monitoring

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

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

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, m^3/min			Total Volume, m^3	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
30-Sep-16	8:15	Fine	16730	2.8162	2.8337	7346.77	7347.77	1.00	0.96	0.93	0.94	57	309.3
30-Sep-16	9:57	Fine	16723	2.8207	2.8310	7347.77	7348.77	1.00	0.87	0.87	0.87	52	196.7
30-Sep-16	13:00	Fine	17455	2.7971	2.8088	7348.77	7349.77	1.00	0.87	0.87	0.87	52	223.4
6-Oct-16	8:35	Rainy	17486	2.8115	2.8226	7373.77	7374.77	1.00	0.98	0.98	0.98	59	189.0
6-Oct-16	9:40	Rainy	17619	2.7605	2.7728	7374.77	7375.77	1.00	0.98	0.98	0.98	59	209.5
6-Oct-16	10:58	Rainy	17624	2.7639	2.7743	7375.77	7376.77	1.00	0.98	0.98	0.98	59	177.1
12-Oct-16	8:35	Cloudy	17475	2.8118	2.8237	7400.77	7401.77	1.00	0.88	0.88	0.88	53	226.6
12-Oct-16	9:45	Cloudy	17482	2.8196	2.8266	7401.77	7402.77	1.00	0.99	0.99	0.99	59	118.1
12-Oct-16	10:50	Cloudy	17644	2.7485	2.7622	7402.77	7403.77	1.00	0.96	0.96	0.96	58	237.8
17-Oct-16	8:05	Rainy	17557	2.6856	2.6982	7427.77	7428.77	1.00	0.95	0.95	0.95	57	220.1
17-Oct-16	9:10	Rainy	16707	2.9028	2.9213	7428.77	7429.77	1.00	0.95	0.95	0.95	57	323.1
17-Oct-16	10:30	Rainy	16701	2.9259	2.9447	7429.77	7430.77	1.00	0.98	0.98	0.98	59	319.0
22-Oct-16	8:05	Cloudy	17750	2.7531	2.7592	7454.77	7455.77	1.00	0.98	0.98	0.98	59	103.8
22-Oct-16	9:10	Cloudy	17701	2.7119	2.7138	7455.77	7456.77	1.00	0.92	0.87	0.90	54	35.3
22-Oct-16	10:50	Cloudy	17694	2.7597	2.7690	7456.77	7457.77	1.00	0.98	0.98	0.98	59	158.2



Location: MA1e - International Finance Centre (Eastern Wing)

Report on 24-hour TSP monitoring

Action Level ($\mu\text{g}/\text{m}^3$) - 173.4

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

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, m^3/min			Total Volume, m^3	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
29-Sep-16	8:00	Cloudy	16695	2.9272	3.0869	19535.11	19559.11	24.00	1.25	1.25	1.25	1798	88.8
5-Oct-16	8:00	Cloudy	17572	2.6980	2.8009	19562.11	19586.11	24.00	1.25	1.25	1.25	1794	57.3
11-Oct-16	8:00	Cloudy	17466	2.8267	2.9044	19589.11	19613.11	24.00	1.25	1.25	1.25	1804	43.1
17-Oct-16	11:30	Rainy	16718	2.8099	2.8898	19619.12	19643.12	24.00	1.25	1.25	1.25	1800	44.4
21-Oct-16	8:00	Rainy	17730	2.7524	2.8519	19643.12	19667.12	24.00	1.29	1.29	1.29	1854	53.7

Remarks: Due to interruption of electricity, the 24hr TSP was rescheduled from 15 October 2016 to 17 October 2016.

Report on 1-hour TSP monitoring

Action Level ($\mu\text{g}/\text{m}^3$) - 325.1

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

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, m^3/min			Total Volume, m^3	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
30-Sep-16	8:40	Fine	17563	2.6897	2.6937	19559.11	19560.11	1.00	1.21	1.21	1.21	73	55.1
30-Sep-16	9:42	Fine	17566	2.7122	2.7214	19560.11	19561.11	1.00	1.21	1.21	1.21	73	126.8
30-Sep-16	10:44	Fine	17569	2.7038	2.7138	19561.11	19562.11	1.00	1.21	1.21	1.21	73	137.8
6-Oct-16	8:02	Rainy	17437	2.8151	2.8190	19586.11	19587.11	1.00	1.25	1.25	1.25	75	52.2
6-Oct-16	9:04	Rainy	17460	2.7944	2.7991	19587.11	19588.11	1.00	1.25	1.25	1.25	75	62.9
6-Oct-16	10:06	Rainy	17463	2.8017	2.8061	19588.11	19589.11	1.00	1.25	1.25	1.25	75	58.9
12-Oct-16	8:05	Cloudy	16311	2.8294	2.8313	19613.12	19614.12	1.00	1.21	1.21	1.21	73	26.1
12-Oct-16	9:07	Cloudy	16414	2.8554	2.8575	19614.12	19615.12	1.00	1.21	1.21	1.21	73	28.9
12-Oct-16	10:16	Cloudy	16315	2.8656	2.8687	19615.12	19616.12	1.00	1.21	1.21	1.21	73	42.7
17-Oct-16	8:00	Rainy	17528	2.7013	2.7044	19616.12	19617.12	1.00	1.25	1.25	1.25	75	41.4
17-Oct-16	9:02	Rainy	17531	2.7154	2.7199	19617.12	19618.12	1.00	1.25	1.25	1.25	75	60.1
17-Oct-16	10:04	Rainy	17534	2.7134	2.7169	19618.12	19619.12	1.00	1.21	1.21	1.21	72	48.3
22-Oct-16	8:02	Cloudy	16714	2.8988	2.9032	19667.12	19668.12	1.00	1.29	1.29	1.29	77	56.9
22-Oct-16	9:05	Cloudy	17731	2.7535	2.7590	19668.12	19669.12	1.00	1.29	1.29	1.29	77	71.1
22-Oct-16	10:08	Cloudy	17727	2.7781	2.7820	19669.12	19670.12	1.00	1.29	1.29	1.29	77	50.4



Location: MA1w - International Finance Centre (Western Wing)

Report on 24-hour TSP monitoring

Action Level ($\mu\text{g}/\text{m}^3$) - 173.4
Limit Level ($\mu\text{g}/\text{m}^3$) - 260

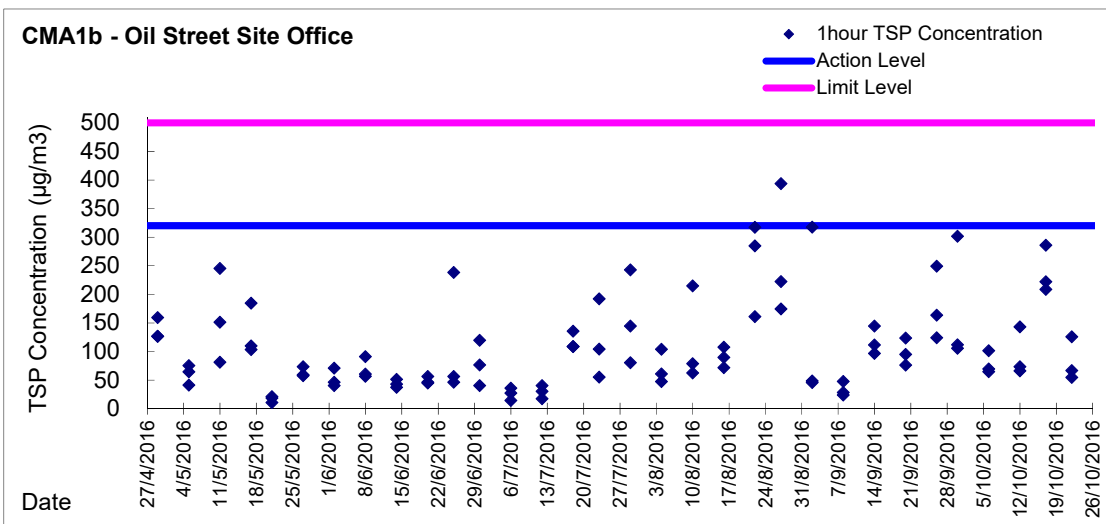
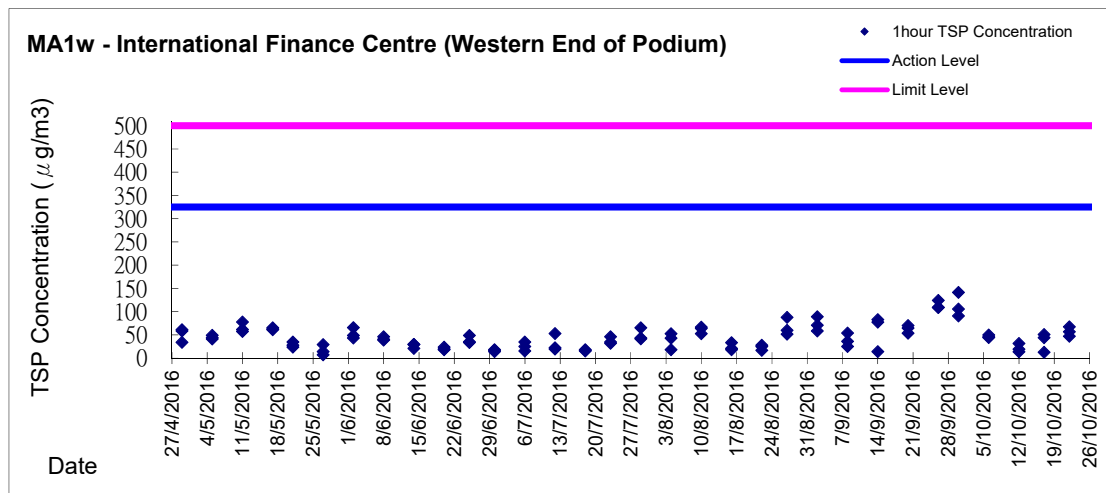
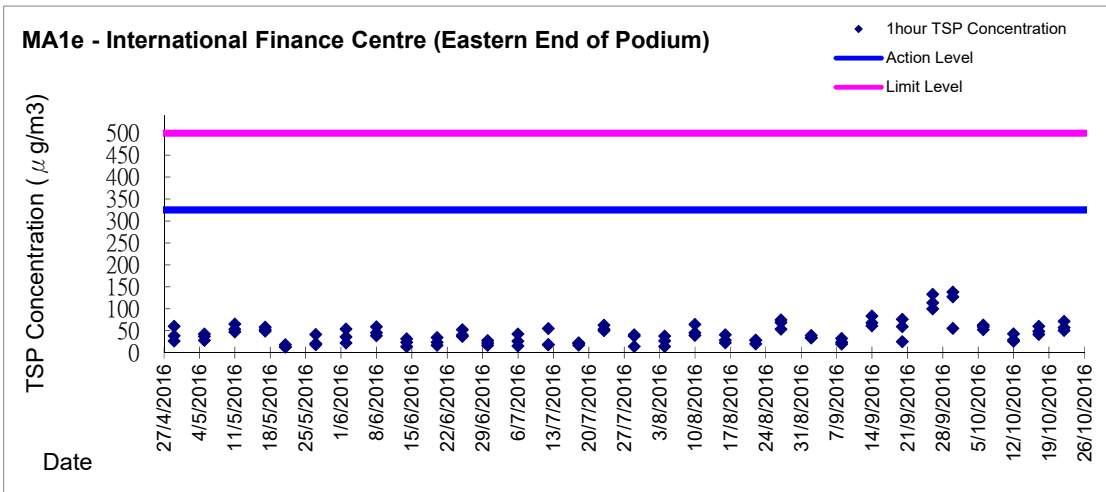
Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, m^3/min			Total Volume, m^3	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
29-Sep-16	8:00	Cloudy	16694	2.9058	3.0379	19424.16	19448.16	24.00	1.21	1.22	1.21	1747	75.6
5-Oct-16	8:00	Cloudy	17571	2.7093	2.8066	19451.16	19475.16	24.00	1.21	1.21	1.21	1743	55.8
11-Oct-16	8:00	Cloudy	17467	2.8210	2.8865	19478.16	19502.16	24.00	1.22	1.22	1.22	1752	37.4
15-Oct-16	8:00	Fine	12824	2.8808	2.9157	19505.16	19529.16	24.00	1.21	1.21	1.21	1748	20.0
21-Oct-16	8:00	Rainy	16717	2.8294	2.9298	19532.16	19556.16	24.00	1.21	1.21	1.21	1743	57.6

Report on 1-hour TSP monitoring

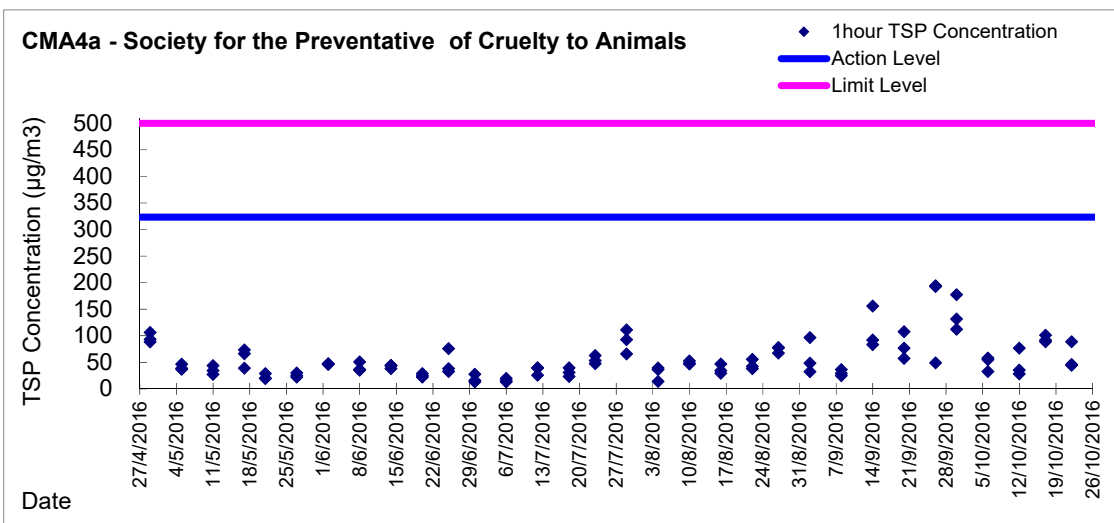
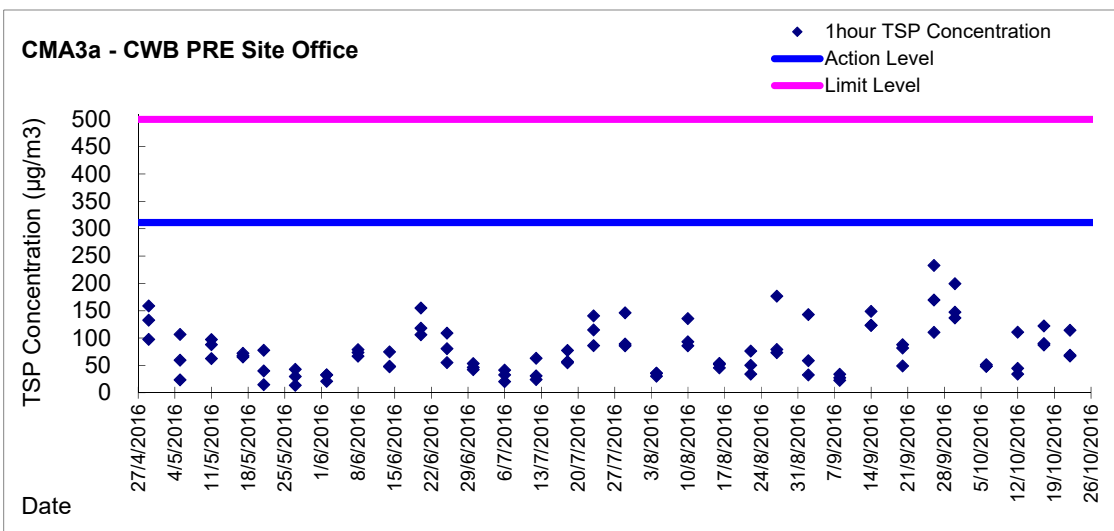
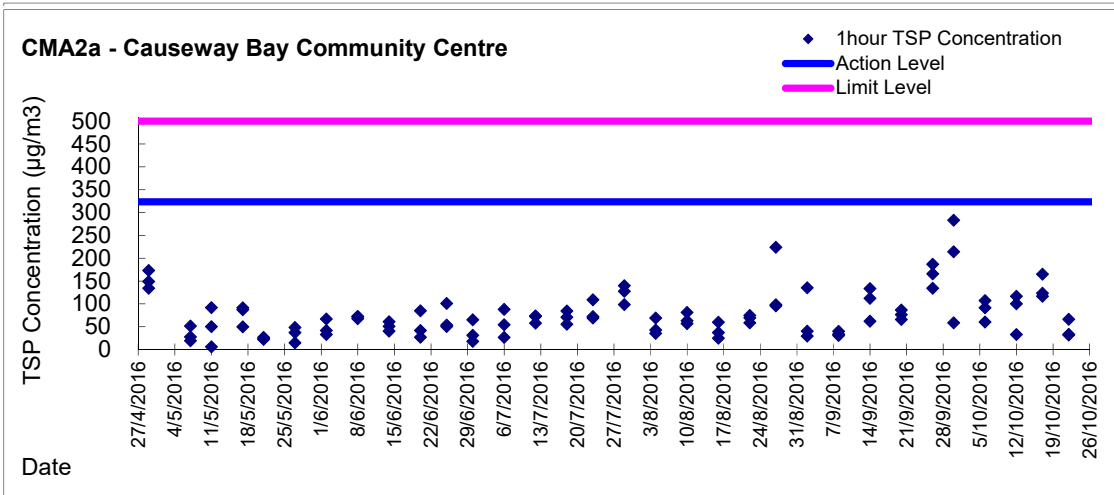
Action Level ($\mu\text{g}/\text{m}^3$) - 325.1
Limit Level ($\mu\text{g}/\text{m}^3$) - 500

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, m^3/min			Total Volume, m^3	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, Q_{si}	Final, Q_{sf}	Average		
30-Sep-16	8:30	Fine	17144	2.8021	2.8087	19448.16	19449.16	1.00	1.22	1.22	1.22	73	90.5
30-Sep-16	9:32	Fine	17565	2.7256	2.7333	19449.16	19450.16	1.00	1.22	1.22	1.22	73	105.6
30-Sep-16	10:35	Fine	17568	2.7148	2.7251	19450.16	19451.16	1.00	1.22	1.22	1.22	73	141.3
6-Oct-16	8:05	Rainy	17436	2.8023	2.8056	19475.16	19476.16	1.00	1.21	1.21	1.21	73	45.4
6-Oct-16	9:07	Rainy	17461	2.7874	2.7910	19476.16	19477.16	1.00	1.21	1.21	1.21	73	49.6
6-Oct-16	10:09	Rainy	17464	2.8187	2.8219	19477.16	19478.16	1.00	1.21	1.21	1.21	73	44.1
12-Oct-16	8:03	Cloudy	16310	2.8312	2.8326	19502.16	19503.16	1.00	1.22	1.22	1.22	73	19.2
12-Oct-16	9:05	Cloudy	16313	2.8419	2.8442	19503.16	19504.16	1.00	1.22	1.22	1.22	73	31.5
12-Oct-16	10:09	Cloudy	16316	2.8583	2.8593	19504.16	19505.16	1.00	1.22	1.22	1.22	73	13.7
17-Oct-16	8:05	Rainy	17529	2.7060	2.7069	19529.16	19530.16	1.00	1.21	1.21	1.21	73	12.4
17-Oct-16	9:07	Rainy	17532	2.7148	2.7185	19530.16	19531.16	1.00	1.21	1.21	1.21	73	50.8
17-Oct-16	10:09	Rainy	17535	2.7141	2.7173	19531.16	19532.16	1.00	1.21	1.21	1.21	73	44.0
22-Oct-16	8:05	Cloudy	17733	2.7506	2.7555	19556.16	19557.16	1.00	1.21	1.21	1.21	73	67.4
22-Oct-16	9:07	Cloudy	17729	2.7726	2.7760	19557.16	19558.16	1.00	1.21	1.21	1.21	73	46.8
22-Oct-16	10:09	Cloudy	17726	2.7727	2.7768	19558.16	19559.16	1.00	1.21	1.21	1.21	73	56.4

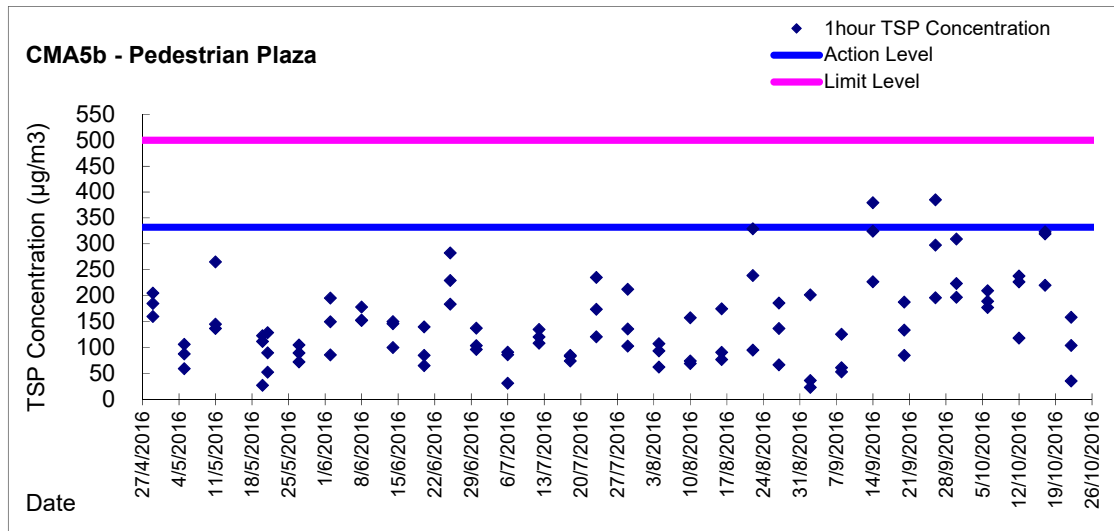
Graphic Presentation of 1 hour TSP Result

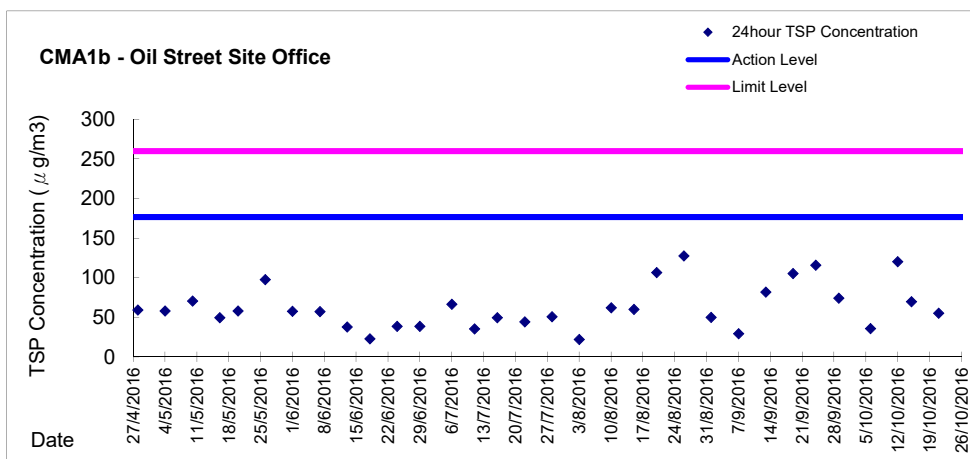
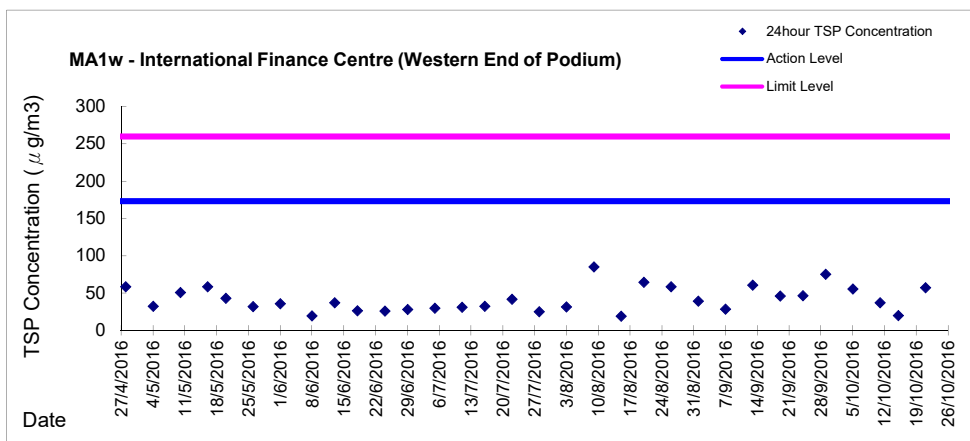
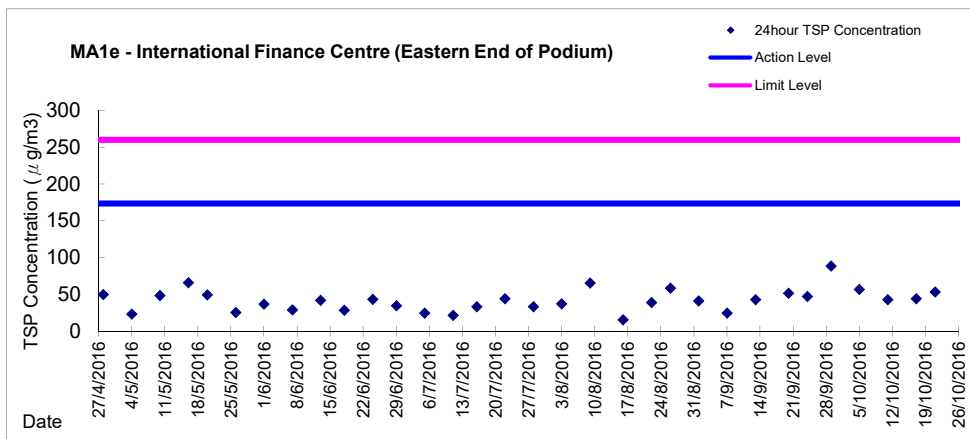


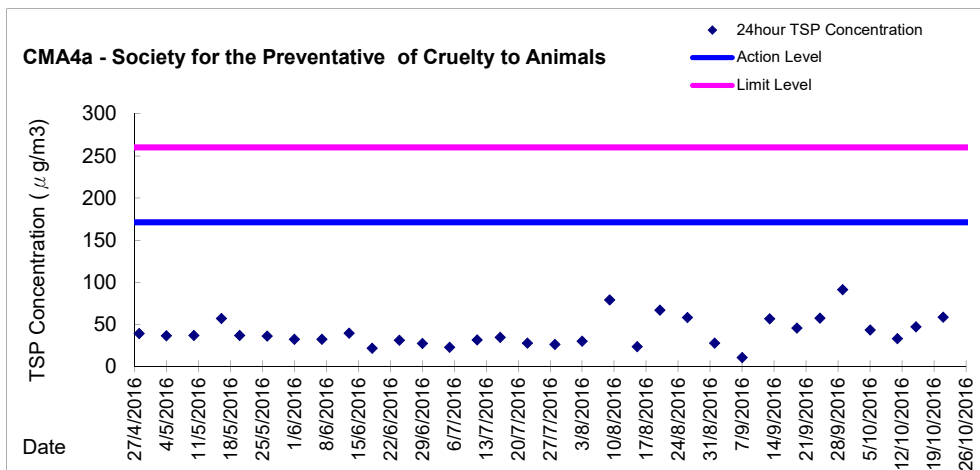
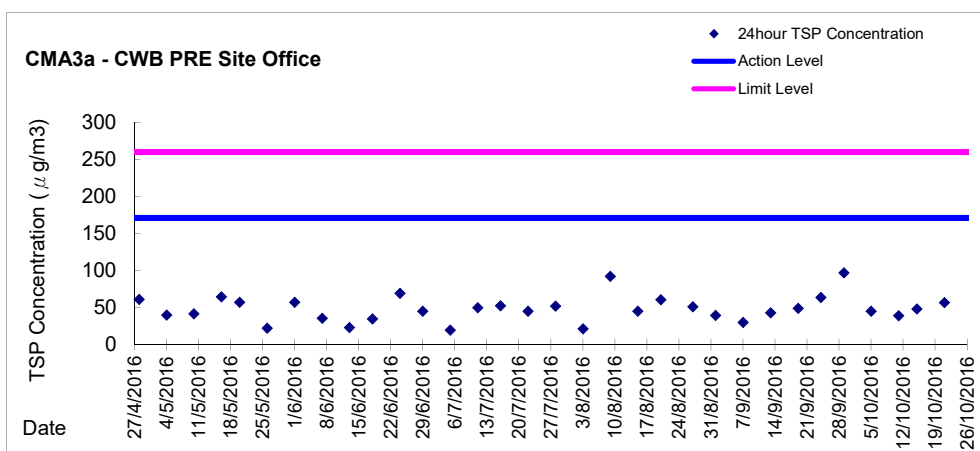
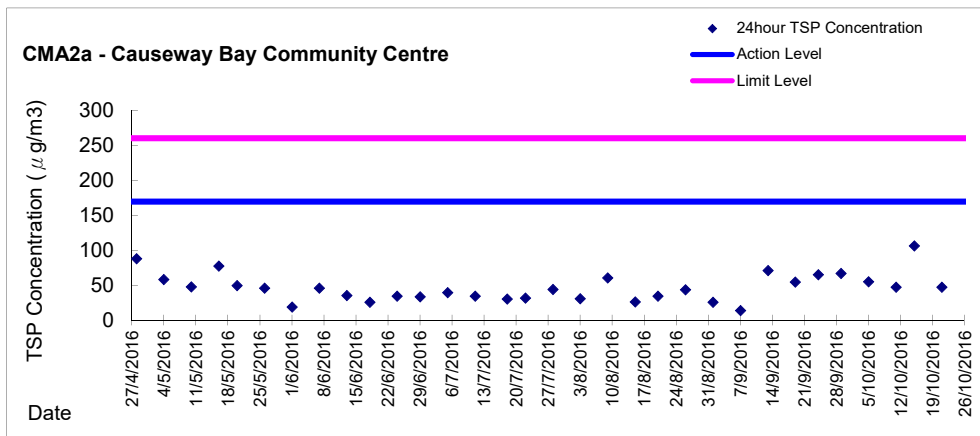
Graphic Presentation of 1 hour TSP Result



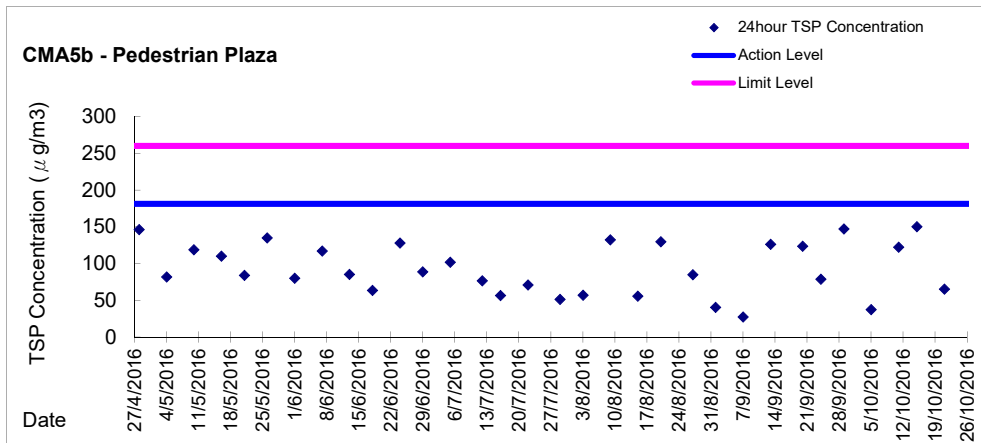
Graphic Presentation of 1 hour TSP Result



Graphic Presentation of 24 hour TSP Result


Graphic Presentation of 24 hour TSP Result


Graphic Presentation of 24 hour TSP Result



Appendix 5.4

Real Time Noise Monitoring Results and Graphical Presentations

Real-time Noise Data	RTN2a (Hong Kong Electric Centre)							
14/10/2016 4:41 54	15/10/2016 5:46 55	16/10/2016 6:51 57	17/10/2016 23:56 45	19/10/2016 1:01 56	20/10/2016 2:06 56			
14/10/2016 4:46 55	15/10/2016 5:51 55	16/10/2016 6:56 58	18/10/2016 0:01 43	19/10/2016 1:06 56	20/10/2016 2:11 55			
14/10/2016 4:51 55	15/10/2016 5:56 56	16/10/2016 23:01 58	18/10/2016 0:06 58	19/10/2016 1:11 56	20/10/2016 2:16 55			
14/10/2016 4:56 54	15/10/2016 6:01 55	16/10/2016 23:06 57	18/10/2016 0:11 57	19/10/2016 1:16 55	20/10/2016 2:21 55			
14/10/2016 5:01 54	15/10/2016 6:06 56	16/10/2016 23:11 58	18/10/2016 0:16 57	19/10/2016 1:21 56	20/10/2016 2:26 56			
14/10/2016 5:06 55	15/10/2016 6:11 57	16/10/2016 23:16 58	18/10/2016 0:21 58	19/10/2016 1:26 56	20/10/2016 2:31 55			
14/10/2016 5:11 55	15/10/2016 6:16 58	16/10/2016 23:21 58	18/10/2016 0:26 58	19/10/2016 1:31 57	20/10/2016 2:36 55			
14/10/2016 5:16 54	15/10/2016 6:21 56	16/10/2016 23:26 57	18/10/2016 0:31 58	19/10/2016 1:36 56	20/10/2016 2:41 55			
14/10/2016 5:21 55	15/10/2016 6:26 57	16/10/2016 23:31 57	18/10/2016 0:36 58	19/10/2016 1:41 58	20/10/2016 2:46 55			
14/10/2016 5:26 55	15/10/2016 6:31 57	16/10/2016 23:36 57	18/10/2016 0:41 57	19/10/2016 1:46 57	20/10/2016 2:51 55			
14/10/2016 5:31 54	15/10/2016 6:36 58	16/10/2016 23:41 58	18/10/2016 0:46 57	19/10/2016 1:51 57	20/10/2016 2:56 54			
14/10/2016 5:36 55	15/10/2016 6:41 57	16/10/2016 23:46 57	18/10/2016 0:51 57	19/10/2016 1:56 57	20/10/2016 3:01 54			
14/10/2016 5:41 56	15/10/2016 6:46 58	16/10/2016 23:51 58	18/10/2016 0:56 57	19/10/2016 2:01 55	20/10/2016 3:06 55			
14/10/2016 5:46 55	15/10/2016 6:51 44	16/10/2016 23:56 57	18/10/2016 1:01 56	19/10/2016 2:06 56	20/10/2016 3:11 55			
14/10/2016 5:51 56	15/10/2016 6:56 58	17/10/2016 0:01 57	18/10/2016 1:06 56	19/10/2016 2:11 57	20/10/2016 3:16 54			
14/10/2016 5:56 56	15/10/2016 23:01 39	17/10/2016 0:06 57	18/10/2016 1:11 56	19/10/2016 2:16 56	20/10/2016 3:21 54			
14/10/2016 6:01 55	15/10/2016 23:06 48	17/10/2016 0:11 57	18/10/2016 1:16 56	19/10/2016 2:21 55	20/10/2016 3:26 53			
14/10/2016 6:06 56	15/10/2016 23:11 51	17/10/2016 0:16 57	18/10/2016 1:21 56	19/10/2016 2:26 55	20/10/2016 3:31 54			
14/10/2016 6:11 57	15/10/2016 23:16 58	17/10/2016 0:21 56	18/10/2016 1:26 56	19/10/2016 2:31 55	20/10/2016 3:36 53			
14/10/2016 6:16 58	15/10/2016 23:21 58	17/10/2016 0:26 57	18/10/2016 1:31 57	19/10/2016 2:36 54	20/10/2016 3:41 55			
14/10/2016 6:21 58	15/10/2016 23:26 46	17/10/2016 0:31 56	18/10/2016 1:36 56	19/10/2016 2:41 55	20/10/2016 3:46 57			
14/10/2016 6:26 57	15/10/2016 23:31 42	17/10/2016 0:36 56	18/10/2016 1:41 55	19/10/2016 2:46 54	20/10/2016 3:51 54			
14/10/2016 6:31 58	15/10/2016 23:36 58	17/10/2016 0:41 57	18/10/2016 1:46 57	19/10/2016 2:51 55	20/10/2016 3:56 55			
14/10/2016 6:36 58	15/10/2016 23:41 58	17/10/2016 0:46 56	18/10/2016 1:51 56	19/10/2016 2:56 55	20/10/2016 4:01 54			
14/10/2016 6:41 58	15/10/2016 23:46 58	17/10/2016 0:51 56	18/10/2016 1:56 57	19/10/2016 3:01 55	20/10/2016 4:06 54			
14/10/2016 6:46 58	15/10/2016 23:51 57	17/10/2016 0:56 56	18/10/2016 2:01 56	19/10/2016 3:06 55	20/10/2016 4:11 54			
14/10/2016 6:51 58	15/10/2016 23:56 49	17/10/2016 1:01 55	18/10/2016 2:06 56</					

Real-time Noise Data	RTN3 (Po Leung Kuk Yu Lee Mo Fan Memorial School)								
23/10/2016 12:26 65	23/10/2016 21:31 64	25/10/2016 22:36 65	27/9/2016 4:26 58	28/9/2016 5:31 60	29/9/2016 6:36 56				
23/10/2016 12:31 66	23/10/2016 21:36 64	25/10/2016 22:41 65	27/9/2016 4:31 58	28/9/2016 5:36 60	29/9/2016 6:41 59				
23/10/2016 12:36 66	23/10/2016 21:41 65	25/10/2016 22:46 65	27/9/2016 4:36 58	28/9/2016 5:41 61	29/9/2016 6:46 60				
23/10/2016 12:41 65	23/10/2016 21:46 64	25/10/2016 22:51 65	27/9/2016 4:41 59	28/9/2016 5:46 61	29/9/2016 6:51 61				
23/10/2016 12:46 66	23/10/2016 21:51 64	25/10/2016 22:56 65	27/9/2016 4:46 57	28/9/2016 5:51 60	29/9/2016 6:56 61				
23/10/2016 12:51 66	23/10/2016 21:56 64	26/10/2016 19:01 62	27/9/2016 4:51 58	28/9/2016 5:56 62	29/9/2016 7:01 59				
23/10/2016 12:56 66	23/10/2016 22:01 65	26/10/2016 19:06 63	27/9/2016 4:56 58	28/9/2016 6:01 61	29/9/2016 7:06 60				
23/10/2016 13:01 40	23/10/2016 22:06 65	26/10/2016 19:11 63	27/9/2016 5:01 59	28/9/2016 6:06 61	29/9/2016 7:11 59				
23/10/2016 13:06 66	23/10/2016 22:11 64	26/10/2016 19:16 64	27/9/2016 5:06 59	28/9/2016 6:11 62	29/9/2016 7:16 59				
23/10/2016 13:11 66	23/10/2016 22:16 65	26/10/2016 19:21 66	27/9/2016 5:11 59	28/9/2016 6:16 62	29/9/2016 7:21 58				
23/10/2016 13:16 66	23/10/2016 22:21 65	26/10/2016 19:26 65	27/9/2016 5:16 59	28/9/2016 6:21 63	29/9/2016 7:26 58				
23/10/2016 13:21 66	23/10/2016 22:26 64	26/10/2016 19:31 65	27/9/2016 5:21 59	28/9/2016 6:26 63	29/9/2016 7:31 58				
23/10/2016 13:26 65	23/10/2016 22:31 64	26/10/2016 19:36 65	27/9/2016 5:26 59	28/9/2016 6:31 58	29/9/2016 7:36 58				
23/10/2016 13:31 65	23/10/2016 22:36 65	26/10/2016 19:41 65	27/9/2016 5:31 59	28/9/2016 6:36 63	29/9/2016 7:41 58				
23/10/2016 13:36 65	23/10/2016 22:41 63	26/10/2016 19:46 65	27/9/2016 5:36 59	28/9/2016 6:41 57	29/9/2016 7:46 55				
23/10/2016 13:41 66	23/10/2016 22:46 64	26/10/2016 19:51 65	27/9/2016 5:41 60	28/9/2016 6:46 59	29/9/2016 7:51 56				
23/10/2016 13:46 66	23/10/2016 22:51 64	26/10/2016 19:56 65	27/9/2016 5:46 60	28/9/2016 6:51 61	29/9/2016 7:56 54				
23/10/2016 13:51 66	23/10/2016 22:56 64	26/10/2016 20:01 65	27/9/2016 5:51 60	28/9/2016 6:56 62	30/9/2016 0:01 55				
23/10/2016 13:56 66	24/10/2016 19:01 65	26/10/2016 20:06 66	27/9/2016 5:56 61	28/9/2016 7:01 55	30/9/2016 0:06 54				
23/10/2016 14:01 65	24/10/2016 19:06 65	26/10/2016 20:11 65	27/9/2016 6:01 61	28/9/2016 7:06 56	30/9/2016 0:11 49				
23/10/2016 14:06 65	24/10/2016 19:11 65	26/10/2016 20:16 65	27/9/2016 6:06 61	28/9/2016 7:11 57	30/9/2016 0:16 63				
23/10/2016 14:11 65	24/10/2016 19:16 64	26/10/2016 20:21 65	27/9/2016 6:11 62	28/9/2016 7:16 58	30/9/2016 0:21 48				
23/10/2016 14:16 65	24/10/2016 19:21 65	26/10/2016 20:26 65	27/9/2016 6:16 62	28/9/2016 7:21 59	30/9/2016 0:26 49				
23/10/2016 14:21 65	24/10/2016 19:26 66	26/10/2016 20:31 65	27/9/2016 6:21 63	28/9/2016 7:26 57	30/9/2016 0:31 62				
23/10/2016 14:26 65	24/10/2016 19:31 66	26/10/2016 20:36 65	27/9/2016 6:26 63	28/9/2016 7:31 57	30/9/2016 0:36 62				
23/10/2016 14:31 65	24/10/2016 19:36 65	26/10/2016 20:41 65	27/9/2016 6:31 55	28/9/2016 7:36 57	30/9/2016 0:41 62				
23/10/2016 14:36 65	24/10/2016 19:41 57	26/10/2016 20:46 65	27/9/2016 6:36 57	28/9/2016 7:41 56	30/9/2016 0:46 62				
23/10/2016 14:41 65	24/10/2016 19:46 66	26/10/2016 20:51 65	27/9/2016 6:41 60	28/9/2016 7:46 54	30/9/2016 0:51 62				

Real-time Noise Data		RTN4 (Causeway Bay Community Centre)									
28/9/2016 20:56	63	30/9/2016 22:01	63	1/10/2016 15:06	62	2/10/2016 8:11	63	2/10/2016 17:16	64	3/10/2016 22:21	62
28/9/2016 21:01	63	30/9/2016 22:06	63	1/10/2016 15:11	62	2/10/2016 8:16	64	2/10/2016 17:21	64	3/10/2016 22:26	62
28/9/2016 21:06	63	30/9/2016 22:11	63	1/10/2016 15:16	61	2/10/2016 8:21	63	2/10/2016 17:26	64	3/10/2016 22:31	62
28/9/2016 21:11	64	30/9/2016 22:16	63	1/10/2016 15:21	61	2/10/2016 8:26	63	2/10/2016 17:31	60	3/10/2016 22:36	61
28/9/2016 21:16	63	30/9/2016 22:21	63	1/10/2016 15:26	62	2/10/2016 8:31	63	2/10/2016 17:36	56	3/10/2016 22:41	62
28/9/2016 21:21	62	30/9/2016 22:26	63	1/10/2016 15:31	62	2/10/2016 8:36	64	2/10/2016 17:41	60	3/10/2016 22:46	62
28/9/2016 21:26	62	30/9/2016 22:31	63	1/10/2016 15:36	61	2/10/2016 8:41	64	2/10/2016 17:46	55	3/10/2016 22:51	62
28/9/2016 21:31	46	30/9/2016 22:36	63	1/10/2016 15:41	61	2/10/2016 8:46	64	2/10/2016 17:51	62	3/10/2016 22:56	61
28/9/2016 21:36	63	30/9/2016 22:41	64	1/10/2016 15:46	61	2/10/2016 8:51	63	2/10/2016 17:56	64	4/10/2016 19:01	58
28/9/2016 21:41	63	30/9/2016 22:46	63	1/10/2016 15:51	62	2/10/2016 8:56	63	2/10/2016 18:01	64	4/10/2016 19:06	59
28/9/2016 21:46	63	30/9/2016 22:51	63	1/10/2016 15:56	61	2/10/2016 9:01	64	2/10/2016 18:06	63	4/10/2016 19:11	62
28/9/2016 21:51	63	30/9/2016 22:56	64	1/10/2016 16:01	61	2/10/2016 9:06	63	2/10/2016 18:11	63	4/10/2016 19:16	60
28/9/2016 21:56	63	1/10/2016 7:01	62	1/10/2016 16:06	62	2/10/2016 9:11	49	2/10/2016 18:16	63	4/10/2016 19:21	62
28/9/2016 22:01	63	1/10/2016 7:06	63	1/10/2016 16:11	61	2/10/2016 9:16	61	2/10/2016 18:21	63	4/10/2016 19:26	58
28/9/2016 22:06	63	1/10/2016 7:11	62	1/10/2016 16:16	61	2/10/2016 9:21	64	2/10/2016 18:26	63	4/10/2016 19:31	58
28/9/2016 22:11	63	1/10/2016 7:16	62	1/10/2016 16:21	62	2/10/2016 9:26	65	2/10/2016 18:31	63	4/10/2016 19:36	56
28/9/2016 22:16	63	1/10/2016 7:21	62	1/10/2016 16:26	62	2/10/2016 9:31	62	2/10/2016 18:36	62	4/10/2016 19:41	57
28/9/2016 22:21	64	1/10/2016 7:26	62	1/10/2016 16:31	62	2/10/2016 9:36	61	2/10/2016 18:41	61	4/10/2016 19:46	61
28/9/2016 22:26	63	1/10/2016 7:31	62	1/10/2016 16:36	62	2/10/2016 9:41	62	2/10/2016 18:46	62	4/10/2016 19:51	60
28/9/2016 22:31	63	1/10/2016 7:36	62	1/10/2016 16:41	62	2/10/2016 9:46	61	2/10/2016 18:51	62	4/10/2016 19:56	61
28/9/2016 22:36	63	1/10/2016 7:41	62	1/10/2016 16:46	59	2/10/2016 9:51	62	2/10/2016 18:56	62	4/10/2016 20:01	61
28/9/2016 22:41	63	1/10/2016 7:46	55	1/10/2016 16:51	56	2/10/2016 9:56	63	2/10/2016 19:01	62	4/10/2016 20:06	61
28/9/2016 22:46	63	1/10/2016 7:51	59	1/10/2016 16:56	58	2/10/2016 10:01	62	2/10/2016 19:06	61	4/10/2016 20:11	62
28/9/2016 22:51	63	1/10/2016 7:56	56	1/10/2016 17:01	60	2/10/2016 10:06	62	2/10/2016 19:11	63	4/10/2016 20:16	61
28/9/2016 22:56	63	1/10/2016 8:01	55	1/10/2016 17:06	62	2/10/2016 10:11	62				

Real-time Noise Data		RTN4 (Causeway Bay Community Centre)									
23/10/2016 12:26 57	23/10/2016 21:31 62	25/10/2016 22:36 61	27/9/2016 4:26 59	28/9/2016 5:31 62	29/9/2016 6:36 59						
23/10/2016 12:31 55	23/10/2016 21:36 64	25/10/2016 22:41 61	27/9/2016 4:31 60	28/9/2016 5:36 62	29/9/2016 6:41 58						
23/10/2016 12:36 57	23/10/2016 21:41 61	25/10/2016 22:46 60	27/9/2016 4:36 58	28/9/2016 5:41 62	29/9/2016 6:46 59						
23/10/2016 12:41 56	23/10/2016 21:46 60	25/10/2016 22:51 61	27/9/2016 4:41 59	28/9/2016 5:46 62	29/9/2016 6:51 60						
23/10/2016 12:46 59	23/10/2016 21:51 60	25/10/2016 22:56 61	27/9/2016 4:46 58	28/9/2016 5:51 62	29/9/2016 6:56 54						
23/10/2016 12:51 58	23/10/2016 21:56 61	26/10/2016 19:01 52	27/9/2016 4:51 58	28/9/2016 5:56 63	29/9/2016 7:01 56						
23/10/2016 12:56 60	23/10/2016 22:01 61	26/10/2016 19:06 58	27/9/2016 4:56 59	28/9/2016 6:01 62	29/9/2016 7:06 58						
23/10/2016 13:01 59	23/10/2016 22:06 61	26/10/2016 19:11 59	27/9/2016 5:01 60	28/9/2016 6:06 63	29/9/2016 7:11 57						
23/10/2016 13:06 60	23/10/2016 22:11 60	26/10/2016 19:16 58	27/9/2016 5:06 59	28/9/2016 6:11 63	29/9/2016 7:16 57						
23/10/2016 13:11 60	23/10/2016 22:16 63	26/10/2016 19:21 62	27/9/2016 5:11 60	28/9/2016 6:16 64	29/9/2016 7:21 59						
23/10/2016 13:16 59	23/10/2016 22:21 61	26/10/2016 19:26 61	27/9/2016 5:16 59	28/9/2016 6:21 64	29/9/2016 7:26 57						
23/10/2016 13:21 58	23/10/2016 22:26 61	26/10/2016 19:31 64	27/9/2016 5:21 59	28/9/2016 6:26 64	29/9/2016 7:31 57						
23/10/2016 13:26 57	23/10/2016 22:31 62	26/10/2016 19:36 60	27/9/2016 5:26 59	28/9/2016 6:31 65	29/9/2016 7:36 54						
23/10/2016 13:31 58	23/10/2016 22:36 60	26/10/2016 19:41 61	27/9/2016 5:31 59	28/9/2016 6:36 65	29/9/2016 7:41 57						
23/10/2016 13:36 59	23/10/2016 22:41 60	26/10/2016 19:46 61	27/9/2016 5:36 60	28/9/2016 6:41 65	29/9/2016 7:46 57						
23/10/2016 13:41 58	23/10/2016 22:46 60	26/10/2016 19:51 63	27/9/2016 5:41 60	28/9/2016 6:46 65	29/9/2016 7:51 56						
23/10/2016 13:46 59	23/10/2016 22:51 61	26/10/2016 19:56 62	27/9/2016 5:46 61	28/9/2016 6:51 65	29/9/2016 7:56 53						
23/10/2016 13:51 59	23/10/2016 22:56 61	26/10/2016 20:01 64	27/9/2016 5:51 60	28/9/2016 6:56 65	30/9/2016 0:01 58						
23/10/2016 13:56 58	24/10/2016 19:01 62	26/10/2016 20:06 61	27/9/2016 5:56 61	28/9/2016 7:01 58	30/9/2016 0:06 55						
23/10/2016 14:01 60	24/10/2016 19:06 62	26/10/2016 20:11 59	27/9/2016 6:01 48	28/9/2016 7:06 57	30/9/2016 0:11 55						
23/10/2016 14:06 60	24/10/2016 19:11 63	26/10/2016 20:16 60	27/9/2016 6:06 55	28/9/2016 7:11 58	30/9/2016 0:16 53						
23/10/2016 14:11 59	24/10/2016 19:16 61	26/10/2016 20:21 63	27/9/2016 6:11 55	28/9/2016 7:16 57	30/9/2016 0:21 56						
23/10/2016 14:16 61	24/10/2016 19:21 61	26/10/2016 20:26 62	27/9/2016 6:16 58	28/9/2016 7:21 58	30/9/2016 0:26 49						
23/10/2016 14:21 61	24/10/2016 19:26 62	26/10/2016 20:31 62	27/9/2016 6:21 57	28/9/2016 7:26 59	30/9/2016 0:31 53						
23/10/2016 14:26 59	24/10/2016 19:31 62	26/10/2016 20:36 59	27/9/2016 6:26 60	28/9/2016 7:31 57	30/9/2016 0:36 51						
23/10/2016 14:31 62	24/10/2016 19:36 62	26/10/2016 20:41 60	27/9/2016 6:31 61	28/9/2016 7:36 55	30/9/2016 0:41 53						
23/10/2016 14:36 62	24/10/2016 19:41 62	26/10/2016 20:46 59	27/9/2016 6:36 60	28/9/2016 7:41 57	30/9/2016 0:46 54						
23/10/2016 14:41 62	24/10/2016 19:46 61	26/10/2016 20:51 52	27/9/2016 6:41 61	28/9/2016 7:46 57	30/9/2016 0:51 48						
23											

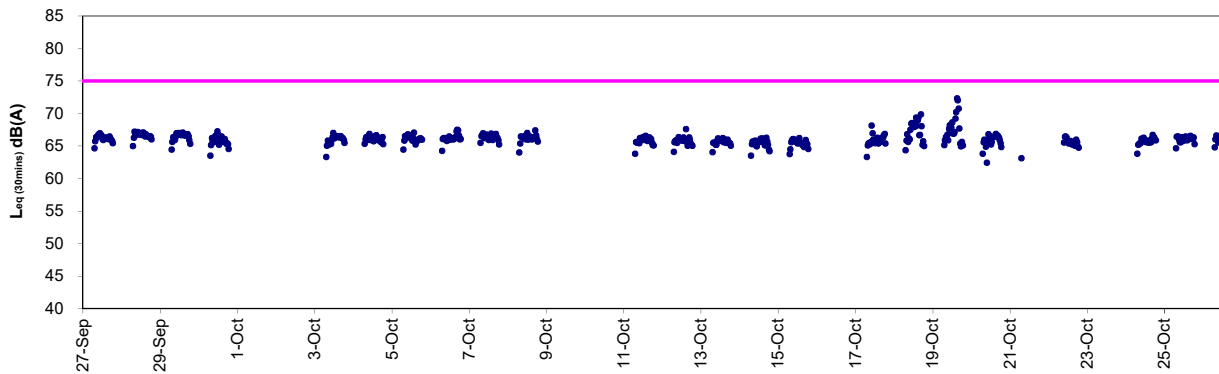
Real-time Noise Data		RTN4 (Causeway Bay Community Centre)									
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7/10/2016 6:16	56	8/10/2016 23:21	54	10/10/2016 0:26	60	11/10/2016 1:31	58	12/10/2016 2:36	59	13/10/2016 3:41	55
7/10/2016 6:21	57	8/10/2016 23:26	56	10/10/2016 0:31	61	11/10/2016 1:36	58	12/10/2016 2:41	58	13/10/2016 3:46	56
7/10/2016 6:26	57	8/10/2016 23:31	53	10/10/2016 0:36	60	11/10/2016 1:41	59	12/10/2016 2:46	59	13/10/2016 3:51	56
7/10/2016 6:31	59	8/10/2016 23:36	54	10/10/2016 0:41	60	11/10/2016 1:46	59	12/10/2016 2:51	59	13/10/2016 3:56	56
7/10/2016 6:36	60	8/10/2016 23:41	52	10/10/2016 0:46	42	11/10/2016 1:51	58	12/10/2016 2:56	58	13/10/2016 4:01	56
7/10/2016 6:41	60	8/10/2016 23:46	46	10/10/2016 0:51	60	11/10/2016 1:56	60	12/10/2016 3:01	58	13/10/2016 4:06	56
7/10/2016 6:46	60	8/10/2016 23:51	53	10/10/2016 0:56	60	11/10/2016 2:01	57	12/10/2016 3:06	58	13/10/2016 4:11	57
7/10/2016 6:51	60	8/10/2016 23:56	54	10/10/2016 1:01	59	11/10/2016 2:06	58	12/10/2016 3:11	58	13/10/2016 4:16	56
7/10/2016 6:56	55	9/10/2016 0:01	35	10/10/2016 1:06	60	11/10/2016 2:11	58	12/10/2016 3:16	58	13/10/2016 4:21	56
7/10/2016 23:01	58	9/10/2016 0:06	61	10/10/2016 1:11	59	11/10/2016 2:16	57	12/10/2016 3:21	58	13/10/2016 4:26	56
7/10/2016 23:06	55	9/10/2016 0:11	50	10/10/2016 1:16	60	11/10/2016 2:21	57	12/10/2016 3:26	58	13/10/2016 4:31	56
7/10/2016 23:11	56	9/10/2016 0:16	61	10/10/2016 1:21	59	11/10/2016 2:26	59	12/10/2016 3:31	59	13/10/2016 4:36	56
7/10/2016 23:16	57	9/10/2016 0:21	60	10/10/2016 1:26	60	11/10/2016 2:31	58	12/10/2016 3:36	58	13/10/2016 4:41	57
7/10/2016 23:21	58	9/10/2016 0:26	61	10/10/2016 1:31	59	11/10/2016 2:36	57	12/10/2016 3:41	57	13/10/2016 4:46	56
7/10/2016 23:26	56	9/10/2016 0:31	61	10/10/2016 1:36	60	11/10/2016 2:41	57	12/10/2016 3:46	58	13/10/2016 4:51	56
7/10/2016 23:31	55	9/10/2016 0:36	50	10/10/2016 1:41	59	11/10/2016 2:46	57	12/10/2016 3:51	58	13/10/2016 4:56	57
7/10/2016 23:36	56	9/10/2016 0:41	61	10/10/2016 1:46	59	11/10/2016 2:51	58	12/10/2016 3:56	59	13/10/2016 5:01	56
7/10/2016 23:41	58	9/10/2016 0:46	55	10/10/2016 1:51	58	11/10/2016 2:56	57	12/10/2016 4:01	58	13/10/2016 5:06	57
7/10/2016 23:46	56	9/10/2016 0:51	61	10/10/2016 1:56	60	11/10/2016 3:01	58	12/10/2016 4:06	58	13/10/2016 5:11	56
7/10/2016 23:51	56	9/10/2016 0:56	61	10/10/2016 2:01	60	11/10/2016 3:06	58	12/10/2016 4:11	58	13/10/2016 5:16	56
7/10/2016 23:56	52	9/10/2016 1:01	61	10/10/2016 2:06	60	11/10/2016 3:11	58	12/10/2016 4:16	59	13/10/2016 5:21	57
8/10/2016 0:01	52	9/10/2016 1:06	61	10/10/2016 2:11	60	11/10/2016 3:16	57	12/10/2016 4:21	59	13/10/2016 5:26	58
8/10/2016 0:06	55	9/10/2016 1:11	61	10/10/2016 2:16	59	11/10/2016 3:21	58	12/10/2016 4:26	58	13/10/2016 5:31	57
8/10/2016 0:11	53	9/10/2016 1:16	51	10/10/2016 2:21							

Real-time Noise Data	RTN4 (Causeway Bay Community Centre)																																																																																																																																																																							
14/10/2016 4:41 56	15/10/2016 5:46 58	16/10/2016 6:51 60	17/10/2016 23:56 60	19/10/2016 1:01 58	20/10/2016 2:06 57	14/10/2016 4:46 57	15/10/2016 5:51 58	16/10/2016 6:56 60	18/10/2016 0:01 60	19/10/2016 1:06 59	20/10/2016 2:11 58	14/10/2016 4:51 57	15/10/2016 5:56 57	16/10/2016 23:01 60	18/10/2016 0:06 60	19/10/2016 1:11 59	20/10/2016 2:16 56	14/10/2016 4:56 56	15/10/2016 6:01 57	16/10/2016 23:06 60	18/10/2016 0:11 59	19/10/2016 1:16 59	20/10/2016 2:21 57	14/10/2016 5:01 56	15/10/2016 6:06 58	16/10/2016 23:11 61	18/10/2016 0:16 60	19/10/2016 1:21 58	20/10/2016 2:26 57	14/10/2016 5:06 56	15/10/2016 6:11 59	16/10/2016 23:16 60	18/10/2016 0:21 60	19/10/2016 1:26 58	20/10/2016 2:31 57	14/10/2016 5:11 56	15/10/2016 6:16 59	16/10/2016 23:21 60	18/10/2016 0:26 60	19/10/2016 1:31 58	20/10/2016 2:36 57	14/10/2016 5:16 56	15/10/2016 6:21 59	16/10/2016 23:26 60	18/10/2016 0:31 60	19/10/2016 1:36 58	20/10/2016 2:41 57	14/10/2016 5:21 57	15/10/2016 6:26 60	16/10/2016 23:31 60	18/10/2016 0:36 59	19/10/2016 1:41 58	20/10/2016 2:46 57	14/10/2016 5:26 57	15/10/2016 6:31 60	16/10/2016 23:36 60	18/10/2016 0:41 59	19/10/2016 1:46 59	20/10/2016 2:51 57	14/10/2016 5:31 57	15/10/2016 6:36 60	16/10/2016 23:41 60	18/10/2016 0:46 58	19/10/2016 1:51 58	20/10/2016 2:56 56	14/10/2016 5:36 57	15/10/2016 6:41 60	16/10/2016 23:46 60	18/10/2016 0:51 59	19/10/2016 1:56 58	20/10/2016 3:01 56	14/10/2016 5:41 57	15/10/2016 6:46 60	16/10/2016 23:51 60	18/10/2016 0:56 58	19/10/2016 2:01 58	20/10/2016 3:06 57	14/10/2016 5:46 57	15/10/2016 6:51 60	16/10/2016 23:56 60	18/10/2016 1:01 58	19/10/2016 2:06 58	20/10/2016 3:11 57	14/10/2016 5:51 58	15/10/2016 6:56 59	17/10/2016 0:01 60	18/10/2016 1:06 59	19/10/2016 2:11 57	20/10/2016 3:16 56	14/10/2016 5:56 57	15/10/2016 6:56 57	17/10/2016 0:06 60	18/10/2016 1:11 58	19/10/2016 2:16 57	20/10/2016 3:21 55	14/10/2016 6:01 58	15/10/2016 23:06 45	17/10/2016 0:11 60	18/10/2016 1:16 58	19/10/2016 2:21 57	20/10/2016 3:26 56	14/10/2016 6:06 59	15/10/2016 23:11 61	17/10/2016 0:16 60	18/10/2016 1:21 58	19/10/2016 2:26 57	20/10/2016 3:31 56	14/10/2016 6:11 59	15/10/2016 23:16 45	17/10/2016 0:21 60	18/10/2016 1:26 58	19/10/2016 2:31 56	20/10/2016 3:36 57	14/10/2016 6:16 59	15/10/2016 23:21 49	17/10/2016 0:26 59	18/10/2016 1:31 58	19/10/2016 2:36 57	20/10/2016 3:41 57	14/10/2016 6:21 60	15/10/2016 23:26 44	17/10/2016 0:31 59	18/10/2016 1:36 58	19/10/2016 2:41 56	20/10/2016 3:46 56	14/10/2016 6:26 59	15/10/2016 23:31 61	17/10/2016 0:36 59	18/10/2016 1:41 58	19/10/2016 2:46 57	20/10/2016 3:51 56	14/10/2016 6:31 60	15/10/2016 23:36 61	17/10/2016 0:41 59	18/10/2016 1:46 58	19/10/2016 2:51 56	20/10/2016 3:56 56	14/10/2016 6:36 61	15/10/2016 23:41 61	17/10/2016 0:46 59	18/10/2016 1:51 58	19/10/2016 2:56 57	20/10/2016 4:01 56	14/10/2016 6:41 61	15/10/2016 23:46 61	17/10/2016 0:51 59	18/10/2016 1:56 58	19/10/2016 3:01 56	20/10/2016 4:06 55	14/10/2016 6:46 61	15/10/2016 23:51 61	17/10/2016 0:56 59	18/10/2016 2:01 57	19/10/2016 3:06 58	20/10/2016 4:11 56	14/10/2016 6:51 61	15/10/2016 23:56 61	17/10/2016 1:01 60	18/10/2016 2:06 57	19/10/2016 3:11 57	20/10/2016 4:16 56	14/10/2016 6:56 60	16/10/2016 0:01 60	17/10/2016 1:06 59	18/10/2016 2:11 57	19/10/2016 3:16 57	20/10/2016 4:21 57	14/10

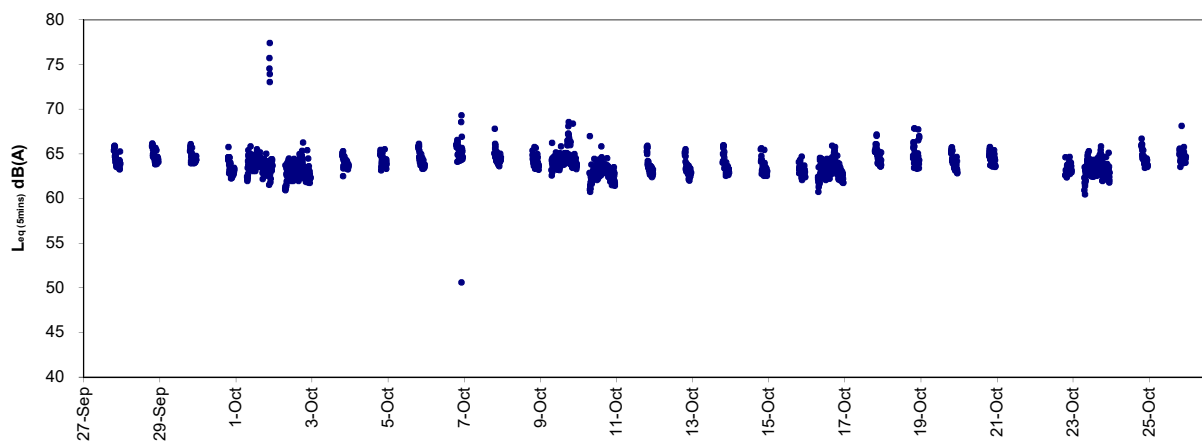


Graphic Presentation of Real Time Noise Monitoring Result (RTN1-Food and Environmental Hygiene Department Depot)

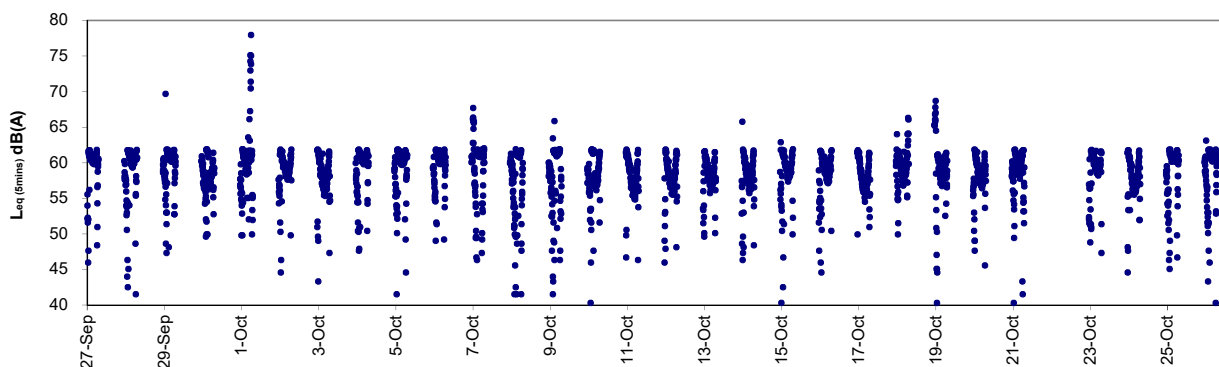
Day Time (0700 -1900 hrs on normal weekdays)



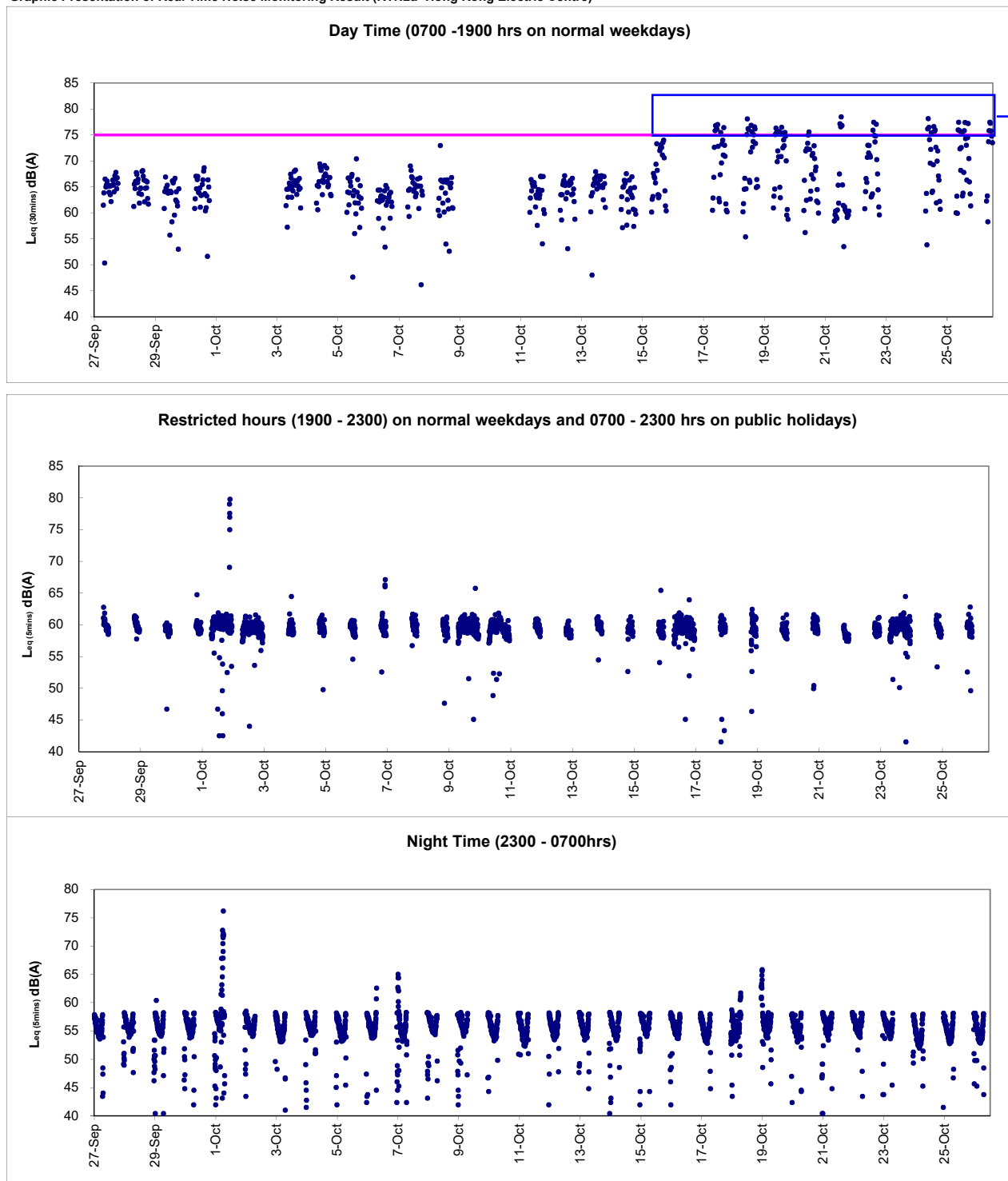
Restricted hours (1900 - 2300) on normal weekdays and 0700 - 2300 hrs on public holidays)



Night Time (2300 - 0700hrs)



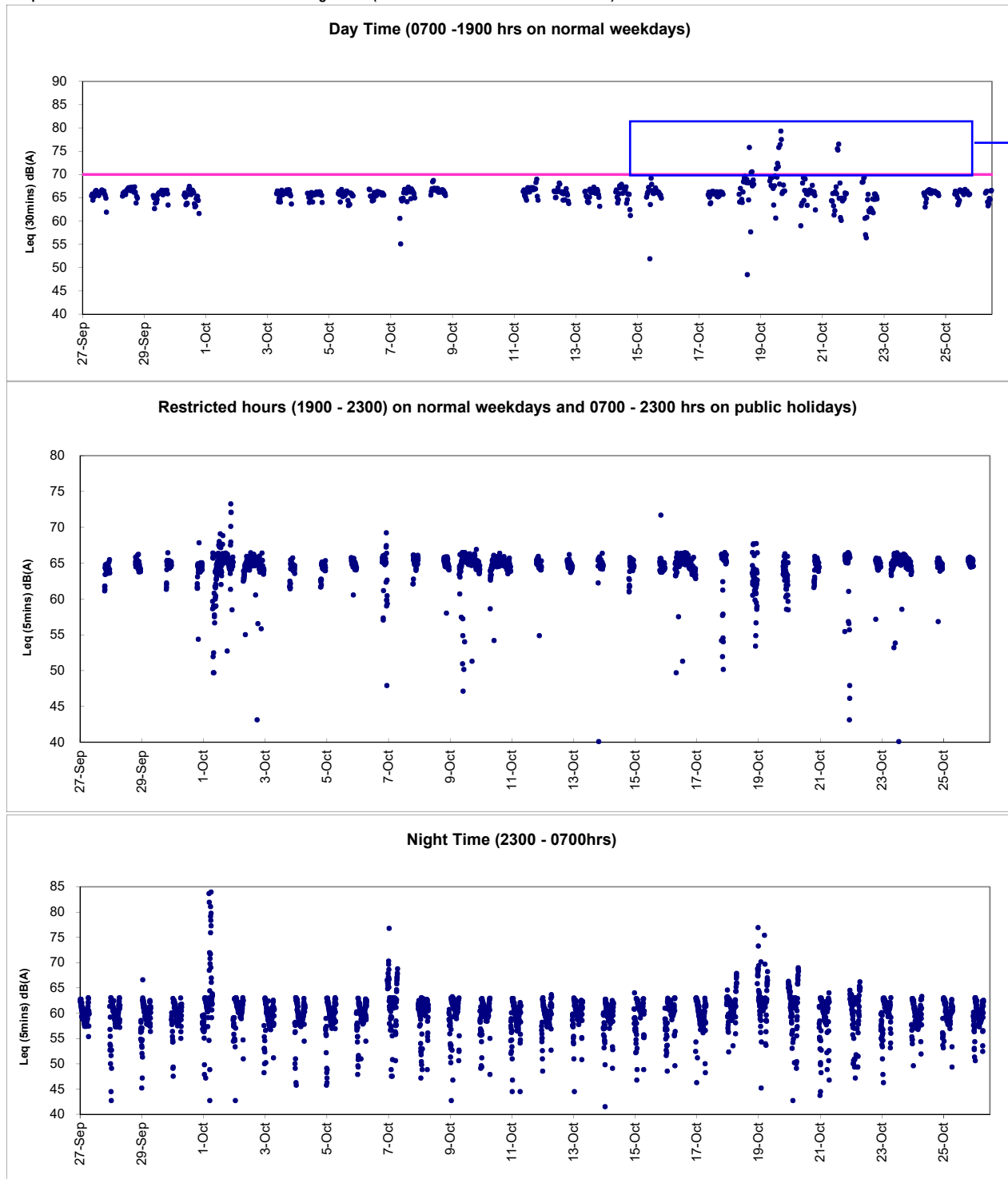
Graphic Presentation of Real Time Noise Monitoring Result (RTN2a- Hong Kong Electric Centre)



After checking with Contractor of HY/2009/19, on 17, 18(morning), 22, 24, 25 and 26 October 2016, sheet pile driving near existing IEC were conducted and noise mitigation measure including provision of noise barrier along site boundary were implemented and no construction activities were conducted on 18(afternoon), 19, 20 and 21 October 2016 under Contractor HY/2009/19. After checking with Contractor of HY/2011/08, on 17, 18, 19, 22, 24, 25 and 26 October 2016, formwork and falsework erection and bar fixing were conducted no major construction noise impact from the above work is considered and only site cleaning works was conducted on 20 October 2016 and no construction activities was conducted on 21 October 2016 under HY/2011/08.

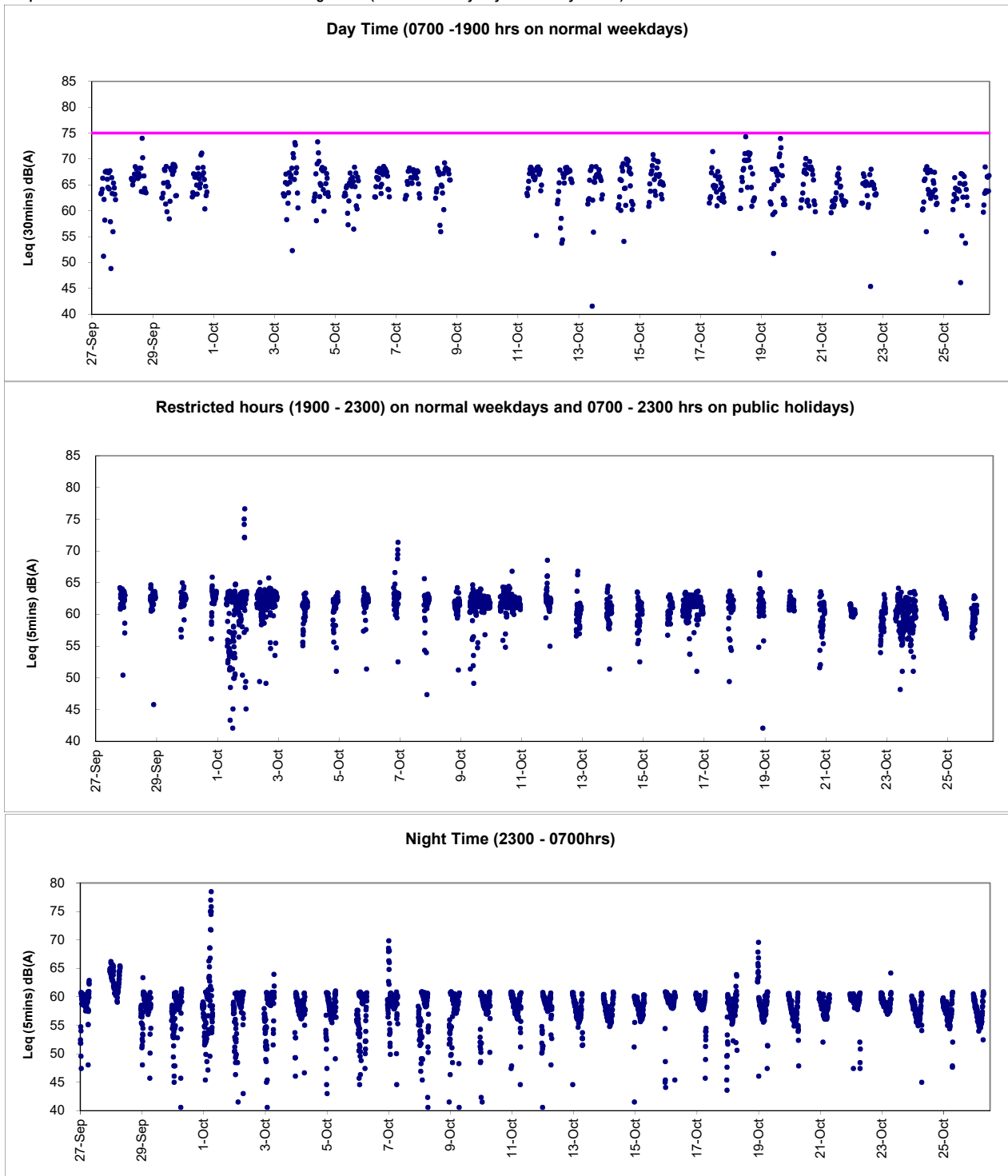
Non CWB Project building demolition works opposite to the monitoring station were observed in October 2016 as the major noise contribution and adverse weather condition with rainstorm and gust were recorded from 18 afternoon to 21 October 2016. In view of the above, the exceedances were considered as non-Project related.

Graphic Presentation of Real Time Noise Monitoring Result (RTN3-Yu Lee Mo Fan Memorial School)



After checking with the Contractor of HY/2009/19, on 18, 19 and 21 October 2016, no construction activities were conducted under HY/2009/19 while adverse weather condition with rainstorm and gust were recorded during the above monitoring period. In view of the above, the exceedances were considered as non-Project related.

Graphic Presentation of Real Time Noise Monitoring Result (RTN4-Causeway Bay Community Centre)



Appendix 6.1

Event Action Plans



Event/Action Plan for Construction Noise

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
Action Level being exceeded	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. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Review the investigation results submitted by the ET; 2. Review the proposed remedial measures by the Contractor and advise the ER accordingly; 3. Advise the ER on the effectiveness of the proposed remedial measures. (The above actions should be taken within 2 working days after the exceedance is identified)	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. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Submit noise mitigation proposals to IEC and ER; 2. Implement noise mitigation proposals. (The above actions should be taken within 2 working days after the exceedance is identified)



EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
Limit Level being exceeded	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)	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)	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)	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	1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform IEC and ER; 3. Repeat measurement to confirm finding; 4. Increase monitoring frequency to daily. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Check monitoring data submitted by ET; 2. Check Contractor's working method. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Notify Contractor. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Rectify any unacceptable practice; 2. Amend working methods if appropriate. (The above actions should be taken within 2 working days after the exceedance is identified)
2. Exceedance for two or more consecutive samples	1. Identify source; 2. Inform IEC and ER; 3. Advise the ER on the effectiveness of the proposed remedial measures; 4. Repeat measurements to confirm findings; 5. Increase monitoring frequency to daily; 6. Discuss with IEC and Contractor on remedial actions required; 7. If exceedance continues, arrange meeting with IEC and ER; 8. If exceedance stops, cease additional monitoring. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET and Contractor on possible remedial measures; 4. Advise the ET on the effectiveness of the proposed remedial measures; 5. Supervise Implementation of remedial measures. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Ensure remedial measures properly implemented. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Submit proposals for remedial to ER within 3 working days of notification; 2. Implement the agreed proposals; 3. 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	1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform ER, Contractor and EPD; 3. Repeat measurement to confirm finding; 4. Increase monitoring frequency to daily; 5. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET and Contractor on possible remedial measures; 4. Advise the ER on the effectiveness of the proposed remedial measures; 5. Supervise implementation of remedial measures. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Ensure remedial measures properly implemented. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC within 3 working days of notification; 3. Implement the agreed proposals; 4. Amend proposal if appropriate. (The above actions should be taken within 2 working days after the exceedance is identified)
2. Exceedance for two or more consecutive samples	1. Notify IEC, ER, Contractor and EPD; 2. Identify source; 3. Repeat measurement to confirm findings; 4. Increase monitoring frequency to daily; 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; 6. Arrange meeting with IEC and ER to discuss the remedial actions to be taken; 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; 8. If exceedance stops, cease additional monitoring. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 2. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; 3. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Ensure remedial measures properly implemented; 5. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC within 3 working days of notification; 3. Implement the agreed proposals; 4. Resubmit proposals if problem still not under control; 5. Stop the relevant portion of works as determined by the ER until the exceedance is abated. (The above actions should be taken within 2 working days after the exceedance is identified)

Appendix 6.2

Summary for Notification of Exceedance



Ref. No.	Date	Time	Location	Construction Noise Level, dB(A)	Parameter	Action Level	Limit Level dB(A)	Follow-up action
X_16N053	11-Oct-16	10:30	M1a-Harbour Road Sports Centre	80	Leq(30min)	when one documented complaint was received.	75	Possible reason: Operation of generator and air compressors opposite to the monitoring station was observed as the major noise contribution under non WDII-CWB Contractor. Action taken / to be taken: A repeat measurement was conducted to confirm result and reviewed the trend of previous noise monitoring and Contractor's working procedure. Remarks / Other Obs: Demolition of Ex-WanChai WSD Pumping Station by hydraulic grab and excavation at Portion 5 were conducted under Contract HK/2009/02 around the concerned location during the time of measurement. No major noise was observed from the above construction activities while operation of generator and air compressors opposite to the monitoring station under non WDII-CWB Contractor was observed as the major noise contribution during monitoring. As such, the exceedance was considered as non-Project related.
X_16N054	11-Oct-16	10:30	M1a-Harbour Road Sports Centre	80	Leq(30min)	when one documented complaint was received.	75	Possible reason: Operation of generator and air compressors opposite to the monitoring station was observed as the major noise contribution under non WDII-CWB Contractor. Action taken / to be taken: A repeat measurement was conducted to confirm result and reviewed the trend of previous noise monitoring and Contractor's working procedure. Remarks / Other Obs: Defect rectification works within tunnel structure was conducted under Contract HK/2009/01 during the time of measurement while operation of generator and air compressors opposite to monitoring station under non WDII-CWB Contractor was observed as the major noise contribution during monitoring. As such, the exceedance was considered as non-Project related.
X_16N056	19-Oct-16	13:30	M1a-Harbour Road Sports Centre	81	Leq(30min)	when one documented complaint was received.	75	Possible reason: Operation of generator and air compressors opposite to the monitoring station was observed as the major noise contribution under non WDII-CWB Contractor. Action taken / to be taken: A repeat measurement was conducted to confirm result and reviewed the trend of previous noise monitoring and Contractor's working procedure. Remarks / Other Obs: Demolition of Ex-WanChai WSD Pumping Station and excavation at Portion 5 were conducted under Contract HK/2009/02 around the concerned location during the time of measurement. No major noise was observed from the above construction activities while operation of generator and air compressors opposite to the monitoring station under non WDII-CWB Contractor was observed as the major noise contribution during monitoring. As such, the exceedance was considered as non-Project related.
X_16N057	19-Oct-16	13:30	M1a-Harbour Road Sports Centre	81	Leq(30min)	when one documented complaint was received.	75	Possible reason: Operation of generator and air compressors opposite to the monitoring station was observed as the major noise contribution under non WDII-CWB Contractor. Action taken / to be taken: A repeat measurement was conducted to confirm result and reviewed the trend of previous noise monitoring and Contractor's working procedure. Remarks / Other Obs: Defect rectification works within tunnel structure was conducted under Contract HK/2009/01 during the time of measurement while operation of generator and air compressors opposite to monitoring station under non WDII-CWB Contractor was observed as the major noise contribution during monitoring. As such, the exceedance was considered as non-Project related.

Appendix 9.1

Complaint Log

**Environmental Complaints Log**

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
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.	1) It was referred by AECOM to ET on 28 July 2011 2) RSS confirmed that the notice was prepared by Victoria Centre 'a Management office to their resident and the advice was only given on the extension construction works (for Contract HY/2009/15) to 7am-9pm 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 and evening time period while breaking and excavation works were observed 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	1) It was referred by AECOM to ET on 8 August 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) With reference to the construction noise monitoring at Victoria Centre, no exceedance was recorded on 19 and 25 July 2011 during daytime while breaking and excavation works were undertaken during monitoring 4) In conclusion, it was related to the construction works under Contract HY/2009/15 and mitigation measure was provided. 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	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 monitoring station at Victoria Centre on 25 July and	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.	4 August 2011 during daytime and evening time period while breaking and excavation works were observed during monitoring. 5) In conclusion, it was related to the construction works under Contract HY/2009/15 and mitigation measure was provided. No further complaint from complainant was received after proposed the mitigation measure.	
110727b	27/07/2011	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	1) It was referred by AECOM to ET on 28 July 2011 2) With reference to the construction noise monitoring at Vitoria Centre, no exceedance was recorded on 25 July and 4 and 10 August 2011 during daytime while breaking and excavation works were undertaken during monitoring. 3) As a mitigation measure to minimize the noise nuisance in the vicinity of the residents, rock breaking activities will be started at 8am.	Closed
	07/08/2011				4) However, complainant did not satisfy with the response on the noise nuisance from the rock-breaking during morning in front of Victoria Centre and then further complaint via 1823 on 7 August 2011. 5) Highways contacted the complainant on 15 August 2011 that the noisy rock breaking operation had been completed. <i>Remarks: There will be counted as two complaints in this complaint log.</i>	
110730	30/07/2011	Mr. Tsui by ICC no. 1-305074350	Central	Construction noise generated by operations of Central-Interchange which is near the spa room at Four-Season Hotel. Also, the complaint enquired the commencement time of the construction on Saturday.	1) It was referred by AECOM to ET on 1 August 2011. 2) RSS confirmed that noisy plants from 2 vibratory hammers have been conducted in alternating manner for piling and drilling works for diaphragm wall construction. 3) With reference to the construction noise monitoring at IFC Western End of Podium, no exceedance was recorded on 4 August 2011 during monitoring while sheet piling works were undertaken during monitoring. 4) In order to reduce the noise impact to nearby noise sensitive receivers, Contractor has been implemented the following noise mitigation measures: - Erection of acoustic lining at the hoarding next to Four Seasons Hotel; - Temporary noise barrier with extended acoustic lining; - Reduced in plant such that only have one vibration hammer operating at the west side near Four	Closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					Seasons Hotel instead of 2 5) In conclusion, it was related to the construction works under Contract HY/2009/18 and mitigation measure was provided. The complainant was satisfied with the arrangement and no further complaint was received after proposed measures.	
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.	1) It was referred by AECOM to ET on 17 August 2011. 2) Confirmed with RE, Muddy water was caused by a heap of earth being washed to the sea by heavy rain. The heap of earth was referred as a small stockpile placed close to the seafront in front of Oil Street within the site area under handover transition period from contract HY/2009/11 to contract HY/2009/19. The necessary mitigation measures to protect the small stockpile against rainfall were missing at the time of complaint. 3) Due to the missing of mitigation measures to protect the small stockpile during handover transition period, loose material was washed into the harbour when heavy rain came. Muddy water was formed and dispersed in the sea that caused the water quality and visual concern to the public. The complaint was considered as valid. 4) Contractors were advised to relocate the loose materials 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.	Closed
110817	17/08/2011	ICC no. 1-307657681	North Point	Visual impact generated by light from a large amount of spot-lights on the barge during mid-night nearby City Garden.	1) It was referred by AECOM to ET on 23 August 2011 2) RSS confirmed that some non-essential lights were turned on during night-time period which caused the nuisance to the nearby residents. In addition, absence of lighting shields at flood lights results in visual glare to the complaint at night-time. 3) Follow-up action had been taken by contractor that switches off all non-essential lights to minimized nuisance to the nearby residents. The complainant satisfied to the practice and no further complaint was received after that.	Closed
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	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	Closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
				reclamation area.	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.	
110826A	26/08/2011	A complaint letter from Mr. Au of Cayley Property of City Garden	North Point	Harbor front adjacent to their water intake suction which caused 3 times of system breakdown of the sea water pump on 9, 22 and 25 August 2011.	1) It was referred by AECOM to ET on 29 August 2011 2) Confirmed with the Resident Site Staff that the construction works were referred to the Contractors HY/2009/11 and HY/2009/19. 3) The pump is located on the site area of HY/2009/19 4) 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. 5) An ad hoc inspection of the effectiveness of garbage defender was conducted with RSS (CWB project team), contractor of HY/200911 and HY/2009/19 and IECon 29 August 2011. Inspection report of it was submitted to RSS on 19 September 2011. 5) Daily cleaning near the water intake was conducted twice a day by contractor HY/2009/19. 6) 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 come from sea bed from entering the intake. 6) According to the complaint letter from Cayley Property, the outcomes of the preventive measures were not complying with their expectation. 7) During on-site inspection, floating refuses observed	Closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					occasionally outside the garbage defender. No conclusion could be made for the source of these floating refuses. On the other hand, some of the floating refuses were observed immigrating in the protective zone during investigation 8) All daily cleaning actions had been taken by contractor to minimize floating refuse inside the construction site. It was noted that the intake (land side) is open access to public, so that many activities such as fishing, feeding fish were conducted there 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. 9) 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. 10) Contractors have fulfilled the requirement of site cleanness and no exceedance was recorded during Water Quality Monitoring. It is consider the cause of this complaint is not related to project and environmental issue in this project as well. No more complaint received after ad-hoc inspection	
111014	14/10/2011	The complainant, Ms. Tam complained via hotline 1823	Wan Chai	The polluted fumes and exhaust from the excavation by sub-contractor of CEDD on pedestrian way outside no.25 Harbour Road (in front of the Harbour Centre)	1) RSS notified ET to carry out investigation on 17 October 2011. 2) ET confirmed with the Resident Site Staff that the location of the excavator was within site area of Contract no. HK/2009/02 undertaking the water cooling main reprovision works along the Harbour Road. The plants including the excavator have been checked before using at the site. However, the polluted fumes and exhausted from the excavator was caused due to insufficient maintenance of the plant after using at site. 3) After receiving the complaint, the excavator was then removal off-site for checking and maintenance works on 17 October 2011. 4) Contractor was reminded to enhance regular checking and maintenance to all plants at site. 5) RSS has replied to the complainant on the arrangement of the measures taken on 17 October 2011. Complainant was satisfied with the response and follow-up action taken by the Contractor.	Closed
111104	04/11/2011	Mr. Liu from	Wan Chai	Complain about a tree near the	1) ET confirmed with the Resident Site Staff that	Closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
		LCSD complained via Contractor Complaint Hotline		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.	- 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. 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.	
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	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 CNP was checked by the police officer. 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. 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	Closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					bentonite pipes at about 6:00a.m to ensure no damages and all the pipe joints should be tightened and in good position. 4) Contractor was advised to enhance the communication between Contractor and sub-contractor and provide sufficient environmental training to all foreman and operators on restricted hour operation. Furthermore, Construction Noise Permit should be checked and in place for the construction works during restricted hour 5) This complaint was considered in relation to the conducted construction works during restricted hours without valid Construction Noise Permit. No more construction works were conducted during night time period. The construction works will be conducted in accordance with the time period stated in valid CNP. This complaint will be kept in view of any follow-up action from the relevant government activities.	
111212	12/12/2011	The complainant, Mr Tsui from IFCII's management office complained via hotline 1823	Central	A visual impact complaint from hotline 1823 was received by ET on 9 January 2011 (ICC Ref. No.: ICC#1-333037096 dated on 12 December 2011). The complaint, Mr Tsui was reported that visual nuisance caused by lighting in the construction site during night time.	1) RSS notified ET on 9 Jan 2012. 2) ET confirmed with the Resident Site Staff that A joint inspection was conducted by Mr Tsui and contractor on that night to see whether there is any improvement. 3) Due to safety reason, igniting enough lights should not be avoided in construction site. However, the light sources were not directed away from pointing to the sensitive receiver and results in visual glare to the complaint. 4) Confirmed with the Resident Site Staff the complainant was satisfied the new arrangement of the lights with contractor after the joint inspection. No further complaint received after that.	Closed
111220	20/12/2011	The complainant, Ms. Poon complained via hotline 1823 (ICC Ref. No.: ICC#1-334683841)	North Point	Construction air and noise nuisance generated that many trucks carrying construction materials driving along Watson Road and Oil Street and possibly entering/leaving the construction site near the IEC during 0800 to 1900 hours.	1) RSS notified ET on 22 Dec 2011. 2) ET confirmed with the Resident Site Staff that the complainant cannot identify whether the trucks were working under the CWB project or not. 3) The dominant construction air and noise nuisances were emitted by the trucks along Oil Street and Waston Road, however, this is the public road for all vehicles. Reviewing the air quality monitoring and noise monitoring results. No exceedance was recorded during this period. 4) Confirmed with the Resident Site Staff that they provided a contact no. for any future enquiries regarding	Closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					CWB project to the complainant and she was satisfied on the arrangement and no further complaint was received after that.	
111230	30/12/2011	Residents of Harbour Heights	North Point	Construction air and noise nuisance generated by construction vehicles were found parked illegally at King Wah Road and lining up at Oil Street without the engine turning off.	1) RSS notified ET on 6 January 2011. 2) ET confirmed with the Resident Site Staff that a number of construction activities are concurrently proceeding in the vicinity of Oil Street, King Wah Street and a private development project in King Wah Street 3) The dominant construction air and noise nuisances were emitted by the trucks along Oil Street and King Wah Road, however, this is the public road for all vehicles. Reviewing the results of air quality monitoring station (CMA1b) and noise monitoring (M4b). No exceedance was recorded during this period. Site inspections for HY/2009/19 were conducted on 4 January 2012. The condition of the site access at Oil Street and the public road nearby were found satisfactory. It is noted that HyD also allow and encourage their contractors to maximize the use of marine access, where available, to work sites, so as to minimize burdening nearby public roads. When land trips are unavoidable, they require contractors to tidy up their construction vehicles before leaving works sites. No contractor under CWB project parked their vehicles illegally at King Wah Street, and HyD still reminded them not to commit such offence. 4) According to HyD's staff replied the complaint letter on 10 January 2012, there is a private development project under construction at King Wah Road. To access these works sites, construction vehicles have to use public roads nearby. No further complaint received after HyD's reply.	Closed
120118	18/01/2012	N/A	North Point	A complaint regarding a tree located in front of Victoria Centre under IECL was covered by one meter mud without any protection. The complainant concerns the health of the tree in such condition.	1) RSS notified ET on 20 January 2012. 2) ET confirmed with the Resident Site Staff that The tree is inside the site area of HY/2009/19 and The Botanical name of the tree is Ficus superba var. japonica and the I.D. of the tree is UT48 3) According to the information provided by RSS on 20 Jan 2012, the tree shall be felled that has been approved by DLO on 29 August 2011. Moreover, the tree was felled	Closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					by contractor on 19 January 2012. 4) No further complaint received after HyD's reply.	
120305	03/03/2012	Resident of Harbour Heights complained via hotline 1823 (ICC Ref. No.: ICC#1-344632511)	North Point	A complaint regarding excessive noise from construction sites of CWB was observed outside Harbour Heights from Monday to Saturday before 8am. The plants were frequently turned on before 7:30am creating nuisance. The complainant requested a speedy follow-up and reply from relevant department.	1) RSS notified ET on 5 March 2012. 2) ET confirmed with the Resident Site Staff that PME for diaphragm wall construction started to operate at about 7:30am whilst the other PME, including those for land bored piling work, started to operate after 8am. 3) After reviewing the results of noise monitoring (M4b), no exceedance was recorded during daytime period and the noise level were below 75dB(A). Site inspection for HY/2009/19 was conducted on 7 March 2012. The condition of noise mitigation measures near Harbour Heights was found satisfactory. RSS confirmed that no operation was active before 7:00am everyday. The suspected nuisance was to be considered caused by the PME for diaphragm wall construction. A surprise check was performed on 13 March 2012 by RSS. It was found that no noisy PME was in operation by Contractor of HY/2009/19 before 8am, and the construction noise level was minimal and not disturbing. The noise level and operation time both complied with statutory requirements set up in NCO. 4) Complainant called ICC on 8 March 2012 to confirm HyD has provided a response. No further complaint was received after the response.	Closed
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.	1) RSS notified ET on 5 April 2012. 2) ET confirmed with the Resident Site Staff that no piling works were performed during the concerned period. 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. 4) HyD made a reply to the complainant on 16 April	Closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					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 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.	
120415	15/04/2012	The complainant Ms. Law, resident of Fu Lee Loy Mansion, complained via hotline 1823 (ICC Ref. No.: 1-351021108)	North Point	A complaint regarding excessive noise generated from a HyD project that is located at the connection point of CWB and IEC affecting nearby residents. Lately during the middle of the night (around 00:00 to 05:00), low frequency noise, which possibly came from the operating power generator and the barges which were parked along the Oil Street work site, were making a nuisance to the complainant and residents nearby. The complainant requested that relevant department should follow-up.	1) RSS notified ET on 17 April 2012. 2) ET confirmed with the Resident Site Staff that there was no operation of power generators for HY/2009/19 and HY/2009/17 (HY/2009/11 had no physical work on site) during the concerned period. Although there were a few barges mooring at the seafront of HY/2009/19, they were not in operation and hence no operational noise would be emitted. 3) After reviewing the results of noise monitoring (M4b and M5b), no exceedance was recorded during day time period and the noise level was below 75dB(A). Site inspection for HY/2009/19 was conducted on 18 April 2012. The condition of noise mitigation measures near Harbour Heights were found satisfactory. RSS confirmed that no operation of power generators for HY/2009/19 and HY/2009/17 (HY/2009/11 had no physical work on site) during the concerned period. Although there were a few barges mooring at the seafront of HY/2009/19, they were not in operation and hence no operational noise would be emitted. 4) HyD made a reply to the complainant on 30 April 2012 via email. HyD replied that the current works near Oil Street, North Point, included CWB tunnel works, IEC connections and associated foundation works. According to RSS records, no operations were performed during the early hours of March and April at Oil Street and the waterbody nearby, and so it was believed that the noise nuisance was not generated from the CWB project. Despite that, RSS would continue to monitor the Contractor on the operations and effectiveness of the environmental mitigation measures implemented on site, as not to affect daily life of local residents nearby. No further complaint was received after the response.	Closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
130308	06/03/2013	ICC Case#1-407181502	Tin Hau	A complaint regarding the dropping of fine rock material into surrounding waterbody was observed during rock breaking operation with two excavators in active operation at the Eastern Breakwater of Causeway Bay Typhoon Shelter near the North Point lighthouse.	1) RSS notified ET on 8 March 2013 2) ET confirmed with RSS that excavation works, installation of buoy, flashing light and silt curtain and dredging works were undertaken at Eastern Breakwater during the concerned period on 6 March 2013. One backhoe equipped with breaker and one derrick barge were confirmed in operation while another backhoe was at idle during the concerned period on 6 March 2013. 3) Reviewing the photo record provided by RSS, the condition of the silt curtain deployed around the Eastern Breakwater on 6 March 2013 was found to be in good condition. It is considered that the silt curtain was properly in place during the concerned period and the concerned act of dropping of fine rock material was confined within the silt curtain boundary without adverse impact to the nearby water quality. Further follow up was conducted on 12 March 2013 during weekly environmental audit inspection, the silt curtain deployed around the concerned area was found to be maintained in good condition and the water quality at the concerned work area was generally satisfactory. No violation of the Environmental Permit condition was found. The 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.	Closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
130606	30/5/2013	ICC Ref. No.: #1-430164728	Central – Man Kat Street	1. A number of trees (approximately more than ten) along Man Kat Street were found to be in poor health condition with withered and yellow leaves. The complainant has requested a follow-up by relevant department.	1) RSS notify ET on 6 June 2013 2) ET confirmed with the Resident Site Staff that According to the information provided by RSS, 13 no. of the trees - Roystonea regia (T1674, T1675, T1676, T1677, T1678, T1679, T1680, T1681, T1683, T1644, T1643, T1641, T1639) at the concerned location raised by the complainant was found to be with withered and yellow leaves and 1 no. of tree- Khaya senegalensis (T1712) raised by the complainant was found to be in poor health condition. No construction works was undertaken by Contract HY/2009/18 at the concerned planter area where the affected trees are located. It was also observed that an active CEDD construction works area under a separate contractor not related to Central Wan Chai Bypass Project was found to be located within the concerned planter area. 3) A follow-up joint inspection with RSS and Landscape specialist was conducted on 10 June 2013, it was considered that the withered and yellow leaves of the affected trees (T1674, T1675, T1676, T1677, T1678, T1679, T1680, T1681, T1683, T1644, T1643, T1641, T1639) at the concerned planter area were contributed by natural life cycle of the affected trees and the health condition of the affected trees were considered to be fair. It was also noted that an active CEDD works area was located within the concerned planter area in close proximity to few of the concerned trees (T1644, T1643, T1641, T1639) According to tree inspection records from Jan 2013 to May 2013 confirmed by RSS (Document Ref: CI-F1-043b, CI-F1-044b, CI-F1-045b, CI-F1-046b, CI-F1-047b), the affected tree (T1712) at the concerned planter area was considered to show sign of withering and considered to be in poor health condition in latest tree survey report confirmed by RSS.	Closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					During the follow-up inspection on 10 June 2013, It was observed that construction material and oil drum were placed near the the roots area of other trees within the CEDD works. Despite the above observation, no direct evidence was found on site which indicates the work front have contributed to the poor health condition of the affected tree (T1712) at the time of investigation. 4) The relevant contractor have removed the construction material near the root area of the trees retained on site and conduct pruning to remove the withered and yellow leaves retained on tree trunk to minimize impact on the trees appearance.In addition, safety supporting wire was provided for concerned tree (T1712) 5) ET recommended the contractor to keep in view the health condition of the concerned tree (T1712) and apply permission for tree felling together with tree compensation plan if considered necessary. Furthermore, the contractor was reminded to implement regular checking of tree health condition and regular removal of withered leaves to maintain the overall tree appearance.	



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
130611	30 May 2013 and 1 June 2013	EPD Ref.:H04/RS/0001 1587-13	Area near Central Pier	1. Noise was emanated from the construction site near the Central Piers at around 0900 hrs on 30 May 2013 and other days and requested follow up action by relevant department.	1) RSS notify ET on 11 June 2013 2) ET confirmed with the Resident Site Staff that According the information confirmed by RSS, major noise generating construction activities undertaken at works area near Central Pier during the concerned time include - Breaking up existing D-wall concrete and excavation at portion 4B and 4C - Sheet piling works at Portion VI (Man Kat Street) 3) Total 1 no. of Backhoe with breaker, 1 no. of Backhoe with vibratory hammer and 4 no.s of pneumatic breakers were deployed for the above construction activities. Reviewing the noise monitoring data at monitoring stations (M7e- International Finance Centre Eastern End of Podium and M7w- International Finance Centre Western End of Podium), no limit level exceedances were recorded during routine noise monitoring event on 28 May 2013 and 03 June 2013. As similar construction works activities conducted on 30 May 2013 was continued across the above monitoring period, the noise emanated from the construction activities under Contract HY/2009/18 was considered to complied with the statutory requirement. In addition, weekly environmental site inspection was conducted on 30 May 2013 at around 10:00. According to the inspection record, no particular observation regarding noise impact was recorded and the mitigation measures including erection of of temporary noise barrier was observed in place. As such, no direct information associated with the noise concerned raised was considered available and no non-conformity was identified. 4) ET recommend the contractor to review the need of additional noise mitigation measures to further reduce the noise enmated during construction works for pier side public area.	Interim report submitted to EPD on 19 June 2013, EPD advised no further comment on 5 Aug 2013 and final report for case closing submitted on 6 Aug 2013.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
131010	03 Oct 2013	ICC Ref: No.1-467000768	Area between Central Pier and International Finance Centre	Noise and air quality impact was experienced at the area located between IFC and Central Pier during peak hours.	ET confirmed with the Resident Site Staff that 1) The major construction activities at the concerned location conducted over the past three months include; - Formwork, rebar and concreting - Backfilling - Water-proofing - Scaffolding erection 2) Mitigation measures implemented by the Contractor for the above construction works include - Select quiet plant and work methods; - Check plant and equipment for condition; - For use of powered mechanical equipment during restricted hours: Obtain necessary Construction Noise Permit and strictly comply with their conditions; - Frequently spray water to major haul road and stockpiles to suppress dust generation; and - Cover stockpiles with impervious sheets The construction activities including backfilling, concreting and other associated tunnel works were undertaken in the past three months. Having reviewing the monitoring data of the monitoring stations in the vicinity of the concerned location raised by the complainant, namely monitoring station M7e and M7w (Noise Monitoring Station) and MA1e and MA1w (Air Monitoring Station), no action or limit level exceedance was recorded. In addition, mitigations measures including water spraying and erection of noise barrier were observed during weekly site inspection in August and September 2013 and reminders on dust mitigations measures given during weekly site inspection to the contractor were rectified. As such, the construction activities under Contract HY/2009/18 were considered in compliance with the statutory requirement and no cumulative air/ noise quality impact was observed in the past three months.	Closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					Elevated noise level at monitoring station M7e (International Finance Centre East Podium) was noted on 24 September 2013. The Contractor is recommended to review the current measures and to implement additional noise mitigation measures to further avoid potential impact to nearby public area during construction works.	
131217	16 Dec 2013	ICC Case Ref.: 1-484998552	Victoria Park near Hing Fat Street Exit	Sweeping of muddy water into public drains.	ET confirmed with the Resident Site Staff that 1)The major construction activities around the concerned location conducted on 16 Dec 2013 a.m.includes: -Preparation work of rootball for tree transplanting According to the information provided by RSS, the construction activities around the concerned location on 16 Dec 2013 include preparation work of rootball for tree transplanting at Zone 17/18. A further investigation on the complaint was conducted on 19 Dec 2013 during weekly environmental inspection. It was observed that a tree worksarea comprised of mainly loosen soil was located near the concerned location. It was considered that the inclined surface and loosen soil nature of the concerned worksarea could have led to the muddy surface runoff in rain. Deposition of muddy runoff onto nearby public pavement outside worksarea was hence resulted and was subsequently cleaned into nearby public stormwater drain by the Contractor's workers on the complaint date. As such, the case was considered as works related. Sandbags, geotextile and gravels were immediately placed by the Contractor around the gullies at the concerned location to prevent leftover muddy runoff to the public stormwater drain as observed during the weekly inspection on 19 Dec 2013. With respect to the follow-up raised by the complainant on 19 Dec 2013, sandbags, geotextile and gravels placed at gullies located at public area were removed by the Contractor on the same day for maintaining passible public pavement. Follow up measures including sandbag bundle and covering of worksarea with impervious sheeting was immediately placed at the source of impact at the concerned worksarea boundary by the Contractor.	Final investigation report issued on 20 Dec 2013. Case closed on 3 Jan 2014.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
131224	24 Dec 2013	(ICC Case Ref.: 1-486434321	Victoria Park Children Playground	Odour and large amount of dust particles affecting the public user of the Victoria Park near Children playground	ET confirmed with the Resident Site Staff that 1) The major construction activities around the concerned location conducted on 24 Dec 2013 include: - Breaking up existng pillar box for new children playground Portion II - Pressing of sheet pile at bowling green for ELS works Portion XII - Welding work for preparation of sheetpiling work at bowling green Portion VI - Demolition of existing pavilion for bowling green Portion VI -Felling of tree TA50 at Victoria Park Zone 2) Mitgitation measures implemented by the Contractor for the above construction works include -Water spraying for demolition and other dust generating works. According to the relevant site records, breaking up of existitng pillar box, pressing of sheet pile, welding work for preparation of sheetpiling demolition of existitng pavilion and felling of tree TA50 at Victoria Park Zone 13 were conducted at the concerned location during the time of complaint. Based on information and photo record provided by the RSS, dust mitigation measures including water spraying during dust generating works were implemented by the Contractor at the concerned location on 24 Dec 2013. Follow-up investigation was conducted on 27 Dec 2013 during weekly environmental inspection, dust mitigation measures including water spraying to dusty area and major dust generation works were confirmed in place despite a general reminder was given to the contractor to enhance the water spraying to dusty haul road during dry season. Based on on-going site inspection and the follow-up investigation, the site condition was considered generally satisfactory and no non-conformance was identified. Upon further review on the supplementary information provided by the complainant on 31 Dec 2013 and investigation conducted on 2 Jan 2014, the tree felling work of tree TA50 was located nearest to the location of the complainant. According to the location plan provided by the RSS and on site investigation, the tree felling work	Case closed and full investigation report issued on 3 Jan 2014.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					for TA50 was immediately in front of the location of the complainant. Based on site observation, scrap material of bark and leaves inevitably generated from cutting of branches during tree felling work was considered to be the most probable cause for the observation raised by the complainant at the concerned location on 24 Dec 2013. Furthermore, welding work was observed near the concerned location and was considered to be the potential source for the smell and exhaust fumes as described by the complainant. Notwithstanding the above, welding work was not identified as a work activity with air quality impact under Project EIA report but it would be desirable to implement preventive measures to minimize potential nuisance to nearby public.	
140123	22 Jan 2014	ICC Case Ref.:1-494077682	Causeway Bay Typhoon Shelter	Construction works have been undertaken during restricted hours until 2300 hrs and occasionally the working hours were extended to around 0100 hrs at nighttime period over the last two to three months at a construction site located within Causeway Bay Typhoon Shelter. For instance, concreting and excavation works were conducted at the concerned location on 22 Jan 2014 during nighttime hours and generated noise impact to the complainant.	ET confirmed with the Resident Site Staff that No construction activity was undertaken at workzone TS1 under HY/2009/15 within Causeway Bay Typhoon Shelter after 1900 hrs on 21 Jan 2014. No construction activity was undertaken at workzone TS3 under HY/2010/08 within Causeway Bay Typhoon Shelter after 1900 hrs on 21 Jan 2014. Concreting for base slab and hanger wall was conducted at workzone TS2 under HY/2009/15 within Causeway Bay Typhoon Shelter from 1900 to 0000 hrs on 21 Jan 2014; Total 8 no.s of concrete lorry mixers, 1 no. of water pump, 2 no.s of concrete pumps (lorry mounted), 1 no. of mobile crane QPME (diesel) and 3 no.s of vibratory pokers were operating from 1900 to 0000hrs on 21 Jan 2014. Concreting for base slab and hanger wall was conducted at workzone TS2 under HY/2009/15 within Causeway Bay Typhoon Shelter from 0000 to 0700 hrs on 22 Jan 2014; Total 1. no of concrete lorry mixer, 1 no. of water pump, 1 no. of concrete pump (lorry mounted), 1 no. of vibratory poker were operating from 1900 to 0000hrs on 22 Jan 2014	Case closed and full investigation report issued on 4 Feb 2014.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					According to the relevant site records, from 1900-0000hrs on 21 Jan 2014, concreting for base slab and hanger wall was conducted at workzone TS2 under HY/2009/15 within Causeway Bay Typhoon Shelter. Total 8 no.s of concrete lorry mixers, 1 no. of water pump, 2 no.s of concrete pumps (lorry mounted), 1 no. of mobile crane QPME (diesel) and 3 no.s of vibratory pokers were operating at the above period. From 0000 to 0700 hrs on 22 Jan 2014, concreting for base slab and hanger wall was conducted at workzone TS2 under HY/2009/15 within Causeway Bay Typhoon Shelter. Total 1. no of concrete lorry mixer, 1 no. of water pump, 1 no. of concrete pump (lorry mounted), 1 no. of vibratory poker were found operating at the above period. After reviewing relevant photo records and information verified by RSS and the Construction Noise Permit (CNP) no.GW-RS1384-13, it was considered that several conditions of CNP GW-RS1384-13 were not fulfilled by the Contractor in particular for the item(s) below, No acoustic installation was provided for the relevant PME(s) used as stated in CNP condition 3.d.during the concerned concreting works. From 1900 to 2300 hours on 21 Jan 2014, the PME(s) used on-site did not comply with any given PME grouping requirement(s) as stated in condition 3.a. and condition 3.d. in CNP no.GW-RS1384-13. From 0000 to 0700 hours on 22 Jan 2014, the PME(s) used by the Contractor on-site did not comply with any given PME grouping requirement(s) as stated in condition 3.a. and condition 3.d. in CNP no.GW-RS1384-13. From 1900 to 2300 hours on 21 Jan 2014 and from 0000 to 0700 hours on 22 Jan 2014, PME (Concrete Lorry Mixer) was deployed by the Contractor without barge enclosure and was unable to comply with condition 3.a. in CNP no.GW-RS1384-13.	



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
140127	24 Jan 2014	ICC Case Ref.: 1-494612639	Works area adjacent to the Victoria Park Bowling Green	Noise generated from piling works conducted at the works area adjacent to the Victoria Park Bowling Green have created nuisance to the Bowling Green users.	ET confirmed with the Resident Site Staff that The major construction activities around the concerned location conducted on 23 Jan 2014 include: Pressing of sheetpile Ch.279-285 (RHS) and Ch.317 for ELS works on 23 Jan 2014. Splicing of sheetpile Ch.275-285 (LHS) for ELS works on 23 Jan 2014. Mitigation measures implemented by the Contractor for the above construction works include: Installation of acoustic panels along hoarding line at East Bowling Green; Installation of addition noise barriers on top of hoarding at East Bowling Green; Display of publicity notices along hoarding line; and No noisy work shall be carried out at the areas adjoining East Bowling Green as if there is any Bowling Green competition event to be held (i.e. Saturday afternoon). According to relevant site records, pressing of sheetpile Ch.279-285 (RHS) and Ch.317 for ELS works and splicing of sheetpile Ch.275-285 (LHS) for ELS works were conducted at the concerned location during the time of complaint. Based on the photo records and information verified by RSS, noise mitigation measures including installation of acoustic panels along hoarding line at East Bowling Green and installation of addition noise barriers on top of hoarding at East Bowling Green were implemented by the Contractor at the concerned location. Furthermore, no noisy work was conducted by contractor at the areas adjoining	Case closed and full investigation report issued on 6 Feb 2014.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					East Bowling Green when there is any Bowling Green competition event to be held. Follow-up investigation was conducted on 29 Jan 2014 during weekly environmental inspection, noise mitigation measures including noise barriers and acoustic panels were confirmed in place and maintained in good condition. According to previous environmental inspections recorded in Jan 2014, no particular observation regarding the noise impact was recorded. As such, no non-conformity was identified.	
140311	27 Feb 2014	EPD Complaint Case (Ref:H04/RS/00 04232-14) received by ET on 11 March 2014	Central IFC Area	Excessive noise (from the operation of compressors, other heavy machinery and concrete breaking) was emanated from the construction site near IFC in daytime on 27 Feb 2014.	ET confirmed with the Resident Site Staff that The major construction activities at the concerned location conducted on 27 Feb 2014 (Daytime) include: Backfilling works between north wall and sheetpiles and for roof slab; Site hoarding removal; Formwork erection and removal works, falsework erection; Concrete breaking works at roof slab and base slab and breaking up of existing tunnel corner; Concreting works for profile barrier inside cut and cover tunnel; and Rebar fixing works and WVB basement remediation works. Mitigation measures implemented by the Contractor for the above construction works include: Use of quiet plants (air compressor with a Noise Emission Label of 99 dB(A)).	Interim report submitted to EPD on 18 March 2014, EPD advised no further comment on 26 March 2014 and final report for case closing issued on 26 March 2014



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					According to relevant site records, major noise emanating construction activities conducted around the concerned location on 27 Feb 2014 include concrete breaking works at roof slab and base slab and breaking up of existing tunnel corner and concreting works. Based on information verified by the RSS, noise mitigation measure including utilization of quiet air compressor with noise emission label of 99 dB(A) was implemented by the Contractor on the 27 February 2014 to minimize the potential noise impact. Having reviewed the monitoring data of the monitoring stations in the vicinity of the construction site near IFC, namely noise monitoring stations M7e and M7w, no limit level exceedances were recorded on 24 Feb 2014 and 4 March 2014 and the major concrete breaking works at the concerned location conducted on 27 February 2014 was continued across the above monitoring period. In addition, no particular observations regarding noise impact were recorded during weekly site inspection conducted on 27 Feb 2014. No non-conformity was identified. As such, the construction activities under Contract HY/2009/18 were considered generally in compliance with the statutory requirement. Nevertheless, in view of the concern regarding noise nuisance raised by public, it is considered desirable for the Contractor to review and strengthen the noise mitigation measures around the concerned location. Follow-up inspection was conducted during weekly environmental inspection on 13 March 2014, additional noise mitigation measure including erection of noise blanket for concrete breaking works were implemented by the Contractor to further minimize the noise nuisance to nearby public	



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
140623	11 June 2014	EPD Complaint Case (Ref:H04/RS/00 013590-14) received by ET on 23 June 2014	Foot Bridge to Central Pier 7	Excessive Paint Spray Odour	A public complaint regarding odour concern referred by EPD was received by ET on 23 June 2014. The complainant reported that excessive paint spray odour was detected at the foot-bridge to the Central Pier 7. ET confirmed with the Resident Site Staff that spraying of waterproofing membrane (integritank) from Ch1700 to Ch1705 was conducted at roof slab Bay12 on 11 June 2014 and Screeding concrete placing from Ch1700 to Ch1683 was conducted at roof slab Bay12 on 11 June 2014 and Backfilling and removal of concrete blocks was conducted at roof slab Bay 11 and Bay 10-north on 11 June 2014 According to relevant site records, major construction activities conducted around the concerned location on 11 June 2014 include spraying of waterproofing membrane (integritank) from Ch1700 to Ch1705; screeding concrete placing from Ch1700 to Ch1683 and backfilling and removal of concrete blocks. Having reviewed the relevant information verified by RSS, the chemicals applied at the concerned area on 11 June 2014 are waterproof paint and paint adhesives. In view of the concern regarding odour nuisance raised by the public, it is considered desirable for the Contractor to review the application method for waterproof layer nearby public area to minimize the nuisance caused to the surroundings.	Preliminary report issued on 25 June 2014. Interim report submitted to EPD on 30 June 2014.



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					Follow-up inspection was conducted during weekly environmental inspection on 26 June 2014, no further spraying works was conducted by the Contractor at the concerned area and no particular odour was observed at the concerned location.	
20140723	21 July 2014	ICC complaint (ICC Case Ref.: 2-341537112) received by ET on 23 July 2014	Area opposite to Ngan Tao Building	Noise nuisance due to works and machine at opposite project site during nighttime	A public complaint regarding construction noise impact referred by RSS was received by ET on 25 July 2014 (ICC Case Ref.: 2-341537112 dated 21 July 2014). The complainant reported that : At 00:57hrs on 21 July 2014, he could not sleep due to work and machine at the project site opposite to the building (Ngan Tao Building), where he was living, were still going on and in operation. Noise traveled to his flat despite it was some distance away. ET confirmed with the Resident Site Staff that dewatering works was conducted under HY/2009/19 at the works area at Watson Road from around 23:00hrs on 20 July 2014 to 01:00hrs on 21 July 2014. Total 1 no. of generator and 23 nos. of dewatering pumps were in operation. Mobilization of telescopic arm excavator to trailer truck was performed under HY/2009/19 at the works area at Watson Road from around 00:15hrs to 01:00hrs on 21 July 2014. Total 1 no. of telescopic arm excavator and 1 no. of trailer truck were in operation. According to the relevant site records under Contract HY/2009/19, from around 23:00hrs on 20 July 2014 to 01:00hrs on 21 July 2014, dewatering works was conducted under HY/2009/19 at the works area at Watson Road. Total 1 no. of generator and 23 nos. of dewatering pump were in	Final Investigation report (Issue1) issued on 31 July 2014. Final investigation report (Issue 2) based on further follow-up issued on 12 Aug 2014.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					operation at the above period. In addition, mobilization of telescopic arm excavator to trailer truck was performed under HY/2009/19 at the works area at Watson Road from around 00:15hrs to 01:00hrs on 21 July 2014. Total 1 no. of telescopic arm excavator and 1 no. of trailer truck were in operation. After reviewing relevant records and information verified by RSS and the Construction Noise Permit (CNP) no. GW-RS0152-14, it was considered that the below condition of CNP no.GW-RS0152-14 was not fulfilled by the Contractor of HY/2009/19. From 00:15hrs to 01:00hrs on 21 July 2014, the PME(s) (1 no. of telescopic arm excavator and 1 no. of trailer truck) operated under the Contractor of HY/2009/19 on-site could not follow any given PME grouping requirement(s) as stated in condition 3.a. and condition 3.d. in no.GW-RS0152-14. Notwithstanding the above, according to the information provided by the RSS, the telescopic arm excavator was mobilized at night time hours with consideration that passage of vehicle with large plant & machinery through cross harbour tunnel shall be conducted after mid-night. the Contractor of HY/2009/19 was advised to review the need to renew relevant CNP for PME grouping with respect to specific site operation requirements such that the Construction Noise Permit would be followed. Furthermore, the Contractor of HY/2009/19 was suggested to review the arrangement for PME mobilization with maintenance need to be conducted within specific period allowed under the relevant CNP(s).	



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
20140801	30 July 2014	ICC complaint (ICC Case Ref.: 2-360638977) received by ET on 01 August 2014	Area opposite to Harbour Heights	Noise of sand and gravel movements at area opposite to the Harbour Heights	A public complaint regarding construction noise impact referred by RSS was received by ET on 01 Aug 2014 (ICC Case Ref.: 2-360638977 dated 31 July 2014). The complainant reported that at 01:20hrs on 30 July 2014, the complainant was woken up by the noise of sand and gravel movements at area opposite to the Harbour Heights. ET confirmed with the Resident Site Staff that EVB excavation was undertaken at the works area around Watson Road under HY/2009/19 before 23:00hrs on 29 July 2014. (Total 1 no. of excavator, 1 no. of dump truck, 23 nos. of underground dewatering pump and 3 nos. of generator were in operation). Dewatering works was undertaken at works area around Watson Road under HY/2009/19 from 23:00hrs on 29 July 2104 to 01:00 hrs on 30 July 2014. (Total 23 nos. of underground dewatering pumps and 1 no. of generator were in operation). Mobilization of PMEs was performed at works area around Watson Road under HY/2009/19 from 00:45hrs to 01:30hrs on 30 July 2014. (1 no. of excavation machine and 1 no. of dump truck were in operation). No other construction activity or operation was performed at the area opposite to Harbour Heights from 23:00hrs on 29 July 2014 to 01:00hrs on 30 July 2014 under HY/2009/19. According to the relevant site records, before 2300hrs on 29 July 2014, EVB excavation at the works area around Watson Road was conducted under HY/2009/19. (Total 1 no. of dump truck , 1 no. of excavator, 3 nos. of generators and 23 nos. of dewatering pumps were in operation at the	Final investigation report issued on 12 Aug 2014.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					above period). From around 23:00hrs on 29 July 2014 to 01:00hrs on 30 July 2014, dewatering works at works area around Watson Road was conducted under HY/2009/19. Total 23 nos. of dewatering pumps were operating at the above period. In addition, mobilization of PMEs was performed at works area around Watson Road under HY/2009/19 from 00:45hrs to 01:30hrs on 30 July 2014. Total 1 no. of excavation machine and 1 no. of dump truck were in operation. After reviewing relevant records and information verified by RSS and the Construction Noise Permit (CNP) no. GW-RS0152-14, it was considered the below condition of CNP GW-RS0152-14 was not fulfilled by the Contractor of HY/2009/19. From around 00:45hrs to 01:30hrs on 30 July 2014, the operation of PME(s) (1 no. of excavator and 1 no. of dump truck) under the Contractor of HY/2009/19 on-site could not follow any given PME grouping requirement(s) as stated in condition 3.a. and condition 3.d. in no. GW-RS0152-14. Notwithstanding the above, according to the information provided by the RSS, the excavator and dump truck were mobilized away from the edge of the temporary ELS structure towards the area opposite to the Harbour Heights after 23:00hrs under safety consideration. The Contractor of HY/2009/19 was advised to review the arrangement and location for retaining and securing PME(s)/ plants to minimize the movements of PME or plants after completion of works such that the Construction Noise Permit would be followed.	



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
20140929	26 Sep 2014	ICC complaint (ICC Case Ref.: 2-466911619) received by ET on 29 September 2014	IEC flyover opposite to City Garden	Light originating from the flyover under Central-WanChai Bypass Project was emitted towards City Garden direction and caused light nuisance	A public complaint regarding visual impact referred by RSS was received by ET on 29 September 2014 (ICC Case Ref.: 2-466911619 dated 26 September 2014) The complainant reported that on 26 September 2014 at around 00:50hrs, light originating from the flyover under Central-WanChai Bypass Project was emitted towards City Garden direction and caused light nuisance. ET confirmed with the Resident Site Staff that the light emission on 25 and 26 September 2014 at the concerned area was originated from the temporary lighting provided at the soffit of the permanent noise enclosure at the new Island Eastern Corridor (IEC) Eastbound which was necessary to provide sufficient illumination for the traffic operation on the new IEC Eastbound after the traffic diversion on 28 September 2014. According to the relevant information provided by RSS, the light emission on 25 and 26 September 2014 at the concerned location was originated from the temporary lighting provided at the soffit of the permanent noise enclosure at the new Island Eastern Corridor Eastbound. The lighting was necessary to provide sufficient illumination for the traffic operation on the new IEC Eastbound after traffic diversion on 28 September 2014. Nevertheless, in view of the public concern regarding light nuisance raised by the public, it is considered desirable for the Contractor to review the lighting arrangement and implement additional measures to minimize the nuisance caused to the surrounding receivers as far as practicable.	Final Investigation report submitted on 9 October 2014.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					Follow-up inspection was conducted during weekly environmental inspection on 8 October 2014, additional measures including erection of green net and tarpaulin sheet were provided by the Contractor of HY/2009/19 at the concerned area as interim measure to minimize the nuisance caused to the surroundings. Further to the interim measure implemented by the Contractor of HY/2009/19, the Contractor of HY/2009/19 will replace the concerned temporary lighting with temporary lighting facing Victoria Harbour at the other side of the road to minimize the light nuisance to the surroundings. The Contractor of HY/2009/19 was suggested to review the lighting arrangement and implement additional measures to minimize the nuisance caused to the surroundings receivers as far as practicable. Additional measures including erection of green net and tarpaulin sheet were provided by the Contractor of HY/2009/19 at the concerned area as interim measure to minimize the nuisance caused to the surroundings and the Contractor of HY/2009/19 will replace the concerned temporary lighting with temporary lighting facing Victoria Harbour at the other side of the road to minimize the light nuisance to the surroundings.	



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
20141006	25,26 Sep 2014	ICC complaint (ICC Case Ref.: 2-469099657) received by ET on 06 October 2014	IEC flyover opposite to City Garden	Light originating from the flyover under Central-WanChai Bypass Project was emitted towards City Garden direction and caused light nuisance	A public complaint regarding visual impact referred by RSS was received by ET on 6 October 2014 (ICC Case Ref.: 2-469099657 dated 26 September 2014). The complainant reported that on 25 September 2014 night and on 26 September 2014 at around 23:23 hrs, light originating from the flyover under Central-Wan Chai Bypass Project was emitted towards City Garden direction and caused light nuisance. ET confirmed with the Resident Site Staff that the light emission on 25 and 26 September 2014 at the concerned area was originated from the temporary lighting provided at the soffit of the permanent noise enclosure at the new Island Eastern Corridor (IEC) Eastbound which was necessary to provide sufficient illumination for the traffic operation on the new IEC Eastbound after the traffic diversion on 28 September 2014. According to the relevant information provided by RSS, the light emission on 25 and 26 September 2014 at the concerned location was originated from the temporary lighting provided at the soffit of the permanent noise enclosure at the new Island Eastern Corridor Eastbound. The lighting was necessary to provide sufficient illumination for the traffic operation on the new IEC Eastbound after traffic diversion on 28 September 2014. Nevertheless, in view of the public concern regarding light nuisance raised by the public, it is considered desirable for the Contractor to review the lighting arrangement and implement additional measures to minimize the nuisance caused to the surrounding receivers as far as practicable.	Final Investigation report submitted on 9 October 2014.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					Follow-up inspection was conducted during weekly environmental inspection on 8 October 2014, additional measures including erection of green net and tarpaulin sheet were provided by the Contractor of HY/2009/19 at the concerned area as interim measure to minimize the nuisance caused to the surroundings. Further to the interim measure implemented by the Contractor of HY/2009/19, the Contractor of HY/2009/19 will replace the concerned temporary lighting with temporary lighting facing Victoria Harbour at the other side of the road to minimize the light nuisance to the surroundings. The Contractor of HY/2009/19 was suggested to review the lighting arrangement and implement additional measures to minimize the nuisance caused to the surroundings receivers as far as practicable. Additional measures including erection of green net and tarpaulin sheet were provided by the Contractor of HY/2009/19 at the concerned area as interim measure to minimize the nuisance caused to the surroundings and the Contractor of HY/2009/19 will replace the concerned temporary lighting with temporary lighting facing Victoria Harbour at the other side of the road to minimize the light nuisance to the surroundings.	



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
20141010	07 Oct 2014	ICC complaint (ICC Case Ref.: 2-487376144) received by ET on 10 October 2014	IEC flyover opposite to City Garden	Light originating from the flyover under Central-WanChai Bypass Project was emitted towards City Garden direction and caused light nuisance	ET confirmed with the Resident Site Staff that temporary lighting was provided at the concerned area at the soffit of the permanent noise enclosure at the new Island Eastern Corridor (IEC) Eastbound which was necessary to provide sufficient illumination for the traffic operation on the new IEC Eastbound after the traffic diversion on 28 September 2014. Temporary lighting was provided at the concerned area at the soffit of the permanent noise enclosure at the new Island Eastern Corridor (IEC) Eastbound which was necessary to provide sufficient illumination for the traffic operation on the new IEC Eastbound after the traffic diversion on 28 September 2014. In view of the public concern regarding light nuisance raised by the public, it is considered desirable for the Contractor to review the lighting arrangement and implement additional measures to minimize the nuisance caused to the surrounding receivers as far as practicable. During weekly environmental inspection on 8 October 2014, additional measures including erection of green net and tarpaulin sheet were provided by the Contractor of HY/2009/19 at the concerned area as interim measure to minimize the nuisance caused to the surroundings. Further to the interim measure implemented, on 13 October 2014 the Contractor of HY/2009/19 have replaced the concerned temporary lighting with temporary lighting facing Victoria Harbour at the other side of the road to minimize the light nuisance to the surroundings.	Final investigation report submitted on 14 Oct 2014.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					The Contractor of HY/2009/19 was suggested to review the lighting arrangement and implement additional measures to minimize the nuisance caused to the surroundings receivers as far as practicable. Additional measures including erection of green net and tarpaulin sheet were provided by the Contractor of HY/2009/19 at the concerned area as interim measure and on 13 October 2014 the Contractor of HY/2009/19 have replaced the concerned temporary lighting with temporary lighting facing Victoria Harbour at the other side of the road to minimize the light nuisance to the surroundings.	
141016	14 Oct 2014	EPD complaint EPD Ref.:H05/RS/00 025795-14) received by ET on 16 October 2014	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.	A public complaint regarding construction noise impact referred by EPD was received by ET on 16 October 2014 (EPD Ref.: EP860/E2/24 Annex IV dated 16 October 2014). The complainant reported that construction noise like piling works was heard on 14 October 2014 night until 23:45 hrs. It was suspected that the noise was emanated from the work site next to new Wan Chai Ferry Pier and opposite to Wan Chai Sports Ground. ET confirmed with the Resident Site Staff that From 19:00hrs to 23:00hrs on 14 October 2014, dredging works was conducted under Contractor of HK/2009/02 at WCR3 Area. Total one grab dredger was in operation. Mitigation measures including provision of steel sheeting screening to the power generation part of the grab dredger was implemented by the Contractor of HK/2009/02.	Updated interim investigation with supplementary information submitted to EPD on 17 November 2014. EPD advised no further comment on the updated interim report and case closed on 27 Nov 2014.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					From 23:00 hrs to 05:00 hrs, dredging works was conducted under Contractor of HK/2009/02 at WCR3 Area. Total one grab dredger was in operation. Mitigation measures including provision of steel sheeting screening to the power generation part of the grab dredger was implemented by the Contractor of HK/2009/02. From 23:00 hrs to 06:00hrs, panel replacement works was conducted under Contractor of HK/2009/02 at the Temporary Covered Walkway. Total one scissor platform and two hand held drills (battery) were in operation. From 23:00 hrs to 06:00hrs, trial pit works was conducted under Contractor of HK/2009/02 at Hung Hing Road. Total one crane lorry was in operation. According to the relevant site records under Contract HK/2009/02, from 19:00hrs to 23:00hrs on 14 October 2014, dredging works was conducted under Contractor of HK/2009/02 at WCR3 Area. Total one grab dredger was in operation. Mitigation measures including provision of steel sheeting screening to the power generation part of the grab dredger was implemented by the Contractor of HK/2009/02. From 23:00 hrs to 05:00 hrs, dredging works was conducted under Contractor of HK/2009/02 at WCR3 Area. Total one grab dredger was in operation. Mitigation measures including provision of steel sheeting screening to the power generation part of the grab dredger was implemented by the Contractor of HK/2009/02.	



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					From 23:00 hrs to 06:00hrs, panel replacement works was conducted under Contractor of HK/2009/02 at the Temporary Covered Walkway. Total one scissor platform and two hand held drills (battery) were in operation. From 23:00 hrs to 06:00hrs, trial pit works was conducted under Contractor of HK/2009/02 at Hung Hing Road. Total one crane lorry was in operation. In view of the above findings, no direct information associated with the noise concern was considered available.	
20141108	07 Nov 2014	EPD complaint (EPD Ref.: H05/RS/00027 815-14) 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.	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). 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. 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). 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.	Interim investigation report submitted to EPD on 17 November 2014. EPD advised no comment on the interim report and case closed on 1 Dec 2014.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					Dredging works was conducted on 7 November 2014 during daytime at WCR3 (East of old Wan Chai Ferry Pier) Total 1 no. of dredger, 1 no. of hopper and 1 no. of tug boat were operated. According to the relevant site records under Contract HK/2009/02, ELS works was conducted on 7 November 2014 during daytime at Portion 2 (Area oppsite to WanChai Swimming Pool). Total 3 nos. of excavators, 2 nos. of crawler cranes, 2 nos. of generator, 1 no. of crane lorry and 2 no. of dump trucks were operated. Demolition works was conducted on 7 November 2014 during daytime at West of old Wan Chai Ferry Pier. Total 2 nos. of excavators, 1 no. of derrick barge and 1 no. of tug boat were operated. Follow-up inspection was conducted during weekly environmental inspection on 13 November 2014, no dark smoke emission was observed from the PMEs operating 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. 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.	



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
20141113	12 Nov 2014	EPD complaint (EPD Ref.: H05/RS/00028 253-14) 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.	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) ET confirmed with the Resident Site Staff that demolition works was conducted under Contract HK/2009/02 on 12 November 2014 during daytime at old Wan Chai Ferry Pier. Total 2 nos. of excavators, 1 no. of derrick barge and 1 no. tug boat were operated. According to the relevant site records under Contract HK/2009/02, demolition works was conducted on 12 November 2014 during daytime at old Wan Chai Ferry Pier. Total 2 nos. of excavators, 1 no. of derrick barge and 1 no. tug boat were operated. In addition, investigation found that due to malfunctioning of one of the excavators deployed at old Wan Chai Ferry Pier, dark smoke was emitted from the defective excavator for a short period of approximately 30 seconds at around 15:00 hrs on 12 November 2014. The operation of excavator was immediately suspended and followed by repair works. The normal operation of the excavator was resumed after repair. Follow-up inspection was conducted during weekly environmental inspection on 13 November 2014, no dark smoke emission was observed from the PMEs operating 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.	Interim investigation report submitted to EPD on 19 November 2014. EPD advised no comment on the interim report and case closed on 8 Dec 2014.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
20150127	21 Jan 2015	EPD complaint (EPD Ref.: H05/RS/00001 725-15) received by ET on 27 January 2015 and further information from EPD regarding the updated location under complaint was received by ET on 30 January 2015	A portion of Hung 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.	A public complaint regarding air quality impact referred by EPD was received by ET on 27 January 2015 (EPD Case Ref.: H05/RS/00001725-15 dated 27 January 2015) and further information from EPD regarding the updated location under complaint was received by ET on 30 January 2015. The complainant reported that construction dust and grit was emitted from the construction site to the carriageway causing nuisance to the public. ET confirmed with the Resident Site Staff that the major construction activities around the concerned location conducted on 21 January 2015 include breaking of seawall blocks and D-wall at TPCWAW; concreting, grouting and drilling works at TPCWAW;reclamation/ backfilling works at TPCWAW Mitigation measures implemented by the Contractor for the above construction works include spraying haul road with water; covering bagged cement with tarpaulin; providing three sided and top covering for grouting stations; providing water spraying to dusty activities such as breaking works According to the relevant site records, breaking of seawall blocks and D-wall, concreting, grouting and drilling works and reclamation/ backfilling works were 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.	Interim report submitted to EPD on 9 February 2015, EPD advised no comment on 27 February 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
					Follow-up investigation was conducted on 27 January 2015 during weekly environmental inspection, dust mitigation measures including water spraying for dusty haul road and major dust generation works; and provision of three sides and top covering for grouting station were confirmed in place. In addition, based on the review of the monitoring data of the monitoring station located at the concerned location raised by the complainant, namely monitoring station CMA3a, no action or limit level exceedance was recorded during air quality monitoring conducted on 20 and 21 January 2015. Nevertheless, the Air Quality Health Index (AQHI) recorded by EPD across Western District and Eastern District on the complaint date was ranged from 4 to 10+ indicating a severely high concentration of ambient air pollutants. As such, the site condition under Contract HY/2009/15 at the concerned location was considered to be generally satisfactory and no non-conformity related to cumulative air quality impact was observed. Nevertheless, in view of the public concern, the contractor was reminded to enhance the dust mitigation measures implemented to minimize potential nuisance to nearby public. ET confirmed with the Resident Site Staff that the major construction activities under Contract HK/2009/02 around the concerned location conducted on 21 January 2015 include trenching grabbing for D-wall construction at temporary road eastward, shear pin installation at temporary road westward and ground Investigation drilling at temporary road westward	



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					Mitigation measures implemented by the Contractor of HK/2009/02 for the above construction works include regular water spraying at haul road, vehicle wheel-washing at the ingress/egress (Gate No. 4) to the temporary road, hard paving at the works area at temporary road northward and frequent water spraying at the ingress/egress (Gate No. 4) to the temporary road. According to the relevant site records, trenching grabbing for D-wall construction, shear pin installation and ground investigation drilling works were conducted at the concerned location. Dust mitigation measures including water spraying for haul road, vehicle wheel washing and hard paving for a section of works area nearby public road were implemented by the Contractor of HK/2009/02 near the concerned location on 21 January 2015. Follow-up investigation was conducted on 5 February 2015 during weekly environmental inspection, dust mitigation measures including water spraying for dusty haul road and major dust generation works and provision of wheel washing combine with cleaning of public road were confirmed in place and no dust related impact from the construction works was observed. The Air Quality Health Index (AQHI) recorded by EPD across Western District and Eastern District on 21 January 2015 was ranged from 4 to 10+ indicating a severely high concentration of ambient air pollutants. Based on reviewing relevant impact monitoring data, elevated TSP were recorded at monitoring stations across Wan Chai West area to North Point area and a non-Project related exceedance was recorded at nearby monitoring station CMA4a (at SPCA) on 21 January 2015 due to ambient air pollutant.	



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					In addition, it was noted that a section of the works area at the concerned location was not provided with site hoarding. Based on further review on relevant records it was noted that the works area at concerned section was either hard paved or have to maintain adequate line of sight due to traffic safety consideration. The Contractor of HK/2009/02 was advised to inform EPD with respect to the site constraint and provide relevant updated meeting records on the arrangement for review. In view of the public concern, the contractor has committed to conduct additional cleaning of the concerned public road section once a week to minimize potential nuisance caused to nearby road users. The contractor was also reminded to enhance the dust mitigation measures implemented to minimize potential nuisance to nearby public.	
20150409	07 April 2015 09 April 2015	EPD complaint (Ref.:H05/RS/00008074-15 dated 9 April 2015) received by ET on 09 April 2015	Construction site exit near Expo Drive Central; Construction site gate V2 & gate V8	Construction dust was generated from lorries transporting out of the construction via site exit without wheel washing	A public complaint regarding construction dust impact referred by EPD was received by ET on 09 April 2015 (EPD Ref.:H05/RS/00008074-15 dated 9 April 2015). The complainant reported that: Construction dust was generated from lorries transporting out of the construction via site exit near Expo Drive Central without wheel washing at the morning of 7 April 2015. Lorries were also found transporting out of the construction site via gates V2 and V8 without wheel washing and causing dust nuisance at about 10:30 hours on 9 April 2015. ET confirmed with the Resident Site Staff that on 7 April 2015, major vehicle movements included oil tanker passing at Gate V2 at Expo Drive East and dump truck passing at Gate V8 at Expo Drive Central under Contract HK/2009/01.	Interim report submitted to EPD on 17 April 2015, EPD advised no comment on 30 April 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
					2. On 9 April 2015, major vehicle movements include oil tanker, crane lorry and dump truck passing at at Gate V2 at Expo Drive East and dump truck at Gate V8 at Expo Drive Central under Contract HK/2009/01. Mitigation measures adopted by the Contractor of HK/2009/01 at the above locations include water hose was provided for wheel washing at Gate V2 and Gate V8, concrete paving at site exit, dump truck fitted with mechanic cover and cleaned before leaving construction site, regular street washing at Expo Drive Central. According to the relevant site records under Contract HK/2009/01, on 7 April 2015, major vehicle movements included oil tanker passing at Gate V2 at Expo Drive East and dump truck passing at Gate V8 at Expo Drive Central under Contract HK/2009/01 while on 9 April 2015 major vehicle movements include oil tanker, crane lorry and dump truck passing at at Gate V2 at Expo Drive East and dump truck at Gate V8 at Expo Drive Central under Contract HK/2009/01. At the above locations, mitigation measures including water hose for wheel washing at Gate V2 and Gate V8; concrete paving at site exit; dump truck fitted with mechanic cover and cleaned before leaving construction site and regular street washing at Expo Drive Central were generally adopted by the Contractor of HK/2009/01. In view of the public concern on the complaint date, the Contractor of HK/2009/01 was advised to conduct cleaning at the concerned site exit point and the section of public road adjoining the site exit to clear any residue grit and silt desposit to avoid further dust impact.	



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					Follow up inspection was conducted on 16 April 2015 during weekly environmental inspection and mitigation measures including water spraying for dusty haul road and provision of wheel washing were in place. The construction site exit was observed clear from residue silt / grit at the concerned location. In view of the public concern, the contractor was advised to conduct training to the construction site workers to enhance the effectiveness of wheel washing and to ensure proper wheel washing is provided for dump truck and other vehicle prior to leaving the construction site to avoid generating any dust nuisance.	
20150409A	03 April 2015 to 07 April 2015	EPD complaint (Ref.:H05/RS/00007861-15 dated 9 April 2015) received by ET on 09 April 2015	Construction site at Convention Avenue near Renaissance Harbour View Hotel	Construction noise was emanated from the construction site at Convention Avenue near Renaissance Harbour View Hotel during the period of Easter Holiday	A public complaint regarding construction noise impact referred by EPD was received by ET on 09 April 2015 (EPD Ref.:H05/RS/00007861-15 dated 9 April 2015). The complainant reported that construction noise was emanated from the construction site at Convention Avenue near Renaissance Harbour View Hotel during the period of Easter Holiday, including April 3 at about 13:00 hours. ET confirmed with the Resident Site Staff that from 3 April 2015 to 7 April 2015, from 08:00 hours to 18:00 hours, and at about 13:00 hours on 3 April 2015 at area CWB Tunnel Stage 3, backfilling works was conducted under HK/2009/01. Either 1 no. of dump truck and 1. no. of excavator was operated on site at each given time during the concerned period. According to the relevant site records under Contract HK/2009/01, from across 08:00hrs to 18:00hrs during the period from 3 April 2015 to 7 April 2015, backfilling works was conducted under Contract HK/2009/01 at CWB Tunnel Stage 3. Either 1 no. of dump truck and 1 no. of excavator was operated on site at each given time during the	Interim report submitted to EPD on 17 April 2015, EPD advised no comment on 30 April 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
					concerned period and the relevant Construction Noise Permit GW-RS0104-15 for the works was in place and the same construction activity was undertaken at around 13:00hrs on 3 April 2015. No other concurrent construction activity was undertaken at the concerned location during the concerned period under Contract HK/2009/01. The construction activity conducted under Contract HK/2009/01 during the concerned period was in compliance with the statutory requirement. Nevertheless, in view of the concern regarding the noise nuisance raised by the public at the concerned location, it is considered desirable for the Contractor of HK/2009/01 to review the truck unloading procedures of the specific construction task to minimize potential noise emanated during the course for work.	
20150415	13 April 2015	ICC complaint case (ICC Case Ref.: 2-885677297 dated 13 April 2015) received by ET on 15 April 2015	Construction Site at Causeway Bay Typhoon Bay Shelter	Unnecssary light nuisance from the construction site	A public complaint regarding visual impact received by the RSS was referred to the ET on 15 April 2015 (ICC Case Ref.: 2-885677297 dated 13 April 2015). The complainant reported that " I live in a building next to Gloucester Road in Causeway Bay. Recently, I am suffering from unnecessary light source from the construction site. The banners of the construction companies are always illuminated with very bright lights." ET confirmed with the Resident Site Staff that the concerned lighting for the banners was maintained under Contract HY/2010/08. The concerned lighting for the banners was maintained under Contract HY/2010/08 and the concerned lighting was subsequently switched off at all times since 13 April 2015 to alleviate the lighting nuisance caused to the surroundings.	Final Investigation report issued on 20 April 2015 and case closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
20150423	21 April 2015	EPD complaint case (EPD Case Ref: :H05/RS/00009456-15 dated 23 April 2015) received by ET on 23 April 2015	Road work at Fleming Road and Convention Avenue near Renaissance Harbour View Hotel	Construction noise emanated from the road work at Fleming Road and Convention Avenue near Renaissance Harbour View Hotel causing nuisance	A public complaint regarding construction noise impact referred by EPD was received by ET on 23 April 2015 (EPD Ref.:H05/RS/00009456-15 dated 23 April 2015). The complainant reported that construction noise emanated from the road work at Fleming Road and Convention Avenue near Renaissance Harbour View Hotel almost every night recently causing nuisance. ET confirmed with the Resident Site Staff that from 21:00hrs on 20 April 2015 to 06:00hrs on 21 April 2015 and from 21:00hrs on 21 April 2015 to 06:00hrs on 22 April 2015, cooling main connection works was undertaken by the Contractor of Contract HK/2009/01 at the concerned location. Total 1 no. of crane lorry and 1 no. of excavator were in operation. According to the relevant site records under Contract HK/2009/01, from 21:00hrs on 20 April 2015 to 06:00hrs on 21 April 2015 and from 21:00hrs on 21 April 2015 to 06:00hrs on 22 April 2015, cooling main connection works was undertaken by the Contractor of Contract HK/2009/01 at the concerned location. Total 1 no. of crane lorry and 1 no. of excavator were in operation during the concerned period and the relevant Construction Noise Permit GW-RS0269-15 was confirmed in place. The construction activity conducted under Contract HK/2009/01 during the concerned period was in compliance with the statutory requirement. In view of the potential noise nuisance, a notice to affected parties was issued by the Contractor of Contract HK/2009/01 to the nearby residents including Renaissance Harbour View Hotel on 17 April 2015. Besides, construction works undertaken by other parties at the concerned location was observed at the concerned period.	Final Investigation report issued on 18 May 2015 and case closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
20150601	29 May 2015	EPD complaint case (EPD Case Ref: :H05/RS/00013254-15 dated 1 June 2015) received by ET on 23 April 2015	Construction site gates V2 and V3 near Expo Drive Central	Vehicle with plate no. TG2426 was found leaving the construction site at gate V2 near Expo Drive Central without wheel-washed	A public complaint regarding construction dust impact referred by EPD was received by ET on 01 June 2015 (EPD Ref.:H05/RS/00013254-15 dated 1 June 2015). The complainant reported that vehicle with plate no. TG2426 was found leaving the construction site at gate V2 near Expo Drive Central without wheel-washed at about 10:33hrs on 29 May 2015. The complainant also alleged that water spraying at the gates V2 and V3 near Expo Drive Central was insufficient causing dust nuisance to the public. ET confirmed with the Resident Site Staff that on 29 May 2015, vehicle record indicated that concerned vehicle TG 2426 has entered and exited the construction site via gate V3. Mitigation measures adopted by the Contractor of HK/2009/01 at the above locations include, water hose was provided for wheel washing at Gate V2 and Gate V3. According to the relevant site records under Contract HK/2009/01, vehicle record indicated that concerned vehicle TG 2426 has entered and exited the construction site via gate V3 on 29 May 2015 under Contract HK/2009/01. As confirmed by WDII RSS, the concerned construction site Gate V2 and Gate V3 have been closed from 31 May 2015 and formed part of the construction site area. Follow up inspection was conducted on 3 June 2015 during weekly environmental inspection and mitigation measures including wheel washing were implemented at construction exit gates around the concerned location despite a vehicle was observed leaving the construction site via Gate V8 without wheel washing. The Contractor was immediately advised to review and strengthen the control measures for vehicle exits to ensure wheel washing are provided for exiting vehicles.	Interim report submitted to EPD on 08 June 2015, EPD advised no comment on 22 June 2015 on the interim report submitted and case closed.



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					In view of the public concern and the site observation, the Contractor of HK/2009/01 has implemented enhanced site exit control measures using red string to alert drivers to stop their vehicles for cleaning before leaving the construction site and wheel washing facilities including water hose were implemented at Gate V1 and Gate V10 around the concerned location and the vehicle gate V8 was subsequently closed. In addition, removal of spoil arising from wheel washing around site exit location would be conducted by the Contractor of HK/2009/01 as appropriate to alleviate for potential dust impact at construction site exits.	
20150608	04 June 2015	EPD Ref.:H05/RS/0013843-15 dated 8 June 2015	A portion of construction site of Contract HK/2012/08 outside Fleet Arcade	Construction noise was generated from the construction site of Contract HK/2012/08 at location outside Fleet Arcade during restricted hours including Sundays and General Holidays.	A public complaint regarding construction noise impact referred by EPD was received by ET on 8 June 2015 (EPD Ref.:H05/RS/00013843-15 dated 8 June 2015). The complainant reported that construction noise was generated from the construction site of Contract HK/2012/08 at location outside Fleet Arcade during restricted hours including Sundays and General Holidays. ET confirmed with the Resident Site Staff that from 08:00hrs to 18:00hrs on 31 May 2015 (Sunday), construction work including steel welding was conducted under Contract HK/2012/08 at site portion zone A1 opposite to Fleet Arcade. Total one welding machine was in operation. According to the relevant site records under Contract HK/2012/08, from 08:00hrs to 18:00hrs on 31 May 2015 (Sunday), construction work including steel welding was conducted under Contract HK/2012/08 site portion zone A1 opposite to Fleet Arcade. Total one welding machine was in operation and the relevant Construction Noise Permit GW-RS0296-15 was confirmed in place. The construction activity conducted under Contract	Interim report submitted to EPD on 16 June 2015 and EPD advised no comment on 20 July 2015 on the interim report submitted and case closed.



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					HK/2012/08 during the concerned period was in compliance with the statutory requirement. Ad-hoc inspection was conducted during weekly environmental inspection on 9 June 2015 and it was noted that Construction Noise Permits under Contract HK/2012/08 were posted at site entrance locations for public inspection. In view of the potential noise nuisance, 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. Besides, other construction sites at the concerned location were observed. Furthermore, a meeting was held on 15 June 2015 between the EPD, Contractor of HK/2012/08, WDII RSS team and the Environmental Team on the public concern and the Contractor of HK/2012/08 has committed to review the re-application for the Construction Noise Permits GW-RS0223-15 and GW-RS0296-15 on usage of PMEs at a portion of site area outside the Fleet Arcade during public holiday including Sundays to minimize for the potential noise nuisance to nearby public.	
150622	18 June 2015	EPD Ref.:H05/RS/0015054-15 dated 22 June 2015	A mooring location near shore and at location outside Wan Chai Sports Ground	Dark smoke and malodour emission was observed from a hopper barge moored near shore and other construction plants under operation from the reclamation construction site	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 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.	Interim report submitted to EPD on 29 June 2015 and EPD advised no comment on 20 July 2015 on the interim report submitted and case closed.



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					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. 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. Follow-up inspection was conducted during weekly environmental inspection on 25 June 2015, no dark smoke and malodour emission was observed from the PMEs operating on-site. A derrick barge was	



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					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.	
150714	11 July 2015	ICC Complaint (Ref:#2-1149562777) referred by RSS was received by ET on 14 July 2015	A portion of site area adjacent to Hing Fat Street Site entrance	Direct discharge of muddy effluent into marine waters	A public complaint regarding direct discharge of muddy effluent referred by RSS was received by ET on 14 July 2015 (ICC Ref.: #2-1149562777). The complainant reported that: Muddy effluent was directly discharged into nearby marine waters by Chun Wo worker. Further information was received by ET from RSS on 23 July 2015 and the complaint date was clarified to be 11 July 2015 and the concerned vehicle registration number shall be JV 7319. ET confirmed with the Resident Site Staff that no construction works was undertaken by the Contractors HY/2009/19 and adjacent Central WanChai Bypass Project construction site at the concerned location on 11 July 2015. No construction works was undertaken by the Contractor of HY/2009/19 and adjacent Central WanChai Bypass Project construction site at the concerned location on 11 July 2015 and the concerned vehicle (License Plate JV 7319 labelled as Chun Wo) was confirmed not belonging to the Contractor of HY/2009/19. Follow-up inspection was conducted during weekly environmental inspection on 14 July 2015, no direct discharge connection was further observed on site.	Updated Final investigation report submitted on 27 July 2015.



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					No construction works was undertaken by Central WanChai Bypass Project at the concerned location and no sump pit or works area under Central WanChai Bypass Project associated with potential muddy effluent discharge was identified. In addition, a construction area with excavated pit under WSD Contract 12/WSD/10 was noted at the concerned location behind the alleged vehicle responsible for direct discharge of muddy effluent. Based on the further review on the information received on 23 July 2015, the alleged direct discharge was observed originating from the works area under WSD Contract 12/WSD/10 and not related to the Central Wan Chai Bypass Project construction works.	
150723	20 July 2015	EPD Ref.:H05/RS/0018040-15 dated 23 July 2015	Ex-Wanchai Ferry Pier near 720 & 722 Bus stop	Malodour from marine sediment	A public complaint regarding malodour referred by EPD was received by ET on 23 July 2015 (EPD Ref.: H05/RS/00018040-15 dated 23 July 2015). The complainant reported that malodour from marine sediment was scented at ex-Wanchai ferry pier near route 720 & 722 bus stop. (Contract HK/2009/02). ET confirmed with the Resident Site Staff that Rockfill placing works was conducted by one derrick barge at the concerned location (WCR3) under Contract HK/2009/02 on 20 July 2015. No marine sediment was stored or placed on site at the concerned location under Contract HK/2009/02 on 20 July 2015. According to the relevant site records under Contract HK/2009/02, rockfill placing works was conducted by one derrick barge at WCR3 area on 20 July 2015 and no marine sediment was stored or placed on site at the concerned location on the concerned date.	Interim report submitted to EPD on 30 July 2015. EPD advised no comment on 17 August 2015 on the interim report submitted and case closed.



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					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. 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	A public complaint regarding dropping of excavated material from land to sea referred by EPD was received by ET on 04 September 2015 (EPD Ref.: H05/RS/00022241-15 dated 04 September 2015). The complainant reported that dropping of excavated materials from land to sea during loading of materials by excavator at the construction site to work boat. (Contract HK/2009/02) ET confirmed with the Resident Site Staff that transferring of C&D materials from land to hopper barge by excavator at seaside along CWB Tunnel Portions 3 and 4 was undertaken by Contract HK/2009/02 on 01 September 2015. Mitigation measure including providing tarpaulin sheet to cover the gap between seawall and the hopper barge to prevent dropping of material to the sea was implemented by the Contractor. According to the relevant site records under Contract HK/2009/02, transferring of C&D materials from land to hopper barge by excavator at seaside along CWB Tunnel Portions 3 and 4 was carried out on 01 September 2015 and mitigation measures including provision of tarpaulin sheet between	Interim report submitted to EPD on 14 September 2015. EPD advised no comment on 5 October 2015 on the interim report submitted and case closed.



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					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 barge and the material transfer works was generally in order. Nevertheless, the Contractor of HK/2009/02 was reminded to maintain the handling procedure for C&D materials transfer from land to hopper barge and regularly inspect the condition of the tarpaulin sheet provided to ensure the nearby water quality are not affected by the loading and unloading of material from land side to hopper barge. The Contractor was reminded to maintain the handling procedure for C&D materials transfer from land to hopper barge and regularly inspect the condition of the tarpaulin sheet provided to ensure the nearby water quality are not affected by the loading and unloading of material from land side to hopper barge.	
150904	02 Sept 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	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)	Interim report submitted to EPD on 14 September 2015. 2 nd interim report submitted to EPD on 17 Dec 2015



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				transporting C&D material at the site.	ET confirmed with the Resident Site Staff that from 0800 hrs to 1800 hrs on 30 August 2015, removal of scaffold and timber and installation of bulkhead was undertaken by the Contractor of HK/2012/08 at the concerned location. Total one generator and one circular saw were in operation. From 1900hrs on 30 August 2015 to 0700 on 31 August 2015, no construction works was undertaken by the Contractor of HK/2012/08 at the concerned location. From 1900hrs on 31 August 2015 to 0700hrs on 01 September 2015, no construction works was undertaken by the Contractor of HK/2012/08 at the concerned location. From 1900hrs to 2115 hrs on 01 September 2015, unloading of soil was undertaken by the Contractor of HK/2012/08 at the concerned location. Total one derrick barge was in operation. From 2300hrs on 01 September 2015 to 0700hrs on 02 September 2015, no construction works was undertaken by the Contractor of HK/2012/08 at the concerned location. One derrick barge was deployed for unloading of soil on 02 September 2015 during daytime under Contract HK/2012/08 at the concerned location. Based on the relevant site records, from 0800 hrs to 1800 hrs on 30 August 2015, removal of scaffold	3 rd interim report submitted to EPD on 31 Dec 2015



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					and timber and installation of bulkhead was undertaken by the Contractor of HK/2012/08 at the concerned location. Total one generator and one circular saw were in operation and the relevant Construction Noise Permit GW-RS0296-15 for the concerned operation was confirmed in place. From 1900hrs on 30 August 2015 to 0700 on 31 August 2015, no construction works was undertaken by the Contractor of HK/2012/08 at the concerned location and from 1900hrs on 31 August 2015 to 0700hrs on 01 September 2015, no construction works was undertaken by the Contractor of HK/2012/08 at the concerned location. From 1900hrs to 2115 hrs on 01 September 2015, unloading of soil was undertaken by the Contractor of HK/2012/08 at the concerned location. Total one derrick barge was in operation and the Construction Noise Permit GW-RS0296-15 for the concerned operation was confirmed in place. 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.	



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					In addition, one derrick barge was deployed for unloading of soil on 02 September 2015 during daytime under Contract HK/2012/08 at the concerned location. Follow-up inspection was conducted during weekly environmental inspection on 08 September 2015 and no dark smoke emission was observed from the derrick barge moored outside the concerned location. Nevertheless, the Contractor of HK/2012/08 was reminded to conduct regular checking on the condition of the all derrick barges deployed on site to ensure only well maintained equipment are used to avoid potential dark smoke emission affecting nearby public and the Contractor of HK/2012/08 was reminded to upkeep the site control system for construction works carrying out at restricted hours and night time for Construction Noise Permit compliance. The Contractor was reminded to conduct regular checking on the condition of derrick barges deployed on site to ensure only well maintained equipments are used on site to avoid potential dark smoke emission affecting nearby public. The Contractor of HK/2012/08 was reminded to upkeep the site control system for construction works carrying out at restricted hours and night time for Construction Noise Permit compliance.	



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151117	Not specified	EPD complaint received by ET on 17 November 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	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. 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. 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. White or greyish effluent was discharged directly into Victoria Harbour marine waters from wastewater treatment plant on construction site. In response to the complaint concern, additional water quality monitoring from end November 2015 to mid January 2016 until the post-diaphragm wall construction activities and all bentonite silos and residue bentonite slurry at TS3 were completely removed had been undertaken by the Environmental Team and additional site inspections	Interim investigation report submitted to EPD on 24 November 2015. 2nd interim investigation report submitted to EPD on 17 December 2015. 3rd interim investigation report submitted to EPD on 31 December 2015. Final investigation report submitted on 5 February 2016.



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					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. Specific enhancement on site supervision was undertake by the CWB RSS team to ensure the properly handling of the remaining bentonite slurry in terms of the following: Depth of the bentonite slurry at the primary mixing pit (at south of TS3) was recorded by RSS team daily at regular intervals starting from 22nd December 2015 to record the changes in the level of slurry, particularly before end of works and at the start of works on the next day to confirm no significant change in bentonite slurry level during non-working hours until the complete removal of the mud pit. During the silo dismantling stage, the amount of residue bentonite cleared from the remaining silo were monitored on daily basis to record of the residue bentonite transferred for mixing and final disposal.	



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					The Environmental Team will continue to keep in view on the contractor environmental mitigation measures during the routine inspections, with specific attention at TS3 area on the effectiveness of Contractor's remediation measures and check the implementation of site measures in accordance with the EIA and EM&A Manual recommendations.	
ICC complaint case (ICC Ref: 2-159316569 4) dated 26 November 2015	26 No 2015	ICC complaint received by ET on 27 November 2015	Construction area outside City Garden Block 11	Noise nuisance due to windblown slapping of a metal onto adjacent barrier at night time	A public complaint regarding noise impact referred by RSS was received by ET on 27 November 2015 (ICC Case Ref.: 2-1593165694 dated 26 November 2015). The complainant reported that noise was emanated from the IECL construction site outside City Garden Block 11 due to the windblown slapping of a metal sheet onto adjacent barrier causing nuisance to nearby residents at night time. ET confirmed with the Resident Site Staff that the noise nuisance was caused by the windblown action of the corrugated metal sheet loosely affixed onto the temporary noise barrier panel above a concrete block footing fronting City Garden. The noise nuisance was caused by the windblown action of the corrugated metal sheet loosely affixed onto the temporary noise barrier panel above a concrete blocking footing fronting City Garden. The concerned corrugated metal sheet was removed by the Contractor of HY/2009/19 on 27 November 2015 to avoid further generation of noise nuisance.	Final investigation report to be issued on 01 December 2015.



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					The Contractor was reminded to check and ensure metal sheetings and other material stored within the construction site are properly affixed to avoid potential noise nuisance due to windblown action.	
EPD complaint case (EPD Ref: H04/RS/00 028924-15 dated 04 December 2015	12 Novemb er 2015	EPD complaint received by ET on 04 December 2015	Two International Finance Centre at Finance Street, Central	Construction dust generated from construction site near Two International Finance Centre	A public complaint regarding construction dust impact referred by EPD was received by ET on 04 December 2015 (EPD Ref: H04/RS/00028924-15). The complainant reported that excessive construction dust was generated from the construction site near Two International Finance Centre at Finance Street, Central ET confirmed with the Resident Site Staff that bridge works and drains/ sewers construction at the concerned location was undertaken by Contract HY/2009/18 on 12 November 2015. A stockpile which would be reused for backfilling was stored at the concerned location by Contract HY/2009/18 on 12 November 2015. Mitigation measures implemented by the Contractor for the above construction works including covering of idled portion of stockpile and dampening of the exposed stockpile was implemented for the stockpile at the concerned location.	1st interim report submitted to EPD on 14 December 2015 2nd interim report submitted to EPD on 4 January 2016 EPD advised no comment on 07 January 2015 on the report submitted and case closed.



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					According to relevant site records confirmed by RSS, bridge works and drains/ sewers construction at the concerned location was undertaken by Contractor of HY/2009/18 on 12 November 2015 and a stockpile which would be reused for backfilling was stored at the concerned location. Mitigation measures including covering of idled portion of stockpile and dampening of the exposed stockpile was implemented for the stockpile at the concerned location. In view of the public concern on potential dust impact at the concerned location, the Contractor of HY/2009/18 rearranged the works sequence and placed concrete blocks at the bridge retaining wall to allow for early commencement of backfilling on 19 November 2015 to minimize the size of the stockpile at an earlier stage. Additional water sprinklers were installed on 27 November 2015 to further enhance the dampening of the stockpile surface during excavation. Follow-up inspection was conducted during weekly environmental inspection on 10 December 2015 and mitigation measures including covering of stockpile stored at the concerned location was implemented while it was observed that stockpiles stored near Man Chiu Street was not properly covered. The Contractor of HY/2009/18 was advised to promptly provide covering to all idled stockpile stored on site and the Contractor was reminded to enhance the	



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					watering during excavated material handling near the concerned location. Further follow up inspection was conducted on 17 December 2015 and mitigation measures including covering and watering for idle stockpile and material handling were implemented.	
ICC complaint case (ICC Case Ref: 2-1656689815 dated 14 December 2015	14 December 2015	EPD complaint received by ET on 04 December 2015	Construction area outside City Garden Block 10 and Block 11	Incessant noise emanating from the construction site of the Island East Corridor link that forms part of the Central Wanchai Bypass Project	A public complaint regarding noise impact referred by RSS was received by ET on 16 December 2015 (ICC Case Ref.: 2-1656689815 dated 14 December 2015). The complainant reported that: Incessant noise emanating from the construction site of the Island Eastern Corridor Link that forms part of the Central-Wanchai Bypass Project. Over the past couple of weeks, there have been loud mechanical pounding at the construction site over the reclaimed area between Blocks 10 and 11 of City Garden. As can be seen, machines have been breaking open the concrete paved on top of the reclaimed area. Work often starts well before 9am on weekdays and, barring a brief period of lull during lunch hours, would often continue unabated untill after 5pm. Although I note that certain noise reduction measures have been put into place (e.g. the erection of flimsy noise barriers around the work area), the noise created is still enormous, and this has become a significant nuisance for residents	Final report was issued on 23 December 2015 and case closed.



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					living in nearby blocks of our estate, especially children and the elderly who have to stay at home for longer hours. ET confirmed with the Resident Site Staff that concreting breaking works was carried out with one breaker on 7, 9, 11, 12 and 14 December 2015 and the breaking works at the concerned location were completed on 14 December 2015 morning. Noise mitigation measures including temporary noise barriers near the point of breaking and covering the breaker with acoustic mat were provided during the concerned concrete breaking works. According to information confirmed by RSS, concreting breaking works was carried out by one excavator mounted breaker on 7, 9, 11, 12 and 14 December 2015 and the concerned breaking works outside City Garden Block 10 and Block 11 was completed on 14 December 2015 morning. Noise mitigation measures including temporary noise barriers near the point of breaking and covering the breaker with acoustic mat were provided during the concerned concrete breaking works. Based on the further review on the record of the environmental inspection conducted on 09 December 2015, the Contractor of HY/2009/19 was reminded to temporary noise barrier provided for the pile cap demolition shall follow the the Environmental Permit EP-364/2009/D requirement.	



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					Follow up inspection was conducted during weekly environmental inspection on 17 December 2015, the concerned breaking works opposite to City Garden Block 10 and Block 11 was observed completed while the Contractor was reminded that the remaining section of temporary noise barrier in accordance with the latest Environmental Permit EP-364/2009/D shall be completed on site as soon as possible. According to the information provided by RSS, the temporary noise barrier in accordance with the Environmental Permit requirement opposite to City Garden was substantially completed on 21 December 2015. In view of the public concern, the Contractor was suggested to consider to review the works duration at daytime and conduct other future breaking works around the concerned location intermittently to minimize the potential noise nuisance caused to the surroundings.	
EPD Ref.: H05/RS/00 000570-16 dated 14 January 2016	07 January 2016	EPD complaint received by ET on 14 January 2016	Lung King Street	Operation of powered mechanical equipment at the construction site near Lung King Street after 1900hrs.	A public complaint regarding construction noise referred by EPD was received by ET on 14 January 2016 (EPD Ref.: H05/RS/00000570-16 dated 14 January 2016). The complainant reported that there was operation of powered mechanical equipment at the construction site near Lung King Street after 1900hrs. (Contract HK/2012/08) ET confirmed with the Resident Site Staff that from 1900hrs to 2115hrs on 06 January 2016, shifting of equipment and socket H-pile casing was undertaken by the Contractor of HK/2012/08 at the concerned location. Total one crawler crane was in operation.	Interim investigation report submitted to EPD on 22 January 2016. EPD advised on 17 February no comment on the interim report submitted and case closed.



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					According to the relevant site records provided by RSS, shifting of equipment and socket H-pile casing was undertaken by the Contractor of HK/2012/08 at the concerned location from 1900hrs to 2115hrs on 06 January 2016. Total one crawler crane was in operation and the relevant Construction Noise Permit GW-RS0976-15 for the concerned operation was confirmed in place. Based on the above, the construction activities conducted under Contract HK/2012/08 on 06 January 2016 after 1900hrs was in compliance with the statutory requirement. Nevertheless, the Contractor was reminded to upkeep the site control system for construction works carried out during restricted hours and night time for Construction Noise Permit compliance in view of the nearby public concern.	
ICC complaint case (ICC Ref.: #2-1754682833 and ICC Ref: #2-1759629742	19 January 2016	EPD complaint received by ET on 19 January 2016	Hung Hing Road	Drainage at Hung Hing Road, Causeway Bay near the entrance of Cross Harbour Tunnel was blocked and sewage was overflowing from the sewer.	Two public complaints regarding the subject matter on blocked drainage were referred by RSS was received by ET on 19 January 2016 (ICC Ref.: #2-1754682833 and ICC Ref: #2-1759629742). The first complainant (ICC Ref.: #2-1754682833) on 11 January 2016 reported that the drainage at Hung Hing Road, Causeway Bay near the entrance of Cross Harbour Tunnel was blocked and sewage was overflowing from the sewer. The first complainant on 13 January 2016 enquired the status of follow-up, the complainant reported that the sewage overflow was severe and pose environmental hygiene concern to the	Final investigation report issued on 27 January 2016



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					surroundings. The first complainant on 14 January 2016 reported that the situation was not improved and would escalate the case if not addressed. The second complainant on 12 January 2016 (ICC Ref: #2-1759629742) reported that a foul sewer was found choking and foul water flows onto the carriageways. ET confirmed with the Resident Site Staff that no discharge point from the Contractor of HY/2009/15 is located within the concern portion of public drain (roadside gully) along Hung Hing Road. The observed yellow pipe extending from the roadside gully at Hung Hing Road into the site area under Contract HY/2009/15 was installed by the Contractor of HY/2009/15 to pump excessive sewage from the roadside gully on 11 January 2016. According to relevant site records and information provided by RSS, a steady flow of wastewater, noticeably sewer-like odour, was seeping through an existing sewage manhole at Hung Hing Road on 11 January 2016 and resulting in the formation of local ponding formed around the low point gully nearby. Based on relevant site information, no discharge point from the Contractor of HY/2009/15 was located at the concerned public drain (roadside gully) along Hung Hing Road while the observed yellow pipe extending from the roadside gully at Hung Hing Road into Contract HY/2009/15 site area was installed by the Contractor of HY/2009/15 to pump excessive sewage from the roadside gully on 11 January 2016. In view of no discharge point established under Contractor HY/2009/15 was observed at the concerned portion of Hung Hing Road, no direct information	



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					indicating the association with the Contractor of HY/2009/15 is considered available. Follow up inspection was conducted during the weekly environmental inspection on 26 January 2016, no further accumulation of wastewater and no particular blockage of the concerned roadside gully at Hung Hing Road was observed. In addition, no overflow from the roadside sewer was observed. Nevertheless, the Contractor of HY/2009/15 was reminded to upkeep the site exit condition to avoid any potential impact to the surroundings.	
EPD complaint case (EPD Case Ref.:H05/RS/00001524-16	22 January 2016	EPD complaint received by ET on 22 January 2016	Hung Hing Road	Construction wastewater from the China Stat's construction site under Contract HY/2009/15 was discharged from the site exit at Hung Hing Road near the Royal Hong Kong Yacht Club to the carriage of Hung Hing Road causing accumulation of stagnant water	A public complaint regarding the blockage of public drainage referred by EPD was received by ET on 22 January 2016 (EPD Case Ref.: H05/RS/00001524-16). The complainant reported that construction wastewater from the China State's construction site under Contract HY/2009/15 was discharged from the site exit at Hung Hing Road near the Royal Hong Kong Yacht Club to the carriage of Hung Hing Road causing accumulation of stagnant water starting from 11 January 2016. ET confirmed with the Resident Site Staff that no construction activities with potential runoff at the main entrance of PRE Office was conducted under Contractor of HY/2009/15 on 11, 14, 15 and 17 January 2016. Concreting for Seawall Reinstatement at TPCWAE was conducted under Contractor of HY/2009/15 on 12 January 2016 and 18 January 2016. Concreting for construction works at covered Tunnel by using concrete pump at TPCWAE was conducted under Contractor of HY/2009/15 on 13 January 2016 and 16 January 2016. According to relevant site records and information	Interim investigation report submitted to EPD on 01 February 2016. EPD advised on 17 February no comment 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
					provided by RSS, a steady flow of wastewater, noticeably sewer-like odour, was seeping through an existing sewage manhole at Hung Hing Road on 11 January 2016 and resulting in the formation of local ponding formed around the low point gully nearby. Based on relevant site information provided by RSS, no construction activity with potential runoff at the main entrance of PRE Office were conducted under Contractor of HY/2009/15 on 11, 14, 15 and 17 January 2016 while concreting for seawall reinstatement at TPCWAE were conducted on 12 January 2016 and 18 January 2016 and concreting for construction works at covered Tunnel by using concrete pump at TPCWAE were conducted on 13 January 2016 and 16 January 2016. All construction runoff was pumped to the wastewater treatment facility. In addition, no discharge point from the Contractor of HY/2009/15 was located at the concerned public drain (roadside gully) along Hung Hing Road. Follow up inspection was conducted during the weekly environmental inspection on 26 January 2016. No further accumulation of wastewater and particular blockage of the concerned roadside gully at Hung Hing Road was observed and no overflow from the roadside sewer was observed. The condition of the construction site exit under HY/2009/15 was generally in order and no particular construction surface runoff was observed. Nevertheless, the Contractor of HY/2009/15 was reminded to upkeep the site exit condition to avoid any potential impact to the surroundings.	



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
EPD Ref.: H05/RS/000 03169-16 dated 16 February 2016	16 February 2016	EPD complaint received by ET on 16 February 2016	West of HKCEC	Construction work at construction site of CEDD Wan Chai Development Phase II reclamation project around 2200hrs	A public complaint regarding construction works at restricted hours referred by EPD was received by ET on 16 February 2016 (EPD Ref.:H05/RS/00003169-16 dated 16 February 2016). The complainant reported that: There was construction work at construction site of CEDD Wan Chai Development Phase II reclamation project around 2200hrs on 06 February 2016 at the west of HKCEC within the work area of Contract HK/2012/08. ET confirmed with the Resident Site Staff that from 1900hrs to 2300hrs on 06 February 2016, no site activity was undertaken by the Contractor of HK/2012/08 at the concerned location and site activities under the Contractor of HK/2012/08 at the concerned area were stopped around 1700hrs on 06 February 2016. According to the relevant site records provided by RSS, from 1900hrs to 2300hrs on 06 February 2016, no site activity was undertaken by the Contractor of HK/2012/08 at the concerned location and site activities under the Contractor of HK/2012/08 at the concerned area were stopped around 1700hrs on 06 February 2016. Nevertheless, the Contractor was reminded to upkeep the site control system for any construction works carried out during restricted hours and night time for Construction Noise Permit compliance.	Interim investigation report submitted to EPD on 23 February 2016.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
ICC Ref.: CASE#2-1938637403 dated 01 March 2016	01 March 2016	ICC complaint received by ET on 03 March 2016	Lung King Street near the parking spaces for motorcycles	Construction noise was emanated from road works	A public complaint regarding construction noise referred by ICC was received by ET on 03 March 2016 (ICC Ref.: CASE#2-1938637403 dated 01 March 2016). The complainant reported that construction noise was emanated from road works located between Lung Wo Road and Lung Wui Road Interface. Further information was referred by RSS on 15 March 2016, the complainant clarified on 15 March 2016 that construction noise was emanated from road works located between Lung Wo Road and Lung Wui Road Interface during midnight and has lasted for one and half month resulting in nuisance to nearby residence. Further information was referred by RSS on 18 March 2016, the complainant further clarified on 18 March 2016 that the concerned location shall be Lung King Street near the parking spaces for motorcycles and the Contract no. as stated on the publicity board is HK/2012/08. Furthermore, the complainant identified the noise was from power generators. ET confirmed with the Resident Site Staff that there was neither construction works nor operation of power generators under Contract HK/2012/08 at the concerned location from 1900hrs to 0700hrs during the period from 23 February 2016 to 14 March 2016. Based on the complaint information referred by ICC on 3 March 2016, according to the relevant site records provided by RSS, from 0800hrs to 1800hrs on both 29 February 2016 and 01 March 2016, drainage works was undertaken by Contract HK/2012/08 at Lung Wo Road and one excavator was in operation for soil excavation. Follow up inspection was conducted during the weekly environmental site inspection on 08 March 2016	1st investigation report issued on 11 March 2016. 2nd investigation report issued on 23 March 2016 and case closed.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					and no particular noise emanating works was observed. Based on the further information provided by the complainant on 15 March 2016, the complainant clarified on 15 March 2016 that Construction noise was emanated from road works located between Lung Wo Road and Lung Wui Road Interface during midnight and has lasted for one and half month resulting in nuisance to nearby residence. On 18 March 2016, the complainant further clarified on 18 March 2016 that the concerned location shall be Lung King Street near the parking spaces for motorcycles and the Contract no. as stated on the publicity board is HK/2012/08. Furthermore, the complainant identified the noise was from power generators. According to the relevant site records provided by RSS, there was neither construction works nor operation of power generators under Contract HK/2012/08 at the concerned location from 1900hrs to 0700hrs during the period from 23 February 2016 to 14 March 2016. Nevertheless, in view of the public concern, the Contractor is recommended to maintain regular maintenance of the plant and equipment deployed to avoid potential nuisance to the nearby public.	



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
EPD Ref.: H05/RS/000 05206-16 dated 10 March 2016	07 March 2016	EPD complaint received by ET on 10 March 2016	Waterfront at Lung King Street	Construction dust, plant exhaust and construction noise generated from the construction work of Contract HK/2012/08 at waterfront of Lung King Street caused nuisance, and the water quality at the waterfront of Lung King Street was becoming worse that accumulation of the floating refuse and foam was found	A public complaint regarding construction dust, plant exhaust, construction noise and water quality referred by EPD was received by ET on 10 March 2016 (EPD Ref.: H05/RS/00005206-16 dated 10 March 2016). The complainant reported that construction dust, plant exhaust and construction noise generated from the construction work of Contract HK/2012/08 at waterfront of Lung King Street caused nuisance, and the water quality at the waterfront of Lung King Street was becoming worse that accumulation of the floating refuse and foam was found. ET confirmed with the Resident Site Staff that soil excavation at ELS area, Zone A2(2), was carried out, where at approx. 100m from the waterfront of Lung King Street from 08:00 hrs to 18:00 hrs on 07 March 2016 under Contract HK/2012/08. Two excavators were involved at that location. Erection of falsework for culvert L was carried out near the waterfront of Lung King Street from 08:00 hrs to 18:00 hrs on 07 March 2016 under Contract HK/2012/08. One lorry crane was involved for lifting falsework elements. Dust suppression measures including the water sprinklers were installed along site haul road. Regularly removed the floating refuse at the waterfront of Lung King Street was conducted by the Contractor of HK/2012/08. The concerned observed floating foam at the waterfront of Lung King Street was found originating from the diverted cooling mains discharge. According to the relevant site records provided by RSS, soil excavation at ELS area, Zone A2(2) was carried out, where at approx.100m from the waterfront of Lung King Street under Contract	Interim investigation report submitted to EPD on 18 March 2016. EPD advised no comment on 29 April 2016 on the interim report submitted and case closed.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					HK/2012/08 from 08:00hrs to 18:00hrs on 07 March 2016 and two excavators were in operation at that location while erection of falsework for culvert L was carried out near the waterfront of Lung King Street from 08:00hrs and 18:00hrs on 07 March 2016 under Contract HK/2012/08 and one lorry crane was involved for lifting falsework elements. Dust suppression measures including the use of water sprinklers along the site haul road was implemented by the Contractor of HK/2012/08 and removal of floating refuse was regularly conducted at the waterfront of Lung King Street by the Contractor of HK/2012/08. Upon investigation, the concerned observed floating foam at the waterfront of Lung King Street was found originating from the diverted cooling mains discharge. Follow up inspection was conducted during the weekly environmental site inspection on 15 March 2016 and dust suppression measures including watering for haul road, tarpaulin sheet covering for cement bags stored on site and three side and top covering for grouting station were implemented while and no dark smoke emission from the plant and machinery deployed on site was observed. Noise mitigation measures including acoustic covering was implementing for excavator mounted breaker. In addition, removal of floating refuse on site was observed implemented by the Contractor of HK/2012/08 and no accumulation of floating refuse was found. The concerned foam originating from diverted cooling mains discharge was observed during inspection and the dispersion of the concerned foam of unknown chemical nature was observed isolated from the nearby public area. Nevertheless, in view of the public concern, the	



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					Contractor was recommended to maintain regular checking of the plants and equipment deployed on site to avoid potential air quality impact to the nearby public and to maintain adequate dust suppression measures on site to avoid potential dust impact to the surroundings. The Contractor was reminded to maintain regular cleaning of floating refuse within the construction site area to avoid potential nuisance to the surroundings. The Contractor was also reminded to maintain the noise mitigation measure if breaking works would be required. The Contractor was also suggested to reflect the observed foam to relevant Cooling Mains owners.	
EPD Ref.: H05/RS/000 06732-16 dated 10 March 2016	23 March 2016	EPD complaint received by ET on 31 March 2016	Seafront opposite to City Garden	Muddy water discharge from construction site outside City Garden	A public complaint regarding direct discharge of muddy effluent referred by EPD was received by ET on 31 March 2016 (Case Ref.: H08/RS/00006732-16). The complainant reported that: Muddy water was observed discharged from the construction site of Central – Wan Chai Bypass – Tunnel (North Point Section) and Island Eastern Corridor Link (Contract No. HY/2009/19) into Victoria Harbour via a drain hole. ET confirmed with the Resident Site Staff that pipe Laying works between Pier 32 and Pier 33 and excavation and blinding works for Manhole at Pier 34 were in progress on 22 March 2016. The observed drain hole was identified to be the outlet point of a manhole and a section of an abandoned U-channel (extending from the concerned manhole to the Hong Kong Electric Substation in length along the site boundary) was adjoining the concerned manhole and sandbag was previously placed at the U-channel at the location near the inlet point to the concerned manhole.	The interim investigation report was submitted to EPD on 11 April 2016. EPD advised no comment on 02 September 2016 on the interim report submitted and case closed.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					Based on the site records confirmed by RSS, pipe laying works between Pier 32 and Pier 33 and excavation and blinding works for Manhole at Pier 34 were in progress on 22 March 2016. The observed drain hole was identified to be the outlet point of a manhole and a section of an abandoned U-channel (extending from the concerned manhole to the Hong Kong Electric Substation in length along the site boundary) was adjoining the concerned manhole and sandbag was previously placed at the U-channel at the location near the inlet point to the concerned manhole. In addition, no site discharge point was connected to the aforesaid U-channel and the concerned manhole. In view of the environmental concern, the following remedial and precautionary actions were taken by the Contractor of HY/2009/19 on 29 March 2016. i) Plugging the inlet point of the concerned manhole (connecting to the abandoned U-channel) with concrete; ii) Plugging the outlet of the concerned manhole (connecting to the observed drain hole) with concrete; iii) Filling the concerned manhole with rubbles; iv) Shifting the unused wastewater treatment plant around the concerned location to other site location for use. Follow-up inspection was conducted by the Environmental Team on 06 April 2016. No further contaminated runoff discharge was observed from the concerned drain hole and precautionary measures including provision of concrete bunding was implemented along the site boundary at the concerned location to avoid potential surface overflow. The pipe laying works and the excavation works was found at distant location	



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					away from the concerned drain hole with no surface drain connection and no particular effluent was generated from the work. As such, no information indicate the discharge was related to the above construction activities. However, it was noted that another section of surface drainage channel within the construction site (perpendicular in direction to the initial identified abandoned U-channel) was also in connection to concerned manhole and minor residue mud deposition was observed within the surface drainage channel. Despite the above additional surface drainage channel identified, the outlet point of concerned final manhole (in connection with the observed drain hole) was observed plugged with concrete and filled with rubbles as rectification measure to avoid any further contaminated runoff discharge via the observed drain hole. Nevertheless, the Contractor of HY/2009/19 was reminded to conduct regular cleaning works for site surface drainage channel to avoid accumulation of silt and soil and avoid potential overflow by directing the surface runoff within the surface drainage channel to proper collection point for necessary treatment prior to discharge. The Contractor of HY/2009/19 was also reminded to check and review other surface drainage channel within the construction site to avoid potential runoff related impact via surface drainage channel to the nearby waters. In addition, it was noticed that water was discharged from a piping extending from City Garden and the discharged water would result in seepage across the site hoarding into the abandoned U-channel. The Contractor of HY/2009/19 was suggested to liaise with the City Garden Management Office for proper connection	



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					of the observed pipping with discharge to prevent further seepage water into the construction site.	
H08/RS/000 07662-16	05 April 2016	EPD complaint received by ET on 05 April 2016	Construction area opposite to Harbour Heights	Construction dust emission arising from drilling activity	A public complaint regarding construction dust emission was referred by EPD was received by ET on 05 April 2016 (Case Ref.: H08/RS/00007662-16). The complainant reported that construction dust emission arising from drilling activity from the construction site of Central – Wan Chai Bypass – Tunnel (North Point Section) and Island Eastern Corridor Link (Contract No. HY/2009/19). ET confirmed with the Resident Site Staff that drilling holes for installation of starter bars was carried out under Contract HY/2009/19 at the vertical cut face of the existing IEC road slab on 05 April 2016 Based on the site records confirmed by RSS, drilling holes for installation of starter bars was carried out under Contract HY/2009/19 at the vertical cut face of the existing IEC road slab on 05 April 2016 and according to the photo information provided by the EPD, no dust suppression measures was implemented during the observed drilling works on 05 April 2016. According to Air Pollution Control Ordinance, for pneumatic or power-driven drilling, cutting and polishing, water or a dust suppression chemical shall be continuously sprayed on the surface where any pneumatic or power-driven drilling, cutting, polishing or other mechanical breaking operation that causes dust emission is carried out, unless the process is accompanied by the operation of an effective dust extraction and filtering device.	The interim report was submitted to the EPD on 14 April 2016. EPD conducted follow up site visit on rectification measures on 21 April 2016. A inspection record form (Pink Form) was issued to the Contractor regarding the observed incident. EPD advised no comment on 02 September 2016 on the interim report submitted and case closed.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					Follow-up inspection was conducted on 06 April 2016, rectification actions including the use of vacuum suction to extract dust generated during the concerned drilling works was observed implemented by the Contractor of HY/2009/19 for starter bars drilling works.	
ICC Case Ref.:2-203652505 5 dated 27 March 2016	27 March 2016	ICC complaint case received by ET on 11 April 2016	Victoria Park Road Pedestrian Pathway	Toppling of tree	An ICC public complaint regarding landscape aspect was referred by RSS was received by ET on 11 April 2016 (Case Ref.:2-2036525055). The complainant reported that a tree (6 meters in height and 1.5 meters in diameter) was found toppled at 111 Victoria Park Road, near Lamp post 38632 and blocking the Pedestrian pathway on 27 March 2016. ET confirmed with the Resident Site Staff that the concerned tree was identified as T710 and no construction activity in the vicinity of tree T710 on 27 March 2016 and no construction works are required in or near its vicinity. Based on the site records confirmed by RSS, the concerned tree was identified as the retained tree T710 maintained under the Contract of HY/2010/08 and the concerned tree T710 was located outside the assessment area in the relevant Project EIA Report. No construction works are required in the vicinity of concerned tree T710 and no construction activity was conducted in the vicinity of tree T710 on 27 March 2016. Nevertheless, based on RSS information, recent tree monitoring report indicates an existing cavity at trunk and the concerned tree T710 has been recommended to be felled in the tree risk assessment Form 2. With respect to the observed incident of the toppling of the concerned tree T710, the	Investigation Report issued on 15 April 2016 and case closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					Contractor of HY/2010/08 was instructed by RSS to remove the broken trunk/ remains to avoid impact to the surroundings. The concerned tree T710 shall be compensated by the Contractor of HY/2010/08 in accordance with the Development Bureau Technical Circular (Works) No. 7/2015 and the detail on compensation would be further agreed with Victoria Park Management Office. Follow-up inspection was conducted on 13 April 2016, and the remaining parts of the concerned tree T710 was observed felled to avoid further impact to nearby public road.	
Not available	12 April 2016	A CEDD public complaint referred by RSS was received by ET on 13 April 2016	East of Star Ferry Piers	Muddy water was observed to disperse from Contract HK/2009/02 site area to Victoria Harbour occasionally as there was no silt curtain installed under the buoyancy floats. The location concerned was the East of Star Ferry Piers (Contract No. HK/2009/02).	A CEDD public complaint regarding muddy dispersion referred by RSS was received by ET on 13 April 2016. The complainant reported that muddy water was observed to disperse from Contract HK/2009/02 site area to Victoria Harbour occasionally as there was no silt curtain installed under the buoyancy floats. The location concerned was the East of Star Ferry Piers (Contract No. HK/2009/02). ET confirmed with the Resident Site Staff that no marine construction activities or land construction activities under Contract HK/2009/02 at the concerned location on 12 April 2016. Surface runoff control measures including provision of concrete bund at the concerned location was implemented by Contract HK/2009/02. No soil & silt deposition along the seawall at the concerned location on 12 April 2016. No discharge point located in the vicinity of the concerned location under Contract HK/2009/02. Silt curtain with buoyancy floats acting as anchor points was installed at Monitoring Station RW21-P789 for Water intakes.	Investigation report issued on 19 April 2016 and case closed



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					Based on the site records confirmed by RSS, no marine construction activities or land construction activities was carried out under Contract HK/2009/02 at the concerned location on 12 April 2016 and no soil and silt deposition was found along the seawall at the concerned location and precautionary measures for site runoff control including provision of concrete bund along boundary of site area near the waterfront around the concerned location was implemented by the Contractor HK/2009/02. In addition, no discharge point under Contract HK/2009/02 was located in the vicinity of the concerned location. Based on information confirmed by RSS, the buoyancy floats deployed at the concerned location are acting as the anchor points for the silt curtain deployed around the WQM Station RW21-P789 for the WSD and Cooling Water Intakes group. Follow-up inspection was conducted on 14 April 2016, no surface runoff from the construction site nor discharge of contaminated effluent was observed around the concerned location and precautionary measures including the provision of concrete bund at the concerned location was observed maintained by the Contractor of HK/2009/02 and the silt curtain deployed around the WQM station RW21-P789 was generally in order. In view of the public concern on the water quality, the Contractor of HK/2009/02 was reminded to maintain effective surface runoff protection and provide proper collection point of construction effluent around the concerned location to avoid potential surface runoff related impact.	



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EPD Ref.: H05/RS/000 08367-16 dated 13 April 2016	13 April 2016	A public complaint referred by EPD was received by ET on 13 April 2016	Outside the Hong Kong Academy for Performing Arts	Muddy water discharge from construction site	A public complaint regarding muddy water discharge referred by EPD was received by ET on 13 April 2016 (EPD Ref.: H05/RS/00008367-16 dated 13 April 2016). The complainant reported that muddy water was discharged from the construction work of Contract HK/2012/08 to the sea outside the Hong Kong Academy for Performing Arts on 13 April 2016 morning. ET confirmed with the Resident Site Staff that internal transport of soil to the hopper barge for storage via landing barge was conducted by Contractor of HK/2012/08 during 0800 hours to 1000 hours on 13 April 2016 at the sea outside the concerned location and 3 nos. of dump trucks were deployed for the operation. Protection measure including provision of sandbag bunding along the side of the landing barge was implemented by the Contractor of HK/2012/08. According to the relevant site records provided by RSS, internal transport of soil to the hopper barge for storage via landing barge was conducted by Contractor of HK/2012/08 during 0800 hours to 1000 hours on 13 April 2016 at the sea outside the concerned location and 3 nos. of dump trucks were deployed for the operation. Protection measure including provision of sandbag bunding along the side of the landing barge was implemented by the Contractor of HK/2012/08. In addition, amber rainstorm warning signal was hoisted from 0630 hours to 1200 hours on 13 April 2016 and during the above time period, muddy water was observed from the upstream of culvert L outside the HK/2012/08 site. Follow up inspection was conducted on 19 April 2016, protection measures including provision of	Interim investigation report was submitted to the EPD on 21 April 2016. EPD advised no further comment on 06 June 2016 on the interim report submitted and case closed.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					sandbag bunding along the side of the landing barge was implemented and no mud or soil deposition was observed along the seawall and no discharge point was located within the temporary water channel connecting the Culvert L outfall location to the Victoria Harbour. In addition, piling works was observed at the north side of Zone A1 on 19 April 2016 and construction effluent collection from piling work via sedimentation tank to wastewater treatment facility was implemented and steel barrier was installed around the piling works area to mitigate against potential surface runoff related impact. Nevertheless, in view of the public concern, the Contractor was reminded to maintain adequate perimeter embankment protection along the seawall boundary and maintain proper construction effluent collection system to avoid potential runoff related impact to nearby waters.	
EPD Ref: H05/RS/000 12646-16 dated 27 May 2016	26 May 2016	A public complaint referred by EPD was received by ET on 27 May 2016	Construction Site near Wanchai Ferry Pier	Operation of generator around the clock	A EPD complaint regarding noise nuisance referred by RSS was received by ET on 27 May 2016 (EPD Ref: H05/RS/00012646-16 dated 27 May 2016). The complainant reported that a generator was operated round-the-clock in the Chun Wo- CRGL JV construction site near Wanchai Ferry Pier that cause noise nuisance. (Contract No. HK/2009/02). ET confirmed with the Resident Site Staff that a generator deployed under Contract HK/2009/02 near the covered walkway for Wanchai Ferry Pier at Portion 2 area and was operated from 1900hrs on 24 May 2016 to 0700hrs on 25 May 2016 and from 1900hrs on 25 May 2016 to 0700hrs on 26 May 2016. The generator was used for the power supply of lighting inside Tunnel Portions 1 and 2. According to the relevant site records provided by	Interim investigation report submitted to EPD on 7 June 2016. EPD advised no further comment on 05 August 2016 on the report submitted and case closed.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					RSS, a generator deployed under Contract HK/2009/02 near the covered walkway for Wanchai Ferry Pier at Portion 2 area and was operated from 1900hrs on 24 May 2016 to 0700hrs on 25 May 2016 and from 1900hrs on 25 May 2016 to 0700hrs on 26 May 2016. The generator was used for the power supply of lighting inside Tunnel Portions 1 and 2. Based on review on site information, relevant Construction Noise Permits GW-RS0516-16 and GW-RS0390-16 for the operation of the concerned generator were confirmed in place while no sufficient site information was considered available to demonstrate the use of acoustic enclosure for the operation of the generator following the special condition 3d item 4. Despite the above, the Contractor of HK/2009/02 has suspended the use of the generator at the concerned location after 2300hours to minimize potential noise concern to the surroundings from 28 May 2016. Nevertheless, the Contractor of HK/2009/02 was reminded to upkeep the site control system for construction works carried out during restricted hours and night time for Construction Noise Permit compliance and maintain regular maintenance of the plant and equipment deployed to avoid potential nuisance to the nearby public.	



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
EPD Ref: H08/RS/000 14627-16 dated 16 June 2016	15 June 2016	A public complaint referred by EPD was received by ET on 16 June 2016	Construction area of Island Eastern Corridor near Sea View Estate.	Splashing from the working area of Island Eastern Corridor near Sea View Estate.	A public complaint was referred by EPD was received by ET on 16 June 2016 (Case Ref.: H08/RS/00014627-16). The complainant reported that his or her properties were covered by many water stains which were splashing from the working area of Island Eastern Corridor near Sea View Estate. ET confirmed with the Resident Site Staff that rebar fixing was carried out on 13 and 14 June 2016 under the Contractor of HY/2009/19 while formwork cleaning and laying concrete for stitching and curing work for concrete were carried out under the Contractor of HY/2009/19 on 15 June 2016 and 16 June 2016 respectively. Mitigation measures including provision of metal cover underneath the bridge deck in slanting position at Watson Road to prevent spilling of water onto public road and provision of tarpaulin sheet along the guard rails of the bridge deck at Pier 19-20 (opposite to Sea View Estate) to prevent splashing of water to outside area were implemented by the Contractor of HY/2009/19. Based on the site records confirmed by RSS, rebar fixing was carried out on 13 and 14 June 2016 under the Contractor of HY/2009/19 while formwork cleaning and laying concrete for stitching and curing work for concrete were carried out under the Contractor of HY/2009/19 on 15 June 2016 and 16 June 2016 respectively. Mitigation measures including provision of metal cover underneath the bridge deck in slanting position at Watson Road to prevent spilling of water onto public road and provision of tarpaulin sheet along the guard rails of the bridge deck at Pier 19-20 (opposite to Sea View Estate) to prevent splashing of water to outside area were implemented by the Contractor of HY/2009/19.	The interim report submitted to the EPD on 29 June 2016. EPD advised no comment on the interim report submitted and case closed on 02 September 2016.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					Follow up inspection was conducted on 22 June 2016, mitigation measures including the use of metal cover underneath the bridge deck at Watson Road and provision of tarpaulin sheet along the guard rails of the section of bridge deck opposite to Sea View Estate were implemented by the Contractor of HY/2009/19. No particular spilling or splashing of construction water was observed during inspection around the concerned location. Nevertheless, in view of the public concern, the Contractor of HY/2009/19 was suggested that the direction of the water hose shall be pointed away from the public area as far as practicable during water use or watering for dust suppression to avoid potential splashing nuisance caused to the surroundings. The Contractor of HY/2009/19 was also reminded to maintain proper site drainage to direct surface runoff generated from construction works or cleaning to the proper collection point within site area to avoid potential nuisance to the surroundings.	
EPD Ref: H08/RS/000 16213-16 dated 14 July 2016	30 June 2016	A public complaint referred by EPD was received by ET on 14 July 2016	Construction Site of TS3 near Slip Road 8	Night time construction noise from construction works between 0200hrs to 0300hrs and construction dust emission from construction site of TS3 near Slip Road 8 section.	A public complaint referred by EPD was received by ET on 14 July 2016 (Case Ref.: H08/RS/00016213-16). The complainant reported the concern about night time construction noise from construction works between 0200hrs to 0300hrs and construction dust emission from construction site of TS3 near Slip Road 8 section. ET confirmed with the Resident Site Staff that excavation at TS3 and loading of material onto derrick barge (Shun Tat 28) by crawler crane was undertaken by the Contractor of HY/2010/08 from 19:00hrs to around 02:00hrs on 30 June 2016. Total one crawler crane was in operation. Noise mitigation measures including equipping the crawler crane with noise barrier was implemented	The interim report submitted to the EPD on 22 July 2016



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					by the Contractor of HY/2010/08. Dust mitigation measures including manual spraying of water and mist nozzles are deployed on the ground level and at the cofferdam. Based on the site records confirmed by RSS, excavation at TS3 and loading of material onto derrick barge (Shun Tat 28) by crawler crane was undertaken by the Contractor of HY/2010/08 from 19:00hrs on 29 June 2016 to around 02:00hrs on 30 June 2016. No construction works was conducted at the concerned location after around 02:00hrs on 30 June 2016. Total one crawler crane was in operation and noise mitigation measures including equipping the crawler crane with noise barrier was implemented by the Contractor of HY/2010/08. Based on review on relevant record, Construction Noise Permit GW-RS0434-16 for the operation of crawler crane at the concerned location was in place. However, based on relevant site record, it was noted that the crawler crane deployed during the concerned period could not match with the specific PME requirement under condition 3a (Crane, crawler, mounted with noise barrier (Kobelco 7250S)) of the Construction Noise Permit GW-RS0434-16 between 23:00hrs to 07:00hrs on the following day. Dust mitigation measures including manual spraying of water and mist nozzles were deployed on the ground level and at the cofferdam. Follow up inspection was conducted on 20 July 2016, the potential concerned excavation works at the concerned location was not observed and no particular dust impact was observed around the concerned location. In view of the above, the Contractor of HY/2010/08 was advised to review the site control system for	



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					construction works carried out during restricted hours to check and ensure the model/ specific PMEs deployed are in compliance with relevant Construction Noise Permit. The Contractor of HY/2010/08 was also reminded to maintain regular maintenance of the plant and equipment deployed to avoid potential nuisance to the nearby public. Also, the Contractor of HY/2010/08 was reminded to maintain sufficient watering for excavated material handling to avoid potential dust nuisance to the surroundings.	
EPD Ref: H08/RS/000 22448-16 dated 06 September 2016	04 Sept 2016	A public complaint referred by EPD was received by ET on 06 September 2016	Road construction works area near Causeway Bay Typhoon Shelter	Construction noise from road construction work near Causeway Bay Typhoon Shelter	A public complaint referred by EPD was received by ET on 06 September 2016 (Case Ref.: H08/RS/00022448-16). The complainant reported that construction noise from the road construction work near Causeway Bay Typhoon Shelter during 0800hrs to 2100 hrs on 04 September 2016 (Sunday) caused nuisance. The complainant also indicated that the construction noise was generated up to 0100 hrs on normal weekdays. ET confirmed with the Resident Site Staff that underwater welding of lagging plate at Zone C was conducted from 0800hrs to 2100hrs on 04 September 2016. Total 1 no. of generator and 1 no. of welding machine were in operation. Grouting works at Victoria Park Road Eastbound slow lane was conducted from 2300hrs on 01 September 2016 to 0100hrs on 02 September 2016. Total 1 no. of grout mixer, 1 no. of agitator and 1 no. of grout pump were in operation. Grouting works at Victoria Park Road Eastbound slow lane was conducted from 2300hrs on 02 September 2016 to 0100hrs on 03 September 2016. Total 1 no. of grout mixer, 1 no. of agitator and 1 no. of grout pump were in operation. Grouting works at Victoria Park Road Eastbound	The interim report submitted to EPD on 20 September 2016. EPD advised no comment on 31 October 2016 on the interim report submitted and case closed.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					slow lane was conducted from 2300hrs to 2359hrs on 03 September 2016. Total 1 no. of grout mixer, 1 no. of agitator and 1 no. of grout pump were in operation. Based on the site records confirmed by RSS, underwater welding of lagging plate at Zone C was conducted from 0800hrs to 2100hrs on 04 September 2016, total 1 no. of generator and 1 no. of welding machine were in operation and relevant Construction Noise Permit GW-RS0442-16 was in place. Grouting works at Victoria Park Road Eastbound slow lane was conducted from 2300hrs on 01 September 2016 to 0100hrs on 02 September 2016. Total 1 no. of grout mixer, 1 no. of agitator and 1 no. of grout pump were in operation. Grouting works at Victoria Park Road Eastbound slow lane was conducted from 2300hrs on 02 September 2016 to 0100hrs on 03 September 2016. Total 1 no. of grout mixer, 1 no. of agitator and 1 no. of grout pump were in operation. Grouting works at Victoria Park Road Eastbound slow lane was conducted from 2300hrs to 2359hrs on 03 September 2016. Total 1 no. of grout mixer, 1 no. of agitator and 1 no. of grout pump were in operation. Relevant Construction Noise Permit GW-RS0531-16 was in place for the above construction activities. Nevertheless, in view of the public concern, the Contractor of HY/2010/08 was reminded to maintain the site control system for construction works carried out during restricted hours to ensure the PMEs deployed are in compliance with relevant Construction Noise Permit. The Contractor of HY/2010/08 was also reminded to maintain regular maintenance of the plant and equipment deployed to avoid potential nuisance to the nearby public.	



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
EPD Ref: H08/RS/000 24768-16 dated 07 October 2016	28 Sept 2016 04 Oct 2016	A public complaint referred by EPD was received by ET on 07 October 2016	Causeway Bay Typhoon Shelter	Construction work at the construction site in Causeway Bay Typhoon Shelter area was found after 1900hrs on 28 September 2016 and 04 October 2016 that caused noise nuisance.	A public complaint referred by EPD was received by ET on 07 October 2016 (Case Ref.: H08/RS/00024768-16). The complainant reported that construction work at the construction site in Causeway Bay Typhoon Shelter area was found after 1900hrs on 28 September 2016 and 04 October 2016 that caused noise nuisance. The complainant also reported that there were 5 concrete lorry mixers operating at the above site after 1900hrs on 04 October 2016. ET confirmed with the Resident Site Staff that concreting for tunnel structure in TS3 (W) was conducted from 1900hrs to 2300hrs on 28 September 2016. One concrete pump and two concrete lorry mixers were in operation. One no. of concrete lorry mixer was located at the East of TS3 (W) and one no. of concrete lorry mixer was located at the west of TS3 (W). Concreting for tunnel structure in TS3 (W) was conducted from 1900hrs to 2300hrs on 04 October 2016. One concrete pump and two concrete lorry mixers were in operation. One no. of concrete lorry mixer was located at the East of TS3 (W) and one no. of concrete lorry mixer was located at the west of TS3 (W). Based on the site records confirmed by RSS, concreting for tunnel structure in TS3 (W) was conducted from 1900hrs to 2300hrs on 28 September 2016 and from 1900hrs to 2300hrs on 04 October 2016 and total one concrete pump and two concrete lorry mixers were in operation during the above concerned periods. One no. of concrete lorry mixer was located at the East of TS3 (W) and one no. of concrete lorry mixer was located at the west of TS3(W) during the above concerned periods and relevant Construction Noise Permit	The interim investigation report was submitted to EPD on 18 October 2016.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					GW-RS0434-16 and GW-RS0407-16 were in place for the construction works conducted during the above concerned periods. Nevertheless, in view of the public concern, the Contractor of HY/2010/08 was reminded to maintain the site control system for construction works carried out during restricted hours to ensure the PMEs deployed are in compliance with relevant Construction Noise Permit. The Contractor of HY/2010/08 was also reminded to maintain regular maintenance of the plant and equipment deployed to avoid potential nuisance to the nearby public.	

Appendix 10.1

Construction Programme of Individual Contracts

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HKCFPC's Event Move In/Out Date
TTA at Expo Drive is required to deck over

Activity ID	Activity Name	Ori Dur	Rem Dur	Scheduled/ Actual Start	Scheduled/ Actual Finish	Total Float	Calendar	2016																2017					
								October				November				December				January									
								25	02	09	16	23	30	06	13	20	27	04	11	18	25	01	08	15	22				
Three Months Rolling Programme 2016-10-20 (dd 20-Oct-16)																													
Programme Milestones (Revised up to EOTO No.16 issued on 01-Dec-15)																													
Contractual Completion Dates																													
KDC0170	Section 9B Works (2107 days) - CWB Structure (CH3400 Eastward) (5-Nov-15 Noon)	0	0		20-Oct-16*	-349	Calendar Day																		◆ Section 9B Works (2107 days) - CWB Structure (CH3400 Eastward) (5-Nov-15 Noon)				
KDC0180	Section 10 Works (2197 days) - CWB Structure (CH3400 Westward) (3-Feb-16 Noon)	0	0		20-Oct-16*	-259	Calendar Day																		◆ Section 10 Works (2197 days) - CWB Structure (CH3400 Westward) (3-Feb-16 Noon)				
KDC0190	Section 11 Works (2407 days) - Remainder of Works/ Works Completion Date (31-Aug-16 Noon)	0	0		20-Oct-16*	-49	Calendar Day																		◆ Section 11 Works (2407 days) - Remainder of Works/ Works Completion Date (31-Aug-16 Noon)				
Soft Landscaping & Establishment Key Dates																													
KDC0200	Section 11A Works (2437 days) - Remaining Landscape Softworks (30-Sep-16 Noon)	0	0		20-Oct-16*	-19	Calendar Day																		◆ Section 11A Works (2437 days) - Remaining Landscape Softworks (30-Sep-16 Noon)				
KDC0220	Section 12 Works (2407 days) - Protection and Preservation of Existing Trees (31-Aug-16 Noon)	0	0		20-Oct-16*	-49	Calendar Day																		◆ Section 12 Works (2407 days) - Protection and Preservation of Existing Trees (31-Aug-16 Noon)				
Possession of Site																													
PS0070a	Possession of Portion 7 - Remaining Part of Area 9 (14-Sep-15)	0	0	20-Oct-16*		-402	Calendar Day																		◆ Possession of Portion 7 - Remaining Part of Area 9 (14-Sep-15)				
Preliminaries																													
Critical Submission & Approval																													
PRE-SUB-1010B	Temp Covered Walkway Cover System (PS30.5) - Design Approval by AECOM	30	11	29-Jan-15 A	30-Oct-16*	-794	Calendar Day																		■ Temp Covered Walkway Cover System (PS30.5) - Design Approval by AECOM, Temp Covered Walkway Cover System (PS30.5) - Design Approval by AECOM				
Section 8A of the Works - Reprovisioning of Wan Chai Ferry Pier in Area 8																													
Outstanding Works																													
S8A-OUT-1007	Liaison with utility companies for relocating utilities from the steel decking	14	0	12-Sep-16 A	28-Sep-16 A		Calendar Day																		■ Liaison with utility companies for relocating utilities from the steel decking				
S8A-OUT-1020	Dismantle existing temporary EVA and relocate existing utilities	15	6	15-Sep-16 A	25-Oct-16	-165	HK Working Day																		■ Dismantle existing temporary EVA and relocate existing utilities, Dismantle existing temporary EVA and relocate existing utilities				
S8A-OUT-1030	Demolish the bulkhead wall underneath the temporary EVA	25	25	26-Oct-16	21-Nov-16	-165	HK Working Day																		■ Demolish the bulkhead wall underneath the temporary EVA, Demolish the bulkhead wall underneath the temporary EVA				
S8A-OUT-1040	Backfill and construct Permanent EVA, including relocation of fire hydrant near Ferry Pier	55	55	21-Nov-16	20-Jan-17	-165	HK Working Day																		■ Backfill and construct Permanent EVA, including relocation of fire hydrant near Ferry Pier				
Section 9B of the Works - CWB Tunnel Structure (CH3400 - CH3796)																													
Tunnel Portion 3 & Tunnel Portion 4 (CH3630-CH3790)																													
CWB Structural Works																													
S9B-T34-5900	King Post Load Transfer in Bay 14 to Bay 17	9	0	15-Sep-16 A	12-Oct-16 A		Calendar Day																		■ King Post Load Transfer in Bay 14 to Bay 17				
S9B-T34-6300	Roof Waterproofing - Bay 14 to Bay 17	7	0	28-Jun-16 A	06-Oct-16 A		Calendar Day																		■ Roof Waterproofing - Bay 14 to Bay 17				
S9B-T34-7001	ELS (S3) Removal - Bay 1 to Bay 4	6	0	10-Oct-16 A	14-Oct-16 A		Calendar Day																		■ ELS (S3) Removal - Bay 1 to Bay 4				
S9B-T34-7002	ELS (S2) Removal - Bay 1 to Bay 4	6	6	17-Dec-16	22-Dec-16	-390	Calendar Day																		■ ELS (S2) Removal - Bay 1 to Bay 4, ELS (S2) Removal - Bay 1 to Bay 4				
S9B-T34-7100	ELS (S4) Removal - Bay 5 to Bay 8	6	0	15-Sep-16 A	20-Sep-16 A		Calendar Day																		■ ELS (S4) Removal - Bay 5 to Bay 8				
S9B-T34-7101	ELS (S3) Removal - Bay 5 to Bay 8	6	6	09-Nov-16	14-Nov-16	-393	Calendar Day																		■ ELS (S3) Removal - Bay 5 to Bay 8, ELS (S3) Removal - Bay 5 to Bay 8				
S9B-T34-7102	ELS (S2) Removal - Bay 5 to Bay 8	6	6	20-Dec-16	25-Dec-16	-393	Calendar Day																		■ ELS (S2) Removal - Bay 5 to Bay 8, ELS (S2) Removal - Bay 5 to Bay 8				
S9B-T34-7200	ELS (S4) Removal - Bay 9 to Bay 13	6	0	21-Sep-16 A	27-Sep-16 A		Calendar Day																		■ ELS (S4) Removal - Bay 9 to Bay 13				
S9B-T34-7201	ELS (S3) Removal - Bay 9 to Bay 13	6	6	16-Nov-16	21-Nov-16	-395	Calendar Day																		■ ELS (S3) Removal - Bay 9 to Bay 13, ELS (S3) Removal - Bay 9 to Bay 13				
S9B-T34-7202	ELS (S2) Removal - Bay 9 to Bay 13	6	6	22-Dec-16	27-Dec-16	-395	Calendar Day																		■ ELS (S2) Removal - Bay 9 to Bay 13, ELS (S2) Removal - Bay 9 to Bay 13				
S9B-T34-7300	ELS (S4) Removal - Bay 14 to Bay 17	6	0	28-Sep-16 A	30-Sep-16 A		Calendar Day																		■ ELS (S4) Removal - Bay 14 to Bay 17				
S9B-T34-7301	ELS (S3) Removal - Bay 14 to Bay 17	6	6	29-Nov-16	04-Dec-16	-436	Calendar Day																		■ ELS (S3) Removal - Bay 14 to Bay 17, ELS (S3) Removal - Bay 14 to Bay 17				
S9B-T34-7302	ELS (S2) Removal - Bay 14 to Bay 17	6	6	01-Feb-17	06-Feb-17	-436	Calendar Day																		■ ELS (S2) Removal - Bay 14 to Bay 17, ELS (S2) Removal - Bay 14 to Bay 17				
Tunnel Portion 5 (CH3400-CH3425)																													
Bay 1 (Eastern Bay)																													
S9B-T5-B1-1000	Base Slab - Trim Bored Pile & Blinding	7	7	25-Nov-16	01-Dec-16	-575	Calendar Day																		■ Base Slab - Trim Bored Pile & Blinding, Base Slab - Trim Bored Pile & Blinding				
S9B-T5-B1-1010	Base Slab - Waterproofing	4	4	03-Dec-16	07-Dec-16	-577	Calendar Day																		■ Base Slab - Waterproofing, Base Slab - Waterproofing				
S9B-T5-B1-1020	Base Slab - Rebar Fixing	10	10	29-Nov-16	09-Dec-16	-577	Calendar Day																		■ Base Slab - Rebar Fixing, Base Slab - Rebar Fixing				
S9B-T5-B1-1030	Base Slab - Concrete	1	1	09-Dec-16	10-Dec-16	-577	Calendar Day																		■ Base Slab - Concrete, Base Slab - Concrete				
S9B-T5-B1-1040	Base Slab - Curing	4	4	10-Dec-16	14-Dec-16	-575	Calendar Day																		■ Base Slab - Curing, Base Slab - Curing				
S9B-T5-B1-2000	Breaking through Temp. Bulkhead b/w Tunnel Portion 2 & 5	22	22	20-Oct-16 A	24-Nov-16	-525	HK Working Day																		■ Breaking through Temp. Bulkhead b/w Tunnel Portion 2 & 5, Breaking through Temp. Bulkhead b/w Tunnel Portion 2 & 5				
Bay 2																													
S9B-T5-B2-1000	Base Slab - Trim Bored Pile & Blinding	7	7	28-Nov-16	04-Dec-16	-591	Calendar Day																		■ Base Slab - Trim Bored Pile & Blinding, Base Slab - Trim Bored Pile & Blinding				
S9B-T5-B2-1010	Base Slab - Waterproofing	4	4	05-Dec-16	08-Dec-16	-590	Calendar Day																		■ Base Slab - Waterproofing, Base Slab - Waterproofing				
S9B-T5-B2-1020	Base Slab - Rebar Fixing	10	10	09-Dec-16	18-Dec-16	-586	Calendar Day																		■ Base Slab - Rebar Fixing, Base Slab - Rebar Fixing				
S9B-T5-B2-1030	Base Slab - Concrete	1	1	19-Dec-16	19-Dec-16	-586	Calendar Day																		■ Base Slab - Concrete, Base Slab - Concrete				
S9B-T5-B2-1040	Base Slab - Curing	4	4	20-Dec-16	23-Dec-16	-585	Calendar Day																		■ Base Slab - Curing, Base Slab - Curing				
S9B-T5-B2-1150	Wall (Middle) - Rebar Fixing & Working Platform	4	4	24-Dec-16	27-Dec-16	-529	Calendar Day																		■ Wall (Middle) - Rebar Fixing & Working Platform				
Section 10 Works - CWB Tunnel Structure (CH3246 - CH3400)																													
Tunnel Portion 5 (CH3276-CH3400)																													
S10-T5-2030	Tunnel Portion 5 - Excavate to Level S2 and Install Strut S2 (36,800m3@ 1100m3/d)	42	0	01-Aug-16 A	08-Oct-16 A		Calendar Day																		■ Tunnel Portion 5 - Excavate to Level S2 and Install Strut S2 (36,800m3@ 1100m3/d)				
◆ Milestone ◆ Critical Milestones ■ Current Works ■ Critical Works ■ Remaining Level of Effort								CHUN WO - CRGL JOINT VENTURE								CEDD CONTRACT NO. HK/2009/02 WD II - Central Wanchai Bypass at Wan Chai East (Contract 2) 3-MONTH ROLLING PROGRAMME (dd 20-Oct-16)								Date	Revision	Checked	Approved		
																								07-Jul-16	Rev. 18				

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Activity ID	Activity Name	On Dur	Rem Dur	Scheduled / Actual Start	Scheduled / Actual Finish	Total Float	Calendar	2016																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
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 Remaining Work
 Actual Work
 Remaining Work
 Critical Remaining Work
 Milestone
 Summary
 Actual Work

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

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

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

2 of 3

China State Construction Engineering (Hong Kong) Ltd.

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

WORKS PROGRAMME UPDATE

Prepared by Anthony Fesalbon

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



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

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

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

3 of 3

China State Construction Engineering (Hong Kong) Ltd.

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

WORKS PROGRAMME UPDATE

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

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

Activity ID	Activity Name	Remaining Dur	Early Start	Early Finish	Total Float	2016					2017
HK/2012/08 Revised Works Programme Rev.8 (DD 31 August 2016)						Sep	Oct	Nov	Dec	Jan	
Dredging and Reclamation											
Marine Work Construction											
Zone A1											
Seawall Construction - Zone A1											
MAR10330	Zone A1 - Seawall - Install remaining seawall type 3 (after reinstatement of culver k and cooling mains)	11	31-Aug-16	10-Sep-16	-68						
MAR10340	Zone A1 - seawall - place type A behind seawall type 3	5	11-Sep-16	15-Sep-16	-68						
MAR10345	Zone A1 - seawall - lay geotextile and filter behind seawall Type 3	6	16-Sep-16	21-Sep-16	-68						
Others - Landing Steps											
MAR21360	Zone A2 - [summary] landing steps at seawall 4	77	05-Dec-16	11-Mar-17	-28						
MAR21380	Zone B - [summary] landing steps at seawall 5	73	05-Dec-16	07-Mar-17	-24						
MAR21400	Zone D - [summary] landing steps at seawall 9	70	05-Dec-16	03-Mar-17	-21						
MAR21420	Zone A2 - [summary] landing steps at seawall 13	73	05-Dec-16	07-Mar-17	-24						
Works for Section Completion											
Construction											
Section II - MVB Structure											
MVB Substructure - ELS & Structural Works for Portion A											
MVB Substructure - Structural Works for Portion A											
SII11250	Sec II - MVB A : Remove strut S1	7	20-Sep-16	26-Sep-16	-166						
SII11252	Sec II - MVB A : Remove bulkhead at east	46	20-Sep-16	04-Nov-16	-159						
SII11254	Sec II - MVB A : Remove bulkhead at west	46	02-Oct-16	16-Nov-16	-166						
SII11260	Sec II - MVB A : Construct Bay 14- B2M/F wall	6	29-Jul-16 A	05-Sep-16	-166						
SII11300	Sec II - MVB A : Construct Bay 15 - B2M/F OHVD	10	06-Sep-16	15-Sep-16	-166						
SII11420	Sec II - MVB A : Construct Bay 14a - B2M/F wall (adjacent to bulkhead)	13	12-Nov-16	24-Nov-16	-166						
SII11960	Sec II - MVB A : Construct Bay 15a - B2M/F OHVD (adjacent to bulkhead)	6	25-Nov-16	30-Nov-16	-166						
SII11980	Sec II - MVB A : Construct Bay 16 - Wall btw OHVD and Roof)	19	27-Sep-16	15-Oct-16	-131						
SII12140	Sec II - MVB A : Construct Bay 17 - Roof Slab	17	16-Oct-16	01-Nov-16	-127						
SII12160	Sec II - MVB A : Construct Bay 18 - Roof Slab	21	16-Oct-16	05-Nov-16	-131						
SII12340	Sec II - MVB A : Construct Bay 16a, 17a & 18a - Wall & Slab (Adjacent to bulkhead)	10	01-Dec-16	10-Dec-16	-166						
MVB Substructure - Other Works for Portion A											
SII11320	Sec II - MVB A: Remove Strut & flasework	7	11-Dec-16	17-Dec-16	-166						
MVB Substructure - ELS & Structural Works for Portion B											
MVB Substructure - Structural Works for Portion B											
SII11920	Sec II - MVB B: Construct Bay K - B2M/F Wall	16	01-Aug-16 A	15-Sep-16	-103						
SII11930	Sec II - MVB B: Construct Bay L - B2M/F Top Slab	14	11-Sep-16	24-Sep-16	-103						



Activity ID	Activity Name	Remaining Dur	Early Start	Early Finish	Total Float	2016					2017
						Sep	Oct	Nov	Dec	Jan	
SII11940	Sec II - MVB B: Remove Strut SL1 & Concrete Backing	8	28-Sep-16	05-Oct-16	-103						
SII12080	Sec II - MVB B: Saw cut southern diaphragm wall	8	06-Oct-16	13-Oct-16	-103						
SII12360	Sec II - MVB B: Construct Bay M - B1/F Wall	26	14-Oct-16	08-Nov-16	-103						
SII12420	Sec II - MVB B: Construct Bay M - B1/F Top Slab	8	09-Nov-16	16-Nov-16	-103						
MVB Substructure - Other Works for Portion B											
SII12100	Sec III - MVB B: remove strut and flasework	12	17-Nov-16	30-Nov-16	-85						
SII12120	Sec II - MVB B: seal up temp access openings	12	01-Dec-16	12-Dec-16	-103						
MVB Substructure - Diaphragm Wall for Portion C											
MVB C - Sheetpile Installation											
SII10670	Sec II - MVB C - sheetpile wall installation	5	13-Aug-16 A	04-Sep-16	-112						
MVB Substructure - ELS & Structural Works for Portion C											
MVB Substructure - ELS for Portion C											
SII12020	Sec II - MVB C: Excavation down to +1.7mPD	6	11-Sep-16	16-Sep-16	-112						
SII12040	Sec II - MVB C : Install Strut S1	5	17-Sep-16	21-Sep-16	-112						
SII12060	Sec II - MVB C : Excavation down to formation (-1.8mPD/-3.0mPD)	7	22-Sep-16	28-Sep-16	-112						
SII12180	Sec II - MVB C : Cast Blinding layer & pile head treatment	8	29-Sep-16	06-Oct-16	-112						
SII12380	Sec III - MVB C : Remove bulhead wall between MVB plant room and Zone CW	20	14-Oct-16	02-Nov-16	-112						
SII12400	Sec III - MVB C : Remove bulhead wall between MVB plant room and MVB south	20	03-Nov-16	22-Nov-16	-112						
MVB Substructure - Structural Works for Portion C											
SII12200	Sec II - MVB C : Construct Slab B1/F	7	07-Oct-16	13-Oct-16	-112						
SII12220	Sec II - MVB C : Remove Strut S1	3	23-Nov-16	25-Nov-16	-112						
SII12240	Sec II - MVB C : Construct Wall of B1/F	9	26-Nov-16	04-Dec-16	-112						
SII12260	Sec II - MVB C : Construct Floor Slab of G/F	5	05-Dec-16	09-Dec-16	-112						
MVB Substructure - Other Works for Portion C											
SII12280	Sec II - MVB C : Remove all struts and Falsework	6	10-Dec-16	15-Dec-16	-112						
SII12300	Sec II - MVB C : seal up temp access openings	12	10-Dec-16	21-Dec-16	-112						
Section II A - CWB Tunnel & Slip Road Structures and Facilities											
CWB A2(2)											
CWB A2 (2) - ELS & Tunnel Structure											
CWB A2 - Tunnel Structure											
SIIA11700	Sec II A - CWB A2(2): base, wall, OHVD & roof (bay 1 -Adjacent to A1)	15	11-Jun-16 A	14-Sep-16	-97						
SIIA11750	Sec II A - CWB A2(2): base, wall, OHVD & roof (bay 2)	4	12-May-16 A	03-Sep-16	-93						
CWB A2 - Other Works											
SIIA12530	Sec II A - CWB A2(2) : waterproofing and backfill to +4.0mPD	45	15-Sep-16	29-Oct-16	-92						
CWB A2 (2) - Associated Facilities											
SIIA14320	Sec II A - CWB A2(2): Civil Provisions - lay screeding	7	08-Sep-16	14-Sep-16	-97						
SIIA14430	Sec II A - CWB A2(2): Civil Provisions - cast cable trough	8	15-Sep-16	22-Sep-16	-97						
CWB B & A2(1)											
CWB B - ELS & Tunnel Structure											
CWB B - ELS											



Activity ID	Activity Name	Remaining Dur	Early Start	Early Finish	Total Float	2016					2017
						Sep	Oct	Nov	Dec	Jan	
CWB B - Inside Concrete Plug											
SIIA13662	Sec II A - CWB B Inside Concrete Plug: Cut and remove the excess blinding layer	18	23-Aug-16 A	17-Sep-16	-175						
SIIA13664	Sec II A - CWB B Inside Concrete Plug: Saw Cut the Base Slab of C4 Unit	18	27-Aug-16 A	21-Sep-16	-144						
SIIA13682	Sec II A - CWB B: Demolish cocnrete plug (near C4 unit)	25	13-Oct-16	06-Nov-16	-180						
CWB B - Outside Concrete Plug											
SIIA 15200	Sec II A - CWB B Outside Concrete Plug: Tunnel Formation Excavation	5	29-Aug-16 A	04-Sep-16	-180						
SIIA 15220	Sec II A - CWB B Outside Concrete Plug: Vertical Blinding	1	05-Sep-16	05-Sep-16	-180						
SIIA 15260	Sec II A - CWB B Outside Concrete Plug: Remove struts & Sheetpile	17	06-Sep-16	22-Sep-16	-180						
CWB A2(1) & B - Tunnel Structure											
SIIA13570	Sec II A - CWB A2(1): Construct Bay 4 - Wall (remaining)	12	25-Oct-16	05-Nov-16	-186						
SIIA13572	Sec II A - CWB A2(1): Construct Bay 4 - OHVD	16	06-Nov-16	21-Nov-16	-186						
SIIA13574	Sec II A - CWB A2(1): Construct Bay 4 - Top Slab	14	22-Nov-16	05-Dec-16	-186						
SIIA13580	Sec II A - CWB B: Construct Bay 5 - Exhaust Duct Base Slab (South)	8	01-Sep-16*	08-Sep-16	0						
SIIA13590	Sec II A - CWB B: Construct Bay 5 - Exhaust Duct Wall	8	17-Sep-16	24-Sep-16	-190						
SIIA13600	Sec II A - CWB B: Construct Bay 6 - Base Slab	14	25-Sep-16	08-Oct-16	-190						
SIIA13610	Sec II A - CWB B: Construct Bay 6 - Wall	14	25-Oct-16	07-Nov-16	-181						
SIIA13620	Sec II A - CWB B: Construct Bay 6 - OHVD	13	11-Nov-16	23-Nov-16	-184						
SIIA13630	Sec II A - CWB B: Construct Bay 6 - Roof Slab	12	27-Nov-16	08-Dec-16	-187						
SIIA13640	Sec II A - CWB B: Construct Bay 7a - Base Slab	18	25-Sep-16	12-Oct-16	-190						
SIIA13645	Sec II A - CWB B: Remove Strut S2 & S3 and concrete packing (for Bay 4, 6 & 7a)	9	16-Oct-16	24-Oct-16	-190						
SIIA13650	Sec II A - CWB B: Construct Bay 7a - Wall	17	25-Oct-16	10-Nov-16	-190						
SIIA13660	Sec II A - CWB B: Construct Bay 7a - OHVD	16	11-Nov-16	26-Nov-16	-190						
SIIA13680	Sec II A - CWB B: Construct Bay 7a - Top Slab	15	27-Nov-16	11-Dec-16	-190						
SIIA13700	Sec II A - CWB B: Construct Bay 7b - Base Slab	11	23-Sep-16	03-Oct-16	-180						
SIIA13710	Sec II A - CWB B: Remove Strut S2 & S3 (for Bay 7b)	6	07-Oct-16	12-Oct-16	-180						
SIIA13880	Sec II A - CWB B: Construct Bay 7b - Wall	11	07-Nov-16	17-Nov-16	-180						
SIIA13900	Sec II A - CWB B: Construct Bay 7b - OHVD	10	18-Nov-16	27-Nov-16	-180						
SIIA13920	Sec II A - CWB B: Construct Bay 7b - Top Slab	10	28-Nov-16	07-Dec-16	-180						
CWB A2(1) & B - Other Works											
CWB A2(1) & B - Associated Facilities											
SIIA14460	Sec II A - CWB A2(1): Civil Provisions - lay screeding	7	06-Dec-16	12-Dec-16	-186						
SIIA14480	Sec II A - CWB A2(1): Civil Provisions - cast cable trough	8	13-Dec-16	20-Dec-16	-186						
SIIA14580	Sec II A - CWB B: Civil Provisions - lay screeding	6	12-Dec-16	17-Dec-16	-190						
CWB C (W)											
CWB C(W) - ELS & Tunnel Structure											
CWB C(W) - ELS											
CWB C(W) - ELS Inside Concrete Plug											
SIIA 12210	Sec II A - CWB CW inside Concret Plug: cut and remove 2m strip opening along bulkhead	6	31-Aug-16	05-Sep-16	-186						
SIIA 12230	Sec II A - CWB CW inside Concret Plug: cut and remove base slab of C4 unit	21	06-Sep-16	26-Sep-16	-186						
SIIA 12250	Sec II A - CWB CW inside Concret Plug: cut and remove the excess blinding layer	9	25-Aug-16 A	08-Sep-16	874						



Activity ID	Activity Name	Remaining Dur	Early Start	Early Finish	Total Float	2016					2017
						Sep	Oct	Nov	Dec	Jan	
SIIA 12270	Sec II A - CWB CW inside Concret Plug: remove concrete bulkhead	20	19-Oct-16	07-Nov-16	-186						
CWB C(W) - ELS Outside Concrete Plug											
SIIA 13100	Sec II A - CWB CW outside Concrete Plug: Remove struts S3	4	30-Aug-16 A	03-Sep-16	-155						
SIIA 13120	Sec II A - CWB CW outside Concrete Plug: Install transverse strut	3	04-Sep-16	06-Sep-16	-155						
SIIA 13140	Sec II A - CWB CW outside Concrete Plug: Remove strut S1 & S2	11	07-Sep-16	17-Sep-16	-155						
SIIA 13160	Sec II A - Sec II A - CWB CW outside Concrete Plug: Tunnel formation excavation	4	25-Aug-16 A	03-Sep-16	-185						
SIIA 13180	Sec II A - CWB CW outside Concrete Plug: Exhaust duct formation excavation	5	05-Sep-16	09-Sep-16	-185						
SIIA 13200	Sec II A - CWB CW outside Concrete Plug: blinding layer and remove diagonal struts & sheetpile	16	10-Sep-16	25-Sep-16	-185						
CWB C(W) - Tunnel Structure											
SIIA12160	Sec II A - CWB CW: Construct Bay 1 - Base Slab	12	27-Sep-16	08-Oct-16	-186						
SIIA12180	Sec II A - CWB CW: Remove Struts S2 & S3	6	13-Oct-16	18-Oct-16	-186						
SIIA12300	Sec II A - CWB CW: Construct Bay 1 - Wall	8	08-Nov-16	15-Nov-16	-186						
SIIA12320	Sec II A - CWB CW: Construct Bay 1 - OHVD	10	18-Nov-16	27-Nov-16	-186						
SIIA12340	Sec II A - CWB CW: Construct Bay 1 - Top Slab	10	28-Nov-16	07-Dec-16	-186						
SIIA12380	Sec II A - CWB CW: Construct Bay 2b - Exhaust duct base slab	9	17-Sep-16	25-Sep-16	-165						
SIIA12400	Sec II A - CWB CW: Construct Bay 2b - Exhaust duct wall	8	26-Sep-16	03-Oct-16	-165						
SIIA12420	Sec II A - CWB CW: Construct Bay 2b - Tunnel base slab	13	04-Oct-16	16-Oct-16	-165						
SIIA12460	Sec II A - CWB CW: Construct Bay 2b - B1/F slab	8	27-Oct-16	03-Nov-16	-136						
SIIA12480	Sec II A - CWB CW: Construct Bay 2b - B1/F wall	9	04-Nov-16	12-Nov-16	-136						
SIIA12520	Sec II A - CWB CW: Construct Bay 2b - B1/F roof slab	11	13-Nov-16	23-Nov-16	-136						
SIIA12640	Sec II A - CWB CW: Construct Bay 2a & 2b - Wall	8	17-Oct-16	24-Oct-16	-165						
SIIA12700	Sec II A - CWB CW: Construct Bay 2a & 2b - OHVD	10	27-Oct-16	05-Nov-16	-165						
SIIA12720	Sec II A - CWB CW: Construct Bay 2a & 2b - Roof Slab	11	06-Nov-16	16-Nov-16	-165						
CWB C(W) - Other Works											
SIIA12200	Sec II A - CWB CW: Cut Down Dwall Head	21	08-Dec-16	28-Dec-16	-142						
SIIA12220	Sec II A - CWB CW: backfill to +4.0mPD	52	08-Dec-16	28-Jan-17	-150						
CWB C(W) - Associated Facilities											
SIIA14040	Sec II A - CWB CW: Civil Provisions - lay screeding	6	08-Dec-16	13-Dec-16	-186						
SIIA14220	Sec II A - CWB CW: Civil Provisions - cast cable trough	7	14-Dec-16	20-Dec-16	-186						
CWB C (E)											
CWB C(E) - ELS & Tunnel Structure											
CWB C(E) - ELS											
CWB C(E) - ELS - Bay 2 & 3											
SIIA15600	Sec II A - CWB CE: Demolish Bulkhead at C1 Interface	19	31-Aug-16	18-Sep-16	-166						
CWB C(E) - Tunnel Structure											
SIIA13255	Sec II A - CWB CE: Construct Bay 1 - Wall	46	26-Aug-16 A	15-Oct-16	-164						
SIIA13275	Sec II A - CWB CE: Construct Bay 1 - OHVD	14	18-Oct-16	31-Oct-16	-164						
SIIA13295	Sec II A - CWB CE: Construct Bay 1 - Roof Slab	13	01-Nov-16	13-Nov-16	-164						
SIIA13315	Sec II A - CWB CE: Construct Bay 2 - Wall	31	30-Aug-16 A	30-Sep-16	-151						
SIIA13335	Sec II A - CWB CE: Construct Bay 2 - OHVD	14	03-Oct-16	16-Oct-16	-151						



Activity ID	Activity Name	Remaining Dur	Early Start	Early Finish	Total Float	2016					2017
						Sep	Oct	Nov	Dec	Jan	
SIIA13355	Sec II A - CWB CE: Construct Bay 2 - Roof Slab	15	17-Oct-16	31-Oct-16	-151						
SIIA13375	Sec II A - CWB CE: Construct Bay 3 - Base Slab	8	19-Sep-16	26-Sep-16	-166						
SIIA13395	Sec II A - CWB CE: Remove Strut S2 & S3 (for Bay 3)	5	27-Sep-16	01-Oct-16	-166						
SIIA13415	Sec II A - CWB CE: Construct Bay 3 - Wall	22	02-Oct-16	23-Oct-16	-166						
SIIA13435	Sec II A - CWB CE: Construct Bay 3 - OHVD	11	26-Oct-16	05-Nov-16	-166						
SIIA13455	Sec II A - CWB CE: Construct Bay 3 - Roof Slab	10	06-Nov-16	15-Nov-16	-166						
CWB C(E) - Other Works											
SIIA13300	Sec II A - CWB CE: Dismantle Scaffolding	24	16-Nov-16	09-Dec-16	-123						
SIIA13320	Sec II A - CWB CE: Cut Down Dwall Head	45	16-Nov-16	30-Dec-16	-144						
SIIA13325	Sec II A - CWB CE: backfill to +4.0mPD	47	16-Nov-16	01-Jan-17	-146						
CWB C(E) - Associated Facilities											
SIIA14222	Sec II A - CWB CE: Civil Provisions - lay screeding	7	16-Nov-16	22-Nov-16	-166						
SIIA14280	Sec II A - CWB CE: Civil Provisions - cast cable trough	8	23-Nov-16	30-Nov-16	-166						
CWB C - Exhaust Duct											
CWB C - Exhaust Duct Temp Work & ELS											
SIIA12900	Sec II A - Exhaust Duct at Slip Rd3: Excavation & Shoring - Bay 1	20	19-Sep-16*	08-Oct-16	-165						
SIIA12910	Sec II A - Exhaust Duct at Slip Rd3: Excavation & Shoring - Bay 2	15	19-Sep-16	03-Oct-16	-150						
SIIA12920	Sec II A - Exhaust Duct at Slip Rd3: Excavation & Shoring - Bay 3	10	07-Oct-16	16-Oct-16	-150						
CWB C - Exhaust Duct Structural Work											
SIIA12938	Sec II A - Exhaust Duct at Slip Rd3: Construt Bay 1 - base slab	5	09-Oct-16	13-Oct-16	-165						
SIIA12939	Sec II A - Exhaust Duct at Slip Rd 3: Demolish bulkhead between MVB south and exhaust duct	21	19-Oct-16	08-Nov-16	-165						
SIIA12940	Sec II A - Exhaust Duct at Slip Rd3: Construt Bay 1 - wall	13	09-Nov-16	21-Nov-16	-165						
SIIA13480	Sec II A - Exhaust Duct at Slip Rd3: Construt Bay 1 - roof slab	8	22-Nov-16	29-Nov-16	-165						
SIIA13520	Sec II A - Exhaust Duct at Slip Rd3: Construt Bay 2 - base slab	5	04-Oct-16	08-Oct-16	-122						
SIIA13540	Sec II A - Exhaust Duct at Slip Rd3: Construt Bay 2 - wall & roof slab	9	09-Oct-16	17-Oct-16	-122						
SIIA13560	Sec II A - Exhaust Duct at Slip Rd3: Construt Bay 3 - base slab	5	17-Oct-16	21-Oct-16	-150						
SIIA13575	Sec II A - Exhust Duct at Slaip Rd 3: Demolish bulkhead at C1	15	22-Oct-16	05-Nov-16	-150						
SIIA13960	Sec II A - Exhaust Duct at Slip Rd3: Construt Bay 3 - wall & roof slab	9	06-Nov-16	14-Nov-16	-150						
CWB C - Exhaust Duct Others											
SIIA12950	Sec II A - Exhaust Duct at Slip Rd3: curing and dismantle formwork / falsework	12	15-Nov-16	26-Nov-16	-93						
SIIA12952	Sec II A - Exhaust Duct at Slip Rd3: Backfilling	15	18-Nov-16	02-Dec-16	-93						
CWB D - Slip Road 1											
CWB D - Slip Road 1 - ELS & Tunnel Structure											
CWB D - Slip Road 1 - ELS											
CWB D - SR1 - ELS - Bay 1 & 2											
SIIA 12582	Sec II A - CWB SR1 Concrete Plug: Saw cut to formation	26	31-Aug-16	25-Sep-16	-172						
SIIA 12584	Sec II A - CWB SR1 Concrete Plug: Remove concrete bulkhead	26	26-Sep-16	21-Oct-16	-172						
SIIA 12622	Sec II A - CWB SR1 Bay 1&2: 2nd layer excavation & strutting	9	24-Aug-16 A	08-Sep-16	-142						
SIIA 12642	Sec II A - CWB SR1 Bay 1&2: Formation excavation	9	09-Sep-16	17-Sep-16	-142						
CWB D - SR1 - ELS - Bay 3											



Activity ID	Activity Name	Remaining Dur	Early Start	Early Finish	Total Float	2016					2017
						Sep	Oct	Nov	Dec	Jan	
SIIA 12590	Sec II A - CWB SR1 Bay 3: Blinding Layer	3	31-Aug-16	02-Sep-16	-151						
CWB D - Slip Road 1 - Tunnel Structure											
SIIA13060	Sec II A - CWB SR1: Construct Bay 1 - Base Slab	13	22-Oct-16	03-Nov-16	-172						
SIIA13070	Sec II A - CWB SR1: Remove Strut S1 & S2	5	07-Nov-16	11-Nov-16	-172						
SIIA13080	Sec II A - CWB SR1: Construct Bay 1 - Roof Slab	13	12-Nov-16	24-Nov-16	-172						
SIIA13220	Sec II A - CWB SR1: Construct Bay 2 - Base Slab	15	18-Sep-16	02-Oct-16	-142						
SIIA13230	Sec II - CWB SR1: Remove Strut S1 & S2	4	06-Oct-16	11-Oct-16	-118						
SIIA13240	Sec II A - CWB SR1: Construct Bay 2 - Roof Slab	16	12-Oct-16	27-Oct-16	-144						
SIIA13260	Sec II A - CWB SR1: Construct Bay 3 - Trough Base Slab	7	03-Sep-16	09-Sep-16	-151						
SIIA13280	Sec II A - CWB SR1: Construct Bay 3 - Trough Wall	7	18-Sep-16	24-Sep-16	-151						
SIIA13380	Sec II A - CWB SR1: Construct Bay 3 - Base Slab	14	25-Sep-16	08-Oct-16	-151						
SIIA13440	Sec II A - CWB SR1: Construct Bay 3 - Roof Slab	18	17-Oct-16	03-Nov-16	-151						
SIIA13460	Sec II A - CWB SR1: Construct Bay 4 - Roof Slab	18	17-Oct-16	03-Nov-16	-151						
SIIA13940	Sec II A - CWB SR1: Cut Down Dwall Head	55	25-Nov-16	18-Jan-17	-120						
CWB D - Associated Facilities											
SIIA12580	Sec II A - CWB SR1: Civil Provisions - lay screeding	7	25-Nov-16	01-Dec-16	-172						
SIIA14000	Sec II A - CWB SR1: Civil Provisions - cast cable trough	8	29-Nov-16	06-Dec-16	-172						
CWB D - Slip Road 1 - Trough / Retaining Wall											
CWB D - Slip Road 1 - Trough/Retaining Wall Temp Work & ELS											
SIIA12760	Sec II A - CWB SR1 Trough & RW: install sheetpile	13	05-Sep-16*	17-Sep-16	-157						
SIIA12780	Sec II A - CWB SR1 Trough & RW: Excavation & Shoring	23	18-Sep-16	10-Oct-16	-157						
CWB D - Slip Road 1 - Trough/Retaining Wall Structure											
SIIA12800	Sec II A - CWB SR1 Trough & RW: Trough Structure (bay 1)	12	11-Oct-16	22-Oct-16	-157						
SIIA13720	Sec II A - CWB SR1 Trough & RW: Trough Structure (bay 2)	12	23-Oct-16	03-Nov-16	-157						
SIIA13740	Sec II A - CWB SR1 Trough & RW: Trough Structure (bay 3)	12	29-Oct-16	09-Nov-16	-157						
SIIA13760	Sec II A - CWB SR1 Trough & RW: construct upstand wall along top of Trough Structure	12	03-Nov-16	14-Nov-16	-157						
SIIA13780	Sec II A - CWB SR1 Trough & RW: install waling	7	15-Nov-16	21-Nov-16	-157						
SIIA13800	Sec II A - CWB SR1 Trough & RW: Retaining Walls RW3 (bay 1)	12	25-Oct-16	05-Nov-16	-152						
SIIA13820	Sec II A - CWB SR1 Trough & RW: Retaining Walls RW3 (bay 2)	12	05-Nov-16	16-Nov-16	-152						
SIIA13840	Sec II A - CWB SR1 Trough & RW: Retaining Walls RW3 (bay 3)	12	25-Oct-16	05-Nov-16	-152						
SIIA13860	Sec II A - CWB SR1 Trough & RW: Retaining Walls RW4 (bay 1)	12	05-Nov-16	16-Nov-16	-152						
CWB D - Slip Road 1 - Trough/ Retaining Wall Other Works											
SIIA13865	Sec II A - CWB SR1: backfill to +4.0mPD	38	17-Nov-16	03-Jan-17	-111						
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	42	31-Aug-16	21-Oct-16	-69						
SIIIA10280	Sec III A - roadwork and utilities (Zone A1) - storm water drain & sub-soil drain	42	09-Sep-16	31-Oct-16	-69						
SIIIA10300	Sec III A - roadwork and utilities (Zone A1) - Fresh watermain & Irrigation Mains	42	22-Sep-16	11-Nov-16	-69						
SIIIA10320	Sec III A - roadwork and utilities (Zone A1) - Gas main	42	05-Oct-16	23-Nov-16	-69						
SIIIA10340	Sec III A - roadwork and utilities (Zone A1) - HEC	42	15-Oct-16	02-Dec-16	-69						



Activity ID	Activity Name	Remaining Dur	Early Start	Early Finish	Total Float	2016					2017
						Sep	Oct	Nov	Dec	Jan	
SIIIA10360	Sec III A - roadwork and utilities (Zone A1) - sub-base	42	25-Oct-16	12-Dec-16	-69						
SIIIA10380	Sec III A - roadwork and utilities (Zone A1) - road kerb	42	05-Nov-16	23-Dec-16	-69						
SIIIA10400	Sec III A - roadwork and utilities (Zone A1) - flexible pavement	42	22-Nov-16	12-Jan-17	-62						
SIIIA10420	Sec III A - roadwork and utilities (Zone A1) - construct u-channel	42	05-Nov-16	23-Dec-16	-58						
SIIIA10440	Sec III A - roadwork and utilities (Zone A1) - pave footpath concrete	42	02-Dec-16	23-Jan-17	-69						
SIIIA10460	Sec III A - roadwork and utilities (Zone A1) - Road Lighting, TCSS Ducts &Traffic Signs	40	12-Dec-16	03-Feb-17	-69						
SIIIA10480	Sec III A - roadwork and utilities (Zone A1) - lay footpath paving block	45	17-Nov-16	11-Jan-17	-60						
SIIIA10500	Sec III A - roadwork and utilities (Zone A1) - Road sign and road marking	40	03-Dec-16	21-Jan-17	-62						
Roadwork & Utilities at A2											
SIIIA10580	Sec III A - roadwork and utilities (Zone A2) - Backfill to pavement founding level	40	11-Oct-16	25-Nov-16	-76						
SIIIA10600	Sec III A - roadwork and utilities (Zone A2) - storm water drain & sub-soil drain	40	20-Oct-16	05-Dec-16	-76						
SIIIA10620	Sec III A - roadwork and utilities (Zone A2) - Fresh watermain & Irrigation Mains	40	01-Nov-16	16-Dec-16	-76						
SIIIA10640	Sec III A - roadwork and utilities (Zone A2) - Gas main	40	08-Nov-16	23-Dec-16	-76						
SIIIA10660	Sec III A - roadwork and utilities (Zone A2) - HEC	40	15-Nov-16	03-Jan-17	-76						
SIIIA10680	Sec III A - roadwork and utilities (Zone A2) - sub-base	40	22-Nov-16	10-Jan-17	-76						
SIIIA10700	Sec III A - roadwork and utilities (Zone A2) - road kerb	40	01-Dec-16	19-Jan-17	-76						
SIIIA10720	Sec III A - roadwork and utilities (Zone A2) - flexible pavement	50	10-Dec-16	14-Feb-17	-76						
SIIIA10740	Sec III A - roadwork and utilities (Zone A2) - construct u-channel	50	29-Nov-16	02-Feb-17	-68						
SIIIA10760	Sec III A - roadwork and utilities (Zone A2) - pave footpath concrete	40	08-Dec-16	26-Jan-17	-74						
SIIIA10800	Sec III A - roadwork and utilities (Zone A2) - lay footpath paving block	40	10-Dec-16	02-Feb-17	-74						
Roadwork & Utilities at D											
SIIIA11090	Sec III A - roadwork and utilities (Zone D) - backfill to pavement founding level	50	08-Dec-16	11-Feb-17	-111						
SIIIA11100	Sec III A - roadwork and utilities (Zone D) - storm water drain & sub-soil drain	50	14-Dec-16	17-Feb-17	-111						
SIIIA11110	Sec III A - roadwork and utilities (Zone D) - Fresh watermain & Irrigation Mains	50	14-Dec-16	17-Feb-17	-107						
SIIIA11120	Sec III A - roadwork and utilities (Zone D) - Gas main	50	14-Dec-16	17-Feb-17	-103						
SIIIA11130	Sec III A - roadwork and utilities (Zone D) - HEC	50	14-Dec-16	17-Feb-17	-103						
Box Culvert L1 & FRP-L - Bay 8											
Box Culvert L1 & FRP-L - Bay 8 Structure											
CUL11320	Culvert L - bay 8 - construct pile cap	23	25-Jul-16 A	22-Sep-16	6						
CUL11322	Culvert L - bay 8 - construct base slab	26	23-Sep-16	18-Oct-16	6						
CUL11326	Culvert L - Bay 8 - construct wall	21	19-Oct-16	08-Nov-16	6						
CUL11328	Culvert L - bay 8 - construt top slab	11	09-Nov-16	19-Nov-16	6						
Box Culvert L1 & FRP-L - Bay 8 Others											
CUL11340	Culvert L - bay 8 - backfill above box section	12	21-Nov-16	03-Dec-16	5						
Section VI D - Area 8B & 10											
WDII Box 1 Construction											
WDII Box 1 Existing Pile Head and Dry Dock											
WD-C3054	Sec VID - Install rebar & formwork at Wall 12	24	09-Sep-16*	02-Oct-16	-175						
WD-C3056	Sec VID - Install rebar & formwork at Wall BH	24	16-Sep-16	09-Oct-16	-168						
WD-C3058	Sec VID - Install rebar & formwork at Wall 15 & 16	24	23-Sep-16	16-Oct-16	-175						



Activity ID	Activity Name	Remaining Dur	Early Start	Early Finish	Total Float	2016					2017
						Sep	Oct	Nov	Dec	Jan	
WD-C3072	Sec VID - Formwork striking, tie bolt hole and waterproofing	20	18-Aug-16 A	19-Sep-16	-178						
WD-C3092	Sec VID - Install internal strutting S1	9	22-Sep-16	30-Sep-16	-178						
WD-C3112	Sec VID - Install buoyancy tank	9	01-Oct-16	09-Oct-16	-178						
WD-C3132	Sec VID - Install ballast tanks inside precast box I and internal strut S2	10	10-Oct-16	19-Oct-16	-178						
WDII Box 1 ELS											
WD-C3998	Sec VIC - Install middle strut S2 at -6.5mPD	14	30-Aug-16 A	13-Sep-16	-179						
WD-C4060	Sec VIC - Excavation of rock fill down to -11.5mPD	8	14-Sep-16	21-Sep-16	-179						
WD-C4070	Sec VIC - Install waling WB4 at -10.6mPD	7	22-Sep-16	28-Sep-16	-179						
WD-C4080	Sec VIC - 3rd Layer of Strut	9	29-Sep-16	07-Oct-16	-179						
WD-C4120	Sec VIC - Joint Survey of excavated level	2	08-Oct-16	09-Oct-16	-179						
WD-C4140	Sec VIC - Tremie concrete at bottom level	5	10-Oct-16	14-Oct-16	-179						
WD-C4160	Sec VIC - Joint Survey of concrete level	2	15-Oct-16	16-Oct-16	-179						
WD-C4180	Sec VIC - Remove Strut S2	2	17-Oct-16	18-Oct-16	-179						
WD-C4190	Sec VIC - Cut bored pile casing	2	19-Oct-16	20-Oct-16	-179						
WDII Box 1 Bottom Slab											
WD-C5040	Sec VI D - tow bottom slab to position	2	21-Oct-16	22-Oct-16	-179						
WDII Box 1 Remaining Structure											
WD-C6040	Sec VID - Concreting Wall 12, 13, 15 & 16 and Wall BH	4	23-Oct-16	26-Oct-16	-179						
WD-C6060	Sec VID - Construct roof slab	10	27-Oct-16	05-Nov-16	-179						
WD-C6080	Sec VID - Extension of sacrificial wall (2.3m)	17	06-Nov-16	22-Nov-16	-179						
WD-C6100	Sec VID - Balasting and final sink Box I to -10.0mPD	3	23-Nov-16	25-Nov-16	-179						
WD-C6120	Sec VID - Constrcut remaining roof slab	8	26-Nov-16	03-Dec-16	-179						
WD-C6140	Sec VID - Backfilling lean concreting to -6.5mPD	3	04-Dec-16	06-Dec-16	-179						
WD-C6160	Sec VID - Remove ELS and cut off pipe pile head	16	07-Dec-16	22-Dec-16	-179						
Section IV - Slip Road 3											
Roadwork & Utilities (Lung King Street)											
SIV11000	Sec IV - Stage 1: Roadwork & Utilities (MH1.2 to MH1.3)	1	09-May-16 A	31-Aug-16	-64						
SIV11020	Sec IV - Stage 2: Roadwork & Utilities (MH1.3 to MH1.4)	31	01-Sep-16	08-Oct-16	-64						
SIV11060	Sec IV - Stage 3: Roadwork & Utilities (MH1.4 to MH1.5)	13	11-Oct-16	25-Oct-16	-64						
Section VII - Remainder Works											
Retaining Wall RW5 Construction											
SVII10660	Sec VII - Retaining Wall RW5 (bay 1) - construct base slab and wall	18	07-Nov-16	26-Nov-16	-18						
SVII10680	Sec VII - Retaining wall RW5 (bay 2) - construct base slab and wall	18	28-Nov-16	17-Dec-16	-18						
SVII10800	Sec VII - Retaining wall RW5 (bay 3) - construct base slab and wall	18	07-Nov-16	26-Nov-16	-18						
SVII10820	Sec VII - Retaining wall RW5 (bay 4) - construct base slab and wall	18	28-Nov-16	17-Dec-16	-18						
Landing Steps Construction											
Landing Steps BSW13											
SVII10700	Sec VII - Landing steps (BSW13) - construct mass concrete coping	26	05-Dec-16	06-Jan-17	-28						
Landing Steps BSW4											
SVII10940	Sec VII - Landing steps (BSW4) - construct mass concrete coping	26	05-Dec-16	06-Jan-17	-28						



中國建築-利達聯營
CHINA STATE - LEADER JOINT VENTURE

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

Activity ID	Activity Name	Remaining Dur	Early Start	Early Finish	Total Float	2016					2017
						Sep	Oct	Nov	Dec	Jan	
Landing Steps BSW5											
SVIII11020	Sec VII - Landing steps (BSW5) - construct mass concrete coping	26	05-Dec-16	06-Jan-17	-24						
Landing Steps BSW9											
SVIII11100	Sec VII - Landing steps (BSW9) - construct mass concrete coping	24	05-Dec-16*	04-Jan-17	-21						
Promenade Seawall Parapet Construction											
SVII10400	Sec VII - construct block seawall mass concrete coping & backfill to pavement formation	90	03-Oct-16*	19-Jan-17	-9						
SVII10600	Sec VII - construct seawall parapet (Zone A1, A2 & B)	90	13-Dec-16	05-Apr-17	-9						
Section VIII - Landscape Softworks											
Soft Landscaping Works											
SVIII10040	Sec VIII - Trees Planting	163	31-Aug-16	20-Mar-17	0						
Section X - Protection & Preservation of Trees											
Soft Landscaping Works											
SX10020	Sec X - Protection & Preservation of Trees	326	31-Jan-13 A	22-Jul-17	0						
VO : Construction of Box 4A & 4B											
Box 4A											
4A10000	Concrete Fill with 300 dia. carrier drain (Approx. 50m)	16	26-Sep-16*	11-Oct-16	-152						
4A10020	Internal Suspended Slab & Internal Wall	24	30-Sep-16	23-Oct-16	-152						
Box 4B											
4B10000	Concrete Fill with 300 dia. carrier drain (Approx. 50m)	16	12-Oct-16	27-Oct-16	-144						
4B10010	Internal Suspended Slab & Internal Wall	24	24-Oct-16	16-Nov-16	-152						

Data Date: 20-Aug-16

HY/2009/18 Central - Wan Chai Bypass (Central Interchange)
TASK filters: 3 Months_1, Not HL.

TASK filters: 3 Months_1, Not HL.

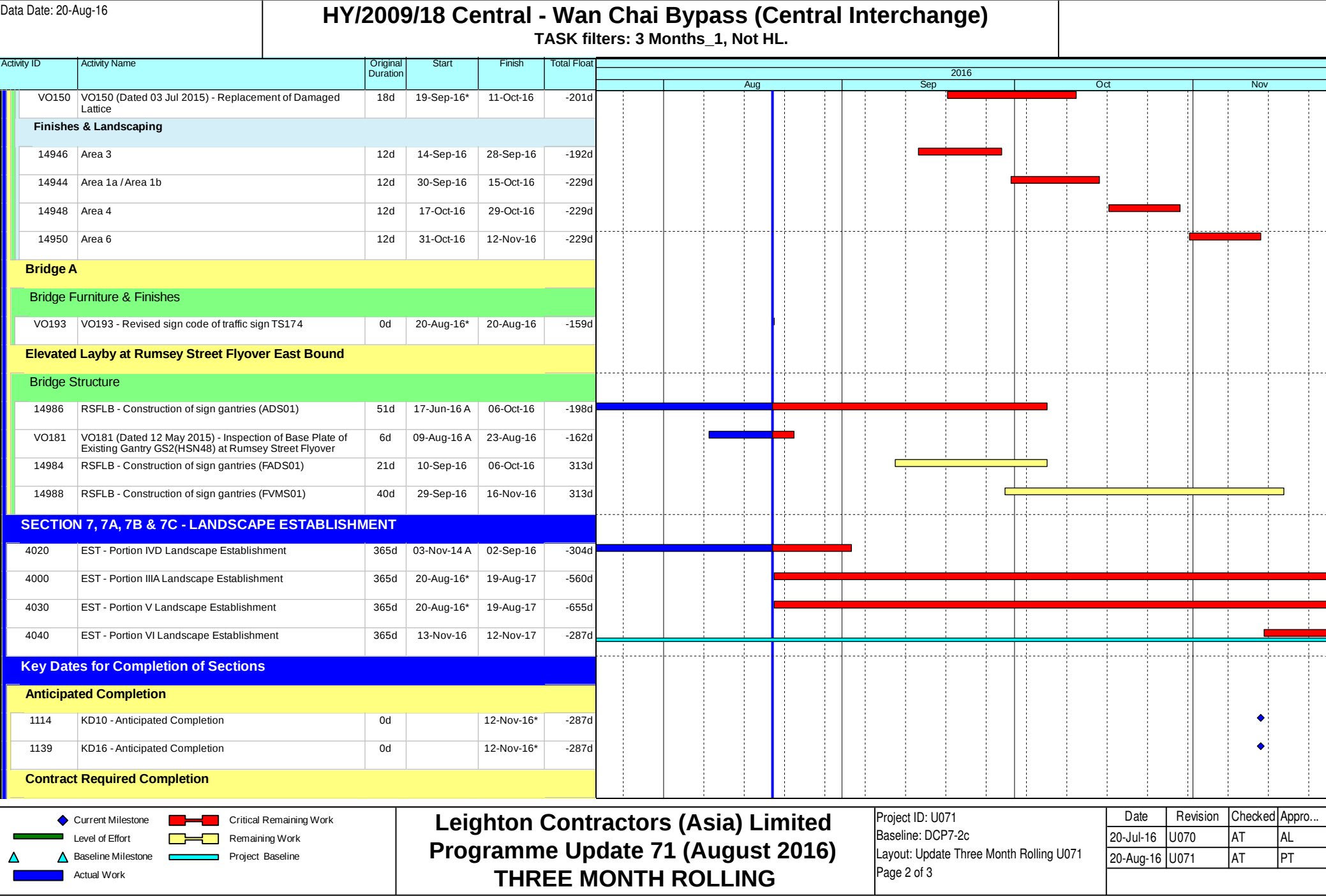
Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	2016									
							Aug		Sep		Oct		Nov		
Update 2016-08-20 CWB - Central Interchange (2014-06-20)Revised DWP R7															
PRELIMINARIES															
Access Dates & Milestones															
Commencement & Completion															
1005	Contract Construction Completion	0d		20-Aug-16*	-202d										
SECTION 5 - ALL WORKS IN PORTION V & VA															
CWB Trough B - CH1360 to CH1480															
Preliminaries															
1533	V - Permanent Reinstate Finance Street for TTA6 (Both lanes) & drainage settlement- (VO V/021)	142d	16-Nov-15 A	08-Sep-16	-249d										
Trough Internal Works															
VO207	VO207 - Revised Details of Roadside Barrier at Trough B	24d	20-Aug-16*	17-Sep-16	-256d										
SECTION 6 - ALL WORKS IN PORTION VI															
General Surface Works															
Formation & Roadworks															
Irrigation System															
14916	Area VIII (New cross road pipes added)	140d	05-Nov-15 A	02-Sep-16	-171d										
14912	Area VI	78d	18-Apr-16 A	23-Sep-16	-188d										
14914	Area VII	78d	18-Apr-16 A	15-Sep-16	-182d										
14908	Area IV /Area V	78d	28-Jun-16 A	02-Sep-16	-171d										
14920	Area X	78d	04-Jul-16 A	02-Sep-16	-171d										
Roadworks															
VO189	VO189 (Dated 20 May 2015) - Revised General Arrangement of the Mounting Post for Height Detector	106d	15-Dec-15 A	17-Sep-16	-201d										
14926	Area 3	66d	19-Dec-15 A	13-Sep-16	-210d										
14922	Area 1a /Area 1b	129d	28-Dec-15 A	13-Sep-16	-229d										
14928	Area 4	18d	15-Apr-16 A	09-Sep-16	-210d										

 Current Milestone  Critical Remaining Work
 Level of Effort  Remaining Work
 Baseline Milestone  Project Baseline
 Actual Work

**Leighton Contractors (Asia) Limited
Programme Update 71 (August 2016)
THREE MONTH ROLLING**

Project ID: U071
Baseline: DCP7-2c
Layout: Update Three Month Rolling U071
Page 1 of 3

Date	Revision	Checked	Appro...
20-Jul-16	U070	AT	AL
20-Aug-16	U071	AT	PT



Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	2016											
						Aug			Sep			Oct			Nov		
1095	KD12 - Section 7A Complete (DAY-1870)	0d		20-Aug-16*	-290d												
1105	KD14 - Section 7B Complete (DAY-1870)	0d		20-Aug-16*	-290d												
1115	KD10 - Section 6 Complete (DAY-1958)	0d		20-Aug-16*	-202d												
1125	KD11 - Section 7 Complete (DAY-1965)	0d		20-Aug-16*	-195d												
1140	KD16 - Section 8 Complete (DAY-1958)	0d		20-Aug-16*	-202d												
Portion Handover Dates																	
Anticipated Handover																	
2960a	Portion IIIA Handover - Remaining (KD3 + 28 days) - (EOT 26.5 days added)	0d		20-Aug-16*	-505d												
Contract Required Handover																	
3096	Portion VI Handover (KD10 + 28 days)	0d		20-Aug-16*	-174d												

◆

Current Milestone

▬

Level of Effort

▲

Baseline Milestone

■

Actual Work

■

Critical Remaining Work

▬

Remaining Work

▬

Project Baseline

Data Date: 20-Oct-16				CWB(CC) - Commissioning Contract TASK filters: 3 Months_4, 3MRP, No Original Sections, Not HL.											
Activity ID		Activity Name		Original Duration	Start	Finish	Total Float	2016 OctNovDec 2017 Jan							
Update 2016-10-20 CWB(CC) - Commissioning Contract (DWP R2d)															
PRELIMINARIES AND GENERAL REQUIREMENTS															
Salient Key Dates and Milestones															
Contract Key Dates															
KD001	KD1 - Achievement of Stage 1 (1054 days)			0d		16-Jan-17*	0d								
Possession Dates and Vacation Dates															
PO-VIc_a	Possession of Portion VIc (Day 761) - CH3770-3800 (Access Shaft Opening)			391d	23-Sep-16 A	18-Oct-17	-136d								
PO-VIb_c	Possession of Portion VIb (Day 761) - CH3625-3770			391d	23-Sep-16 A	18-Oct-17	-161d								
PO-VIa_a	Possession of Portion VIa (Day 823) - CH3250-3283			425d	20-Oct-16	18-Dec-17	-157d								
PO-Vb2_b	Possession of Portion V (Day 607) - SCP3			425d	20-Oct-16	18-Dec-17	-223d								
PO-VIIIa	Possession of Portion VIIIa (Day 929) - CH4250-4600			323d	30-Nov-16	18-Oct-17	-225d								
PO-VIb_a	Possession of Portion VIb (Day 761) - CH3400-3428			323d	30-Nov-16	18-Oct-17	-182d								
PO-VIIIb	Possession of Portion VIIIb (Day 929) - SR8 (CH700-350)			290d	02-Jan-17	18-Oct-17	-292d								
PO-VIIIC	Possession of Portion VIIIC (Day 1039) - SR8 (CH350-310) / SCP4			290d	02-Jan-17	18-Oct-17	-81d								
Submissions and Approvals															
Initial General Submission															
1211	Submission of 1st Project video film			0d		20-Oct-16*	-262d								
9932	Submission of 1st Project video film Video1 / Video2 (Release II)			0d		20-Oct-16*	-627d								
Specified Plans															
1172	Submission of a Traffic management Contingency Plan			90d	20-Oct-16	17-Jan-17	197d								
DETAILED DESIGN OF WORKS															
Permanent Works Design and Engineering															
Metal Roof on MVB															
2182	MVB Roof - Prepare Preliminary Design and Submission (Schematics)			48d	01-Dec-15 A	05-Nov-16	-310d								
2182a	MVB Roof - Pending for RFI reply for Schematic design			24d	14-Jan-16 A	05-Nov-16	-310d								

◆ Current Milestone

Level of Effort

▲ Baseline Milestone

Actual Work

Critical Remaining Work

Remaining Work

Project Baseline

Leighton Contractors (Asia) Limited

Programme Update 32 (October 2016)

THREE MONTH ROLLING

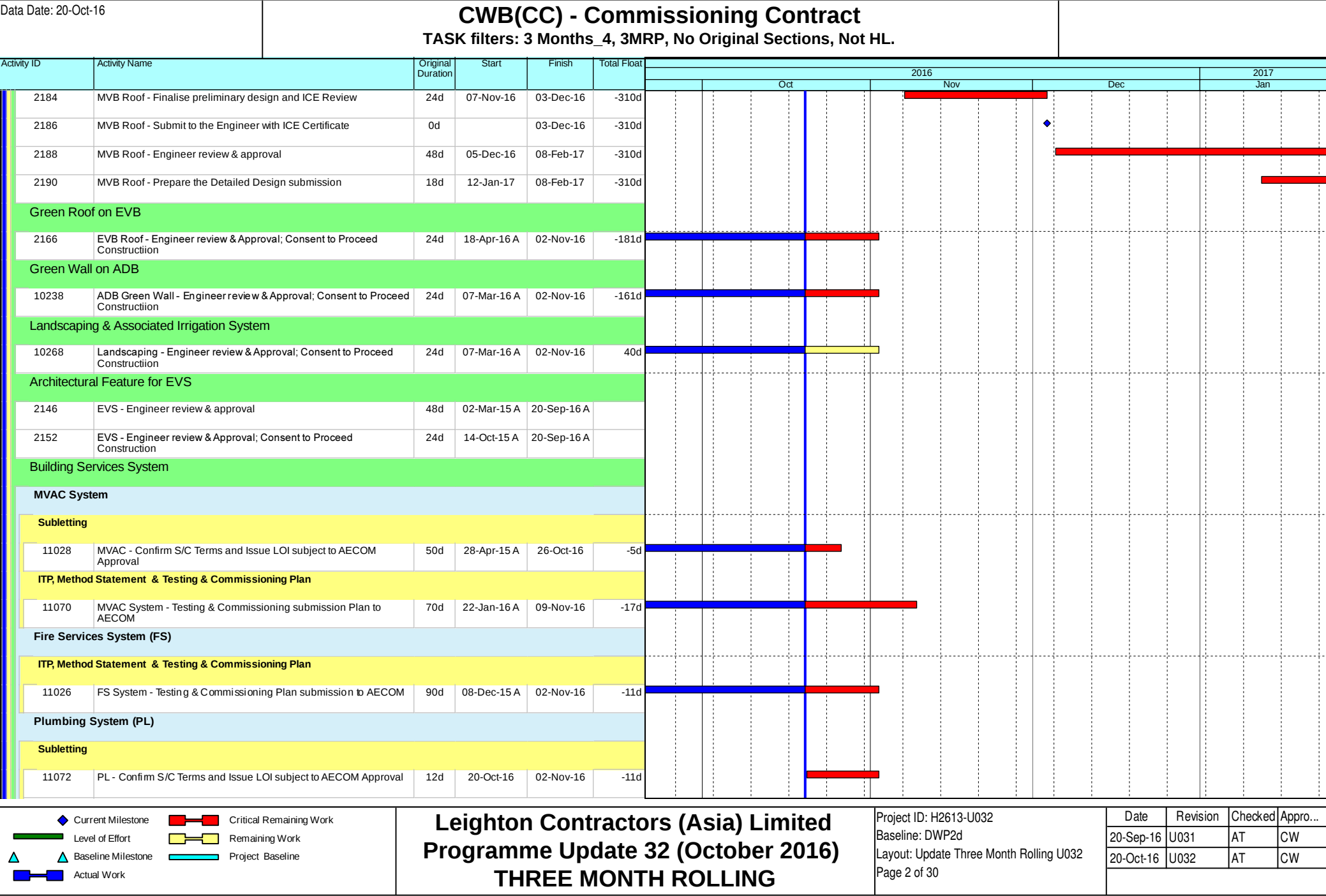
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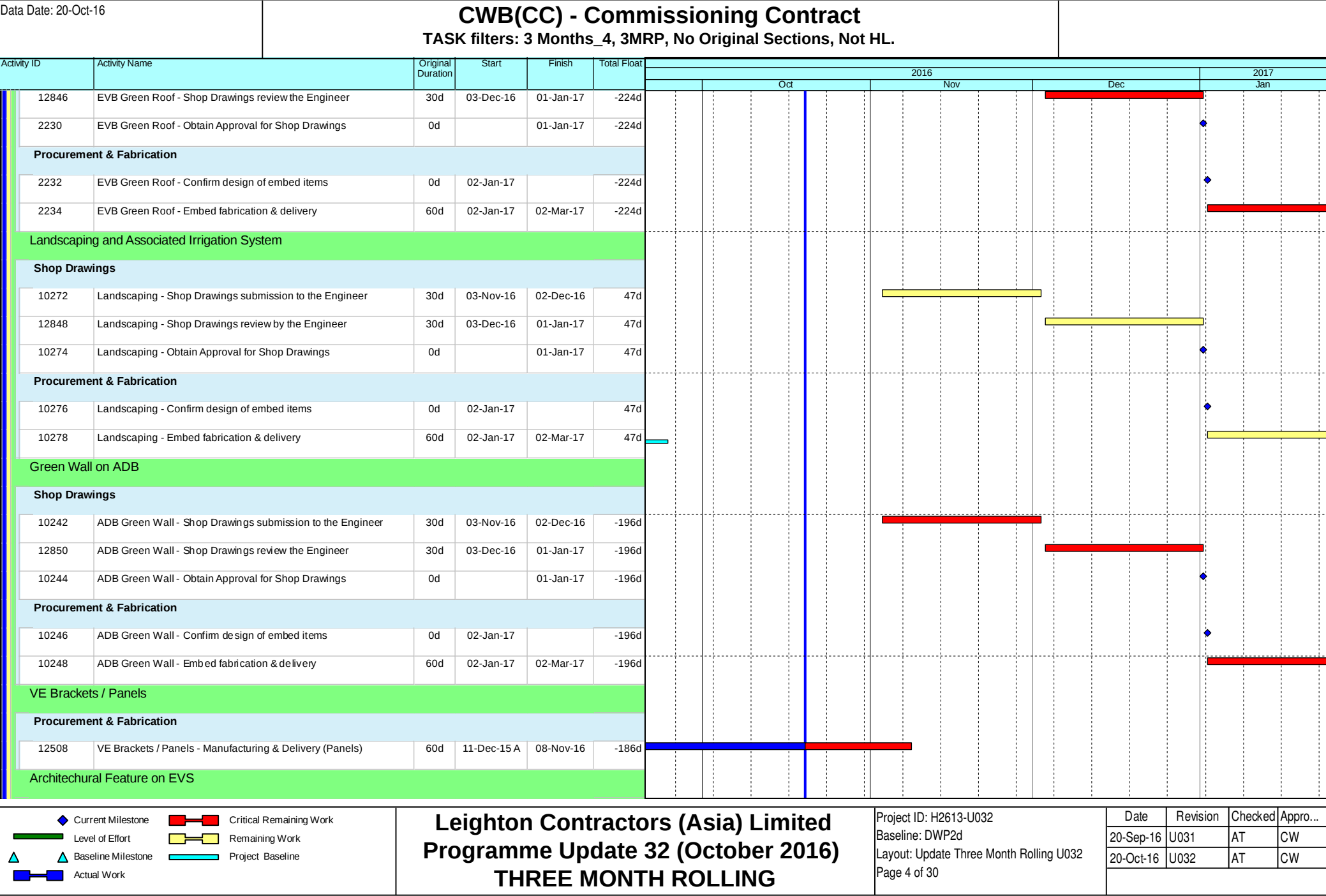
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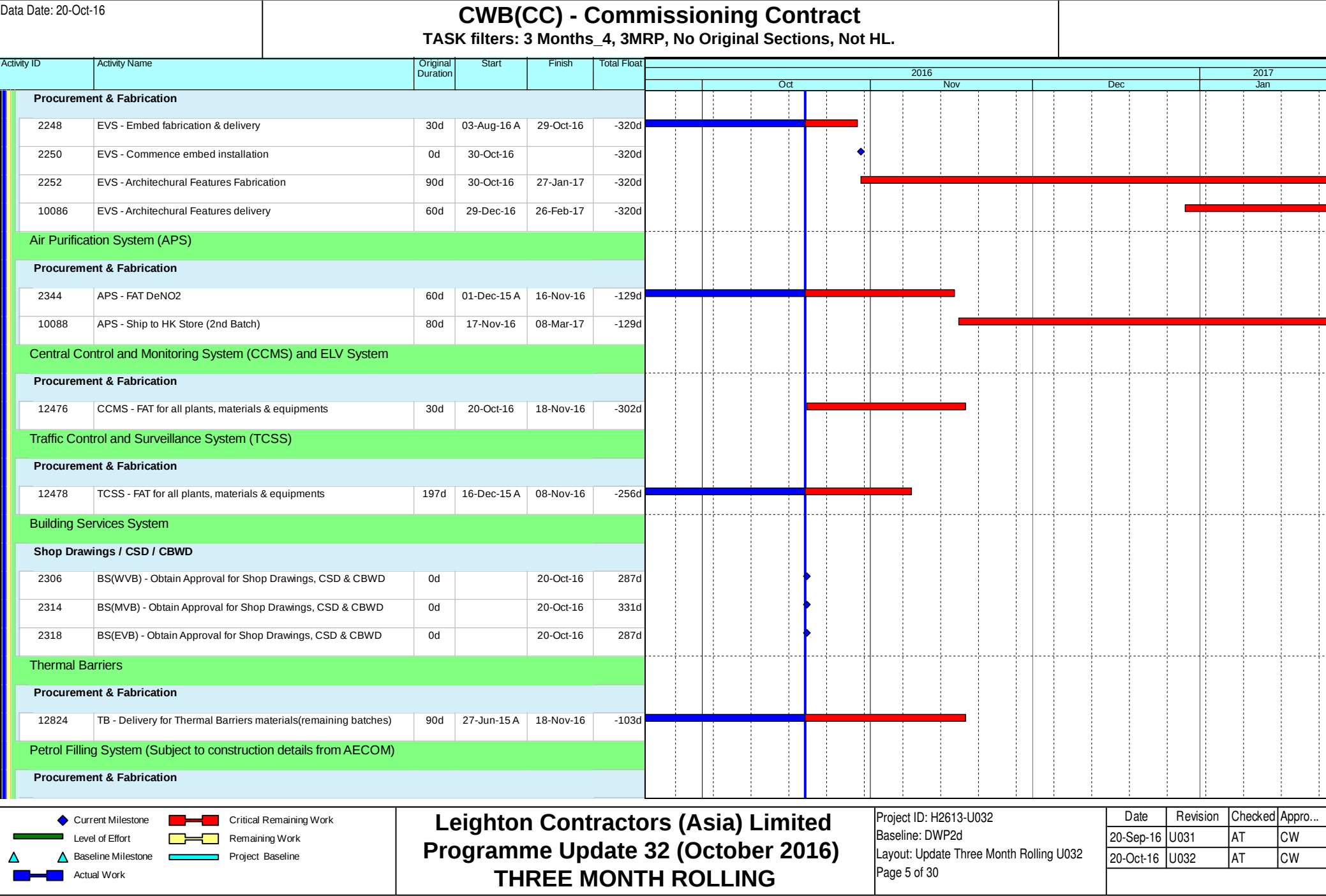
Layout: Update Three Month Rolling U032

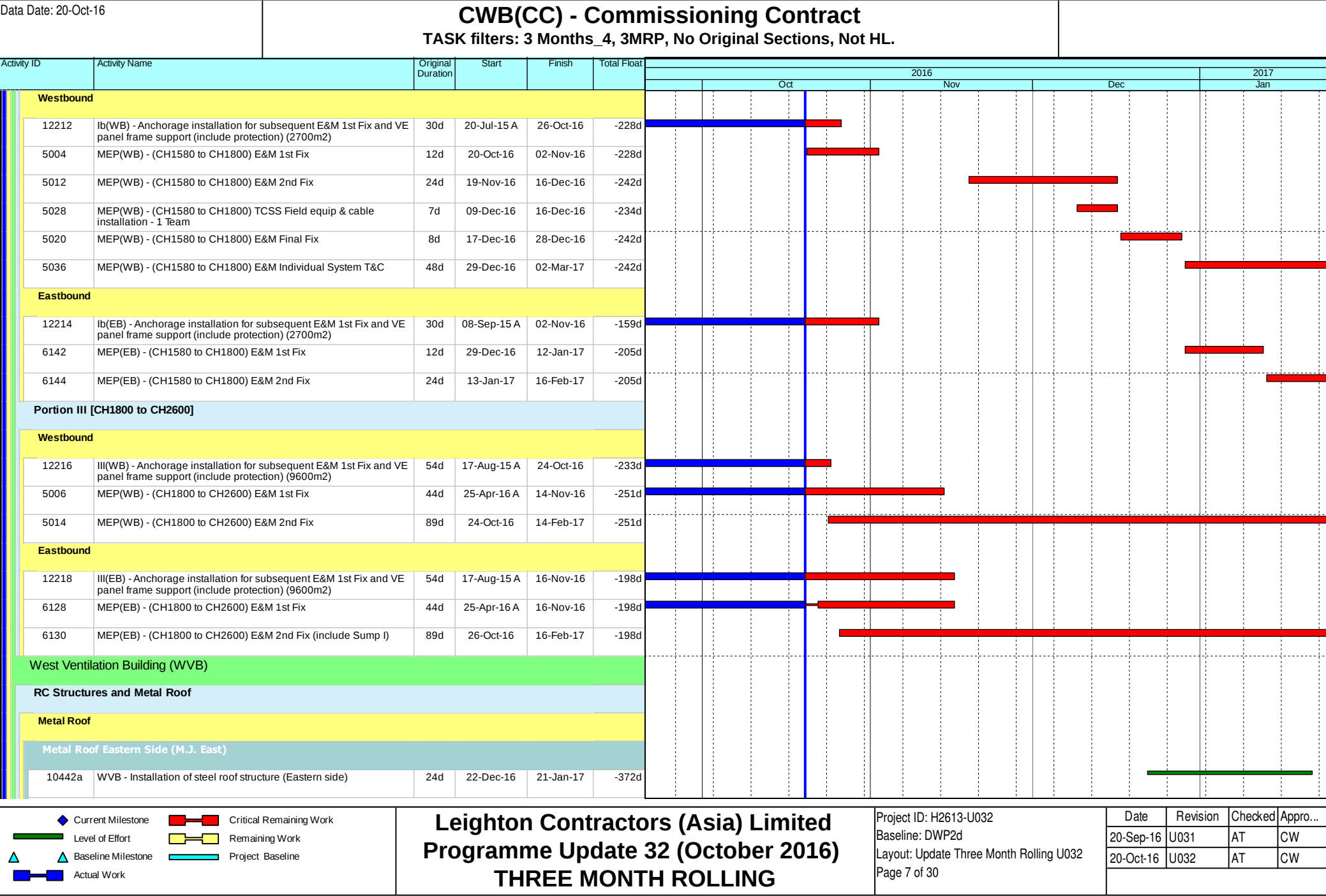
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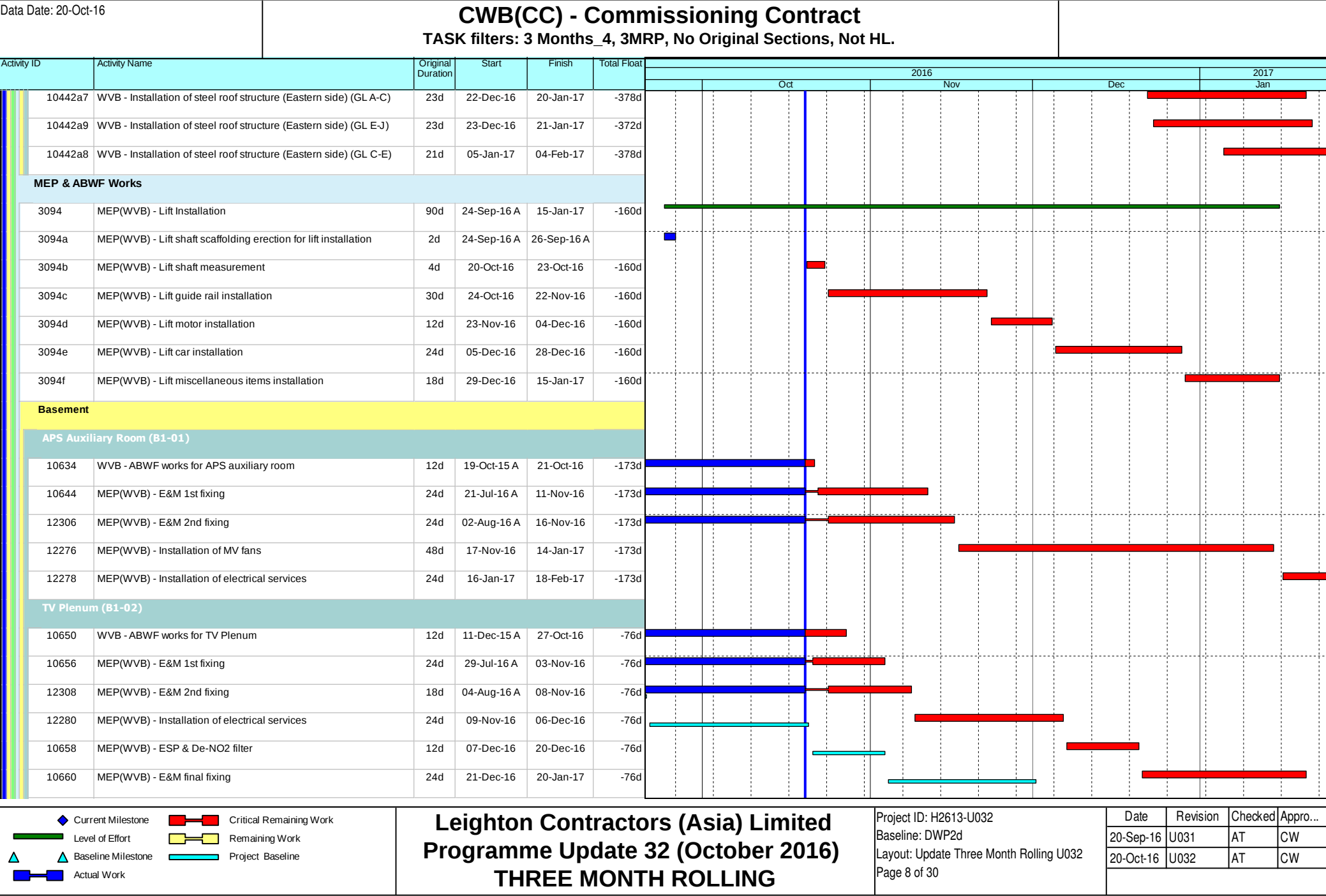
Date	Revision	Checked	Appro...
20-Sep-16	U031	AT	CW
20-Oct-16	U032	AT	CW

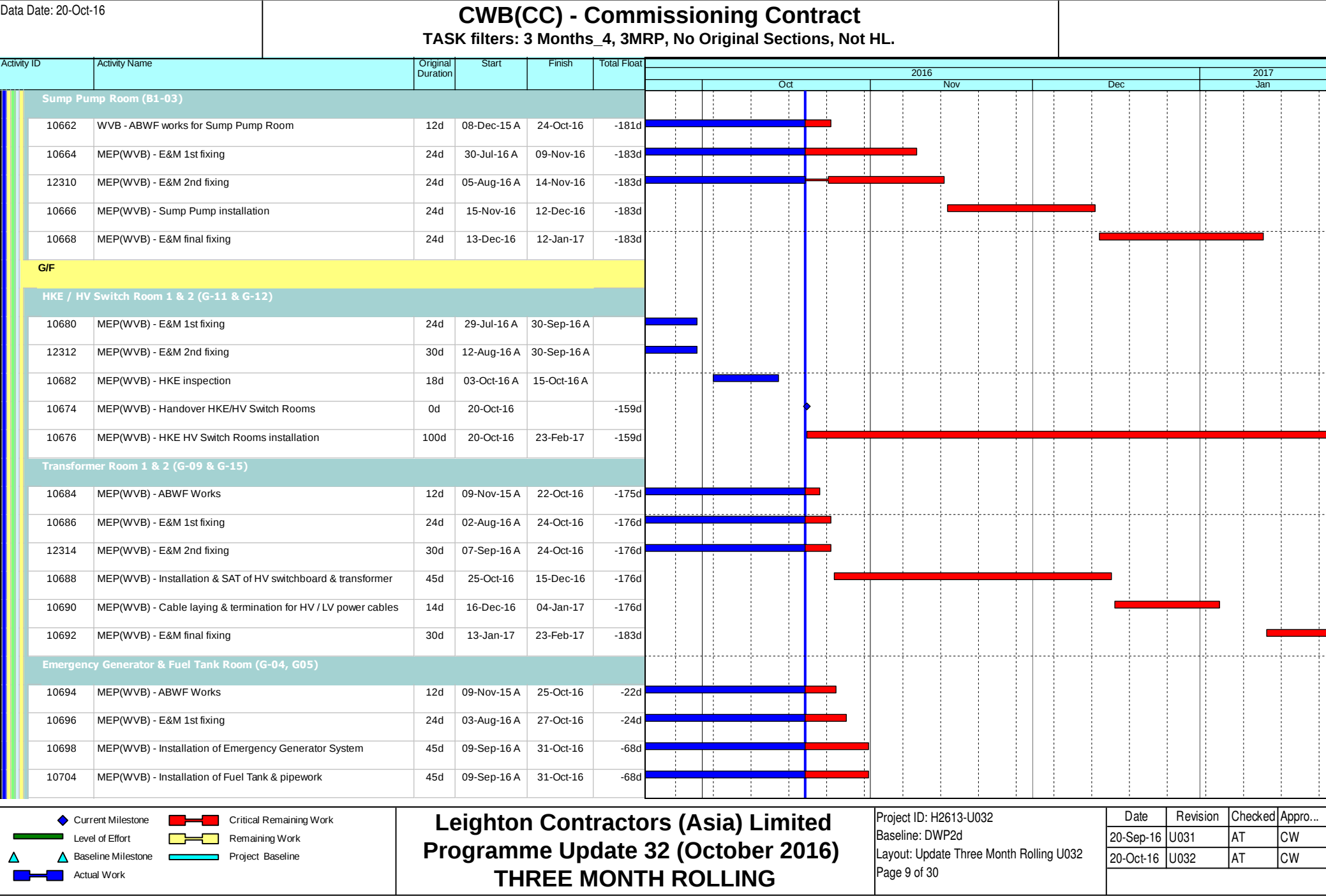


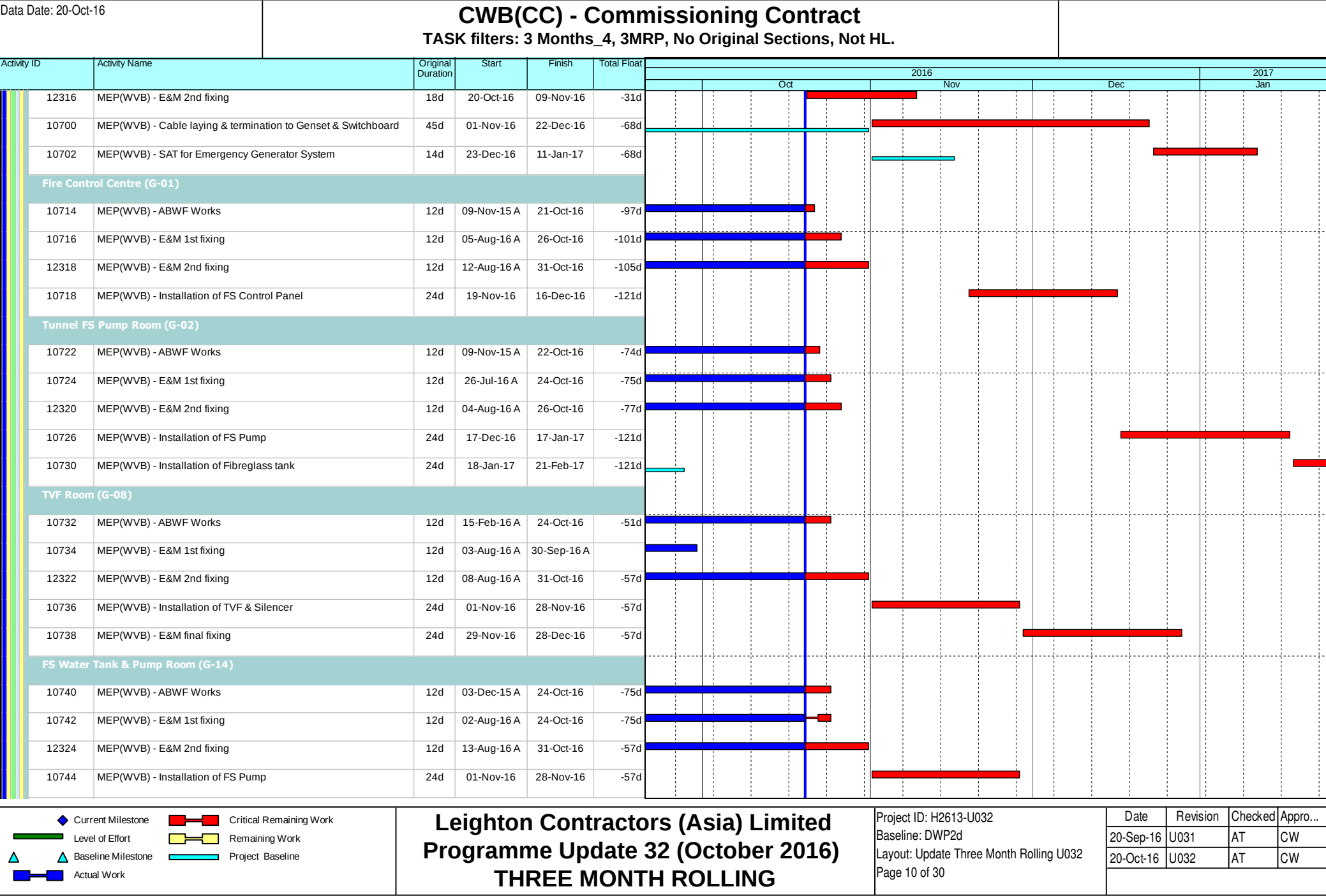


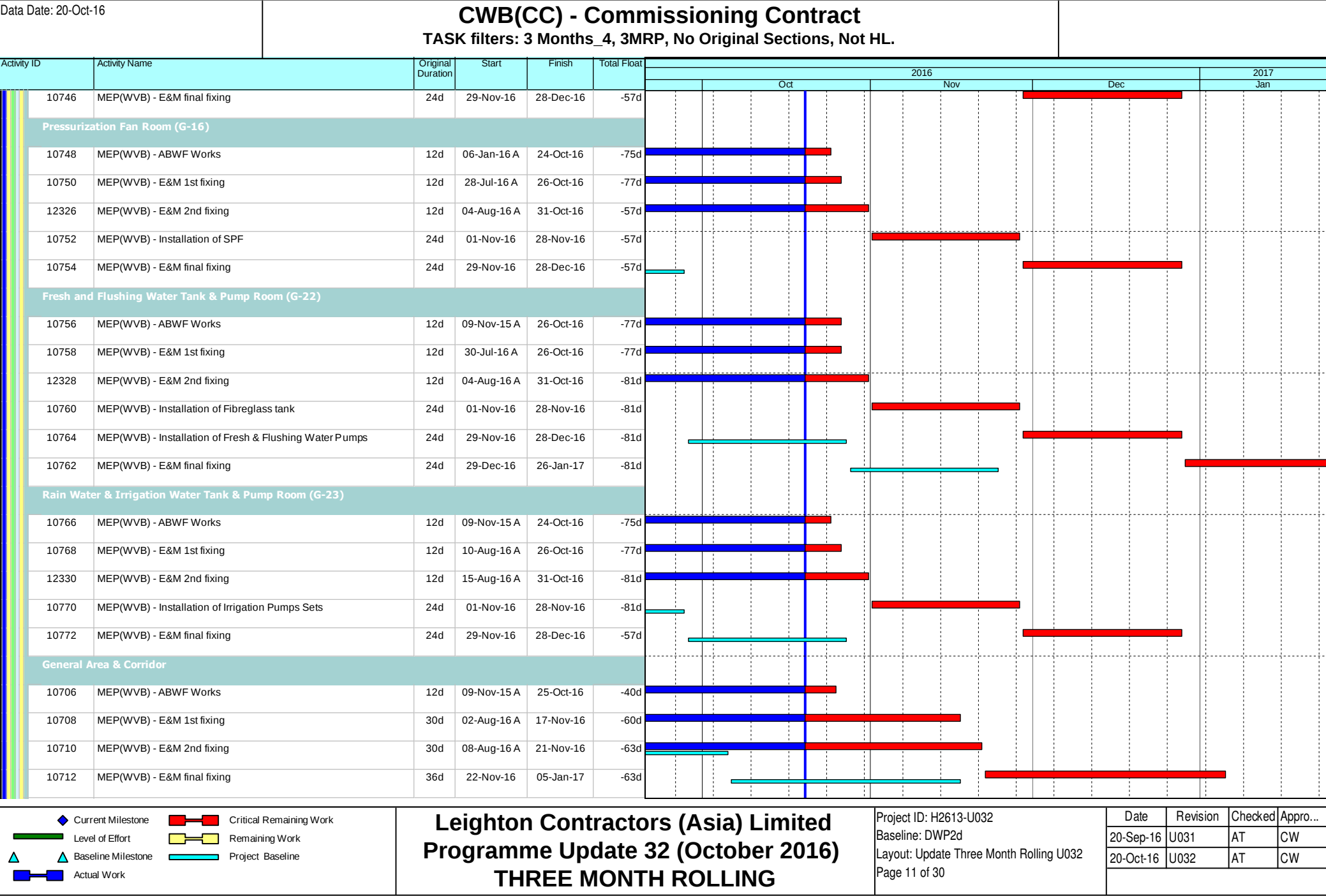


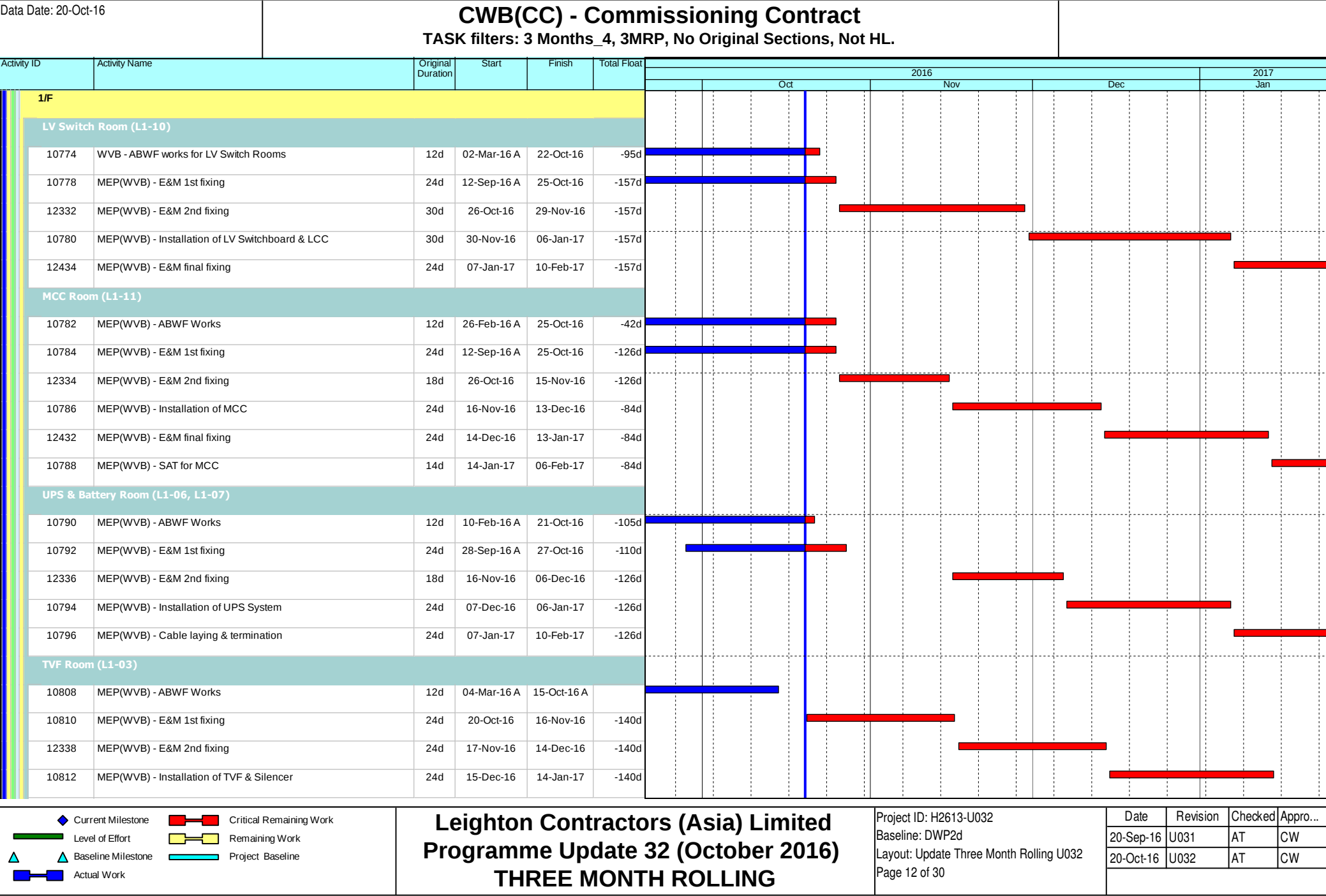


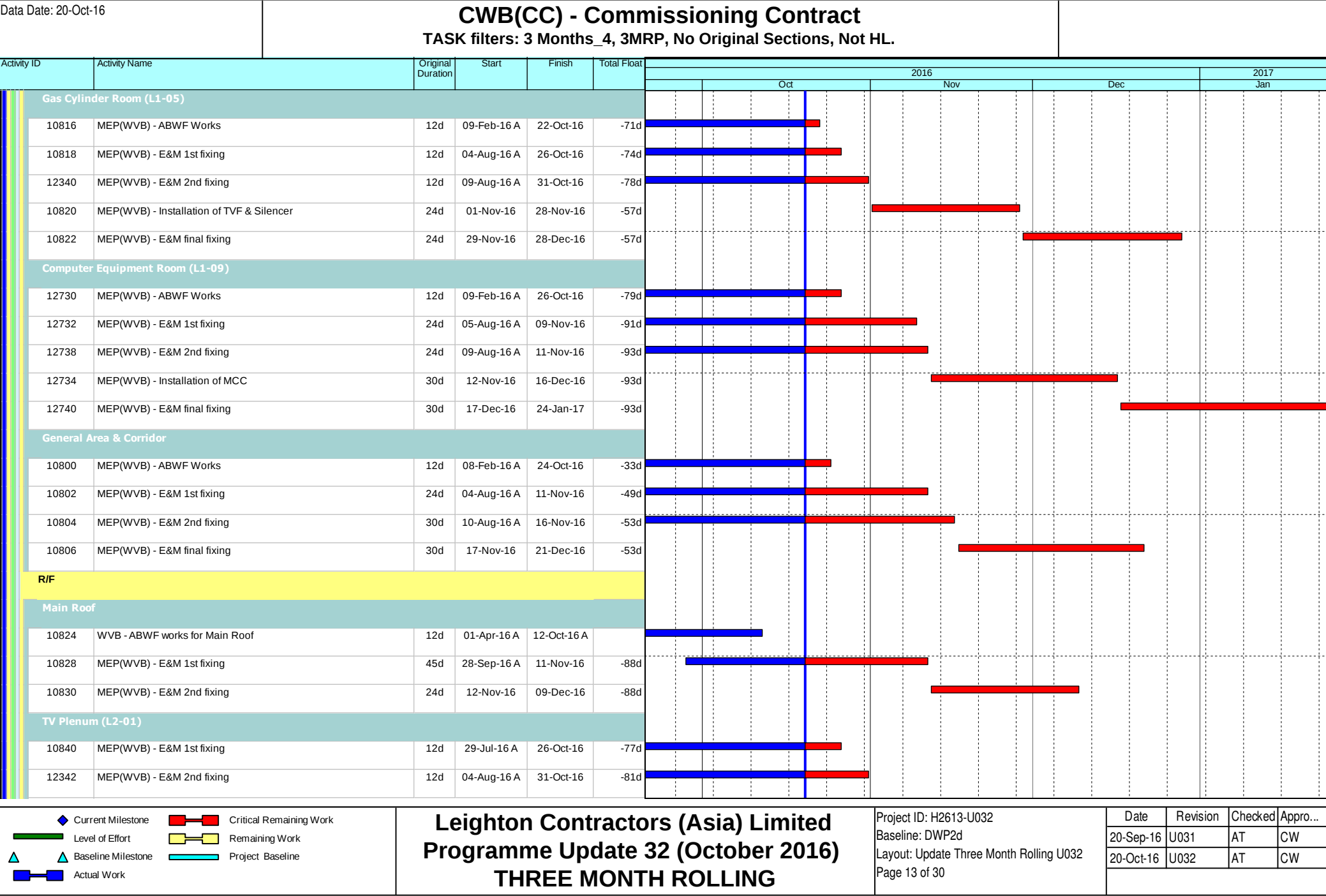


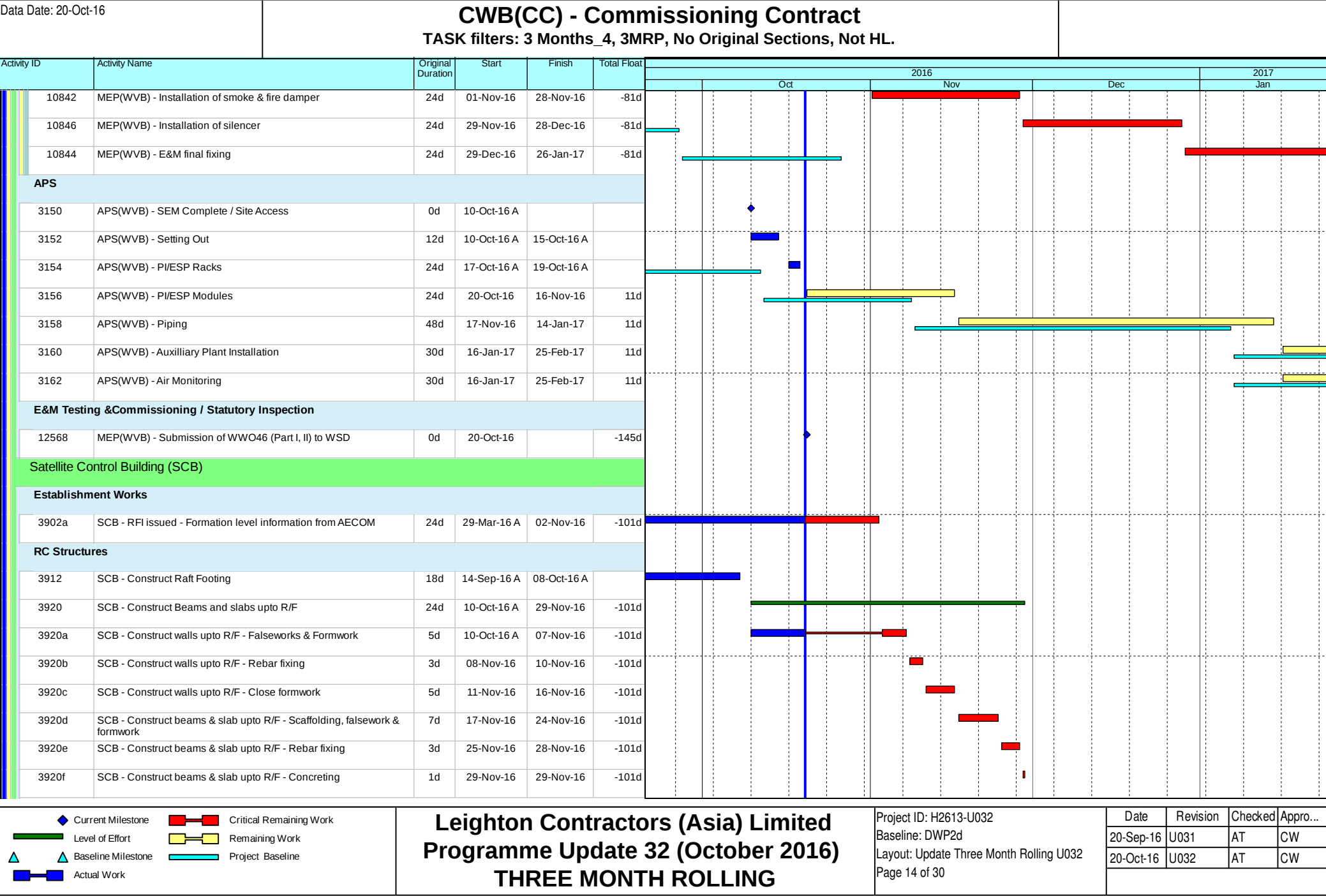


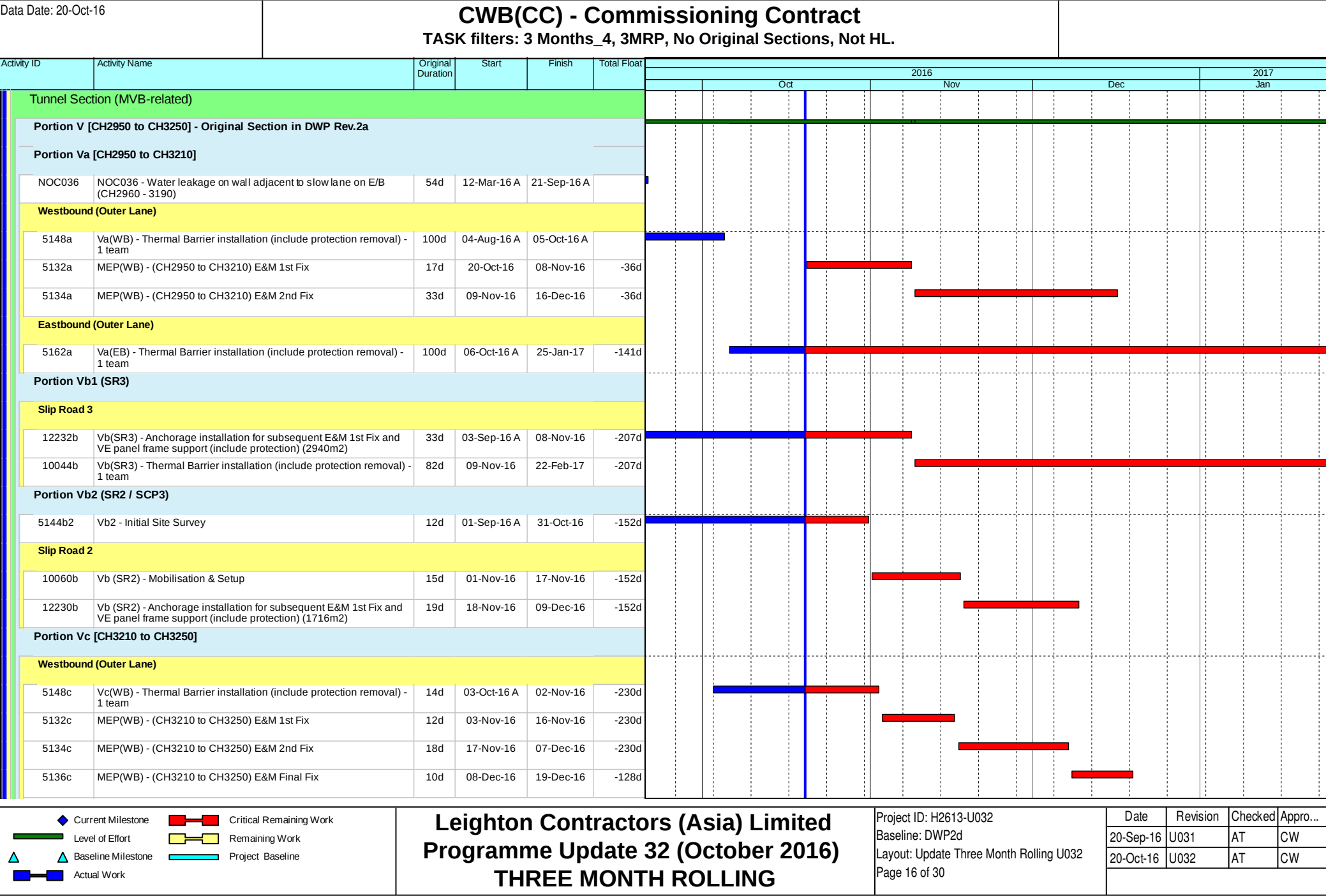


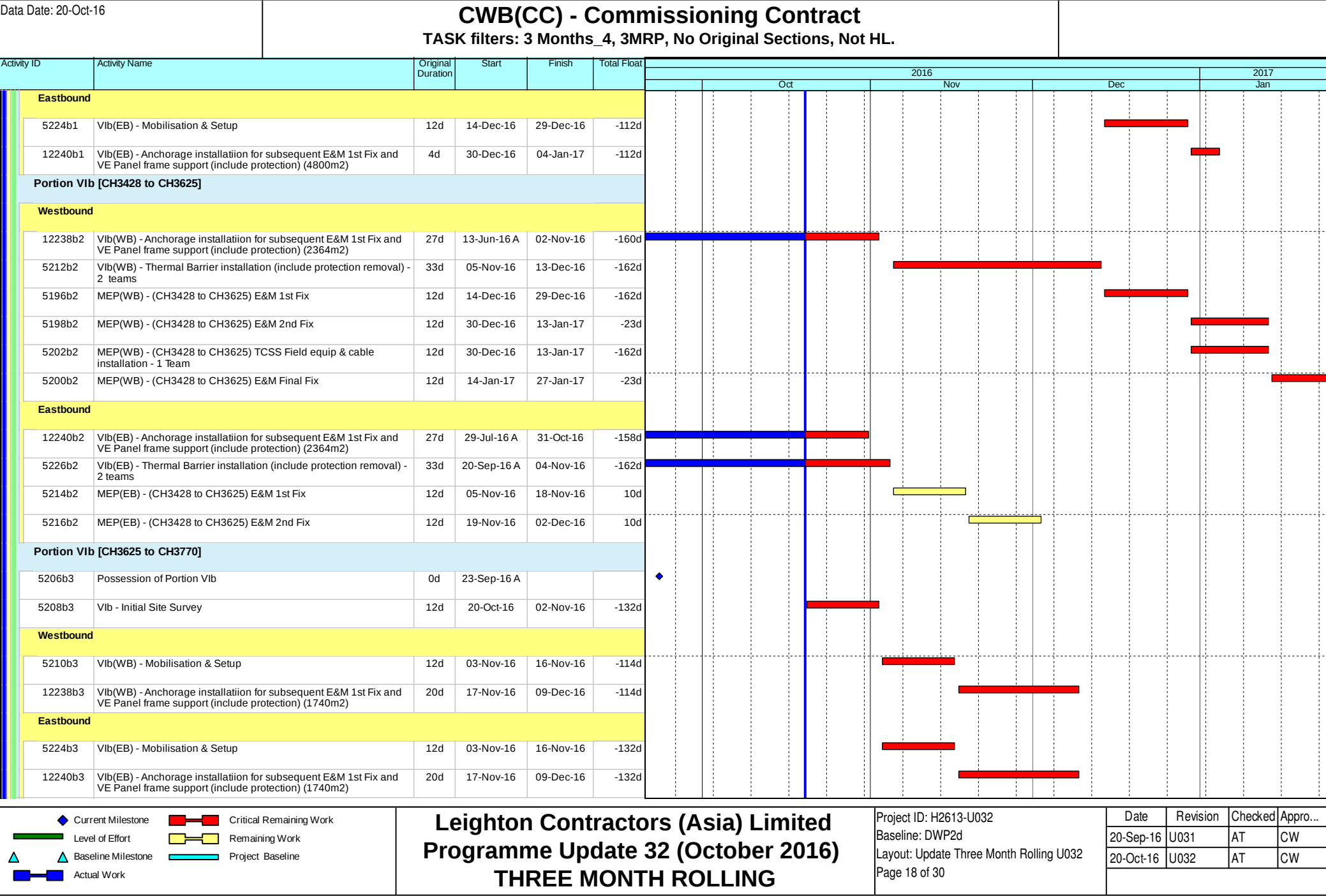


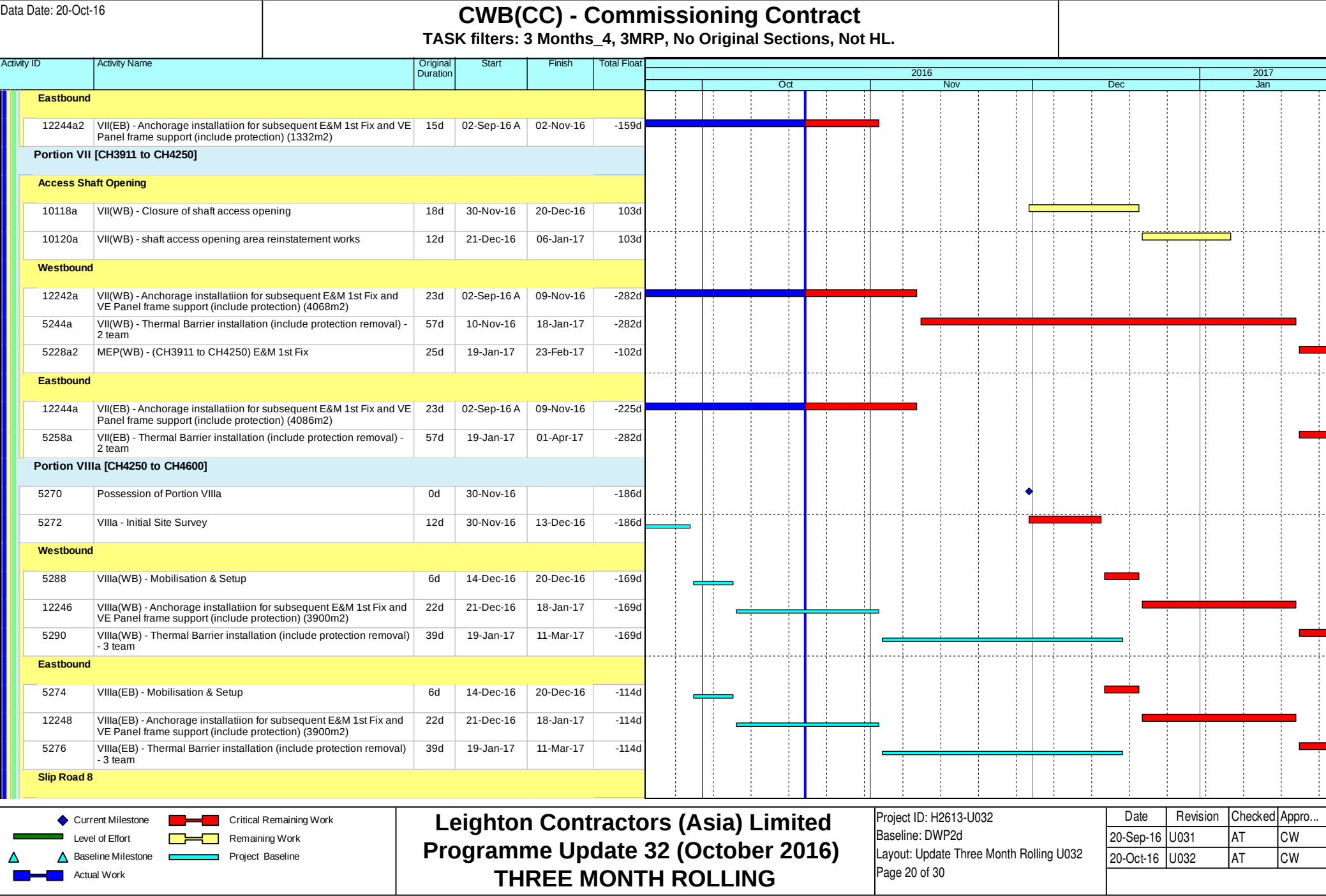


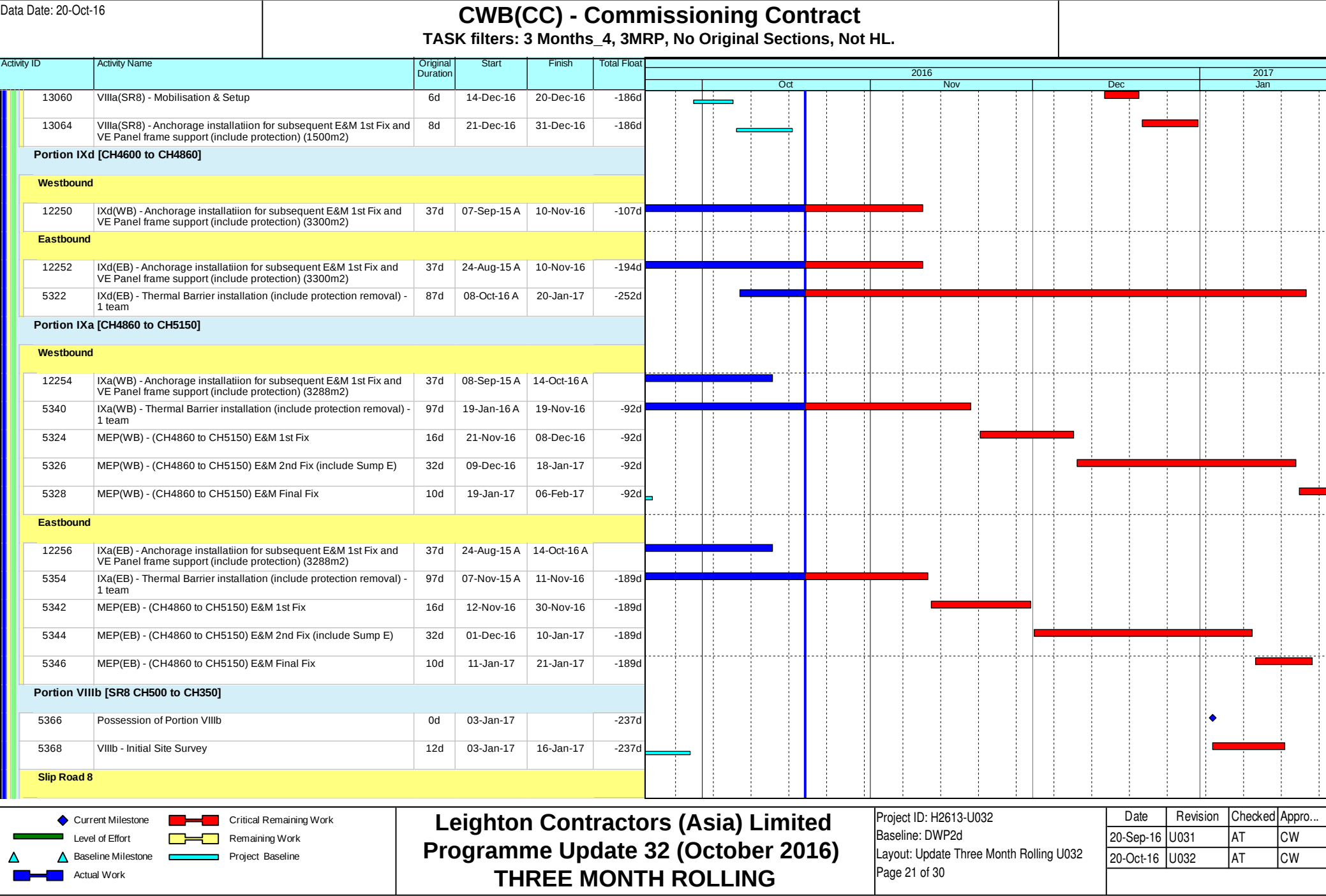


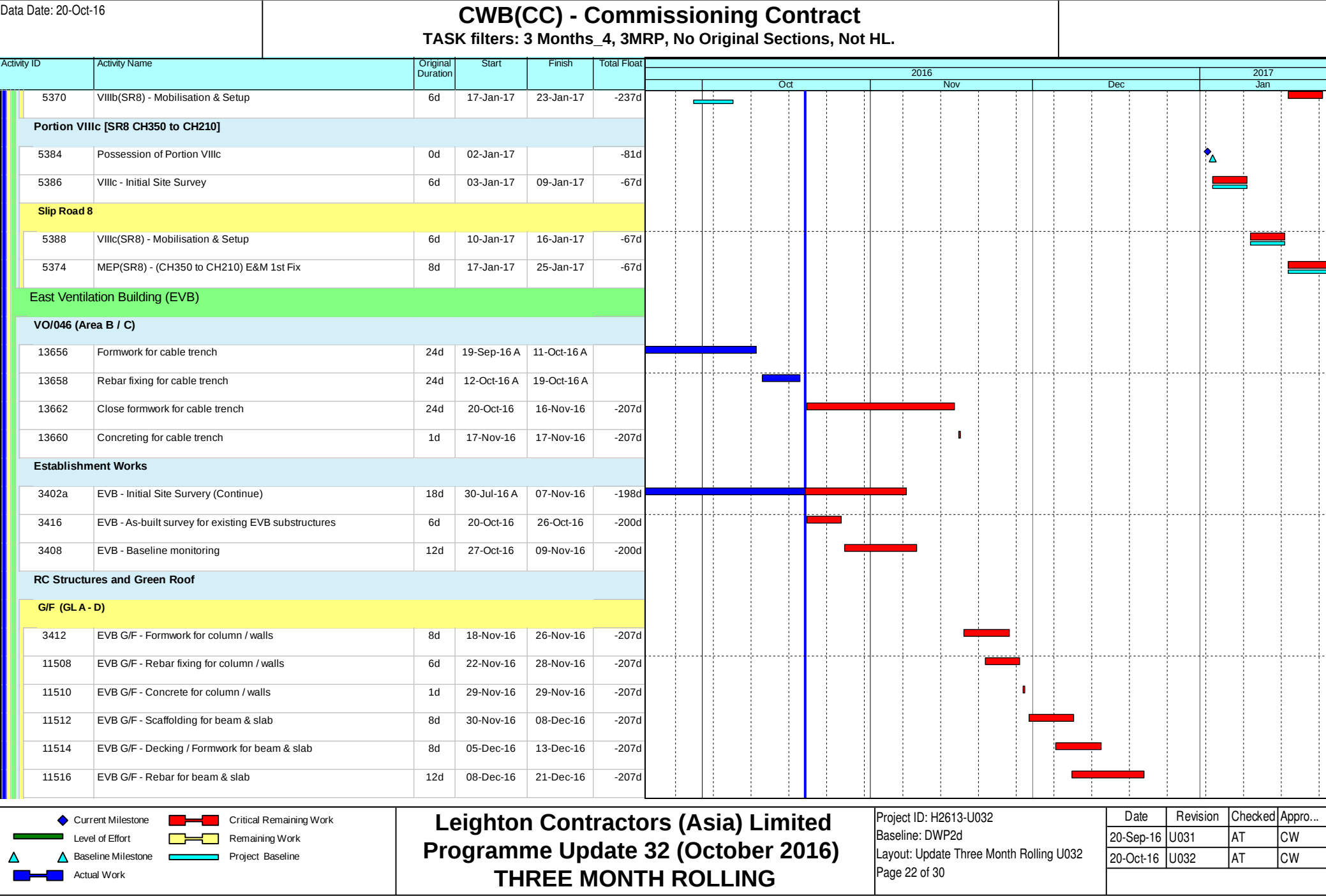




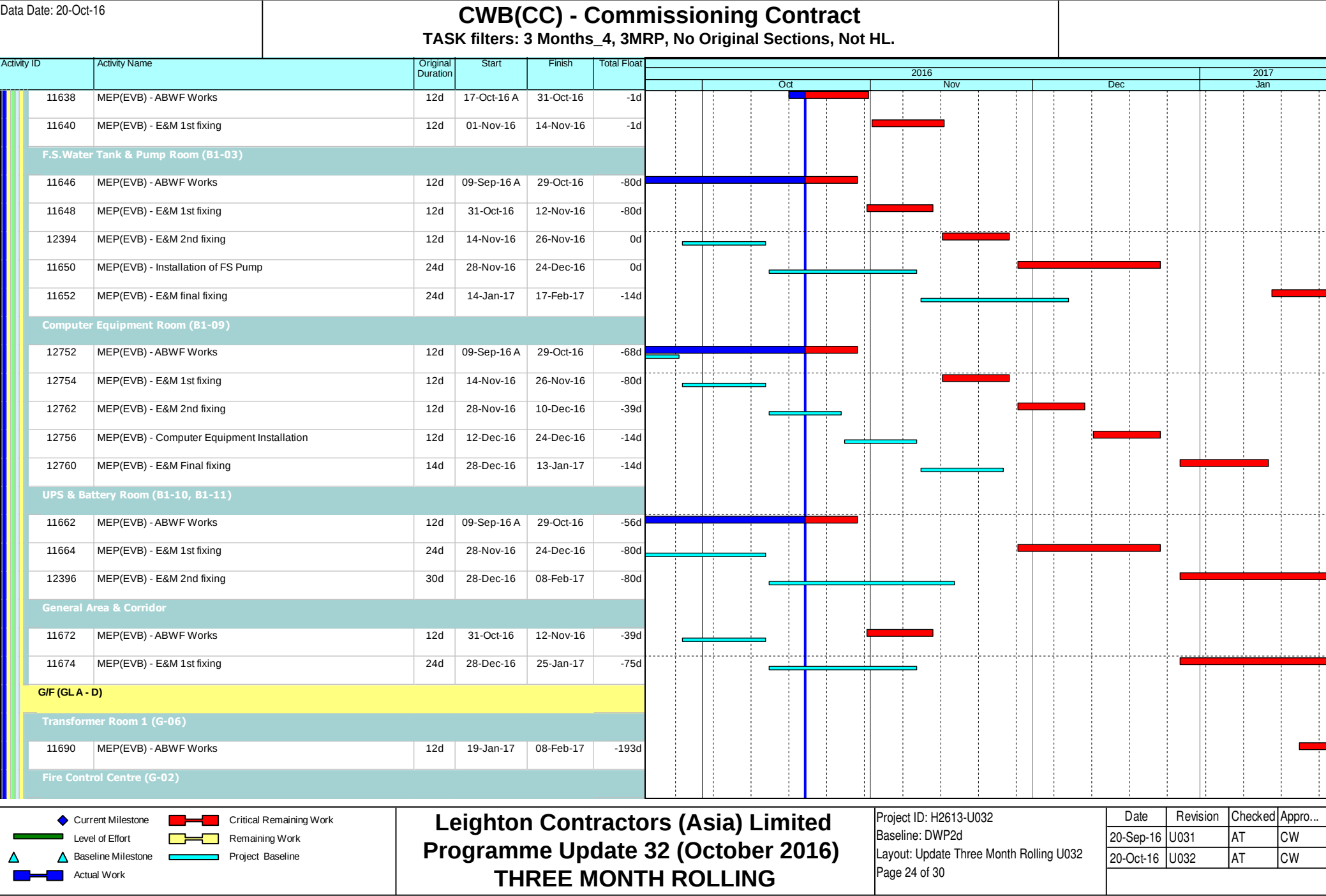


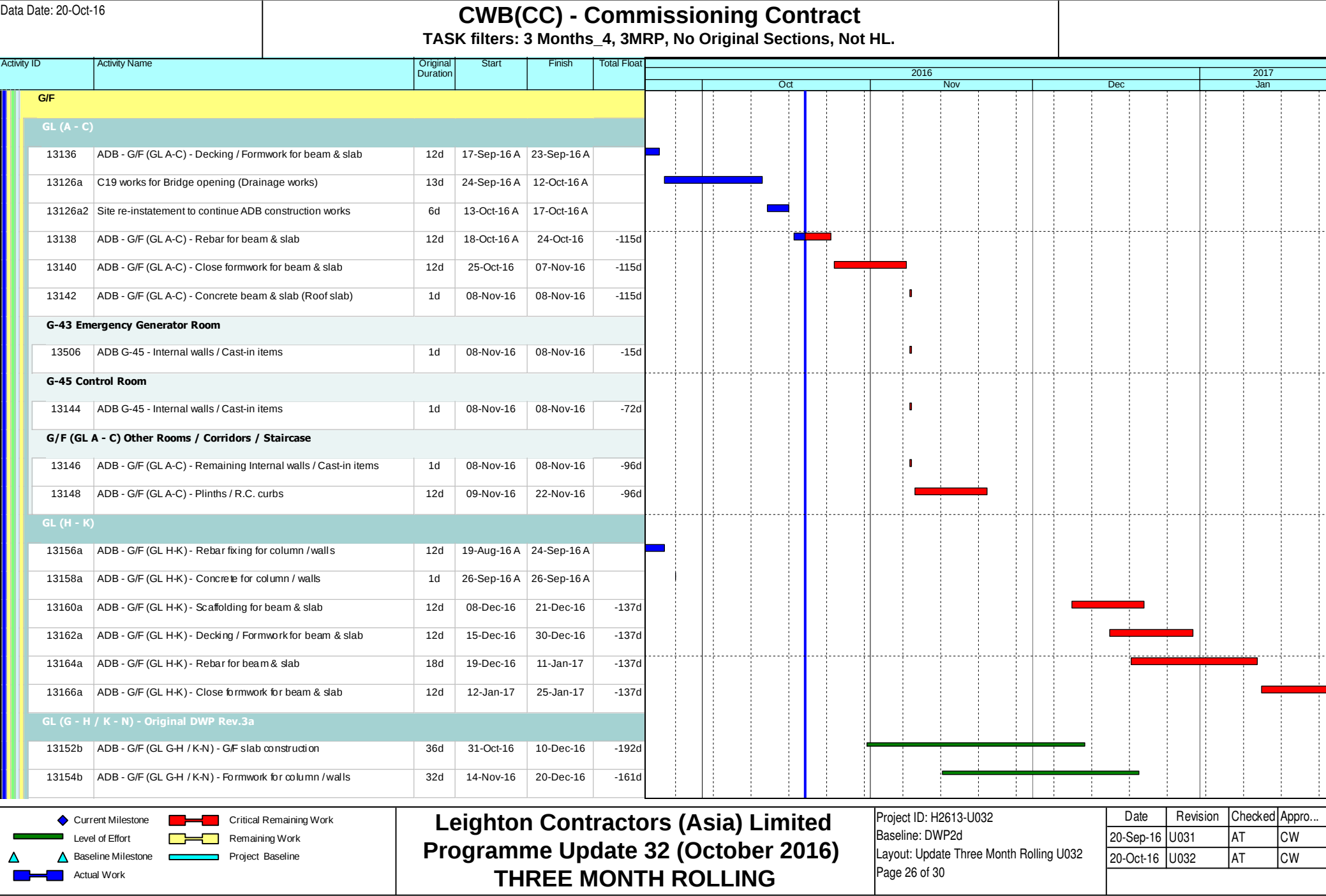


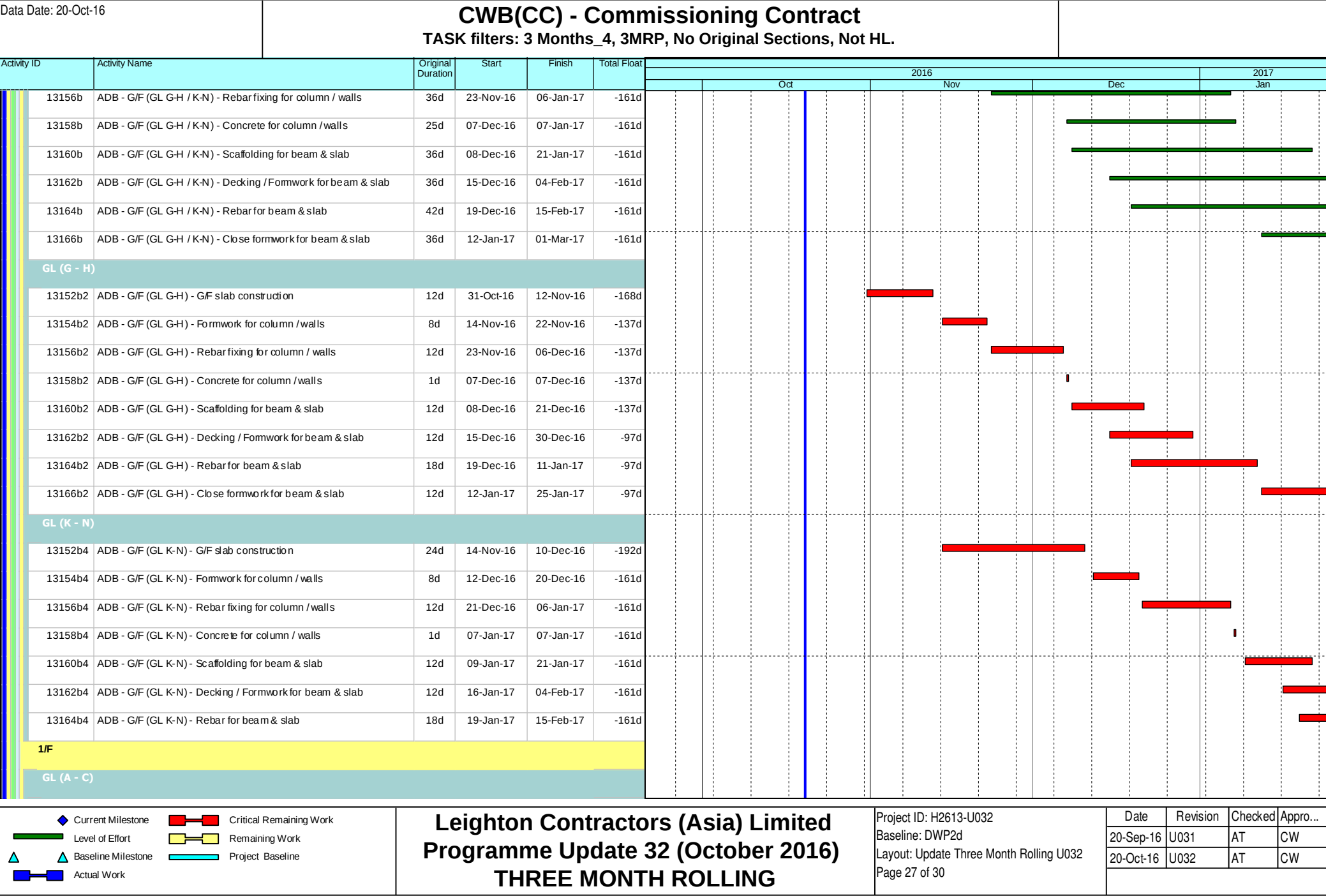




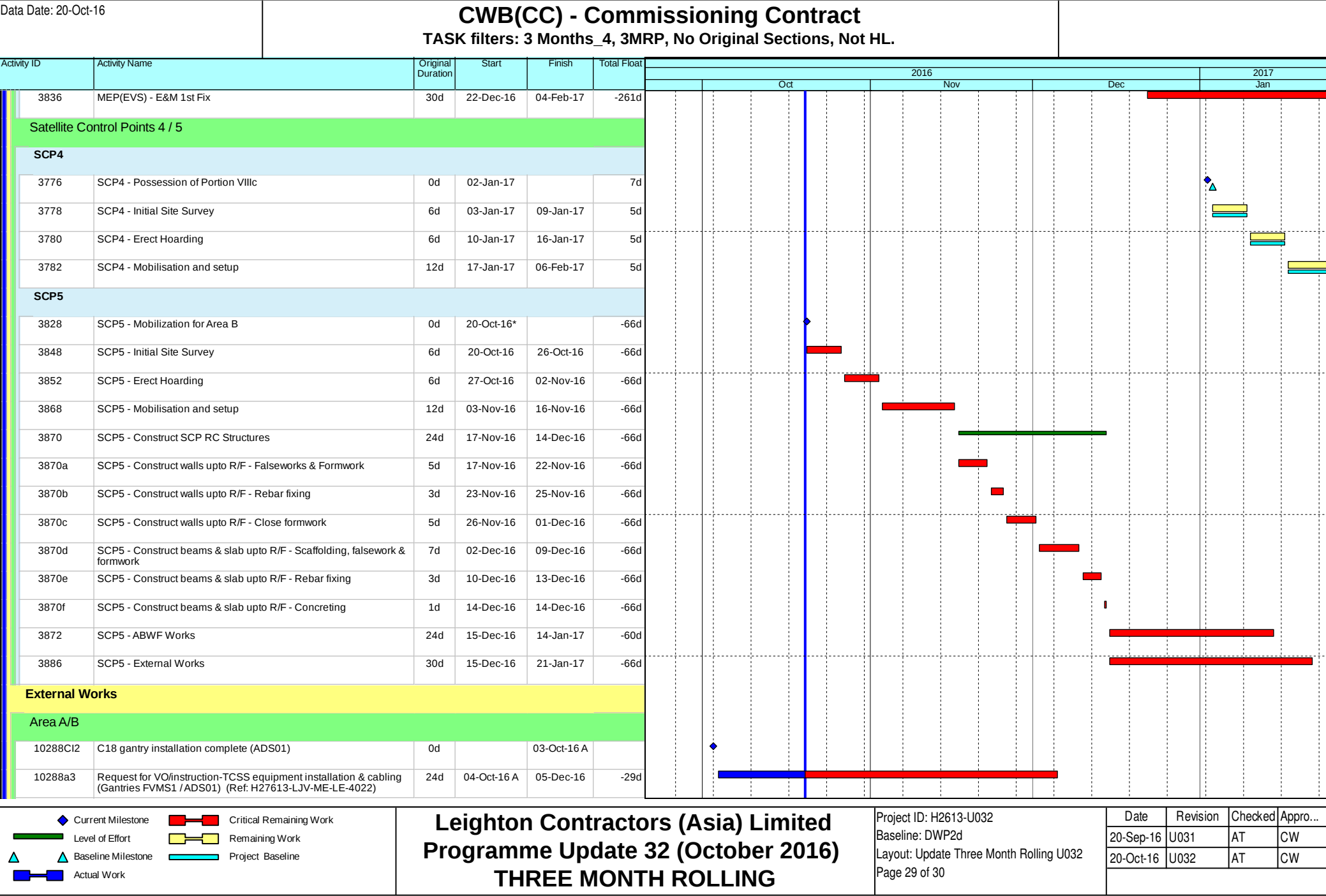
Data Date: 20-Oct-16				CWB(CC) - Commissioning Contract																	
TASK filters: 3 Months_4, 3MRP, No Original Sections, Not HL.																					
Activity ID		Activity Name		Original Duration	Start	Finish	Total Float	2016										2017			
								Oct				Nov			Dec			2017 Jan			
11518		EVB G/F - Close formwork for beam & slab		8d	22-Dec-16	03-Jan-17	-207d														
11520		EVB G/F - Concrete beam & slab		1d	04-Jan-17	04-Jan-17	-207d														
G/F (GL A - D)																					
G-02 Fire Control Centre																					
11550		EVB G-11 - Internal walls / Cast-in items		1d	04-Jan-17	04-Jan-17	-193d														
G-06 Transformer Room 1																					
11544		EVB G-05 - Internal walls / Cast-in items		1d	04-Jan-17	04-Jan-17	-181d														
G-03 Transformer Room 2																					
11538		EVB G-05 - Internal walls / Cast-in items		1d	04-Jan-17	04-Jan-17	-169d														
G-10 HKE/HV Switch Room 1																					
11548		EVB G-07 - Internal walls / Cast-in items		1d	04-Jan-17	04-Jan-17	-167d														
G-07 HKE/HV Switch Room 2																					
11546		EVB G-07 - Internal walls / Cast-in items		1d	04-Jan-17	04-Jan-17	-156d														
G-04 Emergency Generator Room																					
11540		EVB G-04 - Internal walls / Cast-in items		1d	04-Jan-17	04-Jan-17	-163d														
G/F (GL A-D) Other Rooms / Corridors / Staircase																					
11576		EVB G/F (GL A-C) - Remaining Internal walls / Cast-in items		1d	04-Jan-17	04-Jan-17	-129d														
1/F (GL A - D)																					
3422		EVB 1/F - Formwork for column / walls		8d	05-Jan-17	13-Jan-17	-207d														
11524		EVB 1/F - Rebar fixing for column / walls		6d	09-Jan-17	14-Jan-17	-207d														
11526		EVB 1/F - Concrete for column / walls		1d	16-Jan-17	16-Jan-17	-207d														
11528		EVB 1/F - Scaffolding for beam & slab		8d	17-Jan-17	25-Jan-17	-207d														
MEP & ABWF Works																					
Basement 1 (GL L - O)																					
Tunnel F.S.Water Tank & Pump Room (B1-02)																					
◆ Current Milestone Level of Effort ▲ Baseline Milestone Actual Work Critical Remaining Work Remaining Work Project Baseline				Leighton Contractors (Asia) Limited Programme Update 32 (October 2016) THREE MONTH ROLLING										Project ID: H2613-U032 Baseline: DWP2d Layout: Update Three Month Rolling U032 Page 23 of 30				Date	Revision	Checked	Appro...
																		20-Sep-16	U031	AT	CW
																		20-Oct-16	U032	AT	CW







Data Date: 20-Oct-16			CWB(CC) - Commissioning Contract																												
			TASK filters: 3 Months_4, 3MRP, No Original Sections, Not HL.																												
Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	2016												2017													
						Oct			Nov			Dec			Jan																
13202	ADB - 1/F (GL A-C) - Formwork for column / walls	8d	09-Nov-16	17-Nov-16	-115d																										
13204	ADB - 1/F (GL A-C) - Rebar fixing for column / walls	12d	09-Nov-16	22-Nov-16	-115d																										
13206	ADB - 1/F (GL A-C) - Concrete for column / walls	1d	23-Nov-16	23-Nov-16	-113d																										
13208	ADB -1/F (GL A-C) - Scaffolding for beam & slab	12d	24-Nov-16	07-Dec-16	-113d																										
13210	ADB - 1/F (GL A-C) - Decking / Formwork for beam & slab	12d	01-Dec-16	14-Dec-16	-113d																										
13212	ADB - 1/F (GL A-C) - Rebar for beam & slab	12d	05-Dec-16	17-Dec-16	-113d																										
13214	ADB - 1/F (GL A-C) - Close formwork for beam & slab	12d	12-Dec-16	24-Dec-16	-113d																										
13216	ADB - 1/F (GL A-C) - Concrete beam & slab (Roof Slab)	1d	28-Dec-16	28-Dec-16	-113d																										
L1-08 Water Pump Room																															
13578	ADB - L1-09 - Internal walls / Cast-in items	1d	29-Dec-16	29-Dec-16	-78d																										
13580	ADB - L1-09 - Plinths for F.S. Pump	6d	30-Dec-16	06-Jan-17	-78d																										
13582	ADB - L1-09 - Water Tank	20d	07-Jan-17	06-Feb-17	-78d																										
L1-09 F.S. Water Tank & Pump Room																															
13222	ADB - L1-09 - Internal walls / Cast-in items	1d	28-Dec-16	28-Dec-16	-71d																										
13224	ADB - L1-09 - Plinths for F.S. Pump	6d	29-Dec-16	05-Jan-17	-71d																										
13226	ADB - L1-09 - Water Tank	20d	06-Jan-17	04-Feb-17	-71d																										
1/F (GL A - D) Other Rooms / Corridors / Staircase																															
13218	ADB - 1/F (GL A-C) - Remaining Internal walls / Cast-in items	1d	28-Dec-16	28-Dec-16	-75d																										
13220	ADB - 1/F (GL A-C) - Plinths / R.C. curbs	30d	29-Dec-16	09-Feb-17	-75d																										
Administration Building (ADB) - Original in DWP 2d																															
East Ventilation Shaft (EVS)																															
ABWF Works																															
3826	EVS - ABWF (Dry Trade)	60d	22-Dec-16	11-Mar-17	-249d																										
MEP Works																															
3834	MEP(EVS) - E&M Start	0d	22-Dec-16		-261d																										
◆ Current Milestone ■ Level of Effort ▲ Baseline Milestone ■ Actual Work ■ Critical Remaining Work ■ Remaining Work ■ Project Baseline						Leighton Contractors (Asia) Limited Programme Update 32 (October 2016) THREE MONTH ROLLING						Project ID: H2613-U032 Baseline: DWP2d Layout: Update Three Month Rolling U032 Page 28 of 30						<table><tr><th>Date</th><th>Revision</th><th>Checked</th><th>Appro...</th></tr><tr><td>20-Sep-16</td><td>U031</td><td>AT</td><td>CW</td></tr><tr><td>20-Oct-16</td><td>U032</td><td>AT</td><td>CW</td></tr></table>		Date	Revision	Checked	Appro...	20-Sep-16	U031	AT	CW	20-Oct-16	U032	AT	CW
Date	Revision	Checked	Appro...																												
20-Sep-16	U031	AT	CW																												
20-Oct-16	U032	AT	CW																												



Data Date: 20-Oct-16			CWB(CC) - Commissioning Contract TASK filters: 3 Months_4, 3MRP, No Original Sections, Not HL.																
Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	2016												2017	
						Oct				Nov				Dec				Jan	
10288CI1	C18 gantry installation complete (FVMS 1)	0d		01-Nov-16*	0d														
10288b1	Area B TCSS equipment installation and cabling (on IEC's Westbound)	72d	01-Dec-16	04-Mar-17	36d														
10288c	Area B Install Tunnel Lighting / Noise Enclosure night time Lighting Brackets/Cable Containment	48d	01-Dec-16	04-Feb-17	-55d														
10288f	C19 allow access at Area B	0d	01-Dec-16*		-55d														
10288b2	Area B TCSS equipment installation and cabling (on IEC's Eastbound)	72d	01-Dec-16	04-Mar-17	36d														
10288a1	Area A TCSS equipment installation and cabling (Gantry FVMS 1) - After C18 gantry installation complete	40d	06-Dec-16	24-Jan-17	-29d														
10288a2	Area A TCSS equipment installation and cabling (Gantry ADS01) - Start date is tentative and to be confirmed	40d	06-Dec-16	24-Jan-17	-29d														

Activity ID	Activity Name	Rem Dur	Start	Finish	2016														
					18	25	02	09	16	23	30	06	13	20	27	04	11	18	25
3MRP - Sept 2016 to Dec 2016		184	20-Jun-15 A	29-Apr-17															
02 - PRE-CONSTRUCTION WORKS		184	20-Jun-15 A	29-Apr-17															
02.3 - Method Statement / Shop Drawings		76	20-Jun-15 A	04-Dec-16															
0230-1380	MS Landscape Deck Structure - Submission	11	20-Jun-15 A	01-Oct-16	MS Landscape Deck Structure - Submission														
0230-1390	MS Landscape Deck Structure - ER Review & Comment	28	01-Oct-16	29-Oct-16	MS Landscape Deck Structure - ER Review & Comment														
0230-1400	MS Landscape Deck Structure - Resubmission	28	29-Oct-16	26-Nov-16	MS Landscape Deck Structure - Resubmission														
0240-1230	HGHK Carpark - Application for BD Consent (BA8)	0	21-Jun-16 A	16-Aug-16 A															
0240-1240	HGHK Carpark - BD Consent Received	0		16-Aug-16 A															
0240-1241	HGHK Carpark - Resubmit ammended Design as Req'd by HGHK to change 900H to 2400H boundary wall at Phase II (by AECOM)	12	20-Sep-16*	01-Oct-16	HGHK Carpark - Resubmit ammended Design as Req'd by HGHK to change 900H to 2400H boundary wall at Phase II (by AECOM)														
0240-1250	HGHK Carpark - Commencement Notification to BD (BA10)(A&A Works)	12	17-Aug-16 A	01-Oct-16	HGHK Carpark - Commencement Notification to BD (BA10)(A&A Works)														
0240-1270	Landscaping Design - Submission	20	20-Apr-16 A	09-Oct-16	Landscaping Design - Submission														
0240-1280	Landscaping Design - ER Review/Resubmission	28	10-Oct-16	06-Nov-16	Landscaping Design - ER Review/Resubmission														
0240-1290	Landscaping Design - ER Approval	28	07-Nov-16	04-Dec-16	Landscaping Design - ER Approval														
0240-1298	Green Roof Minimum 2 years Establishment - Start	0	15-Oct-16		Green Roof Minimum 2 years Establishment - Start														
0240-2460	MS for for trial erection of green roof - Resubmission	10	04-Apr-16 A	29-Sep-16	MS for for trial erection of green roof - Resubmission														
0240-2470	MS for for trial erection of green roof - No Adverse Comment	15	30-Sep-16	14-Oct-16	MS for for trial erection of green roof - No Adverse Comment														
A2050	MS for Dismantling of LG-A at Pier 44-46 - Submission	0	25-Jul-16 A	29-Jul-16 A	MS for Dismantling of LG-A at Pier 44-46 - Submission														
A2060	MS for Dismantling of LG-A at Pier 44-46 - ER Review / Comment	0	20-Aug-16 A	25-Aug-16 A	MS for Dismantling of LG-A at Pier 44-46 - ER Review / Comment														
A2070	MS for Dismantling of LG-A at Pier 44-46 - Resubmission	0	26-Aug-16 A	31-Aug-16 A	MS for Dismantling of LG-A at Pier 44-46 - Resubmission														
A2080	MS for Dismantling of LG-A at Pier 44-46 - No Adverse Comment	0	01-Sep-16 A	06-Sep-16 A	MS for Dismantling of LG-A at Pier 44-46 - No Adverse Comment														
A2090	MS for Demolition Eastbound Bridge - Submission	6	20-Sep-16*	25-Sep-16	MS for Demolition Eastbound Bridge - Submission														
A2100	MS for Demolition Eastbound Bridge - ER Review / Comment	6	26-Sep-16	01-Oct-16	MS for Demolition Eastbound Bridge - ER Review / Comment														
A2110	MS for Demolition Eastbound Bridge - Resubmission	6	02-Oct-16	07-Oct-16	MS for Demolition Eastbound Bridge - Resubmission														
A2120	MS for Demolition Eastbound Bridge - No Adverse Comment	6	08-Oct-16	13-Oct-16	MS for Demolition Eastbound Bridge - No Adverse Comment														
A3200	MS for LG-BM Assembly at Pier(F8B - F9B) - Submission	9	19-Sep-16 A	28-Sep-16	MS for LG-BM Assembly at Pier(F8B - F9B) - Submission														
A3210	MS for LG-BM Assembly at Pier(F8B - F9B) - ER Review / Comment	6	29-Sep-16	04-Oct-16	MS for LG-BM Assembly at Pier(F8B - F9B) - ER Review / Comment														
A3220	MS for LG-BM Assembly at Pier(F8B - F9B) - Resubmission	6	05-Oct-16	10-Oct-16	MS for LG-BM Assembly at Pier(F8B - F9B) - Resubmission														
A3230	MS for LG-BM Assembly at Pier(F8B - F9B) - No Adverse Comment	6	11-Oct-16	16-Oct-16	MS for LG-BM Assembly at Pier(F8B - F9B) - No Adverse Comment														
02.5 - Bridge Segment/Beam Off-site Precasting		184	26-Aug-16 A	29-Apr-17															
0250-3980	Bridge F2B - Pier F5B Segment - 6 nos. (S2) - Mould 2	4	26-Aug-16 A	23-Sep-16	Bridge F2B - Pier F5B Segment - 6 nos. (S2) - Mould 2														
0250-4000	Bridge F3B - Pier F5B Segment - 6 nos. (S2) - Mould 2	17	24-Sep-16	15-Oct-16	Bridge F3B - Pier F5B Segment - 6 nos. (S2) - Mould 2														
0250-4010	Bridge F3B - Pier F8B Segment - 6 nos. (S2) - Mould 2	19	17-Oct-16	07-Nov-16	Bridge F3B - Pier F8B Segment - 6 nos. (S2) - Mould 2														
0250-4015	Bridge F2B - Pier F3B2 Segment - 5 nos. (S2) - Mould 2	20	08-Nov-16	30-Nov-16	Bridge F2B - Pier F3B2 Segment - 5 nos. (S2) - Mould 2														
0250-4040	Bridge F3B - Pier F7B Segment - 11 nos. (S1) - Mould 1	32	17-Oct-16*	22-Nov-16	Bridge F3B - Pier F7B Segment - 11 nos. (S1) - Mould 1														
0250-4045	Bridge F3B - Pier F6B Segment - 13 nos. (S2) - Mould 1	37	23-Nov-16	04-Jan-17	Bridge F3B - Pier F6B Segment - 13 nos. (S2) - Mould 1														
0250-4110	Bridge F1B1 - Pier F2B1 Segment - 11 nos. (T) - Mould 3	28	24-Jan-17	27-Feb-17	Bridge F1B1 - Pier F2B1 Segment - 11 nos. (T) - Mould 3														
0250-4115	Bridge F1B1 - Pier F1B1 Segment - 13 nos. (T) - Mould 3	32	28-Feb-17	06-Apr-17	Bridge F1B1 - Pier F1B1 Segment - 13 nos. (T) - Mould 3														

Activity ID	Activity Name	Rem Dur	Start	Finish	2016														
					October					November					December				
					18	25	02	09	16	23	30	06	13	20	27	04	11	18	25
0250-4120	Bridge F1B1 - Abut D12 Segment - 5 nos. (T) - Mould 3	18	07-Apr-17	29-Apr-17															
05 - SECTION 2 & 2A OF THE WORKS		70	01-Dec-15 A	12-Dec-16															
05.1 - Cut & Cover Tunnel Ch 4855-4932 (APS Footprint)		70	01-Dec-15 A	12-Dec-16															
05.1.6 - EVB Sub-structure & Tunnel		70	01-Dec-15 A	12-Dec-16															
05.1.6 - EVB Outstanding Works		70	12-May-16 A	12-Dec-16															
0515-3099	Complete EVB Outstanding Works	0		12-Dec-16*															◆ Complete EVB Outs
0710-0900	Water proofing system (external) - Stage 1	0	12-May-16 A	25-Aug-16 A															
0710-1000	Backfill (N46-64/S48-67) for East Vent Bldg - Stage 1	0	27-Jun-16 A	26-Aug-16 A															
A1960	Reinstate the temporary opening	27	20-Sep-16	22-Oct-16															
A1961	Water proofing system (external) - Stage 2	0	02-Sep-16 A	10-Sep-16 A															
A1962	Backfill (N46-64/S48-67) for East Vent Bldg - Stage 2	32	20-Sep-16	28-Oct-16															
A1963	Concrete paving / Finishing surface	5	29-Oct-16	03-Nov-16															
A1980	Remove of temporary sheet pile cover	14	26-Sep-16	13-Oct-16															
A1990	Water proofing system (internal)	24	05-Aug-16 A	19-Oct-16															
05.1.7 - EVB & Tunnel Remedial Works		70	01-Dec-15 A	12-Dec-16															
A2030	Tunnel - Pump Sump E > Rectification of Reserve Pipe & Gen Cleaning Works	0	22-Aug-16 A	31-Aug-16 A															
A2032	Tunnel - Pump Sump E > Coring works for rectify the inclination of reserve pipe	5	22-Aug-16 A	24-Sep-16															
A2040	Tunnel - OHVD (Eastern Side) > Rectification of Water Seepage	70	15-May-16 A	12-Dec-16															
A2250	Tunnel - OHVD (Western Side) > Rectification of Structural Concrete Defect	0	25-May-16 A	15-Sep-16 A															
A2260	Tunnel - OHVD (Western Side) > Rectification of Water Seepage	70	24-Jun-16 A	12-Dec-16															
A2270	Tunnel - APS > Rectification of Structural Concrete Defect & Gen Cleaning Works	34	01-Jul-16 A	31-Oct-16															
A2280	EVB - Rectification of Structural Defects at Stairs 03	10	05-Aug-16 A	30-Sep-16															
A2290	EVB - Rectification of Structural Defects at Stairs 01	9	01-Sep-16 A	29-Sep-16															
A2300	EVB - Rectification of Structural Defects at Stairs 02	16	01-Dec-15 A	08-Oct-16															
A2310	EVB - (Western Side) > Rectification of Structural Concrete Defect & Gen Cleaning Works	10	01-May-16 A	30-Sep-16															
A2320	EVB - (Eastern Side) > Rectification of Structural Concrete Defect & Gen Cleaning Works	25	01-May-16 A	20-Oct-16															
A2330	EVB - Rectification of Defects to Water Tanks	10	01-May-16 A	30-Sep-16															
09 - SECTION 6 OF THE WORKS		63	08-Oct-16	22-Dec-16															
09.1 - Carparks for Harbour Grand Hong Kong		63	08-Oct-16	22-Dec-16															
0910-1003	HGHK Carpark Work Commenced	0		08-Oct-16															
0910-1007	Demo > Gen Clearance, Plant/Tile/Slab Removal (Part 1)	7	11-Oct-16	18-Oct-16															
0910-1007.1	Drainage Construction	10	19-Oct-16	29-Oct-16															
0910-1007.2	E&M Manhole Const. and Waterpipe Installations	5	31-Oct-16	04-Nov-16															
0910-1007.3	3000H Feature Wall (RC)	10	05-Nov-16	16-Nov-16															
0910-1007.4	900H Boundary Wall (RC)	8	05-Nov-16	14-Nov-16															
0910-1007.5	Planter Box (RC)	10	05-Nov-16	16-Nov-16															
0910-1010	Carprk Base Slab Works (Partial - Portion IVB)	18	17-Nov-16	07-Dec-16															

Activity ID	Activity Name	Rem Dur	Start	Finish	2016														
								October				November					December		
					18	25	02	09	16	23	30	06	13	20	27	04	11	18	25
0910-1050	Demo > Gen Clearance, Plant/Tile/Slab Removal (Part II)	9	02-Nov-16	11-Nov-16															
0910-1050.1	Drainage Construction	6	06-Dec-16	12-Dec-16															
0910-1050.2	E&M Manhole Const. and Waterpipe Installations	3	13-Dec-16	15-Dec-16															
0910-1050.3	3000H Feature Wall (RC)	6	16-Dec-16	22-Dec-16															
0910-1050.4	2400H Boundary Wall (RC)	6	16-Dec-16	22-Dec-16															
0910-1050.5	Planter Box (RC)	6	16-Dec-16	22-Dec-16															
10 - SECTION X OF THE WORKS		86	20-Jun-16 A	30-Dec-16															
10.2 - WB Bridges (Bridge C and F)		41	20-Jun-16 A	08-Nov-16															
10.2.1 - Tie Beam & Pile Caps Extension		20	16-Jul-16 A	14-Oct-16															
1021-2300	Pier 26 > Pile Cap Ext. - Excavation & ELS Works	0	08-Aug-16 A	17-Aug-16 A															
1021-2320	Pier 26 > Pile Cap Ext. - Post Drilling & Rebar Fixing Works	0	18-Aug-16 A	01-Sep-16 A															
1021-2330	Pier 26 > Pile Cap Ext. - Formworks & Concreting Works	0	02-Sep-16 A	08-Sep-16 A															
1021-2340	Pier 26 > Pile Cap Ext. - Remove Fwk & Backfilling	0	09-Sep-16 A	13-Sep-16 A															
1021-2360	Pier 26 > Tie Beam. - Post Drilling & Rebar Fixing Works	0	16-Jul-16 A	30-Jul-16 A															
1021-2370	Pier 26 > Tie Beam. - Formworks & Concreting Works	0	28-Jul-16 A	10-Aug-16 A															
1021-2380	Pier 26 > Tie Beam. - Remove Fwk & Backfilling	0	11-Aug-16 A	27-Aug-16 A															
A1950	Pier 23 > Tie Beam. - Remove Fwk & Backfilling	4	11-Oct-16	14-Oct-16															
A2140	Pier 25 > Tie Beam. - Post Drilling & Rebar Fixing Works	5	12-Sep-16 A	24-Sep-16															
A2150	Pier 25 > Tie Beam. - Formworks & Concreting Works	4	26-Sep-16	29-Sep-16															
A2160	Pier 25 > Tie Beam. - Remove Fwk & Backfilling	4	30-Sep-16	05-Oct-16															
A2170	Pier 22 > Tie Beam - Excavation & ELS Works	5	19-Sep-16 A	24-Sep-16															
A2180	Pier 22 > Tie Beam. - Post Drilling & Rebar Fixing Works	7	26-Sep-16	04-Oct-16															
A2190	Pier 22 > Tie Beam. - Formworks & Concreting Works	4	05-Oct-16	08-Oct-16															
A2200	Pier 22 > Tie Beam. - Remove Fwk & Backfilling	4	11-Oct-16	14-Oct-16															
A2240	Pier 24 > Tie Beam. - Remove Fwk & Backfilling	4	20-Sep-16	23-Sep-16															
10.2.3 - Bridge Construction		41	20-Jun-16 A	08-Nov-16															
Bridge C1		41	20-Jun-16 A	08-Nov-16															
1022-1004	Bridge C1 - Construct Int. Single Noise Encl. (South) Pier 17-22 Stage 0 - Base Plate & Main Post	8	05-Sep-16 A	28-Sep-16															
1022-1004.2	Bridge C1 - Construct Int. Single Noise Encl. (South) Pier 17-22 Stage 0 - Secondary Farnes & Panels (Vertical)	12	09-Sep-16 A	04-Oct-16															
1022-2754	Bridge C1 - Construction (Pier 21- 22)-Part 1 > Construct Parapet (North & South)	0	20-Jun-16 A	15-Aug-16 A															
1022-2756	Bridge C1 - Construction (Pier 21-22) > Install MJ at Pier 22	5	17-Sep-16 A	24-Sep-16															
1022-3100	Bridge C1 - Construct North Parapet Pier 19-20 W/B	14	24-Oct-16	08-Nov-16															
A2440	Pier 21 - MJ (remaining small part at wing extension)	3	17-Sep-16 A	22-Sep-16															
Bridge C2		27	02-Sep-16 A	22-Oct-16															
1022-4120	Bridge C2 - Construct Int. Single Noise Encl. Bridge C2 - Excl. Pier 25-22 - Base Plate & Main Post	3	17-Sep-16 A	22-Sep-16															
1022-4120.2	Bridge C2 - Construct Int. Single Noise Encl. Bridge C2 - Excl. Pier 25-22 - Secondary Farnes & Panels(50%)	9	21-Sep-16	30-Sep-16															
1022-4120.3	Bridge C2 - Construct Int. Single Noise Encl. Bridge C2 - Excl. Pier 25-22 - Complete Panel Installation	17	03-Oct-16	22-Oct-16															

Activity ID	Activity Name	Rem Dur	Start	Finish	2016														
					October					November					December				
					18	25	02	09	16	23	30	06	13	20	27	04	11	18	25
1022-4140	Bridge C2 + C1 Deck Road Waterproofing, Surfacing & Marking	4	11-Oct-16	14-Oct-16	Bridge C2 + C1 Deck Road Waterproofing, Surfacing & Marking														
A2390	Pier 25 - MJ	12	02-Sep-16 A	04-Oct-16	Pier 25 - MJ														
Bridge C3		27	20-Aug-16 A	22-Oct-16															
1022-4110.4	Bridge C3 - Construct Parapet at Temporay access/Opening	2	12-Sep-16 A	21-Sep-16	Bridge C3 - Construct Parapet at Temporay access/Opening														
1022-4110.5	Bridge C3 - Construct Int. Single Noise Encl. Bridge C3 - Base Plate & Main Post - Part 2	5	08-Sep-16 A	24-Sep-16	Bridge C3 - Construct Int. Single Noise Encl. Bridge C3 - Base Plate & Main Post - Part 2														
1022-4110.6	Bridge C3 - Construct Int. Single Noise Encl. Bridge C3 - Main Frames - Part 2	7	08-Sep-16 A	27-Sep-16	Bridge C3 - Construct Int. Single Noise Encl. Bridge C3 - Main Frames - Part 2														
1022-4110.7	Bridge C3 - Construct Int. Single Noise Encl. Bridge C3 - Secondary Farnes & Panels - Part 2	20	28-Sep-16	22-Oct-16	Bridge C3 - Construct Int. Single Noise Encl. Bridge C3 - Secondary Farnes & Panels - Part 2														
1022-4111	Bridge C3 - Deck Road Waterproofing, Surfacing & Marking	4	11-Oct-16	14-Oct-16	Bridge C3 - Deck Road Waterproofing, Surfacing & Marking														
A2380	Pier 28 - MJ	3	20-Aug-16 A	22-Sep-16	Pier 28 - MJ														
Bridge C4		5	26-Sep-16	30-Sep-16															
1022-1564	Bridge C4 - Deck Road Waterproofing, Surfacing & Marking	5	26-Sep-16	30-Sep-16	Bridge C4 - Deck Road Waterproofing, Surfacing & Marking														
Bridge C5		5	26-Sep-16	30-Sep-16															
1022-3954	Bridge C5 - Deck Road Waterproofing, Surfacing & Marking	5	26-Sep-16	30-Sep-16	Bridge C5 - Deck Road Waterproofing, Surfacing & Marking														
Bridge F1C		13	27-Aug-16 A	05-Oct-16															
1022.1-4248	Bridge F1C - Construct Int. Double Noise Encl. Bridge F1C - Main Frames	2	27-Aug-16 A	21-Sep-16	Bridge F1C - Construct Int. Double Noise Encl. Bridge F1C - Main Frames														
1022.1-4249	Bridge F1C - Construct Int. Double Noise Encl. Bridge F1C - Secondary Farnes & Panels	13	02-Sep-16 A	05-Oct-16	Bridge F1C - Construct Int. Double Noise Encl. Bridge F1C - Secondary Farnes & Panels														
1022.1-4251	Bridge F1C - Bridge F1C Deck Road Waterproofing, Surfacing & Marking	3	03-Oct-16	05-Oct-16	Bridge F1C - Bridge F1C Deck Road Waterproofing, Surfacing & Marking														
Bridge F2C		16	29-Aug-16 A	08-Oct-16															
1022.1-4363.1	Bridge F2C - Construct Int. Double Noise Encl. (54m) - Base Plate & Main Post	9	29-Aug-16 A	29-Sep-16	Bridge F2C - Construct Int. Double Noise Encl. (54m) - Base Plate & Main Post														
1022.1-4363.2	Bridge F2C - Construct Int. Double Noise Encl. (54m) - Main Frames	10	05-Sep-16 A	30-Sep-16	Bridge F2C - Construct Int. Double Noise Encl. (54m) - Main Frames														
1022.1-4363.3	Bridge F2C - Construct Int. Double Noise Encl. (54m) - Secondary Farnes & Panels	16	12-Sep-16 A	08-Oct-16	Bridge F2C - Construct Int. Double Noise Encl. (54m) - Secondary Farnes & Panels														
1022.1-4369	Bridge F2C - Deck Road Waterproofing, Surfacing & Marking	3	03-Oct-16	05-Oct-16	Bridge F2C - Deck Road Waterproofing, Surfacing & Marking														
Bridge F3C		27	25-Aug-16 A	22-Oct-16															
1022.1-4525	Bridge F3C - Construct South Parapet (83m)	2	25-Aug-16 A	21-Sep-16	Bridge F3C - Construct South Parapet (83m)														
1022.1-4530	Bridge F3C - Construct Int. Double Noise Encl. Bridge F3C (83m) - Steel Structure	8	22-Sep-16	30-Sep-16	Bridge F3C - Construct Int. Double Noise Encl. Bridge F3C (83m) - Steel Structure														
1022.1-4531	Bridge F3C - Construct Int. Double Noise Encl. Bridge F3C (83m) - Panel Installation	17	03-Oct-16	22-Oct-16	Bridge F3C - Construct Int. Double Noise Encl. Bridge F3C (83m) - Panel Installation														
1022.1-4535	Bridge F3C - Deck Road Waterproofing, Surfacing & Marking	3	06-Oct-16	08-Oct-16	Bridge F3C - Deck Road Waterproofing, Surfacing & Marking														
A2350	Pier 40 - MJ	2	06-Sep-16 A	21-Sep-16	Pier 40 - MJ														
Bridge F5		16	14-Sep-16 A	08-Oct-16															
1022.1-5020	Bridge F5 - W/B Construct Parapet (landside) (24/6m, 2 set @ 3d)	7	22-Sep-16	29-Sep-16	Bridge F5 - W/B Construct Parapet (landside) (24/6m, 2 set @ 3d)														
1022.1-5021	Pier 43 & 44 MJ	5	14-Sep-16 A	24-Sep-16	Pier 43 & 44 MJ														
1022.1-5025	Bridge F5 - W/B Road Surfacing & Marking	3	06-Oct-16	08-Oct-16	Bridge F5 - W/B Road Surfacing & Marking														
All W/B Bridges (Common)		15	01-Jul-16 A	07-Oct-16															
A2450	Instalation of L3 Railings (Bridge C4 - C5)	10	05-Sep-16 A	30-Sep-16	Instalation of L3 Railings (Bridge C4 - C5)														
A2460	Instalation of L3 Railings (Bridge F1C - F5)	14	20-Sep-16	06-Oct-16	Instalation of L3 Railings (Bridge F1C - F5)														
A2470	Instalation of L3 Railings (Bridge C3 - C1)	14	17-Sep-16 A	06-Oct-16	Instalation of L3 Railings (Bridge C3 - C1)														
A2490	Installation of Watermains and Fire Hydrant at WB Bridge	7	01-Jul-16 A	27-Sep-16	Installation of Watermains and Fire Hydrant at WB Bridge														

Activity ID	Activity Name	Rem Dur	Start	Finish	2016														
					October					November					December				
					18	25	02	09	16	23	30	06	13	20	27	04	11	18	25
A2500	Testing of Watermains and Fire Hydrant at WB Bridge	6	28-Sep-16	05-Oct-16	Testing of Watermains and Fire Hydrant at WB Bridge														
A2510	Lighting Installation (Bridge C4 - C5)	8	20-Sep-16	28-Sep-16	Lighting Installation (Bridge C4 - C5)														
A2520	Lighting Installation (Bridge F1C - F5)	6	29-Sep-16	06-Oct-16	Lighting Installation (Bridge F1C - F5)														
A2530	Instalation of L3 Railings (Bridge C3 - C1)	10	26-Sep-16	07-Oct-16	Instalation of L3 Railings (Bridge C3 - C1)														
A2540	Reinstatement of Temporary Opening	5	01-Jul-16 A	24-Sep-16	Reinstatement of Temporary Opening														
A2550	Drainage Gully Installation	5	01-Jul-16 A	24-Sep-16	Drainage Gully Installation														
10.4 - Bridge Deck Demolition		59	24-Oct-16	30-Dec-16															
10.4.1 - Existing W/B Bridge		0	24-Oct-16	24-Oct-16															
10.4.1.2 - Demolition Works		0	24-Oct-16	24-Oct-16															
10410-2580	Complete TTA for W/B Bridge Demolition & Re-Construction	0		24-Oct-16	◆ Complete TTA for W/B Bridge Demolition & Re-Construction														
10.4.3 - Existing E/B Bridge		59	24-Oct-16	30-Dec-16															
10412-2060	Remove Asphalt, Demo Parapet & Prepare for Demolition	9	24-Oct-16	02-Nov-16	Remove Asphalt, Demo Parapet & Prepare for Demolition														
10412-2070	Demolish Temp. E/B Bridge - Deck > Pier 27 to 28 (6 beams)	5	03-Nov-16	08-Nov-16	Demolish Temp. E/B Bridge - Deck > Pier 27 to 28 (6 beams)														
10412-2080	Demolish Temp. E/B Bridge - Deck > Pier 26 to 27 (6 beams)	5	09-Nov-16	14-Nov-16	Demolish Temp. E/B Bridge - Deck > Pier 26 to 27 (6 beams)														
10412-2100	Demolish Temp. E/B Bridge - Crosshead & Pier > 27	9	15-Nov-16	24-Nov-16	Demolish Temp. E/B Bridge - Crosshead & Pier > 27														
10412-2120	Demolish Temp. E/B Bridge - Deck > Pier 25 to 26 (6 beams)	5	19-Nov-16	24-Nov-16	Demolish Temp. E/B Bridge - Deck > Pier 25 to 26 (6 beams)														
10412-2140	Demolish Temp. E/B Bridge - Crosshead & Pier > 26	9	25-Nov-16	05-Dec-16	Demolish Temp. E/B Bridge - Crosshead & Pier > 26														
A2580	Scraping of Asphalt at existng Old E/B Bridge	4	24-Oct-16	27-Oct-16	Scraping of Asphalt at existng Old E/B Bridge														
A2590	Saw Cutting of Bridge Deck - (Pier 44-43)	4	26-Oct-16	29-Oct-16	Saw Cutting of Bridge Deck - (Pier 44-43)														
A2600	Saw Cutting of Bridge Deck - (Pier 43-42)	4	31-Oct-16	03-Nov-16	Saw Cutting of Bridge Deck - (Pier 43-42)														
A2610	Saw Cutting of Bridge Deck - (Pier 42-41)	4	04-Nov-16	08-Nov-16	Saw Cutting of Bridge Deck - (Pier 42-41)														
A2612	Saw Cutting of Bridge Deck - (Pier 41-40)	4	09-Nov-16	12-Nov-16	Saw Cutting of Bridge Deck - (Pier 41-40)														
A2620	Saw Cutting of Bridge Deck - (Pier 40-39)	4	14-Nov-16	17-Nov-16	Saw Cutting of Bridge Deck - (Pier 40-39)														
A2630	Saw Cutting of Bridge Deck - (Pier 39-38)	4	19-Nov-16	23-Nov-16	Saw Cutting of Bridge Deck - (Pier 39-38)														
A2640	Saw Cutting of Bridge Deck - (Pier 38-37)	4	24-Nov-16	28-Nov-16	Saw Cutting of Bridge Deck - (Pier 38-37)														
A2650	Saw Cutting of Bridge Deck - (Pier 37-36)	4	29-Nov-16	02-Dec-16	Saw Cutting of Bridge Deck - (Pier 37-36)														
A2660	Saw Cutting of Bridge Deck - (Pier 36-35)	4	03-Dec-16	07-Dec-16	Saw Cutting of Bridge Deck - (Pier 36-35)														
A2670	Saw Cutting of Bridge Deck - (Pier 35-34)	4	08-Dec-16	12-Dec-16	Saw Cutting of Bridge Deck - (Pier 35-34)														
A2680	Erection of Two(2nos) Cranes & Testing at Pier 39-41 - (Crane A & B)	6	01-Nov-16	07-Nov-16	Erection of Two(2nos) Cranes & Testing at Pier 39-41 - (Crane A & B)														
A2685	Demolish Three(3nos) Beams at Pier 42-43 - Crane A & B	2	08-Nov-16	09-Nov-16	Demolish Three(3nos) Beams at Pier 42-43 - Crane A & B														
A2687	Demolish Three(3nos) Beams at Pier 42-41 - Crane A & D	2	10-Nov-16	11-Nov-16	Demolish Three(3nos) Beams at Pier 42-41 - Crane A & D														
A2688	Demolish Seven(7nos) Beams at Pier 43-44 - Crane B & C	6	14-Nov-16	19-Nov-16	Demolish Seven(7nos) Beams at Pier 43-44 - Crane B & C														
A2689	Partial cutting of crosshead Pier 43	1	21-Nov-16	21-Nov-16	Partial cutting of crosshead Pier 43														
A2690	Erection of One(1no) Crane & Testing at Pier 44-45 - (Crane C)	6	07-Nov-16	12-Nov-16	Erection of One(1no) Crane & Testing at Pier 44-45 - (Crane C)														
A2710	Erection of One(1no) Crane & Testing at Pier 38-39 - (Crane D)	6	12-Nov-16	18-Nov-16	Erection of One(1no) Crane & Testing at Pier 38-39 - (Crane D)														
A2730	Demolish Three(3nos) Beams at Pier 41-40 - Crane A & D	4	14-Nov-16	17-Nov-16	Demolish Three(3nos) Beams at Pier 41-40 - Crane A & D														
A2740	Demolish Three(3nos) Beams at Pier 40-39 - Crane A & D	4	18-Nov-16	22-Nov-16	Demolish Three(3nos) Beams at Pier 40-39 - Crane A & D														

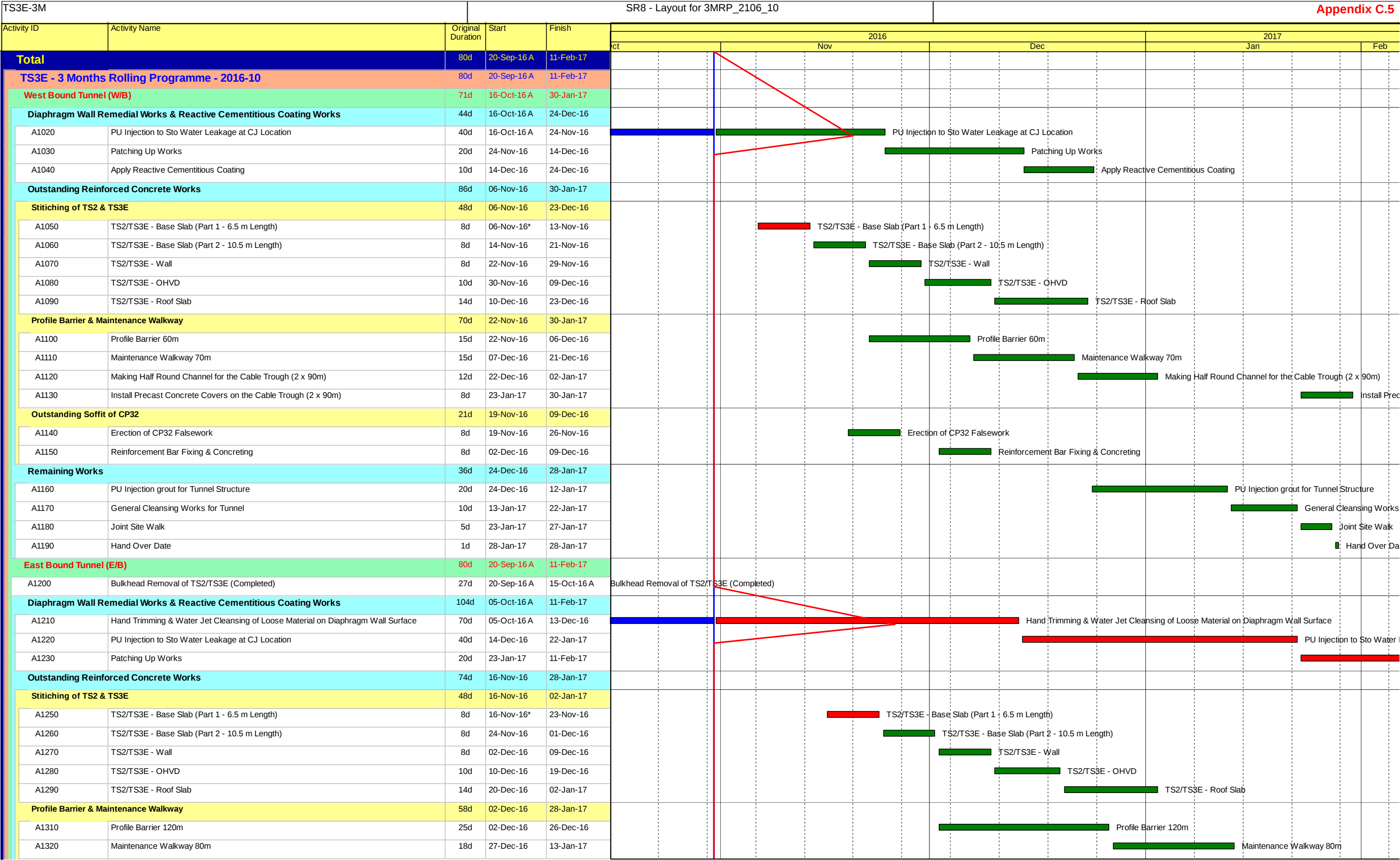
Activity ID	Activity Name	Rem Dur	Start	Finish	2016														
					October					November					December				
					18	25	02	09	16	23	30	06	13	20	27	04	11	18	25
A2750	Demolish Three(3nos) Beams at Pier 39-38 - Crane A & D	4	24-Nov-16	28-Nov-16															Demolish Three(3nos) Beams at Pier 39-38
A2760	Demolish Three(3nos) Beams at Pier 38-37 - Crane A & D	4	29-Nov-16	02-Dec-16															Demolish Three(3nos) Beams at Pier 38-37
A2770	Demolish Three(3nos) Beams at Pier 37-36 - Crane A & D	4	03-Dec-16	07-Dec-16															Demolish Three(3nos) Beams at Pier 37-36
A2780	Demolish Three(3nos) Beams at Pier 36-35 - Crane A & D	4	08-Dec-16	12-Dec-16															Demolish Three(3nos) Beams at Pier 36-35
A2790	Erection and Testing of LG-BM at Pier 43-45	32	22-Nov-16	28-Dec-16															Erection and Testing of LG-BM at Pier 43-45
A2800	Demolish Four(4nos) Beams at Pier 43-42 - by LG-BM	2	29-Dec-16	30-Dec-16															Demolish Four(4nos) Beams at Pier 43-42 - by LG-BM
10.6 - Tunnel Approach Ramp		76	08-Jul-16 A	19-Dec-16															
10.6.1 - Approach Ramp (Excluding Portion IIB)		76	08-Jul-16 A	19-Dec-16															
Excavation & ELS Works		76	08-Jul-16 A	19-Dec-16															
1061-4900.8	Predrilling Works (WF4>B1:46m@1.22m/d)	21	08-Jul-16 A	15-Oct-16															Predrilling Works (WF4>B1:46m@1.22m/d)
1061-4901.1	Sheet Piling Works (WF2>B1:46m@1.5m/d)	20	29-Sep-16	24-Oct-16															Sheet Piling Works (WF2>B1:46m@1.5m/d)
1061-4901.2	Sheet Piling Works (WF1>B3:19m@1.5m/d)	24	12-Jul-16 A	19-Oct-16															Sheet Piling Works (WF1>B3:19m@1.5m/d)
1061-4910	Advance Sheet Piling Works + Pre-drilling in Phase 2 - Cul de sac Area (30m)	14	20-Oct-16	04-Nov-16															Advance Sheet Piling Works + Pre-drilling in Phase 2 - Cul de sac Area (30m)
1061-4915	Tam Grouting	28	14-Sep-16 A	24-Oct-16															Tam Grouting
1061-4940	Instrumentation > Inclinometer (2Nos)	14	20-Sep-16	06-Oct-16															Instrumentation > Inclinometer (2Nos)
1061-4960	Instrumentation > Settlement Marker (14Nos)	3	07-Oct-16	11-Oct-16															Instrumentation > Settlement Marker (14Nos)
1061-4980	Instrumentation > Tiltmeter (14Nos)	3	07-Oct-16	11-Oct-16															Instrumentation > Tiltmeter (14Nos)
1061-5000	Instrumentation > Movement Marker (14Nos)	3	07-Oct-16	11-Oct-16															Instrumentation > Movement Marker (14Nos)
1061-5020	Instrumentation > Pizometer/Standpipe (4Nos)	14	07-Oct-16	24-Oct-16															Instrumentation > Pizometer/Standpipe (4Nos)
1061-5040	Dewatering System > Recharge Well (8Nos)	10	26-Sep-16	07-Oct-16															Dewatering System > Recharge Well (8Nos)
1061-5060	Dewatering System > Dewatering Well (14Nos)	14	03-Oct-16	19-Oct-16															Dewatering System > Dewatering Well (14Nos)
1061-5080	Dewatering System > Observation Well (10Nos)	11	12-Oct-16	24-Oct-16															Dewatering System > Observation Well (10Nos)
1061-5100	Pumping Test	9	25-Oct-16	03-Nov-16															Pumping Test
1061-5120	Complete Pump Test	0		03-Nov-16															◆ Complete Pump Test
1061-5140	Ch 5285 - 5331 > Excav from Ex. Lvl down to 2.5mPD (Ch 5285 - 5331 w/ open cut)	14	15-Aug-16 A	06-Oct-16															Ch 5285 - 5331 > Excav from Ex. Lvl down to 2.5mPD (Ch 5285 - 5331 w/ open cut)
1061-5160	Ch 5234 - 5285 > Excav from Ex. Lvl down to 2.5mPD	15	07-Oct-16	25-Oct-16															Ch 5234 - 5285 > Excav from Ex. Lvl down to 2.5mPD
1061-5180	Ch 5234 - 5285 > Install 1st Layer of Strut & Waling	9	26-Oct-16	04-Nov-16															Ch 5234 - 5285 > Install 1st Layer of Strut & Waling
1061-5200	Ch 5234 - 5285 > Excav from 2.5mPD to 1m Below 2nd Layer of Struts	16	05-Nov-16	23-Nov-16															Ch 5234 - 5285 > Excav from 2.5mPD to 1m Below 2nd Layer of Struts
1061-5220	Ch 5234 - 5285 > Install 2nd Layer of Strut & Waling	9	24-Nov-16	03-Dec-16															Ch 5234 - 5285 > Install 2nd Layer of Strut & Waling
1061-5240	Ch 5234 - 5285 > Excav to FEL	13	05-Dec-16	19-Dec-16															Ch 5234 - 5285 > Excav to FEL
Structure Works		21	24-Nov-16	17-Dec-16															
1061-5260	Bay 1 - Ch 5322 - 5331 > Base Slab - Blinding Layer	1	24-Nov-16	24-Nov-16															Bay 1 - Ch 5322 - 5331 > Base Slab - Blinding Layer
1061-5280	Bay 1 - Ch 5322 - 5331 > Base Slab - Water Proofing Membrane	2	25-Nov-16	26-Nov-16															Bay 1 - Ch 5322 - 5331 > Base Slab - Water Proofing Membrane
1061-5300	Bay 1 - Ch 5322 - 5331 > Base Slab - Rebar Fixing	5	28-Nov-16	02-Dec-16															Bay 1 - Ch 5322 - 5331 > Base Slab - Rebar Fixing
1061-5320	Bay 1 - Ch 5322 - 5331 > Base Slab - Erect Formworks	4	03-Dec-16	07-Dec-16															Bay 1 - Ch 5322 - 5331 > Base Slab - Erect Formworks
1061-5340	Bay 1 - Ch 5322 - 5331 > Base Slab - Concreting	1	08-Dec-16	08-Dec-16															Bay 1 - Ch 5322 - 5331 > Base Slab - Concreting
1061-5360	Bay 2 - Ch 5313 - 5322 > Base Slab - Blinding Layer	1	09-Dec-16	09-Dec-16															Bay 2 - Ch 5313 - 5322 > Base Slab - Blinding Layer

- 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 Sept to 19 Dec 2016)

Activity ID	Activity Name	Rem Dur	Start	Finish	2016														
					October					November					December				
					18	25	02	09	16	23	30	06	13	20	27	04	11	18	25
1061-5380	Bay 2 - Ch 5313 - 5322 > Base Slab - Water Proofing Membrane	2	10-Dec-16	12-Dec-16															Bay 2 - Ch 5313 - 5322 > Base Slab - Water Proofing Membrane
1061-5400	Bay 2 - Ch 5313 - 5322 > Base Slab - Rebar Fixing	5	13-Dec-16	17-Dec-16															Bay 2 - Ch 5313 - 5322 > Base Slab - Rebar Fixing
10.7 - Section X - Miscellaneous Works		77	19-Jul-16 A	20-Dec-16															
10.7.1 - TTM Stages		34	19-Jul-16 A	23-Oct-16															
1071-1300	TTM Stage 6 - TMLG Consultation and Endorsement	18	19-Jul-16 A	07-Oct-16															
1071-1320	TTM Stage 6 - TTM Enabling Works	1	23-Oct-16	23-Oct-16															
1071-1340	TTM Stage 6 - Divert W/B 3 lanes traffic from old E/B to new W/B Bridge	0		23-Oct-16															
10.7.2 - Oil Street/Watson Road (Portion III)		50	24-Oct-16	20-Dec-16															
1072-1040	Fresh Water Main 100DI - F03 Portion III (Oil Street/Admin Bldg)	50	24-Oct-16	20-Dec-16															Fresh Water Main 100DI - F03 Portion III (Oil Street/Admin Bldg)
1072-1060	Salt Water Main 100DI - S03 Portion III (Oil Street/Admin Bldg)	50	24-Oct-16	20-Dec-16															Salt Water Main 100DI - S03 Portion III (Oil Street/Admin Bldg)
1072-1080	Foul Sewer Dia. 300 Portion III (Oil Street/Admin Bldg)	42	24-Oct-16	10-Dec-16															Foul Sewer Dia. 300 Portion III (Oil Street/Admin Bldg)
11 - SECTION 11 OF THE WORKS		56	14-Sep-16 A	25-Nov-16															
11.1 - Portion XIIA - Stage 1		56	14-Sep-16 A	25-Nov-16															
11.1.2 - Along Victoria Park Rd. Triangular Island - Modification Works (Portion XIIA)		5	20-Sep-16	24-Sep-16															
1110-2920	Placing road marking	5	20-Sep-16	24-Sep-16															Placing road marking
11.1.3 - Along Tsing Fung St. - TCSS cable ducting (Portion XIIA)		36	22-Sep-16	04-Nov-16															
1110-2930	TCSS cable ducting along Tsing Fung St	36	22-Sep-16	04-Nov-16															TCSS cable ducting along Tsing Fung St
A2560	Expiration of existing Excavation Permit	0		13-Oct-16*															Expiration of existing Excavation Permit
A2570	Extension of existing Excavation Permit (by AECOM)	18	25-Sep-16	12-Oct-16															Extension of existing Excavation Permit (by AECOM)
11.1.4 - Along Gordon House - Cross road ducting at Hing Fat St adjacent to (Portion XIIA)		54	19-Sep-16 A	23-Nov-16															
1110-2940	Trench 1 (E&M, PL) - (Night Work)	16	19-Sep-16 A	08-Oct-16															Trench 1 (E&M, PL) - (Night Work)
1110-2950	Trench 2 (ATC) - (Night Work)	38	11-Oct-16	23-Nov-16															Trench 2 (ATC) - (Night Work)
11.1.5 - Footing and frame/pole for directional sign FVMSH2, ADS16 and OHVD (Portion XIIA)		38	14-Sep-16 A	04-Nov-16															
1110-2960	ADS16	26	14-Sep-16 A	21-Oct-16															ADS16
1110-2970	OHVD	12	22-Oct-16	04-Nov-16															OHVD
11.1.6 - Along Hing Fat St. - TCSS cable ducting (Pending V.O.) (Portion XIIA)		56	20-Sep-16	25-Nov-16															
1110-2990	Ducting at pedestrian walkway	38	20-Sep-16	04-Nov-16															Ducting at pedestrian walkway
1110-3000	Cross road ducting at Hing Fat St adjacent to Viking Garden	28	20-Sep-16	24-Oct-16															Cross road ducting at Hing Fat St adjacent to Viking Garden
1110-3010	Cross road ducting at Hing Fat St adjacent to The CWB Kaifong Welfare Advancement Bradbuary Building	28	25-Oct-16	25-Nov-16															Cross road ducting at Hing Fat St adjacent to The CWB Kaifong Welfare Advancement Bradbuary Building



Activity ID	Activity Name	Original Duration	Start	Finish												
					2016						2017					
					Oct				Nov				Dec			
	A1330	Making Half Round Channel for the Cable Trough (2 x 90m)	15d	14-Jan-17	28-Jan-17											
	Remaining Works		30d	03-Jan-17	01-Feb-17											
	A1340	PU Injection grout for Tunnel Structure	20d	03-Jan-17	22-Jan-17											
	A1350	General Cleansing Works for Tunnel	10d	23-Jan-17	01-Feb-17											

TS3W - 3M			SR8 - Layout for 3MRP_2106_10			Appendix C.5									
Activity ID	Activity Name	Original Duration	Start	Finish											
					2016					2017					
Total					Oct	Nov	Dec	Jan	Feb						
TS3W - 3 Months Rolling Programme - 2016-10															
CCT															
Northern & Southern Tunnel															
Zone E1															
Bay 1															
TS3W_2100	Bay 1 - Break Trough Bulkhead Bay 1N & 1S	21d	20-Sep-16 A	20-Nov-16											
TS3W_2090	Bay 1 - Spray Type Waterproofing, Protection Board & Backfilling	10d	31-Oct-16	09-Nov-16											
Bay N1															
TS3W_2130	Bay N1 - Utility Trough	4d	21-Aug-16 A	21-Nov-16											
TS3W_2150	Bay N1 - Roof Slab	10d	24-Sep-16 A	25-Oct-16 A											
Bay S1															
TS3W_2180	Bay S1 - Utility Trough	4d	21-Aug-16 A	03-Nov-16											
TS3W_2200	Bay S1 - Roof Slab	10d	23-Sep-16 A	11-Oct-16 A											
Bay 2															
TS3W_2230	Bay 2 - Spray Type Waterproofing, Protection Board & Backfilling	10d	31-Oct-16	09-Nov-16											
Bay N2															
TS3W_2260	Bay N2 - Utility Trough	4d	21-Aug-16 A	06-Nov-16											
TS3W_2280	Bay N2 - Roof Slab	10d	30-Aug-16 A	31-Oct-16 A											
TS3W_2270	Bay N2 - OHVD Slab & Hanger Wall	11d	01-Sep-16 A	09-Oct-16 A											
Bay S2															
TS3W_2310	Bay S2 - Utility Trough	4d	21-Aug-16 A	06-Nov-16											
TS3W_2330	Bay S2 - Roof Slab	10d	25-Aug-16 A	28-Oct-16 A											
TS3W_2320	Bay S2 - OHVD Slab & Hanger Wall	11d	29-Aug-16 A	03-Oct-16 A											
Zone E2															
Bay 3															
TS3W_2360	Bay 3 - Spray Type Waterproofing, Protection Board & Backfilling	10d	31-Oct-16	09-Nov-16											
Bay N3															
TS3W_2390	Bay N3 - Utility Trough	4d	21-Aug-16 A	03-Nov-16											
TS3W_2410	Bay N3 - Roof Slab	10d	13-Sep-16 A	25-Nov-16											
TS3W_2400	Bay N3 - OHVD Slab & Hanger Wall	11d	20-Sep-16 A	16-Oct-16 A											
Bay S3															
TS3W_2440	Bay S3 - Utility Trough	4d	23-Aug-16 A	08-Nov-16											
TS3W_2450	Bay S3 - OHVD Slab & Hanger Wall	11d	13-Sep-16 A	14-Oct-16 A											
TS3W_2460	Bay S3 - Roof Slab	10d	28-Sep-16 A	22-Nov-16											
Zone W1															
Bay 4															
TS3W_2490	Bay 4 - Spray Type Waterproofing, Protection Board & Backfilling	10d	31-Oct-16	09-Nov-16											
Bay N4															
TS3W_2620	Bay N4 - Utility Trough	4d	25-Aug-16 A	06-Nov-16											
TS3W_2610	Bay N4 - Wall 5	7d	22-Sep-16 A	03-Oct-16 A											
TS3W_2640	Bay N4 - Roof Slab	10d	26-Sep-16 A	18-Nov-16											
TS3W_2630	Bay N4 - OHVD Slab & Hanger Wall	11d	15-Oct-16 A	19-Oct-16 A											

Activity ID	Activity Name	Original Duration	Start	Finish										
					2016					2017				
					Oct	Nov	Dec	Jan	Feb					
Bay S4		35d	25-Aug-16 A	19-Nov-16										
TS3W_2690	Bay S4 - Utility Trough	4d	25-Aug-16 A	06-Nov-16										
TS3W_2700	Bay S4 - Roof Slab	10d	13-Sep-16 A	19-Nov-16										
TS3W_2710	Bay S4 - OHVD Slab & Hanger Wall	11d	15-Sep-16 A	20-Oct-16 A										
TS3W_2660	Bay S4 - Wall 6	7d	21-Sep-16 A	30-Sep-16 A										
Bay 5		54d	27-Aug-16 A	24-Nov-16										
TS3W_2740	Bay 5 - Spray Type Waterproofing, Protection Board & Backfilling	10d	31-Oct-16	09-Nov-16										
Bay N5		31d	27-Aug-16 A	21-Nov-16										
TS3W_2760	Bay N5 - Utility Trough	4d	27-Aug-16 A	06-Nov-16										
TS3W_2770	Bay N5 - Wall 5	7d	05-Oct-16 A	09-Oct-16 A										
TS3W_2780	Bay N5 - Roof Slab	10d	05-Oct-16 A	21-Nov-16										
TS3W_2790	Bay N5 - OHVD Slab & Hanger Wall	11d	23-Oct-16 A	26-Oct-16 A										
Bay S5		54d	27-Aug-16 A	24-Nov-16										
TS3W_2810	Bay S5 - Utility Trough	4d	27-Aug-16 A	03-Nov-16										
TS3W_2820	Bay S5 - Wall 6	7d	23-Sep-16 A	07-Oct-16 A										
TS3W_2830	Bay S5 - OHVD Slab & Hanger Wall	11d	04-Nov-16	14-Nov-16										
TS3W_2840	Bay S5 - Roof Slab	10d	15-Nov-16	24-Nov-16										
Bay 6		101d	29-Aug-16 A	05-Jan-17										
TS3W_2860	Bay 6 - Concrete Strut & Remove SL 6,7,8	7d	10-Sep-16 A	04-Oct-16 A										
TS3W_2870	Bay 6 - Spray Type Waterproofing, Protection Board & Backfilling	10d	07-Nov-16	16-Nov-16										
Bay N6		62d	06-Sep-16 A	14-Dec-16										
TS3W_2890	Bay N6 - Utility Trough	4d	06-Sep-16 A	13-Nov-16										
TS3W_2900	Bay N6 - Wall 5	7d	10-Oct-16 A	06-Nov-16										
TS3W_2910	Bay N6 - OHVD Slab & Hanger Wall	11d	24-Nov-16	04-Dec-16										
TS3W_2920	Bay N6 - Roof Slab	10d	05-Dec-16	14-Dec-16										
Bay S6		63d	29-Aug-16 A	17-Dec-16										
TS3W_2940	Bay S6 - Utility Trough	4d	29-Aug-16 A	13-Nov-16										
TS3W_2950	Bay S6 - Wall 6	7d	09-Oct-16 A	06-Nov-16										
TS3W_2960	Bay S6 - OHVD Slab & Hanger Wall	11d	27-Nov-16	07-Dec-16										
TS3W_2970	Bay S6 - Roof Slab	10d	08-Dec-16	17-Dec-16										
Bay SR6		50d	17-Nov-16	05-Jan-17										
SR8_S_1250	SR8 - Bay SR6 Base Slab	7d	17-Nov-16	23-Nov-16										
SR8_S_1260	SR8 - Bay SR6 Wall	7d	18-Dec-16	24-Dec-16										
SR8_S_1270	SR8 - Utility Trough	4d	18-Dec-16	21-Dec-16										
SR8_S_1280	SR8 - Bay SR6 OHVD Slab & Hanger Wall	8d	22-Dec-16	29-Dec-16										
SR8_S_1290	SR8 - Bay SR6 Roof Slab	7d	30-Dec-16	05-Jan-17										
Zone W2		101d	25-Aug-16 A	01-Jan-17										
Bay 7		78d	25-Aug-16 A	09-Dec-16										
TS3W_3230	Bay 7 - Concrete Strut & Remove SL 6,7,8	7d	06-Oct-16 A	07-Nov-16										
TS3W_3240	Bay 7 - Spray Type Waterproofing, Protection Board & Backfilling	10d	15-Nov-16	24-Nov-16										
Bay N7		78d	25-Aug-16 A	09-Dec-16										
TS3W_3270	Bay N7 - Utility Trough	4d	25-Aug-16 A	18-Nov-16										
TS3W_3250	Bay N7 - Base Slab	7d	26-Aug-16 A	04-Oct-16 A										
TS3W_3260	Bay N7 - Wall 5 & 1	7d	08-Nov-16	14-Nov-16										

Activity ID		Activity Name	Original Duration	Start	Finish	2016						2017				
						Oct	Nov			Dec			Jan		Feb	
	TS3W_3280	Bay N7 - OHVD	11d	19-Nov-16	29-Nov-16											
	TS3W_3290	Bay N7 - Roof Slab	10d	30-Nov-16	09-Dec-16											
	Bay S7		36d	26-Sep-16 A	09-Dec-16											
	TS3W_3320	Bay S7 - Utility Trough	4d	26-Sep-16 A	18-Nov-16											
	TS3W_3310	Bay S7 - Wall 6 & 2	7d	08-Nov-16	14-Nov-16											
	TS3W_3330	Bay S7 - OHVD	11d	19-Nov-16	29-Nov-16											
	TS3W_3340	Bay S7 - Roof Slab	10d	30-Nov-16	09-Dec-16											
	Bay SR7		40d	31-Oct-16	09-Dec-16											
	SR8_S_1300	SR8 - Bay SR7 - Base Slab	7d	31-Oct-16	06-Nov-16											
	SR8_S_1310	SR8 - Bay SR7 - Wall	7d	08-Nov-16	14-Nov-16											
	SR8_S_1320	SR8 - Bay SR7 - Utility Trough	4d	15-Nov-16	18-Nov-16											
	SR8_S_1330	SR8 - Bay SR7 - OHVD	11d	19-Nov-16	29-Nov-16											
	SR8_S_1340	SR8 - Bay SR7 - Roof Slab	10d	30-Nov-16	09-Dec-16											
	Bay 8		74d	21-Sep-16 A	01-Jan-17											
	TS3W_3400	Bay 8 - Waterproofing (Include SR8 - Bay SR8)	3d	24-Sep-16 A	05-Oct-16 A											
	TS3W_3410	Bay 8 - Concrete Strut & Remove SL 6,7,8	7d	22-Oct-16 A	13-Nov-16											
	TS3W_3430	Bay 8 - Break Trough Bulkhead Bay 8N, 8S & SR8	21d	26-Oct-16 A	11-Dec-16											
	TS3W_3420	Bay 8 - Spray Type Waterproofing, Protection Board & Backfilling	10d	21-Nov-16	30-Nov-16											
	Bay N8		74d	22-Sep-16 A	01-Jan-17											
	TS3W_3440	Bay N8 - Base Slab	7d	22-Sep-16 A	15-Oct-16 A											
	TS3W_3460	Bay N8 - Utility Trough	4d	18-Oct-16 A	24-Nov-16											
	TS3W_3450	Bay N8 - Wall 5 & 1	7d	14-Nov-16	20-Nov-16											
	TS3W_3470	Bay N8 - OHVD	11d	12-Dec-16	22-Dec-16											
	TS3W_3480	Bay N8 - Roof Slab	10d	23-Dec-16	01-Jan-17											
	Bay S8		74d	21-Sep-16 A	01-Jan-17											
	TS3W_3490	Bay S8 - Base Slab	7d	21-Sep-16 A	12-Oct-16 A											
	TS3W_3600	Bay S8 - Utility Trough	4d	24-Oct-16 A	24-Nov-16											
	TS3W_3500	Bay S8 - Wall 6 & 2	7d	14-Nov-16	20-Nov-16											
	SR8_S_1370	SR8 - Utility Trough	4d	21-Nov-16	24-Nov-16											
	TS3W_3610	Bay S8 - OHVD	11d	12-Dec-16	22-Dec-16											
	TS3W_3620	Bay S8 - Roof Slab	10d	23-Dec-16	01-Jan-17											
	Bay SR8		63d	31-Oct-16	01-Jan-17											
	SR8_S_1350	SR8 - Bay SR8 - Base Slab	7d	31-Oct-16	06-Nov-16											
	SR8_S_1360	SR8 - Bay SR8 - Wall	7d	14-Nov-16	20-Nov-16											
	SR8_S_1380	SR8 - Bay SR8 - OHVD	11d	12-Dec-16	22-Dec-16											
	SR8_S_1390	SR8 - Bay SR8 - Roof Slab	10d	23-Dec-16	01-Jan-17											
	Egress Passage (EP-02) & Cross Passage (CP31)		55d	22-Aug-16 A	11-Dec-16											
	TS3W_3680	CP-31 + EP-02 Stair Case Structure at Bay N2 & S2	21d	22-Aug-16 A	20-Nov-16											
	TS3W_3690	EP-02 Cooridor on Top of S2 & S3 Roof	21d	21-Nov-16	11-Dec-16											
	Egress Passage (EP-03) & Cross Passage (CP-30)		35d	22-Oct-16 A	23-Nov-16											
TS3W_3700	CP-30 in Bay 5	7d	22-Oct-16 A	19-Nov-16												
TS3W_3710	Waterproofing to CP-30 & Backfilling up to SR8 BaySR6 Base Slab Bottom	4d	20-Nov-16	23-Nov-16												
SR8 Tunnel		114d	21-Aug-16 A	11-Dec-16												
Waterproofing to Base Slab		10d	21-Aug-16 A	09-Nov-16												

Activity ID	Activity Name	Original Duration	Start	Finish												
					2016						2017					
					Oct	Nov				Dec		Jan				Feb
SR8_S_1000	Waterproof to Base Slab - Bay SR1 to SR3A	10d	21-Aug-16 A	09-Nov-16												
Bay SR1		25d	31-Oct-16	24-Nov-16												
SR8_S_1020	SR8 - Bay SR1 - Utility Trough	4d	31-Oct-16	03-Nov-16												
SR8_S_1030	SR8 - Bay SR1 - OHVD Slab & Hanger Wall	11d	04-Nov-16	14-Nov-16												
SR8_S_1040	SR8 - Bay SR1 - Roof Slab	10d	15-Nov-16	24-Nov-16												
Bay SR2		32d	31-Oct-16	01-Dec-16												
SR8_S_1050	SR8 - Bay SR2 - Base Slab	7d	31-Oct-16	06-Nov-16												
SR8_S_1060	SR8 - Bay SR2 - Utility Trough	4d	07-Nov-16	10-Nov-16												
SR8_S_1070	SR8 - Bay SR2 - OHVD Slab & Hanger Wall	11d	11-Nov-16	21-Nov-16												
SR8_S_1080	SR8 - Bay SR2 - Roof Slab	10d	22-Nov-16	01-Dec-16												
Bay SR3 (Part Within Zone E2)		42d	31-Oct-16	11-Dec-16												
SR8_S_1090	Breaking to Cut Off Level of Temporary Diaphragm Wall	3d	31-Oct-16	02-Nov-16												
SR8_S_1100	SR8 - Bay SR3 - Base Slab	7d	03-Nov-16	09-Nov-16												
SR8_S_1110	SR8 - Bay SR3 - Wall	7d	10-Nov-16	16-Nov-16												
SR8_S_1120	SR8 - Bay SR3 - Utility Trough	4d	17-Nov-16	20-Nov-16												
SR8_S_1130	SR8 - Bay SR3 - OHVD Slab & Hanger Wall	11d	21-Nov-16	01-Dec-16												
SR8_S_1140	SR8 - Bay SR3 - Roof Slab	10d	02-Dec-16	11-Dec-16												
Bay SR4 (Within Zone W1)		42d	31-Oct-16	11-Dec-16												
SR8_S_1150	SR8 - Bay SR4 - Base Slab	10d	31-Oct-16	09-Nov-16												
SR8_S_1160	SR8 - Bay SR4 - Wall	7d	10-Nov-16	16-Nov-16												
SR8_S_1170	SR8 - Bay SR4 - Utility Trough	4d	17-Nov-16	20-Nov-16												
SR8_S_1180	SR8 - Bay SR4 - OHVD Slab & Hanger Wall	11d	21-Nov-16	01-Dec-16												
SR8_S_1190	SR8 - Bay SR4 - Roof Slab	10d	02-Dec-16	11-Dec-16												
Bay SR5 (Within Zone W1)		42d	31-Oct-16	11-Dec-16												
SR8_S_1200	SR8 - Bay SR5 - Base Slab	10d	31-Oct-16	09-Nov-16												
SR8_S_1210	SR8 - Bay SR5 - Wall	7d	10-Nov-16	16-Nov-16												
SR8_S_1220	SR8 - Bay SR5 - Utility Trough	4d	17-Nov-16	20-Nov-16												
SR8_S_1230	SR8 - Bay SR5 - OHVD Slab & Hanger Wall	11d	21-Nov-16	01-Dec-16												
SR8_S_1240	SR8 - Bay SR5 - Roof Slab	10d	02-Dec-16	11-Dec-16												
Waterproofing to Roof Slab		4d	31-Oct-16	03-Nov-16												
SR8_S_1410	Waterproof to Roof Slab - Bay SR2	4d	31-Oct-16	03-Nov-16												
SR8_S_1420	Waterproof to Roof Slab - Bay SR3	4d	31-Oct-16	03-Nov-16												
SR8_S_1430	Waterproof to Roof Slab - Bay SR4	4d	31-Oct-16	03-Nov-16												
SR8_S_1440	Waterproof to Roof Slab - Bay SR5	4d	31-Oct-16	03-Nov-16												
SR8_S_1450	Waterproof to Roof Slab - Bay SR6	4d	31-Oct-16	03-Nov-16												
SR8_S_1460	Waterproof to Roof Slab - Bay SR7	4d	31-Oct-16	03-Nov-16												
SR8_S_1470	Waterproof to Roof Slab - Bay SR8	4d	31-Oct-16	03-Nov-16												
SR8_S_1400	Waterproof to Roof Slab - Bay SR1	4d	31-Oct-16	03-Nov-16												

ZB-CCT-WK-04			SR8 - Layout for 3MRP_2106_10					Appendix C.5													
Activity ID	Activity Name	Original Duration	Start	Finish	2016										2017						
					Oct			Nov				Dec			Jan						
Total		67d	06-Oct-16 A	23-Dec-16																	
Zone B - CCT REV-04 - Progress As of (2016-10-25)		67d	06-Oct-16 A	23-Dec-16																	
Backfill & Remove Struts		8d	12-Nov-16	21-Nov-16																	
A1040	Remove Remaining Struts Near Ground Level	8d	12-Nov-16	21-Nov-16	Remove Remaining Struts Near Ground Level																
OHVD		36d	05-Nov-16	16-Dec-16																	
Bay 2		29d	14-Nov-16	16-Dec-16																	
A1060	Erect Scaffolding & Soffit Fromwork (Commence after Completion of Bay 2 U trough at LHS)	6d	14-Nov-16	19-Nov-16	Erect Scaffolding & Soffit Fromwork (Commence after Completion of Bay 2 U trough at LHS)																
A1070	Rebar Fixing for Base Slab of OHVD	3d	21-Nov-16	23-Nov-16	Rebar Fixing for Base Slab of OHVD																
A1080	Concrete of Slab of OHVD	1d	24-Nov-16	24-Nov-16	Concrete of Slab of OHVD																
A1090	Rebar Fixing to Wall	1d	25-Nov-16	25-Nov-16	Rebar Fixing to Wall																
A1100	Erect Wall Fromwork for OHVD	2d	26-Nov-16	28-Nov-16	Erect Wall Fromwork for OHVD																
A1110	Concrete Hanger Wall of OHVD	1d	29-Nov-16	29-Nov-16	Concrete Hanger Wall of OHVD																
A1120	Curing Period for OHVD Slab	10d	30-Nov-16	10-Dec-16	Curing Period for OHVD Slab																
A1130	Remove Soffit Fromwork & Scaffolding	5d	12-Dec-16	16-Dec-16	Remove Soffit Fromwork & Scaffolding																
Bay 3		29d	05-Nov-16	08-Dec-16																	
A1140	Erect Scaffolding & Soffit Fromwork (Commence after Completion of Bay 2 U trough at LHS)	6d	05-Nov-16	11-Nov-16	Erect Scaffolding & Soffit Fromwork (Commence after Completion of Bay 2 U trough at LHS)																
A1150	Rebar Fixing for Base Slab of OHVD	3d	12-Nov-16	15-Nov-16	Rebar Fixing for Base Slab of OHVD																
A1160	Concrete of Slab of OHVD	1d	16-Nov-16	16-Nov-16	Concrete of Slab of OHVD																
A1170	Rebar Fixing to Wall	1d	17-Nov-16	17-Nov-16	Rebar Fixing to Wall																
A1180	Erect Wall Fromwork for OHVD	2d	18-Nov-16	19-Nov-16	Erect Wall Fromwork for OHVD																
A1190	Concrete Hanger Wall of OHVD	1d	21-Nov-16	21-Nov-16	Concrete Hanger Wall of OHVD																
A1200	Curing Period for OHVD Slab	10d	22-Nov-16	02-Dec-16	Curing Period for OHVD Slab																
A1210	Remove Soffit Fromwork & Scaffolding	5d	03-Dec-16	08-Dec-16	Remove Soffit Fromwork & Scaffolding																
Utility Trough		39d	06-Oct-16 A	21-Nov-16																	
Left Hand Side		21d	28-Oct-16	21-Nov-16																	
A1220	LHS - Bay 3	7d	28-Oct-16	04-Nov-16	LHS - Bay 3																
A1230	LHS - Bay 2	7d	05-Nov-16	12-Nov-16	LHS - Bay 2																
A1240	LHS - Bay 1	7d	14-Nov-16	21-Nov-16	LHS - Bay 1																
Right Hand Side		36d	06-Oct-16 A	17-Nov-16																	
A1280	Clearance Works After Pumping Dry of ELS	7d	06-Oct-16 A	11-Oct-16 A	Clearance Works After Pumping Dry of ELS																
A1250	RHS - Bay 3	7d	25-Oct-16	01-Nov-16	RHS - Bay 3																
A1260	RHS - Bay 2	7d	02-Nov-16	09-Nov-16	RHS - Bay 2																
A1270	RHS - Bay 1	7d	10-Nov-16	17-Nov-16	RHS - Bay 1																
Pump House		28d	22-Nov-16	23-Dec-16																	
A1290	Access Chamber at Ground Level	14d	22-Nov-16	07-Dec-16	Access Chamber at Ground Level																
A1300	Internal Wall Inside Pump House	14d	08-Dec-16	23-Dec-16	Internal Wall Inside Pump House																

ZC-ELS -WK-12B		SR8 - Layout for 3MRP_2106_10			Appendix C.5											
Activity ID		Activity Name		Original Duration	Start	Finish										
Total		148d	10-Sep-16 A	01-Feb-17												
Zone C ELS - REV-12B - Revised on (2016-10-25) - Comment by RL		148d	10-Sep-16 A	01-Feb-17												
ELS		142d	10-Sep-16 A	27-Jan-17												
Area A(CH384 to CH462 - Victoria Park to Steel Deck WB + IEC)		24d	06-Oct-16 A	05-Nov-16												
A1165	Area A - Clearance after Pumping Dry	4d	06-Oct-16 A	10-Oct-16 A	Area A - Clearance after Pumping Dry											
A1170	Area A - Strut & Waling Installation for Layer 6 (SL5) - Stage 2 from Ch420 to Ch462	3d	25-Oct-16	27-Oct-16	Area A - Strut & Waling Installation for Layer 6 (SL5) - Stage 2 from Ch420 to Ch462											
A1180	Area A - Bracing Installation for Layer 2 (Bottom Horizontal & Diagonal)	3d	27-Oct-16	30-Oct-16	Area A - Bracing Installation for Layer 2 (Bottom Horizontal & Diagonal)											
A1190	Area A - Excavate Further Down for Replacement of Rock Fill - Stage 2 from Ch420 to Ch462	3d	30-Oct-16	02-Nov-16	Area A - Excavate Further Down for Replacement of Rock Fill - Stage 2 from Ch420 to Ch462											
A1200	Area A - Rock Fill - Stage 2 from Ch420 to Ch462	2d	02-Nov-16	04-Nov-16	Area A - Rock Fill - Stage 2 from Ch420 to Ch462											
A1210	Area A - Blinding - Stage 2 from Ch420 to Ch462	1d	04-Nov-16	05-Nov-16	Area A - Blinding - Stage 2 from Ch420 to Ch462											
Area B (CH462 to CH514) - steel Deck EB + SR8/TS3 Interface		142d	10-Sep-16 A	27-Jan-17												
A1340E75	Area B - (Inside ELS) Horizontal Grout	5d	10-Sep-16 A	27-Sep-16 A	Horizontal Grout											
A1340E65	Area B - (Victoria Park Road) EV1 to EV10 LW Grout Stage 2	4d	24-Sep-16 A	26-Sep-16 A	Road) EV1 to EV10 LW Grout Stage 2											
A1340E70	Area B - (Inside ELS) EMT1 to EMT4 Micro Fine Grout	2d	24-Sep-16 A	28-Sep-16 A	EMT1 to EMT4 Micro Fine Grout											
A1340E80	Area B - Diver Inspection	1d	28-Sep-16 A	28-Sep-16 A	Inspection											
A1340F	Area B - Discharge Ponding Water By Submerge Pump	5d	28-Sep-16 A	05-Oct-16 A	Discharge Ponding Water By Submerge Pump											
A1340G	Area B - Clearance Works after Pumping Dry	4d	06-Oct-16 A	10-Oct-16 A	Area B - Clearance Works after Pumping Dry											
A1340H	Area B - Lagging Plate, Waling Support & Struts (4 Nos.)up to Grouting Zone	9d	11-Oct-16 A	29-Oct-16	Area B - Lagging Plate, Waling Support & Struts (4 Nos.)up to Grouting Zone											
A1340H30	Area B - Excavation after Removal of Sand Bags	7d	14-Oct-16 A	24-Oct-16 A	Area B - Excavation after Removal of Sand Bags											
A1340G10	Area B - Form Access + Place Steel Plate for Loader & Plant Mobilization	2d	14-Oct-16 A	15-Oct-16 A	Area B - Form Access + Place Steel Plate for Loader & Plant Mobilization											
A1340H20	Area B - Remove Sand Bags at Leakage Location	5d	14-Oct-16 A	17-Oct-16 A	Area B - Remove Sand Bags at Leakage Location											
A1340G30	Area B - Drilling 9 Nos. Grout Holes	9d	16-Oct-16 A	01-Nov-16	Area B - Drilling 9 Nos. Grout Holes											
A1340H40	Area B - Outstanding Waling at Row A	3d	25-Oct-16	27-Oct-16	Area B - Outstanding Waling at Row A											
A1340G40	Area B - Grouting 9 Nos. Grout holes	9d	26-Oct-16	03-Nov-16	Area B - Grouting 9 Nos. Grout holes											
A1340H10	Area B - Waling of Row B at Outstanding Portion Obstructed by Grouting	3d	04-Nov-16	06-Nov-16	Area B - Waling of Row B at Outstanding Portion Obstructed by Grouting											
A1350	Area B - Strut Installation for Layer 5 (SL4) / Remaining 9 Nos.	9d	07-Nov-16	15-Nov-16	Area B - Strut Installation for Layer 5 (SL4) / Remaining 9 Nps.											
Excavation to -14.6mPD From SL4 to SL5 (3,316 m3 / 540m3/D approx.2.8m Depth)		41d	16-Nov-16	26-Dec-16												
1st Excavation Cycle (1.2m Depth)		8d	16-Nov-16	24-Nov-16												
A1490	Area B - Excavation of 1st 1.2m depth	3d	16-Nov-16	18-Nov-16	Area B - Excavation of 1st 1.2m depth											
A1500	Area B - Make Good Access for Strut & Waling Installation	1d	18-Nov-16	18-Nov-16	Area B - Make Good Access for Strut & Waling Installation											
A1510	Area B - Install Lagging Plates (Row A & Row B)	5d	19-Nov-16	24-Nov-16	Area B - Install Lagging Plates (Row A & Row B)											
2nd Excavation Cycle (1.2m Depth)		8d	24-Nov-16	02-Dec-16												
A1520	Area B - Excavation of 2nd 1.2m depth	3d	24-Nov-16	26-Nov-16	Area B - Excavation of 2nd 1.2m depth											
A1530	Area B - Make Good Access for Strut & Waling Installation	1d	26-Nov-16	27-Nov-16	Area B - Make Good Access for Strut & Waling Installation											
A1540	Area B - Install Lagging Plates (Row A & Row B)	5d	27-Nov-16	02-Dec-16	Area B - Install Lagging Plates (Row A & Row B)											
3rd Excavation Cycle (0.4m Depth)		8d	02-Dec-16	10-Dec-16												
A1550	Area B - Excavation of 3rd 0.4m depth	1d	02-Dec-16	03-Dec-16	Area B - Excavation of 3rd 0.4m depth											
A1560	Area B - Make Good Access for Strut & Waling Installation	1d	04-Dec-16	05-Dec-16	Area B - Make Good Access for Strut & Waling Installation											
A1570	Area B - Install Lagging Plates (Row A & Row B)	5d	05-Dec-16	10-Dec-16	Area B - Install Lagging Plates (Row A & Row B)											
Strut & Waling Installation for SL5		16d	10-Dec-16	26-Dec-16												
A1610	Area B - Waling Installation	6d	10-Dec-16	16-Dec-16	Area B - Waling Installation											
A1620	Area B - Srrtut Installation for SL5	9d	16-Dec-16	25-Dec-16	Area B - Srrtut Installation for SL5											
A1621	Area B - Bracing Installation for Layer 2 (Bottom Horizontal & Diagonal)	1d	25-Dec-16	26-Dec-16	Area B - Bracing Installation for Layer 2 (Bottom Horizontal & Diagonal)											
Actual Work Remaining Work Critical Remaining Work Milestone		Page 1 of 4 Contract No. HY/2010/08: Central - Wanchai Bypass Tunnel +(Slip Road 8 Section) - 3 Months Rolling Progamme										Date	Revision	Checked	Approved	
												20-Oct-16	Updated to 20th Oct 2016	DML/WC		

Activity ID	Activity Name	Original Duration	Start	Finish	2016												2017			
					Oct			Nov			Dec			Jan						
	Excavation to -17.9mPD From SL5 to Formation (3,908 m3 / 540m3/D approx.3.3m Depth)	25d	27-Dec-16	27-Jan-17																
	1st Excavation Cycle (1.2m Depth)	8d	27-Dec-16	06-Jan-17																
A1630	Area B - Excavation of 1st 1.2m depth	3d	27-Dec-16	30-Dec-16																
A1640	Area B - Make Good Access for Strut & Waling Installation	1d	29-Dec-16	30-Dec-16																
A1650	Area B - Install Lagging Plates (Row A & Row B)	5d	30-Dec-16	06-Jan-17																
	2nd Excavation Cycle (1.2m Depth)	8d	06-Jan-17	16-Jan-17																
A1660	Area B - Excavation of 2nd 1.2m depth	3d	06-Jan-17	09-Jan-17																
A1670	Area B - Make Good Access for Strut & Waling Installation	1d	08-Jan-17	10-Jan-17																
A1680	Area B - Install Lagging Plates (Row A & Row B)	5d	10-Jan-17	16-Jan-17																
	3rd Excavation Cycle (0.9m Depth)	8d	16-Jan-17	27-Jan-17																
A1720	Area B - Excavation of 2nd 0.9m depth	2d	16-Jan-17	19-Jan-17																
A1730	Area B - Make Good Access for Strut & Waling Installation	1d	19-Jan-17	20-Jan-17																
A1740	Area B - Install Lagging Plates (Row A & Row B)	5d	20-Jan-17	27-Jan-17																
	Tunnel Structure	113d	06-Oct-16 A	01-Feb-17																
	Area A(CH384 to CH462 - Victoria Park to Steel Deck WB + IEC)	113d	06-Oct-16 A	01-Feb-17																
	Vertical Blinding & Waterproofing (Bay C1 to Bay C3)	22d	11-Oct-16 A	26-Nov-16																
	1st Pour	9d	11-Oct-16 A	13-Nov-16																
T1000	Welding Tie Rod	3d	11-Oct-16 A	07-Nov-16																
T1010	Erect Working Platform	2d	13-Oct-16 A	09-Nov-16																
T1020	Formwork Erection	3d	15-Oct-16 A	12-Nov-16																
T1030	Placing Concrete for 1st Pour	1d	24-Oct-16 A	13-Nov-16																
	2nd Pour	13d	13-Nov-16	26-Nov-16																
T1040	Erect Working Platform	3d	13-Nov-16	16-Nov-16																
T1050	Formwork Erection	2d	16-Nov-16	18-Nov-16																
T1060	Placing Concrete for 2nd Pour	1d	18-Nov-16	19-Nov-16																
T1070	Remove Working Fromwork	2d	19-Nov-16	21-Nov-16																
T1080	Fixing T-Grid Waterproofing on Base Slab & Vertical Blinding	5d	21-Nov-16	26-Nov-16																
	Bay C1	63d	26-Nov-16	28-Jan-17																
	Structure	53d	26-Nov-16	18-Jan-17																
	1.2m Thick Base Slab	10d	26-Nov-16	06-Dec-16																
T1090	C1 Base - Rebar Fixing	4d	26-Nov-16	30-Nov-16																
T1100	C1 Base - Kicker Formwork & Water Stop	1d	30-Nov-16	01-Dec-16																
T1110	C1 Base - Concreting	1d	01-Dec-16	02-Dec-16																
T1120	C1 Base - Remove Kicker Formwork & Make Good C.J.	1d	02-Dec-16	03-Dec-16																
T1130	C1 Base - Remove Strut SL4 (7 Nos/Bay C1)	3d	03-Dec-16	06-Dec-16																
	1m Thick Tunnel Wall at Both Sides	15d	06-Dec-16	21-Dec-16																
T1140	C1 Wall - Erect Working Platform	3d	06-Dec-16	09-Dec-16																
T1150	C1 Wall - Steel Fixing	4d	09-Dec-16	13-Dec-16																
T1160	C1 Wall - Internal Formwork & Water Stop	4d	13-Dec-16	17-Dec-16																
T1170	C1 Wall - Placing Concrete to Wall	1d	17-Dec-16	18-Dec-16																
T1180	C1 Wall - Remove Working Platform & Wall Formwork	3d	18-Dec-16	21-Dec-16																
T1190	C1 Wall - Remove Strut SL5 (0 No / Bay C1)	0d	21-Dec-16	21-Dec-16																
	200 mm Thick OHVD Slab	12d	21-Dec-16	02-Jan-17																
T1200	C1 OHVD - Erect Faslework	5d	21-Dec-16	26-Dec-16																

Activity ID	Activity Name	Original Duration	Start	Finish	2016												2017		
					Oct				Nov				Dec				Jan		
T1210	C1 OHVD - Erect Soffit Formwork	4d	26-Dec-16	30-Dec-16															C1 OHVD - Erect Soffit Formwork
T1220	C1 OHVD - Steel Fixing for Slab	2d	30-Dec-16	01-Jan-17															C1 OHVD - Steel Fixing for Slab
T1230	C1 OHVD - Placing Concrete to Slab	1d	01-Jan-17	02-Jan-17															C1 OHVD - Placing Concrete to Slab
400mm Thick OHVD Hanger Wall		4d	02-Jan-17	06-Jan-17															
T1240	C1 OHVD - Erect Formwork for Hanger Wall	2d	02-Jan-17	04-Jan-17															C1 OHVD - Erect Formwork for Hanger Wall
T1250	C1 OHVD - Steel Fixing for Hanger Wall	1d	04-Jan-17	05-Jan-17															C1 OHVD - Steel Fixing for Hanger Wall
T1260	C1 OHVD - Placing Concrete to Hanger Wall	1d	05-Jan-17	06-Jan-17															C1 OHVD - Placing Concrete to Hanger Wall
1.2m Thick Top Slab		12d	06-Jan-17	18-Jan-17															
T1270	C1 Roof - Erect Falsework	3d	06-Jan-17	09-Jan-17															C1 Roof - Erect Falsework
T1280	C1 Roof - Erect Formwork & Water Stop	4d	09-Jan-17	13-Jan-17															C1 Roof - Erect Formwork & Water Stop
T1290	C1 Roof - Steel Fixing	4d	13-Jan-17	17-Jan-17															C1 Roof - Steel Fixing
T1300	C1 Roof - Placing Concrete to Roof Slab	1d	17-Jan-17	18-Jan-17															C1 Roof - Placing Concrete to Roof Slab
Removal of Falseworks		10d	18-Jan-17	28-Jan-17															
T1310	C1 Roof - 10 Days Curing of Roof Prior to Removal of Falsework	10d	18-Jan-17	28-Jan-17															C1 Roof - 10 Days Curing of Roof Prior to Removal of Falsework
Bay C2		74d	06-Oct-16 A	24-Dec-16															
A1411	Clearance Works after Pimping Dry of ELS	10d	06-Oct-16 A	10-Oct-16 A	Clearance Works after Pimping Dry of ELS														
Structure		56d	25-Oct-16	19-Dec-16															
1.2m Thick Base Slab		10d	09-Dec-16	19-Dec-16															
T1330	C2 Base - Rebar Fixing	4d	09-Dec-16	13-Dec-16															C2 Base - Rebar Fixing
T1340	C2 Base - Kicker Formwork & Water Stop	1d	13-Dec-16	14-Dec-16															C2 Base - Kicker Formwork & Water Stop
T1350	C2 Base - Concreting	1d	14-Dec-16	15-Dec-16															C2 Base - Concreting
T1360	C2 Base - Remove Kicker Formwork & Make Good C.J.	1d	15-Dec-16	16-Dec-16															C2 Base - Remove Kicker Formwork & Make Good C.J.
T1370	C2 Base - Remove Strut SL4 (8 Nos/Bay C1)	3d	16-Dec-16	19-Dec-16															C2 Base - Remove Strut SL4 (8 Nos/Bay C1)
1m Thick Tunnel Wall at Both Sides		17d	25-Oct-16	10-Nov-16															
T1380	C2 Wall - Erect Working Platform	3d	25-Oct-16	27-Oct-16															C2 Wall - Erect Working Platform
T1390	C2 Wall - Steel Fixing	4d	28-Oct-16	31-Oct-16															C2 Wall - Steel Fixing
T1400	C2 Wall - Internal Formwork & Water Stop	4d	01-Nov-16	04-Nov-16															C2 Wall - Internal Formwork & Water Stop
T1410	C2 Wall - Placing Concrete to Wall	1d	05-Nov-16	05-Nov-16															C2 Wall - Placing Concrete to Wall
T1420	C2 Wall - Remove Working Platform & Wall Formwork	3d	06-Nov-16	08-Nov-16															C2 Wall - Remove Working Platform & Wall Formwork
T1430	C2 Wall - Remove Strut SL5 (5 No / Bay C1)	2d	09-Nov-16	10-Nov-16															C2 Wall - Remove Strut SL5 (5 No / Bay C1)
200 mm Thick OHVD Slab		12d	11-Nov-16	22-Nov-16															
T1440	C2 OHVD - Erect Falsework	5d	11-Nov-16	15-Nov-16															C2 OHVD - Erect Falsework
T1450	C2 OHVD - Erect Soffit Formwork	4d	16-Nov-16	19-Nov-16															C2 OHVD - Erect Soffit Formwork
T1460	C2 OHVD - Steel Fixing for Slab	2d	20-Nov-16	21-Nov-16															C2 OHVD - Steel Fixing for Slab
T1470	C2 OHVD - Placing Concrete to Slab	1d	22-Nov-16	22-Nov-16															C2 OHVD - Placing Concrete to Slab
400mm Thick OHVD Hanger Wall		4d	23-Nov-16	26-Nov-16															
T1480	C2 OHVD - Erect Formwork for Hanger Wall	2d	23-Nov-16	24-Nov-16															C2 OHVD - Erect Formwork for Hanger Wall
T1490	C2 OHVD - Steel Fixing for Hanger Wall	1d	25-Nov-16	25-Nov-16															C2 OHVD - Steel Fixing for Hanger Wall
T1500	C2 OHVD - Placing Concrete to Hanger Wall	1d	26-Nov-16	26-Nov-16															C2 OHVD - Placing Concrete to Hanger Wall
1.2m Thick Top Slab		12d	27-Nov-16	08-Dec-16															
T1510	C2 Roof - Erect Falsework	3d	27-Nov-16	29-Nov-16															C2 Roof - Erect Falsework
T1520	C2 Roof - Erect Formwork & Water Stop	4d	30-Nov-16	03-Dec-16															C2 Roof - Erect Formwork & Water Stop
T1530	C2 Roof - Steel Fixing	4d	04-Dec-16	07-Dec-16															C2 Roof - Steel Fixing
T1540	C2 Roof - Placing Concrete to Roof Slab	1d	08-Dec-16	08-Dec-16															C2 Roof - Placing Concrete to Roof Slab

Activity ID	Activity Name	Original Duration	Start	Finish	2016												2017			
					Oct		Nov				Dec				Jan					
Removal of Falseworks		16d	09-Dec-16	24-Dec-16																
T1550	C2 Roof - 10 Days Curing of Roof Prior to Removal of Falsework	10d	09-Dec-16	18-Dec-16																
T1560	C2 Roof - Remove Falsework	6d	19-Dec-16	24-Dec-16																
Bay C3		64d	29-Nov-16	01-Feb-17																
Structure		54d	29-Nov-16	22-Jan-17																
1.2m Thick Base Slab		10d	29-Nov-16	09-Dec-16																
T1570	C3 Base - Rebar Fixing	4d	29-Nov-16	03-Dec-16																
T1580	C3 Base - Kicker Formwork & Water Stop	1d	03-Dec-16	04-Dec-16																
T1590	C3 Base - Concreting	1d	04-Dec-16	05-Dec-16																
T1600	C3 Base - Remove Kicker Formwork & Make Good C.J.	1d	05-Dec-16	06-Dec-16																
T1610	C3 Base - Remove Strut SL4 (8 Nos/Bay C1)	3d	06-Dec-16	09-Dec-16																
1m Thick Tunnel Wall at Both Sides		16d	09-Dec-16	25-Dec-16																
T1620	C3 Wall - Erect Working Platform	3d	09-Dec-16	12-Dec-16																
T1630	C3 Wall - Steel Fixing	4d	12-Dec-16	16-Dec-16																
T1640	C3 Wall - Internal Formwork & Water Stop	4d	16-Dec-16	20-Dec-16																
T1650	C3 Wall - Placing Concrete to Wall	1d	20-Dec-16	21-Dec-16																
T1660	C3 Wall - Remove Working Platform & Wall Formwork	3d	21-Dec-16	24-Dec-16																
T1670	C3 Wall - Remove Strut SL5 (3 No / Bay C1)	1d	24-Dec-16	25-Dec-16																
200 mm Thick OHVD Slab		12d	25-Dec-16	06-Jan-17																
T1680	C3 OHVD - Erect Faslework	5d	25-Dec-16	30-Dec-16																
T1690	C3 OHVD - Erect Soffit Formwork	4d	30-Dec-16	03-Jan-17																
T1700	C3 OHVD - Steel Fixing for Slab	2d	03-Jan-17	05-Jan-17																
T1710	C3 OHVD - Placing Concrete to Slab	1d	05-Jan-17	06-Jan-17																
400mm Thick OHVD Hanger Wall		4d	06-Jan-17	10-Jan-17																
T1720	C3 OHVD - Erect Formwork for Hanger Wall	2d	06-Jan-17	08-Jan-17																
T1730	C3 OHVD - Steel Fixing for Hanger Wall	1d	08-Jan-17	09-Jan-17																
T1740	C3 OHVD - Placing Concrete to Hanger Wall	1d	09-Jan-17	10-Jan-17																
1.2m Thick Top Slab		12d	10-Jan-17	22-Jan-17																
T1750	C3 Roof - Erect Falsework	3d	10-Jan-17	13-Jan-17																
T1760	C3 Roof - Erect Formwork & Water Stop	4d	13-Jan-17	17-Jan-17																
T1770	C3 Roof - Steel Fixing	4d	17-Jan-17	21-Jan-17																
T1780	C3 Roof - Placing Concrete to Roof Slab	1d	21-Jan-17	22-Jan-17																
Removal of Falseworks		10d	22-Jan-17	01-Feb-17																
T1790	C3 Roof - 10 Days Curing of Roof Prior to Removal of Falsework	10d	22-Jan-17	01-Feb-17																

EXT WORK - WK- 02

SR8 - Layout for 3MRP_2106_10

Appendix C.5

Activity ID	Activity Name	Original Duration												
			2016											
			Oct			Nov				Dec			2017	
			Jan											
Total		336d												
External Works REV-02 Progress As of (2016-10-25)		336d												
Tsing Fung St - RW & Subway Extension & Toe Wall at Hing Fat St		239d												
Ret. Wall & TF Subway Extension (Portion V)		81d												
Retaining Wall RW8C at Tsing Fung Street (Portion V)		81d												
VP_1415	RW8C - PVC Duct and Draw Pits	24d	RW8C - PVC Duct and Draw Pits											
VP_1400	RW8C - Road Formation - Subbase + Kerb + U-shape Channel	48d	RW8C - Road Formation - Subbase + Kerb + U-shape Channel											
Retaining Wall + Toe Wall at Hing Fat Street		236d												
Subway Extension at Tsing Fung Street (Portion VIII)		8d												
VP_1375.50	TFS Subway extension - install Railing	8d	TFS Subway extension - install Railing											
RC Works - Toe Wall (RW8E)		70d												
A6900	Excavation & Temporary Works for RW8E	14d	Excavation & Temporary Works for RW8E											
A6910	Construction of Base Slab of RW8E - 4 Bays	28d	Construction of Base Slab of RW8E - 4 Bays											
A6920	Construction of Wall Stem of RW8E - 4 Bays	28d	Construction of Wall Stem of RW8E - 4 Bays											
RC Works - Retaining Wall RW8D		229d												
VP_1540	RW8D - Base Slab (4 Bays)	28d	RW8D - Base Slab (4 Bays)											
VP_1550	RW8D - Wall Stem (4 Bay)	11d	RW8D - Wall Stem (4 Bay)											
VP_1550A	Construction of Toe Wall - 1 Bay	14d	Construction of Toe Wall - 1 Bay											
VP_1550B	Backfill behind Retaining Walls & toe Walls	24d	Backfill behind Retaining Walls & toe Walls											
VP_1590	Installation of Steel Vehicle Parapet	14d	Installation of Steel Vehicle Parapet											
SR8 External Works: Raod & Drain, Surfacing, Furnitures, Traffic Signs etc.		313d												
Zone 1 - Within Footpath of Retaining Wall RW8D		119d												
SR8_2100	DS16 Footing & Signage	50d	DS16 Footing & Signage											
SR8_2110	5m CCTV High Mast Footing	14d	5m CCTV High Mast Footing											
SR8_2110A	Overheight Detector Footing & Draw Pits at Footpath	14d	Overheight Detector Footing & Draw Pits at Footpath											
SR8_22740	Construction of FVMSh2 Footing (By Others)	28d	Construction of FVMSh2 Footing (By Others)											
SR8_21900A10	Laying DN40 Irrigation Main	14d	Laying DN40 Irrigation Main											
SR8_2010A	Zone 1 - DN 150 Sewer Pipe	14d	Zone 1 - DN 150 Sewer Pipe											
SR8_22500A10	ATC + E&M Ducting & Draw Pits within VP side	14d	ATC + E&M Ducting & Draw Pits within VP side											
SR8_2030	Zone 1 - DN 100 MDPE Water Main - F01 Laying	45d	Zone 1 - DN 100 MDPE Water Main - F01 Laying											
Zone 2 - Subway Extension to New Lay-by		251d												
SR8_2140A	Zone 2 - Laying DN150 Sewer & DN225 Strom Drain	21d	Zone 2 - Laying DN150 Sewer & DN225 Strom Drain											
SR8_2160	Construction of FVMSh3 Footing	14d	Construction of FVMSh3 Footing											
SR8_21800	Zone 2 - Laying DN100 MDPE Water Main - F01	21d	Zone 2 - Laying DN100 MDPE Water Main - F01											
Zone 3 - Within Zone A & Zone B Area inside Victoria Park/ New Pedestrian Island		82d												
SR8_2190	Construct ion of DS17 Footing	21d	Construct ion of DS17 Footing											
SR8_2180	Sewer & Strom Drain Pipe Laying	21d	Sewer & Strom Drain Pipe Laying											
SR8_2210	Laying DN40 Irrigation Main	14d	Laying DN40 Irrigation Main											
SR8_2220	Installation of Water Point WP 3-0 to WP 3-8	30d	Installation of Water Point WP 3-0 to WP 3-8											
Zone 4 - Zone C Within Victoria Park		14d												
Footing Along U-struture & Portal Both Sides		14d												
SR8_2330	Overheight Detector Footing & Draw Pits at Both Sides	14d	Overheight Detector Footing & Draw Pits at Both Sides											
Works in Victoria Park		305d												

