



Lam Geotechnics Limited

Contract No. HK/2015/01  
Wan Chai Development Phase II and Central Wanchai Bypass  
- Sampling, Field Measurement and Testing Works (Stage 3)  
Monthly EM&A Report (May 2017)

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/E,  
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/E, FEP-12/364/2009/D

MONTHLY ENVIRONMENTAL MONITORING & AUDIT REPORT

- MAY 2017 -

CLIENTS:

Civil Engineering and Development  
Department

and

Highways Department

PREPARED BY:

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CERTIFIED BY:

Raymond Dai  
Environmental Team Leader

DATE:

12 June 2017

Ref.: AACWBIECEM00\_0\_9444L.17

13 June 2017

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 (May 2017)  
for EP-364/2009/E, 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/E & FEP-  
12/364/2009/D**

Reference is made to the Environmental Team's submission of the captioned Monthly Environmental Monitoring and Audit (EM&A) Report for May 2017 received by e-mail on 12 June 2017 for our review and comment.

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

Thank you very much for your 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. Tony Cheung	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 – [May 2017](#) specific for Environmental Permit no. EP-364/2009/E, 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, FEP-11/364/2009/E and FEP-12/364/2009/D. 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 April 2017 to 26 May 2017](#).
- 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](#)
  - [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 amenity area](#)
  - [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
  - [Rectification works for the defects recorded in the inspection for the end of maintenance period of Observation Deck and Staircase ST-01](#)
  - [completion of rectification works for cracks/joints with water leakage inside OHVD cells](#)
  - [backfilling works](#)
  - [construction of temporary wall for inside tunnel](#)
  - [blinding layer for Hung Hing Road Flyover](#)
  - [demolition of diaphragm wall for reinstatement of Hung Hing Road approach ramp](#)
  - [cleaning of cross road duct](#)

- Rectification works against water leakage and remedial works against concrete defects of the tunnel structure
- outstanding works inside tunnel
- Tunnel wall structure
- Concreting for roadside barrier
- Erection of scaffolding for construction of OHVD
- Concreting for OHVD slab
- Erection of scaffolding for construction of top slab
- Tunnel top slab
- Rectification work for road defects at Wan Shing Street

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
- Reinstatement work at the PRE Office car park area

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 Demolition / Construction
- Pier 30-32 Cap Construction
- Bridge E noise barrier installation
- IEC noise enclosure/barrier installation
- Excavation / Construction of retaining wall
- FEHD Metal Roof Construction
- Pre-bored H-piles for Approach Ramp Construction

Contract no. HK/2012/08 – Wan Chai Development Phase II – Central- Wan Chai Bypass at Wan Chai West under FEP-12/364/2009/D

- Grouting
- Construction of Slip Road 1
- Construction of drainage

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

- Tree protection works next to existing BGO,
- Drainage improvement 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-11/364/2009/E

- Construction of Ventilation Buildings, inclusive of Administration Building, Central Ventilation 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 – Footbridge for 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. With respect to the demolition of Ex-Harbour Road Sports Centre, the respective noise monitoring station M1a – Harbour Road Sports Centre were finely adjusted on 16 and 25 May 2017 and thereafter to the Footbridge for Harbour Road Sports for noise monitoring.
- vii. Two limit level exceedances were recorded at M1a – Footbridge for Ex-Harbour Road Sports Centre on 16 and 25 May 2017 in the reporting month. The exceedances were concluded as non Project related.
- viii. With respect to the non-CWB Project building construction at Oil Street, the real-time noise monitoring station RTN2a- Hong Kong Electric Centre was finely adjusted from Northeast Side to Northwestern side at Roof Top location on 03 March 2017.
- ix. 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.
- x. 24-hour real time noise monitoring was conducted at RTN2a – Hong Kong Electric Centre. No project related exceedance was recorded in the reporting month.
- xi. 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.
- xii. 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

- xiii. 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.
- xiv. With respect to the proposed demolition of eastern podium of Oil Street Site Office, the respective air quality monitoring station CMA1b – Oil Street Site Office was finely adjusted from East podium of the Oil Street Site Office to the West podium of the Oil Street Site Office on 21 December 2016.
- xv. No action or limit level exceedance was recorded in the reporting month.
- xvi. Due to electricity interruption, the TSP monitoring in the reporting month are rescheduled as follow:-  
The 24hr TSP monitoring at CMA4b was rescheduled from 28 April 2017 to 29 April 2017;  
The 24hr TSP monitoring at CMA5b was rescheduled from 16 May 2017 to 17 May 2017;  
The 24hr TSP monitoring at MA1e was rescheduled from 04 May 2017 to 05 May 2017.

Complaints, Notifications of Summons and Successful Prosecutions

- xvii. Two environmental complaints were received in the reporting month.
- xviii. The first EPD complaint was referred to the ET on 18 May 2017 (CASE Ref: H05/RS/00014415-17(14448-17)). The complainant reported that construction work was found on 10 May 2017 (~03:52) that caused noise nuisance. According to the photos provided by the complainant lorry mounted concrete pump were used. According to the information provided by the IEC on 11 May 2017 and 15 May 2017, it was alleged that the concreting work under Contract No. HK/2009/02 was carried out for the Central-Wan Chai Bypass Top Slab Bay 6 during night time on 09 May 2017 and early morning on 10 May 2017 (between 11:00pm on 09 May 2017 and about 04:00 a.m. on 10 May 2017) with 3 pump trucks, 10 vibrating pokers, 9 concrete trucks and 2 generators in operation. The concreting works under Contract No. CEDD HK/2009/02 was also carried out for the Central – Wan Chai Bypass Bay 10A OHVS Slab after 23:00 on 12 May 2017 (after 23:00) with 1 Pump truck, 2 vibrating pokers, 1 concrete trucks and 3 generators in operation.

ET confirmed with the Resident Site Staff that 10 nos. of vibratory pokers, 3 nos. of concrete pump trucks and 3 nos. of generators were in operation at Tunnel Portion 5, Top Slab 6 from 2300hrs on 09 May 2017 to 0408hrs on 10 May 2017 while 9 nos. of concrete trucks were in operation at around 0320hrs on 10 May 2017. 2 nos. of vibratory pokers, 1 no. of concrete truck, 1 no. of concrete pump truck, and 3 nos. of generators were in operation at Tunnel Portion 5, Top Slab 6 from 2300hrs on 12 May 2017 to 2340hrs on 12 May 2017.

According to the RSS site information, 10 nos. of vibratory pokers, 3 nos. of concrete pump trucks and 3 nos. of generator were in operation at Tunnel Portion 5, Top Slab 6 from 2300hrs on 09 May 2017 to 0408hrs on 10 May 2017 while 9 nos. of concrete trucks were in operation at around 0320hrs on 10 May 2017 and the above construction operations could not comply with the item 3a - PME requirement under the Construction Noise Permit GW-RS1297-16. In response to the information provided by the RSS/ IEC on 11 May 2017, ad-hoc inspection was conducted by the Environmental Team on 13 May 2017 around 00:40 hrs. No construction operation and no PME deployment was observed at the time of inspection.

According to the RSS site information, 2 nos. of vibratory pokers, 1 no. of concrete pump truck, and 3 nos. of generators were in operation at Tunnel Portion 5, Top Slab 6 from 2300hrs on 12 May 2017 to 2340hrs on 12 May 2017 and could not comply with the item 3a - PME requirement under Construction Noise Permit GW-RS1297-16. In response to the information provided by the RSS/ IEC on 15 May 2017, ad-hoc inspection was conducted by the Environmental Team on 19 May 2017 around 22:20hrs. 2 nos. of concrete truck, 1 no. of concrete pump truck were observed in operation at the time of inspection and relevant CNP GW-RS0334-17 was in place.

Notwithstanding the above, in view of the identified non-conformance, the Contractor of HK/2009/02 was requested to implement the following rectification measures to ensure the strict construction noise permit compliance including i) fully review Construction Noise Permit in force and the tentative construction operations to ensure the strict Construction Noise Permit compliance under Noise Control Ordinance, ii) fully review 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 and iii) review the construction sequence and schedule to ensure the construction operations and PME are operated in accordance to relevant Construction Noise Period within the specified allowable period. The Contractor of HK/2009/02 is also recommended to provide briefing and training session to site staffs to enhance the site awareness and understanding on relevant construction noise permit(s) requirement during restricted hours. The ET/IEC/RSS will maintain ad hoc checking on the construction operations under Contract HK/2009/02 during restricted hours and report relevant findings, if any, accordingly.

- xix. Second EPD complaint was referred to the ET on 25 May 2017 (CASE Ref: N/A). The complainant reported that concreting works under Contract No. CEDD HK/2009/02 was carried out with crawler cranes, 10-12 vibratory pokers, and 7 concrete lorry mixers in the morning on 21 May 2017 without a valid CNP. Also, at 15:30 on 21 May 2017, 9 vibratory pokers and 7 concrete lorry mixers were observed in operation. These works were suspected to contravene the Noise Control Ordinance (NCO).

ET confirmed with the Resident Site Staff that 12 nos. of vibratory pokers were operated at Tunnel Portion 5 from 0730hrs to 1740hrs on 21 May 2017. 3 nos. of crawler cranes were operated at Tunnel Portion 5 from 0800hrs to 0915hrs on 21 May 2017. 3 nos. of crawler cranes were operated at Tunnel Portion 5 from 0915hrs to 1030hrs on 21 May 2017. 4 nos. of concrete pump trucks were operated at Tunnel Portion 5 from 0750hrs to 1650hrs on 21 May 2017. 4 nos. of generators were operated at Tunnel Portion 5 from 0730hrs to 1740hrs on 21 May 2017. 7 nos. of concreting trucks were operated at intervals between the time period of 0730hrs to 1740hrs on 21 May 2017.

According to the RSS site information, the following PMEs were operated on 21 May 2017, i) 12 nos. of vibratory pokers were operated at Tunnel Portion 5 from 0730hrs to 1740hrs; ii) 3 nos. of crawler cranes were operated at Tunnel Portion 5 from 0800hrs to 0915hrs; iii) 3 nos. of crawler cranes were operated at Tunnel Portion 5 from 0915hrs to 1030hrs on 21 May 2017; iv) 4 nos. of concrete pump trucks were operated at Tunnel Portion 5 from 0750hrs to 1650hrs; v) 4 nos. of generators were operated at Tunnel Portion 5 from 0730hrs to 1740hrs ; 7 nos. of concreting trucks were operated at intervals between the time period of 0730hrs to 1740hrs on 21 May 2017 and the above construction operations could not comply with the item 3a - PME requirement under the Construction Noise Permit GW-RS334-17.

EPD notification on the cancellation of the Construction Noise Permits GW-RS0334-17 and Construction Noise Permit GW-RS1297-16 was received by the Environmental Team on 26 May 2017. Ad hoc inspection was conducted by the Environmental Team on 26 May 2017 around 2230hrs and on 28 May 2017 around 1520hrs and no construction works and no operation of PME was observed at the concerned site Portion 5 at the time of inspections.

Notwithstanding the above, in view of the identified non-conformance, the Contractor of HK/2009/02 was requested to implement the following rectification measures to ensure the strict construction noise permit compliance including i) fully review Construction Noise Permit in force and the tentative construction operations to ensure the strict Construction Noise Permit compliance under Noise Control Ordinance, ii) fully review 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 and iii) review the construction sequence and schedule to ensure the construction operations and PME are operated in accordance to relevant Construction Noise Period within the specified allowable period. The Contractor of HK/2009/02 is also recommended to provide briefing and training session to site staffs to enhance the site awareness and understanding on relevant construction noise permit(s) requirement during restricted hours. The ET/IEC/RSS will maintain ad hoc checking on the construction operations under Contract HK/2009/02 during restricted hours and report relevant findings, if any, accordingly.

- xx. Two Summons to Defendant (Case No. ESS40680/2016 and Case No. ESS40679/2016) were issued to the Contractor(s) under Contract HY/2009/19 on 25 October 2016 regarding the case against Section 6(1)(b) and 6(5), Noise Control Ordinance Cap 400 were convicted on 04 May 2017.

#### 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
- 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 amenity area
- 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

- Removal works of the existing sheet piles at the north face of WSD Salt Water Pumping Station.
- Rectification works for the defects for the end of maintenance period of Observation Deck and Staircase ST-01.
- Rectification works for cracks/joints with water leakage inside OHVD cells will be carried out.
- Procurement of new movement joint
- Formwork, rebar fixing and concreting of HHR Flyover Approach Ramp.
- Remedial works of tunnel wall, base slab and OHVD inside tunnel.
- Remedial works for cross road ducts inside tunnel.
- General cleaning and rectification works of OHVD, tunnel base slab, carrier drain, cross road duct and manhole gully.
- Rebar fixing and concreting of top slab.
- Dismantling of scaffolding.
- Crack mapping of surface of top slab.
- Installation of waterproofing membranes at top slab.
- Screeding for waterproofing membranes
- Rectification works for uneven road surface at Hung Hing Road.
- Trial pit at Hung Hing Road for sewage works.

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
- Reinstatement work at the PRE Office car park area
- Re-surfacing work at Hung Hing Road

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 Demolition / Construction
- Pier 30-32 Cap Construction
- Bridge E noise barrier installation
- IEC noise enclosure/barrier installation
- Excavation / Construction of retaining wall
- FEHD Metal Roof Construction
- Pre-bored H-piles for Approach Ramp Construction
- Hing Fat Street modification works
- Oil Street drainage works
- Installation of skin parapet on TB bridge

Contract no. HK/2012/08 – Wan Chai Development Phase II – Central- Wan Chai Bypass at Wan Chai West under FEP-12/364/2009/D

- Grouting
- Construction of Slip Road 1
- Construction of drainage

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,
- 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-11/364/2009/E

- Construction of Ventilation Buildings, inclusive of Administration Building, Central Ventilation 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/E 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-10/364/2009/B, FEP-11/364/2009/E and FEP-12/364/2009/D 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/E, 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, FEP-11/364/2009/E and FEP-12/364/2009/D during the period [27 April 2017 to 26 May 2017](#).

### 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 3328
Chun Wo – Leader Joint Venture	Contractor under Contract no. HK/2009/01	Project Manager	Mr. Simon Liu	2162 9909	2587 1878
		Site Agent	Mr. Andy Yu	9648 4896	
		Construction Manager	Mr. Wyman Wong	9627 2467	
		Environmental Officer	Mr. Terry Tsang	6683 9394	

Party	Role	Post	Name	Contact No.	Contact Fax
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	3758 8879	
		Deputy Site Agent	Mr. Eric Fong	6191 9337	
		Environmental Manager / Environmental Officer	Mr. M.H. Isa	3757 8218	
		Assistant Environmental Officer	Mr. James Chan	3757 8217	
Leighton Contractors (Asia) Limited	Contractor under Contract no. HY/2009/18	Site Agent	Mr. Jimmy Chu	3973 0803	2140 6799
		Environmental Officer	Mr. Chris Chan	3973 0885	
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 Lau	3557 6405	
		Environmental Officer	Mr. Andy Mak	3557 6347	
China State-Build King 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	
		Environmental Supervisor	Mr. Y.L. Ho	6050 4919	
China State	Contractor under Contract no. HY/2010/08	Project Director	Chris Leung	9210 7116	2566 8061
		Site Agent	Mr. Francis Suen	3557 6407	
		Environmental Officer	Mr. Gabriel Wong	3557 6466	
		Environmental Supervisor	Mr. Desmond Ho	3557 6465	
Leighton Joint Venture	Contractor under Contract	Site Agent	Mr. Colman Wong	2823 1410	21406799





Party	Role	Post	Name	Contact No.	Contact Fax
	no. HY/2011/08	Environmental Officer	Mr. Malcolm Leung	3973 0850	
		Environmental Supervisor	Ms. 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
- 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 amenity area
- 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

- Rectification works for the defects recorded in the inspection for the end of maintenance period of Observation Deck and Staircase ST-01
- completion of rectification works for cracks/joints with water leakage inside OHVD cells
- backfilling works
- construction of temporary wall for inside tunnel
- blinding layer for Hung Hing Road Flyover
- demolition of diaphragm wall for reinstatement of Hung Hing Road approach ramp
- cleaning of cross road duct
- Rectification works against water leakage and remedial works against concrete defects of the tunnel structure
- outstanding works inside tunnel
- Tunnel wall structure
- Concreting for roadside barrier
- Erection of scaffolding for construction of OHVD
- Concreting for OHVD slab
- Erection of scaffolding for construction of top slab
- Tunnel top slab
- Rectification work for road defects at Wan Shing Street

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
- Reinstatement work at the PRE Office car park area

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 Demolition / Construction
- Pier 30-32 Cap Construction
- Bridge E noise barrier installation
- IEC noise enclosure/barrier installation
- Excavation / Construction of retaining wall
- FEHD Metal Roof Construction
- Pre-bored H-piles for Approach Ramp Construction

Contract no. HK/2012/08 – Wan Chai Development Phase II – Central- Wan Chai Bypass at Wan Chai West under FEP-12/364/2009/D

- Grouting
- Construction of Slip Road 1
- Construction of drainage

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

- Tree protection works next to existing BGO,
- Drainage improvement 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-11/364/2009/E

- Construction of Ventilation Buildings, inclusive of Administration Building, Central Ventilation 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
- 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 amenity area
- 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

- Removal works of the existing sheet piles at the north face of WSD Salt Water Pumping Station.
- Rectification works for the defects for the end of maintenance period of Observation Deck and Staircase ST-01.
- Rectification works for cracks/joints with water leakage inside OHVD cells will be carried out.
- Procurement of new movement joint
- Formwork, rebar fixing and concreting of HHR Flyover Approach Ramp.
- Remedial works of tunnel wall, base slab and OHVD inside tunnel.
- Remedial works for cross road ducts inside tunnel.
- General cleaning and rectification works of OHVD, tunnel base slab, carrier drain, cross road duct and manhole gully.
- Rebar fixing and concreting of top slab.
- Dismantling of scaffolding.
- Crack mapping of surface of top slab.
- Installation of waterproofing membranes at top slab.
- Screeding for waterproofing membranes
- Rectification works for uneven road surface at Hung Hing Road.
- Trial pit at Hung Hing Road for sewage works.

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
- Reinstatement work at the PRE Office car park area
- Re-surfacing work at Hung Hing Road

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 Demolition / Construction
- Pier 30-32 Cap Construction
- Bridge E noise barrier installation
- IEC noise enclosure/barrier installation
- Excavation / Construction of retaining wall
- FEHD Metal Roof Construction
- Pre-bored H-piles for Approach Ramp Construction
- Hing Fat Street modification works
- Oil Street drainage works
- Installation of skin parapet on TB bridge

Contract no. HK/2012/08 – Wan Chai Development Phase II – Central- Wan Chai Bypass at Wan Chai West under FEP-12/364/2009/D

- Grouting
- Construction of Slip Road 1
- Construction of drainage

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,
- 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-11/364/2009/E

- Construction of Ventilation Buildings, inclusive of Administration Building, Central Ventilation 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	Superseded
Environmental Permit	EP-364/2009/E	22 Dec 2016	Valid
Environmental Permit	EP-376/2009	13 Nov 2010	Valid
Further Environmental Permit	FEP-01/356/2009	18 Feb 2010	Surrendered
Further Environmental Permit	FEP-02/356/2009	24 Mar 2010	Valid
Further Environmental Permit	FEP-03/356/2009	24 Mar 2010	Valid
Further Environmental Permit	FEP-04/356/2009	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	Superseded
Further Environmental Permit	FEP-11/364/2009/E	22 Dec 2016	Valid
Further Environmental Permit	FEP-12/364/2009/D	01 Aug 2016	Valid

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

Contract no. 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-RS1241-16	12 Dec 2016	15 Dec 2016 to 06 Jun 2017	Valid
	GW-RS1240-16	12 Dec 2016	13 Dec 2016 to 06 Jun 2017	Valid
	GW-RS1233-16	12 Dec 2016	14 Dec 2016 to 06 Jun 2017	Valid
	GW-RS1234-16	12 Dec 2016	20 Dec 2016 to 19 Jun 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 Licenses	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
Further Environmental Permit	FEP-03/356/2009	24 Mar 2010	N/A	Valid
	FEP-01/364/2009	24 Mar 2010	N/A	Valid
Notification of Works Under APCO	313962	2 Feb 2010	N/A	Valid
Construction Noise Permit (CNP) for non-piling equipment	GW-RS1153-16	17 Nov 2016	18 Nov 2016 to 13 May 2017	Cancelled
	GW-RS1140-16	11 Nov 2016	14 Nov 2016 to 09 May 2017	Valid
	GW-RS1297-16	15 Dec 2016	16 Dec 2016 to 14 Jun 2017	Valid
	GW-RS1305-16	22 Dec 2016	24 Dec 2016 to 13 Jun 2017	Cancelled
	GW-RS0289-17	31 Mar 2017	02 Apr 2017 to 02 Jul /2017	Valid
	GW-RS0314-17	07 Apr 2017	11 Apr 2017 to 04 Oct 2017	Valid
	GW-RS0338-17	13 Apr 2017	28 May 2017 to 27 Aug 2017	Valid

Permits and/or Licenses	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
	GW-RS0334-17	18 Apr 2017	21 Apr 2017 to 06 Oct 2017	Valid
	GW-RS0348-17	18 Apr 2017	25 Apr 2017 to 24 Oct 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
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

**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-RS1307-16	21 Dec 2016	23 Dec 2016 to 30 Apr 2017	Expired
	GW-RS1338-16	28 Dec 2016	01 Jan 2017 to 30 Jun 2017	Valid
	GW-RS0343-17	19 Apr 2017	21 Apr 2017 to 17 Jul 2017	Valid
	GW-RS0362-17	21 Apr 2017	30 Apr 2017 to 31 Aug 2017	Cancelled
	GW-RS0433-17	16 May 2017	18 May 2017 to 31 Aug 2017	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-RS1174-16	18 Nov 2016	24 Nov 2016 to 23 May 2017	Expired
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
Water Discharge License (Discharge at TS1)	WT00024874-2016	20 Jul 2016	20 Jul 2016 to 31 Mar 2021	Valid
Water Discharge Licence (Discharge at TPCWAE)	WT00024951-2016	08 Jul 2016	8 Jul 2016 to 31 Dec 2017	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	Valid
	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-RS1251-16	07 Dec 2016	18 Dec 2016 to 17 Jun 2017	Valid
	GW-RS0238-17	23 Mar 2017	08 Apr 2017 to 07 Jun 2017	Valid
	GW-RS0482-17	02 Jun 2017	08 Jun 2017 to 07 Sep 2017	Valid
Water Discharge License	WT00025282-2016	15 Sep 2016	30-Sept-21	Valid
Dumping Permit (Approach Ramp) (Type 1 – Open Sea Disposal)	EP/MD/17-078	01 Oct 2016	31 Mar 2017	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.5)	09 December 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-12/364/2009/D 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 Mar 2013	N/A	Valid
	FEP-12/364/2009/D	1 Aug 2016	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	30 Jun 2016	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-RS1336-16	29 Dec 2016	13 Jan 2017 to 12 Jul 2017	Valid
	GW-RS1371-16	5 Jan 2017	9 Jan 2017 to 08 Jul 2017	Valid
	GW-RS0098-17	1 Feb 2017	26 Feb 2017 to 25 Aug 2017	Valid
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-12/364/2009/D**

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-RS1254-16	10 Dec 2016	10 Dec 2016 to 07 Jun 2017	Valid
	GW-RS0086-17	31 Jan 2017	31 Jan 2017 to 30 Jul 2017	Valid
	GW-RS0092-17	31 Jan 2017	31 Jan 2017 to 31 Jul 2017	Valid
	GW-RS1366-16	06 Jan 2017	06 Jan 2017 to 26 Jun 2017	Valid
	GW-RS0201-17	18 Mar 2017	18 Mar 2017 to 17 Sep 2017	Valid
	GW-RS0347-17	27 Apr 2017	27 Apr 2017 to 18 Oct 2017	Valid
	GW-RS0360-17	20 Apr 2017	20 Apr 2017 to 19 Oct 2017	Valid
	GW-RS0290-17	08 Apr 2017	08 Apr 2017 to 30 Sep 2017	Valid
	GW-RW0197-17	19 Apr 2017	24 Apr 2017 to 20 Oct 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/E

- 3.1.13. The current status on licenses and/or permits on environmental protection pertinent and submission under FEP-11/364/2009/E 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
	FEP-11/364/2009/E	22 Dec 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-RS1089-16	28 Oct 2016	01 Nov 2016 to 30 Apr 2017	Expired
	GW-RS1151-16	17 Nov 2016	01 Dec 2016 to 31 May 2017	Valid
	GW-RS1168-16	17 Nov 2016	01 Dec 2016 to 31 May 2017	Valid
	GW-RS1169-16	18 Nov 2016	18 Nov 2016 to 30 Apr 2017	Expired
	GW-RS1178-16	17 Nov 2016	01 Dec 2016 to 31 May 2017	Valid
	GW-RS1134-16	28 Dec 2016	01 Jan 2017 to 30 Jun 2017	Valid
	GW-RS1137-16	28 Dec 2016	01 Jan 2017 to 30 Jun 2017	Valid

Permits and/or Licences	Reference No.	Issued Date	Valid Period/ Expiry Date	Status
	GW-RS0068-17	24 Jan 2017	01 Feb 2017 to 31 Jul 2017	Cancelled
	GW-RS0100-17	1 Feb 2017	03 Feb 2017 to 31 Jul 2017	Valid
	GW-RS0139-17	23 Feb 2017	01 Mar 2017 to 31 Aug 2017	Valid
	GW-RS0146-17	23 Feb 2017	01 Mar 2017 to 31 Aug 2017	Valid
	GW-RS0260-17	27 Mar 2017	29 Mar 2017 to 31 Aug 2017	Cancelled
	GW-RS0294-17	31 Mar 2017	06 Apr 2017 to 30 Sep 2017	Valid
	GW-RS0359-17	25 Apr 2017	01 May 2017 to 31 Oct 2017	Valid
	GW-RS0375-17	25 Apr 2017	01 May 2017 to 31 Oct 2017	Valid
	GW-RS0381-17	26 Apr 2017	01 May 2017 to 31 Oct 2017	Valid
	GW-RS0460-17	18 May 2017	01 Jun 2017 to 31 Oct 2017	Valid
	GW-RS0463-17	18 May 2017	01 Jun 2017 to 31 Oct 2017	Valid
	GW-RS0465-17	18 May 2017	01 Jun 2017 to 31 Oct 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
	WT00025858-2016	17 Oct 2016	31 Oct 2021	Valid
	WT00026829-2017	09 Jan 2017	31 Jan 2022	Valid
	WT00027343-2017	01 Mar 2017	31 Mar 2022	Valid

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

EP Condition	Submission	Date of Submission
Condition 2.9	Noise Management Plan (Rev.4)	08 November 2016
Condition 2.14	Landscape Plan (Rev.2)	18 Feb 2015
Condition 2.13 a)	Operational Air Quality Management Plan for West Ventilation Building (Rev.0)	25 Nov 2014
Condition 2.13 b)	Operational Air Quality Management Plan for Central Ventilation Building (Rev.0)	03 March 2017
Condition 2.13 c)	Operational Air Quality Management Plan for East Ventilation Building and East Vent Shaft (Rev.0)	18 Feb 2015
Condition 2.13 d)	Operational Air Quality Management Plan for an Electrostatic Precipitator system for EVB Operation (Rev.0)	06 April 2017
Condition 2.13 e)	Operational Air Quality Management Plan for ventilation system of Eastern Portal of the CWB Tunnel (Rev.0)	23 October 2016

## 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***	Footbridge for Ex-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 \*: Location ID has been updated from M7 to M8 for City Hall

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

Remarks\*\*\*: The location ID of monitoring station M1a was updated as "Footbridge for Ex-Harbour Road Sports Centre" in May 2017.

#### 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 <sup>TM</sup> issued under the NCO, sound level meters in compliance with the International Electrotechnical Commission Publications 651: 1979 (Type 1) and 804: 1985 (Type 1) specifications shall be used for carrying out the noise monitoring. Immediately prior to and following each noise measurement the accuracy of the sound level meter shall be checked using an acoustic calibrator generating a known sound pressure level at a known frequency. Measurements may be accepted as valid only if the calibration level from before and after the noise measurement agree to within 1.0 dB.
- 4.1.8. 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 m<sup>3</sup> per minute adjustable flow range;
- Equipped with a timing / control device with +/- 5 minutes accuracy for 24 hours operation;
- Installed with elapsed-time meter with +/- 2 minutes accuracy for 24 hours operation;
- Capable of providing a minimum exposed area of 406 cm<sup>2</sup>;
- Flow control accuracy: +/- 2.5% deviation over 24-hour sampling period;
- Equipped with a shelter to protect the filter and sampler;
- Incorporated with an electronic mass flow rate controller or other equivalent devices;
- Equipped with a flow recorder for continuous monitoring;
- Provided with a peaked roof inlet;
- Incorporated with a manometer;
- Able to hold and seal the filter paper to the sampler housing at horizontal position;
- Easily changeable filter; and
- Capable of operating continuously for a 24-hour period.

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

#### LABORATORY MEASUREMENT / ANALYSIS

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

4.2.8. 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 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	Footbridge for Ex-Harbour Road Sports Centre

- 5.1.6 Two limit level exceedances were recorded at M1a – Footbridge for Ex-Harbour Road Sports Centre on 16 and 25 May 2017 in the reporting month.

5.1.7 No Construction works was conducted under Contract HK/2009/01 around the monitoring station on 16 and 25 May 2017, non WDII-CWB Projects breaking and drilling works was observed on 16 May 2017 and non WDII-CWB Project bored pilling works was conducted on 25 May 2017 during monitoring period and observed as the major noise contribution. Hence, the exceedances were considered as non-Project related.

5.1.8 Despite rebar fixing, and formwork fixing works was conducted on 16 May 2017 and rebar fixing was conducted on 25 May 2017 under Contract HK/2009/02, non WDII-CWB Projects breaking and drilling works was observed on 16 May 2017 and non WDII-CWB Project bored pilling works was conducted on 25 May 2017 during monitoring period and observed as the major noise contribution. Hence, the exceedances were considered as non-Project related.

5.1.9 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

5.1.10 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

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

5.1.12 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

- 5.1.13 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

- 5.1.14 No action or limit level exceedance was recorded in this reporting month.
- 5.1.15 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-12/364/2009/D

- 5.1.16 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

- 5.1.17 No action or limit level exceedance was recorded in this reporting month.
- 5.1.18 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

- 5.1.19 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

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

5.1.21 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.
- 5.2.5. With respect to the non-CWB Project building construction at Oil Street, the real-time noise monitoring station RTN2a- Hong Kong Electric Centre was finely adjusted from Northeast Side to Northwestern side at Roof Top location on 03 March 2017.

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

- 5.2.6. 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.

- 5.2.7. No limit level exceedance was recorded at RTN1-FEHD Hong Kong Transport Section Whitfield Depot was recorded in the reporting month.



- 5.2.8. Limit level exceedances were recorded at RTN2a- Hong Kong Electric Centre was recorded on 24 May 2017 during daytime in the reporting month. After checking with Contractor of HY/2009/19, despite sheet piling works was conducted during the monitoring period, adverse weather condition under Red Rainstorm Warning Signal was considered as the major noise contribution during monitoring and hence the exceedance was concluded as non-Project related.
- 5.2.9. Limit level exceedances were recorded at RTN3- Yu Lee Mo Fan Memorial School on 10 and 24 May 2017 during daytime in the reporting month. After checking with Contractor of HY/2009/19, no construction works were conducted on 10 and 24 May 2017 around the monitoring location during the concerned period and hence the exceedances were considered to be non-Project related and potentially related to the traffic on 10 May 2017 and the adverse weather under Red Rainstorm Warning Signal on 24 May 2017.
- 5.2.10. No limit level exceedance was recorded at RTN4- Causeway Bay Community Centre was recorded in the reporting month.
- 5.2.11. 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

- 5.2.12. 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.*

- 5.2.13. No limit level exceedance was recorded at RTN1-FEHD Hong Kong Transport Section Whitfield Depot was recorded in the reporting month.
- 5.2.14. Limit level exceedances were recorded at RTN2a- Hong Kong Electric Centre was recorded on 24 May 2017 during daytime in the reporting month. After checking with Contractor of HY/2011/08, no construction works was conducted during the monitoring period and adverse weather condition under Red Rainstorm Warning Signal was considered as the major noise contribution during monitoring and hence the exceedance was concluded as non-Project related.



- 5.2.15. No limit level exceedance was recorded at RTN4- Causeway Bay Community Centre were recorded 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/B 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-12/364/2009/D

- 5.3.19 The commencement of construction works for Contract no. HY/2010/08 under FEP-12/364/2009/D 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
CMA5b	Pedestrian Plaza

- 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, m <sup>3</sup>	32.2	107983.85	TKO137, TM38
Inert C&D materials recycled, m <sup>3</sup>	Nil	98512.03	N/A
Non-inert C&D materials disposed, m <sup>3</sup>	18.44	5279.06	SENT Landfill
Non-inert C&D materials recycled, kg	Nil	1285746	N/A
Chemical waste disposed, kg	Nil	10400	N/A
Marine Sediment (Type 1 – Open Sea Disposal), m <sup>3</sup>	Nil	11527	South of Cheung Chau
Marine Sediment (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal), m <sup>3</sup>	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 <sup>3</sup>	126	522166.412	TKO137 / TM 38
Inert C&D materials recycled, m <sup>3</sup>	Nil	46520	N/A
Non-inert C&D materials disposed, m <sup>3</sup>	87	4416.317	SENT Landfill
Non-inert C&D materials recycled, m <sup>3</sup>	Nil	N/A	N/A
Chemical waste disposed, kg	Nil	17718	N/A
Marine Sediment (Type 1 – Open Sea Disposal), m <sup>3</sup>	Nil	65663	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 <sup>3</sup>	89.32	1415282.75	T.K.O. 137, TM 38
Inert C&D materials recycled, m <sup>3</sup>	Nil	58787.05	N/A
Non-inert C&D materials disposed, m <sup>3</sup>	3.57	4366.62	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 <sup>3</sup>	Nil Nil	625200.92 245453.3	Tuen Mun Area 38 TKO137 FB
Inert C&D materials recycled, m <sup>3</sup>	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 <sup>3</sup>	Nil Nil	4673.91 1.58	SENT Landfill WENT Landfill
Non-inert C&D materials recycled, m <sup>3</sup>	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 <sup>3</sup>	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, <b>ton</b>	10025.56	686993.92	TM38
Inert C&D materials recycled, <b>ton</b>	Nil	82349.7	N/A
Non-inert C&D materials disposed, <b>ton</b>	199.48	5882.89	SENT Landfill
Non-inert C&D materials recycled, <b>ton</b>	Nil	565.63	N/A
Chemical waste disposed, <b>kg</b>	Nil	10.15	N/A
Marine Sediment (Tunnel) (Type-1 Open Sea Disposal), <b>m<sup>3</sup></b>	Nil	20556	South of Cheung Chau
Marine Sediment (Tunnel) (Type 1- Open Sea Disposal (Dedicated Sites) & Type 2 – Confined Marine Disposal), <b>m<sup>3</sup></b>	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-12/364/2009/D

- 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 <sup>3</sup>	364 Nil	19078 116668	TKO 137 TM38
Inert C&D materials recycled, m <sup>3</sup>	Nil	Nil	N/A
Non-inert C&D materials disposed, m <sup>3</sup>	270	7637	SENT
Non-inert C&D materials recycled, m <sup>3</sup>	Nil	Nil	N/A
Chemical waste disposed, kg	Nil	Nil	N/A
Marine sediment (Type 1) disposal, m <sup>3</sup>	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 of May 2017.

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 <sup>3</sup>	5270.27 Nil Nil 40.56	583935.84 262656.6 82911.8 72670.15	TM 38 WENT SENT TKO area 137
Inert C&D materials recycled, m <sup>3</sup>	Nil	Nil	N/A
Non-inert C&D materials disposed, m <sup>3</sup>	245.2	4543.03	SENT
Non-inert C&D materials recycled, m <sup>3</sup>	Nil	Nil	N/A
Chemical waste disposed, kg	452	1431	N/A
Type 1 – Open Sea Disposal, m <sup>3</sup>	Nil	16368.4	East Sha Chau/ South Brothers Island
Type 2 – Confined Marine disposal, m <sup>3</sup>	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-11/364/2009/E

- 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 <sup>3</sup>	2.41	681.3	CWPF & TKO137
Inert C&D materials recycled, m <sup>3</sup>	Nil	Nil	N/A
Non-inert C&D materials disposed, m <sup>3</sup>	260	2626.05	SENT
Non-inert C&D materials recycled, ton	Nil	31.72	N/A
Chemical waste disposed, kg	Nil	3800	N/A

## **6 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 at M1a – Footbridge for Ex-Harbour Road Sports Centre on 16 and 25 May 2017 in the reporting month.

6.1.3. No Construction works was conducted under Contract HK/2009/01 around the monitoring station on 16 and 25 May 2017, non WDII-CWB Projects breaking and drilling works was observed on 16 May 2017 and non WDII-CWB Project bored pilling works was conducted on 25 May 2017 during monitoring period and observed as the major noise contribution. Hence, 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 at M1a – Footbridge for Ex-Harbour Road Sports Centre on 16 and 25 May 2017 in the reporting month.

6.1.5. Despite rebar fixing, and formwork fixing works was conducted on 16 May 2017 and rebar fixing was conducted on 25 May 2017 under Contract HK/2009/02, non WDII-CWB Projects breaking and drilling works was observed on 16 May 2017 and non WDII-CWB Project bored pilling works was conducted on 25 May 2017 during monitoring period and observed as the major noise contribution. Hence, 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-  
11/364/2009/E

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 was recorded on 24 May 2017 during daytime in the reporting month. After checking with Contractor of HY/2009/19, despite sheet piling works was conducted during the monitoring period, adverse weather condition under Red Rainstorm Warning Signal was considered as the major noise contribution during monitoring and hence the exceedance was concluded as non-Project related.
- 6.1.12. Limit level exceedances were recorded at RTN3- Yu Lee Mo Fan Memorial School on 10 and 24 May 2017 during daytime in the reporting month. After checking with Contractor of HY/2009/19, no construction works were conducted on 10 and 24 May 2017 around the monitoring location during the concerned period and hence the exceedances were considered to be non-Project related and potentially related to the traffic on 10 May 2017 and the adverse weather under Red Rainstorm Warning Signal on 24 May 2017.
- 6.1.13. No limit level exceedance was recorded at RTN4- Causeway Bay Community Centre 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-11/364/2009/E

- 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 was recorded on 24 May 2017 during daytime in the reporting month. After checking with Contractor of HY/2011/08, no construction works was conducted during the monitoring period and adverse weather condition under Red Rainstorm Warning Signal was considered as the major noise contribution during monitoring and hence the exceedance was concluded as non-Project related.
- 6.1.16. No limit level exceedance was recorded at RTN4- Causeway Bay Community Centre were recorded 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-12/364/2009/D

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-11/364/2009/E

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. According to RSS site information, non-compliance with Construction Noise Permits condition under Noise Control Ordinance under Contract HK/2009/02 were observed by RSS team on 09, 10, 12 and 21 May 2017at Wanchai Area with potential noise concern during restricted hours.

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

6.4.1 In response to the information provided by the RSS, relevant investigation report(s) by the Environmental Team reviewed by the Independent Environmental Checker were submitted to the EPD. Ad-hoc site inspection for restricted hours operations on Noise Control Ordinance were conducted by the Environmental Team on 13, 19 and 26 May 2017 to check the



Contractor HK/2009/02 Construction Noise Permit Compliance. Subsequently, two Construction Noise Permits, GW-RS0334-17 and GW-RS1297-16 were cancelled by the Authority on 26 May 2017.

- 6.4.2 The Contractor of HK/2009/02 was requested to implement remedial actions to rectify the environmental concern. The improvement plan for restricted hours operations control were provided by the Contractor of HK/2009/02 to the ET/IEC/RSS/ EPD for follow up on Contractor compliance during restrict hours.

## **7 CUMULATIVE CONSTRUCTION IMPACT DUE TO THE CONCURRENT PROJECTS**

- 7.0.1. According to Condition 3.4 of the EP-364/2009/E, 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 road and drain works, backfilling works and reinstatement of Culvert and Cooling mains were performed in May 2017 reporting month. As no project related exceedance were recorded during the reporting period, cumulative construction impact due to the concurrent activities of the current projects with the Central Reclamation Phase III (CRIII) was considered as insignificant.
- 7.0.4. According to the construction programme of Wan Chai Development Phase II, Central-Wan Chai Bypass and Island Eastern Corridor Link projects, the major construction activities under Wan Chai Development Phase II were, road and drains construction, tunnel construction, backfilling works, road and drains works at Wan Chai West and Wan Chai East. The major construction activities under Central-Wan Chai Bypass and Island Eastern Corridor Link Projects were drainage works and ventilation building construction at Central; backfilling and temporary reclamation removal works at Causeway Bay, road works and side wall construction at Victoria Park; bridge construction, piling works 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. As relevant site mitigation measures for air quality and construction noise were implemented, no significant air quality impact and noise impact from construction activities was concluded 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 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.
- 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.
- 8.0.3. Site inspections for Contract no. HY/2009/18 were carried out during this reporting period. No observation was found in the reporting month.
- 8.0.4. Site inspections for Contract no. HY/2009/19 were carried out during this reporting period. No observation was found in the reporting month.
- 8.0.5. Site inspections for Contract no. HK/2009/01 was carried out during this reporting period. No observation was found in the reporting month.
- 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
170517_01	17 May 2017	Several unknown containers of suspected chemical waste or used chemical were observed and required proper disposal or storage in chemical waste store prior to disposal.	The chemical containers were observed removed on site.	Completion as observed on 25 May 2017

- 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
170502_01	2-May-17	Breaker at Zone CE shall be covered with acoustic material.	Breaker was covered with acoustic material at Zone CE.	Completion as observed on 9 May 2017
170502_02	2-May-17	Drip tray shall be provided for oil container at Zone A2.	Oil container at Zone A2 was observed removed.	Completion as observed on 9 May 2017

- 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
170502_1	2 May 2017	Impermeable barrier shall be deployed and enclose the works area for underwater excavation from -4.5 to -7mPD to avoid muddy dispersion (TS3 North East)	No further underwater excavation works was observed	Completion as observed on 12 May 2017
170502_2	2 May 2017	Mud / Silt sitting on the edge of seawall shall be cleaned regularly to avoid potential drop off (TS3 East)	Mud / Silt was cleaned at the concerned location	Completion as observed on 12 May 2017
170512_1	12 May 2017	Drip tray shall be provided to chemical containers (Victoria Park)	Drip tray was provided to chemical containers	Completion as observed on 17 May 2017
170524_1	24 May 2017	For exposed surface, embankment shall be deployed and reinforced to avoid surface runoff during heavy raining (TS3, Victoria Park)	The embankment protection have been improved.	Completion as observed on 31 May 2017

- 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 COMPLAINTS, NOTIFICATION OF SUMMONS AND PROSECUTION**

9.0.1. Two environmental complaints were received in the reporting month.

9.0.2. The first EPD complaint was referred to the ET on 18 May 2017 (CASE Ref: H05/RS/00014415-17(14448-17)). The complainant reported that construction work was found on 10 May 2017 (~03:52) that caused noise nuisance. According to the photos provided by the complainant lorry mounted concrete pump were used. According to the information provided by the IEC on 11 May 2017 and 15 May 2017, it was alleged that the concreting work under Contract No. HK/2009/02 was carried out for the Central-Wan Chai Bypass Top Slab Bay 6 during night time on 09 May 2017 and early morning on 10 May 2017 (between 11:00pm on 09 May 2017 and about 04:00 a.m. on 10 May 2017) with 3 pump trucks, 10 vibrating pokers, 9 concrete trucks and 2 generators in operation. The concreting works under Contract No. CEDD HK/2009/02 was also carried out for the Central – Wan Chai Bypass Bay 10A OHVS Slab after 23:00 on 12 May 2017 (after 23:00) with 1 Pump truck, 2 vibrating pokers, 1 concrete trucks and 3 generators in operation.

ET confirmed with the Resident Site Staff that 10 nos. of vibratory pokers, 3 nos. of concrete pump trucks and 3 nos. of generators were in operation at Tunnel Portion 5, Top Slab 6 from 2300hrs on 09 May 2017 to 0408hrs on 10 May 2017 while 9 nos. of concrete trucks were in operation at around 0320hrs on 10 May 2017. 2 nos. of vibratory pokers, 1 no. of concrete truck, 1 no. of concrete pump truck, and 3 nos. of generators were in operation at Tunnel Portion 5, Top Slab 6 from 2300hrs on 12 May 2017 to 2340hrs on 12 May 2017.

According to the RSS site information, 10 nos. of vibratory pokers, 3 nos. of concrete pump trucks and 3 nos. of generator were in operation at Tunnel Portion 5, Top Slab 6 from 2300hrs on 09 May 2017 to 0408hrs on 10 May 2017 while 9 nos. of concrete trucks were in operation at around 0320hrs on 10 May 2017 and the above construction operations could not comply with the item 3a - PME requirement under the Construction Noise Permit GW-RS1297-16. In response to the information provided by the RSS/ IEC on 11 May 2017, ad-hoc inspection was conducted by the Environmental Team on 13 May 2017 around 00:40 hrs. No construction operation and no PME deployment was observed at the time of inspection.

According to the RSS site information, 2 nos. of vibratory pokers, 1 no. of concrete pump truck, and 3 nos. of generators were in operation at Tunnel Portion 5, Top Slab 6 from 2300hrs on 12 May 2017 to 2340hrs on 12 May 2017 and could not comply with the item 3a - PME requirement under Construction Noise Permit GW-RS1297-16. In response to the information provided by the RSS/ IEC on 15 May 2017, ad-hoc inspection was conducted by the Environmental Team on 19 May 2017 around 22:20hrs. 2 nos. of concrete truck, 1 no. of concrete pump truck were observed in operation at the time of inspection and relevant CNP GW-RS0334-17 was in place.

Notwithstanding the above, in view of the identified non-conformance, the Contractor of HK/2009/02 was requested to implement the following rectification measures to ensure the strict construction noise permit compliance including i) fully review Construction Noise Permit in force and the tentative construction operations to ensure the strict Construction Noise Permit compliance under Noise Control Ordinance, ii) fully review 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 and iii) review the construction sequence and schedule to ensure the construction operations and PME are operated in accordance to relevant Construction Noise Period within the specified allowable period. The Contractor of HK/2009/02 is also recommended to provide briefing and training session to site staffs to enhance the site awareness and understanding on relevant construction noise permit(s) requirement during restricted hours. The ET/IEC/RSS will maintain ad hoc checking on the construction operations under Contract HK/2009/02 during restricted hours and report relevant findings, if any, accordingly.

- 9.0.3. Second EPD complaint was referred to the ET on 25 May 2017 (CASE Ref: N/A). The complainant reported that concreting works under Contract No. CEDD HK/2009/02 was carried out with crawler cranes, 10-12 vibratory pokers, and 7 concrete lorry mixers in the morning on 21 May 2017 without a valid CNP. Also, at 15:30 on 21 May 2017, 9 vibratory pokers and 7 concrete lorry mixers were observed in operation. These works were suspected to contravene the Noise Control Ordinance (NCO).

ET confirmed with the Resident Site Staff that 12 nos. of vibratory pokers were operated at Tunnel Portion 5 from 0730hrs to 1740hrs on 21 May 2017. 3 nos. of crawler cranes were operated at Tunnel Portion 5 from 0800hrs to 0915hrs on 21 May 2017. 3 nos. of crawler cranes were operated at Tunnel Portion 5 from 0915hrs to 1030hrs on 21 May 2017. 4 nos. of concrete pump trucks were operated at Tunnel Portion 5 from 0750hrs to 1650hrs on 21 May 2017. 4 nos. of generators were operated at Tunnel Portion 5 from 0730hrs to 1740hrs on 21 May 2017. 7 nos. of concreting trucks were operated at intervals between the time period of 0730hrs to 1740hrs on 21 May 2017.

According to the RSS site information, the following PMEs were operated on 21 May 2017, i) 12 nos. of vibratory pokers were operated at Tunnel Portion 5 from 0730hrs to 1740hrs; ii) 3 nos. of crawler cranes were operated at Tunnel Portion 5 from 0800hrs to 0915hrs; iii) 3 nos. of crawler cranes were operated at Tunnel Portion 5 from 0915hrs to 1030hrs on 21 May 2017; iv) 4 nos. of concrete pump trucks were operated at Tunnel Portion 5 from 0750hrs to 1650hrs; v) 4 nos. of generators were operated at Tunnel Portion 5 from 0730hrs to 1740hrs ;) 7 nos. of concreting trucks were operated at intervals between the time period of 0730hrs to 1740hrs on 21 May 2017 and the above construction operations could not comply with the item 3a - PME requirement under the Construction Noise Permit GW-RS334-17.

EPD notification on the cancellation of the Construction Noise Permits GW-RS0334-17 and Construction Noise Permit GW-RS1297-16 was received by the Environmental Team on 26 May 2017. Ad hoc inspection was conducted by the Environmental Team on 26 May 2017 around 2230hrs and on 28 May 2017 around 1520hrs and no construction works and no

operation of PME was observed at the concerned site Portion 5 at the time of inspections. Notwithstanding the above, in view of the identified non-conformance, the Contractor of HK/2009/02 was requested to implement the following rectification measures to ensure the strict construction noise permit compliance including i) fully review Construction Noise Permit in force and the tentative construction operations to ensure the strict Construction Noise Permit compliance under Noise Control Ordinance, ii) fully review 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 and iii) review the construction sequence and schedule to ensure the construction operations and PME are operated in accordance to relevant Construction Noise Period within the specified allowable period. The Contractor of HK/2009/02 is also recommended to provide briefing and training session to site staffs to enhance the site awareness and understanding on relevant construction noise permit(s) requirement during restricted hours. The ET/IEC/RSS will maintain ad hoc checking on the construction operations under Contract HK/2009/02 during restricted hours and report relevant findings, if any, accordingly.

- 9.0.4. Two Summons to Defendant (Case No. ESS40680/2016 and Case No. ESS40679/2016) were issued to the Contractor(s) under Contract HY/2009/19 on 25 October 2016 regarding the case against Section 6(1)(b) and 6(5), Noise Control Ordinance Cap 400 were convicted on 04 May 2017.
- 9.0.5. The details of cumulative complaint log and updated summary of complaints are presented in **Appendix 9.1**
- 9.0.6. 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
May 2017	2
September 2010 – April 2017	78
Total	80

**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	1 (05 April 2016)	0	1
Noise	0	1 (24 April 2016)	1
Water	0	0	0
Waste	0	0	0
<b>Total</b>	<b>1</b>	<b>1</b>	<b>2</b>

## 10 CONCLUSION

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

10.0.2. The scheduled construction activities and the recommended mitigation measures for the coming month are listed in **Table 10.1**. 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	<ul style="list-style-type: none"> <li>Remedial works inside tunnel structure at Mined Tunnel, TS4, TPCWAE and TPCWAW</li> <li>Reinstatement work at the PRE Office car park area</li> <li>Re-surfacing work at Hung Hing Road</li> </ul>	<ul style="list-style-type: none"> <li>Dust control during dust generating activities and covering for stockpile stored on site.</li> <li>Provide protection works and adequate drainage system to ensure no direct discharge into public drainage system or the nearby water.</li> <li>Maintain regular cleaning of floating refuses within construction area.</li> </ul>
HY/2009/18	<ul style="list-style-type: none"> <li>Drainage works</li> <li>Road works</li> <li>Landscaping works</li> <li>Maintenance works</li> </ul>	<ul style="list-style-type: none"> <li>Dust control during dust generating activities</li> <li>Provide protection works to ensure no runoff out of site area or direct discharge into public drainage system.</li> </ul>



HY/2009/19	<ul style="list-style-type: none"> <li>• Approach ramp sheet piling, pre-bored piling and top soil removal works</li> <li>• Bridge Demolition / Construction</li> <li>• Pier 30-32 Cap Construction</li> <li>• Bridge E noise barrier installation</li> <li>• IEC noise enclosure/barrier installation</li> <li>• Excavation / Construction of retaining wall</li> <li>• FEHD Metal Roof Construction</li> <li>• Pre-bored H-piles for Approach Ramp Construction</li> <li>• Hing Fat Street modification works</li> <li>• Oil Street drainage works</li> <li>• Installation of skin parapet on TB bridge</li> </ul>	<ul style="list-style-type: none"> <li>• Noise level shall be controlled by reducing the breaking operation rate.</li> <li>• Noise barrier shall be implemented</li> <li>• Dust control during dust generating works</li> <li>• Provide protection works and adequate drainage system to ensure no direct discharge into public drainage system or the sea.</li> </ul>
HK/2009/01	<ul style="list-style-type: none"> <li>• Reinstatement of amenity area</li> <li>• Road and Drain works</li> </ul>	<ul style="list-style-type: none"> <li>• Provide protection works and adequate drainage system to ensure no direct discharge into public drainage system or the sea.</li> <li>• Dust control during dust generating works</li> <li>• Noise mitigation measures during breaking works</li> </ul>

<p>HK/2009/02</p>	<ul style="list-style-type: none"> <li>• Removal works of the existing sheet piles at the north face of WSD Salt Water Pumping Station.</li> <li>• Rectification works for the defects for the end of maintenance period of Observation Deck and Staircase ST-01.</li> <li>• Rectification works for cracks/joints with water leakage inside OHVD cells will be carried out.</li> <li>• Procurement of new movement joint</li> <li>• Formwork, rebar fixing and concreting of HHR Flyover Approach Ramp.</li> <li>• Remedial works of tunnel wall, base slab and OHVD inside tunnel.</li> <li>• Remedial works for cross road ducts inside tunnel.</li> <li>• General cleaning and rectification works of OHVD, tunnel base slab, carrier drain, cross road duct and manhole gully.</li> <li>• Rebar fixing and concreting of top slab.</li> <li>• Dismantling of scaffolding.</li> <li>• Crack mapping of surface of top slab.</li> <li>• Installation of waterproofing membranes at top slab.</li> <li>• Screeding for waterproofing membranes</li> <li>• Rectification works for uneven road surface at Hung Hing Road.</li> <li>• Trial pit at Hung Hing Road for sewage works.</li> </ul>	<ul style="list-style-type: none"> <li>• Dust control during dust generating works</li> <li>• Proper maintenance boundary surface runoff protection and water treatment facilities to avoid potential runoff related impact.</li> <li>• Provision of protection measures to ensure no runoff out of site area or direct discharge into public drainage system.</li> </ul>
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HK/2012/08	<ul style="list-style-type: none"> <li>• Grouting</li> <li>• Construction of Slip Road 1</li> <li>• Construction of drainage</li> </ul>	<ul style="list-style-type: none"> <li>• Dust control during dust generating works</li> <li>• Provide protection works and adequate drainage system to ensure no direct discharge into public drainage system.</li> </ul>
HY/2010/08	<ul style="list-style-type: none"> <li>• Tree protection works next to existing BGO,</li> <li>• Drainage improvement works,</li> <li>• Utility diversion works,</li> <li>• Retaining wall works</li> <li>• ELS works,</li> <li>• Construction works for subway extension</li> </ul>	<ul style="list-style-type: none"> <li>• Dust control during dust generating works and stockpile stored on site.</li> <li>• Appropriate measures should be taken to ensure adequate protections are provided for trees being transplanted and retained on site.</li> <li>• Provision of protection to ensure no runoff out of site area or direct discharge into public drainage system.</li> </ul>
HY/2011/08	<ul style="list-style-type: none"> <li>• Construction of Ventilation Buildings, inclusive of Administration Building, Central Ventilation Building, East Ventilation Shaft/Building, West Ventilation Building</li> <li>• Construction of Tunnel Thermal Barrier</li> <li>• Installation of Electricals and Mechanicals</li> <li>• Installation of Tunnel Features</li> </ul>	<ul style="list-style-type: none"> <li>• Dust control during dust generating works</li> </ul>

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.

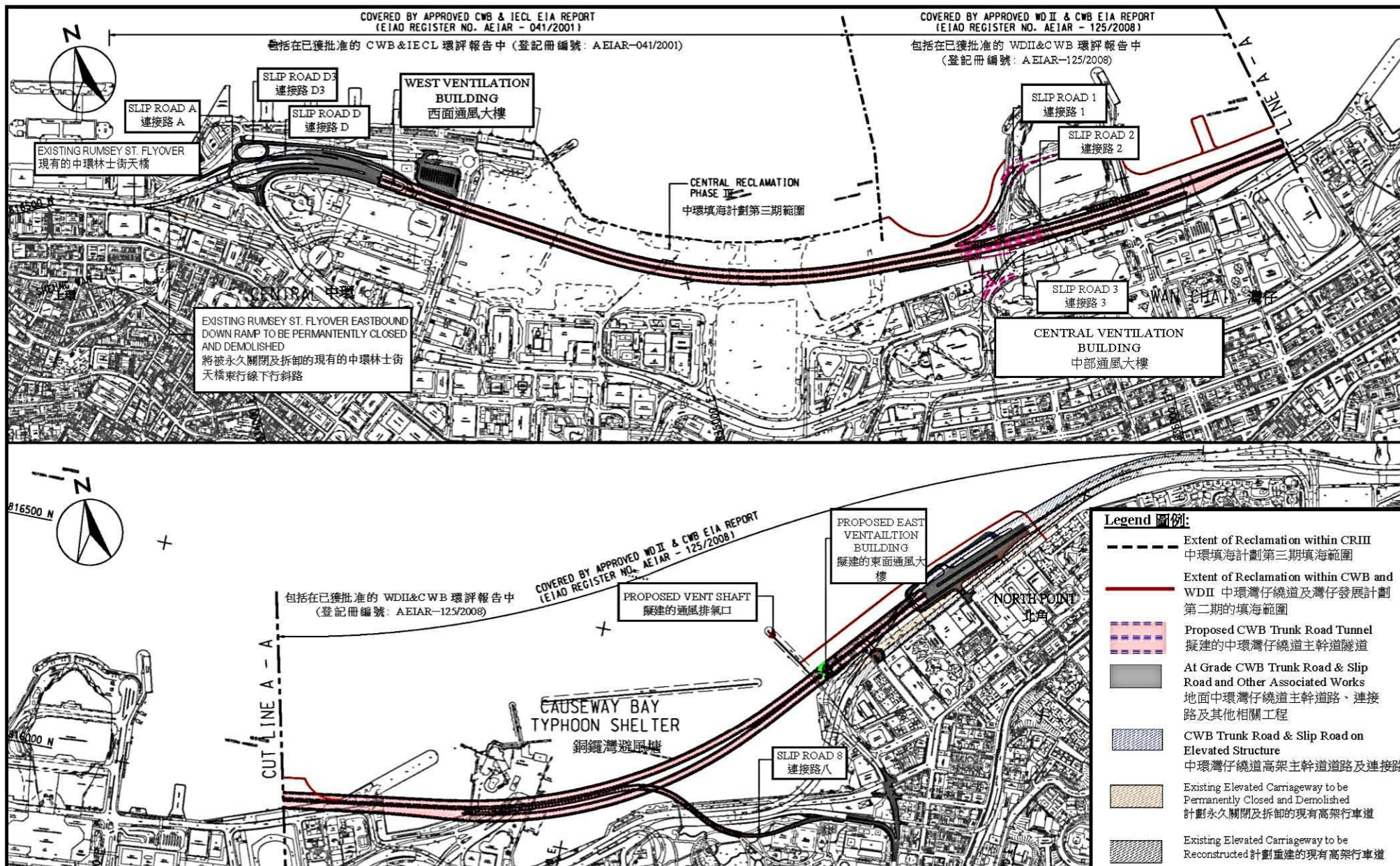
10.0.5. The construction works of Contract HK/2010/06 was completed, and the FEP-08/364/2009/A was surrendered by the Contractor on 3 October 2014.



***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/E  
環境許可證編號: EP-364/2009/E

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))

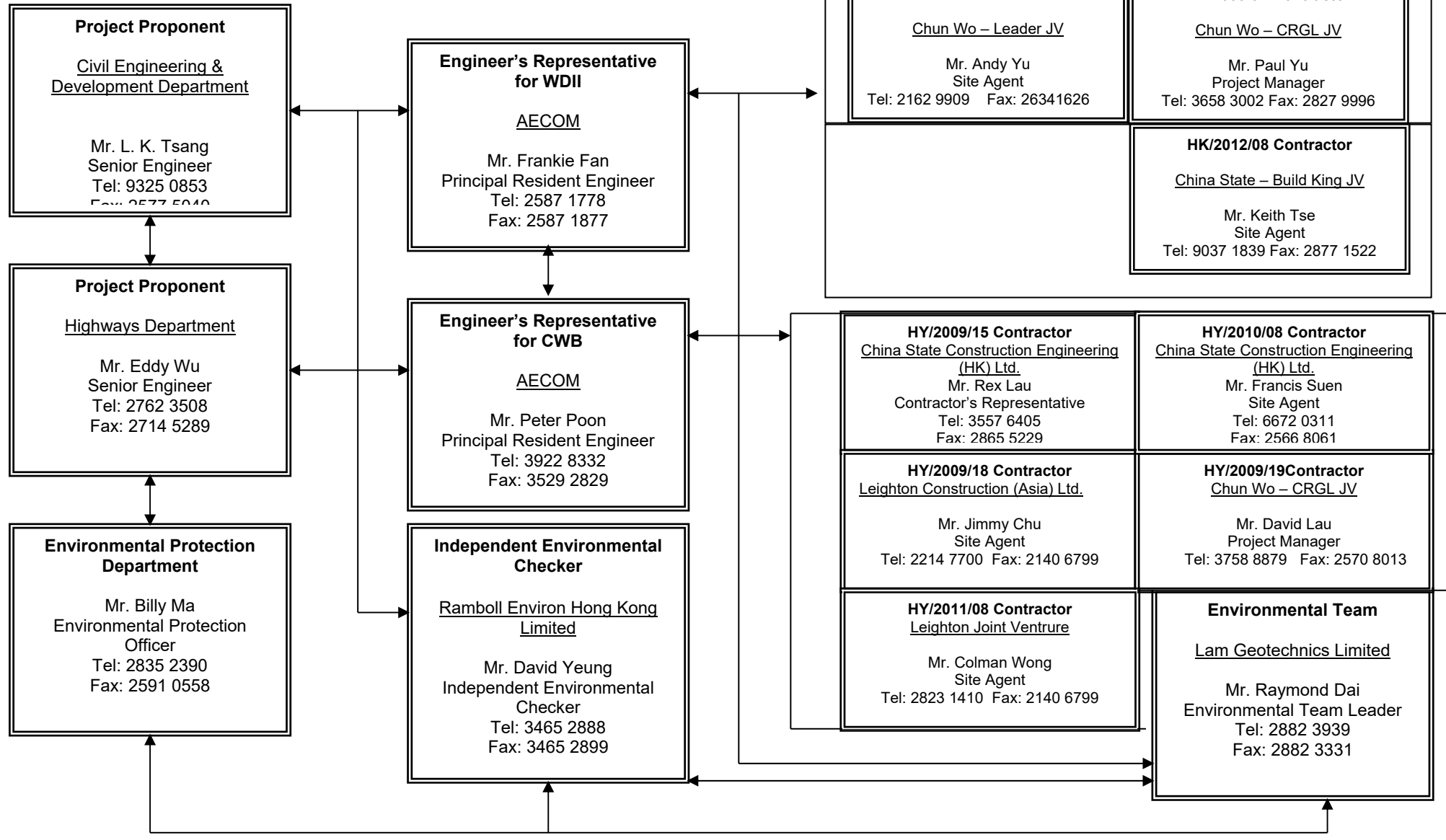


***Figure 2.2***

***Project Organization Chart***



**Project Organization Chart**





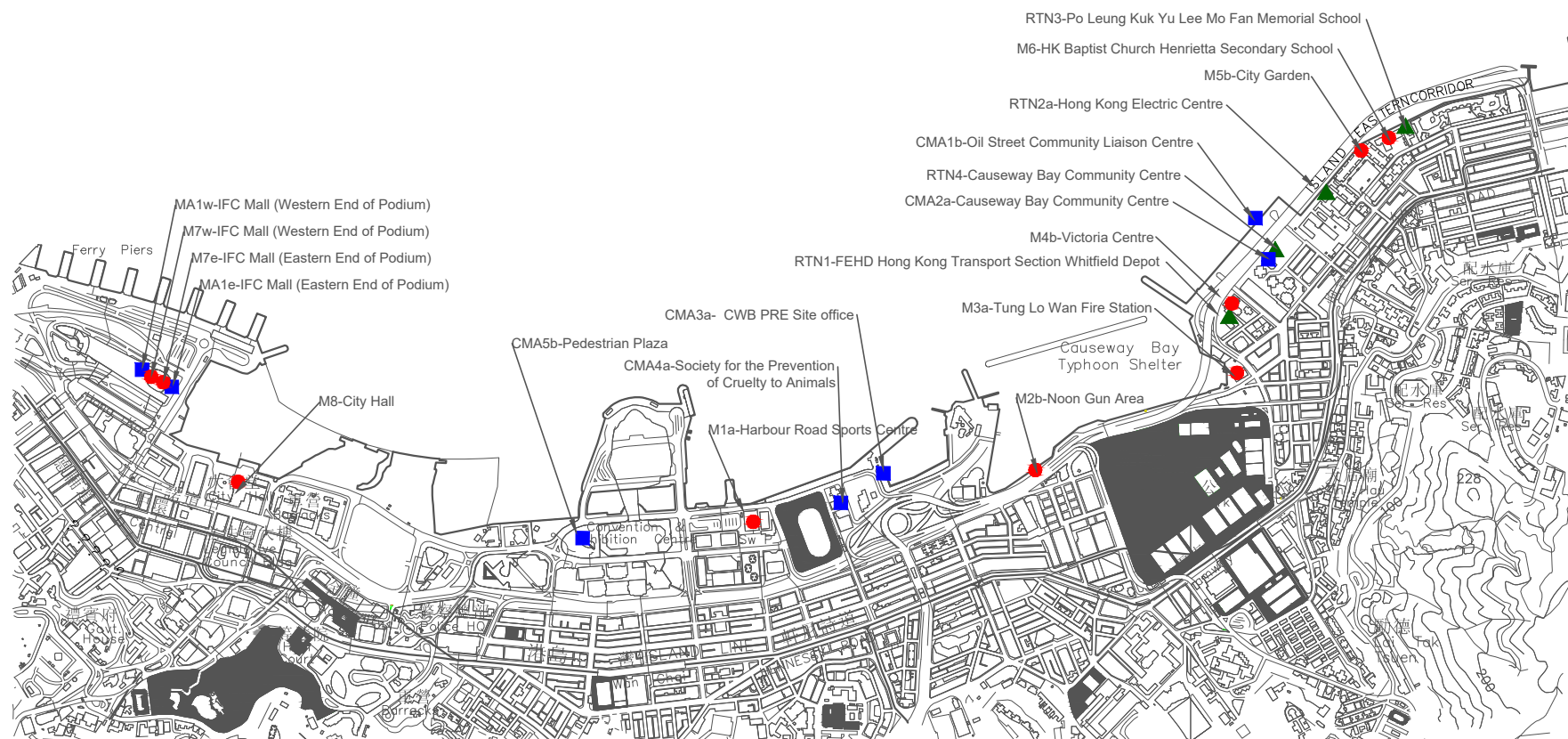
***Figure 4.1***

***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. <ul style="list-style-type: none"><li>Strictly limit the truck speed on site to below 10 km per hour and water spraying to keep the haul roads in wet condition;</li><li>Watering during excavation and material handling;</li><li>Provision of vehicle wheel and body washing facilities at the exit points of the site, combined with cleaning of public roads where necessary; and</li><li>Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations.</li></ul>	Work site / during construction	Contractor		√			
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: <ul style="list-style-type: none"><li>Only well-maintained plant shall be operated on-site and plant shall be serviced regularly during the construction program.</li><li>Silencers or mufflers on construction equipment shall be utilized and shall be properly maintained during the construction program.</li><li>Mobile plant, if any, shall be sited as far away from NSRs as possible.</li><li>Machines and plant (such as trucks) that may be in intermittent use shall be shut down between works periods or shall be throttled down to a minimum.</li><li>Plant known to emit noise strongly in one direction shall, wherever possible, be orientated so that the noise is directed away from the nearby NSRs.</li><li>Material stockpiles and other structures shall be effectively utilized, wherever practicable, in screening noise from on-site construction activities.</li></ul>	Work Sites / During Construction	Contractor		√			EIAO-TM, NCO
S4.8.1 – S4.8.11	Use of quiet powered mechanical equipment, movable noise barrier and temporary noise barrier for the following tasks: <ul style="list-style-type: none"><li>Slip road 8 tunnel</li><li>Construction of diaphragm wall and substructures of the tunnel approach ramp</li><li>Excavation</li><li>Construction of slabs</li><li>Backfill</li></ul>	Work Sites / During Construction	Contractor		√			EIAO-TM, NCO

WDH & CWB EIA Report Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
	<ul style="list-style-type: none"> <li>Demolition and construction of substructures for the IEC</li> <li>Demolition works of existing piers and crossheads of the marine section of the existing IEC</li> </ul> <p>Use of PME grouping for the following tasks:</p> <ul style="list-style-type: none"> <li>At-grade road construction</li> <li>Substructure for IECL connection</li> </ul>							
<b>Operation Phase</b>								
S4.8.12 – S4.8.23	<p>For Existing NSRs</p> <ul style="list-style-type: none"> <li>about 235m length of noise semi-enclosure with transparent panel covering the westbound slip road from the IEC</li> <li>about 230m length of noise semi-enclosure with transparent panel covering the main carriageways (eastbound and westbound) of the CWB and IEC</li> <li>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)</li> <li>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</li> <li>about 350m length of 3.5m high vertical noise barrier with transparent panel on the eastbound slip road to the IEC</li> <li>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</li> </ul>	Near North Point / Before commencement of operation of road project	HyD	√	√	√		EIAO-TM

WDH & CWB EIA Report Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
	<p>For Future/Planned NSRs</p> <ul style="list-style-type: none"> <li>about 265m length of noise semi-enclosure with transparent panel covering the westbound slip road from the IEC</li> <li>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.</li> </ul>	<p>In between the Electric Centre (next to City Garden) and CDA(1) site / Before occupation of Planned NSRs in CDA and CDA(1) sites.</p> <p>Near Causeway Bay Fire Station / During detailed design of the re-provisioned Tin Hau Temple</p>	<p>HyD</p> <p>Project Proponent for the re-provisioned Tin Hau Temple</p>	<p>√</p> <p>√</p>	<p>√ #</p>			

\* 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	<b><i>Floating Refuse</i></b> 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	<b><i>Good Site Practices</i></b> Recommendations for good site practices during the construction activities include: <ul style="list-style-type: none"><li>• nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site;</li><li>• training of site personnel in proper waste management and chemical waste handling procedures;</li><li>• provision of sufficient waste disposal points and regular collection for disposal;</li><li>• appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers;</li><li>• regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors; and</li><li>• a recording system for the amount of wastes generated, recycled and disposed of (including the disposal sites).</li></ul>	Work site / During the construction period	Contractor		√			Waste Disposal Ordinance (Cap.354)

WDH & 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	<p><i>Waste Reduction Measures</i></p> <p>Waste reduction is best achieved at the planning and design stage, as well as by ensuring the implementation of good site practices. Recommendations to achieve waste reduction include:</p> <ul style="list-style-type: none"> <li>• segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal;</li> <li>• to encourage collection of aluminium cans, PET bottles and paper, separate labelled bins shall be provided to segregate these wastes from other general refuse generated by the work force;</li> <li>• any unused chemicals or those with remaining functional capacity shall be recycled;</li> <li>• use of reusable non-timber formwork, such as in casting the tunnel box sections, to reduce the amount of C&amp;D material.</li> <li>• prior to disposal of C&amp;D waste, it is recommended that wood, steel and other metals shall be separated for re-use and / or recycling to minimise the quantity of waste to be disposed of to landfill;</li> <li>• proper storage and site practices to minimise the potential for damage or contamination of construction materials; and</li> <li>• plan and stock construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste.</li> </ul>	Work site / During planning and design stage, and construction stage	Contractor	√	√			



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

WDH & 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	<p><i>Bentonite Slurry</i></p> <p>The disposal of residual used bentonite slurry shall follow the good practice guidelines stated in ProPECC PN 1/94 "Construction Site Drainage" and listed as follows:</p> <ul style="list-style-type: none"> <li>• If the disposal of a certain residual quantity cannot be avoided, the used slurry may be disposed of at the marine spoil grounds subject to obtaining a marine dumping licence from EPD on a case-by-case basis.</li> <li>• If the used bentonite slurry is intended to be disposed of through the public drainage system, it shall be treated to the respective effluent standards applicable to foul sewers, storm drains or the receiving waters as set out in the Technical Memorandum of Standards for Effluents Discharged into Drainage and Sewerage Systems, Inland and Coastal Waters.</li> <li>• If the used bentonite slurry is intended to be disposed to public fill reception facilities, it will be mixed with dry soil on site before disposal.</li> </ul>	Work site / During the construction period	Contractor		√			ProPECC PN 1/94

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

Contract No. HK/2015/01

Wanchai Development Phase III and Central Wanchai Bypass

Sampling, Field Measurement and Testing Work (Stage 3)

Monthly EM&A Report

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

Note 1:

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

*Action and Limit Level for Air Quality Monitoring*

Monitoring Location	1-hour TSP Level in $\mu\text{g}/\text{m}^3$		24-hour TSP Level in $\mu\text{g}/\text{m}^3$	
	Action Level	Limit Level	Action Level	Limit Level
CMA1b	320.1	500	176.7	260
CMA2a	323.4	500	169.5	260
CMA3a	311.3	500	171.0	260
CMA4a	312.5	500	171.2	260
CMA5b	332.0	500	181.0	260
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.: 17CA0209 01 Page 1 of 2

### Item tested

Description:	Sound Level Meter (Class 1)	Microphone
Manufacturer:	Larson Davis	-
Type/Model No.:	Model 831	377B02
Serial/Equipment No.:	0003227	SNLW135892
Adaptors used:	-	-

### Item submitted by

Customer Name: Lam Geotechnics Limited  
Address of Customer: -  
Request No.: -  
Date of receipt: 09-Feb-2017

Date of test: 14-Feb-2017

### 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:  $21 \pm 1$  °C  
Relative humidity:  $40 \pm 10$  %  
Air pressure:  $1020 \pm 5$  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.

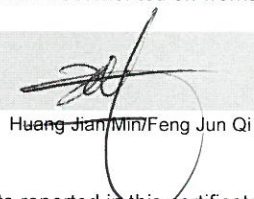
### Test results

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 Min/Feng Jun Qi

Date: 15-Feb-2017

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.:

17CA0209 01

Page 2 of 2

**1, Electrical Tests**

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

Test:	Subtest:	Status:	Expanded Uncertainty (dB) / Coverage Factor	
Self-generated noise	A	Pass	0.3	
	C	Pass	1.0	2.1
	Lin	Pass	1.6	2.2
Linearity range for Leq	At reference range, Step 5 dB at 4 kHz	Pass	0.3	
	Reference SPL on all other ranges	Pass	0.3	
	2 dB below upper limit of each range	Pass	0.3	
	2 dB above lower limit of each range	Pass	0.3	
	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 100 $\mu$ s rectangular pulse	Pass	0.4	
R.M.S. accuracy	Crest factor of 3	Pass	0.3	
Time weighting I	Single burst 5 ms at 2000 Hz	Pass	0.3	
	Repeated at frequency of 100 Hz	Pass	0.3	
Time averaging	1 ms burst duty factor 1/10 <sup>3</sup> at 4kHz	Pass	0.3	
	1 ms burst duty factor 1/10 <sup>4</sup> at 4kHz	Pass	0.3	
Pulse range	Single burst 10 ms at 4 kHz	Pass	0.4	
Sound exposure level	Single burst 10 ms at 4 kHz	Pass	0.4	
Overload indication	SPL	Pass	0.3	
	Leq	Pass	0.4	

**2, Acoustic tests**

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

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

**3, Response to associated sound calibrator**

N/A

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

- End -

Calibrated by:

Date:

Fung Chi Yip  
14-Feb-2017

Checked by:

Date:

Lam Tze Wai  
15-Feb-2017

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.: 16CA1117 01-01

Page 1 of 2

### Item tested

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

### Item submitted by

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

Date of test: 18-Nov-2016

### Reference equipment used in the calibration

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

### Ambient conditions

Temperature:  $23 \pm 1$  °C  
Relative humidity:  $50 \pm 10$  %  
Air pressure:  $1005 \pm 5$  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.

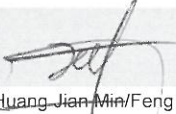
### Test results

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: 21-Nov-2016

Company Chop:



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





## CERTIFICATE OF CALIBRATION

(Continuation Page)

Certificate No.:

16CA1117 01-01

Page

2

of

2

## 1, Electrical Tests

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

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

## 2, Acoustic tests

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

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

## 3, Response to associated sound calibrator

N/A

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

- End -

Calibrated by:

Date:

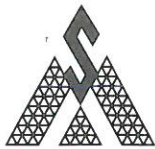
Fung Chi Yip  
18-Nov-2016

Checked by:

Date:

Lam Tze Wai  
21-Nov-2016

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



## CERTIFICATE OF CALIBRATION

Certificate No.: 17CA0320 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 Ltd.  
Address of Customer: -  
Request No.: -  
Date of receipt: 20-Mar-2017

Date of test: 23-Mar-2017

### 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:  $21 \pm 1$  °C  
Relative humidity:  $60 \pm 10$  %  
Air pressure:  $1010 \pm 5$  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.

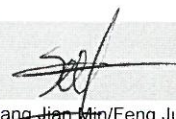
### Test results

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: 24-Mar-2017

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.:

17CA0320 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 100 $\mu$ 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 <sup>3</sup> at 4kHz	Pass	0.3	
	1 ms burst duty factor 1/10 <sup>4</sup> at 4kHz	Pass	0.3	
Pulse range	Single burst 10 ms at 4 kHz	Pass	0.4	
Sound exposure level	Single burst 10 ms at 4 kHz	Pass	0.4	
Overload indication	SPL	Pass	0.3	
	Leq	Pass	0.4	

**2, Acoustic tests**

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

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

**3, Response to associated sound calibrator**

N/A

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

- End -

Calibrated by:

Lai Sheng Jie

Date: 23-Mar-2017

Checked by:

Fung Chi Yip

Date: 24-Mar-2017

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:  $21 \pm 1$  °C  
Relative humidity:  $55 \pm 10$  %  
Air pressure:  $1005 \pm 5$  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.

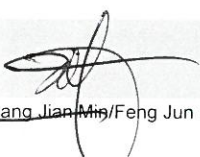
### Test results

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	
Frequency weightings	Lin	Pass	0.3	
	Single Burst Fast	Pass	0.3	
	Single Burst Slow	Pass	0.3	
Peak response	Single 100µs rectangular pulse	Pass	0.3	
R.M.S. accuracy	Crest factor of 3	Pass	0.3	
Time weighting I	Single burst 5 ms at 2000 Hz	Pass	0.3	
	Repeated at frequency of 100 Hz	Pass	0.3	
Time averaging	1 ms burst duty factor 1/10 <sup>3</sup> at 4kHz	Pass	0.3	
	1 ms burst duty factor 1/10 <sup>4</sup> at 4kHz	Pass	0.3	
Pulse range	Single burst 10 ms at 4 kHz	Pass	0.4	
Sound exposure level	Single burst 10 ms at 4 kHz	Pass	0.4	
Overload indication	SPL	Pass	0.3	
	Leq	Pass	0.4	

### 2, Acoustic tests

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

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

### 3, Response to associated sound calibrator

N/A

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

Calibrated by:

Date:

Fung Chi Yip  
21-May-2016

Checked by:

Date:

Lam Tze Wai  
23-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.: 17CA0505 01

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.:	2722311	2698703	13321
Adaptors used:	-	-	-

### Item submitted by

Customer Name: Lam Geotechnics Ltd.  
Address of Customer: -  
Request No.: -  
Date of receipt: 05-May-2017

Date of test: 06-May-2017

### 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	61227	01-Apr-2018	CEPREI

### Ambient conditions

Temperature:  $22 \pm 1$  °C  
Relative humidity:  $50 \pm 10$  %  
Air pressure:  $1010 \pm 5$  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.

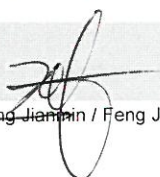
### Test results

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 Jianmin / Feng Junqi

Date: 09-May-2017

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.: 17CA0505 01

Page 2 of 2

### 1, Electrical Tests

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

Test:	Subtest:	Status:	Expanded Uncertainty (dB)	Coverage Factor
Self-generated noise	A	Pass	0.3	
	C	Pass	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	
Frequency weightings	Lin	Pass	0.3	
	Single Burst Fast	Pass	0.3	
	Single Burst Slow	Pass	0.3	
Peak response	Single 100µs rectangular pulse	Pass	0.3	
R.M.S. accuracy	Crest factor of 3	Pass	0.3	
Time weighting I	Single burst 5 ms at 2000 Hz	Pass	0.3	
	Repeated at frequency of 100 Hz	Pass	0.3	
Time averaging	1 ms burst duty factor 1/10 <sup>3</sup> at 4kHz	Pass	0.3	
	1 ms burst duty factor 1/10 <sup>4</sup> at 4kHz	Pass	0.3	
Pulse range	Single burst 10 ms at 4 kHz	Pass	0.4	
Sound exposure level	Single burst 10 ms at 4 kHz	Pass	0.4	
Overload indication	SPL	Pass	0.3	
	Leq	Pass	0.4	

### 2, Acoustic tests

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

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

### 3, Response to associated sound calibrator

N/A

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

Calibrated by:

Lai Sheng Jie

Date: 06-May-2017

Checked by:

Fung Chi Yip

Date: 09-May-2017

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.: 17CA0221 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.:	2701778	2755097	19223
Adaptors used:	-	-	-

### Item submitted by

Customer Name: Lam Geotechnics Limited  
Address of Customer: -  
Request No.: -  
Date of receipt: 22-Feb-2017

Date of test: 02-Mar-2017

### 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:  $20 \pm 1$  °C  
Relative humidity:  $60 \pm 10$  %  
Air pressure:  $1010 \pm 5$  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.

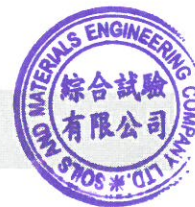
Actual Measurement data are documented on worksheets.

Approved Signatory:

Huang Jian Min/Feng Jun Qi

Date: 06-Mar-2017

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.:

17CA0221 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 <sup>3</sup> at 4kHz	Pass	0.3	
	1 ms burst duty factor 1/10 <sup>4</sup> at 4kHz	Pass	0.3	
Pulse range	Single burst 10 ms at 4 kHz	Pass	0.4	
Sound exposure level	Single burst 10 ms at 4 kHz	Pass	0.4	
Overload indication	SPL	Pass	0.3	
	Leq	Pass	0.4	

**2, Acoustic tests**

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

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

**3, Response to associated sound calibrator**

N/A

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

- End -

Calibrated by:

Date:

Fung Chi Yip  
02-Mar-2017

Checked by:

Date:

Lam Tze Wai  
06-Mar-2017

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.: 17CA0119 01 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.:	3002695	2940839	18582
Adaptors used:	-	-	-

**Item submitted by**

Customer Name:	Lam Geotechnics Limited
Address of Customer:	-
Request No.:	-
Date of receipt:	19-Jan-2017

Date of test: 20-Jan-2017

**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 ± 1 °C
Relative humidity:	40 ± 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 ±20%.
- 3, The acoustic calibration was performed using an B&K 4226 sound calibrator and corrections was applied for the difference between the free-field and pressure responsiveness of the Sound Level Meter.

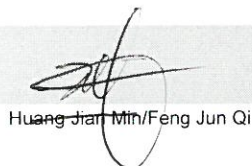
**Test results**

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

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

Actual Measurement data are documented on worksheets.

Approved Signatory:

  
Huang Jian Min/Feng Jun Qi

Date: 23-Jan-2017

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.:

17CA0119 01

Page 2 of 2

**1, Electrical Tests**

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

Test:	Subtest:	Status:	Expanded Uncertainty (dB)	Coverage Factor
Self-generated noise	A	Pass	0.3	
	C	Pass	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 <sup>3</sup> at 4kHz	Pass	0.3	
	1 ms burst duty factor 1/10 <sup>4</sup> at 4kHz	Pass	0.3	
Pulse range	Single burst 10 ms at 4 kHz	Pass	0.4	
Sound exposure level	Single burst 10 ms at 4 kHz	Pass	0.4	
Overload indication	SPL	Pass	0.3	
	Leq	Pass	0.4	

**2, Acoustic tests**

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

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

**3, Response to associated sound calibrator**

N/A

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

- End -

Calibrated by:

Date:

Fung Chi Yip  
20-Jan-2017

Checked by:

Date:

Lam Tze Wai  
23-Jan-2017

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.: 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

- 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.

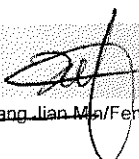
### Test results

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 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

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	
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 <sup>3</sup> at 4kHz	Pass	0.3	
	1 ms burst duty factor 1/10 <sup>4</sup> at 4kHz	Pass	0.3	
Pulse range	Single burst 10 ms at 4 kHz	Pass	0.4	
Sound exposure level	Single burst 10 ms at 4 kHz	Pass	0.4	
Overload indication	SPL	Pass	0.3	
	Leq	Pass	0.4	

**2, Acoustic tests**

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

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

**3, Response to associated sound calibrator**

N/A

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

- End -

Calibrated by:

Date:

Fung Chi Yip  
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.



## CERTIFICATE OF CALIBRATION

Certificate No.: 16CA1117 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.: 10707358  
Adaptors used: -

### Item submitted by

Customer: Lam Geotechnics Ltd.  
Address of Customer: -  
Request No.: -  
Date of receipt: 17-Nov-2016

Date of test: 18-Nov-2016

### Reference equipment used in the calibration

Description:	Model:	Serial No.	Expiry Date:	Traceable to:
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:  $23 \pm 1$  °C  
Relative humidity:  $50 \pm 10$  %  
Air pressure:  $1005 \pm 5$  hPa

### Test specifications

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

### Test results

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

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

Approved Signatory:

Huang Jian Min/Feng Jun Qi

Date: 21-Nov-2016

Company Chop:



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



**CERTIFICATE OF CALIBRATION**

(Continuation Page)

Certificate No.:

16CA1117 01-02

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 $\mu$ Pa)
			Estimated Expanded Uncertainty dB
1000	94.00	94.12	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 = 0.002 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 = 991.6 Hz

Estimated expanded uncertainty

0.1 Hz

Coverage factor k = 2.2

**4, Total Noise and Distortion**

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

At 1000 Hz

TND = 0.6 %

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.

- End -

Calibrated by:

Fung Chi Yip

Date: 18-Nov-2016

Checked by:

Lam Tze Wai

Date: 21-Nov-2016

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



## CERTIFICATE OF CALIBRATION

Certificate No.: 17CA0320 03

Page: 1 of 2

### Item tested

Description: Acoustical Calibrator (Class 1)  
Manufacturer: Larson Davis  
Type/Model No.: CAL200  
Serial/Equipment No.: 13098  
Adaptors used: -

### Item submitted by

Customer: Lam Environmental Service Ltd.  
Address of Customer: -  
Request No.: -  
Date of receipt: 20-Mar-2017

Date of test: 23-Mar-2017

### 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:  $21 \pm 1$  °C  
Relative humidity:  $60 \pm 10$  %  
Air pressure:  $1010 \pm 5$  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: 24-Mar-2017

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.: 17CA0320 03

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 $\mu$ Pa)
			Estimated Expanded Uncertainty dB
1000	94.00	93.98	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 = 0.002 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 = 1000.2 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 = 0.5 %

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.


- End -

Calibrated by:

  
Lai Sheng Jie

Date: 23-Mar-2017

Checked by:

  
Fung Chi Yip

Date: 24-Mar-2017

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 = $\text{SQRT}[\text{H2O}(\text{Pa}/760)(298/\text{Ta})]$			y axis = $\text{SQRT}[\text{H2O}(\text{Ta}/\text{Pa})]$		

CALCULATIONS

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

$$\text{Qstd} = \text{Vstd}/\text{Time}$$

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

$$\text{Qa} = \text{Va}/\text{Time}$$

For subsequent flow rate calculations:

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

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



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

Location : CMA1b  
Equipment no. : HVS001

Calibration Date : 13-Apr-17  
Calibration Due Date : 13-Jun-17

### CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition			
Temperature, $T_a$	293	Kelvin	Pressure, $P_a$
			1017 mmHg

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

Calibration of TSP						
Calibration  Point	Manometer Reading			Q <sub>std</sub>	Continuous Flow	IC
	H (inches of water)			(m <sup>3</sup> / min.)	Recorder, W	(W(P <sub>a</sub> /1013.3x298/T <sub>a</sub> ) <sup>1/2</sup> /35.31)
	(up)	(down)	(difference)	X-axis	(CFM)	Y-axis
1	1.6	1.6	3.2	0.8822	30	30.3101
2	2.9	2.9	5.8	1.1792	38	38.3928
3	3.8	3.8	7.6	1.3463	46	46.4755
4	4.8	4.8	9.6	1.5101	52	52.5375
5	6.4	6.4	12.8	1.7399	58	58.5995

By Linear Regression of Y on X

Slope, m = 34.2668      Intercept, b = -0.3651  
Correlation Coefficient\* = 0.9948  
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 : 13-Apr-17

Checked by : Pauline Wong  
Date : 13-Apr-17





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

Location : CMA2a  
Equipment no. : HVS002

Calibration Date : 13-Apr-17  
Calibration Due Date : 13-Jun-17

### CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition			
Temperature, $T_a$	293	Kelvin	Pressure, $P_a$
			1017 mmHg

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

Calibration of TSP						
Calibration  Point	Manometer Reading			Q <sub>std</sub>	Continuous Flow	IC
	H (inches of water)			(m <sup>3</sup> / min.)	Recorder, W	(W(P <sub>a</sub> /1013.3x298/T <sub>a</sub> ) <sup>1/2</sup> /35.31)
	(up)	(down)	(difference)	X-axis	(CFM)	Y-axis
1	1.5	1.5	3.0	0.8550	32	32.3307
2	2.3	2.3	4.6	1.0529	40	40.4134
3	3.8	3.8	7.6	1.3463	46	46.4755
4	5.1	5.1	10.2	1.5558	52	52.5375
5	6.5	6.5	13.0	1.7533	56	56.5788

By Linear Regression of Y on X

Slope, m = 26.2984      Intercept, b = 11.1467  
Correlation Coefficient\* = 0.9934  
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 : 13-Apr-17

Checked by : Pualine Wong  
Date : 13-Apr-17



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

Location : CMA3a  
 Equipment no. : HVS012  
 Calibration Date : 20-Apr-17  
 Calibration Due Date : 20-Jun-17

### CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition			
Temperature, T <sub>a</sub>	299	Kelvin	Pressure, P <sub>a</sub>
			1010 mmHg

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

Calibration of TSP						
Calibration  Point	Manometer Reading			Q <sub>std</sub>	Continuous Flow	IC
	H (inches of water)			(m <sup>3</sup> / min.)	Recorder, W	(W(P <sub>a</sub> /1013.3x298/T <sub>a</sub> ) <sup>1/2</sup> /35.31)
	(up)	(down)	(difference)	X-axis	(CFM)	Y-axis
1	1.3	1.3	2.6	0.7872	31	30.8977
2	2.2	2.2	4.4	1.0167	36	35.8812
3	3.5	3.5	7.0	1.2759	43	42.8581
4	4.5	4.5	9.0	1.4435	48	47.8416
5	5.3	5.3	10.6	1.5645	54	53.8218

By Linear Regression of Y on X

Slope, m = 28.6680  
 Intercept, b = 7.3550  
 Correlation Coefficient\* = 0.9911  
 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  
 Date : 20-Apr-17  
 Checked by : Pauline Wong  
 Date : 20-Apr-17



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

Location : CMA4a  
Equipment no. : HVS004

Calibration Date : 20-Apr-17  
Calibration Due Date : 20-Jun-17

### CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition				
Temperature, T <sub>a</sub>	299	Kelvin	Pressure, P <sub>a</sub>	1010 mmHg

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

Calibration of TSP						
Calibration Point	Manometer Reading			Q <sub>std</sub> (m <sup>3</sup> / min.)  X-axis	Continuous Flow Recorder, W (CFM)	IC (W(P <sub>a</sub> /1013.3x298/T <sub>a</sub> ) <sup>1/2</sup> /35.31)  Y-axis
	(up)	(down)	(difference)			
1	1.2	1.2	2.4	0.7573	35	34.8845
2	1.8	1.8	3.6	0.9220	41	40.8647
3	2.9	2.9	5.8	1.1636	48	47.8416
4	3.8	3.8	7.6	1.3285	53	52.8251
5	5.0	5.0	10.0	1.5203	57	56.8119

By Linear Regression of Y on X

Slope, m = 28.8782      Intercept, b = 13.7729  
Correlation Coefficient\* = 0.9965  
Calibration Accepted = Yes/No\*\*

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

\*\* Delete as appropriate.

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

Calibrated by : Jackey MA      Checked by : Pauline Wong  
Date : 20-Apr-17      Date : 20-Apr-17





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

Location : CMA5b  
Equipment no. : HVS010

Calibration Date : 21-Apr-17  
Calibration Due Date : 21-Jun-17

### CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition				
Temperature, T <sub>a</sub>	299	Kelvin	Pressure, P <sub>a</sub>	1008 mmHg

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

Calibration of TSP						
Calibration Point	Manometer Reading			Q <sub>std</sub>	Continuous Flow	IC
	H (inches of water)			(m <sup>3</sup> / min.)	Recorder, W	(W(P <sub>a</sub> /1013.3x298/T <sub>a</sub> ) <sup>1/2</sup> /35.31)
	(up)	(down)	(difference)	X-axis	(CFM)	Y-axis
1	1.4	1.4	2.8	0.8152	38	37.8371
2	2.1	2.1	4.2	0.9929	44	43.8113
3	3.3	3.3	6.6	1.2385	52	51.7770
4	4.3	4.3	8.6	1.4102	57	56.7556
5	5.5	5.5	11.0	1.5917	62	61.7341

By Linear Regression of Y on X

Slope, m = 30.8725      Intercept, b = 13.0364  
Correlation Coefficient\* = 0.9991  
Calibration Accepted = Yes/No\*\*

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

\*\* Delete as appropriate.

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

Calibrated by : Jackey MA  
Date : 21-Apr-17

Checked by : Pauline Wong  
Date : 21-Apr-17



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

Location : MA1e  
Equipment no. : HVS007

Calibration Date : 21-Apr-17  
Calibration Due Date : 21-Jun-17

### CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition			
Temperature, T <sub>a</sub>	299	Kelvin	Pressure, P <sub>a</sub>
			1008 mmHg

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

Calibration of TSP						
Calibration Point	Manometer Reading			Q <sub>std</sub> (m <sup>3</sup> / min.)  X-axis	Continuous Flow Recorder, W (CFM)	IC (W(P <sub>a</sub> /1013.3x298/T <sub>a</sub> ) <sup>1/2</sup> /35.31)  Y-axis
	(up)	(down)	(difference)			
1	1.5	1.5	3.0	0.8429	29	28.8757
2	2.3	2.3	4.6	1.0380	38	37.8371
3	3.6	3.6	7.2	1.2924	48	47.7942
4	4.5	4.5	9.0	1.4421	56	55.7599
5	5.1	5.1	10.2	1.5337	64	63.7256

By Linear Regression of Y on X

Slope, m = 48.0836      Intercept, b = -12.3359  
Correlation Coefficient\* = 0.9925  
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 : 21-Apr-17

Checked by : Pauline Wong  
Date : 21-Apr-17



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

Location : MA1w  
Equipment no. : HVS008

Calibration Date : 21-Apr-17  
Calibration Due Date : 21-Jun-17

### CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition			
Temperature, $T_a$	299	Kelvin	Pressure, $P_a$
			1008 mmHg

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

Calibration of TSP						
Calibration  Point	Manometer Reading			Q <sub>std</sub>	Continuous Flow	IC
	H (inches of water)			(m <sup>3</sup> / min.)	Recorder, W	(W(P <sub>a</sub> /1013.3x298/T <sub>a</sub> ) <sup>1/2</sup> /35.31)
	(up)	(down)	(difference)	X-axis	(CFM)	Y-axis
1	1.5	1.5	3.0	0.8429	20	19.9142
2	2.4	2.4	4.8	1.0598	28	27.8799
3	3.8	3.8	7.6	1.3272	38	37.8371
4	5.0	5.0	10.0	1.5188	44	43.8113
5	6.4	6.4	12.8	1.7151	50	49.7856

By Linear Regression of Y on X

Slope, m = 34.4344      Intercept, b = -8.6696  
Correlation Coefficient\* = 0.9989  
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 : 21-Apr-17

Checked by : Pauline Wong  
Date : 21-Apr-17



***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  
May 2017

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				27-Apr	28-Apr	29-Apr
					24hr TSP	24hr TSP(CMA4b) 1hr TSP
30-Apr	1-May	2-May	3-May	4-May	5-May	6-May
		Noise (daytime) (M1a,M2b,M3a,M7e,M7w, M8)		24hr TSP Noise (daytime) (M4b,M5b,M6)	24hr TSP (MA1e) 1hr TSP	
7-May	8-May	9-May	10-May	11-May	12-May	13-May
Noise (daytime) (M1a,M2b,M7e,M7w,M8)		Noise (daytime) (M3a,M4b)	24hr TSP Noise (daytime) (M5b,M6)	1hr TSP		
14-May	15-May	16-May	17-May	18-May	19-May	20-May
	Noise (daytime) (M3a)	24hr TSP Noise (daytime) (M1a,M4b)	24hr TSP (CMA5b) 1hr TSP Noise (daytime) (M7e,M7w,M8)	Noise (daytime) (M2b,M5b,M6)		
21-May	22-May	23-May	24-May	25-May	26-May	
24hr TSP		1hr TSP		Noise (daytime) (M1a,M3a,M4b,M5b,M6 M7e,M7w,M8)	Noise (daytime) (M2b)	

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  
June 2017

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



## ***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)					
2/5/2017	13:30	Fine	75.5	77.0	73.0	72	73	75
8/5/2017	14:48	Fine	75.5	76.1	70.5	72	73	75
16/5/2017	13:48	Cloudy	78.0	80.5	73.3	72	77	75
25/5/2017	10:45	Fine	78.2	79.5	75.7	72	77	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)								
2/5/2017	14:11	Fine	69.2	71.0	66.5	68	64	75
8/5/2017	15:37	Fine	70.5	72.0	65.5	68	67	75
18/5/2017	14:00	Cloudy	68.5	70.5	65.5	68	61	75
26/5/2017	14:00	Fine	69.3	70.9	66.9	68	64	75

Location: M3a - Tung Lo Wan Fire Station

Date	Time	Weather	Measurement Noise Level			Baseline Level	Construction Noise Level	Limit Level
			Leq	L10	L90	Leq	Leq	Leq
Unit: dB(A), (30-min)								
2/5/2017	14:55	Fine	66.1	67.0	64.5	69	66	75
9/5/2017	10:00	Fine	66.4	67.5	63.5	69	66	75
15/5/2017	15:00	Fine	71.4	73.0	62.5	69	68	75
25/5/2017	13:20	Fine	66.5	67.5	65.3	69	67	75

Location: M4b - Victoria Centre

Date	Time	Weather	Measurement Noise Level			Baseline Noise Level	Construction Noise Level		Limit Level
			Leq	L10	L90	Leq	Leq	Leq	
			Unit: dB(A), (30min)						
4/5/2017	15:27	Cloudy	64.8	66.0	62.5	67	65	75	
9/5/2017	10:50	Fine	66.1	67.0	63.5	67	66	75	
16/5/2017	15:45	Fine	65.3	66.5	63.0	67	65	75	
25/5/2017	14:05	Fine	71.6	75.1	66.7	67	70	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)					
4/5/2017	16:10	Cloudy	70.5	74.0	67.5	68	67	75
10/5/2017	10:05	Fine	72.8	74.5	67.5	68	71	75
18/5/2017	15:40	Fine	73.1	74.0	69.0	68	71	75
25/5/2017	14:55	Fine	74.9	76.1	71.0	68	74	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)								
4/5/2017	16:55	Cloudy	66.8	67.5	65.0	71	67	70
10/5/2017	10:45	Fine	68.4	69.5	65.3	71	68	70
18/5/2017	15:00	Fine	69.8	70.5	66.5	71	70	70
25/5/2017	15:30	Fine	64.4	65.8	62.3	71	64	70





## Noise Monitoring Result

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

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

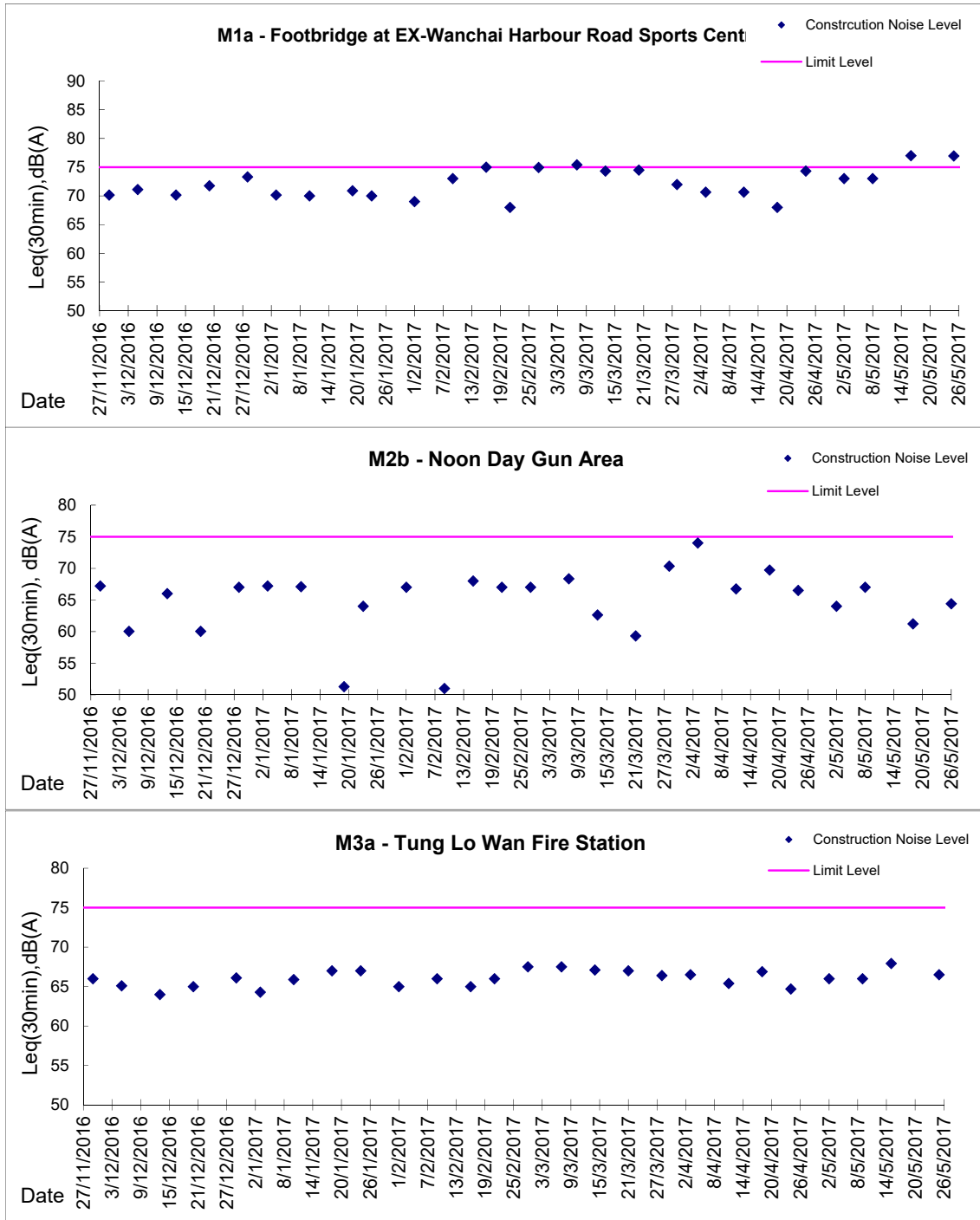
Date	Time	Weather	Measurement Noise Level			Baseline Level	Construction Noise Level		Limit Level
			Leq	L10	L90	Leq	Leq	Leq	
			Unit: dB(A), (30-min)						
2/5/2017	10:55	Cloudy	63.9	66.0	61.0	67	64	N/A	
8/5/2017	10:53	Fine	66.8	68.5	62.0	67	67	N/A	
17/5/2017	15:48	Fine	68.4	69.5	65.0	67	63	N/A	
25/5/2017	09:50	Fine	71.1	74.0	68.0	67	69	N/A	

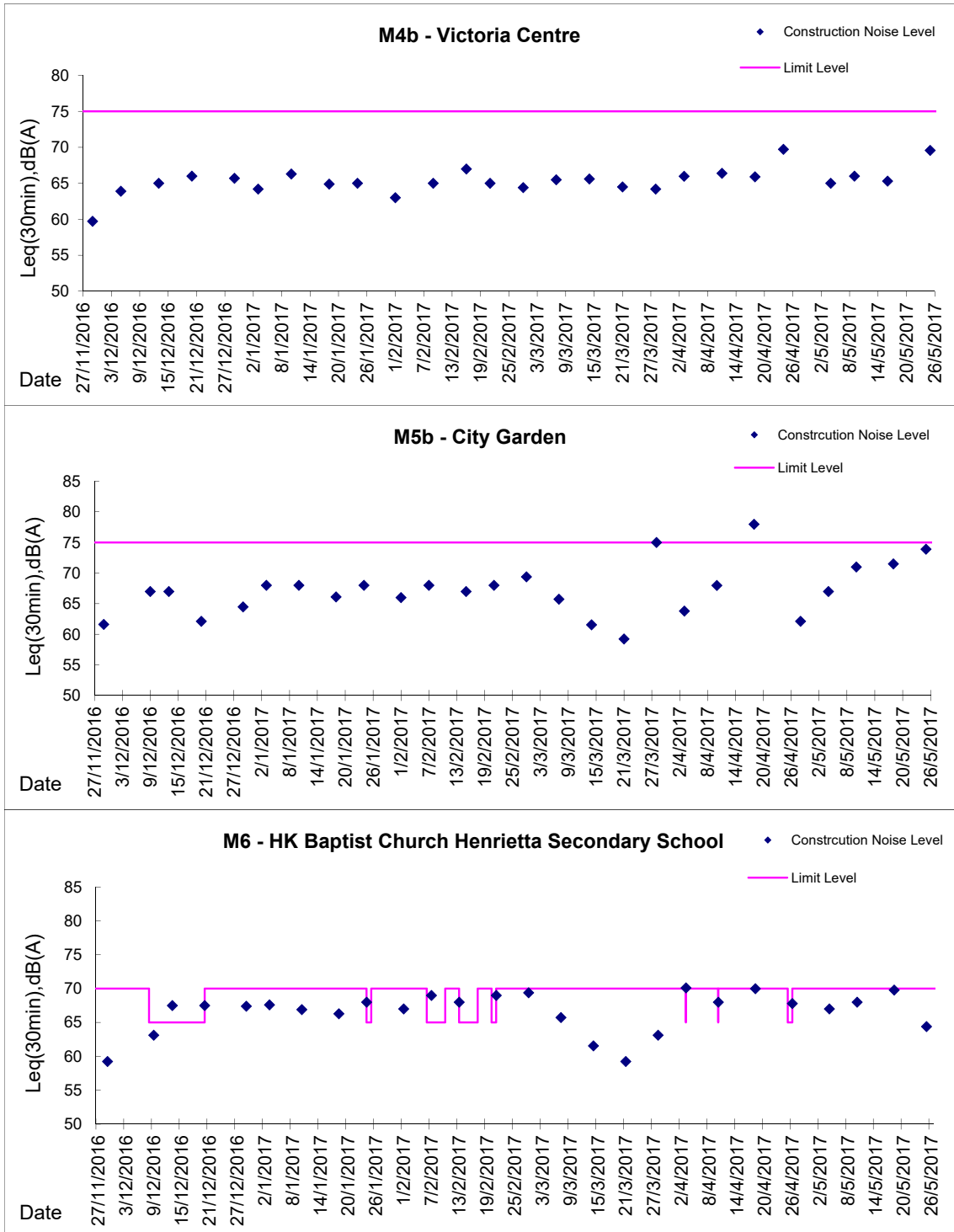
Location: M7w - International Finance Centre (Western End of Podium)

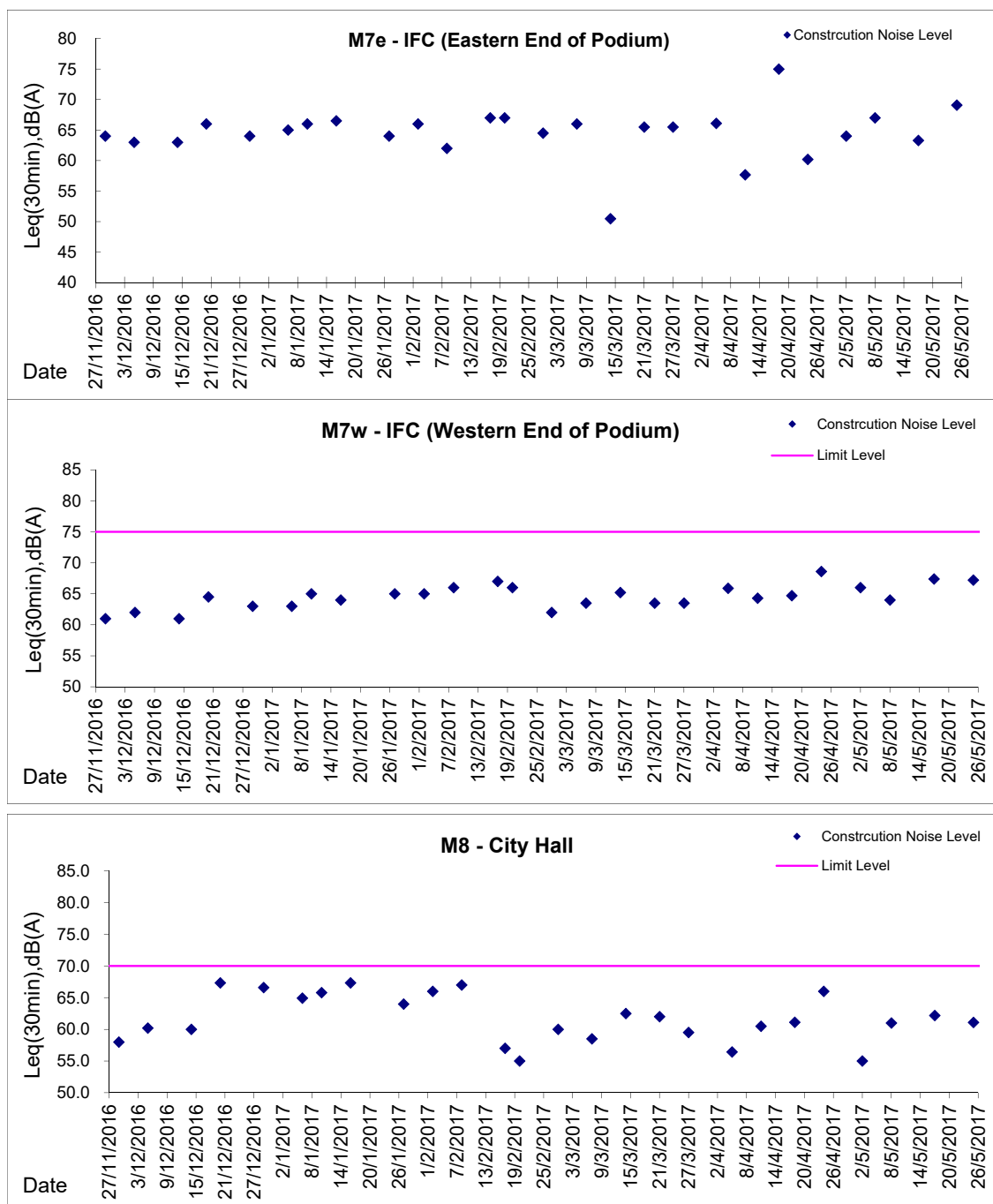
Date	Time	Weather	Measurement Noise Level			Baseline Level	Construction Noise Level		Limit Level
			Leq	L10	L90	Leq		Leq	Leq
			Unit: dB(A), (30-min)						
2/5/2017	10:20	Fine	66.0	67.5	63.5	69		66	75
8/5/2017	10:20	Fine	63.9	65.5	61.5	69		64	75
17/5/2017	15:15	Fine	67.4	69.0	62.0	69		67	75
25/5/2017	09:15	Fine	67.2	69.0	64.6	69		67	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)						
2/5/2017	11:30	Fine	64.5	66.5	61.5	64	55	70	
8/5/2017	11:30	Fine	61.0	63.8	60.0	64	61	70	
17/5/2017	16:27	Fine	66.2	67.5	63.0	64	62	70	
25/5/2017	08:15	Fine	61.1	63.0	56.8	64	61	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, $\text{m}^3/\text{min}$			Total Volume, $\text{m}^3$	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, $Q_{si}$	Final, $Q_{sf}$	Average		
28-Apr-17	8:00	Fine	20179	2.5737	2.7272	9867.84	9891.84	24.00	1.14	1.14	1.14	1637	93.8
4-May-17	8:00	Rainy	20281	2.5669	2.6705	9894.86	9918.86	24.00	1.19	1.19	1.19	1709	60.6
10-May-17	8:00	Fine	20364	2.9426	3.1379	9921.87	9945.87	24.00	1.13	1.13	1.13	1624	120.2
16-May-17	8:00	Cloudy	20420	2.8407	2.9583	9948.87	9972.87	24.00	1.18	1.18	1.18	1706	68.9
22-May-17	8:00	Cloudy	20403	2.8484	2.9709	9975.87	9999.87	24.00	1.18	1.18	1.18	1705	71.9

Report on 1-hour TSP monitoring

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

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

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, $\text{m}^3/\text{min}$			Total Volume, $\text{m}^3$	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, $Q_{si}$	Final, $Q_{sf}$	Average		
29-Apr-17	8:45	Fine	20174	2.5705	2.5843	9891.84	9892.84	1.00	1.19	1.19	1.19	72	193.0
29-Apr-17	9:58	Fine	20295	2.5510	2.5669	9892.84	9893.84	1.00	1.19	1.19	1.19	72	222.3
29-Apr-17	11:00	Fine	20288	2.5763	2.5867	9893.84	9894.84	1.00	1.19	1.19	1.19	72	145.4
5-May-17	9:30	Fine	20328	2.8960	2.9045	9918.87	9919.87	1.00	1.19	1.19	1.19	71	119.4
5-May-17	11:00	Fine	20251	2.5800	2.5876	9919.87	9920.87	1.00	1.19	1.19	1.19	71	106.8
5-May-17	15:25	Fine	20369	2.8962	2.9083	9920.87	9921.87	1.00	1.19	1.19	1.19	71	170.0
11-May-17	9:05	Fine	20384	2.8443	2.8551	9945.87	9946.87	1.00	1.07	1.07	1.07	64	168.0
11-May-17	10:30	Fine	20385	2.8518	2.8604	9946.87	9947.87	1.00	1.18	1.18	1.18	71	121.2
11-May-17	13:00	Fine	20424	2.5001	2.5073	9947.87	9948.87	1.00	1.18	1.18	1.18	71	101.4
17-May-17	9:30	Fine	20395	2.8546	2.8634	9972.87	9973.87	1.00	1.18	1.18	1.18	71	123.9
17-May-17	11:00	Fine	20409	2.8425	2.8476	9973.87	9974.87	1.00	1.18	1.18	1.18	71	71.8
17-May-17	13:00	Fine	20406	2.8662	2.8758	9974.87	9975.87	1.00	1.18	1.18	1.18	71	135.1
23-May-17	9:25	Cloudy	20620	2.5496	2.5545	9999.87	10000.87	1.00	1.18	1.18	1.18	71	69.0
23-May-17	11:00	Cloudy	20614	2.5822	2.5861	10000.87	10001.87	1.00	1.18	1.18	1.18	71	54.9
23-May-17	13:00	Cloudy	20603	2.5252	2.5322	10001.87	10002.87	1.00	1.18	1.18	1.18	71	98.6



Location: CMA2a - Causeway Bay Community Centre

Report on 24-hour TSP monitoring

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

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

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, $\text{m}^3/\text{min}$			Total Volume, $\text{m}^3$	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, $Q_{si}$	Final, $Q_{sf}$	Average		
28-Apr-17	8:00	Fine	19989	2.8681	2.9012	19477.15	19501.15	24.00	0.97	0.97	0.97	1397	23.7
4-May-17	8:00	Rainy	20283	2.5741	2.6533	19504.15	19528.15	24.00	1.04	1.04	1.04	1491	53.1
10-May-17	8:00	Fine	20365	2.9174	3.0895	19531.15	19555.15	24.00	1.03	1.03	1.03	1486	115.8
16-May-17	8:00	Cloudy	19711	2.8331	2.8950	19558.16	19582.16	24.00	0.96	0.96	0.96	1382	44.8
22-May-17	8:00	Cloudy	20402	2.8425	2.9315	19585.16	19609.16	24.00	0.96	0.96	0.96	1381	64.4

Report on 1-hour TSP monitoring

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

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

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, $\text{m}^3/\text{min}$			Total Volume, $\text{m}^3$	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, $Q_{si}$	Final, $Q_{sf}$	Average		
29-Apr-17	8:30	Fine	20175	2.5861	2.5904	19501.15	19502.15	1.00	0.97	0.97	0.97	58	74.0
29-Apr-17	10:10	Fine	20168	2.5179	2.5212	19502.15	19503.15	1.00	0.97	0.97	0.97	58	56.8
29-Apr-17	13:00	Fine	20289	2.5573	2.5628	19503.15	19504.15	1.00	0.97	0.97	0.97	58	94.6
5-May-17	9:45	Fine	20327	2.9134	2.9179	19528.15	19529.15	1.00	0.96	0.96	0.96	58	77.9
5-May-17	13:00	Fine	20331	2.8938	2.9010	19529.15	19530.15	1.00	0.96	0.96	0.96	58	124.7
5-May-17	15:21	Fine	20333	2.8930	2.9038	19530.15	19531.15	1.00	0.96	0.96	0.96	58	187.0
11-May-17	9:10	Fine	20361	2.9211	2.9260	19555.15	19556.15	1.00	0.96	0.96	0.96	57	85.2
11-May-17	10:30	Fine	20431	2.4988	2.5036	19556.15	19557.15	1.00	1.10	1.10	1.10	66	72.5
11-May-17	13:00	Fine	20425	2.5083	2.5140	19557.15	19558.15	1.00	1.03	1.03	1.03	62	92.2
17-May-17	9:35	Fine	20394	2.8437	2.8484	19582.16	19583.16	1.00	0.96	0.96	0.96	58	81.6
17-May-17	11:00	Fine	20396	2.8482	2.8498	19583.16	19584.16	1.00	0.96	0.96	0.96	58	27.8
17-May-17	13:00	Fine	20405	2.8426	2.8468	19584.16	19585.16	1.00	0.96	0.96	0.96	58	72.9
23-May-17	9:25	Cloudy	20621	2.6321	2.6344	19609.16	19610.16	1.00	1.10	1.10	1.10	66	34.7
23-May-17	11:00	Cloudy	20615	2.5761	2.5779	19610.16	19611.16	1.00	1.10	1.10	1.10	66	27.2
23-May-17	13:00	Cloudy	20604	2.5405	2.5427	19611.16	19612.16	1.00	0.96	0.96	0.96	57	38.3





Location: CMA3a - CWB PRE Site Office Area

Report on 24-hour TSP monitoring

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

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

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, $\text{m}^3/\text{min}$			Total Volume, $\text{m}^3$	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, $Q_{\text{si}}$	Final, $Q_{\text{sf}}$	Average		
28-Apr-17	8:00	Fine	19987	2.8477	2.9375	6967.72	6991.72	24.00	1.16	1.16	1.16	1666	53.9
4-May-17	8:00	Rainy	20248	2.5766	2.6827	6994.72	7018.72	24.00	1.15	1.15	1.15	1655	64.1
10-May-17	8:00	Fine	20334	2.9015	3.0965	7021.73	7045.73	24.00	1.15	1.14	1.15	1650	118.2
16-May-17	8:00	Cloudy	20387	2.8635	2.9145	7049.74	7073.74	24.00	1.15	1.15	1.15	1651	30.9
22-May-17	8:00	Cloudy	20401	2.8539	2.9298	7076.74	7100.74	24.00	1.15	1.14	1.15	1650	46.0

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, $\text{m}^3/\text{min}$			Total Volume, $\text{m}^3$	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, $Q_{\text{si}}$	Final, $Q_{\text{sf}}$	Average		
29-Apr-17	8:30	Fine	20176	2.5786	2.5864	6991.72	6992.72	1.00	1.16	1.16	1.16	69	112.5
29-Apr-17	9:50	Fine	20169	2.5736	2.5809	6992.72	6993.72	1.00	1.16	1.16	1.16	69	105.3
29-Apr-17	10:52	Fine	20290	2.5718	2.5790	6993.72	6994.72	1.00	1.16	1.16	1.16	69	103.8
5-May-17	9:20	Fine	20254	2.5598	2.5693	7018.73	7019.73	1.00	1.15	1.15	1.15	69	137.8
5-May-17	10:50	Fine	20252	2.5842	2.5964	7019.73	7020.73	1.00	1.15	1.15	1.15	69	177.0
5-May-17	14:50	Fine	20371	2.9154	2.9316	7020.73	7021.73	1.00	1.15	1.15	1.15	69	235.0
11-May-17	8:50	Fine	20421	2.4998	2.5038	7045.74	7046.74	1.00	1.14	1.14	1.14	69	58.2
11-May-17	13:00	Fine	20426	2.5076	2.5131	7046.74	7047.74	1.00	1.14	1.14	1.14	69	80.1
11-May-17	17:00	Fine	20383	2.8463	2.8518	7047.74	7048.74	1.00	1.14	1.14	1.14	69	80.1
17-May-17	9:15	Fine	20392	2.8505	2.8535	7073.74	7074.74	1.00	1.01	1.01	1.01	61	49.4
17-May-17	10:35	Fine	20410	2.8295	2.8339	7074.74	7075.74	1.00	1.15	1.15	1.15	69	64.0
17-May-17	13:00	Fine	20399	2.8384	2.8419	7075.74	7076.74	1.00	1.15	1.15	1.15	69	50.9
23-May-17	9:02	Cloudy	20624	2.6311	2.6334	7100.74	7101.74	1.00	1.14	1.14	1.14	69	33.5
23-May-17	10:50	Cloudy	20617	2.5264	2.5293	7101.74	7102.74	1.00	1.14	1.14	1.14	69	42.2
23-May-17	13:00	Cloudy	20606	2.5990	2.6025	7102.74	7103.74	1.00	1.14	1.14	1.14	69	51.0



Location: CMA4a - SPCA

Report on 24-hour TSP monitoring

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

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

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, $\text{m}^3/\text{min}$			Total Volume, $\text{m}^3$	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, $Q_{\text{si}}$	Final, $Q_{\text{sf}}$	Average		
29-Apr-17	13:00	Fine	20284	2.5574	2.6429	23768.27	23792.27	24.00	0.92	0.92	0.92	1330	64.3
4-May-17	8:00	Rainy	20259	2.5827	2.6645	23792.27	23816.27	24.00	0.92	0.92	0.92	1323	61.8
10-May-17	8:00	Fine	20367	2.9088	3.0387	23819.29	23843.29	24.00	0.92	0.91	0.92	1318	98.6
16-May-17	8:00	Cloudy	20432	2.5155	2.5525	23846.29	23870.29	24.00	0.85	0.85	0.85	1224	30.2
22-May-17	8:00	Cloudy	20400	2.8468	2.9035	23873.29	23897.29	24.00	0.78	0.78	0.78	1127	50.3

Remarks: Due to interruption of electricity, the 24hr TSP was rescheduled from 28 April 2017 to 29 April 2017.

Report on 1-hour TSP monitoring

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

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

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, $\text{m}^3/\text{min}$			Total Volume, $\text{m}^3$	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, $Q_{\text{si}}$	Final, $Q_{\text{sf}}$	Average		
29-Apr-17	8:30	Fine	20247	2.5861	2.5938	23765.27	23766.27	1.00	0.92	0.92	0.92	55	138.8
29-Apr-17	9:55	Fine	20170	2.5724	2.5777	23766.27	23767.27	1.00	0.92	0.92	0.92	55	95.5
29-Apr-17	11:00	Fine	20293	2.5688	2.5737	23767.27	23768.27	1.00	0.92	0.92	0.92	55	88.3
5-May-17	9:25	Fine	20326	2.9080	2.9144	23816.28	23817.28	1.00	0.79	0.79	0.79	47	135.8
5-May-17	13:00	Fine	20330	2.9119	2.9192	23817.28	23818.28	1.00	0.79	0.79	0.79	47	154.9
5-May-17	14:30	Fine	20249	2.5733	2.5810	23818.28	23819.28	1.00	0.79	0.79	0.79	47	163.4
11-May-17	8:50	Fine	20362	2.9258	2.9332	23843.29	23844.29	1.00	0.91	0.91	0.91	55	134.9
11-May-17	10:15	Fine	20356	2.9070	2.9150	23844.29	23845.29	1.00	0.91	0.91	0.91	55	145.9
11-May-17	13:00	Fine	20427	2.5323	2.5364	23845.29	23846.29	1.00	0.91	0.91	0.91	55	74.8
17-May-17	9:15	Fine	20393	2.8553	2.8589	23870.29	23871.29	1.00	0.92	0.92	0.92	55	65.5
17-May-17	10:30	Fine	20412	2.8200	2.8225	23871.29	23872.29	1.00	0.92	0.92	0.92	55	45.5
17-May-17	13:00	Fine	20407	2.8600	2.8630	23872.29	23873.29	1.00	0.92	0.92	0.92	55	54.6
23-May-17	9:00	Cloudy	20623	2.6474	2.6484	23897.30	23898.30	1.00	0.78	0.78	0.78	47	21.3
23-May-17	10:50	Cloudy	20618	2.5606	2.5622	23898.30	23899.30	1.00	0.78	0.78	0.78	47	34.1
23-May-17	13:00	Cloudy	20607	2.5765	2.5783	23899.30	23900.30	1.00	0.78	0.78	0.78	47	38.4



Location: CMA5b - Pedestrian Plaza

Report on 24-hour TSP monitoring

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

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

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, $\text{m}^3/\text{min}$			Total Volume, $\text{m}^3$	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, $Q_{\text{si}}$	Final, $Q_{\text{sf}}$	Average		
28-Apr-17	8:00	Fine	19990	2.8503	2.9953	8322.75	8346.75	24.00	0.77	0.76	0.77	1102	131.6
4-May-17	8:00	Rainy	20287	2.5761	2.6398	8349.75	8373.75	24.00	0.76	0.76	0.76	1093	58.3
10-May-17	8:00	Fine	20370	2.8924	3.1178	8376.75	8400.75	24.00	0.88	0.88	0.88	1267	177.9
17-May-17	16:20	Fine	20550	2.5669	2.7077	8406.76	8430.76	24.00	0.82	0.82	0.82	1179	119.4
22-May-17	8:00	Cloudy	20536	2.5506	2.6304	8430.79	8454.79	24.00	0.79	0.79	0.79	1133	70.4

Remarks: Due to interruption of electricity, the 24hr TSP was rescheduled from 16 May 2017 to 17 May 2017.

Report on 1-hour TSP monitoring

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

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

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, $\text{m}^3/\text{min}$			Total Volume, $\text{m}^3$	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, $Q_{\text{si}}$	Final, $Q_{\text{sf}}$	Average		
29-Apr-17	8:30	Fine	20178	2.5946	2.6054	8346.75	8347.75	1.00	0.76	0.76	0.76	46	235.6
29-Apr-17	9:33	Fine	20173	2.5757	2.5886	8347.75	8348.75	1.00	0.76	0.76	0.76	46	281.4
29-Apr-17	10:40	Fine	20294	2.5919	2.6010	8348.75	8349.75	1.00	0.89	0.89	0.89	53	170.6
5-May-17	8:05	Fine	20262	2.5573	2.5696	8373.75	8374.75	1.00	0.76	0.76	0.76	46	270.2
5-May-17	10:04	Fine	20329	2.8965	2.9095	8374.75	8375.75	1.00	0.76	0.76	0.76	46	285.6
5-May-17	13:00	Fine	20374	2.8945	2.9125	8375.75	8376.75	1.00	0.91	0.91	0.91	55	328.2
11-May-17	8:30	Fine	20263	2.5582	2.5647	8400.76	8401.76	1.00	0.82	0.82	0.82	49	132.6
11-May-17	9:45	Fine	20360	2.8952	2.9005	8401.76	8402.76	1.00	0.75	0.75	0.75	45	117.0
11-May-17	13:00	Fine	20430	2.4996	2.5082	8402.76	8403.76	1.00	0.88	0.88	0.88	53	163.1
17-May-17	8:30	Fine	20537	2.5667	2.5757	8403.76	8404.76	1.00	0.76	0.76	0.76	45	198.3
17-May-17	13:00	Fine	20408	2.8443	2.8535	8404.76	8405.76	1.00	0.76	0.76	0.76	45	202.8
17-May-17	14:28	Fine	20551	2.5723	2.5860	8405.76	8406.76	1.00	0.76	0.76	0.76	45	301.9
23-May-17	8:25	Cloudy	20578	2.5833	2.5855	8454.80	8455.80	1.00	0.76	0.76	0.76	45	48.6
23-May-17	10:00	Cloudy	20619	2.5447	2.5482	8455.80	8456.80	1.00	0.82	0.82	0.82	49	71.4
23-May-17	13:00	Cloudy	20584	2.5931	2.6002	8456.80	8457.80	1.00	0.79	0.82	0.80	48	147.6



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, $\text{m}^3/\text{min}$			Total Volume, $\text{m}^3$	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, $Q_{\text{si}}$	Final, $Q_{\text{sf}}$	Average		
28-Apr-17	8:00	Fine	20064	2.4950	2.6108	20659.53	20683.53	24.00	1.02	1.02	1.02	1467	78.9
5-May-17	16:36	Fine	20276	2.5883	2.8092	20703.94	20727.94	24.00	1.09	1.09	1.09	1575	140.3
10-May-17	8:00	Fine	20363	2.8965	3.0237	20727.94	20751.94	24.00	1.01	1.01	1.01	1459	87.2
16-May-17	8:00	Cloudy	20338	2.9048	2.9244	20754.94	20778.94	24.00	1.01	1.01	1.01	1459	13.4
22-May-17	8:00	Cloudy	20352	2.9143	2.9834	20781.94	20805.94	24.00	1.05	1.09	1.07	1545	44.7

Remarks: Due to interruption of electricity, the 24hr TSP was rescheduled from 4 May 2017 to 5 May 2017.

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, $\text{m}^3/\text{min}$			Total Volume, $\text{m}^3$	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, $Q_{\text{si}}$	Final, $Q_{\text{sf}}$	Average		
29-Apr-17	8:43	Fine	20182	2.5371	2.5436	20683.53	20684.53	1.00	1.06	1.06	1.06	64	102.4
29-Apr-17	9:45	Fine	20181	2.5679	2.5751	20684.53	20685.53	1.00	1.10	1.10	1.10	66	109.2
29-Apr-17	10:48	Fine	20165	2.5546	2.5614	20685.53	20686.53	1.00	1.10	1.10	1.10	66	103.2
5-May-17	10:00	Fine	20279	2.5994	2.6085	20700.94	20701.94	1.00	1.01	1.01	1.01	61	149.5
5-May-17	13:00	Fine	20277	2.6098	2.6171	20701.94	20702.94	1.00	1.09	1.09	1.09	66	111.2
5-May-17	14:20	Fine	20278	2.6062	2.6150	20702.94	20703.94	1.00	1.01	1.01	1.01	61	144.5
11-May-17	9:35	Fine	20337	2.9086	2.9131	20751.94	20752.94	1.00	1.05	1.05	1.05	63	71.3
11-May-17	10:41	Fine	20336	2.8992	2.9045	20752.94	20753.94	1.00	1.05	1.05	1.05	63	84.0
11-May-17	13:00	Fine	20339	2.9017	2.9058	20753.94	20754.94	1.00	1.05	1.05	1.05	63	64.9
17-May-17	9:45	Fine	20355	2.9045	2.9073	20778.94	20779.94	1.00	1.09	1.09	1.09	66	42.7
17-May-17	10:48	Fine	20354	2.9337	2.9407	20779.94	20780.94	1.00	1.09	1.09	1.09	66	106.8
17-May-17	13:00	Fine	20353	2.9239	2.9304	20780.94	20781.94	1.00	1.09	1.09	1.09	66	99.1
23-May-17	8:02	Cloudy	20611	2.5397	2.5412	20805.94	20806.94	1.00	1.05	1.05	1.05	63	23.8
23-May-17	10:30	Cloudy	20582	2.5621	2.5634	20806.94	20807.94	1.00	1.09	1.09	1.09	66	19.8
23-May-17	13:00	Cloudy	20609	2.5551	2.5573	20807.94	20808.94	1.00	1.09	1.09	1.09	66	33.6



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

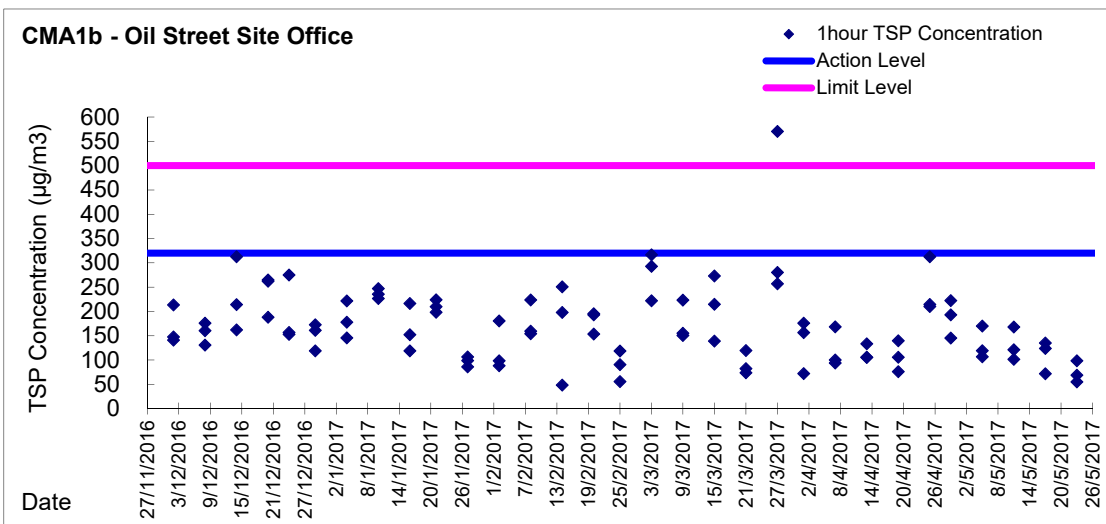
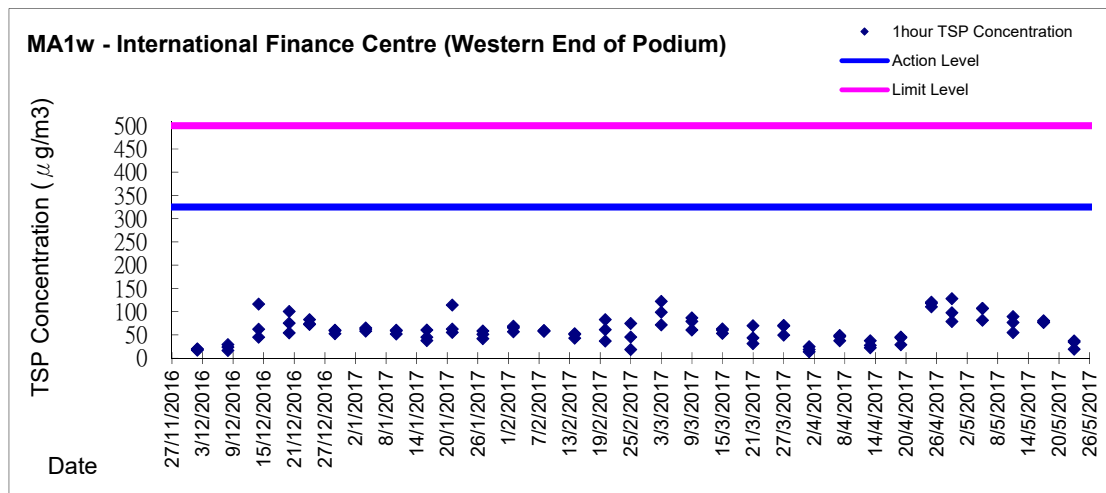
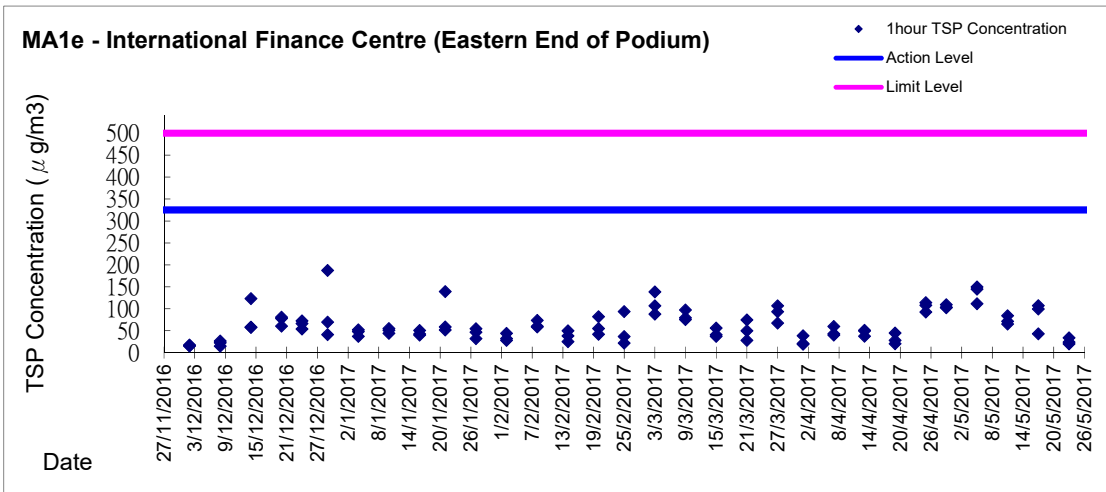
Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, $\text{m}^3/\text{min}$			Total Volume, $\text{m}^3$	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, $Q_{\text{si}}$	Final, $Q_{\text{sf}}$	Average		
28-Apr-17	8:00	Fine	20060	2.4945	2.5306	20440.85	20464.85	24.00	1.32	1.32	1.32	1896	19.0
4-May-17	8:00	Rainy	20055	2.5006	2.6275	20467.85	20491.85	24.00	1.31	1.31	1.31	1888	67.2
10-May-17	8:00	Fine	20272	2.5983	2.7576	20494.86	20518.86	24.00	1.31	1.31	1.31	1884	84.6
16-May-17	8:00	Cloudy	20340	2.9015	2.9638	20521.86	20545.86	24.00	1.31	1.31	1.31	1885	33.1
22-May-17	8:00	Cloudy	20348	2.9523	2.9806	20548.87	20572.87	24.00	1.31	1.31	1.31	1884	15.0

Report on 1-hour TSP monitoring

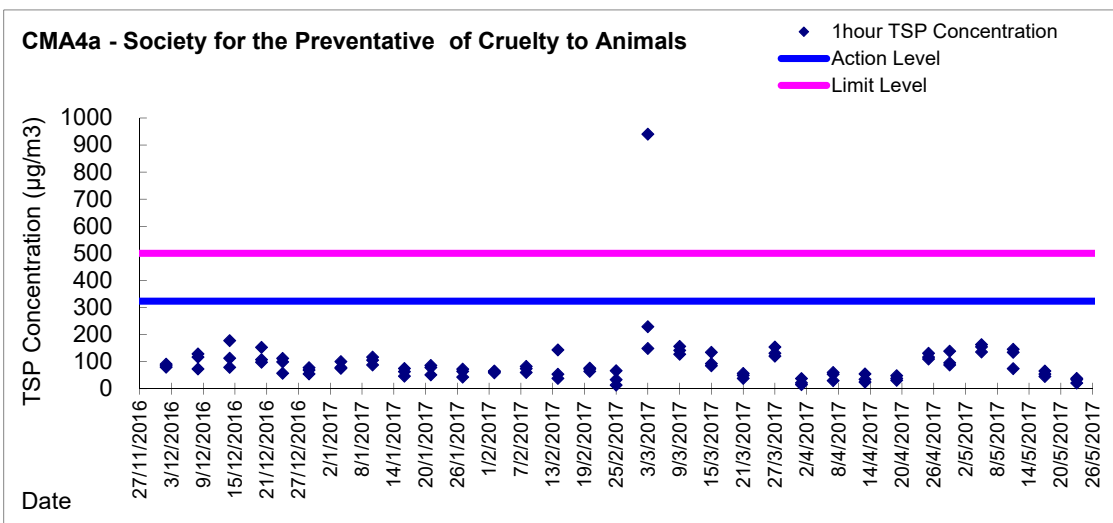
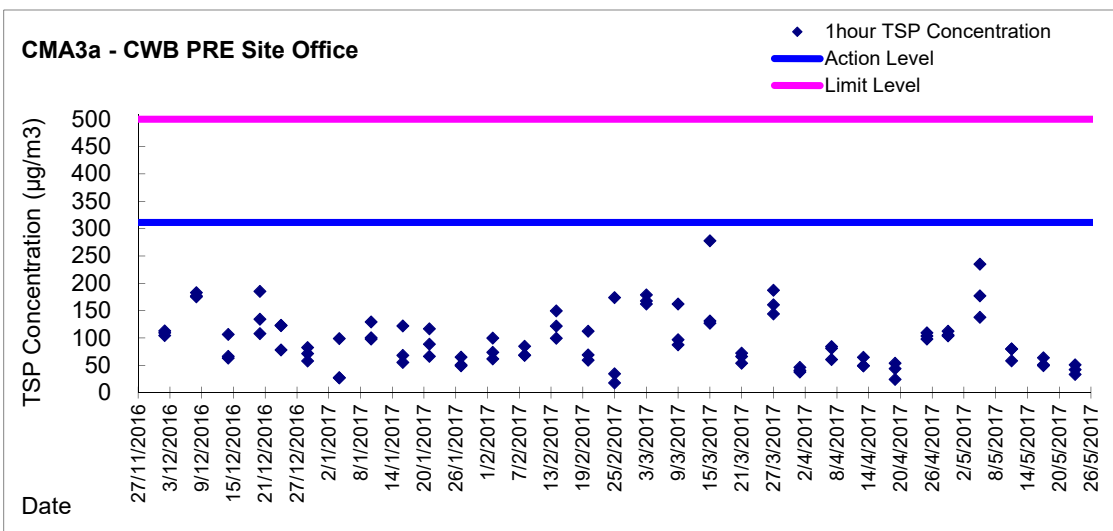
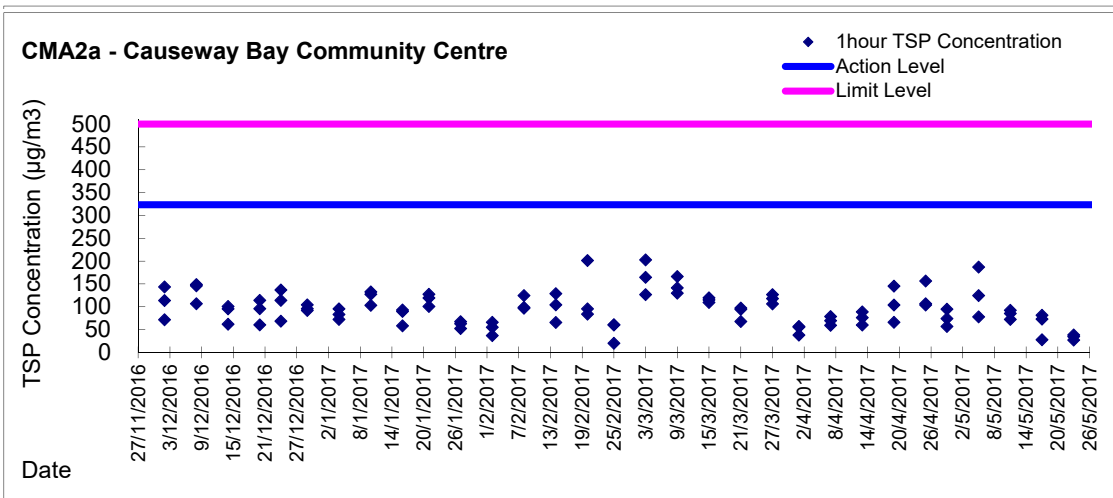
Action Level ( $\mu\text{g}/\text{m}^3$ ) - 325.1  
Limit Level ( $\mu\text{g}/\text{m}^3$ ) - 500

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, $\text{m}^3/\text{min}$			Total Volume, $\text{m}^3$	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, $Q_{\text{si}}$	Final, $Q_{\text{sf}}$	Average		
29-Apr-17	8:46	Fine	20163	2.5560	2.5661	20464.85	20465.85	1.00	1.32	1.32	1.32	79	128.0
29-Apr-17	9:49	Fine	20184	2.5791	2.5868	20465.85	20466.85	1.00	1.32	1.32	1.32	79	97.6
29-Apr-17	10:51	Fine	20183	2.5925	2.5987	20466.85	20467.85	1.00	1.32	1.32	1.32	79	78.6
5-May-17	8:45	Fine	20275	2.5923	2.6007	20491.85	20492.85	1.00	1.31	1.31	1.31	79	106.8
5-May-17	10:31	Fine	20274	2.5916	2.6000	20492.85	20493.85	1.00	1.31	1.31	1.31	79	106.8
5-May-17	13:00	Fine	20273	2.6030	2.6094	20493.85	20494.85	1.00	1.31	1.31	1.31	79	81.4
11-May-17	9:47	Fine	20343	2.9319	2.9362	20518.86	20519.86	1.00	1.31	1.31	1.31	78	54.8
11-May-17	10:49	Fine	20342	2.8977	2.9053	20519.86	20520.86	1.00	1.42	1.42	1.42	85	89.3
11-May-17	13:00	Fine	20341	2.8991	2.9056	20520.86	20521.86	1.00	1.42	1.42	1.42	85	76.4
17-May-17	9:48	Fine	20351	2.9206	2.9269	20545.86	20546.86	1.00	1.31	1.31	1.31	79	80.3
17-May-17	10:50	Fine	20350	2.9301	2.9362	20546.86	20547.86	1.00	1.31	1.31	1.31	79	77.7
17-May-17	13:00	Fine	20349	2.9294	2.9354	20547.86	20548.86	1.00	1.31	1.31	1.31	79	76.4
23-May-17	8:05	Cloudy	20610	2.5487	2.5502	20572.87	20573.87	1.00	1.31	1.31	1.31	78	19.1
23-May-17	10:35	Cloudy	20581	2.5661	2.5688	20573.87	20574.87	1.00	1.31	1.31	1.31	78	34.4
23-May-17	13:00	Cloudy	20608	2.5598	2.5627	20574.87	20575.87	1.00	1.31	1.31	1.31	78	37.0

## Graphic Presentation of 1 hour TSP Result

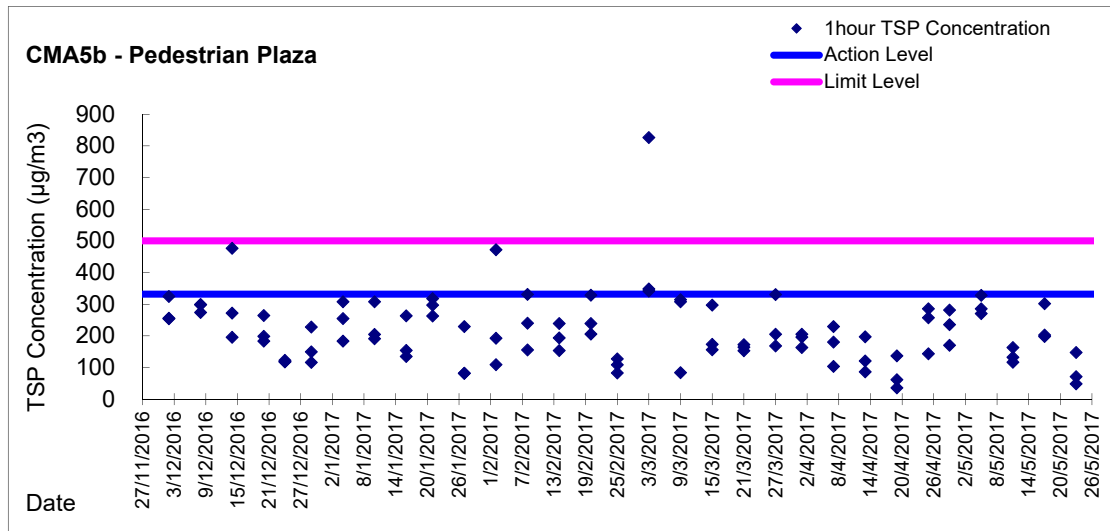


Graphic Presentation of 1 hour TSP Result

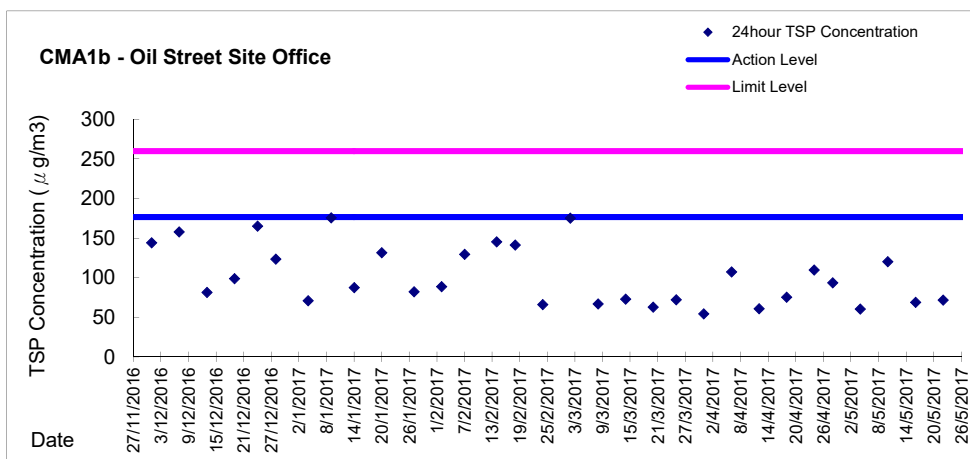
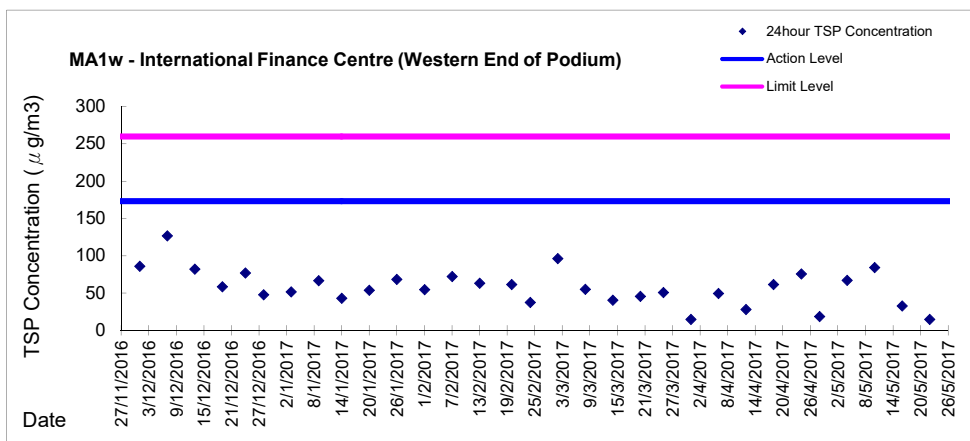
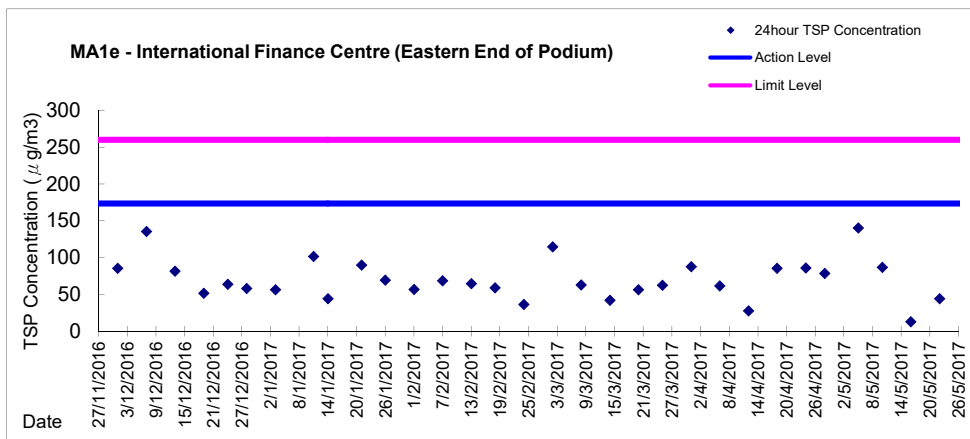




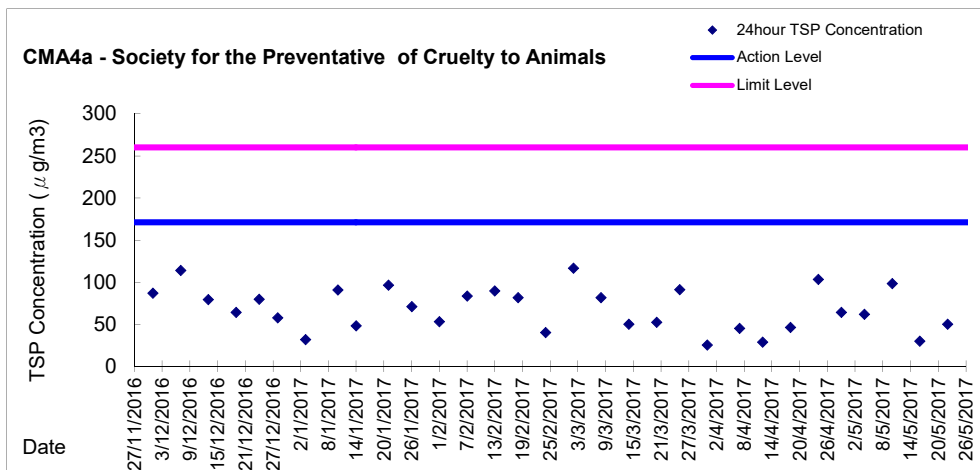
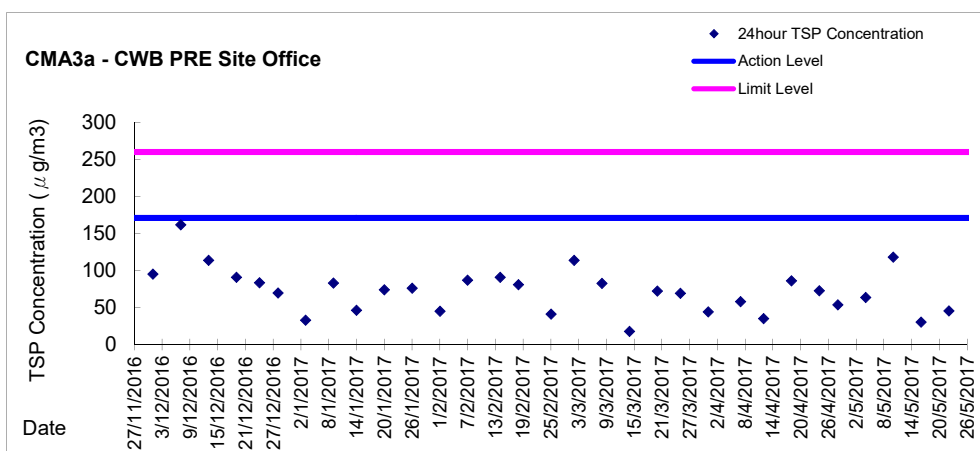
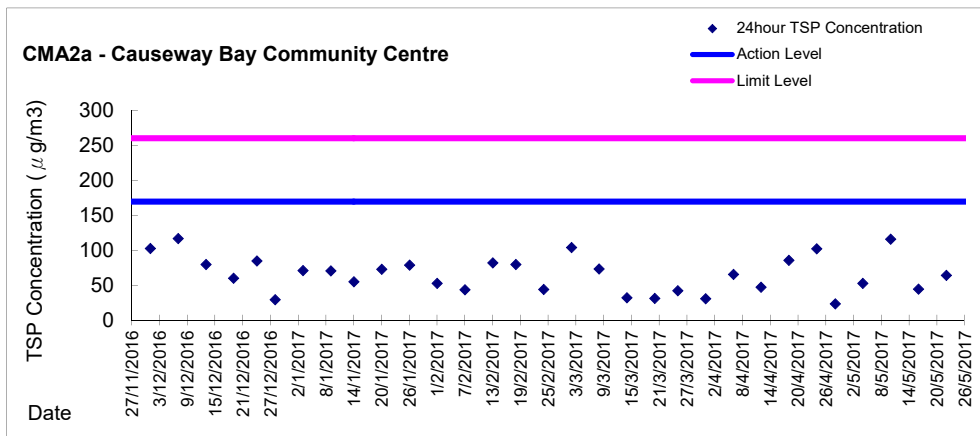
Graphic Presentation of 1 hour TSP Result



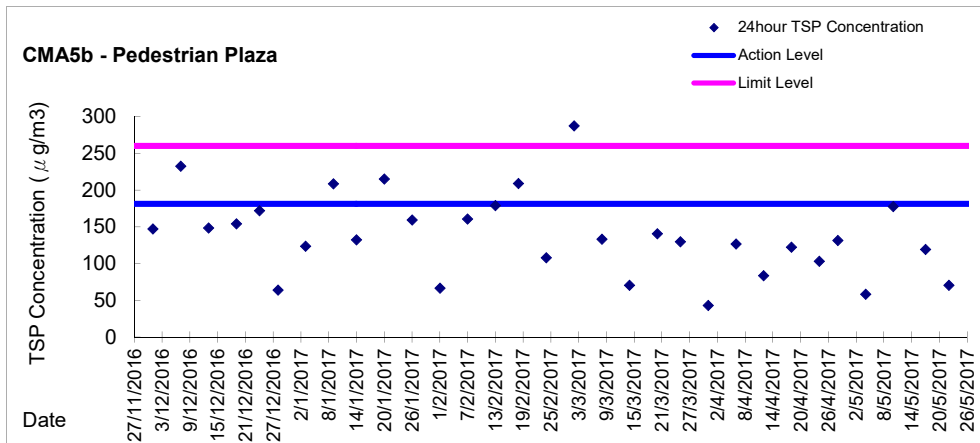
Graphic Presentation of 24 hour TSP Result



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		RTN1 (Food and Environmental Hygiene Department Depot)	
21/5/2017 3:16	59	22/5/2017 4:21	58
21/5/2017 3:21	59	22/5/2017 4:26	57
21/5/2017 3:26	59	22/5/2017 4:31	58
21/5/2017 3:31	60	22/5/2017 4:36	58
21/5/2017 3:36	60	22/5/2017 4:41	58
21/5/2017 3:41	59	22/5/2017 4:46	58
21/5/2017 3:46	59	22/5/2017 4:51	58
21/5/2017 3:51	59	22/5/2017 4:56	58
21/5/2017 3:56	59	22/5/2017 5:01	58
21/5/2017 4:01	59	22/5/2017 5:06	59
21/5/2017 4:06	59	22/5/2017 5:11	58
21/5/2017 4:11	59	22/5/2017 5:16	58
21/5/2017 4:16	59	22/5/2017 5:21	59
21/5/2017 4:21	60	22/5/2017 5:26	59
21/5/2017 4:26	59	22/5/2017 5:31	59
21/5/2017 4:31	60	22/5/2017 5:36	61
21/5/2017 4:36	59	22/5/2017 5:41	60
21/5/2017 4:41	59	22/5/2017 5:46	60
21/5/2017 4:46	59	22/5/2017 5:51	61
21/5/2017 4:51	59	22/5/2017 5:56	61
21/5/2017 4:56	58	22/5/2017 6:01	61
21/5/2017 5:01	59	22/5/2017 6:06	61
21/5/2017 5:06	60	22/5/2017 6:11	49
21/5/2017 5:11	58	22/5/2017 6:16	56
21/5/2017 5:16	59	22/5/2017 6:21	57
21/5/2017 5:21	59	22/5/2017 6:26	57
21/5/2017 5:26	60	22/5/2017 6:31	60
21/5/2017 5:31	60	22/5/2017 6:36	58
21/5/2017 5:36	59	22/5/2017 6:41	60
21/5/2017 5:41	60	22/5/2017 6:46	60
21/5/2017 5:46	60	22/5/2017 6:51	57
21/5/2017 5:51	61	22/5/2017 6:56	57
21/5/2017 5:56	60	22/5/2017 7:01	61
21/5/2017 6:01	61	22/5/2017 7:06	61
21/5/2017 6:06	61	22/5/2017 7:11	61
21/5/2017 6:11	60	22/5/2017 7:16	61
21/5/2017 6:16	61	22/5/2017 7:21	59
21/5/2017 6:21	62	22/5/2017 7:26	57
21/5/2017 6:26	49	22/5/2017 7:31	58
21/5/2017 6:31	62	22/5/2017 7:36	57
21/5/2017 6:36	52	22/5/2017 7:41	56
21/5/2017 6:41	48	22/5/2017 7:46	54
21/5/2017 6:46	53	22/5/2017 7:51	45
21/5/2017 6:51	50	22/5/2017 7:56	54
21/5/2017 6:56	50	23/5/2017 0:01	55
21/5/2017 7:01	55	23/5/2017 0:06	52
21/5/2017 7:06	40	23/5/2017 0:11	44
21/5/2017 7:11	54	23/5/2017 0:16	54
21/5/2017 7:16	56	23/5/2017 0:21	49
21/5/2017 7:21	47	23/5/2017 0:26	54
21/5/2017 7:26	54	23/5/2017 0:31	54
21/5/2017 7:31	47	23/5/2017 0:36	45
21/5/2017 7:36	62	23/5/2017 0:41	62
21/5/2017 7:41	62	23/5/2017 0:46	61
21/5/2017 7:46	46	23/5/2017 0:51	61
21/5/2017 7:51	61	23/5/2017 0:56	61
21/5/2017 7:56	54	23/5/2017 1:01	61
22/5/2017 0:01	61	23/5/2017 1:06	61
22/5/2017 0:06	61	23/5/2017 1:11	60
22/5/2017 0:11	62	23/5/2017 1:16	60
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22/5/2017 0:21	61	23/5/2017 1:26	60
22/5/2017 0:26	61	23/5/2017 1:31	59
22/5/2017 0:31	61	23/5/2017 1:36	60
22/5/2017 0:36	61	23/5/2017 1:41	60
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22/5/2017 0:51	60	23/5/2017 1:56	59
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22/5/2017 1:01	59	23/5/2017 2:06	60
22/5/2017 1:06	60	23/5/2017 2:11	59
22/5/2017 1:11	58	23/5/2017 2:16	59
22/5/2017 1:16	59	23/5/2017 2:21	60
22/5/2017 1:21	60	23/5/2017 2:26	57
22/5/2017 1:26	59	23/5/2017 2:31	59
22/5/2017 1:31	60	23/5/2017 2:36	59
22/5/2017 1:36	59	23/5/2017 2:41	58
22/5/2017 1:41	59	23/5/2017 2:46	59
22/5/2017 1:46	58	23/5/2017 2:51	59
22/5/2017 1:51	59	23/5/2017 2:56	59
22/5/2017 1:56	58	23/5/2017 3:01	59
22/5/2017 2:01	58	23/5/2017 3:06	59
22/5/2017 2:06	59	23/5/2017 3:11	58
22/5/2017 2:11	57	23/5/2017 3:16	59
22/5/2017 2:16	58	23/5/2017 3:21	57
22/5/2017 2:21	57	23/5/2017 3:26	57
22/5/2017 2:26	57	23/5/2017 3:31	59
22/5/2017 2:31	58	23/5/2017 3:36	58
22/5/2017 2:36	58	23/5/2017 3:41	57
22/5/2017 2:41	58	23/5/2017 3:46	57
22/5/2017 2:46	57	23/5/2017 3:51	57
22/5/2017 2:51	59	23/5/2017 3:56	58
22/5/2017 2:56	58	23/5/2017 4:01	57
22/5/2017 3:01	57	23/5/2017 4:06	57
22/5/2017 3:06	57	23/5/2017 4:11	58
22/5/2017 3:11	58	23/5/2017 4:16	58
22/5/2017 3:16	57	23/5/2017 4:21	58
22/5/2017 3:21	58	23/5/2017 4:26	58
22/5/2017 3:26	56	23/5/2017 4:31	58
22/5/2017 3:31	57	23/5/2017 4:36	58
22/5/2017 3:36	58	23/5/2017 4:41	57
22/5/2017 3:41	58	23/5/2017 4:46	58
22/5/2017 3:46	57	23/5/2017 4:51	59
22/5/2017 3:51	56	23/5/2017 4:56	58
22/5/2017 3:56	57	23/5/2017 5:01	58
22/5/2017 4:01	57	23/5/2017 5:06	59
22/5/2017 4:06	57	23/5/2017 5:11	58
22/5/2017 4:11	57	23/5/2017 5:16	59
22/5/2017 4:16	57	23/5/2017 5:21	58

24/5/2017 6:31	68	25/5/2017 23:36	51
24/5/2017 6:36	66	25/5/2017 23:41	52
24/5/2017 6:41	64	25/5/2017 23:46	62
24/5/2017 6:46	64	25/5/2017 23:51	61
24/5/2017 6:51	62	25/5/2017 23:56	63
24/5/2017 6:56	69	26/5/2017 0:01	62
24/5/2017 7:01	59	26/5/2017 0:06	62
24/5/2017 7:06	57	26/5/2017 0:11	62
24/5/2017 7:11	59	26/5/2017 0:16	62
24/5/2017 7:16	57	26/5/2017 0:21	61
24/5/2017 7:21	57	26/5/2017 0:26	61
24/5/2017 7:26	57	26/5/2017 0:31	61
24/5/2017 7:31	59	26/5/2017 0:36	61
24/5/2017 7:36	56	26/5/2017 0:41	62
24/5/2017 7:41	54	26/5/2017 0:46	61
24/5/2017 7:46	57	26/5/2017 0:51	62
24/5/2017 7:51	48	26/5/2017 0:56	61
24/5/2017 7:56	62	26/5/2017 1:01	61
25/5/2017 0:01	52	26/5/2017 1:06	61
25/5/2017 0:06	62	26/5/2017 1:11	61
25/5/2017 0:11	55	26/5/2017 1:16	60
25/5/2017 0:16	62	26/5/2017 1:21	60
25/5/2017 0:21	61	26/5/2017 1:26	61
25/5/2017 0:26	61	26/5/2017 1:31	60
25/5/2017 0:31	62	26/5/2017 1:36	61
25/5/2017 0:36	61	26/5/2017 1:41	61
25/5/2017 0:41	61	26/5/2017 1:46	59
25/5/2017 0:46	61	26/5/2017 1:51	60
25/5/2017 0:51	61	26/5/2017 1:56	60
25/5/2017 0:56	61	26/5/2017 2:01	59
25/5/2017 1:01	61	26/5/2017 2:06	59
25/5/2017 1:06	60	26/5/2017 2:11	58
25/5/2017 1:11	60	26/5/2017 2:16	58
25/5/2017 1:16	60	26/5/2017 2:21	59
25/5/2017 1:21	60	26/5/2017 2:26	58
25/5/2017 1:26	61	26/5/2017 2:31	59
25/5/2017 1:31	60	26/5/2017 2:36	60
25/5/2017 1:36	60	26/5/2017 2:41	58
25/5/2017 1:41	60	26/5/2017 2:46	58
25/5/2017 1:46	59	26/5/2017 2:51	58
25/5/2017 1:51	61	26/5/2017 2:56	59
25/5/2017 1:56	61	26/5/2017 3:01	59
25/5/2017 1:56	59	26/5/2017 3:06	59
25/5/2017 2:01	60	26/5/2017 3:11	58
25/5/2017 2:06	60	26/5/2017 3:16	58
25/5/2017 2:11	59	26/5/2017 3:21	58
25/5/2017 2:16	59	26/5/2017 3:26	58
25/5/2017 2:21	59	26/5/2017 3:31	57
25/5/2017 2:26	59	26/5/2017 3:36	59
25/5/2017 2:31	59	26/5/2017 3:41	57
25/5/2017 2:36	59	26/5/2017 3:46	58
25/5/2017 2:41	58	26/5/2017 3:51	58
25/5/2017 2:46	58	26/5/2017 3:56	57
25/5/2017 2:51	58	26/5/2017 4:01	58
25/5/2017 2:56	59	26/5/2017 4:06	58
25/5/2017 3:01	59	26/5/2017 4:11	58
25/5/2017 3:06	59	26/5/2017 4:16	57
25/5/2017 3:11	58	26/5/2017 4:21	58
25/5/2017 3:16	58	26/5/2017 4:26	58
25/5/2017 3:21	58	26/5/2017 4:31	58
25/5/2017 3:26	58	26/5/2017 4:36	58
25/5/2017 3:31	59	26/5/2017 4:41	60
25/5/2017 3:36	59	26/5/2017 4:46	60
25/5/2017 3:41	57	26/5/2017 4:51	61
25/5/2017 3:46	56	26/5/2017 4:56	60
25/5/2017 3:51	57	26/5/2017 5:01	61
25/5/2017 3:56	58	26/5/2017 5:06	61
25/5/2017 4:01	58	26/5/2017 5:11	61
25/5/2017 4:06	57	26/5/2017 5:16	48
25/5/2017 4:11	58	26/5/2017 5:21	51
25/5/2017 4:16	58	26/5/2017 5:26	57
25/5/2017 4:21	60	26/5/2017 5:31	54
25/5/2017 4:26	61	26/5/2017 5:36	59
25/5/2017 4:31	60	26/5/2017 5:41	59
25/5/2017 4:36	61	26/5/2017 5:46	60
25/5/2017 4:41	61	26/5/2017 5:51	57
25/5/2017 4:46	61	26/5/2017 5:56	58
25/5/2017 4:51	61	26/5/2017 6:01	58
25/5/2017 4:56	61	26/5/2017 6:06	56
25/5/2017 5:01	62	26/5/2017 6:11	56
25/5/2017 5:06	62	26/5/2017 6:16	54
25/5/2017 5:11	62	26/5/2017 6:21	56
25/5/2017 5:16	55	26/5/2017 6:26	58
25/5/2017 5:21	57	26/5/2017 6:31	54
25/5/2017 5:26	58	26/5/2017 6:36	52
25/5/2017 5:31	59	26/5/2017 6:41	53
25/5/2017 5:36	60	26/5/2017 6:46	50
25/5/2017 5:41	58	26/5/2017 6:51	60
25/5/2017 5:46	58	26/5/2017 6:56	60
25/5/2017 5:51	56	26/5/2017 7:01	56
25/5/2017 5:56	52	26/5/2017 7:06	52
25/5/2017 6:01	54	26/5/2017 7:11	54
25/5/2017 6:06	48	26/5/2017 7:16	48
25/5/2017 6:11	47	26/5/2017 7:21	47
25/5/2017 6:16	54	26/5/2017 7:26	54
25/5/2017 6:21	52	26/5/2017 7:31	52



Real-time Noise Data		RTN2a (Hong Kong Electric Centre)									
<u>Normal Day 07:00-19:00</u>											
27/4/2017 7:01	59	4/5/2017 13:01	61	10/5/2017 7:31	69	15/5/2017 14:01	65	20/5/2017 8:31	66	25/5/2017 15:01	65
27/4/2017 7:31	67	4/5/2017 13:31	65	10/5/2017 8:01	68	15/5/2017 14:31	65	20/5/2017 9:01	66	25/5/2017 15:31	66
27/4/2017 8:01	66	4/5/2017 14:01	58	10/5/2017 8:31	65	15/5/2017 15:01	63	20/5/2017 9:31	66	25/5/2017 16:01	64
27/4/2017 8:31	66	4/5/2017 14:31	64	10/5/2017 9:01	66	15/5/2017 15:31	67	20/5/2017 10:01	66	25/5/2017 16:31	62
27/4/2017 8:31	56	4/5/2017 15:01	62	10/5/2017 9:31	67	15/5/2017 16:01	65	20/5/2017 10:31	65	25/5/2017 17:01	63
27/4/2017 9:01	59	4/5/2017 15:31	60	10/5/2017 10:01	69	15/5/2017 16:31	63	20/5/2017 11:01	66	25/5/2017 17:31	60
27/4/2017 9:31	63	4/5/2017 16:01	69	10/5/2017 10:31	69	15/5/2017 17:01	63	20/5/2017 11:31	62	25/5/2017 18:01	59
27/4/2017 10:01	68	4/5/2017 16:31	59	10/5/2017 11:01	68	15/5/2017 17:31	61	20/5/2017 12:01	61	25/5/2017 18:31	60
27/4/2017 10:31	62	4/5/2017 17:01	60	10/5/2017 11:31	67	15/5/2017 18:01	59	20/5/2017 12:31	62	26/5/2017 7:01	57
27/4/2017 11:01	61	4/5/2017 17:31	65	10/5/2017 12:01	62	15/5/2017 18:31	58	20/5/2017 13:01	64	26/5/2017 7:31	60
27/4/2017 11:31	66	4/5/2017 18:01	64	10/5/2017 12:31	64	16/5/2017 7:01	59	20/5/2017 13:31	65	26/5/2017 8:01	62
27/4/2017 12:01	65	4/5/2017 18:31	58	10/5/2017 13:01	68	16/5/2017 7:31	55	20/5/2017 14:01	65	26/5/2017 8:31	66
27/4/2017 12:31	65	5/5/2017 7:01	60	10/5/2017 13:31	68	16/5/2017 8:01	66	20/5/2017 14:31	66	26/5/2017 9:01	66
27/4/2017 13:01	56	5/5/2017 7:31	60	10/5/2017 14:01	68	16/5/2017 8:31	55	20/5/2017 15:01	65	26/5/2017 9:31	65
27/4/2017 13:31	64	5/5/2017 8:01	66	10/5/2017 14:31	66	16/5/2017 9:01	66	20/5/2017 15:31	65	26/5/2017 10:01	66
27/4/2017 14:01	62	5/5/2017 8:31	65	10/5/2017 15:01	66	16/5/2017 9:31	67	20/5/2017 16:01	65	26/5/2017 10:31	66
27/4/2017 14:31	64	5/5/2017 9:01	68	10/5/2017 15:31	61	16/5/2017 10:01	67	20/5/2017 16:31	64	26/5/2017 11:01	67
27/4/2017 15:01	66	5/5/2017 9:31	68	10/5/2017 16:01	55	16/5/2017 10:31	65	20/5/2017 17:01	64	26/5/2017 11:31	64
27/4/2017 15:31	66	5/5/2017 10:01	69	10/5/2017 16:31	67	16/5/2017 11:01	65	20/5/2017 17:31	61	26/5/2017 12:01	61
27/4/2017 16:01	67	5/5/2017 10:31	67	10/5/2017 17:01	66	16/5/2017 11:31	62	20/5/2017 18:01	60	26/5/2017 12:31	61
27/4/2017 16:31	61	5/5/2017 11:01	65	10/5/2017 17:31	60	16/5/2017 12:01	59	20/5/2017 18:31	58	26/5/2017 13:01	64
27/4/2017 17:01	57	5/5/2017 11:31	65	10/5/2017 18:01	59	16/5/2017 12:31	59	22/5/2017 7:01	58	26/5/2017 13:31	67
27/4/2017 17:31	66	5/5/2017 12:01	66	10/5/2017 18:31	59	16/5/2017 13:01	65	22/5/2017 7:31	62	26/5/2017 14:01	66
27/4/2017 18:01	62	5/5/2017 12:31	65	11/5/2017 7:01	58	16/5/2017 13:31	66	22/5/2017 8:01	65	26/5/2017 14:31	65
27/4/2017 18:31	60	5/5/2017 13:01	67	11/5/2017 7:31	61						





















Real-time Noise Data		RTN3 (Po Leung Kuk Yu Lee Mo Fan Memorial School)									
28/4/2017 21:01	66	30/4/2017 10:06	66	30/4/2017 19:11	66	1/5/2017 12:16	66	1/5/2017 21:21	64	3/5/2017 10:26	66
28/4/2017 21:06	66	30/4/2017 10:11	65	30/4/2017 19:16	65	1/5/2017 12:21	66	1/5/2017 21:26	65	3/5/2017 10:31	66
28/4/2017 21:11	66	30/4/2017 10:16	54	30/4/2017 19:21	66	1/5/2017 12:26	66	1/5/2017 21:31	64	3/5/2017 10:36	66
28/4/2017 21:16	66	30/4/2017 10:21	65	30/4/2017 19:26	65	1/5/2017 12:31	65	1/5/2017 21:36	64	3/5/2017 10:41	66
28/4/2017 21:21	65	30/4/2017 10:26	66	30/4/2017 19:31	65	1/5/2017 12:36	65	1/5/2017 21:41	65	3/5/2017 10:46	66
28/4/2017 21:26	66	30/4/2017 10:31	66	30/4/2017 19:36	65	1/5/2017 12:41	66	1/5/2017 21:46	64	3/5/2017 10:51	66
28/4/2017 21:31	66	30/4/2017 10:36	66	30/4/2017 19:41	65	1/5/2017 12:46	65	1/5/2017 21:51	65	3/5/2017 10:56	65
28/4/2017 21:36	65	30/4/2017 10:41	66	30/4/2017 19:46	65	1/5/2017 12:51	65	1/5/2017 21:56	65	3/5/2017 11:01	66
28/4/2017 21:41	66	30/4/2017 10:46	46	30/4/2017 19:51	66	1/5/2017 12:56	66	1/5/2017 22:01	66	3/5/2017 11:06	66
28/4/2017 21:46	65	30/4/2017 10:51	66	30/4/2017 19:56	65	1/5/2017 13:01	65	1/5/2017 22:06	64	3/5/2017 11:11	66
28/4/2017 21:51	66	30/4/2017 10:56	49	30/4/2017 20:01	65	1/5/2017 13:06	66	1/5/2017 22:11	65	3/5/2017 11:16	66
28/4/2017 21:56	66	30/4/2017 11:01	66	30/4/2017 20:06	65	1/5/2017 13:11	65	1/5/2017 22:16	65	3/5/2017 11:21	66
28/4/2017 22:01	66	30/4/2017 11:06	66	30/4/2017 20:11	65	1/5/2017 13:16	65	1/5/2017 22:21	66	3/5/2017 11:26	65
28/4/2017 22:06	65	30/4/2017 11:11	66	30/4/2017 20:16	65	1/5/2017 13:21	65	1/5/2017 22:26	64	3/5/2017 11:31	65
28/4/2017 22:11	66	30/4/2017 11:16	66	30/4/2017 20:21	65	1/5/2017 13:26	65	1/5/2017 22:31	66	3/5/2017 11:36	65
28/4/2017 22:16	66	30/4/2017 11:21	66	30/4/2017 20:26	65	1/5/2017 13:31	65	1/5/2017 22:36	65	3/5/2017 11:41	66
28/4/2017 22:21	65	30/4/2017 11:26	66	30/4/2017 20:31	65	1/5/2017 13:36	66	1/5/2017 22:41	65	3/5/2017 11:46	66
28/4/2017 22:26	65	30/4/2017 11:31	65	30/4/2017 20:36	64	1/5/2017 13:41	66	1/5/2017 22:46	64	3/5/2017 11:51	65
28/4/2017 22:31	66	30/4/2017 11:36	66	30/4/2017 20:41	66	1/5/2017 13:46	65	1/5/2017 22:51	64	3/5/2017 11:56	66
28/4/2017 22:36	66	30/4/2017 11:41	58	30/4/2017 20:46	65	1/5/2017 13:51	65	1/5/2017 22:56	64	3/5/2017 12:01	66
28/4/2017 22:41	66	30/4/2017 11:46	58	30/4/2017 20:51	64	1/5/2017 13:56	65	2/5/2017 19:01	66	3/5/2017 12:06	66
28/4/2017 22:46	66	30/4/2017 11:51	66	30/4/2017 20:56	66	1/5/2017 14:01	65	2/5/2017 19:06	66	3/5/2017 12:11	65
28/4/2017 22:51	65	30/4/2017 11:56	66	30/4/2017 21:01	64	1/5/2017 14:06	65	2/5/2017 19:11	66	3/5/2017 12:16	65
28/4/2017 22:56	66	30/4/2017 12:01	66	30/4/2017 21:06	66	1/5/2017 14:11	66	2/5/2017 19:16	65	3/5/2017 12:21	65
29/4/2017 19:01	66	30/4/2017 12:06	65	30/4/2017 21:11	65	1/5/2017 14:16	66	2/5/2017 19:21	66	3/5/2017 12:26	65
29/4/2017 19:06	66	30/4/2017 12:11	65	30/4/2017 21:16	65	1/5/2017 14:21	65	2/5/2017 19:26	65	3/5/2017 12:31	66
29/4/2017 19:11	66	30/4/2017 12:16	65	30/4/2017 21:21	65	1/5/2017 14:26	65	2/5/2017 19:31	66	3/5/2017 12:36	66
29/4/2017 19:16	65	30/4/2017 12:21	66	30/4/2017 21:26	65	1/5/2017 14:31	66	2/5/2017 19:36	67	3/5/2017 12:41	66
29/4/2017 19:21	66	30/4/2017 12:26	66	30/4/2017 21:31	65	1/5/2017 14:36	54	2/5/2017 19:41	66	3/5/2017 12:46	65
29/4/2017 19:26	66	30/4/2017 12:31	65	30/4/2017 21:36	65	1/5/2017 14:41	66	2/5/2017 19:46	65	3/5/2017 12:51	66
29/4/2017 19:31	66	30/4/2017 12:36	65	30/4/2017 21:41	65	1/5/2017 14:46	65	2/5/2017 19:51	66	3/5/2017 12:56	65
29/4/2017 19:36	66	30/4/2017 12:41	66	30/4/2017 21:46	65	1/5/2017 14:51	65	2/5/2017 19:56	66	3/5/2017 13:01	66
29/4/2017 19:41	66	30/4/2017 12:46	66	30/4/2017 21:51	65	1/5/2017 14:56	65	2/5/2017 20:01	54	3/5/2017 13:06	66
29/4/2017 19:46	65	30/4/2017 12:51	66	30/4/2017 21:56	66	1/5/2017 15:01	65	2/5/2017 20:06	66	3/5/2017 13:11	66
29/4/2017 19:51	66	30/4/2017 12:56	65	30/4/2017 22:01	65	1/5/2017 15:06	66	2/5/2017 20:11	65	3/5/2017 13:16	65
29/4/2017 19:56	66	30/4/2017 13:01	66	30/4/2017 22:06	65	1/5/2017 15:11	66	2/5/2017 20:16	65	3/5/2017 13:21	65
29/4/2017 20:01	56	30/4/2017 13:06	66	30/4/2017 22:11	65	1/5/2017 15:16	65	2/5/2017 20:21	66	3/5/2017 13:26	65
29/4/2017 20:06	65	30/4/2017 13:11	66	30/4/2017 22:16	65	1/5/2017 15:21	66	2/5/2017 20:26	65	3/5/2017 13:31	65
29/4/2017 20:11	66	30/4/2017 13:16	65	30/4/2017 22:21	65	1/5/2017 15:26	65	2/5/2017 20:31	65	3/5/2017 13:36	66
29/4/2017 20:16	65	30/4/2017 13:21	66	30/4/2017 22:26	48	1/5/2017 15:31	64	2/5/2017 20:36	65	3/5/2017 13:41	65
29/4/2017 20:21	65	30/4/2017 13:26	65	30/4/2017 22:31	65	1/5/2017 15:36	65	2/5/2017 20:41	65	3/5/2017 13:46	66
29/4/2017 20:26	65	30/4/2017 13:31	66	30/4/2017 22:36	65	1/5/2017 15:41	65	2/5/2017 20:46	66	3/5/2017 13:51	66
29/4/2017 20:31	65	30/4/2017 13:36	66	30/4/2017 22:41	65	1/5/2017 15:46	65	2/5/2017 20:51	65	3/5/2017 13:56	65
29/4/2017 20:36	66	30/4/2017 13:41	66	30/4/2017 22:46	65	1/5/2017 15:51	66	2/5/2017 20:56	66	3/5/2017 14:01	66
29/4/2017 20:41	66	30/4/2017 13:46	66	30/4/2017 22:51	65	1/5/2017 15:56	65	2/5/2017 21:01	65	3/5/2017 14:06	65
29/4/2017 20:46	65	30/4/2017 13:51	66	30/4/2017 22:56	65	1/5/2017 16:01	65	2/5/2017 21:06	65	3/5/2017 14:11	66
29/4/2017 20:51	66	30/4/2017 13:56	66	1/5/2017 7:01	63	1/5/2017 16:06	65	2/5/2017 21:11	66	3/5/2017 14:16	65
29/4/2017 20:56	65	30/4/2017 14:01	65	1/5/2017 7:06	64	1/5/2017 16:11	65	2/5/2017 21:16	66	3/5/2017 14:21	66
29/4/2017 21:01	65	30/4/2017 14:06	47	1/5/2017 7:11	64	1/5/2017 16:16	65	2/5/2017 21:21	65	3/5/2017 14:26	66
29/4/2017 21:06	66	30/4/2017 14:11	66	1/5/2017 7:16	63	1/5/2017 16:21	66	2/5/2017 21:26	64	3/5/2017 14:31	65
29/4/2017 21:11	65	30/4/2017 14:16	66	1/5/2017 7:21	56	1/5/2017 16:26	66	2/5/2017 21:31	66	3/5/2017 14:36	65
29/4/2017 21:16	66	30/4/2017 14:21	65	1/5/2017 7:26	64	1/5/2017 16:31	65	2/5/2017 21:36	65	3/5/2017 14:41	65
29/4/2017 21:21	53	30/4/2017 14:26	65	1/5/2017 7:31	64	1/5/2017 16:36	66	2/5/2017 21:41	65	3/5/2017 14:46	65
29/4/2017 21:26	65	30/4/2017 14:31	66	1/5/2017 7:36	64	1/5/2017 16:41	65	2/5/2017 21:46	65	3/5/2017 14:51	65
29/4/2017 21:31	65	30/4/2017 14:36	66	1/5/2017 7:41	64	1/5/2017 16:46	65	2/5/2017 21:51	66	3/5/2017 14:56	65
29/4/2017 21:36	66	30/4/2017 14:41	66	1/5/2017 7:46	65	1/5/2017 16:51	66	2/5/2017 21:56	65	3/5/2017 15:01	66
29/4/2017 21:41	65	30/4/2017 14:46	66	1/5/2017 7:51	64	1/5/2017 16:56	66	2/5/2017 22:01	65	3/5/2017 15:06	65
29/4/2017 21:46	65	30/4/2017 14:51	65	1/5/2017 7:56	65	1/5/2017 17:01	65	2/5/2017 22:06	65	3/5/2017 15:11	66
29/4/2017 21:51	65	30/4/2017 14:56	66	1/5/2017 8:01	65	1/5/2017 17:06	66	2/5/2017 22:11	65	3/5/2017 15:16	65
29/4/2017 21:56	66	30/4/2017 15:01	66	1/5/2017 8:06	66	1/5/2017 17:11	66	2/5/2017 22:16	56	3/5/2017 15:21	65
29/4/2017 22:01	65	30/4/2017 15:06	66	1/5/2017 8:11	64	1/5/2017 17:16	65	2/5/2017 22:21	65	3/5/2017 15:26	65
29/4/2017 22:06	66	30/4/2017 15:11	66	1/5/2017 8:16	65	1/5/2017 17:21	66	2/5/2017 22:26	65	3/5/2017 15:31	65
29/4/2017 22:11	65	30/4/2017 15:16	65	1/5/2017 8:21	65	1/5/2017 17:26	66	2/5/2017 22:31	65	3/5/2017 15:36	66
29/4/2017 22:16	65	30/4/2017 15:21	66	1/5/2017 8:26	65	1/5/2017 17:31	66	2/5/2017 22:36	66	3/5/2017 15:41	65
29/4/2017 22:21	65	30/4/2017 15:26	66	1/5/2017 8:31	65	1/5/2017 17:36	66	2/5/2017 22:41	65	3/5/2017 15:46	65
29/4/2017 22:26	65	30/4/2017 15:31	66	1/5/2017 8:36	64	1/5/2017 17:41	66	2/5/2017 22:46	65	3/5/2017 15:51	66
29/4/2017 22:31	65	30/4/2017 15:36	66	1/5/2017 8:41	66	1/5/2017 17:46	66	2/5/2017 22:51	65	3/5/2017 15:56	65
29/4/2017 22:36	66	30/4/2017 15:41	66	1/5/2017 8:46	65	1/5/2017 17:51	66	2/5/2017 22:56	65	3/5/2017 16:01	65
29/4/2017 22:41	66	30/4/2017 15:46	66	1/5/2017 8:51	65	1/5/2017 17:56	65	3/5/2017 7:01	65	3/5/2017 16:06	65
29/4/2017 22:46	65	30/4/2017 15:51	66	1/5/2017 8:56	54	1/5/2017 18:01	66	3/5/2017 7:06	65	3/5/2017 16:11	65
29/4/2017 22:51	66	30/4/2017 15:56	66	1/5/2017 9:01	65	1/5/2017 18:06	66	3/5/2017 7:11	64	3/5/2017 16:16	66
29/4/2017 22:56	65	30/4/2017 16:01	66	1/5/2017 9:06	60	1/5/2017 18:11	65	3/5/2017 7:16	65	3/5/2017 16:21	66
30/4/2017 7:01	64	30/4/2017 16:06	50	1/5/2017 9:11	66	1/5/2017 18:16	65	3/5/2017 7:21	64	3/5/2017 16:26	65
30/4/2017 7:06	64	30/4/2017 16:11	51	1/5/2017 9:16	65	1/5/2017 18:21	60	3/5/2017 7:26	64	3/5/2017 16:31	65
30/4/2017 7:11	66	30/4/2017 16:16	59	1/5/2017 9:21	66	1/5/2017 18:26	66	3/5/2017 7:31	64	3/5/2017 16:36	65
30/4/2017 7:16	64	30/4/2017 16:21	66	1/5/2017 9:26	66	1/5/2017 18:31	65	3/5/2017 7:36	64	3/5/2017 16:41	65



















Real-time Noise Data		RTN4 (Causeway Bay Community Centre)			
28/4/2017 21:01 61	30/4/2017 10:06 60	30/4/2017 19:11 60	1/5/2017 12:16 60	1/5/2017 21:21 60	3/5/2017 10:26 62
28/4/2017 21:06 62	30/4/2017 10:11 63	30/4/2017 19:16 61	1/5/2017 12:21 61	1/5/2017 21:26 59	3/5/2017 10:31 62
28/4/2017 21:11 61	30/4/2017 10:16 61	30/4/2017 19:21 60	1/5/2017 12:26 61	1/5/2017 21:31 59	3/5/2017 10:36 51
28/4/2017 21:16 62	30/4/2017 10:21 60	30/4/2017 19:26 60	1/5/2017 12:31 60	1/5/2017 21:36 60	3/5/2017 10:41 62
28/4/2017 21:21 62	30/4/2017 10:26 62	30/4/2017 19:31 59	1/5/2017 12:36 61	1/5/2017 21:41 59	3/5/2017 10:46 61
28/4/2017 21:26 61	30/4/2017 10:31 59	30/4/2017 19:36 60	1/5/2017 12:41 60	1/5/2017 21:46 59	3/5/2017 10:51 60
28/4/2017 21:31 61	30/4/2017 10:36 61	30/4/2017 19:41 61	1/5/2017 12:46 61	1/5/2017 21:51 59	3/5/2017 10:56 61
28/4/2017 21:36 61	30/4/2017 10:41 60	30/4/2017 19:46 60	1/5/2017 12:51 61	1/5/2017 21:56 59	3/5/2017 11:01 61
28/4/2017 21:41 61	30/4/2017 10:46 60	30/4/2017 19:51 60	1/5/2017 12:56 61	1/5/2017 22:01 61	3/5/2017 11:06 62
28/4/2017 21:46 61	30/4/2017 10:51 59	30/4/2017 19:56 60	1/5/2017 13:01 61	1/5/2017 22:06 59	3/5/2017 11:11 62
28/4/2017 21:51 53	30/4/2017 10:56 61	30/4/2017 20:01 59	1/5/2017 13:06 61	1/5/2017 22:11 59	3/5/2017 11:16 61
28/4/2017 21:56 61	30/4/2017 11:01 60	30/4/2017 20:06 60	1/5/2017 13:11 61	1/5/2017 22:16 60	3/5/2017 11:21 61
28/4/2017 22:01 60	30/4/2017 11:06 59	30/4/2017 20:11 60	1/5/2017 13:16 61	1/5/2017 22:21 59	3/5/2017 11:26 60
28/4/2017 22:06 61	30/4/2017 11:11 59	30/4/2017 20:16 60	1/5/2017 13:21 61	1/5/2017 22:26 59	3/5/2017 11:31 61
28/4/2017 22:11 61	30/4/2017 11:16 59	30/4/2017 20:21 60	1/5/2017 13:26 60	1/5/2017 22:31 59	3/5/2017 11:36 61
28/4/2017 22:16 61	30/4/2017 11:21 60	30/4/2017 20:26 60	1/5/2017 13:31 62	1/5/2017 22:36 59	3/5/2017 11:41 62
28/4/2017 22:21 60	30/4/2017 11:26 59	30/4/2017 20:31 59	1/5/2017 13:36 55	1/5/2017 22:41 59	3/5/2017 11:46 60
28/4/2017 22:26 60	30/4/2017 11:31 59	30/4/2017 20:36 61	1/5/2017 13:41 61	1/5/2017 22:46 59	3/5/2017 11:51 61
28/4/2017 22:31 62	30/4/2017 11:36 60	30/4/2017 20:41 60	1/5/2017 13:46 61	1/5/2017 22:51 58	3/5/2017 11:56 61
28/4/2017 22:36 63	30/4/2017 11:41 60	30/4/2017 20:46 59	1/5/2017 13:51 61	1/5/2017 22:56 60	3/5/2017 12:01 63
28/4/2017 22:41 62	30/4/2017 11:46 60	30/4/2017 20:51 59	1/5/2017 13:56 62	2/5/2017 19:01 56	3/5/2017 12:06 60
28/4/2017 22:46 60	30/4/2017 11:51 60	30/4/2017 20:56 60	1/5/2017 14:01 62	2/5/2017 19:06 62	3/5/2017 12:11 61
28/4/2017 22:51 61	30/4/2017 11:56 59	30/4/2017 21:01 43	1/5/2017 14:06 60	2/5/2017 19:11 62	3/5/2017 12:16 60
28/4/2017 22:56 60	30/4/2017 12:01 60	30/4/2017 21:06 60	1/5/2017 14:11 61	2/5/2017 19:16 62	3/5/2017 12:21 62
29/4/2017 19:01 62	30/4/2017 12:06 60	30/4/2017 21:11 60	1/5/2017 14:16 61	2/5/2017 19:21 61	3/5/2017 12:26 61
29/4/2017 19:06 62	30/4/2017 12:11 60	30/4/2017 21:16 59	1/5/2017 14:21 60	2/5/2017 19:26 62	3/5/2017 12:31 61
29/4/2017 19:11 61	30/4/2017 12:16 60	30/4/2017 21:21 60	1/5/2017 14:26 61	2/5/2017 19:31 62	3/5/2017 12:36 61
29/4/2017 19:16 61	30/4/2017 12:21 60	30/4/2017 21:26 58	1/5/2017 14:31 63	2/5/2017 19:36 64	3/5/2017 12:41 61
29/4/2017 19:21 62	30/4/2017 12:26 59	30/4/2017 21:31 59	1/5/2017 14:36 61	2/5/2017 19:41 61	3/5/2017 12:46 62
29/4/2017 19:26 62	30/				













Real-time Noise Data		RTN4 (Causeway Bay Community Centre)													
14/5/2017 4:46	56	15/5/2017 5:51	58	16/5/2017 6:56	61	18/5/2017 0:01	59	19/5/2017 1:06	58	20/5/2017 2:11	56				
14/5/2017 4:51	57	15/5/2017 5:56	58	16/5/2017 23:01	60	18/5/2017 0:06	59	19/5/2017 1:11	58	20/5/2017 2:16	56				
14/5/2017 4:56	57	15/5/2017 6:01	59	16/5/2017 23:06	59	18/5/2017 0:11	59	19/5/2017 1:16	57	20/5/2017 2:21	56				
14/5/2017 5:01	56	15/5/2017 6:06	60	16/5/2017 23:11	59	18/5/2017 0:16	58	19/5/2017 1:21	57	20/5/2017 2:26	56				
14/5/2017 5:06	57	15/5/2017 6:11	59	16/5/2017 23:16	59	18/5/2017 0:21	58	19/5/2017 1:26	57	20/5/2017 2:31	56				
14/5/2017 5:11	57	15/5/2017 6:16	60	16/5/2017 23:21	59	18/5/2017 0:26	59	19/5/2017 1:31	57	20/5/2017 2:36	56				
14/5/2017 5:16	57	15/5/2017 6:21	59	16/5/2017 23:26	59	18/5/2017 0:31	58	19/5/2017 1:36	59	20/5/2017 2:41	56				
14/5/2017 5:21	57	15/5/2017 6:26	60	16/5/2017 23:31	59	18/5/2017 0:36	57	19/5/2017 1:41	56	20/5/2017 2:46	56				
14/5/2017 5:26	59	15/5/2017 6:31	61	16/5/2017 23:36	59	18/5/2017 0:41	58	19/5/2017 1:46	57	20/5/2017 2:51	56				
14/5/2017 5:31	59	15/5/2017 6:36	35	16/5/2017 23:41	59	18/5/2017 0:46	59	19/5/2017 1:51	57	20/5/2017 2:56	56				
14/5/2017 5:36	58	15/5/2017 6:41	49	16/5/2017 23:46	58	18/5/2017 0:51	58	19/5/2017 1:56	57	20/5/2017 3:01	56				
14/5/2017 5:41	59	15/5/2017 6:46	53	16/5/2017 23:51	58	18/5/2017 0:56	57	19/5/2017 2:01	56	20/5/2017 3:06	56				
14/5/2017 5:46	59	15/5/2017 6:51	61	16/5/2017 23:56	59	18/5/2017 1:01	58	19/5/2017 2:06	57	20/5/2017 3:11	55				
14/5/2017 5:51	58	15/5/2017 6:56	60	17/5/2017 0:01	59	18/5/2017 1:06	58	19/5/2017 2:11	56	20/5/2017 3:16	56				
14/5/2017 5:56	58	15/5/2017 23:01	60	17/5/2017 0:06	58	18/5/2017 1:11	57	19/5/2017 2:16	55	20/5/2017 3:21	55				
14/5/2017 6:01	58	15/5/2017 23:06	59	17/5/2017 0:11	58	18/5/2017 1:16	57	19/5/2017 2:21	56	20/5/2017 3:26	56				
14/5/2017 6:06	58	15/5/2017 23:11	59	17/5/2017 0:16	58	18/5/2017 1:21	58	19/5/2017 2:26	56	20/5/2017 3:31	55				
14/5/2017 6:11	58	15/5/2017 23:16	58	17/5/2017 0:21	59	18/5/2017 1:26	58	19/5/2017 2:31	56	20/5/2017 3:36	55				
14/5/2017 6:16	59	15/5/2017 23:21	59	17/5/2017 0:26	59	18/5/2017 1:31	59	19/5/2017 2:36	56	20/5/2017 3:41	55				
14/5/2017 6:21	59	15/5/2017 23:26	59	17/5/2017 0:31	59	18/5/2017 1:36	56	19/5/2017 2:41	55	20/5/2017 3:46	57				
14/5/2017 6:26	60	15/5/2017 23:31	59	17/5/2017 0:36	57	18/5/2017 1:41	56	19/5/2017 2:46	55	20/5/2017 3:51	55				
14/5/2017 6:31	60	15/5/2017 23:36	58	17/5/2017 0:41	58	18/5/2017 1:46	57	19/5/2017 2:51	55	20/5/2017 3:56	55				
14/5/2017 6:36	59	15/5/2017 23:41	58	17/5/2017 0:46	58	18/5/2017 1:51	57	19/5/2017 2:56							





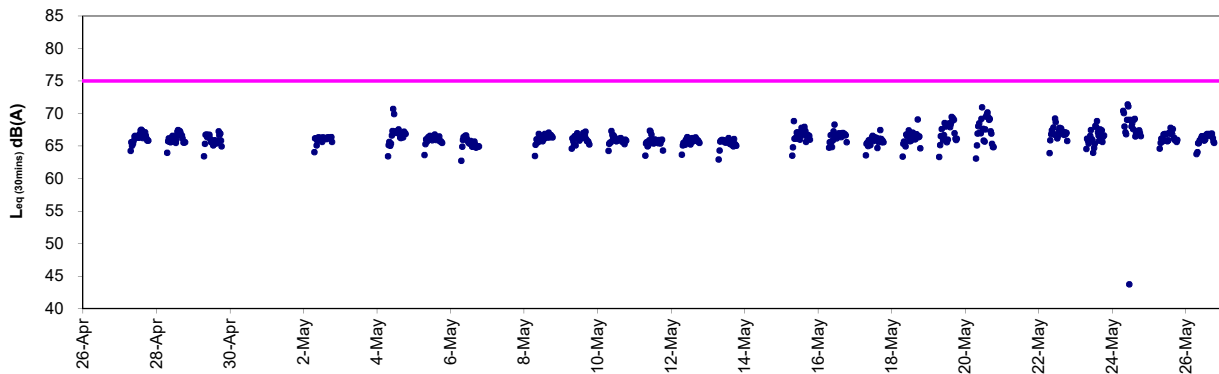
Contract no. HK/2015/01

Wan Chai Development Phase II and Central-Wan Chai Bypass

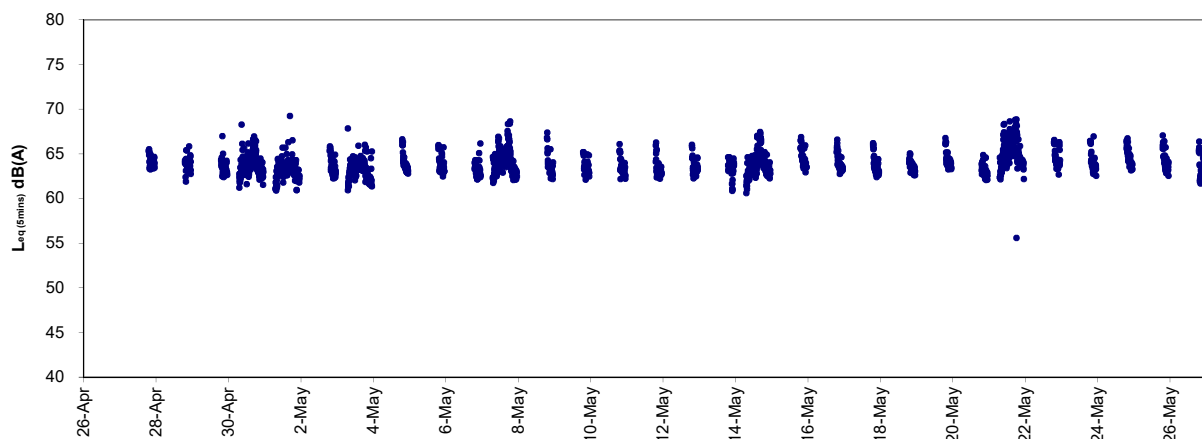
Sampling, Field Measurement and Testing Works (Stage 3)

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

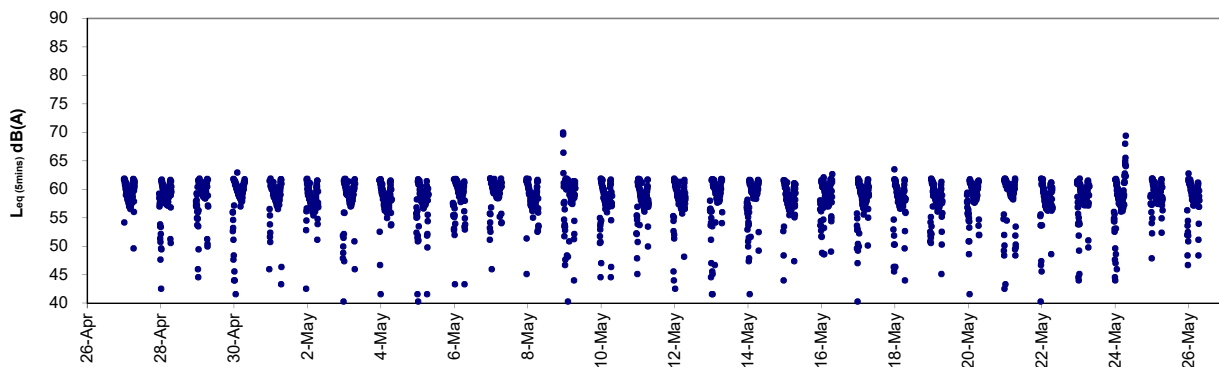
Day Time (0700 -1900 hrs on normal weekdays)



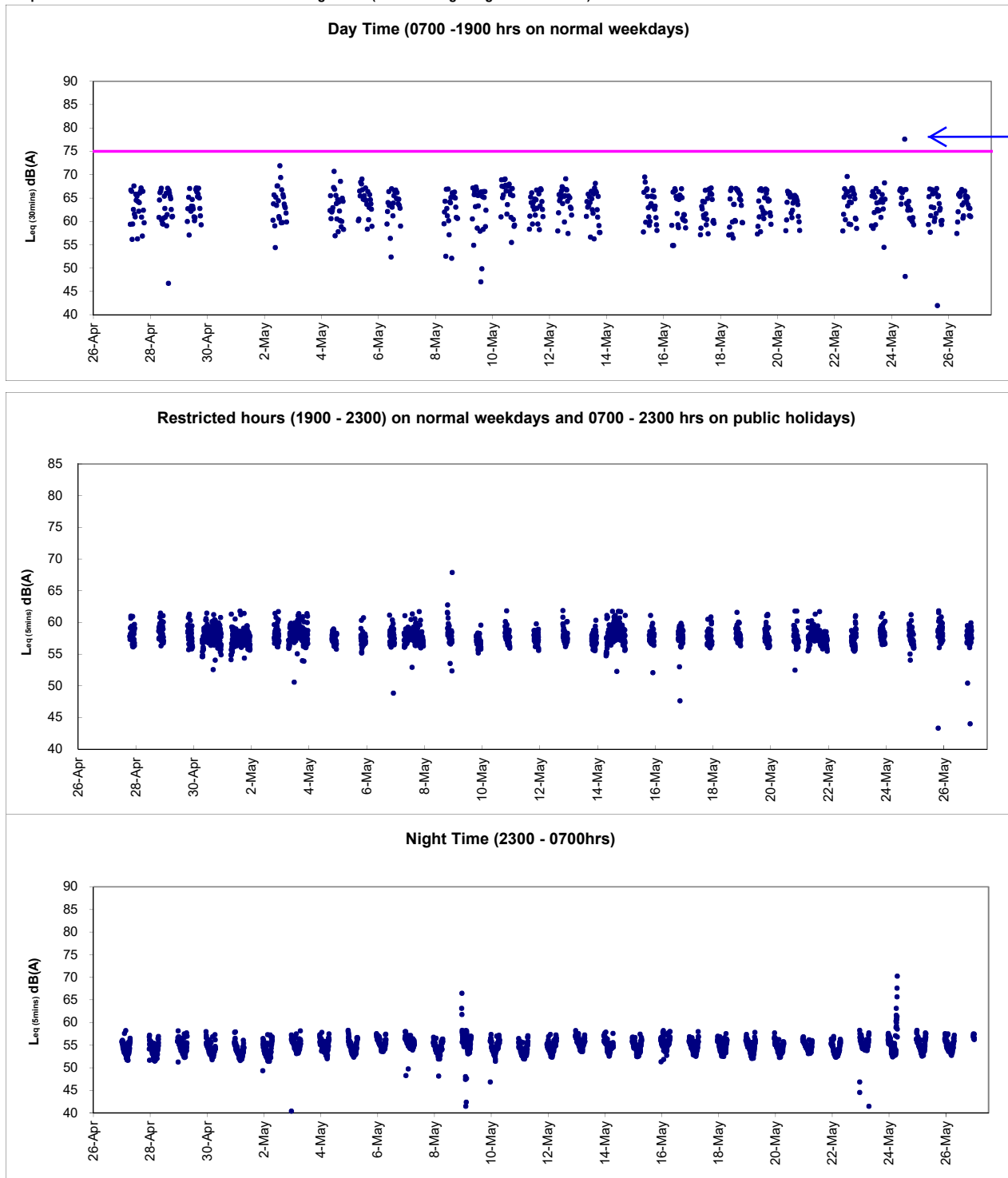
Restricted hours (1900 - 2300) on normal weekdays and 0700 - 2300 hrs on public holidays)



Night Time (2300 - 0700hrs)

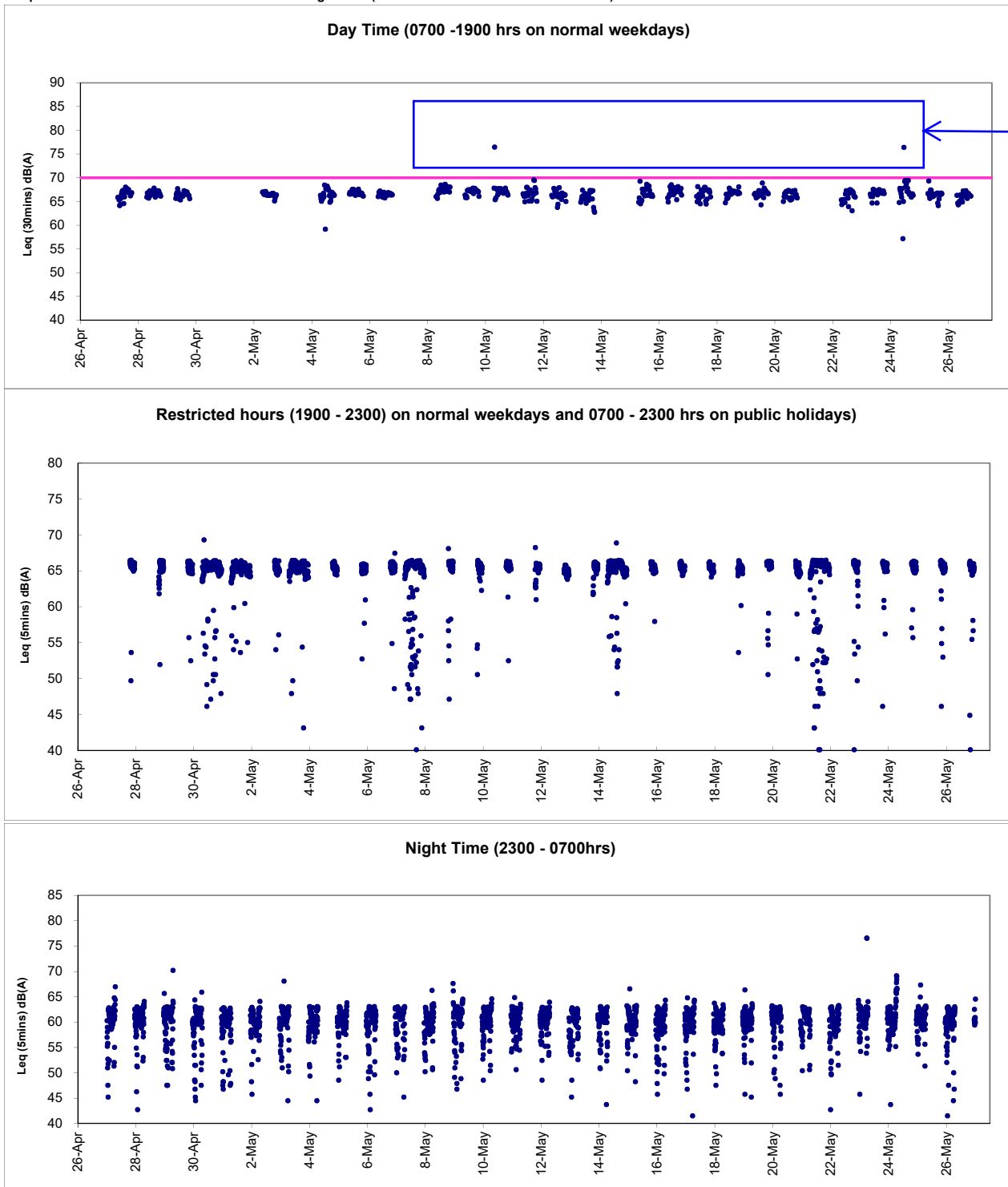


## Graphic Presentation of Real Time Noise Monitoring Result (RTN2a- Hong Kong Electric Centre)



After checking with Contractor of HY/2009/19, despite sheet piling works was conducted during the monitoring period and no construction works was conducted under HY/2011/08 during the monitoring period while adverse weather condition under Red Rainstorm Warning Signal was considered as the major noise contribution during monitoring. Hence, the exceedance was concluded as non-Project related.

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



After checking with Contractor of HY/2009/19, no construction works were conducted on 10 and 24 May 2017 around the monitoring location during the concerned period and hence the exceedances were considered to be non-Project related and potentially related to the traffic on 10 May 2017 and the adverse weather under Red Rainstorm Warning Signal on 24 May 2017.



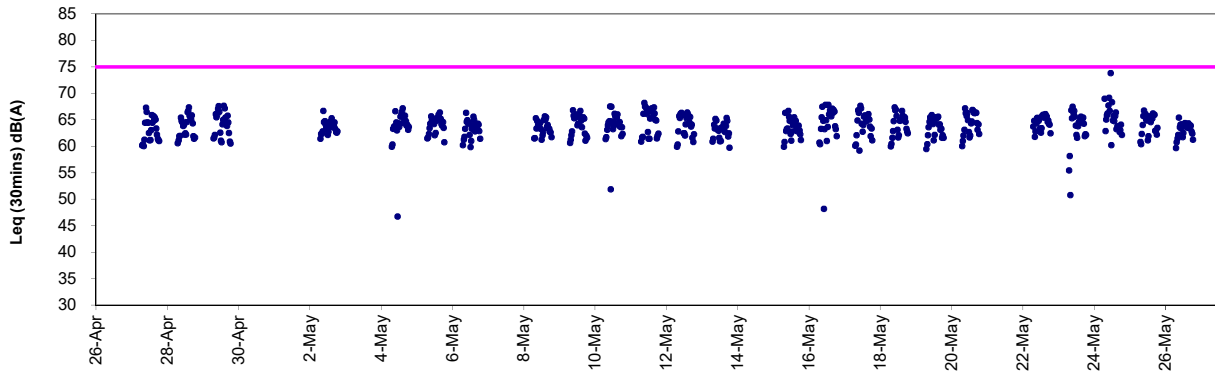
Contract no. HK/2015/01

Wan Chai Development Phase II and Central-Wan Chai Bypass

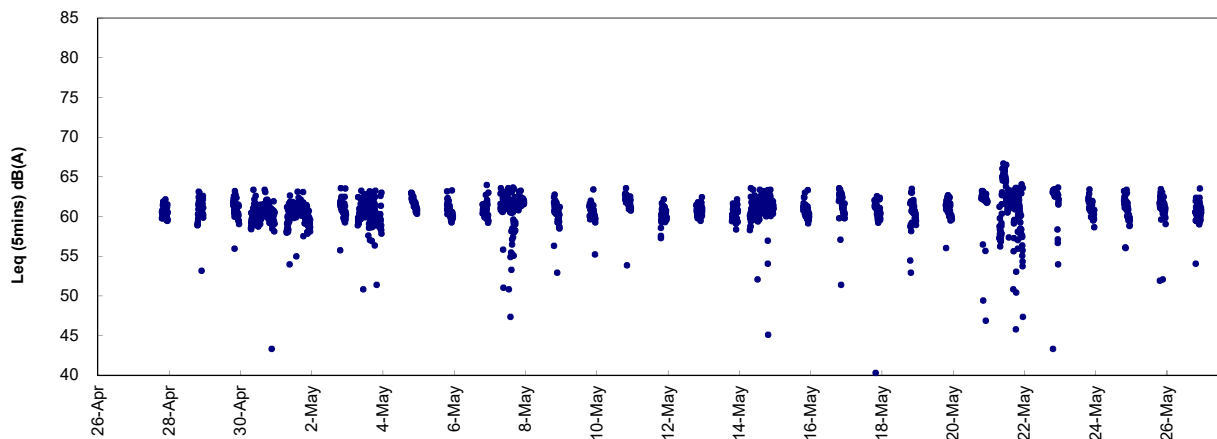
Sampling, Field Measurement and Testing Works (Stage 3)

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

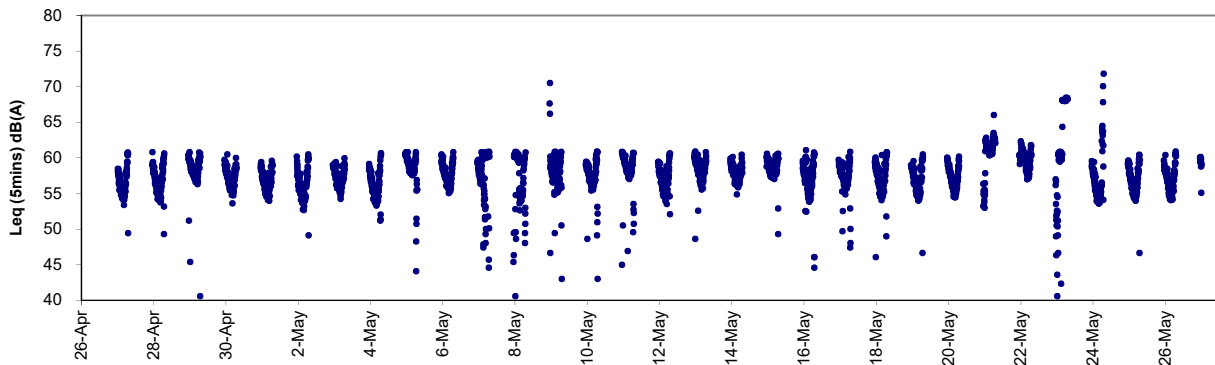
Day Time (0700 -1900 hrs on normal weekdays)



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



Night Time (2300 - 0700hrs)





***Appendix 6.1***

*Event Action Plans*





Event/Action Plan for Construction Noise

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



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

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

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
<b>ACTION LEVEL</b>				
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)
<b>LIMIT LEVEL</b>				
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_16N067	16-May-17	13:48	M1a-Harbour Road Sports Centre	78	Leq(30min)	when one documented complaint was received.	75	<p>Possible reason: Breaking and drilling opposite next to the monitoring station under non WDII-CWB Contractor was observed as the major noise contribution.</p> <p>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.</p> <p>Remarks / Other Obs: No construction work under EP-376/2009 was conducted by Contract HK/2012/08 around the concerned location during the time of measurement while breaking and drilling next 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.</p>
X_16N068	16-May-17	13:48	M1a-Harbour Road Sports Centre	78	Leq(30min)	when one documented complaint was received.	75	<p>Possible reason: Breaking and drilling operation opposite next to the monitoring station under non WDII-CWB Contractor was observed as the major noise contribution.</p> <p>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.</p> <p>Remarks / Other Obs: Re-bar and formwork fixing 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 breaking and drilling operation next 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.</p>
X_16N069	16-May-17	13:48	M1a-Harbour Road Sports Centre	78	Leq(30min)	when one documented complaint was received.	75	<p>Possible reason: Breaking and drilling opposite next to the monitoring station under non WDII-CWB Contractor was observed as the major noise contribution.</p> <p>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.</p> <p>Remarks / Other Obs: No construction works was conducted under Contract HK/2009/01 during the time of measurement while breaking and drilling operation next 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.</p>
X_16N070	25-May-17	10:45	M1a-Harbour Road Sports Centre	77	Leq(30min)	when one documented complaint was received.	75	<p>Possible reason: Bored piling works next to the monitoring station under non WDII-CWB Contractor was observed as the major noise contribution.</p> <p>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.</p> <p>Remarks / Other Obs: No construction work under EP-376/2009 was conducted by Contract HK/2012/08 around the concerned location during the time of measurement while bored piling works next 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.</p>
X_16N071	25-May-17	10:45	M1a-Harbour Road Sports Centre	77	Leq(30min)	when one documented complaint was received.	75	<p>Possible reason: Bored piling works opposite next to the monitoring station under non WDII-CWB Contractor was observed as the major noise contribution.</p> <p>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.</p> <p>Remarks / Other Obs: Re-bar fixing at Portion 5 was 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 bored piling works next 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.</p>
X_16N072	25-May-17	10:45	M1a-Harbour Road Sports Centre	77	Leq(30min)	when one documented complaint was received.	75	<p>Possible reason: Bored piling works opposite next to the monitoring station under non WDII-CWB Contractor was observed as the major noise contribution.</p> <p>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.</p> <p>Remarks / Other Obs: No construction works was conducted under Contract HK/2009/01 during the time of measurement while bored piling works next 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.</p>



***Appendix 9.1***

***Complaint Log***

**Environmental Complaints Log**

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
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/2009/11 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.	<ul style="list-style-type: none"><li>• A tree near the site of pipe installation works outside Wan Chai Swimming Pool at Harbour Road is the Tree no. TA1122 under Contract no. HK/2009/02. Leaves of a branch of this tree were shrivelled.</li><li>• Two trees inside the site near Renaissance Hong Kong Harbour View Hotel at Convention Avenue are the tree nos. A160 and A161 under Contract no. HK/2009/01. Part of roof ball of these two trees was covered by the metal plate.</li></ul> 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	<p>1) According to the information reported by Contractor, one BC cutter and hoist were operated for Diaphragm Wall construction of Shatin-Central Link to inspect bentonite pipes and ensure no damages and all the joints are tightened in good position. Then, the subcontractor for Diaphragm wall, SAMBO Korean foreman stopped the engine of the BC cutter immediately. The police officer recorded the details and HKID number of the foreman and then left. Due to the different language communication between the police officer and the Korean foreman, no CNP was checked by the police officer.</p> <p>2) ET confirmed with the Resident Site Staff that same issue was also raised out by RSS at about 7:00a.m on the same day. Besides, it was confirmed that there is no valid Construction Noise Permit for the conducted construction works in the period between 2300 and 0700.</p> <p>3) Due to insufficient communication between Contractor HK/2009/01 and their Korean Sub-contractor, Korean Sub-contractor had not notified to Contractor before carrying out the inspection of the BC cutter, hoists and</p>	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.	<p>1) RSS notified ET on 17 April 2012.</p> <p>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.</p> <p>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.</p> <p>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.</p>	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.	<p>1) RSS notified ET on 8 March 2013</p> <p>2) ET confirmed with RSS that excavation works, installation of buoy, flashing light and silt curtain and dredging works were undertaken at Eastern Breakwater during the concerned period on 6 March 2013. One backhoe equipped with breaker and one derrick barge were confirmed in operation while another backhoe was at idle during the concerned period on 6 March 2013.</p> <p>3) Reviewing the photo record provided by RSS, the condition of the silt curtain deployed around the Eastern Breakwater on 6 March 2013 was found to be in good condition. It is considered that the silt curtain was properly in place during the concerned period and the concerned act of dropping of fine rock material was confined within the silt curtain boundary without adverse impact to the nearby water quality.</p> <p>Further follow up was conducted on 12 March 2013 during weekly environmental audit inspection, the silt curtain deployed around the concerned area was found to be maintained in good condition and the water quality at the concerned work area was generally satisfactory. No violation of the Environmental Permit condition was found.</p> <p>The contractor was advised and committed to implement preventive measures to minimize the potential impact of work including conducting regular diver check to ensure the integrity and the extend of silt curtain deployment and to provide adequate back up stock of silt curtain for emergency use.</p>	Closed



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.	<p>1 ) RSS notify ET on 6 June 2013</p> <p>2) ET confirmed with the Resident Site Staff that</p> <p>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.</p> <p>No construction works was undertaken by Contract HY/2009/18 at the concerned planter area where the affected trees are located.</p> <p>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.</p> <p>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)</p> <p>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.</p>	Closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>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.</p> <p>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)</p> <p>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.</p>	



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.	<p>1) RSS notify ET on 11 June 2013</p> <p>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</p> <ul style="list-style-type: none"><li>- Breaking up existing D-wall concrete and excavation at portion 4B and 4C</li><li>- Sheet piling works at Portion VI (Man Kat Street)</li></ul> <p>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.</p> <p>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.</p> <p>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.</p> <p>As such, no direct information associated with the noise concerned raised was considered available and no non-conformity was identified.</p> <p>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.</p>	<p>Interim report submitted to EPD on 19 June 2013,</p> <p>EPD advised no further comment on 5 Aug 2013 and final report for case closing submitted on 6 Aug 2013.</p>



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.	<p>ET confirmed with the Resident Site Staff that</p> <p>1) The major construction activities at the concerned location conducted over the past three months include;</p> <ul style="list-style-type: none"><li>- Formwork, rebar and concreting</li><li>- Backfilling</li><li>- Water-proofing</li><li>- Scaffolding erection</li></ul> <p>2) Mitigation measures implemented by the Contractor for the above construction works include</p> <ul style="list-style-type: none"><li>- Select quiet plant and work methods;</li><li>- Check plant and equipment for condition;</li><li>- For use of powered mechanical equipment during restricted hours: Obtain necessary Construction Noise Permit and strictly comply with their conditions;</li><li>- Frequently spray water to major haul road and stockpiles to suppress dust generation; and</li><li>- Cover stockpiles with impervious sheets</li></ul> <p>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.</p> <p>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.</p>	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.	<p>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</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>	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	<p>ET confirmed with the Resident Site Staff that</p> <p>1) The major construction activities around the concerned location conducted on 24 Dec 2013 include:</p> <ul style="list-style-type: none"><li>- Breaking up existng pillar box for new children playground Portion II</li><li>- Pressing of sheet pile at bowling green for ELS works Portion XII</li><li>- Welding work for preparation of sheetpiling work at bowling green Portion VI</li><li>- Demolition of existing pavilion for bowling green Portion VI</li><li>-Felling of tree TA50 at Victoria Park Zone</li></ul> <p>2) Mitgitation measures implemented by the Contractor for the above construction works include</p> <ul style="list-style-type: none"><li>-Water spraying for demolition and other dust generating works.</li></ul> <p>According to the relevant site records, breaking up of existng pillar box, pressing of sheet pile, welding work for preparation of sheetpiling</p> <p>demolition of existng pavilion and felling of tree TA50 at Victoria Park Zone 13 were conducted at the concerned location during the time of complaint.</p> <p>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.</p> <p>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.</p> <p>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</p>	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
					<p>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.</p> <p>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.</p>	
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.	<p>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.</p> <p>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.</p> <p>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;</p> <p>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</p>	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
					<p>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.</p> <p>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.</p> <p>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,</p> <p>No acoustic installation was provided for the relevant PME(s) used as stated in CNP condition 3.d.during the concerned concreting works.</p> <p>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.</p> <p>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.</p> <p>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.</p>	



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.	<p>ET confirmed with the Resident Site Staff that The major construction activities around the concerned location conducted on 23 Jan 2014 include:</p> <p>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.</p> <p>Mitigation measures implemented by the Contractor for the above construction works include:</p> <p>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).</p> <p>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.</p> <p>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</p>	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
					<p>East Bowling Green when there is any Bowling Green competition event to be held.</p> <p>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.</p>	
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.	<p>ET confirmed with the Resident Site Staff that</p> <p>The major construction activities at the concerned location conducted on 27 Feb 2014 (Daytime) include:</p> <p>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.</p> <p>Mitigation measures implemented by the Contractor for the above construction works include:</p> <p>Use of quiet plants (air compressor with a Noise Emission Label of 99 dB(A)).</p>	<p>Interim report submitted to EPD on 18 March 2014,</p> <p>EPD advised no further comment on 26 March 2014 and final report for case closing issued on 26 March 2014</p>



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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</p>	



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	<p>A public complaint regarding odour concern referred by EPD was received by ET on 23 June 2014.</p> <p>The complainant reported that excessive paint spray odour was detected at the foot-bridge to the Central Pier 7.</p> <p>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</p> <p>Screeding concrete placing from Ch1700 to Ch1683 was conducted at roof slab Bay12 on 11 June 2014 and</p> <p>Backfilling and removal of concrete blocks was conducted at roof slab Bay 11 and Bay 10-north on 11 June 2014</p> <p>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.</p> <p>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.</p>	<p>Preliminary report issued on 25 June 2014.</p> <p>Interim report submitted to EPD on 30 June 2014.</p>



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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	<p>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 :</p> <p>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.</p> <p>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.</p> <p>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</p>	<p>Final Investigation report (Issue1) issued on 31 July 2014.</p> <p>Final investigation report (Issue 2) based on further follow-up issued on 12 Aug 2014.</p>



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>operation at the above period.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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 &amp; machinery through cross harbour tunnel shall be conducted after mid-night.</p> <p>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).</p>	



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	<p>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.</p> <p>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).</p> <p>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).</p> <p>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.</p> <p>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</p>	Final investigation report issued on 12 Aug 2014.





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					<p>above period).</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>	



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	<p>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)</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>	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
					<p>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.</p> <p>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.</p> <p>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.</p>	



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	<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>	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
					<p>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.</p> <p>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.</p> <p>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.</p>	



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	<p>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.</p> <p>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.</p> <p>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.</p>	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
					<p>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.</p> <p>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.</p>	
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.	<p>A public complaint regarding construction noise impact referred by EPD was received by ET on 16 October 2014 (EPD Ref.: EP860/E2/24 Annex IV dated 16 October 2014).</p> <p>The complainant reported that construction noise like piling works was heard on 14 October 2014 night until 23:45 hrs. It was suspected that the noise was emanated from the work site next to new Wan Chai Ferry Pier and opposite to Wan Chai Sports Ground.</p> <p>ET confirmed with the Resident Site Staff that From 19:00hrs to 23:00hrs on 14 October 2014, dredging works was conducted under Contractor of HK/2009/02 at WCR3 Area.</p> <p>Total one grab dredger was in operation. Mitigation measures including provision of steel sheeting screening to the power generation part of the grab dredger was implemented by the Contractor of HK/2009/02.</p>	<p>Updated interim investigation with supplementary information submitted to EPD on 17 November 2014.</p> <p>EPD advised no further comment on the updated interim report and case closed on 27 Nov 2014.</p>



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





Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>From 23:00 hrs to 06:00hrs, panel replacement works was conducted under Contractor of HK/2009/02 at the Temporary Covered Walkway. Total one scissor platform and two hand held drills (battery) were in operation.</p> <p>From 23:00 hrs to 06:00hrs, trial pit works was conducted under Contractor of HK/2009/02 at Hung Hing Road. Total one crane lorry was in operation.</p> <p>In view of the above findings, no direct information associated with the noise concern was considered available.</p>	
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.	<p>A public complaint regarding odour concern referred by EPD was received by ET on 07 November 2014 (EPD Ref.: H05/RS/00027815-14 dated 10 November 2014).</p> <p>The complainant reported that Malodour of construction plant exhaust from the construction site at old Wan Chai Ferry Pier was scented that affecting the swimmers at Wan Chai Swimming Pool.</p> <p>ET confirmed with the Resident Site Staff that ELS works was conducted on 7 November 2014 during daytime at Portion 2 (Area oppsite to WanChai Swimming Pool).</p> <p>Total 3 nos. of excavators, 2 nos. of crawler cranes, 2 nos. of generator, 1 no. of crane lorry and 2 no. of dump trucks were operated.</p> <p>Demolition works was conducted on 7 November 2014 during daytime at West of old Wan Chai Ferry Pier.</p> <p>Total 2 nos. of excavators, 1 no. of derrick barge and 1 no. of tug boat were operated.</p>	<p>Interim investigation report submitted to EPD on 17 November 2014.</p> <p>EPD advised no comment on the interim report and case closed on 1 Dec 2014.</p>



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>Dredging works was conducted on 7 November 2014 during daytime at WCR3 (East of old Wan Chai Ferry Pier)</p> <p>Total 1 no. of dredger, 1 no. of hopper and 1 no. of tug boat were operated.</p> <p>According to the relevant site records under Contract HK/2009/02, ELS works was conducted on 7 November 2014 during daytime at Portion 2 (Area oppsite to WanChai Swimming Pool). Total 3 nos. of excavators, 2 nos. of crawler cranes, 2 nos. of generator, 1 no. of crane lorry and 2 no. of dump trucks were operated. Demolition works was conducted on 7 November 2014 during daytime at West of old Wan Chai Ferry Pier. Total 2 nos. of excavators, 1 no. of derrick barge and 1 no. of tug boat were operated.</p> <p>Follow-up inspection was conducted during weekly environmental inspection on 13 November 2014, no dark smoke emission was observed from the PMEs operating on-site. The condition of chemical waste storage was considered satisfactory and no malodour was identified. Despite no information related to malodour was identified, the Contractor was reminded to conduct regular checking on the condition of PMEs to ensure only well maintained PMEs are used on site.</p> <p>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</p> <p>The interim report would be submitted to EPD on 17 November 2014.</p>	



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



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



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>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.</p> <p>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.</p> <p>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.</p>	



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					<p>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.</p> <p>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.</p>	
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	<p>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.</p> <p>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.</p>	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
					<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>	





Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>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.</p> <p>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.</p>	
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	<p>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.</p> <p>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.</p> <p>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</p>	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
					<p>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.</p> <p>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.</p>	
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	<p>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."</p> <p>ET confirmed with the Resident Site Staff that the concerned lighting for the banners was maintained under Contract HY/2010/08.</p> <p>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.</p>	Final Investigation report issued on 20 April 2015 and case closed



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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	<p>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.</p> <p>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.</p> <p>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.</p>	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	<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>	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.	<p>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.</p> <p>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.</p> <p>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</p>	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.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>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.</p> <p>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.</p> <p>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.</p>	
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.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>ET confirmed with the Resident Site Staff that reinforced bar fixing and concreting work (on 17 June 2015 only) were conducted at Portion 2 from 15 June 2015 to 19 June 2015. Total 3 nos. of mobile crane were in operation. On 17 June 2015, one no. of concrete pump truck and two nos. of concrete mixer were in operation. Excavation and Lateral Support was conducted at Portions 3 &amp; 4 from 15 June 2015 to 19 June 2015. Total 4 nos. of excavator, 2 nos. of truck and 2 nos. of crawler crane were in operation. In addition, on 15 June 2015, 17 June 2015 and 19 June 2015, 1 no. of derrick barge was moored near Portions 3 &amp; 4 for transportation of the excavated material away from site.</p> <p>According to the relevant site records under Contract HK/2009/02, from 15 June 2015 to 19 June 2015, reinforced bar fixing and concreting work (on 17 June 2015 only) were conducted at Portion 2 and total 3 nos. of mobile crane, one no. of concrete pump truck (on 17 June 2015 only) and two nos. of concrete mixer (on 17 June 2015 only) were in operation; excavation and lateral support was conducted at Portions 3 &amp; 4 and total 4 nos. of excavator, 2 nos. of truck and 2 nos. of crawler crane were in operation. Based on relevant site record, no hopper barge was moored under Contract HK/2009/02 around the concerned location while 1 no. of derrick barge was moored under Contract HK/2009/02 near Portions 3 &amp; 4 for transportation of the excavated material from Portions 3 &amp; 4 away from site on 15 June 2015, 17 June 2015 and 19 June 2015 respectively.</p> <p>Follow-up inspection was conducted during weekly environmental inspection on 25 June 2015, no dark smoke and malodour emission was observed from the PMEs operating on-site. A derrick barge was</p>	



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	<p>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:</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>Follow-up inspection was conducted during weekly environmental inspection on 14 July 2015, no direct discharge connection was further observed on site.</p>	Updated Final investigation report submitted on 27 July 2015.





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					<p>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.</p> <p>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.</p>	
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	<p>A public complaint regarding malodour referred by EPD was received by ET on 23 July 2015 (EPD Ref.: H05/RS/00018040-15 dated 23 July 2015).</p> <p>The complainant reported that malodour from marine sediment was scented at ex-Wanchai ferry pier near route 720 &amp; 722 bus stop. (Contract HK/2009/02).</p> <p>ET confirmed with the Resident Site Staff that Rockfill placing works was conducted by one derrick barge at the concerned location (WCR3) under Contract HK/2009/02 on 20 July 2015. No marine sediment was stored or placed on site at the concerned location under Contract HK/2009/02 on 20 July 2015.</p> <p>According to the relevant site records under Contract HK/2009/02, rockfill placing works was conducted by one derrick barge at WCR3 area on 20 July 2015 and no marine sediment was stored or placed on site at the concerned location on the concerned date.</p>	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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					<p>Follow-up inspection was conducted during weekly environmental inspection on 29 July 2015. No marine sediment was observed stored or placed at the concerned location while it was noted that a culvert outfall with potential odour concern is located adjacent to the concerned location.</p> <p>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.</p>	
150904	01 Sept 2015	EPD Ref.: H05/RS/0002 2241-15 dated 04 September 2015 received by ET on 4 September 2015	East of New WanChai Ferry Pier	Dropping of excavated material from land to sea during loading of material	<p>A public complaint regarding dropping of excavated material from land to sea referred by EPD was received by ET on 04 September 2015 (EPD Ref.: H05/RS/00022241-15 dated 04 September 2015). The complainant reported that dropping of excavated materials from land to sea during loading of materials by excavator at the construction site to work boat. (Contract HK/2009/02)</p> <p>ET confirmed with the Resident Site Staff that transferring of C&amp;D materials from land to hopper barge by excavator at seaside along CWB Tunnel Portions 3 and 4 was undertaken by Contract HK/2009/02 on 01 September 2015.</p> <p>Mitigation measure including providing tarpaulin sheet to cover the gap between seawall and the hopper barge to prevent dropping of material to the sea was implemented by the Contractor.</p> <p>According to the relevant site records under Contract HK/2009/02, transferring of C&amp;D materials from land to hopper barge by excavator at seaside along CWB Tunnel Portions 3 and 4 was carried out on 01 September 2015 and mitigation measures including provision of tarpaulin sheet between</p>	Interim report submitted to EPD on 14 September 2015. EPD advised no comment on 5 October 2015 on the interim report submitted and case closed.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>seawall and the hopper barge was implemented by the Contractor of HK/2009/02 on the concerned date. Follow-up inspection was conducted during weekly environmental inspection on 10 September 2015. Transferring of C&amp;D materials from land to barge by excavator was observed at the concerned location and mitigation measures including provision of tarpaulin sheet between seawall and hopper barge and the material transfer works was generally in order. Nevertheless, the Contractor of HK/2009/02 was reminded to maintain the handling procedure for C&amp;D materials transfer from land to hopper barge and regularly inspect the condition of the tarpaulin sheet provided to ensure the nearby water quality are not affected by the loading and unloading of material from land side to hopper barge.</p> <p>The Contractor was reminded to maintain the handling procedure for C&amp;D materials transfer from land to hopper barge and regularly inspect the condition of the tarpaulin sheet provided to ensure the nearby water quality are not affected by the loading and unloading of material from land side to hopper barge.</p>	
150904	02 Sept 2015	EPD Ref.: H04/RS/0002 2385-15 dated 04 September 2015 received by ET on 04 September 2015	Location outside Fleet Arcade	Construction noise was generated from the construction site of HK/2012/08 at location outside Fleet Arcade during night time on weekdays and daytime during General Holidays. The complainant also concerned construction dust and exhaust emission from derrick barges during	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 <sup>nd</sup> interim report submitted to EPD on 17 Dec 2015



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



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					<p>and timber and installation of bulkhead was undertaken by the Contractor of HK/2012/08 at the concerned location. Total one generator and one circular saw were in operation and the relevant Construction Noise Permit GW-RS0296-15 for the concerned operation was confirmed in place.</p> <p>From 1900hrs on 30 August 2015 to 0700 on 31 August 2015, no construction works was undertaken by the Contractor of HK/2012/08 at the concerned location and from 1900hrs on 31 August 2015 to 0700hrs on 01 September 2015, no construction works was undertaken by the Contractor of HK/2012/08 at the concerned location.</p> <p>From 1900hrs to 2115 hrs on 01 September 2015, unloading of soil was undertaken by the Contractor of HK/2012/08 at the concerned location. Total one derrick barge was in operation and the Construction Noise Permit GW-RS0296-15 for the concerned operation was confirmed in place.</p> <p>From 2300hrs on 01 September 2015 to 0700hrs on 02 September 2015, no construction works was undertaken by the Contractor of HK/2012/08 at the concerned location. In view of the above, the construction activities conducted under Contract HK/2012/08 during the concerned period was in compliance with the statutory requirement.</p>	



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



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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	<p>A public complaint regarding illegal disposal of construction waste referred by EPD was received by ET on 17 November 2015. The complainant reported that over 10,000 m3 of bentonite after usage for construction of diaphragm wall was disposed of at Victoria Harbour.</p> <p>The Contractor recently deployed mobile crane to transfer the bentonite from mud pit on to works barge. The bentonite was then mixed with soil and transported to the Public Fill. During the course, seepage of slurry through grab generated drop off to marine waters and the soil mixing generated dust impact to nearby yacht club, typhoon shelter and affect nearby public and boats.</p> <p>Disposal of dredged marine sediment was not carried out in accordance with the Management of Dredged/Excavated Sediment. Instead the marine sediment was covered by sand and soil and transported to the Public Fill.</p> <p>White or greyish effluent was discharged directly into Victoria Harbour marine waters from wastewater treatment plant on construction site.</p> <p>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</p>	<p>Interim investigation report submitted to EPD on 24 November 2015.</p> <p>2<sup>nd</sup> interim investigation report submitted to EPD on 17 December 2015.</p> <p>3<sup>rd</sup> interim investigation report submitted to EPD on 31 December 2015.</p> <p>Final investigation report submitted on 5 February 2016.</p>



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					<p>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&amp;D material disposed.</p> <p>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:</p> <p>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.</p> <p>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.</p>	





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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	<p>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.</p> <p>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.</p> <p>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.</p>	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	<p>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</p> <p>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.</p> <p>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.</p>	<p>1<sup>st</sup> interim report submitted to EPD on 14 December 2015</p> <p>2<sup>nd</sup> interim report submitted to EPD on 4 January 2016</p> <p>EPD advised no comment on 07 January 2015 on the report submitted and case closed.</p>



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>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.</p> <p>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.</p> <p>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</p>	



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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	<p>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:</p> <p>Incessant noise emanating from the construction site of the Island Eastern Corridor Link that forms part of the Central-Wanchai Bypass Project.</p> <p>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</p>	Final report was issued on 23 December 2015 and case closed.



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					<p>living in nearby blocks of our estate, especially children and the elderly who have to stay at home for longer hours.</p> <p>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.</p> <p>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.</p>	



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 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.	<p>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)</p> <p>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.</p>	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.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>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.</p> <p>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.</p>	
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.	<p>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).</p> <p>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.</p> <p>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</p>	Final investigation report issued on 27 January 2016



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>surroundings.</p> <p>The first complainant on 14 January 2016 reported that the situation was not improved and would escalate the case if not addressed.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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</p>	





Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					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	<p>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).</p> <p>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.</p> <p>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.</p> <p>Concreting for Seawall Reinstatement at TPCWAE was conducted under Contractor of HY/2009/15 on 12 January 2016 and 18 January 2016.</p> <p>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.</p> <p>According to relevant site records and information</p>	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
					<p>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.</p> <p>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.</p> <p>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.</p>	



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	<p>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:</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>	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	<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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</p>	<p>1<sup>st</sup> investigation report issued on 11 March 2016.</p> <p>2<sup>nd</sup> investigation report issued on 23 March 2016 and case closed.</p>



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>and no particular noise emanating works was observed.</p> <p>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.</p> <p>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.</p>	



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	<p>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.</p> <p>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.</p> <p>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.</p> <p>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</p>	<p>Interim investigation report submitted to EPD on 18 March 2016.</p> <p>EPD advised no comment on 29 April 2016 on the interim report submitted and case closed.</p>



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>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.</p> <p>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.</p> <p>Nevertheless, in view of the public concern, the</p>	



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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	<p>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:</p> <p>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.</p> <p>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.</p> <p>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.</p>	<p>The interim investigation report was submitted to EPD on 11 April 2016.</p> <p>EPD advised no comment on 02 September 2016 on the interim report submitted and case closed.</p>





Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>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.</p> <p>i) Plugging the inlet point of the concerned manhole (connecting to the abandoned U-channel) with concrete;</p> <p>ii) Plugging the outlet of the concerned manhole (connecting to the observed drain hole) with concrete;</p> <p>iii) Filling the concerned manhole with rubbles;</p> <p>iv) Shifting the unused wastewater treatment plant around the concerned location to other site location for use.</p> <p>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</p>	



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>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.</p> <p>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.</p> <p>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.</p> <p>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</p>	



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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	<p>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).</p> <p>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</p> <p>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.</p> <p>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.</p>	<p>The interim report was submitted to the EPD on 14 April 2016.</p> <p>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.</p> <p>EPD advised no comment on 02 September 2016 on the interim report submitted and case closed.</p>



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					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 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	<p>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.</p> <p>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.</p> <p>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.</p> <p>With respect to the observed incident of the toppling of the concerned tree T710, the</p>	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).	<p>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).</p> <p>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 &amp; 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.</p>	Investigation report issued on 19 April 2016 and case closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>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.</p> <p>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.</p> <p>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.</p>	



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



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					<p>sandbag bunding along the side of the landing barge was implemented and no mud or soil deposition was observed along the seawall and no discharge point was located within the temporary water channel connecting the Culvert L outfall location to the Victoria Harbour. In addition, piling works was observed at the north side of Zone A1 on 19 April 2016 and construction effluent collection from piling work via sedimentation tank to wastewater treatment facility was implemented and steel barrier was installed around the piling works area to mitigate against potential surface runoff related impact.</p> <p>Nevertheless, in view of the public concern, the Contractor was reminded to maintain adequate perimeter embankment protection along the seawall boundary and maintain proper construction effluent collection system to avoid potential runoff related impact to nearby waters.</p>	
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	<p>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).</p> <p>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.</p> <p>According to the relevant site records provided by</p>	<p>Interim investigation report submitted to EPD on 7 June 2016.</p> <p>EPD advised no further comment on 05 August 2016 on the report submitted and case closed.</p>





Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>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.</p> <p>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.</p>	



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.	<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>	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.



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					<p>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.</p> <p>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.</p>	
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.	<p>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.</p> <p>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.</p> <p>Noise mitigation measures including equipping the crawler crane with noise barrier was implemented</p>	The interim report submitted to the EPD on 22 July 2016



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					<p>by the Contractor of HY/2010/08.</p> <p>Dust mitigation measures including manual spraying of water and mist nozzles are deployed on the ground level and at the cofferdam.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>In view of the above, the Contractor of HY/2010/08 was advised to review the site control system for</p>	



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					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	<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>Grouting works at Victoria Park Road Eastbound</p>	<p>The interim report submitted to EPD on 20 September 2016.</p> <p>EPD advised no comment on 31 October 2016 on the interim report submitted and case closed.</p>



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>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.</p> <p>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.</p> <p>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.</p>	



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.	<p>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.</p> <p>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).</p> <p>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</p>	The interim investigation report was submitted to EPD on 18 October 2016.



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					<p>GW-RS0434-16 and GW-RS0407-16 were in place for the construction works conducted during the above concerned periods.</p> <p>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.</p>	
EPD Ref: H05/RS/0002 9722-16 dated 22 November 2016	15 Nov 2016	A public complaint referred by EPD received by ET on 22 November 2016	Construction Site near Wanchai Ferry Pier	Noise was emanated in the Chun Wo – CRGLJV construction site near Wanchai Ferry Pier till late night and caused nuisance to nearby sensitive receivers.	<p>An EPD complaint regarding noise nuisance referred by EPD was received by ET on 22 November 2016 (EPD Ref: H05/RS/00029722-16 dated 22 November 2016). The complainant reported that noise was emanated in the Chun Wo – CRGLJV construction site near Wanchai Ferry Pier till late night and caused nuisance to nearby sensitive receivers.</p> <p>ET confirmed with the Resident Site Staff that Excavation works at Portion 5 was conducted under Contract HK/2009/02 at Portion 5 area (West of Wan Chai Ferry Pier) from 1900hrs to 2300hrs on 14 November 2016. Total two crawler cranes, two excavators and two generators were operated at ground level and four excavators were operated below ground level. No construction activity was conducted under Contract HK/2009/02 from 2300hrs on 14 November 2016 to 0700hrs on 15 November 2016. Total two generators were operated at ground level for lighting illumination of Portion 5.</p>	Interim investigation report submitted to EPD on 29 November 2016.





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					<p>According to information provided by RSS, excavation works at Portion 5 was conducted under Contract HK/2009/02 at Portion 5 area (West of Wan Chai Ferry Pier) from 1900hrs to 2300hrs on 14 November 2016. Total two crawler cranes and two excavators were operated at ground level and four excavators were operated below ground level. Two generators were operated at ground level. Based on review on site information, relevant Construction Noise Permits GW-RS0593-15 for the above construction activities and above operation of the generators were confirmed in place. No construction activity was conducted under Contract HK/2009/02 from 2300hrs on 14 November 2016 to 0700hrs on 15 November 2016 and two generators were operated at ground level for lighting illumination of Portion 5.</p> <p>In view of the public concern, the Contractor of HK/2009/02 confirmed that the two generators for lighting power supply at ground level after 2300hrs had been suspended and replaced by other two generators located below ground level at Portion 5 area since 23 November 2016 to minimize the noise impact to the surroundings. In addition, 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. Also, the Contractor of HK/2009/02 was recommended to review the enhancement noise mitigation measure to be adopted for the generators deployed at ground level before 2300hrs to alleviate potential noise concern to the surroundings.</p>	



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EPD ref: H08/RS/0003 0890-16 dated 07 December 2016	24 Nov 2016	A public complaint referred by EPD received by ET on 07 December 2016	Construction Site at Victoria Park	Noise emanated from the construction site at Victoria Park after 1900hrs.	<p>A public complaint referred by EPD was received by ET on 07 December 2016 (Case Ref.: H08/RS/00030890-16). The complainant reported that Noise was emanated in the construction site near Victoria Park after 19:00 and caused nuisance to nearby sensitive receivers on 24 November 2016. ET confirmed with the Resident Site Staff that welding works for the tie-rod for the vertical blinding concrete was undertaken by the Contractor of HY/2010/08 at the construction site in the Victoria Park from 1900hrs to 2300hrs on 24 November 2016. Total 3 nos. of welding machines (electric), 3 nos. of water pumps (electric) and 1 no. of AquaSED were in operation.</p> <p>Based on the site records confirmed by RSS, welding works for the tie-rod for the vertical blinding concrete was undertaken by the Contractor of HY/2010/08 at the construction site in the Victoria Park from 1900hrs to 2300hrs on 24 November 2016. Total 3 nos. of welding machines (electric), 3 nos. of water pumps (electric) and 1 no. of AquaSED were in operation and relevant Construction Noise Permit GW-RS0930-16 was in place for the construction works conducted during the above concerned period. In addition, according to relevant site information confirmed by RSS, the welding machines, water pumps and AquaSED were connected to and powered by Hong Kong Electric power grid. 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.</p>	<p>Investigation report submitted to EPD on 16 December 2016.</p> <p>Under EPD review</p>



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
EPD complaint H08/RS/000 01175-17 dated 16 January 2016	10 January 2017	A public complaint referred by EPD received by ET on 16 January 2017	Causeway Bay Typhoon Shelter	Construction work at the reclamation site in Causeway Bay Typhoon Shelter area (Under the Island Eastern Corridor) was found after 1900hrs on 10 January 2017 and the concrete lorry mixer and concrete pump may not comply with the Construction Noise Permit	<p>A public complaint referred by EPD was received by ET on 16 January 2017 (Case Ref.: H08/RS/00001175-17). The complainant reported that construction work at the reclamation site in Causeway Bay Typhoon Shelter area (Under the Island Eastern Corridor) was found after 1900hrs on 10 January 2017. The complainant reported that there were 3 concrete pumps and around 10 concrete lorry mixers operating at the above site during the said period which may not comply with the Construction Noise Permit.</p> <p>ET confirmed with the Resident Site Staff that concreting of tunnel structure was conducted under Contract HY/2010/08 at Temporary Reclamation Area TS3 between 1900hrs and 2000hrs on 10 January 2017.</p> <p>Total 3 nos. of Lorry Mounted Concrete Pumps and 6 nos. of Concrete Lorry Mixers were operated at TS3 while temporary noise barrier was provided for 2 nos. of the operating Lorry Mounted Concrete Pumps and 4 nos. of the operating Concrete Lorry Mixers. Total 1 no. of Concrete Lorry Mixer was at stand-by within TS3 Works area.</p> <p>Concreting of tunnel structure was conducted under Contract HY/2010/08 at Temporary Reclamation Area TS3 between 2000hrs and 2030hrs 10 January 2017. Total 2 nos. of Lorry Mounted Concrete Pump and 4 nos. of Concrete Lorry Mixers were operated at TS3 while temporary noise barrier was provided for 1 no. of the operating Lorry Mounted Concrete Pumps and 2 nos. of the operating Concrete Lorry Mixers. Total 1 no. of Concrete Lorry Mixer was at stand-by within TS3 Works area.</p>	Interim investigation report submitted to EPD on 03 February 2017.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>Concreting of tunnel structure was conducted under Contract HY/2010/08 at Temporary Reclamation Area TS3 between 2030hrs and 2300hrs 10 January 2017. Total 1 no. of Lorry Mounted Concrete Pump and 2 nos. of Concrete Lorry Mixers were operated at TS3.</p> <p>Based on the site records confirmed by RSS, concreting of tunnel structure was conducted under Contract HY/2010/08 at Temporary Reclamation Area TS3 between 1900hrs and 2300hrs on 10 January 2017. From 1900hrs to 2000hrs, total 3 nos. of Lorry Mounted Concrete Pumps and 6 nos. of Concrete Lorry Mixers while temporary noise barrier was provided for 2 nos. of the operating Lorry Mounted Concrete Pumps and 4 nos. of the operating Concrete Lorry Mixers. Total 1 no. of Concrete Lorry Mixer was at stand-by within TS3 Works area.</p> <p>From 2000hrs to 2030hrs, total 2 nos. of Lorry Mounted Concrete Pump and 4 nos. of Concrete Lorry Mixers were operated at TS3 while temporary noise barrier was provided for 1 no. of the operating Lorry Mounted Concrete Pumps and 2 nos. of the operating Concrete Lorry Mixers. Total 1 no. of Concrete Lorry Mixer was at stand-by within TS3 Works area.</p> <p>From 2030hrs to 2300hrs, total 1 no. of Lorry Mounted Concrete Pump and 2 nos. of Concrete Lorry Mixers were operated at TS3.</p> <p>Relevant Construction Noise Permit GW-RS1232-16 (Corresponding PME Groups operated include Group M, Group K and Group H) was in place for the construction works conducted during the above concerned periods and based on RSS information, a designated personnel on-site was responsible for controlling and supervising the switching between PME Groups. Meanwhile, there</p>	



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					<p>is no sufficient information to conclude if the concerned PME(s) (Concrete Lorry Mixer and Lorry Mounted Concrete Pump) deployed behind the temporary noise barrier provided were not visible to nearby sensitive receivers.</p> <p>As multiple PME grouping under the Construction Noise Permit are involved, the Contractor of HY/2010/08 was reminded to strictly follow the site control system for construction works carried out during restricted hours to ensure the PMEs deployed are in strict 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.</p>	
ICC complaint case (Ref: #2-3218844776) dated 23 December 2017	22 Dec 2016	ICC complaint case referred by RSS received by ET on 18 January 2017	Construction Site Gate Exit near Expo Drive East	No wheel washing from CEDD work site, no supervision from the Resident Site Staff, mud was dispersed on the road and flush to the communal drain by Chun Wo-China Railway JV HK/2009/02.	<p>A public complaint regarding the subject matter on wheel washing referred by RSS was received by ET on 18 January 2017 (ICC Ref: #2-3218844776). The complainant reported that no wheel washing from CEDD work site, no supervision from the Resident Site Staff, mud was dispersed on the road and flush to the communal drain by Chun Wo-China Railway JV HK/2009/02.</p> <p>ET confirmed with the Resident Site Staff that the concerned location was Site Exit Gate No. 6 at Expo Drive East operated and maintained under HK/2009/02 on 22 December 2016. Site measures including provision of wheel washing facility was implemented by the Contractor of HK/2009/02 on the concerned date.</p> <p>According to information provided by RSS, the concerned location was Site Exit Gate No. 6 at Expo Drive East operated and maintained under HK/2009/02 on 22 December 2016. In view of the environmental concern, remedial measures including i) instructing all workers to conduct wheel</p>	Final investigation report issued on 23 January 2017.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>washing within the designated location with collection pit to prevent overflow of washing effluent and ii) manual removal of dirt/silt by worker instead of water flushing in case of dirt/muddy trail found on road were implemented by the Contractor on 28 December 2016. Also, the Contractor of HK/2009/02 was further reminded by the WDII RSS to maintain proper wheel washing facilities at Gate No.6 and inspect regularly to ensure that all vehicles leaving the site to public roads are free of mud.</p> <p>Nevertheless, the Environmental Team further reminded the Contractor on 04 January 2017 that site measures including i) wheel washing operation shall be conducted at the designated location behind the backfall to avoid overflow of washing effluent onto public road ii) any silt/ soil deposited of the public road shall be cleared manually shall be strictly followed and relevant remedial actions were taken by the Contractor of HK/2009/02 on 04 January 2017.</p> <p>According to site inspection conducted on 17 January 2017, the concerned site exit Gate No.6 was maintained in proper condition, no silt/ mud deposition was observed on the public road and wheel washing was conducted by the Contractor of HK/2009/02 at the designated location within the construction site to avoid overflow of washing effluent onto nearby public road.</p>	



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
ICC complaint case (Ref: #2-351203393 6) dated 20 February 2017	20 February 2017	ICC complaint case referred by RSS received by ET on 24 February 2017	Victoria Park Swimming Pool	Noise was emanated from the construction site near Victoria Park Swimming Pool between 2300hrs to 2400hrs in the past months and caused nuisance.	<p>An ICC complaint referred by RSS was received by ET on 24 February 2017 (CASE#2-3512033936). The complainant reported that noise was emanated from the construction site near Victoria Park Swimming Pool between 2300hrs to 2400hrs in the past months and caused nuisance. ET confirmed with the Resident Site Staff that no works was conducted under Contract HY/2010/08 near Victoria Park Swimming Pool (Hing Fat Street) during the restricted hours (from 1900hrs to 0700hrs on the following day) from 21 December 2016 to 20 February 2017.</p> <p>No works was conducted under Contract HY/2010/08 near Victoria Park Swimming Pool (Hing Fat Street) during the restricted hours (from 1900hrs to 0700hrs on the following day) from 21 December 2016 to 20 February 2017.</p> <p>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.</p>	Final Investigation Report issued on 02 March 2017 and case closed.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
ICC complaint case (Ref: #2-3515474831) dated 21 February 2017	21 February 2017	ICC complaint case referred by RSS received by ET on 24 February 2017	Construction Site near Victoria Park Swimming Park and Causeway Bay Typhoon Shelter	Noise was emanated from the construction site near Victoria Park Swimming Pool between 2300hrs to 2400hrs in the past months and caused nuisance.	<p>An ICC complaint referred by RSS was received by ET on 24 February 2017 (CASE#2-3515474831). The complainant reported that noise was emanated from the construction site near Victoria Park Swimming Pool and Causeway Bay Typhoon Shelter between 1900hrs to 2400hrs in the past months and caused nuisance.</p> <p>ET confirmed with the Resident Site Staff that concreting of tunnel structure at Temporary Reclamation Area TS3 were conducted under Contract HY/2010/08 between 1900hrs and 2300hrs on 13, 14, 15, 16 and 18 February 2017. Total 3 nos. of concrete pump and 6 nos. of concrete lorry mixers were operated.</p> <p>Concreting of tunnel structure at Temporary Reclamation Area TS3 were conducted under Contract HY/2010/08 between 1900hrs and 2100hrs on 21 February 2017. Total 3 nos. of concrete pump and 6 nos. of concrete lorry mixers were operated. Concreting of tunnel structure at Zone C was conducted under Contract HY/2010/08 between 1900hrs to 2300hrs on 17 and 20 February 2017. Total 1 no. of concrete pump and 2 nos. of concrete mixers were operated. Bar bending at Zone C was conducted under Contract HY/2010/08 between 1900hrs to 2300hrs on 13, 14, 15, 16, 18 and 19 February 2017. Total 1 no. bar bender and cutter was operated. No works was conducted under Contract HY/2010/08 near Victoria Park Swimming Pool (Hing Fat Street) during the restricted hours (from 1900hrs to 0700hrs on the following day) across the period from 13 February 2017 to 21 February 2017.</p> <p>Based on the site records confirmed by RSS, no works was conducted under Contract HY/2010/08</p>	Final Investigation Report issued on 07 March 2017 and case closed.





Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>near Victoria Park Swimming Pool (Hing Fat Street) during the restricted hours (from 1900hrs to 0700hrs on the following day) from 13 February 2017 to 20 February 2017. Concreting of tunnel structure at Temporary Reclamation Area TS3 was conducted under Contract HY/2010/08 between 1900hrs and 2300hrs on 13, 14, 15, 16 and 18 February 2017 and total 3 nos. of concrete pumps and 6 nos. of concrete lorry mixers were operated. Concreting of tunnel structure at Temporary Reclamation Area TS3 were conducted under Contract HY/2010/08 between 1900hrs and 2100hrs on 21 February 2017 and total 3 nos. of concrete pump and 6 nos. of concrete lorry mixers were operated. Relevant Construction Noise Permit GW-RS0029-17 was in place while it is considered that there is no sufficient information to indicate whether the Powered Mechanical Equipment were deployed at the designed location stipulated under the relevant Construction Noise Permit with noise mitigation measures required.</p> <p>Concreting of tunnel structure at Zone C was conducted under Contract HY/2010/08 between 1900hrs to 2300hrs on 17 and 20 February 2017. Total 1 no. of concrete pump and 2 nos. concrete mixers were operated. Bar bending at Zone C was conducted under Contract HY/2010/08 between 1900hrs to 2300hrs on 13, 14, 15, 16, 18 and 19 February 2017 and total 1 no. bar bender and cutter was operated. Relevant Construction Noise Permit GW-RS1366-13 was in place while it is considered that there is no sufficient information to indicate whether the Powered Mechanical Equipment were deployed at the designed location stipulated under the relevant Construction Noise Permit with noise mitigation measures required.</p>	



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>Nevertheless, further to the joint ad-hoc inspection conducted by the ET/IEC on 13 February 2017 during restricted hours (between 1900hrs to 2200hrs), concurrent operations of 4 nos. of concrete lorry trucks at the Southern Side of TS3 near Construction Site Entrance and concurrent operations of 2 nos. of concrete lorry pumps and 2 nos. of concrete lorry truck at Western and Northern Side of TS3 were observed while the temporary noise barrier provided for the concrete lorry pump and concrete lorry truck at the Northern Side of TS3 could not screen entirely the concrete lorry truck and concrete lorry pump (Located at Northern Side of TS3) from nearby sensitive receivers. Therefore, it is considered that the above operations observed could not follow the PME grouping requirement and the specific condition 3.d.4 under the relevant Construction Noise Permit.</p> <p>In view of the above, the Contractor of HY/2010/08 was advised to enhance the site supervision and strictly implement the site control system for construction works carried out during restricted hours to ensure the PMEs deployed strictly comply 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.</p>	



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
ICC complaint case (Ref: #2-3521097579) dated 22 February 2017	22 February 2017	ICC complaint case referred by RSS received by ET on 27 February 2017	Construction Site at Victoria Harbour near Victoria Park	Noise was emanated from the construction Site at Victoria Harbour near Victoria Park from 0000hrs to 0200hrs on Tuesday and caused nuisance and Concrete Lorry was observed on scene.	<p>An ICC complaint referred by RSS was received by ET on 27 February 2017 (CASE#2-3521097579). The complainant reported that noise was emanated from the construction Site at Victoria Harbour near Victoria Park from 0000hrs to 0200hrs on Tuesday and caused nuisance and Concrete Lorry was observed on scene.</p> <p>ET confirmed with the Resident Site Staff that no construction work was conducted under HY/2010/08 at Zone C (Victoria Park Road) and Temporary Reclamation Area Zone between 0000hrs to 0200hrs on 21 February 2017 and between 0000hrs to 0200hrs on 22 February 2017.</p> <p>No construction work was conducted under HY/2010/08 at Zone C (Victoria Park Road) and Temporary Reclamation Area Zone between 0000hrs to 0200hrs on 21 February 2017 and between 0000hrs to 0200hrs on 22 February 2017.</p> <p>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.</p>	Final Investigation Report issued on 02 March 2017 and case closed.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
ICC Complaint Case (CASE #2-357615753 8 dated 05 March 2017)	05 March 2017	ICC complaint referred by RSS was received by ET on 06 March 2017	Construction works area under Contract HK/2009/02 for Wanchai Development Phase II	Noise was emanated from the construction works under Contract HK/2009/02 for Wanchai Development Phase II on 05 March 2017 and potential violation of ordinance was suspected.	<p>An ICC complaint referred by RSS was received by ET on 06 March 2017 (CASE#2-3576157538). The complainant reported that noise was emanated from the construction works under Contract HK/2009/02 for Wanchai Development Phase II on 05 March 2017 and potential violation of ordinance was suspected.</p> <p>ET confirmed with the Resident Site Staff that no works was conducted under Contract HK/2009/02 from 0000hrs to 0830hrs on 05 March 2017. Removal ELS waling at Portion 5 (West of WanChai Ferry Pier) was conducted under Contract HK/2009/02 from 0830hrs to 1700hrs on 05 March 2017. Total 2 nos. of crawler cranes were in operation at ground level.</p> <p>Tunnel backfilling and construction of temporary walls at Portions 3&amp;4 (Near Wan Shing Street) were conducted under Contract HK/2009/02 from 0830hrs to 1700hrs. Total 1 no. of excavator and 1 no. of dump truck were in operation at ground level and 2 nos. of excavator and 1 no. of loader were in operation below ground level.</p> <p>According to the information confirmed by RSS, no works was conducted under Contract HK/2009/02 from 0000hrs to 0830hrs on 05 March 2017. Removal ELS waling at Portion 5 (West of WanChai Ferry Pier) was conducted under Contract HK/2009/02 from 0830hrs to 1700hrs on 05 March 2017. Total 2 nos. of crawler cranes were in operation at ground level. Tunnel backfilling and construction of temporary walls at Portions 3&amp;4 (Near Wan Shing Street) were conducted under Contract HK/2009/02 from 0830hrs to 1700hrs. Total 1 no. of excavator and 1 no. of dump truck were in operation at ground level and 2 nos. of excavator and 1 loader were in operation below</p>	Investigation report issued on 10 March 2017 and case closed.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					ground level. Relevant Construction Noise Permit GW-RS1305-16 was in place.  Nevertheless, in view of the public concern, the Contractor of HK/2009/02 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 HK/2009/02 was also reminded to maintain regular maintenance of the plant and equipment deployed to avoid potential nuisance to the nearby public.	
EPD complaint (Case Ref: H05/RS/00 06240-17)	05 March 2017	EPD complaint referred by RSS was received by ET on 14 March 2017. EPD clarified the complaint case shall be referred by ICC Complaint Hotline (CASE #2-3576157538)	Construction works area under Contract HK/2009/02 for Wanchai Development Phase II	Noise was emanated from the construction works under Contract HK/2009/02 for Wanchai Development Phase II on 05 March 2017 and potential violation of ordinance was suspected.	A EPD complaint was referred to the ET on 14 March 2017 (CASE Ref: H05/RS/0006240-17). The complainant reported that noise was emanated from the construction works under Contract HK/2009/02 for Wanchai Development Phase II on 05 March 2017 and potential violation of ordinance was suspected.  ET confirmed with the Resident Site Staff that no works was conducted under Contract HK/2009/02 from 0000hrs to 0830hrs on 05 March 2017. Removal ELS waling at Portion 5 (West of WanChai Ferry Pier) was conducted under Contract HK/2009/02 from 0830hrs to 1700hrs on 05 March 2017. Total 2 nos. of crawler cranes were in operation at ground level.  Tunnel backfilling and construction of temporary walls at Portions 3&4 (Near Wan Shing Street) were conducted under Contract HK/2009/02 from 0830hrs to 1700hrs. Total 1 no. of excavator and 1 no. of dump truck were in operation at ground level and 2 nos. of excavator and 1 no. of loader were in operation below ground level.	Interim Investigation report issued on 10 March 2017 and case closed.  Under EPD Review.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>According to the information confirmed by RSS, no works was conducted under Contract HK/2009/02 from 0000hrs to 0830hrs on 05 March 2017. Removal ELS waling at Portion 5 (West of WanChai Ferry Pier) was conducted under Contract HK/2009/02 from 0830hrs to 1700hrs on 05 March 2017. Total 2 nos. of crawler cranes were in operation at ground level. Tunnel backfilling and construction of temporary walls at Portions 3&amp;4 (Near Wan Shing Street) were conducted under Contract HK/2009/02 from 0830hrs to 1700hrs. Total 1 no. of excavator and 1 no. of dump truck were in operation at ground level and 2 nos. of excavator and 1 loader were in operation below ground level. Relevant Construction Noise Permit GW-RS1305-16 was in place.</p> <p>Nevertheless, in view of the public concern, the Contractor of HK/2009/02 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 HK/2009/02 was also reminded to maintain regular maintenance of the plant and equipment deployed to avoid potential nuisance to the nearby public.</p>	
ICC complaint Case (CASE#2-3603182890) dated 10 March 2017	10 March 2017	An ICC complaint referred by RSS was received by ET on 13 March 2017	Construction Site at Victoria Park	Noise was emanated from the construction Site at Victoria Park from 2300hrs to 2400hrs on 10 March 2017 and caused nuisance to nearby residents.	<p>An ICC complaint referred by RSS was received by ET on 13 March 2017 (CASE#2-3603182890). The complainant reported that noise was emanated from the construction Site at Victoria Park from 2300hrs to 2400hrs on 10 March 2017 and caused nuisance to nearby residents.</p> <p>ET confirmed with the Resident Site Staff that no construction work was conducted under Contract HY/2010/08 at Victoria Park at from 2300hrs to 2400hrs on 10 March 2017.</p>	Investigation Report issued on 15 March 2017 and case closed



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>Based on the information provided by the RSS, no construction work was conducted under Contract HY/2010/08 at Victoria Park at from 2300hrs to 2400hrs on 10 March 2017.</p> <p>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.</p>	
EPD complaint Case (CASE Ref: H05/RS/00 014415-17(14448-17) dated 18 May 2017	11 May 2017	An EPD complaint referred to ET on 18 May 2017	Construction Site under Contract HK/2009/02	<p>Construction work was found on 10 May 2017 (~03:52) that caused noise nuisance.</p> <p>According to the information provided by the IEC on 11 May 2017 and 15 May 2017, it was alleged that the concreting work under Contract No. HK/2009/02 was carried out for the Central-Wan Chai Bypass Top Slab Bay 6 during night time on 09 May 2017 and early morning on 10 May 2017 (between 11:00pm on 09 May 2017 and about 04:00 a.m. on 10 May 2017) with 3 pump trucks, 10 vibrating pokers, 9 concrete trucks and 2 generators in operation.</p>	<p>An EPD complaint was referred to the ET on 18 May 2017 (CASE Ref: H05/RS/00014415-17(14448-17). The complainant reported that:</p> <p>Construction work was found on 10 May 2017 (~03:52) that caused noise nuisance. According to the photos provided by the complainant lorry mounted concrete pump were used. According to the information provided by the IEC on 11 May 2017 and 15 May 2017, it was alleged that the concreting work under Contract No. HK/2009/02 was carried out for the Central-Wan Chai Bypass Top Slab Bay 6 during night time on 09 May 2017 and early morning on 10 May 2017 (between 11:00pm on 09 May 2017 and about 04:00 a.m. on 10 May 2017) with 3 pump trucks, 10 vibrating pokers, 9 concrete trucks and 2 generators in operation. The concreting works under Contract No. CEDD HK/2009/02 was also carried out for the Central – Wan Chai Bypass Bay 10A OHVS Slab after 23:00 on 12 May 2017 (after 23:00) with 1 Pump truck, 2 vibrating pokers, 1 concrete trucks and 3 generators in operation.</p>	Investigation report submitted to EPD on 26 May 2017.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
				<p>The concreting works under Contract No. CEDD HK/2009/02 was also carried out for the Central – Wan Chai Bypass Bay 10A OHVS Slab after 23:00 on 12 May 2017 (after 23:00) with 1 Pump truck, 2 vibrating pokers, 1 concrete trucks and 3 generators in operation.</p>	<p>ET confirmed with the Resident Site Staff that 10 nos. of vibratory pokers, 3 nos. of concrete pump trucks and 3 nos. of generators were in operation at Tunnel Portion 5, Top Slab 6 from 2300hrs on 09 May 2017 to 0408hrs on 10 May 2017 while 9 nos. of concrete trucks were in operation at around 0320hrs on 10 May 2017.</p> <p>2 nos. of vibratory pokers, 1 no. of concrete truck, 1 no. of concrete pump truck, and 3 nos. of generators were in operation at Tunnel Portion 5, Top Slab 6 from 2300hrs on 12 May 2017 to 2340hrs on 12 May 2017.</p> <p>According to the RSS site information, 10 nos. of vibratory pokers, 3 nos. of concrete pump trucks and 3 nos. of generator were in operation at Tunnel Portion 5, Top Slab 6 from 2300hrs on 09 May 2017 to 0408hrs on 10 May 2017 while 9 nos. of concrete trucks were in operation at around 0320hrs on 10 May 2017 and the above construction operations could not comply with the item 3a - PME requirement under the Construction Noise Permit GW-RS1297-16. In response to the information provided by the RSS/ IEC on 11 May 2017, ad-hoc inspection was conducted by the Environmental Team on 13 May 2017 around 00:40 hrs. No construction operation and no PME deployment was observed at the time of inspection.</p> <p>According to the RSS site information, 2 nos. of vibratory pokers, 1 no. of concrete pump truck, and 3 nos. of generators were in operation at Tunnel Portion 5, Top Slab 6 from 2300hrs on 12 May 2017 to 2340hrs on 12 May 2017 and could not comply with the item 3a - PME requirement under Construction Noise Permit GW-RS1297-16. In response to the information provided by the RSS/ IEC on 15 May 2017, ad-hoc inspection was conducted by the Environmental Team on 19 May</p>	





Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>2017 around 22:20hrs. 2 nos. of concrete truck, 1 no. of concrete pump truck were observed in operation at the time of inspection and relevant CNP GW-RS0334-17 was in place.</p> <p>Notwithstanding the above, in view of the identified non-conformance, the Contractor of HK/2009/02 was requested to implement the following rectification measures to ensure the strict construction noise permit compliance including i) fully review Construction Noise Permit in force and the tentative construction operations to ensure the strict Construction Noise Permit compliance under Noise Control Ordinance, ii) fully review 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 and iii) review the construction sequence and schedule to ensure the construction operations and PME are operated in accordance to relevant Construction Noise Period within the specified allowable period. The Contractor of HK/2009/02 is also recommended to provide briefing and training session to site staffs to enhance the site awareness and understanding on relevant construction noise permit(s) requirement during restricted hours.</p> <p>The ET/IEC/RSS will maintain ad hoc checking on the construction operations under Contract HK/2009/02 during restricted hours and report relevant findings, if any, accordingly.</p>	



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
EPD complaint Case (CASE Ref: N/A) dated 23 May 2017	23 May 2017	An EPD complaint referred to ET on 25 May 2017	Construction Site under Contract HK/2009/02	Concreting works under Contract No. CEDD HK/2009/02 was carried out with crawler cranes, 10-12 vibratory pokers, and 7 concrete lorry mixers in the morning on 21 May 2017 without a valid CNP. Also, at 15:30 on 21 May 2017, 9 vibratory pokers and 7 concrete lorry mixers were observed in operation. These works were suspected to contravene the Noise Control Ordinance (NCO).	<p>An EPD complaint was referred to the ET on 25 May 2017 (CASE Ref: N/A). The complainant reported that concreting works under Contract No. CEDD HK/2009/02 was carried out with crawler cranes, 10-12 vibratory pokers, and 7 concrete lorry mixers in the morning on 21 May 2017 without a valid CNP. Also, at 15:30 on 21 May 2017, 9 vibratory pokers and 7 concrete lorry mixers were observed in operation. These works were suspected to contravene the Noise Control Ordinance (NCO).</p> <p>ET confirmed with the Resident Site Staff that 12 nos. of vibratory pokers were operated at Tunnel Portion 5 from 0730hrs to 1740hrs on 21 May 2017. 3 nos. of crawler cranes were operated at Tunnel Portion 5 from 0800hrs to 0915hrs on 21 May 2017. 3 nos. of crawler cranes were operated at Tunnel Portion 5 from 0915hrs to 1030hrs on 21 May 2017. 4 nos. of concrete pump trucks were operated at Tunnel Portion 5 from 0750hrs to 1650hrs on 21 May 2017. 4 nos. of generators were operated at Tunnel Portion 5 from 0730hrs to 1740hrs on 21 May 2017. 7 nos. of concreting trucks were operated at intervals between the time period of 0730hrs to 1740hrs on 21 May 2017.</p> <p>According to the RSS site information, the following PME were operated on 21 May 2017, i) 12 nos. of vibratory pokers were operated at Tunnel Portion 5 from 0730hrs to 1740hrs; ii) 3 nos. of crawler cranes were operated at Tunnel Portion 5 from 0800hrs to 0915hrs; iii) 3 nos. of crawler cranes were operated at Tunnel Portion 5 from 0915hrs to 1030hrs on 21 May 2017; iv) 4 nos. of concrete pump trucks were operated at Tunnel Portion 5 from 0750hrs to 1650hrs; v) 4 nos. of generators were operated at Tunnel Portion 5 from 0730hrs to 1740hrs ;) 7 nos. of concreting trucks were</p>	Investigation report submitted to EPD on 02 June 2017.



Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					<p>operated at intervals between the time period of 0730hrs to 1740hrs on 21 May 2017 and the above construction operations could not comply with the item 3a - PME requirement under the Construction Noise Permit GW-RS334-17.</p> <p>EPD notification on the cancellation of the Construction Noise Permits GW-RS0334-17 and Construction Noise Permit GW-RS1297-16 was received by the Environmental Team on 26 May 2017. Ad hoc inspection was conducted by the Environmental Team on 26 May 2017 around 2230hrs and on 28 May 2017 around 1520hrs and no construction works and no operation of PME was observed at the concerned site Portion 5 at the time of inspections. Notwithstanding the above, in view of the identified non-conformance, the Contractor of HK/2009/02 was requested to implement the following rectification measures to ensure the strict construction noise permit compliance including i) fully review Construction Noise Permit in force and the tentative construction operations to ensure the strict Construction Noise Permit compliance under Noise Control Ordinance, ii) fully review 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 and iii) review the construction sequence and schedule to ensure the construction operations and PME are operated in accordance to relevant Construction Noise Period within the specified allowable period. The Contractor of HK/2009/02 is also recommended to provide briefing and training section to site staffs to enhance the site awareness and understanding on relevant construction noise permit(s) requirement during restricted hours.</p>	





***Appendix 10.1***

*Construction Programme of Individual Contracts*

Contract No. HK/2009/01

Wan Chai Development Phase II – Central -Wan Chai Bypass at  
Hong Kong Convention and Exhibition Centre

**Construction Activities for Three Months Rolling**

Construction Activities	May 2017	June 2017	July 2017
Reinstatement of Amenity Area			
Road and Drain Works			

[illegible]

[illegible]



	Milestone					Date	Revision	Checked	Approved
	Critical Milestones						Rev. Programme (08-Apr-...		
	Current Works								
	Critical Works								
	Remaining Level of Effort								
<b>CHUN WO - CRGL JOINT VENTURE</b>		<b>CEDD CONTRACT NO. HK/2009/02 WD II - Central Wanchai Bypass at Wan Chai East (Contract 2) 3-MONTH ROLLING PROGRAMME (dd 20-Apr-17)</b>							



[illegible]

- ◆ Milestone
- ◆ Critical Milestones
- Current Works
- Critical Works
- Remaining Level of Effort

**CEDD CONTRACT NO. HK/2009/02**  
**WD II - Central Wanchai Bypass at Wan Chai East (Contract 2)**  
**3-MONTH ROLLING PROGRAMME (dd 20-Apr-17)**

[illegible]

- ◆ Milestone
- ◆ Critical Milestones
- Current Works
- Critical Works
- Remaining Level of Effort

**CEDD CONTRACT NO. HK/2009/02**  
**WD II - Central Wanchai Bypass at Wan Chai East (Contract 2)**  
**3-MONTH ROLLING PROGRAMME (dd 20-Apr-17)**

[illegible]



[illegible]

[illegible]

[illegible]



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

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Activity ID	Activity Name	Remaining Dur	Early Start	Early Finish	Total Float	Activity % Complete	Apr	May	Jun	Jul	Aug
HK/2012/08 Works Programme Rev.10(DD 31 March 2017)											
Works for Section Completion											
Construction											
Section II A - CWB Tunnel & Slip Road Structures and Facilities											
CWB D - Slip Road 1 - Trough / Retaining Wall											
CWB D - Slip Road 1 - Trough/Retaining Wall Structure											
SIIA12788	Sec II A - CWB SR1 Trough & RW: jet grout for seepage at SR1 trough	27	11-Mar-17 A	26-Apr-17	48	0%					
SIIA12800	Sec II A - CWB SR1 Trough & RW: Trough Structure - Base Slab & Wall (bay 1)	15	23-May-17	06-Jun-17	59	0%					
SIIA13720	Sec II A - CWB SR1 Trough & RW: Trough Structure -Base Slab & Wall (bay 2)	15	08-May-17	22-May-17	48	0%					
SIIA13740	Sec II A - CWB SR1 Trough & RW: Trough Structure - Base Slab & Wall (bay 3)	15	14-May-17	28-May-17	48	0%					
SIIA13800	Sec II A - CWB SR1 Trough & RW: Retaining Walls RW3 & RW4 (bay 1)	16	29-May-17	13-Jun-17	48	0%					
SIIA13860	Sec II A - CWB SR1 Trough & RW: Retaining Walls RW3 & RW4 (bay 2)	15	03-Jun-17	17-Jun-17	48	0%					
Section III A - Road A2, A4 & A5											
Roadwork & Utilities - Section 1 (L1806 - L1801)											
SIIIA10280	Sec III A - roadwork and utilities section 1 carriageway - Drainage works (TTA Stage 4A, 4B & 4C)	52	10-Apr-17*	15-Jun-17	15	0%					
SIIIA10290	Sec III A - roadwork and utilities section 1 carriageway - TTA Stage 5	15	26-Jun-17*	13-Jul-17	7	0%					
Roadwork & Utilities - Section 2 (L1810 - L1806)											
SIIIA12470	Sec III A - roadwork and utilities section 2 carriageway - Relocate site access	14	29-Jun-17*	15-Jul-17	8	0%					
Roadwork & Utilities - Section 4 (L1406 - L1401)											
SIIIA12930	Sec III A - roadwork and utilities section 4 carriageway - Drainage works (L1406 -L1401)	59	08-May-17*	17-Jul-17	0	0%					
Roadwork & Utilities - Section 5 (L1411 - L1406)											
SIIIA13150	Sec III A - roadwork and utilities section 5 carriageway - Drainage works (L1411 - L1406)	44	25-May-17*	17-Jul-17	0	0%					
Roadwork & Utilities - Section 6 (L1102 - L1411)											
SIIIA13370	Sec III A - roadwork and utilities section 1 carriageway - Drainage works (Culvert L - L1411)	49	10-May-17*	07-Jul-17	14	0%					
Section V - Remaining At-Grade Road; Remove 2nd Stage ITA											
Roadwork & Utilities											
Section 1 (L1504 - L1900)											
SV12420	Sec V - Roadwork & Utilities Section 1 Carriageway - Drainage Works at MVB North	112	16-Mar-17 A	17-Aug-17	57	0%					
SV12450	Sec V - Roadwork & Utilities Section 1 Carriageway - Gully pipe	109	05-May-17	11-Sep-17	57	0%					
Section 2 (L1510 - L1504)											
SV12600	Sec V - Roadwork & Utilities Section 2 Carriageway - Drainage Works (L1501-L1507, L1406B-L1406A,	82	25-May-17*	30-Aug-17	0	0%					
Section 3 (Culvert L - L1504)											
SIV12760	Sec V - Roadwork & Utilities Section 3 Carriageway - Drainage Works (Culvert L - L1504 & L1406B - L1406C)	51	16-Mar-17 A	06-Jun-17	130	0%					
SIV12800	Sec V - Roadwork & Utilities Section 3 Carriageway - Gully pipe (Culvert L - L1504)	30	07-Jun-17	12-Jul-17	130	0%					
Box Culvert L1 & FRP-L - Bay 8											

Data Date: 31-Mar-17	◆	▼	Current Milestone
	■	■	Actual Work
	■	■	Critical Remaining Work
	■	■	Remaining Work
	■	■	Remaining Level of Effort

Three Months Rolling Programme for Non-CRIII (Apr 2017 to Jun 2017)  
(Ref. to Works Programme Rev.10)

Date	Revision	Checked	Approved
11-May-17			





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

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Activity ID	Activity Name	Remaining Dur	Early Start	Early Finish	Total Float	Activity % Complete	2017				
							Apr	May	Jun	Jul	Aug
Box Culvert L1 & FRP-L - Bay 8 Structure											
CUL11328	Culvert L - bay 8 - construt top slab	12	10-Apr-17*	21-Apr-17	79	0%	<div></div>				
Box Culvert L1 & FRP-L - Bay 8 Others											
CUL11340	Culvert L - bay 8 - backfill above box section	25	03-Jun-17*	03-Jul-17	30	0%			<div></div>		
Section VI D - Area 8B & 10											
WDII Box 1 Construction											
WDII Box 1 Remaining Structure											
WD-C6075	Sec VID -Remaining of Box I: Construct sacarfical wall (2.3m)	11	19-Mar-17 A	10-Apr-17	0	60.71%	<div></div>				
WD-C6080	Sec VID - Remaining of Box I: Construct Wall 13(23m run)	16	07-Mar-17 A	15-Apr-17	8	46.67%	<div></div>				
WD-C6090	Sec VID - Remaining of Box I:Construct 2.5m wall 13	13	11-Apr-17	23-Apr-17	0	0%	<div></div>				
WD-C6120	Sec VID - Remaining of Box I: Blasting and final sink box to -10.0 mPD	2	24-Apr-17	25-Apr-17	0	0%	<div></div>				
WD-C6122	Sec VID - Remaining of Box I: Stiching of 4 bored piles	12	26-Apr-17	07-May-17	0	0%		<div></div>			
WD-C6124	Sec VID - Remaining of Box I: Scaffoding and soffit work at 4 bored piles	10	08-May-17	17-May-17	0	0%		<div></div>			
WD-C6126	Sec VID - Remaining of Box I: Roof rebar and concreting flat roof	8	18-May-17	25-May-17	0	0%		<div></div>			
WD-C6128	Sec VID - Remaining of Box I: Construct remaining roof half joint	7	28-May-17	03-Jun-17	0	0%			<div></div>		
WD-C6130	Sec VID - Remaining of Box I: Waterproofing work of roof	12	04-Jun-17	15-Jun-17	0	0%			<div></div>		
WD-C6140	Sec VID - Backfilling at South of Box I : Backfilling bagged cement to -6.5mPD	5	26-Apr-17	30-Apr-17	6	0%		<div></div>			
WD-C6160	Sec VID - Backfilling at South of Box I : Remove all ELS shoring and cut off P7 to P58 at -6.5mPD	18	01-May-17	18-May-17	6	0%		<div></div>			
WD-C6200	Sec VID - Backfilling at South of Box I : Remove SIC coarse screen hood	11	19-May-17	29-May-17	6	0%		<div></div>			
WD-C6220	Sec VID - Backfilling at South of Box I : Install pipe cap for box beam	4	30-May-17	02-Jun-17	6	0%			<div></div>		
WD-C6222	Sec VID - Backfilling at South of Box I : Stiching of H-pile	4	03-Jun-17	06-Jun-17	6	0%			<div></div>		
WD-C6223	Sec VID - Backfilling at South of Box I : Bagged lighweight concrete btw cap & seawall	6	07-Jun-17	12-Jun-17	6	0%			<div></div>		
WD-C6240	Sec VID - Backfilling at South of Box I : Install box beam	4	13-Jun-17	16-Jun-17	6	0%			<div></div>		
WD-C6250	Sec VID - Backfilling at South of Box I : Place 400mm thk precast cover to SIC	4	17-Jun-17	20-Jun-17	6	0%			<div></div>		
WD-C6255	Sec VID - Backfilling at South of Box I : Bagged lightweight concrete btw precast cover and box beam	4	21-Jun-17	24-Jun-17	6	0%			<div></div>		
WD-C6275	Sec VID - Backfilling at North of Box I : Type C concrete block at Box I half joint	4	19-May-17	22-May-17	13	0%		<div></div>			
WD-C6295	Sec VID - Backfilling at North of Box I : Install ceramsite concrete blocks	8	23-May-17	30-May-17	13	0%		<div></div>			
WD-C6315	Sec VID - Backfilling at North of Box I : Type A concrete block at roof of Box 1/2	3	31-May-17	02-Jun-17	13	0%			<div></div>		
WD-C6320	Sec VI D - Public fill on the top of Box I	15	16-Jun-17	30-Jun-17	0	0%			<div></div>		
Section IV - Slip Road 3											
Roadwork & Utilities											
Section 2 ( L2301 - L2103)											
SIV11940	Sec IV - Roadwork & Utilities at SR3 Section 2 Carriageway - Drainage Works	35	20-Apr-17*	02-Jun-17	0	0%	<div></div>				
SIV11960	Sec IV - Roadwork & Utilities at SR3 Section 2 Carriageway - Watermain	10	28-Jun-17	10-Jul-17	161	0%				<div></div>	
SIV12000	Sec IV - Roadwork & Utilities at SR3 Section 2 Carriageway - Gully pipe	21	03-Jun-17	27-Jun-17	161	0%			<div></div>		
Section VII - Remainder Works											
Promenade Seawall Parapet Construction											
SVII10400	Sec VII - construct block seawall mass concrete coping & backfill to pavement formation	50	15-Jun-17*	12-Aug-17	13	0%			<div></div>		
Section VIII - Landscape Softworks											
Soft Landscaping Works											













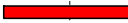












中國建築-利達聯營  
CHINA STATE - LEADER JOINT VENTURE

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	Activity % Complete	2017				
							Apr	May	Jun	Jul	Aug
SVIII10040	Sec VIII - Trees Planting	118	31-Mar-17	24-Aug-17	0	0%					
Section X - Protection & Preservation of Trees											
Soft Landscaping Works											
SX10020	Sec X - Protection & Preservation of Trees	234	31-Jan-13 A	19-Nov-17	0	85.66%					





Total		1791d	21-Mar-13 A	10-Mar-18
DWP-07 - (6) - Update Progress As of 20 May 17		1791d	21-Mar-13 A	10-Mar-18
Works in KD2		93d	06-Mar-17 A	04-Jul-17
Works in TS3-East		93d	06-Mar-17 A	04-Jul-17
Removal of Temporary Reclamation at TS3(E)		93d	06-Mar-17 A	04-Jul-17
TS3E Remaining Works & TS3E/TS3W, TS3E/TS2 Sitiching Works		93d	06-Mar-17 A	04-Jul-17
West Bound Tunnel (W/B)		41d	21-May-17	30-Jun-17
Outstanding Reinforced Concrete Works		41d	21-May-17	30-Jun-17
A6580	Joint Site Walk	5d	21-May-17	25-May-17
A6590	Handover Date	1d	30-Jun-17	30-Jun-17
Stitching of TS2 & TS3E (5.0 m Tunnel Length for Base Slab, Roof Slab, Approx. 15 m length for OT		40d	21-May-17	29-Jun-17
A6650	TS2/TS3E OHVD (Hindrance: Falsework Erection and Rebar Lifting) - 10 days	23d	21-May-17	12-Jun-17
A6660	Falsework Removal for OHVD - 7 days	7d	23-Jun-17	29-Jun-17
Profile Barrier and Maintenance Walkway		8d	21-May-17	28-May-17
A6700	Install Precast Concrete Covers on Cable Trough (2 X 90m)	8d	21-May-17	28-May-17
East Bound Tunnel (E/B)		93d	06-Mar-17 A	04-Jul-17
Outstanding Reinforced Concrete Works		93d	06-Mar-17 A	04-Jul-17
A6960	Joint Site Walk	5d	29-Jun-17	03-Jul-17
A6970	Handover Date	1d	04-Jul-17	04-Jul-17
Stitching of TS2 & TS3E (5.0 m Length for Base Slab, Roof Slab, Approx. 15 m length for OHVD)		87d	06-Mar-17 A	28-Jun-17
A6860	TS2/TS3E OHVD (Hindrance: Falsework Erection and Rebar Lifting) - 10 days	10d	06-Mar-17 A	11-Jun-17
A6870	Falsework Removal for OHVD - 7 days	7d	22-Jun-17	28-Jun-17
Works in KD7		81d	23-Mar-17 A	19-Jun-17
Works in TS3-West		81d	23-Mar-17 A	19-Jun-17
Tunnel Structure		81d	23-Mar-17 A	19-Jun-17
Skin Wall Removal Works between TS4/TS3W and Shaft D Closure		81d	23-Mar-17 A	19-Jun-17
A2590	Skin Wall Removal Works between TS4/TS3W - 20 days (2nd stage) - After Tunnel Roof Slab Completion - E/B and W/B	20d	23-Mar-17 A	30-May-17 A
A2600	Construction of Remaining Tunnel Structure between CH. 4260.2- 4265.2 at SOL T100 for Mainline E/B, W/B, SR8	30d	10-May-17 A	19-Jun-17
Works in KD8		127d	31-Mar-17 A	24-Aug-17
TS3W - Remove Temporary Reclamation		127d	31-Mar-17 A	24-Aug-17
Stage 3 - North to East Side (Bay 19 to bay 26)		16d	14-Apr-17 A	29-Apr-17 A
North West D-wall Opening		16d	14-Apr-17 A	29-Apr-17 A
A2730	Vertical cut at Panel DW02 to NA6 (19 nos.)	8d	14-Apr-17 A	20-Apr-17 A
A2740	Horizontal cut at Panel DW02 to NA6 (25 nos.)	8d	21-Apr-17 A	29-Apr-17 A
Stage 4 - West & South Side (Remove Seawall Block Bay Z4-23 & 24, Excavate to -4.35mPD)		76d	31-Mar-17 A	15-Jun-17
West Side		49d	31-Mar-17 A	22-May-17 A
A2790	Remove seawall blocks at Bay Bay Z4-23 to Z4-24 (249 nos.)	5d	31-Mar-17 A	15-May-17 A
A2800	Remove filled material to -7.0mPD (West)	5d	22-Apr-17 A	22-May-17 A
North East Side		48d	19-Apr-17 A	31-May-17 A
A2810	Core D-wall cut holes at Panel W1D1 to W1D32 (128 nos.) (North Side)	14d	19-Apr-17 A	26-Apr-17 A
A2820	Vertical cut at Panel W1D1 to W1D32 (96 nos.) (North Side)	16d	27-Apr-17 A	17-May-17 A
A2830	Horizontal cut at Panel W1D1 to W1D32 (128 nos.) (North Side)	20d	06-May-17 A	31-May-17 A
East Side		64d	20-Apr-17 A	31-May-17 A

Date	Revision	Checked	Approved
20-May-17	DWP-07 (6) - 3 Months Rolling	FS	TL

Activity ID	Activity Name	Original Duration	Start	Finish	2017											
					May			Jun			Jul			Aug		
A2840	Core D-wall cut holes at Panel TZ31 to TZ38 (32 nos.) (East Side)	10d	20-Apr-17 A	26-Apr-17 A	oles at Panel TZ31 to TZ38 (32 nos.) (East Side)											
A2850	Vertical cut at Panel TZ31 to TZ38 (24 nos.) (East Side)	9d	11-May-17 A	24-May-17 A	 Vertical cut at Panel TZ31 to TZ38 (24 nos.) (East Side)											
A2860	Horizontal cut at Panel TZ31 to TZ38 (32 nos.) (East Side)	10d	23-May-17 A	31-May-17 A	 Horizontal cut at Panel TZ31 to TZ38 (32 nos.) (East Side)											
South Side		30d	12-May-17 A	15-Jun-17												
A2870	Remove filled material to -4.35mPD (41,300m3)	30d	12-May-17 A	15-Jun-17	 Remove filled material to -4.35mPD (41,300m3)											
Stage 5 - West & South side (Reove Seawall Block Bay 24 7 25, Excavate to -7.0mPD)		44d	26-Apr-17 A	03-Jul-17												
A2920	Vertical cut at Panel BWD2 to BWD9 (22 nos.) (West Side)	8d	26-Apr-17 A	02-May-17 A	cal cut at Panel BWD2 to BWD9 (22 nos.) (West Side)											
A2930	Horizontal cut at Panel BWD2 to BWD9 (29 nos.) (West Side)	8d	06-May-17 A	21-May-17 A	 Horizontal cut at Panel BWD2 to BWD9 (29 nos.) (West Side)											
A2880	Remove seawall blocks at Bay 24, 25 (264 nos.) (South West)	6d	21-May-17 A	21-Jun-17	 Remove seawall blocks at Bay 24, 25 (264 nos.) (South West)											
A2890	Remove seawall blocks at Bay 2 to 4 (550 nos.) (South East)	11d	16-Jun-17	26-Jun-17	 Remove seawall blocks at Bay 2 to 4 (550 nos.) (South East)											
A2900	Remove filled material to -7.0mPD (South)	7d	27-Jun-17	03-Jul-17	 Remove filled material to -7.0mPD (South)											
Stage 6 - West & South Side (Saw Cut D-wall + Shaft D)		70d	12-Apr-17 A	27-Jul-17												
A2950	Core D-wall cut holes at PanelW2D1 to W2D18 (72 nos.) (South West)	9d	12-Apr-17 A	04-Jul-17							I Core D-wall cut holes at PanelW2D1 to W2D18 (72 nos.) (South West)					
A2940	Remove fill material to -7.0mPD around shaft D	5d	23-Apr-17 A	26-Apr-17 A	erial to -7.0mPD around shaft D											
A2960	Vertical cut at Panel W2D1 to W2D18 (54 nos.) (South West)	18d	26-Apr-17 A	04-Jul-17							I Vertical cut at Panel W2D1 to W2D18 (54 nos.) (South West)					
A2970	Horizontal cut at Panel W2D1 to W2D18 (72 nos.) (South West)	18d	04-Jul-17	21-Jul-17							 Horizontal cut at Panel W2D1 to W2D18 (72 nos.) (South West)					
A2980	Core D-wall cut holes at Panel W2D23 to W2D34 (50 nos.) (South East)	10d	04-Jul-17	13-Jul-17							 Core D-wall cut holes at Panel W2D23 to W2D34 (50 nos.) (South East)					
A2990	Vertical cut at Panel W2D23 to W2D34 (38 nos.) (South East)	13d	08-Jul-17	20-Jul-17							 Vertical cut at Panel W2D23 to W2D34 (38 nos.) (South East)					
A3000	Horizontal cut at Panel W2D23 to W2D34 (50 nos.) (South East)	13d	15-Jul-17	27-Jul-17							 Horizontal cut at Panel W2D23 to W2D34 (50 nos.) (Sc					
Stage 7 - West & South Side (Saw Cut Shaft D, Excavate to -7.0mPD at SR8)		70d	26-Apr-17 A	03-Aug-17												
A3010	Vertical cut at Shaft D (14 nos.)	10d	26-Apr-17 A	30-Apr-17 A	cut at Shaft D (14 nos.)											
A3020	Horizontal cut at Shaft D (14 nos.)	5d	28-Apr-17 A	04-May-17 A	Horizontal cut at Shaft D (14 nos.)											
A3030	Remove filled material to -7.0mPD at SR8	7d	28-Jul-17	03-Aug-17							 Remove filled material to -7.0mPD at SR8					
Stage 8 - South East & West Side (Remove Seawall Block Bay Z4-22 to Bay 23, Saw Cut D-wall at SR8)		96d	21-May-17	24-Aug-17												
South West Side		42d	21-May-17	01-Jul-17												
A3040	Remove seawall blocks at Bay Z4-22 to Bay 23 (741 nos.)	15d	21-May-17	04-Jun-17	 Remove seawall blocks at Bay Z4-22 to Bay 23 (741 nos.)											
A3050	Remove filled material to -7.0mPD (South West)	8d	05-Jun-17	12-Jun-17	 Remove filled material to -7.0mPD (South West)											
A3060	Vertical cut at Panel BWD10 to SA7 (26 nos.) (South West)	9d	13-Jun-17	21-Jun-17	 Vertical cut at Panel BWD10 to SA7 (26 nos.) (South West)											
A3070	Horizontal cut at Panel BWD10 to SA7 (37 nos.) (South West)	10d	22-Jun-17	01-Jul-17	 Horizontal cut at Panel BWD10 to SA7 (37 nos.) (South West)											
SR08 - West Wall		21d	04-Aug-17	24-Aug-17												
A3080	Vertical cut at Panel W4D1 to W4D11 (28 nos.) (SR8)	10d	04-Aug-17	13-Aug-17										 Vertical cut at Panel W		
A3090	Horizontal cut at Panel W4D1 to W4D11 (39 nos.) (SR8)	11d	14-Aug-17	24-Aug-17										 H		
SR08 - East Wall		19d	04-Aug-17	22-Aug-17												
A7010	Vertical cut at Panel W4D1 to W4D11 (26 nos.)	9d	04-Aug-17	12-Aug-17										 Vertical cut at Panel W4		
A7020	Horizontal cut at Panel W3D1 to W3D7 (36 nos.)	10d	13-Aug-17	22-Aug-17										 Horiz		
Works in KD6		225d	22-Jan-17 A	15-Jul-17												
Works in SR8 (Open Cut Method)		225d	22-Jan-17 A	15-Jul-17												
SR8 (Zone C) - Ch. 528 to Ch. 368		177d	23-Mar-17 A	05-Jun-17												
Zone C - Tunnel Structure		177d	23-Mar-17 A	05-Jun-17												
200mm Thick OHVD Slab & 400mm Thick Hanger Wall		9d	21-May-17	29-May-17												
Bay C6		9d	21-May-17	29-May-17												
A7570	C6 - Construct OHVD Slab & Hanger Wall	9d	21-May-17	29-May-17	 C6 - Construct OHVD Slab & Hanger Wall											
1.2m Thick Roof Slab		9d	23-Mar-17 A	16-May-17 A												
Bay C6		9d	23-Mar-17 A	16-May-17 A												



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

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

Date	Revision	Checked	Approved
20-May-17	DWP-07 (6) - 3 Months Rolling	FS	TL

Activity ID		Activity Name	Original Duration	Start	Finish	2017											
						May			Jun			Jul			Aug		
	A7630	C6 - Partial Roof + Up Stand Wall Construction for Access Shaft	9d	23-Mar-17 A	16-May-17 A	C6 - Partial Roof + Up Stand Wall Construction for Access Shaft											
Removal of Roof Falsework - 10 days Curing			4d	23-May-17 A	27-May-17 A												
	A7680	C6 - Removal of Falsework of Roof slab	4d	23-May-17 A	27-May-17 A	C6 - Removal of Falsework of Roof slab											
Egress Passage - EP01			14d	06-Apr-17 A	24-Apr-17 A												
Bay C3			14d	06-Apr-17 A	24-Apr-17 A												
	A8030	C3 - Dismantle Scaffolding of EP01 Roof Slab - 10 days Curing	14d	06-Apr-17 A	24-Apr-17 A	olding of EP01 Roof Slab - 10 days Curing											
Bay C4			14d	06-Apr-17 A	24-Apr-17 A												
	A8040	C4 - Dismantle Scaffolding of EP01 Roof Slab - 10 days Curing	14d	06-Apr-17 A	24-Apr-17 A	olding of EP01 Roof Slab - 10 days Curing											
Utility Trough			16d	21-May-17	05-Jun-17												
Bay C1			16d	21-May-17	05-Jun-17												
	A7790	RHS / C1 - Backing Concrete	4d	21-May-17	24-May-17	RHS / C1 - Backing Concrete											
	A7800	RHS / C1 - Profile Barrier	4d	25-May-17	28-May-17	RHS / C1 - Profile Barrier											
	A7770	LHS / C1 - Backing Concrete	4d	29-May-17	01-Jun-17	LHS / C1 - Backing Concrete											
	A7780	LHS / C1 - Profile Barrier	4d	02-Jun-17	05-Jun-17	LHS / C1 - Profile Barrier											
Bay C2			16d	21-May-17	05-Jun-17												
	A7830	RHS / C2 - Backing Concrete	4d	21-May-17	24-May-17	RHS / C2 - Backing Concrete											
	A7840	RHS / C2 - Profile Barrier	4d	25-May-17	28-May-17	RHS / C2 - Profile Barrier											
	A7810	LHS / C2 - Backing Concrete	4d	29-May-17	01-Jun-17	LHS / C2 - Backing Concrete											
	A7820	LHS / C2 - Profile Barrier	4d	02-Jun-17	05-Jun-17	LHS / C2 - Profile Barrier											
Bay C3			16d	21-May-17	05-Jun-17												
	A7870	RHS / C3 - Backing Concrete	4d	21-May-17	24-May-17	RHS / C3 - Backing Concrete											
	A7880	RHS / C3 - Profile Barrier	4d	25-May-17	28-May-17	RHS / C3 - Profile Barrier											
	A7850	LHS / C3 - Backing Concrete	4d	29-May-17	01-Jun-17	LHS / C3 - Backing Concrete											
	A7860	LHS / C3 - Profile Barrier	4d	02-Jun-17	05-Jun-17	LHS / C3 - Profile Barrier											
Bay C4			16d	21-May-17	05-Jun-17												
	A7910	RHS / C4 - Backing Concrete	4d	21-May-17	24-May-17	RHS / C4 - Backing Concrete											
	A7920	RHS / C4 - Profile Barrier	4d	25-May-17	28-May-17	RHS / C4 - Profile Barrier											
	A7890	LHS / C4 - Backing Concrete	4d	29-May-17	01-Jun-17	LHS / C4 - Backing Concrete											
	A7900	LHS / C4 - Profile Barrier	4d	02-Jun-17	05-Jun-17	LHS / C4 - Profile Barrier											
Bay C5			16d	21-May-17	05-Jun-17												
	A7950	RHS / C5 - Backing Concrete	4d	21-May-17	24-May-17	RHS / C5 - Backing Concrete											
	A7960	RHS / C5 - Profile Barrier	4d	25-May-17	28-May-17	RHS / C5 - Profile Barrier											
	A7930	LHS / C5 - Backing Concrete	4d	29-May-17	01-Jun-17	LHS / C5 - Backing Concrete											
	A7940	LHS / C5 - Profile Barrier	4d	02-Jun-17	05-Jun-17	LHS / C5 - Profile Barrier											
SR8 (Zone B) - Ch.385.000 to Ch.317.500 - (Inside Victoria Park to Tunnel Portal)			56d	09-May-17 A	15-Jul-17												
SR8 (Zone B) Tunnel - ELS / CCT / BF Works ( 7 Bays Ch. 385.000 to Ch.317.500)			56d	09-May-17 A	15-Jul-17												
Portal Structure			56d	09-May-17 A	15-Jul-17												
OHVD			23d	09-May-17 A	12-Jun-17												
Bay B1 + B2 (CH338.625 to CH368)			23d	09-May-17 A	12-Jun-17												
	SR8_ZB_1390	Zone B - OHVD - Erect Scaffolding & Soffit Formwork	6d	09-May-17 A	15-May-17 A	Zone B - OHVD - Erect Scaffolding & Soffit Formwork											
	SR8_ZB_1400	Zone B - Redrill & Install Rebar on Soffit of Roof Slab	10d	16-May-17 A	25-May-17 A	Zone B - Redrill & Install Rebar on Soffit of Roof Slab											
	SR8_ZB_1440	Zone B - OHVD Place Concrete to OHVD Slab & Wall	1d	24-May-17	24-May-17	Zone B - OHVD Place Concrete to OHVD Slab & Wall											
	SR8_ZB_1450	Zone B - OHVD Curing Period for OHVD Slab	10d	25-May-17	06-Jun-17	Zone B - OHVD Curing Period for OHVD Slab											
	SR8_ZB_1420	Zone B - OHVD - Rebar Fixing for Slab & Hanger Wall of OHVD	4d	26-May-17 A	30-May-17 A	Zone B - OHVD - Rebar Fixing for Slab & Hanger Wall of OHVD											



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- Actual Work
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- Milestone

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

Date	Revision	Checked	Approved
20-May-17	DWP-07 (6) - 3 Months Rolling	FS	TL

Activity ID	Activity Name	Original Duration	Start	Finish	2017											
					May			Jun			Jul			Aug		
SR8_ZB_1430	Zone B - OHVD Erect Hanger Wall Formwork for OHVD	2d	31-May-17 A	23-May-17												
SR8_ZB_1460	Zone B - OHVD Remove Soffit Formwork & Scaffolding	5d	07-Jun-17	12-Jun-17												
Utility Trough		28d	13-Jun-17	15-Jul-17												
Left Hand Side		21d	21-Jun-17	15-Jul-17												
SR8_ZB_1570	Zone B - U trough (LHS) Bay 3	7d	21-Jun-17	28-Jun-17												
SR8_ZB_1560	Zone B - U trough (LHS) Bay 2	7d	29-Jun-17	07-Jul-17												
SR8_ZB_1550	Zone B - U trough (LHS) Bay 1	7d	08-Jul-17	15-Jul-17												
Right Hand Side		21d	13-Jun-17	07-Jul-17												
SR8_ZB_1600	Zone B - U trough (RHS) Bay 3	7d	13-Jun-17	20-Jun-17												
SR8_ZB_1590	Zone B - U trough (RHS) Bay 2	7d	21-Jun-17	28-Jun-17												
SR8_ZB_1580	Zone B - U trough (RHS) Bay 1	7d	29-Jun-17	07-Jul-17												
Pump House		52d	21-May-17	11-Jul-17												
Remining Works inside Pump Sump E		52d	21-May-17	11-Jul-17												
SR8_ZB_1890	Steel Works Installation inside Pump Sump E	45d	21-May-17	04-Jul-17												
SR8_ZB_1900	Installation Manhole Covers for Pump Sump E	7d	05-Jul-17	11-Jul-17												
SR8 (Zone A) - Ch 317.500 to Ch 210.000 - U-Structure & Slab (Victoria Park)		28d	22-Jan-17 A	26-Jun-17												
RC CCT & Backfill Ch317.5000 to Ch240.000		28d	22-Jan-17 A	26-Jun-17												
Structure		28d	22-Jan-17 A	26-Jun-17												
Utility Through		28d	22-Jan-17 A	26-Jun-17												
SR8_ZA_1260	Zone A - Utility Trough for Zone A (CH240 to CH317)	28d	22-Jan-17 A	26-Jun-17												
Works in KD9 (Include Re-provisioning Works of KD4,KD5)		330d	12-Dec-16 A	12-Oct-17												
External Works Under KD9		330d	12-Dec-16 A	12-Oct-17												
Tsing Fung St - RW & Subway Extension & Toe Wall at Hing Fat St		172d	01-Mar-17 A	07-Sep-17												
Retaining Wall + Toe Wall at Hing Fat Street		172d	01-Mar-17 A	07-Sep-17												
Retaining Wall RW8D		58d	01-Mar-17 A	02-Jun-17												
Works along RW8D During Reopen Hing Fat Street Footpath to Public		58d	01-Mar-17 A	02-Jun-17												
A4910	Close slow lane of HFS to cut coping of RW8D and subway	20d	01-Mar-17 A	26-Apr-17 A												
A4920	Lay temp bituminous pavement for road diversion (from RW8D to Subway)	3d	22-May-17	24-May-17												
A4940	Install steel vehicle parapet on RW8C, subway and RW8D	10d	22-May-17	02-Jun-17												
Retaining Walls RW8E, Sign Footings & Sewer Pipe (SK266G, SK539C, SK375B)		127d	19-Apr-17 A	07-Sep-17												
A4620	Excavate and lay blinding layer of RW8E ( Including ELS )	14d	19-Apr-17 A	15-May-17 A												
A4650	MH2-70 to MH2-71(150 dia. foul sewer pipe)	12d	02-May-17 A	13-May-17 A												
A4670	MH2-72 to MH2-73	12d	15-May-17 A	27-May-17 A												
A4630	Construction of RW8E and toe wall (2+1 bays, 32m long)	45d	16-May-17 A	27-Jun-17												
A4880	DS16 - Sign Frame Installation	14d	21-May-17	03-Jun-17												
A4640	Backfill and subsoil drainage system behind RW8E	14d	28-Jun-17	14-Jul-17												
A4680	MH 2-73 to Extg MH (on footpath)	12d	15-Jul-17	28-Jul-17												
A4690	OHVD and 5m CCTV high mast footing on footpath	14d	29-Jul-17	14-Aug-17												
A4900	TCSS Drawpit and ducts	21d	15-Aug-17	07-Sep-17												
Storm Drain Pipe behind RW8C along Tsing Fung Street (SK547A)		28d	15-May-17 A	23-Jun-17												
A4540	Modified MH shaft A2 at extg box culvert near MH TFS-04A	14d	15-May-17 A	30-May-17 A												
A6410	MHTFS-06 to extg MH A3 (at slow lane of TFS)	14d	22-May-17	07-Jun-17												
A8050	MHTFS-05 to extg MHA3 (gully)	14d	08-Jun-17	23-Jun-17												
Sign Footings at Victoria Park		75d	22-May-17	18-Aug-17												



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Date	Revision	Checked	Approved
20-May-17	DWP-07 (6) - 3 Months Rolling	FS	TL



Activity ID	Activity Name	Original Duration	Start	Finish	2017											
					May			Jun			Jul			Aug		
A4570	Construction of 5m CCTV, AID, OHVD, TSG, luminance meter at verge inside VP	60d	22-May-17*	01-Aug-17												Construction of 5m CCTV, AID, OHVD, TSG,
A4580	All drawpits (ATC, E&M and lighting) and ductings at verge inside VP (SK375B)	60d	09-Jun-17	18-Aug-17												All drawpits (
Boundary Fence, Type 2 Railing Footings & Fence Wall From RW8C to Zone B		267d	12-Dec-16 A	12-Oct-17												
A8070	Fence wall between BGO and Zone A (78.2m)	90d	12-Dec-16 A	01-Aug-17												Fence wall between BGO and Zone A (78.2m
A4700	Construction of boundary fence from RW8C toe wall to 15m CCTV high mast (approx. 53m)	50d	19-Dec-16 A	20-Jun-17												Construction of boundary fence from RW8C toe wall to 15m CCTV high mast (approx. 53m)
A4710	Modification/ Re-construction of extg type 2 railing footing in front of RW8C (approx. 40m)	60d	10-Feb-17 A	30-Aug-17												
A4720	Construction of boundary fence from 15m CCTV high mast to Zone A at CH210 (approx. 50m)	50d	21-Jun-17	18-Aug-17												Construction
A4730	Construction of boundary fence near nursery compound (approx. 167m, after completion of MH 2-73)	90d	27-Jun-17	12-Oct-17												
Other Storm, Sewerage Pipe & Irrigation System in VP (SK336E, SK539D)		170d	21-Feb-17 A	05-Sep-17												
A4770	MH2-71 to TFS-06 via MH2-72 and MH 2-73 (300 dia. concrete pipe)	40d	21-Feb-17 A	26-Jun-17												MH2-71 to TFS-06 via MH2-72 and MH 2-73 (300 dia. concrete pipe)
A4740	FMH-B01 to Extg 1-40 (5 MHs and 7 foul sewer PE pipeline)	90d	22-May-17	05-Sep-17												
A4970	Irrigation Main Laying	14d	27-Jun-17	10-Jul-17												Irrigation Main Laying
A4760	MHB (beside pump sump E) to MH2-70 (300 dia. stormwater pipeline)	14d	27-Jun-17	13-Jul-17												MHB (beside pump sump E) to MH2-70 (300 dia. stormwater pipeline)
A4980	Water Points Installation	14d	11-Jul-17	24-Jul-17												Water Points Installation
Preparation Works before Implementation TTA at Central Median		172d	02-Feb-17 A	20-Aug-17												
A4795	Excavate to formation level and lay subbase, fix K1 kerb along TFS	14d	02-Feb-17 A	05-Jun-17												Excavate to formation level and lay subbase, fix K1 kerb along TFS
A4890	Laying Ducting Cross Access Ramp Down to Zone C SR8 Tunnel	60d	21-May-17	19-Jul-17												Laying Ducting Cross Access Ramp Down to Zone C SR8 Tunnel
A4930	Shifting Site Entrance 6A	4d	20-Jul-17	23-Jul-17												Shifting Site Entrance 6A
A4950	Laying Ducting in New SR8 Approaching Island	14d	24-Jul-17	06-Aug-17												Laying Ducting in New SR8 Approach
A5020	Forming Island Including Sub-base & Kerbing	14d	07-Aug-17	20-Aug-17												Forming
Reverting Traffic for IEC, VP Rd & TF St & Seawall Reinstatement (KD9)		109d	27-Mar-17 A	27-Aug-17												
TTA Revert Traffic Back to Original Alignment		109d	27-Mar-17 A	27-Aug-17												
Preparation Works - Backfill of Zone C to Top of Tunnel Structure		56d	27-Mar-17 A	10-Jun-17												
A5790	Waterproofing & Screeding to Roof	4d	27-Mar-17 A	22-May-17 A												Waterproofing & Screeding to Roof
A5800	Load Transfer for King Post	6d	05-Apr-17 A	25-May-17 A												Load Transfer for King Post
A5820	Zone C - Bay C1 to C5 Backfill to Formation & Remove Struts SL1 to SL3 (Up to +2.5mPD)	44d	10-Apr-17 A	10-Jun-17												Zone C - Bay C1 to C5 Backfill to Formation & Remove Struts SL1 to SL3 (Up to +2.5mPD)
A5780	Curing to Roof Slab of Zone C	3d	17-May-17 A	19-May-17 A												Curing to Roof Slab of Zone C
A5810	Make Good Box-out Left by King Post	2d	26-May-17 A	27-May-17 A												Make Good Box-out Left by King Post
East Bound TTA - IEC East Bound, Victoria Park Road & Footpath along Sea Side		78d	11-Jun-17	27-Aug-17												
Stage 1 - IEC (East Bound)		36d	11-Jun-17	16-Jul-17												
A5240	IEC/EB - Construct Footing of Sign Gantry & Wing Wall	17d	11-Jun-17	27-Jun-17												IEC/EB - Construct Footing of Sign Gantry & Wing Wall
A5260	IEC/EB - Backfill to Formation Level (Approx. 2.2mPD to +3.9mPD)	5d	11-Jun-17	15-Jun-17												IEC/EB - Backfill to Formation Level (Approx. 2.2mPD to +3.9mPD)
A5270	IEC/EB - Reconstruct Wing Wall of Abutment M (approx. 6m)	10d	11-Jun-17	20-Jun-17												IEC/EB - Reconstruct Wing Wall of Abutment M (approx. 6m)
A5280	IEC/EB - Cast Central Median	21d	11-Jun-17	01-Jul-17												IEC/EB - Cast Central Median
A5310	IEC/EB - Remove Temporary Utilities Supports at IEC	3d	11-Jun-17	13-Jun-17												IEC/EB - Remove Temporary Utilities Supports at IEC
A3285	IEC/EB - Cut and Remove Pipe Pile (2m Below Ground Level)	7d	11-Jun-17	17-Jun-17												IEC/EB - Cut and Remove Pipe Pile (2m Below Ground Level)
A5320	IEC/EB - Reinstate Existing Drainage System	14d	14-Jun-17	27-Jun-17												IEC/EB - Reinstate Existing Drainage System
A3286	IEC/EB - Cut and Remove Sheet Pile (2m Below Ground Level)	7d	18-Jun-17	24-Jun-17												IEC/EB - Cut and Remove Sheet Pile (2m Below Ground Level)
A5290	IEC/EB - Street Lighting Cable Duct & Poles	3d	25-Jun-17	27-Jun-17												IEC/EB - Street Lighting Cable Duct & Poles
A5250	IEC/EB - Install A Frame of Sign Gantry	4d	28-Jun-17	01-Jul-17												IEC/EB - Install A Frame of Sign Gantry
A5300	IEC/EB - TOC of Street Lightings	2d	28-Jun-17	29-Jun-17												IEC/EB - TOC of Street Lightings
A5330	IEC/EB - Backfill Drainage Trench Up to Formation (+2.5mPd to +3.9mPD)	5d	28-Jun-17	02-Jul-17												IEC/EB - Backfill Drainage Trench Up to Formation (+2.5mPd to +3.9mPD)
A5340	IEC/EB - Laying Sub-base	2d	03-Jul-17	04-Jul-17												IEC/EB - Laying Sub-base
A5350	IEC/EB - Laying Asphalt Pavement	3d	05-Jul-17	07-Jul-17												IEC/EB - Laying Asphalt Pavement

Activity ID	Activity Name	Original Duration	Start	Finish	2017											
					May			Jun			Jul			Aug		
A5360	IEC/EB - Road Mark & Traffic Signs	3d	08-Jul-17	10-Jul-17									IEC/EB - Road Mark & Traffic Signs			
A5370	IEC/EB - Implement TTA to Divert Traffic to IEC East Bound	1d	16-Jul-17	16-Jul-17									IEC/EB - Implement TTA to Divert Traffic to IEC East Bound			
Stage 2 - Vitoria Park Road		35d	24-Jul-17	27-Aug-17												
A5380	VP Road - Remove Ligth Weight Concrete Ramp	21d	24-Jul-17	13-Aug-17											VP Road - Remove Lig	
A5390	VP Road - Reinstate Pararpet Wall of IEC Bridge	35d	24-Jul-17	27-Aug-17												
A5400	VP Road - Traffic Deck & Footing Removal	14d	24-Jul-17	06-Aug-17											VP Road - Traffic Deck & Footing R	
A5410	VP Road - Cut Pipe Piles	7d	07-Aug-17	13-Aug-17											VP Road - Cut Pipe Pil	
A5420	VP Road - Cut Sheet Piles	7d	14-Aug-17	20-Aug-17											VP Road	
West Bound - IEC West Bound & Tsing Fung Street		78d	11-Jun-17	27-Aug-17												
Stage 1 - IEC (West Bound)		36d	11-Jun-17	16-Jul-17												
A5690	IEC/WB - Cut pipe pile - 1 week	7d	11-Jun-17	17-Jun-17						IEC/WB - Cut pipe pile - 1 week						
A5710	IEC/WB - Removal of pedestrian decking	11d	11-Jun-17	21-Jun-17						IEC/WB - Removal of pedestrian decking						
A3785	IEC/WB - Reconstruct Wing Wall of Abutment M (approx. 6m)	10d	11-Jun-17	20-Jun-17						IEC/WB - Reconstruct Wing Wall of Abutment M (approx. 6m)						
A5700	IEC/WB - Cut sheetpile - 1 week	7d	18-Jun-17	24-Jun-17						IEC/WB - Cut sheetpile - 1 week						
A5720	IEC/WB - Remove temporary utilities support 3 days	3d	22-Jun-17	24-Jun-17						IEC/WB - Remove temporary utilities support 3 days						
A5730	IEC/WB - Backfill up to Formation under Asphalt (from +2.5mPD to +3.9mPD) 5 days	5d	25-Jun-17	29-Jun-17						IEC/WB - Backfill up to Formation under Asphalt (from +2.5mPD to +3.9mPD) 5 days						
A5740	IEC/WB - Subbase Laying 2 days	2d	30-Jun-17	01-Jul-17						IEC/WB - Subbase Laying 2 days						
A5750	IEC/WB - Asphalt (Road Base, Base Course, Wearing Course) 5 days	5d	02-Jul-17	06-Jul-17						IEC/WB - Asphalt (Road Base, Base Course, Wearing Course) 5 days						
A5760	IEC/WB - Road Marking/Traffic Sign 3 days	3d	07-Jul-17	09-Jul-17						IEC/WB - Road Marking/Traffic Sign 3 days						
A5840	IEC/WB - Implement TTM	1d	16-Jul-17	16-Jul-17						IEC/WB - Implement TTM						
Stage 2 - Tsing Fung Street		42d	17-Jul-17	27-Aug-17												
A5850	Decking /Footing Removal - 2 weeks	14d	17-Jul-17	30-Jul-17											Decking /Footing Removal - 2 weeks	
A5880	Light Weight Conc. Ramp Rem. 4 weeks	28d	17-Jul-17	13-Aug-17											Light Weight Conc. Ra	
A5890	Trench Excavation for Towngas - 4 weeks	28d	17-Jul-17	13-Aug-17											Trench Excavation for	
A5860	Cut pipe pile - 1 week	7d	31-Jul-17	06-Aug-17											Cut pipe pile - 1 week	
A5870	Cut sheetpile - 1 week	7d	07-Aug-17	13-Aug-17											Cut sheetpile - 1 week	
A5900	Diversion ofTowngas at TFS - 3 weeks	21d	07-Aug-17	27-Aug-17												
A5910	Backfill up to Formation (from +2.5mPD to +3.9mPD) 5 days	5d	14-Aug-17	18-Aug-17											Backfill up to	
A5920	Installation of Cross Road Duct of street lighting - 3 days	3d	14-Aug-17	16-Aug-17											Installation of Cre	
A5930	K1 kerb installation - 1 week	7d	19-Aug-17	25-Aug-17												
Reinstatement Existing Slopping & Vertical Sea Wall		55d	11-Jun-17	04-Aug-17												
Major Reinstatement Works for Seawall Reinstatement		55d	11-Jun-17	04-Aug-17												
Stage 1 - Removal of Remaining Pipe Pile Wall, Sheet Pile Wall & D-wall		55d	11-Jun-17	04-Aug-17												
A7030	Backfill upto +2.5mPD at all bay of SR8	1d	11-Jun-17	11-Jun-17						Backfill upto +2.5mPD at all bay of SR8						
A7040	Cut pipe pile wall at A1 - A14	14d	12-Jun-17	25-Jun-17						Cut pipe pile wall at A1 - A14						
A7050	Under water cut sheet pile wall (36 nos.)	40d	26-Jun-17	04-Aug-17											Under water cut sheet pile wall (36 nos.)	
Works in Victoria Park (KD4, KD5, KD9)		184d	20-Jan-17 A	29-Aug-17												
Re-Provisioning Works		184d	20-Jan-17 A	29-Aug-17												
Nursery Compound		184d	20-Jan-17 A	29-Aug-17												
Submission		123d	20-Jan-17 A	26-Jun-17												
ABWF Submission		76d	03-Feb-17 A	10-May-17 A												
Material		21d	19-Apr-17 A	10-May-17 A												
VP_NC_1070	ABWF Materail Delivery	21d	19-Apr-17 A	10-May-17 A												ABWF Materail Delivery
Shop Drawing		14d	03-Feb-17 A	03-May-17 A												



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

Date	Revision	Checked	Approved
20-May-17	DWP-07 (6) - 3 Months Rolling	FS	TL

Activity ID		Activity Name		Original Duration	Start	Finish	2017											
							May			Jun			Jul			Aug		
<div></div>	VP_NC_1090	ABWF Shop Drawing - ER Review and Approval		14d	03-Feb-17 A	03-May-17 A	ABWF Shop Drawing - ER Review and Approval											
	E&M Submission		123d	20-Jan-17 A	26-Jun-17													
	Material		123d	20-Jan-17 A	26-Jun-17													
	VP_NC_1140	E&M Issue P.O. / Manufacturing / Fabrication		15d	20-Jan-17 A	21-May-17 A	E&M Issue P.O. / Manufacturing / Fabrication											
	VP_NC_1150	E&M Materail Delivery		30d	22-May-17	26-Jun-17	E&M Materail Delivery											
	Shop Drawing		30d	08-May-17 A	19-Jun-17													
	VP_NC_1170	E&M Shop Drawing - ER Review and Approval		30d	08-May-17 A	19-Jun-17	E&M Shop Drawing - ER Review and Approval											
	Nursery compound		60d	05-Apr-17 A	29-Aug-17													
	A4420	ABWF, Plumbing Works, waterproofing and E&M works		60d	05-Apr-17 A	12-Aug-17	ABWF, Plumbing Works											
	A4470	Lay CWP, FWP and FSP inside NC (inspection by WSD & FSD)		45d	08-Jul-17	29-Aug-17												
	KD11, KD12, KD13, KD18 Establishment Works for Landscape Softworks		1087d	23-Feb-15 A	10-Mar-18													
	KD11 - Section 7A: Portion XIV & XV (Victoria Park Open Space)		885d	23-Feb-15 A	10-Mar-18													
EW_1000	Establishment Works - for Landscape Softworks and transplanted trees in Portion XIV & XV		901d	23-Feb-15 A	10-Mar-18													
KD12 - Section 7B: Portion VI & VII (Reprov. Bowling Green Area)		177d	03-Dec-15 A	22-May-17														
EW_1010	Establishment Works - for Landscape Softworks and transplanted trees in Portion VI & VII		177d	03-Dec-15 A	22-May-17	Establishment Works - for Landscape Softworks and transplanted trees in Portion VI & VII												
KD10 - Preservation and Protection of Trees		1088d	21-Mar-13 A	22-May-17														
PPT_0000	Preservation and Protection of Existing Trees		1088d	21-Mar-13 A	22-May-17	Preservation and Protection of Existing Trees												
KD15 & KD8 - Mooring Components Upkeep (CBTS and ATS)		980d	15-May-14 A	22-May-17														
MAR_3020	Mooring Upkeep at Portion X(10) & XVI(16) - CBTS		979d	15-May-14 A	22-May-17	Mooring Upkeep at Portion X(10) & XVI(16) - CBTS												
Works for Public Works Regional Laboratory (North Lantau) - KD1,KD16,KD17)		1301d	19-Jul-13 A	21-Nov-17														
KD17 - Maintenance and Upkeep of New PWRL (Portion XVII)		1301d	19-Jul-13 A	21-Nov-17														
PWRL_1050	Maintenance/ Upkeep of New PWRL		1301d	19-Jul-13 A	21-Nov-17													



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

Date	Revision	Checked	Approved
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China State Construction Engineering (Hong Kong) Ltd.

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

Activity Name	Start	Finish	2017		
			Apr	May	Jun
Hung Hing Road Resurfacing	1/6/2017	30/6/2017			
Defect works inside tunnel	1/4/2017	30/9/2017			

Activity ID		Activity Name	Original Duration	Start	Finish	2017															
						Apr				May				Jun				Jul			
Total			1791d	21-Mar-13 A	09-Feb-18																
DWP-07 - (6) - Update Progress As of 20 Apr 17			1791d	21-Mar-13 A	09-Feb-18																
Works in KD2			95d	01-Mar-17 A	03-Jun-17																
Works in TS3-East			95d	01-Mar-17 A	03-Jun-17																
Removal of Temporary Reclamation at TS3(E)			95d	01-Mar-17 A	03-Jun-17																
TS3E Remaining Works & TS3E/TS3W, TS3E/TS2 Sitiching Works			95d	01-Mar-17 A	03-Jun-17																
West Bound Tunnel (W/B)			91d	01-Mar-17 A	30-May-17																
Outstanding Reinforced Concrete Works			91d	01-Mar-17 A	30-May-17																
A6570	General Cleaning Works for the Tunnel, CCTV and Pipe WaterJack Cleaning		10d	01-Mar-17 A	07-Apr-17 A	General Cleaning Works for the Tunnel, CCTV and Pipe WaterJack Cleaning															
A6580	Joint Site Walk		5d	20-Apr-17	24-Apr-17	Joint Site Walk															
A6590	Handover Date		1d	30-May-17	30-May-17	Handover Date															
Stitching of TS2 & TS3E (5.0 m Tunnel Length for Base Slab, Roof Slab, Approx. 15 m length for OHVD)			40d	20-Apr-17	29-May-17																
A6650	TS2/TS3E OHVD (Hindrance: Falsework Erection and Rebar Lifting) - 10 days		23d	20-Apr-17	12-May-17	TS2/TS3E OHVD (Hindrance: Falsework Erection and Rebar Lifting) - 10 days															
A6660	Falsework Removal for OHVD - 7 days		7d	23-May-17	29-May-17	Falsework Removal for OHVD - 7 days															
Profile Barrier and Maintenance Walkway			8d	20-Apr-17	27-Apr-17																
A6700	Install Precast Concrete Covers on Cable Trough (2 X 90m)		8d	20-Apr-17	27-Apr-17	Install Precast Concrete Covers on Cable Trough (2 X 90m)															
East Bound Tunnel (E/B)			62d	06-Mar-17 A	03-Jun-17																
Outstanding Reinforced Concrete Works			62d	06-Mar-17 A	03-Jun-17																
A6950	General Cleaning Works for the Tunnel		25d	11-Mar-17 A	23-Mar-17 A	s for the Tunnel															
A6960	Joint Site Walk		5d	29-May-17	02-Jun-17	Joint Site Walk															
A6970	Handover Date		1d	03-Jun-17	03-Jun-17	Handover Date															
Stitching of TS2 & TS3E (5.0 m Length for Base Slab, Roof Slab, Approx. 15 m length for OHVD)			56d	06-Mar-17 A	28-May-17																
A6860	TS2/TS3E OHVD (Hindrance: Falsework Erection and Rebar Lifting) - 10 days		10d	06-Mar-17 A	11-May-17	TS2/TS3E OHVD (Hindrance: Falsework Erection and Rebar Lifting) - 10 days															
A6870	Falsework Removal for OHVD - 7 days		7d	22-May-17	28-May-17	Falsework Removal for OHVD - 7 days															
Profile Barrier and Maintenance Walkway			8d	24-Mar-17 A	31-Mar-17 A																
A6910	Install Precast Concrete Covers on Cable Trough (2 X 90m)		8d	24-Mar-17 A	31-Mar-17 A	recast Concrete Covers on Cable Trough (2 X 90m)															
Works in KD7			81d	04-Mar-17 A	08-Jun-17																
Works in TS3-West			81d	04-Mar-17 A	08-Jun-17																
Tunnel Structure			81d	04-Mar-17 A	08-Jun-17																
Earthwork Backfilling, ELS Removal and Water Recharging			38d	04-Mar-17 A	06-Apr-17 A																
East Portion			38d	04-Mar-17 A	30-Mar-17 A																
A2490	Stage 4 Backfilling~ 25000 m3 (-14mPD~ -7.0 mPD, Bay 2- Bay 4) - 1000 m3 per day		19d	04-Mar-17 A	22-Mar-17 A	0 m3 (-14mPD~ -7.0 mPD, Bay 2- Bay 4) - 1000 m3 per day															
A2520	Stage 5 Backfilling ~ 15000 m3 (-30 mPD ~ -7.0 mPD, Bay 1) ~ 1000 m3 per day		10d	22-Mar-17 A	28-Mar-17 A	kfilling ~ 15000 m3 (-30 mPD ~ -7.0 mPD, Bay 1) ~ 1000 m3 per day															
A2500	Removal of 2nd Layer ELS and Removal of Reprop inside Tunnel (Bay 2- Bay 4)		7d	23-Mar-17 A	26-Mar-17 A	layer ELS and Removal of Reprop inside Tunnel (Bay 2- Bay 4)															
A2510	Closure of wall opening in Bay 1 of CCT (Wall 4 and Wall 5)		14d	23-Mar-17 A	26-Mar-17 A	ening in Bay 1 of CCT (Wall 4 and Wall 5)															
A2530	Removal of 2nd Layer ELS (Bay 1)		5d	29-Mar-17 A	30-Mar-17 A	of 2nd Layer ELS (Bay 1)															
West Portion			6d	10-Mar-17 A	20-Mar-17 A																
A2550	Removal of 2nd Layer ELS - 6 days		6d	10-Mar-17 A	20-Mar-17 A	5 days															
Water Recharge (CNY- 27/1~ 2/2)			1d	31-Mar-17 A	06-Apr-17 A																
A2560	Water Re-charge to ELS Cofferdam		1d	31-Mar-17 A	06-Apr-17 A	Water Re-charge to ELS Cofferdam															
Skin Wall Removal Works between TS4/TS3W and Shaft D Closure			81d	23-Mar-17 A	08-Jun-17																
A2590	Skin Wall Removal Works between TS4/TS3W - 20 days (2nd stage) - After Tunnel Roof Slab Completion - E/B and W/B		20d	23-Mar-17 A	09-May-17	Skin Wall Removal Works between TS4/TS3W - 20 days (2nd stage) - After Tunnel Roof Slab Completion - E/B and W/B															
A2600	Construction of Remaining Tunnel Structure between CH. 4260.2- 4265.2 at SOL T100 for Mainline E/B, W/B, SR8		30d	10-May-17	08-Jun-17	Construction of Remaining Tunnel Structure between CH. 4260.2- 4265.2 at SOL T100 for															

Activity ID		Activity Name	Original Duration	Start	Finish	2017											
						Apr			May			Jun			Jul		
		Removal Bulkhead at CH525 (TS3W / SR8 Junction)	41d	06-Mar-17 A	13-Apr-17 A												
A6080		Remove Bulkhead between TS3W & SR8	37d	06-Mar-17 A	13-Apr-17 A	Remove Bulkhead between TS3W & SR8											
A5180		Remove Scaffolding of SR1R Roof	4d	22-Mar-17 A	25-Mar-17 A	of SR1R Roof											
Works in KD8			129d	09-Mar-17 A	28-Jul-17												
TS3W - Remove Temporary Reclamation			129d	09-Mar-17 A	28-Jul-17												
Stage 1 - North West Corner (Bay Z4-25 to Bay 20)			56d	09-Mar-17 A	14-Apr-17 A												
A2660		Remove filled material to -4.35mPD at Bay Z4-25 to Bay 19 (6,500m3)	8d	09-Mar-17 A	24-Mar-17 A	l to -4.35mPD at Bay Z4-25 to Bay 19 (6,500m3)											
A2670		Remove filled material to -4.35mPD at Bay Z4-22 to Z4-24 (4,500m3)	5d	25-Mar-17 A	14-Apr-17 A	Remove filled material to -4.35mPD at Bay Z4-22 to Z4-24 (4,500m3)											
A2680		Remove seawall blocks at Bay Z4-25 to Bay 20 (426 nos.)	8d	27-Mar-17 A	10-Apr-17 A	Remove seawall blocks at Bay Z4-25 to Bay 20 (426 nos.)											
A6260		Remove filled material to -7.0 mPD	4d	05-Apr-17 A	13-Apr-17 A	Remove filled material to -7.0 mPD											
Stage 2 - North to East Side (Bay 19 to Bay 11 + Bay 26 to Bay 28)			14d	24-Mar-17 A	07-Apr-17 A												
A2690		Break concrete slab at Bay 19 to Bay 11 + Bay 26 to Bay 28 (2,500m2)	7d	24-Mar-17 A	31-Mar-17 A	concrete slab at Bay 19 to Bay 11 + Bay 26 to Bay 28 (2,500m2)											
A2700		Remove filled material to +2.8mPD (2,500m3)	7d	01-Apr-17 A	07-Apr-17 A	Remove filled material to +2.8mPD (2,500m3)											
Stage 3 - North to East Side (Bay 19 to bay 26)			49d	31-Mar-17 A	01-May-17												
A2710		Completion of Recharging of Sea Water into TS3W Cofferdam	2d	31-Mar-17 A	04-Apr-17 A	Completion of Recharging of Sea Water into TS3W Cofferdam											
North West D-wall Opening			22d	07-Apr-17 A	29-Apr-17 A												
A2720		Core D-wall cut holes at Panel DW02 to NA6 (27 nos.)	6d	07-Apr-17 A	10-Apr-17 A	Core D-wall cut holes at Panel DW02 to NA6 (27 nos.)											
A2730		Vertical cut at Panel DW02 to NA6 (19 nos.)	8d	14-Apr-17 A	20-Apr-17 A	Vertical cut at Panel DW02 to NA6 (19 nos.)											
A2740		Horizontal cut at Panel DW02 to NA6 (25 nos.)	8d	21-Apr-17 A	29-Apr-17 A	Horizontal cut at Panel DW02 to NA6 (25 nos.)											
North East & East			13d	13-Apr-17 A	01-May-17												
A2750		Remove filled material to -4.35mPD (22,500m3)	9d	13-Apr-17 A	26-Apr-17	Remove filled material to -4.35mPD (22,500m3)											
A2760		Remove seawall blocks at Bay 19 to 11 & Bay 26 to 28 (1,335 nos.)	13d	20-Apr-17 A	29-Apr-17	Remove seawall blocks at Bay 19 to 11 & Bay 26 to 28 (1,335 nos.)											
A2770		Remove filled material to -7.0mPD (North & East side)	10d	29-Apr-17 A	01-May-17	Remove filled material to -7.0mPD (North & East side)											
Stage 4 - West & South Side (Remove Seawall Block Bay Z4-23 & 24, Excavate to -4.35mPD)			47d	31-Mar-17 A	05-Jun-17												
West Side			18d	31-Mar-17 A	07-May-17												
A2790		Remove seawall blocks at Bay Bay Z4-23 to Z4-24 (249 nos.)	5d	31-Mar-17 A	02-May-17	Remove seawall blocks at Bay Bay Z4-23 to Z4-24 (249 nos.)											
A2800		Remove filled material to -7.0mPD (West)	5d	03-May-17	07-May-17	Remove filled material to -7.0mPD (West)											
North East Side			32d	19-Apr-17 A	05-Jun-17												
A2810		Core D-wall cut holes at Panel W1D1 to W1D32 (128 nos.) (North Side)	14d	19-Apr-17 A	26-Apr-17 A	Core D-wall cut holes at Panel W1D1 to W1D32 (128 nos.) (North Side)											
A2820		Vertical cut at Panel W1D1 to W1D32 (96 nos.) (North Side)	16d	27-Apr-17 A	08-May-17	Vertical cut at Panel W1D1 to W1D32 (96 nos.) (North Side)											
A2830		Horizontal cut at Panel W1D1 to W1D32 (128 nos.) (North Side)	20d	17-May-17	05-Jun-17	Horizontal cut at Panel W1D1 to W1D32 (128 nos.) (North Side)											
East Side			33d	20-Apr-17 A	03-Jun-17												
A2840		Core D-wall cut holes at Panel TZ31 to TZ38 (32 nos.) (East Side)	10d	20-Apr-17 A	26-Apr-17 A	Core D-wall cut holes at Panel TZ31 to TZ38 (32 nos.) (East Side)											
A2850		Vertical cut at Panel TZ31 to TZ38 (24 nos.) (East Side)	9d	16-May-17	24-May-17	Vertical cut at Panel TZ31 to TZ38 (24 nos.) (East Side)											
A2860		Horizontal cut at Panel TZ31 to TZ38 (32 nos.) (East Side)	10d	25-May-17	03-Jun-17	Horizontal cut at Panel TZ31 to TZ38 (32 nos.) (East Side)											
South Side			30d	20-Apr-17	19-May-17												
A2870		Remove filled material to -4.35mPD (41,300m3)	30d	20-Apr-17	19-May-17	Remove filled material to -4.35mPD (41,300m3)											
Stage 5 - West & South side (Reove Seawall Block Bay 24 7 25, Excavate to -7.0mPD)			30d	12-Apr-17 A	06-Jun-17												
A2910		Core D-wall cut holes at Panel BWD2 to BWD9 (30 nos.) (West Side)	5d	12-Apr-17 A	17-Apr-17 A	Core D-wall cut holes at Panel BWD2 to BWD9 (30 nos.) (West Side)											
A2920		Vertical cut at Panel BWD2 to BWD9 (22 nos.) (West Side)	8d	08-May-17	15-May-17	Vertical cut at Panel BWD2 to BWD9 (22 nos.) (West Side)											
A2930		Horizontal cut at Panel BWD2 to BWD9 (29 nos.) (West Side)	8d	16-May-17	23-May-17	Horizontal cut at Panel BWD2 to BWD9 (29 nos.) (West Side)											
A2880		Remove seawall blocks at Bay 24, 25 (264 nos.) (South West)	6d	20-May-17	25-May-17	Remove seawall blocks at Bay 24, 25 (264 nos.) (South West)											
A2890		Remove seawall blocks at Bay 2 to 4 (550 nos.) (South East)	11d	20-May-17	30-May-17	Remove seawall blocks at Bay 2 to 4 (550 nos.) (South East)											
A2900		Remove filled material to -7.0mPD (South)	7d	31-May-17	06-Jun-17	Remove filled material to -7.0mPD (South)											

Activity ID	Activity Name	Original Duration	Start	Finish	2017											
					Apr			May			Jun			Jul		
Stage 6 - West & South Side (Saw Cut D-wall + Shaft D)		48d	24-May-17	10-Jul-17												
A2940	Remove fill material to -7.0mPD around shaft D	5d	24-May-17	28-May-17												
A2950	Core D-wall cut holes at PanelW2D1 to W2D18 (72 nos.) (South West)	9d	07-Jun-17	15-Jun-17												
A2980	Core D-wall cut holes at Panel W2D23 to W2D34 (50 nos.) (South East)	10d	07-Jun-17	16-Jun-17												
A2990	Vertical cut at Panel W2D23 to W2D34 (38 nos.) (South East)	13d	11-Jun-17	23-Jun-17												
A2960	Vertical cut at Panel W2D1 to W2D18 (54 nos.) (South West)	18d	15-Jun-17	02-Jul-17												
A3000	Horizontal cut at Panel W2D23 to W2D34 (50 nos.) (South East)	13d	18-Jun-17	30-Jun-17												
A2970	Horizontal cut at Panel W2D1 to W2D18 (72 nos.) (South West)	18d	23-Jun-17	10-Jul-17												
Stage 7 - West & South Side (Saw Cut Shaft D, Excavate to -7.0mPD at SR8)		40d	29-May-17	07-Jul-17												
A3010	Vertical cut at Shaft D (14 nos.)	10d	29-May-17	07-Jun-17												
A3020	Horizontal cut at Shaft D (14 nos.)	5d	08-Jun-17	12-Jun-17												
A3030	Remove filled material to -7.0mPD at SR8	7d	01-Jul-17	07-Jul-17												
Stage 8 - South East & West Side (Remove Seawall Block Bay Z4-22 to Bay 23, Saw Cut D-wall at SR8)		46d	13-Jun-17	28-Jul-17												
South West Side		42d	13-Jun-17	24-Jul-17												
A3040	Remove seawall blocks at Bay Z4-22 to Bay 23 (741 nos.)	15d	13-Jun-17	27-Jun-17												
A3050	Remove filled material to -7.0mPD (South West)	8d	28-Jun-17	05-Jul-17												
A3060	Vertical cut at Panel BWD10 to SA7 (26 nos.) (South West)	9d	06-Jul-17	14-Jul-17												
A3070	Horizontal cut at Panel BWD10 to SA7 (37 nos.) (South West)	10d	15-Jul-17	24-Jul-17												
SR08 - West Wall		21d	08-Jul-17	28-Jul-17												
A3080	Vertical cut at Panel W4D1 to W4D11 (28 nos.) (SR8)	10d	08-Jul-17	17-Jul-17												
A3090	Horizontal cut at Panel W4D1 to W4D11 (39 nos.) (SR8)	11d	18-Jul-17	28-Jul-17												
SR08 - East Wall		19d	08-Jul-17	26-Jul-17												
A7010	Vertical cut at Panel W4D1 to W4D11 (26 nos.)	9d	08-Jul-17	16-Jul-17												
A7020	Horizontal cut at Panel W3D1 to W3D7 (36 nos.)	10d	17-Jul-17	26-Jul-17												
Works in KD6		136d	22-Jan-17 A	05-Jul-17												
Works in SR8 (Open Cut Method)		136d	22-Jan-17 A	05-Jul-17												
SR8 (Zone C) - Ch. 528 to Ch. 368		88d	14-Feb-17 A	16-May-17												
Zone C - Tunnel Structure		88d	14-Feb-17 A	16-May-17												
1.2m Thick Base Slab		2d	26-Feb-17 A	21-Apr-17												
Bay C6		2d	26-Feb-17 A	21-Apr-17												
A7540	C6 - Remove Strut SL5 & SL3	2d	26-Feb-17 A	21-Apr-17												
1.0m Thick Wall at Both Side		7d	22-Apr-17	28-Apr-17												
LHS Wall		7d	22-Apr-17	28-Apr-17												
A7340	5th Pour - CH500 to CH525	7d	22-Apr-17	28-Apr-17												
200mm Thick OHVD Slab & 400mm Thick Hanger Wall		9d	01-May-17	09-May-17												
Bay C6		9d	01-May-17	09-May-17												
A7570	C6 - Construct OHVD Slab & Hanger Wall	9d	01-May-17	09-May-17												
1.2m Thick Roof Slab		55d	14-Feb-17 A	08-May-17												
Bay C4		13d	14-Feb-17 A	24-Mar-17 A												
A7610	C4 - Roof Slab Construction	13d	14-Feb-17 A	24-Mar-17 A												
Bay C5		8d	16-Mar-17 A	25-Mar-17 A												
A7620	C5 - Roof Slab Construction	8d	16-Mar-17 A	25-Mar-17 A												
Bay C6		9d	23-Mar-17 A	08-May-17												
A7630	C6 - Partial Roof + Up Stand Wall Construction for Access Shaft	9d	23-Mar-17 A	08-May-17												



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Activity ID		Activity Name		Original Duration	Start	Finish	2017											
							Apr			May			Jun			Jul		
Egress Passage - EP01				31d	13-Mar-17 A	24-Apr-17 A												
Bay C1				31d	13-Mar-17 A	14-Apr-17 A												
A7690	C1 - EP01 Wall Construction		9d	13-Mar-17 A	30-Mar-17 A	Wall Construction												
A7700	C1 - EP01 Roof Construction		8d	13-Mar-17 A	30-Mar-17 A	Roof Construction												
A8010	C1 - Dismantle Scaffolding of EP01 Roof Slab - 10 days Curing		14d	31-Mar-17 A	14-Apr-17 A	C1 - Dismantle:Scaffolding of EP01 Roof Slab - 10 days Curing												
Bay C2				31d	13-Mar-17 A	14-Apr-17 A												
A7710	C2 - EP01 Wall Construction		9d	13-Mar-17 A	30-Mar-17 A	Wall Construction												
A7720	C2 - EP01 Roof Construction		8d	13-Mar-17 A	30-Mar-17 A	Roof Construction												
A8020	C2 - Dismantle Scaffolding of EP01 Roof Slab - 10 days Curing		14d	31-Mar-17 A	14-Apr-17 A	C2 - Dismantle:Scaffolding of EP01 Roof Slab - 10 days Curing												
Bay C3				31d	20-Mar-17 A	24-Apr-17 A												
A7730	C3 - EP01 Wall Construction		9d	20-Mar-17 A	05-Apr-17 A	C3 - EP01 Wall Construction												
A7740	C3 - EP01 Roof Construction		8d	20-Mar-17 A	05-Apr-17 A	C3 - EP01 Roof Construction												
A8030	C3 - Dismantle Scaffolding of EP01 Roof Slab - 10 days Curing		14d	06-Apr-17 A	24-Apr-17 A	C3 - Dismantle Scaffolding of EP01 Roof Slab - 10 days Curing												
Bay C4				31d	20-Mar-17 A	24-Apr-17 A												
A7750	C4 - EP01 Wall Construction		9d	20-Mar-17 A	05-Apr-17 A	C4 - EP01 Wall Construction												
A7760	C4 - EP01 Roof Construction		8d	20-Mar-17 A	05-Apr-17 A	C4 - EP01 Roof Construction												
A8040	C4 - Dismantle Scaffolding of EP01 Roof Slab - 10 days Curing		14d	06-Apr-17 A	24-Apr-17 A	C4 - Dismantle Scaffolding of EP01 Roof Slab - 10 days Curing												
Utility Trough				27d	20-Apr-17	16-May-17												
Bay C1				16d	20-Apr-17	05-May-17												
A7790	RHS / C1 - Backing Concrete		4d	20-Apr-17	23-Apr-17	RHS / C1 - Backing Concrete												
A7800	RHS / C1 - Profile Barrier		4d	24-Apr-17	27-Apr-17	RHS / C1 - Profile Barrier												
A7770	LHS / C1 - Backing Concrete		4d	28-Apr-17	01-May-17	LHS / C1 - Backing Concrete												
A7780	LHS / C1 - Profile Barrier		4d	02-May-17	05-May-17	LHS / C1 - Profile Barrier												
Bay C2				16d	20-Apr-17	05-May-17												
A7830	RHS / C2 - Backing Concrete		4d	20-Apr-17	23-Apr-17	RHS / C2 - Backing Concrete												
A7840	RHS / C2 - Profile Barrier		4d	24-Apr-17	27-Apr-17	RHS / C2 - Profile Barrier												
A7810	LHS / C2 - Backing Concrete		4d	28-Apr-17	01-May-17	LHS / C2 - Backing Concrete												
A7820	LHS / C2 - Profile Barrier		4d	02-May-17	05-May-17	LHS / C2 - Profile Barrier												
Bay C3				16d	20-Apr-17	05-May-17												
A7870	RHS / C3 - Backing Concrete		4d	20-Apr-17	23-Apr-17	RHS / C3 - Backing Concrete												
A7880	RHS / C3 - Profile Barrier		4d	24-Apr-17	27-Apr-17	RHS / C3 - Profile Barrier												
A7850	LHS / C3 - Backing Concrete		4d	28-Apr-17	01-May-17	LHS / C3 - Backing Concrete												
A7860	LHS / C3 - Profile Barrier		4d	02-May-17	05-May-17	LHS / C3 - Profile Barrier												
Bay C4				16d	20-Apr-17	05-May-17												
A7910	RHS / C4 - Backing Concrete		4d	20-Apr-17	23-Apr-17	RHS / C4 - Backing Concrete												
A7920	RHS / C4 - Profile Barrier		4d	24-Apr-17	27-Apr-17	RHS / C4 - Profile Barrier												
A7890	LHS / C4 - Backing Concrete		4d	28-Apr-17	01-May-17	LHS / C4 - Backing Concrete												
A7900	LHS / C4 - Profile Barrier		4d	02-May-17	05-May-17	LHS / C4 - Profile Barrier												
Bay C5				16d	01-May-17	16-May-17												
A7950	RHS / C5 - Backing Concrete		4d	01-May-17	04-May-17	RHS / C5 - Backing Concrete												
A7960	RHS / C5 - Profile Barrier		4d	05-May-17	08-May-17	RHS / C5 - Profile Barrier												
A7930	LHS / C5 - Backing Concrete		4d	09-May-17	12-May-17	LHS / C5 - Backing Concrete												
A7940	LHS / C5 - Profile Barrier		4d	13-May-17	16-May-17	LHS / C5 - Profile Barrier												
SR8 (Zone B) - Ch.385.000 to Ch.317.500 - (Inside Victoria Park to Tunnel Portal)				77d	20-Apr-17	05-Jul-17												

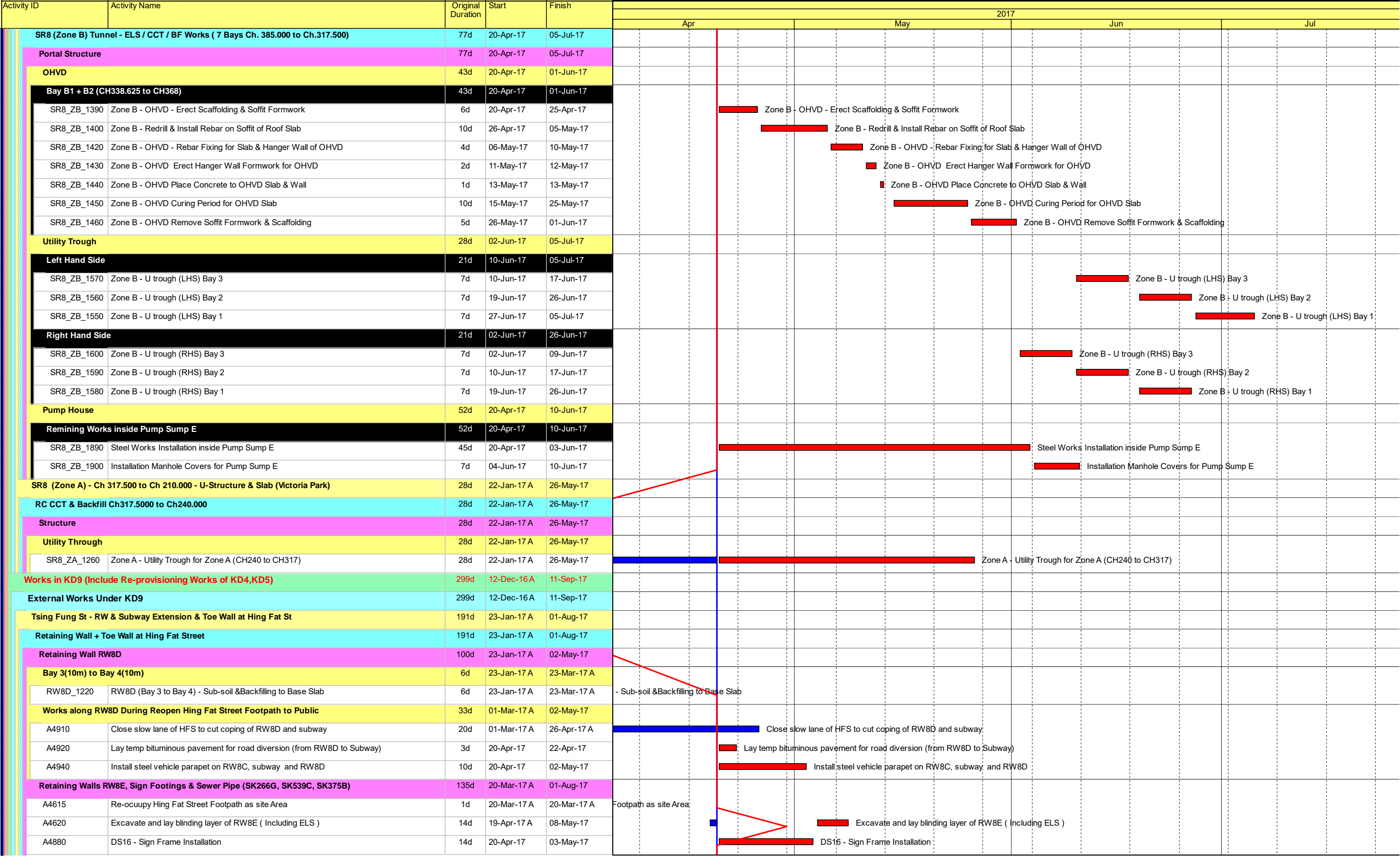


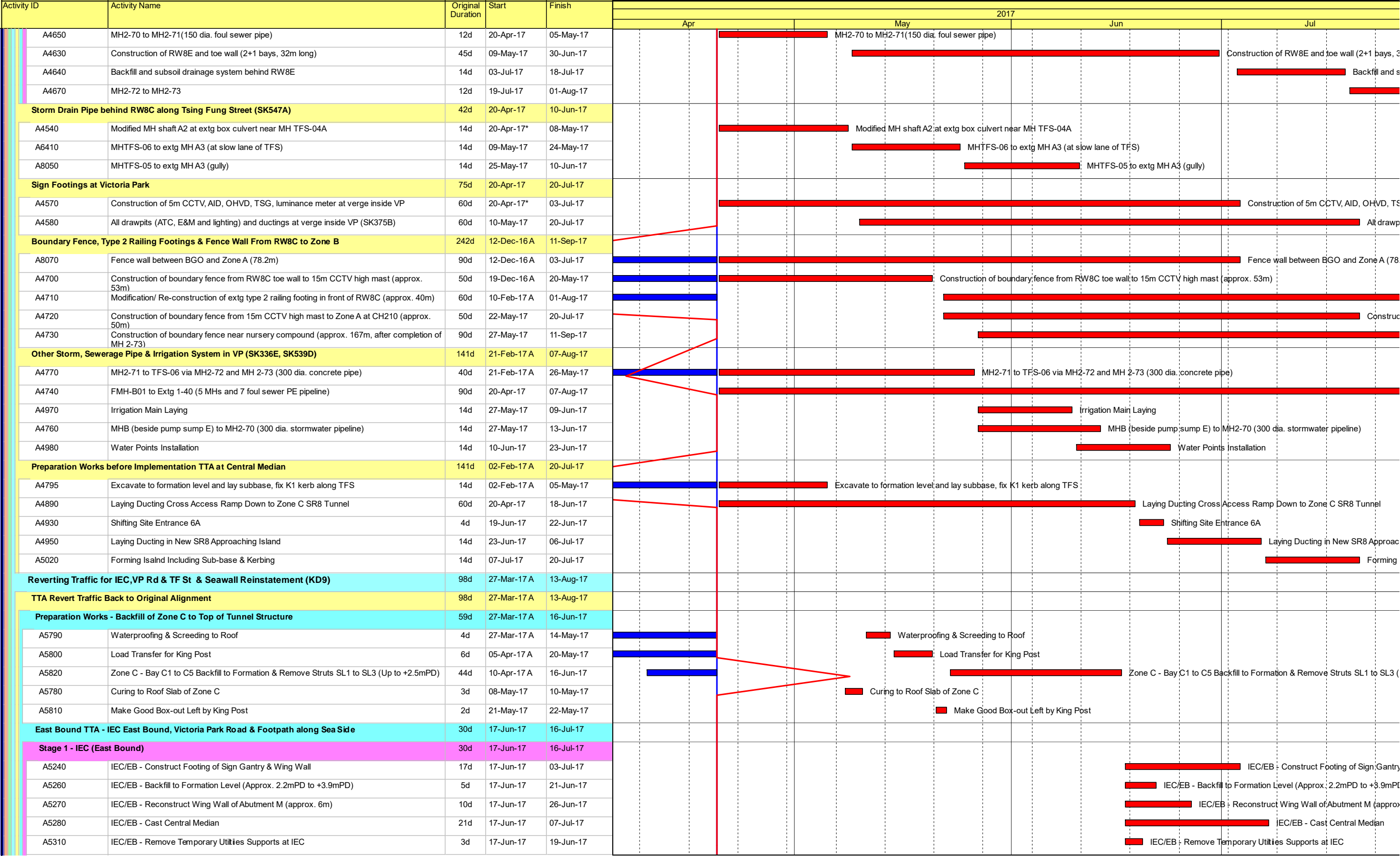
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						Apr			May			Jun			Jul		
	A3285	IEC/EB - Cut and Remove Pipe Pile (2m Below Ground Level)	7d	17-Jun-17	23-Jun-17												
	A5320	IEC/EB - Reinstate Existing Drainage System	14d	20-Jun-17	03-Jul-17												
	A3286	IEC/EB - Cut and Remove Sheet Pile (2m Below Ground Level)	7d	24-Jun-17	30-Jun-17												
	A5290	IEC/EB - Street Lighting Cable Duct & Poles	3d	01-Jul-17	03-Jul-17												
	A5250	IEC/EB - Install A Frame of Sign Gantry	4d	04-Jul-17	07-Jul-17												
	A5300	IEC/EB - TOC of Street Lightings	2d	04-Jul-17	05-Jul-17												
	A5330	IEC/EB - Backfill Drainage Tranch Up to Formnation (+2.5mPd to +3.9mPD)	5d	04-Jul-17	08-Jul-17												
	A5340	IEC/EB - Laying Sub-base	2d	09-Jul-17	10-Jul-17												
	A5350	IEC/EB - Laying Asphlat Pavement	3d	11-Jul-17	13-Jul-17												
	A5360	IEC/EB - Road Mark & Traffic Signs	3d	14-Jul-17	16-Jul-17												
West Bound - IEC West Bound & Tsing Fung Street			58d	17-Jun-17	13-Aug-17												
Stage 1 - IEC (West Bound)			30d	17-Jun-17	16-Jul-17												
	A5690	IEC/WB - Cut pipe pile - 1 week	7d	17-Jun-17	23-Jun-17												
	A5710	IEC/WB - Removal of pedestrian decking	11d	17-Jun-17	27-Jun-17												
	A3785	IEC/WB - Reconstruct Wing Wall of Abutment M (approx. 6m)	10d	17-Jun-17	26-Jun-17												
	A5700	IEC/WB - Cut sheetpile - 1 week	7d	24-Jun-17	30-Jun-17												
	A5720	IEC/WB - Remove temporary utilities support 3 days	3d	28-Jun-17	30-Jun-17												
	A5730	IEC/WB - Backfill up to Formation under Asphalt (from +2.5mPD to +3.9mPD) 5 days	5d	01-Jul-17	05-Jul-17												
	A5740	IEC/WB - Subbase Laying 2 days	2d	06-Jul-17	07-Jul-17												
	A5750	IEC/WB - Asphalt (Road Base, Base Course, Wearing Course) 5 days	5d	08-Jul-17	12-Jul-17												
	A5760	IEC/WB - Road Marking/Traffic Sign 3 days	3d	13-Jul-17	15-Jul-17												
	A5840	IEC/WB - Implement TTM	1d	16-Jul-17	16-Jul-17												
Stage 2 - Tsing Fung Street			28d	17-Jul-17	13-Aug-17												
	A5850	Decking /Footing Removal - 2 weeks	14d	17-Jul-17	30-Jul-17												
	A5880	Light Weight Conc. Ramp Rem. 4 weeks	28d	17-Jul-17	13-Aug-17												
	A5890	Trench Excavation for Towngas - 4 weeks	28d	17-Jul-17	13-Aug-17												
Reinstatement Existing Slopping & Vertical Sea Wall			55d	17-Jun-17	10-Aug-17												
Major Reinstatement Works for Seawall Reinstatement			55d	17-Jun-17	10-Aug-17												
Stage 1 - Removal of Remaining Pipe Pile Wall, Sheet Pile Wall & D-wall			55d	17-Jun-17	10-Aug-17												
	A7030	Backfill upto +2.5mPD at all bay of SR8	1d	17-Jun-17	17-Jun-17												
	A7040	Cut pipe pile wall at A1 - A14	14d	18-Jun-17	01-Jul-17												
	A7050	Under water cut sheet pile wall (36 nos.)	40d	02-Jul-17	10-Aug-17												
Works in Victoria Park (KD4, KD5, KD9)			184d	20-Jan-17 A	06-Sep-17												
Re-Provisioning Works			184d	20-Jan-17 A	06-Sep-17												
Nursery Compound			184d	20-Jan-17 A	06-Sep-17												
Submission			124d	20-Jan-17 A	27-Jun-17												
ABWF Submission			99d	01-Feb-17 A	02-Jun-17												
Material			99d	01-Feb-17 A	12-May-17												
	VP_NC_1060	ABWF Issue P.O. / Manufacturing / Fabrication	14d	01-Feb-17 A	18-Apr-17 A												
	VP_NC_1070	ABWF Materail Delivery	21d	19-Apr-17 A	12-May-17												
Shop Drawing			14d	03-Feb-17 A	02-Jun-17												
	VP_NC_1090	ABWF Shop Drawing - ER Review and Approval	14d	03-Feb-17 A	02-Jun-17												
E&M Submission			124d	20-Jan-17 A	27-Jun-17												
Material			124d	20-Jan-17 A	27-Jun-17												



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

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

Date	Revision	Checked	Approved
20-Apr-17	DWP-07 (6) - 3 Months Rolling	FS	TL



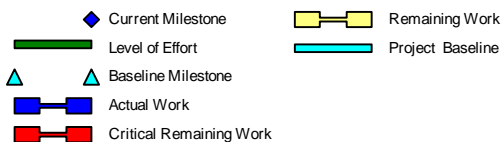
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					Apr			May			Jun			Jul		
VP_NC_1140	E&M Issue P.O. / Manufacturing / Fabrication	15d	20-Jan-17 A	22-May-17												
VP_NC_1150	E&M Materail Delivery	30d	23-May-17	27-Jun-17												
Shop Drawing		30d	20-Apr-17	26-May-17												
VP_NC_1170	E&M Shop Drawing - ER Review and Approval	30d	20-Apr-17	26-May-17												
Nursery compound		125d	09-Mar-17 A	06-Sep-17												
A4410	Concreting of two concrete plinths, 150 thick curbs and 1450H parapet wall above roof slab	7d	09-Mar-17 A	30-Mar-17 A												
A4420	ABWF, Plumbing Works, waterproofing and E&M works	60d	05-Apr-17 A	06-Sep-17												
KD11, KD12, KD13, KD18 Establishment Works for Landscape Softworks		1087d	23-Feb-15 A	09-Feb-18												
KD11 - Section 7A: Portion XIV & XV (Victoria Park Open Space)		885d	23-Feb-15 A	09-Feb-18												
EW_1000	Establishment Works - for Landscape Softworks and transplanted trees in Portion XIV & XV	901d	23-Feb-15 A	09-Feb-18												
KD12 - Section 7B: Portion VI & VII (Reprov. Bowling Green Area)		177d	03-Dec-15 A	20-Apr-17												
EW_1010	Establishment Works - for Landscape Softworks and transplanted trees in Portion VI & VII	177d	03-Dec-15 A	20-Apr-17												
KD10 - Preservation and Protection of Trees		1088d	21-Mar-13 A	20-Apr-17												
PPT_0000	Preservation and Protection of Existing Trees	1088d	21-Mar-13 A	20-Apr-17												
KD15 & KD8 - Mooring Components Upkeep (CBTS and ATS)		980d	15-May-14 A	20-Apr-17												
MAR_3020	Mooring Upkeep at Portion X(10) & XVI(16) - CBTS	979d	15-May-14 A	20-Apr-17												
Works for Public Works Regional Laboratory (North Lantau) - KD1,KD16,KD17)		1301d	19-Jul-13 A	21-Nov-17												
KD17 - Maintenance and Upkeep of New PWRL (Portion XVII)		1301d	19-Jul-13 A	21-Nov-17												
PWRL_1050	Maintenance/ Upkeep of New PWRL	1301d	19-Jul-13 A	21-Nov-17												

Data Date: 20-Apr-17

## CWB(CC) - Commissioning Contract

**TASK filters: 3 Months\_4, 3MRP, No Original Sections, No Summary, Not HL.**

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	2017											
						Apr			May			Jun			Jul		
Update 2017-04-20 CWB(CC) - Commissioning Contract (DWP R2d)																	
PRELIMINARIES AND GENERAL REQUIREMENTS																	
Salient Key Dates and Milestones																	
Contract Key Dates																	
KD003	KD3 - Achievement of Stage 3 (1178 days)	0		20-May-17*	0												
KD002	KD2 - Achievement of Stage 2 (1232 days)	0		13-Jul-17*	0												
Possession Dates and Vacation Dates																	
PO-IVa2_b	Possession of Portion IVa (Day 930) - SR1	203	30-Mar-17 A	18-Oct-17	-369												
PO-Vb2_b	Possession of Portion V (Day 607) - SCP3	182	20-Apr-17	18-Oct-17	-343												
PO-IVc	Possession of Portion IVc (Day 1144) - MVB (above +5.0mPD)	111	30-Jun-17	18-Oct-17	-74												
Submissions and Approvals																	
Initial General Submission																	
1211	Submission of 1st Project video film	0		17-Apr-17 A													
9932	Submission of 1st Project video film Video1 / Video2 (Release II)	0		20-Apr-17*	-809												
DETAILED DESIGN OF WORKS																	
Permanent Works Design and Engineering																	
Metal Roof on MVB																	
2188	MVB Roof - Engineer review & approval	24	06-Mar-17 A	05-May-17	-259												
2190	MVB Roof - Prepare the Detailed Design submission	12	06-May-17	19-May-17	-259												
2192	MVB Roof - Finalise detailed design submission and ICE Checks & issue Check Certificate	12	20-May-17	03-Jun-17	-259												
12436	MVB Roof - Submit detailed design to the Engineer with ICE Certificate	0		03-Jun-17	-259												
2194	MVB Roof - Engineer review & Approval; Consent to Proceed Construction	24	05-Jun-17	03-Jul-17	-257												
Green Roof on EVB																	
2166	EVB Roof - Engineer review & Approval; Consent to Proceed Construction	24	18-Apr-16 A	05-May-17	-324												



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**Programme Update 38 (April 2017)**  
**THREE MONTH ROLLING**

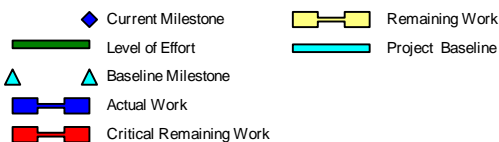
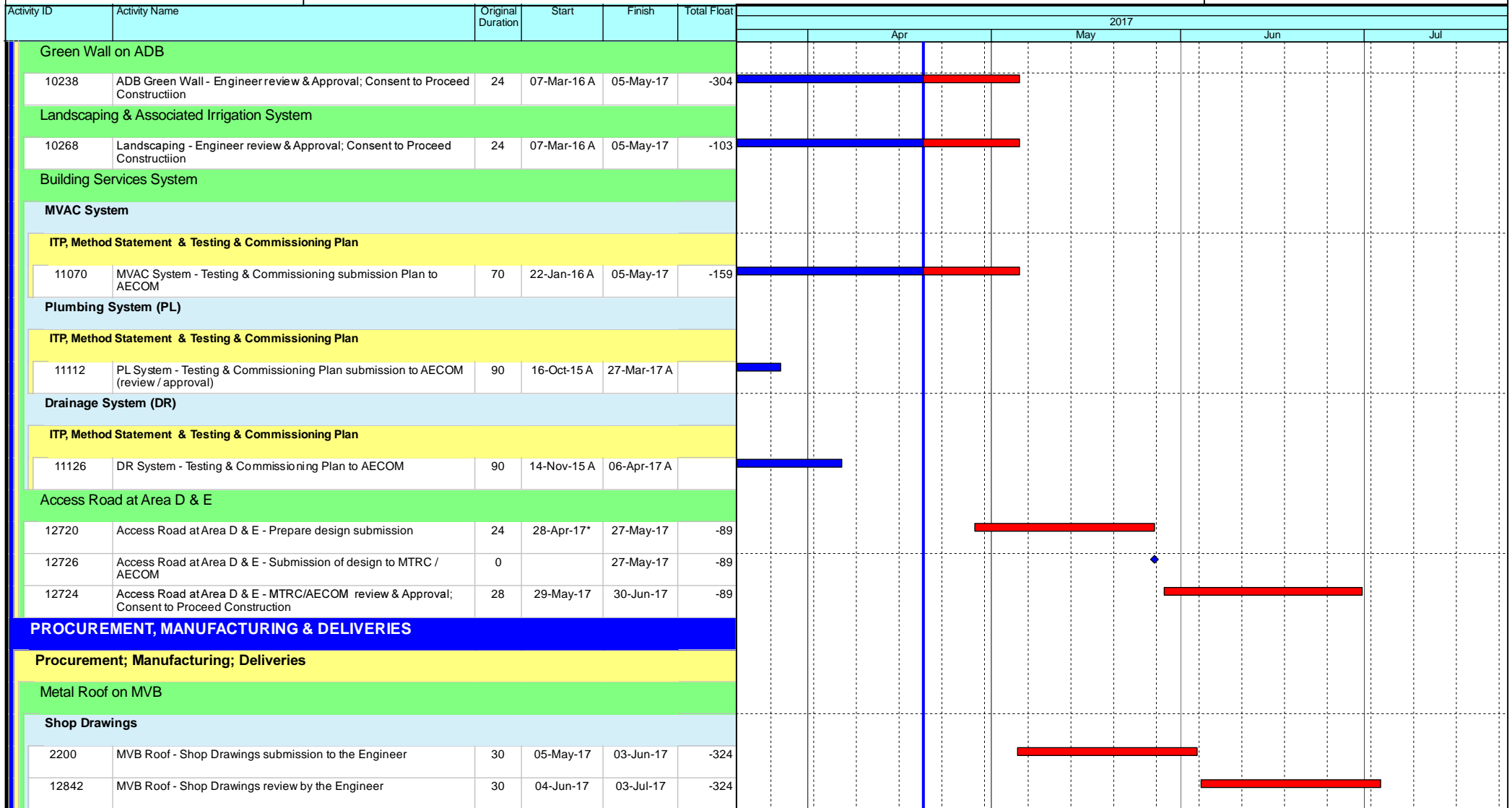
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## CWB(CC) - Commissioning Contract

TASK filters: 3 Months\_4, 3MRP, No Original Sections, No Summary, Not HL.



### Leighton Contractors (Asia) Limited Programme Update 38 (April 2017) THREE MONTH ROLLING

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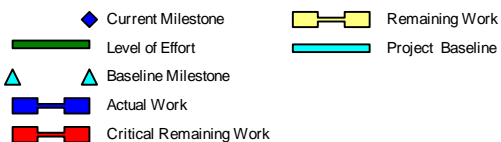


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## CWB(CC) - Commissioning Contract

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Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	2017											
						Apr			May			Jun			Jul		
<b>Shop Drawings</b>																	
10242	ADB Green Wall - Shop Drawings submission to the Engineer	30	06-May-17	04-Jun-17	-380												
12850	ADB Green Wall - Shop Drawings review the Engineer	30	05-Jun-17	04-Jul-17	-380												
10244	ADB Green Wall - Obtain Approval for Shop Drawings	0		04-Jul-17	-380												
<b>Procurement &amp; Fabrication</b>																	
10246	ADB Green Wall - Confirm design of embed items	0	05-Jul-17		-380												
10248	ADB Green Wall - Embed fabrication & delivery	60	05-Jul-17	02-Sep-17	-380												
<b>VE Brackets / Panels</b>																	
<b>Procurement &amp; Fabrication</b>																	
12508	VE Brackets / Panels - Manufacturing & Delivery (Panels)	60	11-Dec-15 A	09-May-17	-192												
<b>Architectural Feature on EVS</b>																	
<b>Procurement &amp; Fabrication</b>																	
10086	EVS - Architectural Features delivery	60	09-Jun-17	07-Aug-17	-452												
2254	EVS - Commence installation	0	09-Jul-17		-452												
<b>Air Purification System (APS)</b>																	
<b>Procurement &amp; Fabrication</b>																	
10088	APS - Ship to HK Store (2nd Batch)	80	18-Jan-17 A	16-Jun-17	-175												
13664	APS - Ship to HK Store (3rd Batch)	80	19-Jun-17	06-Oct-17	-175												
<b>Building Services System</b>																	
<b>Shop Drawings / CSD / CBWD</b>																	
2314	BS(MVB) - Obtain Approval for Shop Drawings, CSD & CBWD	0		20-Apr-17	149												
2318	BS(EVB) - Obtain Approval for Shop Drawings, CSD & CBWD	0		20-Apr-17	105												
<b>Thermal Barriers</b>																	
<b>Procurement &amp; Fabrication</b>																	

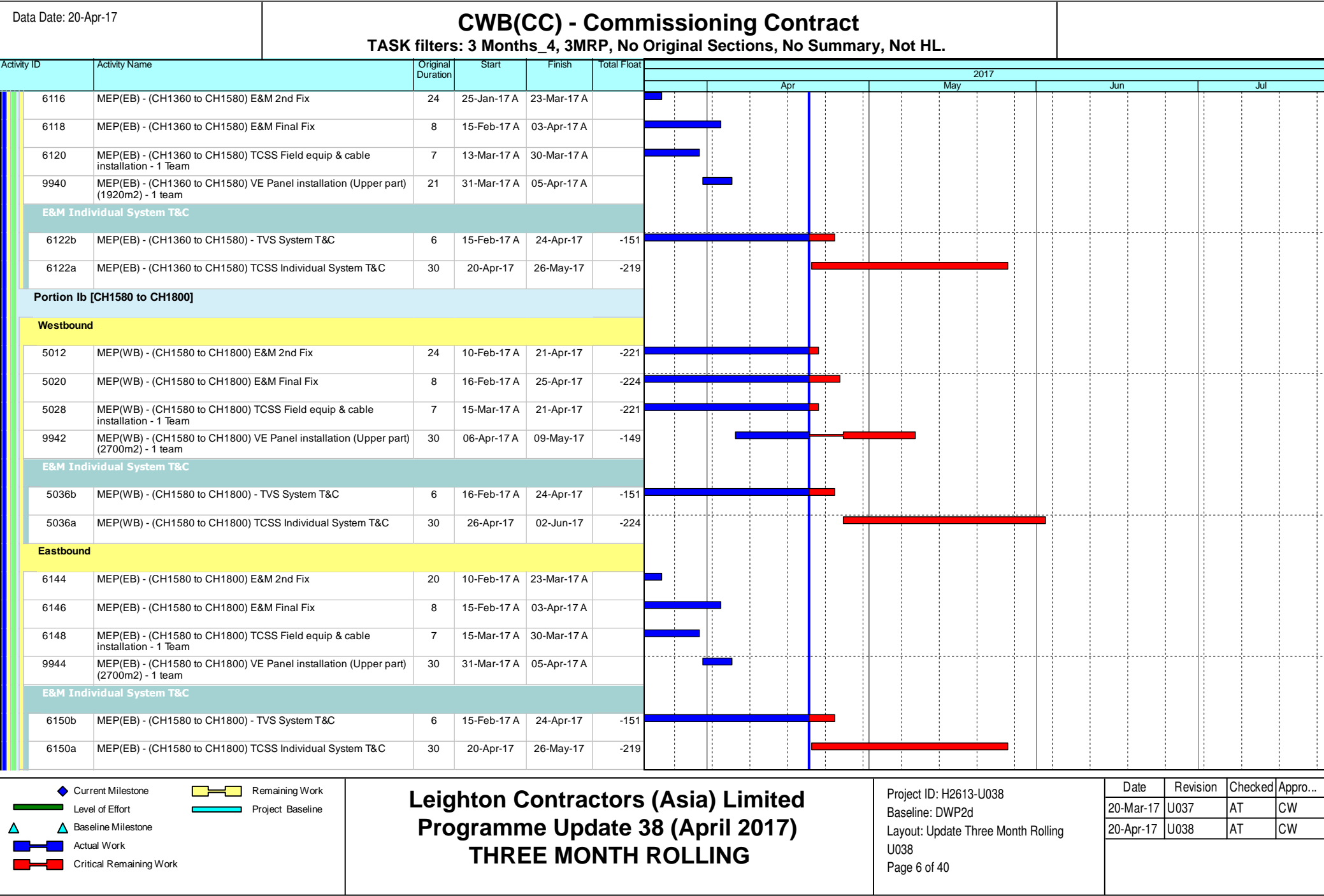


### Leighton Contractors (Asia) Limited Programme Update 38 (April 2017) THREE MONTH ROLLING

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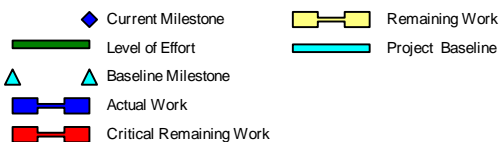
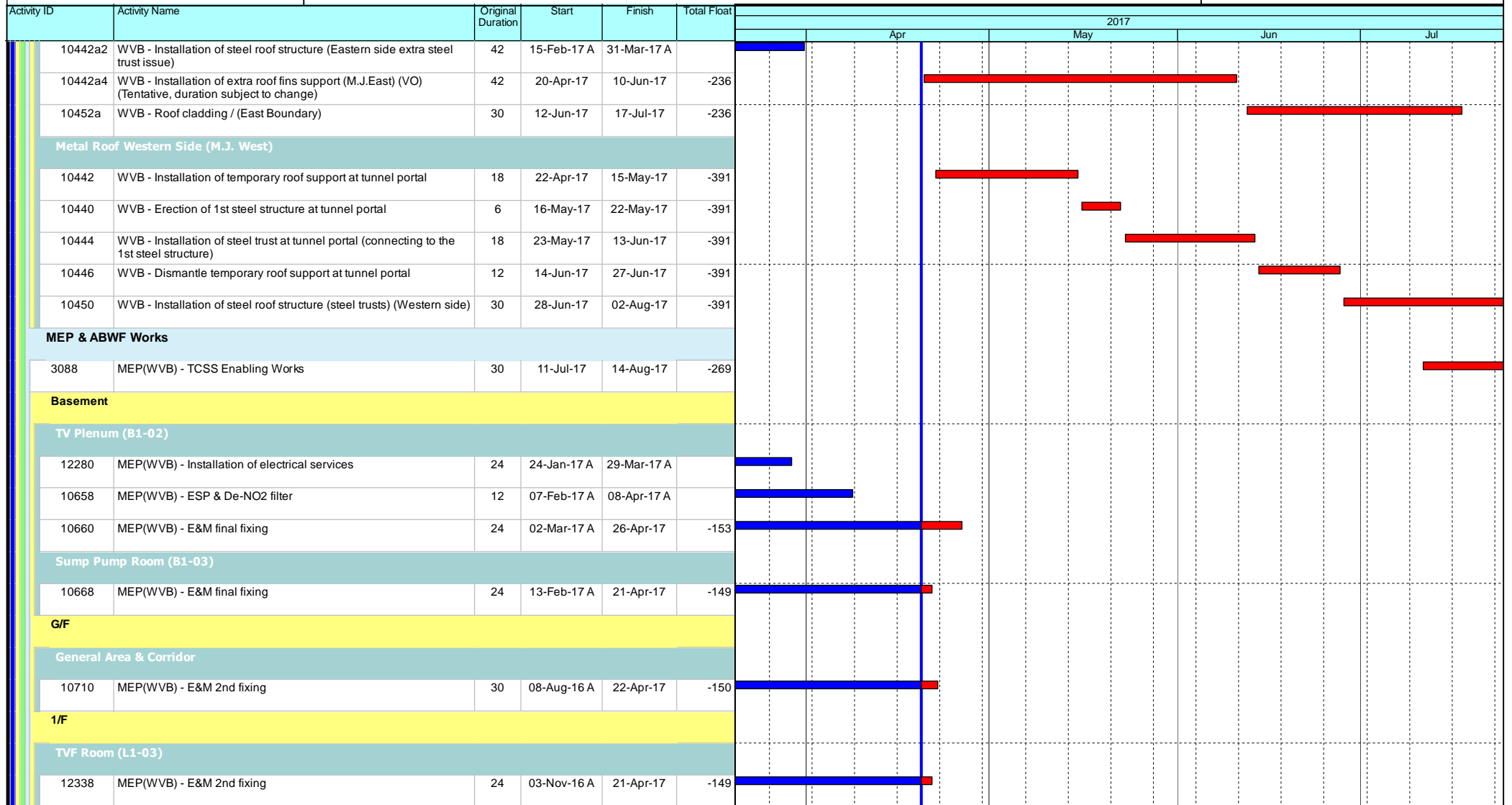




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## CWB(CC) - Commissioning Contract

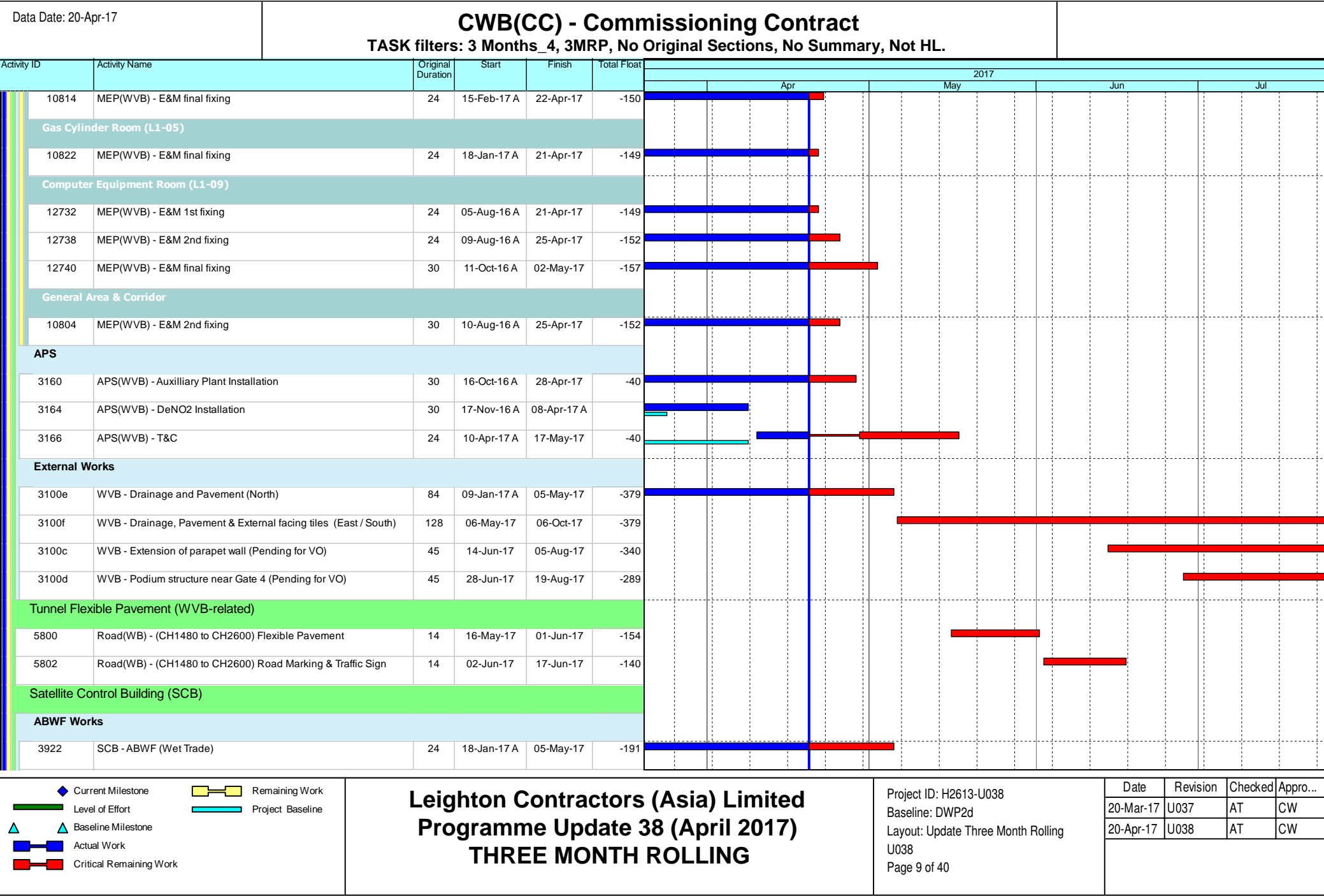
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### Leighton Contractors (Asia) Limited Programme Update 38 (April 2017) THREE MONTH ROLLING

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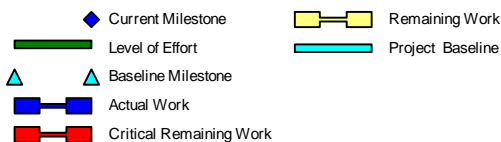


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## CWB(CC) - Commissioning Contract

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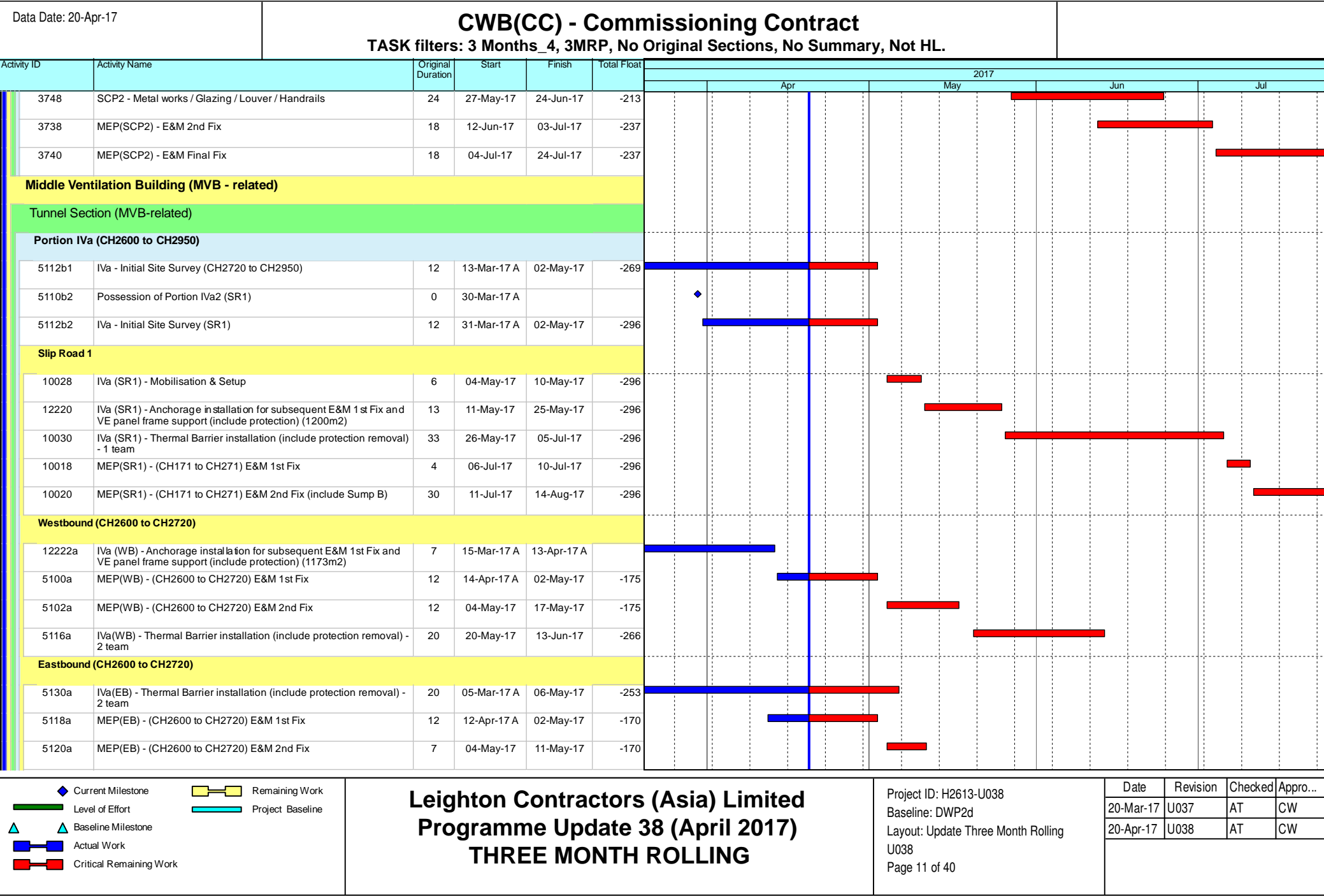
Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	2017											
						Apr			May			Jun			Jul		
3926	SCB - ABWF (Dry Trade)	24	11-Apr-17 A	09-May-17	-143												
3928	SCB - Metal works / steel platform / Ladders / Handrails	36	10-May-17	21-Jun-17	-143												
<b>External Facade</b>																	
3930	SCB - External facing tiles / Louvre	48	06-May-17	03-Jul-17	-188												
<b>MEP Works</b>																	
3932	MEP(SCB) - E&M Start	0	06-May-17		-191												
3934	MEP(SCB) - E&M 1st Fix	24	06-May-17	03-Jun-17	-191												
3938	MEP(SCB) - E&M 2nd Fix	24	20-May-17	17-Jun-17	-191												
<b>External Works</b>																	
3946	SCB - External concrete pavement	18	04-Jul-17	24-Jul-17	-188												
<b>Satellite Control Points 1 / 2</b>																	
<b>SCP1</b>																	
3708a	VO052 - Construct steel vehicle parapet at elevated layby	40	18-Aug-16 A	28-Apr-17	-253												
3708	SCP1 - Construct SCP RC Structures	18	09-Mar-17 A	02-May-17	-255												
3710	SCP1 - ABWF Works	24	20-May-17	17-Jun-17	-269												
3712	MEP(SCP1) - E&M 1st Fix	18	12-Jun-17	03-Jul-17	-269												
3722	SCP1 - External Works	30	19-Jun-17	24-Jul-17	-160												
3711	SCP1 - Metal works / Glazing / Louver / Handrails	24	19-Jun-17	17-Jul-17	-166												
10106	MEP(SCP1) - TCSS Enabling Works	18	19-Jun-17	10-Jul-17	-269												
3714	MEP(SCP1) - E&M 2nd Fix	18	11-Jul-17	31-Jul-17	-190												
<b>SCP2</b>																	
3734	SCP2 - ABWF Works	24	20-Apr-17	19-May-17	-269												
3746	SCP2 - External Works	30	20-Apr-17	26-May-17	-213												
3736	MEP(SCP2) - E&M 1st Fix	18	20-May-17	10-Jun-17	-237												

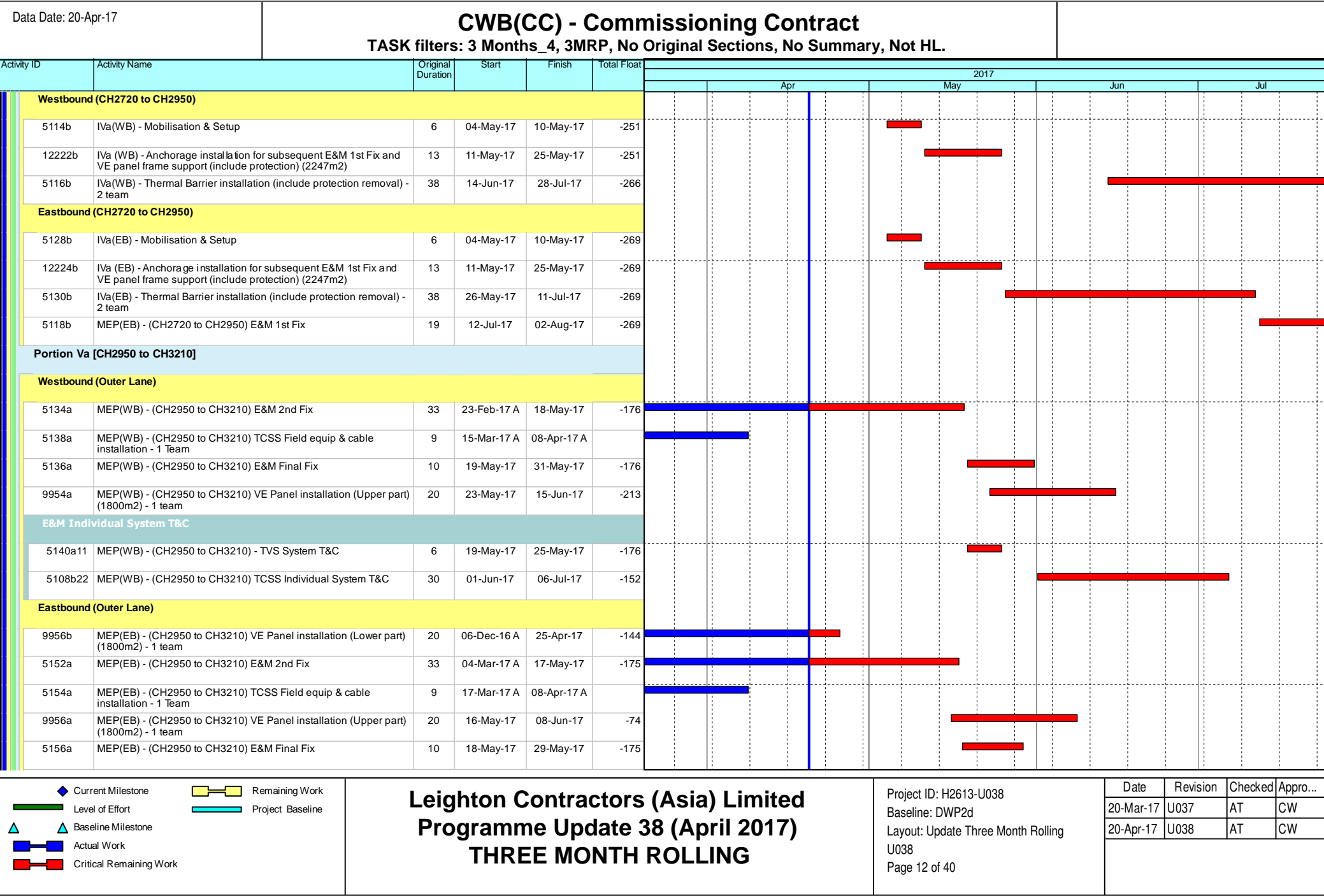


### Leighton Contractors (Asia) Limited Programme Update 38 (April 2017) THREE MONTH ROLLING

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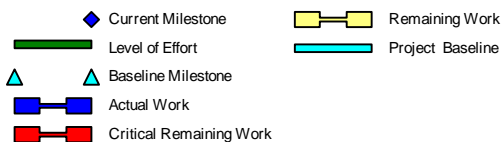


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**CWB(CC) - Commissioning Contract**  
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**CWB(CC) - Commissioning Contract**  
TASK filters: 3 Months\_4, 3MRP, No Original Sections, No Summary, Not HL.

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float
<b>E&amp;M Individual System T&amp;C</b>					
5158a11	MEP(WB) - (CH2720 to CH2950) - TVS System T&C	6	18-May-17	24-May-17	-175
5158a2	MEP(EB) - (CH2950 to CH3210) TCSS Individual System T&C	30	01-Jun-17	06-Jul-17	-152
Portion Vb1 (SR3)					
Slip Road 3					
10032b	MEP(SR3) - (CH3089 to CH3334) E&M 1st Fix	13	15-Mar-17 A	27-Apr-17	-187
10036b	MEP(SR3) - (CH3089 to CH3334) TCSS Field equip & cable installation - 1 Team	8	15-Mar-17 A	27-Apr-17	-160
10048c	MEP(SR3) - (CH3089 to CH3334) VE Panel installation (Lower part) (2940m2) - 1 team	33	26-Apr-17	06-Jun-17	-144
10034b	MEP(SR3) - (CH3089 to CH3334) E&M 2nd Fix (include Sump C)	27	28-Apr-17	01-Jun-17	-187
10038b	MEP(SR3) - (CH3089 to CH3334) E&M Final Fix	8	02-Jun-17	10-Jun-17	-187
10048b	MEP(SR3) - (CH3089 to CH3334) VE Panel installation (Upper part) (2940m2) - 1 team	33	09-Jun-17	18-Jul-17	-74
<b>E&amp;M Individual System T&amp;C</b>					
10040b11	EP(SR3) - (CH3089 to CH3334) - TVS System T&C	6	02-Jun-17	08-Jun-17	-187
10040b2	EP(SR3) - (CH3089 to CH3334) TCSS Individual System T&C	30	12-Jun-17	17-Jul-17	-161
Portion Vb2 (SR2 / SCP3)					
Slip Road 2					
10050b	MEP(SR2) - (CH3114 to CH3257) E&M 1st Fix	8	08-Mar-17 A	24-Apr-17	-197
10056b	MEP(SR2) - (CH3114 to CH3257) TCSS Field equip & cable installation - 1 Team	5	16-Mar-17 A	24-Apr-17	-153
10052b	MEP(SR2) - (CH3114 to CH3257) E&M 2nd Fix (include Sump F)	40	25-Apr-17	13-Jun-17	-197
10054b	MEP(SR2) -(CH3114 to CH3257) E&M Final Fix	5	14-Jun-17	19-Jun-17	-197
<b>E&amp;M Individual System T&amp;C</b>					
10058b11	MEP(SR2) - (CH3114 to CH3257) - TVS System T&C	6	14-Jun-17	20-Jun-17	-197
10058b2	MEP(SR2) - (CH3114 to CH3257) TCSS Individual System T&C	30	20-Jun-17	25-Jul-17	-168
Portion Vc [CH3210 to CH3250]					

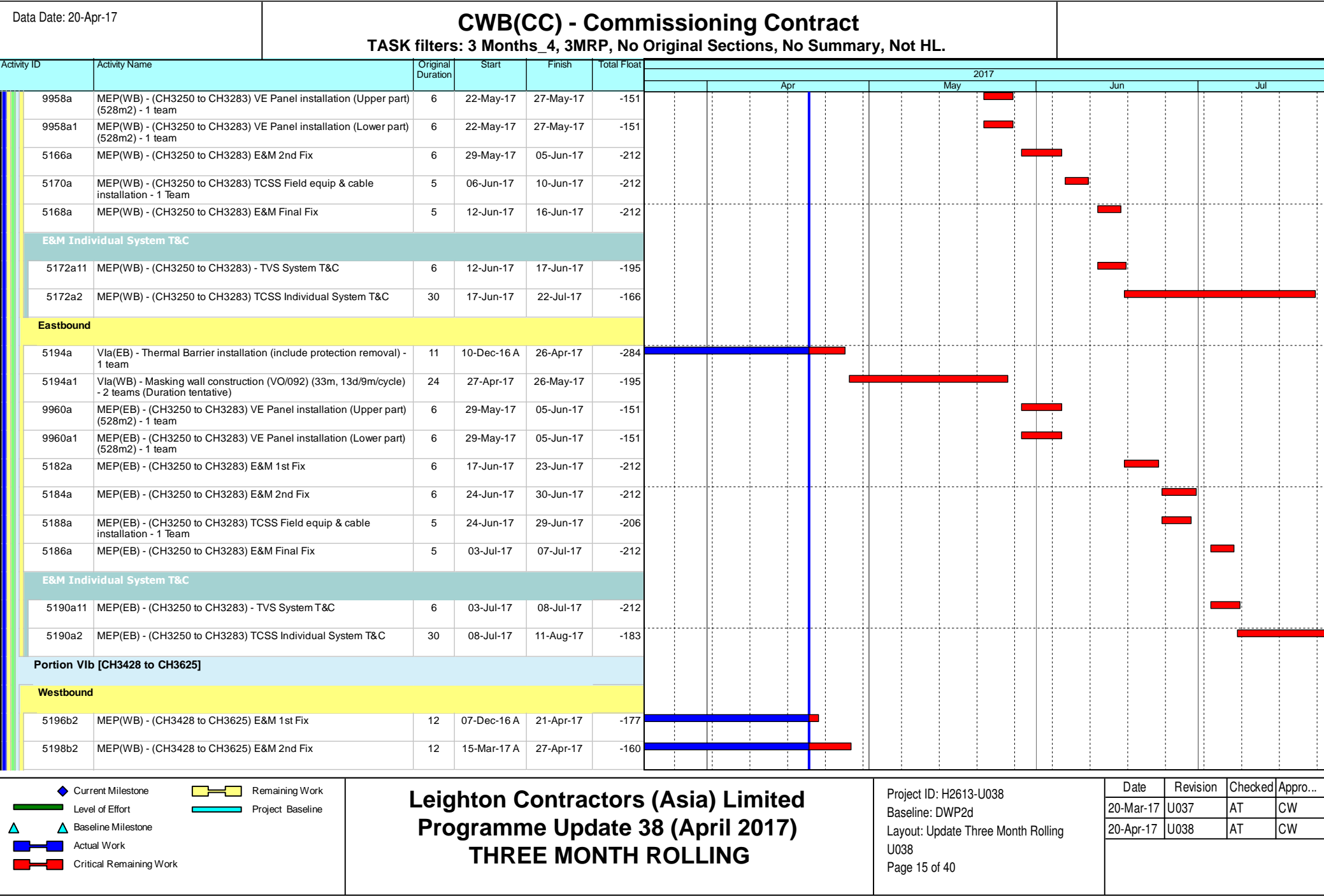


**Leighton Contractors (Asia) Limited**  
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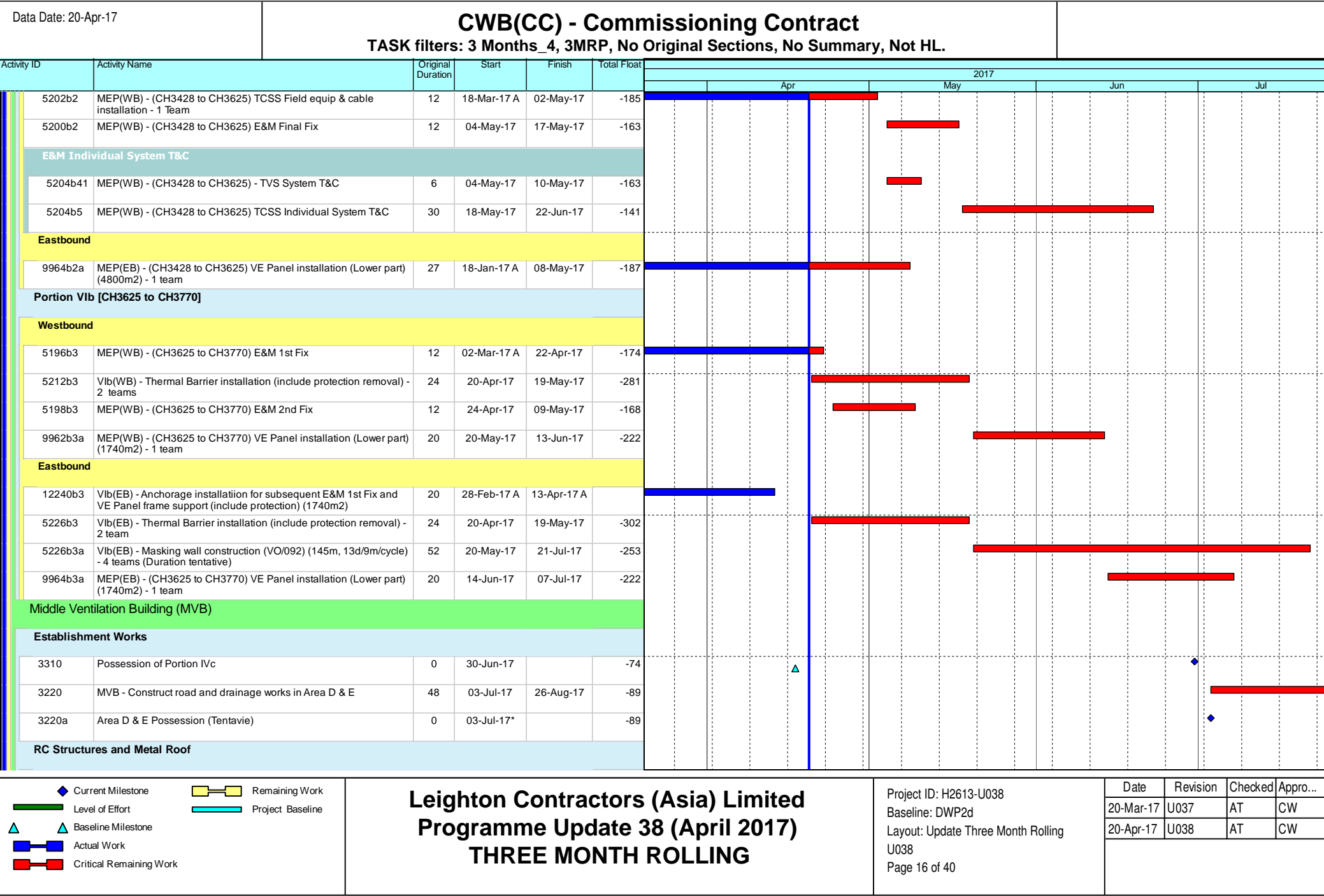
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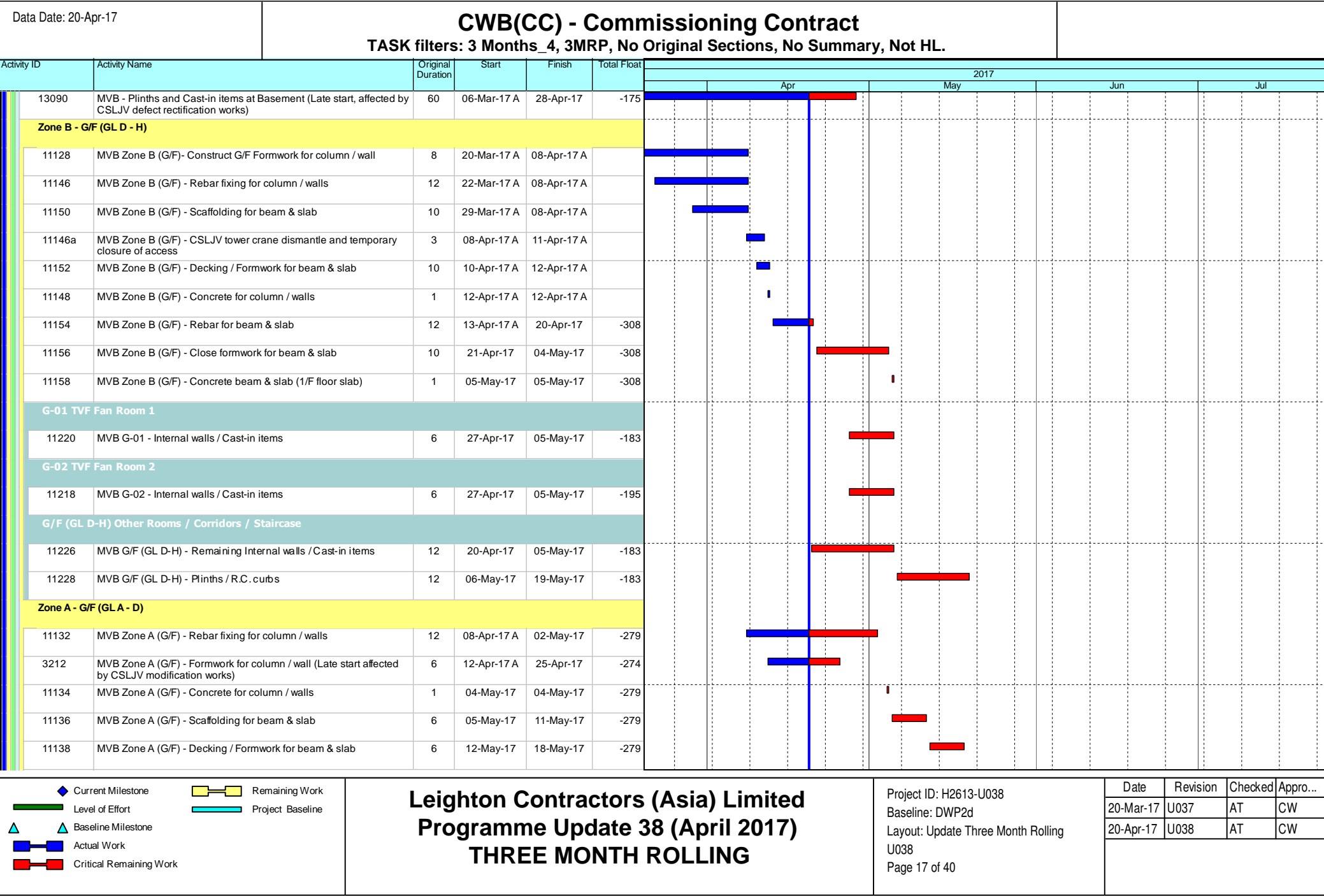
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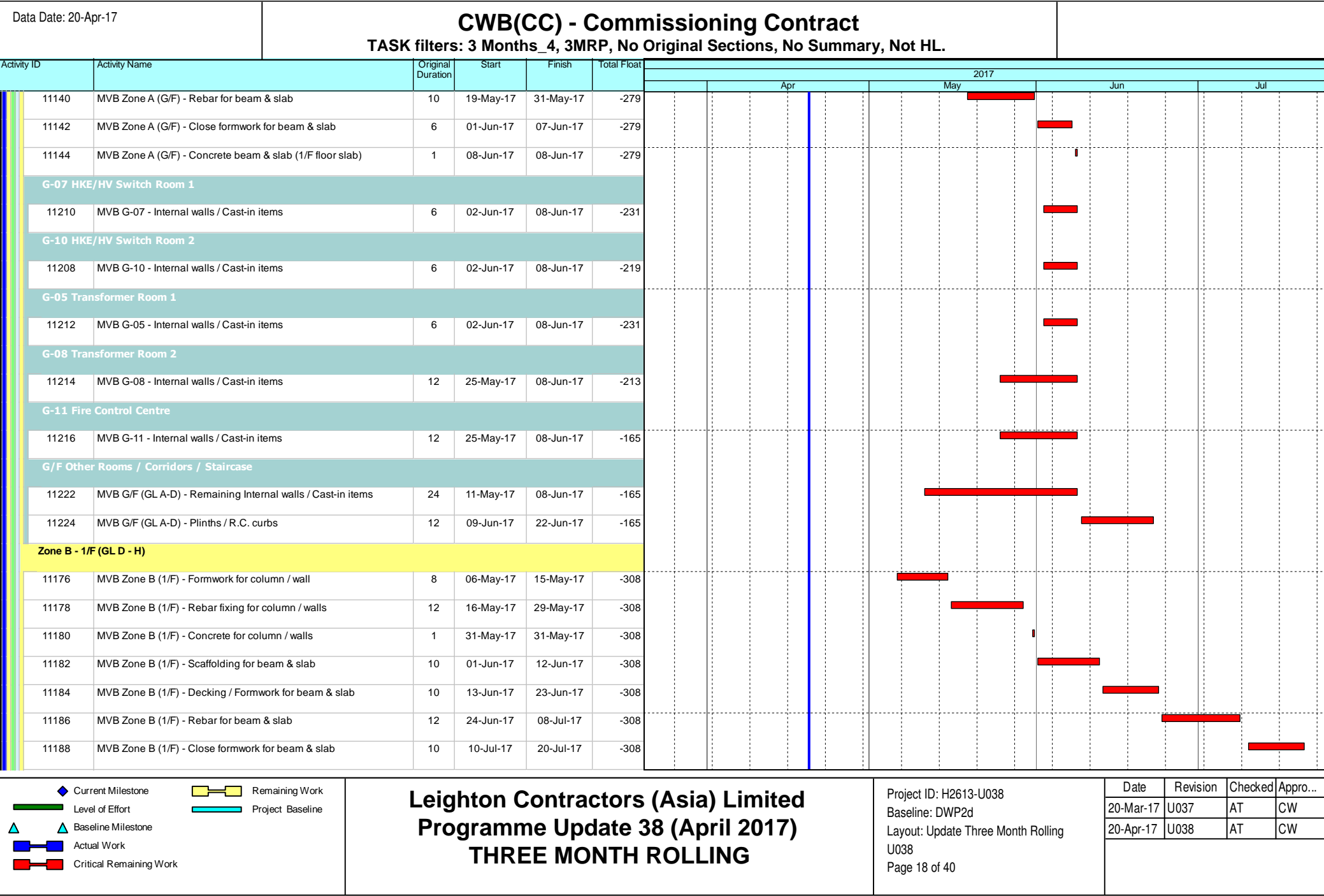














Data Date: 20-Apr-17		CWB(CC) - Commissioning Contract																
TASK filters: 3 Months_4, 3MRP, No Original Sections, No Summary, Not HL.																		
Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	2017												
						Apr			May			Jun			Jul			
19030	MEP(MVB) - E&M 1st fixing	30	31-May-17	05-Jul-17	-163													
19032	MEP(MVB) - E&M 2nd fixing	24	06-Jul-17	02-Aug-17	-163													
Basement 2M (GL D - H)																		
TV Plenum																		
19036	MEP(MVB) - ABWF Works	12	31-May-17	13-Jun-17	-175													
19038	MEP(MVB) - E&M 1st fixing	30	14-Jun-17	19-Jul-17	-175													
Basement 1 (GL D - H)																		
General Area & Corridor																		
11312	MEP(MVB) - ABWF Works	12	29-Apr-17	15-May-17	-151													
11314	MEP(MVB) - E&M 1st fixing	30	16-May-17	20-Jun-17	-151													
11316	MEP(MVB) - E&M 2nd fixing	24	21-Jun-17	19-Jul-17	-151													
Basement 1 (GLA - D)																		
MCC Room 1 (B1-04)																		
11280	MVB - ABWF works for MCC Room 1	12	01-Jun-17	14-Jun-17	-258													
11282	MEP(MVB) - E&M 1st fixing	12	15-Jun-17	28-Jun-17	-204													
12346	APS(MVB) - E&M 2nd fixing	12	29-Jun-17	13-Jul-17	-204													
11284	MEP(MVB) - MCC installation	12	14-Jul-17	27-Jul-17	-158													
UPS Room 1 (B1-11)																		
11288	MVB - ABWF works for UPS Room	12	15-Jun-17	28-Jun-17	-258													
11290	MEP(MVB) - E&M 1st fixing	12	29-Jun-17	13-Jul-17	-212													
12348	APS(MVB) - E&M 2nd fixing	12	14-Jul-17	27-Jul-17	-212													
MCC Room 2 (B1-07)																		
11304	MVB - ABWF works for MCC Room 2	12	29-Jun-17	13-Jul-17	-258													
11306	MEP(MVB) - E&M 1st fixing	12	14-Jul-17	27-Jul-17	-212													

Current Milestone

Level of Effort

Baseline Milestone

Actual Work

Critical Remaining Work

Remaining Work

Project Baseline

Leighton Contractors (Asia) Limited

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THREE MONTH ROLLING

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◆ Current Milestone

▬ Level of Effort

▲ Baseline Milestone

▬ Actual Work

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▬ Remaining Work

▬ Project Baseline

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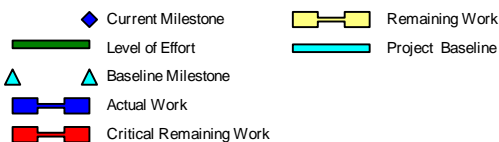
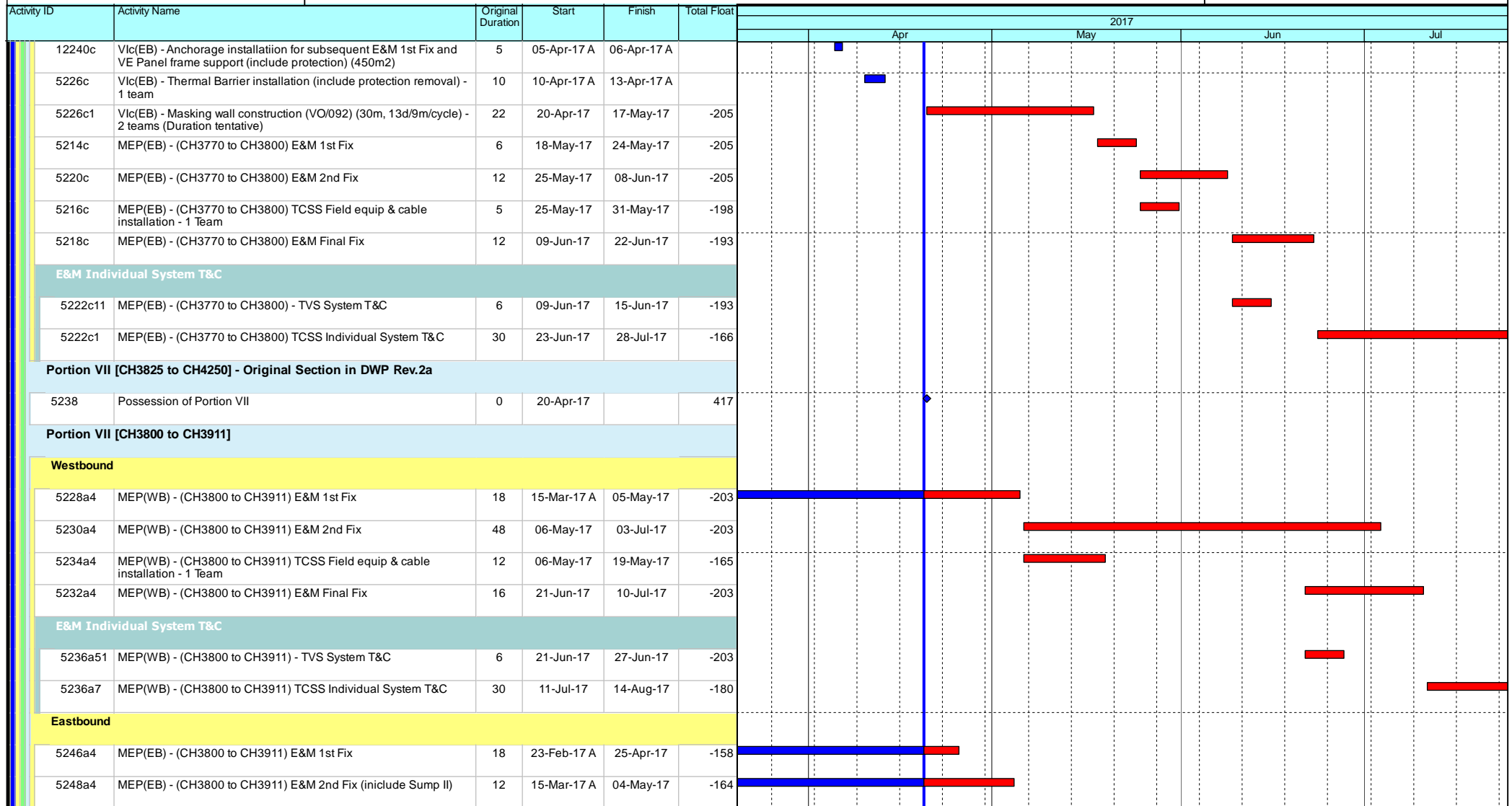
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## CWB(CC) - Commissioning Contract

TASK filters: 3 Months\_4, 3MRP, No Original Sections, No Summary, Not HL.



### Leighton Contractors (Asia) Limited

### Programme Update 38 (April 2017)

### THREE MONTH ROLLING

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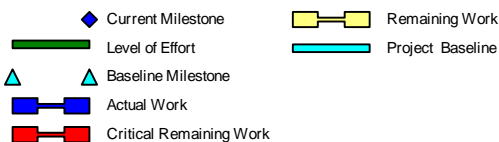
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Data Date: 20-Apr-17

## CWB(CC) - Commissioning Contract

**TASK filters: 3 Months\_4, 3MRP, No Original Sections, No Summary, Not HL.**

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	2017														
						Apr			May			Jun			Jul					
5252a4	MEP(EB) - (CH3800 to CH3911) TCSS Field equip & cable installation - 1 Team	12	17-Mar-17 A	04-May-17	-164															
5250a4	MEP(EB) - (CH3800 to CH3911) E&M Final Fix	16	05-May-17	23-May-17	-164															
9968a4	MEP(EB) - (CH3800 to CH3911) VE Panel installation (Upper part) (1332m2) - 1 team	15	08-Jul-17	25-Jul-17	-178															
9968a4a	MEP(EB) - (CH3800 to CH3911) VE Panel installation (Lower part) (1332m2) - 1 team	15	08-Jul-17	25-Jul-17	-222															
E&M Individual System T&C																				
5254a51	MEP(EB) - (CH3800 to CH3911) - TVS System T&C	6	05-May-17	11-May-17	-164															
5254a7	MEP(EB) - (CH3800 to CH3911) TCSS Individual System T&C	30	24-May-17	28-Jun-17	-141															
Portion VII [CH3911 to CH4250]																				
Access Shaft Opening																				
10118a	VII(WB) - Closure of shaft access opening	18	20-Apr-17	12-May-17	-5															
10120a	VII(WB) - shaft access opening area reinstatement works	12	13-May-17	26-May-17	-5															
Westbound																				
5228a2	MEP(WB) - (CH3911 to CH4250) E&M 1st Fix	25	14-Mar-17 A	05-May-17	-208															
5234a2	MEP(WB) - (CH3911 to CH4250) TCSS Field equip & cable installation - 1 Team	15	15-Mar-17 A	06-May-17	-183															
5230a2	MEP(WB) - (CH3911 to CH4250) E&M 2nd Fix	53	06-May-17	08-Jul-17	-208															
9966a2a	MEP(WB) - (CH3911 to CH4250) VE Panel installation (Lower part) (4068m2) - 2 team	23	09-May-17	05-Jun-17	-187															
5232a2	MEP(WB) - (CH3911 to CH4250) E&M Final Fix	16	27-Jun-17	15-Jul-17	-208															
9966a2	MEP(WB) - (CH3911 to CH4250) VE Panel installation (Upper part) (4068m2) - 2 team	23	04-Jul-17	29-Jul-17	-187															
E&M Individual System T&C																				
5236a21	MEP(WB) - (CH3911 to CH4250) - TVS System T&C	6	27-Jun-17	04-Jul-17	-208															
5236a3	MEP(WB) - (CH3911 to CH4250) TCSS Individual System T&C	30	17-Jul-17	19-Aug-17	-185															
Eastbound																				
5246a2	MEP(EB) - (CH3911 to CH4250) E&M 1st Fix	25	22-Mar-17 A	15-May-17	-226															
5248a2	MEP(EB) - (CH3911 to CH4250) E&M 2nd Fix (inlcude Sump II)	53	16-May-17	18-Jul-17	-226															

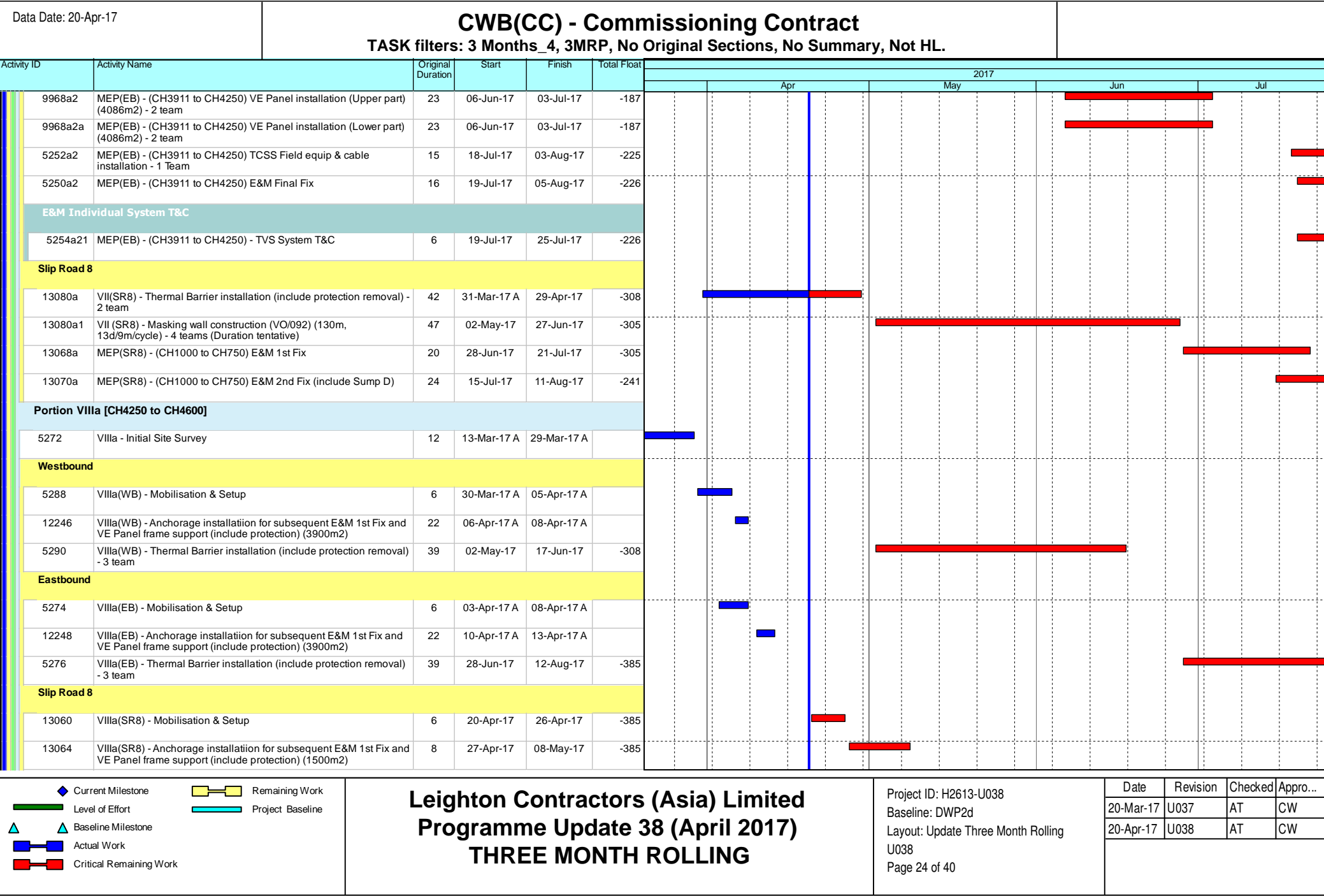


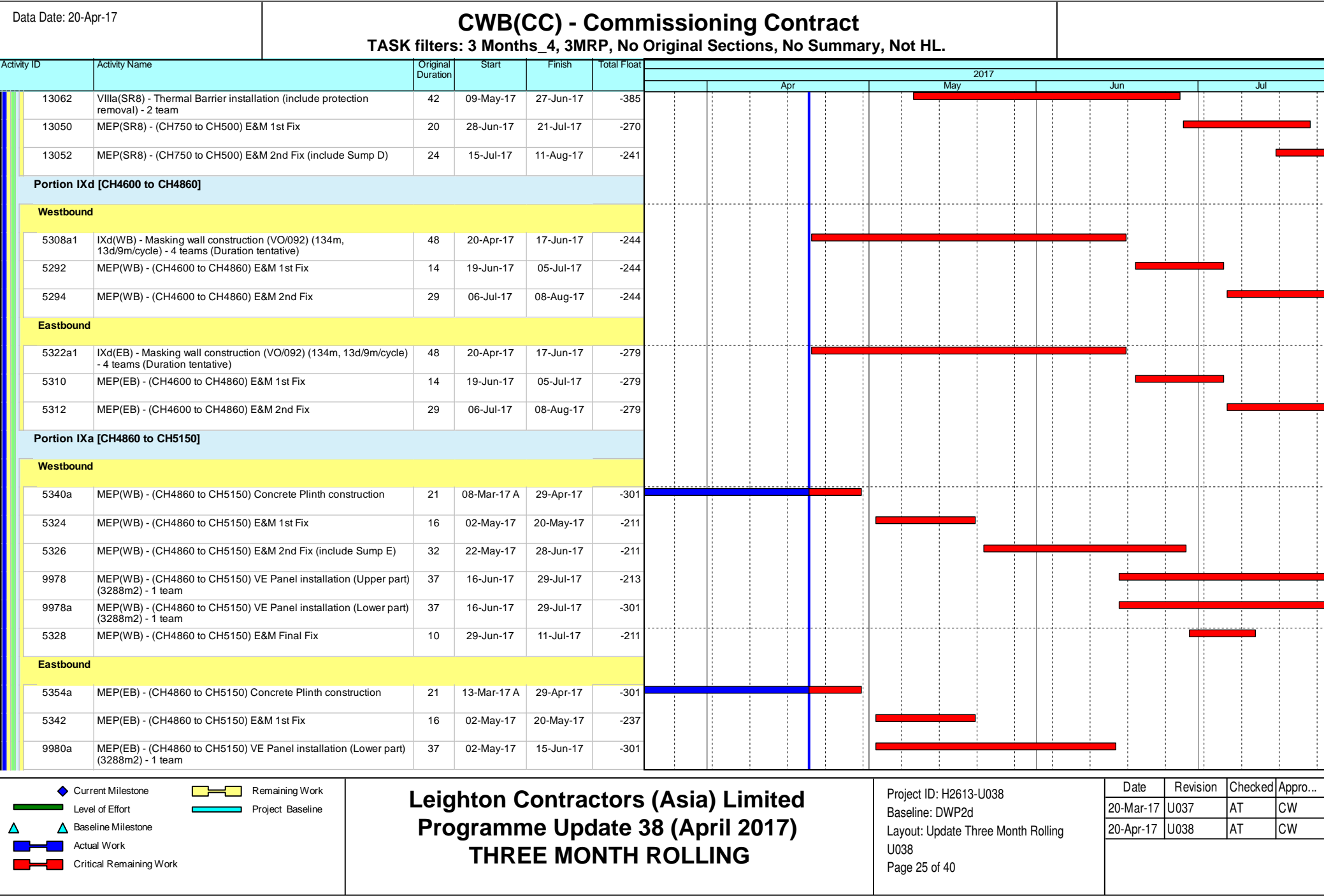
### Leighton Contractors (Asia) Limited Programme Update 38 (April 2017) THREE MONTH ROLLING

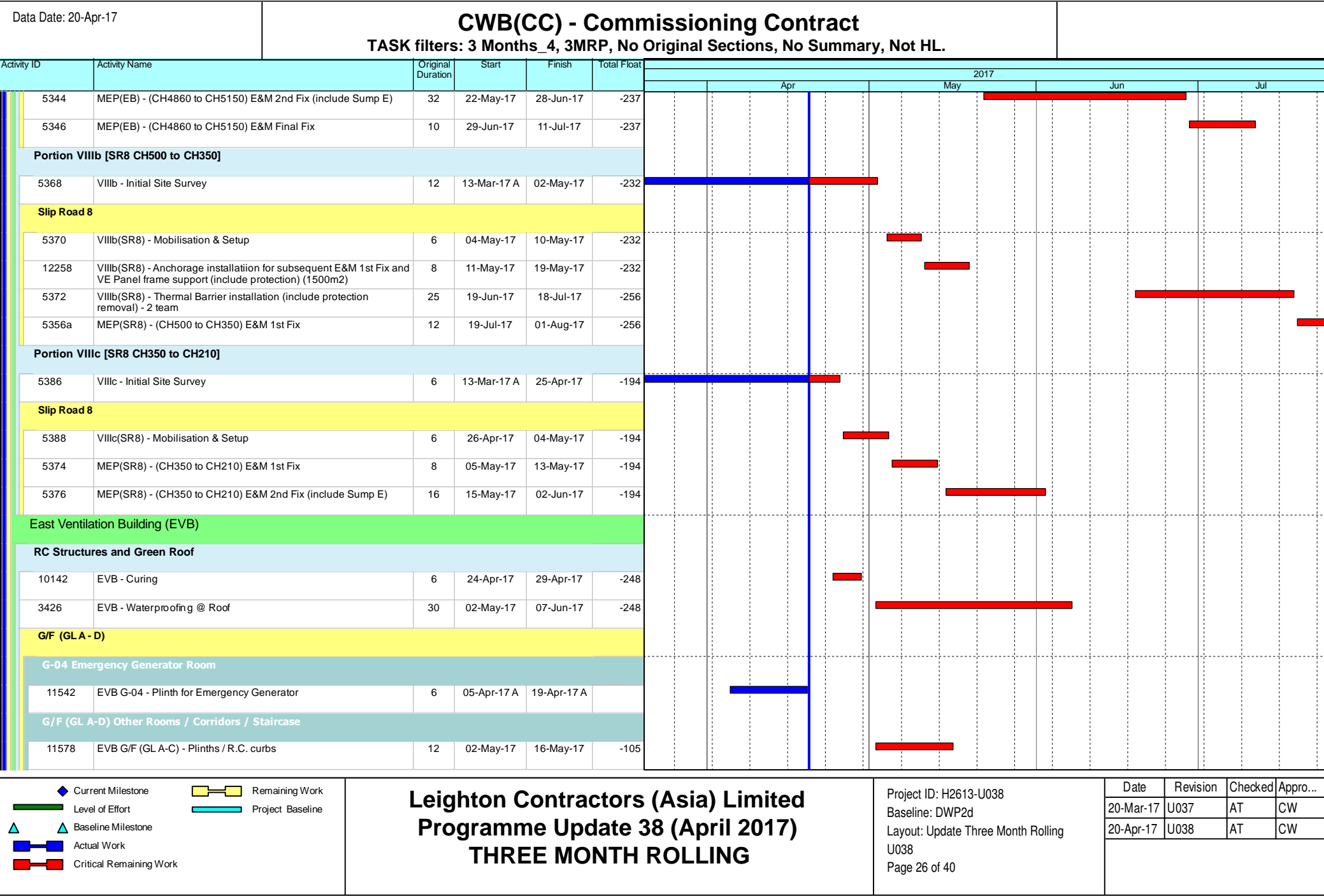
Project ID: H2613-U038  
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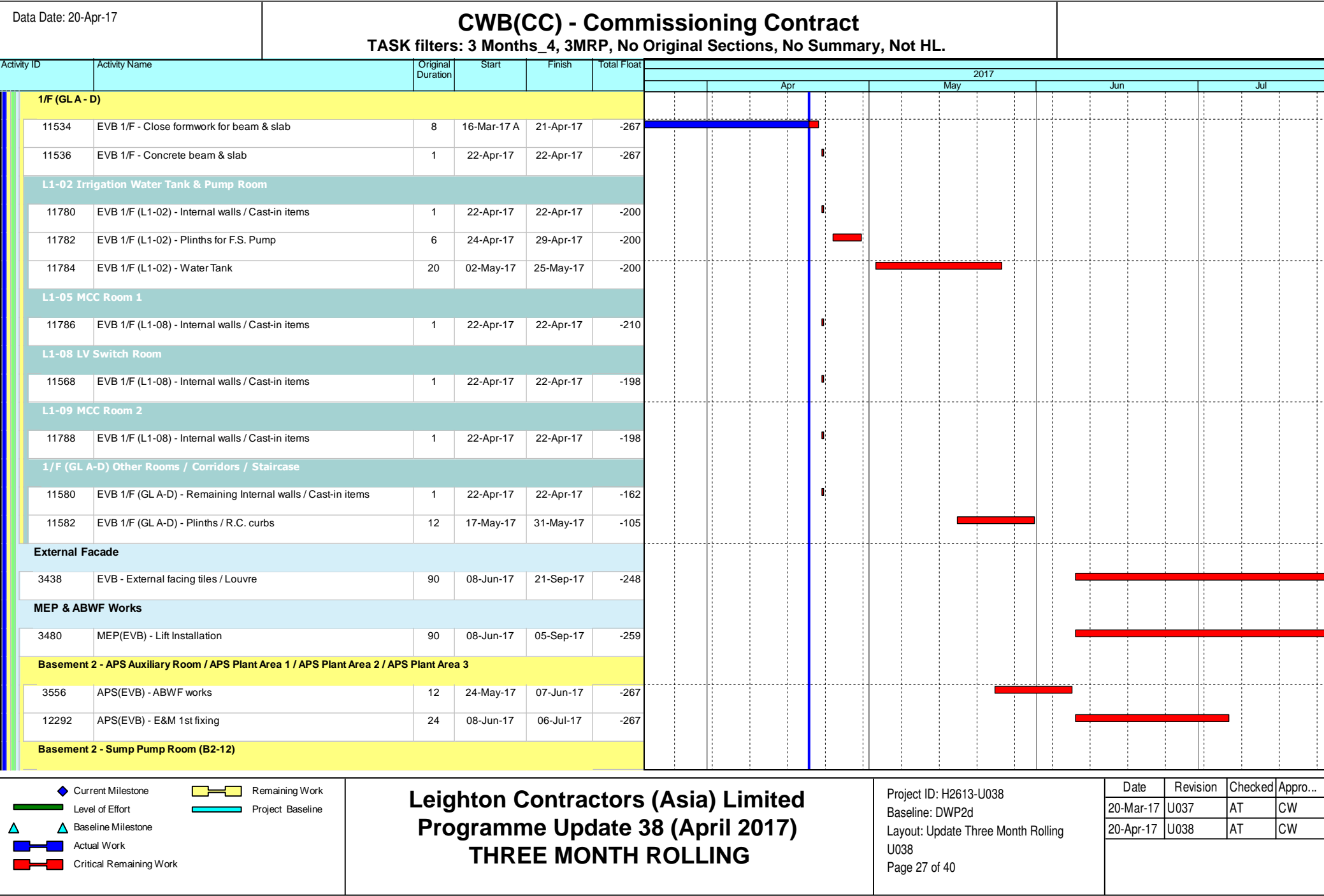
Date	Revision	Checked	Appro...
20-Mar-17	U037	AT	CW
20-Apr-17	U038	AT	CW

















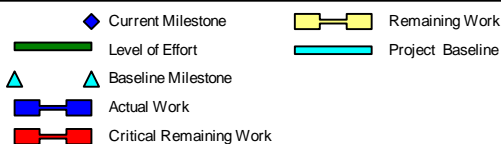
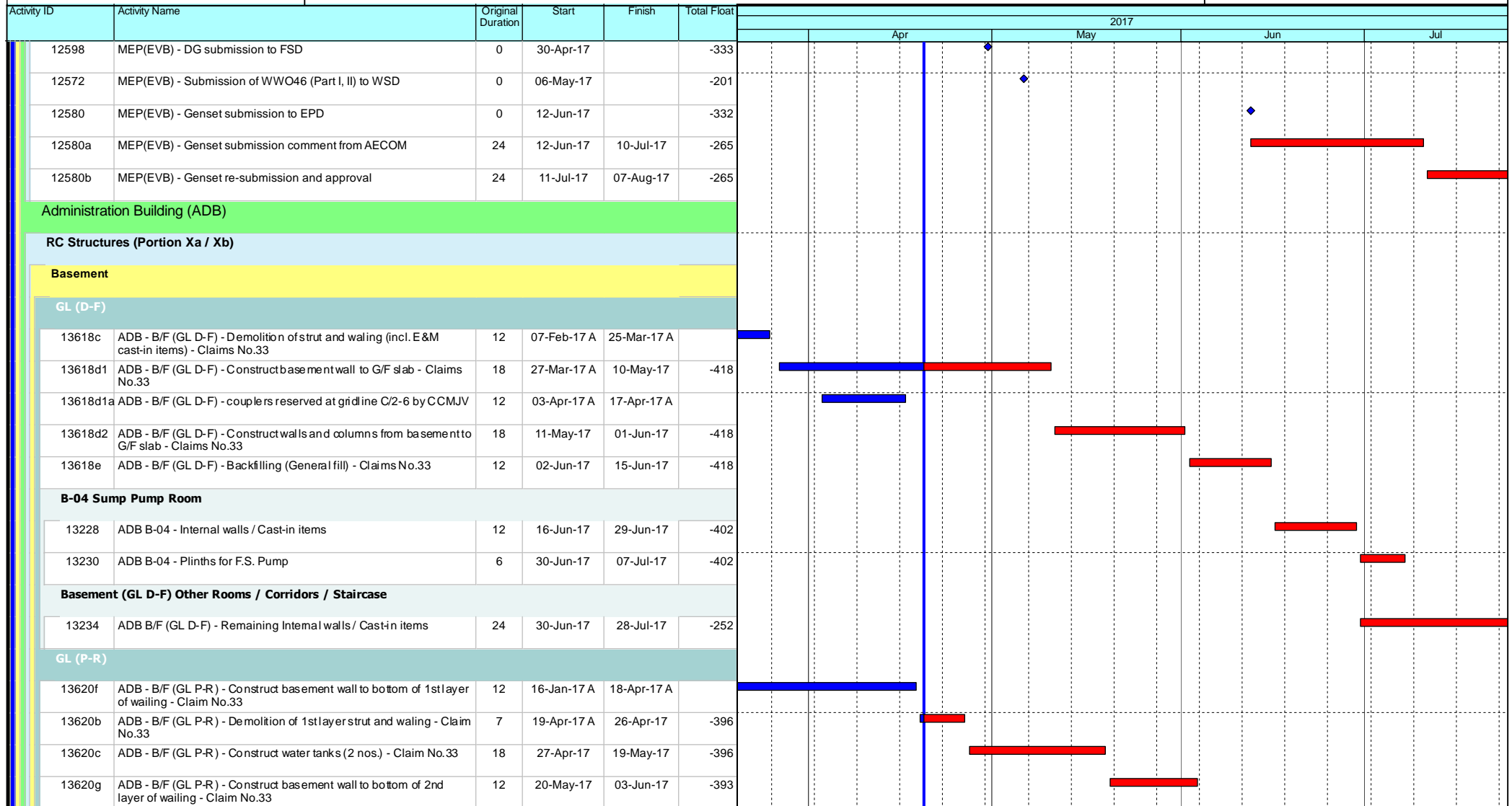




Data Date: 20-Apr-17

## CWB(CC) - Commissioning Contract

TASK filters: 3 Months\_4, 3MRP, No Original Sections, No Summary, Not HL.



### Leighton Contractors (Asia) Limited Programme Update 38 (April 2017) THREE MONTH ROLLING

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Date	Revision	Checked	Appro...
20-Mar-17	U037	AT	CW
20-Apr-17	U038	AT	CW

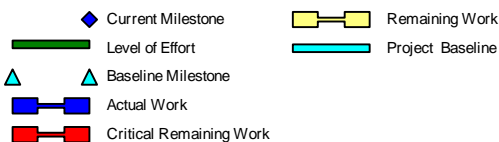


Data Date: 20-Apr-17

## CWB(CC) - Commissioning Contract

TASK filters: 3 Months\_4, 3MRP, No Original Sections, No Summary, Not HL.

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	2017											
						Apr			May			Jun			Jul		
13178	ADB G-15 - Internal walls / Cast-in items	1	23-May-17	23-May-17	-197												
<b>G-50 HKE/HV Switch Room</b>																	
13532	ADB (Xb) G-50 - Internal walls / Cast-in items	1	23-May-17	23-May-17	-245												
<b>GL (G - H)</b>																	
13154b2	ADB - G/F (GL G-H) - Formwork for column / walls	8	13-Mar-17 A	21-Mar-17 A													
13156b2	ADB - G/F (GL G-H) - Rebarfixing for column / walls	12	22-Mar-17 A	29-Mar-17 A													
13160b2	ADB - G/F (GL G-H) - Scaffolding for beam & slab	12	25-Mar-17 A	01-Apr-17 A													
13158b2	ADB - G/F (GL G-H) - Concrete for column / walls	1	30-Mar-17 A	30-Mar-17 A													
13162b2	ADB - G/F (GL G-H) - Decking / Formwork for beam & slab	12	03-Apr-17 A	19-Apr-17 A													
13164b2	ADB - G/F (GL G-H) - Rebar for beam & slab	12	19-Apr-17 A	04-May-17	-233												
13166b2	ADB - G/F (GL G-H) - Close formwork for beam & slab	12	25-Apr-17	10-May-17	-233												
13168b2	ADB - G/F (GL G-H) - Concrete beam & slab (Roofslab)	1	11-May-17	11-May-17	-233												
<b>G-21 F.S.Control Room</b>																	
13170	ADB G-21 - Internal walls / Cast-in items	1	11-May-17	11-May-17	-233												
13172	ADB G-21 - Plinths for F.S. Pump	6	12-May-17	18-May-17	-233												
<b>GL (K - N)</b>																	
13154b4	ADB - G/F (GL K-N) - Formwork for column / walls	8	06-Mar-17 A	07-Apr-17 A													
13162b4	ADB - G/F (GL K-N) - Decking / Formwork for beam & slab	12	06-Mar-17 A	07-Apr-17 A													
13156b4	ADB - G/F (GL K-N) - Rebar fixing for column / walls	12	06-Apr-17 A	27-Apr-17	-262												
13164b4	ADB - G/F (GL K-N) - Rebar for beam & slab	12	06-Apr-17 A	27-Apr-17	-262												
13166b4	ADB - G/F (GL K-N) - Close formwork for beam & slab	12	13-Apr-17 A	27-Apr-17	-262												
13158b4	ADB - G/F (GL K-N) - Concrete for column / walls	1	28-Apr-17	28-Apr-17	409												
13168b4	ADB - G/F (GL K-N) - Concrete beam & slab (Roof slab)	1	28-Apr-17	28-Apr-17	-262												
<b>G/F (GL K - N) Other Rooms / Corridors / Staircase</b>																	

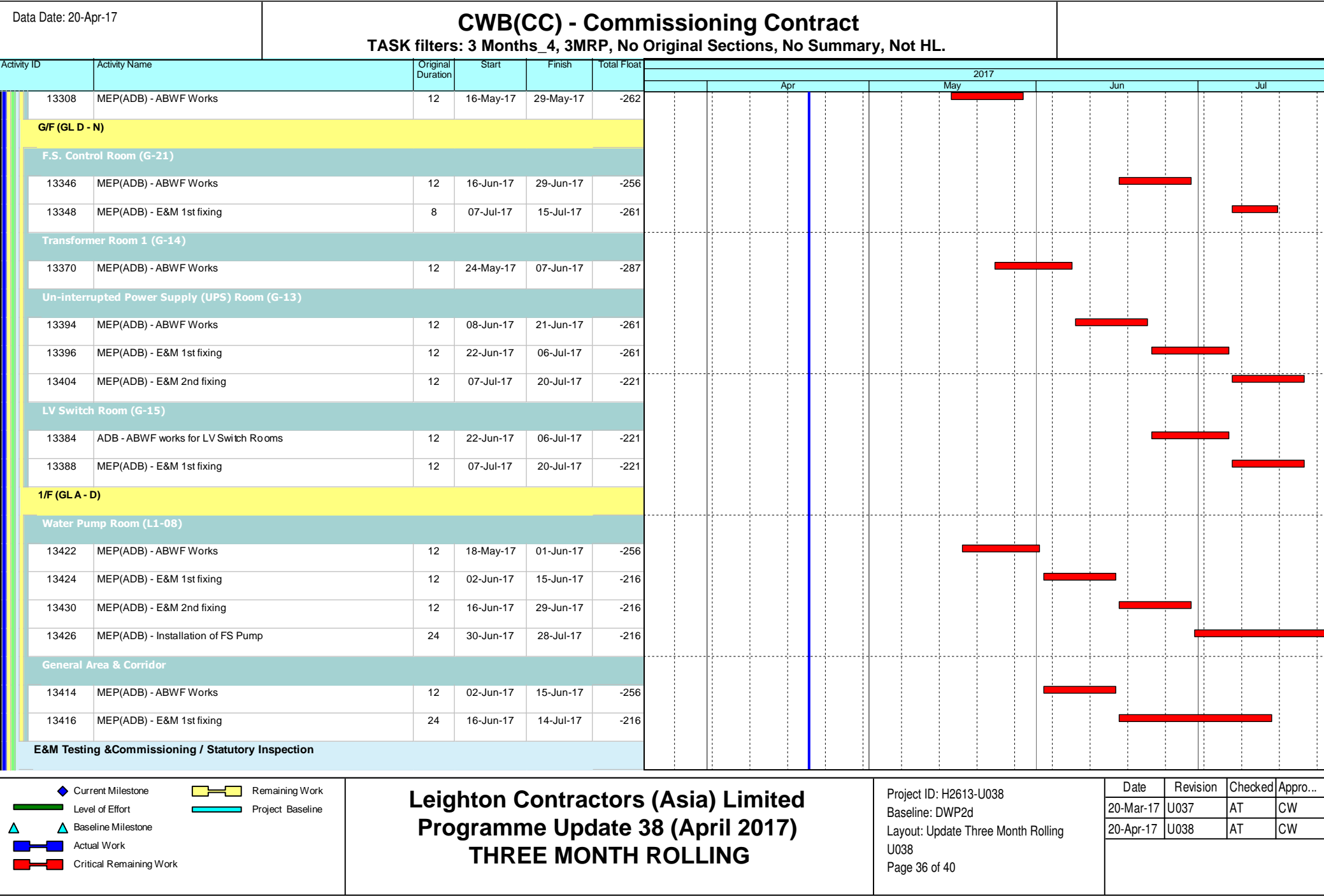


### Leighton Contractors (Asia) Limited Programme Update 38 (April 2017) THREE MONTH ROLLING

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20-Apr-17	U038	AT	CW

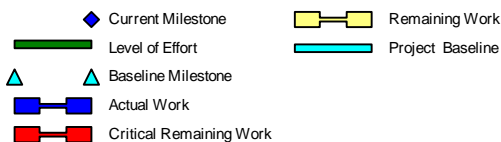
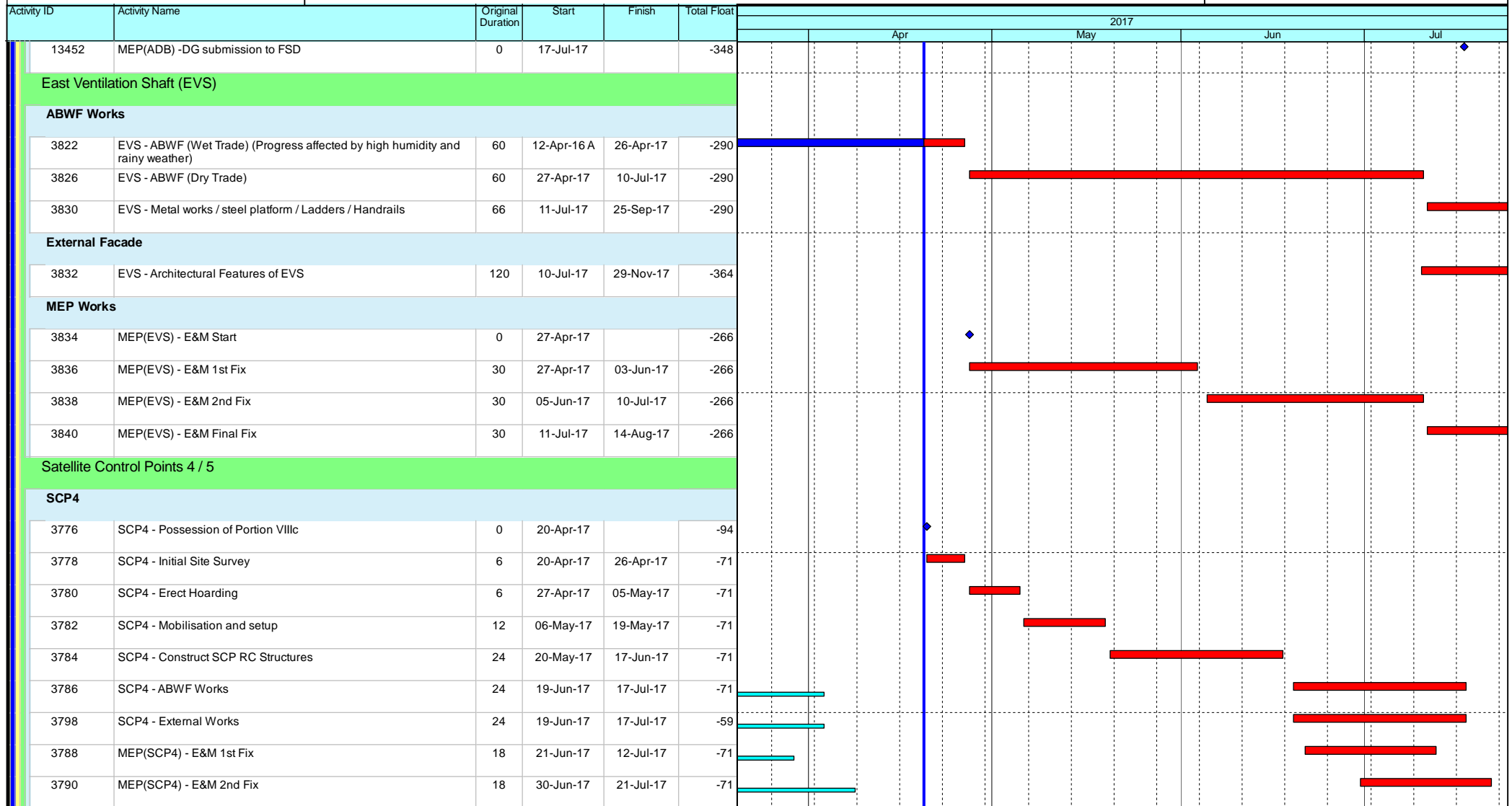




Data Date: 20-Apr-17

## CWB(CC) - Commissioning Contract

TASK filters: 3 Months\_4, 3MRP, No Original Sections, No Summary, Not HL.



### Leighton Contractors (Asia) Limited Programme Update 38 (April 2017) THREE MONTH ROLLING

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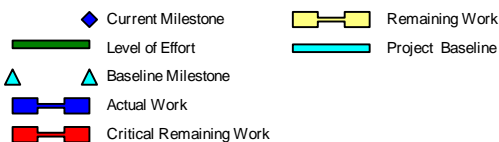
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20-Apr-17	U038	AT	CW

Data Date: 20-Apr-17

## CWB(CC) - Commissioning Contract

TASK filters: 3 Months\_4, 3MRP, No Original Sections, No Summary, Not HL.

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	2017											
						Apr			May			Jun			Jul		
3824	SCP4 - Metal works / Glazing / Louver / Handrails	18	04-Jul-17	24-Jul-17	-65												
3792	MEP(SCP4) - E&M Final Fix	18	11-Jul-17	31-Jul-17	-71												
SCP5																	
3828	SCP5 - Mobilization for Area B	0	29-Apr-17		-241												
3848	SCP5 - Initial Site Survey	6	29-Apr-17	08-May-17	-241												
3852	SCP5 - Erect Hoarding	6	09-May-17	15-May-17	-241												
3868	SCP5 - Mobilisation and setup	12	16-May-17	29-May-17	-241												
3870a	SCP5 - Construct walls upto R/F - Falseworks & Formwork	5	31-May-17	05-Jun-17	-241												
3870b	SCP5 - Construct walls upto R/F - Rebar fixing	3	06-Jun-17	08-Jun-17	-241												
3870c	SCP5 - Construct walls upto R/F - Close formwork	5	09-Jun-17	14-Jun-17	-241												
3870d	SCP5 - Construct beams & slab upto R/F - Scaffolding, falsework & formwork	7	15-Jun-17	22-Jun-17	-241												
3870e	SCP5 - Construct beams & slab upto R/F - Rebar fixing	3	23-Jun-17	26-Jun-17	-241												
3870f	SCP5 - Construct beams & slab upto R/F - Concreting	1	27-Jun-17	27-Jun-17	-241												
3872	SCP5 - ABWF Works	24	28-Jun-17	26-Jul-17	-235												
3886	SCP5 - External Works	30	28-Jun-17	02-Aug-17	-241												
External Works																	
Area A/B																	
10288a3	Request for VO/instruction-TCSS equipment installation & cabling (Gantries FVMS1 /ADS01) (Ref: H27613-LJV-ME-LE-4022)	24	04-Oct-16 A	26-May-17	-162												
10288f	C19 allow access at Area B	0	29-Apr-17*		-321												
10288a1	Area A TCSS equipment installation and cabling (Gantry FVMS 1) - After C18 gantry installation complete	40	27-May-17	14-Jul-17	-162												
10288a2	Area A TCSS equipment installation and cabling (Gantry ADS01) - Start date is tentative and to be confirmed	40	27-May-17	14-Jul-17	-162												
Area B TCSS																	
Landscape Deck / Noise Enclosure (No TTA)																	
10288b1	Area B TCSS equipment installation and cabling (on IEC's Westbound)	120	29-Apr-17	20-Sep-17	-168												



### Leighton Contractors (Asia) Limited Programme Update 38 (April 2017) THREE MONTH ROLLING

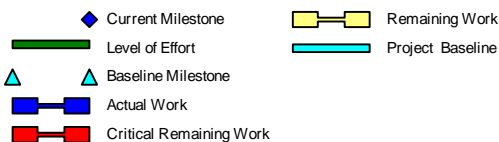
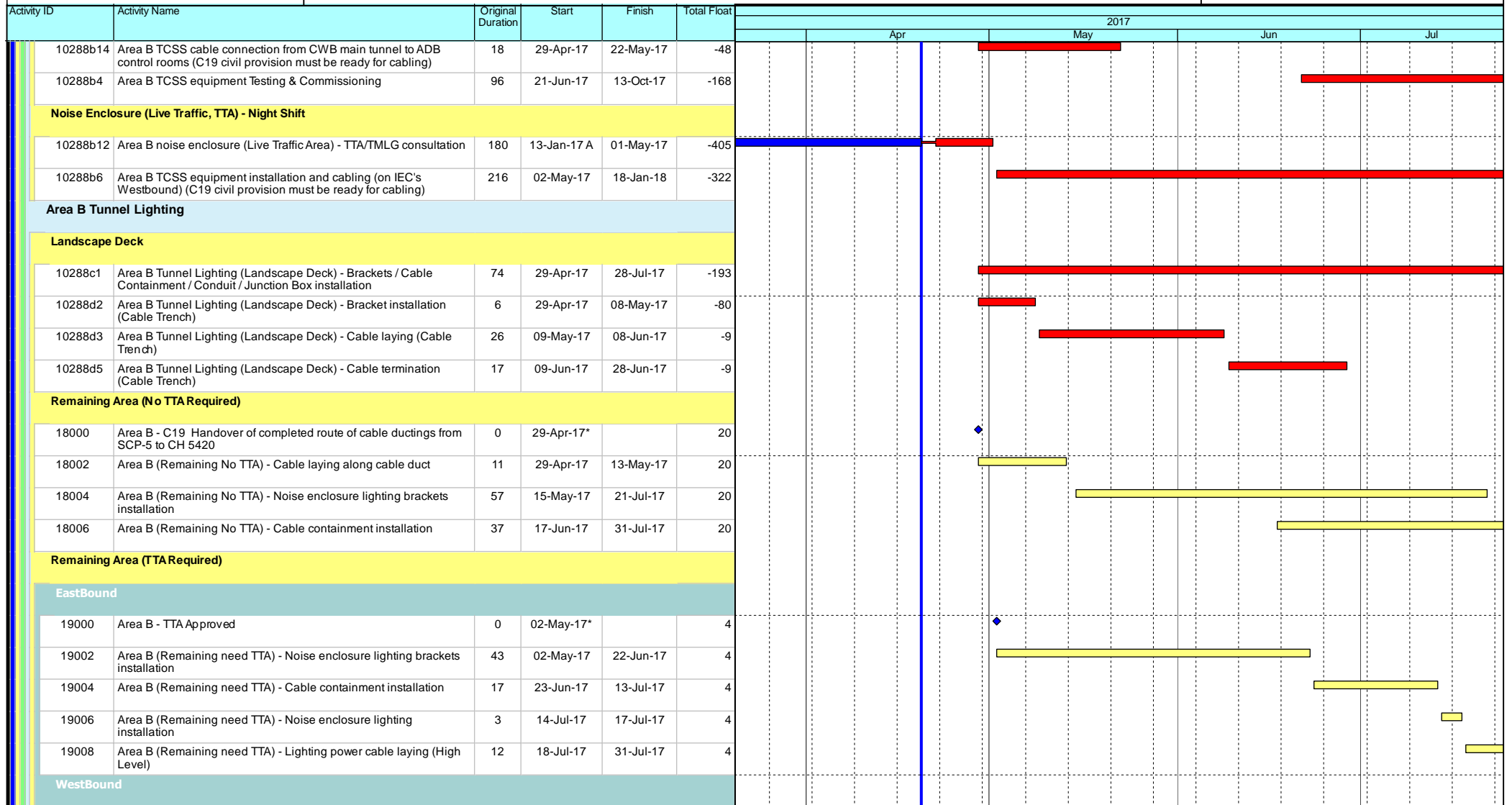
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Date	Revision	Checked	Appro...
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## CWB(CC) - Commissioning Contract

**TASK filters: 3 Months\_4, 3MRP, No Original Sections, No Summary, Not HL.**



### Leighton Contractors (Asia) Limited Programme Update 38 (April 2017) THREE MONTH ROLLING

Project ID: H2613-U038  
 Baseline: DWP2d  
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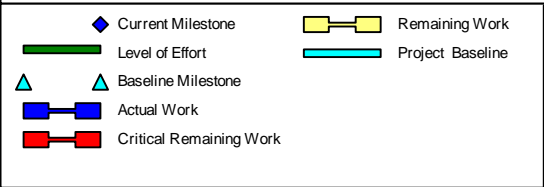
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Data Date: 20-Apr-17

**CWB(CC) - Commissioning Contract**  
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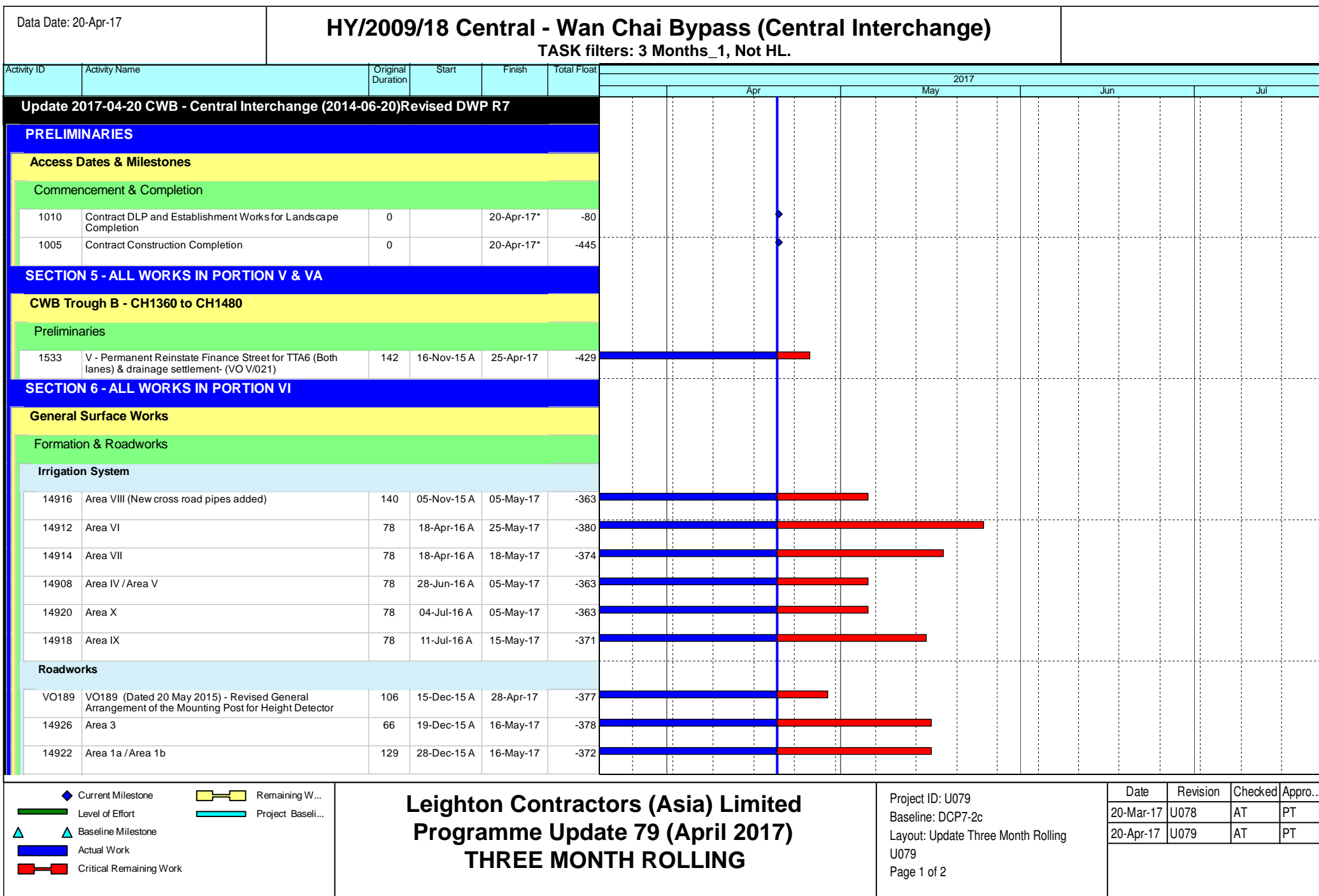
**CWB(CC) - Commissioning Contract**  
TASK filters: 3 Months\_4, 3MRP, No Original Sections, No Summary, Not HL.

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**Leighton Contractors (Asia) Limited  
Programme Update 38 (April 2017)  
THREE MONTH ROLLING**

Project ID: H2613-U038  
Baseline: DWP2d  
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Date	Revision	Checked	Appro...
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Activity ID	Activity Name	Rem Dur	Start	Finish	2017															
									May				June				July			
					16	23	30	07	14	21	28	04	11	18	25	02	09	16	23	
0330-1043	Construction of Brace Footing	5	10-May-17	15-May-17																
0330-1047	Erection of Bracing Beam (3Nos)	3	16-May-17	18-May-17																
0330-1049	Touch-up Painting	12	22-May-17	05-Jun-17																
0330-1051	Waterproofing & Slab Reinstatement	7	19-May-17	26-May-17																
0330-1053	Breaking Slab & Excavate for Lamp Pole Footing	7	11-May-17	18-May-17																
0330-1055	Construction of Lamp Pole Footing (12Nos)	21	12-May-17	06-Jun-17																
0330-1057	Drilling for Lamp Pole at Existing Slab (8Nos Poles; M16-64Nos)	8	18-May-17	26-May-17																
0330-1059	Installation of Lamp Pole (total 20Nos)	14	23-May-17	08-Jun-17																
0330-1061	Breaking Existing Slab for Cross Road Ducting (Approx 300m)	18	24-May-17	14-Jun-17																
0330-1063	Laying Duct	5	15-Jun-17	20-Jun-17																
0330-1065	Cabling Works	9	21-Jun-17	30-Jun-17																
0330-1067	Slab Reinstatement	8	03-Jul-17	11-Jul-17																
0330-1069	Drilling for Post Anchor Bolts for Facility Area 5 & 10 (172Nos)	9	25-Apr-17	05-May-17																
0330-1071	Installation of Post (43Nos)	9	28-Apr-17	09-May-17																
0330-1073	Construction of Steel Roof	9	04-May-17	13-May-17																
0330-1075	Sprinkler System Installation	10	09-May-17	19-May-17																
0330-1077	T & C of Sprinkler System	6	20-May-17	26-May-17																
0330-1079	Drilling for Post Anchor Bolts for Facility Area 6, 8 & 9 (292Nos)	15	08-May-17	24-May-17																
0330-1081	Installation of Post (73Nos)	15	12-May-17	29-May-17																
0330-1083	Breaking Slab & Connection to Existing Draw Pits	14	11-May-17	26-May-17																
0330-1085	Breaking Slab & Excavate for Draw Pits (17Nos)	15	27-May-17	14-Jun-17																
0330-1087	Construction of Draw Pits (3 Gang @ 6d/Pit)	36	02-Jun-17	14-Jul-17																
0330-1089	BackFilling Works around Draw Pits	7	15-Jul-17	22-Jul-17																
0330-1093	Construction of U-Channels	33	02-Jun-17	11-Jul-17																
05 - SECTION 2 & 2A OF THE WORKS																				
05.1 - Cut & Cover Tunnel Ch 4855-4932 (APS Footprint)																				
05.1.6 - EVB Sub-structure & Tunnel																				
05.1.7 - EVB & Tunnel Remedial Works																				
A2273	EVB - Rectification of Concrete Defects at Stairs 01 & 6	6	20-Dec-16 A	26-Apr-17																
A4870	APS - B2M Southern Wall	6	11-Mar-17 A	26-Apr-17																
09 - SECTION 6 OF THE WORKS																				
09.1 - Carparks for Harbour Grand Hong Kong																				
HGHK Reprovision																				
Design, Submission, Material Approval																				
Testing and Commissioning																				

Remaining Level of Effort

Actual Level of Effort

Actual Work

Remaining Work

Critical Remaining Work

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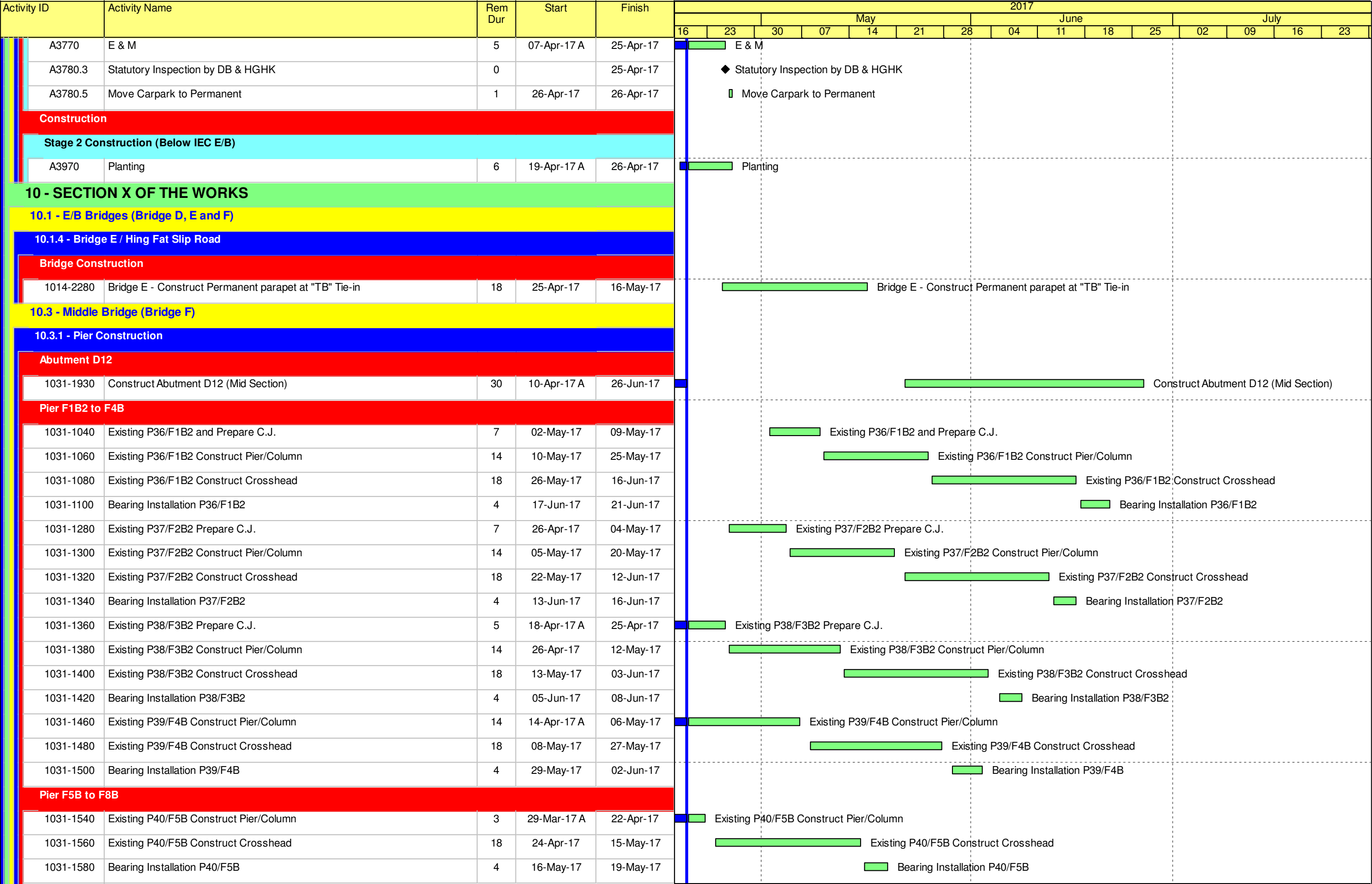
 Milestone

◆ Milestone

Contract HY/2009/19

Three Months Rolling Programme (20 April 2017 to 19 July 2017)

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Activity ID		Activity Name	Rem Dur	Start	Finish	2017															
						May						June				July					
						16	23	30	07	14	21	28	04	11	18	25	02	09	16	23	
	1031-1640	Existing P41/F6B Construct Crosshead	13	10-Apr-17 A	05-May-17	Existing P41/F6B Construct Crosshead															
	1031-1660	Bearing Installation P41/F6B	4	06-May-17	10-May-17	Bearing Installation P41/F6B															
	1031-1720	Existing P42/F7B Construct Crosshead	8	24-Mar-17 A	28-Apr-17	Existing P42/F7B Construct Crosshead															
	1031-1740	Bearing Installation P42/F7B	4	29-Apr-17	04-May-17	Bearing Installation P42/F7B															
	1031-1800	Existing P43/F8B Construct Crosshead	3	17-Mar-17 A	22-Apr-17	Existing P43/F8B Construct Crosshead															
	1031-1820	Upstand Wall + Bearing Installation P43/F8B	11	24-Apr-17	06-May-17	Upstand Wall + Bearing Installation P43/F8B															
10.3.2 - Bridge Construction																					
Bridge F3B																					
	1032-1840	LG-A Launching - Engage FL at F7B/Pier42	2	08-May-17	09-May-17	LG-A Launching - Engage FL at F7B/Pier42															
	1032-1860	P42/F7B - Install Pier Segment - Place Pier Segment	1	10-May-17	10-May-17	P42/F7B - Install Pier Segment - Place Pier Segment															
	1032-1880	P42/F7B - Install Pier Segment - Adjust Segment Level and Location	2	11-May-17	12-May-17	P42/F7B - Install Pier Segment - Adjust Segment Level and Location															
	1032-1900	P42/F7B - Install Pier Segment - Grouting the Bearing Upper Plinth	2	13-May-17	15-May-17	P42/F7B - Install Pier Segment - Grouting the Bearing Upper Plinth															
	1032-1920	P42/F7B - Install Pier Segment - Stressing Nailing	2	16-May-17	17-May-17	P42/F7B - Install Pier Segment - Stressing Nailing															
	1032-1940	LG-A Launching - Install MS at P42/F7B	1	18-May-17	18-May-17	LG-A Launching - Install MS at P42/F7B															
	1032-1960	LG-A Launching - Deactivate the MS at F9B/Pier44 and Engage FL at P41/F6B	2	19-May-17	20-May-17	LG-A Launching - Deactivate the MS at F9B/Pier44 and Engage FL at P41/F6B															
	1032-1980	P41/F6B - Install Pier Segment - Place Pier Segment	1	22-May-17	22-May-17	P41/F6B - Install Pier Segment - Place Pier Segment															
	1032-2000	P41/F6B - Install Pier Segment - Adjust Segment Level and Location	2	23-May-17	24-May-17	P41/F6B - Install Pier Segment - Adjust Segment Level and Location															
	1032-2020	P41/F6B - Install Pier Segment - Grouting the Bearing Upper Plinth	2	25-May-17	26-May-17	P41/F6B - Install Pier Segment - Grouting the Bearing Upper Plinth															
	1032-2040	P41/F6B - Install Pier Segment - Stressing Nailing	2	27-May-17	29-May-17	P41/F6B - Install Pier Segment - Stressing Nailing															
	1032-2060	P41/F6B - Install Pier Segment - Install MS at F6B/Pier41	1	31-May-17	31-May-17	P41/F6B - Install Pier Segment - Install MS at F6B/Pier41															
	1032-2080	P42/F7B - T Span Erection (5 pairs)	4	01-Jun-17	05-Jun-17	P42/F7B - T Span Erection (5 pairs)															
	1032-2100	P43/F8B(MJ Left) - End Span Erection - Hanging Segments	3	06-Jun-17	08-Jun-17	P43/F8B(MJ Left) - End Span Erection - Hanging Segments															
	1032-2120	P43/F8B(MJ Left) - End Span Erection - Erect Segments	1	09-Jun-17	09-Jun-17	P43/F8B(MJ Left) - End Span Erection - Erect Segments															
	1032-2140	P43/F8B(MJ Left) - End Span Erection - Stitching	2	10-Jun-17	12-Jun-17	P43/F8B(MJ Left) - End Span Erection - Stitching															
	1032-2160	P43/F8B(MJ Left) - End Span Erection - Formwork Fixing for and Grouting for Bearing	2	10-Jun-17	12-Jun-17	P43/F8B(MJ Left) - End Span Erection - Formwork Fixing for and Grouting for Bearing															
	1032-2180	P43/F8B(MJ Left) - End Span Erection - Prestress Span Tendons	2	13-Jun-17	14-Jun-17	P43/F8B(MJ Left) - End Span Erection - Prestress Span Tendons															
	1032-2200	P43/F8B(MJ Left) - End Span Erection - Remove Hanger Bar & Hanger Beam & Stitching Formwork	1	15-Jun-17	15-Jun-17	P43/F8B(MJ Left) - End Span Erection - Remove Hanger Bar & Hanger Beam & Stitching Formwork															
	1032-2220	LG-A Launching - Deactivate the MS at F8B/Pier43 and Engage FL at P40/F5B	2	16-Jun-17	17-Jun-17	LG-A Launching - Deactivate the MS at F8B/Pier43 and Engage FL at P40/F5B															
	1032-2240	P41/F6B - T Span Erection (6 pairs)	4	19-Jun-17	22-Jun-17	P41/F6B - T Span Erection (6 pairs)															
	1032-2260	P40/F5B - Install Pier Segment - Place Pier Segment (2nos.)	2	19-Jun-17	20-Jun-17	P40/F5B - Install Pier Segment - Place Pier Segment (2nos.)															
	1032-2280	P40/F5B - Install Pier Segment - Adjust Segment Level and Location	3	21-Jun-17	23-Jun-17	P40/F5B - Install Pier Segment - Adjust Segment Level and Location															
	1032-2300	P40/F5B - Install Pier Segment - Install the Tie & Packing System	2	24-Jun-17	26-Jun-17	P40/F5B - Install Pier Segment - Install the Tie & Packing System															
	1032-2320	P40/F5B - Install Pier Segment - Install MS at P40/F5B (Right) and Engage FL at P39/F4B	2	27-Jun-17	28-Jun-17	P40/F5B - Install Pier Segment - Install MS at P40/F5B (Right) and Engage FL at P39/F4B															
	1032-2340	P40/F5B(MJ Right) - End Span Erection - Hanging Segments	2	29-Jun-17	30-Jun-17	P40/F5B(MJ Right) - End Span Erection - Hanging Segments															
	1032-2360	P40/F5B(MJ Right) - End Span Erection - Erect Segments	1	03-Jul-17	03-Jul-17	P40/F5B(MJ Right) - End Span Erection - Erect Segments															

Remaining Level of Effort

Actual Level of Effort

Actual Work

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Activity ID	Activity Name	Rem Dur	Start	Finish	2017															
									May				June				July			
					16	23	30	07	14	21	28	04	11	18	25	02	09	16	23	
1032-2380	P40/F5B(MJ Right) - End Span Erection - Stitching	2	04-Jul-17	05-Jul-17													<div><div></div></div> P40/F5B(MJ Right) - End Span Erection - Stitching			
1032-2400	P40/F5B(MJ Right) - End Span Erection - Formwork Fixing for and Grouting for Bearing	2	04-Jul-17	05-Jul-17													<div><div></div></div> P40/F5B(MJ Right) - End Span Erection - Formwork Fixing for and Grouting for Bearing			
1032-2420	P40/F5B(MJ Right) - End Span Erection - Prestress Span Tendons	2	06-Jul-17	07-Jul-17													<div><div></div></div> P40/F5B(MJ Right) - End Span Erection - Prestress Span Tendons			
1032-2440	P40/F5B(MJ Right) - End Span Erection - Remove Hanger Bar & Hanger Beam & Stitching Formwork	1	08-Jul-17	08-Jul-17													<div><div></div></div> P40/F5B(MJ Right) - End Span Erection - Remove Hanger Bar & Hanger Beam & Stitching Formwork			
1032-2460	Prestress Extenral Tendon Bridge F3B	10	10-Jul-17	20-Jul-17													<div><div></div></div> Prestress Extenral Tendon Bridge F3B			
Bridge F2B																				
1032-2580	P39/F4B - Install Pier Segment - Place Pier Segment	1	04-Jul-17	04-Jul-17													<div><div></div></div> P39/F4B - Install Pier Segment - Place Pier Segment			
1032-2600	P39/F4B - Install Pier Segment - Adjust Segment Level and Location	2	05-Jul-17	06-Jul-17													<div><div></div></div> P39/F4B - Install Pier Segment - Adjust Segment Level and Location			
1032-2620	P39/F4B - Install Pier Segment - Grouting the Bearing Upper Plinth	2	07-Jul-17	08-Jul-17													<div><div></div></div> P39/F4B - Install Pier Segment - Grouting the Bearing Upper Plinth			
1032-2640	P39/F4B - Install Pier Segment - Stressing Nailing	2	10-Jul-17	11-Jul-17													<div><div></div></div> P39/F4B - Install Pier Segment - Stressing Nailing			
1032-2660	P39/F4B - Install MS at P39/F4B	2	12-Jul-17	13-Jul-17													<div><div></div></div> P39/F4B - Install MS at P39/F4B			
1032-2680	P39/F4B - Install Pier Segment - Relocate MS at P40/F5B to left and Engage FL at P39/F3B	2	14-Jul-17	15-Jul-17													<div><div></div></div> P39/F4B - Install Pier Segment - Relocate MS at P40/F5B to left and Engage FL at P39/F3B			
1032-2700	P39/F4B - T Span Erection (6 pairs)	4	17-Jul-17	20-Jul-17													<div><div></div></div> P39/F4B - T Span Erection (6 pairs)			
All Middle Bridge F (Common)																				
1032-4350	TCSS/LV Ducts at Pier 50-51	14	27-Apr-17	13-May-17		<div><div></div></div> TCSS/LV Ducts at Pier 50-51														
1032-4353	TCSS/LV Ducts at Pier 51-52	14	15-May-17	31-May-17			<div><div></div></div> TCSS/LV Ducts at Pier 51-52													
1032-4354	TCSS/LV Ducts at Pier 52-53	14	01-Jun-17	16-Jun-17				<div><div></div></div> TCSS/LV Ducts at Pier 52-53												
1032-4355	TCSS/LV Ducts at Pier 53-54	14	17-Jun-17	04-Jul-17					<div><div></div></div> TCSS/LV Ducts at Pier 53-54											
1032-4356	TCSS/LV Ducts at Pier 55-56	14	05-Jul-17	20-Jul-17						<div><div></div></div> TCSS/LV Ducts at Pier 55-56										
10.4 - Bridge Deck Demolition																				
10.4.3 - Existing E/B Bridge																				
10412-1650	Demolish Dolphin + Tie Beam & Reconstruct Tie Beam Pier 34	20	19-Jun-17	12-Jul-17												<div><div></div></div> Demolish Dolphin + Tie Beam & Reconstruct Tie Beam Pier 34				
10412-1670	Demolish Temp. E/B Bridge - Crosshead & Pier > Pier 34 & 35 by Crane	9	08-Jun-17	17-Jun-17									<div><div></div></div> Demolish Temp. E/B Bridge - Crosshead & Pier > Pier 34 & 35 by Crane							
10412-1700	Demolish Dolphin+Pile Cap & Reconstruct Pier 33 Pile Cap	20	19-Jun-17	12-Jul-17												<div><div></div></div> Demolish Dolphin+Pile Cap & Reconstruct Pier 33 Pile Cap				
10412-1710	Demolish Temp. E/B Bridge - Crosshead & Pier > Pier 33	9	27-May-17	07-Jun-17					<div><div></div></div> Demolish Temp. E/B Bridge - Crosshead & Pier > Pier 33											
10412-1720	Demolish Temp. E/B Bridge - Deck > Pier 33 to 34 (6 beams)	5	22-May-17	26-May-17				<div><div></div></div> Demolish Temp. E/B Bridge - Deck > Pier 33 to 34 (6 beams)												
10412-1730	Demolish Dolphin+Pile Cap & Reconstruct Pier 32 Pile Cap	20	08-Jun-17	30-Jun-17									<div><div></div></div> Demolish Dolphin+Pile Cap & Reconstruct Pier 32 Pile Cap							
10412-1760	Demolish Dolphin+Pile Cap & Reconstruct Pier 31 Pile Cap	20	08-Mar-17 A	13-May-17	<div><div></div></div> Demolish Dolphin+Pile Cap & Reconstruct Pier 31 Pile Cap															
10412-1790	Demolish Dolphin+Pile Cap & Reconstruct Pier 30 Pile Cap	20	02-Mar-17 A	13-May-17	<div><div></div></div> Demolish Dolphin+Pile Cap & Reconstruct Pier 30 Pile Cap															
A3430	Demolish Pier + Steel Support at Pier 36	9	20-Apr-17 A	29-Apr-17	<div><div></div></div> Demolish Pier + Steel Support at Pier 36															
A3440	Launch LG-BM to next Bridge Span	1	02-May-17	02-May-17	<div><div></div></div> Launch LG-BM to next Bridge Span															
A3450	Demolish Four(4nos) Beams at Pier 35-34 - by LG-BM	2	03-May-17	04-May-17	<div><div></div></div> Demolish Four(4nos) Beams at Pier 35-34 - by LG-BM															
A3460	Dismantle LGB	14	05-May-17	20-May-17	<div><div></div></div> Dismantle LGB															
10.5 - Temporary Bridge																				
10.5.2 - Temporary Bridge 'TB'																				

Remaining Level of Effort

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					May				June				July							
					16	23	30	07	14	21	28	04	11	18	25	02	09	16	23	
1061-4901.2	Sheet Piling Works (WF1>B3:19m@1.5m/d) (incl Re-boring & Welding Remedial Works)	9	12-Jul-16 A	29-Apr-17	Sheet Piling Works (WF1>B3:19m@1.5m/d) (incl Re-boring & Welding Remedial Works)															
1061-4910	Advance Sheet Piling Works + Pre-drilling in Phase 2 - Cul de sac Area (30m)	14	04-Apr-17 A	17-May-17	Advance Sheet Piling Works + Pre-drilling in Phase 2 - Cul de sac Area (30m)															
1061-4915	Tam Grouting	12	14-Sep-16 A	04-May-17	Tam Grouting															
1061-5060	Dewatering Well Installation (14Nos)	9	11-Jan-17 A	29-Apr-17	Dewatering Well Installation (14Nos)															
1061-5080	Observation Well Installation (10Nos)	9	13-Feb-17 A	29-Apr-17	Observation Well Installation (10Nos)															
1061-5100	Pumping Test	9	05-May-17	15-May-17	Pumping Test															
1061-5120	Complete Pump Test	0		15-May-17	◆ Complete Pump Test															
1061-5140	Ch 5285 - 5331 > Excav from Ex. Lvl down to 2.5mPD (Ch 5285 - 5331 w/ open cut)	7	15-Aug-16 A	27-Apr-17	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	9	30-Mar-17 A	09-May-17	Ch 5234 - 5285 > Excav from Ex. Lvl down to 2.5mPD															
1061-5180	Ch 5234 - 5285 > Install 1st Layer of Strut & Waling	9	10-May-17	19-May-17	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	20-May-17	08-Jun-17	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	09-Jun-17	19-Jun-17	Ch 5234 - 5285 > Install 2nd Layer of Strut & Waling															
1061-5240	Ch 5234 - 5285 > Excav to FEL	13	20-Jun-17	05-Jul-17	Ch 5234 - 5285 > Excav to FEL															
Structure Works																				
1061-5260	Bay 1 - Ch 5322 - 5331 > Base Slab - Blinding Layer	1	09-Jun-17	09-Jun-17	Bay 1 - Ch 5322 - 5331 > Base Slab - Blinding Layer															
1061-5280	Bay 1 - Ch 5322 - 5331 > Base Slab - Water Proofing Membrane	2	10-Jun-17	12-Jun-17	Bay 1 - Ch 5322 - 5331 > Base Slab - Water Proofing Membrane															
1061-5300	Bay 1 - Ch 5322 - 5331 > Base Slab - Rebar Fixing	5	13-Jun-17	17-Jun-17	Bay 1 - Ch 5322 - 5331 > Base Slab - Rebar Fixing															
1061-5320	Bay 1 - Ch 5322 - 5331 > Base Slab - Erect Formworks	4	19-Jun-17	22-Jun-17	Bay 1 - Ch 5322 - 5331 > Base Slab - Erect Formwo															
1061-5340	Bay 1 - Ch 5322 - 5331 > Base Slab - Concreting	1	23-Jun-17	23-Jun-17	Bay 1 - Ch 5322 - 5331 > Base Slab - Concreting															
1061-5360	Bay 2 - Ch 5313 - 5322 > Base Slab - Blinding Layer	1	24-Jun-17	24-Jun-17	Bay 2 - Ch 5313 - 5322 > Base Slab - Blinding Lay															
1061-5380	Bay 2 - Ch 5313 - 5322 > Base Slab - Water Proofing Membrane	2	26-Jun-17	27-Jun-17	Bay 2 - Ch 5313 - 5322 > Base Slab - Water P															
1061-5400	Bay 2 - Ch 5313 - 5322 > Base Slab - Rebar Fixing	5	28-Jun-17	04-Jul-17	Bay 2 - Ch 5313 - 5322 > Base Slab - Rebar															
1061-5420	Bay 2 - Ch 5313 - 5322 > Base Slab - Erect Formworks	4	05-Jul-17	08-Jul-17	Bay 2 - Ch 5313 - 5322 > Bas															
1061-5440	Bay 2 - Ch 5313 - 5322 > Base Slab - Concreting	1	10-Jul-17	10-Jul-17	Bay 2 - Ch 5313 - 5322 > B															
1061-5460	Bay 3 - Ch 5303 - 5313 > Base Slab - Blinding Layer	1	11-Jul-17	11-Jul-17	Bay 3 - Ch 5303 - 5313 >															
1061-5480	Bay 3 - Ch 5303 - 5313 > Base Slab - Water Proofing Membrane	2	12-Jul-17	13-Jul-17	Bay 3 - Ch 5303 - 531															
1061-5500	Bay 3 - Ch 5303 - 5313 > Base Slab - Rebar Fixing	5	14-Jul-17	19-Jul-17	Bay 3 - Ch 53															
1061-5560	Bay 6 - Ch 5262 - 5277 > Base Slab - Blinding Layer	1	06-Jul-17	06-Jul-17	Bay 6 - Ch 5262 - 5277 > Base S															
1061-5580	Bay 6 - Ch 5262 - 5277 > Base Slab - Water Proofing Membrane	2	07-Jul-17	08-Jul-17	Bay 6 - Ch 5262 - 5277 > Bas															
1061-5600	Bay 6 - Ch 5262 - 5277 > Base Slab - Rebar Fixing	6	10-Jul-17	15-Jul-17	Bay 6 - Ch 5262 - 5															
Retaining Walls & Trough Structure B,C & D																				
1061-6860	Construct Retaining Wal E Pile Cap (7 nos)	24	06-Mar-17 A	18-May-17	Construct Retaining Wal E Pile Cap (7 nos)															
1061-6880	Construct Retaining Wal E1 (Ch 5332 - 5371)	18	19-May-17	09-Jun-17	Construct Retaining Wal E1 (Ch 5332 - 5371)															
1061-6900	Construct Retaining Wal E3 (Ch 5371 - 5398)	18	10-Jun-17	30-Jun-17	Construct Retaining Wal E3 (Ch 5371 - 5															
1061-6920	Construct Retaining Wal E3 (Ch 5398 - 5419)	18	19-May-17	09-Jun-17	Construct Retaining Wal E3 (Ch 5398 - 5419)															

Remaining Level of Effort

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							May				June				July					
					16	23	30	07	14	21	28	04	11	18	25	02	09	16	23	
10.6.2 - Approach Ramp (Within Portion IIB)																				
Pre-Bored H-Piles																				
1062-1020	Predrilling for ramp within Portion IIB (14no - 3set)	18	28-Apr-17	19-May-17	Predrilling for ramp within Portion IIB (14no - 3set)															
1062-1040	Approach Ramp Portion IIB Piles Final Report / Founding Level	18	08-May-17	27-May-17	Approach Ramp Portion IIB Piles Final Report / Founding Level															
1062-1400	Pre Bored H-Pile > Pile Ramp - BS01 A	14	15-May-17	31-May-17	Pre Bored H-Pile > Pile Ramp - BS01 A															
1062-1420	Pre Bored H-Pile > Pile Ramp - BS01 B	14	20-May-17	06-Jun-17	Pre Bored H-Pile > Pile Ramp - BS01 B															
1062-1440	Pre Bored H-Pile > Pile Ramp - BS02 A	14	26-May-17	12-Jun-17	Pre Bored H-Pile > Pile Ramp - BS02 A															
1062-1460	Pre Bored H-Pile > Pile Ramp - BS02 B	14	02-Jun-17	17-Jun-17	Pre Bored H-Pile > Pile Ramp - BS02 B															
1062-1480	Pre Bored H-Pile > Pile Ramp - BS03 A	14	08-Jun-17	23-Jun-17	Pre Bored H-Pile > Pile Ramp - BS03 A															
1062-1500	Pre Bored H-Pile > Pile Ramp - BS03 B	14	14-Jun-17	29-Jun-17	Pre Bored H-Pile > Pile Ramp - BS03 B															
1062-1520	Pre Bored H-Pile > Pile Ramp - BS04 A	14	20-Jun-17	06-Jul-17	Pre Bored H-Pile > Pile Ramp - BS04 A															
1062-1540	Pre Bored H-Pile > Pile Ramp - BS04 B	14	26-Jun-17	12-Jul-17	Pre Bored H-Pile > Pile Ramp - BS04 B															
1062-1560	Pre Bored H-Pile > Pile Ramp - BS05 A	14	15-May-17	31-May-17	Pre Bored H-Pile > Pile Ramp - BS05 A															
1062-1580	Pre Bored H-Pile > Pile Ramp - BS05 B	14	20-May-17	06-Jun-17	Pre Bored H-Pile > Pile Ramp - BS05 B															
1062-1600	Pre Bored H-Pile > Pile Ramp - BS06 A	14	26-May-17	12-Jun-17	Pre Bored H-Pile > Pile Ramp - BS06 A															
1062-1620	Pre Bored H-Pile > Pile Ramp - BS06 B	14	02-Jun-17	17-Jun-17	Pre Bored H-Pile > Pile Ramp - BS06 B															
1062-1640	Pre Bored H-Pile > Pile Ramp - BS07 A	14	08-Jun-17	23-Jun-17	Pre Bored H-Pile > Pile Ramp - BS07 A															
1062-1660	Pre Bored H-Pile > Pile Ramp - BS07 B	14	14-Jun-17	29-Jun-17	Pre Bored H-Pile > Pile Ramp - BS07 B															
1062-1680	Pre Bored H-Pile > Pile Ramp - BS08 A	14	20-Jun-17	06-Jul-17	Pre Bored H-Pile > Pile Ramp - BS08 A															
1062-1700	Pre Bored H-Pile > Pile Ramp - BS08 B	14	26-Jun-17	12-Jul-17	Pre Bored H-Pile > Pile Ramp - BS08 B															
1062-1720	Pre Bored H-Pile > Pile Ramp - BS09 A	14	20-May-17	06-Jun-17	Pre Bored H-Pile > Pile Ramp - BS09 A															
1062-1740	Pre Bored H-Pile > Pile Ramp - BS09 B	14	26-May-17	12-Jun-17	Pre Bored H-Pile > Pile Ramp - BS09 B															
1062-1760	Pre Bored H-Pile > Pile Ramp - BS10 A	14	02-Jun-17	17-Jun-17	Pre Bored H-Pile > Pile Ramp - BS10 A															
1062-1780	Pre Bored H-Pile > Pile Ramp - BS10 B	14	08-Jun-17	23-Jun-17	Pre Bored H-Pile > Pile Ramp - BS10 B															
1062-1800	Pre Bored H-Pile > Pile Ramp - BS11 A	14	14-Jun-17	29-Jun-17	Pre Bored H-Pile > Pile Ramp - BS11 A															
1062-1820	Pre Bored H-Pile > Pile Ramp - BS11 B	14	20-Jun-17	06-Jul-17	Pre Bored H-Pile > Pile Ramp - BS11 B															
1062-1840	Pre Bored H-Pile > Pile Ramp - BS12 A	14	26-Jun-17	12-Jul-17	Pre Bored H-Pile > Pile Ramp - BS12 A															
1062-1860	Pre Bored H-Pile > Pile Ramp - BS12 B	14	20-May-17	06-Jun-17	Pre Bored H-Pile > Pile Ramp - BS12 B															
1062-1880	Pre Bored H-Pile > Pile Ramp - BS13 A	14	26-May-17	12-Jun-17	Pre Bored H-Pile > Pile Ramp - BS13 A															
1062-1900	Pre Bored H-Pile > Pile Ramp - BS13 B	14	02-Jun-17	17-Jun-17	Pre Bored H-Pile > Pile Ramp - BS13 B															
1062-1920	Pre Bored H-Pile >Pile Ramp - BM01 A	14	08-Jun-17	23-Jun-17	Pre Bored H-Pile >Pile Ramp - BM01 A															
1062-1940	Pre Bored H-Pile > Pile Ramp - BM01 B	14	14-Jun-17	29-Jun-17	Pre Bored H-Pile > Pile Ramp - BM01 B															
1062-1960	Pre Bored H-Pile > Pile Ramp - BM02 A	14	20-Jun-17	06-Jul-17	Pre Bored H-Pile > Pile Ramp - BM02 A															
1062-1980	Pre Bored H-Pile > Pile Ramp - BM02 B	14	26-Jun-17	12-Jul-17	Pre Bored H-Pile > Pile Ramp - BM02 B															
ELS																				

Remaining Level of Effort

Actual Level of Effort

Actual Work

Remaining Work

Critical Remaining Work

Milestone

Milestone

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									May				June				July				
					16	23	30	07	14	21	28	04	11	18	25	02	09	16	23		
	A1000	Sheet Pile and Preboring Works	61	09-May-17	20-Jul-17	Sheet Pile and Preboring Works															
	A1010	Dewatering System and Instrumentation installation	38	31-May-17	14-Jul-17	Dewatering System and Instrumentation installation															
10.7 - Section X - Miscellaneous Works																					
10.7.2 - Oil Street/Watson Road (Portion III)																					
	1072-1000	Remaining Fresh Water Main 200DI - F02 Portion VIIB (Watson/VB)	120	27-Apr-17	16-Sep-17	Remaining Fresh Water Main 200DI - F02 Portion VIIB (Watson/VB)															
	1072-1020	Remaining Storm Water Drain Portion VII (Watson/VB)	120	27-Apr-17	16-Sep-17	Remaining Storm Water Drain Portion VII (Watson/VB)															
	1072-1040	Fresh Water Main 100DI - F03 Portion III (Oil Street/Admin Bldg)	50	27-Apr-17	26-Jun-17	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	27-Apr-17	26-Jun-17	Salt Water Main 100DI - S03 Portion III (Oil Street/Admin Bldg)															
	1072-1065	Salt Water Main 100DI - S02 (Watson rd - Previously at Portion XIIB)	50	27-Apr-17	26-Jun-17	Salt Water Main 100DI - S02 (Watson rd - Previously at Portion XIIB)															
	1072-1080	Foul Sewer Dia. 225 Portion III (Oil Street/Admin Bldg)	50	27-Apr-17	26-Jun-17	Foul Sewer Dia. 225 Portion III (Oil Street/Admin Bldg)															
10.7.3 - Open Area																					
	1073-1010	Open Area - Pedestrian Parapet -Ch570.40 to Ch540.00	14	22-May-17*	07-Jun-17	Open Area - Pedestrian Parapet -Ch570.40 to Ch540.00															
	1073-1010.3	Open Area - Pedestrian Parapet - Ch540.00 to Ch520.00	14	08-Jun-17	23-Jun-17	Open Area - Pedestrian Parapet - Ch540.00 to Ch520.00															
	1073-1010.5	Open Area - Pedestrian Parapet - Ch0.00 - Ch40.00	14	24-Jun-17	11-Jul-17	Open Area - Pedestrian Parapet - Ch0.00 - Ch40.00															
	1073-1010.7	Open Area - Pedestrian Parapet - Ch40.00 - 80.00	14	12-Jul-17	27-Jul-17	Open Area - Pedestrian Parapet - Ch40.00 - 80.00															
11 - SECTION 11 OF THE WORKS																					
11.1 - Portion XIIA - Stage 1																					
11.1.1 - Along Watson Road - Waterwork & Roadworks (Portion XIIA)																					
	1110-2820	Permanent Cul-de Sac - Constr. of drainage	25	20-Apr-17*	19-May-17	Permanent Cul-de Sac - Constr. of drainage															
	1110-2830	Permanent Cul-de Sac - Constr. of watermains	25	03-May-17	01-Jun-17	Permanent Cul-de Sac - Constr. of watermains															
	1110-2840	Permanent Cul-de Sac - Constr. of public lighting & telecom (conduits & drawpits)	25	15-May-17	13-Jun-17	Permanent Cul-de Sac - Constr. of public lighting & telecom (conduits & drawpits)															
	1110-2850	Permanent Cul-de Sac - Constr. of (kerbs & pavements)	25	14-Jun-17	13-Jul-17	Permanent Cul-de Sac - Constr. of (kerbs & pavements)															
11.1.3 - Along Tsing Fung St. - TCSS cable ducting (Portion XIIA)																					
	1110-2930	TCSS cable ducting along Tsing Fung St	36	08-May-17*	19-Jun-17	TCSS cable ducting along Tsing Fung St															
11.1.4 - Along Gordon House - Cross road ducting at Hing Fat St adjacent to (Portion XIIA)																					
	1110-2940	Trench 1 (E&M, PL) - (Night Work)	16	19-Sep-16 A	09-May-17	Trench 1 (E&M, PL) - (Night Work)															
	1110-2950	Trench 2 (ATC) - (Night Work)	38	10-May-17	23-Jun-17	Trench 2 (ATC) - (Night Work)															
11.1.5 - Footing and frame/pole for directional sign FVMSH2, ADS16 and OHVD (Portion XIIA)																					
	1110-2960	ADS16	26	14-Sep-16 A	20-May-17	ADS16															
	1110-2970	OHVD	12	22-May-17	05-Jun-17	OHVD															
	1110-2980	FVMSH2	18	06-Jun-17	26-Jun-17	FVMSH2															

Remaining Level of Effort

Actual Level of Effort

Actual Work

Remaining Work

Critical Remaining Work

Milestone