CONTRACT NO: HK/2011/07

WANCHAI DEVELOPMENT PHASE II AND CENTRAL WANCHAI BYPASS SAMPLING, FIELD MEASUREMENT AND TESTING WORK (STAGE 2)

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

QUARTERLY ENVIRONMENTAL MONITORING AND AUDIT REPORT

- SEPTEMBER 2015 TO NOVEMBER 2015 -

CLIENTS:

Civil Engineering and Development Department

and

Highways Department

PREPARED BY:

Lam Geotechnics Limited

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

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

CHECKED BY:

Raymond Dai
Environmental Team Leader

DATE:

23 December 2015

RAMBOLL ENVIRON

Ref.: AACWBIECEM00_0_7607L.15

31 December 2015

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

By Post and Fax (2691 2649)

Attention: Mr. Peter Poon

Dear Sirs,

Re: Wan Chai Development Phase II and Central-Wan Chai Bypass

Quarterly EM&A Report (September to November 2015) for EP-356/2009, FEP-02/356/2009, FEP-03/356/2009, FEP-04/356/2009, FEP-06/356/2009 and FEP-07/356/2009

Reference is made to the Environmental Team's submission of the captioned Quarterly Environmental Monitoring and Audit (EM&A) Report for September to November 2015 received by e-mail on 23 December 2015.

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

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

Yours sincerely,

David Yeung
Independent Environmental Checker

Encl.

c.c.

HyD	Attn: Mr. Bond Chow	by fax: 2714 5289
CEDD	Attn: Mr. Stephen Lo	by fax: 2577 5040

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Ramboll Environ Hong Kong Limited 英環香港有限公司
Rm 2403, 24/F., Jubilee Centre, 18 Fenwick Street, Wanchai, Hong Kong Tel: 852.3465 2888 Fax: 852.3465 2899
www.Ramboll-Environ.com

AECOM	Attn: Mr. Francis Leong/Stephen Lai	by fax: 2691 2649
AECOM	Attn: Mr. Conrad Ng	by fax: 2691 2649
Lam	Attn: Mr. Raymond Dai	by fax: 2882 3331

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Construction Activities for the Reported Period

ii. During this reporting period, the principal work activities for Contract no. HK/2009/01 are summarized as below:

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

September 2015	October 2015	November 2015
• Nil	• Rock trimming works	• Nil

iii. During this reporting period, the principal work activities for Contract no. HK/2009/02 are summarized as below:

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

September 2015	October 2015	November 2015
• Placing levelling stone for construction of seawall at WCR3 • Placing caisson seawall	• Placing rock fill material behind caisson seawall at WCR3 • Reclamation works at WCR3	• Reclamation works in WCR3

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

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

September 2015	October 2015	November 2015
• Reinstatement of vertical seawall at TPCWAE	• Reinstatement of vertical seawall at TPCWAE	• Reinstatement of vertical seawall at TPCWAE • Construction of floating pontoon at TS4

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

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

September 2015	October 2015	November 2015
• Nil	• Nil	• Nil

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

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

September 2015	October 2015	November 2015
• Dry dock construction • Installation of pipe pile wall • Construction of culvert	• Dry dock construction • Installation of seawall blocks • Construction of culvert	• Construction of culvert • Trimming of rock bedding

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

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

September 2015	October 2015	December 2015
• Diversion pipe maintenance	• Diversion pipe maintenance	• Diversion pipe maintenance

Noise Monitoring

viii. Noise monitoring during day time and evening time were conducted at the M1a, M2b, M3a, M4b, M5b and M6 on a weekly basis in the reporting period. The Action and Limit level exceedances recorded in the reporting period are listed below. Investigation found that exceedances were not related to the Project. Investigation found that exceedances were not related to the Project.

ix. No action and limit level exceedance was recorded in September reporting month.

x. No action and limit level exceedance was recorded in October reporting month.

xi. One limit level exceedance was recorded at noise monitoring station M1a – Habour Road Sports Center on 24 November 2015 in November reporting month. The exceedance was concluded as non-project related.

Real-time Noise Monitoring

xii. As the land-based piling and filling works- DP3 at Tin Hau had been completed on 3 September 2012 and confirmed by RSS, the real-time noise monitoring results at FEHD Hong Kong Transport Section Whitfield Depot was excluded under EP-356/2009 since 28 November 2012.

xiii. Real-time noise monitoring at FEHD Hong Kong Transport Section Whitefield Depot and Oil Street Community Centre have been commenced on 5 October 2010 for the filling works of Contract no. HY/2009/11.

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

xv. Oil Street Community Liaison Centre was confirmed to be demolished in mid-October by CWB RSS. This presented a need for relocation of RTN2 – Oil Street Community Liaison Centre. After liaison with Hong Kong Electric, permission was granted on 21 Sep 2012 for

real time noise monitoring set up at City Garden Electric Centre (RTN2a – Electric Centre), which is a representative of the noise sensitive receiver City Garden. The real-time noise monitoring at RTN2-Oil Street Community Liaison Centre has been relocated to City Garden Electric Centre (RTN2a- Electric Centre) on 5 Oct 2012. The baseline noise level of RTN2a will adopt the results derived from the baseline noise monitoring conducted in Electric Centre from 4 December 2009 to 17 December 2009.

xvi. No limit level exceedance was recorded in September reporting months at RTN2a-Hong Kong Electric Centre.

xvii. No limit level exceedance was recorded in October reporting month at RTN2a-Hong Kong Electric Centre.

xviii. No project related limit level exceedance was recorded in November reporting month at RTN2a-Hong Kong Electric Centre.

Air Quality Monitoring

xix. Due to interruption of electricity supply, the following 24hr TSP monitoring events were rescheduled in this reporting quarter,
24hr TSP at CMA3a was rescheduled from 5 October 2015 to 6 October 2015
24hr TSP at CMA5b was rescheduled from 5 October 2015 to 6 October 2015
24hr TSP at CMA2a was rescheduled from 26 November 2015 to 27 November 2015.
24hr TSP at CMA3a was rescheduled from 3 November 2015 to 4 November 2015.
24hr TSP at CMA5b was rescheduled from 20 November 2015 to 21 November 2015.

xx. One action level exceedance during 24hr TSP monitoring was recorded at monitoring station CMA1b – Oil Street Site Office on 24 September 2015 in September reporting month. Investigation found that the exceedance recorded was not related to the Project.

xxi. One action level exceedance during 1hr TSP monitoring was recorded at monitoring station CMA1b – Oil Street Site Office on 30 September 2015 in October reporting month. Investigation found that the exceedance recorded was not related to the Project.

xxii. No action or limit level exceedance for TSP monitoring was recorded in November reporting month.

xxiii. The odour patrol along the odour route with 7 sniffing locations was conducted by a qualified odour patrol member on 1 and 15 September 2015 at the concerned hours (afternoon for higher daily temperature). No Action and Limit Level was recorded in September reporting month.

xxiv. The odour patrol along the odour route with 7 sniffing locations was conducted by a qualified odour patrol member on 29 September 2015 at the concerned hours (afternoon for higher daily temperature). No Action and Limit Level was recorded in October reporting month.

xxv. With respect to the removal of Oil Street Site Office, the respective air quality monitoring station CMA1b was finely adjusted on 11 September 2015.

xxvi. The location ID of air monitoring station CMA1b was updated as Oil Street Site Office in April 2013.

xxvii. With respect to the area handover, the air quality monitoring station CMA5a at Children Playgrounds opposite to the Pedestrian Plaza was relocated to the Pedestrian Plaza on 3 December 2014. The station reference and location ID of the air quality monitoring station CMA5a was updated as CMA5b and Pedestrian Plaza respectively.

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

Water Quality Monitoring

xxix. Action and Limit level of water quality monitoring was transited from dry season to wet season from 1 April 2015.

xxx. With respect to the completion of dredging activities at HKCEC and WCR the removal of silt screen at WSD7 and WSD19 were conducted on 15 September 2015 and removal of silt screen at C1, P1, P3, P4, P5 were conducted on 7 November 2015 under Contract HK/2009/01.

xxxi. With respect to the maintenance works for the diverted seawater supply system to the Windsor House Cooling water intake and the suspension of seawater supplies to Windsor House from the water storage tank from 6 November 2015 to 10 November 2015, the respective water quality monitoring at WQM station C7 was cancelled on 6 November 2015 flood tide and was temporarily suspended on 9 November 2015. The aforesaid monitoring station was resumed on 11 November 2015 upon completion of the maintenance works.

xxxii. Due to obstruction of water sampling point by the removed silt curtain stock at WQM station C1 on 9 November 2015, the respective water quality monitoring was temporarily conducted at the finely adjusted location immediately outside the steel frame to represent water quality for the respective cooling intake.

xxxiii. Due to the water sampling point at WQM station P1 was found hindered by detached fabric mesh in the remaining frame of the silt screen on 11 November 2015, the respective water quality monitoring sampling was temporarily conducted at the finely adjusted location immediately outside the silt screen frame to represent water quality for the respective cooling intake.

xxxiv. Due to obstruction by temporary fencing at the water quality monitoring station RW21-P789, the water quality monitoring at WQM station RW21-P789 was conducted at finely adjusted position during flood tide on 16 October 2015 adjacent to the original sampling position within the same silt curtain enclosed area.

xxxv. Due to the hoisting of Amber Rainstorm Warning Signal and safety consideration under adverse weather condition, the scheduled Water Quality Monitoring on 26 September 2015 during flood tide was cancelled.

xxxvi. With respect to the completion of the removal of the silt screen maintained under WDII Contract HK/2009/01 at WSD Saltwater Intake Station WSD19 on 15 September 2015, the monitoring location for the WQM station WSD19 would be finely adjusted to the location immediately outside the abstraction point of the respective WSD Saltwater Intake from 16 September 2015.

xxxvii. With respect to the resumption of seawall reinstatement works at Ex-PCWAE and the location of the Enhance DO monitoring station Ex-PCWAE SE would form an active construction area. The Enhance DO monitoring station Ex-PCWAE SE was temporarily suspended from 31 August 2015 and the monitoring at Ex-PCWAE SE is tentatively to be resumed by November 2015.

xxxviii. With respect to the construction stage and access condition at Ex-PCWAW and the potential DO concern within the area, the suspended Enhance DO monitoring within Ex-PCWAW area

at the Enhance DO monitoring station Ex-PCWA-SE was resumed on 10 August 2015 at the finely adjusted monitoring location.

xxxix. With respect to the construction works undertaken at Ex-PCWAW and the wet season DO concern, the suspended Enhance DO monitoring within Ex-PCWAW area at the Enhance DO monitoring station Ex-PCWA-SW was resumed on 30 March 2015 at the finely adjusted monitoring location.

xl. With respect to the commencement of seawall modification works at Ex-PCWAE and the location of the Enhance DO monitoring stations would form an active construction area, the Enhance DO monitoring at monitoring station EX-PCWA SW and SE were temporarily suspended from 2 March 2015 ebb tide and the monitoring at the location is tentatively to be resumed by early April 2015 to cater for the potential DO concern during Wet Season.

xli. As informed by CWB RSS, the operation of the diverted Windsor House cooling intake was commenced on 20 Dec 2014 and the water quality monitoring at monitoring station C7 for Windsor House Cooling water intake was resumed on 22 Dec 2014.

xlii. Water quality monitoring was conducted at 8 monitoring stations namely WSD19, C1, C7, P1, P3, P4, P5 and RW21-P789 during the reporting period.

xliii. There were 2 action level and 9 limit level of turbidity exceedance, and 1 action level and no limit level of suspended solid exceedance recorded in September reporting month. Investigation found that the exceedance was not related to Project works.

xliv. There were 32 action level and 49 limit level of turbidity exceedances, and 4 action level and 4 limit level of suspended solid exceedances recorded in October reporting month.

xlv. Investigation found that the one limit level of turbidity exceedance recorded at monitoring station RW21-P789 on 6 October 2015 in October reporting month was concluded as related to Project works.

xlvi. Investigation found that 32 action level and 48 limit level of turbidity exceedances, and 4 action level and 4 limit level of suspended solid exceedances recorded in October reporting month were not related to Project works.

xlvii. There were 10 action level and 37 limit level of turbidity exceedances, and 1 action level and 1 limit level of suspended solid exceedances recorded in November reporting month. Investigation found that the turbidity exceedances and suspended solid exceedances recorded were not related to Project works.

xlviii. Enhanced DO monitoring at 4 monitoring stations in Causeway Bay Typhoon Shelter and Ex-Public Cargo Works Area was conducted three days per week during the reporting period.

xlix. There were 5 action level and 9 limit level exceedances of enhanced dissolved oxygen recorded in September reporting month. Investigation found that the exceedances were not related to Project works.

l. There were 3 action level and 13 limit level exceedances of enhanced dissolved oxygen recorded in October reporting month. Investigation found that the exceedances were not related to Project works.

li. There were no action level and 4 limit level exceedances of enhanced dissolved oxygen recorded in November reporting month. Investigation found that the exceedances were not related to Project works.

lii. With respect to the commencement of temporary reclamation works and seawall construction at Ex-PCWAW zone and diverted culvert extension, the location of the Enhance DO monitoring stations (Ex-PCWASW and Ex-PCWA SE) were finely adjusted to the PCWAE

since 7 November 2014.

liii. With respect to the commencement of marine dredging works at WCR3 under contract HK/2009/02. The respective water quality monitoring station C1 were associated with HK/2009/01 and HK/2009/02.

liv. As confirmed by CWB RSS, the operation of the pump station for Windsor House Cooling Water was suspended from 22 Oct 2014 for the Windsor House intake cooling intake scheme and temporary supply of freshwater from WSD water mains was provided to cooling water intake The water quality monitoring for the respective cooling water intake at WQM station C7 was temporarily suspended from 22 Oct 2014.

lv. With respect to the commencement of filling works at TS3 and the formation of TZ3 reclamation zone, the enhance DO monitoring at Enhance monitoring station C7 was temporarily suspended from 22 Oct 2014.

lvi. As confirmed by WDII RSS and IEC, the cross harbor dredging works have completed since 16 March 2012 while the dredging works for submarine outfall pipeline has completed since 29 November 2011, considering current construction stage and dredging Scenario, the water quality monitoring at stations WSD9 and WSD17 was temporarily suspended since 8 September 2014 flood tide.

lvii. As advised by WDII RSS, the water quality monitoring for WSD21 pump station with respect to HK/2009/02 was switched over to the relocated location since 12 March 2014. According to the EM&A Manual, the water quality monitoring station WSD21 was relocated to station RW21-P789 and the water quality monitoring at station WSD21 was temporarily suspended since 12 March 2014.

lviii. With respect to the switching over of cooling water intake location, the water quality monitoring at the relocated intake station RW21-P789 under HK/2009/02 was commenced since 29 July 2013 and monitoring station C5e and C5w were temporarily suspended and switched over to monitoring station RW21-P789 on 29 July 2013 due to suspension of pump house operation.

lix. With respect to the commencement of dredging works under HK/2012/08 and the installation of MTR precast protection unit, the enhanced water quality monitoring for Culvert L was temporarily suspended since 24 July 2013.

lx. With respect to the commencement of marine dredging works under contract HY/2010/08. The respective water quality monitoring station C7 were associated with HY/2009/15 and HY/2010/08.

lxi. With respect to the commencement of marine dredging works under contract HK/2012/08/ The respective water quality monitoring station WSD19, P1, P3, P4, and P5 were associated with Contract HK/2012/08 Since September 2013.

lxii. WQM events on 22 April 2013 at monitoring stations C2, C3, C4e and C4w were temporarily suspended. Upon confirmation with WDII RSS and the IEC, water quality monitoring at relocated intakes monitoring location P1, P3, P4 and P5 were commenced since 24 April 2013.

lxiii. Due to the marine piling under Contract no. HY/2009/19 was completed on 4 March 2013, the temporary suspension of impact water quality monitoring at C8 and C9 from 4 March 2013 have been monitored for 4-week period after the completion of marine works to confirm no water deterioration.

lxiv. As confirmed by CWB RSS, the marine pilling works under contract HY/2009/19 was confirmed completed by 4 March 2013. The water quality monitoring at the respective monitoring stations C8 and C9 were temporarily suspended since 30 March 2013.

lxv. RSS confirmed that all Type III Dredging works under HK/2009/01 have been completed since Oct 2012.

lxvi. Due to the presence of obstacle within the inner silt curtain frame at sampling point, water quality point at C7 was finely adjusted to the outside of the inner silt curtain frame since 29 Dec 2012.

lxvii. With respect to the trial dredging at WCR2 was scheduled on 20, 22, 24, 25 March and 1, 3 , 11, 13, 15, 17, 19, 20 Apr and 3 May 2012, on-going water quality monitoring results at WSD21 during this period was checked and indicated that there was no contribution due to the trial dredging operation. Enhanced review of water quality around WCR2 was also implemented and no deterioration in the water quality was observed.

lxviii. Due to the access of water monitoring station at WSD19 was blocked by LCSD construction works from 3 April 2012 to 2 May 2012 and lead to the inaccessibility of sampling either land and marine, there is a fine adjustment of the sampling point of WSD 19 since 5 April 2012 to the closest accessible point prior to the completion of the construction activities.

lxix. WDII/RSS advised that the dredging works for submarine pipeline at Victoria Harbour had been completed in January 2012. Therefore, the concurrent dredging activities at Sewage Pipeline Zone and reclamation shoreline zone TCBR under the EP-356/2009 scenario 2B no longer exist. As such, with reference to Table 5.39 of the EIA Report for Wan Chai Development Phase II and Central-Wan Chai Bypass, the application of silt screen for cooling water intakes for Queensway Government Offices was suspended and the others remain unchanged.

lxx. Due to the dredging works for Cross Harbour Water Mains from Wan Chai to Tsim Sha Tsui-DP6 was completed on 26 March 2012, the temporary suspension of impact water quality monitoring at WSD7 and WSD20 after 27 April 2012 for the water quality monitoring at WSD7 and WSD20 have been monitored for 4-week period after the completion of DP6 to confirm no water deterioration. Water quality monitoring at WSD10 and WSD15 was temporary suspended while water quality monitoring at WSD9 and WSD17 was implemented with respect to HK/2009/02 from 8 Feb 12 onwards;

lxxi. Based on the joint inspection on 4 Jan 2012 for the NPR area, the 4-week water quality monitoring at WSD9, WSD10, WSD15, WSD17, C8, C9 to confirm no water deterioration with respect to NPR was commenced since 7 Jan 2012 and it was completed on 6 February 2012.

lxxii. Based on the safety concern when external façade refurbishment was conducted by contractor employed by Provident Centre (C9) between 9 January 2012 to 30 July 2012 which caused to the inaccessibility of sampling either land and marine since 3 Feb 2012, there is a fine adjustment of the sampling location of water quality monitoring at C9 since 10 March 2012 to the closest accessible point prior to the completion of the external façade refurbishment work.

lxxiii. Water quality monitoring at C8 and C9 have been implemented with respect to HY/2009/19 since the marine bore piling work started on 28 Jan 12.

lxxiv. In response to the Condition 2.18 of the Environmental Permit no. EP-356/2009 requiring that a silt curtain / impermeable barrier system be installed to channel water discharge flow from Culvert L to locations outside the embayment area, a proposed replacement of the

requirement with additional dissolved oxygen monitoring has been conducted at three monitoring stations, namely A, B and C between the eastern seawall of Central Reclamation Phase III and the HKCEC Extension since November 2011 under EP-356/2009 so that DO level between the eastern seawall of Central Reclamation Phase II and the HKCEC extension could be continuously monitored.

Complaints, Notifications of Summons and Successful Prosecutions

i. Three environmental complaints were received in September reporting month.

ii. A public complaint regarding dropping of excavated material from land to sea referred by EPD was received by ET on 04 September 2015 (EPD Ref.: H05/RS/00022241-15 dated 04 September 2015). The complainant reported that dropping of excavated materials from land to sea during loading of materials by excavator at the construction site to work boat. (Contract HK/2009/02)

ET confirmed with the Resident Site Staff that transferring of C&D materials from land to hopper barge by excavator at seaside along CWB Tunnel Portions 3 and 4 was undertaken by Contract HK/2009/02 on 01 September 2015.Mitigation measure including providing tarpaulin sheet to cover the gap between seawall and the hopper barge to prevent dropping of material to the sea was implemented by the Contractor.

According to the relevant site records under Contract HK/2009/02, transferring of C&D materials from land to hopper barge by excavator at seaside along CWB Tunnel Portions 3 and 4 was carried out on 01 September 2015 and mitigation measures including provision of tarpaulin sheet between seawall and the hopper barge was implemented by the Contractor of HK/2009/02 on the concerned date. Follow-up inspection was conducted during weekly environmental inspection on 10 September 2015. Transferring of C&D materials from land to barge by excavator was observed at the concerned location and mitigation measures including provision of tarpaulin sheet between seawall and hopper barge and the material transfer works was generally in order. Nevertheless, the Contractor of HK/2009/02 was reminded to maintain the handling procedure for C&D materials transfer from land to hopper barge and regularly inspect the condition of the tarpaulin sheet provided to ensure the nearby water quality are not affected by the loading and unloading of material from land side to hopper barge.

The Contractor was reminded to maintain the handling procedure for C&D materials transfer from land to hopper barge and regularly inspect the condition of the tarpaulin sheet provided to ensure the nearby water quality are not affected by the loading and unloading of material from land side to hopper barge.

iii. Second public complaint regarding construction noise and dust and exhaust emission referred by EPD was received by ET on 04 September 2015 (EPD Ref.: H04/RS/00022385-15 dated 04 September 2015). The complainant reported that construction noise was generated from the construction site of HK/2012/08 at location outside Fleet Arcade during night time on

weekdays and daytime during General Holidays. The complainant also concerned construction dust and exhaust emission from derrick barges during transporting C&D material at the site. (Contract HK/2012/08)

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

Based on the relevant site records, from 0800 hrs to 1800 hrs on 30 August 2015, removal of scaffold and timber and installation of bulkhead was undertaken by the Contractor of HK/2012/08 at the concerned location. Total one generator and one circular saw were in operation and the relevant Construction Noise Permit GW-RS0296-15 for the concerned operation was confirmed in place.

From 1900hrs on 30 August 2015 to 0700 on 31 August 2015, no construction works was undertaken by the Contractor of HK/2012/08 at the concerned location and from 1900hrs on 31 August 2015 to 0700hrs on 01 September 2015, no construction works was undertaken by the Contractor of HK/2012/08 at the concerned location.

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

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

HK/2012/08 was reminded to upkeep the site control system for construction works carrying out at restricted hours and night time for Construction Noise Permit compliance.

The Contractor was reminded to conduct regular checking on the condition of derrick barges deployed on site to ensure only well maintained equipments are used on site to avoid potential dark smoke emission affecting nearby public.

The Contractor of HK/2012/08 was reminded to upkeep the site control system for construction works carrying out at restricted hours and night time for Construction Noise Permit compliance.

iv. The third public complaint regarding water quality referred by EPD was received by ET on 17 September 2015. The complainant reported that Silt from Central and Wan Chai Reclamation was spotted along the coastline (between LUNG WUI ROAD to LUNG WO ROAD, Central & Wan Chai, Hong Kong).

Based on the site records confirmed by RSS, removal of seawall blocks by derrick barge was undertaken by Contract HK/2012/08 at Central Reclamation Phase III works area while mitigation measures including provision of silt curtain implemented by the Contractor of HK/2012/08 during the seawall block removal works. According to relevant record, muddy dispersion at HKCEC2W (area opposite to Lung King Street) was observed by the Environmental Team on 14 September 2015 afternoon. The muddy patch was observed dispersing outside the outer layer silt curtain deployed by the Contractor of HK/2012/08 towards the Central Reclamation Phase III area while the outer layer silt curtain was observed partially opened.

In view of the above observations, the Contractor was advised to rectify any environmental deficiencies such that adequate protection such as silt curtain shall be provided for exposed soil slope to mitigate for potential runoff related water quality impact to the surrounding waters; outer layer silt curtain deployed shall be entirely closed during works to safeguard the surrounding water quality. Any opening for marine vessel shall be closed promptly after passage and localized silt curtain deployed on site shall be properly maintained to avoid any gap or opening to effectively safeguard the nearby waters.

v. Two environmental complaints were received in October reporting month.

vi. A public complaint regarding direct discharge of muddy effluent referred by RSS was received by ET on 14 October 2015 (ICC Ref: #2-1438897084) The complainant reported that pink fluid was observed discharged into marine waters at seafront opposite to Watson Road adjacent to the Eastern Breakwater on 11 October 2015.

ET confirmed with Resident Site Staff that no construction activity near the seaside between Eastern Breakwater and the Dumping Jetty was undertaken by Contract HY/2009/19 on 11 October 2015. For site area away from the seawall, construction of EVB substructure, EVB and APS structure was in progress. No work involving the use of paint was carried out at the

concerned site area (Site Portion between Eastern Breakwater and the Dumping Jetty) and along the alignment of the Culvert T1 under Contract HY/2009/19 on 11 October 2015. No temporary storage of paint was located at the concerned site area and along the alignment of the Culvert T1 under HY/2009/19 on 11 October 2015.

Based on the site records confirmed by RSS, no construction activity near the seaside between Eastern Breakwater and the Dumping Jetty was undertaken by Contract HY/2009/19 while at site area away from the seawall, construction of EVB substructure, EVB and APS structure was undertaken on 11 October 2015. In addition, no works involving the use of paint was carried out at the concerned site area (Site Portion between Eastern Breakwater and the Dumping Jetty) and along the alignment of the Culvert T1 under Contract HY/2009/19 and no temporary storage of paint was located at the concerned site area and along the alignment of the Culvert T1 under HY/2009/19 on 11 October 2015.

Follow-up inspection was conducted during weekly environmental inspection on 14 October 2015. No construction works involving the use of paint was observed undertaken at the concerned location while a few number of small containers of paint was observed placed around the concerned location and the paint containers were sealed and no sign of leakage was observed. The few containers were further checked and was found not matching the pink fluid observed on the complaint date. On the other hand, a culvert discharge outfall was found located within the concerned area where the pink fluid was observed.

Based on the above, no direct information indicating the pink fluid was originated from the works area under HY/2009/19 was considered available. Nevertheless, the Contractor was reminded that paints stored on site shall be properly labelled and stored in sealed container at weather proof location to avoid potential spillage.

vii. Second complaint regarding construction noise impact referred by EPD was received by ET on 28 October 2015 (EPD Ref: H05/RS/00027330-15 dated 28 October 2015). The complainant reported that operation of grab dredger at construction site near the ex-Wan Chai Ferry Pier from 01:00hrs to 04:00hrs on 26 October 2015 caused noise nuisance.

viii. ET confirmed with the Resident Site Staff that from 01:00hrs to 04:00hrs on 26 October 2015, rock filling was conducted under Contractor of HK/2009/02 at WCR3 Area. Total one grab dredger was in operation. Mitigation measures including provision of steel sheeting screening to the power generation part of the grab dredger was implemented by the Contractor of HK/2009/02.

ix. According to the relevant site records under Contract HK/2009/02, from 01:00hrs to 04:00hrs on 26 October 2015, rock filling was conducted under Contractor of HK/2009/02 at WCR3 Area. Total one grab dredger was in operation. Mitigation measures including provision of steel sheeting screening to the power generation part of the grab dredger was implemented by the Contractor of HK/2009/02 and the relevant Construction Noise Permit GW-RS1121-15 for the concerned construction works was in place.

The construction activity conducted under Contract HK/2009/02 during the concerned period was in compliance with the statutory requirement. Nevertheless, the Contractor was reminded

to upkeep the site control system for construction works carrying out at restricted hours and night time for Construction Noise Permit compliance in view of the nearby public concern

x. Two environmental complaints were received in November reporting month.

xi. A public complaint regarding water quality referred by EPD was received by ET on 16 November 2015 (EPD Ref: H05/RS/00029126-15). The complainant reported that muddy water was discharged from the construction site at HKCEC and dispersed to seafront outside Lung Wo Road on 13 November 2015 afternoon. The complainant also alleged that the deployment of the silt curtain did not follow the design requirement under the environmental permit that the curtain should be hanged to seabed level.

ET confirmed with Resident Site Staff that rock mound trimming works was undertaken by Contract HK/2012/08 at HKCEC area on 13 November 2015. Mitigation measures including provision of localized silt curtain to around the works area was implemented by the Contract of HK/2012/08.

Based on the site record, rock mound trimming works was conducted under Contract HK/2012/08 at HKECE2 area on 13 November 2015 and mitigation measures including provision of localized silt curtain around the works area was implemented by the Contractor. Follow-up inspection was conducted during weekly environmental inspection on 17 November 2015, both outer layer silt curtain and localized layer of silt curtain around the active works area were observed deployed while the localized silt curtain deployed around the marine works area was observed partially opened for marine access. Despite no muddy dispersion was generate around the localized silt curtain enclosed area, the Contractor was advised to promptly improve the condition of the silt curtain to ensure the effectiveness of the mitigation measure deployed and to ensure the silt curtain is closed after marine vessel movement.

Based on further review on the current construction stage at HKECE2, the dredging works and trench filling works were completed and filling works were conducted behind seawall or temporarily seawall in form of rockbund, the outer layer of silt curtain currently serves as the additional mitigation measure to the required silt curtain deployment for safeguarding the water quality in the area. To clarify for the current silt curtain arrangement, the Contractor was advised to submit an updated silt curtain deployment plan with respect to the latest silt curtain arrangement for the current construction stage. In addition, contaminated discharge at Culvert L originating from upstream locations was intermittently observed based on previous site records. Nevertheless, in view of the public concern, the Contractor was reminded to conduct regular checking on the condition and maintenance for the silt curtain deployed on site to ensure the effectiveness of the mitigation measure.

A joint meeting for the complaint was held amongst the EPD, WDII RSS team, the ET and the Contractor of HK/2012/08 on 24 November 2015 and a joint silt curtain diver inspection check amongst EPD, ET, IEC, WDII RSS and the Contractor was conducted on 27 November 2015 to confirm the silt curtain condition and the silt curtain deployed at the HKCEC2 water channel was found generally in order.

xii. Second public complaint regarding illegal disposal of construction waste referred by EPD was received by ET on 17 November 2015. The complainant reported that a) over 10,000 m3 of bentonite after usage for construction of diaphragm wall was disposed of at Victoria Habour, b) 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, c) 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, d) White or greyish effluent was discharged directly into Victoria Habour marine waters from wastewater treatment plant on construction site.

xiii. Interim investigation report was submitted to EPD on 24 November 2015. Due to further investigation undertaken, further information and investigation summary shall be further included in December reporting month.

1. INTRODUCTION

1.1 Scope of the Report

1.1.1. Lam Geotechnics Limited (LGL) has been appointed to work as the Environmental Team (ET) under Environmental Permit no. EP-356/2009 and Further Environmental permit nos. FEP-02/356/2009, FEP-03/356/2009, FEP-04/356/2009, FEP-06/356/2009 and FEP-07/356/2009 to implement the Environmental Monitoring and Audit (EM&A) programme as stipulated in the EM&A Manual of the approved Environmental Impact Assessment (EIA) Report for Wan Chai Development phase II and Central-Wan Chai Bypass (Register No.: AEIAR-125/2008) and in the EM&A Manual of the approved EIA Report for Central-Wan Chai Bypass and Island Eastern Corridor Link (Register No. AEIAR-041/2001).

1.1.2. This report presents the environmental monitoring and auditing work carried out in accordance to the Section 10.4 of EM&A Manual and "*Environmental Monitoring and Audit Requirements"* under Particular Specification Section 27.

1.1.3. This report documents the finding of EM&A works during the period from September 2015 to November 2015.

1.2 Structure of the Report

Section 1 ***Introduction*** – details the scope and structure of the report.

Section 2 ***Project Background*** – summarizes background and scope of the project, site description, project organization and contact details of key personnel during the reporting period.

Section 3 ***Monitoring Requirements*** – summarizes all monitoring parameters, monitoring locations, monitoring frequency, duration and action plan.

Section 4 ***Monitoring Results*** – summarizes the monitoring results obtained in the reporting period.

Section 5 ***Compliance Audit*** – summarizes the auditing of monitoring results, all exceedances environmental parameters.

Section 6 ***Complaints, Notification of summons and Prosecution*** – summarizes the cumulative statistics on complaints, notification of summons and prosecution

Section 7 ***Cumulative Construction Impact due to the Concurrent Projects*** – summarizes the relevant cumulative construction impact due to the concurrent activities of the concurrent Projects.

Section 8 ***Conclusion***

2. PROJECT BACKGROUND

2.1 Background

2.1.1. "Wan Chai Development phase II and Central-Wan Chai Bypass" and "Central-Wan Chai Bypass and Island Eastern Corridor Link" (hereafter called "the Project") are Designed Project (DP) under the Environmental Impact Assessment Ordinance (Cap. 499) (EIAO). The Environmental Impact Assessment (EIA) Reports for Central-Wan Chai Bypass and Island Eastern Corridor Link (Register No. AEIAR-041/2001) and Wan Chai Development phase II and Central-Wan Chai Bypass (Register No.: AEIAR-125/2008) have been approved on 31 August 2001 and 11 December 2008 respectively.

2.1.2. The key purpose of Wan Chai Development Phase II (WDII) is to provide land at Wan Chai North and North Point for construction of the Central-Wan Chai Bypass and Island Eastern Corridor Link (CWB). Land formed under the project will be developed as a world-class waterfront promenade joining that at the new Central waterfront for public enjoyment.

2.1.3. There is a compelling and present need for the CWB to provide relief to the very congested east-west Connaught Road Central/Harcourt Road / Gloucester Road Corridor (the Corridor) which is currently operating beyond its capacity. The CWB will provide relief to the existing congestion along the Corridor and cater for the anticipated growth of traffic on Hong Kong Island. Without the CWB and its access roads, there will not be sufficient capacity to serve the heavy traffic demands at both strategic and local levels.

2.2 Scope of the Project and Site Description

2.2.1. The Project is located mainly in Wan Chai North, Causeway Bay and North Point, and is demarcated by Gloucester Road and Victoria Park Road to the south, Fenwick Pier Street to the west and Tong Shui Road Interchange to the east, as shown in ***Figure 2.1***.

2.2.2. The study area encompasses existing developments along the Wan Chai, Causeway Bay and North Point shorelines. Major land uses include the Hong Kong Convention & Exhibition Centre (HKCEC) Extension, the Wan Chai Ferry Pier, the ex-Wan Chai Public Cargo Working Area (ex-PCWA), the Royal Hong Kong Yacht Club (RHKYC), the Police Officers' Club, the Causeway Bay Typhoon Shelter (CBTS) and commercial and residential developments.

2.2.3. The scope of the Project comprises:

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

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

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

Table 2.1 Schedule 2 Designated Projects under this Project

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

2.3 Division of the Project Responsibility

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

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

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

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

2.3.3 The construction works were completed and the FEP-01/356/2009 was surrendered by the Contractor on 22 October 2012.

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

2.3.5 The details of individual contracts are summarized in ***Table2.2***.

Table 2.2 Details of Individual Contracts under the Project

Contract No.	Contract Title	Associated DP(s)	Construction Commencement Date
HK/2009/01	Wan Chai Development Phase II – Central –Wanchai Bypass at Hong Kong Convention and Exhibition Centre	DP3, DP6	23 July 2010
		DP1, DP2	25 August 2011
HK/2009/02	Wan Chai Development Phase II – Central – Wan Chai Bypass at WanChai East	DP3, DP5	5 July 2010
		DP1	26 April 2011
HY/2009/11	Wan Chai Development Phase II and Central – Wan Chai Bypass – North Point Reclamation	DP3	17 March 2010 (Completed)
HY/2009/15	Central-Wanchai Bypass – Tunnel (Causeway Bay Typhoon Shelter Section)	DP3	10 November 2010
		DP1	13 July 2011
HK/2010/06	Wan Chai Development Phase II-Central-Wan Chai Bypass over MTR Tsuen Wan Line	DP3	22 March 2011 (Completed)
04/HY/2006	Reconstruction of Bus Terminus near Man Yiu Street and Man Kwong Street	DP1	September 2010 (Completed)
HY/2009/17	Central - Wan Chai Bypass (CWB) at FEHD Whitfield Depot - Advanced piling works.	DP1	5 October 2010 (Completed)
HY/2009/18	Central - Wan Chai Bypass (CWB) – Central Interchange	DP1	10 March 2014
HY/2009/19	Central - Wanchai Bypass Tunnel (North Point Section) and Island Eastern Corridor Link	DP1	24 March 2011
HK/2012/08	Wan Chai Development Phase II Central- Wan Chai Bypass at Wan Chai West	DP1,DP2, DP3	5 March 2013
HY/2011/08	Central-Wan Chai Bypass (CWB) – Tunnel Buildings, Systems and Fittings, and Works Associated with Tunnel Commissioning	DP1	8 October 2014

2.4 Project Organization and Contact Personnel

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

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

Table 2.3 Contact Details of Key Personnel

Party	Role	Post	Name	Contact No.	Contact Fax
AECOM	Engineer's Representative for WDII	Principal Resident Engineer	Mr. Frankie Fan	2587 1778	2587 1877
	Engineer's Representative for CWB	Principal Resident Engineer	Mr. Peter Poon	3912 3388	3912 3010
Chun Wo – Leader Joint Venture	Contractor under Contract no. HK/2009/01	Project Manager	Mr. Simon Liu	9304 8355	2587 1878
		Site Agent	Mr. Andy Yu	9648 4896	
		Engineer Manager	Mr. Terry Wong	9757 9846	
		Construction Manager	Mr. Wyman Wong	9627 2467	
		Construction Manager	Mr. Kenneth Chan	9160 3850	
		Environmental Officer	Ms. Wendy Ng	9803 0057	
		Assistant Environmental Engineer	Miss. Connie Chan	6157 7057	
Chun Wo – CRGL Joint Venture	Contractor under Contract no. HK/2009/02	Project Manager	Mr. Paul Yu	3658 3085	2827 9996
		Quality & Environmental Manager	Mr. C.P. Ho	9191 8856	
China State Construction Engineering (HK) Ltd.	Contractor under Contract no. HY/2009/15	Project Director	Chris Leung	3557 6393	2566 2192
		Site Manager	Y Huo	3557 6368	
		Contractor's Representative	Andrew Wong	3557 6358	
		Contractor's Representative	Gene Cheung	3557 6395	
		Environmental Officer	Andy Mak	3557 6347	

Party	Role	Post	Name	Contact No.	Contact Fax
Chun Wo - CRGL - MBEC_Joint Venture	Contractor under Contract no. HY/2009/19	Project Manager	Rayland Lee	3758 6788	2570 8013
		Site Agent	David Lau	3758 8879	
		Environmental Manager / Environmental Officer	Eric Fong	6191 9337	
		Construction Manager (Marine)	M.H. Isa	9884 0810	
		Construction Manager (Land)	Andy Chan	9879 4325	
		Construction Manager (Land)	Bear Ding	6483 6198	
		Operation Manager (Land)	Yung Kwok Wah	9834 1010	
China State-Leader JV	Contractor under Contract no. HK/2012/08	Project Director	C. N. Lai	9106 5806	2877 1522
		Project Manager	Eddie Chung	9189 8118	
		Site Agent	Keith Tse	9037 1839	
		Environmental Officer	James Ma	9130 9549	
		Environmental Supervisor	Y. L. Ho	9856 5669	
China State	Contractor under Contract no. HY/2010/08	Project Director	Chris Leung	3467 4299	2566 8061
		Project Manager	Chan Ying Lun	3418 3001	
		Site Agent	Dave Chan	3467 4277	
		Environmental Officer	Gabriel Wong	35576466	
		Environmental Supervisor	Desmond Ho Tsz Ho	3557 6466	
Ramboll Environ Hong Kong Limited	Independent Environmental Checker (IEC)	Independent Environmental Checker (IEC)	Mr. David Yeung	34652888	34652899
Lam Geotechnics Limited	Environmental Team (ET)	Environmental Team Leader (ETL)	Mr. Raymond Dai	2882 3939	2882 3331

2.5 Principal Work and Activities

2.5.1. During this reporting period, the principal work activities for Contract no. HK/2009/01 are summarized in ***Table 2.4***.

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

September 2015	October 2015	November 2015
• Nil	• Rock trimming works	• Nil

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

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

September 2015	October 2015	November 2015
• Placing levelling stone for construction of seawall at WCR3 • Placing caisson seawall	• Placing rock fill material behind caisson seawall at WCR3 • Reclamation works at WCR3	• Reclamation works in WCR3

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

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

September 2015	October 2015	November 2015
• Reinstatement of vertical seawall at TPCWAE	• Reinstatement of vertical seawall at TPCWAE	• Reinstatement of vertical seawall at TPCWAE • Construction of floating pontoon at TS4

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

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

September 2015	October 2015	November 2015
• Nil	• Nil	• Nil

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

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

September 2015	October 2015	November 2015
• Dry dock construction • Installation of pipe pile wall • Construction of culvert	• Dry dock construction • Installation of seawall blocks • Construction of culvert	• Construction of culvert • Trimming of rock bedding

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

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

September 2015	October 2015	December 2015
• Diversion pipe maintenance	• Diversion pipe maintenance	• Diversion pipe maintenance

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

3. MONITORING REQUIREMENTS

3.1. Noise Monitoring

NOISE MONITORING STATIONS

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

Table 3.1 Noise Monitoring Stations

Station	Description
M1a	Harbour Road Sports Centre
M2b	Noon Gun Area
M3a	Tung Lo Wan Fire Station
M4b	Victoria Centre
M5b	City Garden
M6	HK Baptist Church Henrietta Secondary School

REAL TIME NOISE MONITORING STATIONS

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

3.1.3. The real-time noise monitoring at RTN2-Oil Street Community Liaison Centre has been relocated to City Garden Electric Centre (RTN2a- Electric Centre) on 5 Oct 2012, which is a representative of noise sensitive receiver- City Garden. The baseline noise level of RTN2a will adopt the results derived from the baseline noise monitoring conducted in Electric Centre from 4 December 2009 to 17 December 2009.

3.1.4. As the land-based piling and filling works- DP3 at Tin Hau had been completed on 3 September 2012 and confirmed by RSS, the real-time noise monitoring results at RTN1 - FEHD Hong Kong Transport Section Whitfield Depot was excluded under EP-356/2009 since 28 November 2012.

Table 3.2 Real Time Noise Monitoring Station

District	Station	Description
North Point	RTN2a	Electric Centre

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

NOISE MONITORING PARAMETERS, FREQUENCY AND DURATION

3.1.5. 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 L10 and L90 shall also be obtained for reference.

3.1.6. Noise monitoring shall be carried out at all the designated monitoring stations. The monitoring frequency shall depend on the scale of the construction activities. The following is an initial guide on the regular monitoring frequency for each station on a weekly basis when noise generating activities are underway:

- one set of measurements between 0700 and 1900 hours on normal weekdays.

3.1.7. If construction works are extended to include works during the hours of 1900 – 0700 as well as public holidays and Sundays, additional weekly impact monitoring shall be carried out during respective restricted hours periods. Applicable permits under NCO shall be obtained by the Contractor.

3.1.8. Real time noise shall be carried out at the designated monitoring stations. The following is an initial guide on the regular monitoring frequency for each station on a 24 hours daily basis when noise generating activities are underway:

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

MONITORING EQUIPMENT

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

3.1.10. Noise measurements shall not be made in fog, rain, wind with a steady speed exceeding 5 m/s or wind with gusts exceeding 10 m/s. The wind speed shall be checked with a portable wind speed meter capable of measuring the wind speed in m/s.

3.2. Air Monitoring

AIR QUALITY MONITORING STATIONS

3.2.1. The air monitoring stations for the Project are listed and shown in ***Table 3.3*** and ***Figure 3.1***. ***Appendix 3.1*** shows the established Action/Limit Levels for the monitoring works.

Table 3.3 Air Monitoring Stations

Station ID	Monitoring Location	Description
CMA1b	Oil Street Site Office**	North Point
CMA2a	Causeway Bay Community Centre	Causeway Bay
CMA3a	CWB PRE Site Office *	Causeway Bay
CMA4a	Society for the Prevention of Cruelty to Animals	Wan Chai
CMA5b	Pedestrian Plaza***	Wan Chai
CMA6a	WDII PRE Site Office *	Wan Chai

* Remarks: As per the ENPC meeting in January 2011, the monitoring stations CMA3a - Future CWB site office at Wanchai Waterfront Promenade and CMA6a - Future AECOM site office at Work Area were renamed as remark.

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

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

AIR MONITORING PARAMETERS, FREQUENCY AND DURATION

3.2.2. One-hour and 24-hour TSP levels should be measured to indicate the impacts of construction dust on air quality. The 24-hour TSP levels shall be measured by following the standard high volume sampling method as set out in the Title 40 of the Code of Federal Regulations, Chapter 1 (Part 50), Appendix B.

3.2.3. All relevant data including temperature, pressure, weather conditions, elapsed-time meter reading for the start and stop of the sampler, identification and weight of the filter paper, and any other local atmospheric factors affecting or affected by site conditions, etc., shall be recorded down in detail.

3.2.4. For regular impact monitoring, the sampling frequency of at least once in every six-days, shall be strictly observed at all the monitoring stations for 24-hour TSP monitoring. For 1-hour TSP monitoring, the sampling frequency of at least three times in every six-days should be undertaken when the highest dust impact occurs.

SAMPLING PROCEDURE AND MONITORING EQUIPMENT

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

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

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

LABORATORY MEASUREMENT / ANALYSIS

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

3.2.8 An alternative non-HOKLAS accredited laboratory was set-up for carrying out the laboratory analysis, the laboratory equipment was approved by the ER on 8 February 2011 and the measurement procedures were witnessed by the IEC. Any measurement performed by the laboratory was be demonstrated to the satisfaction of the ER and IEC. IEC shall regularly audit to the measurement performed by the laboratory to ensure the accuracy of measurement results.

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

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

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

IMPACT MONITORING FOR ODOUR PATROL

3.2.12 Odour patrols along the shorelines of Causeway Bay Typhoon Shelter and ex-Wan Chai Public Cargo Working Area when there is temporary reclamation in Causeway Bay Typhoon Shelter and/or in the ex-Wan Chai Public Cargo Working Area, or when there is dredging of the odorous sediment and slime at the south-western corner of the Causeway Bay Typhoon Shelter. Odour patrols will be carried out at bi-weekly intervals during July, August and September by a qualified person of the ET who shall:

- be at least 16 years of age;
- be free from any respiratory illnesses; and
- not be allowed to smoke, eat, drink (except water) or use chewing gum or sweets 30 min
- before and during odour patrol

3.2.13 Odour patrol shall be conducted by independent trained personnel / competent persons patrolling and sniffing around the shore as shown in ***Figure 3.1*** to detect any odour at the concerned hours (afternoon is preferred for higher daily temperature).

3.2.14 The qualified person will use the nose (olfactory sensor) to sniff odours at different locations. The main odour emission sources and the areas to be affected by the odour nuisance will be identified.

3.2.15 The perceived odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:

- 0 - Not detected. No odour perceived or an odour so weak that it cannot be easily characterized or described;
- 1 - Slight Identifiable odour, and slight chance to have odour nuisance;
- 2 - Moderate Identifiable odour, and moderate chance to have odour nuisance;
- 3 - Strong Identifiable, likely to have odour nuisance;
- 4 - Extreme Severe odour, and unacceptable odour level.

3.2.16 The findings including odour intensity, odour nature and possible odour sources, and also the local wind speed and direction at each location will be recorded. In addition, some relevant meteorological and tidal data such as daily average temperature, and daily average humidity, on that surveyed day will be obtained from the Hong Kong Observatory Station for reference. The Action and Limit levels for odour patrol are shown in ***Appendix 3.1***.

3.3 Water Quality Monitoring

3.3.1. The EIA Report has identified that the key water quality impact would be associated with the dredging works during the construction phase. Marine water quality monitoring for dissolved oxygen (DO), suspended solid (SS) and turbidity is therefore recommended to be carried out at selected WSD flushing water intakes. The impact monitoring should be carried out during the proposed dredging works to ensure the compliance with the water quality standards.

3.3.2. The updated EM&A Manual for EP-356/2009 (Version in March 2011) is approval by EPD on 29 April 2011. As such, the Action Level and Limit Level for the wet season (April –

September) will be effected and applied to the water quality monitoring data from 30 April 2011.

Water Quality Monitoring Stations

3.3.3. It is proposed to monitor the water quality at 2 WSD salt water intakes and 7 cooling water intakes along the seafront of the Victoria Harbour. The proposed water quality monitoring stations of the Project are shown in ***Table 3.4*** and ***Figure 3.1***. ***Appendix 3.1*** shows the established Action/Limit Levels for the monitoring works.

Table 3.4 Marine Water Quality Stations for Water Quality Monitoring

Station Ref.	Location	Easting	Northing
WSD Salt Water Intake			
WSD19	Sheung Wan	833415.0	816771.0
Cooling Water Intake			
C1	HKCEC Extension	835885.6	816223.0
C7	Windsor House	837193.7	816150.0
P1	HKCEC Phase I	835774.7	816179.4
P3	The Academy of performing Arts	835824.6	816212.0
P4	Shui on Centre	835865.6	816220.0
P5	Government Buildings (Wanchai Tower / Revenue Tower / Immigration Tower)	835895.2	816215.2
Cooling Water Intake / WSD Salt Water Intake			
RW21-P789	Great Eagle Centre/ Sun Hung Kai Centre/ WSD Wanchai salt water intake	836268.0	816020.0

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

- WSD9 and WSD17 were implemented with respect to HK/2009/02 from 8 Feb 2012.
- 4-week water quality monitoring at WSD9, WSD10, WSD15, WSD17, C8, C9 were completed on 6 Feb 2012.
- C8 and C9 were implemented with respect to HY/2009/19 from 28 Jan 2012.
- C8 & C9 was temporary suspended on 30 March 2013 due to the marine works for Contract no. HY/2009/19 had been completed on 4 March 2013
- WSD7 and WSD20 were temporarily suspended from 27 Apr 2012
- C2, C3 C4e and C4w water quality monitoring station was temporarily suspended since 24 Apr 2013
- C5e and C5w water quality monitoring station was temporarily suspended since 29 July 2013
- WSD21 water quality monitoring station was temporarily suspended since 12 March 2014
- Maintenance responsibility of silt screen C1, WSD19, P3, P4 and P5 are under Contract HK/2009/01.
- WSD9 and WSD17 water quality monitoring station was temporarily suspended since 8 September 2014 flood tide.

WATER QUALITY PARAMETERS AND FREQUENCY

3.3.4. Monitoring of dissolved oxygen (DO), turbidity and suspended solids (SS) shall be carried out at WSD flushing water intakes and cooling water intakes. DO and Turbidity are measured in-situ while SS is determined in laboratory.

3.3.5. In association with the water quality parameters, other relevant data shall also be measured, such as monitoring location/position, time, sampling depth, water temperature, pH, salinity, dissolved oxygen (DO) saturation, weather conditions, sea conditions, tidal stage, and any special phenomena and work underway at the construction site etc.

3.3.6. The interval between two sets of monitoring should not be less than 36 hours except where there are exceedances of Action and/or Limit Levels, in which case the monitoring frequency will be increased. ***Table 3.5*** shows the proposed monitoring frequency and water quality parameters. Duplicate in-situ measurements and water sampling should be carried out in each sampling event. For selection of tides for in-situ measurement and water sampling, tidal range of individual flood and ebb tides should be not less than 0.5m.

Table 3.5 Marine Water Quality Monitoring Frequency and Parameters

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

Notes:
1. For selection of tides for in-situ measurement and water sampling, tidal range of individual flood and ebb tides should be not less than 0.5m.
2. Turbidity should be measured in situ whereas SS should be determined by laboratory.

DISSOLVED OXYGEN AND TEMPERATURE MEASURING EQUIPMENT

3.3.7. The instrument should be a portable, weatherproof dissolved oxygen measuring instrument complete with cable, sensor, comprehensive operation manuals, and use a DC power source. It should be capable of measuring:

- a dissolved oxygen level in the range of 0-20 mg/l and 0-200% saturation
- a temperature of 0-45 degree Celsius

3.3.8. It should have a membrane electrode with automatic temperature compensation complete with a cable. Sufficient stocks of spare electrodes and cables should be available for replacement where necessary. (e.g. YSI model 59 meter, YSI 5739 probe, YSI 5795A submersible stirrer with reel and cable or an approved similar instrument).

3.3.9. Should salinity compensation not be build-in in the DO equipment, in-situ salinity shall be measured to calibrate the DO equipment prior to each DO measurement.

TURBIDITY MEASUREMENT INSTRUMENT

3.3.10 The instrument should be a portable, weatherproof turbidity-measuring instrument complete with comprehensive operation manual. The equipment should use a DC power source. It should have a photoelectric sensor capable of measuring turbidity between 0-1000 NTU and be complete with a cable (e.g. Hach model 2100P or an approved similar instrument).

SAMPLER

3.3.11 Water sampler comprises a transparent PVC cylinder, with a capacity of not less than 2 litres, and can be effectively sealed with latex cups at both ends. The sampler should have a positive latching system to keep it open and prevent premature closure until released by a messenger when the sampler is at the selected water depth (e.g. Kahlsico Water Sampler or an approved similar instrument).

SAMPLE CONTAINER AND STORAGE

3.3.12 Water samples for suspended solids measurement should be collected in high-density polythene bottles, packed in ice (cooled to 4°C without being frozen), and delivered to ALS Technichem (HK) Pty Ltd. as soon as possible after collection for analysis.

WATER DEPTH DETECTOR

3.3.13 A portable, battery-operated echo sounder shall be used for the determination of water depth at each designated monitoring station. This unit can either be handheld or affixed to the bottom of the workboat, if the same vessel is to be used throughout the monitoring programme.

SALINITY

3.3.14 A portable salinometer capable of measuring salinity in the range of 0-40 ppt shall be provided for measuring salinity of the water at each of monitoring location.

MONITORING POSITION EQUIPMENT

3.3.15 A hand-held or boat-fixed type digital Global Positioning System (GPS) with waypoint bearing indication or other equivalent instrument of similar accuracy shall be provided and used during monitoring to ensure the monitoring vessel is at the correct location before taking measurements.

CALIBRATION OF IN-SITU INSTRUMENTS

3.3.16 All in-situ monitoring instrument shall be checked, calibrated and certified by a laboratory accredited under HOKLAS or equivalent before use, and subsequently re-calibrated at 3 monthly intervals throughout all stages of the water quality monitoring. Responses of sensors and electrodes should be checked with certified standard solutions before each use. Wet bulb calibration for a DO meter shall be carried out before measurement at each monitoring location.

3.3.17 For the on site calibration of field equipment by the ET, the BS 127:1993, "Guide to Field and on-site test methods for the analysis of waters" should be observed.

3.3.18 Sufficient stocks of spare parts should be maintained for replacements when necessary. Backup monitoring equipment shall also be made available so that monitoring can proceed uninterrupted even when some equipment is under maintenance, calibration, etc.

LABORATORY MEASUREMENT / ANALYSIS

3.3.19 Analysis of suspended solids has been carried out in a HOKLAS accredited laboratory, ALS Technichem (HK) Pty Ltd. Water samples of about 1L shall be collected at the monitoring stations for carrying out the laboratory SS determination. The SS determination work shall start within 24 hours after collection of the water samples. The SS determination shall follow APHA 19ed or equivalent methods subject to the approval of IEC and EPD.

ENHANCED WATER QUALITY MONITORING IN THE EX-WAN CHAI PUBLIC CARGO WORKING AREA AND THE CAUSEWAY BAY TYPHOON SHELTER

3.3.20 The enhanced water quality monitoring and audit programme is to avoid aggravation of odour nuisance from seawater arising from temporary reclamation in the ex-Wan Chai Public Cargo Working Area and the Causeway Bay Typhoon Shelter.

3.3.21 Dissolved oxygen monitoring at the intakes C6 and C7 in Causeway Bay Typhoon Shelter when there is temporary reclamation in Causeway Bay Typhoon Shelter and at the south-western and south-eastern corners of the ex-Wan Chai Public Cargo Working Area. The proposed water quality monitoring stations of the Project are shown in ***Table 3.6*** and ***Figure 3.1.***

Table 3.6 Marine Water Quality Stations for Enhanced Water Quality Monitoring

Station	Location
C6	Excelsior Hotel
C7	Windsor House
Ex-WPCWA-SW	South-western of the ex-Wan Chai Public Cargo Working Area
Ex-WPCWA-SE	South-eastern of the ex-Wan Chai Public Cargo Working Area

3.3.22 The monitoring of dissolved oxygen are to be carried out 3 days per week, at mid-flood and mid-ebb tides for 3 water depths (1m below water surface, mid-depth and 1m above sea bed, except where the water depth less than 6m, the mid-depth may be omitted. If the water depth be less than 3m, only the mid-depth will be monitored).

DAILY SS MONITORING AND 24 HOURS TURBIDITY MONITORING SYSTEM

3.3.23 During dredging of the sediment at the south-western corner of the Causeway Bay Typhoon Shelter, daily monitoring of suspended solids and 24 hour monitoring of turbidity at the cooling water intakes (C6 and C7) shall be conducted.

3.3.24 The 24 hours monitoring of turbidty at the cooling water intakes (C6 and C7) shall be established by setting up a continuous water quality monitoring station in front of the intakes during the dredging activities. The monitoring system include the turbidity sensor and data logger which is capable of data capturing at every 5 minutes. The data shall be downloaded daily and compared with the Action and Limit level determined during the baseline water qualtiy monitoring at the cooling water intake locations.

ADDITIONAL DISSOVLED OXYGEN MONITORING FOR CULVERT L WATER DISCHARGE FLOW

3.3.25 In response to the Condition 2.18 of the Environmental Permit no. EP-356/2009 requiring that a silt curtain / impermeable barrier system be installed to channel water discharge flow from Culvert L to locations outside the embayment area, a proposed replacement of the requirement with additional dissolved oxygen monitoring has been conducted at three monitoring stations, namely A, B and C between the eastern seawall of Central Reclamation Phase III and the HKCEC Extension since November 2011 under EP-356/2009 so that DO level between the eastern seawall of Central Reclamation Phase II and the HKCEC extension could be continuously monitored.

3.3.26 With respect to the commencement of dredging works under HK/2012/08 and the installation of MTR precast protection unit, the enhanced water quality monitoring for Culvert L was temporarily suspended since 24 July 2013

3.3.27 The monitoring of dissolved oxygen are to be carried out once per week, at mid-flood and mid-ebb tides for 3 water depths (1m below water surface, mid-depth and 1m above sea bed, except where the water depth less than 6m, the mid-depth may be omitted. If the water depth be equal to or less than 3m, only the mid-depth will be monitored).

4. MONITORING RESULTS

4.0.1. The environmental monitoring will be implemented based on the division of works areas of each designed project managed under different contracts with separate FEP applied by individual contractors. Overall layout showing work areas of various contracts, latest status of work commencement and monitoring stations is shown in ***Figure 2.1*** and ***Figure 3.1***. The monitoring results are presented in according to the Individual Contract(s).

4.0.2 According to EP-364/2009/A Part B, "Scale and Scope of Designated Project", Remarks (c),"The permanent and temporary reclamation and associated dredging works related to the CWB construction are separately covered by environmental permit No. EP-356/2009 issued to Civil Engineering and Development Department", and marine piling works to be conducted by the Contractor of Contract no. HY/2009/19 from 28 January 2012 was considered to be governed under EP-356/2009. As the construction site area of Contract no. HY/2009/11 had already been handed over to Contract no. HY/2009/19, the designated noise, water and air quality monitoring stations for Contract no. HY/2009/11 would be shared with Contract no. HY/2009/19 from 28 January 2012.

4.1. Noise Monitoring Results

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

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

Table 4.1 Noise Monitoring Station for Contract nos. HK/2009/01 and HK/2009/02

Station	Description
M1a	Harbour Road Sports Centre

4.1.2. No action or limit level exceedance was recorded in September reporting month.

4.1.3. No action or limit level exceedance was recorded in October reporting month.

4.1.4. One limit level exceedance was recorded at M1a- Harbour Road Sports Centre on 24 November 2015 in November reporting month.

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

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

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

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

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

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

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

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

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

4.1.8. Noise quality monitoring at M4b and M5b have been implemented with respect to HY/2009/19 since the marine bore piling work started on 28 Jan 2012.

4.1.9. The proposed division of noise monitoring stations for Contract no. HY/2009/19 are summarized in ***Table 4.3*** below:

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

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

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

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

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

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

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

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

4.1.13. No action or limit level exceedance was recorded in the reporting quarter.

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

4.2. Real Time Noise Monitoring Results

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

4.2.1 As the land-based piling and filling works- DP3 at Tin Hau had been completed on 3 September 2012 and confirmed by RSS, the real-time noise monitoring results at FEHD Hong Kong Transport Section Whitfield Depot was excluded under EP-356/2009 since 28 November 2012.

4.2.2 The real-time noise monitoring at RTN2-Oil Street Community Liaison Centre has been relocated to City Garden Electric Centre (RTN2a- Electric Centre) on 5 Oct 2012, which is a representative of noise sensitive receiver- City Garden. The baseline noise level of RTN2a will adopt the results derived from the baseline noise monitoring conducted in Electric Centre from 4 December 2009 to 17 December 2009.

4.2.3 The major work activities for Contract no. HY/2009/11 was confirmed substantial complete by RSS on 4 January 2012. The construction site was handed over to contractor HY/2009/19 on 31 December 2011 and the FEP-01/356/2009 was surrendered on 22 Oct 2012.

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

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

District	Station	Description
North Point	RTN2a	Electric Centre

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

4.2.5 No limit level exceedance was recorded in September reporting month.

4.2.6 No limit level exceedance was recorded in October reporting month.

4.2.7 Limit level exceedance was recorded at RTN2a-Electric Centre on 14 November 2015 during daytime in November reporting month. On 14 November 2015, pre-bored piling works was undertaken by Contract HY/2009/19 while mitigation measures including erection of temporary noise barrier was in place. In addition, cooling pipe removal works with saw cutting for Hong Kong Electric Centre was conducted at the roof top by non-CWB Contractor at the roof top location of the Hong Kong Electric Centre immediately next to the noise monitoring station. In view of the mitigation measures implemented and the non-CWB works conducted next to the monitoring station as major noise contribution, the exceedances were considered as non-Project related.

4.3. Air Monitoring Results

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

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

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

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

Station	Description
CMA5b	Pedestrian Plaza
CMA6a	WDII PRE Site Office *

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

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

4.3.4. Air monitoring was commenced in mid-January 2011 for the land-filling work for Contract no. HK/2009/02. The proposed division of air monitoring stations is summarized in ***Table 4.7*** below.

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

Station	Description
CMA4a	Society for the Prevention of Cruelty to Animals

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

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

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

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

Station	Description
CMA3a	CWB PRE Site Office

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

4.3.8. The odour patrol along the odour route with 7 sniffing locations was conducted by a qualified odour patrol member on 1 and 15 September 2015 at the concerned hours (afternoon for higher daily temperature). No Action and Limit Level was recorded during September reporting month.

4.3.9. The odour patrol along the odour route with 7 sniffing locations was conducted by a qualified odour patrol member on 29 September 2015 at the concerned hours (afternoon for higher daily temperature). No Action and Limit Level was recorded during October reporting month.

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

4.3.10. Air monitoring at CMA1b and CMA2a have been implemented with respect to HY/2009/19 since the marine bore piling works started on 28 Jan 2012. No exceedance was recorded in the reporting period.

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

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

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

4.3.12. One action level exceedance was recorded at monitoring station CMA1b on 24 September 2015 during 24hr TSP monitoring in September reporting month.

4.3.13. After investigation, no construction activities was undertaken during monitoring period around the monitoring station and the condition of the haul road around the monitoring station was generally maintained with dust suppression measures, the exceedance was considered as non-Project related and contributed by local ambient condition. Nevertheless, in view of the transition into dry season, the Contractor was reminded to enhance all necessary dust

suppression measure for construction works or potential dust surface to minimize potential dust impact to the surroundings.

4.3.14. One action level exceedance was recorded at monitoring station CMA1b on 30 September 2015 during 1hr TSP monitoring in the reporting month.

4.3.15. After investigation, no construction activities was undertaken during monitoring period around the monitoring station and the condition of the haul road around the monitoring station was generally maintained with dust suppression measures, the exceedance was considered as non-Project related and contributed by local ambient condition. Nevertheless, the Contractor was reminded to maintain necessary dust suppression measure for construction works or potential dust surface to minimize potential cumulative dust impact to the surroundings.

4.3.16. No action or limit exceedance was recorded in November reporting month.

4.4 Water Monitoring Results

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

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

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

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

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

Remarks:

- The water monitoring stations for the dredging works under Contract No. HK/2009/01 should also include WSD9, WSD17, WSD 21 and C5 if water quality monitoring at these locations have not been carried out by others. Similarly, the water monitoring stations for the dredging works under Contract No. HK/2009/02 should also include WSD7, WSD9, WSD17, WSD 19, C1, C2, C3 and C4 if water quality monitoring at these locations have not been carried out by others.
- WSD7 and WSD20 water quality monitoring were temporarily suspended since 27 Apr 2012.
- C2, C3 C4e and C4w water quality monitoring station was temporarily suspended since 24 Apr 2013

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

4.4.3. Water quality monitoring for Contract no. HK/2009/02 was commenced on 8 July 2010. The proposed division of water monitoring stations is summarized in ***Table 4.11*** below.

Table 4.11 Water Monitoring Stations for Contract no. HK/2009/02

Station Ref.	Location	Easting	Northing
WSD Salt Water Intake			

WSD9	Tai Wan	837921.0	818330.0
WSD17	Quarry Bay	839790.3	817032.2
Cooling Water Intake			
C1	HKCEC Extension	835885.6	816223.0
Cooling Water Intake			
RW21-P789	Great Eagle Centre/ Sun Hung Kai Centre/CWB	836268.0	816020.0

Remarks:

- The water monitoring stations for the dredging works under Contract No. HK/2009/01 should also include WSD9, WSD17, WSD 21 and C5 if water quality monitoring at these locations have not been carried out by others. Similarly, the water monitoring stations for the dredging works under Contract No. HK/2009/02 should also include WSD7, WSD9, WSD17, WSD 19, C1, C2, C3 and C4 if water quality monitoring at these locations has not been carried out by others.
- Water quality monitoring at WSD9 and WSD 17 was implemented with respect to HK/2009/02 from 8 Feb 2012.
- C5e and C5w water quality monitoring station was temporarily suspended since 29 July 2013
- WSD21 water quality monitoring station was temporarily suspended since 12 March 2014
- WSD9 and WSD17 water quality monitoring station was temporarily suspended since 8 September 2014 flood tide.
- The water monitoring station C1 was associated with Contract No. HK/2009/02 as the marine works under DP3 at WCR3 area has commenced and was in progress.

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

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

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

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

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

4.4.5. As the removal of reclamation work of TS1 at CBTS has been completed, all procedures have been rectified and complied with the conditions set in EP-356/2009 and FEP-04/356/2009.

4.4.6. Due to the presence of obstacle within the inner silt curtain frame at sampling point, water quality point at C7 was finely adjusted to the outside of the inner silt curtain frame since 29 Dec 2012.

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

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

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

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

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

4.4.8. Due to the commencement of the marine bored piling on 28 Jan 2012, water quality monitoring for Contract no. HY/2009/19 was commenced on 28 Jan 2012.

4.4.9. Due to the marine piling under Contract no. HY/2009/19 was completed on 4 March 2013, the temporary suspension of impact water quality monitoring at C8 and C9 from 4 March 2013 have been monitored for 4-week period after the completion of marine works to confirm no water deterioration.

4.4.10. As confirmed by CWB RSS, the marine pilling works under contract HY/2009/19 was confirmed completed by 4 March 2013. The water quality monitoring at the respective monitoring stations C8 and C9 were temporarily suspended since 30 March 2013.

4.4.11. Based on the joint inspection on 4 Jan 2012 for the NPR area, the 4-week water quality monitoring at WSD9, WSD10, WSD15, WSD17, C8, C9 to confirm no water deterioration with respect to NPR was commenced since 7 Jan 2012 and it was completed on 6 February 2012.

4.4.12. Water quality monitoring at WSD10 and WSD15 was temporary suspended while water quality monitoring at WSD9 and WSD17 was implemented with respect to HK/2009/02 from 8 Feb 12 onwards;

4.4.13. Water quality monitoring at C8 and C9 have been implemented with respect to HY/2009/19 since the marine bore piling work started on 28 Jan 12.

4.4.14. Based on the safety concern when external façade refurbishment was conducted by contractor employed by Provident Center (C9) between 9 January 2012 to 30 July 2012 which caused to the inaccessibility of sampling either land and marine since 3 Feb 2012, there is a fine adjustment of the sampling location of water quality monitoring at C9 since 10 March 2012 to the closest accessible point prior to the completion of the external façade refurbishment work.

4.4.15. With respect to the trial dredging at WCR2 was scheduled on 20, 22, 24, 25 March and 1, 3 , 11, 13, 15, 17, 19, 20 Apr and 3 May 2012, on-going water quality monitoring results at WSD21 during this period was checked and indicated that there was no contribution due to the trial dredging operation. Enhanced review of water quality around WCR2 was also implemented and no deterioration in the water quality was observed.

4.4.16. Due to the access of water monitoring station at WSD19 was blocked by LCSD construction works from 3 April 2012 to 2 May 2012 and lead to the inaccessibility of sampling either land and marine, there is a fine adjustment of the sampling point of WSD 19 since 5 April 2012 to the closest accessible point prior to the completion of the construction activities.

4.4.17. Due to the dredging works for Cross Harbour Water Mains from Wan Chai to Tsim Sha Tsui-DP6 was completed on 26 March 2012, the temporary suspension of impact water quality monitoring at WSD7 and WSD20 after 27 April 2012 for the water quality monitoring at WSD7 and WSD20 have been monitored for 4-week period after the completion of DP6 to confirm no water deterioration.

4.4.18. As per the meeting with the representative of Excelsior Hotel and World Trade Centre on 17 May 2011, they confirmed that the seawater intake for The Excelsior was no longer in use and replaced by the connected permanent water supply from WSD pipelines since 11 January 2011. Thus, the impact water quality monitoring for the cooling intake - C6 was terminated effective from 26 May 2011.

4.4.19. 24 hours monitoring of turbidity at the cooling water intakes at C7 was conducted. With respect to the seawall collapsing at TS4 on 17 November 2011, the 24 hours turbidity monitoring and was kept in November 2011. Since the reinstating the seawall was completed on 13 January 2012 and no any water deterioration was performed, 24 hour turbidity monitoring was then suspended on 27 January 2012.

4.4.20. The enhanced water quality monitoring at C6, C7, Ex-WPCWA-SW and Ex-WPCWA-SE was commenced on 13 January 2011.

4.4.21. Water monitoring results measured in this reporting period are reviewed and summarized in ***Table 4.14***. Details of water quality monitoring results and graphical presentation can be referred in ***Appendix 4.3***.

Table 4.14 Summary of Water Quality Monitoring Exceedances in Reporting period

Contract no.	Water Monitoring Station	Mid-flood						Mid-ebb					
		DO		Turbidity		SS		DO		Turbidity		SS	
		AL	LL	AL	LL	AL	LL	AL	LL	AL	LL	AL	LL
HK/2009/01 & HK/2009/02	C1	0	0	4	6	1	0	0	0	2	3	0	0
HK/2012/08	WSD19	0	0	6	20	1	3	0	0	6	13	1	1
	P1	0	0	2	2	0	0	0	0	4	1	1	0
	P3	0	0	4	1	0	0	0	0	2	1	0	0
	P4	0	0	1	9	1	0	0	0	3	3	0	0
	P5	0	0	1	10	1	0	0	0	1	4	0	0
HK/2009/02	RW21-P789	0	0	5	11	0	0	0	0	2	4	0	0
HY/2009/15 & HY/2010/08	C7	0	0	1	3	0	0	0	0	1	3	0	1
Total		0	0	24	62	4	3	0	0	21	32	2	2

Remarks:

- The cessation of seawater intake operation for C6 was confirmed on 17 May 2011, the water monitoring at C6 was then terminated since 17 May 2011.
- WSD9 and WSD17 were implemented with respect to HK/2009/02 from 8 Feb 2012.
- 4-week water quality monitoring at WSD9, WSD10, WSD15, WSD17, C8 and C9 were completed on 6 Feb 2012.
- C8 and C9 were implemented with respect to HY/2009/19 from 28 Jan 2012.
- C8 & C9 was temporary suspended on 30 March 2013 due to the marine works for Contract no. HY/2009/19 had been completed on 4 March 2013
- WSD7 and WSD20 were temporarily suspended from 27 Apr 2012
- C2, C3 C4e and C4w water quality monitoring station was temporarily suspended since 24 Apr 2013
- C5e and C5w water quality monitoring station was temporarily suspended since 29 July 2013
- WSD21 water quality monitoring station was temporarily suspended since 12 March 2014
- Maintenance responsibility of silt screen C1, WSD19, P3, P4 and P5 are under Contract HK/2009/01.
- WSD9 and WSD17 water quality monitoring station was temporarily suspended since 8 September 2014 flood tide.
- Water quality monitoring for Windsor House Cooling (Station Ref: C7) was temporarily suspended since 22 October 2014 with respect to the diversion scheme and was resumed since 22 December 2014.
- The water monitoring station C1 was associated with Contract No. HK/2009/02 as the marine works under DP3 at WCR3 area has commenced and was in progress.
- Silt screen at WSD19 was removed since 15 September 2015.

4.4.22. There was 3 action and 8 limit level turbidity exceedances, and 1 action and no limit level suspended solid exceedance recorded in September reporting month. Investigation found that the exceedance was not related to Project works.

4.4.23. There was 32 action and 49 limit level turbidity exceedances, and 4 action and 4 limit level suspended solids exceedances recorded in October reporting month.

4.4.24. Investigation found that the one limit level of turbidity exceedance recorded at monitoring station RW21-P789 on 6 October 2015 in October reporting month was concluded as related to Project works.

4.4.25. Investigation found that 32 action level and 48 limit level of turbidity exceedances, and 4 action level and 4 limit level of suspended solid exceedances recorded in October reporting month were not related to Project works.

4.4.26. There was 10 action and 37 limit level of turbidity exceedances, and 1 action and 1 limit level exceedances of suspended solids recorded in November reporting month. Investigation found that the exceedances recorded in this reporting month were not related to Project works.

4.4.27. Enhanced DO monitoring at 4 monitoring stations in Causeway Bay Typhoon Shelter and Ex-Public Cargo Works Area was conducted three days per week during the reporting period. The action and limit level exceedances of water quality monitoring are summarized in ***Table 4.15.***

Table 4.15 Summary of Enhanced Dissolved Oxygen Monitoring Exceedances in Reporting period

Contract no.	Water Monitoring Station	Mid-flood		Mid-ebb	
		DO		DO	
		AL	LL	AL	LL
HY/2009/15	C6	0	0	2	0
	Ex-WPCWA SW	2	12	3	13
	Ex-WPCWA SE	0	1	1	0
Total		**2**	**13**	**6**	**13**

4.4.28. There were 5 action level and 9 limit level exceedances of enhanced dissolved oxygen recorded in September reporting month. Investigation found that the exceedances were not related to Project works.

4.4.29. There were 3 action level and 13 limit level exceedances of enhanced dissolved oxygen recorded in October reporting month. Investigation found that the exceedances were not related to Project works.

4.4.30. There were no action level and 4 limit level exceedances of enhanced dissolved oxygen recorded in November reporting month. Investigation found that the exceedances were not related to Project works.

4.4.31. Investigation found that the exceedances are not related to the Project works. Details of graphical presentation can be referred in ***Appendix 4.3***.

4.4.32. In response to the Condition 2.18 of the Environmental Permit no. EP-356/2009 requiring that a silt curtain / impermeable barrier system be installed to channel water discharge flow from Culvert L to locations outside the embayment area, a proposed replacement of the requirement with additional dissolved oxygen monitoring has been conducted at three monitoring stations, namely A, B and C between the eastern seawall of Central Reclamation Phase III and the HKCEC Extension since November 2011 under EP-356/2009 so that DO

level between the eastern seawall of Central Reclamation Phase II and the HKCEC extension could be continuously monitored.

4.4.33. With respect to the commencement of dredging works under HK/2012/08 and the installation of MTR precast protection unit, the enhanced water quality monitoring for Culvert L was temporarily suspended since 24 July 2013

4.4.34. With respect to the commencement of temporary reclamation works and seawall construction at Ex-PCWAW zone and diverted culvert extension, the location of the Enhance DO monitoring stations (Ex-PCWASW and Ex-PCWA SE) were finely adjusted to the PCWAE since 7 November 2014.

4.5 Waste Monitoring Results

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

4.5.1. No Inert C&D waste and non-inert C&D waste was disposed of for the site works in this reporting period. Details of the waste flow table are summarized in ***Table 4.16.***

Table 4.16 Details of Waste Disposal for Contract no. HK/2009/01

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

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

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

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

Table 4.17 Details of Waste Disposal for Contract no. HK/2009/02

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

Remarks: The cumulative quantity of Type 1 – Open Sea Disposal (Delicate Sites) & Type 2 – Confined Marine Disposal has been updated in September reporting month.

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

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

4.5.5. No inert and non-inert C&D waste were disposed of for the site works in this reporting period. Details of the waste flow table are summarized in ***Table 4.18.***

Table 4.18 Details of Waste Disposal for Contract no. HY/2009/15

Waste Type	Quantity this quarter	Cumulative Quantity-to-Date	Disposal / Dumping Grounds	Remarks
Inert C&D materials disposed, m^3	NIL	141579.2	Tuen Mun Area 38	NIL
	NIL	65216	TKO137 FB	NIL
Inert C&D materials recycled, m^3	NIL	304	Ex-PCWA	NIL
	NIL	111.9	TS4	NIL
Non-inert C&D materials disposed, m^3	NIL	252.2	SENT Landfill	NIL
Non-inert C&D materials recycled, kg	NIL	299361.5	N/A	NIL
Chemical waste disposed, kg	NIL	8,200	N/A	NIL
Marine Sediment (Type 1 – Open Sea Disposal) , m^3	5684	156909* (Bulk Volume)	South of Cheung Chau	Dredging from TCBR1E / TCBR1W / TCBR2/ TCBR3 / TCBR4 / Maintenance dredging
Marine Sediment (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal) , m^3	NIL	322796* (Bulk Volume)	East of Sha Chau	Dredging from TCBR1E / TCBR1W / TCBR2/ TCBR3 / TCBR4 / Maintenance dredging
Marine Sediment (Type 3 – Special Treatment / Disposal contained in Geosynthetic Containers)	NIL	12640 (Bulk Volume)	East of Sha Chau	Dredging from TCBR1W / Maintenance dredging
Marine Sediment (Type 2 – Confined Marine Disposal), m3	NIL (Bulk Volume)	9350 (Bulk Volume)	East of Sha Chau	Dredging from Eastern Breakwater of CBTS
Marine Sediment (Type 1 – Open Sea Disposal) , m3	NIL (Bulk Volume)	600 (Bulk Volume)	East Sha Chau / South of The Brothers	Dredging from Phase 3 Mooring Re-arrangement
Marine Sediment (Type 2– Confined Marine Disposal) , m3	NIL (Bulk Volume)	14,780 (Bulk Volume)	South of The Brothers	Dredging from Phase 3 Mooring Re-arrangement
Marine Sediment (Type 3 – Special Treatment / Disposal contained in Geosynehetic Containers) , m3	NIL (Bulk Volume)	2,760 (Bulk Volume)	South of The Brothers	Dredging from Phase 3 Mooring Re-arrangement

*Remark: Contractor has updated the cumulative quantity of Marine Sediment (Type 1 - Open Sea Disposal) and Marine Sediment (Type 1 – Open Sea Disposal (Dedicated Sites) & Type 2 – Confined Marine Disposal) in November reporting month.

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

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

4.5.7. No Inert and non-inert C&D waste were disposed of in this reporting quarter

Table 4.19 Details of Waste Disposal for Contract no. HY/2009/19

Waste Type	Quantity this month	Cumulative Quantity-to-Date	Disposal / Dumping Grounds
Inert C&D materials disposed, m^3	NIL	355921.04	TM38
Inert C&D materials recycled, m^3	NIL	59367	N/A
Non-inert C&D materials disposed, m^3	NIL	1068.6	N/A
Non-inert C&D materials recycled, kg	NIL	333.14	N/A
Chemical waste disposed, L	NIL	2.12	N/A
Marine Sediment (Type 1 – Open Sea Disposal), m^3	NIL	162	South Cheung Chau
Marine Sediment (Type 2 – Confined Marine Disposal) , m^3	NIL	681	East Sha Chau
Marine Sediment (Type 1 – Open Sea Disposal (Dedicate Sites) & Type 2 – Confined Marine Disposal) , m3	NIL	4976.00	N/A

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

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

4.5.9. Inert C&D waste were disposed of in this reporting quarter. Details of the waste flow table are summarized in Table 4.20.

Table 4.20 Details of Waste Disposal for Contract no. HK/2012/08

Waste Type	Quantity this month	Cumulative Quantity-to-Date	Disposal / Dumping Grounds
Inert C&D materials disposed, m^3	NIL	4131	TM38
Inert C&D materials recycled, m^3	NIL	NIL	N/A

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

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

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

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

Table 4.21 Details of Waste Disposal for Contract no. HY/2010/08

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

*Remarks: The cumulative quantity of Inert C&D materials disposed was updated in this reporting quarter.

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

5. COMPLIANCE AUDIT

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

5.1. Noise Monitoring

5.1.1 No action and limit level exceedance was recorded in September reporting month.

5.1.2 No action and limit level exceedance was recorded in October reporting month.

5.1.3 One limit level exceedance was recorded at noise monitoring station M1a – Habour Road Sports Center on 24 November 2015 in November reporting month. The exceedance was concluded as non-project related.

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

5.2. Real-time Noise Monitoring

5.2.1 No limit level exceedance was recorded in September reporting month at RTN2a-Hong Kong Electric Centre.

5.2.2 No limit level exceedance was recorded in October reporting month at RTN2a-Hong Kong Electric Centre.

5.2.3 Limit level exceedance was recorded at RTN2a-Electric Centre on 14 November 2015 during daytime in November reporting month. On 14 November 2015, pre-bored piling works was undertaken by Contract HY/2009/19 while mitigation measures including erection of temporary noise barrier was in place. In addition, cooling pipe removal works with saw cutting for Hong Kong Electric Centre was conducted at the roof top by non-CWB Contractor at the roof top location of the Hong Kong Electric Centre immediately next to the noise monitoring station. In view of the mitigation measures implemented and the non-CWB works conducted next to the monitoring station as major noise contribution, the exceedances were considered as non-Project related.

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

5.3. Air Monitoring

5.3.1 One action level exceedance was recorded at monitoring station CMA1b on 24 September 2015 during 24hr TSP monitoring in September reporting month.

5.3.2 After investigation, local ambient condition was considered as the major air quality contribution and the exceedance was considered as non- Project related. The Contractor was reminded to enhance all necessary dust suppression measure for construction works or potential dust surface for dry season transition.

5.3.3 One action level exceedance was recorded at monitoring station CMA1b on 30 September 2015 during 1hr TSP monitoring in October reporting month.

5.3.4 After investigation, local ambient condition was considered as the major air quality contribution and the exceedance was considered as non- Project related. The Contractor was reminded to maintain the regular dust suppression measure for construction works or potential dust surface for dry season transition.

5.3.5 No exceedance was recorded in November reporting month.

5.3.6 No action and limit level was recorded for odour patrol during September and October reporting months.

5.4. Water Quality Monitoring

5.4.1. The summary of water quality exceedances recorded in reporting period is presented in the ***Table 5.1*** and ***Table 5.2***.

Table 5.1 Summary of Water Quality Monitoring Exceedances in Reporting period

Contract no.	Water Monitoring Station	Mid-flood						Mid-ebb					
		DO		Turbidity		SS		DO		Turbidity		SS	
		AL	LL	AL	LL	AL	LL	AL	LL	AL	LL	AL	LL
HK/2009/01 & HK/2009/02	C1	0	0	4	6	1	0	0	0	2	3	0	0
HK/2012/08	WSD19	0	0	6	20	1	3	0	0	6	13	1	1
	P1	0	0	2	2	0	0	0	0	4	1	1	0
	P3	0	0	4	1	0	0	0	0	2	1	0	0
	P4	0	0	1	9	1	0	0	0	3	3	0	0
	P5	0	0	1	10	1	0	0	0	1	4	0	0
HK/2009/02	RW21-P789	0	0	5	11	0	0	0	0	2	4	0	0
HY/2009/15 & HY/2010/08	C7	0	0	1	3	0	0	0	0	1	3	0	1
Total		0	0	24	62	4	3	0	0	21	32	2	2

Remarks:

- The cessation of seawater intake operation for C6 was confirmed on 17 May 2011, the water monitoring at C6 was then terminated since 17 May 2011.
- WSD9 and WSD17 were implemented with respect to HK/2009/02 from 8 Feb 2012.
- 4-week water quality monitoring at WSD9, WSD10, WSD15, WSD17, C8 and C9 were completed on 6 Feb 2012.
- C8 and C9 were implemented with respect to HY/2009/19 from 28 Jan 2012.
- C8 & C9 was temporary suspended on 30 March 2013 due to the marine works for Contract no. HY/2009/19 had been completed on 4 March 2013

- WSD7 and WSD20 were temporary suspended since 27 April 2012
- C2, C3 C4e and C4w water quality monitoring station was temporarily suspended since 24 Apr 2013
- C5e and C5w water quality monitoring station was temporarily suspended since 29 July 2013
- WSD21 water quality monitoring station was temporarily suspended since 12 March 2014
- Maintenance responsibility of silt screen C1, WSD19, P3, P4 and P5 are under Contract HK/2009/01.
- WSD9 and WSD17 water quality monitoring station was temporarily suspended since 8 September 2014 flood tide.
- Water quality monitoring for Windsor House Cooling (Station Ref: C7) was temporarily suspended since 22 October 2014 with respect to the diversion scheme and was resumed since 22 December 2014
- The water monitoring station C1 was associated with Contract No. HK/2009/02 as the marine works under DP3 at WCR3 area has commenced and was in progress
- Silt screen at WSD19 was removed since 15 September 2015.

4.4.35. There was 2 action and 9 limit level turbidity exceedances, and 1 action and no limit level exceedance recorded in September reporting month. Investigation found that the exceedance was not related to Project works.

4.4.36. There was 32 action and 49 limit level turbidity exceedances, and 4 action and 4 limit level suspended solid exceedances recorded in October reporting month.

4.4.37. Investigation found that the one limit level of turbidity exceedance recorded at monitoring station RW21-P789 on 6 October 2015 in October reporting month was concluded as related to Project works.

4.4.38. Investigation found that 32 action level and 48 limit level of turbidity exceedances, and 4 action level and 4 limit level of suspended solid exceedances recorded in October reporting month were not related to Project works.

4.4.39. There was 10 action and 37 limit level of turbidity exceedances, and 1 action and 1 limit level exceedances of suspended solids recorded in November reporting month. Investigation found that the exceedances recorded in this reporting month were not related to Project works.

Table 5.2 Summary of Enhanced Dissolved Oxygen Monitoring Exceedances in Reporting period

Contract no.	Water Monitoring Station	Mid-flood		Mid-ebb	
		DO		DO	
		AL	LL	AL	LL
HY/2009/15	C6	0	0	2	0
	Ex-WPCWA SW	2	12	3	13
	Ex-WPCWA SE	0	1	1	0
Total		**2**	**13**	**6**	**13**

5.4.2. There were 2 action level and 8 limit level exceedances of enhanced dissolved oxygen recorded in September reporting month. Investigation found that the exceedances were not related to Project works.

5.4.3. There were 3 action level and 13 limit level exceedances of enhanced dissolved oxygen recorded in October reporting month. Investigation found that the exceedances were not related to Project works.

5.4.4. There were no action level and 4 limit level exceedances of enhanced dissolved oxygen recorded in November reporting month. Investigation found that the exceedances were not related to Project works.

5.5. Site Audit

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

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

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

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

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

5.7.2 One limit level turbidity exceedance was recorded on 6 October 2015 at water monitoring station RW21-P789 in October reporting month. C&D material transfer from derrick barge to land side was conducted under Contract HK/2009/02 during the monitoring period on 6 October 2015 while excavated material drop off during transferring material from barge to land side and muddy dispersion generated from on-site surface runoff was observed during the monitoring period. The silt screen system for WQM station RW21-P789 was found removed during the monitoring period. It is concluded that the exceedance was project related and the contractor was advised to promptly rectify any defects and reinstate the silt screen system for the water quality monitoring station RW21-P789. Relevant mitigation measures such as provision of bunds and embankment and use of tarpaulin sheet was implemented on 6 October 2015 and the silt screen system for water quality monitoring station RW21-P789 was reinstated on 8 October 2015, and no further exceedance was recorded on the subsequent monitoring tide on the same monitoring date.

5.7.3 There was no particular action taken since no project-related non-compliance was recorded from site audit in November reporting month.

6. COMPLAINTS, NOTIFICATION OF SUMMONS AND PROSECUTION

6.0.1. Three environmental complaints were received in September reporting month.

6.0.2. A public complaint regarding dropping of excavated material from land to sea referred by EPD was received by ET on 04 September 2015 (EPD Ref.: H05/RS/00022241-15 dated 04 September 2015). The complainant reported that dropping of excavated materials from land to sea during loading of materials by excavator at the construction site to work boat. (Contract HK/2009/02)

ET confirmed with the Resident Site Staff that transferring of C&D materials from land to hopper barge by excavator at seaside along CWB Tunnel Portions 3 and 4 was undertaken by Contract HK/2009/02 on 01 September 2015.Mitigation measure including providing tarpaulin sheet to cover the gap between seawall and the hopper barge to prevent dropping of material to the sea was implemented by the Contractor.

According to the relevant site records under Contract HK/2009/02, transferring of C&D materials from land to hopper barge by excavator at seaside along CWB Tunnel Portions 3 and 4 was carried out on 01 September 2015 and mitigation measures including provision of tarpaulin sheet between seawall and the hopper barge was implemented by the Contractor of HK/2009/02 on the concerned date. Follow-up inspection was conducted during weekly environmental inspection on 10 September 2015. Transferring of C&D materials from land to barge by excavator was observed at the concerned location and mitigation measures including provision of tarpaulin sheet between seawall and hopper barge and the material transfer works was generally in order. Nevertheless, the Contractor of HK/2009/02 was reminded to maintain the handling procedure for C&D materials transfer from land to hopper barge and regularly inspect the condition of the tarpaulin sheet provided to ensure the nearby water quality are not affected by the loading and unloading of material from land side to hopper barge.

The Contractor was reminded to maintain the handling procedure for C&D materials transfer from land to hopper barge and regularly inspect the condition of the tarpaulin sheet provided to ensure the nearby water quality are not affected by the loading and unloading of material from land side to hopper barge.

6.0.3. Second public complaint regarding construction noise and dust and exhaust emission referred by EPD was received by ET on 04 September 2015 (EPD Ref.: H04/RS/00022385-15 dated 04 September 2015). The complainant reported that construction noise was generated from the construction site of HK/2012/08 at location outside Fleet Arcade during night time on weekdays and daytime during General Holidays. The complainant also concerned construction dust and exhaust emission from derrick barges during transporting C&D material at the site. (Contract HK/2012/08)

ET confirmed with the Resident Site Staff that from 0800 hrs to 1800 hrs on 30 August 2015, removal of scaffold and timber and installation of bulkhead was undertaken by the Contractor of HK/2012/08 at the concerned location. Total one generator and one circular saw were in

operation. From 1900hrs on 30 August 2015 to 0700 on 31 August 2015, no construction works was undertaken by the Contractor of HK/2012/08 at the concerned location.

From 1900hrs on 31 August 2015 to 0700hrs on 01 September 2015, no construction works was undertaken by the Contractor of HK/2012/08 at the concerned location.

From 1900hrs to 2115 hrs on 01 September 2015, unloading of soil was undertaken by the Contractor of HK/2012/08 at the concerned location. Total one derrick barge was in operation.

From 2300hrs on 01 September 2015 to 0700hrs on 02 September 2015, no construction works was undertaken by the Contractor of HK/2012/08 at the concerned location. One derrick barge was deployed for unloading of soil on 02 September 2015 during daytime under Contract HK/2012/08 at the concerned location.

Based on the relevant site records, from 0800 hrs to 1800 hrs on 30 August 2015, removal of scaffold and timber and installation of bulkhead was undertaken by the Contractor of HK/2012/08 at the concerned location. Total one generator and one circular saw were in operation and the relevant Construction Noise Permit GW-RS0296-15 for the concerned operation was confirmed in place.

From 1900hrs on 30 August 2015 to 0700 on 31 August 2015, no construction works was undertaken by the Contractor of HK/2012/08 at the concerned location and from 1900hrs on 31 August 2015 to 0700hrs on 01 September 2015, no construction works was undertaken by the Contractor of HK/2012/08 at the concerned location.

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

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

The Contractor was reminded to conduct regular checking on the condition of derrick barges deployed on site to ensure only well maintained equipments are used on site to avoid potential dark smoke emission affecting nearby public.

The Contractor of HK/2012/08 was reminded to upkeep the site control system for construction works carrying out at restricted hours and night time for Construction Noise Permit compliance.

6.0.4. The third public complaint regarding water quality referred by EPD was received by ET on 17 September 2015. The complainant reported that Silt from Central and Wan Chai Reclamation was spotted along the coastline (between LUNG WUI ROAD to LUNG WO ROAD, Central & Wan Chai, Hong Kong).

Based on the site records confirmed by RSS, removal of seawall blocks by derrick barge was undertaken by Contract HK/2012/08 at Central Reclamation Phase III works area while mitigation measures including provision of silt curtain implemented by the Contractor of HK/2012/08 during the seawall block removal works. According to relevant record, muddy dispersion at HKCEC2W (area opposite to Lung King Street) was observed by the Environmental Team on 14 September 2015 afternoon. The muddy patch was observed dispersing outside the outer layer silt curtain deployed by the Contractor of HK/2012/08 towards the Central Reclamation Phase III area while the outer layer silt curtain was observed partially opened.

In view of the above observations, the Contractor was advised to rectify any environmental deficiencies such that adequate protection such as silt curtain shall be provided for exposed soil slope to mitigate for potential runoff related water quality impact to the surrounding waters; outer layer silt curtain deployed shall be entirely closed during works to safeguard the surrounding water quality. Any opening for marine vessel shall be closed promptly after passage and localized silt curtain deployed on site shall be properly maintained to avoid any gap or opening to effectively safeguard the nearby waters.

6.0.5. Two environmental complaints were received in October reporting month.

6.0.6. A public complaint regarding direct discharge of muddy effluent referred by RSS was received by ET on 14 October 2015 (ICC Ref: #2-1438897084) The complainant reported that pink fluid was observed discharged into marine waters at seafront opposite to Watson Road adjacent to the Eastern Breakwater on 11 October 2015.

ET confirmed with Resident Site Staff that no construction activity near the seaside between Eastern Breakwater and the Dumping Jetty was undertaken by Contract HY/2009/19 on 11 October 2015. For site area away from the seawall, construction of EVB substructure, EVB and APS structure was in progress. No work involving the use of paint was carried out at the concerned site area (Site Portion between Eastern Breakwater and the Dumping Jetty) and along the alignment of the Culvert T1 under Contract HY/2009/19 on 11 October 2015. No temporary storage of paint was located at the concerned site area and along the alignment of the Culvert T1 under HY/2009/19 on 11 October 2015.

Based on the site records confirmed by RSS, no construction activity near the seaside between Eastern Breakwater and the Dumping Jetty was undertaken by Contract HY/2009/19 while at site area away from the seawall, construction of EVB substructure, EVB and APS

structure was undertaken on 11 October 2015. In addition, no works involving the use of paint was carried out at the concerned site area (Site Portion between Eastern Breakwater and the Dumping Jetty) and along the alignment of the Culvert T1 under Contract HY/2009/19 and no temporary storage of paint was located at the concerned site area and along the alignment of the Culvert T1 under HY/2009/19 on 11 October 2015.

Follow-up inspection was conducted during weekly environmental inspection on 14 October 2015. No construction works involving the use of paint was observed undertaken at the concerned location while a few number of small containers of paint was observed placed around the concerned location and the paint containers were sealed and no sign of leakage was observed. The few containers were further checked and was found not matching the pink fluid observed on the complaint date. On the other hand, a culvert discharge outfall was found located within the concerned area where the pink fluid was observed.

Based on the above, no direct information indicating the pink fluid was originated from the works area under HY/2009/19 was considered available. Nevertheless, the Contractor was reminded that paints stored on site shall be properly labelled and stored in sealed container at weather proof location to avoid potential spillage.

6.0.7. Second complaint regarding construction noise impact referred by EPD was received by ET on 28 October 2015 (EPD Ref: H05/RS/00027330-15 dated 28 October 2015). The complainant reported that operation of grab dredger at construction site near the ex-Wan Chai Ferry Pier from 01:00hrs to 04:00hrs on 26 October 2015 caused noise nuisance.

ET confirmed with the Resident Site Staff that from 01:00hrs to 04:00hrs on 26 October 2015, rock filling was conducted under Contractor of HK/2009/02 at WCR3 Area. Total one grab dredger was in operation. Mitigation measures including provision of steel sheeting screening to the power generation part of the grab dredger was implemented by the Contractor of HK/2009/02.

According to the relevant site records under Contract HK/2009/02, from 01:00hrs to 04:00hrs on 26 October 2015, rock filling was conducted under Contractor of HK/2009/02 at WCR3 Area. Total one grab dredger was in operation. Mitigation measures including provision of steel sheeting screening to the power generation part of the grab dredger was implemented by the Contractor of HK/2009/02 and the relevant Construction Noise Permit GW-RS1121-15 for the concerned construction works was in place.

The construction activity conducted under Contract HK/2009/02 during the concerned period was in compliance with the statutory requirement. Nevertheless, the Contractor was reminded to upkeep the site control system for construction works carrying out at restricted hours and night time for Construction Noise Permit compliance in view of the nearby public concern

6.0.8. Two environmental complaints were received in November reporting month.

6.0.9. A public complaint regarding water quality referred by EPD was received by ET on 16 November 2015 (EPD Ref: H05/RS/00029126-15). The complainant reported that muddy water was discharged from the construction site at HKCEC and dispersed to seafront outside

Lung Wo Road on 13 November 2015 afternoon. The complainant also alleged that the deployment of the silt curtain did not follow the design requirement under the environmental permit that the curtain should be hanged to seabed level.

ET confirmed with Resident Site Staff that rock mound trimming works was undertaken by Contract HK/2012/08 at HKCEC area on 13 November 2015. Mitigation measures including provision of localized silt curtain to around the works area was implemented by the Contract of HK/2012/08.

Based on the site record, rock mound trimming works was conducted under Contract HK/2012/08 at HKECE2 area on 13 November 2015 and mitigation measures including provision of localized silt curtain around the works area was implemented by the Contractor. Follow-up inspection was conducted during weekly environmental inspection on 17 November 2015, both outer layer silt curtain and localized layer of silt curtain around the active works area were observed deployed while the localized silt curtain deployed around the marine works area was observed partially opened for marine access. Despite no muddy dispersion was generate around the localized silt curtain enclosed area, the Contractor was advised to promptly improve the condition of the silt curtain to ensure the effectiveness of the mitigation measure deployed and to ensure the silt curtain is closed after marine vessel movement.

Based on further review on the current construction stage at HKECE2, the dredging works and trench filling works were completed and filling works were conducted behind seawall or temporarily seawall in form of rockbund, the outer layer of silt curtain currently serves as the additional mitigation measure to the required silt curtain deployment for safeguarding the water quality in the area. To clarify for the current silt curtain arrangement, the Contractor was advised to submit an updated silt curtain deployment plan with respect to the latest silt curtain arrangement for the current construction stage. In addition, contaminated discharge at Culvert L originating from upstream locations was intermittently observed based on previous site records. Nevertheless, in view of the public concern, the Contractor was reminded to conduct regular checking on the condition and maintenance for the silt curtain deployed on site to ensure the effectiveness of the mitigation measure.

A joint meeting for the complaint was held amongst the EPD, WDII RSS team, the ET and the Contractor of HK/2012/08 on 24 November 2015 and a joint silt curtain diver inspection check amongst EPD, ET, IEC, WDII RSS and the Contractor was conducted on 27 November 2015 to confirm the silt curtain condition and the silt curtain deployed at the HKCEC2 water channel was found generally in order.

6.0.10. Second public complaint regarding illegal disposal of construction waste referred by EPD was received by ET on 17 November 2015. The complainant reported that a) over 10,000 m3 of bentonite after usage for construction of diaphragm wall was disposed of at Victoria Habour, b)

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, c) 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, d) White or greyish effluent was discharged directly into Victoria Habour marine waters from wastewater treatment plant on construction site.

Interim investigation report was submitted to EPD on 24 November 2015. Due to further investigation undertaken, further information and investigation summary shall be further included in December reporting month.

6.0.11. The details of cumulative complaint log and summary of complaints are presented in ***Appendix 6.1***.

6.0.12. Cumulative statistic on complaints and successful prosecutions are summarized in ***Table 6.1*** and ***Table 6.2*** respectively.

Table 6.1 Cumulative Statistics on Complaints

Reporting Period	No. of Complaints
Commencement works (Mar 2010) to last reporting period	37
September 2015 - November 2015	7
Project-to-Date	**44**

Table 6.2 Cumulative Statistics on Successful Prosecutions

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

7. CUMULATIVE CONSTRUCTION IMPACT DUE TO THE CONCURRENT PROJECTS

7.0.1. According to Condition 3.4 of the EP-356/2009, this section addresses the relevant cumulative construction impact due to the concurrent activities of the current projects including the Central Reclamation Phase III, Central-Wanchai Bypass and Island Eastern Corridor Link projects.

7.0.2. According to the Final EM&A Report of Central Reclamation Phase III (CRIII) for Contract HK 12/02, the major construction activities were completed by end of January 2014 and no construction activities were undertaken thereafter and the water quality monitoring was completed in October 2011 and no Project-related exceedance was recorded for air and noise monitoring. It can be concluded that cumulative construction impact due to the concurrent activities of the current projects with the Central Reclamation Phase III (CRIII) was insignificant.

7.0.3. According to the construction programme of Central-Wanchai Bypass at Wanchai West at the Central Reclamation Phase III area, include caisson seawall installation, ELS works, road works and drainage works and Road P1 pedestrian road reinstatement were performed in November 2015 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 tunnel works, ELS works and road works at Wan Chai East and caisson installation, D-wall construction and ELS works at Wan Chai West. The major construction activities under Central-Wan Chai Bypass and Island Eastern Corridor Link Projects were bridge construction and road works at Central Interchange, ELS works at Ex-PCWAW, ELS works and retaining wall construction at Victoria Park; D- wall construction, ELS works and tunnel works at TS3; IEC demolition 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 were observed undertaken at Wan Chai North area.

7.0.5. No significant air impact from construction activities was anticipated in the reporting month. Besides, no project related exceedance was recorded during the air and noise environmental monitoring events in the reporting month. Thus, it is evaluated that the cumulative construction impact from the concurrent projects including Central Reclamation Phase III (CRIII), Wan Chai Development Phase II (WDII), Central-WanChai Bypass (CWB), Island Eastern Corridor Link projects (IECL) was insignificant.

8. CONCLUSION

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

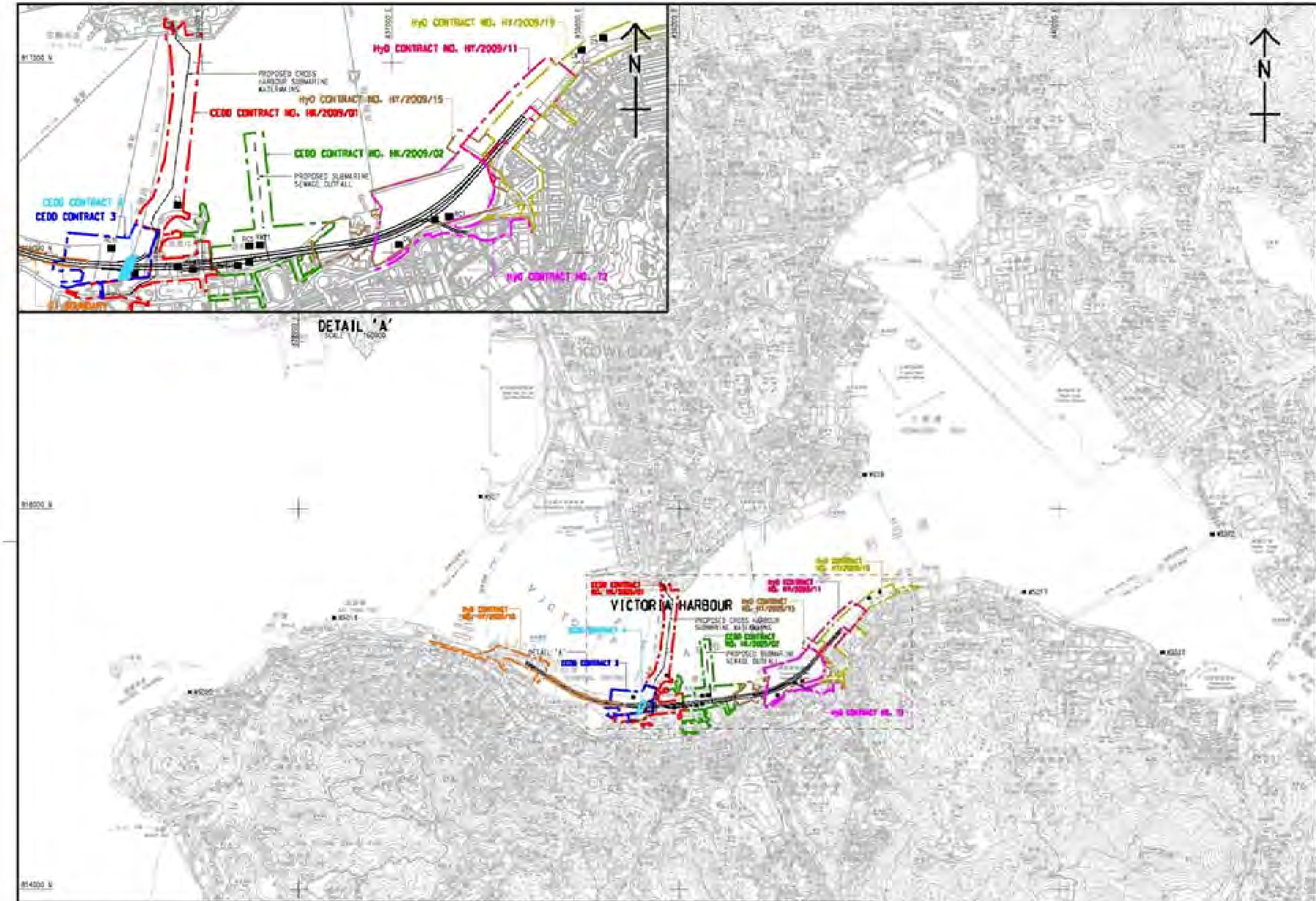
8.0.2. No non-compliance was noted and no prosecution was received during in September and November reporting months.

8.0.3. One limit level of turbidity exceedance recorded at monitoring station RW21-P789 on 6 October 2015 in October reporting month was concluded as related to Project works. Rectification measures was implemented by the Contractor and no further exceedance was recorded on the subsequent monitoring.

8.0.4. The construction programmes of individual contracts are provided in ***Appendix 8.1***.

Figure 2.1

Project Layout



LEGEND:

■ WATER QUALITY MONITORING STATIONS

COOLING WATER INTAKES

C1	HONG KONG CONVENTION AND EXHIBITION CENTRE EXTENSION
C2	TELEVISION HOUSE/HK ACADEMY FOR PERFORMING ARTS / SHUI ON CENTRE
C3	HONG KONG CONVENTION AND EXHIBITION CENTRE PHASE I
C4	WAN CHAI TOWER AND GREAT EAGLE CENTRE
C5	SUN HUNG KAI CENTRE
C6	PROPOSED EXHIBITION STATION / WORLD TRADE CENTRE
C7	WINDSOR HOUSE
C8	CITY GARDEN
C9	PROVIDENT CENTRE
RC1	PROPOSED HKAPA EXTENSION
RC5	SUN HUNG KAI CENTRE (REPROVISION)
RC7	WINDSOR HOUSE (TEMPORARY REPROVISION)

WSD SALT WATER INTAKE

WSD21	WAN CHAI
RW21	WAN CHAI (REPROVISION)
WSD7	KOWLOON SOUTH
WSD9	TAI WAN
WSD10	CHA KWO LING
WSD15	SAI WAN HO
WSD17	QUARRY BAY
WSD19	SHEUNG WAN
WSD20	KENNEDY TOWN

DESIGNATED PROJECTS (DP)

- DP1 — CENTRAL-WAN CHAI BYPASS (CWB) (INCLUDING ITS ROAD TUNNEL AND SLIP ROADS)
- DP2 — ROAD P2 AND OTHER ROADS (PRIMARY / DISTRICT DISTRIBUTOR ROADS)
- DP3 — PERMANENT AND TEMPORARY RECLAMATION WORKS INCLUDING ASSOCIATED DREDGING WORKS IN WAN CHAI DEVELOPMENT PHASE II (WDII) AREA
- ~~DP4 — TEMPORARY TYPHOON SHELTER~~ (DP4 NOT TO BE IMPLEMENTED)
- DP5 — WAN CHAI EAST SEWAGE OUTFALL
- DP6 — DREDGING FOR THE CROSS-HARBOUR WATER MAINS

DP1 IS COVERED BY EP - 356/2009

DP2 IS COVERED BY EP - 376/2009

DP3, DP5 AND DP6 ARE COVERED BY EP - 340/2009

WORKS CONTRACT	DESIGNATED PROJECT INVOLVED	CONSTRUCTION COMMENCEMENT
CEDD CONTRACT NO. HK/2009/01	DP1, DP3, DP6	APRIL 2010
CEDD CONTRACT NO. HK/2009/02	DP1, DP3, DP5	APRIL 2010
CEDD CONTRACT 3	DP1, DP3	END 2011
CEDD CONTRACT 4	DP1, DP3	END 2011
CEDD CONTRACT 5	DP2	2015
HyD CONTRACT NO. HY/2009/11	DP3	18 MARCH 2010
HyD CONTRACT NO. HY/2009/15	DP1, DP3	SEPTEMBER 2010
HyD CONTRACT NO. HY/2009/18	DP1	OCTOBER 2010
HyD CONTRACT NO. HY/2009/19	DP1	NOVEMBER 2010
HyD CONTRACT 12	DP1, DP3	MID 2013

土木工程拓展署
Civil Engineering and Development Department

WAN CHAI DEVELOPMENT PHASE II

WAN CHAI DEVELOPMENT PHASE II AND CENTRAL - WAN CHAI BYPASS - SAMPLING, FIELD MEASUREMENT AND TESTING WORKS (STAGE 1)

LOCATIONS OF WATER QUALITY MONITORING STATIONS

AECOM

DRG NO. 圖則編號 60041297/C5/SK001

SCALE A1 1:20000

DIMENSIONS IN METRES

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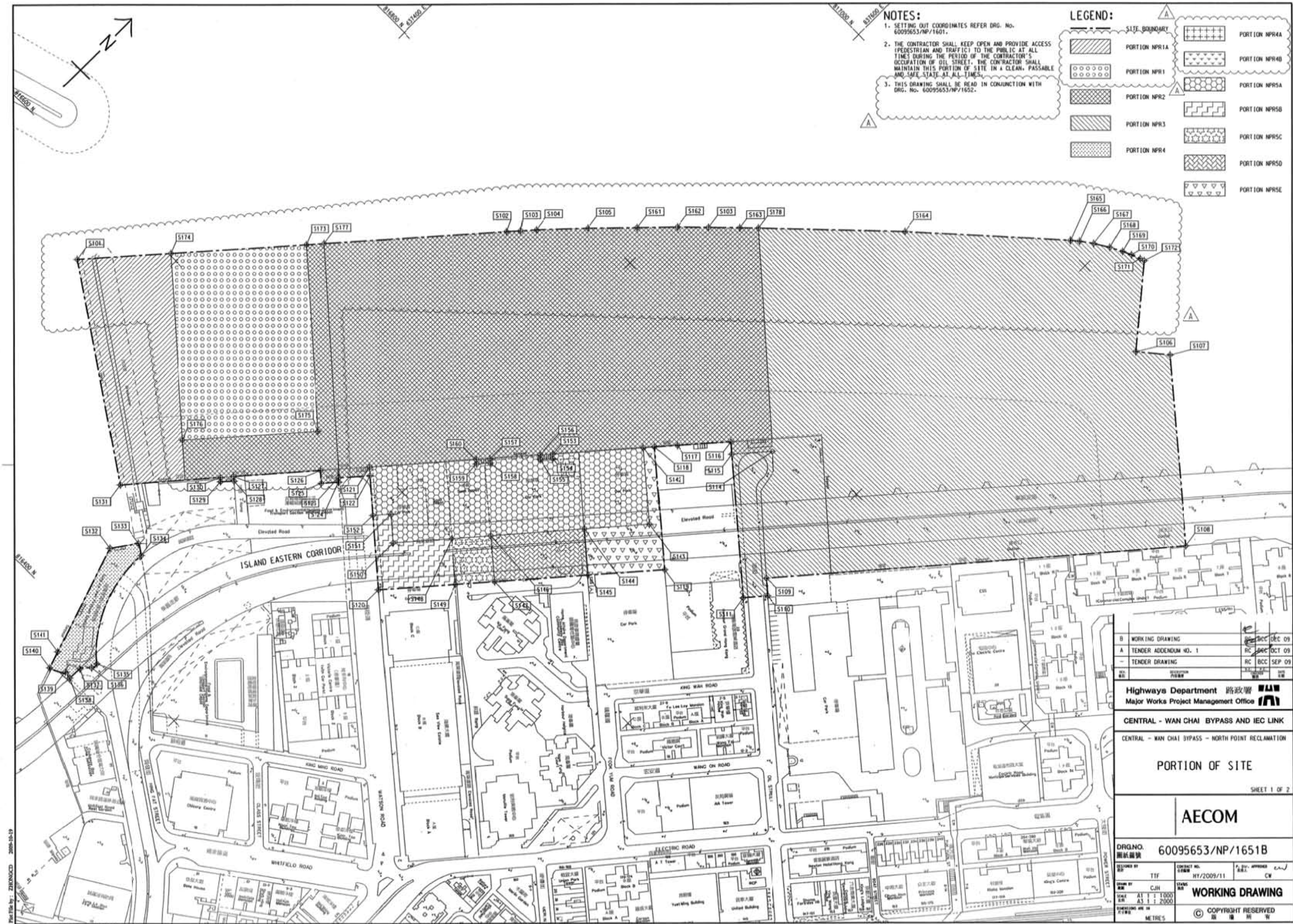

NOTES:

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

LEGEND:

- SITE BOUNDARY
- PORTION NPR1A
- PORTION NPR1
- PORTION NPR2
- PORTION NPR3
- PORTION NPR4
- PORTION NPR4A
- PORTION NPR4B
- PORTION NPR5A
- PORTION NPR5B
- PORTION NPR5C
- PORTION NPR5D
- PORTION NPR5E

REV.	DESCRIPTION		CHECKED	DATE
B	WORKING DRAWING	RC	BCC	DEC 09
A	TENDER ADDENDUM NO. 1	RC	BCC	OCT 09
–	TENDER DRAWING	RC	BCC	SEP 09

Highways Department 路政署
Major Works Project Management Office

CENTRAL - WAN CHAI BYPASS AND IEC LINK

CENTRAL - WAN CHAI BYPASS - NORTH POINT RECLAMATION

PORTION OF SITE

SHEET 1 OF 2

AECOM

DRG.NO. 圖紙編號 60095653/NP/1651B

DESIGNED BY TTF	CONTRACT NO. HY/2009/11	APPROVED CW
DRAWN BY CJH	STATUS WORKING DRAWING	
SCALE A1 1 : 1000, A3 1 : 2000		
DIMENSIONS ARE IN METRES	© COPYRIGHT RESERVED	

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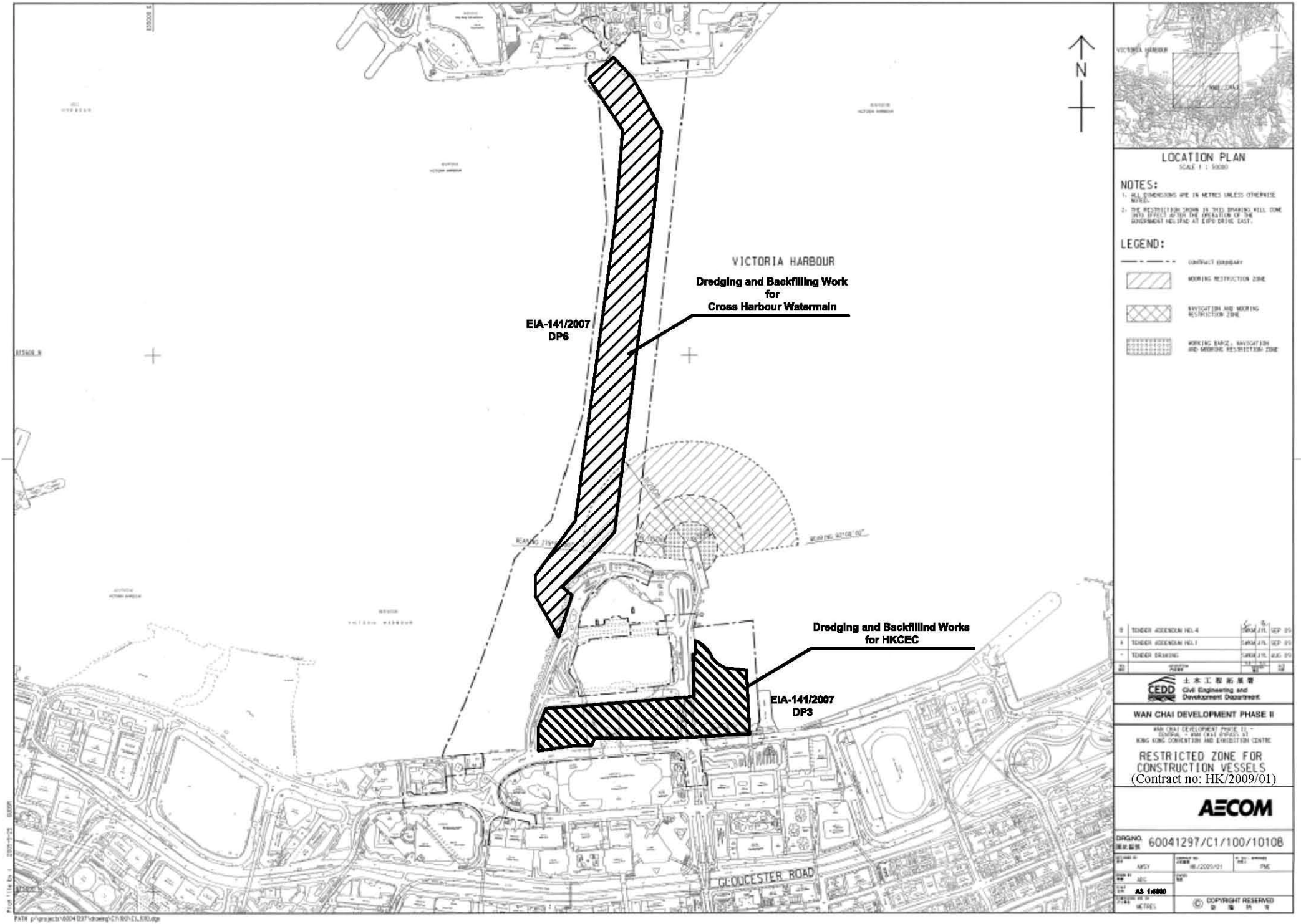
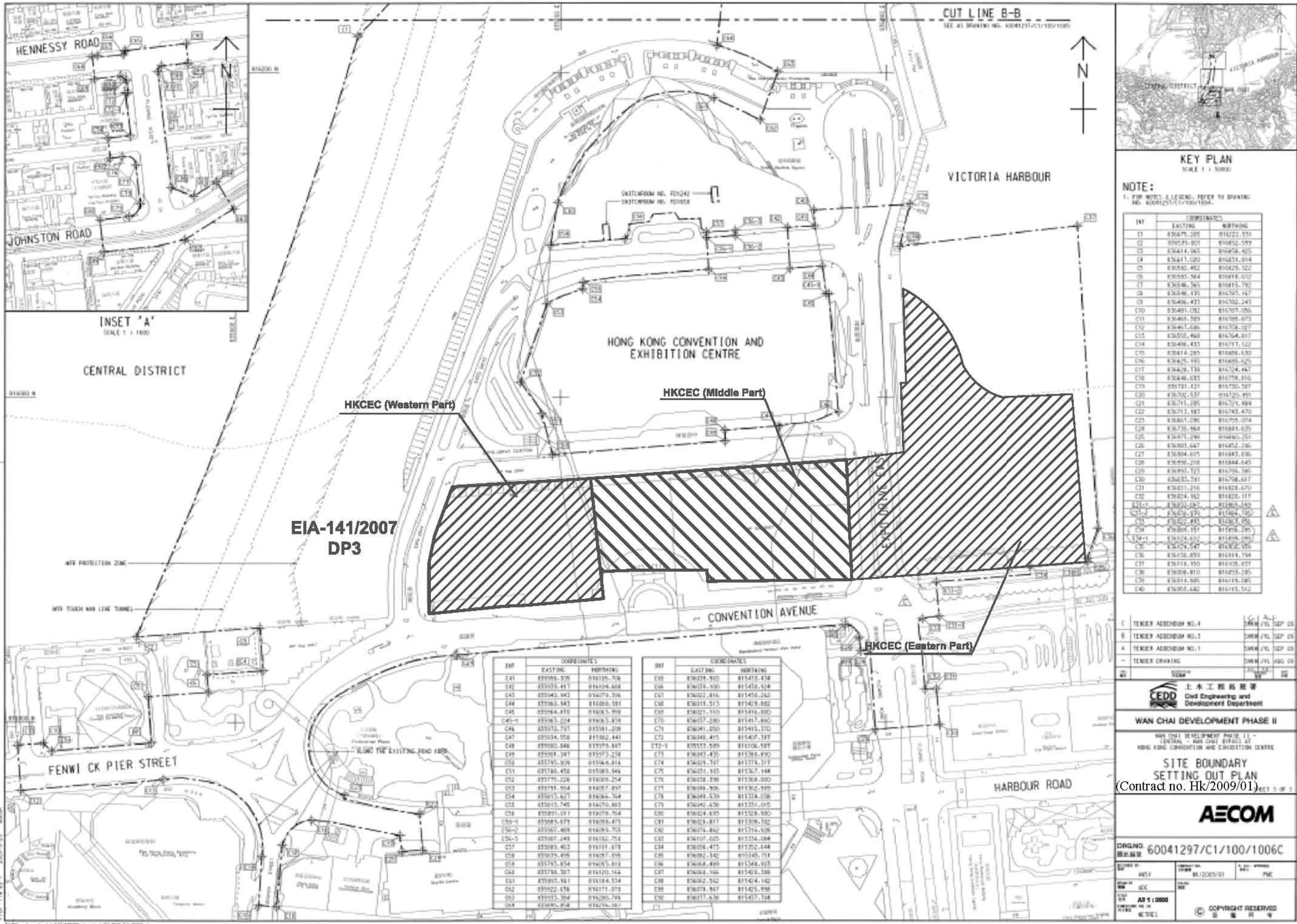

VICTORIA HARBOUR
Dredging and Backfilling Work
for
Cross Harbour Watermain
EIA-141/2007
DP6
Dredging and Backfillind Works
for HKCEC
EIA-141/2007
DP3
GLOUCESTER ROAD
N
LOCATION PLAN
SCALE 1 : 50000
NOTES:
1. ALL DIMENSIONS ARE IN METRES UNLESS OTHERWISE NOTED.
2. THE RESTRICTION SHOWN IN THIS DRAWING WILL COME INTO EFFECT AFTER THE OPERATION OF THE GOVERNMENT HELIPAD AT EXPO DRIVE EAST.
LEGEND:
CONTRACT BOUNDARY
MOORING RESTRICTION ZONE
NAVIGATION AND MOORING RESTRICTION ZONE
WORKING BARGE, NAVIGATION AND MOORING RESTRICTION ZONE
TENDER ADDENDUM NO.4
TENDER ADDENDUM NO.1
TENDER DRAWING
CEDD
土木工程拓展署
Civil Engineering and Development Department
WAN CHAI DEVELOPMENT PHASE II
WAN CHAI DEVELOPMENT PHASE II - EXTERNAL WORKS AT HONG KONG CONVENTION AND EXHIBITION CENTRE
RESTRICTED ZONE FOR CONSTRUCTION VESSELS
(Contract no: HK/2009/01)
AECOM
DRG.NO. 60041297/C1/100/10108
AS 1:6000
METRES
© COPYRIGHT RESERVED



CUT LINE B-B
HENNESSY ROAD
JOHNSTON ROAD
INSET 'A'
SCALE 1 : 1000
CENTRAL DISTRICT
VICTORIA HARBOUR
HONG KONG CONVENTION AND EXHIBITION CENTRE
HKCEC (Western Part)
HKCEC (Middle Part)
HKCEC (Eastern Part)
EIA-141/2007
DP3
MTR PROTECTION ZONE
CONVENTION AVENUE
FENWICK PIER STREET
HARBOUR ROAD
KEY PLAN
NOTE:
COORDINATES
EASTING
NORTHING
C TENDER ADDENDUM NO.4
B TENDER ADDENDUM NO.3
A TENDER ADDENDUM NO.1
- TENDER DRAWING
CEDD Civil Engineering and Development Department
WAN CHAI DEVELOPMENT PHASE II
SITE BOUNDARY SETTING OUT PLAN
(Contract no. Hk/2009/01)
AECOM
60041297/C1/100/1006C
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OVERALL Working Schedule

ACTIVITY	DURATION	START	FINISH
OVERALL STAGE 1 (Days 1 to 830)	830	28/01/10	06/05/12
DREDGING & RECLAMATIONS PHASE 1 (WCR1)	C 146	22/05/10	19/10/10
DREDGING & LAYING OF SUBMARINE OUTFALL PIPE ON SEA	410	21/09/10	02/02/12

Stage 1 - Overall Working Schedule on Reclamation Area of WCR1 and Associated Area (Days 1 to 830)

Section of Works	A	Major Work at Area WCR1
XI	A1	Construct western and eastern temporary seawall
XI	A2	Dredging and construct new seawall
XI	A3	Reclamation to level +3.5mPD
IXB	A4	Construct diaphragm wall and barrette pile of tunnel "Portion 1"
IXB	A5	Construct tunnel "Portion 1" structures including excavation and backfilling with ELSW
IVA, IVB, IVC V, VI, VII	A6	Construct all drainage system, pipeworks of intakes and cooling system within Area WCR1

Section of Works	B	Major Work in Associated Area
IVA, IVB, IVC	B1	Construct P7, P8 and P9 new pumping stations
V	B2	Construct WSD's pumping station
VI	B3	Construct connection chamber in Wan Chai East Preliminary Treatment Plant
IVA, IVB, IVC V, VI, VII	B4	Construct all drainage system, pipeworks of intakes and cooling system on public road
VI	B5	Dredging and construct the submarine outfall pipes
VIIIA	B6	Construct new Wan Chai Ferry Pier
III	B7	Construct new permanent helipad at Expo Drive
III	B8	Construct new public toilet and passenger terminal building at Expo Drive

Section of Works	C	Other Miscellaneous Works
III	C1	Construct new taxi and coach bus parking space at Expos Drive East
III	C2	Modification work on existing seawall and provide new EVA at Expo Drive
III	C3	Road re-alignment work on existing PTI at Expo Drive
II	C4	Road improvement work at junction of Harbour Road / Tonnochy Road and Fleming Road / Gloucester Road
III	C5	Demolition of existing above ground structure at Expo Drive
V	C6	Demolition of existing staircase of footbridge at Wan Shing Street
IXA	C7	Demolition of existing temporary helipad at ex-PCWA

Section of Works	D	Other Temporary Works
XI	D1	Divert existing 1800 mm diameter drain pipe

N

N 816230

N 816030

N 815830

GOLDEN BAUHINIA SQUARE

VICTORIA HARBOUR

RECLAMATION WORKS BY OTHERS

TUNNEL WORKS BY OTHERS

35m CLEAR SPACE

P7 P8 P9

EXISTING WATER INTAKES

DIRECTION OF TUNNEL WORKS

DRAINAGE DIVERSION OF 1800 PIPE

EXISTING SUBMARINE OUTFALL (SEWAGE)

EXISTING DISCHARGE

B1 B2 B3 B4 B5 B6 B7 B8

A1 A2 A3 A4 A5 A6

C1 C2 C3 C4 C6 C7

D1

0 20 40 60m

1 : 2000 SCALE BAR

REV	DATE	DESCRIPTION
C	19/05/2010	WORKING SCHEDULE UPDATED & TEMPORARY SEAWALL LAYOUT REVISED
B	14/04/2010	SECTION OF WORKS ADDED
A	08/04/2010	AS MARKED & TITLE BLOCK UPDATED

CLIENT

ENGINEER'S REPRESENTATIVE

CONTRACTOR

俊和－中國中鐵聯營
CHUN WO - CRGL JOINT VENTURE

PROJECT

CONTRACT NO. HK/2009/02
WAN CHAI DEVELOPMENT PHASE II
CENTRAL - WAN CHAI BYPASS AT WAN CHAI EAST

DRAWING TITLE

DETAILED WORKS SCHEDULE AND LOCATION PLAN - STAGE 1

	DESIGN	DRAWN	CHECKED
INITIAL	-	M.S. SIN	-
DATE	-	07/04/2010	-

DRAWING NO. CWCRJV/HK200902/SK0031 REV C

SCALE 1 : 2000 (A3)

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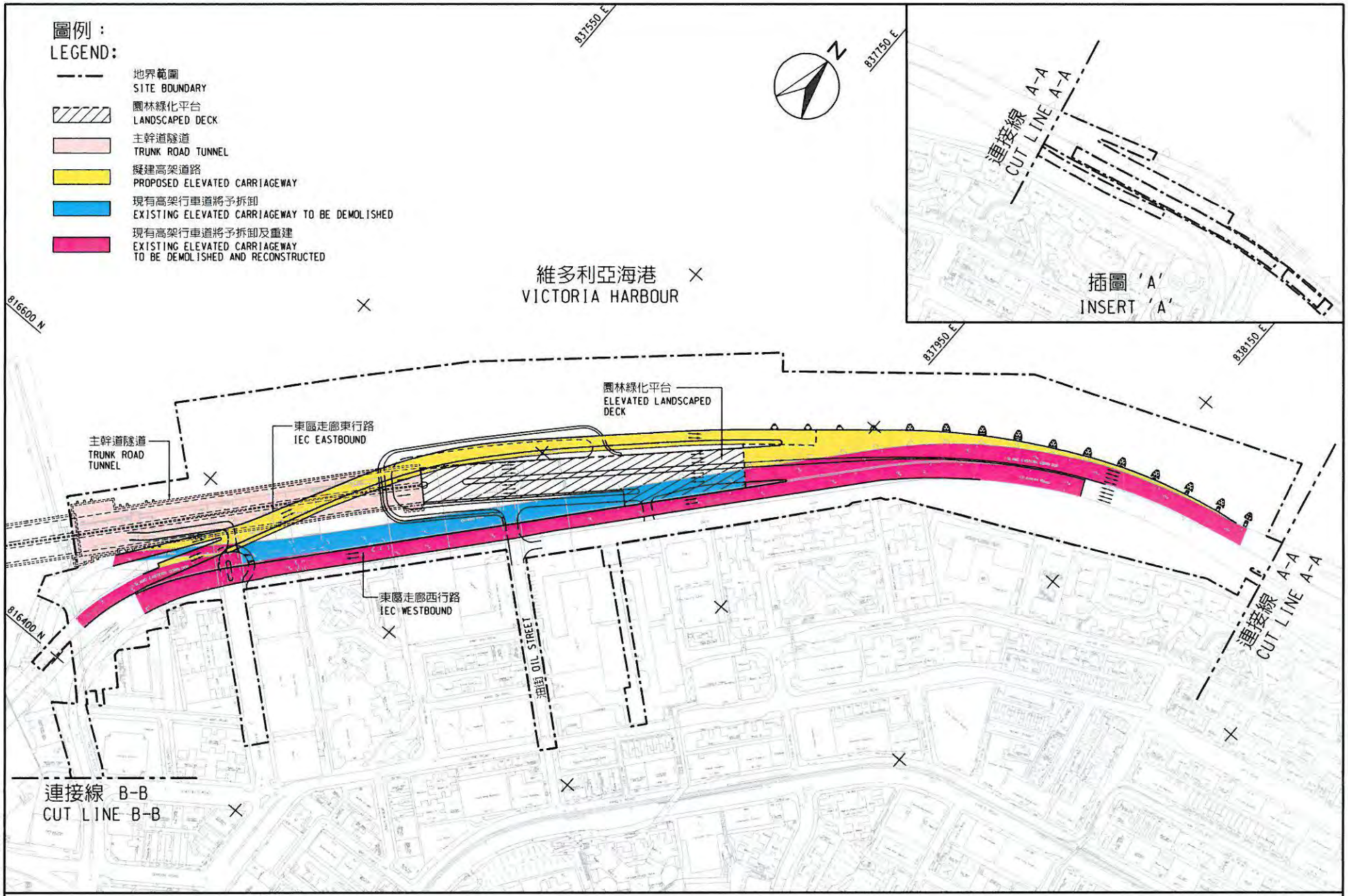

合約編號 HY/2009/19 - 中環灣仔繞道 - 北角段隧道及東區走廊連接路

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

SCALE 1 : 3000

Plot File by : ZHOUNL 2011-1-12

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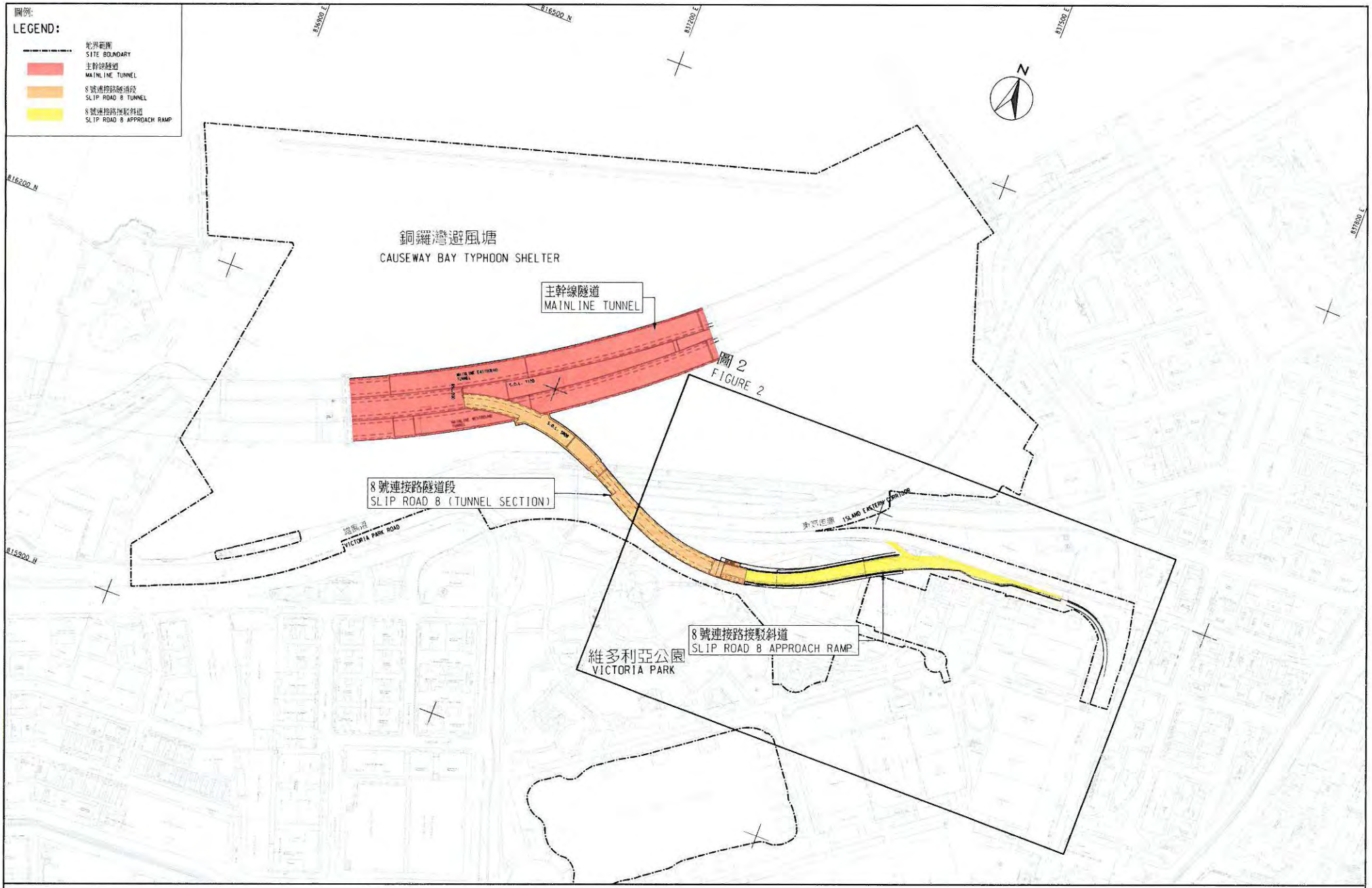


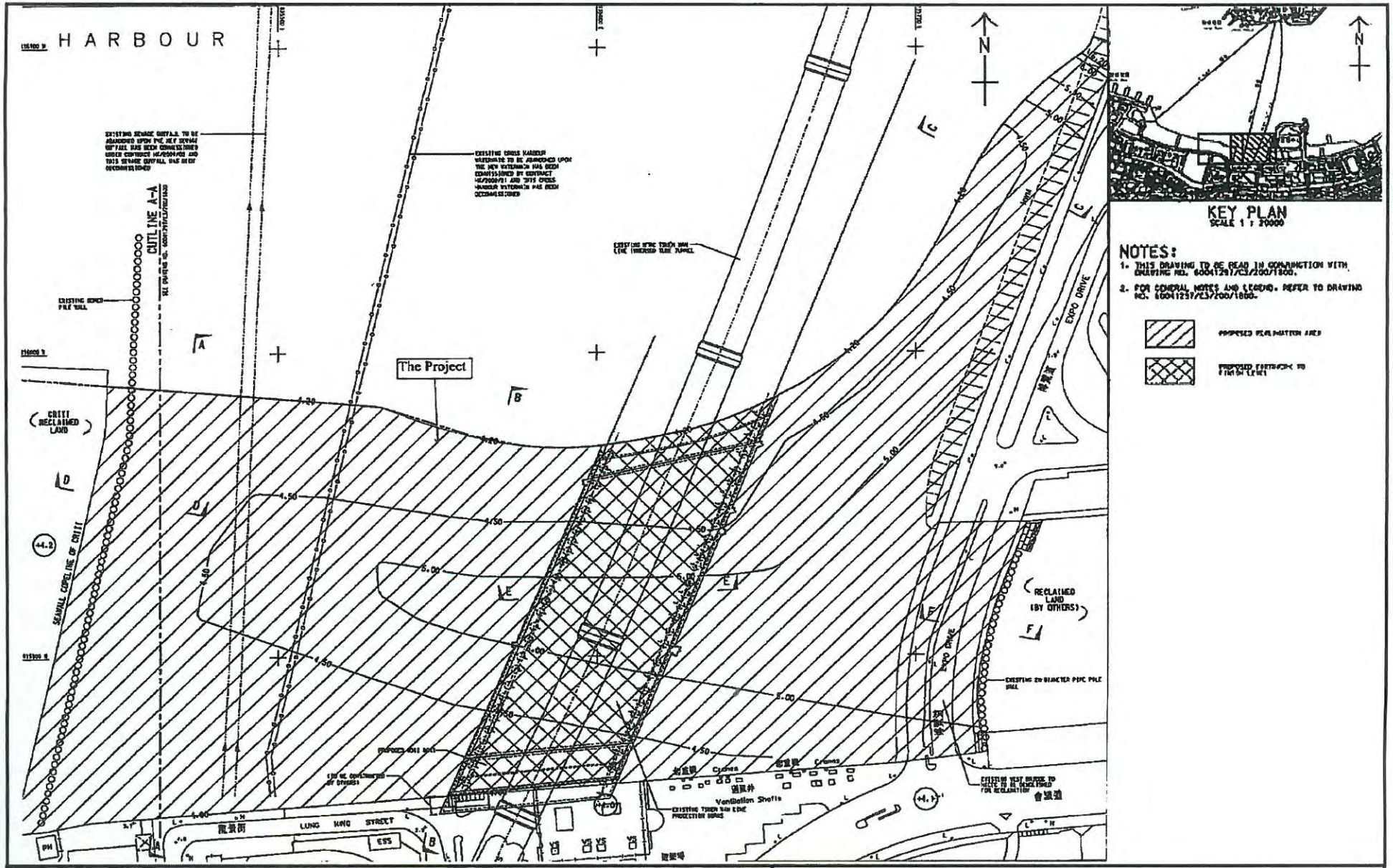
圖1- 合約編號 HY/2010/08 中環灣仔繞道-8號連接路段隧道

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

SCALE 1 : 3000

T:\HY_2010_08\Misc\ARE\Doris\Figure for Website\T2 Figure 1.dgn 08-Apr-13


LEGEND:
WORKS AREA
DREDGING AREA FOR MITGATION OF ODOUR(DP3)
SITE BOUNDARY
N
TCBR1E
TCBR2 AND TCBR3
TCBR4
TCBR1W
TPCWAW
TPCWAE
DP3
中國建築工程(香港)有限公司
CHINA STATE CONSTRUCTION ENGRG. (HONG KONG) LTD.
Highways Department
CONTRACT NO. HY/2009/15
CENTRAL-WAN CHAI BYPASS -TUNNEL
(CAUSEWAY BAY TYPHOON SHELTER SECTION)
TITLE
LOCATION PLAN OF WORKS AREA
DRG. NO.
CWBT/EPD/001B
SCALE
1:1000 @ A0
STATUS
DIMENSIONS ARE IN MILLIMETERS
COPYRIGHT RESERVED



Project Title: Wan Chai Development Phase II – Central Wan Chai Bypass at Wan Chai West (Contract No. HK/2012/08) – Marine Works
工程項目名稱: 灣仔發展計劃第二期 - 中環灣仔繞道-灣仔西段(合約編號:HK/2012/08)-海事工程
Environmental Permit No. : FEP-06/356/2009
環境許可證編號 : FEP-06/356/2009

EIAO Ordinance Register Office EIAO DPD 環境影響評估條例登記冊

Figure 1b : General Layout of the Project
圖 1b : 工程項目佈局圖

(This figure was prepared based on Figure 1b of Application for Further Environmental Permit (Application No.: FEP 145/2013))
(本圖是根據申請新的環境許可證(申請書編號 FEP-145/2013) 圖 1b 編製)

Figure 2.2

Project Organization Chart

Project Organization Chart

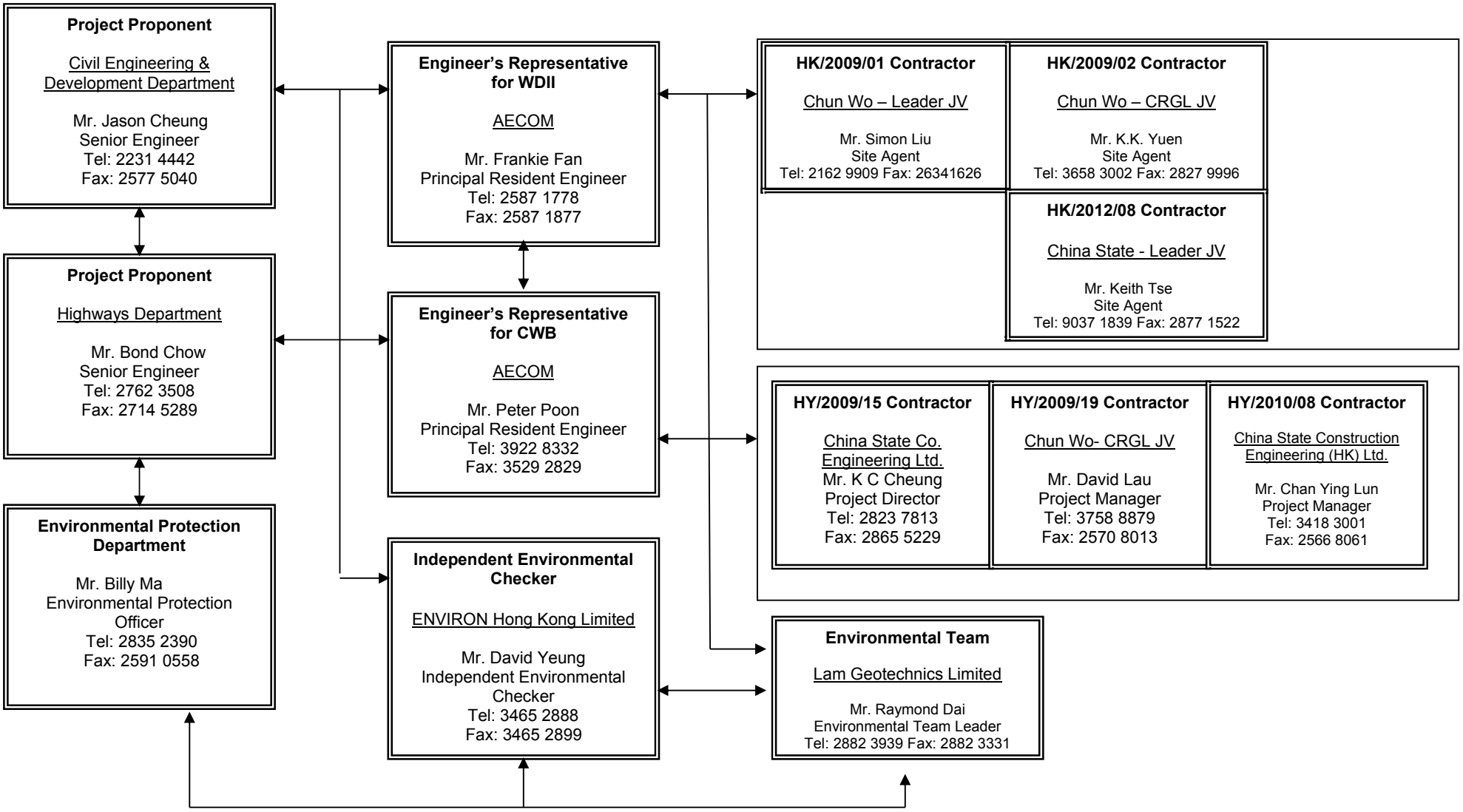
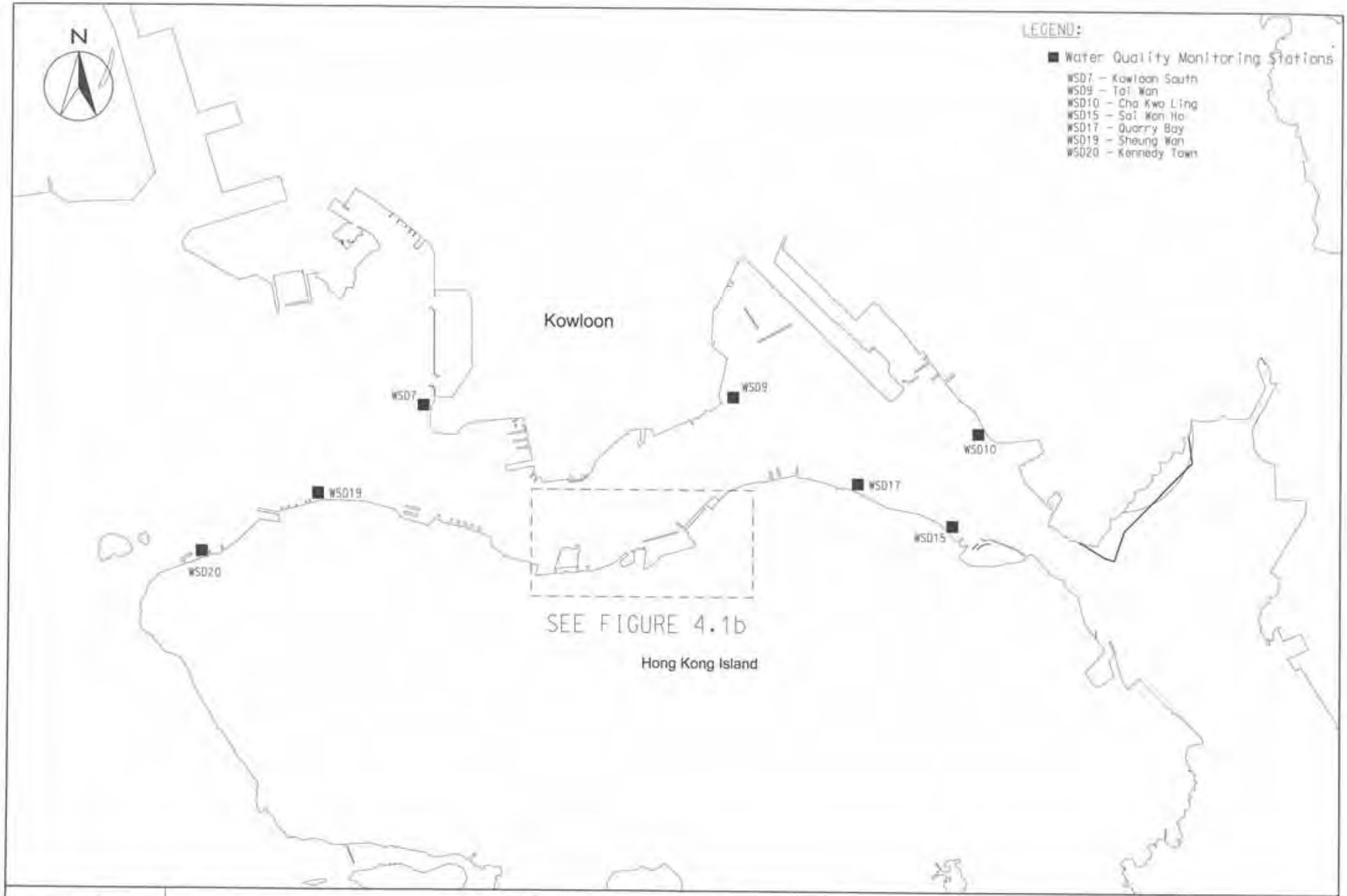


Figure 4.1

Locations of Monitoring Stations



MAUNSELL AECOM
Maunsell Consultants Asia Ltd

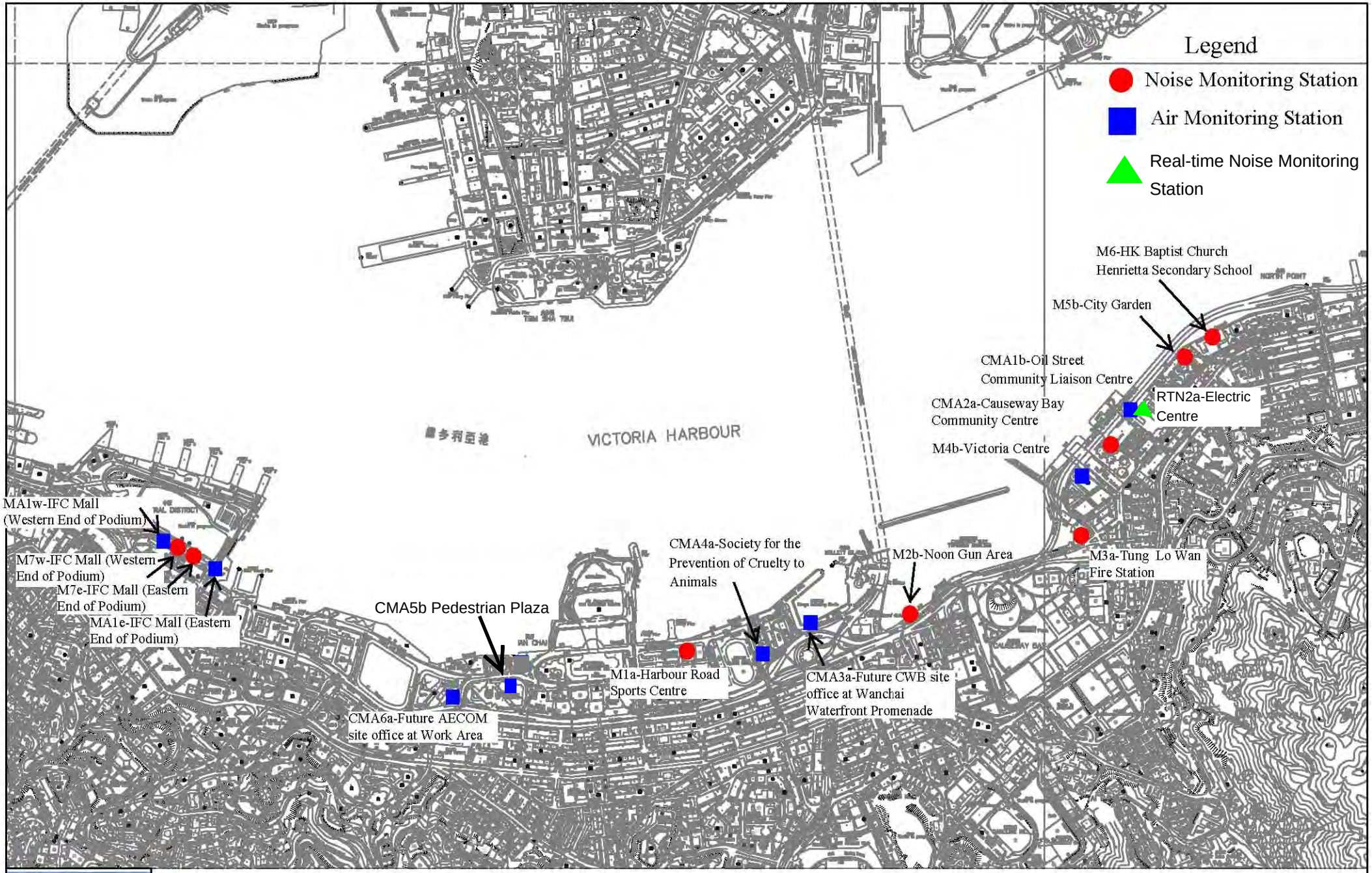
WAN CHAI DEVELOPMENT PHASE II - PLANNING AND ENGINEERING REVIEW

LOCATIONS OF WATER QUALITY MONITORING STATIONS

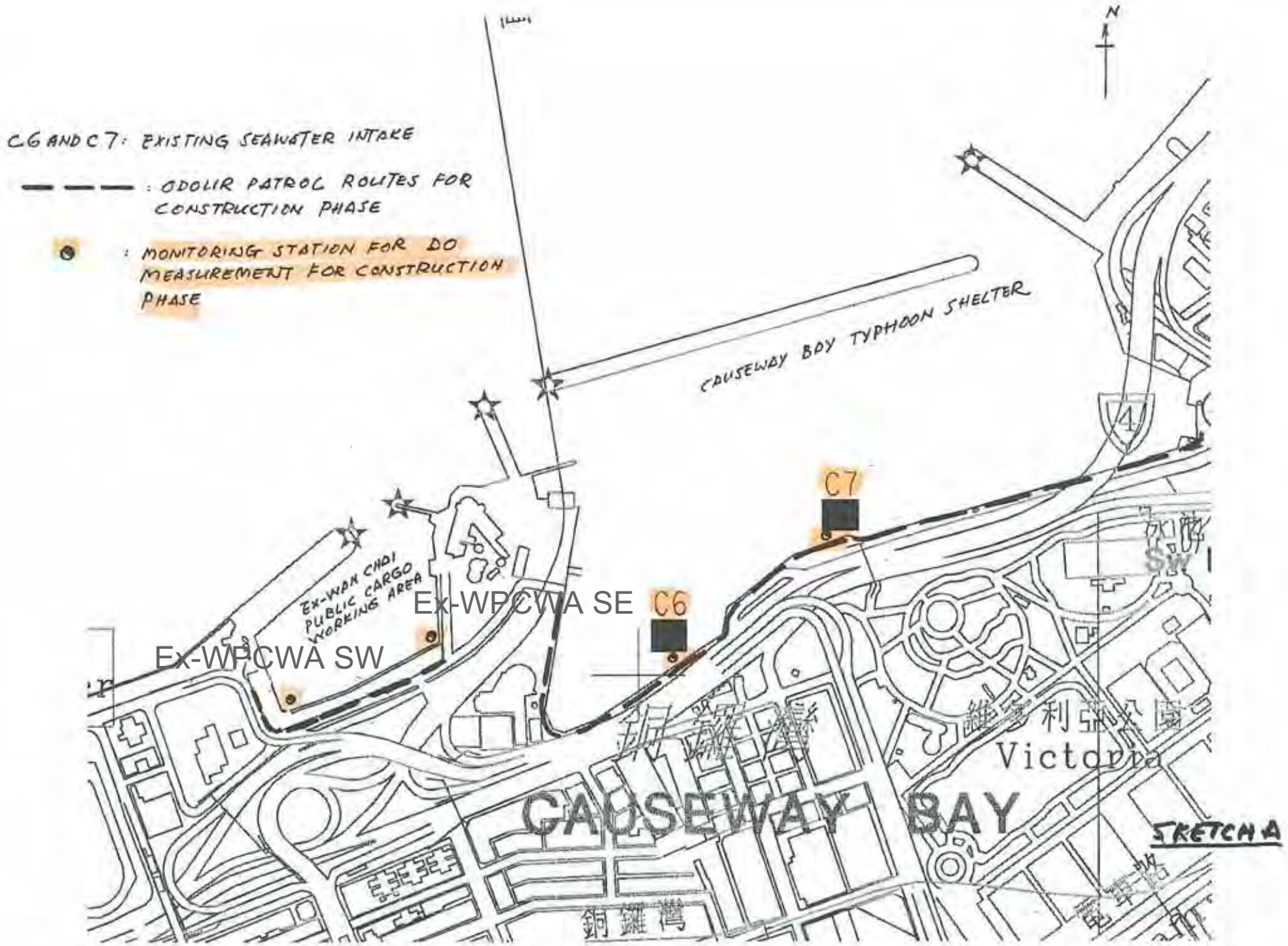
(SHEET 1 OF 2)

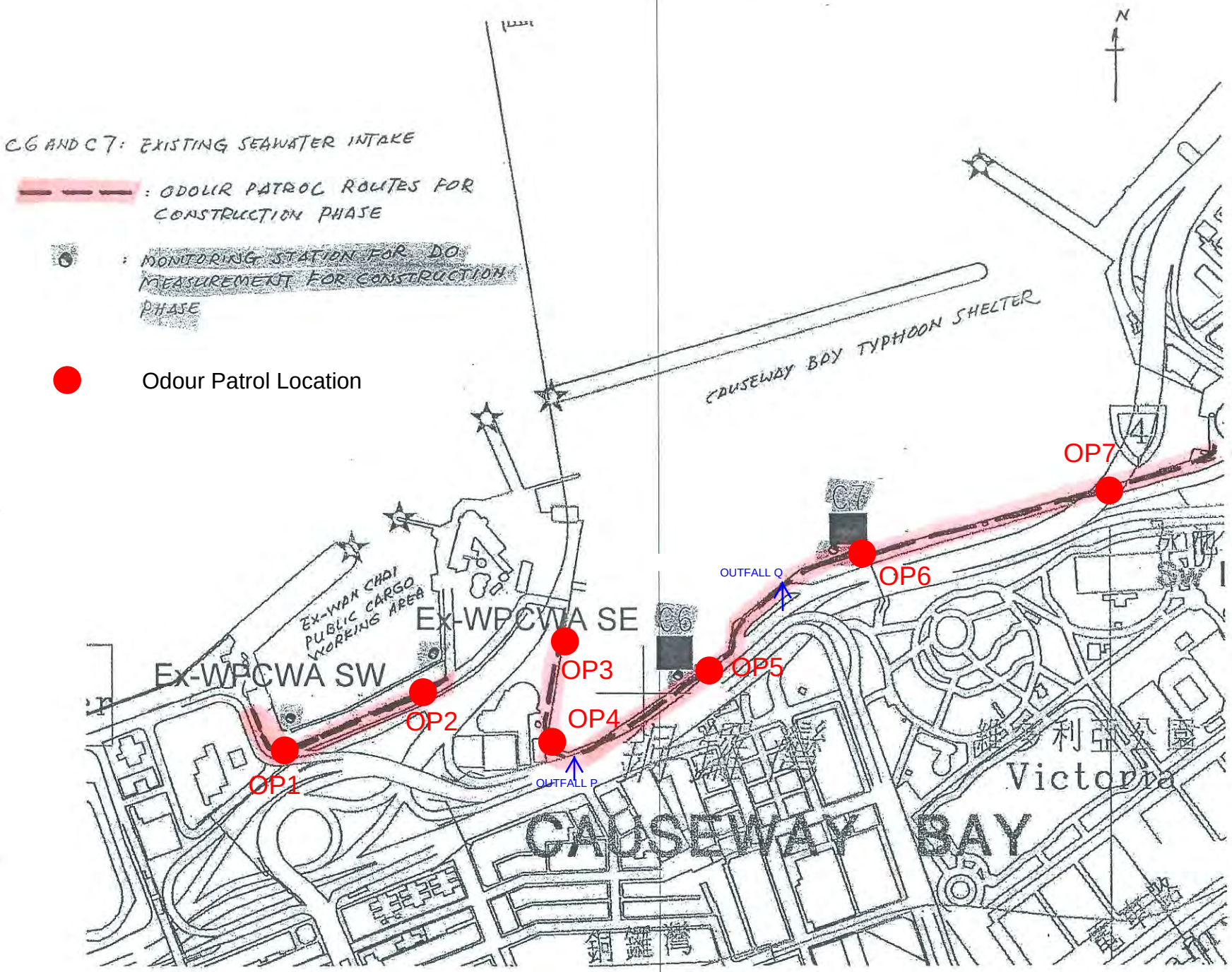
FIGURE 4.1a

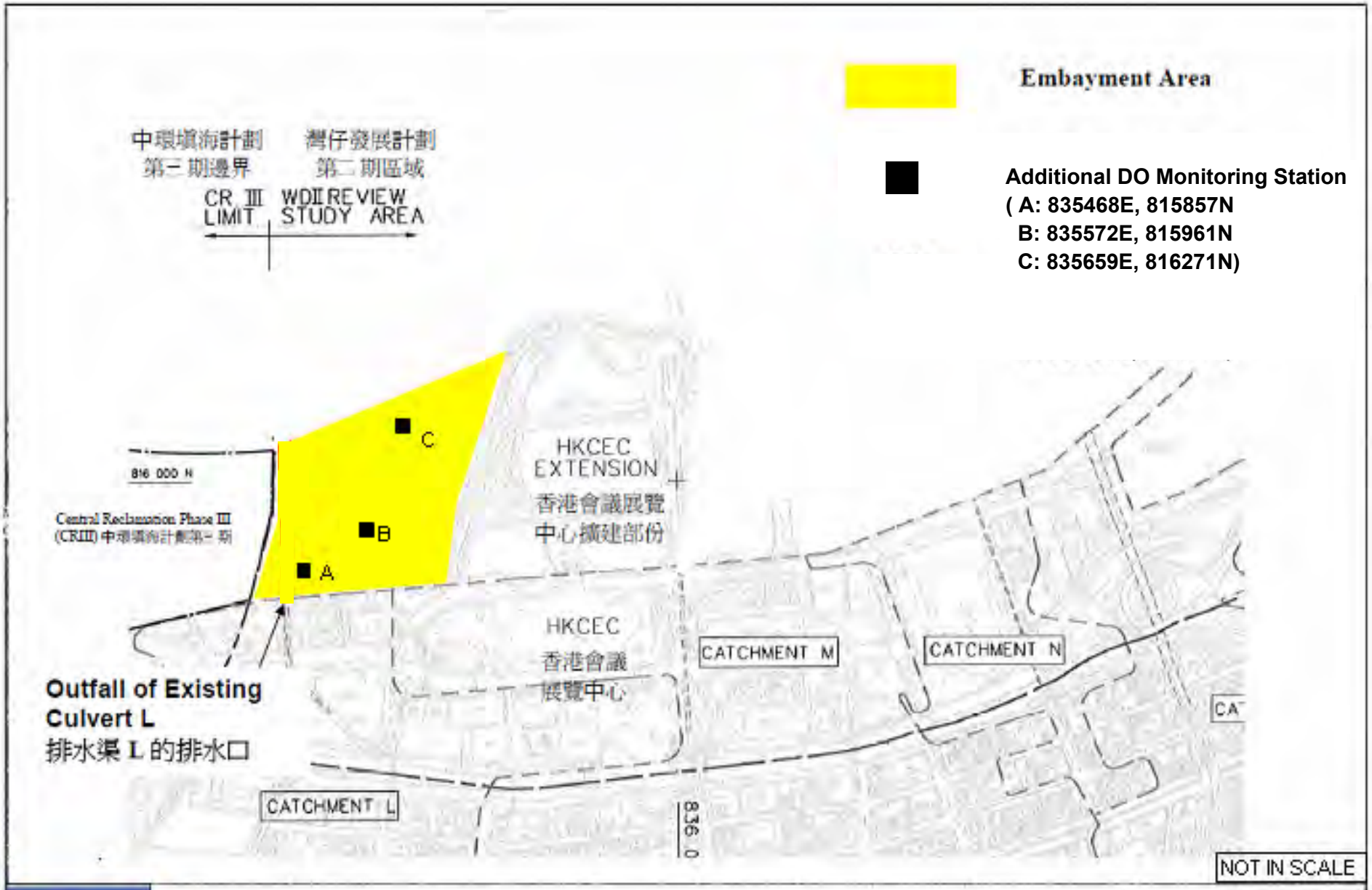
P:/60017193/REPORT/DRAWINGS/EM&A-0708/WQ/4.1A.DGN SCALE: N.T.S. (A3)



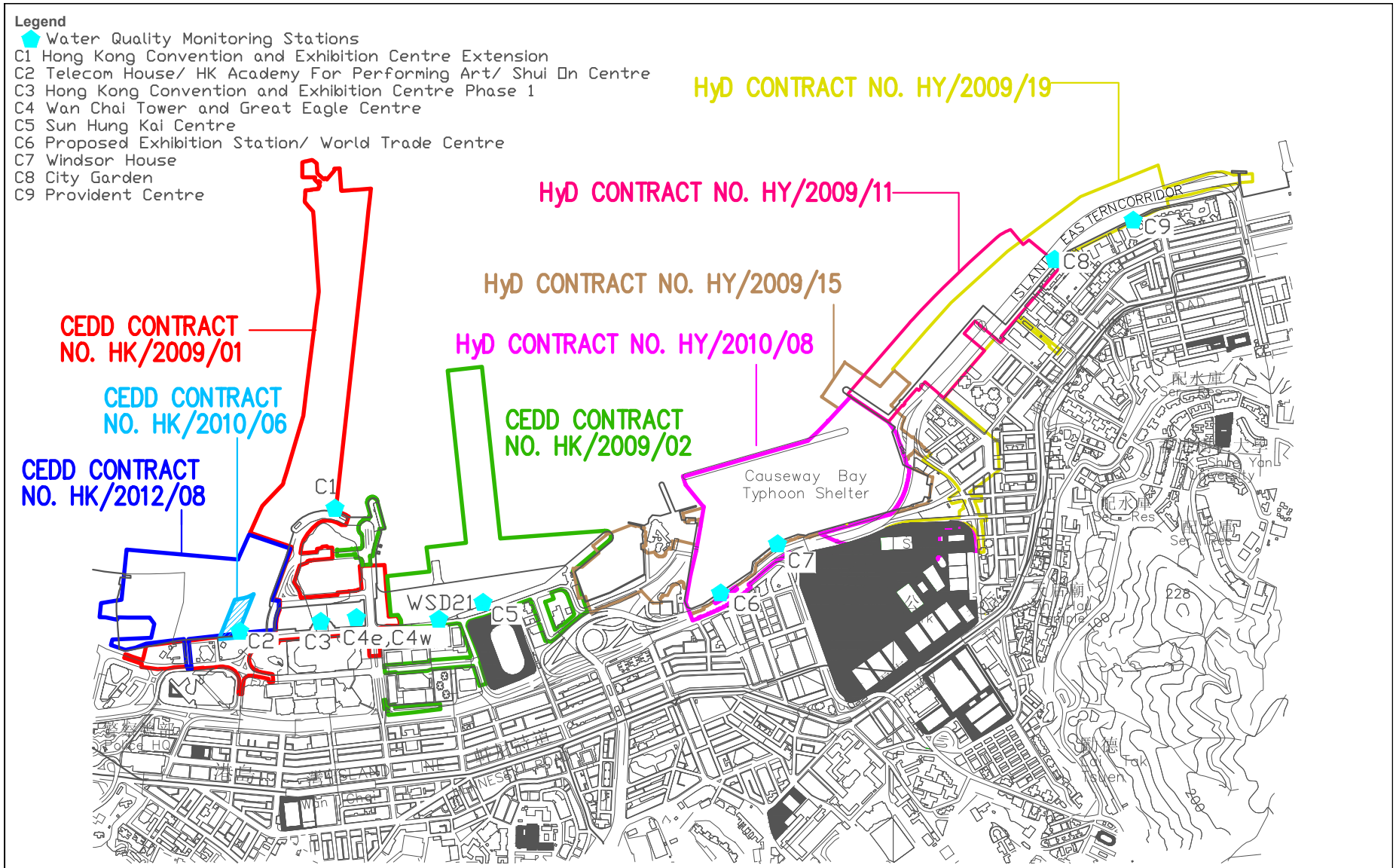
Location plan of Environmental Monitoring Stations


C6 AND C7: EXISTING SEAWATER INTAKE
: ODOUR PATROL ROUTES FOR CONSTRUCTION PHASE
: MONITORING STATION FOR DO MEASUREMENT FOR CONSTRUCTION PHASE
N
CAUSEWAY BAY TYPHOON SHELTER
C7
C6
EX-WAN CHAI PUBLIC CARGO WORKING AREA
Ex-WPCWA SE
Ex-WPCWA SW
CAUSEWAY BAY
銅鑼灣
Victoria
SKETCH A

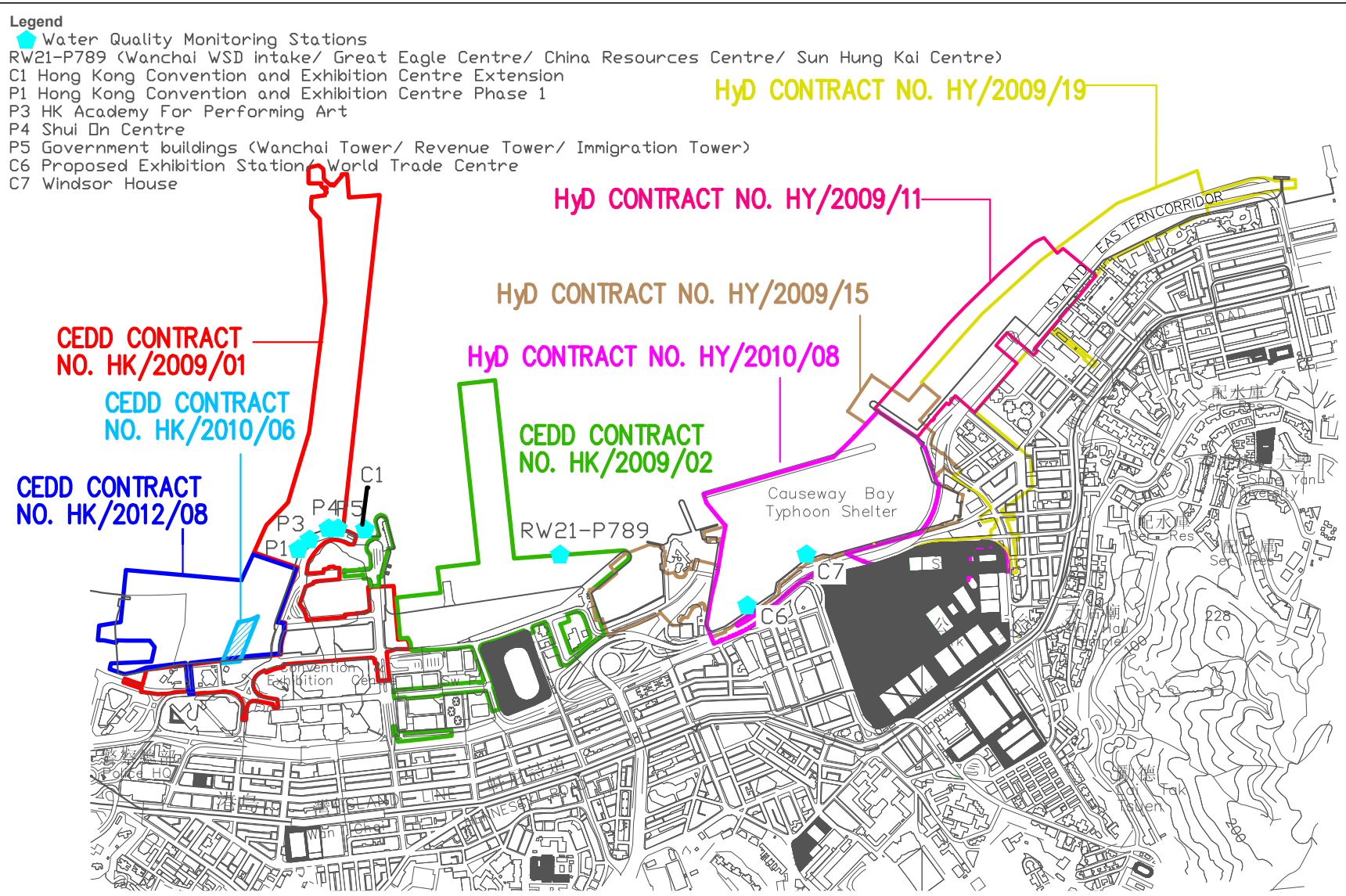

C6 AND C7: EXISTING SEAWATER INTAKE
: ODOUR PATROL ROUTES FOR CONSTRUCTION PHASE
: MONITORING STATION FOR DO MEASUREMENT FOR CONSTRUCTION PHASE
Odour Patrol Location
N
CAUSEWAY BAY TYPHOON SHELTER
EX-WAN CHAI PUBLIC CARGO WORKING AREA
Ex-WPCWA SE
Ex-WPCWA SW
OP1
OP2
OP3
OP4
OP5
OP6
OP7
OUTFALL P
OUTFALL Q
C6
C7
CAUSEWAY BAY
Victoria



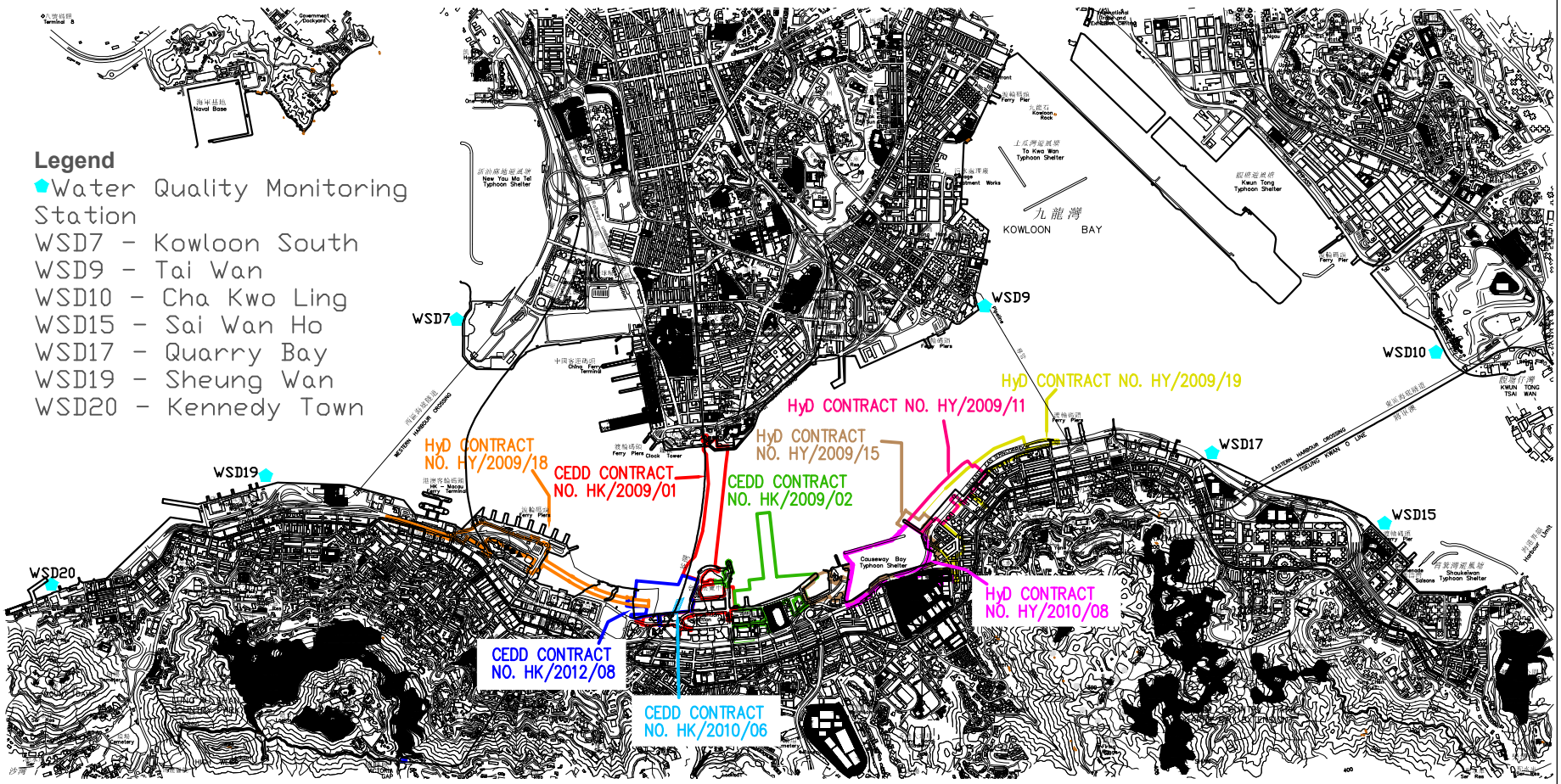
Location Plan of Additional Dissolved Oxygen Monitoring Stations for Culvert L Water Discharge Flow



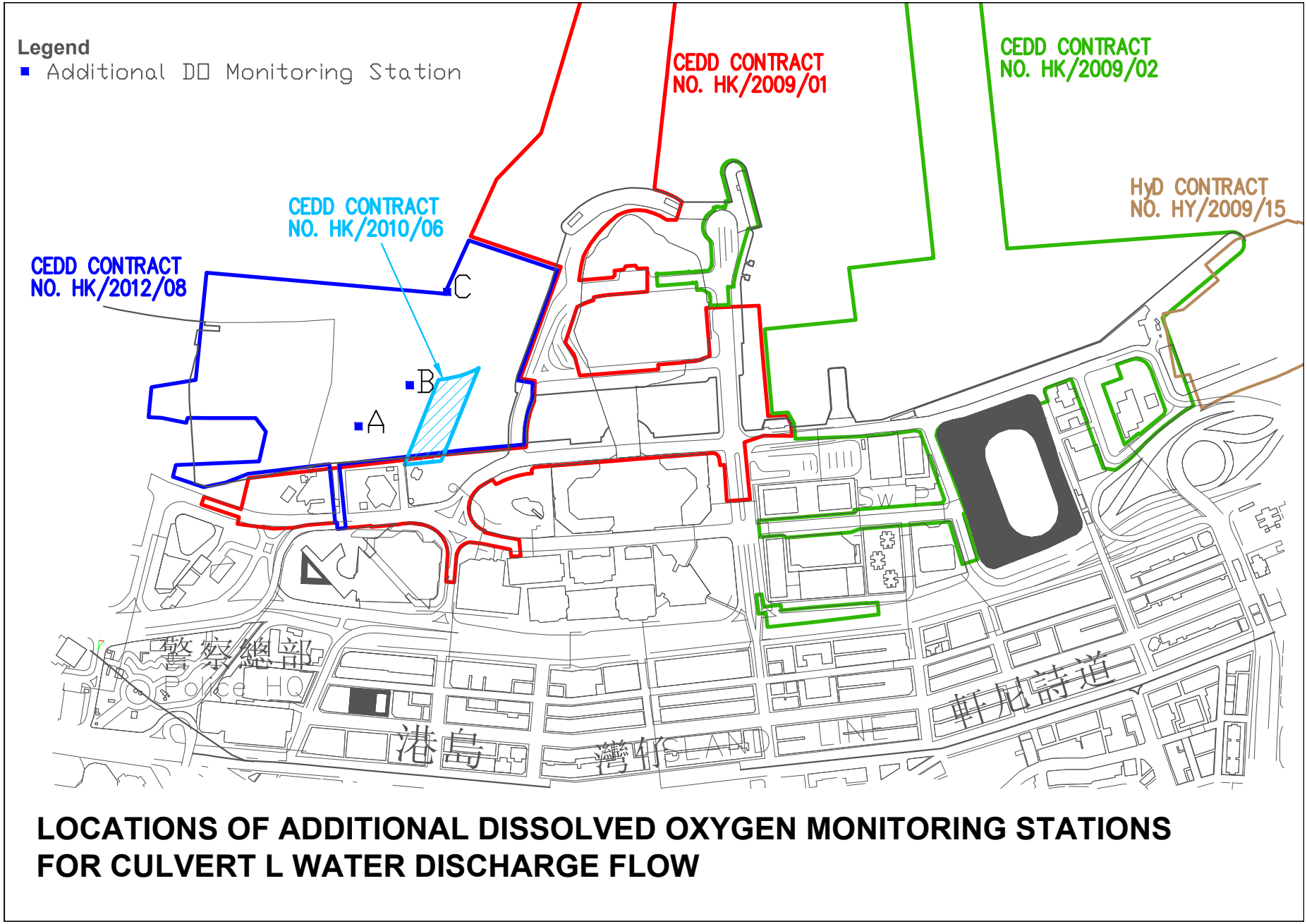
LOCATIONS OF WATER QUALITY MONITORING STATIONS



LOCATIONS OF WATER QUALITY MONITORING STATIONS



LOCATIONS OF WATER QUALITY MONITORING STATIONS



LOCATIONS OF ADDITIONAL DISSOLVED OXYGEN MONITORING STATIONS FOR CULVERT L WATER DISCHARGE FLOW

Appendix 2.1

Environmental Mitigation Implementation Schedule

Environmental Mitigation Implementation Schedule

Implementation Schedule for Air Quality Control

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

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

[1] CEDD will identify an implementation agent.

[2] CEDD will identify an implementation agent.

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S3.10.2	Monthly (from July to September) monitoring of odour impacts, for a period of 5 years, is proposed during the operational phase of the Project to ascertain the effectiveness of the Enhancement Package over time, and to monitor any on-going odour impacts at the ASRs.	Planned ASRs (CBTS Breakwater)/First 5-year period of operation phase	CEDD[1]			√		EIAO-TM
For DP1 – CWB (Within the Project Boundary)								
S3.6.53 – S3.6.54	The design parameters of the East and Central Ventilation Buildings as set in Tables 3.10 and 3.11	East and Central Ventilation Buildings / During operation of the Trunk Road	HyD			√		
S3.10.2	Air quality monitoring for the operation performance of the East Ventilation Building and associated East Vent Shaft will be conducted.	East Vent Shaft / During operation of the East Ventilation Building and associated East Vent Shaft	HyD			√		EIAO-TM

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

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Table A13.2 Implementation Schedule for Noise Control

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

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S4.9.4	Good Site Practice: • Only well-maintained plant shall be operated on-site and plant shall be serviced regularly during the construction program. • Silencers or mufflers on construction equipment shall be utilized and shall be properly maintained during the construction program. • Mobile plant, if any, shall be sited as far away from NSRs as possible. • Machines and plant (such as trucks) that may be in intermittent use shall be shut down between works periods or shall be throttled down to a minimum. • Plant known to emit noise strongly in one direction shall, wherever possible, be orientated so that the noise is directed away from the nearby NSRs. • Material stockpiles and other structures shall be effectively utilized, wherever practicable, in screening noise from on-site construction activities.	Work Sites / During Construction	Contractor		√			EIAO-TM, NCO
For DP1 – CWB (Within the Project Boundary)								

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

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

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

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

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EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
	• 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.	Near Causeway Bay Fire Station / During detailed design of the re-provisioned Tin Hau Temple	Project Proponent for the re-provisioned Tin Hau Temple	√				

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

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

Table A13.3 Implementation Schedule for Water Quality Control

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
Construction Phase								
For DP3 – Reclamation Works, DP5 (Wan Chai East Sewage Outfall), DP6 (Cross-Harbour Water Mains from Wan Chai to Tsim Sha Tsui), DP1 – CWB (within the Project Boundary)								
S5.8	A phased reclamation approach is planned for the WDII. Containment of fill within each of the reclamation phases by seawalls is proposed, with the seawall constructed first (above high water mark) with filling carried out behind the completed seawalls. Any gaps that may need to be provided for marine access will be shielded by silt curtains to control sediment plume dispersion away from the site. Filling for seawall construction should be carried out behind the silt curtain	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO
S5.8	Dredging shall be carried out by closed grab dredger for the following works: • Seawall construction in all the reclamation areas; • Construction of the CWB Tunnel • Construction of the proposed WSD water mains; and • Construction of the proposed Wan Chai East sewage outfall pipelines.	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO
S5.8, Figure 5.3	Dredging for the Wan Chai East sewage outfall pipelines shall not be carried out concurrently with the following activities: • Dredging along the proposed cross-harbour water mains; • Dredging along the seawall in the Wan Chai Reclamation (WCR) zone (area between HKCEC Extension and PCWA).	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S5.8	The water body behind the temporary reclamations within the Causeway Bay typhoon shelter shall not be fully enclosed.	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO
S5.8	As a mitigation measure, to avoid the accumulation of water borne pollutants within the temporary embayment between CRIII and HKCEC1, an impermeable barrier, suspended from a floating boom on the water surface and extending down to the seabed, will be erected by the contractor before the HKCEC1 commences. The barrier will channel the stormwater discharge flows from Culvert L to the outside of the embayment. The contractor will maintain this barrier until the reclamation works in HKCEC2W are carried out and the new Culvert L extension is constructed.	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO
S5.8, Figure 5.3	The total dredging rates in each of the marine works zones shall not be more than the maximum production rates stated in the table below. These are the production rates without considering the effect of silt curtain.	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO

Reclamation Area		Maximum Dredging Rate		Maximum Dredging Rate (m^3 per week)
		m^3 per day	m^3 per hour (for 16 hrs per day)	
Dredging along seawall or breakwater				
North Point Shoreline Zone (NPR)		6,000	375	42,000
Causeway Bay Shoreline Zone	TBW	1,500	94	10,500
	TCBR	6,000	375	42,000
PCWA Zone		5,000	313	35,000

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
	<table><tr><td colspan="2">Wan Chai Shoreline Zone (WCR)</td><td>6,000</td><td>375</td><td>42,000</td></tr><tr><td rowspan="2">HKCEC Shoreline Zone (HKCEC)</td><td>HKCEC Stage 1 & 3</td><td>1,500</td><td>94</td><td>10,500</td></tr><tr><td>HKCEC Stage 2</td><td>6,000</td><td>375</td><td>42,000</td></tr><tr><td colspan="2">Cross Harbour Water Mains</td><td>1,500</td><td>94</td><td>10,500</td></tr><tr><td colspan="2">Wan Chai East Submarine Sewage Pipeline</td><td>1,500</td><td>94</td><td>10,500</td></tr></table> Note: 1,500 m^3 per day shall be applied for construction of the western seawall of WCR1.							
S5.8, Figure 5.3	Dredging along the seawall at WCR1 shall be undertaken initially at 1,500m^3 per day for construction of the western seawall (which is in close proximity of the WSD intake), followed by partial seawall construction at the western seawall (above high water mark) to protect the adjacent intakes as much as possible from further dredging activities.	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO
S5.8, Figure 5.3	For dredging within the Causeway Bay typhoon shelter, seawall shall be partially constructed to protect the nearby seawater intakes from further dredging activities. For example, at TCBR1W, the southern and eastern seawalls shall be constructed first (above high water mark) so that the seawater intakes at the inner water would be protected from the impacts from the remaining dredging activities along the northern boundary.	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO
S5.8, Figure 5.3	Silt curtains shall be deployed around the closed grab dredgers during seawall dredging and seawall trench filling in the areas of HKCEC, WCR, TCBR and NP.	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO
S5.8, Figure 5.3	Silt screens shall be applied to seawater intakes at interim construction stages as stated below: <table><tr><th>Interim Construction Stage</th><th>Location of Applications</th></tr><tr><td>**Scenario 2A** in early 2009 with concurrent dredging activities at HKCEC, WCR, TPCWA, TBW, NP and Water Mains Zone</td><td>**WSD saltwater intakes** at Sai Wan Ho, Quarry Bay, Sheung Wan, Wan Chai, Kowloon South **Cooling water intakes** for Hong Kong Convention and Exhibition Centre Extension, Hong Kong Convention and Exhibition Centre Phase I, Telecom House / HK Academy for Performing Arts / Shun On Centre, Wan Chai Tower / Revenue Tower / Immigration Tower and Sun Hung Kai Centre</td></tr><tr><td>**Scenario 2B** in late 2009/2010 with concurrent dredging activities at Sewage Pipelines Zone and TCBR.</td><td>**WSD saltwater intakes** at Sheung Wan, Wan Chai **Cooling water intakes** for Queensway Government Offices, Excelsior Hotel, World Trade Centre and Windsor House.</td></tr><tr><td>**Scenario 2C** in 2011 with concurrent dredging activities at HKCEC and TCBR.</td><td>**WSD saltwater intakes** at Sheung Wan and Reprovisioned WSD Wan Chai saltwater intake. **Cooling water intakes** for MTR South, Excelsior Hotel & World Trade Centre and reprovisioned Windsor House.</td></tr></table>	Work site / During the construction period	Contractor		√			EIAO-TM, WPCO

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				Des	C	O	Dec	
S5.8	Other mitigation measures include: • mechanical grabs, if used, shall be designed and maintained to avoid spillage and sealed tightly while being lifted. For dredging of any contaminated mud, closed watertight grabs must be used; • all vessels shall be sized so that adequate clearance is maintained between vessels and the seabed in all tide conditions, to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash; • all hopper barges and dredgers shall be fitted with tight fitting seals to their bottom openings to prevent leakage of material; • construction activities shall not cause foam, oil, grease, scum, litter or other objectionable matter to be present on the water within the site or dumping grounds; • loading of barges and hoppers shall be controlled to prevent splashing of dredged material into the surrounding water. Barges or hoppers shall not be filled to a level that will cause the overflow of materials or polluted water during loading or transportation; and	Work site / During the construction period	Contractor		√			ProPECC PN 1/94; WPCO (TM-DSS)

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

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

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

[3] CEDD will identify an implementation agent.

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

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S5.8	*Storm Water Discharges* Minimum distances of 100 m shall be maintained between the existing or planned stormwater discharges and the existing or planned WSD flushing water intakes.	Work site and adjacent water / During the design and construction period.	Contractor	√	√			WPCO
Operation Phase								
DP1 – CWB (within the Project Boundary)								
S5.8	For the operation of CWB, a surface water drainage system would be provided to collect road runoff. The following operation stage mitigation measures are recommended to ensure road runoff would comply with the TM under the WPCO: • The drainage from tunnel sections shall be directed through petrol interceptors to remove oil and grease before being discharged to the nearby foul water manholes. • Petrol interceptors shall be regularly cleaned and maintained in good working condition. • Oily contents of the petrol interceptors shall be properly handled and disposed of, in compliance with the requirements of the Waste Disposal Ordinance. • Sewage arising from ancillary facilities of CWB (for examples, car park,	CWB/During design and operational period	HyD/TD[3]	√		√		WPCO

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

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

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

Table A13.4 Implementation Schedule for Waste Management

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

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

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

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EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S6.7.7	*Good Site Practices* Recommendations for good site practices during the construction activities include: • nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site; • training of site personnel in proper waste management and chemical waste handling procedures; • provision of sufficient waste disposal points and regular collection for disposal; • appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers; • regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors; and • a recording system for the amount of wastes generated, recycled and disposed of (including the disposal sites).	Work site / During the construction period	Contractor		√			Waste Disposal Ordinance (Cap.354)

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

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EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
S6.7.10	*General Refuse* General refuse shall be stored in enclosed bins or compaction units separate from C&D material. A licensed waste collector shall be employed by the contractor to remove general refuse from the site, separately from C&D material. A collection area shall be provided where wastes can be stored and loaded prior to removal from site. An enclosed and covered area is recommended to reduce the occurrence of 'wind blow' light material.	Work site / During the construction period	Contractor		√			Public Health and Municipal Services Ordinance (Cap. 132)
S6.7.11	*Chemical Wastes* After use, chemical wastes (for example, cleaning fluids, solvents, lubrication oil and fuel) shall be handled according to the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. Spent chemicals shall be collected by a licensed collector for disposal at the CWTF or other licensed facility in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.	Work site / During the construction period	Contractor		√			Waste Disposal (Chemical Waste) (General) Regulation Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes
S6.7.12	*Construction and Demolition Material* C&D material shall be sorted on-site into inert C&D material (that is, public fill) and C&D waste. All the suitable inert C&D material shall be broken down to 250 mm in size for reuse as public fill in the WDII reclamation. C&D waste, such as wood, glass, plastic, steel and other metals shall be reused or recycled and, as a last resort, disposed of to landfill. A suitable area shall be designated to facilitate the sorting process and a temporary stockpiling area will be required for the separated materials.	Work site / During the construction period	Contractor		√			ETWB TCW No. 33/2002, 31/2004, 19/2005

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

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Table A13.5 Implementation Schedule for Land Contamination

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

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

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

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

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Table A13.6 Implementation Schedule for Marine Ecology

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

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

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				Des	C	O	Dec	
S.9.7.6	To minimize potential disturbance impacts on the foraging ardeid population in the CBTS, particularly in the area near the A King Shipyard, appropriate mitigation measures shall be adopted particularly during the construction phase. The following measures are recommended: • Use of Quiet Mechanical Plant during the construction phase shall be adopted wherever possible. • Adoption of multiple-phase construction schedule. • General measures to reduce noise generated during the construction phase (see noise impact assessment) shall be effectively implemented.	Work site / during construction phase	Contractor		√			EIAO TM Annex 16 (Section 8.4) & EIAO Guidance Note No. 3/2002.
S.9.7.7	Seawalls shall be constructed in advance around the reclamation areas within the area of the CBTS to screen adjacent feeding ground from construction phase activities, reduce noise disturbance to the associated seabirds and also to restrict access to this habitat adjacent to works areas by ship traffic.	Work site / during construction phase	Contractor		√			EIAO TM Annex 16 (Section 8.4) & EIAO Guidance Note No. 3/2002.
S.9.7.8	Loss of artificial seawall habitats shall be reinstated by the construction of about 1 km vertical wave absorbing seawall along the coastlines of the new reclamation around the HKCEC and at North Point. The new seawalls are expected to provide large area of hard substrata for settlement and recruitment of intertidal fauna similar to those previously recorded from existing intertidal habitats.	Work site / during construction phase	Contractor		√			EIAO TM Annex 16 (Section 8.4) & EIAO Guidance Note No. 3/2002.

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Table A13.7 Implementation Schedule for Landscape and Visual

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
Construction Phase								
For the Whole Project								
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
For DP1 – CWB (Within the Project Boundary)								
Table 10.5	CM1 Topsoil, where identified, shall be stripped and stored for re-use in the construction of the soft landscape works, where practical.	Work site / During 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

EIA Ref	Environmental Protection Measures / Mitigation Measures	Location / Timing	Implementation Agent	Implementation Stages*				Relevant Legislation and Guidelines
				Des	C	O	Dec	
Table 10.5	CM6 Erection of decorative screen hoarding compatible with the surrounding setting.	Work site / During Construction Phase	Contractor		√			EIAO TM
For DP2 – WDII Major Roads (Road P2)								
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
For DP3 – Reclamation Works								
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
For DP5 – Wan Chai East Sewage Outfall								
Refer to EIA-058/2001 Table 10.13	CM2 Minimisation of works areas.	Work site / During Construction Phase	Contractor		√			EIAO TM
Refer to EIA-058/2001 Table 10.13	CM3 Erection of decorative hoardings.	Work site / During Construction Phase	Contractor		√			EIAO TM

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

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

[4] CEDD will identify an implementation agent

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

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

[5] CEDD will identify an implementation agent

Appendix 3.1

Action and Limit Level

Action and Limit Level

Action and Limit Level for Noise Monitoring

Time Period	Action Level	Limit Level
07:00 – 19:00 hours on normal weekdays	When one documented complaint is received.	75 dB(A)[Note 1]

Note 1:

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

Action and Limit Level for Air Monitoring

Monitoring Location	1-hour TSP Level in $\mu g/m^3$		24-hour TSP Level in $\mu g/m^3$	
	Action Level	Limit Level	Action Level	Limit Level
CMA1b [Note 2]	320.1	500	176.7	260
CMA2a	323.4	500	169.5	260
CMA3a [Note 2]	311.3	500	171.0	260
CMA4a	312.5	500	171.2	260
CMA5b [Note 2]	332.0	500	181.0	260
CMA6a [Note 2]	300.1	500	187.3	260

Note 2:

- *As per facing owner's rejection in allowing the implementation of long-term air quality impact monitoring at their premises, alternative monitoring stations and justification were proposed for IEC verification and EPD approval.*
- *The established Action and Limit Levels from the baseline air monitoring will be adopted to the alternative monitoring stations.*

Action and Limit Level for Water Monitoring

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

Remarks:

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

Action and Limit Levels for Odour Patrol

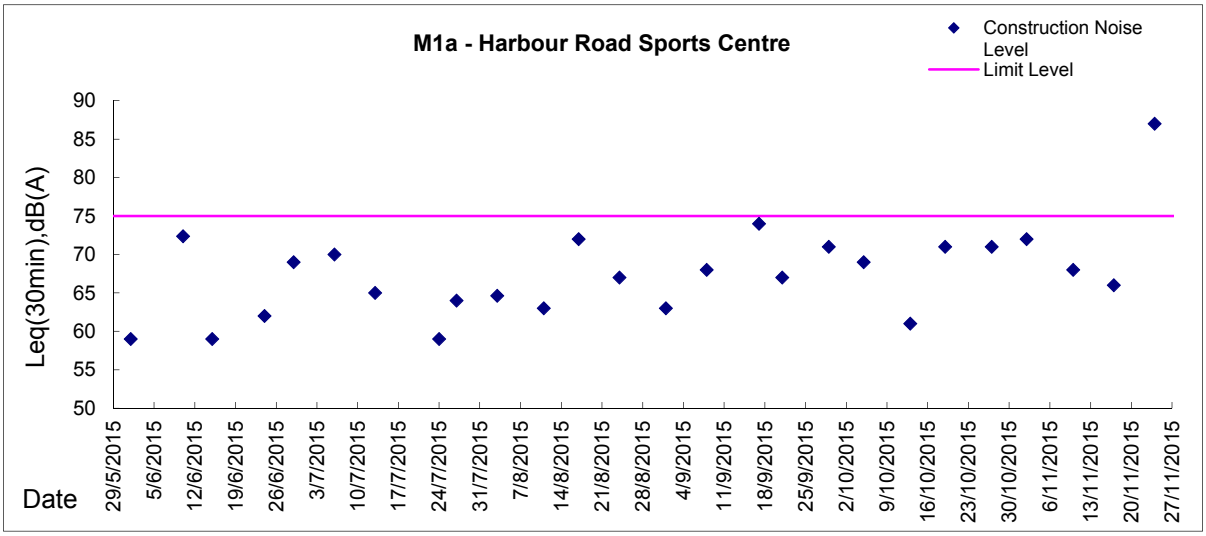
Parameters	Action	Limit
Odour Nuisance (from odour intensity analysis or odour patrol)	• When two documented complaint are received; or • Odour Intensity of 2 is measured from odour intensity analysis.	• Five or more consecutive genuine documented complaints within a week; or • Odour Intensity of 3 or above is measured from odour intensity analysis.

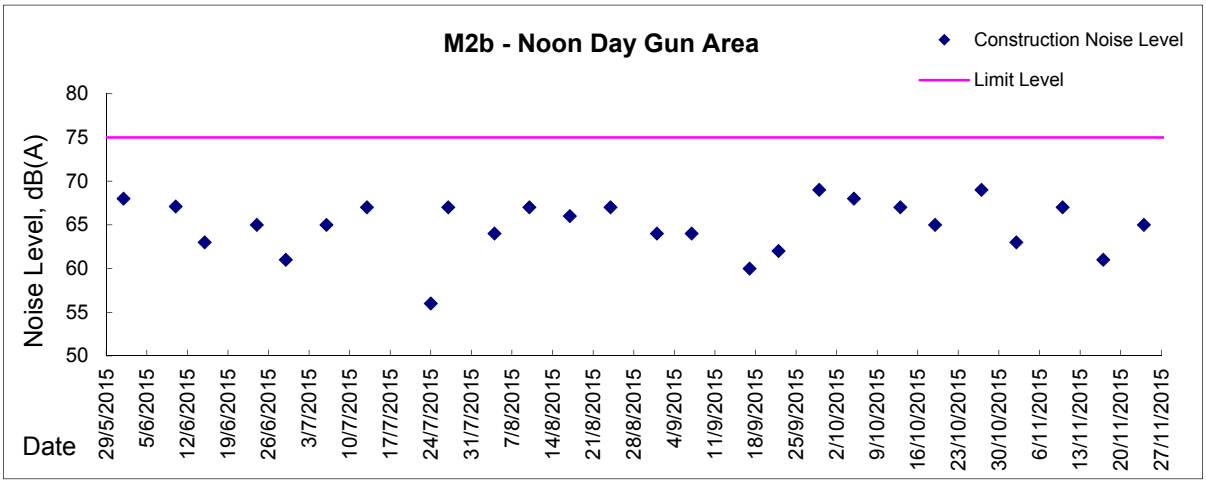
Appendix 4.1

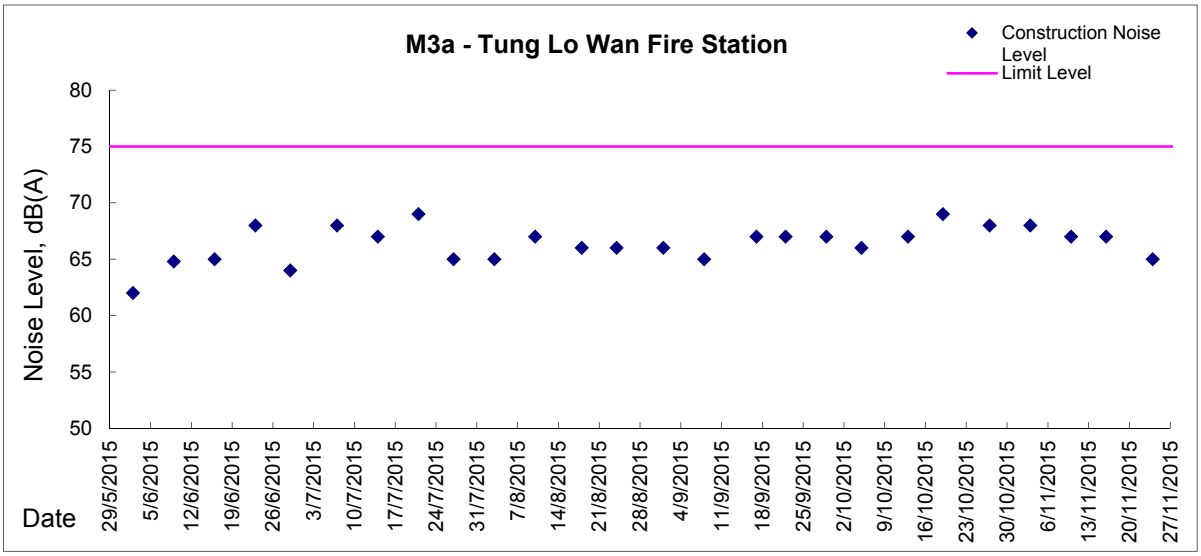
Noise Monitoring Graphical Presentations

Graphic Presentation of Noise Monitoring Result

Day Time (0700 - 1900hrs on normal weekdays)

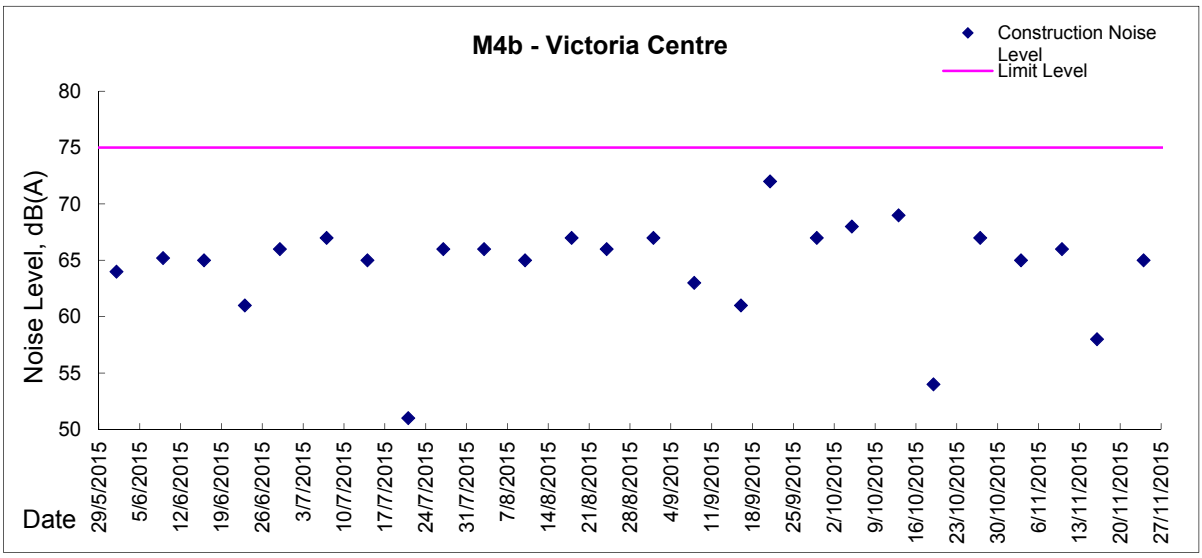


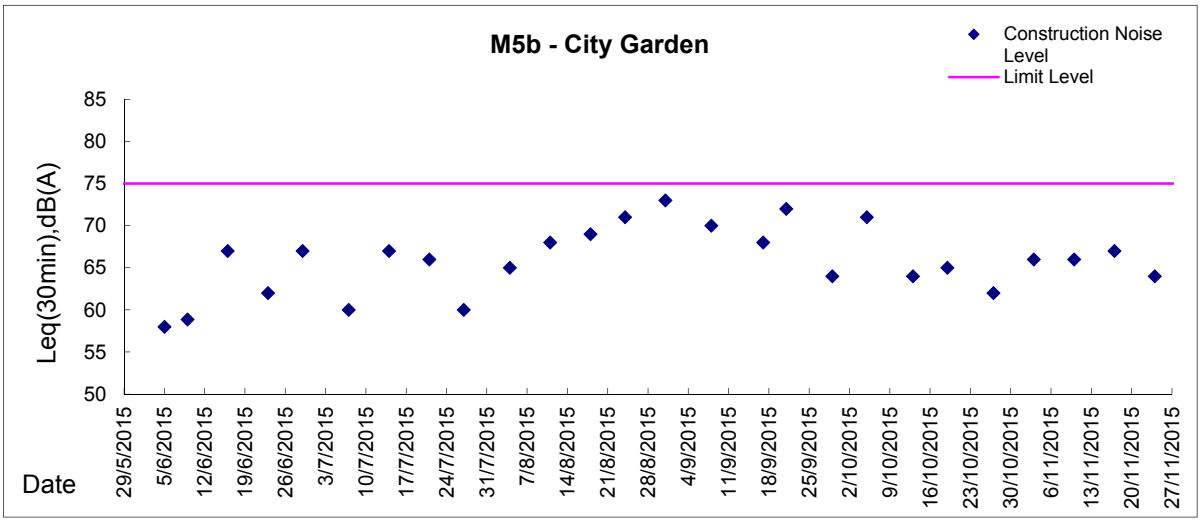


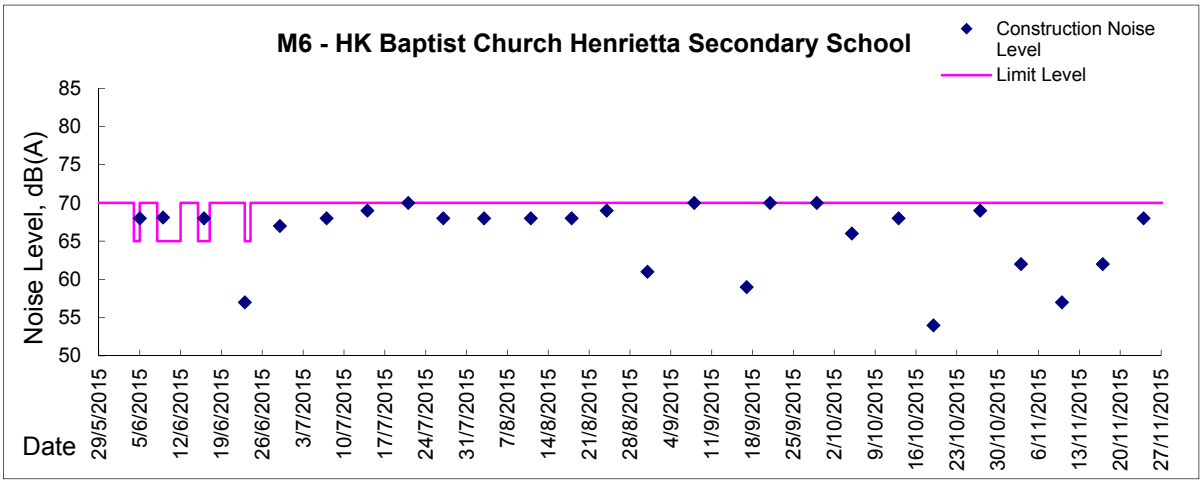


Graphic Presentation of Noise Monitoring Result

Day Time (0700 - 1900hrs on normal weekdays)

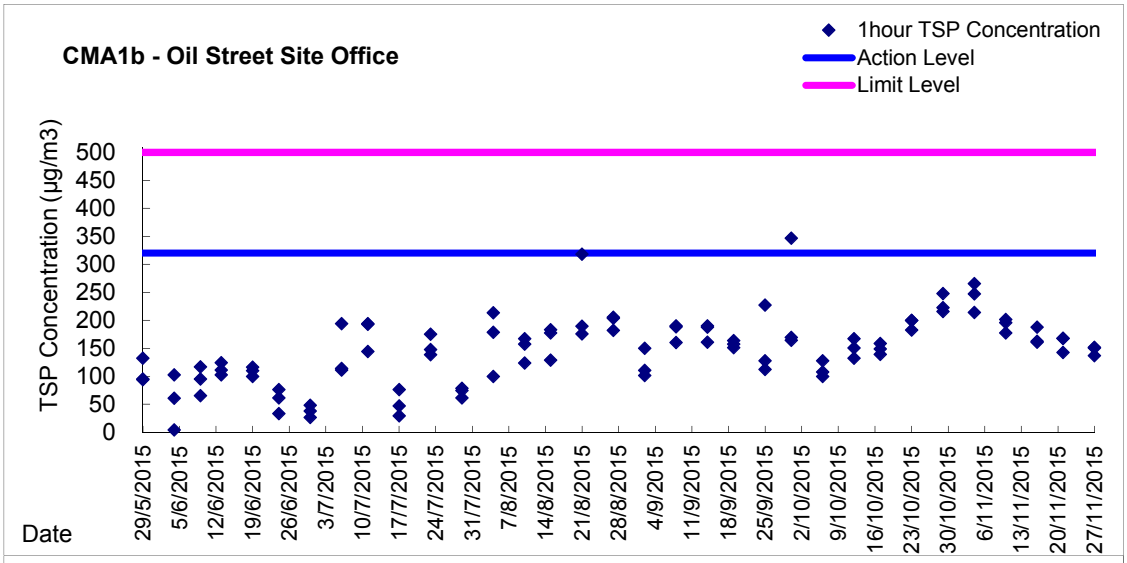


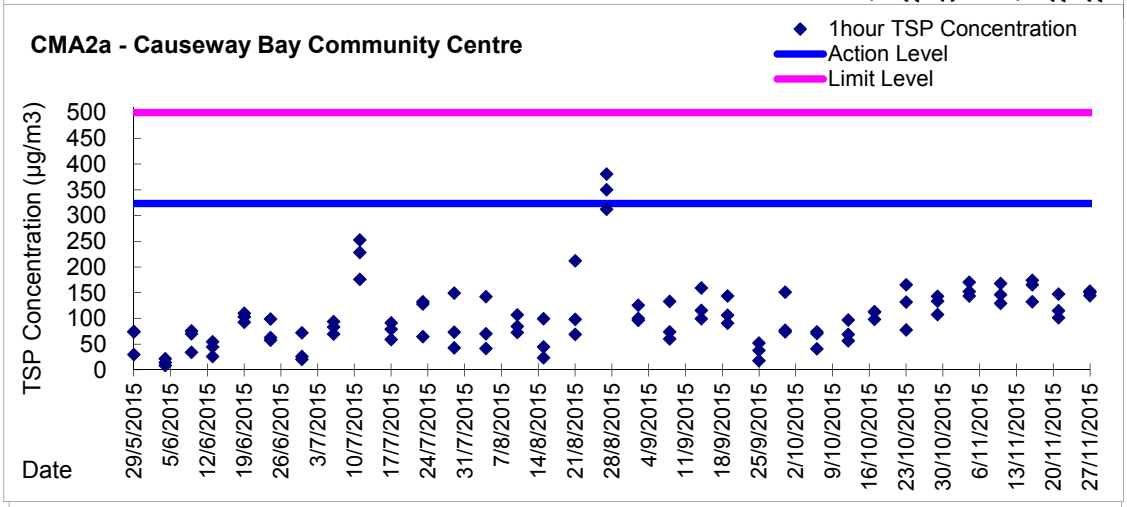


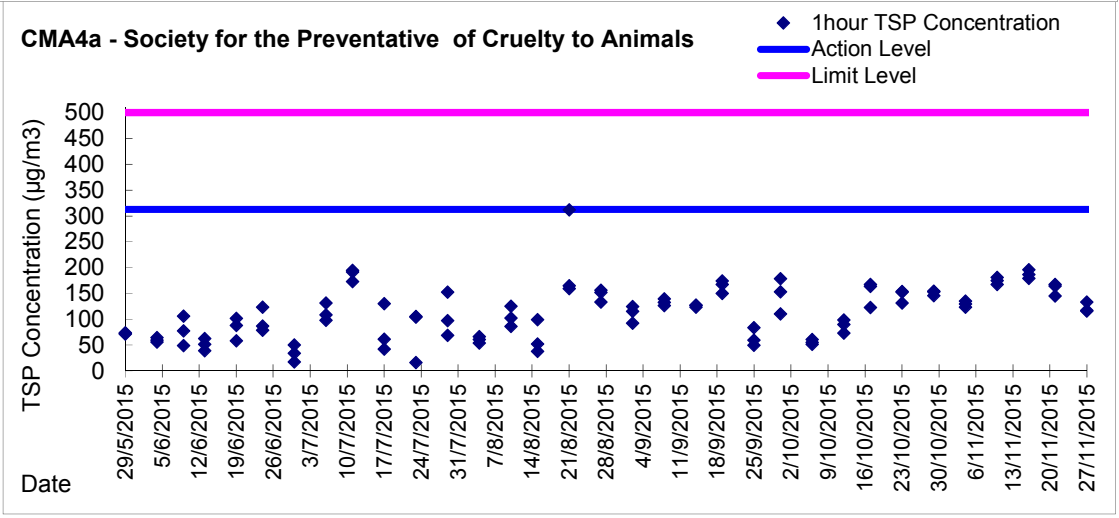


Appendix 4.2
Air Quality Monitoring Graphical Presentations

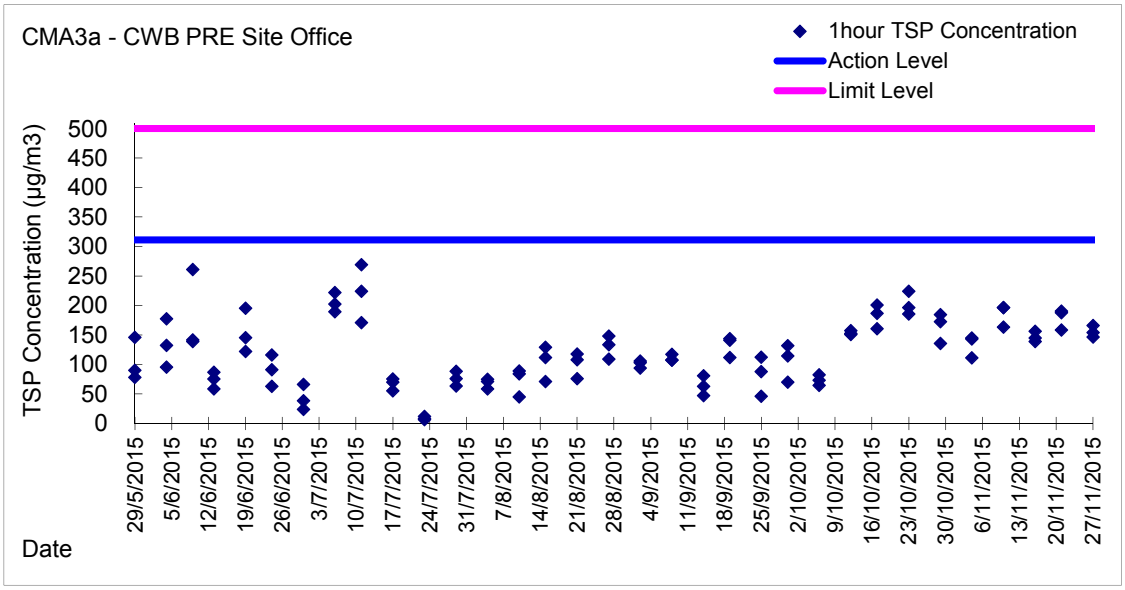
Graphic Presentation of 1 hour TSP Result

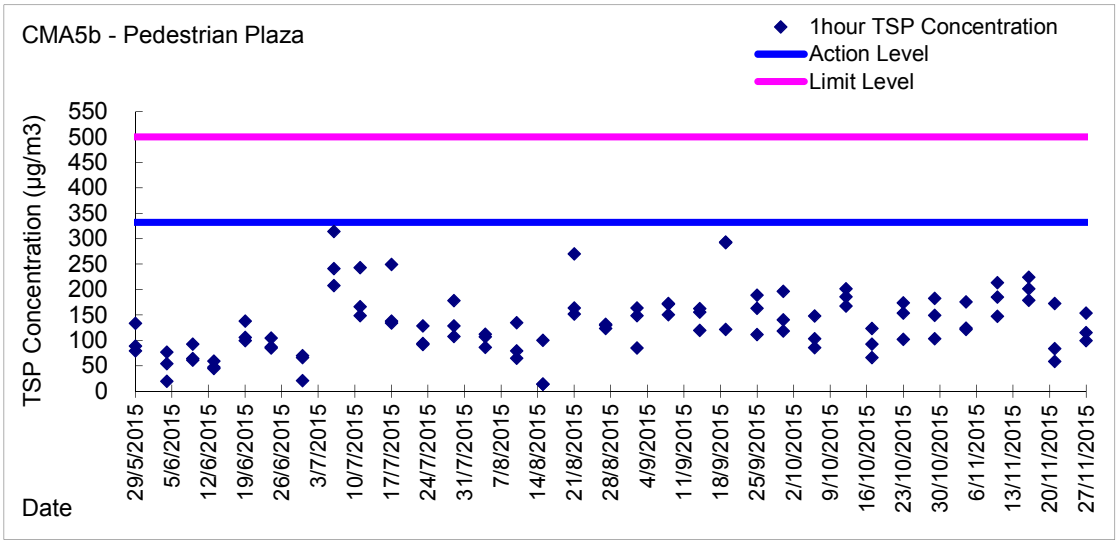


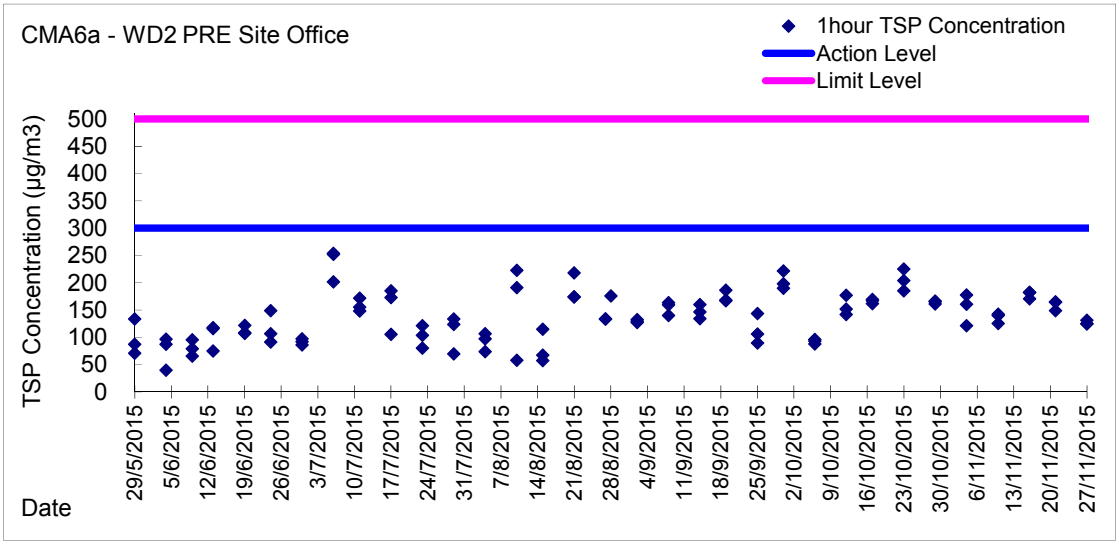




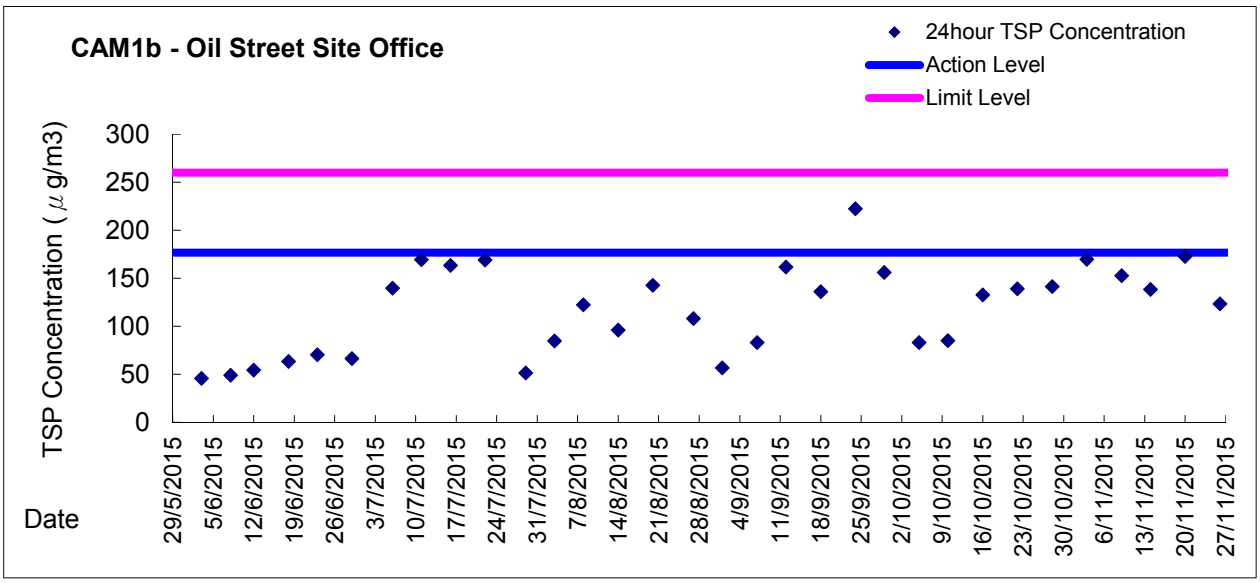
Graphic Presentation of 1 hour TSP Result

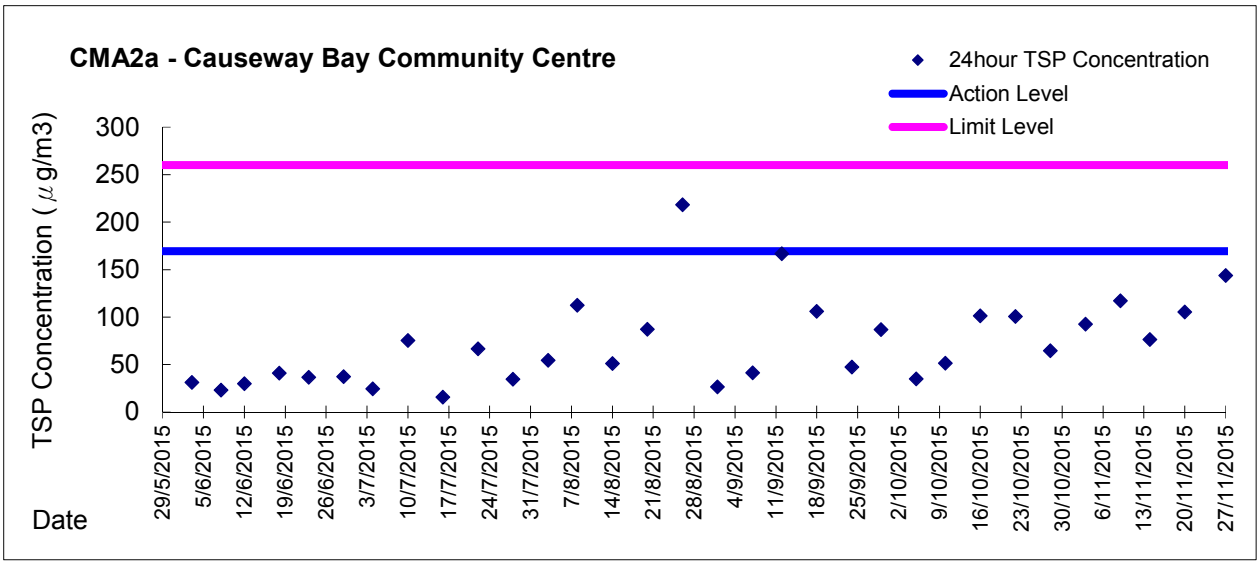


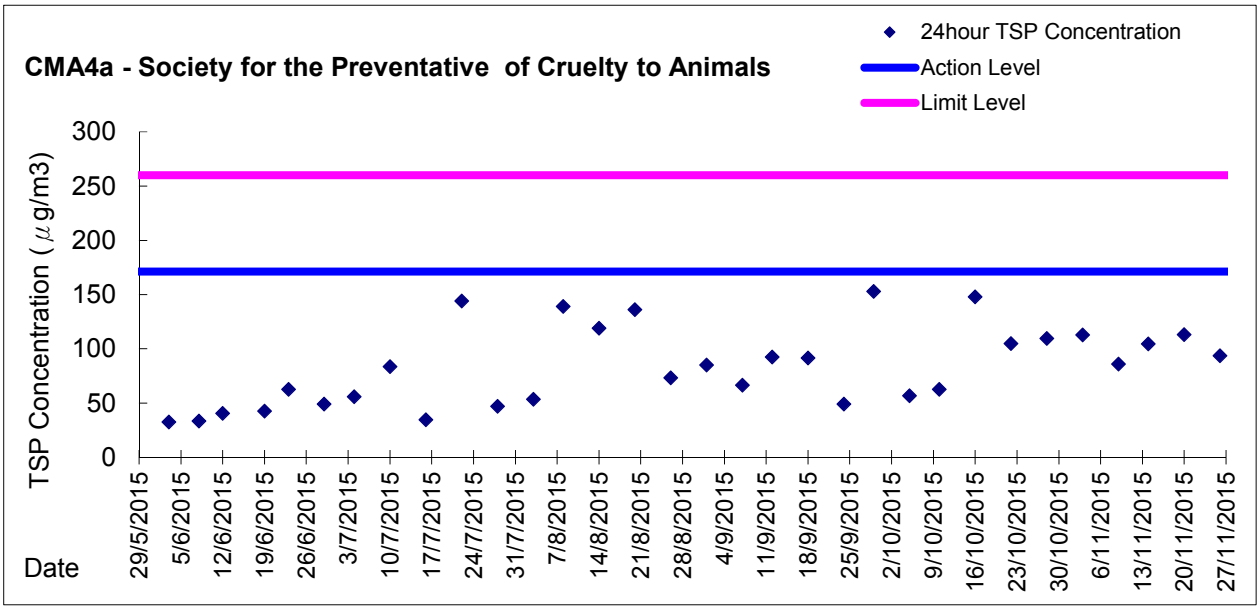




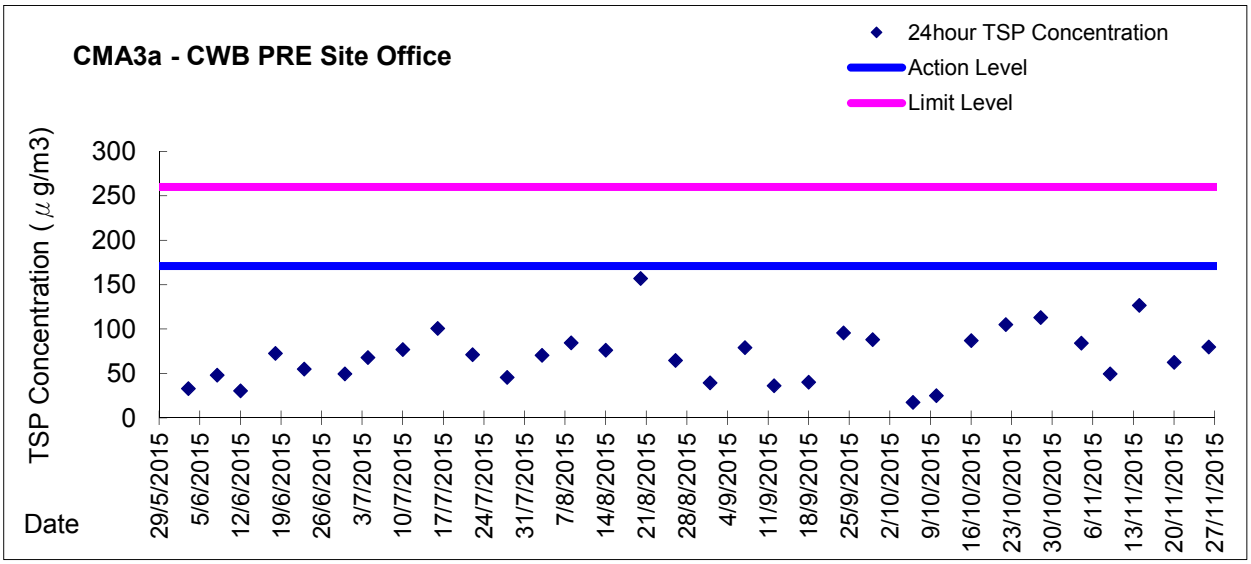
Graphic Presentation of 24 hour TSP Result

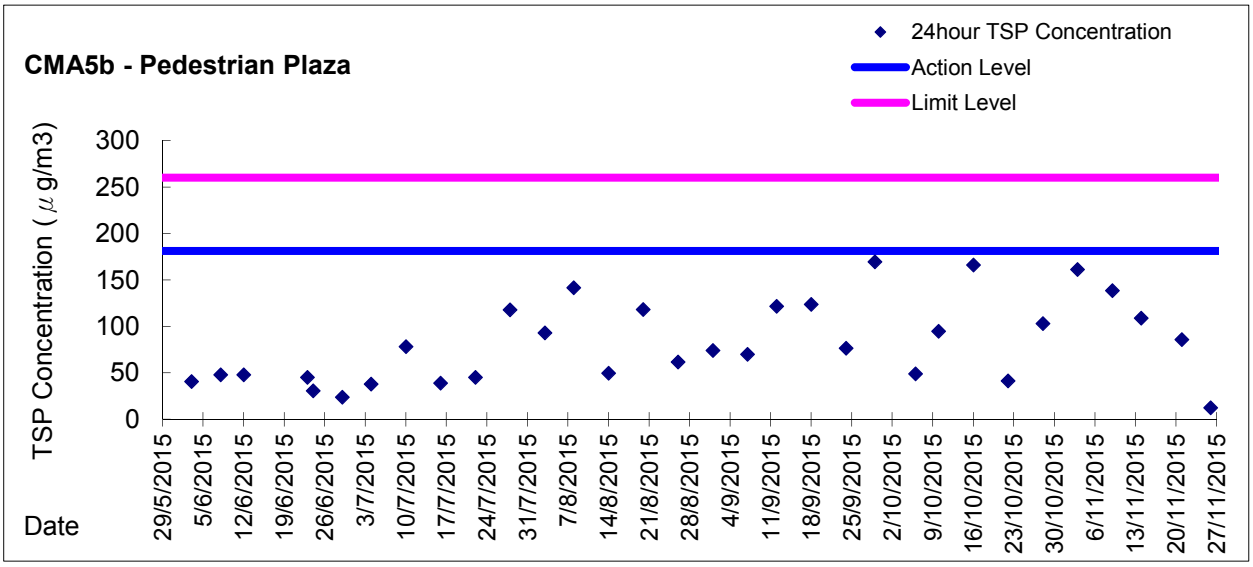


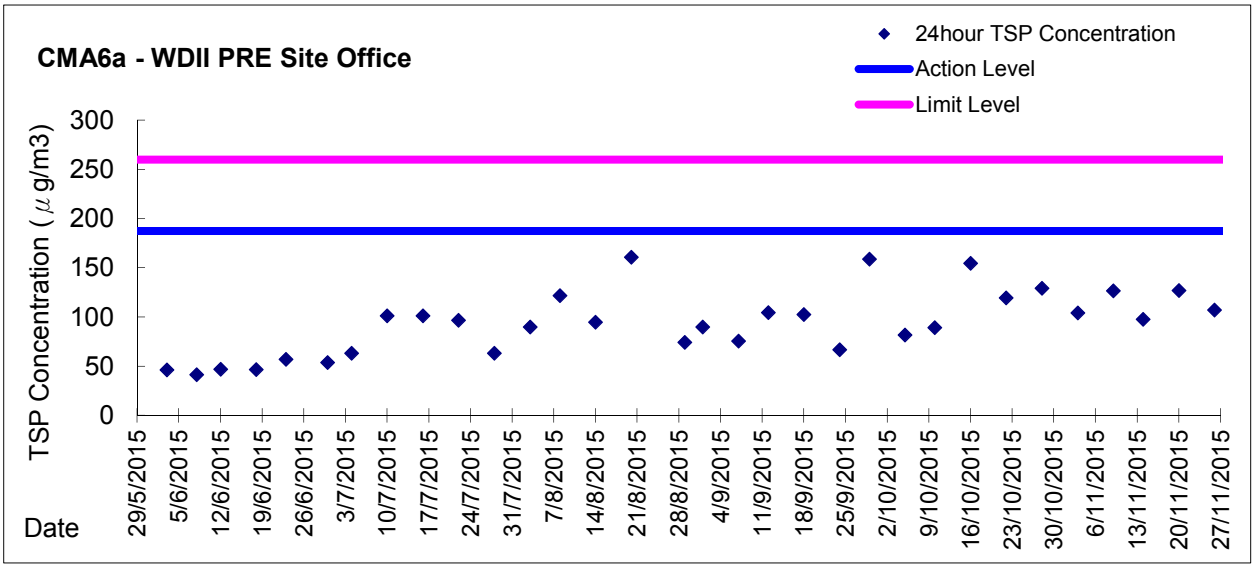




Graphic Presentation of 24 hour TSP Result







Field Data Record Sheet

Monitoring Date: 1 September 2015 **Weather Condition:** Cloudy **Tidal Condition:** Ebb

Temperature: 29.4^{0}C – 32.5^{0}C **Relative Humidity:** 73.2% - 78.8%

Location	Time	Temperature (℃)	Relative Humidity (%)	Odour Intensity	Odour Nature	Possible Odour Sources	Duration	Wind Speed(m/s)	Wind Direction	Remarks
OP7	13:26	30.6	77.2	0	/	/	/	0.4	NW	
OP6	13:31	31.0	76.1	0-1	Sea Water	Sea	Intermittent	0.8	SSW	
OP5	13:37	30.2	78.8	0-1	Culvert discharge	Sea	Intermittent	3.6	ESE	
OP4	13:42	29.6	78.8	1	Culvert discharge	Sea	Intermittent	32	ENE	
OP3	13:49	29.4	78.7	0-1	Culvert discharge	Sea	Intermittent	1.5	ESE	
OP2	13:57	32.5	73.2	0-1	Culvert discharge	Sea	Persistent	1.0	NNE	
OP1	14:00	30.9	73.9	1	Culvert discharge	Sea	Persistent	1.2	ENE	

Remarks for Odour Intensity: The perceived odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:
0 – Not detected. No odour perceived or an odour so weak that it cannot be easily characterised or described;
1 – Slight Identifiable odour, and slight chance to have odour nuisance;
2 – Moderate Identifiable odour, and moderate chance to have odour nuisance
3 – Strong Identifiable, likely to have odour nuisance;
4 – Extreme Severe odour, and unacceptable level

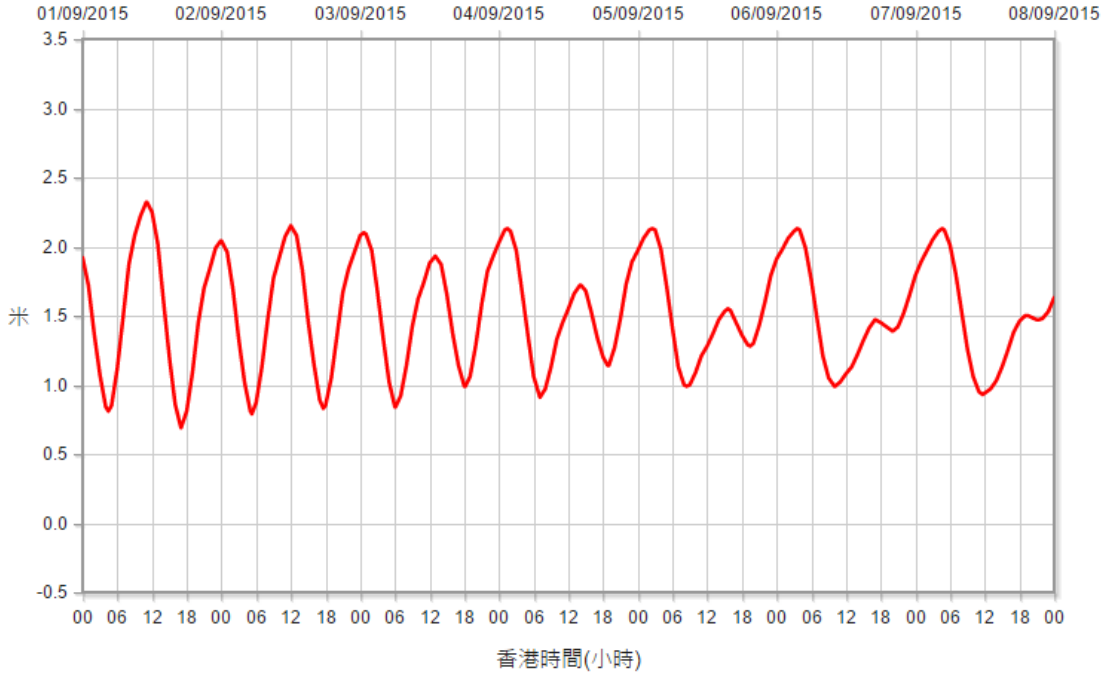
Meteorological Conditions on 1 September 2015

- **Hong Kong Observatory Weather Station at Hong Kong Observatory**
  Air Temperature: **28.9 – 25.7** ℃ Relative humidity: **83 – 96%**

- **Hong Kong Observatory Weather Station at Hong Kong Park**
  Air Temperature: **24.7 – 28.9** ℃

- **The tidal data at Quarry Bay Station**

Tide Time	Tide Height (m)
04:27	0.8
11:07	2.3
17:02	0.7
23:52	2.0



Field Data Record Sheet

Monitoring Date: 15 September 2015 **Weather Condition:** Fine **Tidal Condition:** Ebb

Temperature: 31.5^{0}C – 34.5^{0}C **Relative Humidity:** 54.4% - 62.3%

Location	Time	Temperature (℃)	Relative Humidity (%)	Odour Intensity	Odour Nature	Possible Odour Sources	Duration	Wind Speed(m/s)	Wind Direction	Remarks
OP7	13:15	31.7	59.4	0	/	/	/	0.5	NNE	
OP6	13:20	31.5	62.3	0	/	/	/	2.1	N	
OP5	13:25	34.0	54.8	0	/	/	/	2.0	WSW	
OP4	13:30	31.6	57.9	0-1	Culvert Discharge	Culvert	Intermittent	1.3	NNW	
OP3	13:35	32.0	59.0	0-1	Culvert Discharge	Sea	Intermittent	2.4	NEE	
OP2	13:40	33.4	55.5	1	Seawater	Sea	Persistent	0.6	NE	
OP1	13:45	34.5	54.4	0-1	Seawater	Sea	Persistent	1.7	NE	

Remarks for Odour Intensity: The perceived odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:
0 – Not detected. No odour perceived or an odour so weak that it cannot be easily characterised or described;
1 – Slight Identifiable odour, and slight chance to have odour nuisance;
2 – Moderate Identifiable odour, and moderate chance to have odour nuisance
3 – Strong Identifiable, likely to have odour nuisance;
4 – Extreme Severe odour, and unacceptable level

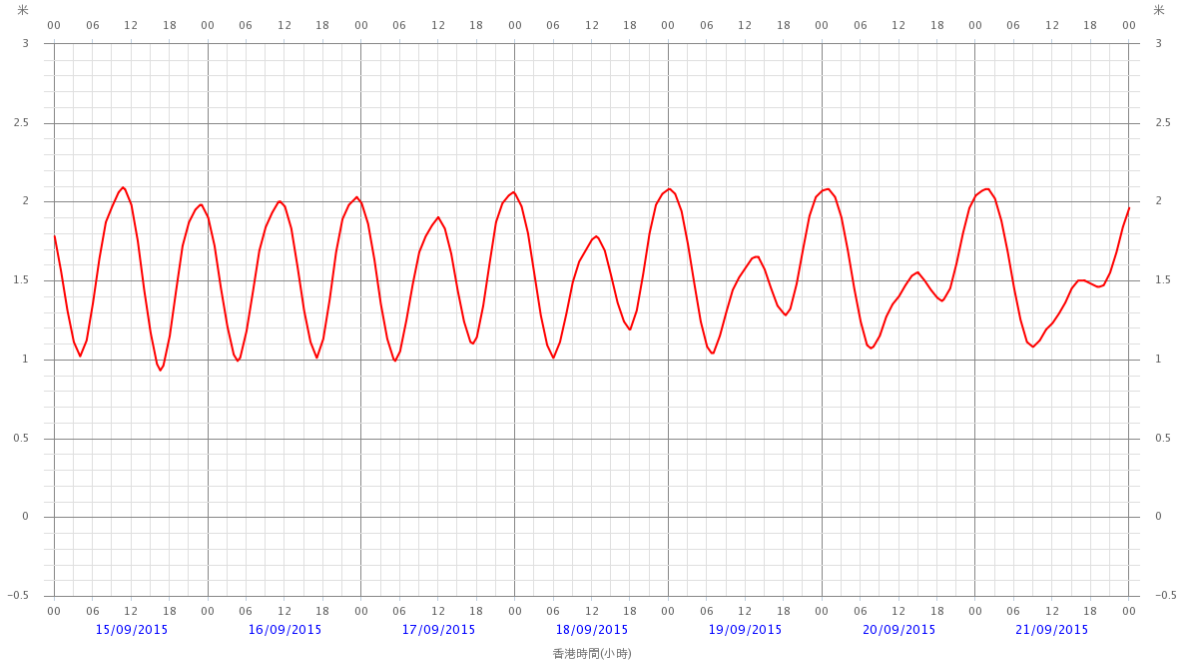
Meteorological Conditions on 15 September 2015

- **Hong Kong Observatory Weather Station at Hong Kong Observatory**
  Air Temperature: **26.5 – 31.9** ℃ Relative humidity: **58 – 81%**

- **Hong Kong Observatory Weather Station at Hong Kong Park**
  Air Temperature: **26.5 – 31.1** ℃

- **The tidal data at Quarry Bay Station**

Tide Time	Tide Height (m)
03:59	1.0
10:39	2.1
16:31	0.9
22:45	2.0



Field Data Record Sheet

Monitoring Date: 29 September 2015 **Weather Condition:** Fine **Tidal Condition:** Ebb

Temperature: 30.9^{0}C – 34.8^{0}C **Relative Humidity:** 41.3% - 54.2%

Location	Time	Temperature (℃)	Relative Humidity (%)	Odour Intensity	Odour Nature	Possible Odour Sources	Duration	Wind Speed(m/s)	Wind Direction	Remarks
OP7	13:26	30.9	54.2	0	/	/	/	3.0	NW	
OP6	13:33	33.7	48.4	1	Fuel Gas	Fisherman Ship/Car	Intermittent	1.7	WNW	
OP5	13:40	32.8	50.4	1	Wastewater	Wastewater Effluent	Intermittent	5.3	WNW	
OP4	13:46	34.8	41.3	0-1	Fuel Gas	Vehicle	Intermittent	2.1	NNE	
OP3	13:53	34.1	45.4	0	/	/	/	1.3	SE	
OP2	14:00	33.7	44.1	0-1	Seawater	Sea	Intermittent	1.8	W	
OP1	14:03	34.7	44.4	0-1	Wastewater	Wastewater Effluent	Intermittent	2.0	NW	

Remarks for Odour Intensity: The perceived odour intensity is to be divided into 5 levels which are ranked in the descending order as follows:
0 – Not detected. No odour perceived or an odour so weak that it cannot be easily characterised or described;
1 – Slight Identifiable odour, and slight chance to have odour nuisance;
2 – Moderate Identifiable odour, and moderate chance to have odour nuisance
3 – Strong Identifiable, likely to have odour nuisance;
4 – Extreme Severe odour, and unacceptable level

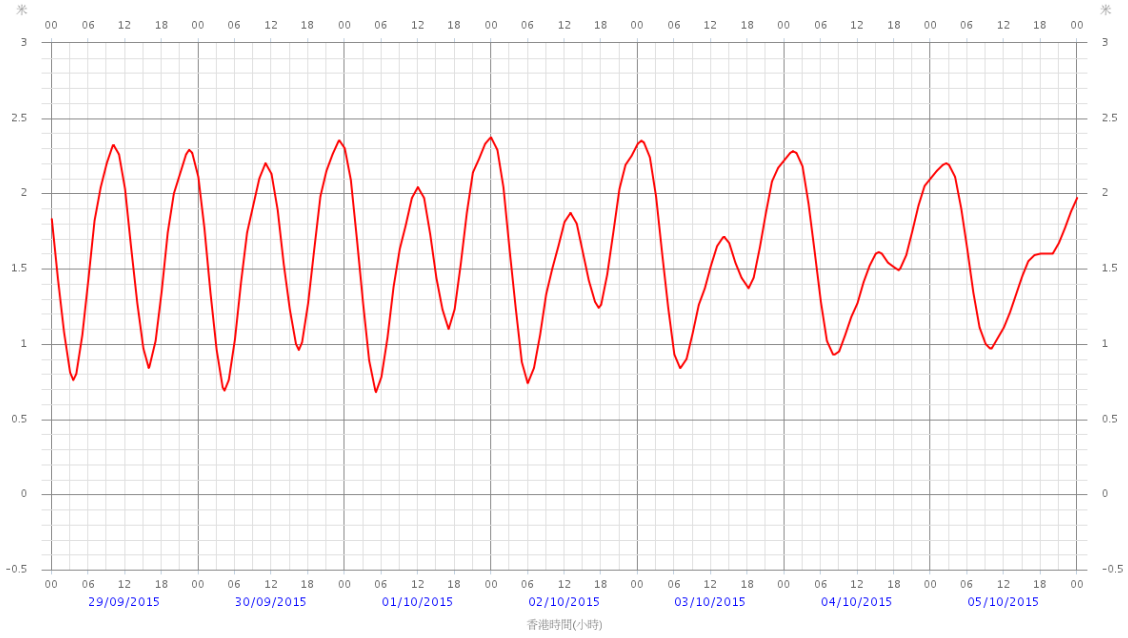
Meteorological Conditions on 29 September 2015

- **Hong Kong Observatory Weather Station at Hong Kong Observatory**
  Air Temperature: **27.4 – 31.3** ℃ Relative humidity: **50 – 70%**

- **Hong Kong Observatory Weather Station at Hong Kong Park**
  Air Temperature: **26.9 – 32.2** ℃

- **The tidal data at Quarry Bay Station**

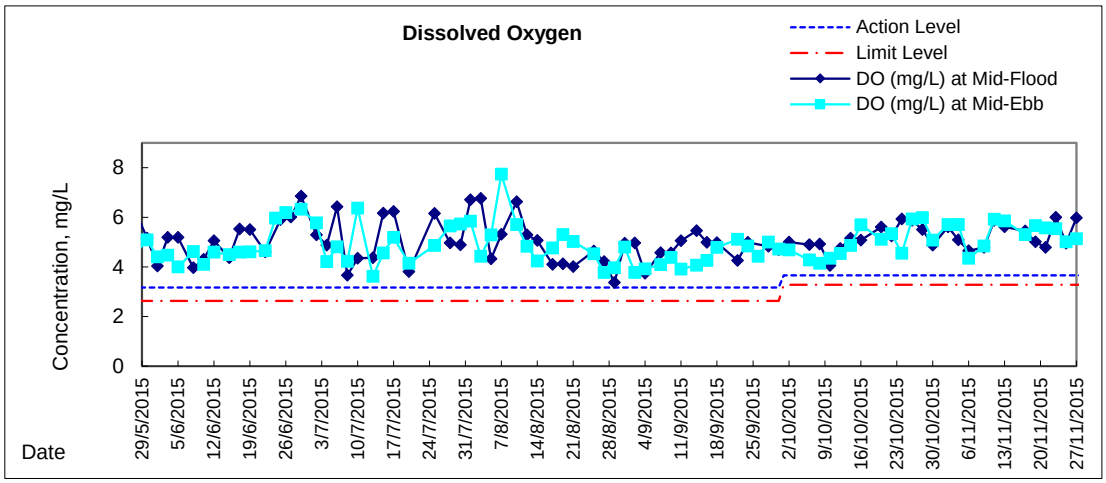
Tide Time	Tide Height (m)
03:31	0.8
10:09	2.3
15:53	0.8
22:30	2.3

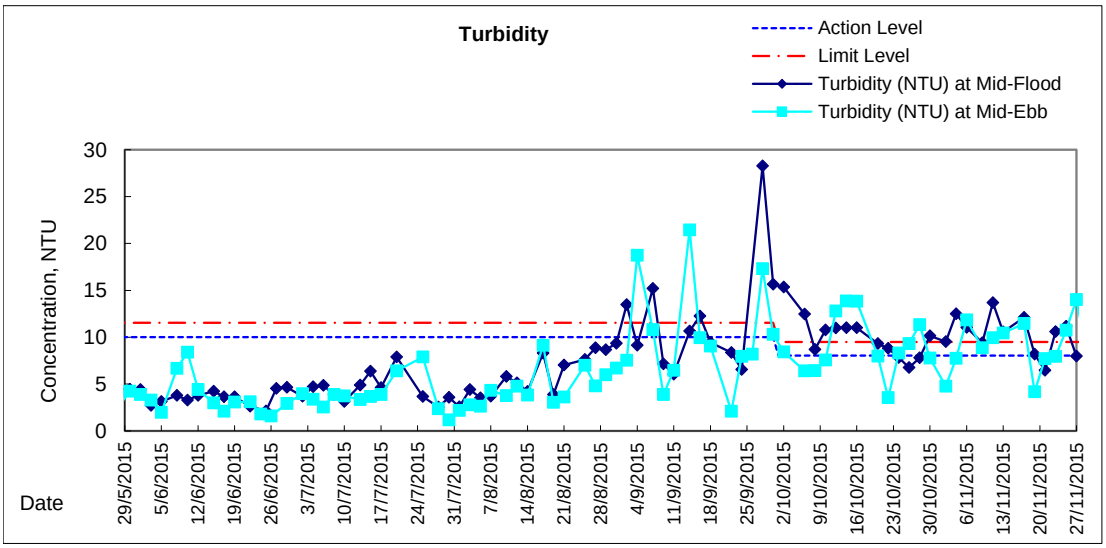


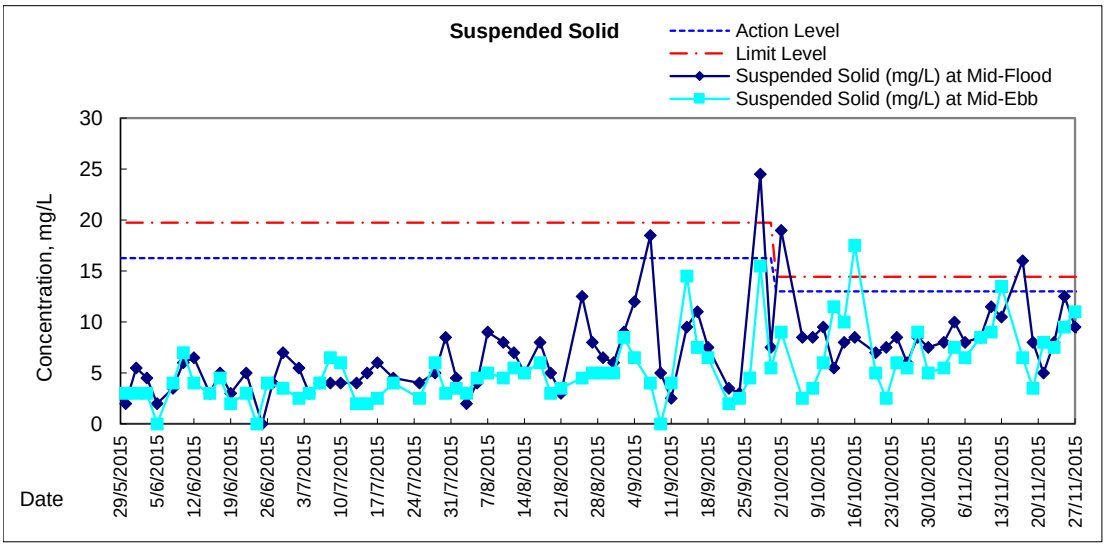
Appendix 4.3

Water Quality Monitoring Graphical Presentations

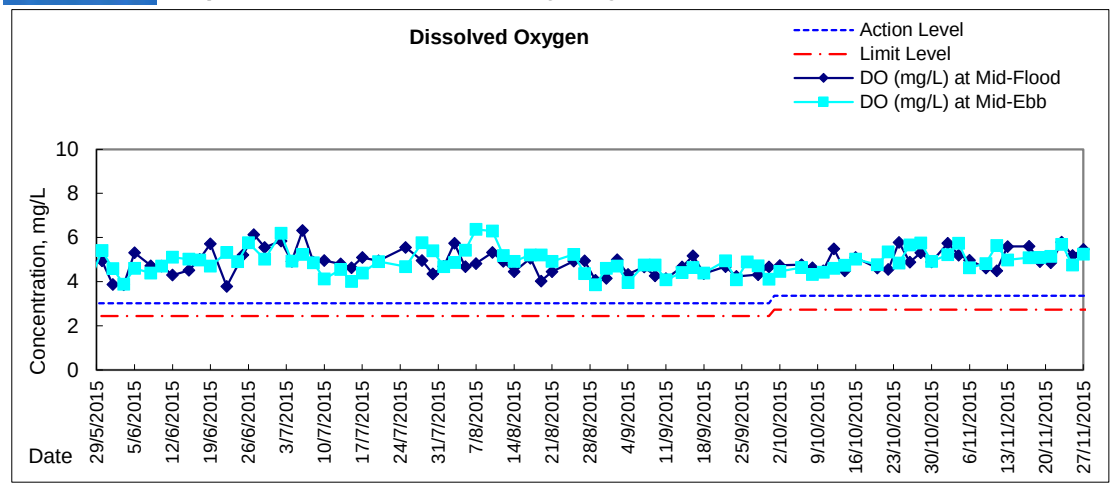
Graphic Presentation of Water Quality Result of WSD19 - Sheung Wan

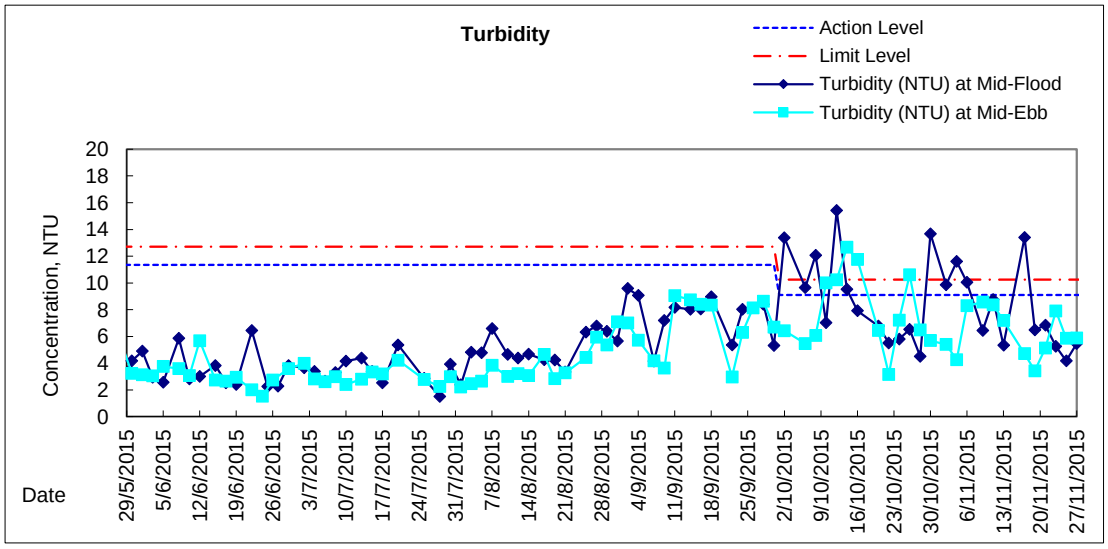


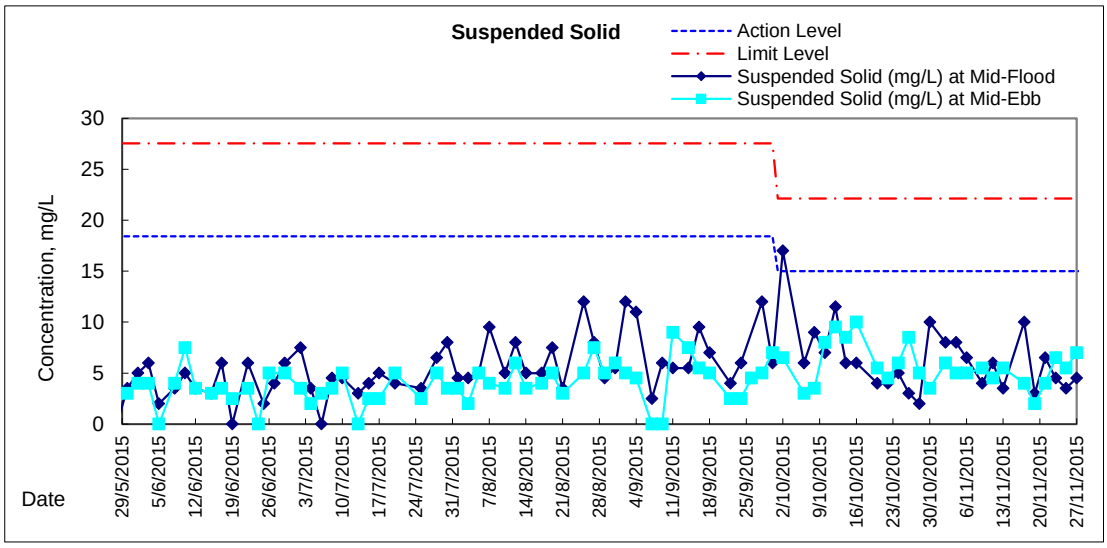




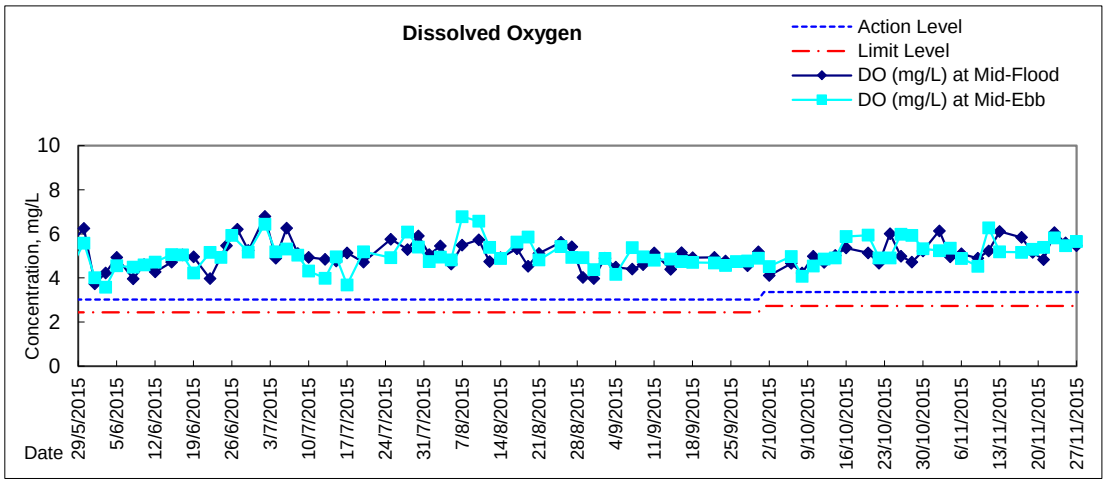
Graphic Presentation of Water Quality Result of C1 - HKCEC

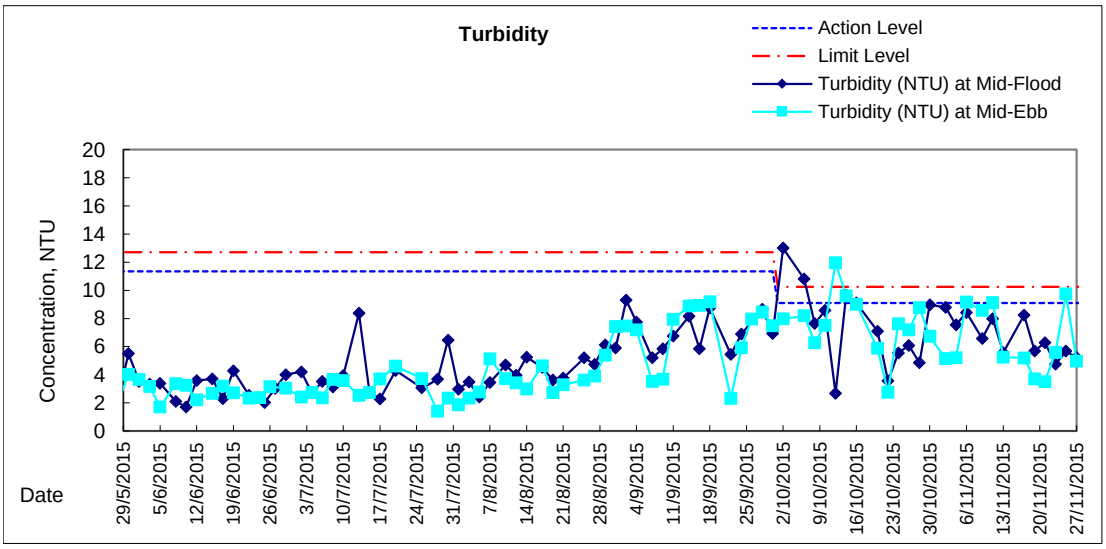


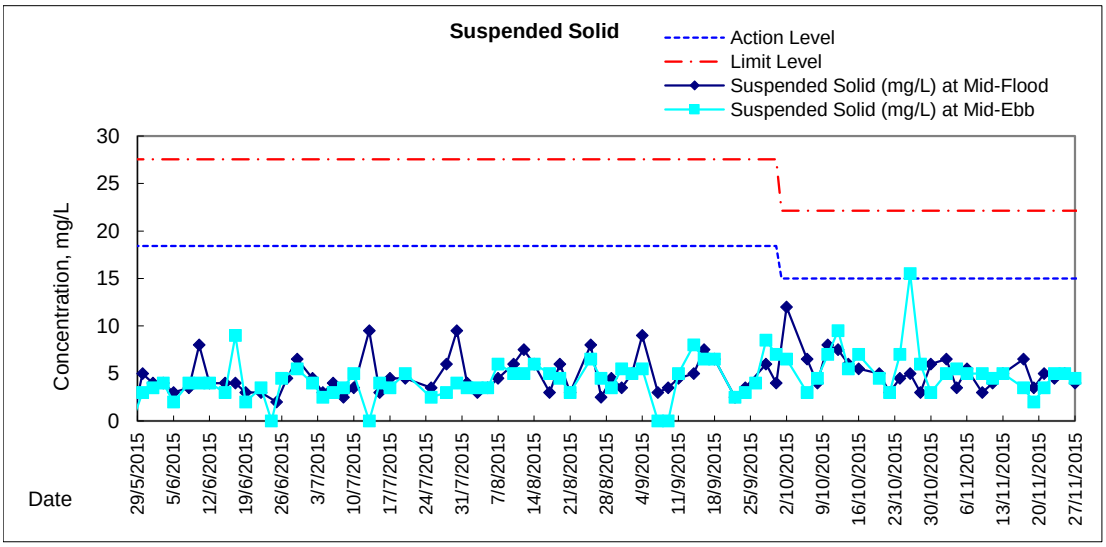




Graphic Presentation of Water Quality Result of P1 - HKCEC Phase I







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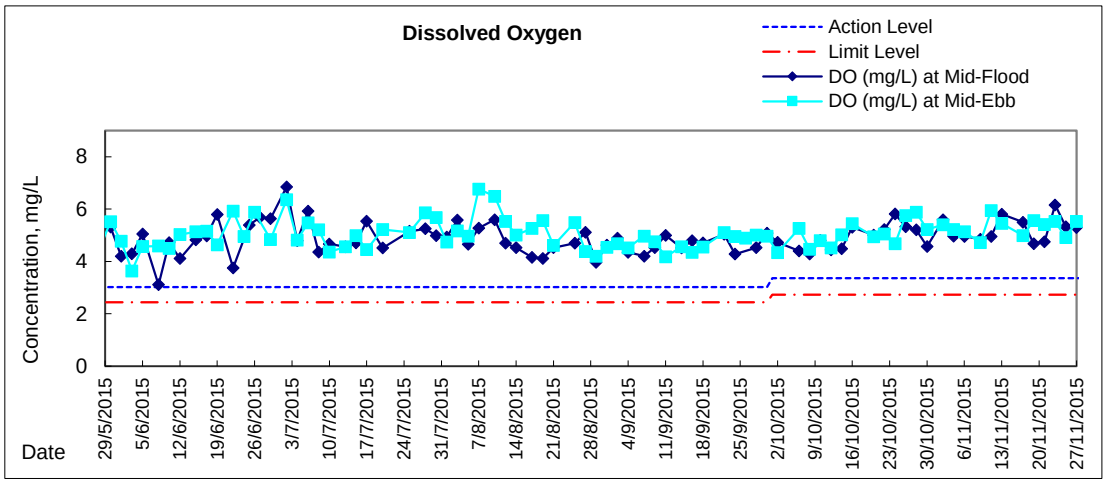
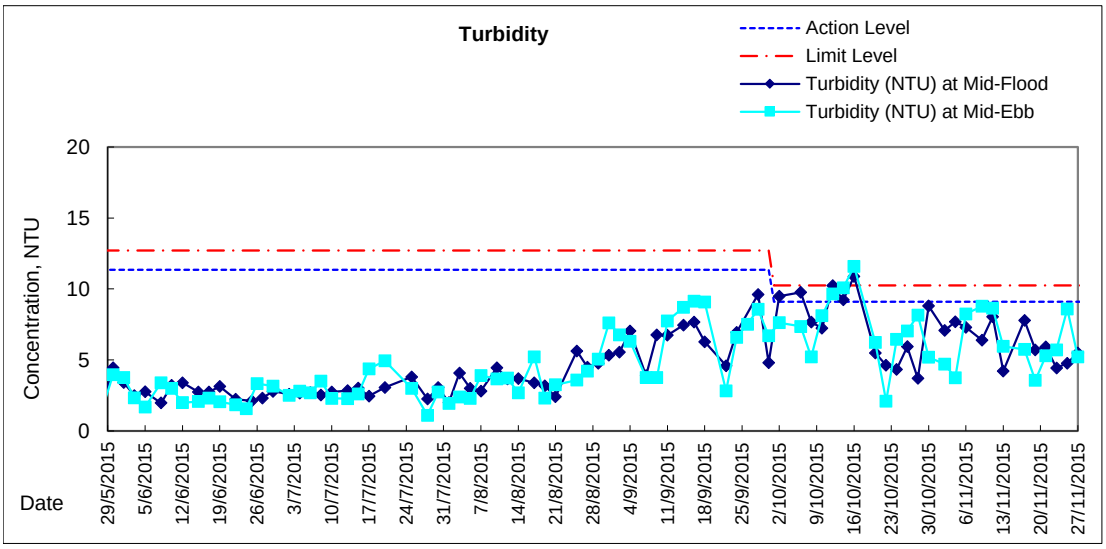
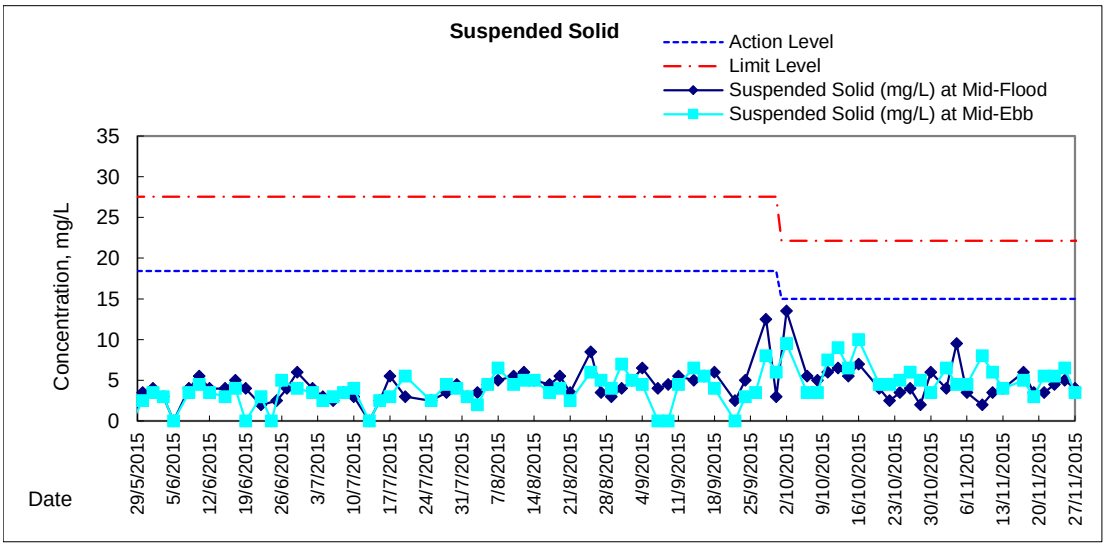
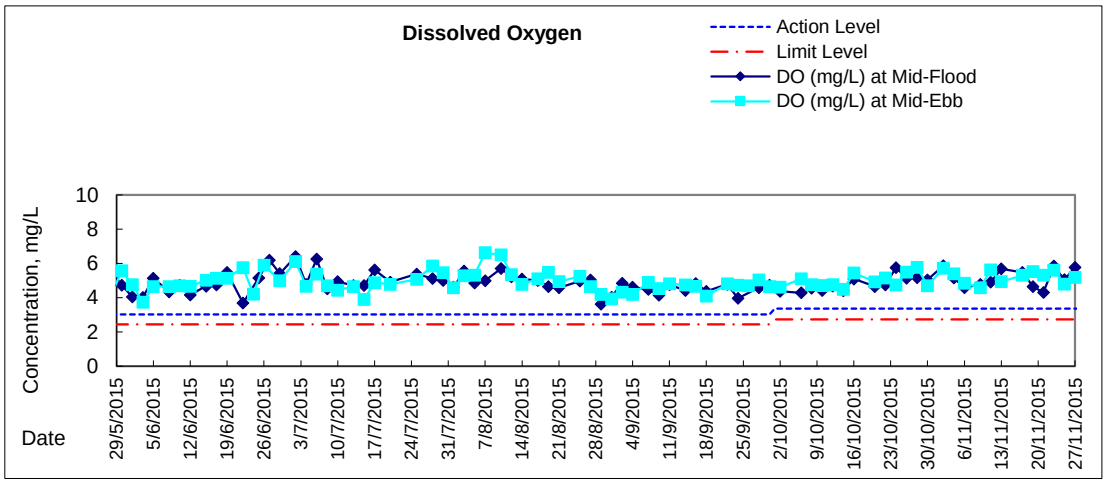
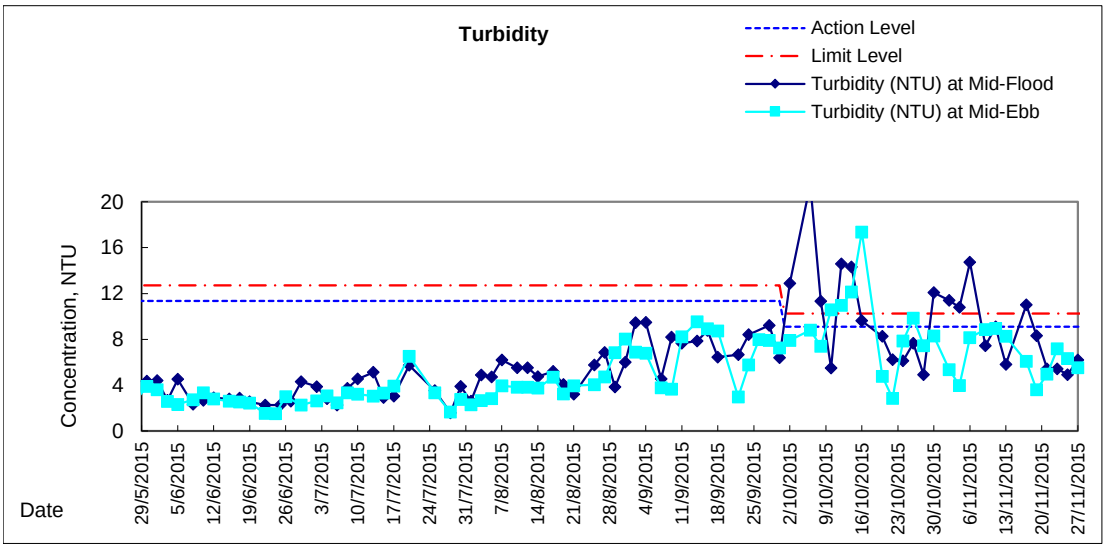


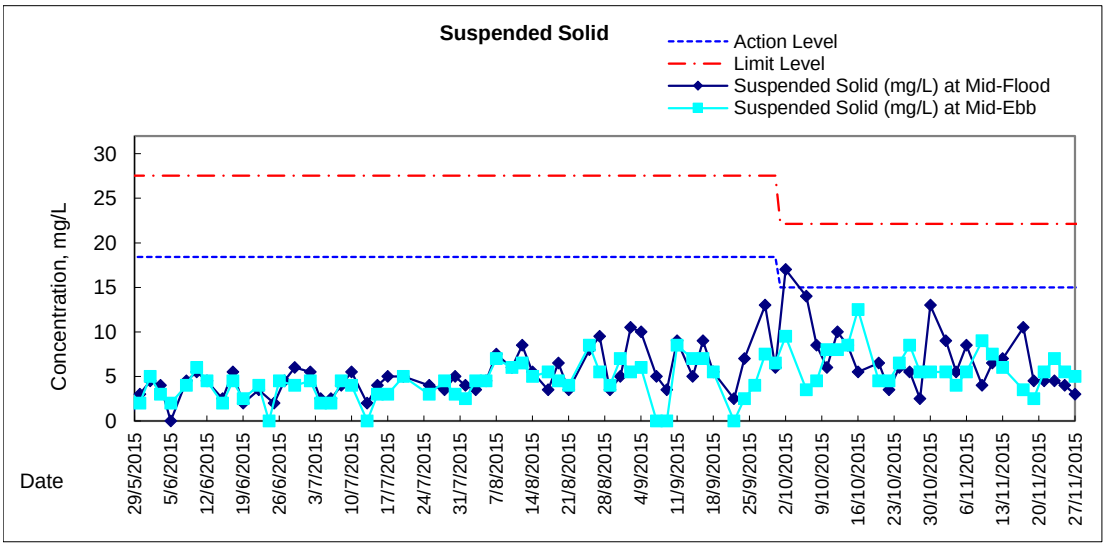




Graphic Presentation of Water Quality Result of P5 - WCT / RT / IT







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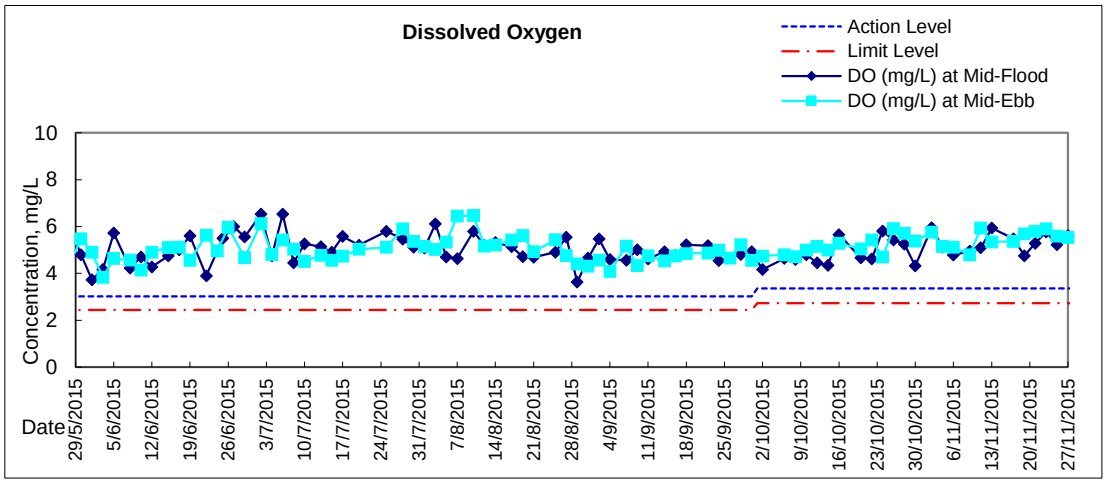

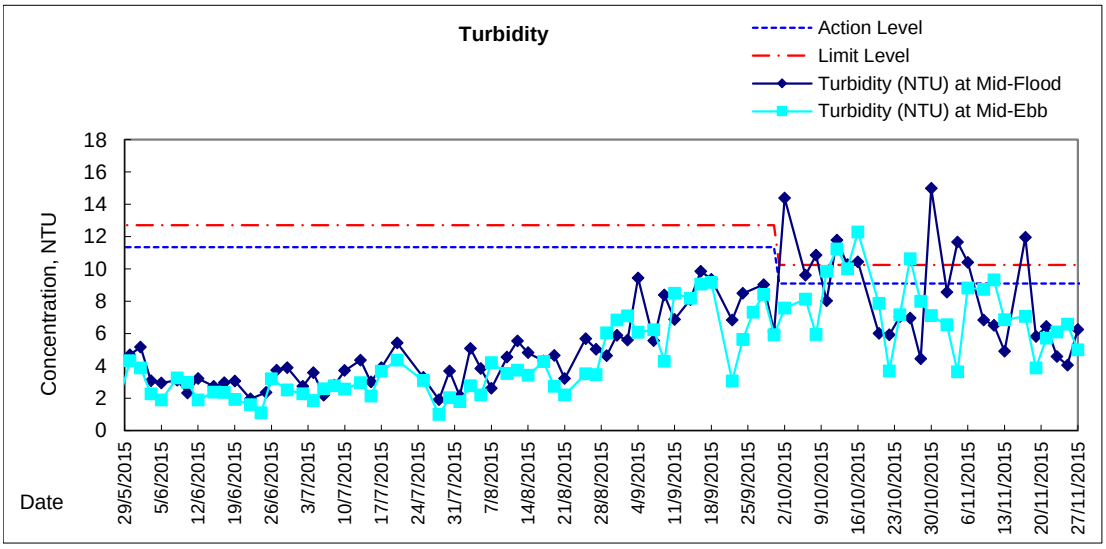

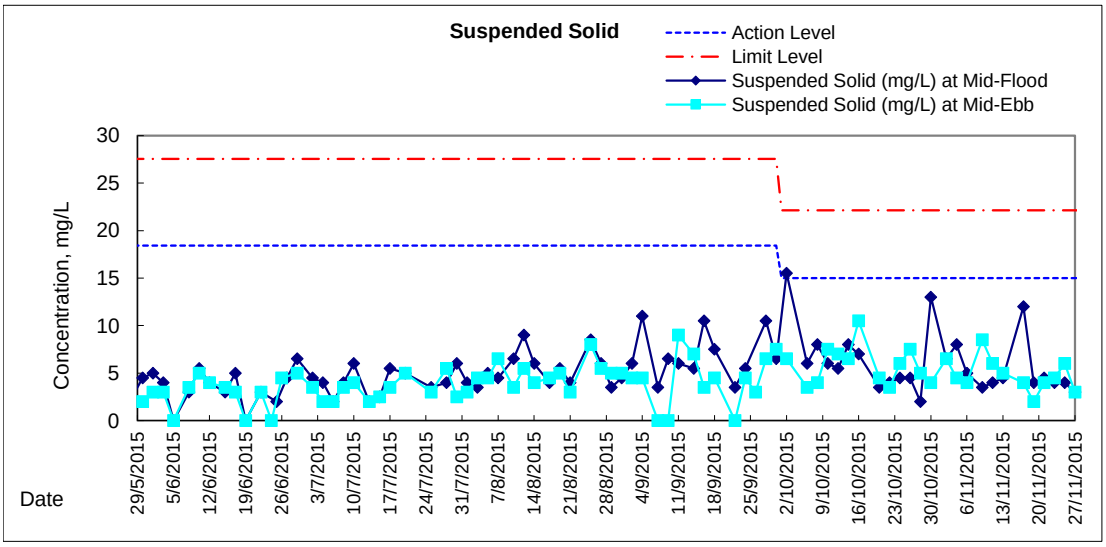

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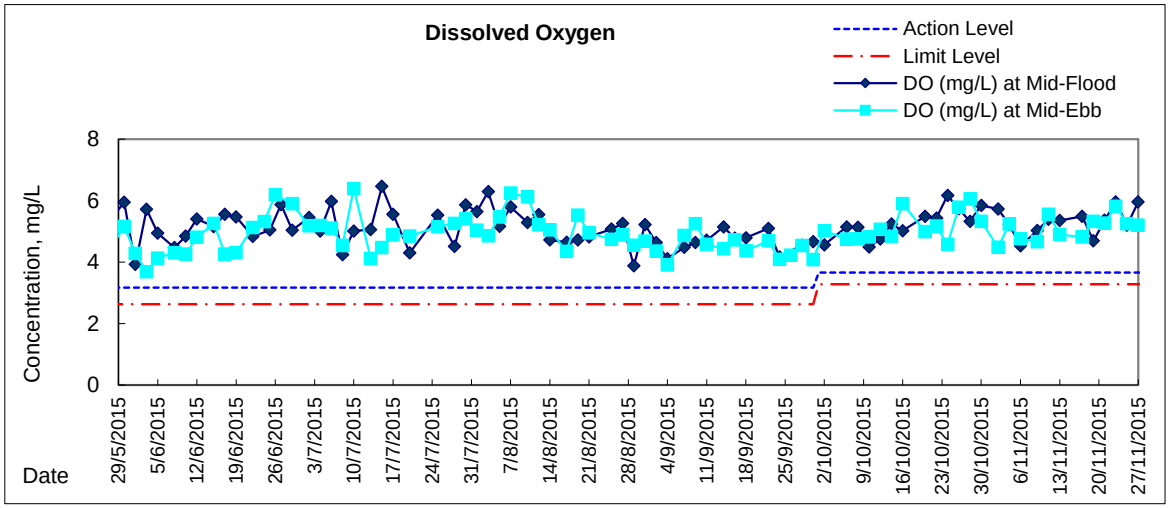
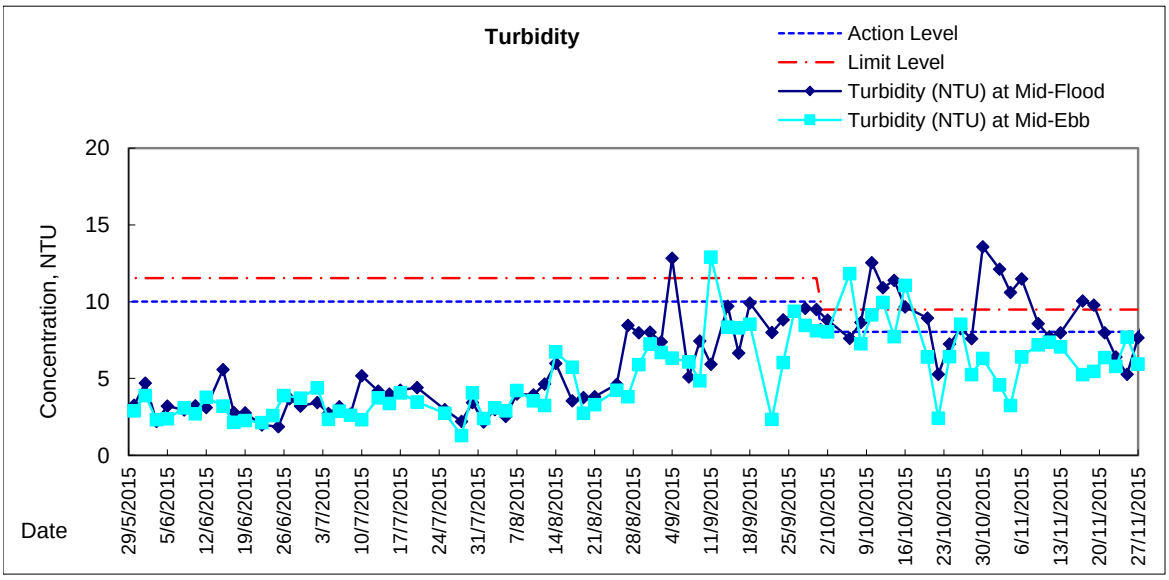
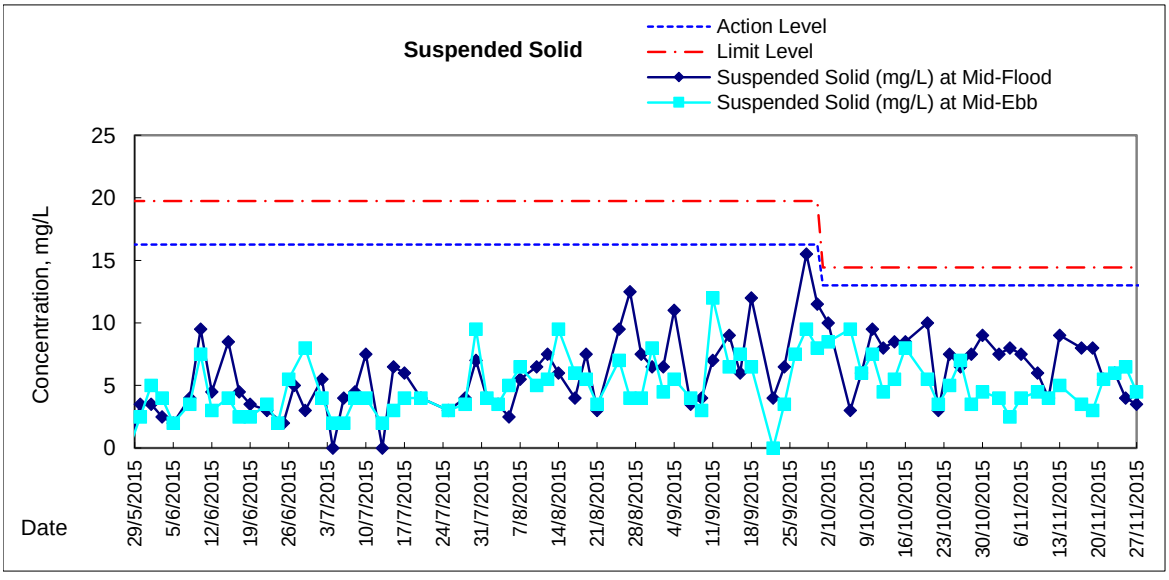
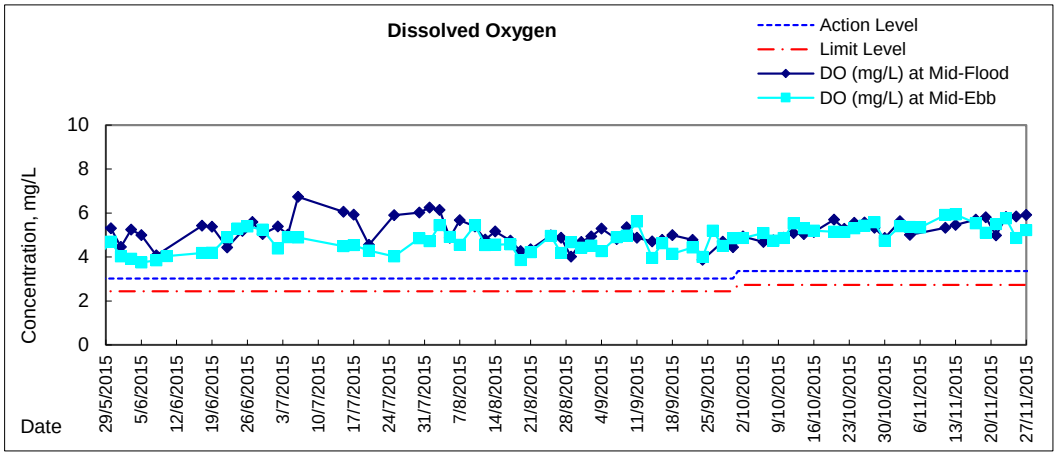
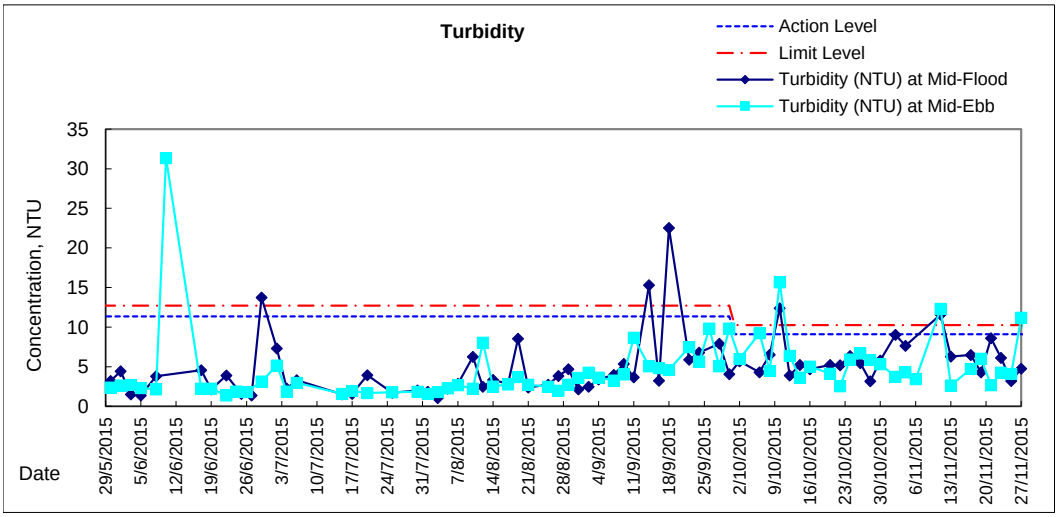


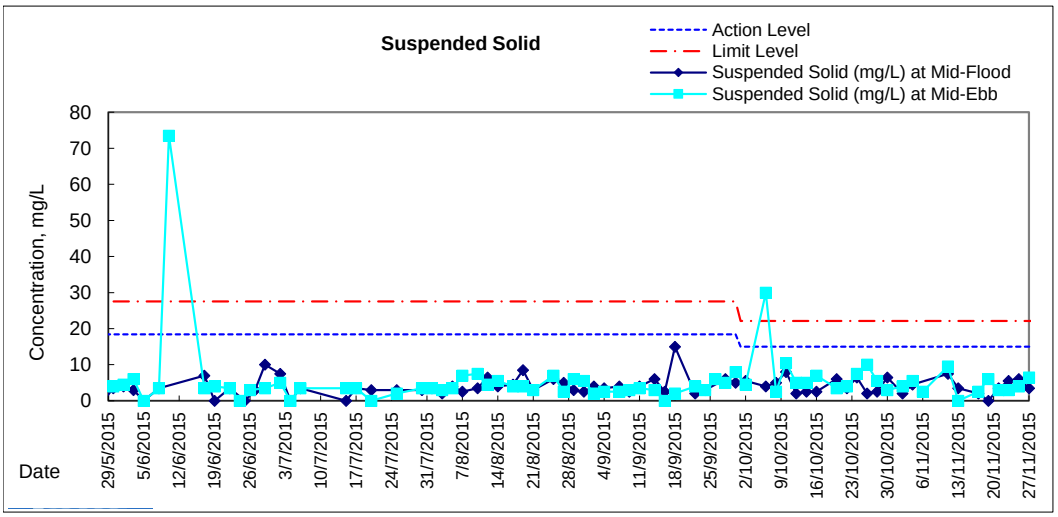




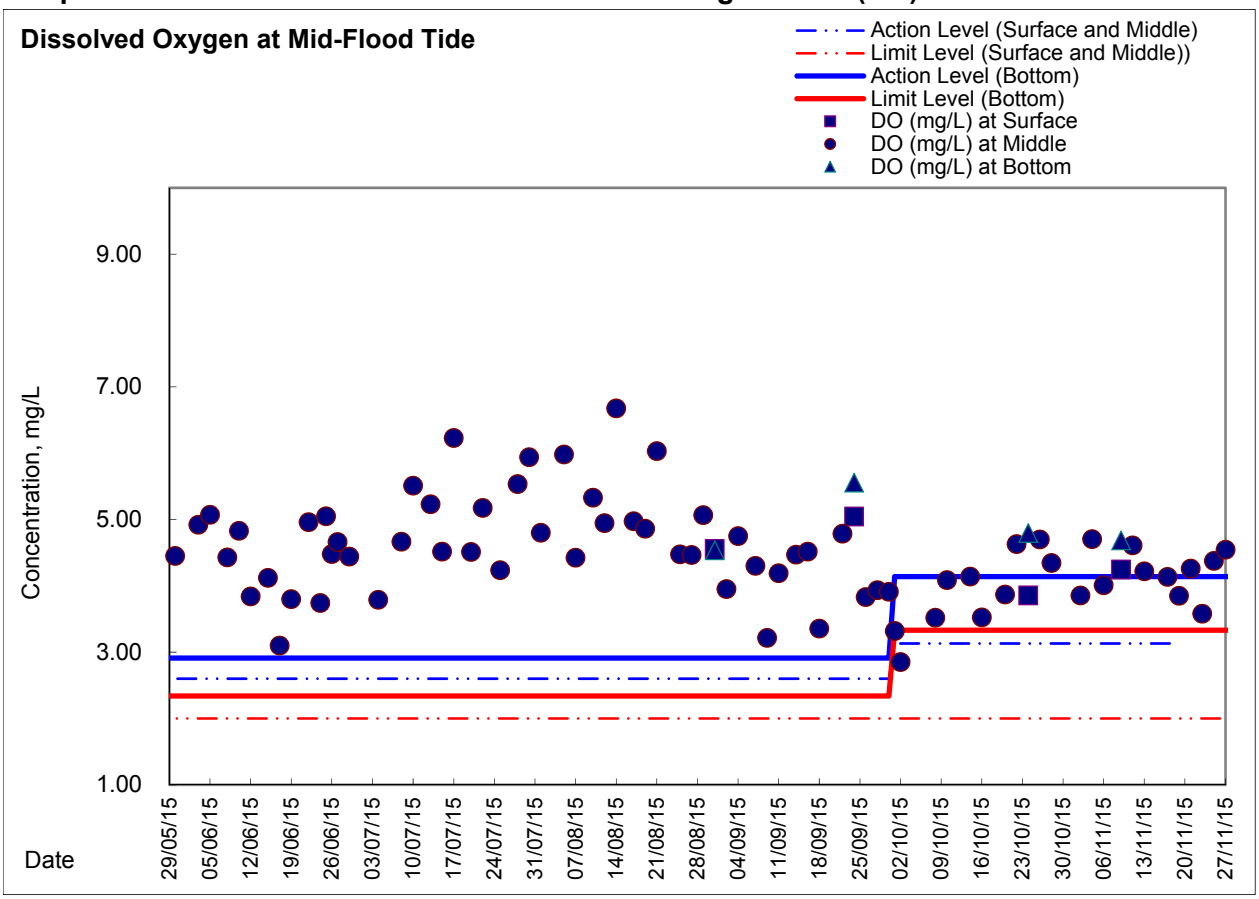
Graphic Presentation of Water Quality Result of C7 - Windsor House

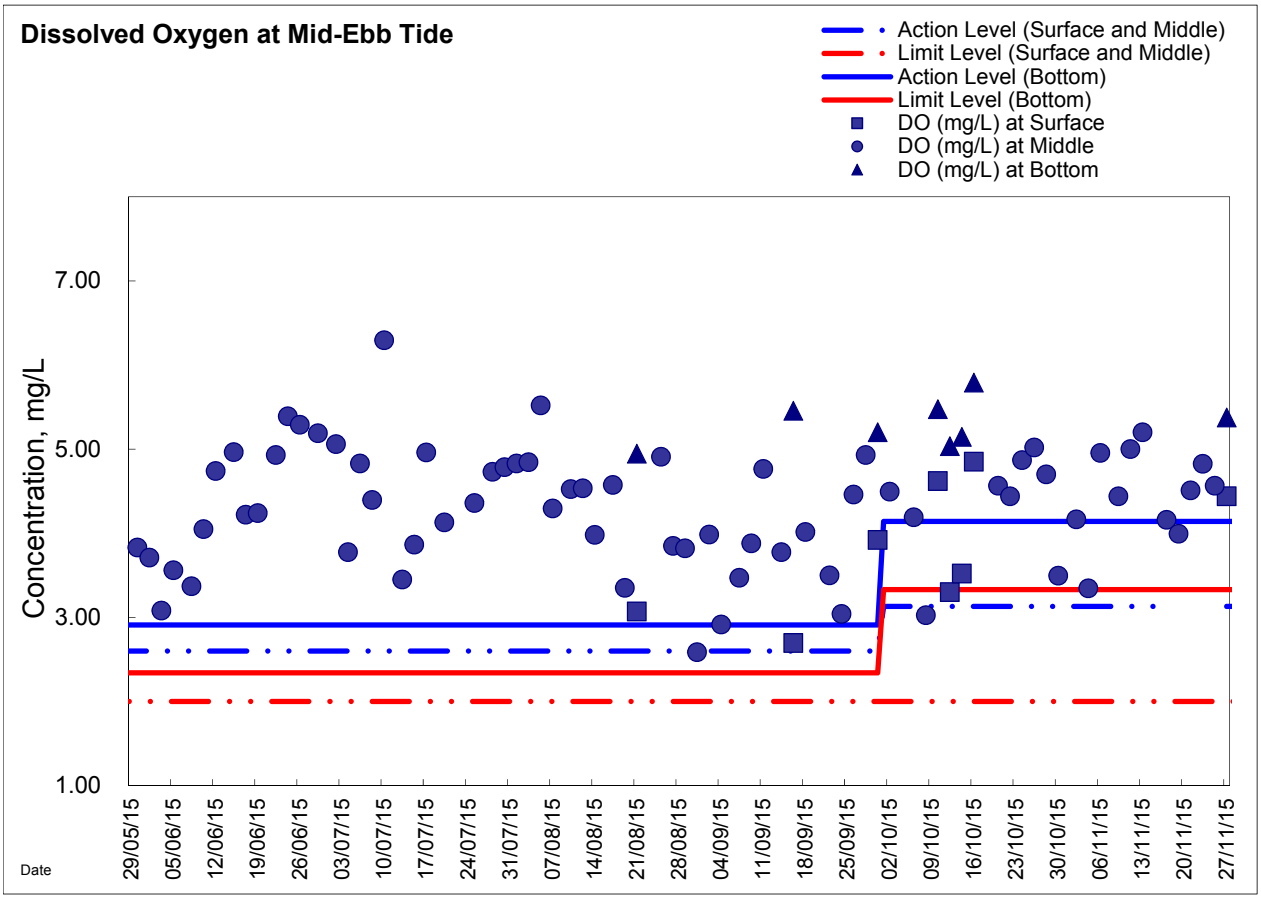




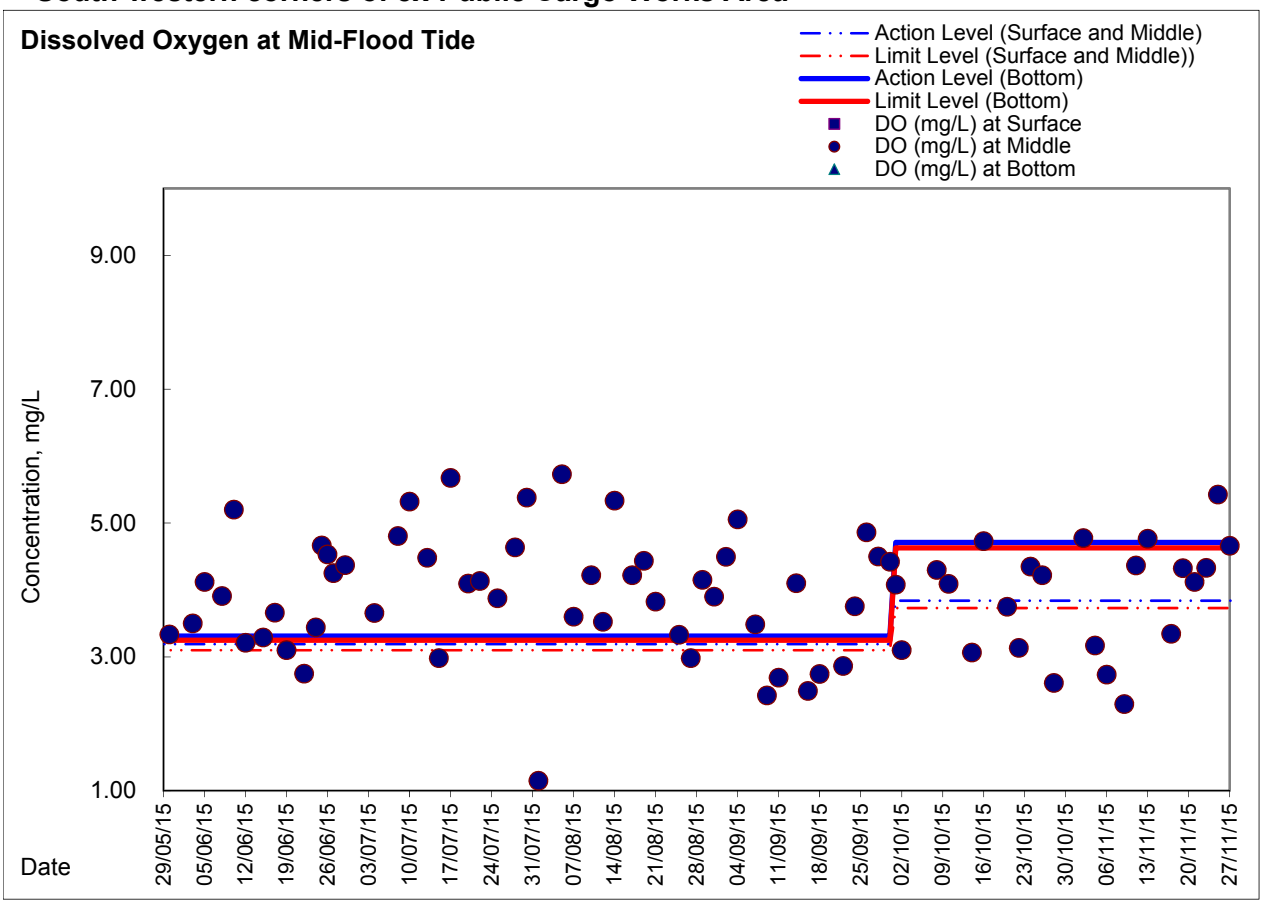


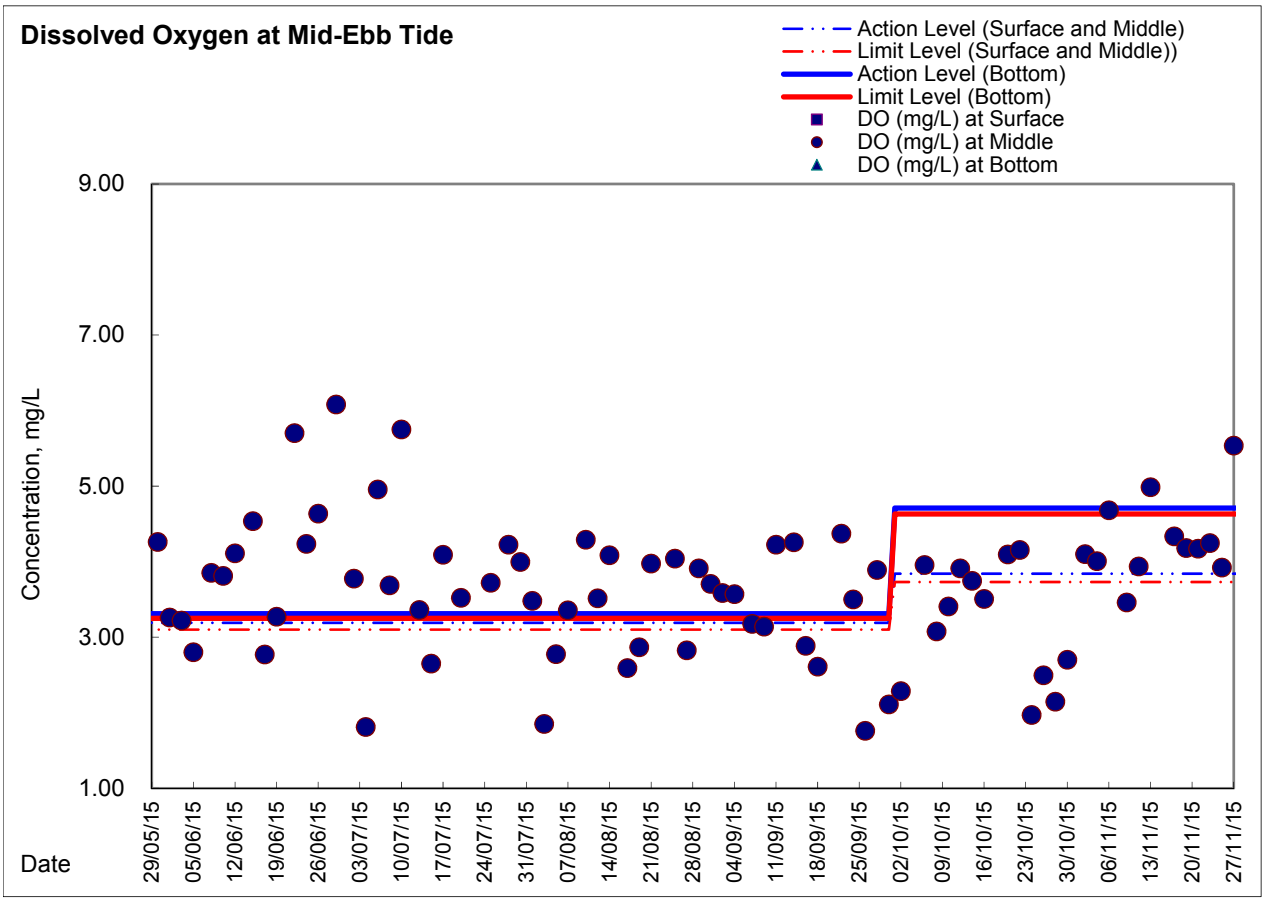
Graphic Presentation of Enhanced Water Monitoring Results (DO) at C6 - Excelsior Hotel



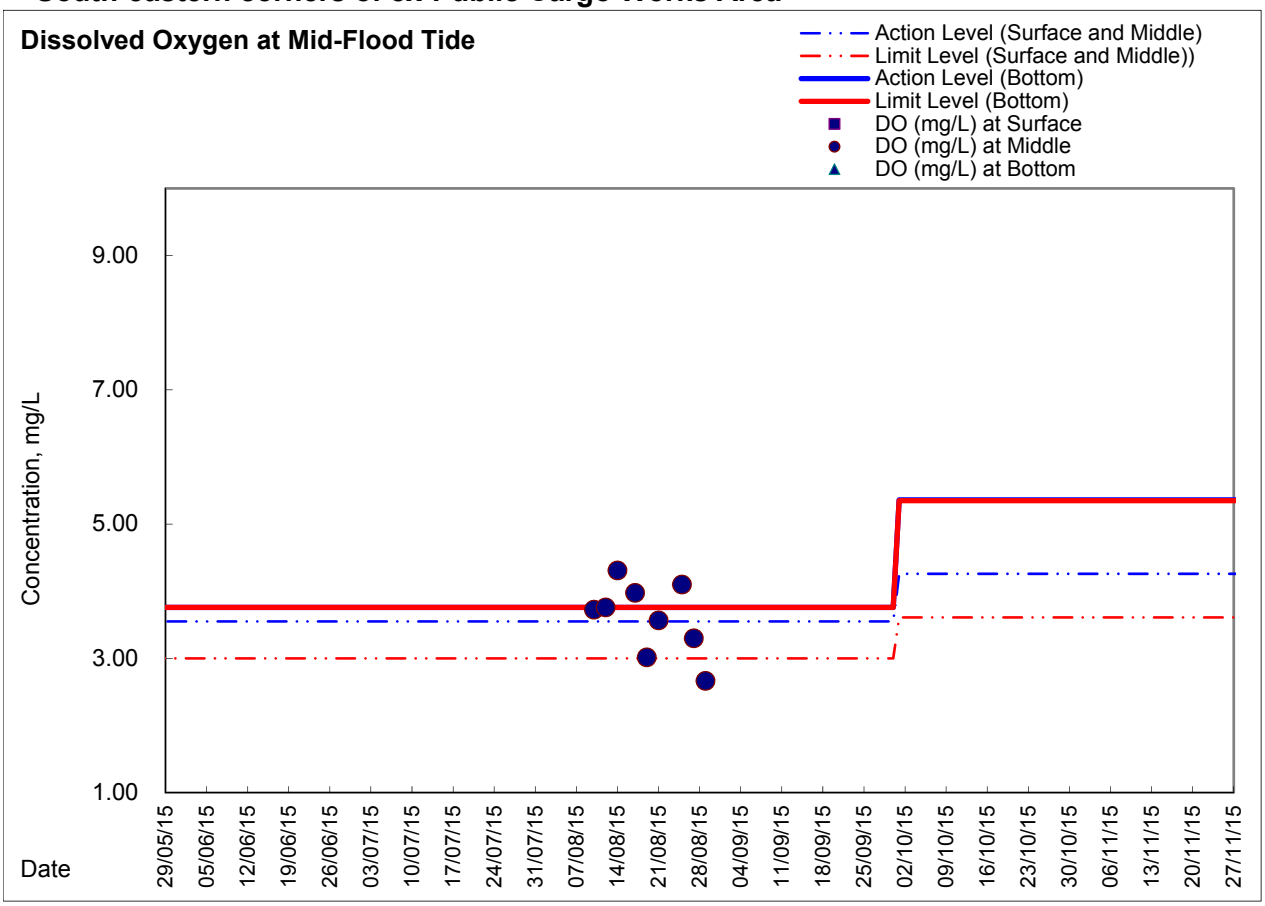


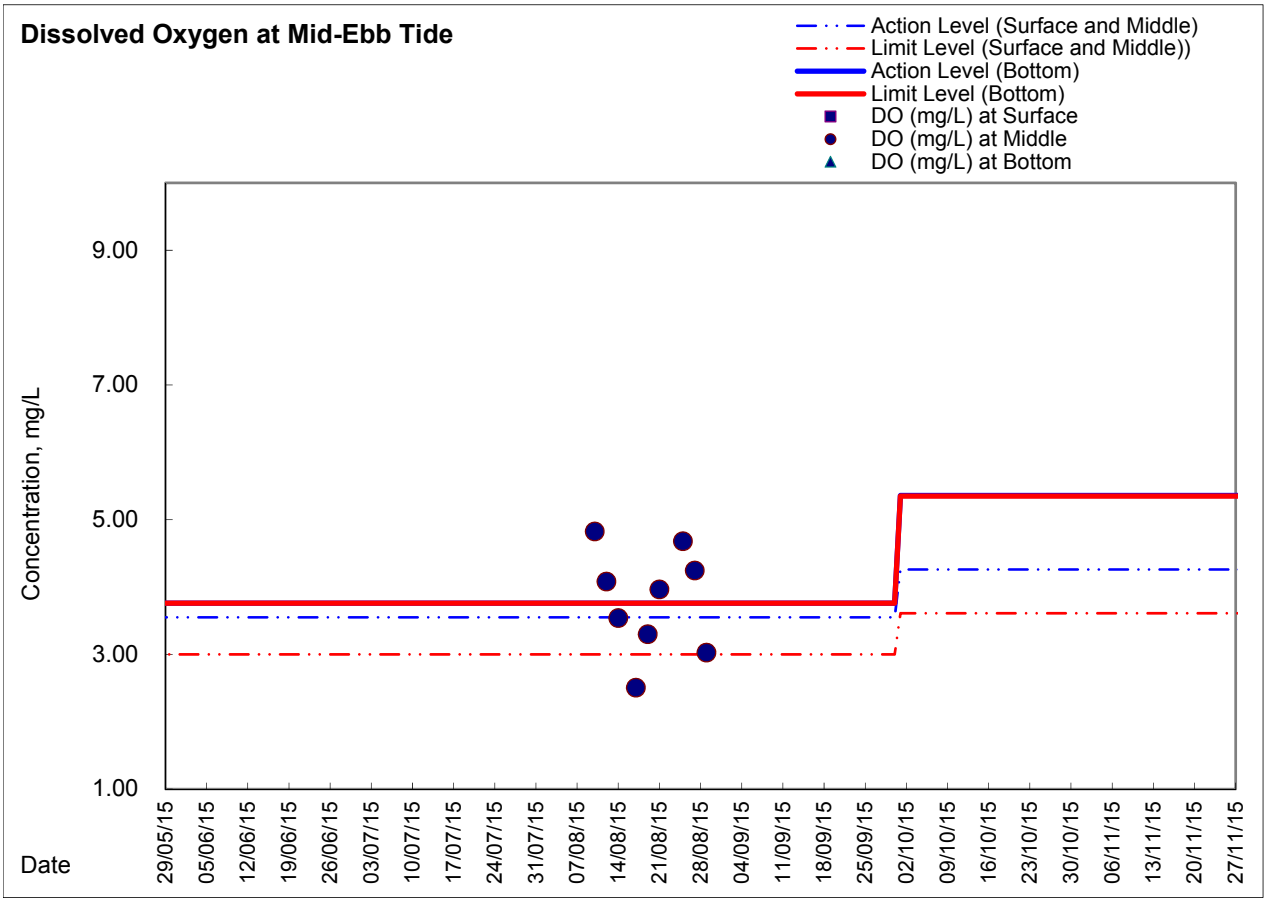
Graphic Presentation of Enhanced Water Monitoring Results (DO) at Ex-WPCWA SW - South-western corners of ex-Public Cargo Works Area





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

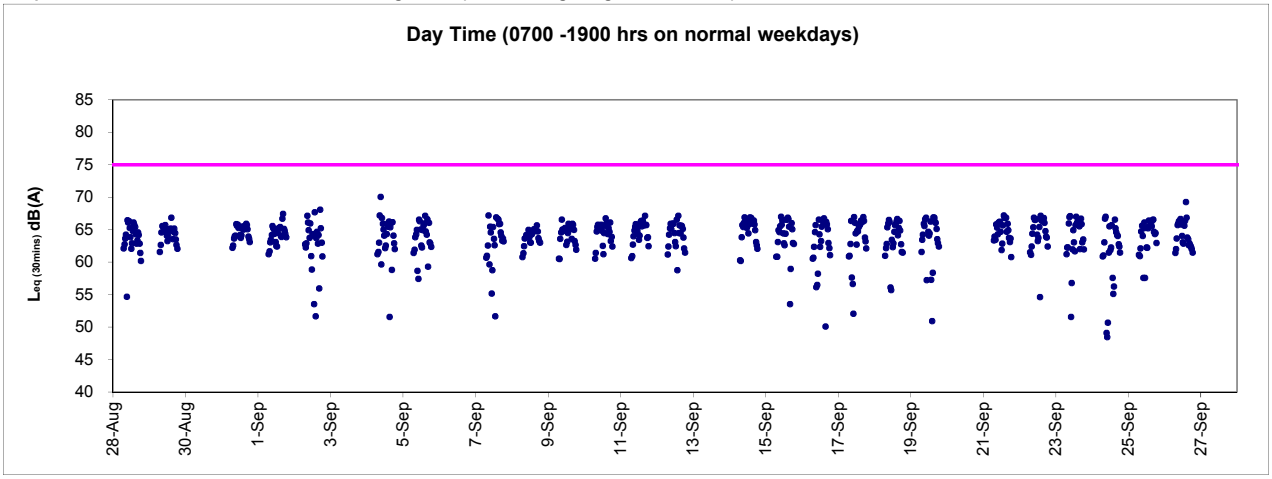


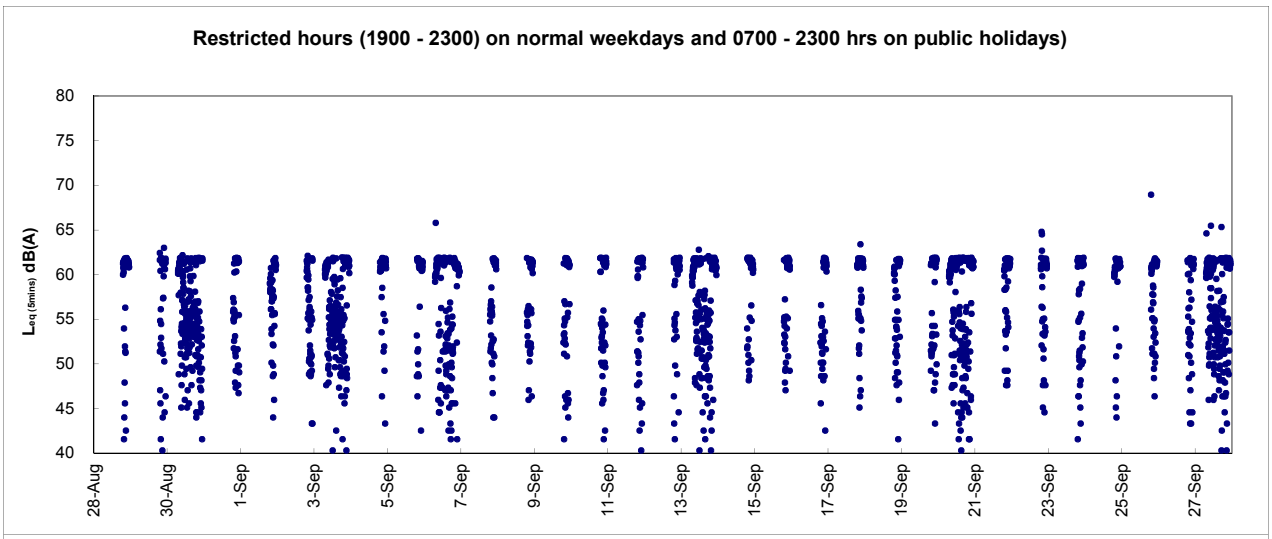


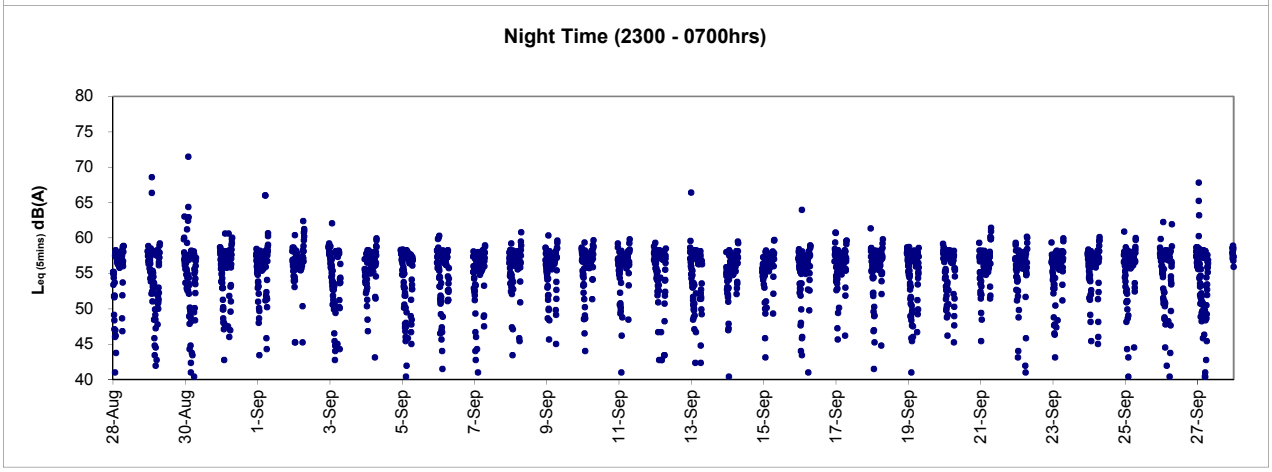
Appendix 4.4

Real-time Noise Monitoring Results and Graphical Presentations

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

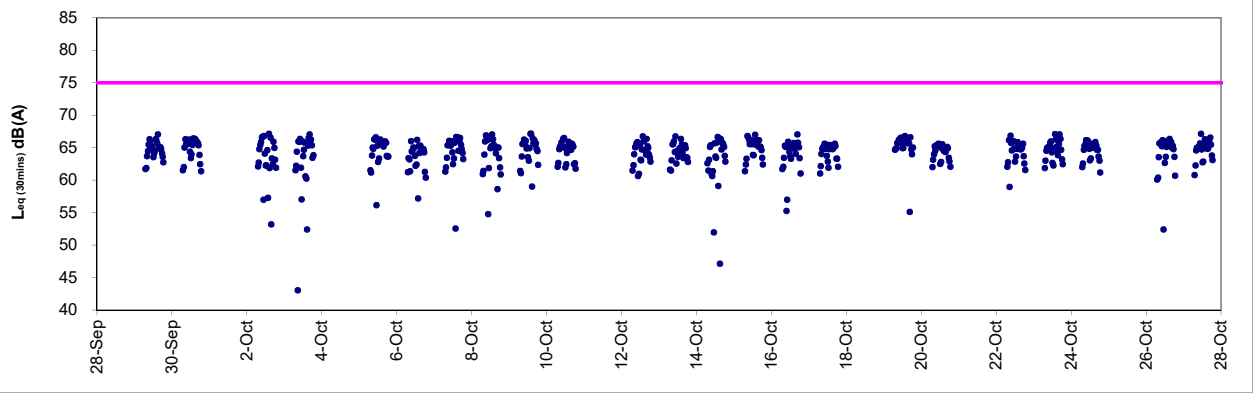




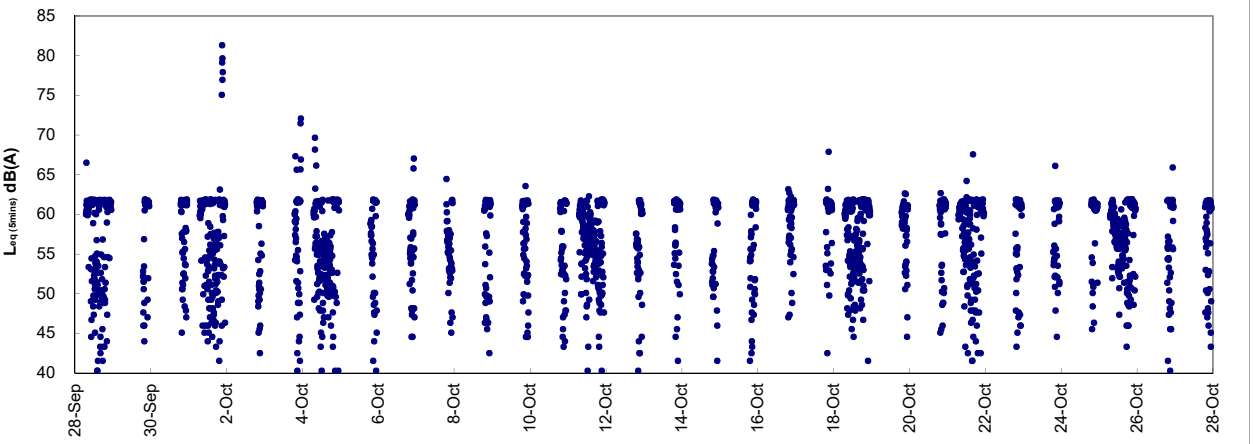


Graphic Presentation of Real Time Noise Monitoring Result (RTN2a- Hong Kong Electric Centre)

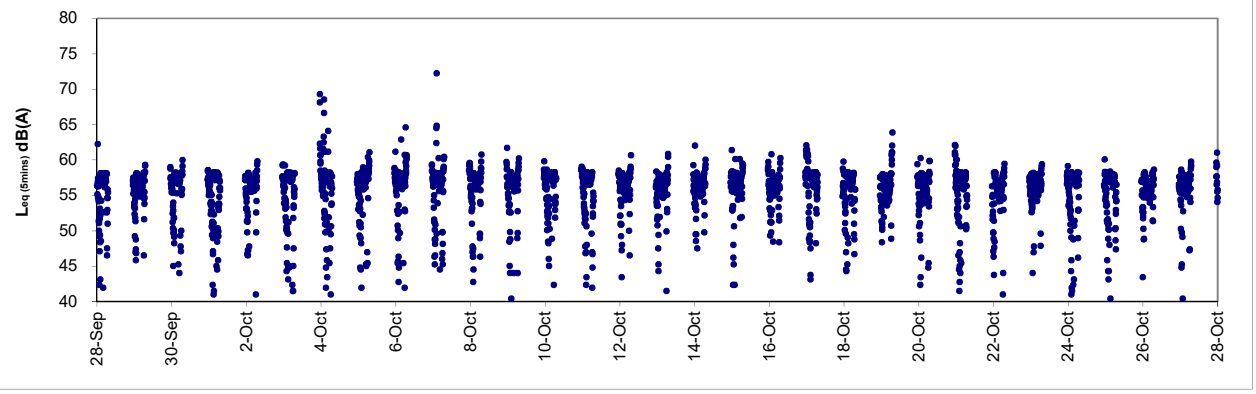
Day Time (0700 -1900 hrs on normal weekdays)



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

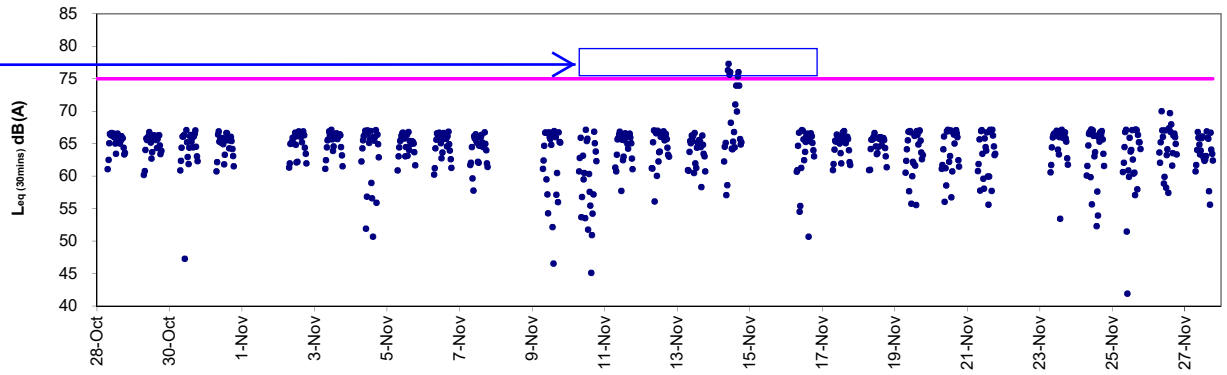


Night Time (2300 - 0700hrs)

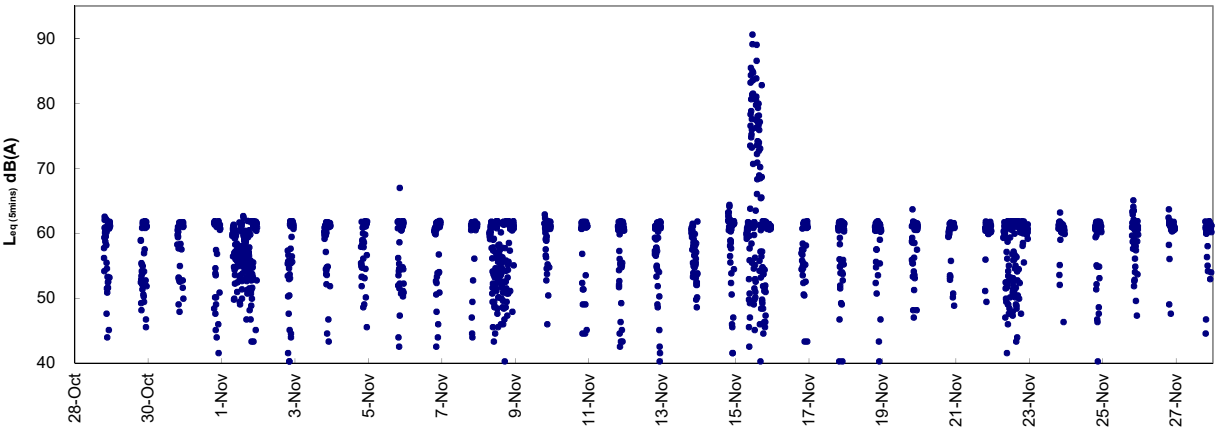


Graphic Presentation of Real Time Noise Monitoring Result (RTN2a- Hong Kong Electric Centre)

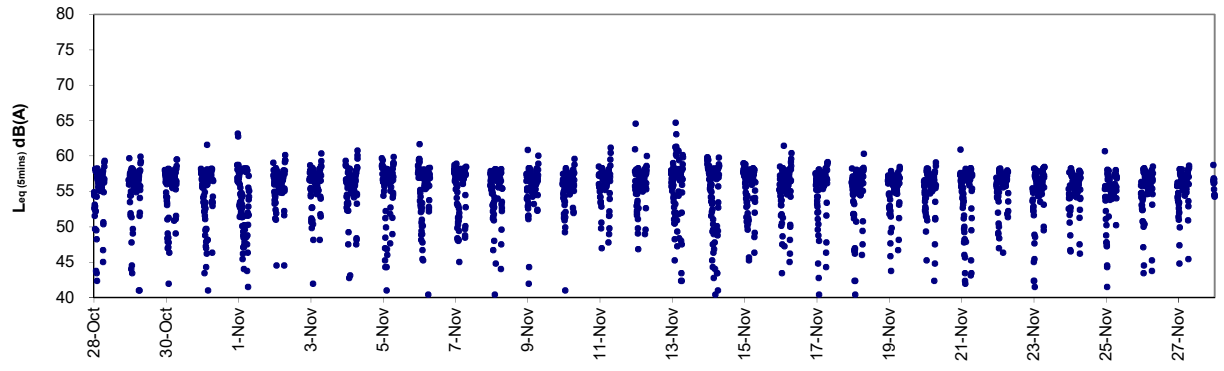
Day Time (0700 -1900 hrs on normal weekdays)



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



Night Time (2300 - 0700hrs)



After checking with Contractor of HY/2009/19, on 14 November 2015, pre-bored piling works was undertaken by Contract HY/2009/19 while mitigation measures including erection of temporary noise barrier was in place. In addition, cooling pipe removal works with saw cutting for Hong Kong Electric Centre was conducted at the roof top by non-CWB Contractor at the roof top location of the Hong Kong Electric Centre immediately next to the noise monitoring station. In view of the mitigation measures implemented and the non-CWB works conducted next to the monitoring station, the exceedances were considered as non-Project related.

Appendix 5.1

Event Action Plans

Event/Action Plan for Construction Noise

EVENT	ACTION			
	ET	**IEC**	**ER**	**CONTRACTOR**
Action Level being exceeded	1. Notify ER, IEC and Contractor; 2. Carry out investigation; 3. Report the results of investigation to the IEC, ER and Contractor; 4. Discuss with the IEC and Contractor on remedial measures required; 5. Increase monitoring frequency to check mitigation effectiveness. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Review the investigation results submitted by the ET; 2. Review the proposed remedial measures by the Contractor and advise the ER accordingly; 3. Advise the ER on the effectiveness of the proposed remedial measures. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Supervise the implementation of remedial measures. (The above actions should be taken within 2 working days after the exceedance is identified)	1. Submit noise mitigation proposals to IEC and ER; 2. Implement noise mitigation proposals. (The above actions should be taken within 2 working days after the exceedance is identified)

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

Event / Action Plan for Construction Air Quality

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

Event and Action Plan for Marine Water Quality

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

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

Appendix 6.1

Complaints Log

Environmental Complaints Log

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
100321a	21/3/2010	ICC Case no. 1-224618029, Ms. Tsang	Location near Tin Hau	Complaint regarding the loud noise and dark smoke in the course of dredging works on 21 March 2010 (Sunday).	1) A valid Construction Noise Permit no. GW-RS0119-10 was granted from EPD since 18th Feb. 2010 for the dredging works which carry out at area for North Point Reclamation. 2) Officer from Marine Department, Police and EPD's officer attended the scene for inspection and investigation. 3) The Contractor (CHEC-CRBC JV) strictly comply all the conditions in CNP and take all mitigation measures in order to minimize the potential impacts to surrounding sensitive receivers. A formal letter was issued out by CHEC-CRBC JV and to explain the status of the recent construction activities. 4) No limit level exceedance was recorded on the noise measurement during day time and evening time noise measurement on 23 March 2010. Additional restrict hours noise monitoring at Causeway Bay Community and City Garden was conducted on 5 April 2010 (Public Holiday). No limit level exceedance was recorded in the monitoring. 5) No further complaints were received from Mr. Tsang in the reporting month. The complaint is considered closed.	Closed
100321b	21/3/2010	Unknown	Near the eastern breakwater of the Causeway Bay Typhoon Shelter	A public complaint and enquiry regarding loud noises emanated from dredging activities on 21/3/2010 (Sunday) until 2220 hours and between 1920-1946 hours in the evening of 22 March 2010(Monday).	1) A valid Construction Noise Permit no. GW-RS0119-10 was granted from EPD since 18th Feb. 2010 for the dredging works at area for North Point Reclamation during general holidays including Sunday between 0700-2300 hours and any day not being a general holiday between 1900-2300hours. It is complied with the condition of CNP. 2) Officer from Marine Department, Police and EPD's officer attended the scene for inspection and investigation. 3) No limit level exceedance was recorded on the noise measurement during day time and evening time noise measurement on 23 March 2010. Additional restrict hours noise monitoring at Causeway Bay Community and City Garden was conducted on 5 April 2010 (Public Holiday). No limit level exceedance was recorded in the monitoring. 4) No further complaints were received in the reporting month. The complaint is considered closed.	Closed

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
100504	4/5/2010	Public complainant received by ICC (ICC case: 1-233384048)	Watson Road	Complaint on the noise nuisance due to the large scale of dredging machine (face to Island East Corridor) in particular the hours 1900 to 0800 and request to reduce the noise level.	1) Contractor for HY/2009/11 was granted valid Construction Noise Permit no. GW-RS0119-10 for their dredging works. Contractor has implemented mitigation measures to reduce the working hour not later than 2230. 2) According to RSS 's record, no more daytime and night time dredging since the departure of the split hopper barge from the workplace on 29 April 2010 at 1900 hrs to 5 May 2010. 3) No further complaints were received in the reporting month. The complaint is considered closed.	Closed
100731	31/7/2010	Mr. Lee received by ICC (CC Case: 1-250702681)	Oil Street to Watson Road	Complaint on the noise nuisance due to the dredging works. Three construction plants were operated concurrently.	1) Contractor for HY/2009/11 was granted valid Construction Noise Permit no. GW-RS0371-10 for their dredging works. 2) There was only 1 grab dredger operated by Contractor within NPR project site area for dredging works. 3) No noise exceedance was recorded at noise monitoring station at Victoria Centre on 27 July and 3 August 2010 during daytime and evening time period. 4) It is considered as invalid from the EP and CNP point of view.	Closed
100812	12/8/2010	Mr. Wong, Harbour Heights (Management) Ltd.	Harbour Heights	Management office received their resident complained on the noise nuisance from the dredging works at the marine works area adjacent to the Harbour Height during the period from 0700 to 2200.	1) Contractor for HY/2009/11 was granted valid Construction Noise Permit no. GW-RS0371-10 for their dredging works. Contractor has implemented mitigation measures to reduce the working hour not later than 2230. 2) No noise exceedance was recorded at noise monitoring station at Victoria Centre on 10 and 17 August 2010 during daytime and evening time period. 3) It is considered as invalid complaint. No further complaints were received in the reporting month. The complaint is considered closed.	Closed

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

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		Garden by ICC (ICC case: 1-266039336)		filling operation was louder than the traffic noise & visual impact was generated due to the spot-light pointing directly to the complainant flat, suspected the filling operation was part of Wanchai Development Phase II; Complainant also raised the same complaint to District Councillor, Mr. Hui on 7 Dec 2010 regarding the night-time noise and suspected earlier start of work at 06:30. Complaint also requested for limiting the plant operating hours from 09:00-21:00.	Reclamation of Central Wan Chai Bypass site area instead of part of Wanchai Development Phase II; • Two derrick barges were in operation at the time of complaint for placing 400 rockfill onto the excavation trench and for levelling the formation level to receive the pre-cast caisson seawall; • Flood light on the control mast of derrick barge have no lighting shields for the prevention of glare of flood lights; • No starting work on 7 Dec 2010 at 0630hours. 2) PME used in restricted hours were checked and confirmed compliant with valid CNP no. GW-RS0870-10. The noise level recorded on 6 Dec 2010 was complied with the noise criteria during restricted hour; 3) It was found that the occasional noise nuisance might be caused by the hitting or scratching onto the rock surface during loading down the grab onto the Grade 400 rockfill; 4) The absence of the lighting shields at flood light results in visual glare to the complainant at night-time. 5) Contractor was advised to minimize the finishing time of placing Grade 400 rockfill at 2100hrs and switch off all unnecessary flood lights apart from the light for the safety and security purpose; 6) No further complaint was received after implementation of proposed measures	
110415	15/04/2011	The resident, Mr Law at Victoria Centre by ICC (ICC#1-281451236)	North Point	A dust generation and a concern of mosquitoes breeding complaint in which suspected the filling operation was part of North Point Reclamation.	1) The concerned stockpile was a working stockpile under Contract HY/209/15 and was covered at night time after work. 2) Water spraying on the haul road and potential dust generating material at least 4 times a day was conducted by contractor that complies with the requirement. 3) It is considered invalid but preventive actions can be taken because the stockpile is relatively large and easily visible by complainant. 4) It was recommended that increasing the frequency of water spraying shall be conducted to all potential dust generating materials and activities. Besides, Contractor should consider to cover the idle part of the stockpile 5) The concern of mosquitoes breeding is out the scope of EM&A, the follow-up action is not reported in this monthly EM&A report.	Closed

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110419	19/04/2011	Ms Chiu at Victoria Centre at Victoria Centre by ICC (ICC# 1-272874759)	North Point	The episode of night noise on 19/4/11 and 20/4/11 at 2:50 am and the noise lasted for 30 minutes per night.	1) According to the RSS's record, there was no construction works undertaken under the EP-356/2009 during the concern time period. 2) There was no abnormal real-time noise monitoring data recorded in RTN1 - FEHD Hong Kong Transport Section Whitefield Depot which is next to the Victoria Centre. 3) It is considered as invalid complaint under this Project.	Closed
110617	9/06/2011	Mr. Law from Victoria Centre Management Office	North Point	An odour nuisance suspected generating from the discharge point – Channel T at Watson Road in part of the site area was related to CWB under Contract no. HY/2009/11	1) The complaint was received by ET on 13 Jun 2011. During the weekly site inspection on 7 and 17 June 2011, there was no any odour impact detected in the site area. 2) According to the site record, there was muddy water discharged from the unknown source at upstream of Channel T during heavy rainstorm. No any site surface runoff to the Channel T and out of site boundary was observed in the inspection. 3) In order to prevent muddy water washing out to the water body under heavy rainstorm, a silt curtain was installed at the outfall of the channel by Contractor. ET confirmed with the Resident Site Staff that a silt curtain was installed at the outfall of the channel to prevent muddy water washing out to the water body under heavy rainstorm. Besides, regular cleaning of refuse in the channel has been conducted by Contractor. 4) A further site investigation on 28 June 2011 revealed that no odour nuisance was detected at the upstream of the Channel T and no source of odour nuisance was identified at site. As such, it was concluded that the source of odour nuisance was not related to the Project works. 5) Although no source of odour nuisance was identified at site, the muddy water and dirt from the unknown source at upstream of Channel T may cause a potential smell during low tide and low water flow. Contractor was reminded to remove the silt curtain at the channel on non-rainy day so as to avoid the accumulation of the sediment and dirt in the water channel.	Closed

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110709	09/07/2011	Mr. Au from City Garden Management Office	North Point	A complaint letter to Contractor HY/2009/11 was raised by Cayley Property Management Limit on 9 July 2011 regarding a series of pump breakdown events at seawater intake of City Garden on 4, 6, 7 and 8 July 2011. A lot of rubbish such as plastic bags, nylon bags, nylon-wire mesh was observed sucking from the seawater intake at the seawater front of Block 7 of City Garden affecting the operation of seawater pump plant.	1) Contractor conducted formation works for installation of caisson seawall at C27, C28, C29 and C30 on 4, 6, 7 and 8 July 2011 and no dredging work was conducted during this time period 2) Water mitigation measures of an 80m long silt curtain at the site boundary in front of City Garden Relocation of silt curtain and silt curtain at the outfall of the channel were provided and maintained to accommodate the site works. All vessels are equipped with rubbish collection facilities and disposed the rubbish regularly. Also, daily cleaning actions had been taken by contractor to minimize floating refuse within the site boundary. 3) Moreover, it has been reported several times that discharged from outfall pipeline outside the site boundary near the intake of the pump maybe considered as another source of rubbish generation. 4) Referring to the record provided by Cayley Property Management Limit, the trapped rubbish was unlikely generated from the construction works. It was considered that complaint is invalid and not related to project.	Closed
110710	09/07/2011	Complainant by ICC (ICC no. 1-301520309	North Point	It was received at 00:56 on 10 July 2011. There was complained a derrick barge unloading rockfill material off the shore facing the Harbour Grant HK Hotel causing noise nuisance.	1) ET confirmed with the Resident Site Staff that the complaint was referred to Contract HY/2009/15 for the loading and unloading of fill material at two barges operation in the sea at around 300m adjacent to Island Eastern Corridor (Oil Street Chainage) where is outside the Site of HY/2009/15 in the period of around 19:45 on 9 July to 1:00 on 10 July 2011. 2) The material loading and unloading operation processed in restricted hours was checked without a valid CNP. It was found that the operation was due to an unexpected water leakage of the hopper barge and considered an incident. 3) According to the incident report provided from RSS on 20 July 2011, around 7:30 pm the barge S22 was inclined slightly and slightly water leakage might occur. Due to marine safety concern, the hopper barge would open the hopper to release the contained materials in order to reduce the weight and stabilize the barge. In consider of slight water leakage, the operator decided to use the nearby Derrick Barge ST32 to help for unload the general fill materials first and the unloading operation was started at around 7:45pm, and end at around 1:00 am. Contractor was reminder to provide frequent check of vessel condition	Closed

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

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				Central-Wanchai Bypass at noon rather than in morning at 7am.	monitoring station at Victoria Centre on 25 July and 4 August 2011 during daytime while breaking and excavation works were undertaken during monitoring. 4) In conclusion, it was related to the construction works under Contract HY/2009/15 and mitigation measure was provided. No further complaint from complainant was received after proposed the mitigation measure.	
110727b	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
	08/08/2011				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. *Remarks: There will be counted as two complaints in this complaint log.*	
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	Closed

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					away from the coastline as far as practicable. Any loose material placed which needed to be placed near the coastline shall be properly compacted or covered as appropriate. To avoid any further environmental deficiency, Contractors shall ensure all necessary environmental mitigation measures will not be missing during site area handover.	
110826	26/08/2011	Grand Hyatt and a complainant by ICC	Wan Chai	Construction noise and vibration nuisance generated from the works at Convention Avenue and inside the HKCEC1 reclamation area.	1) Confirmed with the Resident Site Staff that the construction works were referred to the Contractor HK/2009/01. 2) The Excavator mounted breaker at Convention Avenue and Drilling rig at HKCEC1 reclamation area were the dominant construction noise source during this period. 3) The drilling rig at HKCEC1 reclamation area and excavator mounted breaker at Convention Avenue were then temporary suspended after received the complaint. 4) Investigation revealed that the erected noise barrier (4m cantilevered movable noise barrier for the drilling rig and 1m movable noise barrier for the excavator mounted breaker) were not located close to the plants to provide adequate noise screening. 5) Contractor was advised to avoid concurrent operation of construction plants at site. Further enhancement of movable noise barriers at HKCEC1 and providing noise enclosure for the excavator mounted breaker at Convention Avenue are needed. 6) Further site investigation and checking on 31 August and 7 September 2011 revealed that the implemented noise mitigation measures were in proper and minimize the noise impact.	Closed
110826A	26/08/2011	A complaint letter from Mr. Au of Cayley Property of City Garden	North Point	Harbor front adjacent to their cooling water intake suction which caused 3 times of system breakdown of the sea water pump on 9, 22 and 25 August 2011.	1) It was referred by AECOM to ET on 29 August 2011. Confirmed with the Resident Site Staff that the • construction works were referred to the Contractors HY/2009/11 and HY/2009/19. • The pump is located on the site area of HY/2009/19 • A temporary garbage defender was installed on 23 July 2011 by HY/2009/11 and the shape of the defender was adjusted on 8 August 2011 in order to excluse the outfall. • An ad hoc inspection of the effectiveness of garbage defender was conducted with RSS (CWB project	Closed

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					team), contractor of HY/200911 and HY/2009/19 and IECon 29 August 2011. Inspection report of it was submitted to RSS on 19 September 2011. • Daily cleaning near the water intake was conducted twice a day by contractor HY/2009/19. • In response to City Garden request, the contractors have set up the temporary garbage defender in function and collect the floating refuses, but cannot eliminate all refuses, in particular the refuse coming from the seabed 2) According to the complaint letter from Cayley Property, the outcomes of the preventive measures were not complying wih their expectation. 3) During on-site inspection, floating refuses observed occasionally outside the garbage defender. No conclusion could be made for the source of these floating refuses. On the other hand, some of the refuses were observed floating behind the garbage defender during investigation. 4) All daily cleaning actions had been taken by contractor to minimize floating refuse inside the construction site. 5) It was noted that the cooling water intake was accessible to the public. As such, fish breeding and fishing activities were observed even though a notice has already hoisted. Also, tripping of rubbish by the passers-by could result in a lot of rubbish accumulated around the intake point. 6) Referring to the record provided by CPML, there were a lot of nylon/ plastic bags and nylon wire mesh that matched those rubbishes generated from the public activities. 7) Contractors have fulfilled the requirement of site cleanness and no exceedance was recorded during Water Quality Monitoring. It is consider the cause of this complaint is not related to project and environmental issue in this project as well. No more complaint received after ad-hoc inspection	
111014	14/10/2011	The complainant, 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	Closed

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					at the site. However, the polluted fumes and exhausted from the excavator was caused due to insufficient maintenance of the plant after using at site. 3) After receiving the complaint, the excavator was then removal off-site for checking and maintenance works on 17 October 2011. 4) Contractor was reminded to enhance regular checking and maintenance to all plants at site. 5) RSS has replied to the complainant on the arrangement of the measures taken on 17 October 2011. Complainant was satisfied with the response and follow-up action taken by the Contractor.	
111104	04/11/2011	Mr. Liu from LCSD complained via Contractor Complaint Hotline	Wan Chai	Complain about a tree near the site of pipe installation works outside Wan Chai Swimming Pool at Harbour Road, the status is not healthy and roof ball of two trees inside the site near Renaissance Hong Kong Harbour View Hotel at Convention Avenue were half cut.	1) ET confirmed with the Resident Site Staff that • A tree near the site of pipe installation works outside Wan Chai Swimming Pool at Harbour Road is the Tree no. TA1122 under Contract no. HK/2009/02. Leaves of a branch of this tree were shrivelled. • Two trees inside the site near Renaissance Hong Kong Harbour View Hotel at Convention Avenue are the tree nos. A160 and A161 under Contract no. HK/2009/01. Part of roof ball of these two trees was covered by the metal plate. 2) Independent Tree Specialists for these two inspected the trees. Contractor HK/2009/01 has taken the measure as recommend downgrading the soil level around the trunk base. Reinstating of the ground works will be conducted in mid-December 2011. For the tree no. TA1122 under Contract no. HK/2009/02, the brown leaves were removed and fenced the tree with orange net is provided to prevent damage of tree trunk by construction works. The distance between the tree and the edge of the trench is kept approximate 2m. Two Contractors were reminded to carry out regular watering to the trees within their site area.	Waiting RSS respond
111106	06/11/2011	Police officer	Wan Chai	Construction noise generated from the site at about 6:30 a.m on 6 November 2011 and require to stop the machine operation	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	Keep in view for three months from the date of complaint recevied

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					CNP was checked by the police officer. 2) ET confirmed with the Resident Site Staff that same issue was also raised out by RSS at about 7:00a.m on the same day. Besides, it was confirmed that there is no valid Construction Noise Permit for the conducted construction works in the period between 2300 and 0700. 3) Due to insufficient communication between Contractor HK/2009/01 and their Korean Sub-contractor, Korean Sub-contractor had not notified to Contractor before carrying out the inspection of the BC cutter, hoists and bentonite pipes at about 6:00a.m to ensure no damages and all the pipe joints should be tightened and in good position. 4) Contractor was advised to enhance the communication between Contractor and sub-contractor and provide sufficient environmental training to all foreman and operators on restricted hour operation. Futhermore, Construction Noise Permit should be checked and in place for the construction works during restricted hour 5) This complaint was considered in relation to the conducted construction works during restricted hours without valid Construction Noise Permit. No more construction works were conducted during night time period. The construction works will be conducted in accordance with the time period stated in valid CNP. This complaint will be kept in view of any follow-up action from the relevant government activities.	
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 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	Closed

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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					fluid was originated from the worksarea under HY/2009/19 was considered available. Nevertheless, the Contractor was reminded that paints stored on site shall be properly labelled and stored in sealed container at weather proof location to avoid potential spillage.	
151028	26 Oct 2015	A public complaint regarding construction noise impact referred by EPD was received by ET on 28 October 2015 (EPD Ref:H05/RS/00027330-15 Dated 28 October 2015)	Construction Site next to ex-Wan Chai Ferry Pier	Operation of grab dredger at construction site near the ex-Wan Chai Ferry Pier from around 0100 to 0400 hours on 26 October 2015 caused noise nuisance.	According to the relevant site records under Contract HK/2009/02, from 01:00hrs to 04:00hrs on 26 October 2015, rock filling was conducted under Contractor of HK/2009/02 at WCR3 Area. Total one grab dredger was in operation. Mitigation measures including provision of steel sheeting screening to the power generation part of the grab dredger was implemented by the Contractor of HK/2009/02 and the relevant Construction Noise Permit GW-RS1121-15 for the concerned construction works was in place. The construction activity conducted under Contract HK/2009/02 during the concerned period was in compliance with the statutory requirement. Nevertheless, the Contractor was reminded to upkeep the site control system for construction works carrying out at restricted hours and night time for Construction Noise Permit compliance in view of the nearby public concern.	The interim report would be submitted to EPD on 05 November 2015
151116	13 November 2015	A public complaint regarding water quality referred by EPD was received by ET on 16 November 2015 (EPD Ref: H05/RS/00029126-15)	Construction Site at HKCEC and seafront outside Lung Wo Road	Muddy water was discharged from the construction site at HKCEC and dispersed to seafront outside Lung Wo Road on 13 November 2015 afternoon. The complainant also alleged that the deployment of the silt curtain did not follow the design requirement under the environmental permit that the curtain should be hanged to seabed level	Based on the site records, rock mound trimming works was conducted under Contract HK/2012/08 at HKECE2 area on 13 November 2015 and mitigation measures including provision of localized silt curtain around the works area was implemented by the Contractor. Follow-up inspection was conducted during weekly environmental inspection on 17 November 2015, both outer layer silt curtain and localized layer of silt curtain around the active works area were observed deployed while the localized silt curtain deployed around the marine works area was observed partially opened for marine access. Despite no muddy dispersion was generated around the localized silt curtain enclosed area, the Contractor was advised to promptly improve the condition of the silt curtain to ensure the effectiveness of the mitigation measure deployed and to ensure the silt curtain is closed after marine vessel movement. Based on further review on the current construction stage at HKECE2, the dredging works and trench filling works were completed and filling works were conducted behind seawall or temporarily seawall in form of rockbund, the outer layer of silt curtain currently serves as the additional mitigation measure to	The interim investigation report would be submitted to EPD on 1 December 2015.

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

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
					further information and investigation summary shall be further included in December reporting month.	

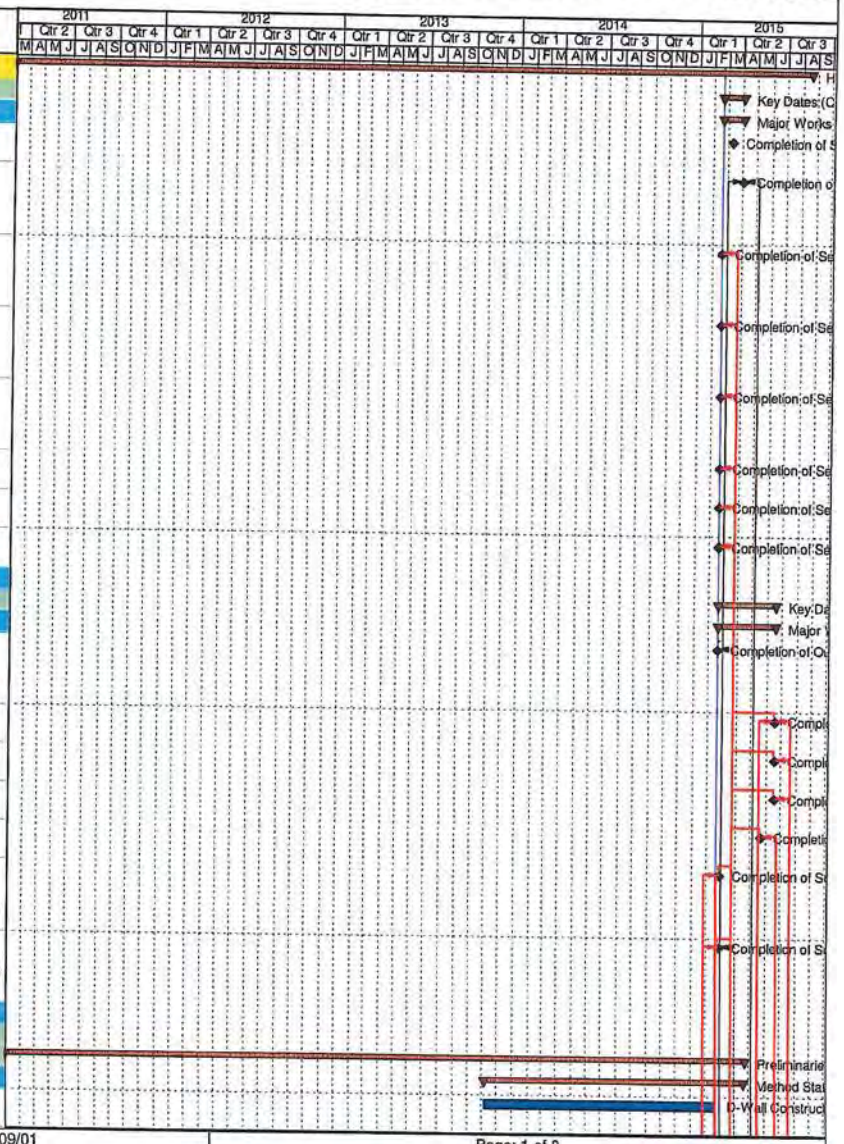
Appendix 7.1

Construction Programme of Individual Contracts

CEDD CONTRACT HK/2009/01

CHUN WO - LEADER JOINT VENTURE

Activity ID	Activity Name	OD	Start	Finish	Total Float	Predecessors
HK/2009/01 -Revised Works Programme Updated (Data Date: 20-Jan-1		1926	04-Mar-11 A	18-Aug-15	428	
Key Dates (Contractual)		48	20-Feb-15	02-Apr-15	589	
Major Works						
KD-0300	Completion of Section 3 of Works - CWB, Slip Roads 2 & 3 & Works in Area 8	0		11-Mar-15*	0	KD-0305, PRE-4050
KD-0400B	Completion of Outstanding Works for Section 4 - Salt Watermains	0		02-Apr-15	500	TTAM-B6-1030B, TTAM-A2-1040D, TTAM-A3-1090B, TTAM-A5-1050B, TTAM-B6-1090B
KD-0610	Completion of Section 6A of Works - Gov't Offices cooling water discharge	0		20-Feb-15*	-122	TTAM-C2-1100B, TTAM-X3-1000B, KD-0615, TTAM-C2-1100B
KD-0620	Completion of Section 6B of Works - Great Eagle Centre cooling water discharge	0		20-Feb-15*	-122	KD-0625, TTAM-C2-1100B, TTAM-X2-1020B, TTAM-C2-1100B
KD-0630	Completion of Section 6C of Works - China Resources Bldg cooling water discharge	0		20-Feb-15*	-122	TTAM-C2-1100B, TTAM-X2-1020B, KD-0635, TTAM-C2-1100B
KD-0800	Completion of Section 8 of Works - Works in Area 6	0		20-Feb-15*	-105	KD-0805
KD-1200	Completion of Section 12 of Works - Works in Area 10	0		20-Feb-15*	-316	KD-1205
KD-1300	Completion of Section 13 of Works - Works in Area 11	0		20-Feb-15*	-29	KD-1305
Landscaping & Establishment Works		0			0	
Key Dates (Forecast Completion)		135	20-Feb-15	18-Jun-15	501	
Major Works						
KD-0405B	Completion of Outstanding Works for Section 4 - Salt Watermains & Works in Area 3	0		20-Feb-15	542	S11-4030, S4-2520, S4-4060, S4-4000, S4-1500, S4-4070, S4-4050, S4-2500, S4-4080, S4-4010,
KD-0615	Completion of Section 6A of Works - Gov't Offices cooling water discharge	0		18-Jun-15	-241	S6-1030, S6A-2010, S6A-2030B
KD-0625	Completion of Section 6B of Works - Great Eagle Centre cooling water discharge	0		18-Jun-15	-241	S6B-2000, S6-1030, S6B-2020B
KD-0635	Completion of Section 6C of Works - China Resources Bldg cooling water discharge	0		18-Jun-15	-241	S6C-2000, S6-1030, S6C-2020B
KD-0805	Completion of Section 8 of Works - Works in Area 6	0		22-May-15	-196	S8-3000
KD-1205	Completion of Section 12 of Works - Works in Area 10	0		28-Feb-15*	0	TTAM-A4-1050C, S12-1000, TTAM-A4-1020B, VO106-1000, VO106-1000A
KD-1305	Completion of Section 13 of Works - Works in Area 11	0		28-Feb-15*	0	S3A-TS-1050, S13-1000, S13-3000, S13-2000, VO106-2000, VO105-2000A
Landscaping & Establishment Works		0			0	
Possession of Site		0			0	
Preliminaries		1510	04-Mar-11 A	21-Apr-15	481	
Method Statement & Design (Major) Approved by ASCOM		120	07-Nov-13 A	19-Aug-15	427	
PRE-2000G	D-Wall Construction for CWB Tunnel (Stage 3)	60	05-Nov-13 A	20-Feb-15*	-426	PRE-2000E



Remaining Work
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CEDD CONTRACT NO. HK/2009/01

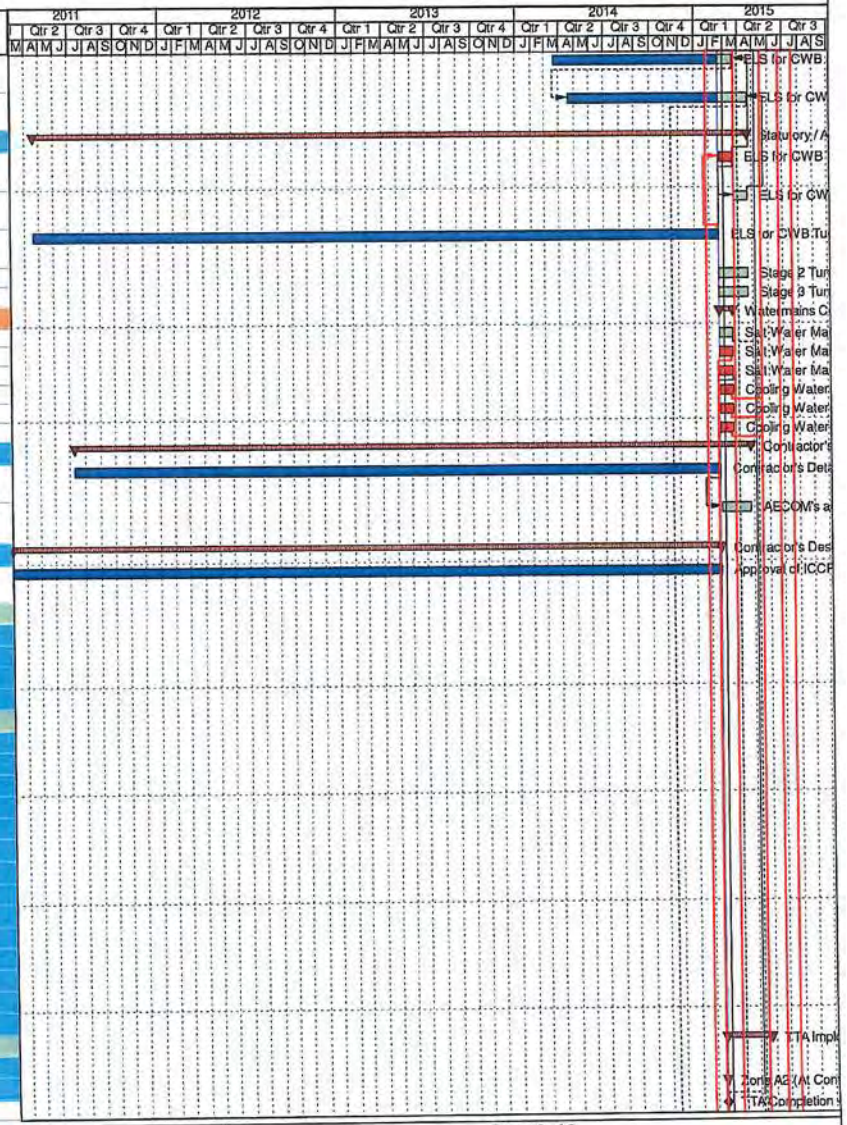
Wan Chai Development Phase II - Central-Wan Chai Bypass at HKCEC (Contract 1)

WORK PROGRAMME Rev. 6E 3mths Rolling Programme (Data Date on:20-Feb-15)

CEDD CONTRACT HK/2009/01

CHUN WO - LEADER JOINT VENTURE

Activity ID	Activity Name	OD	Start	Finish	Total Float	Predecessors
PRE-2030B	ELS for CWB Stage 2	30	20-Mar-14 A	20-Mar-15	513	PRE-2030A, PRE-3050B
PRE-2030C	ELS for CWB Stage 3	30	19-Apr-14 A	19-Apr-15	483	PRE-3050C, PRE-2030B
Statutory / Authority Approval		640	20-Apr-11 A	20-Apr-15	482	
PRE-3050B	ELS for CWB Tunneling Works Stage 2 (GEO)	28	21-Feb-15*	20-Mar-15	-601	PRE-3050D, PRE-3050A
PRE-3050C	ELS for CWB Tunneling Works Stage 3 (GEO)	28	23-Mar-15	19-Apr-15	483	PRE-3050D, PRE-3050B
PRE-3050D	ELS for CWB Tunneling Works Stage 1B (GEO) for Bottom Up	28	20-Apr-11 A	20-Feb-15	-601	PRE-3050A
PRE-3310	Stage 2 Tunnel Structure Design	60	20-Feb-15	20-Apr-15	482	S3B-TS-1000
PRE-3320	Stage 3 Tunnel Structure Design	60	20-Feb-15	20-Apr-15	482	S3C-TS-1100
Watermains Connection Submission Approval by WSD/Stakeholders		28	20-Feb-15	19-Mar-15	507	
PRE-3200C	Salt Water Mains (S3)	28	20-Feb-15*	19-Mar-15	507	KD-0010
PRE-3200D	Salt Water Mains (S8)	28	20-Feb-15*	19-Mar-15	-207	KD-0010
PRE-3200E	Salt Water Mains (S9)	28	20-Feb-15*	19-Mar-15	-629	KD-0010
PRE-3200O	Cooling Watermains (BF)	28	20-Feb-15*	19-Mar-15	-151	KD-0010
PRE-3200P	Cooling Watermains (BG)	28	20-Feb-15*	19-Mar-15	-151	KD-0010
PRE-3200Q	Cooling Watermains (BI)	28	20-Feb-15*	19-Mar-15	-151	KD-0010
Contractor's Design (CWB Diaphragm Wall)		1361	09-Jul-11 A	21-Apr-15	481	
PRE-4020	Contractor's Detailed Design	30	09-Jul-11 A	20-Feb-15	481	PRE-4000
PRE-4030	AECOM's and GEO's approval on Detailed Design	60	21-Feb-15	21-Apr-15	481	PRE-4010, PRE-4020
Contractor's Design (PSt.94)		9	04-Mar-11 A	20-Feb-15	542	
PRE-5100C	Approval of ICCP of Cross-Harbour Mains - by AECOM & Relevant Authorities	9	04-Mar-11 A	20-Feb-15	542	
Major Materials Manufacture & Site Delivery		0			0	
Section 1 - Cross Harbour Mainlaying		0			0	
Section 2A to 2D - T&M for Cooling Water Pumping Stations		0			0	
Section 2A to 2D - Inlet Screens for Cooling Water Pumping Stations (WO)		0			0	
Section 3 - CWB Tunnel		0			0	
Temporary Traffic Arrangement (TTA) Submission & Approval		0			0	
Zone A1 (Junction between Convention Avenue and Expo Drive)		0			0	
Zone A2 (At Convention Avenue)		0			0	
Zone A3 (At Fenwick Pier Street)		0			0	
Zone A4 (At Convention Avenue)		0			0	
Zone A5 (At Harbour Road)		0			0	
Zone B1 (At HKCEC VIP Drop-Off Area and Passenger Drop-Off Area, and Ex)		0			0	
Zone B2 (At HKCEC VIP Drop-Off Area and Expo Drive Central)		0			0	
Zone B3 (At Water Channel)		0			0	
Zone B4 (At Golden Bauhinia Square)		0			0	
Zone B5 (At Expo Drive Central North)		0			0	
Zone B6 (North & West of HKCEC + Sewage System)		0			0	
Area X1 (At Fleming Road and Junction btw Fleming Road & Convention Av		0			0	
Area X2 (At Convention Avenue near Expo Drive East)		0			0	
Zone C (Expo Drive East)		0			0	
TTA Implementation and Completion Summary Milestone		103	20-Feb-15	22-May-15	534	
Zone A1 (Junction between Convention Avenue and Expo Drive)		0			0	
Zone A2 (At Convention Avenue)		0	20-Feb-15	20-Feb-15	542	
TTAM-A2-1040D	TTA Completion - Zone A2-4B	0		20-Feb-15	542	S4-2080



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

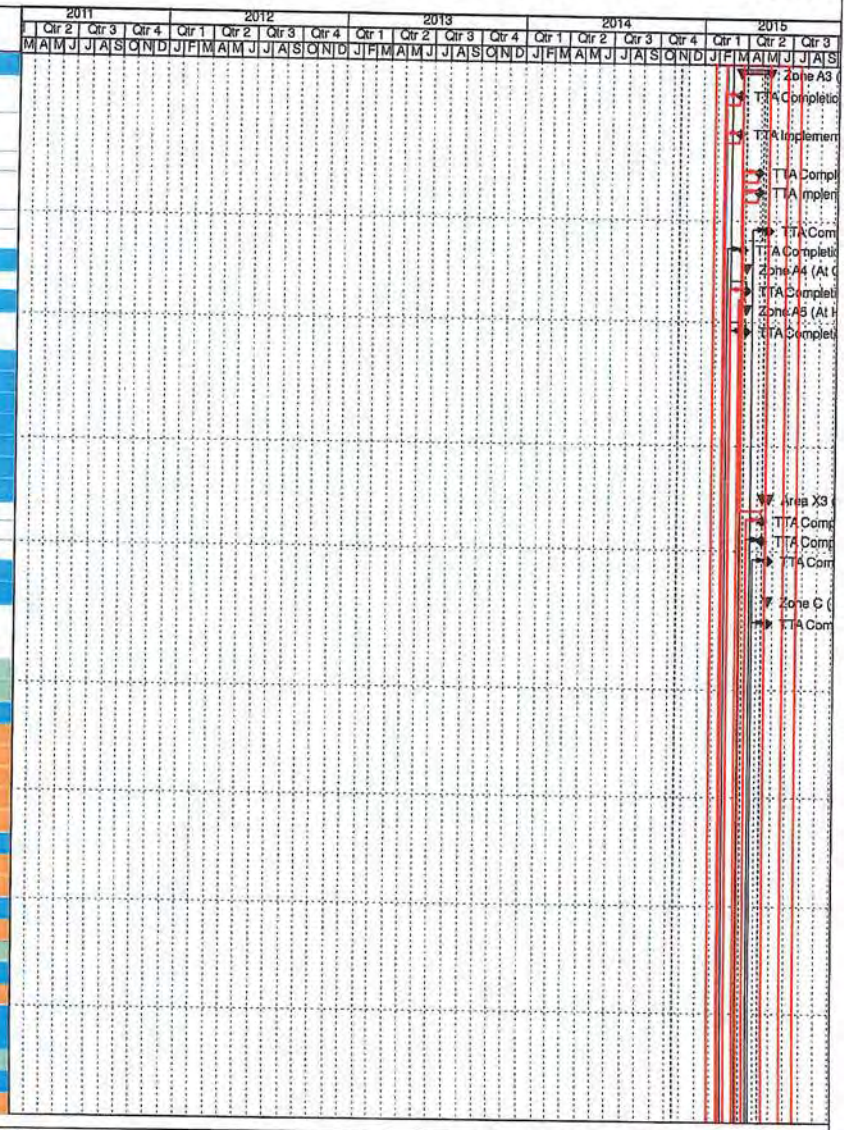
Wan Chai Development Phase II - Central-Wan Chai Bypass at HKCEC (Contract 1)

WORK PROGRAMME Rev. 6E 3mths Rolling Programme (Data Date on:20-Feb-15)

CEDD CONTRACT HK/2009/01

CHUN WO - LEADER JOINT VENTURE

Activity ID	Activity Name	OD	Start	Finish	Total Float	Predecessors
Zone A2 (At Fenwick Pier Street)		52	19-Mar-15	16-May-15	457	
TTAM-A3-1030	TTA Completion - Combination of Zone A3-5D & A3-4D (Sewer)	0		19-Mar-15	-195	S8-1030
TTAM-A3-1040	TTA Implementation - Zone A3-2C (Sewer)	0	19-Mar-15		-195	TTA-A3-6050, TTAM-A3-1030
TTAM-A3-1050	TTA Completion - Zone A3-2C (Sewer)	0		26-Apr-15	-196	S8-1040
TTAM-A3-1060	TTA Implementation - Zone A3-2D (Sewer)	0	26-Apr-15		-196	TTA-A3-6060, TTAM-A3-1050
TTAM-A3-1070	TTA Completion - Zone A3-2D (Sewer)	0		16-May-15	457	S8-1050
TTAM-A3-1090B	TTA Completion - Zone A3-5C - Salt Water	0		26-Mar-15	507	S4-2520, S4-2120
Zone A4 (At Convention Avenue)		0	26-Apr-15	02-Apr-15	-207	
TTAM-A4-1120B	TTA Completion - Zone A4-2C	0		02-Apr-15	-207	S4-1000, S4-1520
Zone A5 (At Harbour Road)		0	02-Apr-15	02-Apr-15	500	
TTAM-A5-1050B	TTA Completion - Zone A5-6	0		02-Apr-15	500	S4-1100, S4-1510, S4-1520
Zone B1 (At HKCEC VIP Drop-Off Area and Passenger Drop-Off Area, and Ext)		0			0	
Zone B2 (At HKCEC VIP Drop-Off Area and Expo Drive Central)		0			0	
Zone B3 (At Water Channel)		0			0	
Zone B4 (At Golden Bauhinia Square)		0			0	
Zone B5 (At Expo Drive Central North)		0			0	
Zone B6 (North & West of HKCEC - Sewage System)		0			0	
Area X3 (Fleming Road b/w Harbour Road & Convention Avenue)		13	09-May-15	09-May-15	463	
TTAM-X3-1000B	TTA Completion - Zone X1-1	0		09-May-15	-201	S6A-1200, S9-5500A
TTAM-X3-1010B	TTA Completion - Zone X1-2	0		09-May-15	463	S9-5500B, S6A-1210
TTAM-X3-1020B	TTA Completion - Zone X1-3	0		22-May-15	450	S9-5500C, S6A-1220
Area X2 (Junction between Fleming Road and Convention Avenue)		0			0	
Zone C (Expo Drive East)		0	22-May-15	22-May-15	450	
TTAM-C3-1000B	TTA Completion - Zone C3-1	0		22-May-15	450	S6B-1220, TTAM-C3-1000A, S6C-1600, S6A-1240
Trial Pit Construction Schedule		0			0	
Section 1 of the Works - Cross Harbour Watermains, Works in Area 1 & 2		0			0	
Submarine Section (CHA & CHB)		0			0	
Preliminaries		0			0	
CHA & CHB 500 to 1160 (Wan Chai Side)		0			0	
CHA & CHB -0.1 to 500 (TST Side)		0			0	
Impressed Current Cathodic Protection (ICCP) System		0			0	
Testing & Commissioning		0			0	
Wan Chai Section (CHC & CHD)		0			0	
Maintaying at Zone B1-5 (Conventional Trench Excavation)		0			0	
Testing & Commissioning		0			0	
Tsim Sha Tsui Section (CHE & CHF)		0			0	
Testing & Commissioning		0			0	
Section 2A of the Works - Cooling Water Intake & Discharge System (Con		0			0	
Pipeworks		0			0	
Testing & Commissioning		0			0	
E&M Works		0			0	
Installation of inlet Screen		0			0	
Section 2B of the Works - Cooling Water Intake & Discharge System (HK/		0			0	
Pipeworks		0			0	
Testing & Commissioning		0			0	



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CEDD CONTRACT NO. HK/2009/01

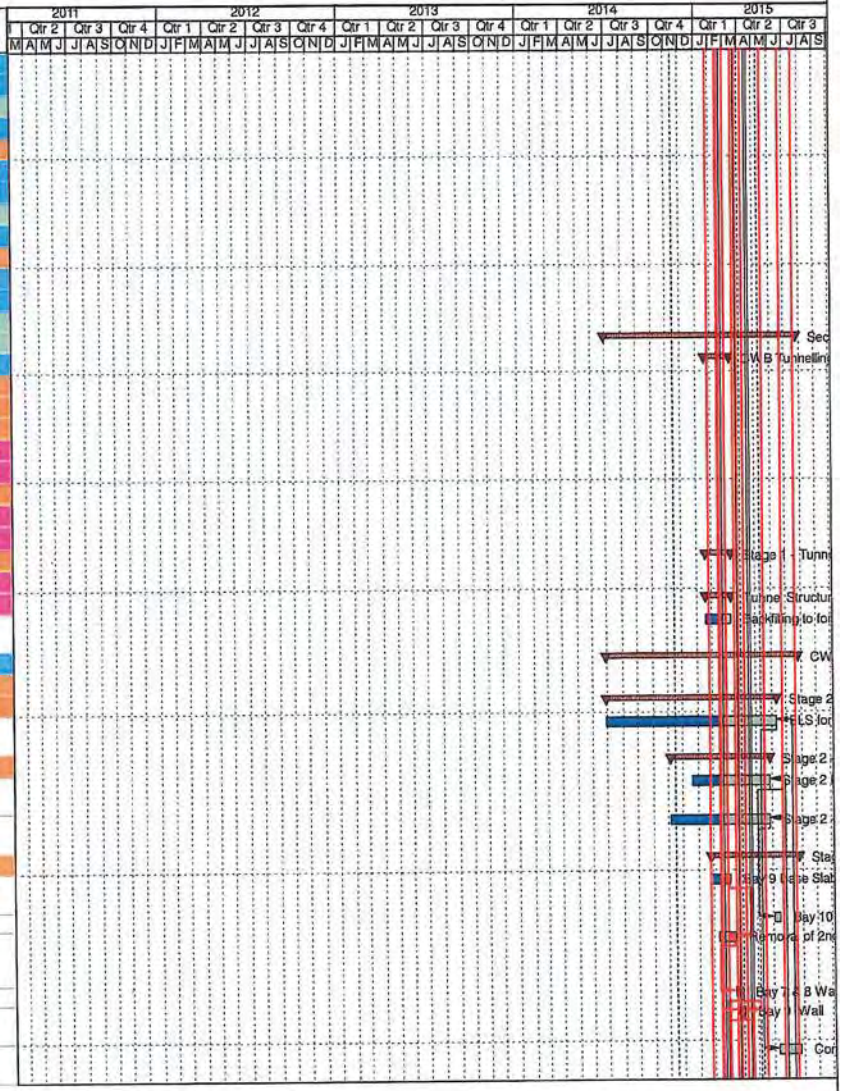
Wan Chai Development Phase II - Central-Wan Chai Bypass at HKCEC (Contract 1)

WORK PROGRAMME Rev. 6E 3mths Rolling Programme (Data Date on:20-Feb-15)

CEDD CONTRACT HK/2009/01

CHUN WO - LEADER JOINT VENTURE

Activity ID	Activity Name	OD	Start	Finish	Total Float	Predecessors
	E&M Works	0			0	
	Installation of Inlet Screen	0			0	
	Section 2C of the Works - Cooling Water Intake & Discharge System (Shu	0			0	
	Pipeworks	0			0	
	Testing & Commissioning	0			0	
	E&M Works	0			0	
	Installation of Inlet Screen	0			0	
	Section 2D of the Works - Cooling Water Intake System (3 nos. Govt Towe	0			0	
	Pipeworks	0			0	
	Testing & Commissioning	0			0	
	E&M Works	0			0	
	Installation of Inlet Screen	0			0	
	Common E&M Works for Sections 2A, 2B, 2C & 2D (LV Switch Board at H	0			0	
	Section 3 of the Works - CWB Tunnel, Slip Roads 2 & 3, Works in Area 8	452	27-Jun-14 A	25-Jul-15	458	
	CWB Tunnelling Works (Stage 1 : CH2947 - CH3045)	37	19-Jan-15 A	10-Mar-15	213	
	Pipe Pile Wall P1	0			0	
	Stage 1 - Reclamation Works (Marine Chainage : CH0 - CH120)	0			0	
	Stage 1 - Foundation Works (CH2947 - CH3045 / CH0 - CH120)	0			0	
	Foundation Works at Stage 1A (Top Down Method : CH2947 - CH2988)	0			0	
	Foundation Works at Stage 1B (Bottom Up Method : CH2988 - CH3045)	0			0	
	Stage 1 - Excavation Works (Ch2947 - Ch 3045)	0			0	
	Excavation Works at Stage 1A (For Top Slab Construction : CH2947 - C	0			0	
	Excavation Works at Stage 1A & 1B (For Bottom Slab Construction : CI	0			0	
	Stage 1 - Tunnel Structure Works (Bay 1 to Bay 7 : CH2947 - Ch 3045)	37	19-Jan-15 A	10-Mar-15	213	
	Tunnel Structure at Stage 1A (Top Slab Construction : CH2947 - CH2988)	0			0	
	Tunnel Structure at Stage 1A & 1B (CH2947 - CH3045)	30	19-Jan-15 A	10-Mar-15	183	
S3A-TS-2080	Backfilling to formation level for Stage 1B (CH 80 to CH 120)	30	19-Jan-15 A	10-Mar-15	183	S3A-TS-1060, S3A-TS-2000
	CWB Tunnelling Works (Stage 2 : Ch3045 - Ch3129)	452	27-Jun-14 A	25-Jul-15	458	
	Stage 2 - Reclamation Works (Marine Chainage : CH120 - CH225)	0			0	
	Stage 2 - Foundation Works (Bottom Up Method : CH3045 - CH3129 / CH1	170	27-Jun-14 A	10-Jun-15	386	
S3B-FW-1040C	ELS for Exhaust Duct CH2988 to CH3045 (~-5.0mPD)	170	27-Jun-14 A	10-Jun-15	386	S3B-FW-1040B, S3B-TS-2000A
	Stage 2 - Excavation Works (For Bottom Slab Construction : CH3045 - CH	75	06-Nov-14 A	27-May-15	339	
S3B-EW-1000E	Stage 2 ELS - excavate to approx. -10.0mPD at Bay 10	32	19-Dec-14 A	27-May-15	339	S3C-EW-1010E
S3B-EW-1030	Stage 2 - Breaking of Bulk Head Wall at Bay 10 Ch3129	35	06-Nov-14 A	27-May-15	339	S3B-EW-1000E
	Stage 2 - Tunnel Structure Works (Bay 1 to Bay 10 : CH3045 - CH3129)	170	27-Jun-14 A	25-Jul-15	386	
S3B-TS-1030	Bay 9 Base Slab	14	27-Jan-15 A	05-Mar-15	-141	S3B-TS-1020
S3B-TS-1040	Bay 10 Base Slab	14	03-Jun-15	16-Jun-15	381	S3B-EW-1000E
S3B-TS-1050	Removal of 2nd and 3rd layer of Strut/Waling at Bay 7, 8 & 9	15	09-Feb-15 A	15-Mar-15	-141	S3B-TS-1010, S3B-TS-1020, S3B-TS-1030
S3B-TS-1060	Bay 7 & 8 Wall	14	16-Mar-15	29-Mar-15	-141	S3B-TS-1050
S3B-TS-1070	Bay 9 Wall	14	21-Mar-15	03-Apr-15	-141	S3B-TS-1050, S3B-TS-1060
S3B-TS-1080	Construction of Exhaust Duct (CH2988 - CH3045)	45	11-Jun-15	25-Jul-15	386	S3B-FW-1040C



Remaining Work
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CEDD CONTRACT NO. HK/2009/01

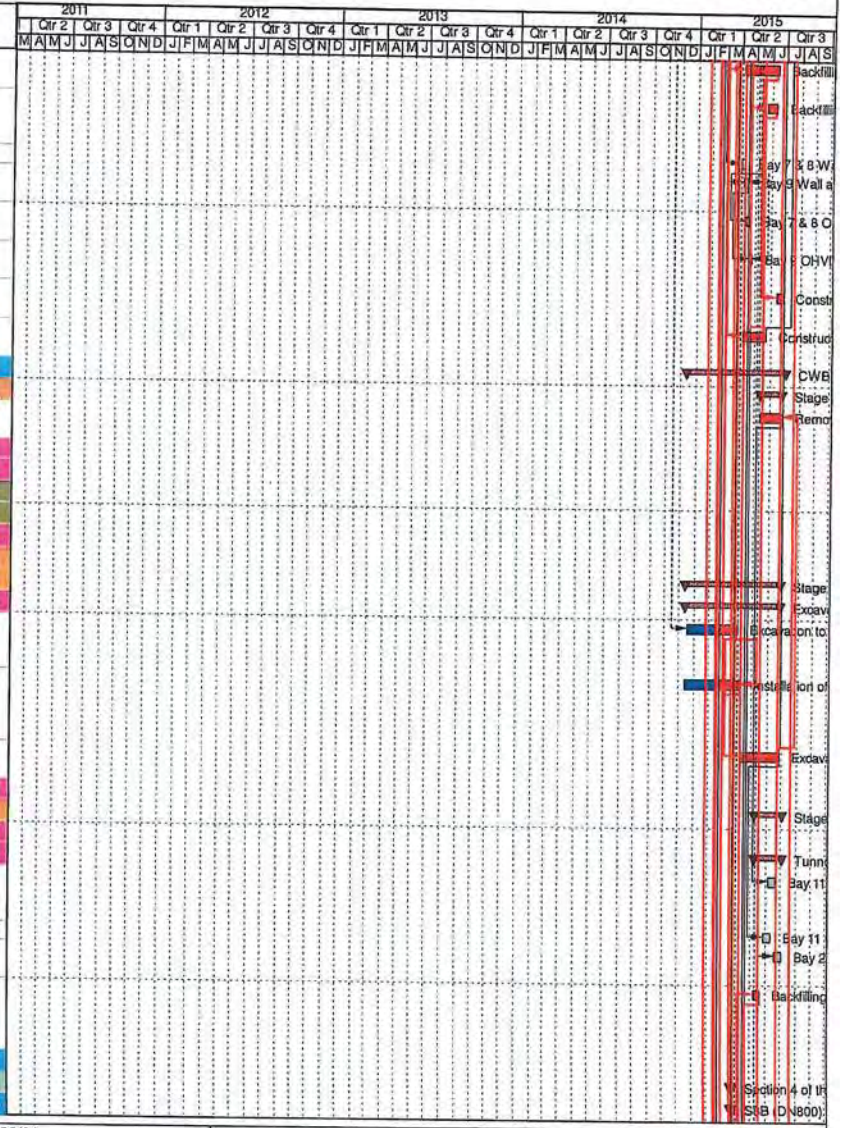
Wan Chai Development Phase II - Central-Wan Chai Bypass at HKCEC (Contract 1)

WORK PROGRAMME Rev. 6E 3mths Rolling Programme (Data Date on:20-Feb-15)

CEDD CONTRACT HK/2009/01

CHUN WO - LEADER JOINT VENTURE

Activity ID	Activity Name	OD	Start	Finish	Total Float	Predecessors
S3B-TS-1090	Backfilling at Northern Side from -10mPD to -2mPD (Slip Road 2 - 4700cu.m)	70	04-Apr-15	12-Jun-15	-141	S3B-TS-1060, S3B-TS-1070
S3B-TS-1100	Backfilling at Southern Side from -10mPD to -2mPD (Slip Road 3 - 4000cu.m)	21	22-May-15	11-Jun-15	-140	S3B-TS-1060, S3B-TS-1070, S3B-TS-2000A
S3B-TS-1110	Bay 7 & 8 Wall and OHVD Base Slab	10	30-Mar-15	08-Apr-15	459	S3B-TS-1060
S3B-TS-1120	Bay 9 Wall and OHVD Base Slab	10	04-Apr-15	13-Apr-15	459	S3B-TS-1070, S3B-TS-1110
S3B-TS-1130	Bay 7 & 8 OHVD Wall Stem and Bay 7 & 8 Top Slab	10	09-Apr-15	18-Apr-15	484	S3B-TS-1110
S3B-TS-1140	Bay 9 OHVD Wall Stem and Bay 9 Top Slab	10	14-Apr-15	23-Apr-15	459	S3B-TS-1110, S3B-TS-1120
S3B-TS-1160	Construction of Slip Road 2 & 3 Base Slab	14	13-Jun-15	26-Jun-15	-141	S3B-TS-1090, S3B-TS-1100
S3B-TS-2000A	Construction of Exhaust Duct (CH3045 - CH3129) including waterproofing works	48	04-Apr-15	21-May-15	-140	S3B-TS-1070
CWB Tunnelling Works (Stage 3 - CH3129 - CH3245)		0			0	
Stage 3 - Reclamation Works		56	12-May-15	25-Jun-15	-242	
S3C-MW-1400	Removal of Remaining Type II & I Material during Stage 3 Excavation	45	12-May-15	25-Jun-15	-242	S3C-EW-1010E
Discharge Pipelines Outfall and Seawall Construction		0			0	
Demolition Works		0			0	
Demolition Works - Stage 2		0			0	
Demolition Works - Stage 3		0			0	
Expo Drive East (Diversion and Reprovision)		0			0	
Stage 3 - Foundation Works		0			0	
Stage 3 - Excavation Works (CH3129 - CH3245)		126	12-Dec-14 A	25-Jun-15	-242	
Excavation Works at Stage 3		96	12-Dec-14 A	25-Jun-15	-242	
S3C-EW-1010	Excavation to -4.0 mPD (approx 26,600m3) including strut/waling installation	96	18-Dec-14 A	31-Mar-15	-236	S3C-FW-1040B, PRE-2030C, S3C-EW-1000
S3C-EW-1010B	Installation of Dewatering Well (45nos.) and Pumping Test	45	12-Dec-14 A	06-Apr-15	-242	PRE-2000H, S3C-FW-1050C, S3C-FW-1040B, S3C-EW-1010
S3C-EW-1010E	Excavation to -16mPD (approx 55,000m3)	80	07-Apr-15	25-Jun-15	-242	S3C-EW-1010, S3C-EW-1010B
Excavation Works at Stage 3A & 3B (For Bottom Slab Construction : Cl		0			0	
Stage 3 - Tunnel Structure Works (Bay 11 to Bay 28 : Ch3129 - Ch3245)		56	08-May-15	02-Jul-15	355	
Tunnel Structure at Stage 3A (Top Slab Construction : CH3165 - CH3246)		0			0	
Tunnel Structure at Stage 3A & 3B (CH3129 - CH3245)		56	08-May-15	02-Jul-15	355	
S3C-TS-2000	Bay 11 Slip Road 3 Sump Pit Base Slab	14	06-Jun-15	19-Jun-15	329	S3C-MW-1400, S3C-EW-1010E, S3B-EW-1030
S3C-TS-2000F	Bay 11 CWB Base Slab	14	27-May-15	09-Jun-15	330	S3C-EW-1010E
S3C-TS-2090A	Bay 20 CWB & Slip Road 2 Base Slab and Slip Road 3 Wall	14	19-Jun-15	02-Jul-15	355	S3C-EW-1010E
S3C-TS-2160	Backfilling up to Formation Level of Cooling Mains & Construction of Surface Drainage incl. strut/waling removal	15	06-May-15	20-May-15	-241	S9-1050, S9-1040B, S9-1040A
Works in Area 3		0			0	
Section 4 of the Works - Salt Water Mains, Works in Area 3		8	20-Mar-15	26-Mar-15	598	
S3B (DN800) Salt Watermains		0			0	



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CEDD CONTRACT NO. HK/2009/01

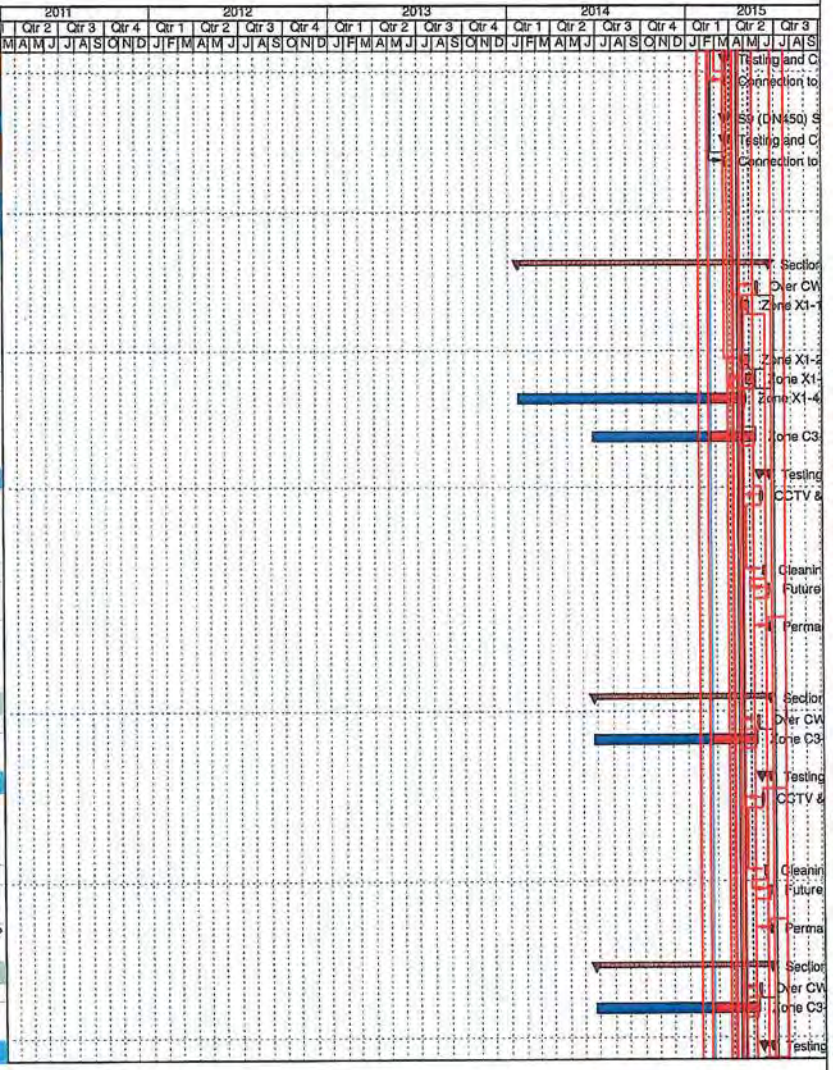
Wan Chai Development Phase II - Central-Wan Chai Bypass at HKCEC (Contract 1)

WORK PROGRAMME Rev. 6E 3mths Rolling Programme (Data Date on:20-Feb-15)

CEDD CONTRACT HK/2009/01

CHUN WO - LEADER JOINT VENTURE

Activity ID	Activity Name	OD	Start	Finish	Total Float	Predecessors
	Testing and Commissioning					
S4-1520	Connection to Existing Mains (S8B)	7	20-Mar-15	26-Mar-15	-207	S4-1510, TP-1210, TP-1200, PRE-3200D
	S9 (DN450) Salt Watermains & Sewer					
	Testing and Commissioning					
S4-2520	Connection to Existing Mains (S9)	7	20-Mar-15	26-Mar-15	507	S4-2510, PRE-3200E, TP-1110
	Stormwater Drainage	0			0	
	Sewage System for Re-Provisioned Cooling Water Pumping Stations	0			0	
	Section 5 of the Works - Works in Area 7 & Pipe Pile Wall P2	0			0	
	Section 6A of the Works - Cooling Water Discharge System (3 nos. Govt T	455	20-Jan-14 A	17-Jun-15	-241	
S6A-1100	Over CWB - CHBF (92m)	7	21-May-15	27-May-15	-241	S3C-TS-2160, S9-1050
S6A-1200	Zone X1-1 - CHBF (11m)	21	19-Apr-15	09-May-15*	-223	TTAM-X3-1030A, TTAM-X3-1000A, S4-1000
S6A-1210	Zone X1-2 - CHBF (5m)	21	19-Apr-15	09-May-15*	-223	TTAM-A4-1120B
S6A-1220	Zone X1-3 - CHBF (7m)	21	02-May-15	22-May-15*	-236	S6A-1230
S6A-1230	Zone X1-4A - CHBF (21m) & S3 (21m) Connection Point	24	20-Jan-14 A	01-May-15	-236	TTAM-X3-1030A
S6A-1240	Zone C3-1 - CHBF (16m) Test and Connection Point	60	22-Jun-14 A	22-May-15	-236	TTAM-C3-1000A
	Testing & Commissioning	21	28-May-15	17-Jun-15	-241	
S6A-2010	CCTV & Pressure Test of CHBF	7	28-May-15	03-Jun-15	-241	S6A-1100, S6A-1050, S6A-1040, S6A-1200, S6A-1020, S6A-1030, S6A-1240, S6A-1210, S6A-1010, S6A-1230
S6A-2020	Cleaning & Sterilization of CHBF	7	04-Jun-15	10-Jun-15	-241	S6A-2010
S6A-2030A	Future Connection to Existing Mains (CHBF) at temporary water channel	7	11-Jun-15	17-Jun-15	-241	S6A-2020
S6A-2030B	Permanent Diversion of Discharge Water to Proposed Discharge Main	0		17-Jun-15	-241	S6A-2020, S6A-2010, TP-1310, TP-1350, S6A-2030A, PRE-3200O
	Section 6B of the Works - Cooling Water Intake & Discharge System (Gre	344	22-Jun-14 A	17-Jun-15	-241	
S6B-1100	Over CWB - CHBG (92m)	7	21-May-15	27-May-15	-241	S3C-TS-2160, S9-1050
S6B-1220	Zone C3-1 - CHBG (16m) Test and Connection Point	60	22-Jun-14 A	22-May-15	-236	TTAM-C3-1000A
	Testing & Commissioning	21	28-May-15	17-Jun-15	-241	
S6B-2000	CCTV & Pressure Test of CHBG	7	28-May-15	03-Jun-15	-241	S6B-1020, S6B-1220, S6B-1200A, S6B-1210, S6B-1200, S6B-1020A, S6B-1000, S6B-1010, S6B-1030, S6B-1050
S6B-2010	Cleaning & Sterilization of CHBG	7	04-Jun-15	10-Jun-15	-241	S6B-2000
S6B-2020A	Future Connection to Existing Mains (CHBG) at temporary water channel	7	11-Jun-15	17-Jun-15	-241	S6B-2010
S6B-2020B	Permanent Diversion of Discharge Water to Proposed Discharge Main	0		17-Jun-15	-241	S6B-2020A, PRE-3200P
	Section 6C of the Works - Cooling Water Discharge System (China Resou	344	22-Jun-14 A	17-Jun-15	-241	
S6C-1100	Over CWB - CHBI (100m)	7	21-May-15	27-May-15	-241	S3C-TS-2160, S9-1050
S6C-1600	Zone C3-1 - CHBI (16m) Test and Connection Point	60	22-Jun-14 A	22-May-15	-236	TTAM-C3-1000A
	Testing & Commissioning	21	28-May-15	17-Jun-15	-241	



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CEDD CONTRACT NO. HK/2009/01

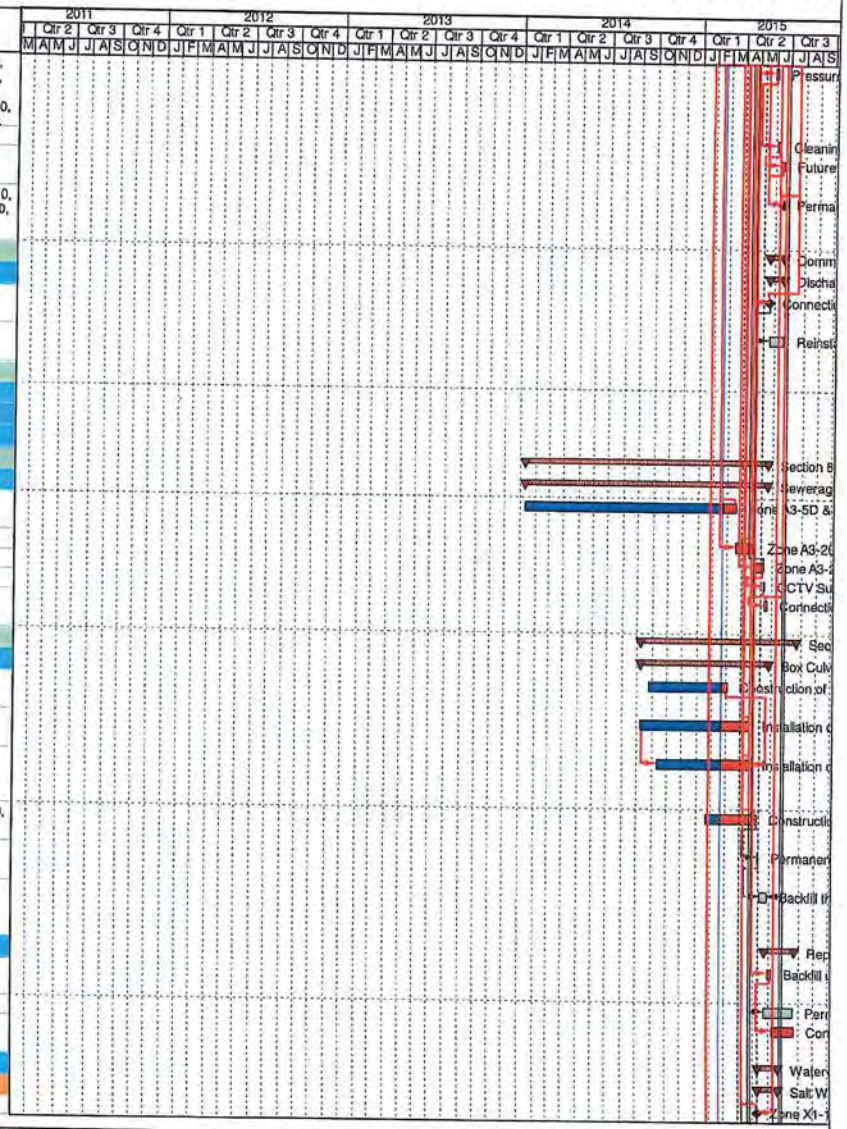
Wan Chai Development Phase II - Central-Wan Chai Bypass at HKCEC (Contract 1)

WORK PROGRAMME Rev. 6E 3mths Rolling Programme (Data Date on:20-Feb-15)

CEDD CONTRACT HK/2009/01

CHUN WO - LEADER JOINT VENTURE

Activity ID	Activity Name	OD	Start	Finish	Total Float	Predecessors
S6C-2000	Pressure Test of CHBI	7	28-May-15	03-Jun-15	-241	S6C-1030, S6C-1600, S6C-1040, S6C-1100, S6C-1020A, S6C-1020A, S6C-1020, S6C-1050, S6C-1300,
S6C-2010	Cleaning & Sterilization of CHBI	7	04-Jun-15	10-Jun-15	-241	S6C-2000
S6C-2020A	Future Connection to Existing Mains (CHBI) at temporary water channel	7	11-Jun-15	17-Jun-15	-241	S6C-2010
S6C-2020B	Permanent Diversion of Discharge Water to Proposed Discharge Main	0		17-Jun-15	-241	PRE-3200Q, S6C-2010, S6C-2020A, S6C-2000, TP-1330
Common Works for Sections 6A, 6B & 6C		30	22-May-15	21-Jun-15	420	
Drainage Outfall Construction						
S6-1030	Connection of the Completed Cooling Mains to Precast Outfall Unit	0		22-May-15	-250	S6C-1600, S8A-1240, S6B-1220, S6-1010
S6-1040	Reinstatement of Existing Seawall after Connection	30	23-May-15	21-Jun-15	420	S6-1030
Section 7 of the Works - Trial Bored Piles in Area 5		0			0	
ADMS Installation						
Trial Bored Piling						
Testing & Commissioning						
Section 8 of the Works - Works in Area 5 (Utilities other than Watermains		583	10-Jan-14 A	22-May-15	-228	
Sewerage Works						
S8-1030	Zone A3-5D & A3-4D	23	10-Jan-14 A	19-Mar-15	-228	TTAM-A3-1020
S8-1040	Zone A3-2C	23	19-Mar-15	26-Apr-15	-228	TTAM-A3-1040
S8-1050	Zone A3-2D	23	26-Apr-15	15-May-15	-228	TTAM-A3-1060
S8-2500	CCTV Survey	1	15-May-15	16-May-15	-228	S8-1000, S8-1050
S8-3000	Connection with Upstream Existing Manhole & Abandon Used Pipe	7	16-May-15	22-May-15	-228	S8-2500
Section 9 of the Works - Remaindar of the Works		214	07-Sep-14 A	21-Jul-15	390	
Box Culvert Construction						
S9-1030	Construction of Precast Bay 1	76	25-Sep-14 A	03-Mar-15	-208	DW3-1020AA, EDE-1010A
S9-1040A	Installation of Sheet Pile / ELS and Construction for Bay 7	180	07-Sep-14 A	20-Apr-15	-226	S3C-FW-1040B
S9-1040B	Installation of Sheet Pile / ELS and Construction for Bay 2	180	11-Oct-14 A	20-Apr-15	-226	S9-1040A, S3C-FW-1050E, S9-1030
S9-1050	Construction of Bay 3 to Bay 6 incl. top slab waterproofing works	75	20-Jan-15 A	05-May-15	-241	S9-1020, S3C-TS-1100, S9-1010
S9-1060	Permanent Diversion of Storm Water to New Provided Box Culvert	5	06-May-15	10-May-15	107	S9-1050
S9-1070	Backfill the Temporary Water Channel from East to West (BG/BI Connection Point at Water Channel)	15	13-May-15	27-May-15	105	S9-1050, S6C-1100, S6B-1100, S6A-1100, S9-1060
Reprovision of Expo Drive East						
S9-2000	Backfill up to Formation Level for Reprovision of Expo Drive East	10	28-May-15	06-Jun-15	-35	S6C-1100, S6B-1100, S6A-1100
S9-2000A	Permanent UU Connection/Change Over	60	21-May-15	20-Jul-15	391	S3C-TS-2160
S9-2010	Construction of New Road and Surface Drainage	45	07-Jun-15	21-Jul-15	-35	S9-2000
Waterworks in Area 5						
Salt Water Mains (ST, SSA & SSB)						
S9-5500A	Zone X1-1 - S3 (5m)	0		09-May-15	-201	S6A-1200



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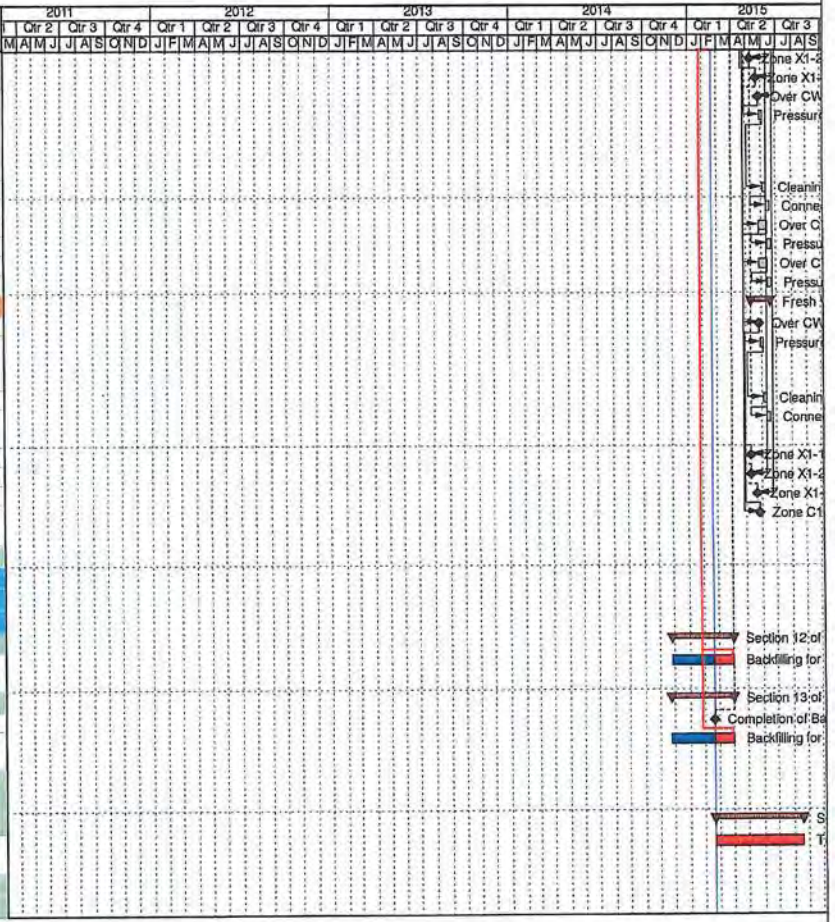
Activity ID	Activity Name	OD	Start	Finish	Total Float	Predecessors
S9-5500B	Zone X1-2 - S3 (5m)	0		09-May-15	442	S6A-1210
S9-5500C	Zone X1-3 - S3 (5m)	0		22-May-15	429	S6A-1220
S9-5510	Over CWB - S3 (92m)	0		27-May-15	79	S6A-1100
S9-5530	Pressure Test of S3	7	28-May-15	03-Jun-15	424	S9-5500A, S9-5500D, S9-5500C, S9-5500B, S9-5510, S9-5520
S9-5540	Cleaning & Sterilization of S3	7	04-Jun-15	10-Jun-15	424	S9-5530
S9-5550	Connection to Existing Mains (S3)	7	11-Jun-15	17-Jun-15	424	PRE-3200C, S9-5540
S9-5600	Over CWB - S5A (30m)	20	27-May-15	12-Jun-15	79	S9-5510
S9-5610	Pressure Test of S5A	7	13-Jun-15	19-Jun-15	65	S9-5600
S9-5700	Over CWB - S5B (30m)	20	27-May-15	12-Jun-15	79	S9-5600
S9-5710	Pressure Test of S5B	7	13-Jun-15	19-Jun-15	65	S9-5700
Fresh Water Mains (F3)		34	28-May-15	17-Jun-15	424	
S9-7000	Over CWB - F3 (100m)	0		27-May-15	503	S6A-1100
S9-7010	Pressure Test of F3	7	28-May-15	03-Jun-15	424	S9-7000, S9-7040, S9-7050, S9-7070, S9-7060
S9-7020	Cleaning & Sterilization of F3	7	04-Jun-15	10-Jun-15	424	S9-7010
S9-7030	Connection to Existing Mains (F3) at Zone C1-3	7	11-Jun-15	17-Jun-15	424	S9-7020, PRE-3200C
S9-7040	Zone X1-1 - F3 (5m)	0		09-May-15	442	S6A-1200
S9-7050	Zone X1-2 - F3 (5m)	0		09-May-15	442	S6A-1210
S9-7060	Zone X1-3 - F3 (5m)	0		22-May-15	429	S6A-1220
S9-7070	Zone C1-5, C1-7 & C1-9 - Expo Drive East - S3 (20m)	0		27-May-15	503	S6A-1100
Section 11 of the Works - SCL Protection Works		0			0	
Foundation Works		0			0	
Excavation Works		0			0	
Structural Works		0			0	
Section 12 of the Works - Works in Area 10 (other than Section 4)		40	24-Nov-14 A	31-Mar-15	-32	
VO106-1000A	Backfilling for Kiu Lok Pump House	40	24-Nov-14 A	31-Mar-15	-32	VO106-1000
Section 13 of the Works - Works in Area 11 (other than Section 11)		40	24-Nov-14 A	31-Mar-15	-32	
S13-3000	Completion of Backfilling to +5.0mPD	0		20-Feb-15	8	VO106-2000
VO106-2000A	Backfilling for Kiu Lok Pump House	40	24-Nov-14 A	31-Mar-15	-32	VO106-2000
Section 1A of the Works - Landscape Softworks in Areas 2 & 4		0			0	
Section 1B of the Works - Establishment Works in Areas 2 & 4		0			0	
Section 9A of the Works - Landscape Softworks in Area 9		180	20-Feb-15	18-Aug-15	-3	
S9A-1000	Transplanting at Expo Drive East and Convention Avenue Junction	180	20-Feb-15	18-Aug-15	-3	PRE-2130, PS-P4, EDE-1050
Section 9B of the Works - Establishment Works in Area 9		0			0	
Section 10 of the Works - Protection and Preservation of Existing Trees		0			0	



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CHUN WO - LEADER JOINT VENTURE

Activity ID	Activity Name	OD	Start	Finish
HK/2009/01 - Revised Works Progress Rev. 6H (Data Date: 15 Oct 15)				
Section 3 of the Works - CWB Tunnel, Slip Roads 2 & 3, Works in Area 8				
CWB Tunnelling Works (Stage 1 : CH2947 - CH3045)				
Stage 1 - Tunnel Structure Works (Bay 1 to Bay 7 : Ch2947 - Ch 3045)				
Tunnel Structure at Stage 1A & 1B (CH2947 - CH3045)				
S3A-TS-2080	Backfilling to formation level for Stage 1B (CH 80 to CH 120)	200	19-Jan-15 A	15-Nov-15
CWB Tunnelling Works (Stage 2 : Ch3045 - Ch3129)				
Stage 2 - Tunnel Structure Works (Bay 7 to Bay 10 : CH3045 - CH3129)				
S3B-TS-1160C2	Construction of Bay 9 Slip Road 2 Wall	10	26-Sep-15 A	21-Oct-15
S3B-TS-1160C3	Construction of Bay 9 Slip Road 2 Road Barrier	14	07-Oct-15 A	19-Oct-15
S3B-TS-1160E1	Construction of Retaining Wall 2 Road Barrier including Demolish ofTemporary Dwall to Cut-off Level	14	14-Oct-15 A	27-Oct-15
S3B-TS-1165A1	Construction of Bay 9 Slip Road 3 Top Slab & Portal Wall	25	05-Oct-15 A	18-Oct-15
S3B-TS-1165B	Construction of Bay 7, 8 & 9 Slip Road 3 Road Barrier	10	20-Aug-15 A	08-Nov-15
S3B-TS-1165E	Construction of Bay 4, 5 & 6 Slip Road 3 Road Barrier	14	24-Sep-15 A	28-Oct-15
S3B-TS-1180A	Bay 9b & 10 CWB Road Barrier	20	03-Oct-15 A	22-Oct-15
S3B-TS-9000A	Backfilling to Formation Level (CWB) - 12,000cu.m	20	03-Aug-15 A	22-Dec-15
CWB Tunnelling Works (Stage 3 : Ch3129 - Ch3245)				
Stage 3 - Excavation Works (Ch3129 - Ch3245)				
Excavation Works at Stage 3				
S3C-EW-1010E	Excavation to -16mPD (approx 55,000m3)	100	13-Mar-15 A	31-Oct-15
Stage 3 - Tunnel Structure Works (Bay 11 to Bay 20 : Ch3129 - Ch3245)				
Tunnel Structure at Stage 3A & 3B (CH3129 - CH3245)				
S3C-TS-2000E	Bay 11 to Bay 13 Slip Road 3 Wall	10	22-Oct-15	31-Oct-15
S3C-TS-2000E	Access reseved for HyD's CC prior to completion of Slip Road 2	80	01-Nov-15	17-Dec-15

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CEDD CONTRACT NO. HK/2009/01

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

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

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

執ASK filters: 3-Month (Works), 3-Month Rolling Prog.

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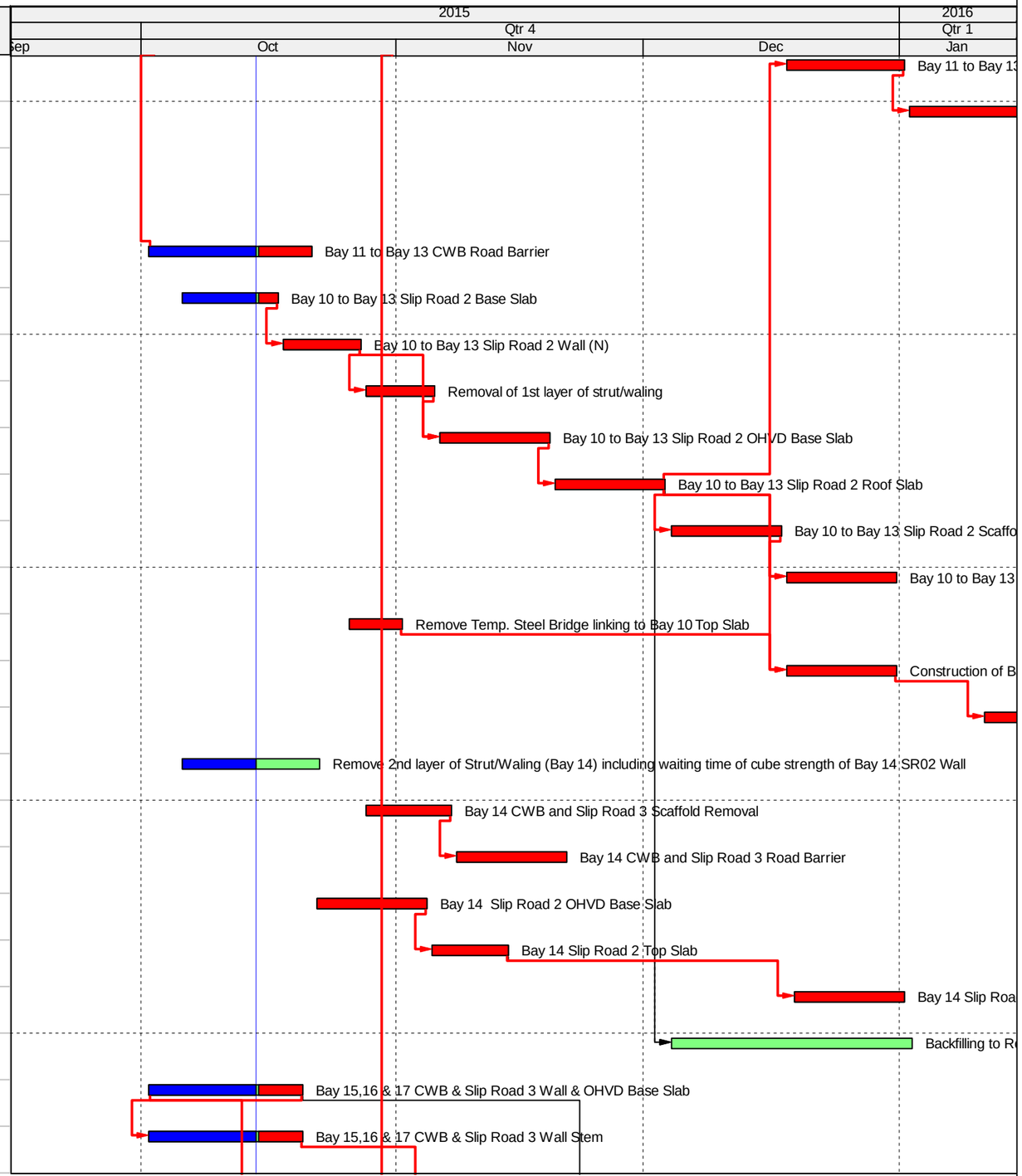
CEDD CONTRACT HK/2009/01

CHUN WO - LEADER JOINT VENTURE

Activity ID	Activity Name	OD	Start	Finish
S3C-TS-2000E	Bay 11 to Bay 13 Slip Road 3 OHVD Base Slab	15	18-Dec-15	01-Jan-16
S3C-TS-2000E	Bay 11 to Bay 13 Slip Road 3 Top Slab	15	02-Jan-16	16-Jan-16
S3C-TS-2000E	Bay 11 to Bay 13 Slip Road 3 Scaffold Removal	14	17-Jan-16	30-Jan-16
S3C-TS-2000E	Bay 11 to Bay 13 Slip Road 3 Road Barrier	13	31-Jan-16	12-Feb-16
S3C-TS-2000I1	Bay 11 to Bay 13 CWB Road Barrier	20	02-Oct-15 A	21-Oct-15
S3C-TS-2000K	Bay 10 to Bay 13 Slip Road 2 Base Slab	10	06-Oct-15 A	17-Oct-15
S3C-TS-2000L	Bay 10 to Bay 13 Slip Road 2 Wall (N)	10	18-Oct-15	27-Oct-15
S3C-TS-2000L(	Removal of 1st layer of strut/waling	9	28-Oct-15	05-Nov-15
S3C-TS-2000L:	Bay 10 to Bay 13 Slip Road 2 OHVD Base Slab	14	06-Nov-15	19-Nov-15
S3C-TS-2000L2	Bay 10 to Bay 13 Slip Road 2 Roof Slab	14	20-Nov-15	03-Dec-15
S3C-TS-2000L2	Bay 10 to Bay 13 Slip Road 2 Scaffold Removal	14	04-Dec-15	17-Dec-15
S3C-TS-2000L3	Bay 10 to Bay 13 Slip Road 2 Road Barrier	14	18-Dec-15	31-Dec-15
S3c-TS-2000I4	Remove Temp. Steel Bridge linking to Bay 10 Top Slab	7	26-Oct-15*	01-Nov-15
S3C-TS-2000M	Construction of Bay 10 Slip Road 3 Wall & Roof Slab	14	18-Dec-15	31-Dec-15
S3C-TS-2000N	Construction of Bay 10 Slip Road 3 Road Barrier	7	11-Jan-16	17-Jan-16
S3C-TS-2030D	Remove 2nd layer of Strut/Waling (Bay 14) including waiting time of cube strength of Bay 14 SR02 Wall	7	06-Oct-15 A	22-Oct-15
S3C-TS-2030H	Bay 14 CWB and Slip Road 3 Scaffold Removal	10	28-Oct-15*	07-Nov-15
S3C-TS-2030H	Bay 14 CWB and Slip Road 3 Road Barrier	14	08-Nov-15	21-Nov-15
S3C-TS-2030I	Bay 14 Slip Road 2 OHVD Base Slab	14	22-Oct-15*	04-Nov-15
S3C-TS-2030J	Bay 14 Slip Road 2 Top Slab	10	05-Nov-15	14-Nov-15
S3C-TS-2030J1	Bay 14 Slip Road 2 Road Barrier	14	19-Dec-15	01-Jan-16
S3C-TS-2030K	Backfilling to Road formation level from Bay 10 to Bay 14	30	04-Dec-15	02-Jan-16
S3C-TS-2090C	Bay 15,16 & 17 CWB & Slip Road 3 Wall & OHVD Base Slab	15	02-Oct-15 A	20-Oct-15
S3C-TS-2090C	Bay 15,16 & 17 CWB & Slip Road 3 Wall Stem	15	02-Oct-15 A	20-Oct-15



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CEDD CONTRACT NO. HK/2009/01

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

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

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

TASK filters: 3-Month (Works), 3-Month Rolling Prog.

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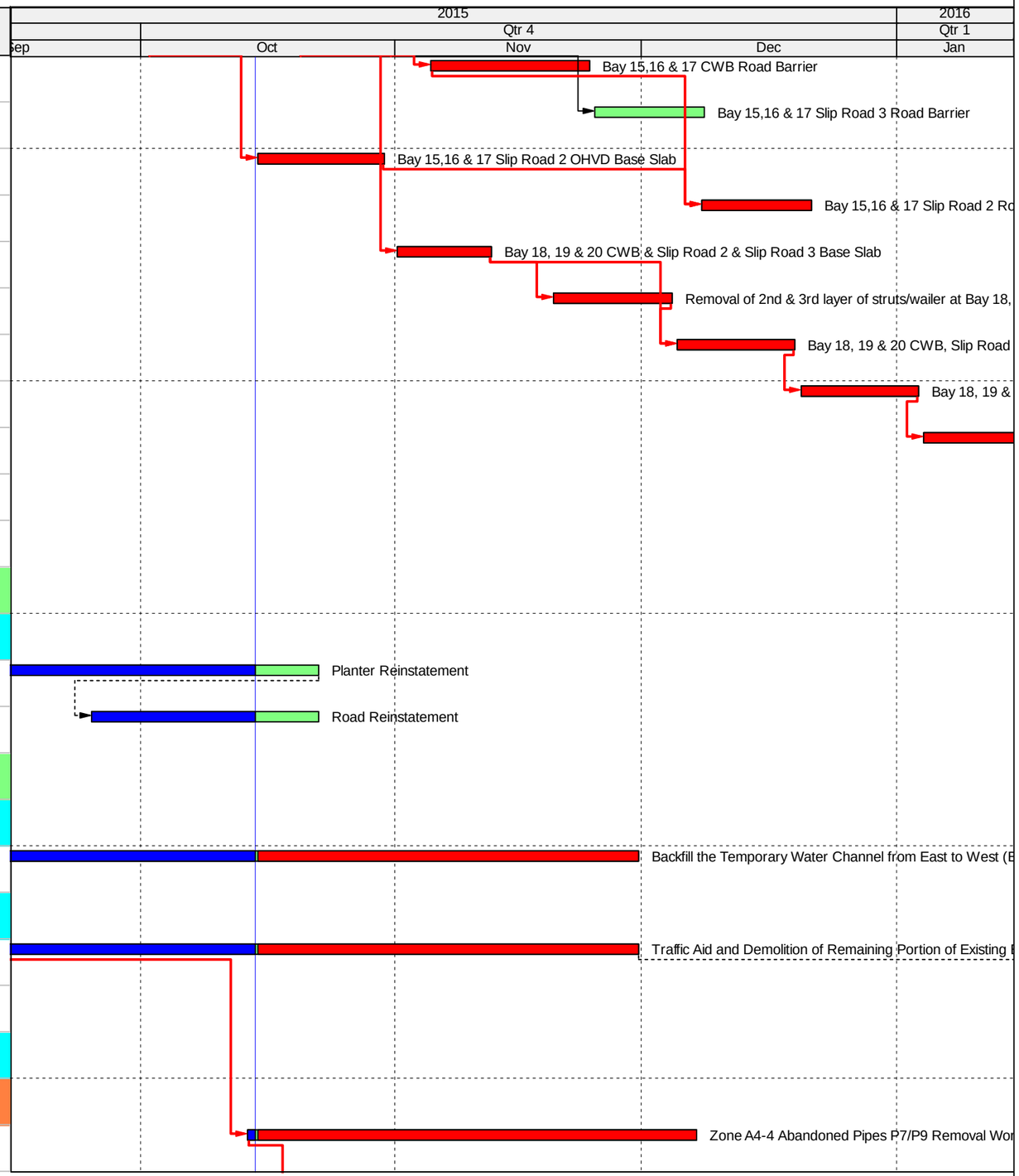
CHUN WO - LEADER JOINT VENTURE

Activity ID	Activity Name	OD	Start	Finish
S3C-TS-2090C	Bay 15,16 & 17 CWB Road Barrier	20	05-Nov-15	24-Nov-15
S3C-TS-2090C	Bay 15,16 & 17 Slip Road 3 Road Barrier	14	25-Nov-15	08-Dec-15
S3C-TS-2090D	Bay 15,16 & 17 Slip Road 2 OHVD Base Slab	16	15-Oct-15	30-Oct-15
S3C-TS-2090D	Bay 15,16 & 17 Slip Road 2 Road Barrier	14	08-Dec-15	21-Dec-15
S3C-TS-2110A	Bay 18, 19 & 20 CWB & Slip Road 2 & Slip Road 3 Base Slab	12	01-Nov-15	12-Nov-15
S3C-TS-2110B	Removal of 2nd & 3rd layer of struts/wailer at Bay 18, 19 & 20	14	20-Nov-15	04-Dec-15
S3C-TS-2110C	Bay 18, 19 & 20 CWB, Slip Road 3 & Slip Road 2 Wall	15	05-Dec-15	19-Dec-15
S3C-TS-2110D	Bay 18, 19 & 20 CWB, Slip Road 3 & Slip Road 2 OHVD Base Slab	15	20-Dec-15	03-Jan-16
S3C-TS-2110E	Bay 18, 19 & 20 CWB, Slip Road 3 and Slip Road 2 OHVD Wall Stem & Top Slab	20	04-Jan-16	23-Jan-16
S3C-TS-2110E	Removal Scaffold at Bay 18 to 20	17	24-Jan-16	09-Feb-16
S3C-TS-2110F	Bay 18, 19 & 20 CWB, Slip Road 3 and Slip Road 2 Road Barrier	9	10-Feb-16	18-Feb-16
Section 8 of the Works - Works in Area 6 (Utilities other than Watermains in Fenwick Pier Street)				
Sewerage Works				
S8-3010	Planter Reinstatement	30	29-Jul-15 A	22-Oct-15
S8-3020	Road Reinstatement	21	25-Sep-15 A	22-Oct-15
Section 9 of the Works - Remaindar of the Works				
Box Culvert Construction				
S9-1070	Backfill the Temporary Water Channel from East to West (BG/BI Connection Point at Water Channel)	30	02-Jun-15 A	30-Nov-15
Reprovision of Expo Drive East				
S9-2050	Traffic Aid and Demolition of Remaining Portion of Existing Expo Drive East Bridge	45	30-Jul-15 A	30-Nov-15
S9-2060	Construction of Retaining Wall Extension to Top of Box Culvert Bay 7	30	17-Jan-16	15-Feb-16
Waterworks in Area 9				
Abandaned Pipes Removal				
S9-7090	Zone A4-4 Abandoned Pipes P7/P9 Removal Works	30	14-Oct-15 A	07-Dec-15



Remaining Work
Actual Work
Summary Bar
Critical Remaining Work
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CEDD CONTRACT NO. HK/2009/01

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

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

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

TASK filters: 3-Month (Works), 3-Month Rolling Prog.

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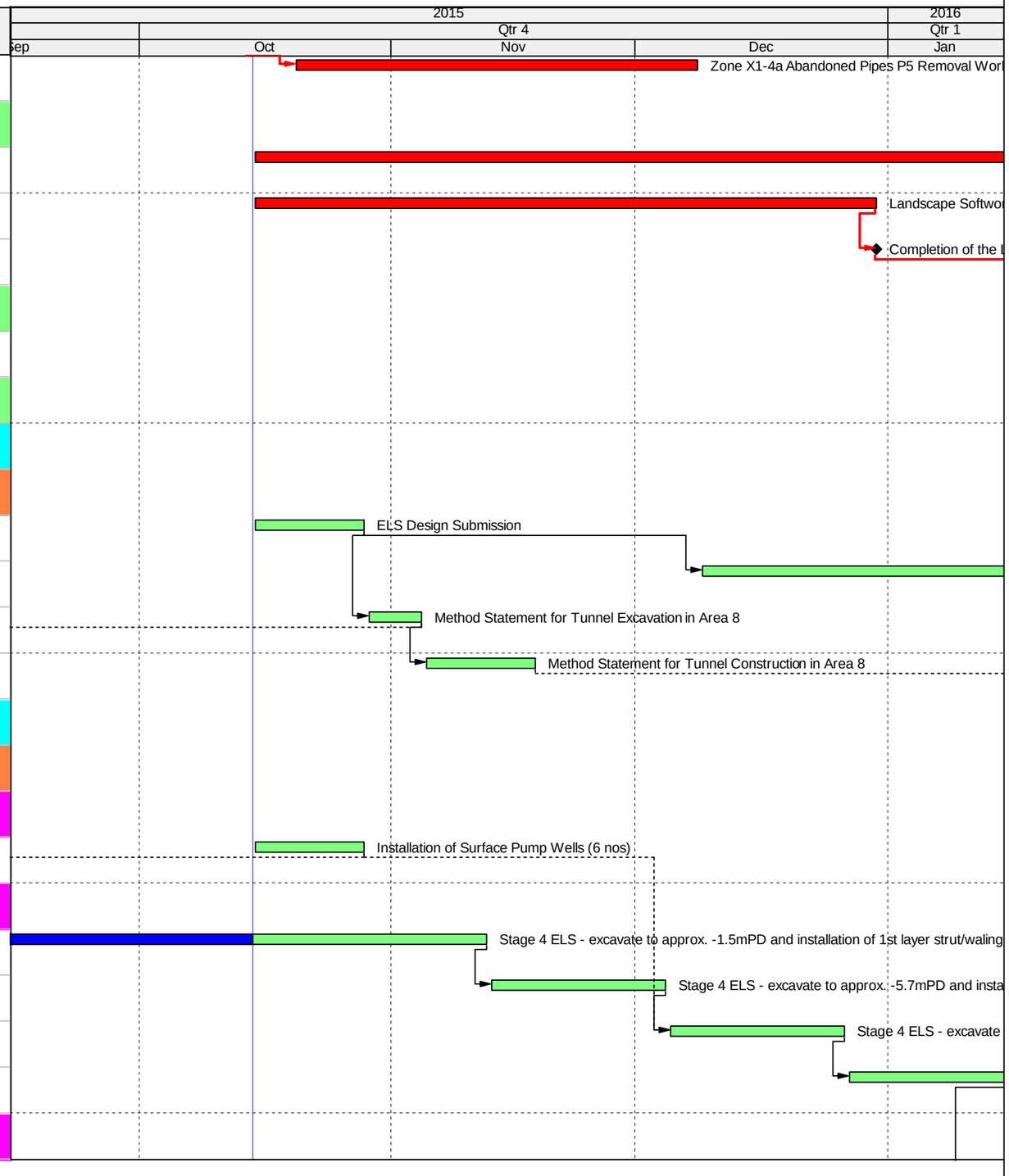
CEDD CONTRACT HK/2009/01

CHUN WO - LEADER JOINT VENTURE

Activity ID	Activity Name	OD	Start	Finish
S9-7100	Zone X1-4a Abandoned Pipes P5 Removal Works	14	20-Oct-15*	08-Dec-15
Section 9A of the Works - Landscape Softworks in Area 9				
S9A-1000	Transplanting at Expo Drive East and Convention Avenue Junction	180	15-Oct-15	11-Apr-16
S9A-2000	Landscape Softworks in Area 9 Footpath	60	15-Oct-15	30-Dec-15
S9A-3000	Completion of the Landscape Softworks in Area 9	0		30-Dec-15
Section 9B of the Works - Establishment Works in Area 9				
S9B-1000	Establishment Works at Area 9	365	11-Apr-16	10-Apr-17
Variation Order No.153 - Design and Construct CWB Bypass Tunnel from CH3246 to CH3278				
Preliminaries				
Major Method Statement & Design Submission and Approval				
DS-0020	ELS Design Submission	28	15-Oct-15	28-Oct-15
DS-0040	Tunnel Structure Design Submission	28	09-Dec-15	16-Jan-16
MS-0040	Method Statement for Tunnel Excavation in Area 8	7	29-Oct-15	04-Nov-15
MS-0060	Method Statement for Tunnel Construction in Area 8	14	05-Nov-15	18-Nov-15
Works at Area 8 - CWB Tunnel, Slip Roads 2 & 3, Works in Area 8				
CWB Tunnelling Works (Stage 4: Ch3246 - Ch3278)				
Stage 4 - Pre-bored H-pile and Dewatering Works (CH3246 - CH3278)				
S4-FW-0020	Installation of Surface Pump Wells (6 nos)	14	15-Oct-15	28-Oct-15
Stage 4 - Excavation Works (CH3246 - CH3278) include Demolition of C2E BH Wall				
S4-EW-0010	Stage 4 ELS - excavate to approx. -1.5mPD and installation of 1st layer strut/waling at -0.5mPD (approx. 6700 cu.m)	21	26-Jun-15 A	12-Nov-15
S4-EW-0020	Stage 4 ELS - excavate to approx. -5.7mPD and installation of 2nd layer strut/waling at -4.7mPD (approx. 6600 cu.m)	21	13-Nov-15	04-Dec-15
S4-EW-0030	Stage 4 ELS - excavate to approx. -10mPD and installation of 3rd layer strut/waling at -9mPD (approx. 6700 cu.m)	21	05-Dec-15	26-Dec-15
S4-EW-0050	Stage 4 ELS - excavate to formation approx. -15.3mPD (approx. 10,000 cu.m)	20	27-Dec-15	16-Jan-16
Stage 4 - Tunnel Structure Works (Bay 21 to Bay 22 : CH3246 - CH3278)				



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CEDD CONTRACT NO. HK/2009/01

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

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

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15-Oct-15	Progress Updated on 15 Oct 2015		

Filters: 3-Month (Works), 3-Month Rolling Prog.

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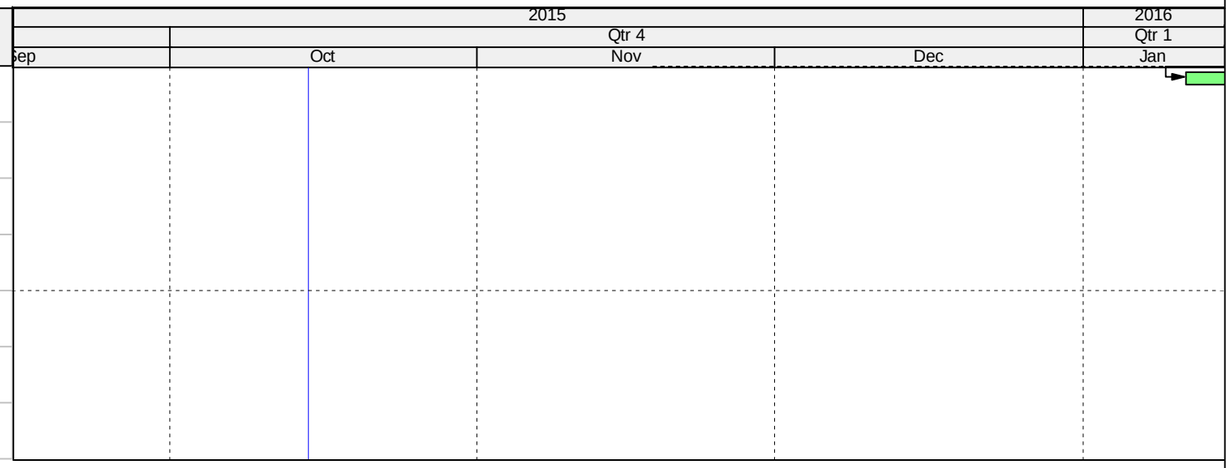
CEDD CONTRACT HK/2009/01

CHUN WO - LEADER JOINT VENTURE

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



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

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

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15-Sep-15	Program 6H 15 Sep 2015		
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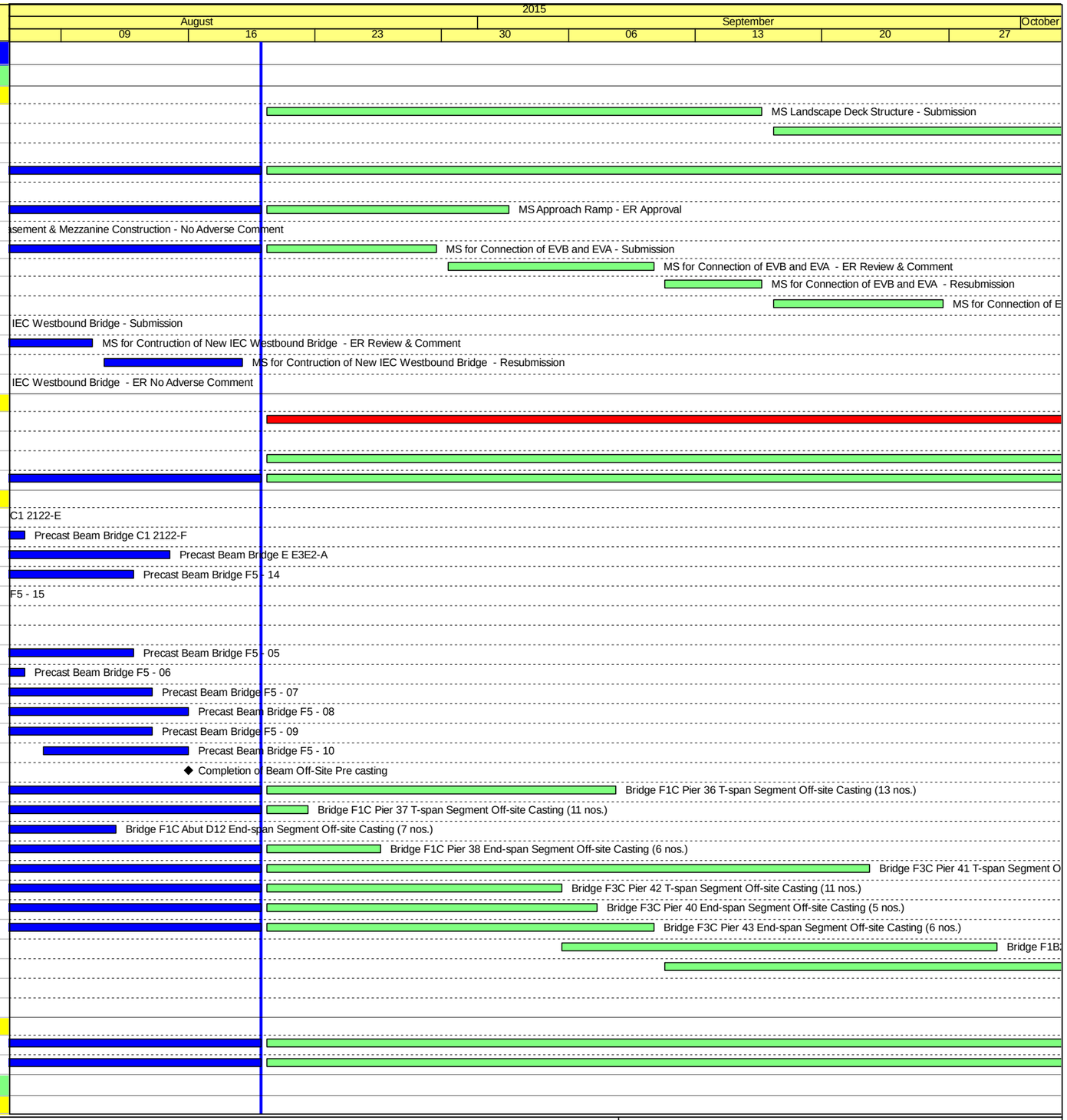
Activity ID	Activity Name	Remaining Duration	Start	Finish
3MRP - Aug 2015 to Nov 2015				
02 - PRE-CONSTRUCTION WORKS				
02.3 - Method Statement / Shop Drawings				
0230-1380	MS Landscape Deck Structure - Submission	28	20-Aug-15	16-Sep-15
0230-1390	MS Landscape Deck Structure - ER Review & Comment	28	17-Sep-15	14-Oct-15
0230-1400	MS Landscape Deck Structure - Resubmission	28	15-Oct-15	11-Nov-15
0230-1611	MS Noise Semi Enclosure - Submission	54	20-Jul-15 A	12-Oct-15
0230-1612	MS Noise Semi Enclosure - ER Review / Comment	28	13-Oct-15	09-Nov-15
0230-1690	MS Approach Ramp - ER Approval	14	01-Feb-15 A	02-Sep-15
0230-2280	MS EVB Basement & Mezzanine Construction - No Adverse Comment	0	20-Jul-15 A	02-Aug-15 A
0230-2330	MS for Connection of EVB and EVA - Submission	10	10-Mar-15 A	29-Aug-15
0230-2340	MS for Connection of EVB and EVA - ER Review & Comment	12	30-Aug-15	10-Sep-15
0230-2350	MS for Connection of EVB and EVA - Resubmission	6	11-Sep-15	16-Sep-15
0230-2360	MS for Connection of EVB and EVA - ER No Adverse Comment	10	17-Sep-15	26-Sep-15*
0230-2370	MS for Contruction of New IEC Westbound Bridge - Submission	0	20-Jul-15 A	29-Jul-15 A
0230-2380	MS for Contruction of New IEC Westbound Bridge - ER Review & Comment	0	30-Jul-15 A	10-Aug-15 A
0230-2390	MS for Contruction of New IEC Westbound Bridge - Resubmission	0	11-Aug-15 A	19-Aug-15 A
0230-2400	MS for Contruction of New IEC Westbound Bridge - ER No Adverse Comment	0	20-Jul-15 A	29-Jul-15 A
02.4 - Contractor's Design and Build Items				
0240-1180	HGHK Permanent Carpark Design - ER/HGHK Review and Comment	50	20-Aug-15	08-Oct-15
0240-1190	HGHK Permanent Carpark Design - Resubmission	50	09-Oct-15	27-Nov-15
0240-1270	Landscaping Design - Submission	90	20-Aug-15*	17-Nov-15
0240-1630	Green Roof & Wall Minimum 2 years Establishment	501	18-Apr-15 A	19-Apr-17
02.5 - Bridge Segment/Beam Off-site Precasting				
0250-2620	Precast Beam Bridge C1 2122-E	0	23-Jun-15 A	31-Jul-15 A
0250-2640	Precast Beam Bridge C1 2122-F	0	11-Jul-15 A	07-Aug-15 A
0250-2660	Precast Beam Bridge E E3E2-A	0	10-May-15 A	15-Aug-15 A
0250-2860	Precast Beam Bridge F5 - 14	0	01-Jun-15 A	13-Aug-15 A
0250-2880	Precast Beam Bridge F5 - 15	0	08-Jun-15 A	31-Jul-15 A
0250-2900	Precast Beam Bridge F5 - 03	0	23-Jun-15 A	27-Jul-15 A
0250-2920	Precast Beam Bridge F5 - 04	0	30-Jun-15 A	27-Jul-15 A
0250-2940	Precast Beam Bridge F5 - 05	0	10-Jul-15 A	13-Aug-15 A
0250-2960	Precast Beam Bridge F5 - 06	0	15-Jul-15 A	07-Aug-15 A
0250-2980	Precast Beam Bridge F5 - 07	0	22-Jul-15 A	14-Aug-15 A
0250-3000	Precast Beam Bridge F5 - 08	0	28-Jul-15 A	16-Aug-15 A
0250-3020	Precast Beam Bridge F5 - 09	0	04-Aug-15 A	14-Aug-15 A
0250-3030	Precast Beam Bridge F5 - 10	0	08-Aug-15 A	16-Aug-15 A
0250-3035	Completion of Beam Off-Site Pre casting	0		16-Aug-15 A
0250-3580	Bridge F1C Pier 36 T-span Segment Off-site Casting (13 nos.)	17	10-Jun-15 A	08-Sep-15
0250-3600	Bridge F1C Pier 37 T-span Segment Off-site Casting (11 nos.)	3	16-Jul-15 A	22-Aug-15
0250-3620	Bridge F1C Abut D12 End-span Segment Off-site Casting (7 nos.)	0	21-Jul-15 A	12-Aug-15 A
0250-3640	Bridge F1C Pier 38 End-span Segment Off-site Casting (6 nos.)	6	18-Jun-15 A	26-Aug-15
0250-3720	Bridge F3C Pier 41 T-span Segment Off-site Casting (13 nos.)	29	10-Apr-15 A	22-Sep-15
0250-3740	Bridge F3C Pier 42 T-span Segment Off-site Casting (11 nos.)	15	18-Apr-15 A	05-Sep-15
0250-3760	Bridge F3C Pier 40 End-span Segment Off-site Casting (5 nos.)	16	10-Apr-15 A	07-Sep-15
0250-3780	Bridge F3C Pier 43 End-span Segment Off-site Casting (6 nos.)	19	22-May-15 A	10-Sep-15
0250-3860	Bridge F1B2 - Abut D12 Segment - 6 nos. (S2)	19	05-Sep-15	29-Sep-15
0250-3880	Bridge F1B2 - Pier F1B2 Segment - 13 nos. (S1)	40	11-Sep-15	30-Oct-15
0250-3920	Bridge F1B2 - Pier F3B2 Segment - 6 nos. (S2)	19	07-Oct-15	30-Oct-15
0250-3940	Bridge F2B - Pier F3B2 Segment - 5 nos. (S2)	16	06-Nov-15	25-Nov-15
02.6 - Fabrication & Delivery of Noise Enclosure				
0260-5000	Int. Noise Enclosure Main + Sub Frames Fab / Del	105	01-Jun-15 A	23-Dec-15
0260-5010	Int. Noise Enclosure Noise Panel Fab / Del	122	19-Jan-15 A	14-Jan-16
05 - SECTION 2 & 2A OF THE WORKS				
05.1 - Cut & Cover Tunnel Ch 4855-4932 (APS Footprint)				



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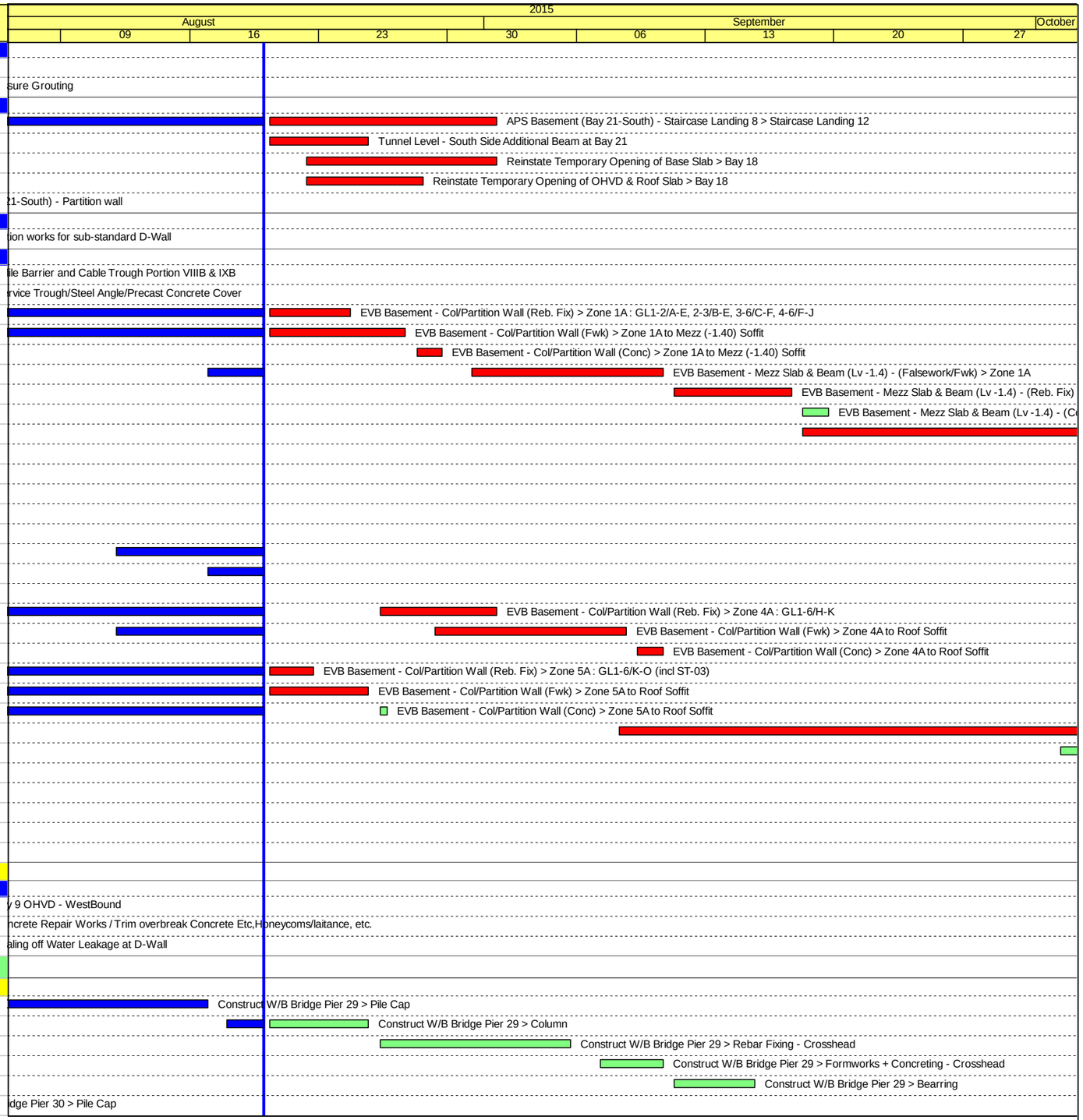
◆ ◆ Milestone

Contract HY/2009/19
Three Months Rolling Programme (20 Aug to 19 Nov 2015)

Activity ID	Activity Name	Remaining Duration	Start	Finish
05.1.1 - D-Wall Construction				
0511-1600	D-Wall Interface Coring	0	16-May-15 A	25-Jul-15 A
0511-1620	D-Wall Grouting/Pressure Grouting	0	26-Jul-15 A	31-Jul-15 A
05.1.3 - APS & Tunnel Structure				
0513-3060	APS Basement (Bay 21-South) - Staircase Landing 8 > Staircase Landing 12	11	07-Jul-15 A	01-Sep-15
0513-3080	Tunnel Level - South Side Additional Beam at Bay 21	5	20-Aug-15	25-Aug-15
0513-3100	Reinstate Temporary Opening of Base Slab > Bay 18	9	22-Aug-15	01-Sep-15
0513-3105	Reinstate Temporary Opening of OHVD & Roof Slab > Bay 18	6	22-Aug-15	28-Aug-15*
0513-3140	APS Basement (Bay 21-South) - Partition wall	0	07-Apr-15 A	31-Jul-15 A
05.1.4 - Tunnel Structure				
0514-2040	Weak Seam Rectification works for sub-standard D-Wall	0	10-Mar-15 A	31-Jul-15 A
05.1.5 - EVB Sub-structure & Tunnel				
0515-1060	Tunnel Roadside/Profile Barrier and Cable Trough Portion VIIIB & IXB	0	16-Jun-15 A	31-Jul-15 A
0515-1061	Roadside Barrier - Service Trough/Steel Angle/Precast Concrete Cover	0	20-Jul-15 A	31-Jul-15 A
0515-1120	EVB Basement - Col/Partition Wall (Reb. Fix) > Zone 1A : GL1-2/A-E, 2-3/B-E, 3-6/C	4	13-Jul-15 A	24-Aug-15
0515-1140	EVB Basement - Col/Partition Wall (Fwk) > Zone 1A to Mezz (-1.40) Soffit	7	03-Aug-15 A	27-Aug-15
0515-1160	EVB Basement - Col/Partition Wall (Conc) > Zone 1A to Mezz (-1.40) Soffit	2	28-Aug-15	29-Aug-15
0515-1180	EVB Basement - Mezz Slab & Beam (Lv -1.4) - (Falsework/Fwk) > Zone 1A	10	17-Aug-15 A	10-Sep-15
0515-1200	EVB Basement - Mezz Slab & Beam (Lv -1.4) - (Reb. Fix) > Zone 1A	6	16-Sep-15 A	17-Sep-15
0515-1220	EVB Basement - Mezz Slab & Beam (Lv -1.4) - (Conc) > Zone 1A	2	18-Sep-15	19-Sep-15
0515-1240	EVB Basement - Col/Partition Wall (Reb. Fix) > Zone 2A : GL1-6/A-D (incl ST-04)	14	18-Sep-15	06-Oct-15
0515-1260	EVB Basement - Col/Partition Wall (Fwk) > Zone 2A to Roof Soffit	14	03-Oct-15	19-Oct-15
0515-1280	EVB Basement - Col/Partition Wall (Conc) > Zone 2A to Roof Soffit	2	20-Oct-15	22-Oct-15
0515-1300	EVB Basement - Mezz Slab & Beam (Lv +2.65) - (Falsework/Fwk) > Zone 2A	6	23-Oct-15	29-Oct-15
0515-1320	EVB Basement - Mezz Slab & Beam (Lv +2.65) - (Reb. Fix) > Zone 2A	3	30-Oct-15	02-Nov-15
0515-1340	EVB Basement - Mezz Slab & Beam (Lv +2.65) - (Conc) > Zone 2A	1	03-Nov-15	03-Nov-15
0515-1360	EVB Basement - Col/Partition Wall (Reb. Fix) > Zone 3A : GL1-6/E-H	6	12-Aug-15 A	13-Oct-15
0515-1380	EVB Basement - Col/Partition Wall (Fwk) > Zone 3A to Roof Soffit	8	17-Aug-15 A	29-Oct-15
0515-1400	EVB Basement - Col/Partition Wall (Conc) > Zone 3A to Roof Soffit	2	28-Oct-15	29-Oct-15
0515-1420	EVB Basement - Col/Partition Wall (Reb. Fix) > Zone 4A : GL1-6/H-K	6	06-Aug-15 A	01-Sep-15
0515-1440	EVB Basement - Col/Partition Wall (Fwk) > Zone 4A to Roof Soffit	9	12-Aug-15 A	08-Sep-15
0515-1460	EVB Basement - Col/Partition Wall (Conc) > Zone 4A to Roof Soffit	2	09-Sep-15	10-Sep-15
0515-1480	EVB Basement - Col/Partition Wall (Reb. Fix) > Zone 5A : GL1-6/K-O (incl ST-03)	3	07-Jul-15 A	22-Aug-15
0515-1500	EVB Basement - Col/Partition Wall (Fwk) > Zone 5A to Roof Soffit	5	11-Jul-15 A	25-Aug-15
0515-1520	EVB Basement - Col/Partition Wall (Conc) > Zone 5A to Roof Soffit	1	30-Jul-15 A	26-Aug-15
0515-1540	EVB Basement - Roof Slab (Falsework/Fwk) > Zone 5B : GL1-6/K-O	21	08-Sep-15	03-Oct-15
0515-1560	EVB Basement - Roof Slab (Reb Fix) > Zone 5B : GL1-6/K-O	14	02-Oct-15	17-Oct-15
0515-1580	EVB Basement - Roof Slab (Conc) > Zone 5B : GL1-6/K-O	2	19-Oct-15	20-Oct-15
0515-1600	EVB Basement - Roof Slab (Falsework/Fwk) > Zone 4B : GL1-6/H-K	21	05-Oct-15	29-Oct-15
0515-1620	EVB Basement - Roof Slab (Reb Fix) > Zone 4B : GL1-6/H-K	14	28-Oct-15	12-Nov-15
0515-1640	EVB Basement - Roof Slab (Conc) > Zone 4B : GL1-6/H-K	2	13-Nov-15	14-Nov-15
0515-1660	EVB Basement - Roof Slab (Falsework/Fwk) > Zone 3B : GL1-6/E-H	21	30-Oct-15	23-Nov-15
05.2 - Cut & Cover Tunnel Ch 4932-5149				
05.2.5 - Road & Miscellaneous Works				
0525-1240	Remedial Works - Bay 9 OHVD - WestBound	0	26-Jul-15 A	31-Jul-15 A
0525-1260	Remedial Works - Concrete Repair Works / Trim overbreak Concrete Etc,Honeycoms	0	09-Mar-15 A	31-Jul-15 A
0525-1280	Remedial Works - Sealing off Water Leakage at D-Wall	0	01-Jun-15 A	31-Jul-15 A
06 - SECTION 3 OF THE WORKS				
06.1 - Westbound - Pier 29-34				
0610-1380	Construct W/B Bridge Pier 29 > Pile Cap	0	11-Jul-15 A	17-Aug-15 A
0610-1400	Construct W/B Bridge Pier 29 > Column	5	18-Aug-15 A	25-Aug-15
0610-1420	Construct W/B Bridge Pier 29 > Rebar Fixing - Crosshead	10	26-Aug-15	05-Sep-15
0610-1440	Construct W/B Bridge Pier 29 > Formworks + Concreting - Crosshead	4	07-Sep-15	10-Sep-15
0610-1460	Construct W/B Bridge Pier 29 > Bearring	4	11-Sep-15	15-Sep-15
0610-1480	Construct W/B Bridge Pier 30 > Pile Cap	0	06-Jul-15 A	01-Aug-15 A



Remaining Level of Effort
Actual Level of Effort
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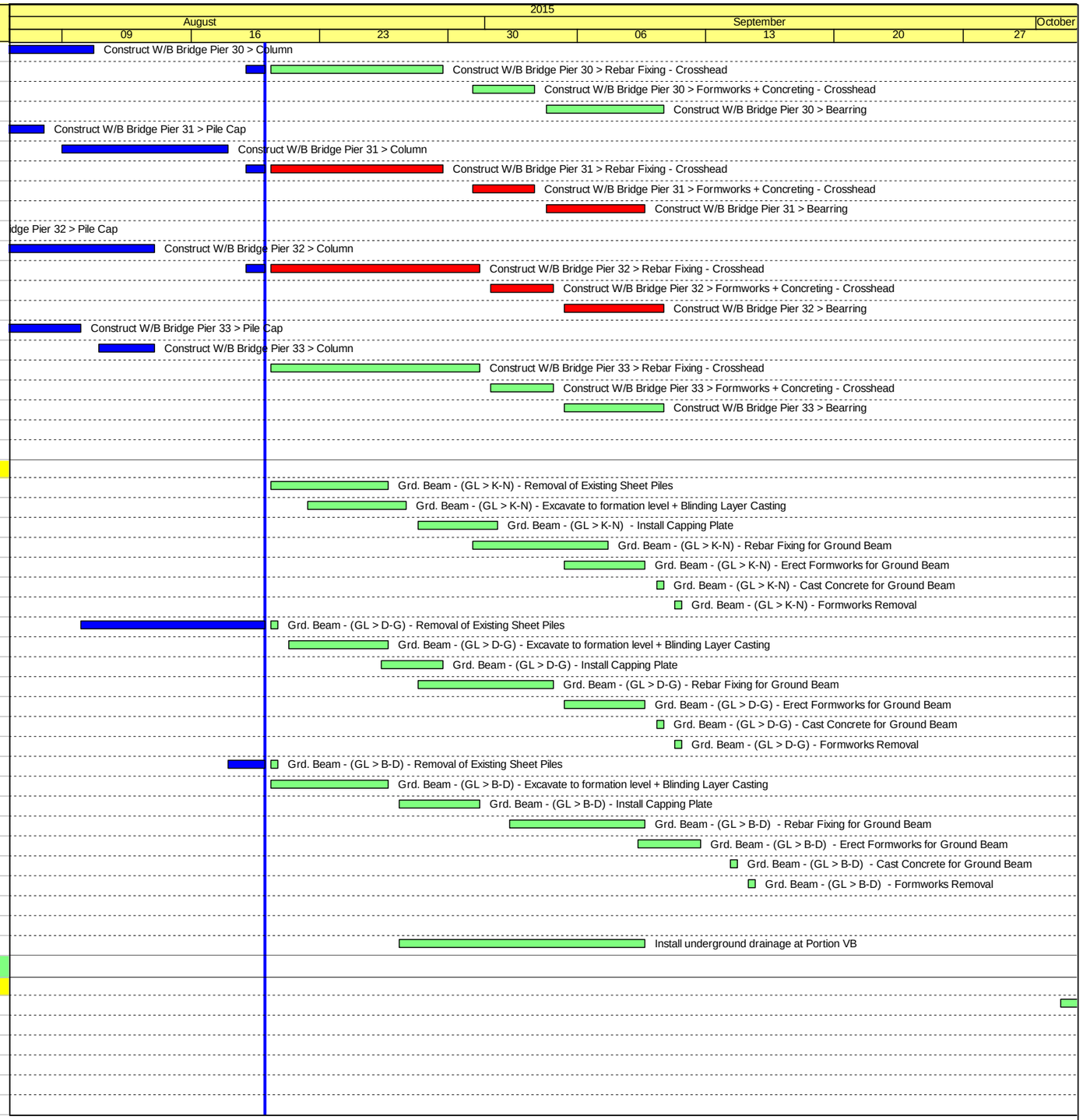
Contract HY/2009/19
Three Months Rolling Programme (20 Aug to 19 Nov 2015)

Activity ID	Activity Name	Remaining Duration	Start	Finish
0610-1500	Construct W/B Bridge Pier 30 > Column	0	02-Aug-15 A	10-Aug-15 A
0610-1520	Construct W/B Bridge Pier 30 > Rebar Fixing - Crosshead	9	19-Aug-15 A	29-Aug-15
0610-1540	Construct W/B Bridge Pier 30 > Formworks + Concreting - Crosshead	4	31-Aug-15	03-Sep-15
0610-1560	Construct W/B Bridge Pier 30 > Bearring	6	04-Sep-15	10-Sep-15
0610-1580	Construct W/B Bridge Pier 31 > Pile Cap	0	08-Jul-15 A	08-Aug-15 A
0610-1600	Construct W/B Bridge Pier 31 > Column	0	09-Aug-15 A	18-Aug-15 A
0610-1620	Construct W/B Bridge Pier 31 > Rebar Fixing - Crosshead	9	19-Aug-15 A	29-Aug-15
0610-1640	Construct W/B Bridge Pier 31 > Formworks + Concreting - Crosshead	4	31-Aug-15	03-Sep-15
0610-1660	Construct W/B Bridge Pier 31 > Bearring	5	04-Sep-15	09-Sep-15
0610-1680	Construct W/B Bridge Pier 32 > Pile Cap	0	14-Jul-15 A	01-Aug-15 A
0610-1700	Construct W/B Bridge Pier 32 > Column	0	02-Aug-15 A	14-Aug-15 A
0610-1720	Construct W/B Bridge Pier 32 > Rebar Fixing - Crosshead	10	19-Aug-15 A	31-Aug-15
0610-1740	Construct W/B Bridge Pier 32 > Formworks + Concreting - Crosshead	4	01-Sep-15	04-Sep-15
0610-1760	Construct W/B Bridge Pier 32 > Bearring	5	05-Sep-15	10-Sep-15
0610-1780	Construct W/B Bridge Pier 33 > Pile Cap	0	28-Jul-15 A	10-Aug-15 A
0610-1800	Construct W/B Bridge Pier 33 > Column	0	11-Aug-15 A	14-Aug-15 A
0610-1820	Construct W/B Bridge Pier 33 > Rebar Fixing - Crosshead	10	20-Aug-15	31-Aug-15
0610-1840	Construct W/B Bridge Pier 33 > Formworks + Concreting - Crosshead	4	01-Sep-15	04-Sep-15
0610-1860	Construct W/B Bridge Pier 33 > Bearring	5	05-Sep-15	10-Sep-15
0610-1880	W/B Bridge Pier 34 - Tie Beam > Breaking + Excav + Blinding	8	12-Nov-15	20-Nov-15
0610-1920	Construct W/B Bridge Pier 34 Drilling of Starter Bars for Pier/Column	14	12-Nov-15	27-Nov-15
06.3 - Admin Building				
0630-1100	Grd. Beam - (GL > K-N) - Removal of Existing Sheet Piles	6	20-Aug-15	26-Aug-15
0630-1101	Grd. Beam - (GL > K-N) - Excavate to formation level + Blinding Layer Casting	5	22-Aug-15	27-Aug-15
0630-1120	Grd. Beam - (GL > K-N) - Install Capping Plate	4	28-Aug-15	01-Sep-15
0630-1140	Grd. Beam - (GL > K-N) - Rebar Fixing for Ground Beam	7	31-Aug-15	07-Sep-15
0630-1160	Grd. Beam - (GL > K-N) - Erect Formworks for Ground Beam	4	05-Sep-15	09-Sep-15
0630-1180	Grd. Beam - (GL > K-N) - Cast Concrete for Ground Beam	1	10-Sep-15	10-Sep-15
0630-1200	Grd. Beam - (GL > K-N) - Formworks Removal	1	11-Sep-15	11-Sep-15
0630-1600	Grd. Beam - (GL > D-G) - Removal of Existing Sheet Piles	1	10-Aug-15 A	20-Aug-15
0630-1620	Grd. Beam - (GL > D-G) - Excavate to formation level + Blinding Layer Casting	5	21-Aug-15	26-Aug-15
0630-1640	Grd. Beam - (GL > D-G) - Install Capping Plate	4	26-Aug-15	29-Aug-15
0630-1660	Grd. Beam - (GL > D-G) - Rebar Fixing for Ground Beam	7	28-Aug-15	04-Sep-15
0630-1700	Grd. Beam - (GL > D-G) - Erect Formworks for Ground Beam	4	05-Sep-15	09-Sep-15
0630-1720	Grd. Beam - (GL > D-G) - Cast Concrete for Ground Beam	1	10-Sep-15	10-Sep-15
0630-1740	Grd. Beam - (GL > D-G) - Formworks Removal	1	11-Sep-15	11-Sep-15
0630-2020	Grd. Beam - (GL > B-D) - Removal of Existing Sheet Piles	1	18-Aug-15 A	20-Aug-15
0630-2021	Grd. Beam - (GL > B-D) - Excavate to formation level + Blinding Layer Casting	6	20-Aug-15	26-Aug-15
0630-2040	Grd. Beam - (GL > B-D) - Install Capping Plate	4	27-Aug-15	31-Aug-15
0630-2080	Grd. Beam - (GL > B-D) - Rebar Fixing for Ground Beam	7	02-Sep-15	09-Sep-15
0630-2100	Grd. Beam - (GL > B-D) - Erect Formworks for Ground Beam	4	09-Sep-15	12-Sep-15
0630-2120	Grd. Beam - (GL > B-D) - Cast Concrete for Ground Beam	1	14-Sep-15	14-Sep-15
0630-2140	Grd. Beam - (GL > B-D) - Formworks Removal	1	15-Sep-15	15-Sep-15
A1000	Construction of pile cap for PC21	15	22-Oct-15	07-Nov-15
A1010	Construction of pile cap for PC22	15	30-Oct-15	16-Nov-15
A1020	Install underground drainage at Portion VB	12	27-Aug-15	09-Sep-15
08 - SECTION 5 WORK				
08.1 - Retaining Wall 'F' Substructure				
0810-1640	Retaining Wall F > Pile Testing & prep for Caps Const	5	02-Oct-15*	07-Oct-15
0810-1650	Retaining Wall F > Temp Excav Support/Open cut Excav works	21	08-Oct-15*	02-Nov-15
0810-1660	Retaining Wall F > Excavation Works for Pile caps	25	19-Oct-15	17-Nov-15
0810-1670	Construction of pile cap for Retaining Wall F @ C4-13	15	22-Oct-15	07-Nov-15
0810-1680	Construction of pile cap for Retaining Wall F @ C4-14/C15-11	15	31-Oct-15	17-Nov-15
0810-1700	Construction of pile cap for Retaining Wall F @ C5-12	15	10-Nov-15	26-Nov-15



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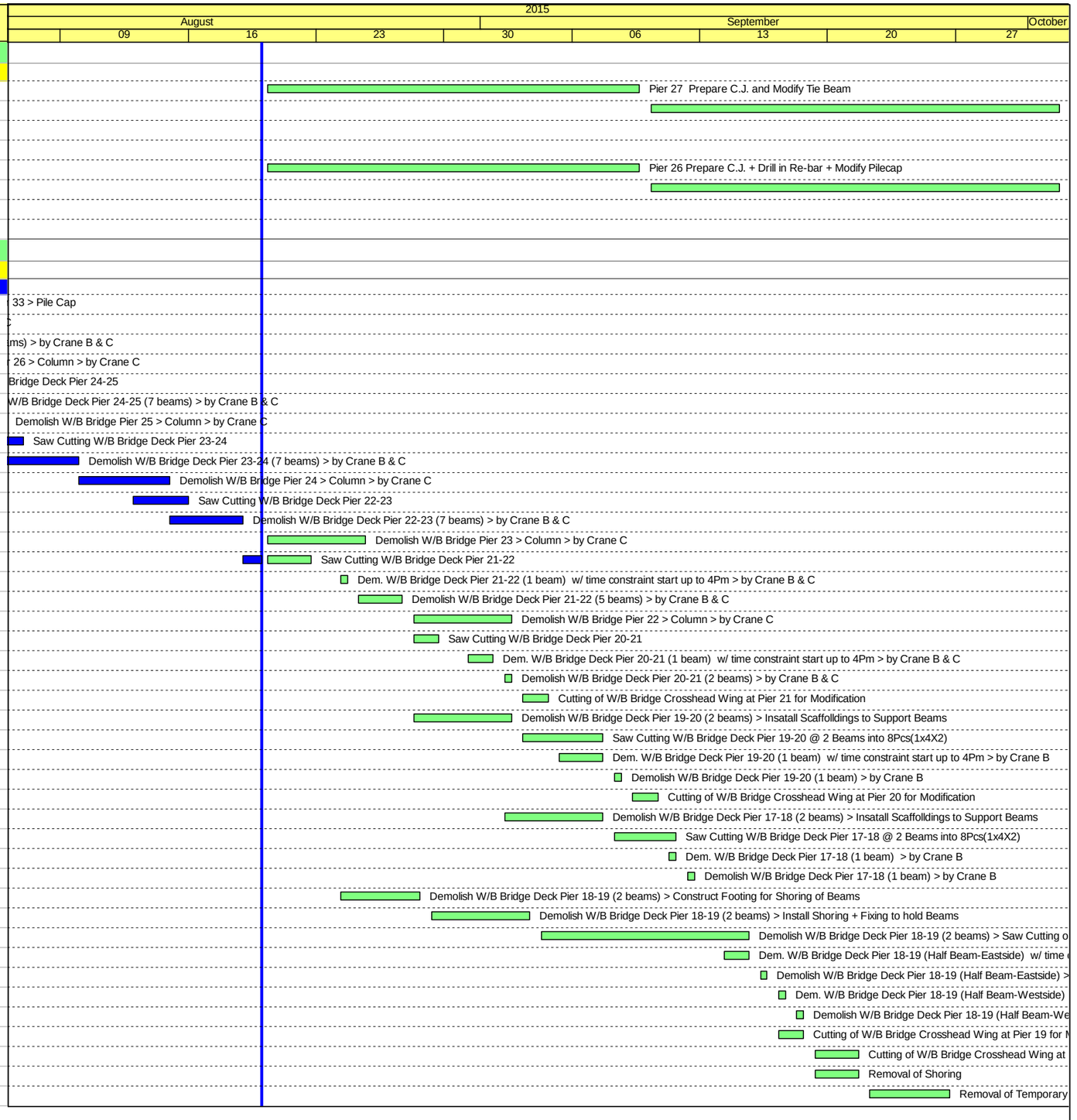
Activity ID	Activity Name	Remaining Duration	Start	Finish
09 - SECTION 6 OF THE WORKS				
09.2 - Westbound - Pier 26-27				
0920-1080	Pier 27 Prepare C.J. and Modify Tie Beam	18	20-Aug-15	09-Sep-15
0920-1100	Pier 27 Construct Pier/Column	18	10-Sep-15	02-Oct-15
0920-1120	Pier 27 Construct Crosshead	24	03-Oct-15	31-Oct-15
0920-1140	Pier 27 Install Bearing	9	02-Nov-15	11-Nov-15
0920-1160	Pier 26 Prepare C.J. + Drill in Re-bar + Modify Pilecap	18	20-Aug-15	09-Sep-15
0920-1180	Pier 26 Construct Pier/Column	18	10-Sep-15	02-Oct-15
0920-1200	Pier 26 Construct Crosshead	24	03-Oct-15	31-Oct-15
0920-1220	Pier 26 Install Bearing	9	02-Nov-15	11-Nov-15
10 - SECTION X OF THE WORKS				
10.4 - Bridge Deck Demolition				
10.4.1 - Existing W/B Bridge (Part 1)				
10410-1320	Excavate + Demolish W/B Bridge Pier 33 > Pile Cap	0	14-Jul-15 A	27-Jul-15 A
10410-1440	Demolish W/B Bridge Pier 27 > Column > by Crane C	0	19-Jul-15 A	23-Jul-15 A
10410-1480	Demolish W/B Bridge Deck Pier 25-26 (7 beams) > by Crane B & C	0	23-Jul-15 A	25-Jul-15 A
10410-1500	Demolish W/B Bridge Pier 26 > Column > by Crane C	0	25-Jul-15 A	30-Jul-15 A
10410-1520	Saw Cutting W/B Bridge Deck Pier 24-25	0	30-Jul-15 A	01-Aug-15 A
10410-1540	Demolish W/B Bridge Deck Pier 24-25 (7 beams) > by Crane B & C	0	31-Jul-15 A	03-Aug-15 A
10410-1560	Demolish W/B Bridge Pier 25 > Column > by Crane C	0	03-Aug-15 A	06-Aug-15 A
10410-1580	Saw Cutting W/B Bridge Deck Pier 23-24	0	04-Aug-15 A	07-Aug-15 A
10410-1600	Demolish W/B Bridge Deck Pier 23-24 (7 beams) > by Crane B & C	0	06-Aug-15 A	10-Aug-15 A
10410-1620	Demolish W/B Bridge Pier 24 > Column > by Crane C	0	10-Aug-15 A	15-Aug-15 A
10410-1640	Saw Cutting W/B Bridge Deck Pier 22-23	0	13-Aug-15 A	16-Aug-15 A
10410-1660	Demolish W/B Bridge Deck Pier 22-23 (7 beams) > by Crane B & C	0	15-Aug-15 A	19-Aug-15 A
10410-1680	Demolish W/B Bridge Pier 23 > Column > by Crane C	5	20-Aug-15	25-Aug-15
10410-1700	Saw Cutting W/B Bridge Deck Pier 21-22	3	19-Aug-15 A	22-Aug-15
10410-1701	Dem. W/B Bridge Deck Pier 21-22 (1 beam) w/ time constraint start up to 4Pm > by (	1	24-Aug-15	24-Aug-15
10410-1720	Demolish W/B Bridge Deck Pier 21-22 (5 beams) > by Crane B & C	3	25-Aug-15	27-Aug-15
10410-1740	Demolish W/B Bridge Pier 22 > Column > by Crane C	5	28-Aug-15	02-Sep-15
10410-1741	Saw Cutting W/B Bridge Deck Pier 20-21	2	28-Aug-15	29-Aug-15
10410-1742	Dem. W/B Bridge Deck Pier 20-21 (1 beam) w/ time constraint start up to 4Pm > by (	2	31-Aug-15	01-Sep-15
10410-1743	Demolish W/B Bridge Deck Pier 20-21 (2 beams) > by Crane B & C	1	02-Sep-15	02-Sep-15
10410-1743.1	Cutting of W/B Bridge Crosshead Wing at Pier 21 for Modification	2	03-Sep-15	04-Sep-15
10410-1744	Demolish W/B Bridge Deck Pier 19-20 (2 beams) > Insatall Scaffolldings to Support B	5	28-Aug-15	02-Sep-15
10410-1745	Saw Cutting W/B Bridge Deck Pier 19-20 @ 2 Beams into 8Pcs(1x4X2)	4	03-Sep-15	07-Sep-15
10410-1746	Dem. W/B Bridge Deck Pier 19-20 (1 beam) w/ time constraint start up to 4Pm > by (	2	05-Sep-15	07-Sep-15
10410-1747	Demolish W/B Bridge Deck Pier 19-20 (1 beam) > by Crane B	1	08-Sep-15	08-Sep-15
10410-1747.1	Cutting of W/B Bridge Crosshead Wing at Pier 20 for Modification	2	09-Sep-15	10-Sep-15
10410-1747.5	Demolish W/B Bridge Deck Pier 17-18 (2 beams) > Insatall Scaffolldings to Support B	5	02-Sep-15	07-Sep-15
10410-1748	Saw Cutting W/B Bridge Deck Pier 17-18 @ 2 Beams into 8Pcs(1x4X2)	4	08-Sep-15	11-Sep-15
10410-1749	Dem. W/B Bridge Deck Pier 17-18 (1 beam) > by Crane B	1	11-Sep-15	11-Sep-15
10410-1750	Demolish W/B Bridge Deck Pier 17-18 (1 beam) > by Crane B	1	12-Sep-15	12-Sep-15
10410-1751	Demolish W/B Bridge Deck Pier 18-19 (2 beams) > Construct Footing for Shoring of E	5	24-Aug-15	28-Aug-15
10410-1752	Demolish W/B Bridge Deck Pier 18-19 (2 beams) > Install Shoring + Fixing to hold Be	5	29-Aug-15	03-Sep-15
10410-1753	Demolish W/B Bridge Deck Pier 18-19 (2 beams) > Saw Cutting of Bridge Deck & Par	10	04-Sep-15	15-Sep-15
10410-1754	Dem. W/B Bridge Deck Pier 18-19 (Half Beam-Eastside) w/ time constraint start at 4I	2	14-Sep-15	15-Sep-15
10410-1755	Demolish W/B Bridge Deck Pier 18-19 (Half Beam-Eastside) > by Crane D	1	16-Sep-15	16-Sep-15
10410-1756	Dem. W/B Bridge Deck Pier 18-19 (Half Beam-Westside) w/ time constraint start at 4	1	17-Sep-15	17-Sep-15
10410-1757	Demolish W/B Bridge Deck Pier 18-19 (Half Beam-Westside) > by Crane D	1	18-Sep-15	18-Sep-15
10410-1760	Cutting of W/B Bridge Crosshead Wing at Pier 19 for Modification > by Crane D	2	17-Sep-15	18-Sep-15
10410-1761	Cutting of W/B Bridge Crosshead Wing at Pier 18 for Modification > by Crane D	2	19-Sep-15	21-Sep-15
10410-1762	Removal of Shoring	2	19-Sep-15	21-Sep-15
10410-1763	Removal of Temporary Footing	5	22-Sep-15	26-Sep-15



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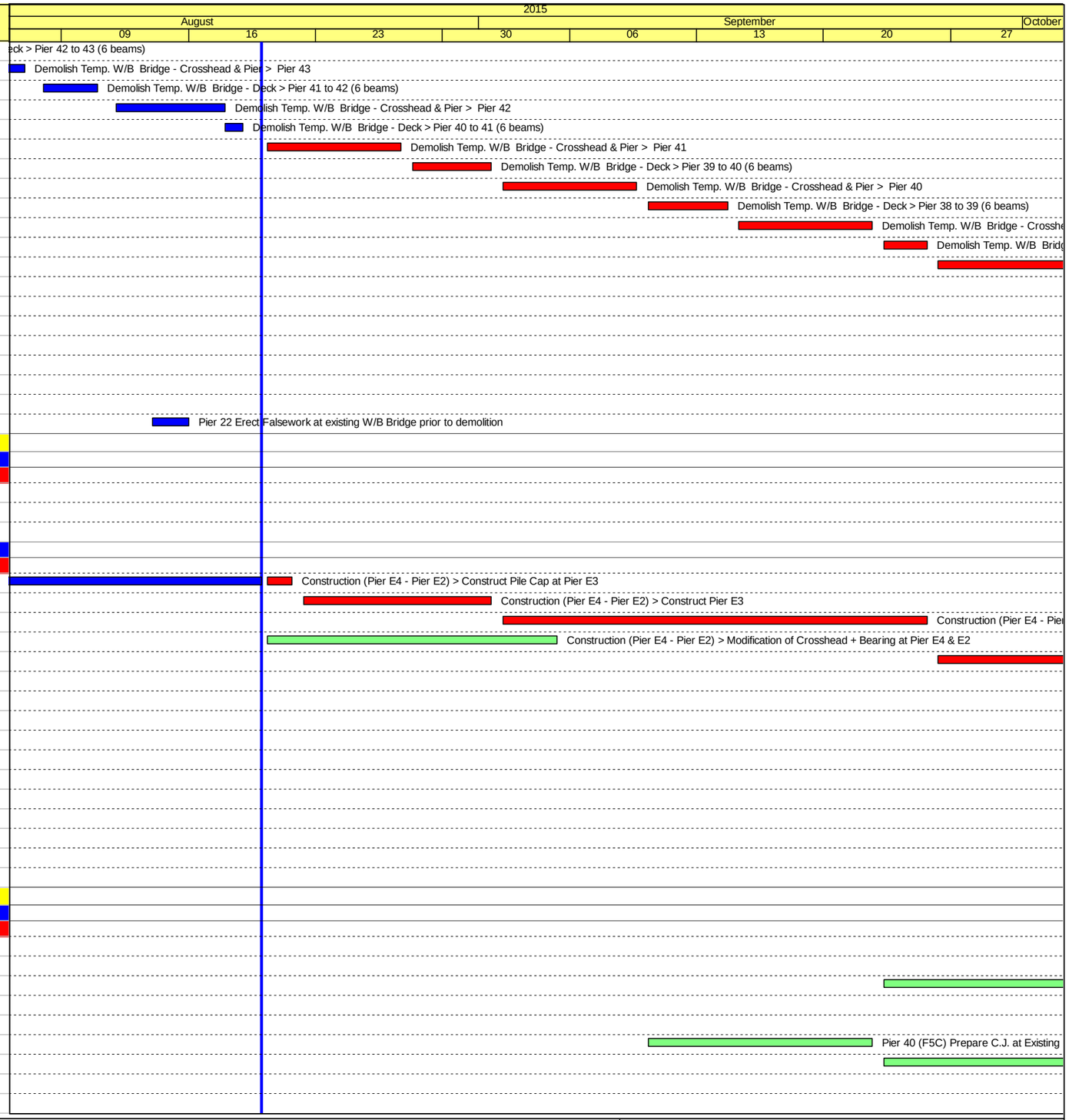
Activity ID	Activity Name	Remaining Duration	Start	Finish
10410-2180	Demolish Temp. W/B Bridge - Deck > Pier 42 to 43 (6 beams)	0	17-Jul-15 A	28-Jul-15 A
10410-2200	Demolish Temp. W/B Bridge - Crosshead & Pier > Pier 43	0	29-Jul-15 A	07-Aug-15 A
10410-2220	Demolish Temp. W/B Bridge - Deck > Pier 41 to 42 (6 beams)	0	08-Aug-15 A	11-Aug-15 A
10410-2240	Demolish Temp. W/B Bridge - Crosshead & Pier > Pier 42	0	12-Aug-15 A	18-Aug-15 A
10410-2260	Demolish Temp. W/B Bridge - Deck > Pier 40 to 41 (6 beams)	0	18-Aug-15 A	19-Aug-15 A
10410-2280	Demolish Temp. W/B Bridge - Crosshead & Pier > Pier 41	7	20-Aug-15	27-Aug-15
10410-2300	Demolish Temp. W/B Bridge - Deck > Pier 39 to 40 (6 beams)	4	28-Aug-15	01-Sep-15
10410-2320	Demolish Temp. W/B Bridge - Crosshead & Pier > Pier 40	7	02-Sep-15	09-Sep-15
10410-2340	Demolish Temp. W/B Bridge - Deck > Pier 38 to 39 (6 beams)	4	10-Sep-15	14-Sep-15
10410-2360	Demolish Temp. W/B Bridge - Crosshead & Pier > Pier 39	7	15-Sep-15	22-Sep-15
10410-2380	Demolish Temp. W/B Bridge - Deck > Pier 37 to 38 (6 beams)	3	23-Sep-15	25-Sep-15
10410-2400	Demolish Temp. W/B Bridge - Crosshead & Pier > Pier 38	7	26-Sep-15	06-Oct-15
10410-2420	Demolish Temp. W/B Bridge - Deck > Pier 36 to 37 (6 beams)	3	07-Oct-15	09-Oct-15
10410-2440	Demolish Temp. W/B Bridge - Crosshead & Pier > Pier 37	7	10-Oct-15	17-Oct-15
10410-2460	Demolish Temp. W/B Bridge - Deck > Pier 35 to 36 (6 beams)	3	19-Oct-15	22-Oct-15
10410-2480	Demolish Temp. W/B Bridge - Crosshead & Pier > Pier 36	7	23-Oct-15	30-Oct-15
10410-2500	Demolish Temp. W/B Bridge - Deck > Pier 34 to 35 (6 beams)	3	31-Oct-15	03-Nov-15
10410-2520	Demolish Temp. W/B Bridge - Crosshead & Pier > Pier 35 (by crane)	7	04-Nov-15	11-Nov-15
10410-2540	Demolish Temp. W/B Bridge - Crosshead & Pier > Pier 34 (by crane)	7	04-Nov-15	11-Nov-15
10410-3020	Pier 22 Erect Falsework at existing W/B Bridge prior to demolition	0	14-Aug-15 A	16-Aug-15 A
10.1 - E/B Bridges (Bridge D, E and F)				
10.1.1 - Marine Pier Construction				
Pier F01 to F02				
1011-8600	F1B Pier/Column Construction	12	07-Oct-15	20-Oct-15
1011-8620	F1B Crosshead Construction	18	22-Oct-15	11-Nov-15
1011-8640	Bearing installation pier F1B & F2B	12	12-Nov-15	25-Nov-15
10.1.4 - Bridge E / Hing Fat Slip Road				
Bridge Construction				
1014-1840	Construction (Pier E4 - Pier E2) > Construct Pile Cap at Pier E3	2	03-Aug-15 A	21-Aug-15
1014-1860	Construction (Pier E4 - Pier E2) > Construct Pier E3	9	22-Aug-15	01-Sep-15
1014-1880	Construction (Pier E4 - Pier E2) > Construct Crosshead + Bearing at Pier E3	21	02-Sep-15	25-Sep-15
1014-1900	Construction (Pier E4 - Pier E2) > Modification of Crosshead + Bearing at Pier E4 & E	14	20-Aug-15	05-Sep-15
1014-1920	Construction (Pier E4 - Pier E2) > Erect 3nos Beams > Pier E3-E2	5	26-Sep-15	03-Oct-15
1014-1940	Construction (Pier E4 - Pier E2) > Erect 3nos Beams > Pier E4-E3	5	05-Oct-15	09-Oct-15
1014-1960	Construction (Pier E4 - Pier E2) > Erect Scaffoldings + Platform + Pre-cast Planking >	7	10-Oct-15	17-Oct-15
1014-1980	Construction (Pier E4 - Pier E2) > Rebar Fixing of Deck + Diaphragm + Concreting >	14	16-Oct-15	02-Nov-15
1014-2000	Construction (Pier E4 - Pier E2) > Construct Parapet D1-E2	14	15-Oct-15	02-Nov-15
1014-2020	Construction (Pier E4 - Pier E2) > Construct Parapet E2-E4	14	03-Nov-15	18-Nov-15
1014-2040	Construction (Pier E4 - Pier E2) > Install Street Furniture/GullyEtc.	14	03-Nov-15	18-Nov-15
1014-2060	Construction (Pier E4 - Pier E2) > Install MJ at Pier E2	7	09-Nov-15	16-Nov-15
1014-2080	Construction (Pier E4 - Pier E2) > Install MJ at Pier E3 & E4	8	12-Nov-15	20-Nov-15
1014-2100	Construction (Pier E4 - Pier E2) > Aspahlt + Road Markings, Install Street Furniture/Si	4	21-Nov-15	25-Nov-15
1014-2940	Bridge E (Pier 19 - D1) - Noise Barrier > Post + Panel	14	02-Nov-15	17-Nov-15
1014-2960	Bridge E (Pier 19 - D1) - Green Panel Installation	2	18-Nov-15	20-Nov-15
10.2 - W/B Bridges (Bridge C and F)				
10.2.1 - Pier Construction				
Pier 38 to 43				
1021-1820	Pier 38 (F3C) Prepare C.J. at Existing Pile Cap	11	07-Oct-15	19-Oct-15
1021-1840	Pier 38 (F3C) Construct Pier/Column	18	20-Oct-15	10-Nov-15
1021-1900	Pier 39 (F4C) Prepare C.J. at Existing Pile Cap	11	23-Sep-15	07-Oct-15
1021-1920	Pier 39 (F4C) Construct Pier/Column	18	08-Oct-15	29-Oct-15
1021-1940	Pier 39 (F4C) Construct Crosshead	24	30-Oct-15	26-Nov-15
1021-1980	Pier 40 (F5C) Prepare C.J. at Existing Pile Cap	11	10-Sep-15	22-Sep-15
1021-2000	Pier 40 (F5C) Construct Pier/Column	18	23-Sep-15	15-Oct-15
1021-2020	Pier 40 (F5C) Construct Crosshead	24	16-Oct-15	13-Nov-15
1021-2040	Pier 40 (F5C) Install Bearing	9	14-Nov-15	24-Nov-15



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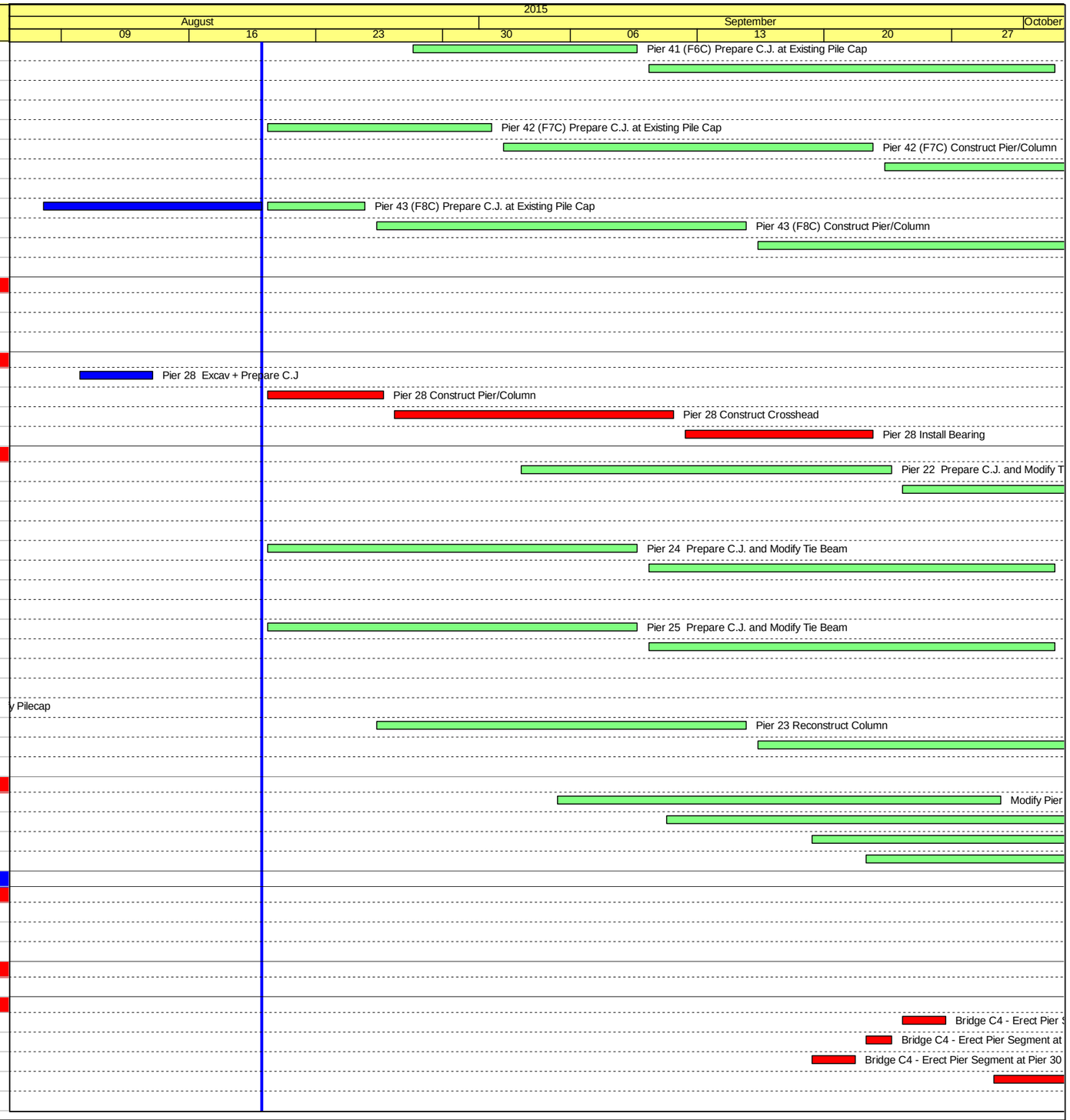
Activity ID	Activity Name	Remaining Duration	Start	Finish
1021-2060	Pier 41 (F6C) Prepare C.J. at Existing Pile Cap	11	28-Aug-15	09-Sep-15
1021-2080	Pier 41 (F6C) Construct Pier/Column	18	10-Sep-15	02-Oct-15
1021-2100	Pier 41 (F6C) Construct Crosshead	24	03-Oct-15	31-Oct-15
1021-2120	Pier 41 (F6C) Install Bearing	9	02-Nov-15	11-Nov-15
1021-2140	Pier 42 (F7C) Prepare C.J. at Existing Pile Cap	11	20-Aug-15	01-Sep-15
1021-2160	Pier 42 (F7C) Construct Pier/Column	18	02-Sep-15	22-Sep-15
1021-2180	Pier 42 (F7C) Construct Crosshead	24	23-Sep-15	23-Oct-15
1021-2200	Pier 42 (F7C) Install Bearing	9	24-Oct-15	03-Nov-15
1021-2220	Pier 43 (F8C) Prepare C.J. at Existing Pile Cap	5	08-Aug-15 A	25-Aug-15
1021-2240	Pier 43 (F8C) Construct Pier/Column	18	26-Aug-15	15-Sep-15
1021-2260	Pier 43 (F8C) Construct Crosshead	24	16-Sep-15	15-Oct-15
1021-2280	Pier 43 (F8C) Install Bearing	9	16-Oct-15	27-Oct-15
Pier 36 to 37				
1021-1580	Pier 36 (F1C) Prepare CJ at Existing Pile Cap	11	31-Oct-15	12-Nov-15
1021-1660	Pier 37 (F2C) Prepare CJ at Existing Pile Cap	11	19-Oct-15	31-Oct-15
1021-1680	Pier 37 (F2C) Construct Pier/Column	18	02-Nov-15	21-Nov-15
Pier 28				
1021-1740	Pier 28 Excav + Prepare C.J	0	10-Aug-15 A	14-Aug-15 A
1021-1760	Pier 28 Construct Pier/Column	6	20-Aug-15	26-Aug-15
1021-1780	Pier 28 Construct Crosshead	14	27-Aug-15	11-Sep-15
1021-1800	Pier 28 Install Bearing	9	12-Sep-15	22-Sep-15
Pier 20 to 25				
1021-1060	Pier 22 Prepare C.J. and Modify Tie Beam	18	03-Sep-15	23-Sep-15
1021-1080	Pier 22 Reconstruct Column	18	24-Sep-15	16-Oct-15
1021-1100	Pier 22 Reconstruct Crosshead	24	17-Oct-15	14-Nov-15
1021-1120	Pier 22 Install Bearing	6	16-Nov-15	23-Nov-15
1021-1280	Pier 24 Prepare C.J. and Modify Tie Beam	18	20-Aug-15	09-Sep-15
1021-1300	Pier 24 Reconstruct Column	18	10-Sep-15	02-Oct-15
1021-1320	Pier 24 Reconstruct Crosshead	24	03-Oct-15	31-Oct-15
1021-1340	Pier 24 Install Bearing	9	02-Nov-15	11-Nov-15
1021-1360	Pier 25 Prepare C.J. and Modify Tie Beam	18	20-Aug-15	09-Sep-15
1021-1380	Pier 25 Reconstruct Column	18	10-Sep-15	02-Oct-15
1021-1400	Pier 25 Reconstruct Crosshead	24	03-Oct-15	31-Oct-15
1021-1420	Pier 25 Install Bearing	9	02-Nov-15	11-Nov-15
1021-1500	Pier 23 Prepare C.J. + Drill in Re-bar + Modify Pilecap	0	09-Jun-15 A	25-Jul-15 A
1021-1520	Pier 23 Reconstruct Column	18	26-Aug-15	15-Sep-15
1021-1540	Pier 23 Reconstruct Crosshead	24	16-Sep-15	15-Oct-15
1021-1560	Pier 23 Install Bearing	9	16-Oct-15	27-Oct-15
Pier 17 to 19				
1021-1215	Modify Pier 21 Crosshead (south wing) + Bearing	20	05-Sep-15	29-Sep-15
1021-1225	Modify Pier 20 Crosshead (south wing) + Bearing	20	11-Sep-15	06-Oct-15
1021-1230	Modify Pier 19 Crosshead (south wing) + Bearing	20	19-Sep-15	14-Oct-15
1021-1235	Modify Pier 18 Crosshead (south wing) + Bearing	20	22-Sep-15	16-Oct-15
10.2.2 - Bridge Construction				
Bridge C1				
1022-1000	Bridge C1 - Precast Beams Pier 17-21 W/B (9 nos)	9	17-Oct-15	28-Oct-15
1022-1001	Construction (Pier 17 - 21) > Erect Scaffoldings + Platform + Pre-cast Planking	7	22-Oct-15	29-Oct-15
1022-1002	Construction (Pier 17 - 21) > Rebar Fixing of Deck + Diaphragm + Concreting	20	30-Oct-15	21-Nov-15
Bridge C2				
1022-2750	Bridge C2 Erect 6nos Pre-cast Beams by Crane D	5	23-Nov-15	28-Nov-15
Bridge C4				
1022-1067	Bridge C4 - Erect Pier Segment at Pier 28 (2 nos) > By Crane	3	24-Sep-15	26-Sep-15
1022-1068	Bridge C4 - Erect Pier Segment at Pier 29 (1 no) > By Crane	2	22-Sep-15	23-Sep-15
1022-1069	Bridge C4 - Erect Pier Segment at Pier 30 (1 no) > By Crane	2	19-Sep-15	21-Sep-15
1022-1070	Erect/Assemble LG2 at Piers 29 and 30 + T&C	39	29-Sep-15	14-Nov-15
1022-1070.3	Bridge C4 Erect T-Span Segment at Pier 30 by LG2 (10 nos)	8	16-Nov-15	24-Nov-15



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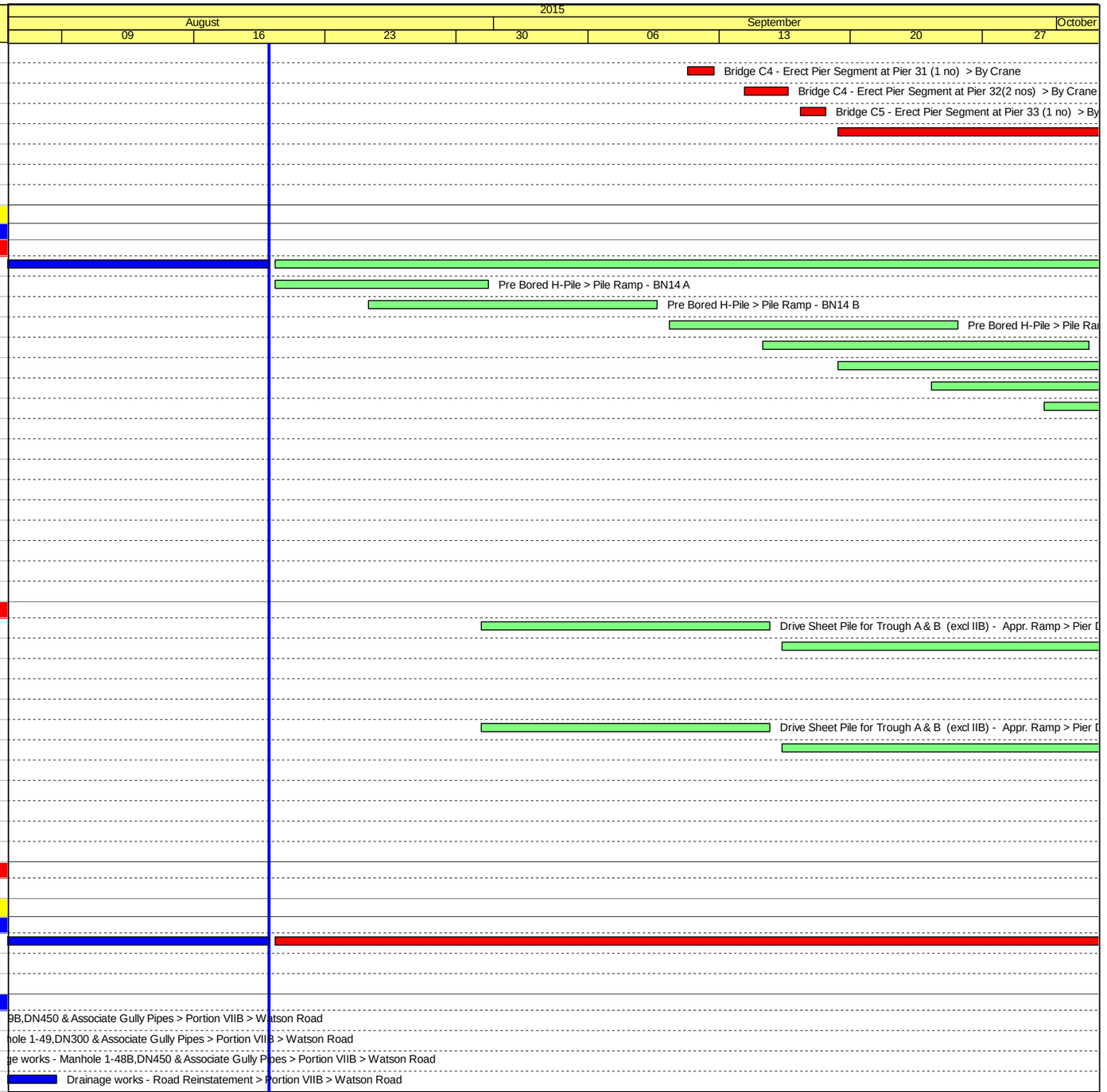
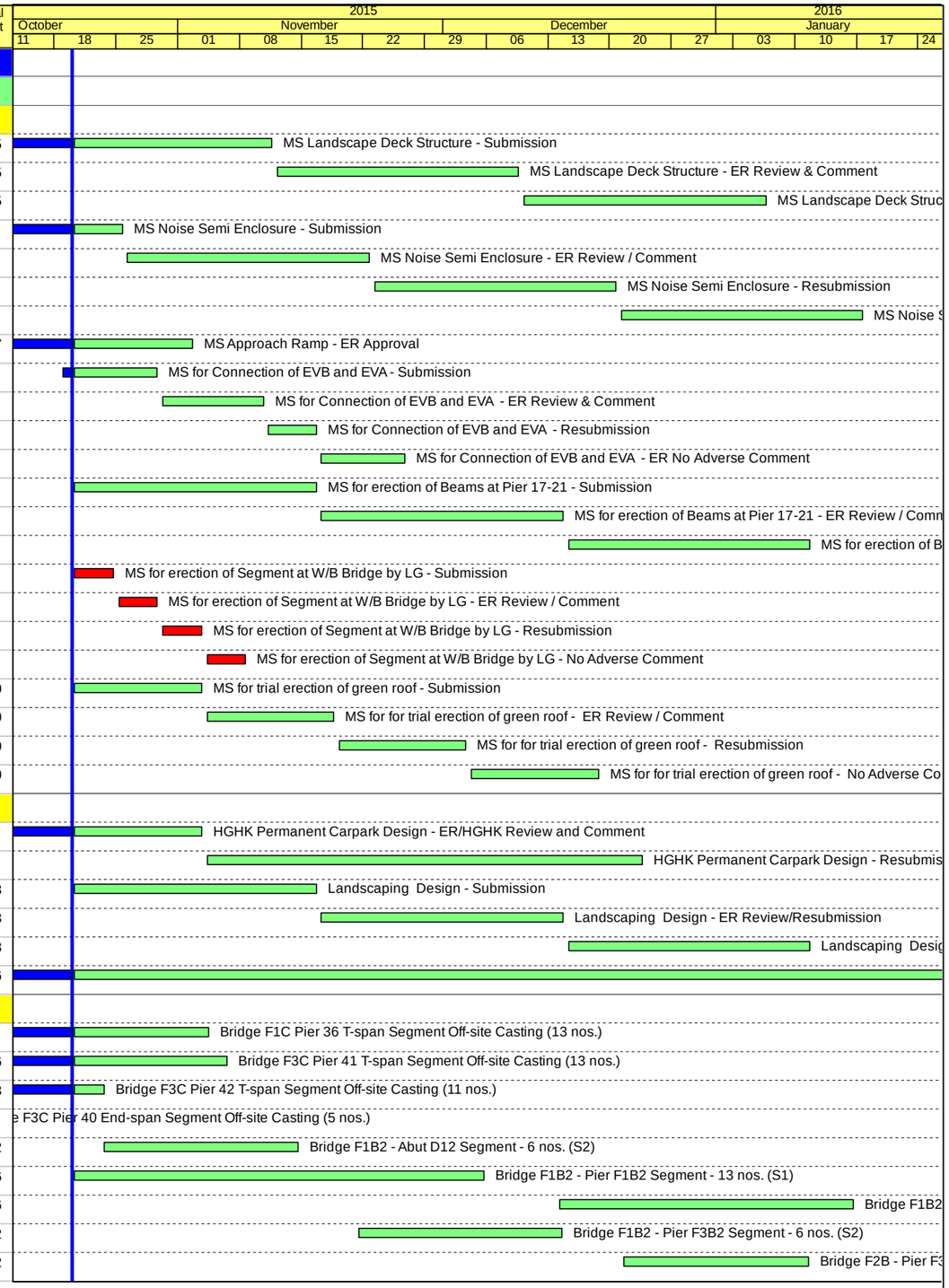
Activity ID	Activity Name	Remaining Duration	Start	Finish
1022-1070.5	Bridge C4 Stitching between Pier 30 and 31	3	27-Nov-15	30-Nov-15
1022-1451	Bridge C4 - Erect Pier Segment at Pier 31 (1 no) > By Crane	2	11-Sep-15	12-Sep-15
1022-1452	Bridge C4 - Erect Pier Segment at Pier 32(2 nos) > By Crane	3	14-Sep-15	16-Sep-15
1022-1453	Bridge C5 - Erect Pier Segment at Pier 33 (1 no) > By Crane	2	17-Sep-15	18-Sep-15
1022-1454	Erect Temp. Lowering Support on Top of Pier Segment P33, 32 & 31 (design TBC)	15	19-Sep-15	08-Oct-15
1022-1455	Move LG1 to Temp. Lowering Support at Pier 33-31 from Pier 34-35	4	09-Oct-15	13-Oct-15
1022-1456	Modify LG1 at Pier 31,32 and 33 for Segment Erection at Pier 32-44	26	14-Oct-15	13-Nov-15
1022-1457	Bridge C4 Erect T-Span Segment at Piers 31 by LG1 (12 nos)	11	14-Nov-15	26-Nov-15
10.6 - Tunnel Approach Ramp				
10.6.1 - Approach Ramp (Excluding Portion IIB)				
Bored Piles				
1061-1120	Bored Piles Testing Approach Ramp (112 nos)	80	01-Jun-15 A	24-Nov-15
1061-3980	Pre Bored H-Pile > Pile Ramp - BN14 A	10	20-Aug-15*	31-Aug-15
1061-4000	Pre Bored H-Pile > Pile Ramp - BN14 B	14	25-Aug-15	09-Sep-15
1061-4020	Pre Bored H-Pile > Pile Ramp - BN15 A	14	10-Sep-15*	25-Sep-15
1061-4040	Pre Bored H-Pile > Pile Ramp - BN15 B	14	15-Sep-15	02-Oct-15
1061-4060	Pre Bored H-Pile > Pile Ramp - BN16 A	14	19-Sep-15	07-Oct-15
1061-4080	Pre Bored H-Pile > Pile Ramp - BN16 B	14	24-Sep-15	12-Oct-15
1061-4100	Pre Bored H-Pile > Pile Ramp - BM07 A	14	30-Sep-15	16-Oct-15
1061-4120	Pre Bored H-Pile > Pile Ramp - BM07 B	14	06-Oct-15	22-Oct-15
1061-4140	Pre Bored H-Pile > Pile Ramp - BM08 A	14	10-Oct-15	27-Oct-15
1061-4160	Pre Bored H-Pile > Pile Ramp - BM08 B	14	15-Oct-15	31-Oct-15
1061-4180	Pre Bored H-Pile > Pile Ramp - BM06 A	14	20-Oct-15	05-Nov-15
1061-4200	Pre Bored H-Pile > Pile Ramp - BM06 B	14	26-Oct-15	10-Nov-15
1061-4220	Pre Bored H-Pile > Pile Ramp - BM05 A	14	30-Oct-15	14-Nov-15
1061-4240	Pre Bored H-Pile > Pile Ramp - BM05 B	14	04-Nov-15	19-Nov-15
1061-4260	Pre Bored H-Pile > Pile Ramp - BM04 A	14	09-Nov-15	24-Nov-15
1061-4280	Pre Bored H-Pile > Pile Ramp - BM04 B	14	13-Nov-15	28-Nov-15
ELS				
1061-1160	Drive Sheet Pile for Trough A & B (excl IIB) - Appr. Ramp > Pier D11-D12 Northern S	14	31-Aug-15*	15-Sep-15
1061-1180	Drive Sheet Pile for Trough A & B (excl IIB) - Appr. Ramp > Pier D11-D10 Northern S	14	16-Sep-15	03-Oct-15
1061-1200	Drive Sheet Pile for Trough A & B (excl IIB) - Appr. Ramp > Pier D10-D09 Northern S	14	05-Oct-15	20-Oct-15
1061-1220	Drive Sheet Pile for Trough A & B (excl IIB) - Appr. Ramp > Pier D09-D08 Northern S	14	22-Oct-15	06-Nov-15
1061-1240	Drive Sheet Pile for Trough A & B (excl IIB) - Appr. Ramp > Pier D08-D07 Northern S	14	07-Nov-15	23-Nov-15
1061-1280	Drive Sheet Pile for Trough A & B (excl IIB) - Appr. Ramp > Pier D11-D12 Southern S	14	31-Aug-15	15-Sep-15
1061-1300	Drive Sheet Pile for Trough A & B (excl IIB) - Appr. Ramp > Pier D11-D10 Southern S	14	16-Sep-15	03-Oct-15
1061-1320	Drive Sheet Pile for Trough A & B (excl IIB) - Appr. Ramp > Pier D10-D09 Southern :	14	05-Oct-15	20-Oct-15
1061-1340	Drive Sheet Pile for Trough A & B (excl IIB) - Appr. Ramp > Pier D09-D08 Southern :	14	22-Oct-15	06-Nov-15
1061-1360	Drive Sheet Pile for Trough A & B (excl IIB) - Appr. Ramp > Pier D08-D07 Southern :	14	07-Nov-15	23-Nov-15
1061-1400	Install & Operate Dewatering System (excl IIB) - Appr. Ramp > Pier D06-D08	14	19-Oct-15	04-Nov-15
1061-1420	Install & Operate Dewatering System (excl IIB) - Appr. Ramp > Pier D08-D10	14	05-Nov-15	20-Nov-15
Structure				
1061-1860	Construct Retaining Wall E Pile Cap (7 nos)	28	31-Oct-15	02-Dec-15
10.7 - Section X - Miscellaneous Works				
10.7.1 - TTM Stages				
1071-1240	TTM Stage 5 - TMLG Consultation and Endorsement	98	29-Jun-15 A	25-Nov-15
1071-1260	TTM Stage 5 - TTM Enabling Works	1	26-Nov-15	26-Nov-15
1071-1280	TTM Stage 5 - Hing Fat Slip Road Divert 1 Lane through 'Bridge From Pier E4 to Pier	0		26-Nov-15
10.7.2 - Oil Street/Watson Road (Portion III)				
1072-1220	Drainage works - Manhole 1-49B,DN450 & Associate Gully Pipes > Portion VIIB > Wa	0	05-May-15 A	28-Jul-15 A
1072-1240	Drainage works - Manhole 1-49,DN300 & Associate Gully Pipes > Portion VIIB > Wats	0	15-May-15 A	30-Jul-15 A
1072-1260	Drainage works - Manhole 1-48B,DN450 & Associate Gully Pipes > Portion VIIB > Wa	0	31-Jul-15 A	03-Aug-15 A
1072-1280	Drainage works - Road Reinstatement > Portion VIIB > Watson Road	0	04-Aug-15 A	08-Aug-15 A



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

Contract HY/2009/19
Three Months Rolling Programme (20 Aug to 19 Nov 2015)

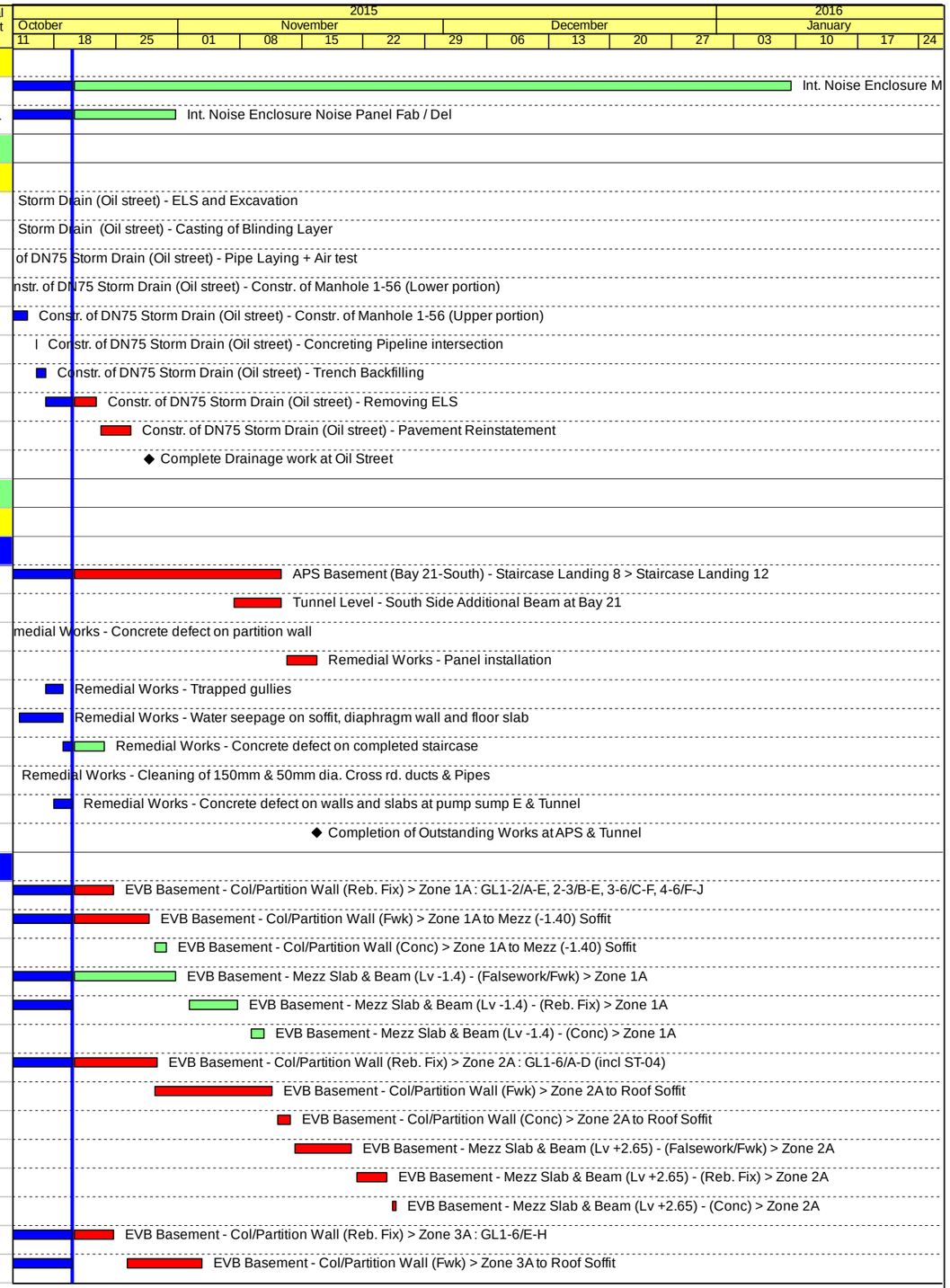
Activity ID	Activity Name	emainir Duratio	Early Start	Early Finish	Late Start	Late Finish	Total Float
3MRP - Oct 2015 to Jan 2016							
02 - PRE-CONSTRUCTION WORKS							
02.3 - Method Statement / Shop Drawings							
0230-1380	MS Landscape Deck Structure - Submission	23	20-Oct-15	11-Nov-15	08-Oct-16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



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

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

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



Remaining Level of Effort ◆ Milestone
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Contract HY/2009/19
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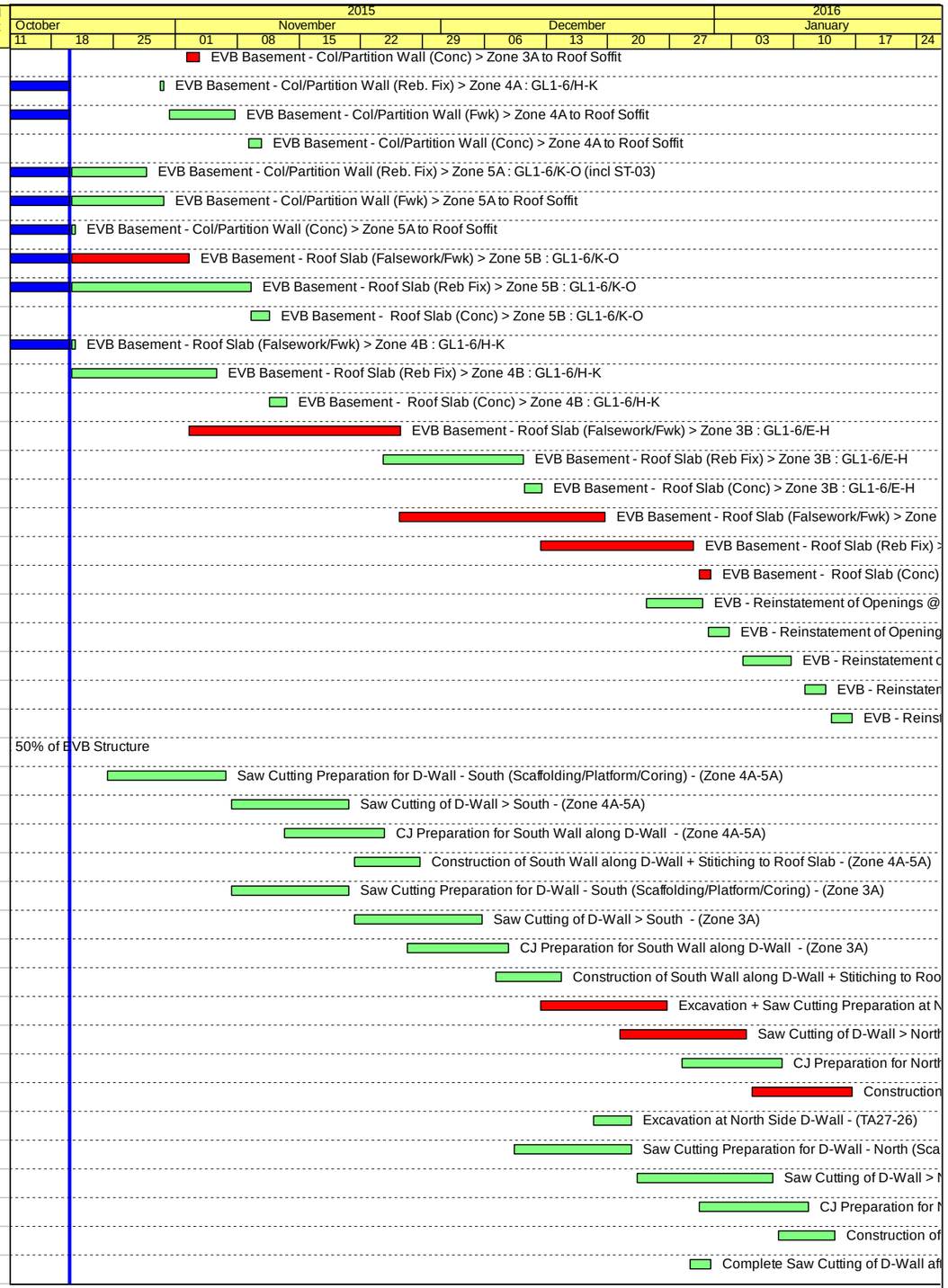
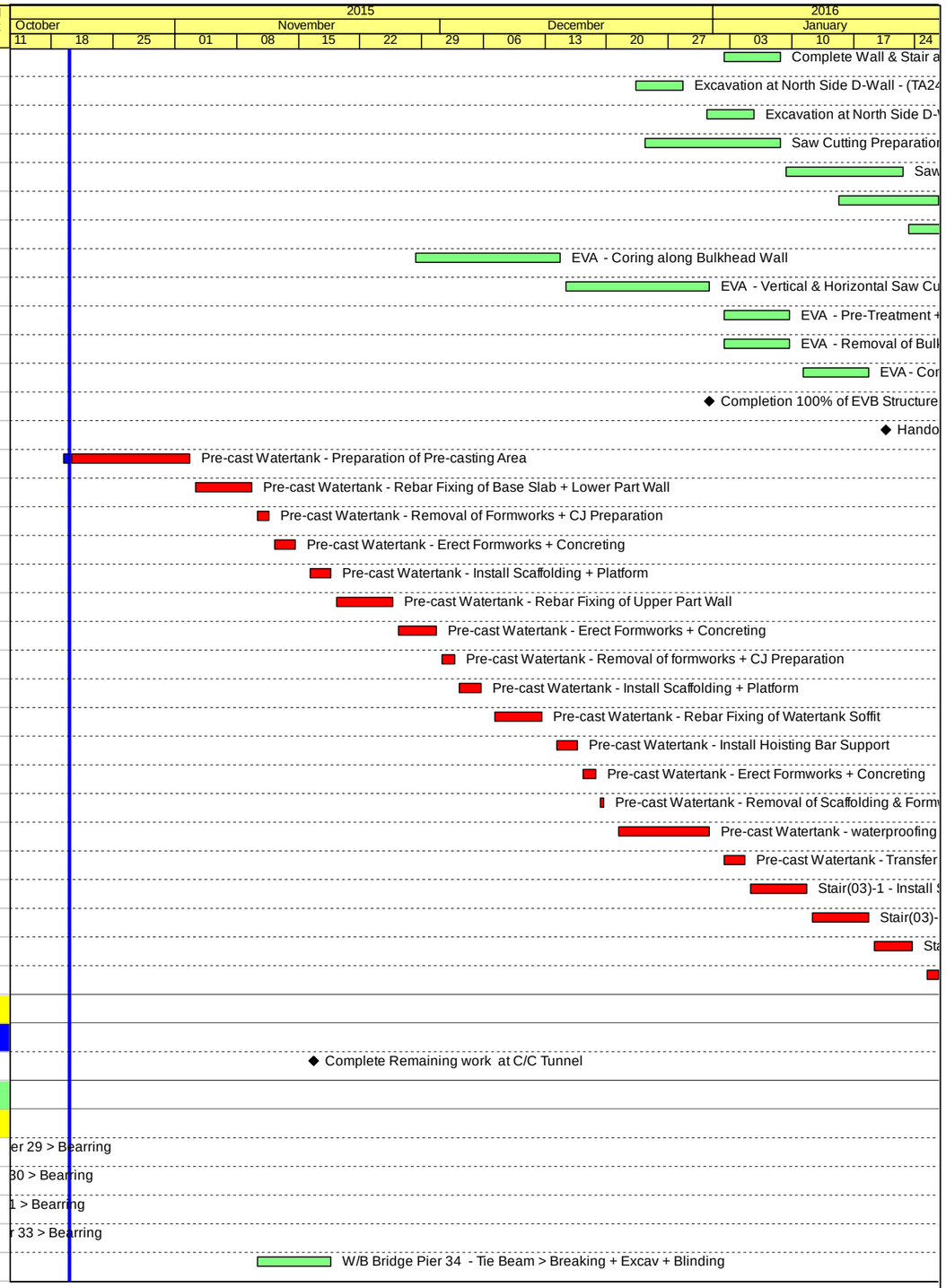
Activity ID	Activity Name	emainir Duratio	Early Start	Early Finish	Late Start	Late Finish	Total Float
0515-1400	EVB Basement - Col/Partition Wall (Conc) > Zone 3A to Roof Soffit	2	02-Nov-15	03-Nov-15	04-Nov-15	05-Nov-15	2
0515-1420	EVB Basement - Col/Partition Wall (Reb. Fix) > Zone 4A : GL1-6/H-K	1	30-Oct-15	30-Oct-15	13-Nov-15	13-Nov-15	12
0515-1440	EVB Basement - Col/Partition Wall (Fwk) > Zone 4A to Roof Soffit	7	31-Oct-15	07-Nov-15	13-Nov-15	20-Nov-15	11
0515-1460	EVB Basement - Col/Partition Wall (Conc) > Zone 4A to Roof Soffit	2	09-Nov-15	10-Nov-15	20-Nov-15	23-Nov-15	11
0515-1480	EVB Basement - Col/Partition Wall (Reb. Fix) > Zone 5A : GL1-6/K-O (incl ST-03)	7	20-Oct-15	28-Oct-15	03-Nov-15	10-Nov-15	11
0515-1500	EVB Basement - Col/Partition Wall (Fwk) > Zone 5A to Roof Soffit	9	20-Oct-15	30-Oct-15	03-Nov-15	12-Nov-15	11
0515-1520	EVB Basement - Col/Partition Wall (Conc) > Zone 5A to Roof Soffit	1	20-Oct-15	20-Oct-15	03-Nov-15	03-Nov-15	11
0515-1540	EVB Basement - Roof Slab (Falsework/Fwk) > Zone 5B : GL1-6/K-O	11	20-Oct-15	02-Nov-15	22-Oct-15	03-Nov-15	2
0515-1560	EVB Basement - Roof Slab (Reb Fix) > Zone 5B : GL1-6/K-O	17	20-Oct-15	09-Nov-15	02-Dec-15	21-Dec-15	36
0515-1580	EVB Basement - Roof Slab (Conc) > Zone 5B : GL1-6/K-O	2	09-Nov-15	11-Nov-15	22-Dec-15	23-Dec-15	36
0515-1600	EVB Basement - Roof Slab (Falsework/Fwk) > Zone 4B : GL1-6/H-K	1	20-Oct-15	20-Oct-15	03-Nov-15	03-Nov-15	11
0515-1620	EVB Basement - Roof Slab (Reb Fix) > Zone 4B : GL1-6/H-K	14	20-Oct-15	05-Nov-15	08-Dec-15	23-Dec-15	41
0515-1640	EVB Basement - Roof Slab (Conc) > Zone 4B : GL1-6/H-K	2	11-Nov-15	13-Nov-15	24-Dec-15	26-Dec-15	36
0515-1660	EVB Basement - Roof Slab (Falsework/Fwk) > Zone 3B : GL1-6/E-H	21	02-Nov-15	26-Nov-15	04-Nov-15	27-Nov-15	2
0515-1680	EVB Basement - Roof Slab (Reb Fix) > Zone 3B : GL1-6/E-H	14	24-Nov-15	10-Dec-15	10-Dec-15	26-Dec-15	14
0515-1700	EVB Basement - Roof Slab (Conc) > Zone 3B : GL1-6/E-H	2	10-Dec-15	12-Dec-15	28-Dec-15	29-Dec-15	14
0515-1720	EVB Basement - Roof Slab (Falsework/Fwk) > Zone 2B : GL1-6/A-E	21	26-Nov-15	19-Dec-15	26-Nov-15	19-Dec-15	0
0515-1740	EVB Basement - Roof Slab (Reb Fix) > Zone 2B : GL1-6/A-E	14	12-Dec-15	29-Dec-15	12-Dec-15	29-Dec-15	0
0515-1760	EVB Basement - Roof Slab (Conc) > Zone 2B : GL1-6/A-E	2	30-Dec-15	31-Dec-15	30-Dec-15	31-Dec-15	0
0515-1780	EVB - Reinstatement of Openings @ TA23-25 - Demo & Erection of Working Platform (hanging)	5	24-Dec-15	30-Dec-15	18-Jan-16	22-Jan-16	19
0515-1800	EVB - Reinstatement of Openings @ TA23-25 - Formworks	2	31-Dec-15	02-Jan-16	23-Jan-16	25-Jan-16	19
0515-1820	EVB - Reinstatement of Openings @ TA23-25 - Rebar Fixing + Concreting	6	04-Jan-16	09-Jan-16	26-Jan-16	01-Feb-16	19
0515-1840	EVB - Reinstatement of Openings @ TA23-25 - Curing of Concrete	3	11-Jan-16	13-Jan-16	02-Feb-16	04-Feb-16	19
0515-1860	EVB - Reinstatement of Openings @ TA23-25 - Removal of Formworks & Platform	3	14-Jan-16	16-Jan-16	05-Feb-16	11-Feb-16	19
0515-1980	Complete approx 50% of EVB Structure	0		22-Oct-15		08-Nov-19	
1051-3221	Saw Cutting Preparation for D-Wall - South (Scaffolding/Platform/Coring) - (Zone 4A-5A)	12	24-Oct-15	06-Nov-15	26-Nov-15	09-Dec-15	28
1051-3222	Saw Cutting of D-Wall > South - (Zone 4A-5A)	12	07-Nov-15	20-Nov-15	18-Jan-16	30-Jan-16	59
1051-3223	CJ Preparation for South Wall along D-Wall - (Zone 4A-5A)	10	13-Nov-15	24-Nov-15	01-Feb-16	15-Feb-16	66
1051-3224	Construction of South Wall along D-Wall + Stitiching to Roof Slab - (Zone 4A-5A)	7	21-Nov-15	28-Nov-15	01-Feb-16	11-Feb-16	59
1051-3225	Saw Cutting Preparation for D-Wall - South (Scaffolding/Platform/Coring) - (Zone 3A)	12	07-Nov-15	20-Nov-15	10-Dec-15	23-Dec-15	28
1051-3226	Saw Cutting of D-Wall > South - (Zone 3A)	13	21-Nov-15	05-Dec-15	24-Dec-15	09-Jan-16	28
1051-3227	CJ Preparation for South Wall along D-Wall - (Zone 3A)	10	27-Nov-15	08-Dec-15	13-Jan-16	23-Jan-16	38
1051-3228	Construction of South Wall along D-Wall + Stitiching to Roof Slab - (Zone 3A)	7	07-Dec-15	14-Dec-15	13-Jan-16	20-Jan-16	30
1051-3230	Excavation + Saw Cutting Preparation at North Side D-Wall - (TA24-23)	12	12-Dec-15	26-Dec-15	16-Dec-15	30-Dec-15	3
1051-3240	Saw Cutting of D-Wall > North - (Zone 2A)	11	21-Dec-15	04-Jan-16	24-Dec-15	07-Jan-16	3
1051-3250	CJ Preparation for North Wall along D-Wall - (Zone 2A)	10	28-Dec-15	08-Jan-16	08-Jan-16	19-Jan-16	9
1051-3260	Construction of North Wall along D-Wall + Stitiching to Roof Slab - (Zone 2A)	11	05-Jan-16	16-Jan-16	08-Jan-16	20-Jan-16	3
1051-3330	Excavation at North Side D-Wall - (TA27-26)	4	18-Dec-15	22-Dec-15	14-Jan-16	18-Jan-16	21
1051-3340	Saw Cutting Preparation for D-Wall - North (Scaffolding/Platform/Coring) - (Zone 5A)	12	09-Dec-15	22-Dec-15	05-Jan-16	18-Jan-16	21
1051-3350	Saw Cutting of D-Wall > North - (Zone 5A)	12	23-Dec-15	07-Jan-16	19-Jan-16	01-Feb-16	21
1051-3360	CJ Preparation for North Wall along D-Wall - (Zone 5A)	10	30-Dec-15	11-Jan-16	02-Feb-16	16-Feb-16	28
1051-3370	Construction of North Wall along D-Wall + Stitiching to Roof Slab - (Zone 5A)	6	08-Jan-16	14-Jan-16	02-Feb-16	11-Feb-16	21
1051-3430	Complete Saw Cutting of D-Wall after Removal of TA23	3	29-Dec-15	31-Dec-15	11-Jan-16	13-Jan-16	10



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

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

Activity ID	Activity Name	emainir Duratio	Early Start	Early Finish	Late Start	Late Finish	Total Float
1051-3440	Complete Wall & Stair along TA23	6	02-Jan-16	08-Jan-16	14-Jan-16	20-Jan-16	10
1051-3441	Excavation at North Side D-Wall - (TA24-25)	4	23-Dec-15	28-Dec-15	14-Jan-16	18-Jan-16	17
1051-3510	Excavation at North Side D-Wall - (TA25-26)	4	31-Dec-15	05-Jan-16	14-Jan-16	18-Jan-16	11
1051-3520	Saw Cutting Preparation for D-Wall - North (Scaffolding/Platform/Coring) - (Zone 3A-4A)	12	24-Dec-15	08-Jan-16	05-Jan-16	18-Jan-16	8
1051-3530	Saw Cutting of D-Wall > North - (Zone 3A-4A)	12	09-Jan-16	22-Jan-16	19-Jan-16	01-Feb-16	8
1051-3540	CJ Preparation for North Wall along D-Wall - (Zone 3A-4A)	10	15-Jan-16	26-Jan-16	02-Feb-16	16-Feb-16	15
1051-3550	Construction of North Wall along D-Wall + Stitiching to Roof Slab - (Zone3A-4A)	6	23-Jan-16	29-Jan-16	02-Feb-16	11-Feb-16	8
1051-3560	EVA - Coring along Bulkhead Wall	14	28-Nov-15	14-Dec-15	19-Dec-15	06-Jan-16	18
1051-3570	EVA - Vertical & Horizontal Saw Cutting along Bulk Head Wall	14	15-Dec-15	31-Dec-15	07-Jan-16	22-Jan-16	18
1051-3580	EVA - Pre-Treatment + Pressure Grouting	7	02-Jan-16	09-Jan-16	23-Jan-16	30-Jan-16	18
1051-3590	EVA - Removal of Bulkhead Wall	7	02-Jan-16	09-Jan-16	23-Jan-16	30-Jan-16	18
1051-3600	EVA - Complete demolition and Prepare CJ	7	11-Jan-16	18-Jan-16	01-Feb-16	11-Feb-16	18
1051-3615	Completion 100% of EVB Structure (excl reinstatement)	0		31-Dec-15		31-Dec-15	0
1051-3620	Handover EVB (Zone 2A)	0		20-Jan-16		20-Jan-16	0
1070-1000	Pre-cast Watertank - Preparation of Pre-casting Area	11	20-Oct-15	02-Nov-15	20-Oct-15	02-Nov-15	0
1070-1010	Pre-cast Watertank - Rebar Fixing of Base Slab + Lower Part Wall	6	03-Nov-15	09-Nov-15	03-Nov-15	09-Nov-15	0
1070-1020	Pre-cast Watertank - Removal of Formworks + CJ Preparation	2	10-Nov-15	11-Nov-15	10-Nov-15	11-Nov-15	0
1070-1030	Pre-cast Watertank - Erect Formworks + Concreting	3	12-Nov-15	14-Nov-15	12-Nov-15	14-Nov-15	0
1070-1040	Pre-cast Watertank - Install Scaffolding + Platform	3	16-Nov-15	18-Nov-15	16-Nov-15	18-Nov-15	0
1070-1050	Pre-cast Watertank - Rebar Fixing of Upper Part Wall	6	19-Nov-15	25-Nov-15	19-Nov-15	25-Nov-15	0
1070-1060	Pre-cast Watertank - Erect Formworks + Concreting	4	26-Nov-15	30-Nov-15	26-Nov-15	30-Nov-15	0
1070-1070	Pre-cast Watertank - Removal of formworks + CJ Preparation	2	01-Dec-15	02-Dec-15	01-Dec-15	02-Dec-15	0
1070-1080	Pre-cast Watertank - Install Scaffolding + Platform	3	03-Dec-15	05-Dec-15	03-Dec-15	05-Dec-15	0
1070-1090	Pre-cast Watertank - Rebar Fixing of Watertank Soffit	6	07-Dec-15	12-Dec-15	07-Dec-15	12-Dec-15	0
1070-1100	Pre-cast Watertank - Install Hoisting Bar Support	3	14-Dec-15	16-Dec-15	14-Dec-15	16-Dec-15	0
1070-1110	Pre-cast Watertank - Erect Formworks + Concreting	2	17-Dec-15	18-Dec-15	17-Dec-15	18-Dec-15	0
1070-1120	Pre-cast Watertank - Removal of Scaffolding & Formworks + Cleaning of Tank	1	19-Dec-15	19-Dec-15	19-Dec-15	19-Dec-15	0
1070-1130	Pre-cast Watertank - waterproofing and Water Test	9	21-Dec-15	31-Dec-15	21-Dec-15	31-Dec-15	0
1070-1140	Pre-cast Watertank - Transfer and Fixing of Pre-cast Watertank at EVB	2	02-Jan-16	04-Jan-16	02-Jan-16	04-Jan-16	0
1070-1150	Stair(03)-1 - Install Scaffolding and Platform + Formworks	6	05-Jan-16	11-Jan-16	05-Jan-16	11-Jan-16	0
1070-1160	Stair(03)-1 - Rebar Fixing + Concreting	6	12-Jan-16	18-Jan-16	12-Jan-16	18-Jan-16	0
1070-1170	Stair(03)-2 - Install Scaffolding and Platform + Formworks	5	19-Jan-16	23-Jan-16	19-Jan-16	23-Jan-16	0
1070-1180	Stair(03)-2 - Rebar Fixing + Concreting	2	25-Jan-16	26-Jan-16	25-Jan-16	26-Jan-16	0
05.2 - Cut & Cover Tunnel Ch 4932-5149							
05.2.5 - Road & Miscellaneous Works							
0525-1340	Complete Remaining work at C/C Tunnel	0		16-Nov-15		16-Nov-15	0
06 - SECTION 3 OF THE WORKS							
06.1 - Westbound - Pier 29-34							
0610-1460	Construct W/B Bridge Pier 29 > Bearring	0	20-Oct-15	20-Oct-15	20-Oct-15	20-Oct-15	
0610-1560	Construct W/B Bridge Pier 30 > Bearring	0	20-Oct-15	20-Oct-15	20-Oct-15	20-Oct-15	
0610-1660	Construct W/B Bridge Pier 31 > Bearring	0	20-Oct-15	20-Oct-15	24-Oct-15	24-Oct-15	
0610-1860	Construct W/B Bridge Pier 33 > Bearring	0	20-Oct-15	20-Oct-15	20-Oct-15	20-Oct-15	
0610-1880	W/B Bridge Pier 34 - Tie Beam > Breaking + Excav + Blinding	8	10-Nov-15	18-Nov-15	17-Nov-15	25-Nov-15	6



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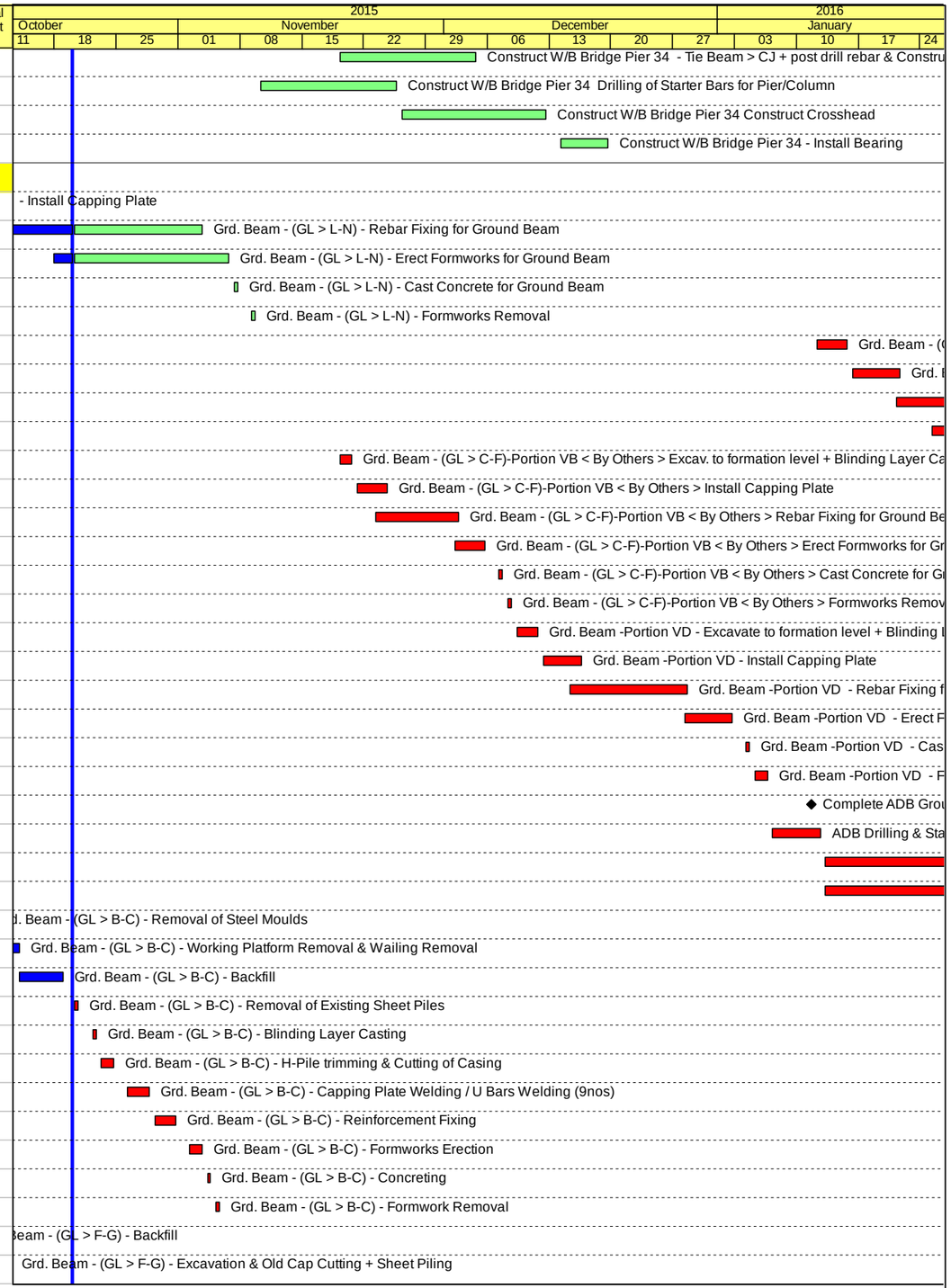
Activity ID	Activity Name	emainir Duratio	Early Start	Early Finish	Late Start	Late Finish	Total Float
0610-1900	Construct W/B Bridge Pier 34 - Tie Beam > CJ + post drill rebar & Construction	14	19-Nov-15	04-Dec-15	24-Dec-15	11-Jan-16	30
0610-1920	Construct W/B Bridge Pier 34 Drilling of Starter Bars for Pier/Column	14	10-Nov-15	25-Nov-15	17-Nov-15	02-Dec-15	6
0610-1940	Construct W/B Bridge Pier 34 Construct Crosshead	15	26-Nov-15	12-Dec-15	03-Dec-15	19-Dec-15	6
0610-1960	Construct W/B Bridge Pier 34 - Install Bearing	6	14-Dec-15	19-Dec-15	21-Dec-15	28-Dec-15	6
06.3 - Admin Building							
0630-1120	Grd. Beam - (GL > L-N) - Install Capping Plate	0	20-Oct-15	20-Oct-15	12-Nov-15	12-Nov-15	
0630-1140	Grd. Beam - (GL > L-N) - Rebar Fixing for Ground Beam	12	20-Oct-15	03-Nov-15	12-Nov-15	25-Nov-15	19
0630-1160	Grd. Beam - (GL > L-N) - Erect Formworks for Ground Beam	15	20-Oct-15	06-Nov-15	12-Nov-15	28-Nov-15	19
0630-1180	Grd. Beam - (GL > L-N) - Cast Concrete for Ground Beam	1	07-Nov-15	07-Nov-15	30-Nov-15	30-Nov-15	19
0630-1200	Grd. Beam - (GL > L-N) - Formworks Removal	1	09-Nov-15	09-Nov-15	01-Dec-15	01-Dec-15	19
0630-1880	Grd. Beam - (GL > P-R) - Removal of Existing Sheet Piles	4	12-Jan-16	15-Jan-16	12-Jan-16	15-Jan-16	0
0630-1900	Grd. Beam - (GL > P-R) - Excavate to formation level + Blinding Layer Casting	5	16-Jan-16	21-Jan-16	16-Jan-16	21-Jan-16	0
0630-1920	Grd. Beam - (GL > P-R) - Install Capping Plate	6	21-Jan-16	27-Jan-16	21-Jan-16	27-Jan-16	0
0630-1940	Grd. Beam - (GL > P-R) - Rebar Fixing for Beam	7	25-Jan-16	01-Feb-16	25-Jan-16	01-Feb-16	0
0630-2021	Grd. Beam - (GL > C-F)-Portion VB < By Others > Excav. to formation level + Blinding Layer Casting	2	19-Nov-15	20-Nov-15	24-Nov-15	25-Nov-15	4
0630-2040	Grd. Beam - (GL > C-F)-Portion VB < By Others > Install Capping Plate	3	21-Nov-15	24-Nov-15	26-Nov-15	28-Nov-15	4
0630-2080	Grd. Beam - (GL > C-F)-Portion VB < By Others > Rebar Fixing for Ground Beam	9	23-Nov-15	02-Dec-15	27-Nov-15	07-Dec-15	4
0630-2100	Grd. Beam - (GL > C-F)-Portion VB < By Others > Erect Formworks for Ground Beam	4	02-Dec-15	05-Dec-15	07-Dec-15	10-Dec-15	4
0630-2120	Grd. Beam - (GL > C-F)-Portion VB < By Others > Cast Concrete for Ground Beam	1	07-Dec-15	07-Dec-15	11-Dec-15	11-Dec-15	4
0630-2140	Grd. Beam - (GL > C-F)-Portion VB < By Others > Formworks Removal	1	08-Dec-15	08-Dec-15	12-Dec-15	12-Dec-15	4
0630-2141	Grd. Beam -Portion VD - Excavate to formation level + Blinding Layer Casting	3	09-Dec-15	11-Dec-15	14-Dec-15	16-Dec-15	4
0630-2142	Grd. Beam -Portion VD - Install Capping Plate	4	12-Dec-15	16-Dec-15	17-Dec-15	21-Dec-15	4
0630-2143	Grd. Beam -Portion VD - Rebar Fixing for Ground Beam	11	15-Dec-15	28-Dec-15	19-Dec-15	02-Jan-16	4
0630-2144	Grd. Beam -Portion VD - Erect Formworks for Ground Beam	5	28-Dec-15	02-Jan-16	02-Jan-16	07-Jan-16	4
0630-2145	Grd. Beam -Portion VD - Cast Concrete for Ground Beam	1	04-Jan-16	04-Jan-16	08-Jan-16	08-Jan-16	4
0630-2146	Grd. Beam -Portion VD - Formworks Removal	2	05-Jan-16	06-Jan-16	09-Jan-16	11-Jan-16	4
0630-2440	Complete ADB Ground Beam (Portion VB & VD)	0		11-Jan-16		11-Jan-16	0
0630-2441	ADB Drilling & Starter Bar Fixing - Cleaning + Setting out & Marking (to be confirmed)	5	07-Jan-16	12-Jan-16	12-Jan-16	16-Jan-16	4
0630-2442	ADB Drilling & Starter Bar Fixing - Structural Walls @ 4 Gang (to be confirmed)	15	13-Jan-16	29-Jan-16	18-Jan-16	03-Feb-16	4
0630-2443	ADB Drilling & Starter Bar Fixing - Drilling of Non structural Walls @ 4 Gang (to be confirmed)	15	13-Jan-16	29-Jan-16	18-Jan-16	03-Feb-16	4
0700-1000	Grd. Beam - (GL > B-C) - Removal of Steel Moulds	0	20-Oct-15	20-Oct-15	20-Oct-15	20-Oct-15	
0700-1010	Grd. Beam - (GL > B-C) - Working Platform Removal & Wailing Removal	0	20-Oct-15	20-Oct-15	20-Oct-15	20-Oct-15	
0700-1020	Grd. Beam - (GL > B-C) - Backfill	0	20-Oct-15	20-Oct-15	20-Oct-15	20-Oct-15	
0700-1030	Grd. Beam - (GL > B-C) - Removal of Existing Sheet Piles	1	20-Oct-15	20-Oct-15	20-Oct-15	20-Oct-15	0
0700-1040	Grd. Beam - (GL > B-C) - Blinding Layer Casting	1	22-Oct-15	22-Oct-15	22-Oct-15	22-Oct-15	0
0700-1050	Grd. Beam - (GL > B-C) - H-Pile trimming & Cutting of Casing	2	23-Oct-15	24-Oct-15	23-Oct-15	24-Oct-15	0
0700-1060	Grd. Beam - (GL > B-C) - Capping Plate Welding / U Bars Welding (9nos)	3	26-Oct-15	28-Oct-15	26-Oct-15	28-Oct-15	0
0700-1070	Grd. Beam - (GL > B-C) - Reinforcement Fixing	3	29-Oct-15	31-Oct-15	29-Oct-15	31-Oct-15	0
0700-1080	Grd. Beam - (GL > B-C) - Formworks Erection	2	02-Nov-15	03-Nov-15	02-Nov-15	03-Nov-15	0
0700-1090	Grd. Beam - (GL > B-C) - Concreting	1	04-Nov-15	04-Nov-15	04-Nov-15	04-Nov-15	0
0700-1100	Grd. Beam - (GL > B-C) - Formwork Removal	1	05-Nov-15	05-Nov-15	05-Nov-15	05-Nov-15	0
0700-1110	Grd. Beam - (GL > F-G) - Backfill	0	20-Oct-15	20-Oct-15	20-Oct-15	20-Oct-15	
0700-1120	Grd. Beam - (GL > F-G) - Excavation & Old Cap Cutting + Sheet Piling	0	20-Oct-15	20-Oct-15	20-Oct-15	20-Oct-15	



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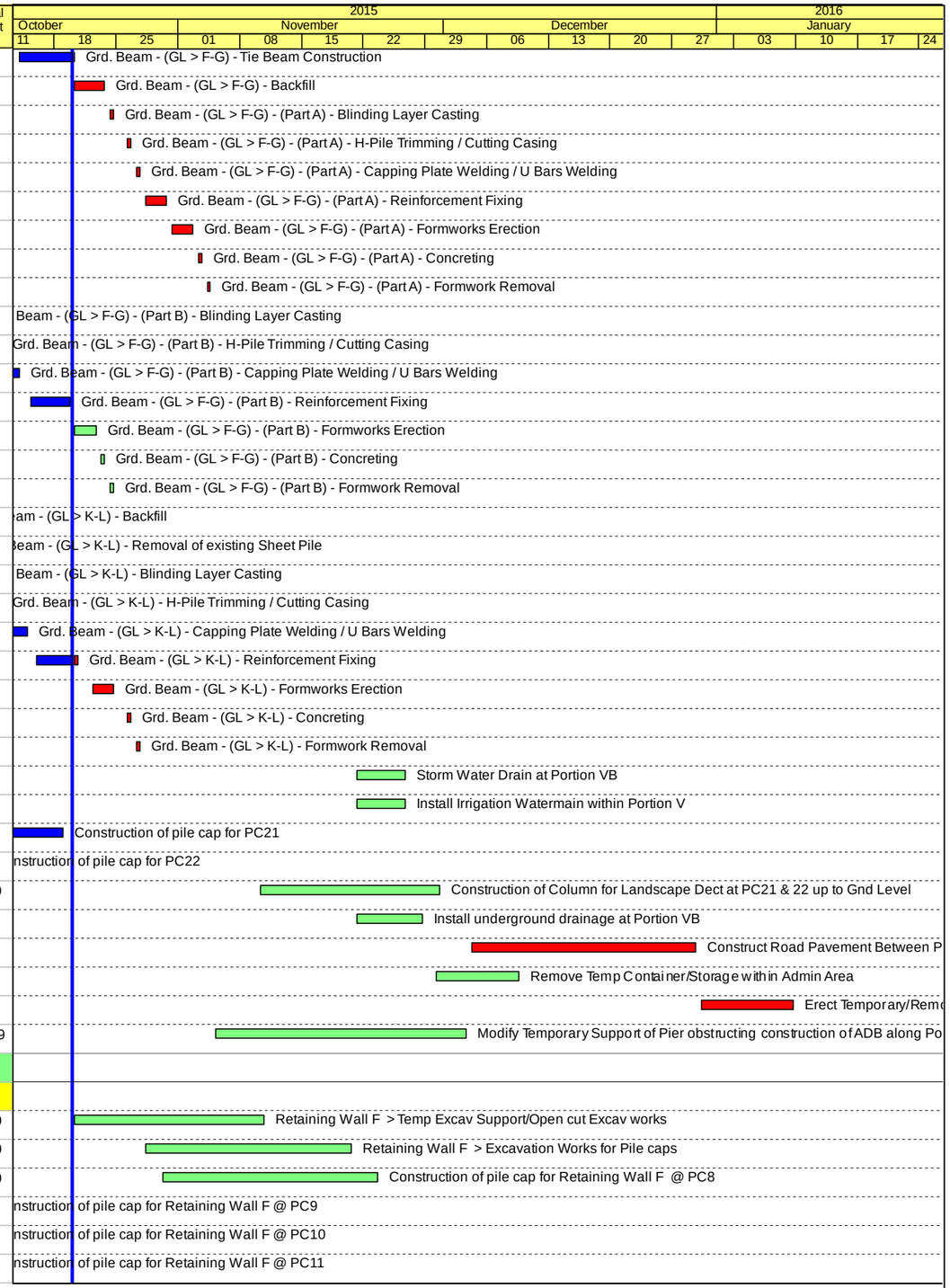
Activity ID	Activity Name	emainir Duratio	Early Start	Early Finish	Late Start	Late Finish	Total Float
0700-1130	Grd. Beam - (GL > F-G) - Tie Beam Construction	0	20-Oct-15	20-Oct-15	20-Oct-15	20-Oct-15	1
0700-1140	Grd. Beam - (GL > F-G) - Backfill	3	20-Oct-15	23-Oct-15	22-Oct-15	24-Oct-15	1
0700-1150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



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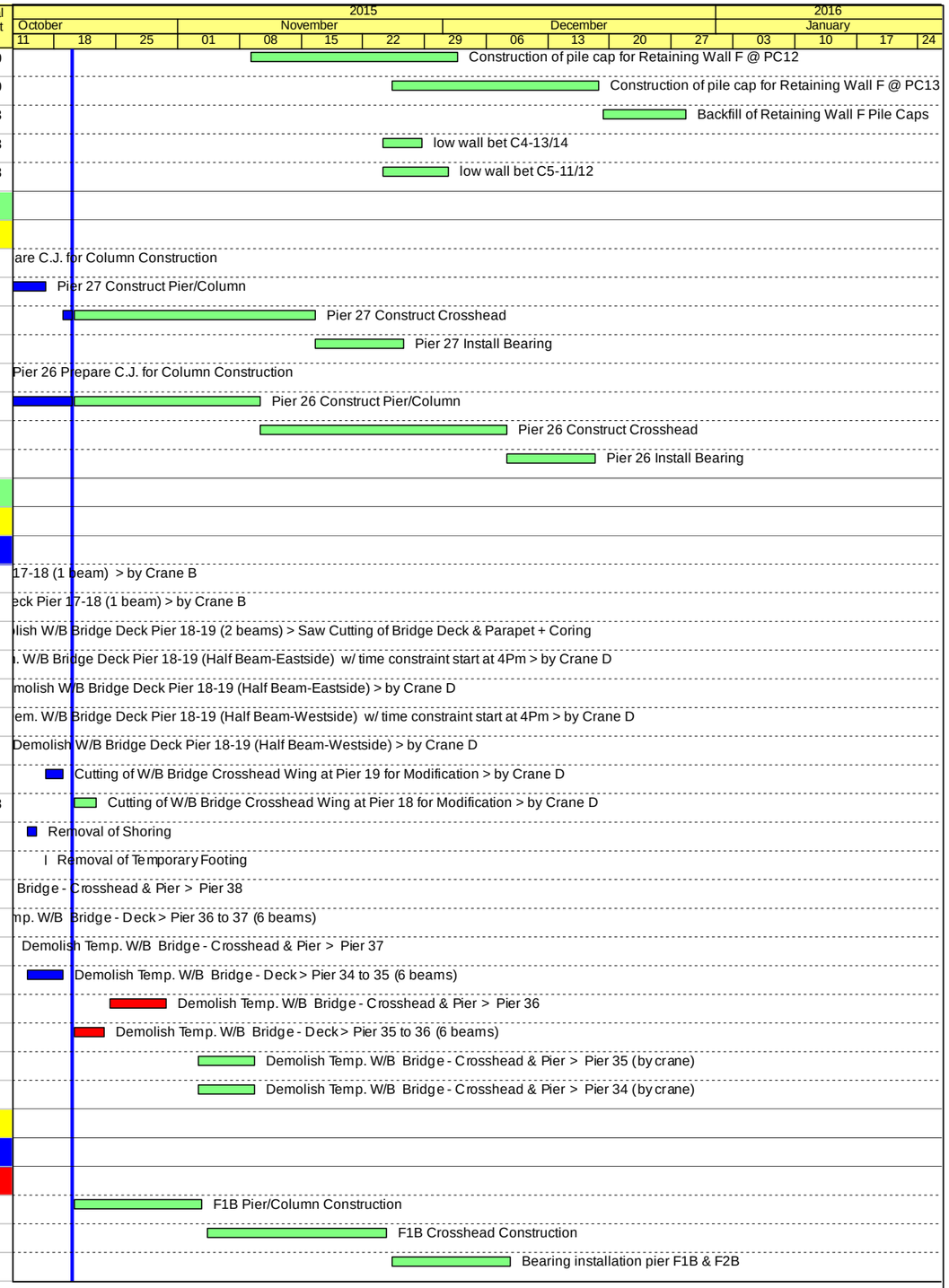
Critical Remaining Work

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

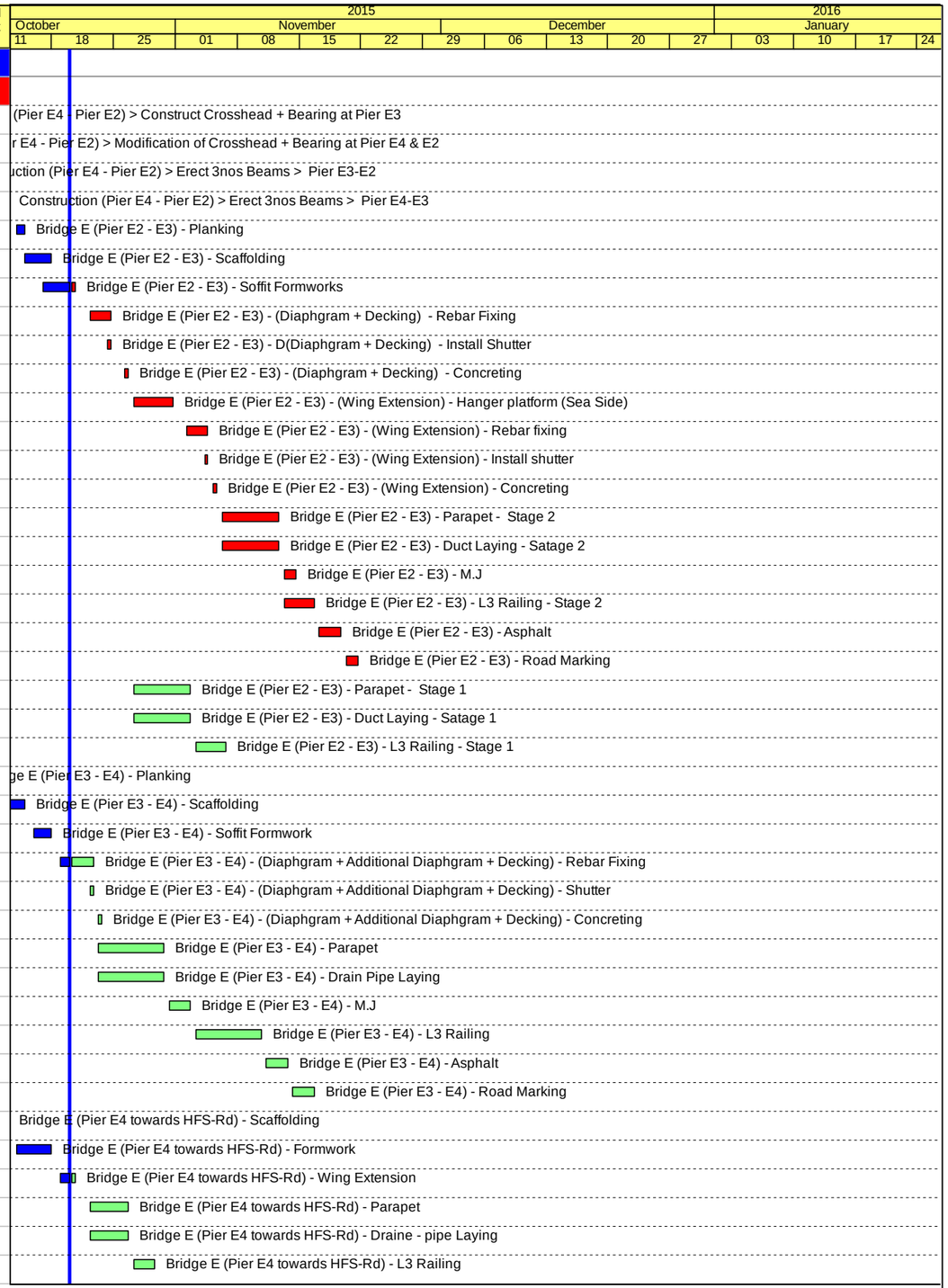
Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
0810-1740	Construction of pile cap for Retaining Wall F @ PC12	21	09-Nov-15	02-Dec-15	28-Jun-16	22-Jul-16	190
0810-1760	Construction of pile cap for Retaining Wall F @ PC13	21	25-Nov-15	18-Dec-15	15-Jul-16	08-Aug-16	190
0810-1780	Backfill of Retaining Wall F Pile Caps	7	19-Dec-15	28-Dec-15	14-Jan-17	21-Jan-17	323
0820-1000	low wall bet C4-13/14	5	24-Nov-15	28-Nov-15	06-Jan-17	11-Jan-17	338
0820-1010	low wall bet C5-11/12	7	24-Nov-15	01-Dec-15	06-Jan-17	13-Jan-17	338
09 - SECTION 6 OF THE WORKS							
09.2 - Westbound - Pier 26-27							
0920-1080	Pier 27 Prepare C.J. for Column Construction	0	20-Oct-15	20-Oct-15	12-Jan-16	12-Jan-16	
0920-1100	Pier 27 Construct Pier/Column	0	20-Oct-15	20-Oct-15	12-Jan-16	12-Jan-16	
0920-1120	Pier 27 Construct Crosshead	23	20-Oct-15	16-Nov-15	12-Jan-16	06-Feb-16	69
0920-1140	Pier 27 Install Bearing	9	16-Nov-15	26-Nov-15	11-Feb-16	20-Feb-16	69
0920-1160	Pier 26 Prepare C.J. for Column Construction	0	20-Oct-15	20-Oct-15	04-Jan-16	04-Jan-16	
0920-1180	Pier 26 Construct Pier/Column	17	20-Oct-15	10-Nov-15	04-Jan-16	23-Jan-16	63
0920-1200	Pier 26 Construct Crosshead	24	10-Nov-15	08-Dec-15	25-Jan-16	24-Feb-16	63
0920-1220	Pier 26 Install Bearing	9	08-Dec-15	18-Dec-15	25-Feb-16	05-Mar-16	63
10 - SECTION X OF THE WORKS							
10.4 - Bridge Deck Demolition							
10.4.1 - Existing W/B Bridge (Part 1)							
10410-1749	Dem. W/B Bridge Deck Pier 17-18 (1 beam) > by Crane B	0	20-Oct-15	20-Oct-15	24-Mar-16	24-Mar-16	
10410-1750	Demolish W/B Bridge Deck Pier 17-18 (1 beam) > by Crane B	0	20-Oct-15	20-Oct-15	24-Mar-16	24-Mar-16	
10410-1753	Demolish W/B Bridge Deck Pier 18-19 (2 beams) > Saw Cutting of Bridge Deck & Parapet + Coring	0	20-Oct-15	20-Oct-15	24-Mar-16	24-Mar-16	
10410-1754	Dem. W/B Bridge Deck Pier 18-19 (Half Beam-Eastside) w/ time constraint start at 4Pm > by Crane D	0	20-Oct-15	20-Oct-15	24-Mar-16	24-Mar-16	
10410-1755	Demolish W/B Bridge Deck Pier 18-19 (Half Beam-Eastside) > by Crane D	0	20-Oct-15	20-Oct-15	24-Mar-16	24-Mar-16	
10410-1756	Dem. W/B Bridge Deck Pier 18-19 (Half Beam-Westside) w/ time constraint start at 4Pm > by Crane D	0	20-Oct-15	20-Oct-15	24-Mar-16	24-Mar-16	
10410-1757	Demolish W/B Bridge Deck Pier 18-19 (Half Beam-Westside) > by Crane D	0	20-Oct-15	20-Oct-15	24-Mar-16	24-Mar-16	
10410-1760	Cutting of W/B Bridge Crosshead Wing at Pier 19 for Modification > by Crane D	0	20-Oct-15	20-Oct-15	29-Mar-16	29-Mar-16	
10410-1761	Cutting of W/B Bridge Crosshead Wing at Pier 18 for Modification > by Crane D	2	20-Oct-15	22-Oct-15	24-Mar-16	26-Mar-16	128
10410-1762	Removal of Shoring	0	20-Oct-15	20-Oct-15	22-Apr-16	22-Apr-16	
10410-1763	Removal of Temporary Footing	0	20-Oct-15	20-Oct-15	22-Apr-16	22-Apr-16	
10410-2400	Demolish Temp. W/B Bridge - Crosshead & Pier > Pier 38	0	20-Oct-15	20-Oct-15	20-Oct-15	20-Oct-15	
10410-2420	Demolish Temp. W/B Bridge - Deck > Pier 36 to 37 (6 beams)	0	20-Oct-15	20-Oct-15	20-Oct-15	20-Oct-15	
10410-2440	Demolish Temp. W/B Bridge - Crosshead & Pier > Pier 37	0	20-Oct-15	20-Oct-15	20-Oct-15	20-Oct-15	
10410-2460	Demolish Temp. W/B Bridge - Deck > Pier 34 to 35 (6 beams)	0	20-Oct-15	20-Oct-15	20-Oct-15	20-Oct-15	
10410-2480	Demolish Temp. W/B Bridge - Crosshead & Pier > Pier 36	6	24-Oct-15	30-Oct-15	24-Oct-15	30-Oct-15	0
10410-2500	Demolish Temp. W/B Bridge - Deck > Pier 35 to 36 (6 beams)	3	20-Oct-15	23-Oct-15	20-Oct-15	23-Oct-15	0
10410-2520	Demolish Temp. W/B Bridge - Crosshead & Pier > Pier 35 (by crane)	6	03-Nov-15	09-Nov-15	10-Nov-15	16-Nov-15	6
10410-2540	Demolish Temp. W/B Bridge - Crosshead & Pier > Pier 34 (by crane)	6	03-Nov-15	09-Nov-15	10-Nov-15	16-Nov-15	6
10.1 - E/B Bridges (Bridge D, E and F)							
10.1.1 - Marine Pier Construction							
Pier F01 to F02							
1011-8600	F1B Pier/Column Construction	12	20-Oct-15	03-Nov-15	29-Oct-15	11-Nov-15	7
1011-8620	F1B Crosshead Construction	18	04-Nov-15	24-Nov-15	12-Nov-15	02-Dec-15	7
1011-8640	Bearing installation pier F1B & F2B	12	25-Nov-15	08-Dec-15	03-Dec-15	16-Dec-15	7



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

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

Activity ID	Activity Name	emainir Duratio	Early Start	Early Finish	Late Start	Late Finish	Total Float
10.1.4 - Bridge E / Hing Fat Slip Road							
Bridge Construction							
1014-1880	Construction (Pier E4 - Pier E2) > Construct Crosshead + Bearing at Pier E3	0	20-Oct-15	20-Oct-15	26-Oct-15	26-Oct-15	
1014-1900	Construction (Pier E4 - Pier E2) > Modification of Crosshead + Bearing at Pier E4 & E2	0	20-Oct-15	20-Oct-15	08-Nov-19	08-Nov-19	
1014-1920	Construction (Pier E4 - Pier E2) > Erect 3nos Beams > Pier E3-E2	0	20-Oct-15	20-Oct-15	26-Oct-15	26-Oct-15	
1014-1940	Construction (Pier E4 - Pier E2) > Erect 3nos Beams > Pier E4-E3	0	20-Oct-15	20-Oct-15	08-Nov-19	08-Nov-19	
1015-1950	Bridge E (Pier E2 - E3) - Planking	0	20-Oct-15	20-Oct-15	26-Oct-15	26-Oct-15	
1015-1960	Bridge E (Pier E2 - E3) - Scaffolding	0	20-Oct-15	20-Oct-15	26-Oct-15	26-Oct-15	
1015-1970	Bridge E (Pier E2 - E3) - Soffit Formworks	1	20-Oct-15	20-Oct-15	26-Oct-15	26-Oct-15	4
1015-1980	Bridge E (Pier E2 - E3) - (Diaphgram + Decking) - Rebar Fixing	3	22-Oct-15	24-Oct-15	27-Oct-15	29-Oct-15	4
1015-1990	Bridge E (Pier E2 - E3) - D(Diaphgram + Decking) - Install Shutter	1	24-Oct-15	24-Oct-15	29-Oct-15	29-Oct-15	4
1015-2000	Bridge E (Pier E2 - E3) - (Diaphgram + Decking) - Concreting	1	26-Oct-15	26-Oct-15	30-Oct-15	30-Oct-15	4
1015-2010	Bridge E (Pier E2 - E3) - (Wing Extension) - Hanger platform (Sea Side)	5	27-Oct-15	31-Oct-15	31-Oct-15	05-Nov-15	4
1015-2020	Bridge E (Pier E2 - E3) - (Wing Extension) - Rebar fixing	3	02-Nov-15	04-Nov-15	06-Nov-15	09-Nov-15	4
1015-2030	Bridge E (Pier E2 - E3) - (Wing Extension) - Install shutter	1	04-Nov-15	04-Nov-15	09-Nov-15	09-Nov-15	4
1015-2040	Bridge E (Pier E2 - E3) - (Wing Extension) - Concreting	1	05-Nov-15	05-Nov-15	10-Nov-15	10-Nov-15	4
1015-2050	Bridge E (Pier E2 - E3) - Parapet - Stage 2	6	06-Nov-15	12-Nov-15	11-Nov-15	17-Nov-15	4
1015-2060	Bridge E (Pier E2 - E3) - Duct Laying - Satage 2	6	06-Nov-15	12-Nov-15	12-Nov-15	18-Nov-15	5
1015-2070	Bridge E (Pier E2 - E3) - M.J	2	13-Nov-15	14-Nov-15	19-Nov-15	20-Nov-15	5
1015-2080	Bridge E (Pier E2 - E3) - L3 Railing - Stage 2	3	13-Nov-15	16-Nov-15	18-Nov-15	20-Nov-15	4
1015-2090	Bridge E (Pier E2 - E3) - Asphalt	3	17-Nov-15	19-Nov-15	21-Nov-15	24-Nov-15	4
1015-2100	Bridge E (Pier E2 - E3) - Road Marking	2	20-Nov-15	21-Nov-15	25-Nov-15	26-Nov-15	4
1015-2110	Bridge E (Pier E2 - E3) - Parapet - Stage 1	6	27-Oct-15	02-Nov-15	04-Nov-15	10-Nov-15	7
1015-2120	Bridge E (Pier E2 - E3) - Duct Laying - Satage 1	6	27-Oct-15	02-Nov-15	05-Nov-15	11-Nov-15	8
1015-2130	Bridge E (Pier E2 - E3) - L3 Railing - Stage 1	4	03-Nov-15	06-Nov-15	13-Nov-15	17-Nov-15	9
1015-2140	Bridge E (Pier E3 - E4) - Planking	0	20-Oct-15	20-Oct-15	08-Nov-19	08-Nov-19	
1015-2150	Bridge E (Pier E3 - E4) - Scaffolding	0	20-Oct-15	20-Oct-15	08-Nov-19	08-Nov-19	
1015-2160	Bridge E (Pier E3 - E4) - Soffit Formwork	0	20-Oct-15	20-Oct-15	08-Nov-19	08-Nov-19	
1015-2170	Bridge E (Pier E3 - E4) - (Diaphgram + Additional Diaphgram + Decking) - Rebar Fixing	2	20-Oct-15	22-Oct-15	31-Oct-15	02-Nov-15	9
1015-2180	Bridge E (Pier E3 - E4) - (Diaphgram + Additional Diaphgram + Decking) - Shutter	1	22-Oct-15	22-Oct-15	02-Nov-15	02-Nov-15	9
1015-2190	Bridge E (Pier E3 - E4) - (Diaphgram + Additional Diaphgram + Decking) - Concreting	1	23-Oct-15	23-Oct-15	03-Nov-15	03-Nov-15	9
1015-2200	Bridge E (Pier E3 - E4) - Parapet	7	23-Oct-15	30-Oct-15	03-Nov-15	10-Nov-15	9
1015-2210	Bridge E (Pier E3 - E4) - Drain Pipe Laying	7	23-Oct-15	30-Oct-15	03-Nov-15	10-Nov-15	9
1015-2220	Bridge E (Pier E3 - E4) - M.J	2	31-Oct-15	02-Nov-15	11-Nov-15	12-Nov-15	9
1015-2230	Bridge E (Pier E3 - E4) - L3 Railing	7	03-Nov-15	10-Nov-15	13-Nov-15	20-Nov-15	9
1015-2240	Bridge E (Pier E3 - E4) - Asphalt	3	11-Nov-15	13-Nov-15	21-Nov-15	24-Nov-15	9
1015-2250	Bridge E (Pier E3 - E4) - Road Marking	2	14-Nov-15	16-Nov-15	25-Nov-15	26-Nov-15	9
1015-2260	Bridge E (Pier E4 towards HFS-Rd) - Scaffolding	0	20-Oct-15	20-Oct-15	08-Nov-19	08-Nov-19	
1015-2270	Bridge E (Pier E4 towards HFS-Rd) - Formwork	0	20-Oct-15	20-Oct-15	08-Nov-19	08-Nov-19	
1015-2280	Bridge E (Pier E4 towards HFS-Rd) - Wing Extension	1	20-Oct-15	20-Oct-15	13-Nov-15	13-Nov-15	20
1015-2290	Bridge E (Pier E4 towards HFS-Rd) - Parapet	4	22-Oct-15	26-Oct-15	14-Nov-15	18-Nov-15	20
1015-2300	Bridge E (Pier E4 towards HFS-Rd) - Draine - pipe Laying	4	22-Oct-15	26-Oct-15	14-Nov-15	18-Nov-15	20
1015-2310	Bridge E (Pier E4 towards HFS-Rd) - L3 Railing	3	27-Oct-15	29-Oct-15	19-Nov-15	21-Nov-15	20



Remaining Level of Effort ◆ ◆ Milestone
Actual Level of Effort
Actual Work
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Contract HY/2009/19
Three Months Rolling Programme (20 Oct 2015 to 19 Jan 2016)

Activity ID	Activity Name	Remaining Duration	Early Start	Early Finish	Late Start	Late Finish	Total Float
1015-2320	Bridge E (Pier E4 towards HFS-Rd) - Asphalt	2	30-Oct-15	31-Oct-15	23-Nov-15	24-Nov-15	20
1015-2330	Bridge E (Pier E4 towards HFS-Rd) - Road Marking	2	02-Nov-15	03-Nov-15	25-Nov-15	26-Nov-15	20
10.2 - W/B Bridges (Bridge C and F)							
10.2.1 - Pier Construction							
Pier 38 to 43							
1021-1820	Pier 38 (F3C) Prepare C.J. at Existing Pile Cap	0	20-Oct-15	20-Oct-15	05-Jan-16	05-Jan-16	
1021-1840	Pier 38 (F3C) Construct Pier/Column	18	20-Oct-15	10-Nov-15	05-Jan-16	25-Jan-16	63
1021-1860	Pier 38 (F3C) Construct Crosshead	24	11-Nov-15	08-Dec-15	26-Jan-16	25-Feb-16	63
1021-1880	Pier 38 (F3C) Install Bearing	9	09-Dec-15	18-Dec-15	26-Feb-16	07-Mar-16	63
1021-1900	Pier 39 (F4C) Prepare C.J. at Existing Pile Cap	0	20-Oct-15	20-Oct-15	13-Jan-16	13-Jan-16	
1021-1920	Pier 39 (F4C) Construct Pier/Column	17	20-Oct-15	10-Nov-15	13-Jan-16	02-Feb-16	71
1021-1940	Pier 39 (F4C) Construct Crosshead	24	10-Nov-15	08-Dec-15	03-Feb-16	04-Mar-16	71
1021-1960	Pier 39 (F4C) Install Bearing	9	08-Dec-15	18-Dec-15	05-Mar-16	15-Mar-16	71
1021-1980	Pier 40 (F5C) Prepare C.J. at Existing Pile Cap	0	20-Oct-15	20-Oct-15	13-Jan-16	13-Jan-16	
1021-2000	Pier 40 (F5C) Construct Pier/Column	17	20-Oct-15	10-Nov-15	13-Jan-16	02-Feb-16	71
1021-2020	Pier 40 (F5C) Construct Crosshead	24	10-Nov-15	08-Dec-15	03-Feb-16	04-Mar-16	71
1021-2040	Pier 40 (F5C) Install Bearing	9	08-Dec-15	18-Dec-15	05-Mar-16	15-Mar-16	71
1021-2060	Pier 41 (F6C) Prepare C.J. at Existing Pile Cap	0	20-Oct-15	20-Oct-15	05-Jan-16	05-Jan-16	
1021-2080	Pier 41 (F6C) Construct Pier/Column	18	20-Oct-15	10-Nov-15	05-Jan-16	25-Jan-16	63
1021-2100	Pier 41 (F6C) Construct Crosshead	24	11-Nov-15	08-Dec-15	23-Feb-16	21-Mar-16	84
1021-2120	Pier 41 (F6C) Install Bearing	9	09-Dec-15	18-Dec-15	22-Mar-16	02-Apr-16	84
1021-2160	Pier 42 (F7C) Construct Pier/Column	0	20-Oct-15	20-Oct-15	13-Jan-16	13-Jan-16	
1021-2180	Pier 42 (F7C) Construct Crosshead	24	20-Oct-15	17-Nov-15	17-Mar-16	16-Apr-16	122
1021-2200	Pier 42 (F7C) Install Bearing	9	17-Nov-15	27-Nov-15	18-Apr-16	27-Apr-16	122
1021-2240	Pier 43 (F8C) Construct Pier/Column	0	20-Oct-15	20-Oct-15	13-Jan-16	13-Jan-16	
1021-2260	Pier 43 (F8C) Construct Crosshead	24	20-Oct-15	17-Nov-15	31-Mar-16	28-Apr-16	132
1021-2280	Pier 43 (F8C) Install Bearing	9	18-Nov-15	27-Nov-15	29-Apr-16	09-May-16	132
Pier 36 to 37							
1021-1580	Pier 36 (F1C) Prepare CJ at Existing Pile Cap	11	31-Oct-15	12-Nov-15	19-Nov-15	01-Dec-15	16
1021-1600	Pier 36 (F1C) Construct Pier/Column	18	13-Nov-15	03-Dec-15	02-Dec-15	22-Dec-15	16
1021-1620	Pier 36 (F1C) Construct Crosshead	24	04-Dec-15	02-Jan-16	23-Dec-15	21-Jan-16	16
1021-1640	Pier 36 (F1C) Install Bearing	9	04-Jan-16	13-Jan-16	22-Jan-16	01-Feb-16	16
1021-1660	Pier 37 (F2C) Prepare CJ at Existing Pile Cap	11	20-Oct-15	02-Nov-15	09-Dec-15	21-Dec-15	42
1021-1680	Pier 37 (F2C) Construct Pier/Column	18	03-Nov-15	23-Nov-15	22-Dec-15	13-Jan-16	42
1021-1700	Pier 37 (F2C) Construct Crosshead	24	24-Nov-15	21-Dec-15	14-Jan-16	13-Feb-16	42
1021-1720	Pier 37 (F2C) Install Bearing	9	22-Dec-15	02-Jan-16	15-Feb-16	24-Feb-16	42
Abutment D12							
1021-1020	Construct Abutment D12 W/B Bridge	30	10-Nov-15	14-Dec-15	08-Dec-15	13-Jan-16	24
1021-1040	Bearing installation D12 W/B Bridge	9	15-Dec-15	24-Dec-15	14-Jan-16	23-Jan-16	24
Pier 28							
1021-1760	Pier 28 Construct Pier/Column	0	20-Oct-15	20-Oct-15	26-Oct-15	26-Oct-15	
1021-1780	Pier 28 Construct Crosshead	0	20-Oct-15	20-Oct-15	26-Oct-15	26-Oct-15	
1021-1800	Pier 28 Install Bearing	5	20-Oct-15	26-Oct-15	26-Oct-15	30-Oct-15	4

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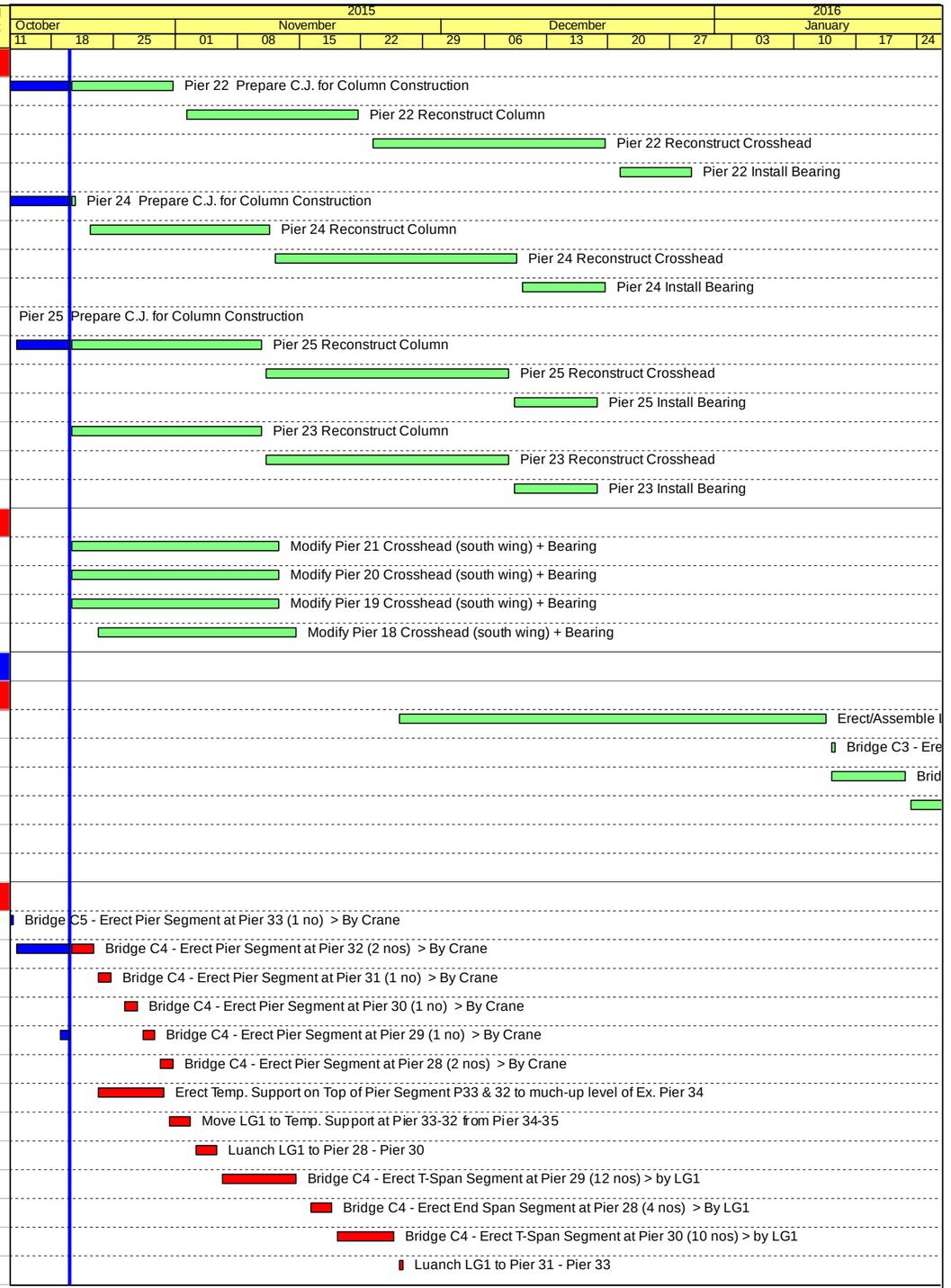
Contract HY/2009/19
Three Months Rolling Programme (20 Oct 2015 to 19 Jan 2016)

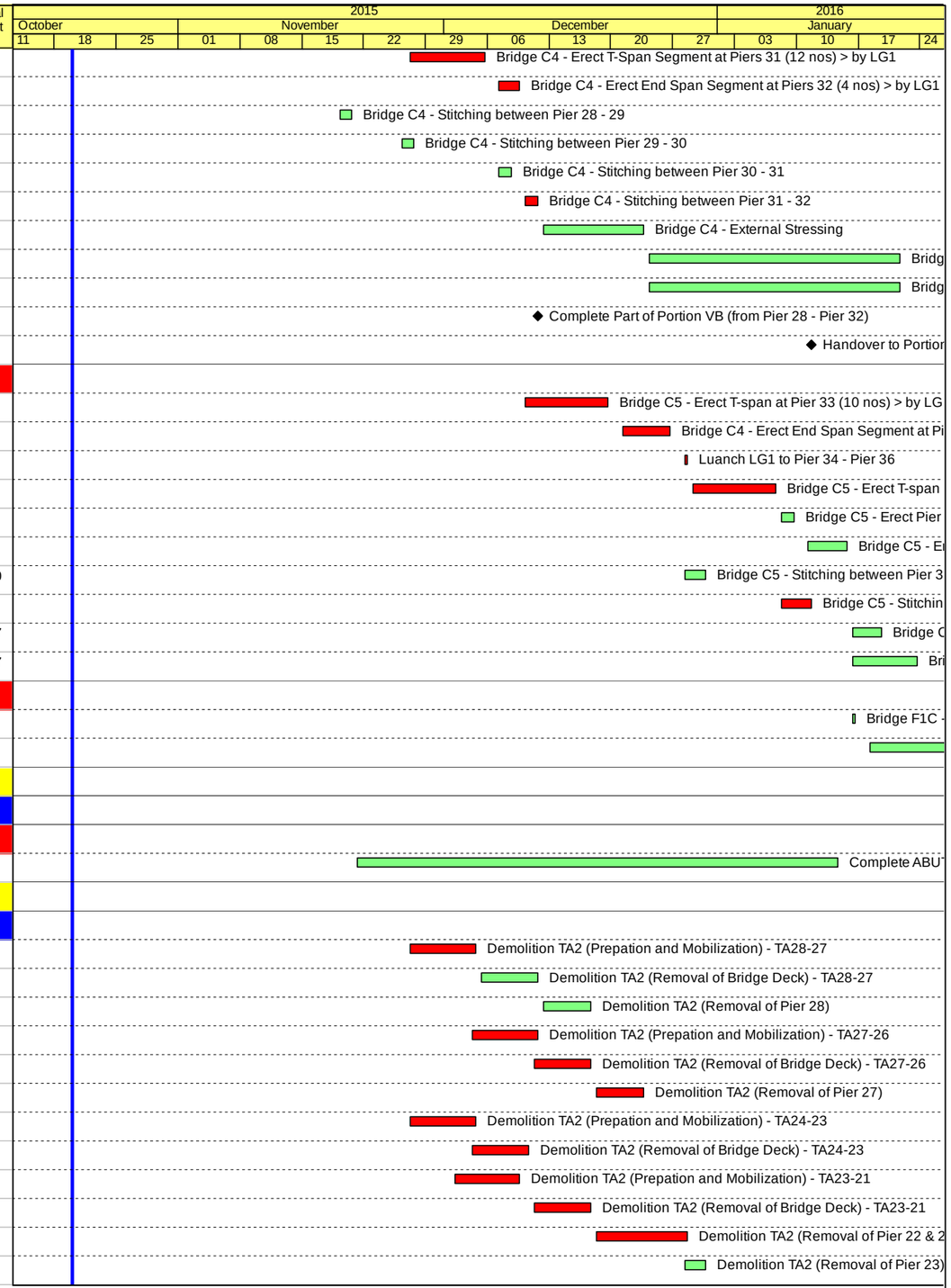
Activity ID	Activity Name	emainir Duratio	Early Start	Early Finish	Late Start	Late Finish	Total Float
Pier 20 to 25							
1021-1060	Pier 22 Prepare C.J. for Column Construction	10	20-Oct-15	31-Oct-15	20-Feb-16	03-Mar-16	101
1021-1080	Pier 22 Reconstruct Column	18	02-Nov-15	21-Nov-15	03-Mar-16	24-Mar-16	101
1021-1100	Pier 22 Reconstruct Crosshead	24	23-Nov-15	19-Dec-15	24-Mar-16	25-Apr-16	101
1021-1120	Pier 22 Install Bearing	6	21-Dec-15	29-Dec-15	25-Apr-16	02-May-16	101
1021-1280	Pier 24 Prepare C.J. for Column Construction	1	20-Oct-15	20-Oct-15	23-Jan-16	23-Jan-16	79
1021-1300	Pier 24 Reconstruct Column	18	22-Oct-15	11-Nov-15	25-Jan-16	17-Feb-16	79
1021-1320	Pier 24 Reconstruct Crosshead	24	12-Nov-15	09-Dec-15	18-Feb-16	16-Mar-16	79
1021-1340	Pier 24 Install Bearing	9	10-Dec-15	19-Dec-15	17-Mar-16	29-Mar-16	79
1021-1360	Pier 25 Prepare C.J. for Column Construction	0	20-Oct-15	20-Oct-15	25-Jan-16	25-Jan-16	
1021-1380	Pier 25 Reconstruct Column	18	20-Oct-15	10-Nov-15	25-Jan-16	17-Feb-16	80
1021-1400	Pier 25 Reconstruct Crosshead	24	11-Nov-15	08-Dec-15	18-Feb-16	16-Mar-16	80
1021-1420	Pier 25 Install Bearing	9	09-Dec-15	18-Dec-15	17-Mar-16	29-Mar-16	80
1021-1520	Pier 23 Reconstruct Column	18	20-Oct-15	10-Nov-15	25-Jan-16	17-Feb-16	80
1021-1540	Pier 23 Reconstruct Crosshead	24	11-Nov-15	08-Dec-15	18-Feb-16	16-Mar-16	80
1021-1560	Pier 23 Install Bearing	9	09-Dec-15	18-Dec-15	17-Mar-16	29-Mar-16	80
Pier 17 to 19							
1021-1215	Modify Pier 21 Crosshead (south wing) + Bearing	20	20-Oct-15	12-Nov-15	29-Mar-16	21-Apr-16	130
1021-1225	Modify Pier 20 Crosshead (south wing) + Bearing	20	20-Oct-15	12-Nov-15	29-Mar-16	21-Apr-16	130
1021-1230	Modify Pier 19 Crosshead (south wing) + Bearing	20	20-Oct-15	12-Nov-15	29-Mar-16	21-Apr-16	130
1021-1235	Modify Pier 18 Crosshead (south wing) + Bearing	20	23-Oct-15	14-Nov-15	29-Mar-16	21-Apr-16	128
10.2.2 - Bridge Construction							
Bridge C3							
1022-1070	Erect/Assemble LG2 at Piers 29 and 30 + T&C	40	26-Nov-15	13-Jan-16	02-Jan-16	20-Feb-16	30
1022-1120	Bridge C3 - Erect Pier Segment at Pier 27 (1no) > by LG2	1	14-Jan-16	14-Jan-16	22-Feb-16	22-Feb-16	30
1022-2580	Bridge C3 - Erect T-span at Pier 27 (10 nos) > By LG2	8	14-Jan-16	22-Jan-16	22-Feb-16	01-Mar-16	30
1022-2582	Bridge C3 - Erect End Span at Pier 28 (5 nos) > By LG2	4	23-Jan-16	27-Jan-16	02-Mar-16	05-Mar-16	30
1022-2620	Bridge C3 - Erect Pier Segment at Pier 26 (1no) > By LG2	1	28-Jan-16	28-Jan-16	07-Mar-16	07-Mar-16	30
1022-2650	Bridge C3 - Stitching at midspan between Pier 27 and 28	2	28-Jan-16	29-Jan-16	07-Mar-16	08-Mar-16	30
Bridge C4							
1022-1453	Bridge C5 - Erect Pier Segment at Pier 33 (1 no) > By Crane	0	20-Oct-15	20-Oct-15	20-Oct-15	20-Oct-15	
1022-1453.2	Bridge C4 - Erect Pier Segment at Pier 32 (2 nos) > By Crane	2	20-Oct-15	22-Oct-15	20-Oct-15	22-Oct-15	0
1022-1453.3	Bridge C4 - Erect Pier Segment at Pier 31 (1 no) > By Crane	2	23-Oct-15	24-Oct-15	24-Oct-15	26-Oct-15	1
1022-1453.4	Bridge C4 - Erect Pier Segment at Pier 30 (1 no) > By Crane	2	26-Oct-15	27-Oct-15	27-Oct-15	28-Oct-15	1
1022-1453.5	Bridge C4 - Erect Pier Segment at Pier 29 (1 no) > By Crane	2	28-Oct-15	29-Oct-15	29-Oct-15	30-Oct-15	1
1022-1453.6	Bridge C4 - Erect Pier Segment at Pier 28 (2 nos) > By Crane	2	30-Oct-15	31-Oct-15	31-Oct-15	02-Nov-15	1
1022-1454	Erect Temp. Support on Top of Pier Segment P33 & 32 to much-up level of Ex. Pier 34	7	23-Oct-15	30-Oct-15	23-Oct-15	30-Oct-15	0
1022-1455	Move LG1 to Temp. Support at Pier 33-32 from Pier 34-35	2	31-Oct-15	02-Nov-15	31-Oct-15	02-Nov-15	0
1022-1455.2	Luanch LG1 to Pier 28 - Pier 30	3	03-Nov-15	05-Nov-15	03-Nov-15	05-Nov-15	0
1022-1456.2	Bridge C4 - Erect T-Span Segment at Pier 29 (12 nos) > by LG1	8	06-Nov-15	14-Nov-15	06-Nov-15	14-Nov-15	0
1022-1456.3	Bridge C4 - Erect End Span Segment at Pier 28 (4 nos) > By LG1	3	16-Nov-15	18-Nov-15	16-Nov-15	18-Nov-15	0
1022-1456.4	Bridge C4 - Erect T-Span Segment at Pier 30 (10 nos) > by LG1	6	19-Nov-15	25-Nov-15	19-Nov-15	25-Nov-15	0
1022-1456.5	Luanch LG1 to Pier 31 - Pier 33	1	26-Nov-15	26-Nov-15	26-Nov-15	26-Nov-15	0



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

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

Activity ID	Activity Name	emainir Duratio	Early Start	Early Finish	Late Start	Late Finish	Total Float
1022-1457	Bridge C4 - Erect T-Span Segment at Piers 31 (12 nos) > by LG1	8	27-Nov-15	05-Dec-15	27-Nov-15	05-Dec-15	0
1022-1458	Bridge C4 - Erect End Span Segment at Piers 32 (4 nos) > by LG1	3	07-Dec-15	09-Dec-15	07-Dec-15	09-Dec-15	0
1022-1458.2	Bridge C4 - Stitching between Pier 28 - 29	2	19-Nov-15	20-Nov-15	27-Feb-16	29-Feb-16	81
1022-1458.3	Bridge C4 - Stitching between Pier 29 - 30	2	26-Nov-15	27-Nov-15	27-Feb-16	29-Feb-16	75
1022-1458.4	Bridge C4 - Stitching between Pier 30 - 31	2	07-Dec-15	08-Dec-15	27-Feb-16	29-Feb-16	66
1022-1459	Bridge C4 - Stitching between Pier 31 - 32	2	10-Dec-15	11-Dec-15	10-Dec-15	11-Dec-15	0
1022-1460	Bridge C4 - External Stressing	10	12-Dec-15	23-Dec-15	01-Mar-16	11-Mar-16	63
1022-1620	Bridge C4 - Construct South Parapet (108m)	23	24-Dec-15	21-Jan-16	12-Mar-16	11-Apr-16	63
1022-1640	Bridge C4 - Construct North Parapet (108m)	23	24-Dec-15	21-Jan-16	12-Mar-16	11-Apr-16	63
1022-3830	Complete Part of Portion VB (from Pier 28 - Pier 32)	0		11-Dec-15		11-Dec-15	0
1022-3840	Handover to Portion VB to CC contract (from Pier 28 - Pier 34)	0		11-Jan-16		11-Jan-16	0
Bridge C5							
1022-1570	Bridge C5 - Erect T-span at Pier 33 (10 nos) > by LG1	9	10-Dec-15	19-Dec-15	10-Dec-15	19-Dec-15	0
1022-1575	Bridge C4 - Erect End Span Segment at Piers 32 (5 nos) > by LG1	5	21-Dec-15	26-Dec-15	21-Dec-15	26-Dec-15	0
1022-1578	Luanch LG1 to Pier 34 - Pier 36	1	28-Dec-15	28-Dec-15	28-Dec-15	28-Dec-15	0
1022-1580	Bridge C5 - Erect T-span at Pier 34 (8 nos) > By LG1	8	29-Dec-15	07-Jan-16	29-Dec-15	07-Jan-16	0
1022-1585	Bridge C5 - Erect Pier Segment at Abut D12 (2 nos) > by LG1	2	08-Jan-16	09-Jan-16	25-Jan-16	26-Jan-16	14
1022-1588	Bridge C5 - Erect E-span at Abut D12 (5 nos) > by LG1	5	11-Jan-16	15-Jan-16	27-Jan-16	01-Feb-16	14
1022-1600	Bridge C5 - Stitching between Pier 32 and 33	3	28-Dec-15	30-Dec-15	17-Jun-16	20-Jun-16	140
1022-1700	Bridge C5 - Stitching between Pier 33 and 34	3	08-Jan-16	11-Jan-16	08-Jan-16	11-Jan-16	0
1022-1760	Bridge C5 - Stitching between Pier 34 and D12	3	16-Jan-16	19-Jan-16	21-Jun-16	23-Jun-16	127
1022-1780	Bridge C5 - External Stressing	7	16-Jan-16	23-Jan-16	21-Jun-16	28-Jun-16	127
Bridge F1C							
1022-1840	Bridge F1C - Erect Pier Segment at Pier 36 (1 nos) > by LG1	1	16-Jan-16	16-Jan-16	02-Feb-16	02-Feb-16	14
1022-1860	Bridge F1C- Erect T-span at Pier 36 (12 nos) > by LG1	11	18-Jan-16	29-Jan-16	03-Feb-16	18-Feb-16	14
10.3 - Middle Bridge (Bridge F)							
10.3.1 - Pier Construction							
Abutment D12							
1031-1920	Complete ABUT D12 at Middle Bridge	45	21-Nov-15	14-Jan-16	30-Nov-15	22-Jan-16	7
10.5 - Temporary Bridge							
10.5.1 - Temporary Bridge 'TA'							
1051-3270	Demolition TA2 (Prepation and Mobilization) - TA28-27	7	27-Nov-15	04-Dec-15	28-Nov-15	05-Dec-15	1
1051-3280	Demolition TA2 (Removal of Bridge Deck) - TA28-27	6	05-Dec-15	11-Dec-15	27-Jan-16	02-Feb-16	43
1051-3290	Demolition TA2 (Removal of Pier 28)	5	12-Dec-15	17-Dec-15	03-Feb-16	11-Feb-16	43
1051-3300	Demolition TA2 (Prepation and Mobilization) - TA27-26	7	04-Dec-15	11-Dec-15	05-Dec-15	12-Dec-15	1
1051-3310	Demolition TA2 (Removal of Bridge Deck) - TA27-26	6	11-Dec-15	17-Dec-15	12-Dec-15	18-Dec-15	1
1051-3320	Demolition TA2 (Removal of Pier 27)	5	18-Dec-15	23-Dec-15	19-Dec-15	24-Dec-15	1
1051-3380	Demolition TA2 (Prepation and Mobilization) - TA24-23	7	27-Nov-15	04-Dec-15	01-Dec-15	08-Dec-15	3
1051-3390	Demolition TA2 (Removal of Bridge Deck) - TA24-23	6	04-Dec-15	10-Dec-15	08-Dec-15	14-Dec-15	3
1051-3400	Demolition TA2 (Prepation and Mobilization) - TA23-21	7	02-Dec-15	09-Dec-15	05-Dec-15	12-Dec-15	3
1051-3410	Demolition TA2 (Removal of Bridge Deck) - TA23-21	6	11-Dec-15	17-Dec-15	15-Dec-15	21-Dec-15	3
1051-3420	Demolition TA2 (Removal of Pier 22 & 21)	8	18-Dec-15	28-Dec-15	22-Dec-15	31-Dec-15	3
1051-3470	Demolition TA2 (Removal of Pier 23)	3	28-Dec-15	30-Dec-15	18-Jan-16	20-Jan-16	17



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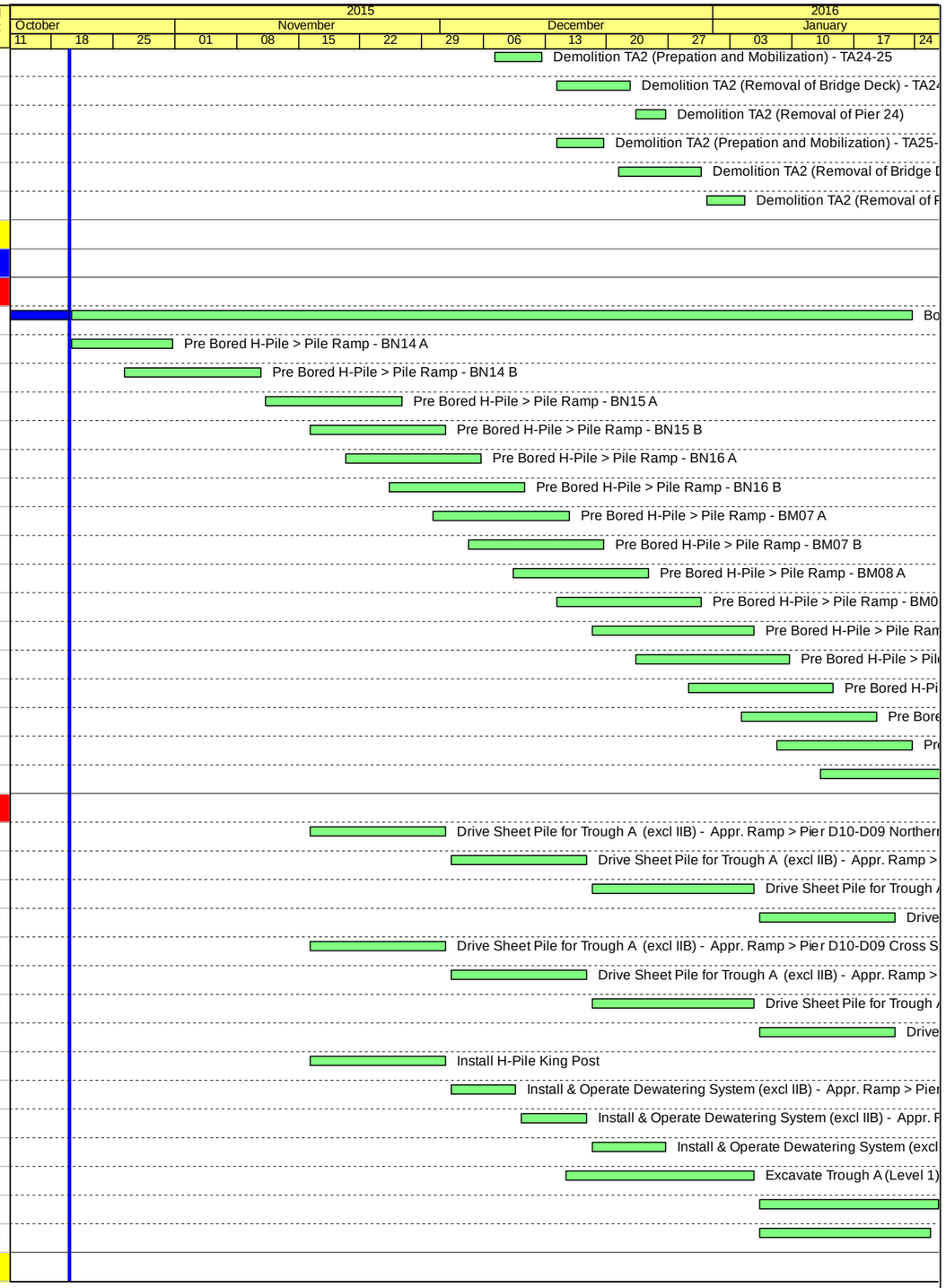
Critical Remaining Work

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

Activity ID	Activity Name	emainir Duratio	Early Start	Early Finish	Late Start	Late Finish	Total Float
1051-3480	Demolition TA2 (Prepation and Mobilization) - TA24-25	6	07-Dec-15	12-Dec-15	16-Dec-15	22-Dec-15	8
1051-3490	Demolition TA2 (Removal of Bridge Deck) - TA24-25	8	14-Dec-15	22-Dec-15	05-Jan-16	13-Jan-16	17
1051-3500	Demolition TA2 (Removal of Pier 24)	3	23-Dec-15	26-Dec-15	14-Jan-16	16-Jan-16	17
1051-3501	Demolition TA2 (Prepation and Mobilization) - TA25-26	6	14-Dec-15	19-Dec-15	23-Dec-15	30-Dec-15	8
1051-3502	Demolition TA2 (Removal of Bridge Deck) - TA25-26	8	21-Dec-15	30-Dec-15	31-Dec-15	09-Jan-16	8
1051-3503	Demolition TA2 (Removal of Pier 25&26)	3	31-Dec-15	04-Jan-16	11-Jan-16	13-Jan-16	8
10.6 - Tunnel Approach Ramp							
10.6.1 - Approach Ramp (Excluding Portion IIB)							
Bored Piles							
1061-1120	Bored Piles Testing Approach Ramp (112 nos)	80	20-Oct-15	23-Jan-16	07-May-16	10-Aug-16	163
1061-3980	Pre Bored H-Pile > Pile Ramp - BN14 A	10	20-Oct-15	31-Oct-15	16-Mar-16	29-Mar-16	121
1061-4000	Pre Bored H-Pile > Pile Ramp - BN14 B	14	26-Oct-15	10-Nov-15	21-Mar-16	08-Apr-16	121
1061-4020	Pre Bored H-Pile > Pile Ramp - BN15 A	14	11-Nov-15	26-Nov-15	09-Apr-16	25-Apr-16	121
1061-4040	Pre Bored H-Pile > Pile Ramp - BN15 B	14	16-Nov-15	01-Dec-15	14-Apr-16	29-Apr-16	121
1061-4060	Pre Bored H-Pile > Pile Ramp - BN16 A	14	20-Nov-15	05-Dec-15	19-Apr-16	04-May-16	121
1061-4080	Pre Bored H-Pile > Pile Ramp - BN16 B	14	25-Nov-15	10-Dec-15	23-Apr-16	09-May-16	121
1061-4100	Pre Bored H-Pile > Pile Ramp - BM07 A	14	30-Nov-15	15-Dec-15	28-Apr-16	13-May-16	121
1061-4120	Pre Bored H-Pile > Pile Ramp - BM07 B	14	04-Dec-15	19-Dec-15	03-May-16	18-May-16	121
1061-4140	Pre Bored H-Pile > Pile Ramp - BM08 A	14	09-Dec-15	24-Dec-15	07-May-16	23-May-16	121
1061-4160	Pre Bored H-Pile > Pile Ramp - BM08 B	14	14-Dec-15	30-Dec-15	12-May-16	27-May-16	121
1061-4180	Pre Bored H-Pile > Pile Ramp - BM06 A	14	18-Dec-15	05-Jan-16	17-May-16	01-Jun-16	121
1061-4200	Pre Bored H-Pile > Pile Ramp - BM06 B	14	23-Dec-15	09-Jan-16	21-May-16	06-Jun-16	121
1061-4220	Pre Bored H-Pile > Pile Ramp - BM05 A	14	29-Dec-15	14-Jan-16	26-May-16	11-Jun-16	121
1061-4240	Pre Bored H-Pile > Pile Ramp - BM05 B	14	04-Jan-16	19-Jan-16	31-May-16	16-Jun-16	121
1061-4260	Pre Bored H-Pile > Pile Ramp - BM04 A	14	08-Jan-16	23-Jan-16	04-Jun-16	21-Jun-16	121
1061-4280	Pre Bored H-Pile > Pile Ramp - BM04 B	14	13-Jan-16	28-Jan-16	10-Jun-16	25-Jun-16	121
ELS							
1061-1200	Drive Sheet Pile for Trough A (excl IIB) - Appr. Ramp > Pier D10-D09 Northern Side	14	16-Nov-15	01-Dec-15	08-Apr-16	23-Apr-16	116
1061-1220	Drive Sheet Pile for Trough A (excl IIB) - Appr. Ramp > Pier D09-D08 Northern Side	14	02-Dec-15	17-Dec-15	15-Jun-16	30-Jun-16	159
1061-1240	Drive Sheet Pile for Trough A (excl IIB) - Appr. Ramp > Pier D08-D07 Northern Side	14	18-Dec-15	05-Jan-16	02-Jul-16	18-Jul-16	159
1061-1260	Drive Sheet Pile for Trough A (excl IIB) - Appr. Ramp > Pier D07 Cross Sectional Side	14	06-Jan-16	21-Jan-16	18-Jul-16	03-Aug-16	159
1061-1320	Drive Sheet Pile for Trough A (excl IIB) - Appr. Ramp > Pier D10-D09 Cross Sectional Side	14	16-Nov-15	01-Dec-15	28-May-16	14-Jun-16	159
1061-1340	Drive Sheet Pile for Trough A (excl IIB) - Appr. Ramp > Pier D10-D09 Southern Side	14	02-Dec-15	17-Dec-15	15-Jun-16	30-Jun-16	159
1061-1360	Drive Sheet Pile for Trough A (excl IIB) - Appr. Ramp > Pier D09-D08 Southern Side	14	18-Dec-15	05-Jan-16	02-Jul-16	18-Jul-16	159
1061-1380	Drive Sheet Pile for Trough A (excl IIB) - Appr. Ramp > Pier D08-D07 Southern Side	14	06-Jan-16	21-Jan-16	18-Jul-16	03-Aug-16	159
1061-1390	Install H-Pile King Post	14	16-Nov-15	01-Dec-15	08-Apr-16	23-Apr-16	116
1061-1400	Install & Operate Dewatering System (excl IIB) - Appr. Ramp > Pier D07-D08	7	02-Dec-15	09-Dec-15	25-Apr-16	02-May-16	116
1061-1420	Install & Operate Dewatering System (excl IIB) - Appr. Ramp > Pier D08-D09	7	10-Dec-15	17-Dec-15	03-May-16	10-May-16	116
1061-1440	Install & Operate Dewatering System (excl IIB) - Appr. Ramp > Pier D09-D10	7	18-Dec-15	26-Dec-15	11-May-16	18-May-16	116
1061-1460	Excavate Trough A (Level 1) > BN/BS18 - BN/BS25	17	15-Dec-15	05-Jan-16	07-May-16	26-May-16	116
1061-1470	Install Strut & Waling Supporty (First layer) > BN/BS18 - BN/BS25	18	06-Jan-16	26-Jan-16	27-May-16	17-Jun-16	116
1061-1530	Excavate Trough A (Level 1) > BN/BS25 - BN/BS30	17	06-Jan-16	25-Jan-16	25-Jun-16	15-Jul-16	140
10.7 - Section X - Miscellaneous Works							



Remaining Level of Effort ◆ ◆ Milestone
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Contract HY/2009/19
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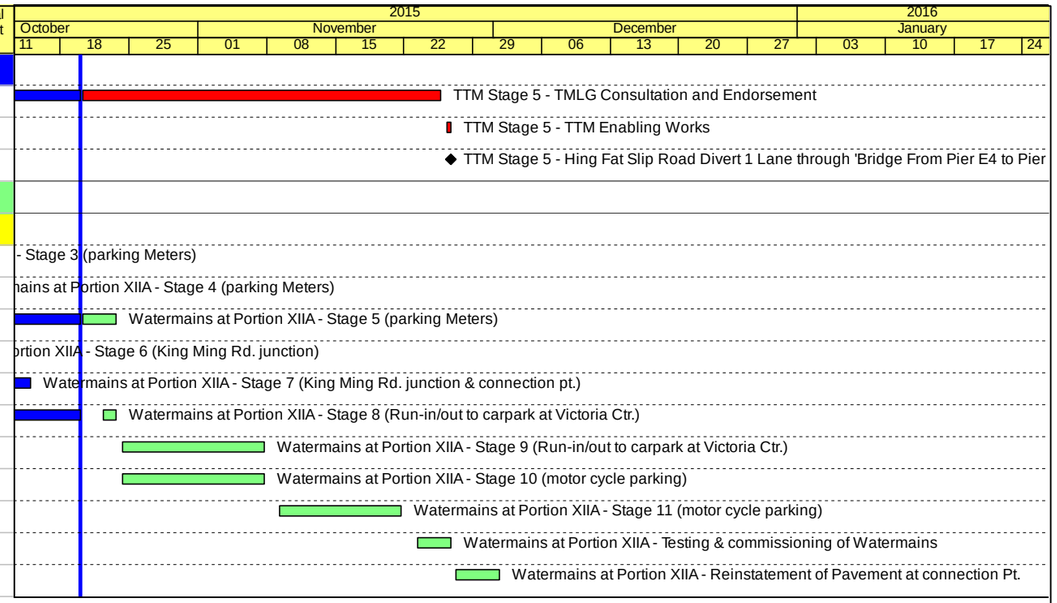
Activity ID	Activity Name	emainir Duratio	Early Start	Early Finish	Late Start	Late Finish	Total Float
10.7.1 - TTM Stages							
1071-1240	TTM Stage 5 - TMLG Consultation and Endorsement	37	20-Oct-15	25-Nov-15	21-Oct-15	26-Nov-15	1
1071-1260	TTM Stage 5 - TTM Enabling Works	1	26-Nov-15	26-Nov-15	27-Nov-15	27-Nov-15	1
1071-1280	TTM Stage 5 - Hing Fat Slip Road Divert 1 Lane through 'Bridge From Pier E4 to Pier E2' to Release "TA2"	0		26-Nov-15		27-Nov-15	1
11 - SECTION 11 OF THE WORKS							
11.2 - Roadworks							
1110-2710	Watermains at Portion XIIA - Stage 3 (parking Meters)	0	20-Oct-15	20-Oct-15	16-Nov-15	16-Nov-15	
1110-2720	Watermains at Portion XIIA - Stage 4 (parking Meters)	0	20-Oct-15	20-Oct-15	16-Nov-15	16-Nov-15	
1110-2730	Watermains at Portion XIIA - Stage 5 (parking Meters)	3	20-Oct-15	23-Oct-15	16-Nov-15	18-Nov-15	22
1110-2740	Watermains at Portion XIIA - Stage 6 (King Ming Rd. junction)	0	20-Oct-15	20-Oct-15	17-Nov-15	17-Nov-15	
1110-2750	Watermains at Portion XIIA - Stage 7 (King Ming Rd. junction & connection pt.)	0	20-Oct-15	20-Oct-15	17-Nov-15	17-Nov-15	
1110-2760	Watermains at Portion XIIA - Stage 8 (Run-in/out to carpark at Victoria Ctr.)	2	22-Oct-15	23-Oct-15	17-Nov-15	18-Nov-15	22
1110-2770	Watermains at Portion XIIA - Stage 9 (Run-in/out to carpark at Victoria Ctr.)	13	24-Oct-15	07-Nov-15	19-Nov-15	03-Dec-15	22
1110-2780	Watermains at Portion XIIA - Stage 10 (motor cycle parking)	13	24-Oct-15	07-Nov-15	19-Nov-15	03-Dec-15	22
1110-2790	Watermains at Portion XIIA - Stage 11 (motor cycle parking)	12	09-Nov-15	21-Nov-15	04-Dec-15	17-Dec-15	22
1110-2800	Watermains at Portion XIIA - Testing & commissioning of Watermains	4	23-Nov-15	26-Nov-15	18-Dec-15	22-Dec-15	22
1110-2810	Watermains at Portion XIIA - Reinstatement of Pavement at connection Pt.	4	27-Nov-15	01-Dec-15	23-Dec-15	28-Dec-15	22



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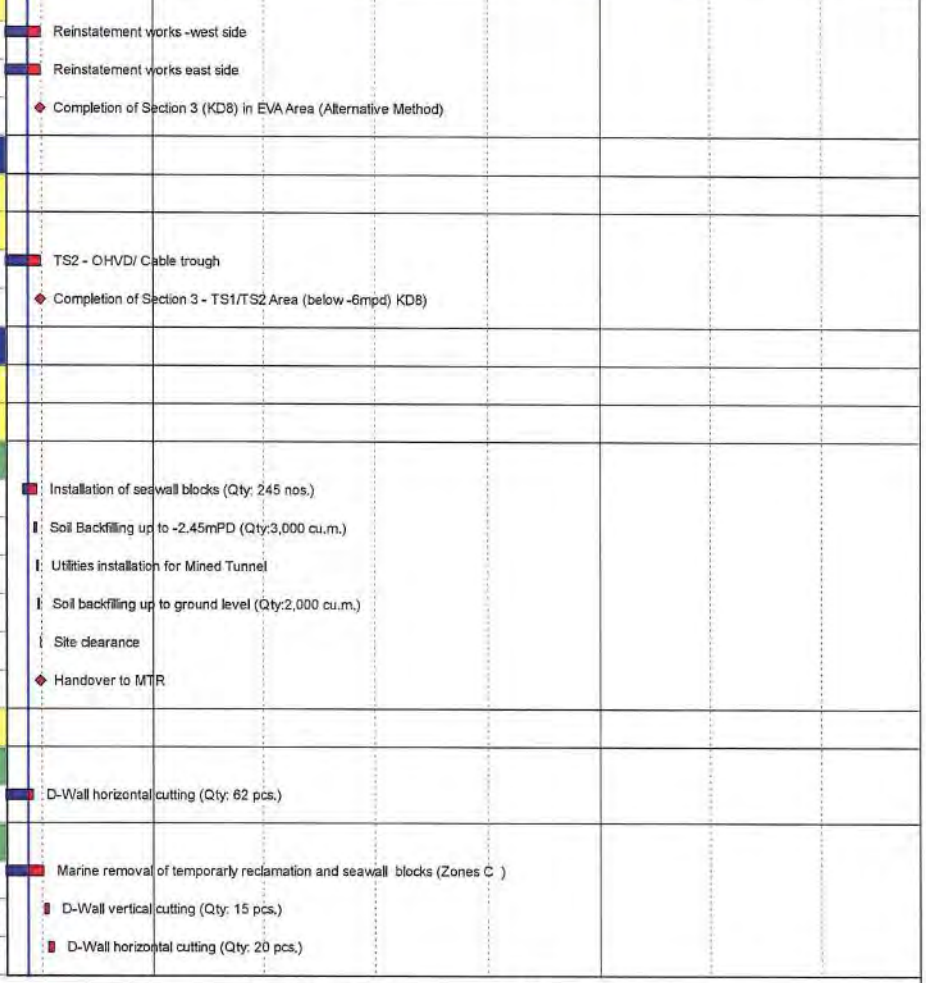
Contract HY/2009/19
Three Months Rolling Programme (20 Oct 2015 to 19 Jan 2016)

WP13-0 | Layout: CWB - Working Layout for DWP Rev M | Date Printed 26-Sep-14 15

Activity ID	Activity Name	Calendar	Original Duration	Start	Finish	Total Float
HY/2009/15 - Works Programme Rev. M (DD:20-Sep-12)						
Works in East Ventilation Adit - Based on Alternative Method						
Reinstatement of Breakwater						
S3_54840	Reinstatement works -west side	7d/wk-1	60d	21-Feb-14 08 A	30-Sep-14 18	-85d
S3_60085	Reinstatement works east side	7d/wk-1	60d	31-May-14 08 A	30-Sep-14 18	-85d
S3_54845	Completion of Section 3 (KD8) in EVA Area (Alternative Method)	7d/wk-2	0d		30-Sep-14 18	-86d
Works in TS1/TS2 - OHVD and Cable Trough/Maintenance Walkway						
TS2 - OHVD and Cable Trough/Maintenance Walkway						
OHVD Slab and Cable Trough Construction						
S3_6210	TS2 - OHVD/ Cable trough	7d/wk-1	40d	20-May-14 08 A	30-Sep-14 18	-85d
S3_6212	Completion of Section 3 - TS1/TS2 Area (below -6mpd) KD8)	7d/wk-2	0d		30-Sep-14 18	-86d
Works in TS4/ME4 Area (Portion 14A, 14B, 15, 23)						
TS4/ME4 - Removal of Temporary Reclamation						
Remaining Works at TZ6						
Stage 4 - Seawall and Reclamation at TZ6						
A-2010	Installation of seawall blocks (Qty: 245 nos.)	7d/wk-2	6d	15-Sep-14 08 A	26-Sep-14 18	-332d
A-2020	Soil Backfilling up to -2.45mPD (Qty:3,000 cu.m.)	7d/wk-2	2d	25-Sep-14 08	26-Sep-14 18	-332d
A-2030	Utilities installation for Mined Tunnel	7d/wk-2	1d	27-Sep-14 08	27-Sep-14 18	-332d
A-2040	Soil backfilling up to ground level (Qty:2,000 cu.m.)	7d/wk-2	2d	28-Sep-14 08	29-Sep-14 18	-332d
A-2050	Site clearance	7d/wk-2	1d	30-Sep-14 08	30-Sep-14 18	-305d
A-2060	Handover to MTR	7d/wk-2	0d		30-Sep-14 18	-305d
Removal of Temporary Reclamation at TS4/ME4						
Stage 5 (Zones A, D & F - TS4-D33 to D-26, SCL2 & ME4-D19 to D13)						
A-3000	D-Wall horizontal cutting (Qty: 62 pcs.)	7d/wk-2	21d	29-Aug-14 08 A	23-Sep-14 18	-340d
Stage 6 (Zone C - P4, ME4-D12 to ME4-D10 & P3)						
A-3011	Marine removal of temporarly reclamation and seawall blocks (Zones C)	7d/wk-2	21d	31-Aug-14 08 A	02-Oct-14 18	-353d
A-3030	D-Wall vertical cutting (Qty: 15 pcs.)	7d/wk-2	4d	03-Oct-14 08	06-Oct-14 18	-353d
A-3040	D-Wall horizontal cutting (Qty: 20 pcs.)	7d/wk-2	5d	06-Oct-14 08	10-Oct-14 18	-352d



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

China State Construction Engineering (Hong Kong) Ltd

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

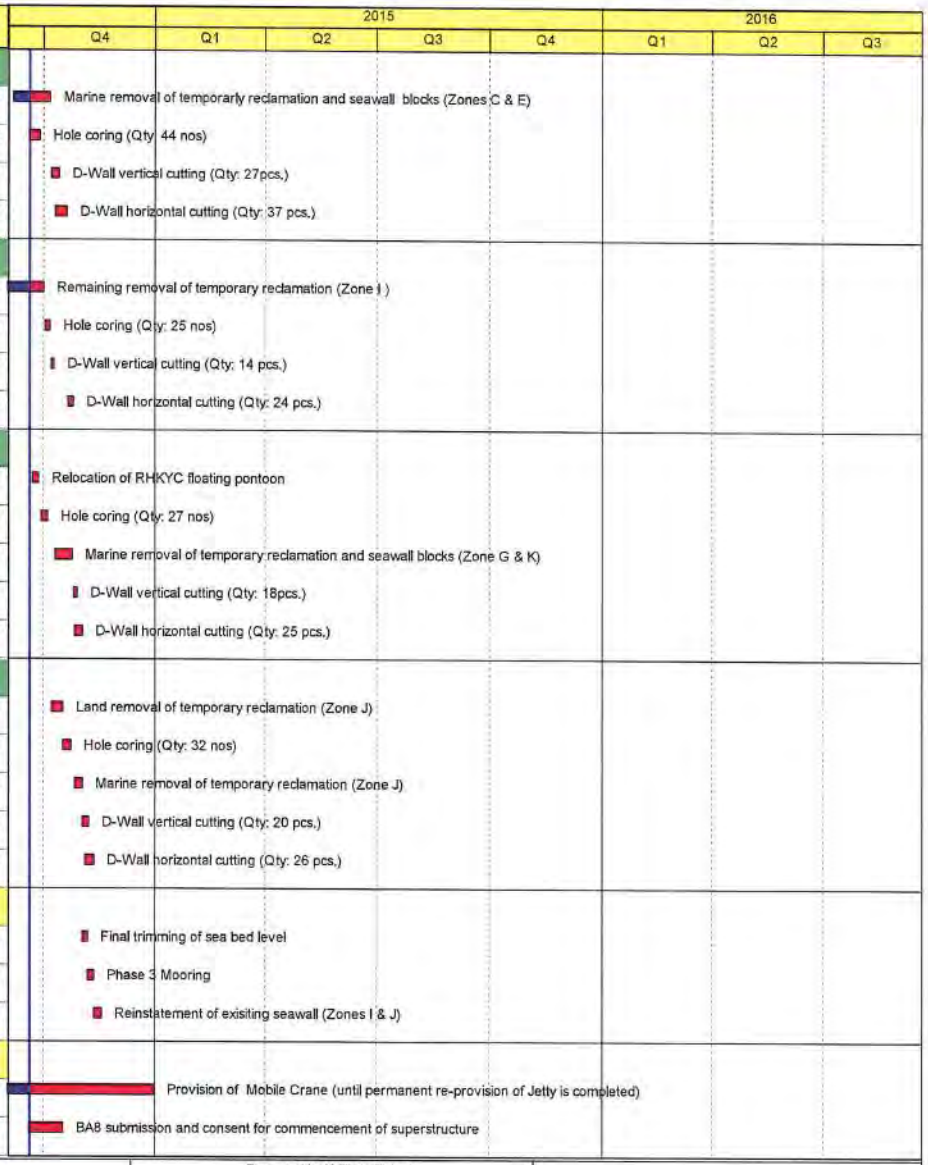
WORKS PROGRAMME REV. M

Prepared by William Caluza

Date	Revision	Checked	Approved
26-Sep...	1st submission		

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

Activity ID	Activity Name	Calendar	Original Duration	Start	Finish	Total Float
Stage 7 (Zones C & E - ME4-D06 to D01, SCL1 & TS4-D25)						
A-4000	Marine removal of temporarly reclamation and seawall blocks (Zones C & E)	7d/wk-2	18d	06-Sep-14 08 A	06-Oct-14 18	-353d
A-3090	Hole coring (Qty: 44 nos)	7d/wk-2	9d	20-Sep-14 08*	28-Sep-14 18	-346d
A-4010	D-Wall vertical cutting (Qty: 27pcs.)	7d/wk-2	7d	07-Oct-14 08	13-Oct-14 18	-353d
A-4020	D-Wall horizontal cutting (Qty: 37 pcs.)	7d/wk-2	10d	11-Oct-14 08	20-Oct-14 18	-353d
Stage 9 (Zone I - TS4-D01 to TS4-D08)						
A-3050	Remaining removal of temporary reclamation (Zone I)	7d/wk-2	28d	29-Aug-14 08 A	01-Oct-14 18	-342d
A-3060	Hole coring (Qty: 25 nos)	7d/wk-2	5d	02-Oct-14 08	06-Oct-14 18	-342d
A-3070	D-Wall vertical cutting (Qty: 14 pcs.)	7d/wk-2	3d	07-Oct-14 08	09-Oct-14 18	-342d
A-3080	D-Wall horizontal cutting (Qty: 24 pcs.)	7d/wk-2	5d	21-Oct-14 08	25-Oct-14 18	-353d
Stage 8 (Zones G & K - TS4-D24 to TS4-D15)						
A-4040	Relocation of RHKYC floating pontoon	7d/wk-2	5d	22-Sep-14 08*	26-Sep-14 18	-338d
A-4050	Hole coring (Qty: 27 nos)	7d/wk-2	6d	29-Sep-14 08	04-Oct-14 18	-346d
A-4060	Marine removal of temporary reclamation and seawall blocks (Zone G & K)	7d/wk-2	14d	11-Oct-14 08	24-Oct-14 18	-352d
A-4070	D-Wall vertical cutting (Qty: 18pcs.)	7d/wk-2	4d	25-Oct-14 08	28-Oct-14 18	-352d
A-4080	D-Wall horizontal cutting (Qty: 25 pcs.)	7d/wk-2	7d	26-Oct-14 08	01-Nov-14 18	-352d
Stage 10 (Zone J - TS4-D09 to TS4-D14)						
A-4090	Land removal of temporary reclamation (Zone J)	7d/wk-2	10d	07-Oct-14 08	16-Oct-14 18	-344d
A-5000	Hole coring (Qty: 32 nos)	7d/wk-2	7d	17-Oct-14 08	23-Oct-14 18	-340d
A-5010	Marine removal of temporary reclamation (Zone J)	7d/wk-2	7d	26-Oct-14 08	01-Nov-14 18	-353d
A-5020	D-Wall vertical cutting (Qty: 20 pcs.)	7d/wk-2	5d	02-Nov-14 08	06-Nov-14 18	-353d
A-5030	D-Wall horizontal cutting (Qty: 26 pcs.)	7d/wk-2	7d	04-Nov-14 08	10-Nov-14 18*	-353d
Stage 13 - Phase 3 Mooring						
A-5050	Final trimming of sea bed level	7d/wk-2	4d	02-Nov-14 08	05-Nov-14 18	-347d
A-5060	Phase 3 Mooring	7d/wk-2	6d	06-Nov-14 08	11-Nov-14 18	-347d
A-5040	Reinstatement of exisiting seawall (Zones I & J)	7d/wk-2	7d	11-Nov-14 08	17-Nov-14 18	-353d
Stage 12 - Re-provisioning of Jetty						
S6_5258	Provision of Mobile Crane (until permanent re-provision of Jetty is completed)	7d/wk-1	160d	20-Feb-14 08 A	30-Dec-14 18	-335d
A-6010	BA8 submission and consent for commencement of superstructure	7d/wk-2	28d	20-Sep-14 08 A	16-Oct-14 18	-336d



Summary Bar
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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)

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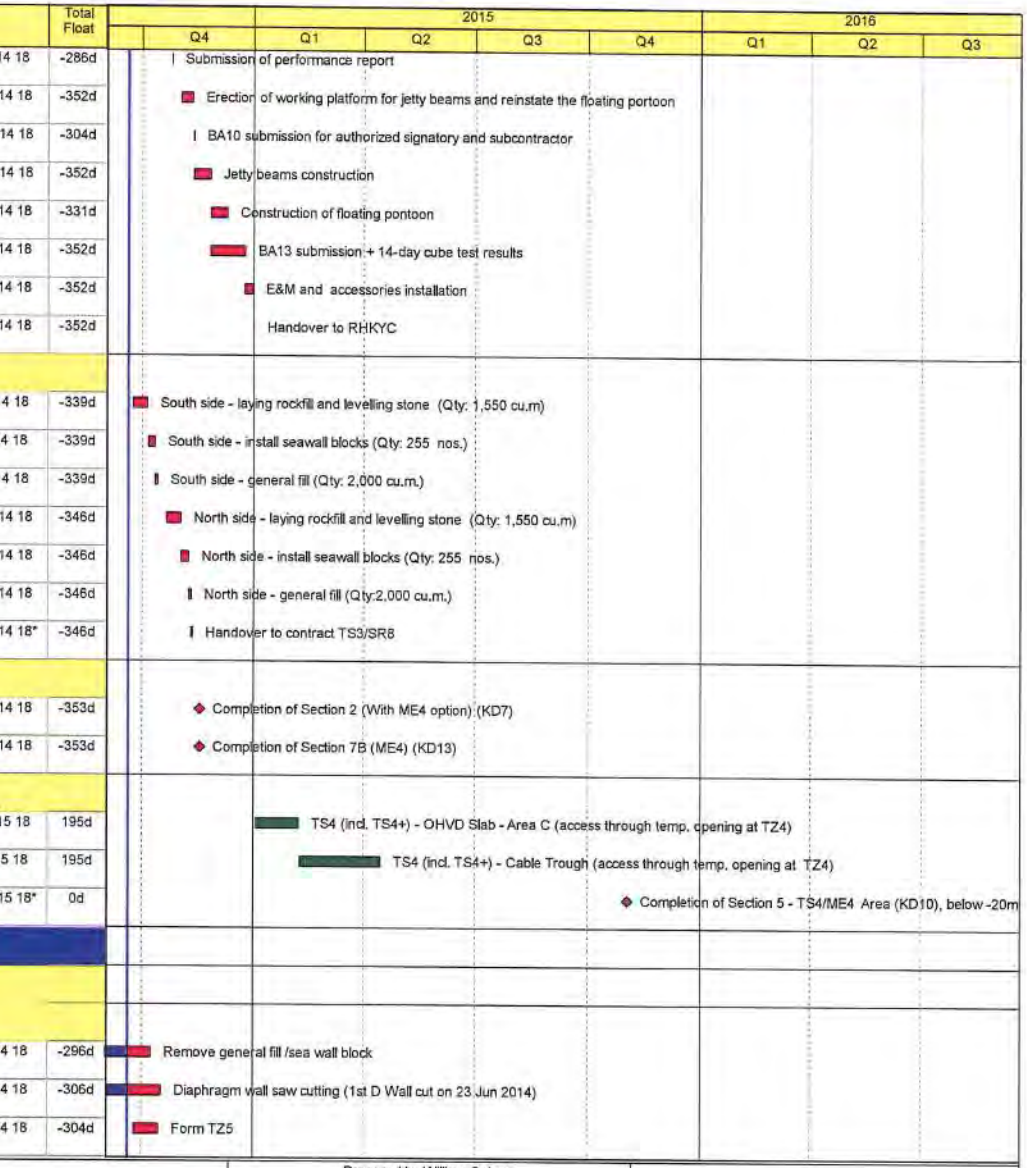
A-6012	Submission of performance report	7d/wk-2	1d	25-Oct-14 08*	25-Oct-14 18	-286d
A-6020	Erection of working platform for jetty beams and reinstate the floating portoon	7d/wk-2	10d	02-Nov-14 08	11-Nov-14 18	-352d
A-6040	BA10 submission for authorized signatory and subcontractor	7d/wk-2	1d	12-Nov-14 08	12-Nov-14 18	-304d
A-6030	Jetty beams construction	7d/wk-2	14d	12-Nov-14 08	25-Nov-14 18	-352d
A-6052	Construction of floating pontoon	7d/wk-2	14d	26-Nov-14 08	09-Dec-14 18	-331d
A-6050	BA13 submission + 14-day cube test results	7d/wk-2	28d	26-Nov-14 08	23-Dec-14 18	-352d
A-6060	E&M and accessories installation	7d/wk-2	7d	24-Dec-14 08	30-Dec-14 18	-352d
A-6070	Handover to RHKYC	7d/wk-2	1d	31-Dec-14 08	31-Dec-14 18	-352d
Stage 11 - Construction of TZ4						
A-6080	South side - laying rockfill and levelling stone (Qty: 1,550 cu.m)	7d/wk-2	12d	24-Sep-14 08	05-Oct-14 18	-339d
A-6090	South side - install seawall blocks (Qty: 255 nos.)	7d/wk-2	6d	06-Oct-14 08	11-Oct-14 18	-339d
A-7000	South side - general fill (Qty: 2,000 cu.m.)	7d/wk-2	2d	12-Oct-14 08	13-Oct-14 18	-339d
A-7010	North side - laying rockfill and levelling stone (Qty: 1,550 cu.m)	7d/wk-2	12d	21-Oct-14 08	01-Nov-14 18	-346d
A-7020	North side - install seawall blocks (Qty: 255 nos.)	7d/wk-2	6d	02-Nov-14 08	07-Nov-14 18	-346d
A-7030	North side - general fill (Qty:2,000 cu.m.)	7d/wk-2	2d	08-Nov-14 08	09-Nov-14 18	-346d
A-7040	Handover to contract TS3/SR8	7d/wk-2	1d	10-Nov-14 08	10-Nov-14 18*	-346d
TS4/ME4, Removal of Temporary Reclamation						
S26875	Completion of Section 2 (With ME4 option) (KD7)	7d/wk-2	0d		17-Nov-14 18	-353d
S26890	Completion of Section 7B (ME4) (KD13)	7d/wk-2	0d		17-Nov-14 18	-353d
TS4 - OHVD / Cable Trough						
S5_6185	TS4 (incl. TS4+) - OHVD Slab - Area C (access through temp. opening at TZ4)	7d/wk-1	36d	02-Jan-15 08*	06-Feb-15 18	195d
S5_6190	TS4 (incl. TS4+) - Cable Trough (access through temp. opening at TZ4)	7d/wk-1	60d	07-Feb-15 08*	14-Apr-15 18	195d
S5_59850	Completion of Section 5 - TS4/ME4 Area (KD10), below -20mPD	7d/wk-2	0d		02-Nov-15 18*	0d
Works in TPCWAE Area (Portion 20A, 20B)						
Removal of Temporary Reclamation						
Removal of Temporary Reclamation & Form TZ5						
S67670	Remove general fill /sea wall block	7d/wk-1	24d	20-May-14 08 A	08-Oct-14 18	-296d
S67675	Diaphragm wall saw cutting (1st D Wall cut on 23 Jun 2014)	7d/wk-1	31d	03-Sep-14 08 A	16-Oct-14 18	-306d
S67755	Form TZ5	7d/wk-1	18d	25-Sep-14 08	14-Oct-14 18	-304d



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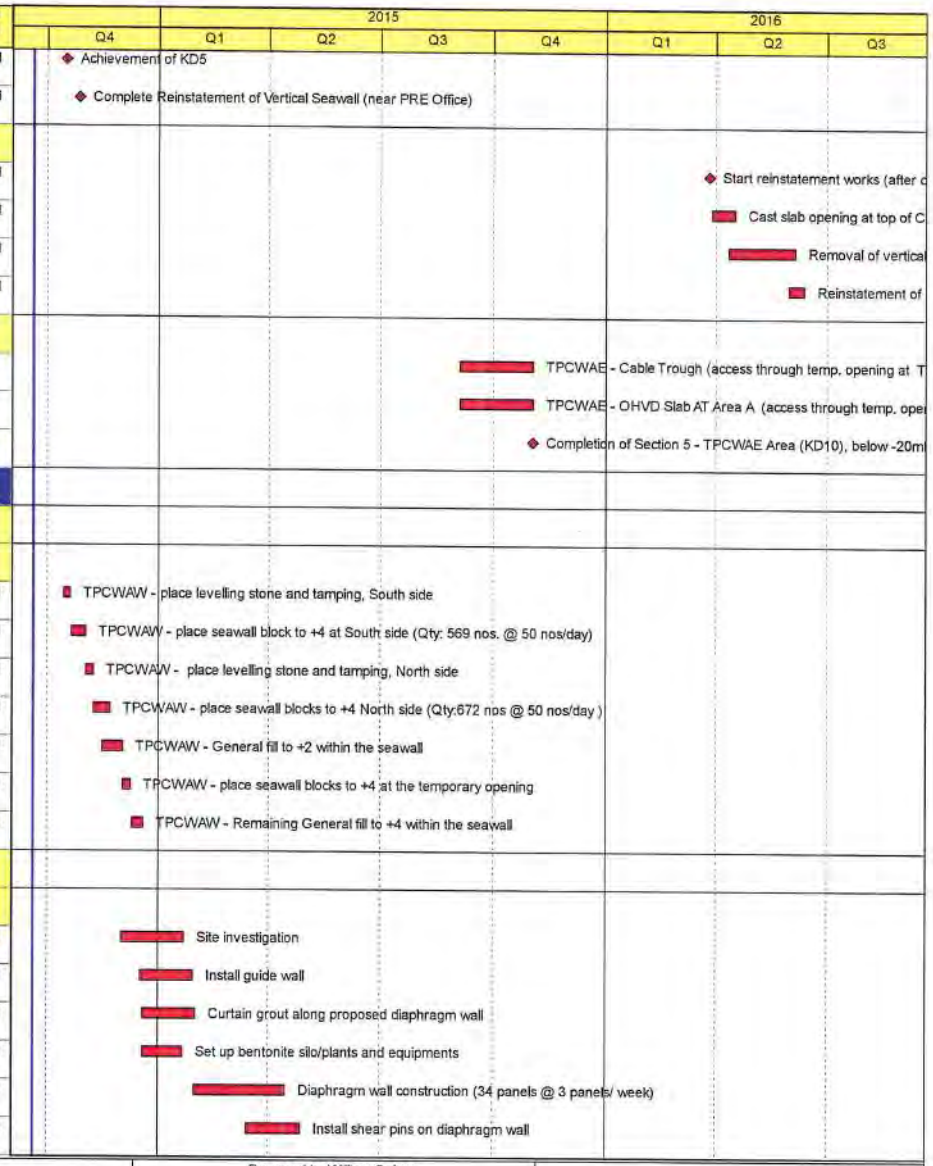
S67685	Achievement of KD5	7d/wk-2	0d		16-Oct-14 18	-323d
S67687	Complete Reinstatement of Vertical Seawall (near PRE Office)	7d/wk-2	0d		27-Oct-14 18	-322d
Reinstate Mucking Out Access Shaft "C"						
S67240	Start reinstatement works (after completion of TPCWAW OHVD works)	6d/wk	0d	26-Mar-16 08		-102d
S67225	Cast slab opening at top of CCT West bound (access shaft)	6d/wk	18d	28-Mar-16 08	16-Apr-16 18	-102d
S67230	Removal of vertical shaft and backfilling	6d/wk	48d	11-Apr-16 08	04-Jun-16 18	-102d
S67235	Reinstatement of pavement	6d/wk	12d	30-May-16 08	11-Jun-16 18	-102d
TPCWAE - OHVD / Cable Trough						
S5_7405	TPCWAE - Cable Trough (access through temp. opening at TZ5 & Portion 19)	6d/wk	48d	04-Sep-15 08	02-Nov-15 18	0d
S5_7400	TPCWAE - OHVD Slab AT Area A (access through temp. opening at TZ5 & Portion 19)	6d/wk	48d	04-Sep-15 08	02-Nov-15 18	0d
S5_59840	Completion of Section 5 - TPCWAE Area (KD10), below -20mPD	7d/wk-2	0d		02-Nov-15 18*	0d
Works in TPCWAW Area						
TPCWAW - Temporary Reclamation						
Temporary Reclamation -						
S6_9440	TPCWAW - place levelling stone and tamping, South side	7d/wk-1	6d	15-Oct-14 08	20-Oct-14 18	-122d
S6_9450	TPCWAW - place seawall block to +4 at South side (Qty: 569 nos. @ 50 nos/day)	7d/wk-1	12d	21-Oct-14 08	01-Nov-14 18	-122d
S6_9465	TPCWAW - place levelling stone and tamping, North side	7d/wk-1	6d	02-Nov-14 08	07-Nov-14 18	-122d
S6_9470	TPCWAW - place seawall blocks to +4 North side (Qty:672 nos @ 50 nos/day)	7d/wk-1	14d	08-Nov-14 08	21-Nov-14 18	-122d
S6_9495	TPCWAW - General fill to +2 within the seawall	7d/wk-1	17d	15-Nov-14 08	01-Dec-14 18	-122d
S6_9490	TPCWAW - place seawall blocks to +4 at the temporary opening	7d/wk-1	7d	02-Dec-14 08	08-Dec-14 18	-122d
S6_9475	TPCWAW - Remaining General fill to +4 within the seawall	7d/wk-1	10d	09-Dec-14 08	18-Dec-14 18	-122d
TPCWAW - Diaphragm Wall						
Diaphragm Wall						
S6_9385	Site investigation	7d/wk-1	49d	01-Dec-14 08	21-Jan-15 18	-113d
S6_8960	Install guide wall	7d/wk-1	40d	17-Dec-14 08	28-Jan-15 18	-120d
S6_8955	Curtain grout along proposed diaphragm wall	7d/wk-1	40d	19-Dec-14 08	30-Jan-15 18	-122d
S6_9382	Set up bentonite silo/plants and equipments	7d/wk-1	30d	19-Dec-14 08	20-Jan-15 18	-112d
S6_9345	Diaphragm wall construction (34 panels @ 3 panels/ week)	7d/wk-1	68d	30-Jan-15 08	14-Apr-15 18	-141d
S6_9350	Install shear pins on diaphragm wall	7d/wk-1	40d	14-Mar-15 08	26-Apr-15 18	-133d



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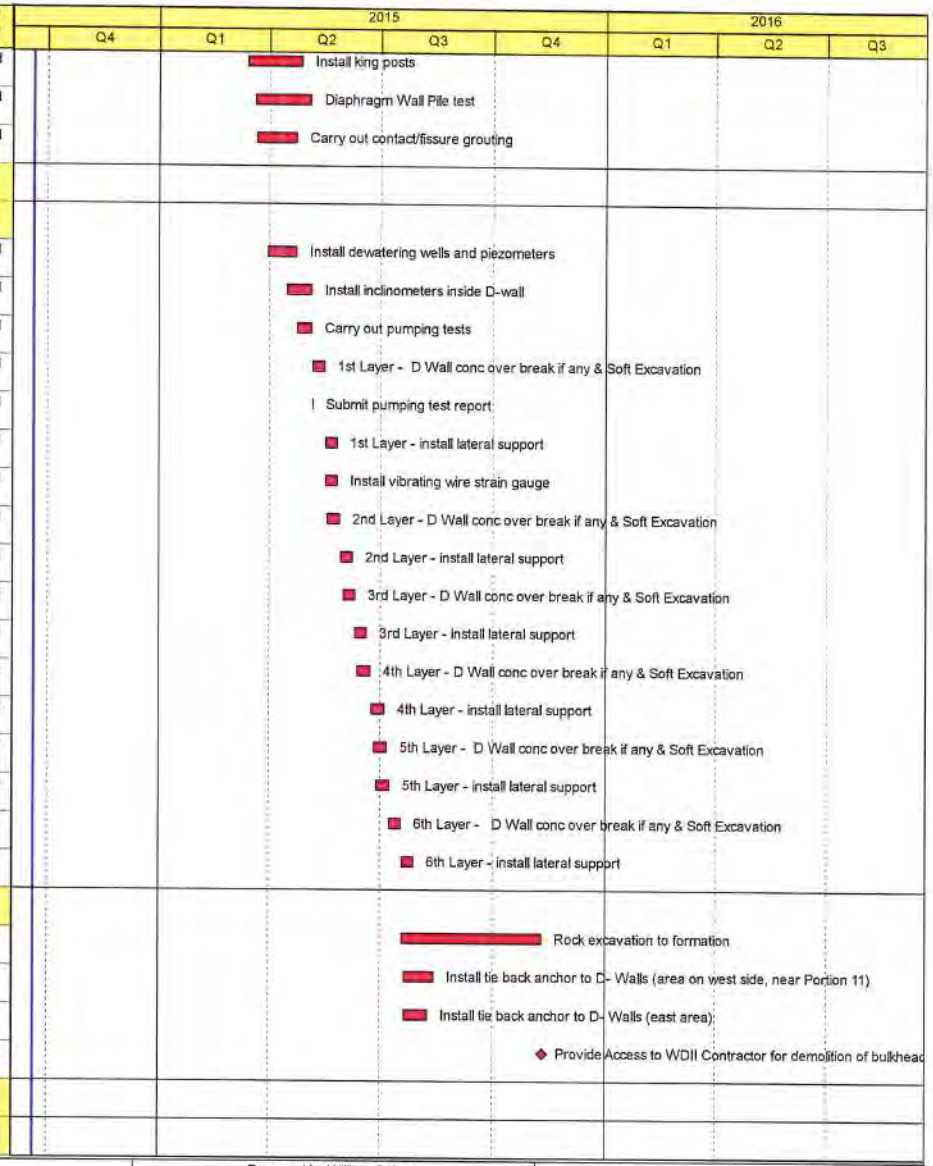
S6_9355	Install king posts	7d/wk-1	40d	14-Mar-15 08	26-Apr-15 18	-133d
S6_8970	Diaphragm Wall Pile test	7d/wk-1	40d	20-Mar-15 08	03-May-15 18	-129d
S6_9375	Carry out contact/fissure grouting	7d/wk-1	29d	21-Mar-15 08	22-Apr-15 18	-141d
TPCWAW- ELS Works						
ELS Works						
S6_9360	Install dewatering wells and piezometers	7d/wk-1	20d	30-Mar-15 08	22-Apr-15 18	-141d
S6_9365	Install inclinometers inside D-wall	7d/wk-1	20d	15-Apr-15 08	05-May-15 18	-141d
S6_8975	Carry out pumping tests	7d/wk-1	12d	23-Apr-15 08	05-May-15 18	-141d
S6_8980	1st Layer - D Wall conc over break if any & Soft Excavation	7d/wk-1	10d	06-May-15 08	15-May-15 18	-141d
S6_9260	Submit pumping test report	7d/wk-1	1d	06-May-15 08	06-May-15 18	-137d
S6_8985	1st Layer - install lateral support	7d/wk-1	10d	16-May-15 08	26-May-15 18	-141d
S6_8990	Install vibrating wire strain gauge	7d/wk-1	10d	16-May-15 08	26-May-15 18	-141d
S6_8995	2nd Layer - D Wall conc over break if any & Soft Excavation	7d/wk-1	10d	18-May-15 08	28-May-15 18	-141d
S6_9000	2nd Layer - install lateral support	7d/wk-1	10d	29-May-15 08	07-Jun-15 18	-141d
S6_9005	3rd Layer - D Wall conc over break if any & Soft Excavation	7d/wk-1	10d	31-May-15 08	09-Jun-15 18	-141d
S6_9010	3rd Layer - install lateral support	7d/wk-1	10d	10-Jun-15 08	19-Jun-15 18	-141d
S6_9015	4th Layer - D Wall conc over break if any & Soft Excavation	7d/wk-1	10d	12-Jun-15 08	22-Jun-15 18	-141d
S6_9020	4th Layer - install lateral support	7d/wk-1	10d	23-Jun-15 08	03-Jul-15 18	-141d
S6_9025	5th Layer - D Wall conc over break if any & Soft Excavation	7d/wk-1	10d	25-Jun-15 08	05-Jul-15 18	-141d
S6_9030	5th Layer - install lateral support	7d/wk-1	10d	27-Jun-15 08	07-Jul-15 18	-141d
S6_9035	6th Layer - D Wall conc over break if any & Soft Excavation	7d/wk-1	10d	08-Jul-15 08	17-Jul-15 18	-141d
S6_9040	6th Layer - install lateral support	7d/wk-1	10d	18-Jul-15 08	27-Jul-15 18	-69d
TPCWAW - ROCK EXCAVATION						
S6_6180	Rock excavation to formation	7d/wk-1	112d	18-Jul-15 08	09-Nov-15 18	-141d
S6_9370	Install tie back anchor to D- Walls (area on west side, near Portion 11)	7d/wk-1	25d	20-Jul-15 08	13-Aug-15 18	-69d
S6_9415	Install tie back anchor to D- Walls (east area)	7d/wk-1	20d	20-Jul-15 08	08-Aug-15 18	-69d
S6_9055	Provide Access to WDII Contractor for demolition of bulkhead at Portion 11	7d/wk-2	0d		10-Nov-15 18	-133d
TPCWAW- CCT RC Structure						
TPCWAW - CCT / OHVD						



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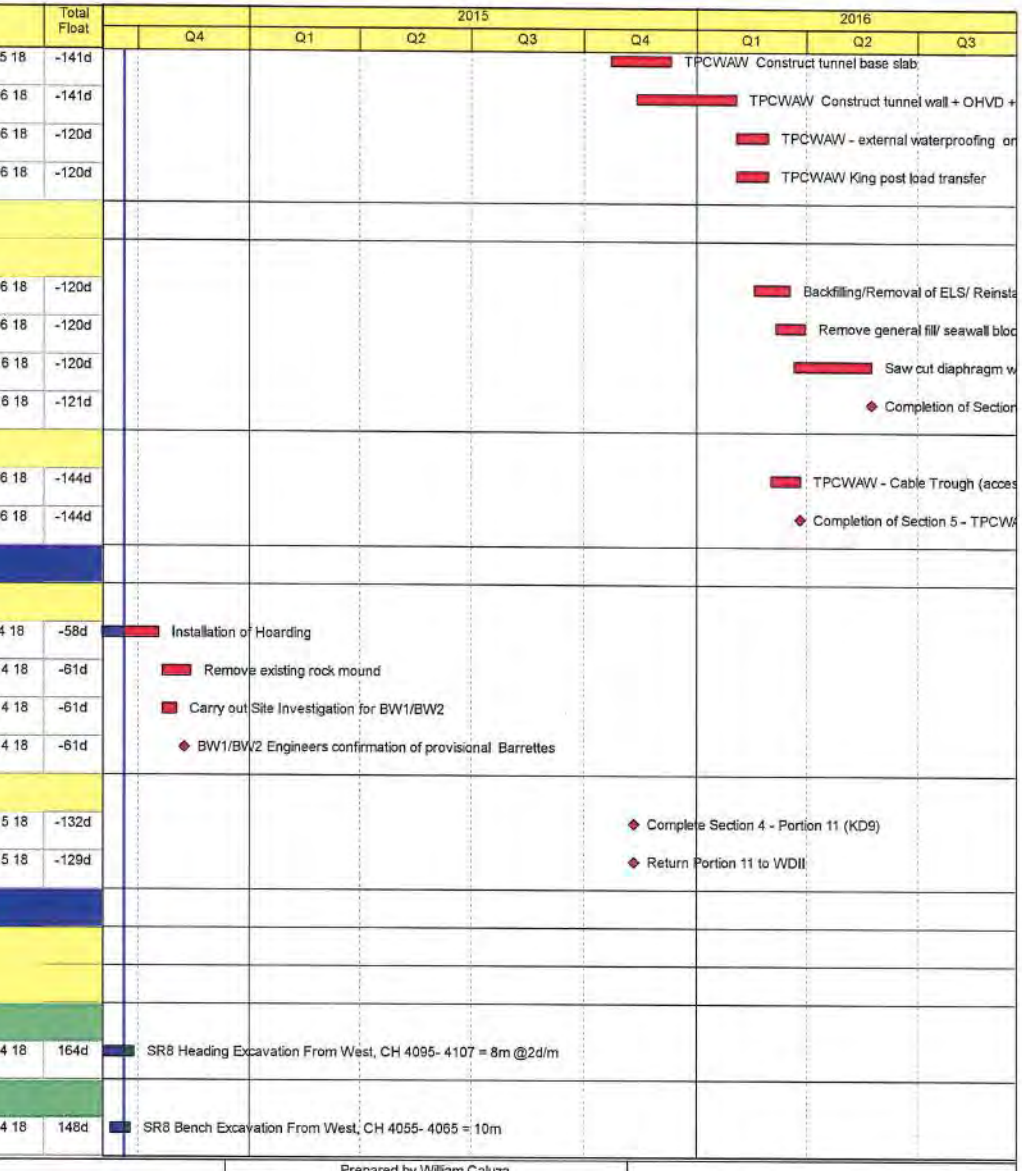
S6_9070	TPCWAW Construct tunnel base slab	7d/wk-1	50d	23-Oct-15 08	11-Dec-15 18	-141d
S6_9075	TPCWAW Construct tunnel wall + OHVD + roof slab	7d/wk-1	80d	13-Nov-15 08	02-Feb-16 18	-141d
S6_9077	TPCWAW - external waterproofing on top of completed CCT box (incl. screeding)	7d/wk-1	26d	03-Feb-16 08	28-Feb-16 18	-120d
S6_9076	TPCWAW King post load transfer	7d/wk-1	26d	03-Feb-16 08	28-Feb-16 18	-120d
	TPCWAW - Removal of Temporary Reclamation					
	Removal of Temporary Reclamation					
S6_9140	Backfilling/Removal of ELS/ Reinstatement of sea wall at Portion 11 (concurrent activities)	7d/wk-1	30d	17-Feb-16 08	17-Mar-16 18	-120d
S6_9105	Remove general fill/ seawall block (concurrent activities)	7d/wk-1	25d	06-Mar-16 08	30-Mar-16 18	-120d
S6_9120	Saw cut diaphragm wall	7d/wk-1	63d	21-Mar-16 08	23-May-16 18	-120d
S6_7550	Completion of Section 6- (KD11), above - 20mPD	7d/wk-2	0d		23-May-16 18	-121d
	TPCWAW -Cable Trough/ Maintenance Walkway					
S6_9085	TPCWAW - Cable Trough (access through temp. opening at Portion 19)	7d/wk-2	24d	02-Mar-16 08	25-Mar-16 18	-144d
S6_9135	Completion of Section 5 - TPCWAW Area (KD10), below -20mPD	7d/wk-2	0d		25-Mar-16 18	-144d
	Works in Wan Chai PCWA (Portion 11)					
	Initial Works & Utilities Works					
S4_2810	Installation of Hoarding	7d/wk-1	24d	05-May-14 08 A	17-Oct-14 18	-58d
S4_2720	Remove existing rock mound	7d/wk-1	24d	21-Oct-14 08	13-Nov-14 18	-61d
S4_2750	Carry out Site Investigation for BW1/BW2	7d/wk-1	12d	21-Oct-14 08	01-Nov-14 18	-61d
S4_2755	BW1/BW2 Engineers confirmation of provisional Barrettes	7d/wk-1	0d		07-Nov-14 18	-61d
	Allow Access to WDII					
S4_2785	Complete Section 4 - Portion 11 (KD9)	7d/wk-2	0d		10-Nov-15 18	-132d
S4_2775	Return Portion 11 to WDII	7d/wk-1	0d		10-Nov-15 18	-129d
	Works for Mined Tunnel (Portion 16, 17, 18)					
	SR8 (Tunnel Excavation + Lining)					
	From West (TPCWAE)					
	Heading Excavation (2d/m, 24h/day work shift, 7d/week, no work on statutory holiday)					
A8676	SR8 Heading Excavation From West, CH 4095- 4107 = 8m @2d/m	7d/wk-1a	16d	03-Sep-14 08 A	28-Sep-14 18	164d
	Bench Excavation (1.5d-2d/m, 20m separation with heading)					
A8700	SR8 Bench Excavation From West, CH 4055- 4065 = 10m	7d/wk-1a	20d	08-Sep-14 08 A	24-Sep-14 18	148d



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A8705	SR8 Bench Excavation From West, CH 4065- 4075 = 10m	7d/wk-1a	20d	25-Sep-14 08	15-Oct-14 18	148d
A8685	SR8 Bench Excavation From West, CH 4075- 4085 = 10m	7d/wk-1a	20d	16-Oct-14 08	04-Nov-14 18	148d
A8680	SR8 Bench Excavation From West, CH 4085- 4095 = 10m	7d/wk-1a	20d	05-Nov-14 08	24-Nov-14 18	148d
A8725	SR8 Bench Excavation From West, CH 4095- 4100 = 5m	7d/wk-1a	10d	25-Nov-14 08	04-Dec-14 18	148d
From East (TS4)						
Heading Excavation (2d/m, 24h/day work shift, 7d/week, no work on statutory holiday)						
A8495	SR8 Heading Excavation From East CH 4115- 4107 = 8m @2d/m	7d/wk-1a	16d	15-Sep-14 08 A	28-Sep-14 18	10d
Bench Excavation (1.5d/m, 20m separation with heading)						
A8455	SR8 Bench Excavation From East, CH 4147.5- 4135 = 12.5m	7d/wk-1a	19d	20-Sep-14 08	09-Oct-14 18	0d
A8470	SR8 Bench Excavation From East, CH 4135- 4125 = 10m	7d/wk-1a	15d	10-Oct-14 08	24-Oct-14 18	0d
A8460	SR8 Bench Excavation From East, CH 4125- 4115 = 10m	7d/wk-1a	15d	25-Oct-14 08	08-Nov-14 18	0d
A8465	SR8 Bench Excavation From East, CH 4115- 4100 = 15m	7d/wk-1a	23d	09-Nov-14 08	01-Dec-14 18	0d
Tunnel Lining Works						
From West - Base Slab (10m/bay, 10m separation with benching excavation)						
A8525	SR8, From West, CH 4015 - 4025 = 10m/bay, base slab	7d/wk-1a	10d	15-Sep-14 08 A	04-Oct-14 18	137d
A8530	SR8, From West,CH 4025 - 4035 = 10m/bay, base slab	7d/wk-1a	10d	05-Oct-14 08	14-Oct-14 18	163d
A8535	SR8, From West,CH 4035 - 4045 = 10m/bay, base slab	7d/wk-1a	8d	15-Oct-14 08	22-Oct-14 18	165d
A8540	SR8, From West, CH 4045 - 4055 = 10m/bay, base slab	7d/wk-1a	8d	23-Oct-14 08	30-Oct-14 18	165d
A8545	SR8, From West, CH 4055 - 4065 = 10m/bay, base slab	7d/wk-1a	8d	05-Nov-14 08	12-Nov-14 18	160d
A8550	SR8, From West, CH 4065 - 4075 = 10m/bay, base slab	7d/wk-1a	8d	25-Nov-14 08	02-Dec-14 18	148d
A8555	SR8, From West, CH 4075 - 4085 = 10m/bay, base slab	7d/wk-1a	8d	05-Dec-14 08	12-Dec-14 18	148d
A8560	SR8, From West, CH 4085 - 4095 = 10m/bay, base slab	7d/wk-1a	8d	13-Dec-14 08	20-Dec-14 18	150d
A8561	SR8, From West, CH 4095 - 4105 = 10m/bay, base slab	7d/wk-1a	8d	21-Dec-14 08	29-Dec-14 18	152d
A8562	SR8, From West, CH 4105 - 4115 = 10m/bay, base slab	7d/wk-1a	8d	30-Dec-14 08	07-Jan-15 18	154d
From West - Lining (5m/bay, 10m separation with base slab)						
A8575	SR8, From West, CH 3995 - 4000 = 1bay, lining	7d/wk-1a	9d	20-Sep-14 08	28-Sep-14 18	0d
A8580	SR8, From West, CH 4000 - 4005 = 1bay, lining	7d/wk-1a	9d	05-Oct-14 08	13-Oct-14 18	137d
A8585	SR8, From West, CH 4005 - 4010 = 1bay, lining	7d/wk-1a	9d	14-Oct-14 08	22-Oct-14 18	137d
A8590	SR8, From West, CH 4010 - 4015 = 1bay, lining	7d/wk-1a	9d	23-Oct-14 08	31-Oct-14 18	137d

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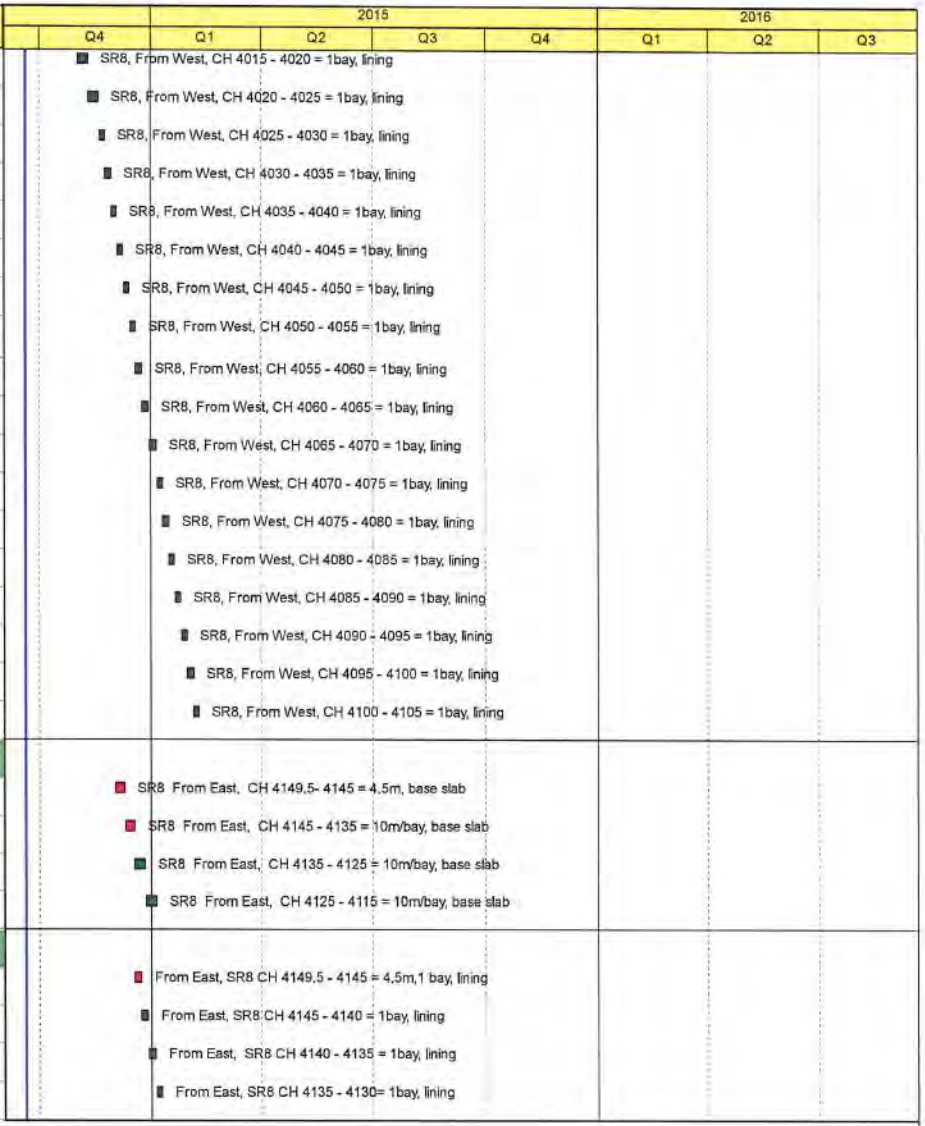
Activity ID	Activity Name	Calendar	Original Duration	Start	Finish	Total Float
A8595	SR8, From West, CH 4015 - 4020 = 1bay, lining	7d/wk-1a	9d	01-Nov-14 08	09-Nov-14 18	137d
A8600	SR8, From West, CH 4020 - 4025 = 1bay, lining	7d/wk-1a	9d	10-Nov-14 08	18-Nov-14 18	137d
A8605	SR8, From West, CH 4025 - 4030 = 1bay, lining	7d/wk-1a	5d	19-Nov-14 08	23-Nov-14 18	137d
A8610	SR8, From West, CH 4030 - 4035 = 1bay, lining	7d/wk-1a	5d	24-Nov-14 08	28-Nov-14 18	137d
A8615	SR8, From West, CH 4035 - 4040 = 1bay, lining	7d/wk-1a	5d	29-Nov-14 08	03-Dec-14 18	137d
A8620	SR8, From West, CH 4040 - 4045 = 1bay, lining	7d/wk-1a	5d	04-Dec-14 08	08-Dec-14 18	137d
A8625	SR8, From West, CH 4045 - 4050 = 1bay, lining	7d/wk-1a	5d	09-Dec-14 08	13-Dec-14 18	137d
A8630	SR8, From West, CH 4050 - 4055 = 1bay, lining	7d/wk-1a	5d	14-Dec-14 08	18-Dec-14 18	137d
A8635	SR8, From West, CH 4055 - 4060 = 1bay, lining	7d/wk-1a	5d	19-Dec-14 08	23-Dec-14 18	137d
A8640	SR8, From West, CH 4060 - 4065 = 1bay, lining	7d/wk-1a	5d	24-Dec-14 08	29-Dec-14 18	137d
A8645	SR8, From West, CH 4065 - 4070 = 1bay, lining	7d/wk-1a	5d	30-Dec-14 08	04-Jan-15 18	137d
A8647	SR8, From West, CH 4070 - 4075 = 1bay, lining	7d/wk-1a	5d	05-Jan-15 08	09-Jan-15 18	137d
A8648	SR8, From West, CH 4075 - 4080 = 1bay, lining	7d/wk-1a	5d	10-Jan-15 08	14-Jan-15 18	137d
A8649	SR8, From West, CH 4080 - 4085 = 1bay, lining	7d/wk-1a	5d	15-Jan-15 08	19-Jan-15 18	137d
A8651	SR8, From West, CH 4085 - 4090 = 1bay, lining	7d/wk-1a	5d	20-Jan-15 08	24-Jan-15 18	137d
A8652	SR8, From West, CH 4090 - 4095 = 1bay, lining	7d/wk-1a	5d	25-Jan-15 08	29-Jan-15 18	137d
A8653	SR8, From West, CH 4095 - 4100 = 1bay, lining	7d/wk-1a	5d	30-Jan-15 08	03-Feb-15 18	137d
A8654	SR8, From West, CH 4100 - 4105 = 1bay, lining	7d/wk-1a	5d	04-Feb-15 08	08-Feb-15 18	137d
	From East - Base Slab (10m/bay, 10m separation with benching excavation)					
A9775	SR8 From East, CH 4149.5- 4145 = 4.5m, base slab	7d/wk-1a	8d	02-Dec-14 08	09-Dec-14 18	0d
A9780	SR8 From East, CH 4145 - 4135 = 10m/bay, base slab	7d/wk-1a	8d	10-Dec-14 08	17-Dec-14 18	0d
A9785	SR8 From East, CH 4135 - 4125 = 10m/bay, base slab	7d/wk-1a	8d	18-Dec-14 08	26-Dec-14 18	8d
A9786	SR8 From East, CH 4125 - 4115 = 10m/bay, base slab	7d/wk-1a	8d	27-Dec-14 08	04-Jan-15 18	10d
	From East - Lining (5m/bay, 10m separation with base slab)					
A9820	From East, SR8 CH 4149.5 - 4145 = 4.5m,1 bay, lining	7d/wk-1a	5d	18-Dec-14 08	22-Dec-14 18	0d
A9815	From East, SR8 CH 4145 - 4140 = 1bay, lining	7d/wk-1a	5d	23-Dec-14 08	28-Dec-14 18	6d
A9810	From East, SR8 CH 4140 - 4135 = 1bay, lining	7d/wk-1a	5d	29-Dec-14 08	03-Jan-15 18	6d
A9805	From East, SR8 CH 4135 - 4130= 1bay, lining	7d/wk-1a	5d	04-Jan-15 08	08-Jan-15 18	6d



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

China State Construction Engineering (Hong Kong) Ltd

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

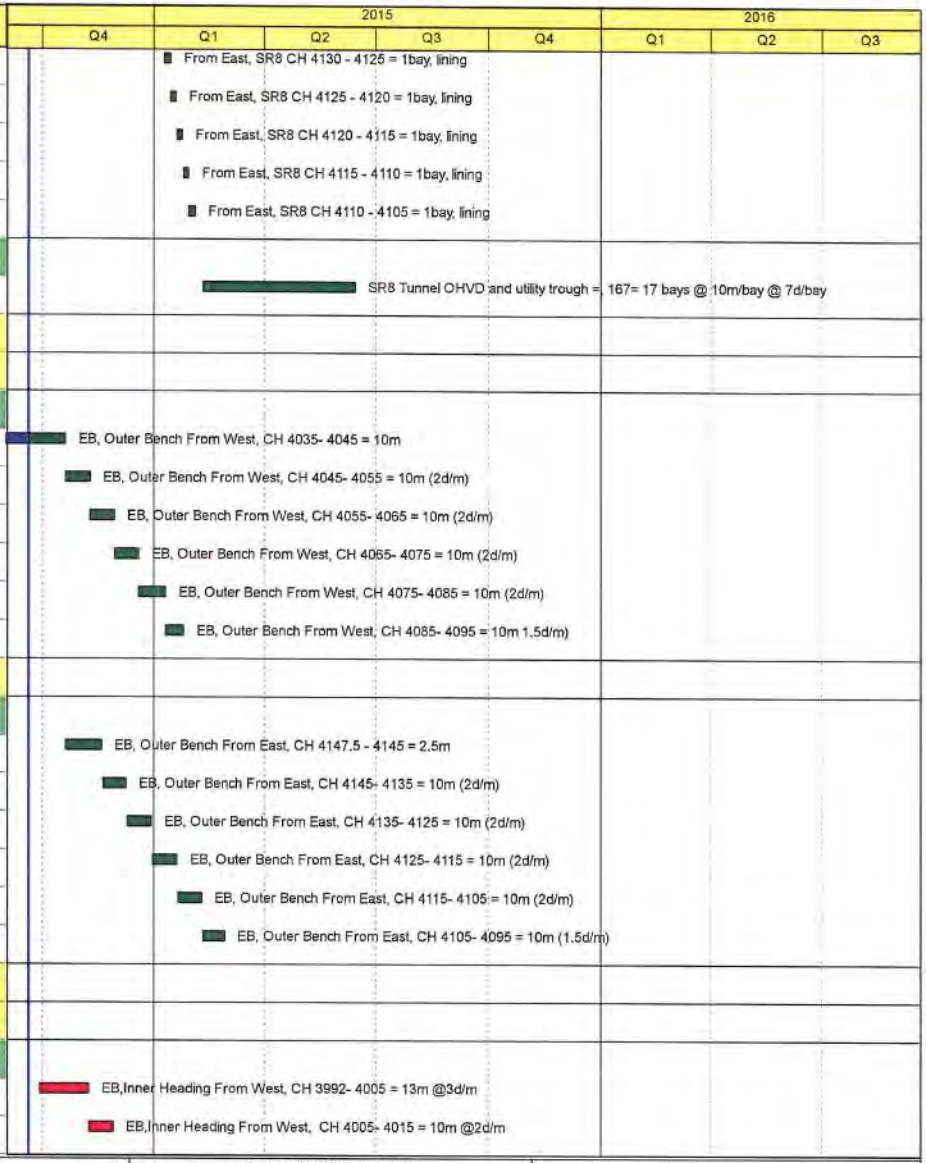
WORKS PROGRAMME REV. M

Prepared by William Caluza

Date	Revision	Checked	Approved
26-Sep...	1st submission		

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

Activity ID	Activity Name	Calendar	Original Duration	Start	Finish	Total Float
A9870	From East, SR8 CH 4130 - 4125 = 1bay, lining	7d/wk-1a	5d	09-Jan-15 08	13-Jan-15 18	6d
A9800	From East, SR8 CH 4125 - 4120 = 1bay, lining	7d/wk-1a	5d	14-Jan-15 08	18-Jan-15 18	143d
A9860	From East, SR8 CH 4120 - 4115 = 1bay, lining	7d/wk-1a	5d	19-Jan-15 08	23-Jan-15 18	143d
A9855	From East, SR8 CH 4115 - 4110 = 1bay, lining	7d/wk-1a	5d	24-Jan-15 08	28-Jan-15 18	143d
A9850	From East, SR8 CH 4110 - 4105 = 1bay, lining	7d/wk-1a	5d	29-Jan-15 08	02-Feb-15 18	143d
OHVD(10m/bay) / Utility Trough						
A8570	SR8 Tunnel OHVD and utility trough =, 167= 17 bays @ 10m/bay @ 7d/bay	7d/wk-1a	120d	09-Feb-15 08	13-Jun-15 18	137d
EB Outer Tunnel Excavation						
From West (TPCWAE)						
Outer Bench Excavation (1.5d - 2d/m, 20m separation with heading)						
A9550	EB, Outer Bench From West, CH 4035- 4045 = 10m	7d/wk-1a	30d	07-Aug-14 08 A	20-Oct-14 18	135d
A9555	EB, Outer Bench From West, CH 4045- 4055 = 10m (2d/m)	7d/wk-1a	20d	20-Oct-14 08	08-Nov-14 18	135d
A9560	EB, Outer Bench From West, CH 4055- 4065 = 10m (2d/m)	7d/wk-1a	20d	09-Nov-14 08	28-Nov-14 18	135d
A9565	EB, Outer Bench From West, CH 4065- 4075 = 10m (2d/m)	7d/wk-1a	20d	29-Nov-14 08	18-Dec-14 18	135d
A9520	EB, Outer Bench From West, CH 4075- 4085 = 10m (2d/m)	7d/wk-1a	20d	19-Dec-14 08	09-Jan-15 18	135d
A9545	EB, Outer Bench From West, CH 4085- 4095 = 10m 1.5d/m)	7d/wk-1a	15d	10-Jan-15 08	24-Jan-15 18	135d
From East (TS4)						
Outer Bench Excavation (1.5d-2d/m, 20m separation with heading)						
A9605	EB, Outer Bench From East, CH 4147.5 - 4145 = 2.5m	7d/wk-1a	30d	20-Oct-14 08*	18-Nov-14 18	120d
A9610	EB, Outer Bench From East, CH 4145- 4135 = 10m (2d/m)	7d/wk-1a	20d	19-Nov-14 08	08-Dec-14 18	120d
A9615	EB, Outer Bench From East, CH 4135- 4125 = 10m (2d/m)	7d/wk-1a	20d	09-Dec-14 08	29-Dec-14 18	120d
A9620	EB, Outer Bench From East, CH 4125- 4115 = 10m (2d/m)	7d/wk-1a	20d	30-Dec-14 08	19-Jan-15 18	120d
A9625	EB, Outer Bench From East, CH 4115- 4105 = 10m (2d/m)	7d/wk-1a	20d	20-Jan-15 08	08-Feb-15 18	120d
A9630	EB, Outer Bench From East, CH 4105- 4095 = 10m (1.5d/m)	7d/wk-1a	15d	09-Feb-15 08	26-Feb-15 18	120d
EB (Inner Tunnel Excavation + Lining)						
From West (TPCWAE)						
Inner Heading Excavation (2d/m, 24h/day work shift, 7d/week, no work on statutory holiday)						
A8805	EB,Inner Heading From West, CH 3992- 4005 = 13m @3d/m	7d/wk-1a	39d	29-Sep-14 08	07-Nov-14 18	0d
A8815	EB,Inner Heading From West, CH 4005- 4015 = 10m @2d/m	7d/wk-1a	20d	08-Nov-14 08	27-Nov-14 18	0d



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

China State Construction Engineering (Hong Kong) Ltd

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

WORKS PROGRAMME REV. M

Prepared by William Caluza

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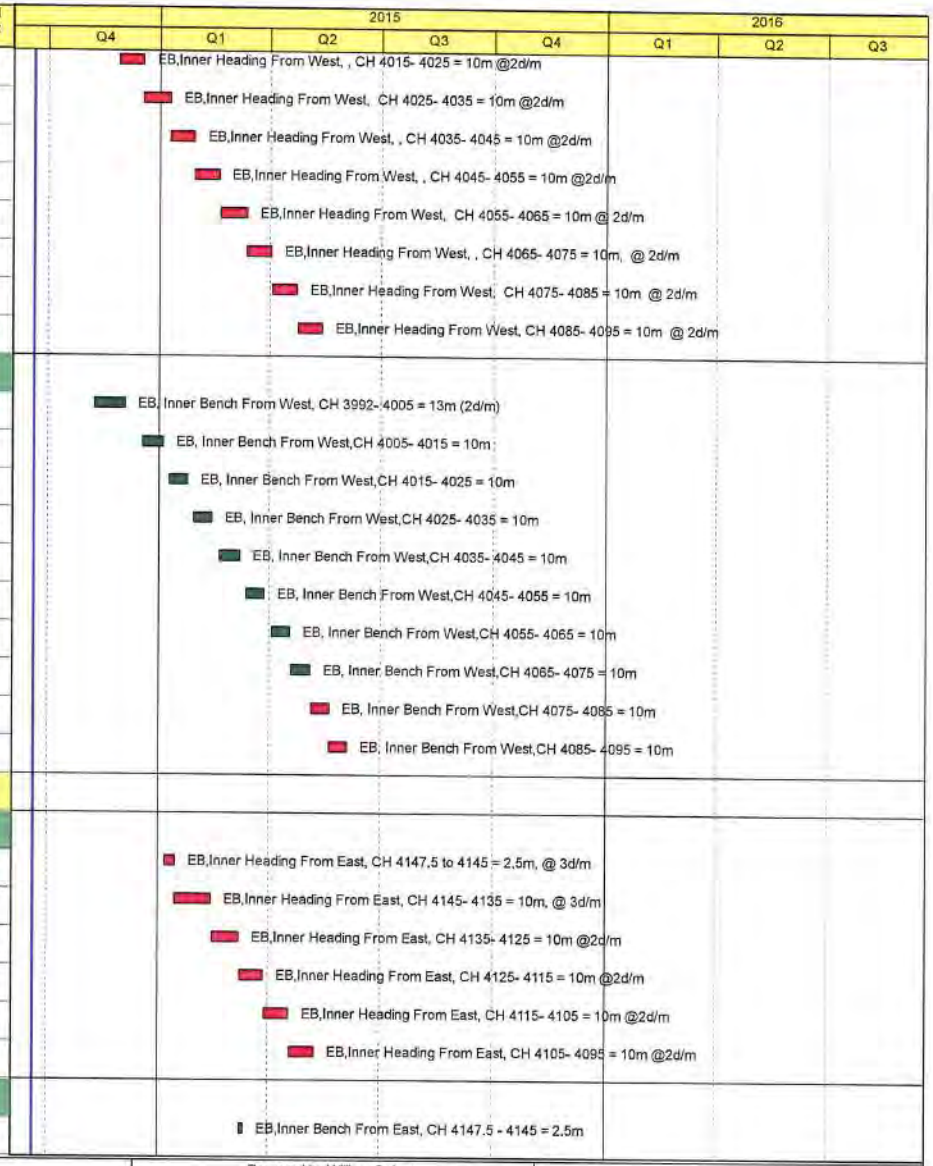
中國建築工程(香港)有限公司
CHINA STATE CONSTRUCTION ENGINEERING (HONG KONG) LTD.

Activity ID	Activity Name	Calendar	Original Duration	Start	Finish	Total Float
A8820	EB,Inner Heading From West, , CH 4015- 4025 = 10m @2d/m	7d/wk-1a	20d	28-Nov-14 08	17-Dec-14 18	0d
A8780	EB,Inner Heading From West, CH 4025- 4035 = 10m @2d/m	7d/wk-1a	20d	18-Dec-14 08	08-Jan-15 18	0d
A8810	EB,Inner Heading From West, , CH 4035- 4045 = 10m @2d/m	7d/wk-1a	20d	09-Jan-15 08	28-Jan-15 18	0d
A8785	EB,Inner Heading From West, , CH 4045- 4055 = 10m @2d/m	7d/wk-1a	20d	29-Jan-15 08	17-Feb-15 18	0d
A8790	EB,Inner Heading From West, CH 4055- 4065 = 10m @ 2d/m	7d/wk-1a	20d	18-Feb-15 08	12-Mar-15 18	0d
A8795	EB,Inner Heading From West, , CH 4065- 4075 = 10m, @ 2d/m	7d/wk-1a	20d	13-Mar-15 08	01-Apr-15 18	0d
A8800	EB,Inner Heading From West, CH 4075- 4085 = 10m @ 2d/m	7d/wk-1a	20d	02-Apr-15 08	22-Apr-15 18	0d
A8825	EB,Inner Heading From West, CH 4085- 4095 = 10m @ 2d/m	7d/wk-1a	20d	23-Apr-15 08	13-May-15 18	0d
	Inner Bench Excavation (1.5-2d/m, 20m separation with heading)					
A8765	EB, Inner Bench From West, CH 3992- 4005 = 13m (2d/m)	7d/wk-1a	26d	08-Nov-14 08	03-Dec-14 18	23d
A8770	EB, Inner Bench From West,CH 4005- 4015 = 10m	7d/wk-1a	15d	18-Dec-14 08	03-Jan-15 18	9d
A8775	EB, Inner Bench From West,CH 4015- 4025 = 10m	7d/wk-1a	15d	09-Jan-15 08	23-Jan-15 18	4d
A8735	EB, Inner Bench From West,CH 4025- 4035 = 10m	7d/wk-1a	15d	29-Jan-15 08	12-Feb-15 18	14d
A8740	EB, Inner Bench From West,CH 4035- 4045 = 10m	7d/wk-1a	15d	18-Feb-15 08	07-Mar-15 18	11d
A8745	EB, Inner Bench From West,CH 4045- 4055 = 10m	7d/wk-1a	15d	13-Mar-15 08	27-Mar-15 18	6d
A8750	EB, Inner Bench From West,CH 4055- 4065 = 10m	7d/wk-1a	15d	02-Apr-15 08	17-Apr-15 18	1d
A8755	EB, Inner Bench From West,CH 4065- 4075 = 10m	7d/wk-1a	15d	18-Apr-15 08	03-May-15 18	1d
A8760	EB, Inner Bench From West,CH 4075- 4085 = 10m	7d/wk-1a	15d	05-May-15 08	19-May-15 18	0d
A8761	EB, Inner Bench From West,CH 4085- 4095 = 10m	7d/wk-1a	15d	20-May-15 08	03-Jun-15 18	0d
	From East (TS4)					
	Inner Heading Excavation (3d/m, 24h/day work shift, 7d/week, no work on statutory holiday)					
A8835	EB,Inner Heading From East, CH 4147.5 to 4145 = 2.5m, @ 3d/m	7d/wk-1a	8d	06-Jan-15 08	13-Jan-15 18	0d
A8850	EB,Inner Heading From East, CH 4145- 4135 = 10m, @ 3d/m	7d/wk-1a	30d	14-Jan-15 08	12-Feb-15 18	0d
A8830	EB,Inner Heading From East, CH 4135- 4125 = 10m @2d/m	7d/wk-1a	20d	13-Feb-15 08	07-Mar-15 18	0d
A8840	EB,Inner Heading From East, CH 4125- 4115 = 10m @2d/m	7d/wk-1a	20d	08-Mar-15 08	27-Mar-15 18	0d
A9910	EB,Inner Heading From East, CH 4115- 4105 = 10m @2d/m	7d/wk-1a	20d	28-Mar-15 08	17-Apr-15 18	0d
A8845	EB,Inner Heading From East, CH 4105- 4095 = 10m @2d/m	7d/wk-1a	20d	18-Apr-15 08	08-May-15 18	0d
	Inner Bench Excavation (1.5d-2d/m, 20m separation with heading)					
A8860	EB,Inner Bench From East, CH 4147.5 - 4145 = 2.5m	7d/wk-1a	4d	08-Mar-15 08	11-Mar-15 18	11d



Summary Bar
Actual Level of Effort
Actual Work
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Milestone

China State Construction Engineering (Hong Kong) Ltd

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

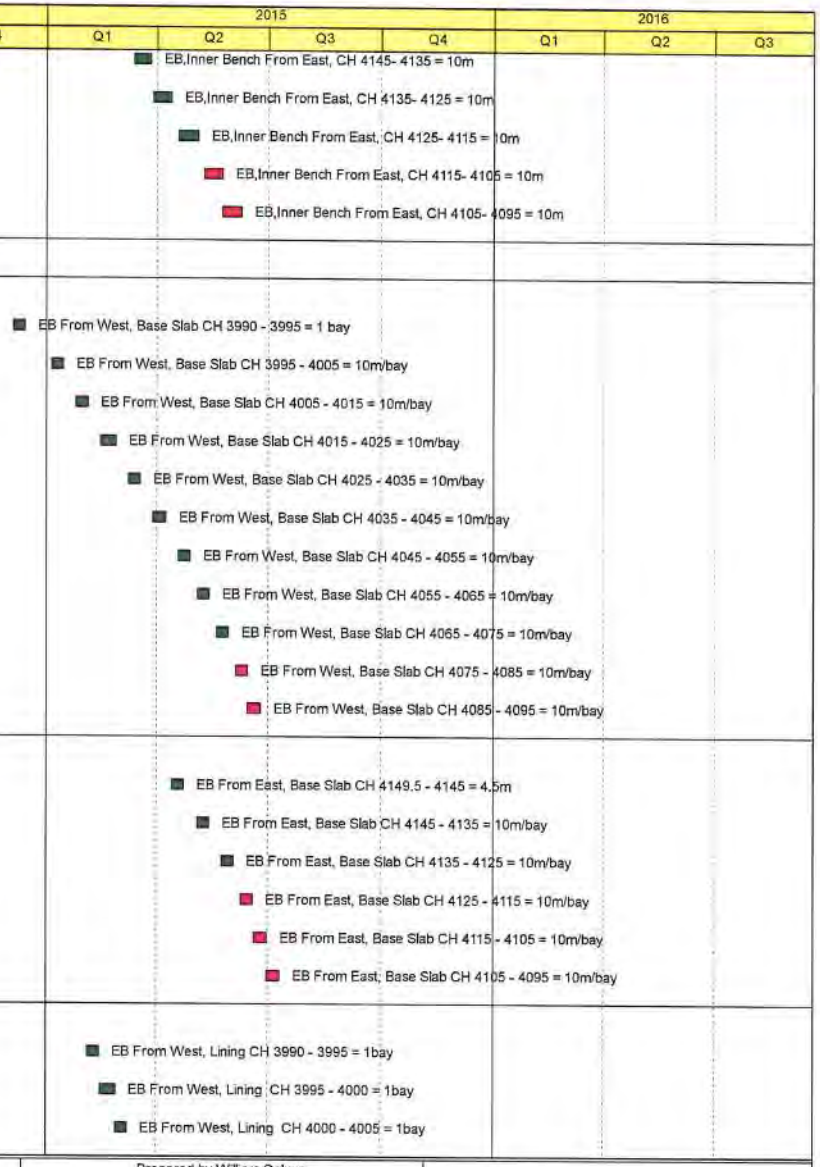
WORKS PROGRAMME REV. M

Prepared by William Caluza

Date	Revision	Checked	Approved
26-Sep...	1st submission		

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

Activity ID	Activity Name	Calendar	Original Duration	Start	Finish	Total Float
A8865	EB,Inner Bench From East, CH 4145- 4135 = 10m	7d/wk-1a	15d	12-Mar-15 08	26-Mar-15 18	11d
A8870	EB,Inner Bench From East, CH 4135- 4125 = 10m	7d/wk-1a	15d	28-Mar-15 08	12-Apr-15 18	10d
A8855	EB,Inner Bench From East, CH 4125- 4115 = 10m	7d/wk-1a	15d	18-Apr-15 08	03-May-15 18	5d
A8875	EB,Inner Bench From East, CH 4115- 4105 = 10m	7d/wk-1a	15d	09-May-15 08	23-May-15 18	0d
A9915	EB,Inner Bench From East, CH 4105- 4095 = 10m	7d/wk-1a	16d	24-May-15 08	08-Jun-15 18	0d
Tunnel Lining Works						
From West Base Slab (10m/bay, 10m separation with benching excavation)						
A8900	EB From West, Base Slab CH 3990 - 3995 = 1 bay	7d/wk-1a	10d	04-Dec-14 08	13-Dec-14 18	33d
A8890	EB From West, Base Slab CH 3995 - 4005 = 10m/bay	7d/wk-1a	10d	04-Jan-15 08	13-Jan-15 18	14d
A8905	EB From West, Base Slab CH 4005 - 4015 = 10m/bay	7d/wk-1a	10d	24-Jan-15 08	02-Feb-15 18	4d
A8910	EB From West, Base Slab CH 4015 - 4025 = 10m/bay	7d/wk-1a	10d	13-Feb-15 08	25-Feb-15 18	14d
A8915	EB From West, Base Slab CH 4025 - 4035 = 10m/bay	7d/wk-1a	10d	08-Mar-15 08	17-Mar-15 18	12d
A8920	EB From West, Base Slab CH 4035 - 4045 = 10m/bay	7d/wk-1a	10d	28-Mar-15 08	07-Apr-15 18	8d
A8925	EB From West, Base Slab CH 4045 - 4055 = 10m/bay	7d/wk-1a	10d	18-Apr-15 08	27-Apr-15 18	4d
A8930	EB From West, Base Slab CH 4055 - 4065 = 10m/bay	7d/wk-1a	10d	04-May-15 08	13-May-15 18	5d
A8880	EB From West, Base Slab CH 4065 - 4075 = 10m/bay	7d/wk-1a	10d	20-May-15 08	29-May-15 18	5d
A8885	EB From West, Base Slab CH 4075 - 4085 = 10m/bay	7d/wk-1a	10d	04-Jun-15 08	13-Jun-15 18	0d
A8895	EB From West, Base Slab CH 4085 - 4095 = 10m/bay	7d/wk-1a	10d	14-Jun-15 08	24-Jun-15 18	0d
From East Base Slab (10m/bay, 10m separation with benching excavation)						
A9905	EB From East, Base Slab CH 4149.5 - 4145 = 4.5m	7d/wk-1a	10d	13-Apr-15 08	22-Apr-15 18	26d
A9900	EB From East, Base Slab CH 4145 - 4135 = 10m/bay	7d/wk-1a	10d	04-May-15 08	13-May-15 18	16d
A9895	EB From East, Base Slab CH 4135 - 4125 = 10m/bay	7d/wk-1a	10d	24-May-15 08	02-Jun-15 18	6d
A9890	EB From East, Base Slab CH 4125 - 4115 = 10m/bay	7d/wk-1a	10d	09-Jun-15 08	18-Jun-15 18	0d
A9885	EB From East, Base Slab CH 4115 - 4105 = 10m/bay	7d/wk-1a	10d	19-Jun-15 08	29-Jun-15 18	0d
A9880	EB From East, Base Slab CH 4105 - 4095 = 10m/bay	7d/wk-1a	10d	30-Jun-15 08	10-Jul-15 18	0d
Lining (5m/bay, 15m separation with base slab)						
A9065	EB From West, Lining CH 3990 - 3995 = 1bay	7d/wk-1a	10d	03-Feb-15 08	12-Feb-15 18	4d
A9005	EB From West, Lining CH 3995 - 4000 = 1bay	7d/wk-1a	10d	13-Feb-15 08	25-Feb-15 18	4d
A9090	EB From West, Lining CH 4000 - 4005 = 1bay	7d/wk-1a	10d	26-Feb-15 08	07-Mar-15 18	4d



Summary Bar
Actual Level of Effort
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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)

WORKS PROGRAMME REV. M

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

Activity ID	Activity Name	Calendar	Original Duration	Start	Finish	Total Float
A9050	EB From West, Lining CH 4005 - 4010 = 1bay	7d/wk-1a	10d	08-Mar-15 08	17-Mar-15 18	4d
A9055	EB From West, Lining CH 4010 - 4015 = 1bay	7d/wk-1a	10d	18-Mar-15 08	27-Mar-15 18	4d
A9060	EB From West, Lining CH 4015 - 4020 = 1bay	7d/wk-1a	10d	26-Mar-15 08	05-Apr-15 18	4d
A9070	EB From West, Lining CH 4020 - 4025 = 1bay	7d/wk-1a	10d	03-Apr-15 08	13-Apr-15 18	4d
A9075	EB From West, Lining CH 4025 - 4030 = 1bay	7d/wk-1a	10d	12-Apr-15 08	21-Apr-15 18	4d
A9080	EB From West, Lining CH 4030 - 4035 = 1bay	7d/wk-1a	10d	20-Apr-15 08	29-Apr-15 18	4d
A9085	EB From West, Lining CH 4035 - 4040 = 1bay	7d/wk-1a	10d	28-Apr-15 08	08-May-15 18	4d
A9015	EB From West, Lining CH 4040 - 4045 = 1bay	7d/wk-1a	10d	07-May-15 08	16-May-15 18	4d
A9020	EB From West, Lining CH 4045 - 4050 = 1bay	7d/wk-1a	10d	15-May-15 08	24-May-15 18	4d
A9025	EB From West, Lining CH 4050 - 4055 = 1bay	7d/wk-1a	10d	23-May-15 08	01-Jun-15 18	4d
A9030	EB From West, Lining CH 4055 - 4060 = 1bay	7d/wk-1a	10d	31-May-15 08	09-Jun-15 18	4d
A9035	EB From West, Lining CH 4060 - 4065 = 1bay	7d/wk-1a	10d	07-Jun-15 08	16-Jun-15 18	4d
A9040	EB From West, Lining CH 4065 - 4070 = 1bay	7d/wk-1a	10d	14-Jun-15 08	24-Jun-15 18	4d
A9045	EB From West, Lining CH 4070 - 4075 = 1bay	7d/wk-1a	10d	25-Jun-15 08	05-Jul-15 18	0d
A8955	EB From West, Lining CH 4075 - 4080 = 1bay	7d/wk-1a	10d	30-Jun-15 08	10-Jul-15 18	0d
A8960	EB From West, Lining CH 4080 - 4085 = 1bay	7d/wk-1a	5d	11-Jul-15 08	15-Jul-15 18	0d
A8970	EB From West, Lining CH 4085 - 4090 = 1bay	7d/wk-1a	5d	16-Jul-15 08	20-Jul-15 18	0d
A8975	EB From West, Lining CH 4090 - 4095 = 1bay	7d/wk-1a	5d	21-Jul-15 08	25-Jul-15 18	0d
A8980	EB From West, Lining CH 4095 - 4100 = 1bay	7d/wk-1a	5d	26-Jul-15 08	30-Jul-15 18	0d
A8985	EB From West, Lining CH 4100 - 4105 = 1bay	7d/wk-1a	5d	31-Jul-15 08	04-Aug-15 18	0d
A8990	EB From West, Lining CH 4105 - 4110 = 1bay	7d/wk-1a	5d	05-Aug-15 08	09-Aug-15 18	0d
A8995	EB From West, Lining CH 4110 - 4115 = 1bay	7d/wk-1a	5d	10-Aug-15 08	14-Aug-15 18	0d
A9000	EB From West, Lining CH 4115 - 4120 = 1bay	7d/wk-1a	5d	15-Aug-15 08	19-Aug-15 18	0d
A9010	EB From West, Lining CH 4120 - 4125 = 1bay	7d/wk-1a	5d	20-Aug-15 08	24-Aug-15 18	0d
A8965	EB From West, Lining CH 4125 - 4130 = 1bay	7d/wk-1a	5d	25-Aug-15 08	29-Aug-15 18	0d
A8935	EB From West, Lining CH 4130 - 4135 = 1bay	7d/wk-1a	5d	30-Aug-15 08	03-Sep-15 18	0d
A8940	EB From West, Lining CH 4135 - 4140 = 1bay	7d/wk-1a	5d	04-Sep-15 08	08-Sep-15 18	0d
A8945	EB From West, Lining CH 4140 - 4145 = 1bay	7d/wk-1a	5d	09-Sep-15 08	13-Sep-15 18	0d
A8950	EB From West, Lining CH 4145 - 4149.5 = 4.5m	7d/wk-1a	5d	14-Sep-15 08	18-Sep-15 18	0d

Summary Bar
Actual Level of Effort
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Milestone

China State Construction Engineering (Hong Kong) Ltd

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

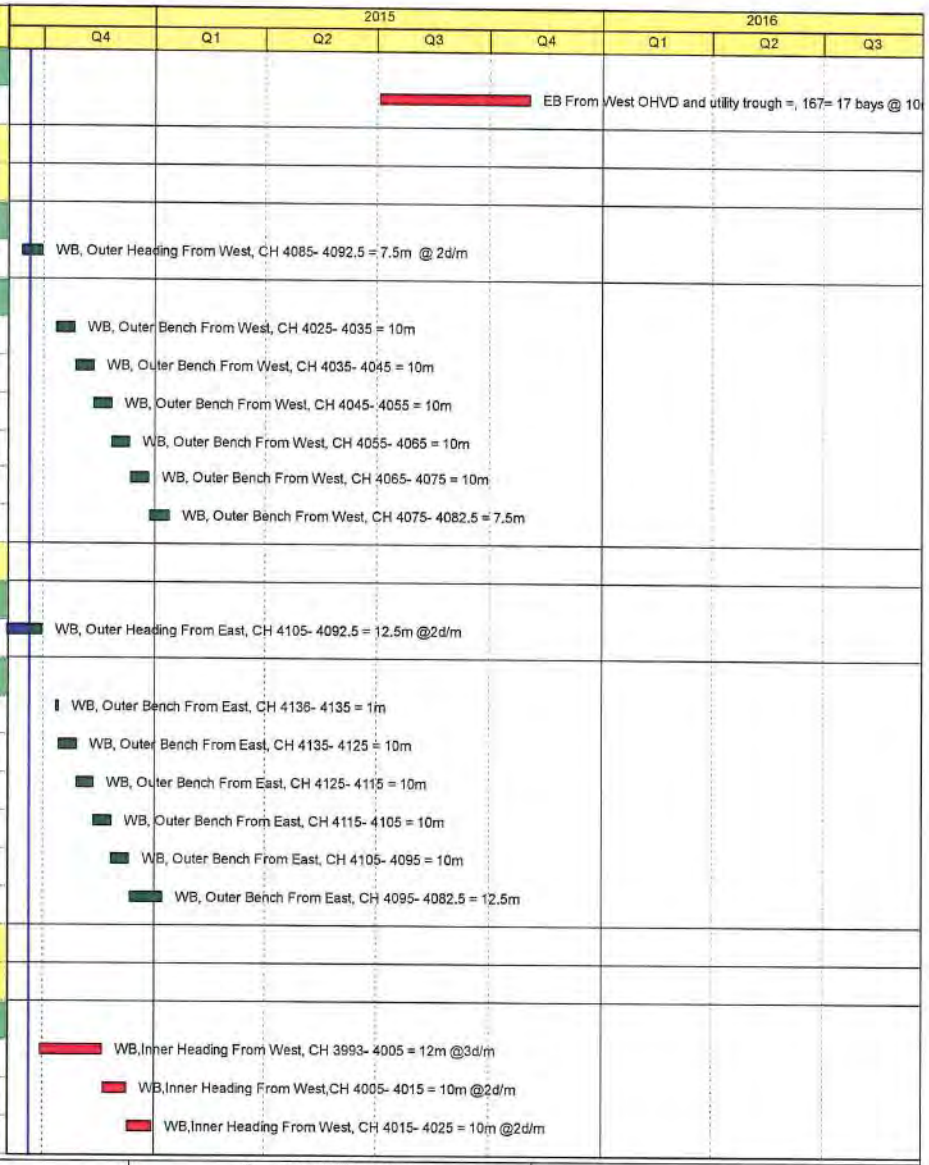
WORKS PROGRAMME REV. M

Prepared by William Caluza

Date	Revision	Checked	Approved
26-Sep...	1st submission		

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

Activity ID	Activity Name	Calendar	Original Duration	Start	Finish	Total Float
OHVD(10m/bay) / Utility Trough						
A9095	EB From West OHVD and utility trough =, 167= 17 bays @ 10m/bay @ 7d/bay	7d/wk-1a	120d	03-Jul-15 08	02-Nov-15 18	0d
WB Outer Tunnel Excavation						
From West (TPCWAE)						
Outer Heading Excavation (2d/m, 24h/day work shift, 7d/week, no work on statutory holiday)						
A9651	WB, Outer Heading From West, CH 4085- 4092.5 = 7.5m @ 2d/m	7d/wk-1a	15d	13-Sep-14 08 A	30-Sep-14 18	163d
Outer Bench Excavation (1.5d-2d/m, 20m separation with heading)						
A9680	WB, Outer Bench From West, CH 4025- 4035 = 10m	7d/wk-1a	15d	12-Oct-14 08	26-Oct-14 18	163d
A9665	WB, Outer Bench From West, CH 4035- 4045 = 10m	7d/wk-1a	15d	27-Oct-14 08	10-Nov-14 18	163d
A9670	WB, Outer Bench From West, CH 4045- 4055 = 10m	7d/wk-1a	15d	11-Nov-14 08	25-Nov-14 18	163d
A9675	WB, Outer Bench From West, CH 4055- 4065 = 10m	7d/wk-1a	15d	26-Nov-14 08	10-Dec-14 18	163d
A9700	WB, Outer Bench From West, CH 4065- 4075 = 10m	7d/wk-1a	15d	11-Dec-14 08	26-Dec-14 18	163d
A9701	WB, Outer Bench From West, CH 4075- 4082.5 = 7.5m	7d/wk-1a	15d	27-Dec-14 08	11-Jan-15 18	163d
From East (TS4)						
Outer Heading Excavation (2d/m, 24h/day work shift, 7d/week, no work on statutory holiday)						
A9730	WB, Outer Heading From East, CH 4105- 4092.5 = 12.5m @2d/m	7d/wk-1a	25d	30-Aug-14 08 A	30-Sep-14 18	168d
Outer Bench Excavation (1.5d-2d/m, 20m separation with heading)						
A9740	WB, Outer Bench From East, CH 4136- 4135 = 1m	7d/wk-1a	2d	12-Oct-14 08	13-Oct-14 18	168d
A9770	WB, Outer Bench From East, CH 4135- 4125 = 10m	7d/wk-1a	15d	14-Oct-14 08	28-Oct-14 18	168d
A9745	WB, Outer Bench From East, CH 4125- 4115 = 10m	7d/wk-1a	15d	28-Oct-14 08	11-Nov-14 18	168d
A9750	WB, Outer Bench From East, CH 4115- 4105 = 10m	7d/wk-1a	15d	11-Nov-14 08	25-Nov-14 18	168d
A9755	WB, Outer Bench From East, CH 4105- 4095 = 10m	7d/wk-1a	15d	26-Nov-14 08	10-Dec-14 18	168d
A9760	WB, Outer Bench From East, CH 4095- 4082.5 = 12.5m	7d/wk-1a	25d	11-Dec-14 08	06-Jan-15 18	168d
WB (Inner Tunnel Excavation + Lining)						
From West (TPCWAE)						
Inner Heading Excavation (2-3d/m, 24h/day work shift, 7d/week, no work on statutory holiday)						
A9130	WB,Inner Heading From West, CH 3993- 4005 = 12m @3d/m	7d/wk-1a	50d	29-Sep-14 08	18-Nov-14 18	0d
A9135	WB,Inner Heading From West,CH 4005- 4015 = 10m @2d/m	7d/wk-1a	20d	19-Nov-14 08	08-Dec-14 18	0d
A9140	WB,Inner Heading From West, CH 4015- 4025 = 10m @2d/m	7d/wk-1a	20d	09-Dec-14 08	29-Dec-14 18	0d



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

China State Construction Engineering (Hong Kong) Ltd

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CHINA STATE CONSTRUCTION ENGINEERING (HONG KONG) LTD.

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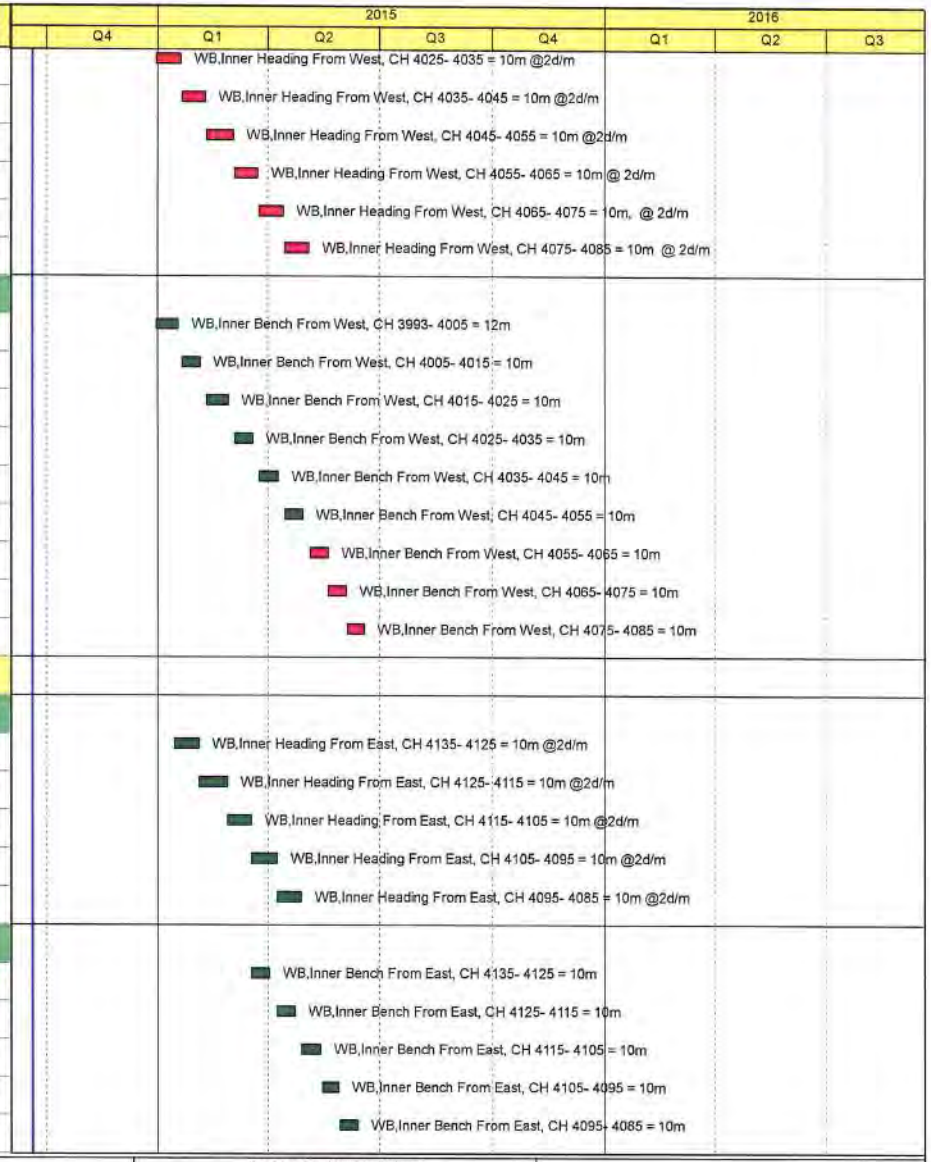
A9100	WB,Inner Heading From West, CH 4025- 4035 = 10m @2d/m	7d/wk-1a	20d	30-Dec-14 08	19-Jan-15 18	0d
A9105	WB,Inner Heading From West, CH 4035- 4045 = 10m @2d/m	7d/wk-1a	20d	20-Jan-15 08	08-Feb-15 18	0d
A9110	WB,Inner Heading From West, CH 4045- 4055 = 10m @2d/m	7d/wk-1a	20d	09-Feb-15 08	03-Mar-15 18	0d
A9115	WB,Inner Heading From West, CH 4055- 4065 = 10m @ 2d/m	7d/wk-1a	20d	04-Mar-15 08	23-Mar-15 18	0d
A9120	WB,Inner Heading From West, CH 4065- 4075 = 10m, @ 2d/m	7d/wk-1a	20d	24-Mar-15 08	13-Apr-15 18	0d
A9125	WB,Inner Heading From West, CH 4075- 4085 = 10m @ 2d/m	7d/wk-1a	20d	14-Apr-15 08	04-May-15 18	0d
	Inner Bench Excavation (1.5d-2d/m, 20m separation with heading)					
A9180	WB,Inner Bench From West, CH 3993- 4005 = 12m	7d/wk-1a	18d	30-Dec-14 08	17-Jan-15 18	27d
A9205	WB,Inner Bench From West, CH 4005- 4015 = 10m	7d/wk-1a	15d	20-Jan-15 08	03-Feb-15 18	25d
A9190	WB,Inner Bench From West, CH 4015- 4025 = 10m	7d/wk-1a	15d	09-Feb-15 08	26-Feb-15 18	20d
A9185	WB,Inner Bench From West, CH 4025- 4035 = 10m	7d/wk-1a	15d	04-Mar-15 08	18-Mar-15 18	15d
A9155	WB,Inner Bench From West, CH 4035- 4045 = 10m	7d/wk-1a	15d	24-Mar-15 08	08-Apr-15 18	10d
A9160	WB,Inner Bench From West, CH 4045- 4055 = 10m	7d/wk-1a	15d	14-Apr-15 08	28-Apr-15 18	5d
A9165	WB,Inner Bench From West, CH 4055- 4065 = 10m	7d/wk-1a	15d	05-May-15 08	19-May-15 18	0d
A9170	WB,Inner Bench From West, CH 4065- 4075 = 10m	7d/wk-1a	15d	20-May-15 08	03-Jun-15 18	0d
A9175	WB,Inner Bench From West, CH 4075- 4085 = 10m	7d/wk-1a	15d	04-Jun-15 08	18-Jun-15 18	0d
	From East (TS4)					
	Inner Heading Excavation (2d/m, 24h/day work shift, 7d/week, no work on statutory holiday)					
A9210	WB,Inner Heading From East, CH 4135- 4125 = 10m @2d/m	7d/wk-1a	20d	14-Jan-15 08	02-Feb-15 18	6d
A9215	WB,Inner Heading From East, CH 4125- 4115 = 10m @2d/m	7d/wk-1a	20d	03-Feb-15 08	25-Feb-15 18	6d
A9230	WB,Inner Heading From East, CH 4115- 4105 = 10m @2d/m	7d/wk-1a	20d	26-Feb-15 08	17-Mar-15 18	6d
A9232	WB,Inner Heading From East, CH 4105- 4095 = 10m @2d/m	7d/wk-1a	20d	18-Mar-15 08	07-Apr-15 18	6d
A9225	WB,Inner Heading From East, CH 4095- 4085 = 10m @2d/m	7d/wk-1a	20d	08-Apr-15 08	27-Apr-15 18	6d
	Inner Bench Excavation (1.5d-2d/m, 20m separation with heading)					
A9235	WB,Inner Bench From East, CH 4135- 4125 = 10m	7d/wk-1a	15d	18-Mar-15 08	01-Apr-15 18	16d
A9240	WB,Inner Bench From East, CH 4125- 4115 = 10m	7d/wk-1a	15d	08-Apr-15 08	22-Apr-15 18	11d
A9245	WB,Inner Bench From East, CH 4115- 4105 = 10m	7d/wk-1a	15d	28-Apr-15 08	13-May-15 18	6d
A9247	WB,Inner Bench From East, CH 4105- 4095 = 10m	7d/wk-1a	15d	14-May-15 08	28-May-15 18	6d
A9250	WB,Inner Bench From East, CH 4095- 4085 = 10m	7d/wk-1a	15d	29-May-15 08	12-Jun-15 18	6d



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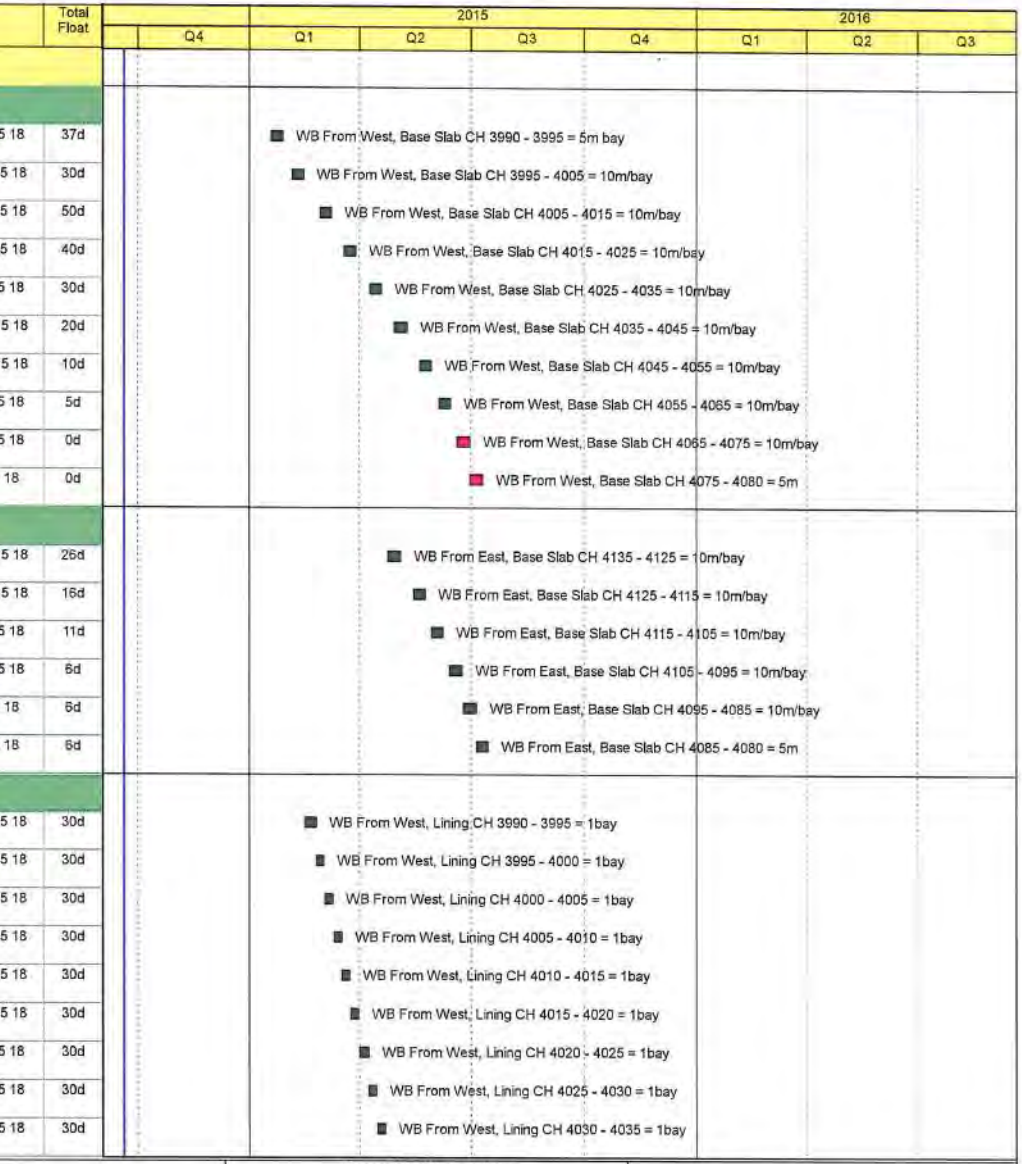
Tunnel Lining Works						
From West Base Slab (10m/bay, 10m separation with benching excavation)						
A9295	WB From West, Base Slab CH 3990 - 3995 = 5m bay	7d/wk-1a	10d	18-Jan-15 08	27-Jan-15 18	37d
A9320	WB From West, Base Slab CH 3995 - 4005 = 10m/bay	7d/wk-1a	10d	04-Feb-15 08	13-Feb-15 18	30d
A9255	WB From West, Base Slab CH 4005 - 4015 = 10m/bay	7d/wk-1a	10d	27-Feb-15 08	08-Mar-15 18	50d
A9260	WB From West, Base Slab CH 4015 - 4025 = 10m/bay	7d/wk-1a	10d	19-Mar-15 08	28-Mar-15 18	40d
A9265	WB From West, Base Slab CH 4025 - 4035 = 10m/bay	7d/wk-1a	10d	09-Apr-15 08	18-Apr-15 18	30d
A9300	WB From West, Base Slab CH 4035 - 4045 = 10m/bay	7d/wk-1a	10d	29-Apr-15 08	09-May-15 18	20d
A9325	WB From West, Base Slab CH 4045 - 4055 = 10m/bay	7d/wk-1a	10d	20-May-15 08	29-May-15 18	10d
A9305	WB From West, Base Slab CH 4055 - 4065 = 10m/bay	7d/wk-1a	10d	04-Jun-15 08	13-Jun-15 18	5d
A9310	WB From West, Base Slab CH 4065 - 4075 = 10m/bay	7d/wk-1a	10d	19-Jun-15 08	29-Jun-15 18	0d
A9315	WB From West, Base Slab CH 4075 - 4080 = 5m	7d/wk-1a	10d	30-Jun-15 08	10-Jul-15 18	0d
From East Base Slab (10m/bay, 10m separation with benching excavation)						
A9960	WB From East, Base Slab CH 4135 - 4125 = 10m/bay	7d/wk-1a	10d	23-Apr-15 08	03-May-15 18	26d
A9955	WB From East, Base Slab CH 4125 - 4115 = 10m/bay	7d/wk-1a	10d	14-May-15 08	23-May-15 18	16d
A9950	WB From East, Base Slab CH 4115 - 4105 = 10m/bay	7d/wk-1a	10d	29-May-15 08	07-Jun-15 18	11d
A9945	WB From East, Base Slab CH 4105 - 4095 = 10m/bay	7d/wk-1a	10d	13-Jun-15 08	23-Jun-15 18	6d
A9940	WB From East, Base Slab CH 4095 - 4085 = 10m/bay	7d/wk-1a	10d	24-Jun-15 08	04-Jul-15 18	6d
A9941	WB From East, Base Slab CH 4085 - 4080 = 5m	7d/wk-1a	10d	05-Jul-15 08	14-Jul-15 18	6d
Lining (5m/bay, 10m separation with base slab)						
A9430	WB From West, Lining CH 3990 - 3995 = 1bay	7d/wk-1a	7d	14-Feb-15 08	23-Feb-15 18	30d
A9470	WB From West, Lining CH 3995 - 4000 = 1bay	7d/wk-1a	7d	24-Feb-15 08	02-Mar-15 18	30d
A9435	WB From West, Lining CH 4000 - 4005 = 1bay	7d/wk-1a	7d	03-Mar-15 08	09-Mar-15 18	30d
A9360	WB From West, Lining CH 4005 - 4010 = 1bay	7d/wk-1a	7d	10-Mar-15 08	16-Mar-15 18	30d
A9365	WB From West, Lining CH 4010 - 4015 = 1bay	7d/wk-1a	7d	17-Mar-15 08	23-Mar-15 18	30d
A9370	WB From West, Lining CH 4015 - 4020 = 1bay	7d/wk-1a	7d	24-Mar-15 08	30-Mar-15 18	30d
A9375	WB From West, Lining CH 4020 - 4025 = 1bay	7d/wk-1a	7d	31-Mar-15 08	07-Apr-15 18	30d
A9380	WB From West, Lining CH 4025 - 4030 = 1bay	7d/wk-1a	7d	08-Apr-15 08	14-Apr-15 18	30d
A9385	WB From West, Lining CH 4030 - 4035 = 1bay	7d/wk-1a	7d	15-Apr-15 08	21-Apr-15 18	30d



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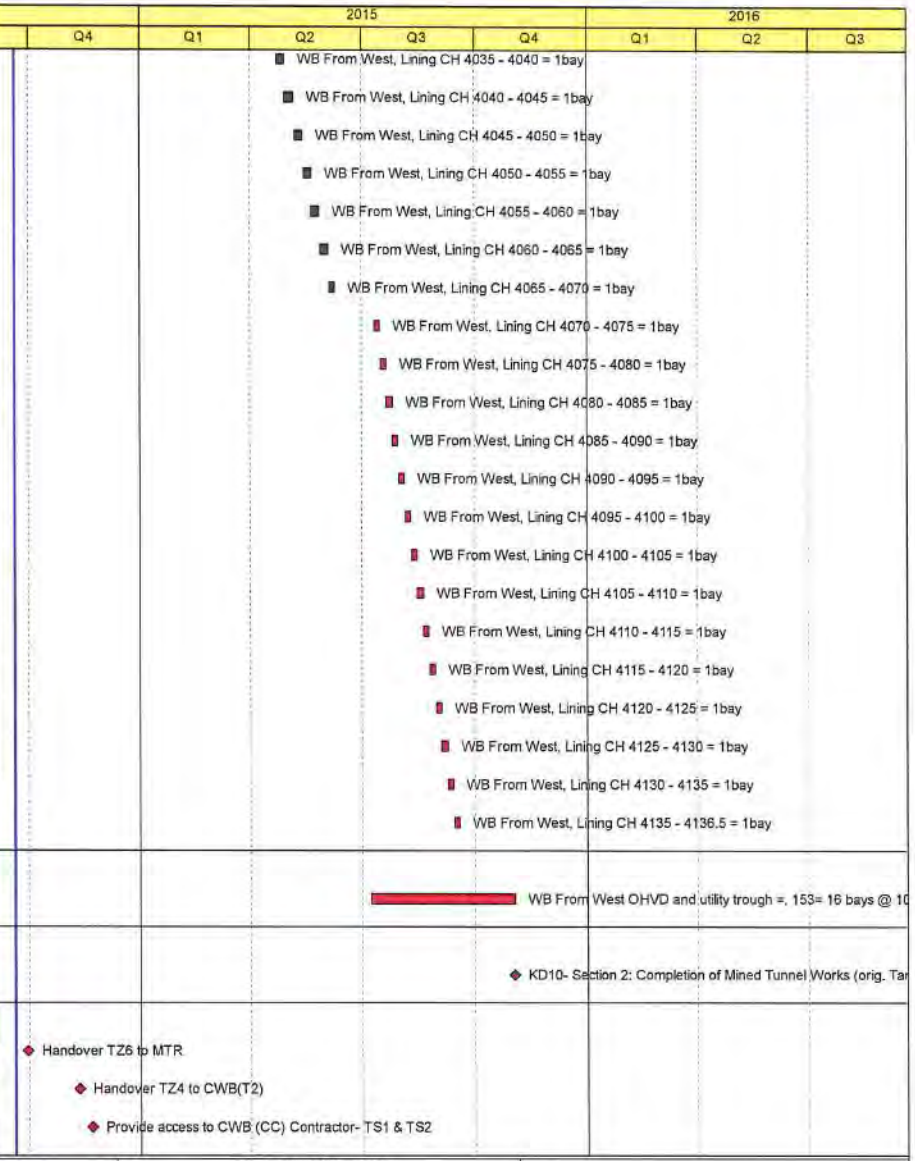
A9390	WB From West, Lining CH 4035 - 4040 = 1bay	7d/wk-1a	7d	22-Apr-15 08	28-Apr-15 18	30d
A9330	WB From West, Lining CH 4040 - 4045 = 1bay	7d/wk-1a	7d	29-Apr-15 08	06-May-15 18	30d
A9335	WB From West, Lining CH 4045 - 4050 = 1bay	7d/wk-1a	7d	07-May-15 08	13-May-15 18	30d
A9340	WB From West, Lining CH 4050 - 4055 = 1bay	7d/wk-1a	7d	14-May-15 08	20-May-15 18	30d
A9345	WB From West, Lining CH 4055 - 4060 = 1bay	7d/wk-1a	7d	21-May-15 08	27-May-15 18	30d
A9350	WB From West, Lining CH 4060 - 4065 = 1bay	7d/wk-1a	7d	28-May-15 08	03-Jun-15 18	30d
A9355	WB From West, Lining CH 4065 - 4070 = 1bay	7d/wk-1a	5d	04-Jun-15 08	08-Jun-15 18	30d
A9415	WB From West, Lining CH 4070 - 4075 = 1bay	7d/wk-1a	5d	11-Jul-15 08	15-Jul-15 18	0d
A9475	WB From West, Lining CH 4075 - 4080 = 1bay	7d/wk-1a	5d	16-Jul-15 08	20-Jul-15 18	0d
A9440	WB From West, Lining CH 4080 - 4085 = 1bay	7d/wk-1a	5d	21-Jul-15 08	25-Jul-15 18	0d
A9445	WB From West, Lining CH 4085 - 4090 = 1bay	7d/wk-1a	5d	26-Jul-15 08	30-Jul-15 18	0d
A9450	WB From West, Lining CH 4090 - 4095 = 1bay	7d/wk-1a	5d	31-Jul-15 08	04-Aug-15 18	0d
A9455	WB From West, Lining CH 4095 - 4100 = 1bay	7d/wk-1a	5d	05-Aug-15 08	09-Aug-15 18	0d
A9420	WB From West, Lining CH 4100 - 4105 = 1bay	7d/wk-1a	5d	10-Aug-15 08	14-Aug-15 18	0d
A9425	WB From West, Lining CH 4105 - 4110 = 1bay	7d/wk-1a	5d	15-Aug-15 08	19-Aug-15 18	0d
A9460	WB From West, Lining CH 4110 - 4115 = 1bay	7d/wk-1a	5d	20-Aug-15 08	24-Aug-15 18	0d
A9465	WB From West, Lining CH 4115 - 4120 = 1bay	7d/wk-1a	5d	25-Aug-15 08	29-Aug-15 18	0d
A9395	WB From West, Lining CH 4120 - 4125 = 1bay	7d/wk-1a	5d	30-Aug-15 08	03-Sep-15 18	0d
A9400	WB From West, Lining CH 4125 - 4130 = 1bay	7d/wk-1a	5d	04-Sep-15 08	08-Sep-15 18	0d
A9405	WB From West, Lining CH 4130 - 4135 = 1bay	7d/wk-1a	5d	09-Sep-15 08	13-Sep-15 18	0d
A9410	WB From West, Lining CH 4135 - 4136.5 = 1bay	7d/wk-1a	5d	14-Sep-15 08	18-Sep-15 18	0d
OHVD(10m/bay) / Utility Trough						
A9480	WB From West OHVD and utility trough =, 153= 16 bays @ 10m/bay @ 7d/bay	7d/wk-1a	115d	08-Jul-15 08	02-Nov-15 18	0d
Completion of KD10- Section 5						
A8445	KD10- Section 2: Completion of Mined Tunnel Works (orig. Target KD10- 2 Nov 2015)	7d/wk-2	0d		02-Nov-15 18*	0d
Interface works with other Contracts						
S5_60115	Handover TZ6 to MTR	7d/wk-2	0d		30-Sep-14 18	-249d
S6_5283	Handover TZ4 to CWB(T2)	7d/wk-2	0d		10-Nov-14 18	-290d
S6_5275	Provide access to CWB (CC) Contractor- TS1 & TS2	7d/wk-2	0d		21-Nov-14 18*	-85d



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S6_5280	Provide access to CWB (CC) Contractor- TS4, TPCWA, Mined Tunnel	7d/wk-2	0d		31-Mar-16 18*	-124d
Stage and Section Completion						
KD_5735	KD8 - Completion of Section 3, (1326d)	7d/wk-2	0d		30-Sep-14 18*	-86d
KD_5720	KD5 - Achievement of Stage 5, (1152d)	7d/wk-2	0d		16-Oct-14 18*	-323d
KD_5760	KD13 - Completion of Section 7B, (1152d)	7d/wk-2	0d		17-Nov-14 18*	-353d
KD_5730	KD7 - Completion of Section 2, (1152d)	7d/wk-2	0d		17-Nov-14 18*	-297d
KD_5740	KD9 - Completion of Section 4, (1739d)	7d/wk-2	0d		10-Nov-15 18*	-132d
KD_5745	KD10 - Completion of Section 5, (1863d)	7d/wk-2	0d		25-Mar-16 18	-144d
KD_5750	KD11 - Completion of Section 6, (1949d)	7d/wk-2	0d		23-May-16 18*	-121d
Portion Handover Date						
CD_5685	Portion Handover - Portion IV(4), KD8 +28	7d/wk-2	0d		28-Oct-14 18*	-50d
CD_5680	Portion Handover - Portion V (5), KD8 +28	7d/wk-2	0d		28-Oct-14 18*	-50d
CD_5695	Portion Handover - Portion VI (6), KD8 +28	7d/wk-2	0d		28-Oct-14 18*	-50d
CD_5735	Portion Handover - Portion XIIIB (13B), KD8 +28	7d/wk-2	0d		28-Oct-14 18*	-50d
CD_5790	Portion Handover - Portion XXII (22), KD8 +28	7d/wk-2	0d		28-Oct-14 18*	-50d
CD_5670	Portion Handover - Portion III (3), KD8 +28	7d/wk-2	0d		28-Oct-14 18*	-50d
CD_5720	Portion Handover - Portion XIIIA (13A), KD7 +28	7d/wk-2	0d		15-Dec-14 18*	-79d
CD_5705	Portion Handover - Portion VIII (8), KD7 +28	7d/wk-2	0d		15-Dec-14 18*	-79d
CD_5730	Portion Handover - Portion XIVA (14A), KD7 +28	7d/wk-2	0d		15-Dec-14 18*	-79d
CD_5740	Portion Handover - Portion XV (15), KD7 +28	7d/wk-2	0d		15-Dec-14 18*	-79d
CD_5805	Portion Handover - Portion XXIII (23), KD7 +28	7d/wk-2	0d		15-Dec-14 18*	-79d
CD_5775	Portion Handover - Portion XVIII (18), KD10 +28	7d/wk-2	0d		30-Nov-15 18*	0d
CD_5710	Portion Handover - Portion XI (11), KD9 +28	7d/wk-2	0d		27-Dec-15 18*	0d
CD_5700	Portion Handover - Portion IX (9), KD10 +28	7d/wk-2	0d		22-Apr-16 18*	-52d
CD_5745	Portion Handover - Portion XIVB (14B), KD10 +28	7d/wk-2	0d		22-Apr-16 18*	-52d
CD_5755	Portion Handover - Portion XVI (16), KD10 +28	7d/wk-2	0d		22-Apr-16 18*	-52d
CD_5750	Portion Handover - Portion XVII (17), KD10 +28	7d/wk-2	0d		22-Apr-16 18*	-52d
CD_5760	Portion Handover - Portion XIX (19), KD10 +28	7d/wk-2	0d		22-Apr-16 18*	-52d
CD_5780	Portion Handover - Portion XXB (20B), KD10 +28	7d/wk-2	0d		22-Apr-16 18*	-52d

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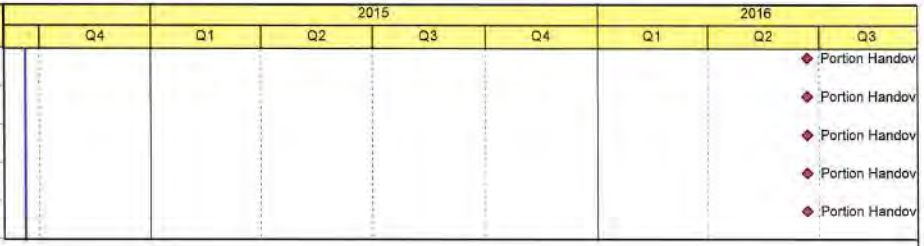
CD_5690	Portion Handover - Portion VII (7), KD11 +28	7d/wk-2	0d		20-Jun-16 18	0d
CD_5725	Portion Handover - Portion XII (12), KD11 +28	7d/wk-2	0d		20-Jun-16 18	0d
CD_5715	Portion Handover - Portion X (10), KD11 +28	7d/wk-2	0d		20-Jun-16 18	0d
CD_5785	Portion Handover - Portion XXA (20A), KD11 +28	7d/wk-2	0d		20-Jun-16 18	0d
CD_5795	Portion Handover - Portion XXI (21), KD11 +28	7d/wk-2	0d		20-Jun-16 18	0d



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

China State Construction Engineering (Hong Kong) Ltd

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

WORKS PROGRAMME REV. M

Prepared by William Caluza

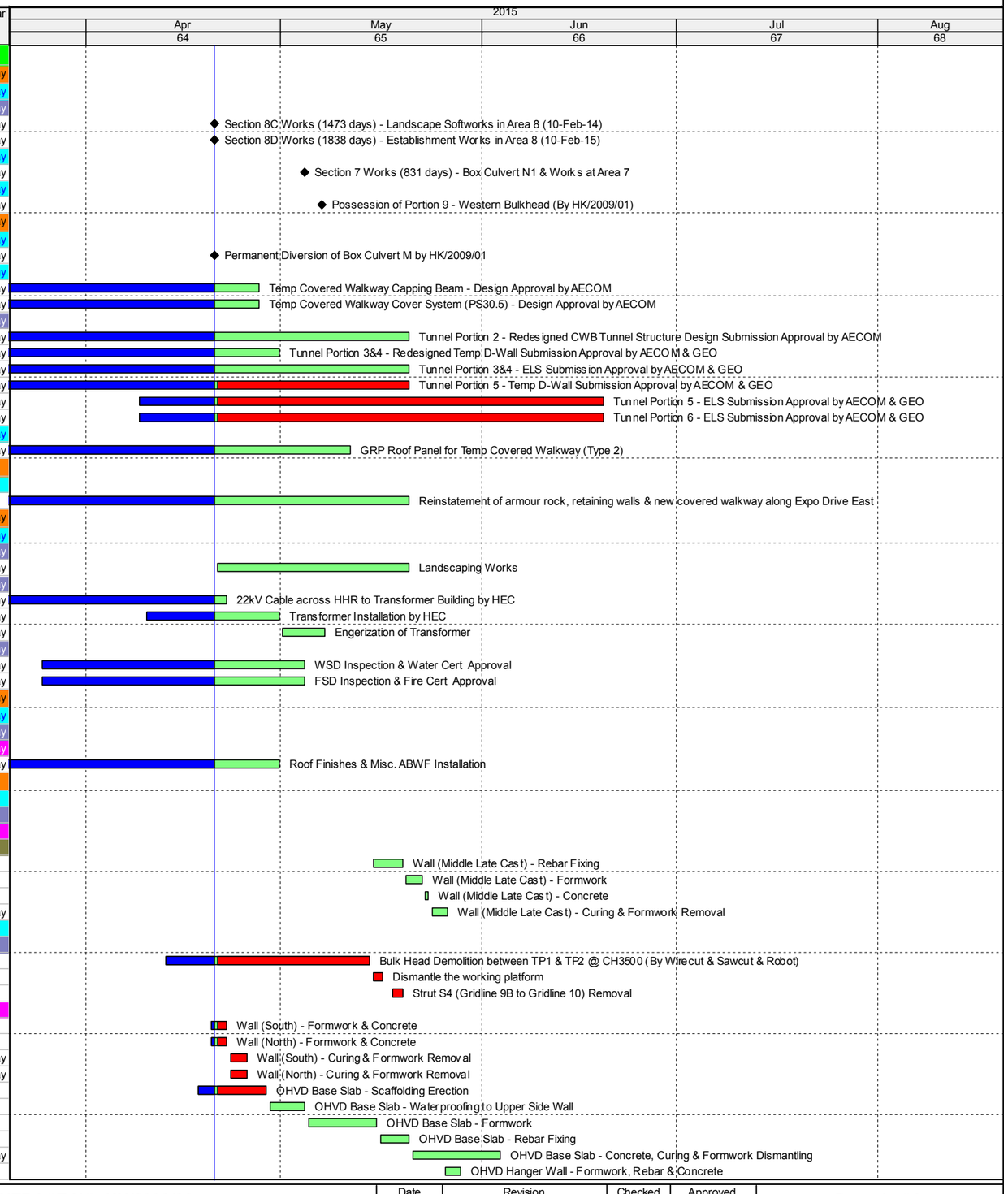
Date	Revision	Checked	Approved
26-Sep...	1st submission		

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

CEDD CONTRACT HK/2009/02

CHUN WO - CRGL JOINT VENTURE

Activity ID	Activity Name	OD	Start	Finish	Calendar
Wan Chai Development Phase II - Central - Wan Chai Bypass at Wan Chai East (dd 9-Apr-15)		1909	24-Feb-10 A	29-Aug-16	
Programme Milestones (Revised up to EOTO No.10 Issued on 29-Nov-13)		16	20-Apr-15	07-May-15	Calendar Day
Contractual Completion Dates		0	20-Apr-15	20-Apr-15	Calendar Day
Soft Landscaping & Establishment Key Dates		0	20-Apr-15	20-Apr-15	Calendar Day
KDC0140	Section 8C Works (1473 days) - Landscape Softworks in Area 8 (10-Feb-14)	0		20-Apr-15*	Calendar Day
KDC0150	Section 8D Works (1838 days) - Establishment Works in Area 8 (10-Feb-15)	0		20-Apr-15*	Calendar Day
Forecast Completion Dates		0	04-May-15	04-May-15	Calendar Day
KDF0110	Section 7 Works (831 days) - Box Culvert N1 & Works at Area 7	0		04-May-15	Calendar Day
Possession of Site		0	07-May-15	07-May-15	Calendar Day
PS0090	Possession of Portion 9 - Western Bulkhead (By HK/2009/01)	0	07-May-15*		Calendar Day
Preliminaries		835	08-Jun-13 A	19-Jun-15	Calendar Day
Interface with Others		0	20-Apr-15	20-Apr-15	Calendar Day
PRE0950	Permanent Diversion of Box Culvert M by HK/2009/01	0		20-Apr-15*	Calendar Day
Critical Submission & Approval		835	08-Jun-13 A	19-Jun-15	Calendar Day
PRE-SUB-1000B	Temp Covered Walkway Capping Beam - Design Approval by AECOM	30	19-Jun-13 A	27-Apr-15	Calendar Day
PRE-SUB-1010B	Temp Covered Walkway Cover System (PS30.5) - Design Approval by AECOM	30	12-Jun-14 A	27-Apr-15	Calendar Day
CSD for CWB Tunnel		835	08-Jun-13 A	19-Jun-15	Calendar Day
PRE-CSD-2030B	Tunnel Portion 2 - Redesigned CWB Tunnel Structure Design Submission Approval by AECO	60	16-Nov-13 A	20-May-15	Calendar Day
PRE-CSD-3000B	Tunnel Portion 3&4 - Redesigned Temp D-Wall Submission Approval by AECOM & GEO	30	08-Jun-13 A	30-Apr-15	Calendar Day
PRE-CSD-3010B	Tunnel Portion 3&4 - ELS Submission Approval by AECOM & GEO	60	17-Jan-14 A	20-May-15	Calendar Day
PRE-CSD-5000B	Tunnel Portion 5 - Temp D-Wall Submission Approval by AECOM & GEO	60	15-Aug-13 A	20-May-15	Calendar Day
PRE-CSD-5010B	Tunnel Portion 5 - ELS Submission Approval by AECOM & GEO	60	09-Apr-15 A	19-Jun-15	Calendar Day
PRE-CSD-6010B	Tunnel Portion 6 - ELS Submission Approval by AECOM & GEO	60	09-Apr-15 A	19-Jun-15	Calendar Day
Critical Procurement & Site Delivery		60	15-Jun-14 A	11-May-15	Calendar Day
PRE-PRO-1100B	GRP Roof Panel for Temp Covered Walkway (Type 2)	60	15-Jun-14 A	11-May-15	Calendar Day
Section 3 of the Works - Reprovisioning of Government Helipad and Public Toilet		254	11-Aug-12 A	20-May-15	HK Working
Outstanding Works		254	11-Aug-12 A	20-May-15	HK Working
S3-0070-1499	Reinstatement of armour rock, retaining walls & new covered walkway along Expo Drive East	254	11-Aug-12 A	20-May-15	HK Working
Section 7 of the Works - Box Culvert N1 & Flood Relief System		194	29-Oct-14 A	20-May-15	Calendar Day
Transformer Building for Dining Services at Ferry Pier (VO116)		194	29-Oct-14 A	20-May-15	Calendar Day
ABWF Works		30	21-Apr-15	20-May-15	Calendar Day
S7-TB-3100	Landscaping Works	30	21-Apr-15	20-May-15	Calendar Day
E&M Works		186	29-Oct-14 A	07-May-15	Calendar Day
S7-TB-4100	22kV Cable across HHR to Transformer Building by HEC	45	29-Oct-14 A	22-Apr-15	Calendar Day
S7-TB-4300	Transformer Installation by HEC	30	10-Apr-15 A	30-Apr-15	Calendar Day
S7-TB-4400	Engerization of Transformer	7	01-May-15	07-May-15	Calendar Day
Overall Testing & Commissioning		43	25-Mar-15 A	04-May-15	Calendar Day
S7-TB-9000	WSD Inspection & Water Cert Approval	14	25-Mar-15 A	04-May-15	Calendar Day
S7-TB-9100	FSD Inspection & Fire Cert Approval	14	25-Mar-15 A	04-May-15	Calendar Day
Section 8A of the Works - Reprovisioning of Wan Chai Ferry Pier in Area 8		120	28-Oct-13 A	30-Apr-15	Calendar Day
ABWF & E&M Installation		120	28-Oct-13 A	30-Apr-15	Calendar Day
Roof		120	28-Oct-13 A	30-Apr-15	Calendar Day
Works in Area 8 - ABWF Works at Observation Deck of Ferry Pier		120	28-Oct-13 A	30-Apr-15	Calendar Day
S8B-FP-01100	Roof Finishes & Misc. ABWF Installation	120	28-Oct-13 A	30-Apr-15	Calendar Day
Section 9B of the Works - CWB Tunnel Structure (CH3400 - CH3796)		269	11-Mar-15 A	19-Jan-16	
Tunnel Portion 1 (CH3500-CH3630)		9	15-May-15	26-May-15	
CWB Structural Works		9	15-May-15	26-May-15	
Bay 6 (For OHVD Base Slab & Side Wall, Combined to Bay 5)		9	15-May-15	26-May-15	
Wall		9	15-May-15	26-May-15	
S9B-T1-B6-1120	Wall (Middle Late Cast) - Rebar Fixing	4	15-May-15	19-May-15	HK Working
S9B-T1-B6-1130A	Wall (Middle Late Cast) - Formwork	3	20-May-15	22-May-15	HK Working
S9B-T1-B6-1130B	Wall (Middle Late Cast) - Concrete	1	23-May-15	23-May-15	HK Working
S9B-T1-B6-1140	Wall (Middle Late Cast) - Curing & Formwork Removal	3	24-May-15	26-May-15	Calendar Day
Tunnel Portion 2 (CH3425-CH3500)		79	13-Apr-15 A	24-Jul-15	
CWB Structural Works		79	13-Apr-15 A	24-Jul-15	
S9B-T2-5030	Bulk Head Demolition between TP1 & TP2 @ CH3500 (By Wirecut & Sawcut & Robot)	21	13-Apr-15 A	14-May-15	HK Working
S9B-T2-5040	Dismantle the working platform	2	15-May-15	16-May-15	HK Working
S9B-T2-5050	Strut S4 (Gridline 9B to Gridline 10) Removal	2	18-May-15	19-May-15	HK Working
Bay 1		75	18-Apr-15 A	21-Jul-15	
S9B-T2-B1-3110	Wall (South) - Formwork & Concrete	3	20-Apr-15 A	22-Apr-15	HK Working
S9B-T2-B1-3120	Wall (North) - Formwork & Concrete	3	20-Apr-15 A	22-Apr-15	HK Working
S9B-T2-B1-3140	Wall (South) - Curing & Formwork Removal	3	23-Apr-15	25-Apr-15	Calendar Day
S9B-T2-B1-3150	Wall (North) - Curing & Formwork Removal	3	23-Apr-15	25-Apr-15	Calendar Day
S9B-T2-B1-3160	OHVD Base Slab - Scaffolding Erection	9	18-Apr-15 A	28-Apr-15	HK Working
S9B-T2-B1-3170	OHVD Base Slab - Waterproofing to Upper Side Wall	4	29-Apr-15	04-May-15	HK Working
S9B-T2-B1-3180	OHVD Base Slab - Formwork	10	05-May-15	15-May-15	HK Working
S9B-T2-B1-3190	OHVD Base Slab - Rebar Fixing	4	16-May-15	20-May-15	HK Working
S9B-T2-B1-3200	OHVD Base Slab - Concrete, Curing & Formwork Dismantling	14	21-May-15	03-Jun-15	Calendar Day
S9B-T2-B1-3210	OHVD Hanger Wall - Formwork, Rebar & Concrete	3	26-May-15	28-May-15	HK Working



俊和－中國中鐵聯營
CHUN WO - CRGL JOINT VENTURE

Remaining Work
Actual Work
Summary Bar
Critical Remaining Work
Milestone

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

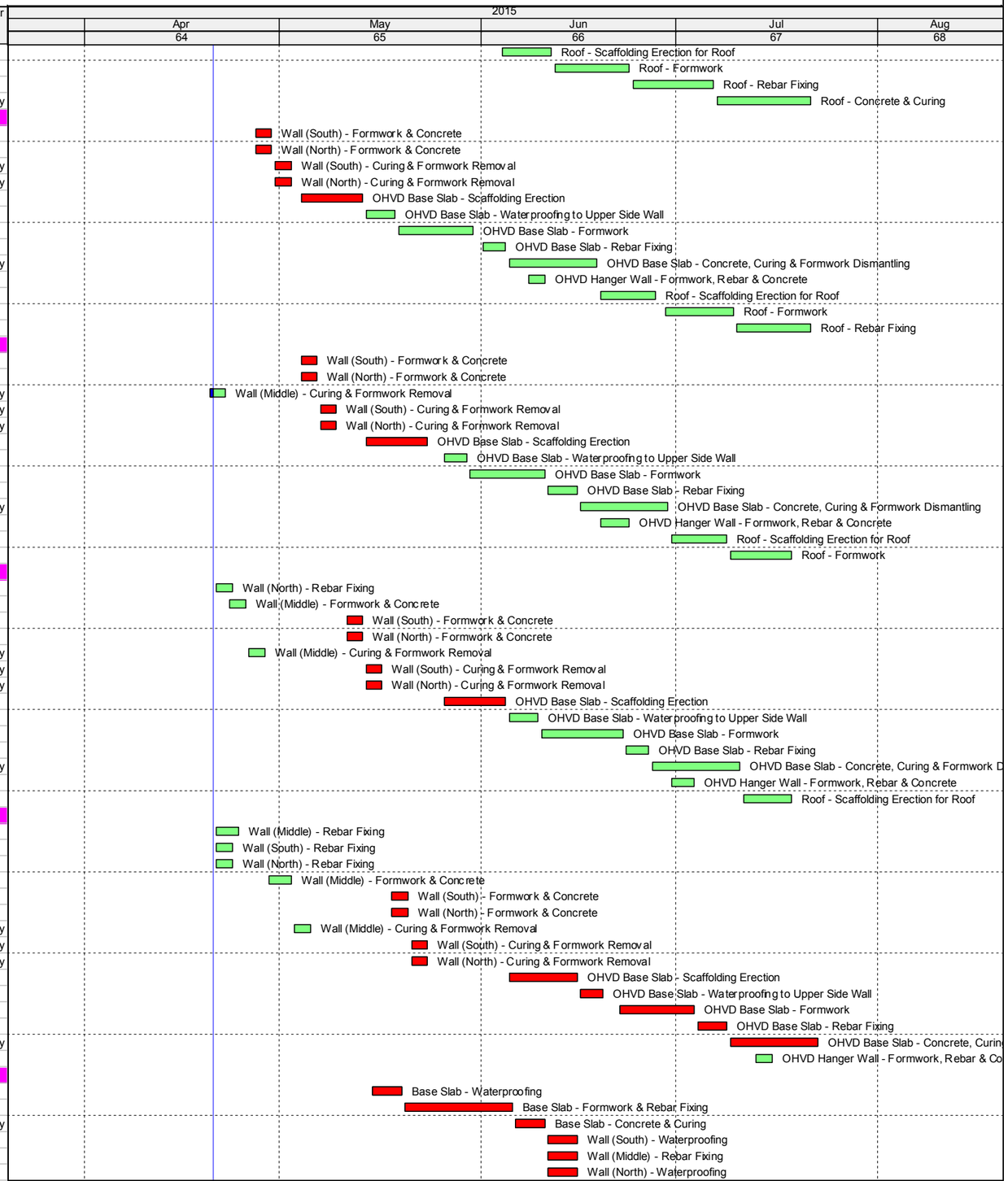
Date	Revision	Checked	Approved
20-Apr-15	3MRP		
20-Sep-14	Revised WP		

TASK filter: 3-Month Rolling.
Print on: 23-Apr-15 09:36

CEDD CONTRACT HK/2009/02

CHUN WO - CRGL JOINT VENTURE

Activity ID	Activity Name	OD	Start	Finish	Calendar
S9B-T2-B1-3220	Roof - Scaffolding Erection for Roof	7	04-Jun-15	11-Jun-15	HK Working
S9B-T2-B1-3230	Roof - Formwork	9	12-Jun-15	23-Jun-15	HK Working
S9B-T2-B1-3240	Roof - Rebar Fixing	10	24-Jun-15	06-Jul-15	HK Working
S9B-T2-B1-3250	Roof - Concrete & Curing	15	07-Jul-15	21-Jul-15	Calendar Day
Bay 2		70	27-Apr-15	21-Jul-15	
S9B-T2-B2-3060	Wall (South) - Formwork & Concrete	3	27-Apr-15	29-Apr-15	HK Working
S9B-T2-B2-3070	Wall (North) - Formwork & Concrete	3	27-Apr-15	29-Apr-15	HK Working
S9B-T2-B2-3090	Wall (South) - Curing & Formwork Removal	3	30-Apr-15	02-May-15	Calendar Day
S9B-T2-B2-3100	Wall (North) - Curing & Formwork Removal	3	30-Apr-15	02-May-15	Calendar Day
S9B-T2-B2-3110	OHVD Base Slab - Scaffolding Erection	9	04-May-15	13-May-15	HK Working
S9B-T2-B2-3120	OHVD Base Slab - Waterproofing to Upper Side Wall	4	14-May-15	18-May-15	HK Working
S9B-T2-B2-3130	OHVD Base Slab - Formwork	10	19-May-15	30-May-15	HK Working
S9B-T2-B2-3140	OHVD Base Slab - Rebar Fixing	4	01-Jun-15	04-Jun-15	HK Working
S9B-T2-B2-3150	OHVD Base Slab - Concrete, Curing & Formwork Dismantling	14	05-Jun-15	18-Jun-15	Calendar Day
S9B-T2-B2-3160	OHVD Hanger Wall - Formwork, Rebar & Concrete	3	08-Jun-15	10-Jun-15	HK Working
S9B-T2-B2-3170	Roof - Scaffolding Erection for Roof	7	19-Jun-15	27-Jun-15	HK Working
S9B-T2-B2-3180	Roof - Formwork	9	29-Jun-15	09-Jul-15	HK Working
S9B-T2-B2-3190	Roof - Rebar Fixing	10	10-Jul-15	21-Jul-15	HK Working
Bay 3		67	20-Apr-15 A	18-Jul-15	
S9B-T2-B3-3060	Wall (South) - Formwork & Concrete	3	04-May-15	06-May-15	HK Working
S9B-T2-B3-3070	Wall (North) - Formwork & Concrete	3	04-May-15	06-May-15	HK Working
S9B-T2-B3-3080	Wall (Middle) - Curing & Formwork Removal	3	20-Apr-15 A	22-Apr-15	Calendar Day
S9B-T2-B3-3090	Wall (South) - Curing & Formwork Removal	3	07-May-15	09-May-15	Calendar Day
S9B-T2-B3-3100	Wall (North) - Curing & Formwork Removal	3	07-May-15	09-May-15	Calendar Day
S9B-T2-B3-3110	OHVD Base Slab - Scaffolding Erection	9	14-May-15	23-May-15	HK Working
S9B-T2-B3-3120	OHVD Base Slab - Waterproofing to Upper Side Wall	4	26-May-15	29-May-15	HK Working
S9B-T2-B3-3130	OHVD Base Slab - Formwork	10	30-May-15	10-Jun-15	HK Working
S9B-T2-B3-3140	OHVD Base Slab - Rebar Fixing	4	11-Jun-15	15-Jun-15	HK Working
S9B-T2-B3-3150	OHVD Base Slab - Concrete, Curing & Formwork Dismantling	14	16-Jun-15	29-Jun-15	Calendar Day
S9B-T2-B3-3160	OHVD Hanger Wall - Formwork, Rebar & Concrete	3	19-Jun-15	23-Jun-15	HK Working
S9B-T2-B3-3170	Roof - Scaffolding Erection for Roof	7	30-Jun-15	08-Jul-15	HK Working
S9B-T2-B3-3180	Roof - Formwork	9	09-Jul-15	18-Jul-15	HK Working
Bay 4		73	21-Apr-15	18-Jul-15	
S9B-T2-B4-3040	Wall (North) - Rebar Fixing	3	21-Apr-15	23-Apr-15	HK Working
S9B-T2-B4-3050	Wall (Middle) - Formwork & Concrete	3	23-Apr-15	25-Apr-15	HK Working
S9B-T2-B4-3060	Wall (South) - Formwork & Concrete	3	11-May-15	13-May-15	HK Working
S9B-T2-B4-3070	Wall (North) - Formwork & Concrete	3	11-May-15	13-May-15	HK Working
S9B-T2-B4-3080	Wall (Middle) - Curing & Formwork Removal	3	26-Apr-15	28-Apr-15	Calendar Day
S9B-T2-B4-3090	Wall (South) - Curing & Formwork Removal	3	14-May-15	16-May-15	Calendar Day
S9B-T2-B4-3100	Wall (North) - Curing & Formwork Removal	3	14-May-15	16-May-15	Calendar Day
S9B-T2-B4-3110	OHVD Base Slab - Scaffolding Erection	9	26-May-15	04-Jun-15	HK Working
S9B-T2-B4-3120	OHVD Base Slab - Waterproofing to Upper Side Wall	4	05-Jun-15	09-Jun-15	HK Working
S9B-T2-B4-3130	OHVD Base Slab - Formwork	10	10-Jun-15	22-Jun-15	HK Working
S9B-T2-B4-3140	OHVD Base Slab - Rebar Fixing	4	23-Jun-15	26-Jun-15	HK Working
S9B-T2-B4-3150	OHVD Base Slab - Concrete, Curing & Formwork Dismantling	14	27-Jun-15	10-Jul-15	Calendar Day
S9B-T2-B4-3160	OHVD Hanger Wall - Formwork, Rebar & Concrete	3	30-Jun-15	03-Jul-15	HK Working
S9B-T2-B4-3170	Roof - Scaffolding Erection for Roof	7	11-Jul-15	18-Jul-15	HK Working
Bay 5		76	21-Apr-15	22-Jul-15	
S9B-T2-B5-3010	Wall (Middle) - Rebar Fixing	4	21-Apr-15	24-Apr-15	HK Working
S9B-T2-B5-3030	Wall (South) - Rebar Fixing	3	21-Apr-15	23-Apr-15	HK Working
S9B-T2-B5-3040	Wall (North) - Rebar Fixing	3	21-Apr-15	23-Apr-15	HK Working
S9B-T2-B5-3050	Wall (Middle) - Formwork & Concrete	3	29-Apr-15	02-May-15	HK Working
S9B-T2-B5-3060	Wall (South) - Formwork & Concrete	3	18-May-15	20-May-15	HK Working
S9B-T2-B5-3070	Wall (North) - Formwork & Concrete	3	18-May-15	20-May-15	HK Working
S9B-T2-B5-3080	Wall (Middle) - Curing & Formwork Removal	3	03-May-15	05-May-15	Calendar Day
S9B-T2-B5-3090	Wall (South) - Curing & Formwork Removal	3	21-May-15	23-May-15	Calendar Day
S9B-T2-B5-3100	Wall (North) - Curing & Formwork Removal	3	21-May-15	23-May-15	Calendar Day
S9B-T2-B5-3110	OHVD Base Slab - Scaffolding Erection	9	05-Jun-15	15-Jun-15	HK Working
S9B-T2-B5-3120	OHVD Base Slab - Waterproofing to Upper Side Wall	4	16-Jun-15	19-Jun-15	HK Working
S9B-T2-B5-3130	OHVD Base Slab - Formwork	10	22-Jun-15	03-Jul-15	HK Working
S9B-T2-B5-3140	OHVD Base Slab - Rebar Fixing	4	04-Jul-15	08-Jul-15	HK Working
S9B-T2-B5-3150	OHVD Base Slab - Concrete, Curing & Formwork Dismantling	14	09-Jul-15	22-Jul-15	Calendar Day
S9B-T2-B5-3160	OHVD Hanger Wall - Formwork, Rebar & Concrete	3	13-Jul-15	15-Jul-15	HK Working
Bay 6		58	15-May-15	24-Jul-15	
S9B-T2-B6-1010	Base Slab - Waterproofing	4	15-May-15	19-May-15	HK Working
S9B-T2-B6-1020	Base Slab - Formwork & Rebar Fixing	14	20-May-15	05-Jun-15	HK Working
S9B-T2-B6-1030	Base Slab - Concrete & Curing	5	06-Jun-15	10-Jun-15	Calendar Day
S9B-T2-B6-3000	Wall (South) - Waterproofing	4	11-Jun-15	15-Jun-15	HK Working
S9B-T2-B6-3010	Wall (Middle) - Rebar Fixing	4	11-Jun-15	15-Jun-15	HK Working
S9B-T2-B6-3020	Wall (North) - Waterproofing	4	11-Jun-15	15-Jun-15	HK Working



俊和－中國中鐵聯營
CHUN WO - CRGL JOINT VENTURE

Remaining Work
Actual Work
Summary Bar
Critical Remaining Work
Milestone

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

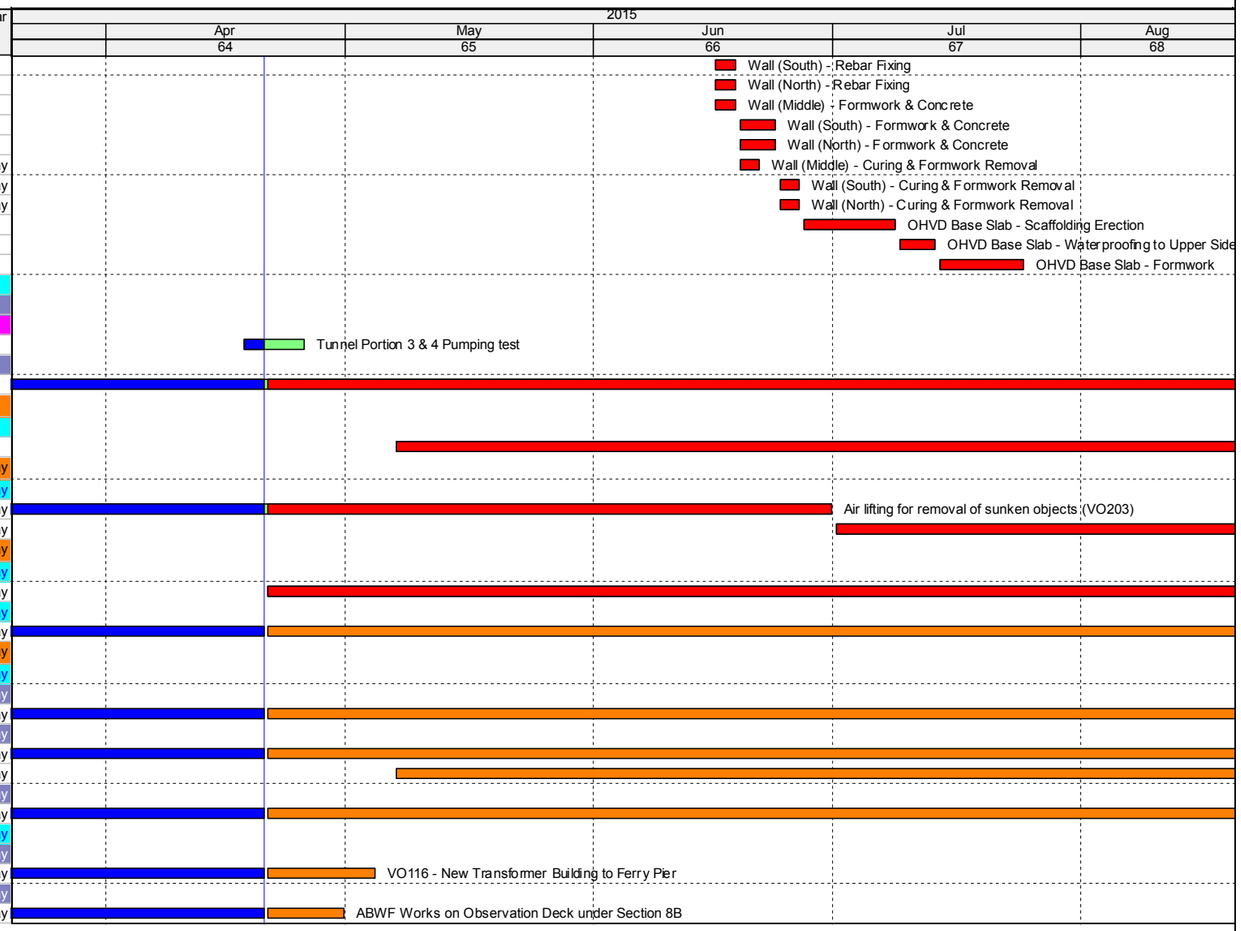
Date	Revision	Checked	Approved
20-Apr-15	3MRP		
20-Sep-14	Revised WP		

TASK filter: 3-Month Rolling.
Print on: 23-Apr-15 09:36

CEDD CONTRACT HK/2009/02

CHUN WO - CRGL JOINT VENTURE

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



俊和－中國中鐵聯營
CHUN WO - CRGL JOINT VENTURE

Remaining Work
Actual Work
Summary Bar
Critical Remaining Work
Milestone

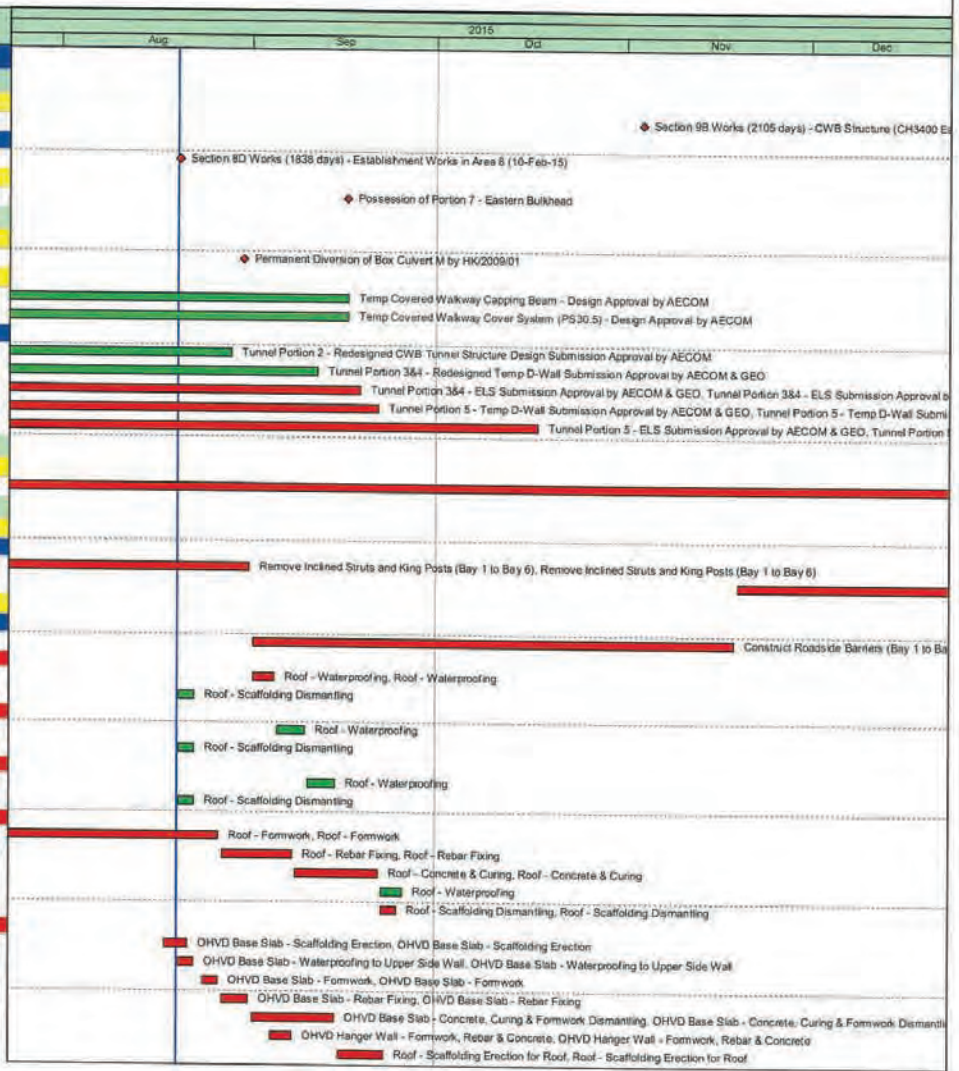
CEDD CONTRACT NO. HK/2009/02
Wan Chai Development Phase II - Central-Wan Chai Bypass at Wan Chai East (Contract 2)
3-MONTH ROLLING PROGRAMME (dd 20-Apr-15)

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

TASK filter: 3-Month Rolling.
Print on: 23-Apr-15 09:36

CEDD CONTRACT HK/2009/02

Activity ID	Activity Name	Orig Dur	Scheduled/ Actual Start	Scheduled/ Actual Finish	Total Float	Calendar
Three Months Rolling Programme 2015-08-20 (dd 20-Aug-15)						
Programme Milestones (Revised up to EOTO No.12 Issued on 15-Jun-15)						
Contractual Completion Dates						
KDC0170	Section 9B Works (2105 days) - CWB Structure (CH3400 Eastward) (3-Nov-15)	0		03-Nov-15*	0	Calendar Day
Soft Landscaping & Establishment Key Dates						
KDC0150	Section 8D Works (1838 days) - Establishment Works in Area 8 (10-Feb-15)	0		20-Aug-15*	-192	Calendar Day
Possession of Site						
PS0070	Possession of Portion 7 - Eastern Bulkhead	0	16-Sep-15*		-60	Calendar Day
Preliminaries						
Interface with Others						
PRE0950	Permanent Diversion of Box Culvert M by HK/2009/01	0		30-Aug-15*	-469	Calendar Day
Critical Submission & Approval						
PRE-SUB-10008	Temp Covered Walkway Capping Beam - Design Approval by AECOM	30	19-Jun-13 A	16-Sep-15	348	Calendar Day
PRE-SUB-10108	Temp Covered Walkway Cover System (PS30.5) - Design Approval by AECOM	30	12-Jun-14 A	16-Sep-15	348	Calendar Day
CSD for CWB Tunnel						
PRE-CSD-2030B	Tunnel Portion 2 - Redesigned CWB Tunnel Structure Design Submission Approval by AEC...	60	16-Nov-13 A	28-Aug-15	67	Calendar Day
PRE-CSD-3000B	Tunnel Portion 3&4 - Redesigned Temp D-Wall Submission Approval by AECOM & GEO	30	08-Jun-13 A	11-Sep-15	53	Calendar Day
PRE-CSD-3010B	Tunnel Portion 3&4 - ELS Submission Approval by AECOM & GEO	60	17-Jan-14 A	18-Sep-15	-316	Calendar Day
PRE-CSD-5000B	Tunnel Portion 5 - Temp D-Wall Submission Approval by AECOM & GEO	60	15-Aug-13 A	21-Sep-15	-389	Calendar Day
PRE-CSD-5010B	Tunnel Portion 5 - ELS Submission Approval by AECOM & GEO	60	09-Apr-15 A	17-Oct-15	-363	Calendar Day
Section 3 of the Works - Reprovisioning of Government Helipad and Public Toilet						
Outstanding Works						
S3-0070-1499	Reinstatement of armour rock, retaining walls & new covered walkway along Expo Drive East	254	11-Aug-12 A	01-May-16*	-287	Calendar Day
Section 9B of the Works - CWB Tunnel Structure (CH3400 - CH3796)						
Tunnel Portion 1 (CH3500-CH3630)						
CWB Structural Works						
S9B-T1-4600	Remove Inclined Struts and King Posts (Bay 1 to Bay 6)	45	29-Jun-15 A	31-Aug-15	-43	HK Working Day
S9B-T1-5100	Construct Roadside Barriers (Bay 1 to Bay 6)	30	19-Nov-15	23-Dec-15	-43	HK Working Day
Tunnel Portion 2 (CH3425-CH3500)						
CWB Structural Works						
S9B-T2-5100	Construct Roadside Barriers (Bay 1 to Bay 6)	65	01-Sep-15	18-Nov-15	-43	HK Working Day
Bay 1						
S9B-T2-B1-3260	Roof - Waterproofing	4	01-Sep-15*	04-Sep-15	-23	HK Working Day
S9B-T2-B1-3270	Roof - Scaffolding Dismantling	3	20-Aug-15	22-Aug-15	14	HK Working Day
Bay 2						
S9B-T2-B2-3210	Roof - Waterproofing	4	05-Sep-15	09-Sep-15	93	HK Working Day
S9B-T2-B2-3220	Roof - Scaffolding Dismantling	3	20-Aug-15	22-Aug-15	14	HK Working Day
Bay 3						
S9B-T2-B3-3210	Roof - Waterproofing	4	10-Sep-15	14-Sep-15	93	HK Working Day
S9B-T2-B3-3220	Roof - Scaffolding Dismantling	3	20-Aug-15	22-Aug-15	14	HK Working Day
Bay 4						
S9B-T2-B4-3180	Roof - Formwork	9	19-Jul-15 A	26-Aug-15	-14	HK Working Day
S9B-T2-B4-3190	Roof - Rebar Fixing	10	27-Aug-15	07-Sep-15	-14	HK Working Day
S9B-T2-B4-3200	Roof - Concrete & Curing	14	08-Sep-15	21-Sep-15	-17	Calendar Day
S9B-T2-B4-3210	Roof - Waterproofing	4	22-Sep-15	25-Sep-15	83	HK Working Day
S9B-T2-B4-3220	Roof - Scaffolding Dismantling	3	22-Sep-15	24-Sep-15	-14	HK Working Day
Bay 5						
S9B-T2-B5-3110	OHVD Base Slab - Scaffolding Erection	4	18-Aug-15 A	21-Aug-15	-46	HK Working Day
S9B-T2-B5-3120	OHVD Base Slab - Waterproofing to Upper Side Wall	3	20-Aug-15	22-Aug-15	-46	HK Working Day
S9B-T2-B5-3130	OHVD Base Slab - Formwork	3	24-Aug-15	26-Aug-15	-46	HK Working Day
S9B-T2-B5-3140	OHVD Base Slab - Rebar Fixing	4	27-Aug-15	31-Aug-15	-46	HK Working Day
S9B-T2-B5-3150	OHVD Base Slab - Concrete, Curing & Formwork Dismantling	14	01-Sep-15	14-Sep-15	-54	Calendar Day
S9B-T2-B5-3160	OHVD Hanger Wall - Formwork, Rebar & Concrete	3	04-Sep-15	07-Sep-15	-40	HK Working Day
S9B-T2-B5-3170	Roof - Scaffolding Erection for Roof	7	15-Sep-15	22-Sep-15	-46	HK Working Day



◆ Milestone
◆ Critical Milestones
Current Works
Critical Works

CHUN WO - CRGL

JOINT VENTURE

CEDD CONTRACT NO. HK/2009/02

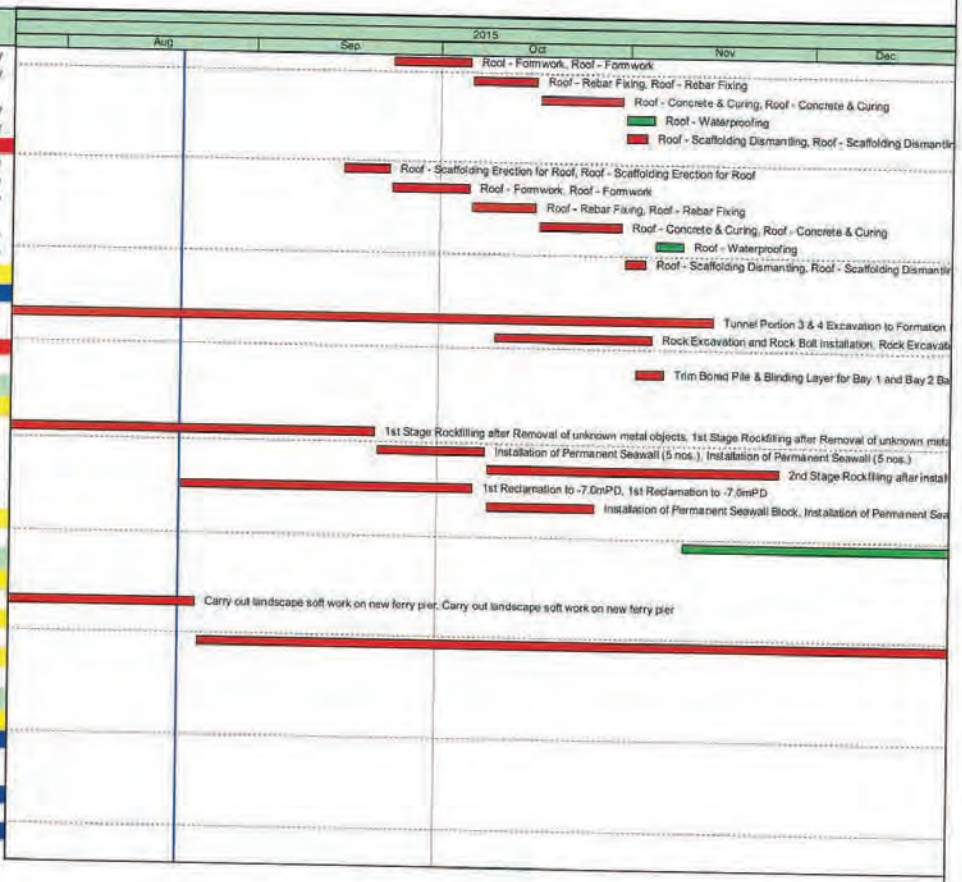
WD II - Central Wanchai Bypass at Wan Chai East (Contract 2)

3-MONTH ROLLING PROGRAMME (dd 20-Aug-15)

Date	Revision	Checked	Approved
20-Aug-15	3MRP		

CEDD CONTRACT HK/2009/02

Activity ID	Activity Name	Orig Dur	Scheduled/ Actual Start	Scheduled/ Actual Finish	Total Float	Calendar
S9B-T2-B5-3180	Roof - Formwork	9	23-Sep-15	05-Oct-15	-46	HK Working Day
S9B-T2-B5-3190	Roof - Rebar Fixing	10	06-Oct-15	16-Oct-15	-46	HK Working Day
S9B-T2-B5-3200	Roof - Concrete & Curing	14	17-Oct-15	30-Oct-15	-56	Calendar Day
S9B-T2-B5-3210	Roof - Waterproofing	4	31-Oct-15	04-Nov-15	48	HK Working Day
S9B-T2-B5-3220	Roof - Scaffolding Dismantling	3	31-Oct-15	03-Nov-15	-45	HK Working Day
Bay 6						
S9B-T2-B6-3170	Roof - Scaffolding Erection for Roof	7	15-Sep-15	22-Sep-15	-46	HK Working Day
S9B-T2-B6-3180	Roof - Formwork	9	23-Sep-15	05-Oct-15	-46	HK Working Day
S9B-T2-B6-3190	Roof - Rebar Fixing	10	06-Oct-15	16-Oct-15	-46	HK Working Day
S9B-T2-B6-3200	Roof - Concrete & Curing	14	17-Oct-15	30-Oct-15	-56	Calendar Day
S9B-T2-B6-3210	Roof - Waterproofing	4	05-Nov-15	09-Nov-15	48	HK Working Day
S9B-T2-B6-3220	Roof - Scaffolding Dismantling	3	31-Oct-15	03-Nov-15	-45	HK Working Day
Tunnel Portion 3 & Tunnel Portion 4 (CH3630-CH3790)						
CWB Structural Works						
S9B-T34-2000B	Tunnel Portion 3 & 4 Excavation to Formation Level (200,000m3 soil and rock@1100m3/d) &...	182	13-Feb-15 A	14-Nov-15	-298	HK Working Day
S9B-T34-3500	Rock Excavation and Rock Bolt Installation	21	10-Oct-15	04-Nov-15	-255	HK Working Day
Bay 1						
S9B-T34-B1-1000	Trim Bored Pile & Blinding Layer for Bay 1 and Bay 2 Base Slab	5	02-Nov-15	06-Nov-15	-365	Calendar Day
Section 11 of the Works - Remainder of Works						
Marine Works at WCR3						
S11-R3-1300	1st Stage Rockfilling after Removal of unknown metal objects	40	14-Jul-15 A	20-Sep-15	-602	Calendar Day
S11-R3-1400	Installation of Permanent Seawall (5 nos.)	14	21-Sep-15	08-Oct-15	-480	HK Working Day
S11-R3-1500	2nd Stage Rockfilling after installation of Caisson Seawall	40	09-Oct-15	25-Nov-15	-480	HK Working Day
S11-R3-1600	1st Reclamation to -7.0mPD	39	20-Aug-15	06-Oct-15	-438	HK Working Day
S11-R3-1700	Installation of Permanent Seawall Block	14	09-Oct-15	26-Oct-15	-424	HK Working Day
Formation and Hard Landscaping Works (except Area 10)						
S11-FM-2000A	Tunnel Portion 2 Backfilling (35,000m3; 350m3/d)	95	10-Nov-15	12-Feb-16	64	Calendar Day
Soft Landscaping & Establishment Works						
Section 8C of the Works - Landscape Softworks in Area 8						
S8C-0010	Carry out landscape soft work on new ferry pier	90	07-Oct-14 A	22-Aug-15	-560	Calendar Day
Section 8D of the Works - Establishment Works in Area 8						
S8D-0010	Carry out establishment work on new ferry pier	365	23-Aug-15	21-Aug-16	-560	Calendar Day
Section 12 of the Works - Protection and Preservation of Existing Trees						
S12-0010	Protection and preservation of existing trees	2375	24-Feb-10 A	29-Aug-16	0	Calendar Day
SUMMARY PROGRAMME						
CWB Tunnel Construction & Remaining Works (Section 9A, 9B, 10 & 11)						
CWB Tunnel Works in WCR2						
SUM-CWB-23000	CWB Tunnel Portion 2 Construction	261	19-Jan-15 A	30-Oct-15	-56	Calendar Day
SUM-CWB-24000	Backfilling for Tunnel Portion 2	95	10-Nov-15	12-Feb-16	64	Calendar Day
CWB Tunnel Works in WCR3						
SUM-CWB-30000C	Reclamation at WCR3	174	14-Jul-15 A	28-Jan-16	-600	Calendar Day
CWB Tunnel Works in WCR4/TWCR4						
SUM-CWB-42000	Pump Test & Excavation for Tunnel Portion 3&4	230	13-Feb-15 A	14-Nov-15	-373	Calendar Day



◆ Milestone
◆ Critical Milestones
Current Works
Critical Works

CHUN WO - CRGL

JOINT VENTURE

CEDD CONTRACT NO. HK/2009/02

WD II - Central Wanchai Bypass at Wan Chai East (Contract 2)

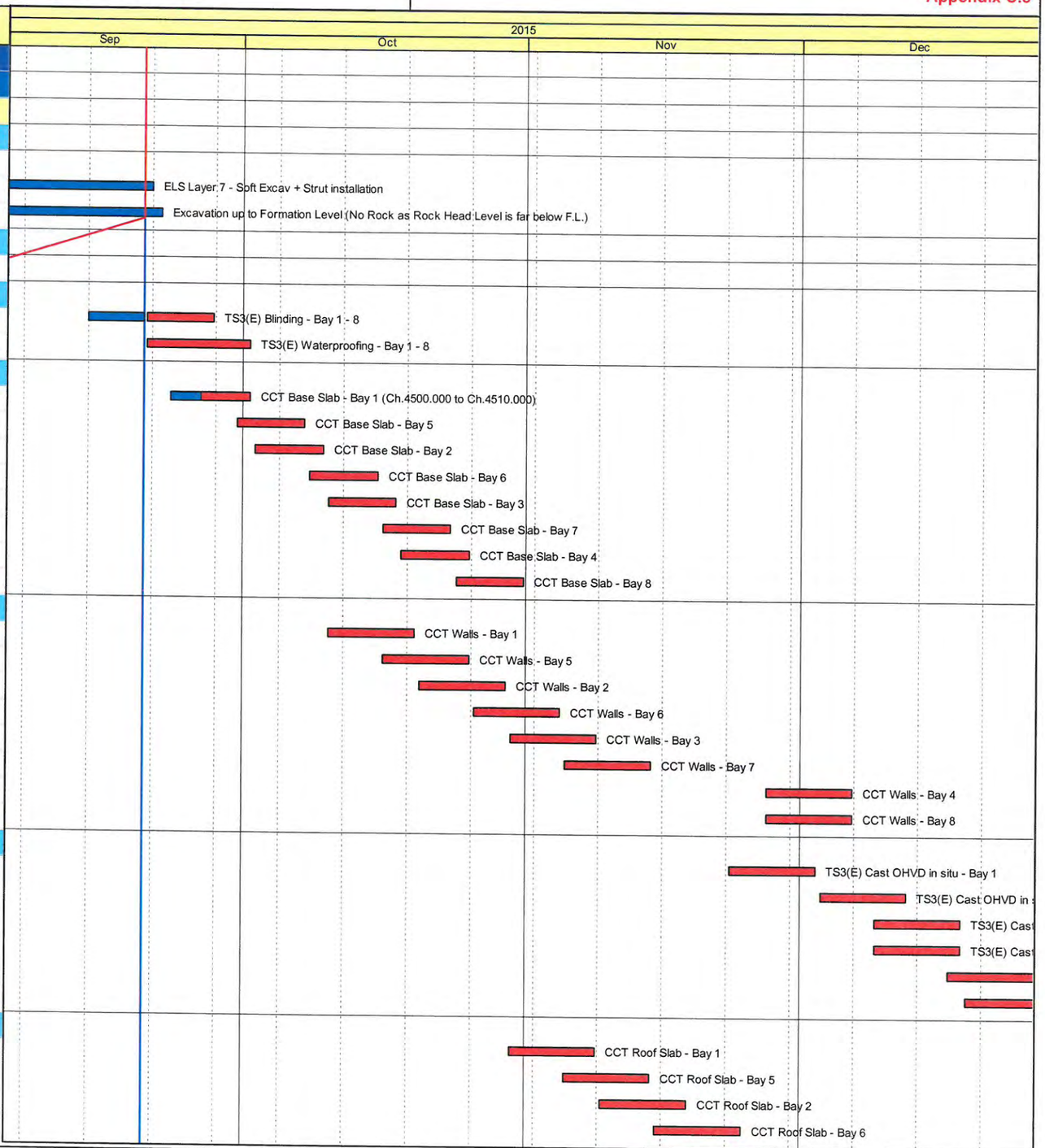
3-MONTH ROLLING PROGRAMME (dd 20-Aug-15)

Date	Revision	Checked	Approved
20-Aug-15	3MRP		

SR8_DWP_06(A)-MU30-1

SR8 - Layout for 3MRP_2105_09

Activity ID	Activity Name	Original Duration	Start	Finish
DWP-06 (A) - Three Months Rolling Programme_updated up to 20-Sep-15				
Works in TS3				
Works in TS3-East				
ELS				
TS3-East ELS Works				
TS3E_5660	ELS Layer 7 - Soft Excav + Strut installation	10	24-Aug-15 A	21-Sep-15 A
TS3E_5670	Excavation up to Formation Level (No Rock as Rock Head Level is far below F.L.)	6	03-Sep-15 A	22-Sep-15 A
Cut & Cover Tunnel Structure				
TS3-East CCT - Ch.4500.000 to Ch.4582.140				
TS3 East CCT - Blinding + Waterproofing				
TS3E_6515	TS3(E) Blinding - Bay 1 - 8	8	14-Sep-15 A	27-Sep-15
TS3E_6525	TS3(E) Waterproofing - Bay 1 - 8	12	22-Sep-15 A	01-Oct-15
TS3 East CCT - Base Slab + Drainage System				
TS3E_6570	CCT Base Slab - Bay 1 (Ch.4500.000 to Ch.4510.000)	8	23-Sep-15 A	01-Oct-15
TS3E_6610	CCT Base Slab - Bay 5	8	30-Sep-15	07-Oct-15
TS3E_6580	CCT Base Slab - Bay 2	8	02-Oct-15	09-Oct-15
TS3E_6620	CCT Base Slab - Bay 6	8	08-Oct-15	15-Oct-15
TS3E_6590	CCT Base Slab - Bay 3	8	10-Oct-15	17-Oct-15
TS3E_6630	CCT Base Slab - Bay 7	8	16-Oct-15	23-Oct-15
TS3E_6600	CCT Base Slab - Bay 4	8	18-Oct-15	25-Oct-15
TS3E_6640	CCT Base Slab - Bay 8	8	24-Oct-15	31-Oct-15
TS3 East CCT - Walls + Removal of Struts 7 & 8				
TS3E_6650	CCT Walls - Bay 1	10	10-Oct-15	19-Oct-15
TS3E_6690	CCT Walls - Bay 5	10	16-Oct-15	25-Oct-15
TS3E_6660	CCT Walls - Bay 2	10	20-Oct-15	29-Oct-15
TS3E_6700	CCT Walls - Bay 6	10	26-Oct-15	04-Nov-15
TS3E_6670	CCT Walls - Bay 3	10	30-Oct-15	08-Nov-15
TS3E_6710	CCT Walls - Bay 7	10	05-Nov-15	14-Nov-15
TS3E_6680	CCT Walls - Bay 4	10	27-Nov-15	06-Dec-15
TS3E_6720	CCT Walls - Bay 8	10	27-Nov-15	06-Dec-15
TS3-East CCT - OHVD Cast In-Situ				
TS3E_6860	TS3(E) Cast OHVD in situ - Bay 1	10	23-Nov-15	02-Dec-15
TS3E_6870	TS3(E) Cast OHVD in situ - Bay 2	10	03-Dec-15	12-Dec-15
TS3E_6880	TS3(E) Cast OHVD in situ - Bay 3	10	09-Dec-15	18-Dec-15
TS3E_6900	TS3(E) Cast OHVD in situ - Bay 5	10	09-Dec-15	18-Dec-15
TS3E_6890	TS3(E) Cast OHVD in situ - Bay 4	10	17-Dec-15	26-Dec-15
TS3E_6910	TS3(E) Cast OHVD in situ - Bay 6	10	19-Dec-15	28-Dec-15
TS3 East CCT - Roof Slab				
TS3E_6730	CCT Roof Slab - Bay 1	10	30-Oct-15	08-Nov-15
TS3E_6770	CCT Roof Slab - Bay 5	10	05-Nov-15	14-Nov-15
TS3E_6740	CCT Roof Slab - Bay 2	10	09-Nov-15	18-Nov-15
TS3E_6780	CCT Roof Slab - Bay 6	10	15-Nov-15	24-Nov-15



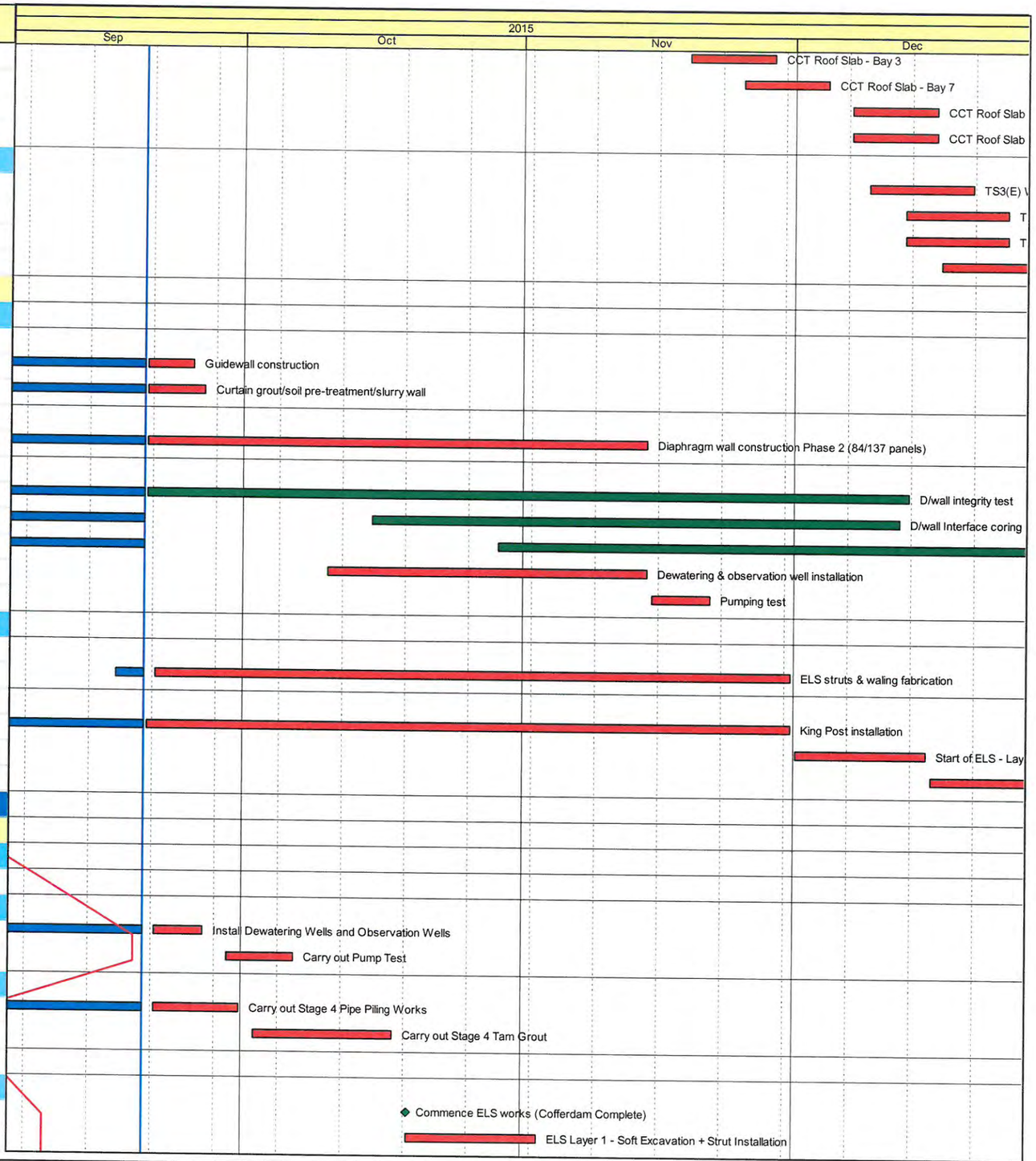
中國建築工程(香港)有限公司
CHINA STATE CONSTRUCTION ENGINEERING (HONG KONG) LTD.

Actual Work
Remaining Work
Critical Remaining Work
Milestone

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

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

Activity ID	Activity Name	Original Duration	Start	Finish
TS3E_6750	CCT Roof Slab - Bay 3	10	19-Nov-15	28-Nov-15
TS3E_6790	CCT Roof Slab - Bay 7	10	25-Nov-15	04-Dec-15
TS3E_6800	CCT Roof Slab - Bay 8	10	07-Dec-15	16-Dec-15
TS3E_6760	CCT Roof Slab - Bay 4	10	07-Dec-15	16-Dec-15
TS3 East CCT - Roof Slab Waterproofing + Screeding				
TS3E_6810	TS3(E) Waterproofing to Roof Slab - Bay 1 to Bay 4	12	09-Dec-15	20-Dec-15
TS3E_6840	TS3(E) Screeding - Bay 1 to Bay 4	12	13-Dec-15	24-Dec-15
TS3E_6820	TS3(E) Waterproofing to Roof Slab - Bay 6 to Bay 8	12	13-Dec-15	24-Dec-15
TS3E_6850	TS3(E) Screeding - Bay 6 to Bay 8	12	17-Dec-15	28-Dec-15
Works in TS3-West				
Diaphragm Wall				
TS3-West Pre-D/wall Works				
TS3W_2540	Guidewall construction	106	11-Feb-15 A	25-Sep-15
TS3W_2530	Curtain grout/soil pre-treatment/slurry wall	137	12-Feb-15 A	26-Sep-15
TS3-West Diaphragm Construction				
TS3W_3120	Diaphragm wall construction Phase 2 (84/137 panels)	152	03-Jun-15 A	14-Nov-15
TS3-West Post D/wall Works				
TS3W_3530	D/wall integrity test	100	04-Jun-15 A	13-Dec-15
TS3W_3510	D/wall Interface coring + grouting	100	06-Jun-15 A	12-Dec-15
TS3W_3520	D/Wall Coring + fissure grouting	100	24-Jun-15 A	01-Jan-16
TS3W_3540	Dewatering & observation well installation	36	10-Oct-15	14-Nov-15
TS3W_3550	Pumping test	7	15-Nov-15	21-Nov-15
ELS & Rock Excavation				
ELS Fabrication Works				
TS3W_4510	ELS struts & waling fabrication	75	17-Sep-15 A	30-Nov-15
TS3-West ELS Works				
TS3W_4515	King Post installation	45	18-May-15 A	30-Nov-15
TS3W_4520	Start of ELS - Layer 1: Soft excavation struts installation	15	01-Dec-15	15-Dec-15
TS3W_4530	Layer 2: Soft excavation struts installation	15	16-Dec-15	30-Dec-15
Works in SR8 (Open Cut Method)				
SR8 - Cofferdam & Cut & Cover Tunnel Works				
SR8 East Bound - (Seaside to Victoria Road / IEC Central Divider)				
TTA Stage 2 - East Bound				
Stage 3 - East Bound (Ref. DRG. No.CDD/SR8/084)				
SR8.EB.1510	Install Dewatering Wells and Observation Wells	6	03-Sep-15 A	26-Sep-15
SR8.EB.1520	Carry out Pump Test	6	29-Sep-15	06-Oct-15
Stage 4 - East Bound (Ref. DRG. No.CDD/SR8/084)				
SR8.EB.1490	Carry out Stage 4 Pipe Piling Works	36	05-Sep-15 A	30-Sep-15
SR8.EB.1500	Carry out Stage 4 Tam Grout	14	02-Oct-15	17-Oct-15
Tunnel Ch.514.500 to Ch.459.000 (East Bound) - ELS / CCT / BF + Reinstatement Works				
ELS Works				
SR8.EB.1610	Commence ELS works (Cofferdam Complete)	0	19-Oct-15	
SR8.EB.1620	ELS Layer 1 - Soft Excavation + Strut Installation	12	19-Oct-15	02-Nov-15



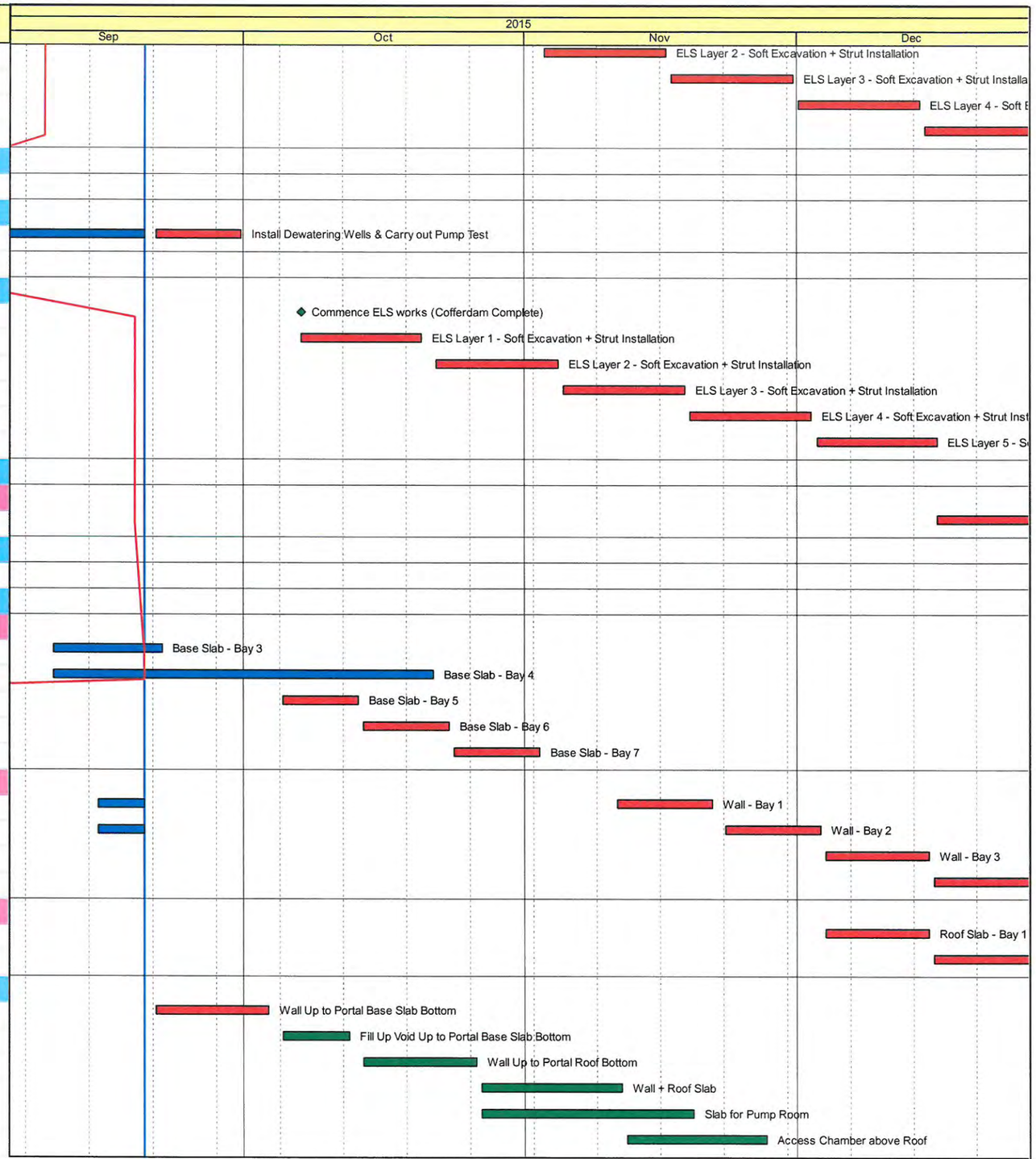
中國建築工程(香港)有限公司
CHINA STATE CONSTRUCTION ENGINEERING (HONG KONG) LTD.

Actual Work
Remaining Work
Critical Remaining Work
Milestone

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

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

Activity ID	Activity Name	Original Duration	Start	Finish
SR8.EB.1621	ELS Layer 2 - Soft Excavation + Strut Installation	12	03-Nov-15	16-Nov-15
SR8.EB.1622	ELS Layer 3 - Soft Excavation + Strut Installation	12	17-Nov-15	30-Nov-15
SR8.EB.1623	ELS Layer 4 - Soft Excavation + Strut Installation	12	01-Dec-15	14-Dec-15
SR8.EB.1624	ELS Layer 5 - Soft Excavation + Strut Installation	12	15-Dec-15	30-Dec-15
SR8 West Bound - Ch. 459.000 to 385.000 (Victoria Road / IEC Central Divider)				
TTA Stage 2 - West Bound				
Stage 3 - West Bound (Ref. DRG. No.CDD/SR8/087)				
SR8.WB.3060	Install Dewatering Wells & Carry out Pump Test	20	03-Sep-15 A	30-Sep-15
Tunnel Ch.459.000 to 385.000 (West Bound) - ELS / CCT/ BF+Reinstatement Works				
West Bound - ELS				
SR8.WB.5070	Commence ELS works (Cofferdam Complete)	0	07-Oct-15	
SR8.WB.5080	ELS Layer 1 - Soft Excavation + Strut Installation	12	07-Oct-15	20-Oct-15
SR8.WB.5130	ELS Layer 2 - Soft Excavation + Strut Installation	12	22-Oct-15	04-Nov-15
SR8.WB.5140	ELS Layer 3 - Soft Excavation + Strut Installation	12	05-Nov-15	18-Nov-15
SR8.WB.5150	ELS Layer 4 - Soft Excavation + Strut Installation	12	19-Nov-15	02-Dec-15
SR8.WB.5160	ELS Layer 5 - Soft Excavation + Strut Installation	12	03-Dec-15	16-Dec-15
West Bound - CCT Structural Works				
Blinding + Waterproofing				
SR8.WB.5090	Blinding for Bay 1 to Bay 8	9	16-Dec-15	29-Dec-15
SR8 Ch.385.000 to Ch.317.500 - (Inside Victoria Park to Tunnel Portal)				
SR8 Tunnel - ELS / CCT / BF Works (7 Bays Ch. 385.000 to Ch.317.500)				
Portal Structure				
Base Slab + Drainage				
SR8.VP.5120	Base Slab - Bay 3	8	10-Sep-15 A	22-Sep-15 A
SR8.VP.5130	Base Slab - Bay 4	8	10-Sep-15 A	22-Oct-15 A
SR8.VP.5140	Base Slab - Bay 5	8	05-Oct-15	13-Oct-15
SR8.VP.5150	Base Slab - Bay 6	8	14-Oct-15	23-Oct-15
SR8.VP.5160	Base Slab - Bay 7	8	24-Oct-15	02-Nov-15
Wall + Removal of Strut				
SR8.VP.5170	Wall - Bay 1	10	15-Sep-15 A	21-Nov-15
SR8.VP.5180	Wall - Bay 2	10	15-Sep-15 A	03-Dec-15
SR8.VP.5190	Wall - Bay 3	10	04-Dec-15	15-Dec-15
SR8.VP.5200	Wall - Bay 4	10	16-Dec-15	29-Dec-15
Roof Slab				
SR8.VP.5240	Roof Slab - Bay 1	10	04-Dec-15	15-Dec-15
SR8.VP.5250	Roof Slab - Bay 2	10	16-Dec-15	29-Dec-15
Pump Sump E				
SR8.VP.5370	Wall Up to Portal Base Slab Bottom	10	21-Sep-15	03-Oct-15
SR8.VP.5380	Fill Up Void Up to Portal Base Slab Bottom	7	05-Oct-15	12-Oct-15
SR8.VP.5390	Wall Up to Portal Roof Bottom	10	14-Oct-15	26-Oct-15
SR8.VP.5400	Wall + Roof Slab	14	27-Oct-15	11-Nov-15
SR8.VP.5440	Slab for Pump Room	21	27-Oct-15	19-Nov-15
SR8.VP.5410	Access Chamber above Roof	14	12-Nov-15	27-Nov-15



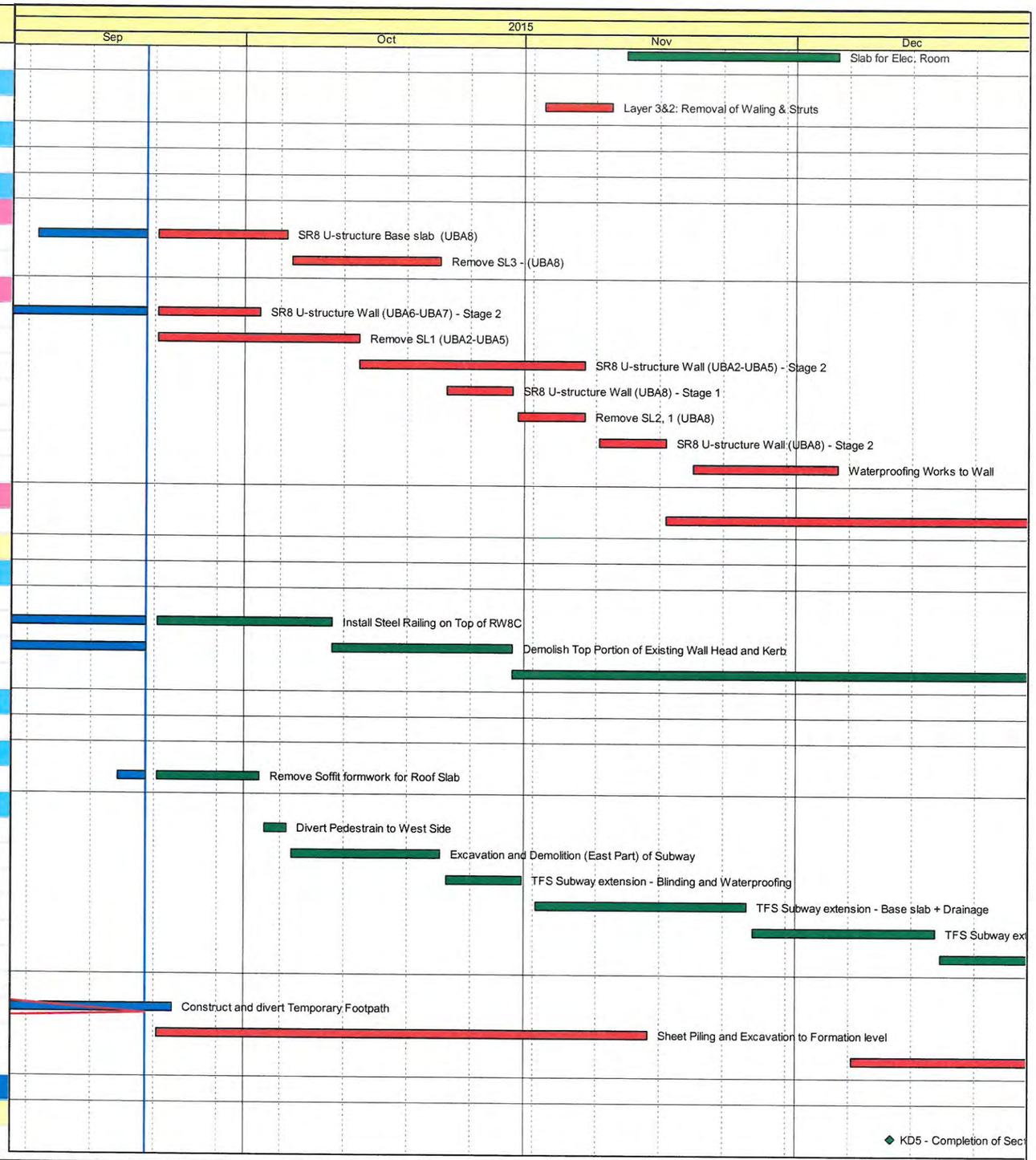
中國建築工程(香港)有限公司
CHINA STATE CONSTRUCTION ENGINEERING (HONG KONG) LTD.

Actual Work
Remaining Work
Critical Remaining Work
Milestone

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

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

Activity ID	Activity Name	Original Duration	Start	Finish
SR8.VP.5450	Slab for Elec. Room	21	12-Nov-15	05-Dec-15
Backfill & Reinstatement Works Including Removal of Strutingss				
SR8.VP.5050	Layer 3&2: Removal of Waling & Struts	7	03-Nov-15	10-Nov-15
SR8 Ch 317.500 to Ch 210.000 - U-Structure & Slab (Victoria Park)				
RC CCT & Backfill Ch317.5000 to Ch240.000				
Structure				
Base Slab				
SR8_1812	SR8 U-structure Base slab (UBA8)	24	08-Sep-15 A	05-Oct-15
SR8_1813	Remove SL3 - (UBA8)	14	06-Oct-15	22-Oct-15
Wall				
SR8_1850B	SR8 U-structure Wall (UBA6-UBA7) - Stage 2	14	10-Apr-15 A	02-Oct-15
SR8_1815A	Remove SL1 (UBA2-UBA5)	18	21-Sep-15	13-Oct-15
SR8_1815B	SR8 U-structure Wall (UBA2-UBA5) - Stage 2	21	13-Oct-15	07-Nov-15
SR8_2060	SR8 U-structure Wall (UBA8) - Stage 1	7	23-Oct-15	30-Oct-15
SR8_2100	Remove SL2, 1 (UBA8)	7	31-Oct-15	07-Nov-15
SR8_2110	SR8 U-structure Wall (UBA8) - Stage 2	7	09-Nov-15	16-Nov-15
SR8_1950	Waterproofing Works to Wall	14	19-Nov-15	05-Dec-15
Utility Through				
SR8_2050	Utility Trough	48	16-Nov-15	14-Jan-16
Tsing Fung St - RW & Subway Extension & Toe Wall at Hing Fat St				
Ret. Wall & TF Subway Extension (Portion V)				
Retaining Wall RW8C at Tsing Fung Street (Portion V)				
VP_1770	Install Steel Railing on Top of RW8C	14	20-May-15 A	10-Oct-15
VP_1390	Demolish Top Portion of Existing Wall Head and Kerb	18	05-Jun-15 A	30-Oct-15
VP_1400	Road Formation - Subbase + Kerb + U-shape Channel	48	30-Oct-15	28-Dec-15
Retaining Wall + Toe Wall at Hing Fat Street				
Subway Extension at Tsing Fung Street (Portion VIII)				
West Side				
VP_1375.70	Remove Soffit formwork for Roof Slab	32	17-Sep-15 A	02-Oct-15
East Side				
VP_1375.60	Divert Pedestrain to West Side	2	03-Oct-15	05-Oct-15
VP_1375.60.10	Excavation and Demolition (East Part) of Subway	14	06-Oct-15	22-Oct-15
VP_1375.60.20	TFS Subway extension - Blinding and Waterproofing	8	23-Oct-15	31-Oct-15
VP_1375.60.30	TFS Subway extension - Base slab + Drainage	21	02-Nov-15	25-Nov-15
VP_1375.60.40	TFS Subway extension - Walls	18	26-Nov-15	16-Dec-15
VP_1375.60.50	TFS Subway extension - Roof Slab	21	17-Dec-15	13-Jan-16
RC Works - Toe Wall (RW8E)				
VP_6152	Construct and divert Temporary Footpath	36	20-May-15 A	23-Sep-15 A
VP_6160	Sheet Piling and Excavation to Formation level	45	21-Sep-15	14-Nov-15
VP_6180	Blinding layer	36	07-Dec-15	20-Jan-16
Works in Victoria Park				
Re-Provisioning Works				
VP_1560	KD5 - Completion of Section 2 of Works (BG & Pavilion)	0		11-Dec-15



中國建築工程(香港)有限公司
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Actual Work
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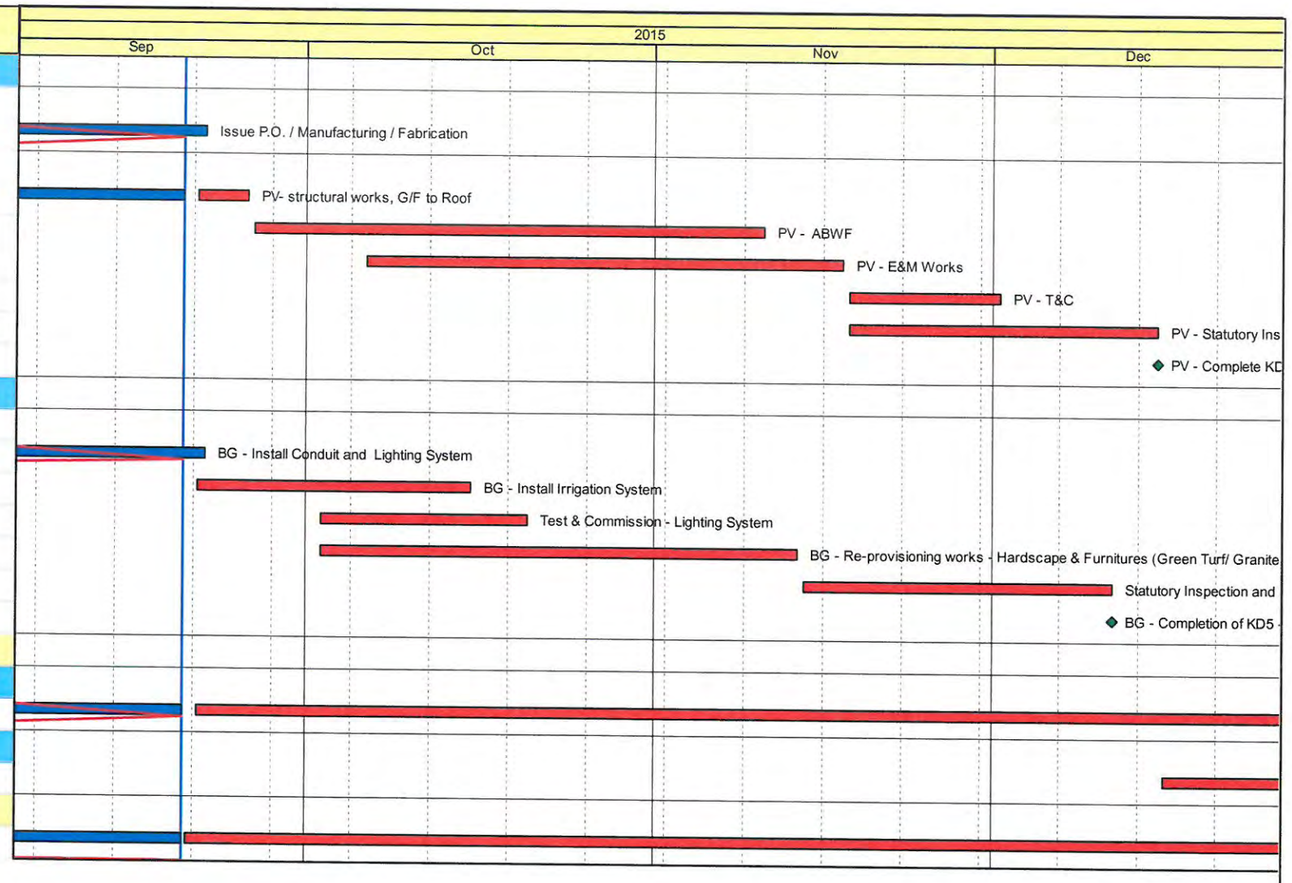
Date	Revision	Checked	Approved
20-Sep-15	Updated to 20th Sep 2015	DML/WC	

Activity ID	Activity Name	Original Duration	Start	Finish
Pavilion				
Materials Submission				
VP_6660	Issue P.O. / Manufacturing / Fabrication	48	20-Apr-15 A	22-Sep-15 A
Construction Works - BG Pavillion				
VP_1380	PV- structural works, G/F to Roof	24	04-Sep-15 A	25-Sep-15
VP_1420	PV - ABWF	36	26-Sep-15	10-Nov-15
VP_1430	PV - E&M Works	36	06-Oct-15	17-Nov-15
VP_1460	PV - T&C	12	18-Nov-15	01-Dec-15
VP_1470	PV - Statutory Inspections & Certification	24	18-Nov-15	15-Dec-15
VP_1480	PV - Complete KD5 - Works in Section 2	0		15-Dec-15
Bowling Green				
Construction Works				
VP_1740	BG - Install Conduit and Lighting System	36	18-Jun-15 A	22-Sep-15 A
VP_1730	BG - Install Irrigation System	24	21-Sep-15 A	15-Oct-15
VP_1745	Test & Commission - Lighting System	16	02-Oct-15	20-Oct-15
VP_1450	BG - Re-provisioning works - Hardscape & Furnitures (Green Turf/ Granite Tiles)	36	02-Oct-15	13-Nov-15
VP_1455	Statutory Inspection and Certification	24	14-Nov-15	11-Dec-15
VP_1490	BG - Completion of KD5 - Section 2	0		11-Dec-15
Establishment Works for Landscape Softworks				
KD11 - Section 7A: Portion XIV & XV (Victoria Park Open Space)				
EW_1000	Establishment Works - for Landscape Softworks and transplanted trees in Portion XIV & XV	901	23-Feb-15 A	14-Dec-17
KD12 - Section 7B: Portion VI & VII (Reprov. Bowling Green Area)				
EW_1010	Establishment Works - for Landscape Softworks and transplanted trees in Portion VI & VII	365	16-Dec-15	14-Dec-16
Preservation and Protection of Trees				
PPT_0000	Preservation and Protection of Existing Trees	1088	21-Mar-13 A	20-Nov-16



中國建築工程(香港)有限公司
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Actual Work
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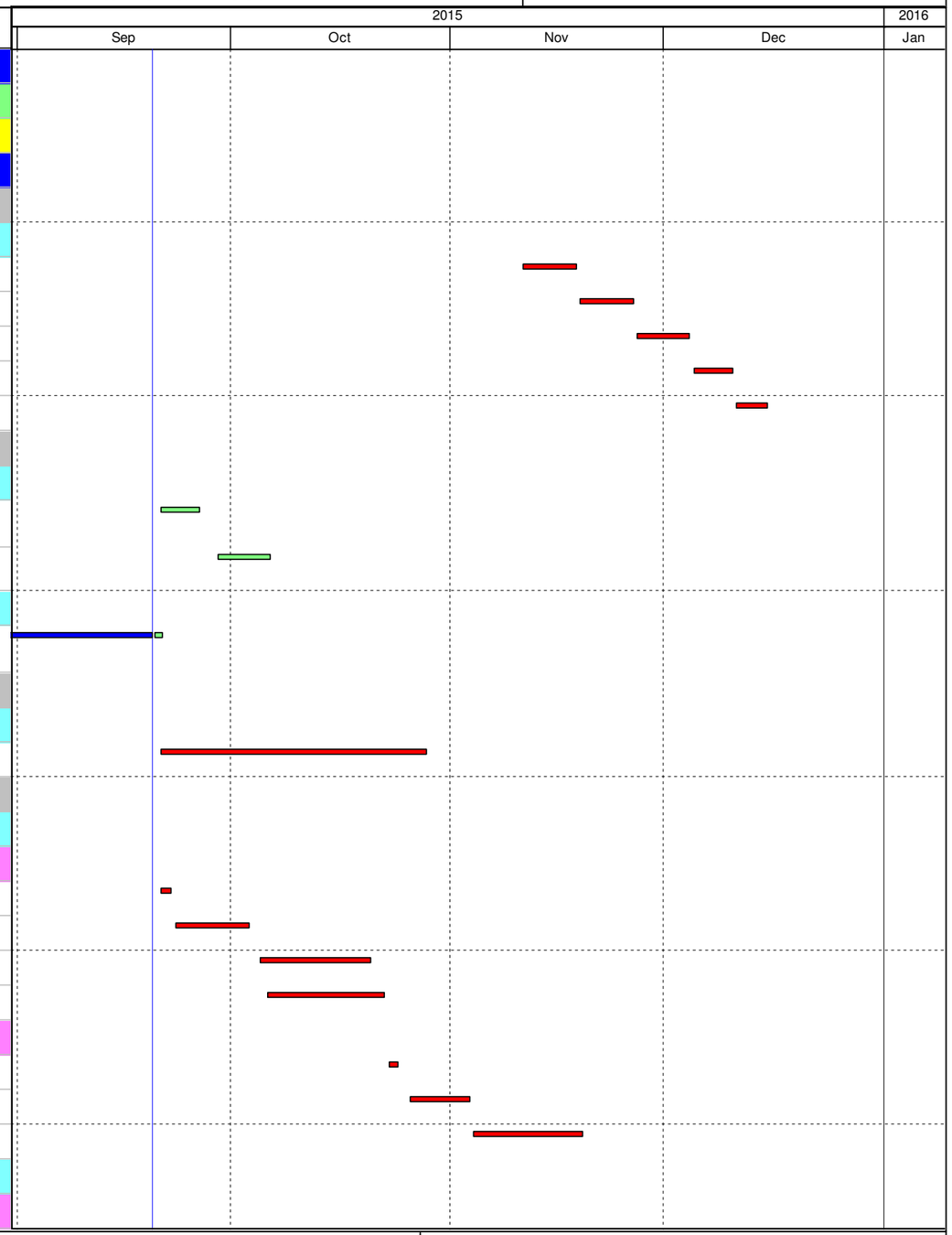
Contract No. HY/2010/08: Central - Wanchai Bypass Tunnel +(Slip Road 8 Section) - 3 Months Rolling Progamme

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

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

Activity ID	Activity Name	Start	Finish	Remaining Duration	Activity % Complete
Total		01-Jan-15 A	28-Dec-15	80	
HK/2012/08 Revised Works Programme Rev.5_Updated as of 20-Sep-15		01-Jan-15 A	28-Dec-15	80	
Dredging and Reclamation		21-Aug-15 A	15-Dec-15	71	
Marine Work Construction		21-Aug-15 A	15-Dec-15	71	
Zone A1		11-Nov-15	15-Dec-15	30	
Seawall Construction - Zone A1		11-Nov-15	15-Dec-15	30	
MAR10310	Zone A1 - seawall - Type 3 - fill rock mound	11-Nov-15	18-Nov-15	8	0%
MAR10312	Zone A1 - seawall - Type 3 - lay toe block and leveling stone	19-Nov-15	26-Nov-15	8	0%
MAR10320	Zone A1 - seawall - install block seawall type 3	27-Nov-15	04-Dec-15	8	0%
MAR10340	Zone A1 - seawall - place type A behind seawall Type 3	05-Dec-15	10-Dec-15	6	0%
MAR10345	Zone A1 - seawall - lay geotextile and filter behind seawall Type 3	11-Dec-15	15-Dec-15	4	0%
Zone A2		21-Aug-15 A	06-Oct-15	12	
Seawall Construction - Zone A2		21-Sep-15	06-Oct-15	12	
MAR10815	Zone A2 - seawall - place type A behind seawall Type 4 and Type 13 up to -1.5 mPD	21-Sep-15	26-Sep-15	6	0%
MAR10817	Zone A2 - seawall - lay geotextile and filter behind seawall Type 4 and Type 13 up to -1.5 mPD	29-Sep-15	06-Oct-15	6	0%
Filling - Zone A2		21-Aug-15 A	21-Sep-15	1	
MAR20365	Zone A2(2) - Public Fill -4.0 to +4.0mPD (behind Type 4 & 13 for temp channel outlet)	21-Aug-15 A	21-Sep-15	1	95%
Zone C		21-Sep-15	28-Oct-15	30	
Dredging - Zone C		21-Sep-15	28-Oct-15	30	
MAR11520	Zone C - Cut existing pipe pile (2 nos.)	21-Sep-15	28-Oct-15	30	0%
Zone D		21-Sep-15	15-Dec-15	71	
Seawall Construction - Zone D		21-Sep-15	19-Nov-15	49	
Seawall 10 & 11		21-Sep-15	22-Oct-15	25	
MAR20582	Zone D - fill rock mound for Seawall 10 & 11	21-Sep-15	22-Sep-15	2	0%
MAR20584	Zone D - lay toe block and level stone for Seawall 10 & 11	23-Sep-15	03-Oct-15	8	0%
MAR20605	Zone D - Install block seawall 10	05-Oct-15	20-Oct-15	14	0%
MAR20610	Zone D - Install block seawall 11	06-Oct-15	22-Oct-15	14	0%
Seawall 9		23-Oct-15	19-Nov-15	24	
MAR11858	Zone D - fill rock mound for Seawall 9	23-Oct-15	24-Oct-15	2	0%
MAR11859	Zone D - lay toe block and level stone for Seawall 9	26-Oct-15	03-Nov-15	8	0%
MAR12300	Zone D - Install block seawall 9	04-Nov-15	19-Nov-15	14	0%
Filling - Zone D		19-Nov-15	15-Dec-15	23	
Filling at North		19-Nov-15	15-Dec-15	23	



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

Project Star :22-Jan-13
Project End: 21-Jul-18

Date Date: 20-Sep-15

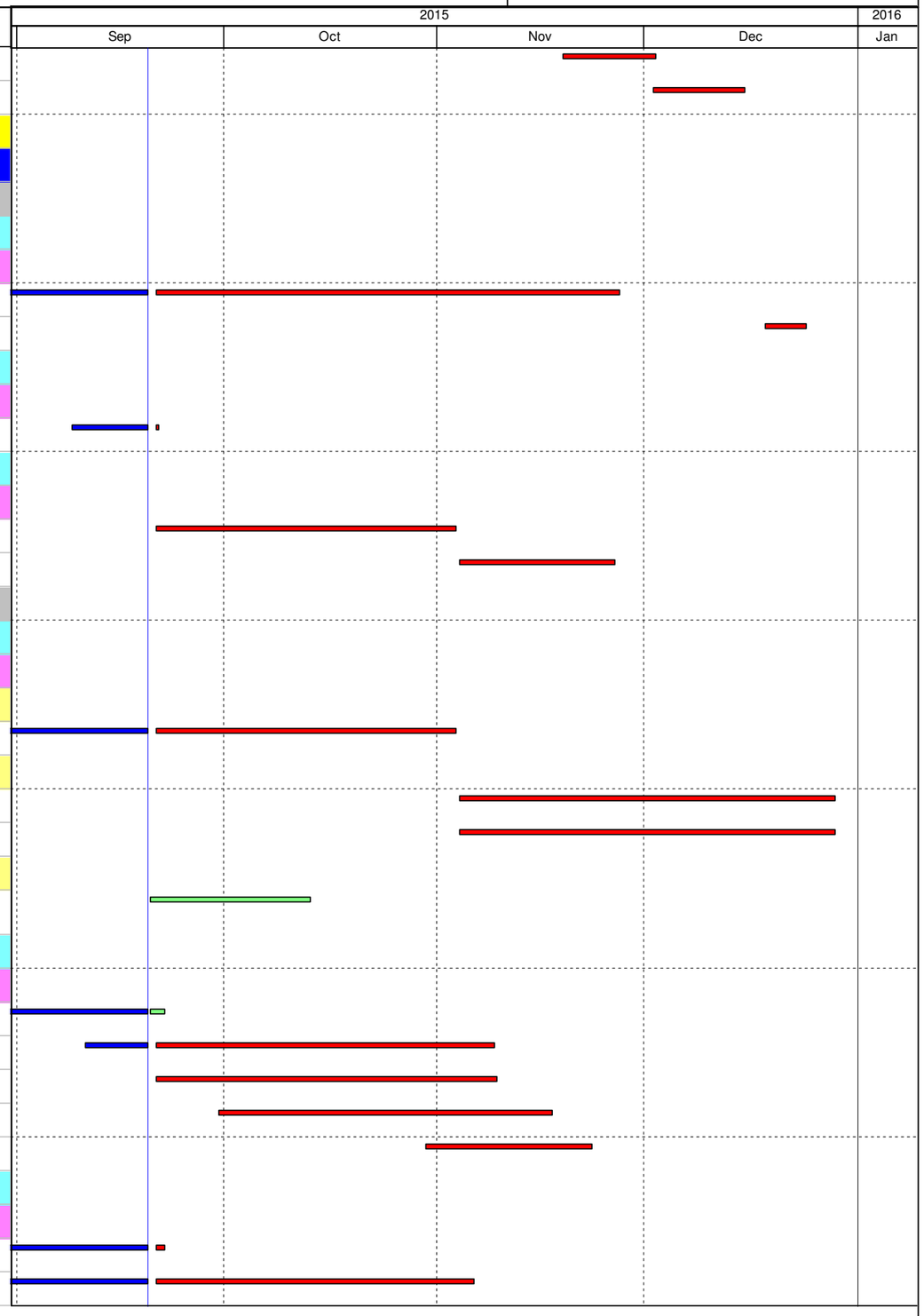
3 Months Rolling Programme _September to November 2015

(For Non-CRIII Zone)

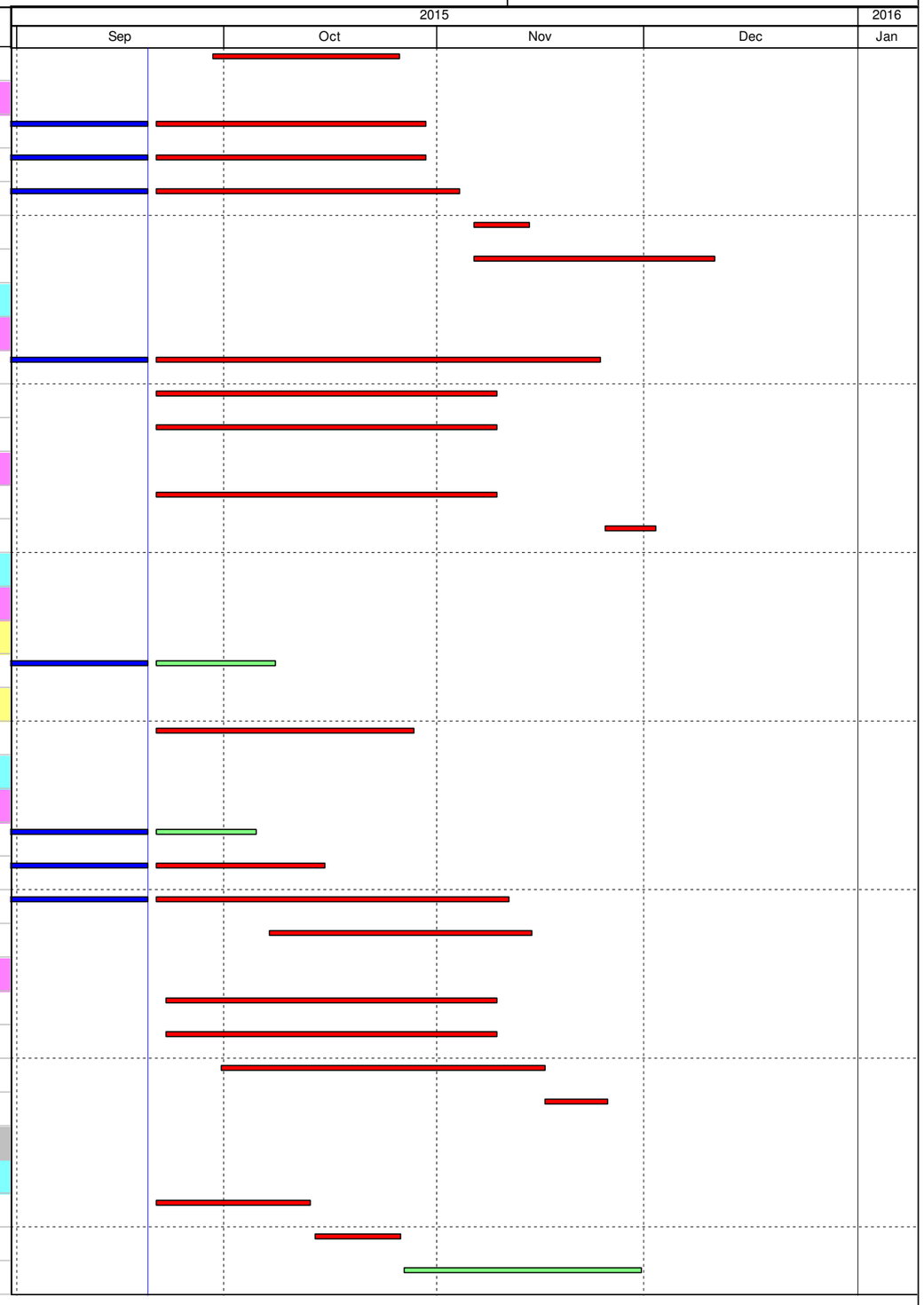
Detailed Works Programme Revision 5

Date	Revision	Checked	Approved
20-Sep-15	3MRP		

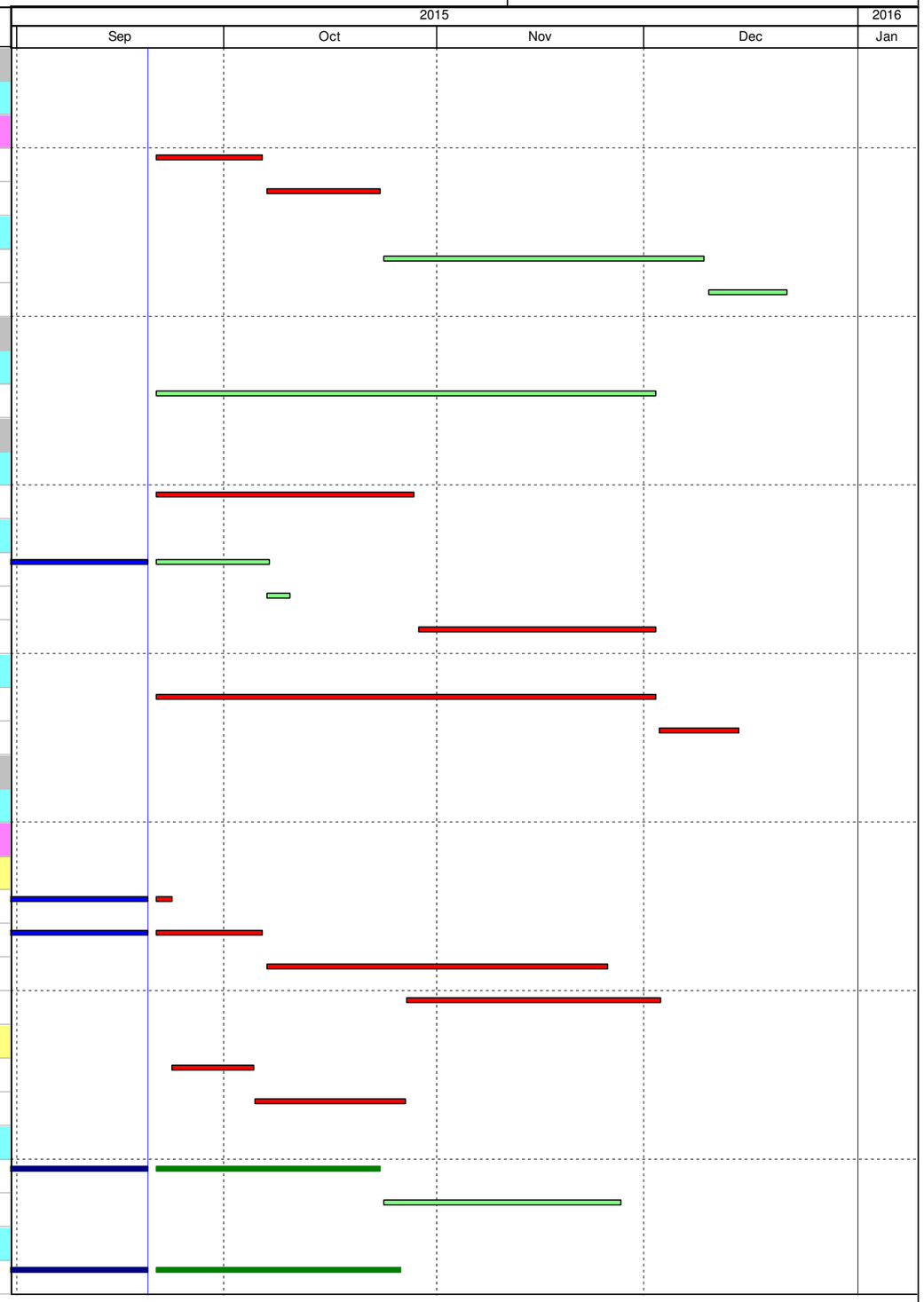
Activity ID	Activity Name	Start	Finish	Remaining Duration	Activity % Complete
MAR12160	Zone D - Sorted Public Fill up to +2.5mPD (north area)	19-Nov-15	02-Dec-15	12	0%
MAR12180	Zone D - Sorted & Compacted Public Fill from +2.5 to +4mPD (north area)	02-Dec-15	15-Dec-15	12	0%
Works for Section Completion		01-Jan-15 A	28-Dec-15	80	
Construction		01-Jan-15 A	28-Dec-15	80	
Section II - MVB Structure		08-Aug-15 A	24-Dec-15	79	
MVB Substructure - ELS & Structural Works for Portion A		08-Aug-15 A	24-Dec-15	79	
MVB Substructure - Structural Works for Portion A		08-Aug-15 A	24-Dec-15	79	
SII11120	Sec II - MVB A - Construct B3M slab, column and wall	08-Aug-15 A	27-Nov-15	55	24%
SII11140	Sec II - MVB A - Remove Strut SL7 and SL6	18-Dec-15	24-Dec-15	5	0%
MVB Substructure - ELS & Structural Works for Portion B		09-Sep-15 A	21-Sep-15	1	
MVB Substructure - ELS for Portion B		09-Sep-15 A	21-Sep-15	1	
SII11760	Sec II - MVB B: Excavation down to -25.45mPD	09-Sep-15 A	21-Sep-15	1	90%
MVB Substructure - Piling Works		21-Sep-15	26-Nov-15	55	
MVB C - Prebored H Piles		21-Sep-15	26-Nov-15	55	
SII10400	Sec II - MVB C - construct prebored H-piles	21-Sep-15	03-Nov-15	35	0%
SII10420	Sec II - MVB C - Loading Test for Prebored H-pile	04-Nov-15	26-Nov-15	20	0%
Section II A - CWB Tunnel & Slip Road Structures and Facilities		17-Jan-15 A	28-Dec-15	80	
CWB CRIII & A1		17-Jul-15 A	28-Dec-15	80	
CWB A1 - ELS & Tunnel Structure		17-Jul-15 A	28-Dec-15	80	
CWB A1 - ELS Remaining		17-Jul-15 A	03-Nov-15	35	
SIIA11286	Sec IIA - CWB A1 : Shoring & Excavation (Remaining)	17-Jul-15 A	03-Nov-15	35	0%
CWB A1 - Tunnel Structure Remaining		04-Nov-15	28-Dec-15	45	
SIIA13045	Sec II A - CWB A1: Pile head + trough + base & wall + OHVD unit (Bay 1)	04-Nov-15	28-Dec-15	45	0%
SIIA13048	Sec IIA - CWB A1 : Pile head + trough + base & wall + OHVD (Bay 3)	04-Nov-15	28-Dec-15	45	0%
CWB A1 - Other Works		20-Sep-15	13-Oct-15	24	
SIIA15500	Zone A2(2) - Public Fill -4.0 to +4.0mPD (behind Type 4 & 13 for temp channel outlet)	20-Sep-15	13-Oct-15	24	0%
CWB A2(2)		20-Aug-15 A	23-Nov-15	51	
CWB A2 (2) - Dwall & Piling		20-Aug-15 A	23-Nov-15	51	
SIIA13500	Sec II A - CWB A2 : backfill to +4.0mPD	20-Aug-15 A	22-Sep-15	2	90%
SIIA15260	Sec II A - CWB A2 : Predrilling for Dwall & piles	11-Sep-15 A	09-Nov-15	39	2%
SIIA15280	Sec II A - CWB A2 : Ground treatment	21-Sep-15	09-Nov-15	40	0%
SIIA15300	Sec II A - CWB A2 : construct Guide Wall	30-Sep-15	17-Nov-15	40	0%
SIIA15420	Sec II A - CWB A2 Loading Test for Prebored H-pile	30-Oct-15	23-Nov-15	20	0%
CWB B (& A2(1))		30-Apr-15 A	11-Dec-15	67	
CWB B - Dwall & Piling		30-Apr-15 A	06-Nov-15	37	
SIIA11540	Sec II A - CWB B (&A2(1)) : Construct pre-bored H-pile	30-Apr-15 A	22-Sep-15	1	98%
SIIA11560	Sec II A - CWB B: Concrete Plug (MTR TWL)	15-Jun-15 A	06-Nov-15	37	40.32%



Activity ID	Activity Name	Start	Finish	Remaining Duration	Activity % Complete
SIIA11565	Sec II A - CWB B: Sheetpile Bulkhead Wall for "Delink"	29-Sep-15	26-Oct-15	21	0%
CWB B - Pumping Test Preparation		13-Jun-15 A	11-Dec-15	67	
SIIA11580	Sec II A - CWB B: Dwall sonic test / interface core	13-Jun-15 A	30-Oct-15	31	48.33%
SIIA11600	Sec II A - CWB B: Dwall precaution grout / fissure grout / grout curtain	13-Jun-15 A	30-Oct-15	31	48.33%
SIIA11620	Sec II A - CWB B: Install dewatering/ recharging/ observation well	14-Jul-15 A	04-Nov-15	35	12.5%
SIIA11640	Sec II A - CWB B: Pumping Test	06-Nov-15	14-Nov-15	7	0%
SIIA11660	Sec II A - CWB B: Demolish Guide Wall	06-Nov-15	11-Dec-15	30	0%
CWB C (W)		16-Jun-15 A	02-Dec-15	60	
CWB C(W) - Dwall Construction		16-Jun-15 A	24-Nov-15	53	
SIIA11960	Sec II A - CWB CW: Concrete Plug (MTR TWL)	16-Jun-15 A	24-Nov-15	53	14.52%
SIIA11980	Sec II A - CWB CW: D-wall contact grout / fissure grout	21-Sep-15*	09-Nov-15	40	0%
SIIA12000	Sec II A - CWB CW: Dwall sonic test / interface core	21-Sep-15	09-Nov-15	40	0%
CWB C(W) - Pumping Test Preparation/ Pumping Test		21-Sep-15	02-Dec-15	60	
SIIA12020	Sec II A - CWB CW: Install dewatering/ recharging/ observation wells	21-Sep-15	09-Nov-15	40	0%
SIIA12040	Sec II A - CWB CW: Pumping Test	25-Nov-15	02-Dec-15	8	0%
CWB C (E)		30-Mar-15 A	28-Oct-15	30	
CWB C(E) & Enabling Work - Dwall Construction		30-Mar-15 A	28-Oct-15	30	
CWB C(E) - Dwall Construction		30-Mar-15 A	08-Oct-15	14	
SIIA12980	Sec II A - CWB CE: ground pre-treatment	30-Mar-15 A	08-Oct-15	14	79%
SCL Enabling Work - Dwall Construction		21-Sep-15	28-Oct-15	30	
SIIA13085	Sec II A - CWB CE: Cut existing pipe piles (2 nos.)	21-Sep-15	28-Oct-15	30	0%
CWB D - Slip Road 1		17-Jan-15 A	25-Nov-15	54	
CWB D - Slip Road 1 - Dwall Construction & Piling		17-Jan-15 A	14-Nov-15	45	
SIIA12260	Sec II A - CWB SR1: ground pre-treatment	17-Jan-15 A	05-Oct-15	11	90.83%
SIIA12305	Sec II A - CWB SR1: construct Permanent DWall (1.2m thk)	07-Apr-15 A	15-Oct-15	20	79%
SIIA12310	Sec II A - CWB SR1: construct pre-bored H-pile	20-Aug-15 A	11-Nov-15	41	2%
SIIA12340	Sec II A - CWB SR1: Concrete Plug (MTR TWL)	07-Oct-15	14-Nov-15	32	0%
CWB D - Slip Road 1 - Pumping Test Preparation/ Pumping Test		22-Sep-15	25-Nov-15	52	
SIIA12360	Sec II A - CWB SR1: Grout curtain / contact grout for Dwall	22-Sep-15	09-Nov-15	38	0%
SIIA12380	Sec II A - CWB SR1: Dwall sonic test / interface core	22-Sep-15	09-Nov-15	38	0%
SIIA12400	Sec II A - CWB SR1: Install dewatering/ recharging/ observation wells	30-Sep-15	16-Nov-15	38	0%
SIIA12420	Sec II A - CWB SR1: Pumping Test	16-Nov-15	25-Nov-15	8	0%
Section VI A - Box Culvert La, L1 & FRP-L Construction		21-Sep-15	30-Nov-15	58	
Sec VI C - Box Culvert La bay 4 (North)		21-Sep-15	30-Nov-15	58	
CUL11652	Sec VI C - Culvert L - bay 4 (north half) - excavate to formation level	21-Sep-15	13-Oct-15	18	0%
CUL11655	Sec VI C - Culvert L - bay 4 (north half) - place granular fill and lay geotextile filter	14-Oct-15	26-Oct-15	10	0%
CUL11660	Sec VI C - Culvert L - bay 4 - backfill	27-Oct-15	30-Nov-15	30	0%



Activity ID	Activity Name	Start	Finish	Remaining Duration	Activity % Complete
Box Culvert L1 & FRP-L Construction (Bay 5 - Bay 7)		21-Sep-15	21-Dec-15	76	
Box Culvert L1 & FRP-L - Bay 5 to 7 Structure		21-Sep-15	23-Oct-15	26	
Box Culvert L1 & FRP-L - Precast Unit Installation		21-Sep-15	23-Oct-15	26	
CUL10874	Sec VI C - Culvert L - bay 5-7 - Demolition of Temp Platform & Cofferdam ready for towing precast culvert units	21-Sep-15	06-Oct-15	12	0%
CUL10875	Sec VI C - Culvert L - bay 5-7 (& Bay 4b) - install precast culvert units & Touch Up	07-Oct-15	23-Oct-15	14	0%
Box Culvert L1 & FRP-L - Bay 5 & 6 Backfill & Others		24-Oct-15	21-Dec-15	50	
CUL10878	Sec VI C - Culvert L - bay 5, 6 - backfill to +4.0mPD	24-Oct-15	09-Dec-15	40	0%
CUL10879	Sec VI C - Culvert L - bay 5, 6 - trim to formation level and handover Area 6	10-Dec-15	21-Dec-15	10	0%
Box Culvert L1 & FRP-L - Bay 9 to 11		21-Sep-15	02-Dec-15	60	
Box Culvert L1 & FRP-L - Bay 9-11 Others		21-Sep-15	02-Dec-15	60	
CUL12020	Culvert L - bay 9-11 - backfill from top slab to final formation level	21-Sep-15	02-Dec-15	60	0%
Box Culvert L1 & FRP-L - Bay 12 to 13		03-Jun-15 A	14-Dec-15	70	
Box Culvert L1 & FRP-L - Bay 12 to 13 Piling		21-Sep-15	28-Oct-15	30	
CUL12356	Culvert L - bay 13 - construct pre-bored H-pile (PC10 & PC11)	21-Sep-15*	28-Oct-15	30	0%
Box Culvert L1 & FRP-L - Bay 12 to 13 Temp Work & ELS		03-Jun-15 A	02-Dec-15	60	
CUL12385	Culvert L - bay 12 - ELS and bulk excavation & Dwall Break Through Ready for Diversion	03-Jun-15 A	07-Oct-15	13	0%
CUL12405	Culvert L - bay 12 & 13 - extract sheet piles ready for flow diversion (from Bay 4 to Bay 11)	07-Oct-15	10-Oct-15	4	0%
CUL12480	Culvert L - bay 12 & 13 - pile head treatment and construct pile cap PC9, PC10 & PC11	29-Oct-15	02-Dec-15	30	0%
Box Culvert L1 & FRP-L - Bay 12 to 13 Structure		21-Sep-15	14-Dec-15	70	
CUL12545	Culvert L - bay 12 & 13 - Construct Precast Units (off site)	21-Sep-15*	02-Dec-15	60	0%
CUL12548	Culvert L - bay 12 & 13 - Deliver and Install Precast Units	03-Dec-15	14-Dec-15	10	0%
Section VI C - Area 3, 6, 8A & 8C		01-Jan-15 A	19-Dec-15	75	
Area 8A & 8C - Seawall Modification		30-May-15 A	03-Dec-15	61	
Modification of Seawall		30-May-15 A	03-Dec-15	61	
Modification of Seawall - Zone 1 & 2		30-May-15 A	03-Dec-15	61	
PRS10043	Sec VIC - Pipe Pile P32 to P62	30-May-15 A	23-Sep-15	3	50%
PRS10044	Sec VIC - P33, P33A, P34, P34A, P35, P35A	20-Aug-15 A	06-Oct-15	12	50%
PRS10060	Sec VIC - Working Platform & P7 to P18, P23 & P24, P20A & P19	07-Oct-15	25-Nov-15	42	0%
PRS10080	Sec VIC - Working Platform & P59, P59A, P60, P60A, P62, P62A	27-Oct-15	03-Dec-15	32	0%
Modification of Seawall - Zone 4		23-Sep-15	27-Oct-15	26	
PRS10160	Sec VIC - Working Platform (Zone 4)	23-Sep-15	05-Oct-15	8	0%
PRS10180	Sec VIC - Pipe Pile P63 to P68 & P64A (Zone 4)	05-Oct-15	27-Oct-15	18	0%
Area 6 - Box Culvert bay 5-6		18-Apr-15 A	27-Nov-15	56	
SVIC10000	Sec VI C - [Summary] Construct Box Culvert Bay 5-6	18-Apr-15 A	23-Oct-15	26	71.74%
SVIC10020	Sec VI C - backfill to formation level at Area 6	24-Oct-15	27-Nov-15	30	0%
Area 3 - Box Culvert bay 4 and Roadwork		01-Jan-15 A	19-Dec-15	75	
SVIC10220	Sec VI C - [Summary] Construct Box Culvert Bay 4 in Area 3	01-Jan-15 A	26-Oct-15	28	60%



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

Activity ID	Activity Name	Start	Finish	Remaining Duration	Activity % Complete
SVIC10240	Sec VI C - reinstate and compact sub-base above Culvert L Bay 4 in Area 3	01-Dec-15	08-Dec-15	7	0%
SVIC10260	Sec VI C - reinstate road kerb in Area 3	01-Dec-15	07-Dec-15	6	0%
SVIC10280	Sec VI C - reinstate flexible pavement in Area 3	08-Dec-15	14-Dec-15	6	0%
SVIC10300	Sec VI C - reinstate footpath in Area 3	15-Dec-15	19-Dec-15	5	0%
SVIC10320	Sec VI C - reinstate traffic sign and road marking in Area 3	19-Dec-15	19-Dec-15	1	0%
Section VI D - Area 8B & 10		27-Sep-15	24-Dec-15	73	
WDII Box 1 Construction		27-Sep-15	24-Dec-15	73	
WDII Box 1 Submission and Approval / Material Procurement		27-Sep-15	25-Nov-15	60	
PCU60410	Sec VI D - WD II Box 1 - Prepare Subcontract for Box 1 structure	27-Sep-15	25-Nov-15	60	0%
WDII Box 1 Existing Pile Head and Dry Dock		24-Oct-15	24-Dec-15	53	
WD-C3030	Sec VI D - form dry dock / waterproofing for Box 1 structure	24-Oct-15	15-Dec-15	45	0%
WDII Box I Existing Pile Head Treatment		03-Dec-15	24-Dec-15	18	
PRS10255	Sec VIC - Mobilisation	03-Dec-15	10-Dec-15	6	0%
PRS10260	Sec VIC - Pile Head at Pile A3	10-Dec-15	24-Dec-15	12	0%
Section VII - Remainder Works		21-Sep-15	30-Nov-15	58	
Demolition of Interim Landing Steps and Construct Permanent Seawall at CRIII		21-Sep-15	30-Nov-15	58	
SVII10220	Sec VII - remove interim landing steps - protect open cut slope	21-Sep-15	22-Sep-15	2	0%
SVII10240	Sec VII - remove interim landing steps - remove old seawall wall blocks	23-Sep-15	30-Sep-15	6	0%
SVII10260	Sec VII - seawall - remove old rubble mound and dredging	02-Oct-15	08-Oct-15	6	0%
SVII10280	Sec VII - seawall - final hydrographic survey	09-Oct-15	16-Oct-15	7	0%
SVII10300	Sec VII - seawall - [summary] fill rubble mound	17-Oct-15	23-Nov-15	31	0%
SVII10320	Sec VII - seawall - [summary] place caisson seawall type 1B(4), 2D and 1	09-Nov-15	30-Nov-15	19	0%