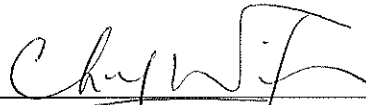


**Contract No. DC/2009/24  
HATS Stage 2A – Upgrading of  
Preliminary Treatment Works at  
Sandy Bay, Cyberport, Wah Fu,  
Aberdeen and Ap Lei Chau**

**Quarterly Environmental  
Monitoring and Audit Report  
April to June 2014**

**(Version 1.0)**

Certified By



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(Environmental Team Leader)

REMARKS:

The information supplied and contained within this report is, to the best of our knowledge, correct at the time of printing.

CINOTECH accepts no responsibility for changes made to this report by third parties

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CE/Harbour Area Treatment Scheme  
Drainage Services Department  
Sewage Services Branch  
Harbour Area Treatment Scheme Division  
5/F, Western Magistracy  
2A Pokfulam Road, Hong Kong

1 September 2014  
By Post

**Attn: Mr. Danny Tang**

Dear Sir,

**Agreement No. CE 8/2009(EP)  
Harbour Area Treatment Scheme (HATS) Stage 2A  
Independent Environmental Checker for Construction Phase – Investigation**

**Contract No. DC/2009/24  
Upgrading of Preliminary Treatment Works at Sandy Bay, Cyberport, Wah Fu, Aberdeen  
and Ap Lei Chau  
Submission of 10<sup>th</sup> Quarterly EM&A Report for April to June 2014 (Version 1.0)**

We refer to the Quarterly EM&A Report for April to June 2014 (version 1.0) received 28 August 2014 and we confirm that we have no further comment.

Yours faithfully  
for MOTT MACDONALD HONG KONG LIMITED

Dr. Anne F Kerr  
Independent Environmental Checker

c.c. Ove Arup & Partners HK Ltd.  
Leader - JEC Joint Venture  
Cinotech Consultants Ltd.

Mr. Ted Y F Tang  
Mr. Patrick Wong  
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## ABBREVIATION AND ACRONYM

AL Levels	Action and Limit Levels
DSD	Drainage Services Department
E / ER	Engineer/Engineer's Representative
EIA	Environmental Impact Assessment
EM&A	Environmental Monitoring and Audit
EMIS	Environmental Mitigation Implementation Schedule
EP	Environmental Permit
EPD	Environmental Protection Department
ET	Environmental Team
HATS 2A	Harbour Area Treatment Scheme Stage 2A
HVS	High Volume Sampler
IEC	Independent Environmental Checker
RE	Resident Engineer
RH	Relative Humidity
QA/QC	Quality Assurance / Quality Control
SLM	Sound Level Meter
WMP	Waste Management Plan

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## EXECUTIVE SUMMARY

### Introduction

1. This is the 10<sup>th</sup> Quarterly Environmental Monitoring and Audit (EM&A) Report prepared by Cinotech Consultants Limited for DSD Contract No. DC/2009/24 “HATS Stage 2A – Upgrading of Preliminary Treatment Works at Sandy Bay, Cyberport, Wah Fu, Aberdeen and Ap Lei Chau” (The Project) which documents the key information of EM&A of Contract No. DC/2009/24 and environmental monitoring results from Contract DC/2007/24 and DC/2008/09 HATS Stage 2A with same Environmental Permit (Permit No. EP-322/2008/G) for April to June 2014.
2. The site activities undertaken for in the reporting quarter included:

#### *April 2014:*

- Wah Fu PTW – Plant operation, Construction for the structure, Excavation of grit trap in progress;
- Ap Lei Chau PTW – Plant operation, Grip trap construction, Wet well construction;
- Aberdeen PTW – Plant operation, Construction for the FSGT structure, Temporary diversion works, Rising Main construction;
- Sandy Bay PTW – Reinstatement works for boundary wall, Staircase construction; and
- Cyberport – NIL.

#### *May 2014:*

- Wah Fu PTW – Plant operation, Construction for the FSGT structure, Excavation of grit trap in progress;
- Ap Lei Chau PTW – Plant operation, FSGT building construction;
- Aberdeen PTW – Plant operation, Construction for the FSGT structure, Flume channel construction, Rising Main construction;
- Sandy Bay PTW – Reinstatement works for boundary wall, Staircase construction; and
- Cyberport – Installation of fine screen, Installation of DO unit.

#### *June 2014:*

- Wah Fu PTW – Plant operation, Construction for the FSGT structure, Excavation of grit trap in progress;
- Ap Lei Chau PTW – Plant operation, FSGT building construction;
- Aberdeen PTW – Plant operation, Construction for the FSGT structure, Flume channel construction, Rising Main construction;
- Sandy Bay PTW – Reinstatement works for boundary wall, Staircase construction; and
- Cyberport – Installation of fine screen, Installation of DO unit.

### Environmental Monitoring Works

3. The environmental monitoring works of the Project was conducted by the ET for the Contract: DC/2007/24 and DC/2008/09 under HATS 2A with same Environmental Permit and in accordance with the EM&A Manual. The monitoring results were checked and reviewed. Site audits were conducted once per week. The implementation of the environmental mitigation measures, Event Action Plans and environmental complaint handling procedures were also checked.

**Air Quality and Noise (Aberdeen PTW)**

4. Since the monitoring of air quality monitoring station at Wah Ming House, Wah Fu Estate (CM\_WF1a) and noise monitoring station at Aegean Terrace (M6a), Wah Ming House (M7a) and Wah Ling House (M8) would be handover to Contract No. DC/2009/24 from Contract No. DC/2007/24 in July 2014. The air quality and noise monitoring stations would be set up by Cinotech Consultants Limited (ET for Contract No. DC/2009/24 for HATS 2A) to monitor the air quality and noise in the vicinity of the sensitive receivers starting from July 2014.
5. Summary of the non-compliance of the reporting quarter is tabulated in **Table I**.

**Table I Summary Table for Non-compliance Recorded in the Reporting Quarter**

Monitoring Station	Parameter	No. of Exceedance		No. of Exceedance Due to the Project		Action Taken
		Action Level	Limit Level	Action Level	Limit Level	
CM_CB1a	1-hr TSP	0	0	0	0	N/A
	24-hr TSP	0	0	0	0	N/A
CM_WF1a	1-hr TSP	0	0	0	0	N/A
	24-hr TSP	0	0	0	0	N/A
CM_AB1a	1-hr TSP	0	0	0	0	N/A
	24-hr TSP	0	0	0	0	N/A
M5	Noise (Day Time)	0	0	0	0	N/A
M6a		0	0	0	0	N/A
M7a		0	0	0	0	N/A
M8		0	0	0	0	N/A
M9		0	0	0	0	N/A
		0	0	0	0	N/A

*1-hour TSP Monitoring*

6. 1-hour TSP monitoring was conducted as scheduled in the reporting quarter while the 1-hour TSP monitoring at CM\_WF1a conducted on 9 May 2014 was suspended to 12 May 2014 by ET of DC/2007/24 due to the adverse weather. No Action/Limit Level exceedance was recorded. Details could be referred to Appendix G of the DC/2007/24 (May 2014) monthly EM&A report.

*24-hour TSP Monitoring*

7. 24-hour TSP monitoring was conducted as scheduled in the reporting quarter while the 24-hour TSP monitoring at CM\_WF1a conducted on 9 May 2014 was suspended to 12 May 2014 by ET of DC/2007/24 due to the adverse weather. No Action/Limit Level exceedance was recorded. Details could be referred to Appendix G of the DC/2007/24 (May 2014) monthly EM&A report.
8. The 24-hour TSP monitoring result of CM\_WF1a recorded on 3 June 2014, which were found invalid by the ET of DC/2007/24. Details could be found in the Appendix J of the DC/2007/24 (June 2014) monthly EM&A report.

*Construction Noise*

9. All construction noise monitoring was conducted as scheduled in the reporting quarter. No Action/Limit Level exceedance was recorded.

---

### **Environmental Complaint and Prosecution**

10. No environmentally related summons, prosecutions or complaints were received for the Project in the reporting quarter.
11. There was no environmental prosecution or notification of summons received while three complaints were already received since the Project commencement. The Complaint Log is presented in **Appendix H**.

### **Environmental Licenses and Permits**

12. Licenses/Permits granted to the Project include the Environmental Permit (EP), Notification of Works under APCO, Water Discharge Licences and Registered as a Chemical Waste Producer for Sandy Bay, Cyberport, Ap Lei Chau, Aberdeen, Wah Fu PTWs sites.

### **Future Key Issues:**

13. Major site activities for the coming two months include:
  - Wah Fu PTW: FSGT structure construction, Plant operation;
  - Aberdeen PTW: Construction of FSGT structure, E&M equipment installation, Plant operation, Rising main construction, Flume channel construction;
  - Ap Lei Chau PTW: Plant operation, Construction of FSGT structure, Relocation of nightsoil discharge point, Pipe pile construction;
  - Sandy Bay PTW: Staircase construction, Reinstatement of boundary wall, Odour pipe/drawpit/ ducting construction; and
  - Cyberport PTW: Installation of fine screen, Installation of DO unit.
14. The environmental concerns in coming months are mainly on chemicals storage, surface run off, spillage of wastewater during rainstorm and dust generated from the construction works.



## 1. INTRODUCTION

### Background

- 1.1 The Project ‘HATS Stage 2A – Upgrading of Preliminary Treatment Works at Sandy Bay, Cyberport, Wah Fu, Aberdeen and Ap Lei Chau’ with Contract No: DC/2009/24 mainly comprises the following major works:
  - The construction of screens, grit traps, deodourisation rooms, workshop and administration buildings, and modification of existing inlet pumping stations at the preliminary treatment works at Sandy Bay, Cyberport, Wah Fu, Aberdeen and Ap Lei Chau.
- 1.2 The general location plan of the Project is shown in **Figure 1**.
- 1.3 The Project is under Harbour Area Treatment Scheme (HATS) Stage 2A and is a designated project (Register No. : AEIAR-121/2008). The environmental permit: (Permit No. EP-322/2008/G) which was issued on 10<sup>th</sup> October 2012 to the Drainage Services Department (hereinafter called the DSD) as the Permit Holder.
- 1.4 Leader and JEC Joint Venture (hereafter called the LJJV) was commissioned by the DSD to undertake the construction of the Contract No. DC/2009/24 “Upgrading of Preliminary Treatment Works at Sandy Bay, Cyberport, Wah Fu, Aberdeen and Ap Lei Chau”.
- 1.5 Cinotech Consultants Limited was commissioned by LJJV to undertake the Environmental Monitoring and Audit (EM&A) works for the project and was appointed as the Environmental Team (ET) of the Project under Condition 2.1 of the EP.
- 1.6 The construction works at Wah Fu PTW and Ap Lei Chau PTW were commenced in the January 2012.
- 1.7 The construction phase of EM&A programme of the Project commenced in January 2012.
- 1.8 This is the 10<sup>th</sup> quarterly EM&A report summarizing the EM&A works conducted for the Project in April to June 2014.

## 2 PROJECT CHARACTERISTICS

### Project Organization and Contacts of Key Management

- 2.1 Different parties with different levels of involvement in the project organization include:
- Project Proponent – The Drainage Services Department (DSD)
  - Engineer’s Representative (ER) – Ove Arup & Partners Hong Kong Ltd.
  - Contractor – Leader and JEC Joint Venture (LJJV)
  - Environmental Team (ET) – Cinotech Consultants Ltd.
  - Independent Environmental Checker (IEC) – Mott MacDonald Hong Kong Ltd.
- 2.2 The key contacts of the Project and the ET organization chart and are shown in **Appendix A** and **Figure 2**.

### Construction Programme and Synopsis of Work

- 2.3 The construction programme is presented in **Appendix B**. The site activities undertaken during the reporting quarter included:

#### *April 2014:*

- Wah Fu PTW – Plant operation, Construction for the structure, Excavation of grit trap in progress;
- Ap Lei Chau PTW – Plant operation, Grit trap construction, Wet well construction;
- Aberdeen PTW – Plant operation, Construction for the FSGT structure, Temporary diversion works, Rising Main construction;
- Sandy Bay PTW – Reinstatement works for boundary wall, Staircase construction; and
- Cyberport – NIL.

#### *May 2014:*

- Wah Fu PTW – Plant operation, Construction for the FSGT structure, Excavation of grit trap in progress;
- Ap Lei Chau PTW – Plant operation, FSGT building construction;
- Aberdeen PTW – Plant operation, Construction for the FSGT structure, Flume channel construction, Rising Main construction;
- Sandy Bay PTW – Reinstatement works for boundary wall, Staircase construction; and
- Cyberport – Installation of fine screen, Installation of DO unit.

#### *June 2014:*

- Wah Fu PTW – Plant operation, Construction for the FSGT structure, Excavation of grit trap in progress;
- Ap Lei Chau PTW – Plant operation, FSGT building construction;
- Aberdeen PTW – Plant operation, Construction for the FSGT structure, Flume channel construction, Rising Main construction;
- Sandy Bay PTW – Reinstatement works for boundary wall, Staircase construction; and
- Cyberport – Installation of fine screen, Installation of DO unit.

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### **3. ENVIRONMENTAL MONITORING & AUDIT REQUIREMENTS**

#### **Monitoring Parameters and Monitoring Locations**

- 3.1 In accordance with the EM&A Manual, 1-hour and 24-hour Total Suspended Particulates (TSP) and Noise monitoring were conducted to monitor the air quality and the impact noise. The general layout plan of the Project and the monitoring locations are shown in **Figures 1, Appendix C** gives details of monitoring requirements.

#### **Monitoring Methodology and Calibration Details**

- 3.2 Monitoring works/equipments were conducted/calibrated regularly in accordance with the Project Specific EM&A Manual. Copies of calibration certificates are attached in the appendices of the Monthly Reports of DC/2007/24 and DC/2008/09.

#### **Environmental Quality Performance Limits (Action and Limit Levels)**

- 3.3 The environmental quality performance limits, i.e. Action and Limit Levels were derived from the baseline monitoring results. Should the measured environmental quality parameters exceed the Action/Limit Levels, the respective action plans would be implemented. The Action/Limit Levels for each environmental parameter are given in **Appendix D**.

#### **Environmental Mitigation Measures**

- 3.4 Relevant mitigation measures as recommended in the project EIA report have been stipulated in the Project Specific EM&A Manual for the Contractor to implement. A summary of the Environmental Mitigation Implementation Schedule (EMIS) is given in **Appendix E**.

**4. MONITORING RESULTS**

**Weather Conditions**

4.1 The weather conditions during monitoring sessions were mainly sunny and sometimes cloudy. The weather conditions for each individual monitoring session were presented in the field record sheets and they could be found in the Appendices of the corresponding monthly EM&A reports.

**Air Quality**

*1-hr TSP Monitoring and 24-hr TSP Monitoring*

4.2 1-hour TSP monitoring was conducted as scheduled in the reporting quarter while the 1-hour TSP monitoring at CM\_WF1a conducted on 9 May 2014 was suspended to 12 May 2014 by ET of DC/2007/24 due to the adverse weather. No Action/Limit Level exceedance was recorded. Details could be referred to Appendix G of the DC/2007/24 (May 2014) monthly EM&A report.

4.3 24-hour TSP monitoring was conducted as scheduled in the reporting quarter while the 24-hour TSP monitoring at CM\_WF1a conducted on 9 May 2014 was suspended to 12 May 2014 by ET of DC/2007/24 due to the adverse weather. No Action/Limit Level exceedance was recorded. Details could be referred to Appendix G of the DC/2007/24 (May 2014) monthly EM&A report. The 24-hour TSP monitoring result of CM\_WF1a recorded on 3 June 2014, which were found invalid by the ET of DC/2007/24. Details could be found in the Appendix J of the DC/2007/24 (June 2014) monthly EM&A report. No Action/Limit Level exceedance was recorded.

4.4 No Action/Limit Level exceedance was recorded in the reporting quarter. Summary of exceedance is presented in **Appendix I**.

4.5 **Table 4.1** summarizes the dust monitoring results which were extracted from the monthly reports for the Contract DC/2007/24.

4.6 The detailed monitoring data and graphical presentations of 1-hour and 24-hour TSP monitoring results could be referred to Appendix E of quarterly report of Contract DC/2007/24.

**Table 4.1 Summary of 1-hour and 24-hour TSP Monitoring Result in Reporting Quarter**

Reporting Months	Air Quality Monitoring Station	Average $\mu\text{g}/\text{m}^3$	Range $\mu\text{g}/\text{m}^3$	Action Level $\mu\text{g}/\text{m}^3$	Limit Level $\mu\text{g}/\text{m}^3$
1 hour TSP					
April 2014	CM_CB1a	134	62.3-227.7	280	500
	CM_WF1a	201	81.9-280.1	285	
	CM_AB1a	149	68.7-270.9	283	
May 2014	CM_CB1a	68	24.2-136.1	280	
	CM_WF1a	128	55.3-207.7	285	
	CM_AB1a	89	31.8-139.9	283	
June 2014	CM_CB1a	76	35.6-114.5	280	
	CM_WF1a	142	64.8-280.1	285	
	CM_AB1a	60	30.5-97.9	283	

24 hours TSP				
April 2014	CM_CB1a	66	60-78	178
	CM_WF1a	44	38-51	185
	CM_AB1a	57	19-78	174
May 2014	CM_CB1a	39	24-77	178
	CM_WF1a	31	24-36	185
	CM_AB1a	43	35-52	174
June 2014	CM_CB1a	43	36-58	178
	CM_WF1a	35	31-41 <sup>1</sup>	185
	CM_AB1a	52	46-63	174

Remark:

- 24-hour TSP values recorded on 3 June 2014 were found invalid by the ET of DC/2007/24. Details could be found in the Appendix J of the DC/2007/24 (June 2014) monthly EM&A report.

**Noise**

- All construction noise monitoring was conducted as scheduled in the reporting quarter.
- No Action/Limit Level exceedance was recorded in the reporting quarter. Summary of exceedance is presented in **Appendix I**.
- Table 4.2** summarizes the noise monitoring results which were extracted from the monthly reports for the Contract DC/2007/24 and DC/2008/09.
- The construction noise monitoring at the designated locations was conducted by the ET of Contract: DC/2007/24 and DC/2008/09 as scheduled in the reporting month. The monitoring results and graphical presentation are provided in Appendix D of the quarterly report for Contract DC/2007/24 and Appendix J of the quarterly report for Contract DC/2008/09.

**Table 4.2 Summary of Noise Monitoring Result in Reporting Quarter**

Reporting Months	Noise Quality Monitoring Station	Range, dB(A) Leq(30 min.)	Limit Level, dB(A) Leq(30 min.)
April 2014	M5	63-66	75.0
	M6a	52-56 <sup>(1)</sup>	
	M7a	68-73	
	M8	64-68	
	M9	40-57	
May 2014	M5	61-66	
	M6a	51-59 <sup>(1)</sup>	
	M7a	68-71	
	M8	67-67	
	M9	52-54	
June 2014	M5	64-67	
	M6a	52-66 <sup>(1)</sup>	
	M7a	62-71	
	M8	66-67	
	M9	54-56	

Remark: (1) Free-field measurement, +3dB correction.

**5 ENVIRONMENTAL AUDIT**

**Implementation Status of Environmental Mitigation Measures**

5.1 The implementation status of the Environmental Mitigation Implementation Schedule (EMIS) is given in **Appendix E**.

**Site Audit Summary**

5.2 During site inspections in the reporting period, no non-conformance was identified. The observations and recommendations made in each site audit session in the reporting period are summarized in **Table 5.1**.

**Table 5.1 ET’s Observations and Recommendations of Site Audits**

Parameters	Date/Ref. Number	Observations	Follow Up Action
Water Quality	140404-O01	The water quality of the sediment tank should be fulfilled the requirement of the WPCO’s wastewater discharge license before discharging out at Wah Fu-PTW and Abd-PTW. The Contractor was reminded to ensure the sediment tanks are non-malfunctioned.	The water quality of the sediment tank was fulfilled the requirement of the WPCO’s wastewater discharge license before discharging out at Wah Fu-PTW and Abd-PTW.
	140404-R02	Properly clear the stagnant water and oil stained water at all PTWs.	The stagnant water and oil stained water were cleared at all PTWs.
	140404-R04	The bunding should be provided near the sewer to prevent the wastewater flowing to the sewer at Sandy Bay-PTW.	The bunding was provided near the sewer at Sandy Bay-PTW.
	140411-R02	The bunding should be provided to prevent the dusty materials runoff the access road at Abd-PTW.	A layer of sand bag bunding was provided at Abd-PTW.
	140415-O02	The WetSep tank should be properly maintained to avoid untreated water from leaking to the drainage channel at WF-PTW.	The Contractor has repaired the WetSep tank and no leakage was observed.
	140415-R03	The Contractor is reminded to provide additional bunding of sand bags to avoid potential muddy run-off at Aberdeen-PTW.	Please refer to 140425-R04.
	140425-O03	The sand bag near the drainage outlet should be removed in Aberdeen-PTW.	The sand bag was removed at Aberdeen-PTW.
	140425-R04	The Contractor is reminded to provide additional bunding of sand bags to avoid potential muddy run-off at Aberdeen-PTW.	The soil behind the bunding has been removed and no muddy run-off was observed outside the bunding.

	140509-001	The water quality of the sediment tank at Abd-PTW should be fulfilled the requirement of the WPCO's wastewater discharge license. The Contractor was reminded to provide the maintenance of the sediment tank.	The maintenance of the sediment tank was provided and the water quality of the sediment tank at Abd-PTW was fulfilled the requirement of the WPCO's wastewater discharge license.
	140509-R03	Properly clear the ponding water at all PTWs.	The ponding water was cleared at all PTWs.
	140523-001	The water quality of the sediment tank at Wah Fu-PTW should be fulfilled the requirement of the WPCO's wastewater discharge license before discharging out.	The water in the sediment tank was cleared and not observed at Wah Fu-PTW.
	140606-001	The water quality of the sediment tank at Abd-PTW should be fulfilled the requirement of the WPCO's wastewater discharge license before discharging out.	The water quality of the sediment tank at Abd-PTW was fulfilled the requirement of the WPCO's wastewater discharge license.
	140613-R03	Properly clear the stagnant water at Abd-PTW.	Please refer to 140620-R02.
	140620-R02	Properly clear the stagnant water at Abd-PTW.	The stagnant water was cleared at Abd-PTW.
	140627-001	The flow meter of the sediment tank at Wah Fu-PTW and the pH meter of the sediment tank at ALC-PTW were mal-functioned. The Contractor was reminded to provide the maintenance of the sediment tanks to ensure the water quality of the sediment tank is fulfilled the requirement of the WPCO's wastewater discharge license before discharging out.	The follow up action will be reported during site inspections in July 2014.
<b>Air Quality</b>	140530-R04	The dusty materials should be cleared properly or covered by the impervious materials at Cyberport-PTW and ALC-PTW.	Please refer to 140606-R02.
	140606-R02	The dusty materials should be cleared properly or covered by the impervious materials at ALC-PTW.	Please refer to 140613-R01.
	140613-R01	The dusty materials should be cleared properly or sprayed water regularly at Cyberport-PTW, ALC-PTW and Abd-PTW.	The dusty materials were cleared properly at Cyberport-PTW, ALC-PTW and Abd-PTW.
	140627-R02	Properly clear the dusty materials at ALC-PTW and Abd-PTW.	The dusty materials were cleared and not observed at ALC-PTW and Abd-PTW.
<b>Waste/ Chemical Management</b>	140404-R02	Properly clear the stagnant water and oil stained water at all PTWs.	The stagnant water and oil stained water were cleared at all PTWs.
	140404-R03	Properly clear the debris in the U-channel at ALC-PTW.	The debris in the U-channel was cleared at ALC-PTW.

	140411-R01	The chemical containers should be provided with the drip tray at ALC-PTW.	The chemical containers were removed at ALC-PTW.
	140415-O01	Oil container should be contained within a drip tray at WF-PTW.	The oil container was placed within the drip tray at WF-PTW.
	140425-O01	Oil stain underneath the excavators should be cleared; The Contractor should prevent equipment from leaking oil. (WF-PTW)	The Contractor has mopped excess oil under the excavator and covered oily mechanical parts.
	140425-O02	The label on the general refuse skip should be revised and cross out 'Metal' on the label. (ALC-PTW).	The identified skip was removed from the site area.
	140516-R01	Properly clear the oil stain at Wah Fu-PTW.	The oil stain was cleared at Wah Fu-PTW.
	140523-R02	Properly clear the general refuse at Cyberport-PTW.	Please refer to 140530-R03.
	140523-R03	Properly clear the oil stain near the drip tray at Wah Fu-PTW.	The oil stain near the drip tray was cleared at Wah Fu-PTW.
	140530-O01	The oil leakage was observed from the excavator at Abd-PTW. The Contractor was reminded to keep it in a good condition.	The oil leakage was not observed from the excavator at Abd-PTW.
	140530-R02	The chemical containers should be provided with the drip tray at Wah Fu-PTW and Abd-PTW.	The chemical container were provided with the drip tray at Wah Fu-PTW and the chemical container was not observed at Abd-PTW.
	140530-R03	Properly clear the general refuse at Cyberport-PTW.	The general refuse was cleared at Cyberport-PTW.
	140613-R02	Properly clear the debris at Abd-PTW.	Please refer to 140620-R01.
	140620-R01	Properly clear the debris at Abd-PTW.	The debris was cleared properly at Abd-PTW.
<b>Landscape and Visual</b>	140502-O01	The tree protective zone should be enlarged and free of construction materials. (SB-PTW, storage area)	The construction materials were removed in the tree protection zone at the storage area of Sandy Bay-PTW.
	140509-R02	The vehicle should be parked far away the tree protection area to prevent the damage of the existing tree at Wah Fu-PTW.	No vehicle was observed around the tree protection area at Wah Fu-PTW.
	140620-R03	Properly clear the chemical container and construction materials near the tree protection area at ALC-PTW.	Please refer to 140627-R03.
	140627-R03	Properly clear the chemical container and construction materials near the tree protection area at ALC-PTW.	The chemical container and construction materials near the tree protection area were cleared at ALC-PTW.
<b>Noise</b>	--	--	--
<b>Permit/ Licenses</b>	--	--	--



**Status of Environmental Licensing and Permitting**

- 5.3 Environmental licenses and permits including the Billing Account for Disposal of Construction Waste, Chemical Waste Producer and Wastewater Discharge were in place and valid during the reporting quarter. A summary status of licenses and permits is given in **Appendix F**.

**Advice on Waste Management Status**

- 5.4 The amount of wastes generated by the activities of the Project in the reporting period was attached in the appendices of the monthly reports for April to June 2014 and was shown in **Appendix G**.

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**6. NON-COMPLIANCE (EXCEEDANCES) OF THE ENVIRONMENTAL QUALITY PERFORMANCE LIMITS (ACTION AND LIMIT LEVELS)****Summary of Exceedances**

- 6.1 Environmental monitoring works were performed in the reporting quarter and all monitoring results were checked and reviewed. A summary of exceedance is attached in **Appendix I**.
- 6.2 No Action/Limit Level exceedance of 1-hour TSP and 24-hour TSP was recorded in the reporting quarter.
- 6.3 No Action/Limit Level exceedance of Noise was recorded in the reporting quarter.

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

- 6.4 There was no non-compliance from the site audits in the reporting quarter. The observations and recommendations made in each individual site audit session were presented in **Table 5.1**.

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

- 6.5 There was no particular action taken since no non-compliance was observed from the site audits in the reporting quarter.

**7 ENVIRONMENTAL COMPLAINTS**

- 7.1 No environmentally complaint was received for the Project in the reporting quarter. The updated Complaint Log is attached in **Appendix H**.

**8 NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTIONS**

- 8.1 No environmental prosecution was recorded in the reporting quarter.

## 9. COMMENTS, CONCLUSIONS AND RECOMMENDATIONS

### 9.1 Key environmental issues for the coming months include:

- Generation of dust from stockpiles of excavated and dusty materials, unpaved site area and vehicle movement, roadworks, excavation works and loading and unloading dusty materials on-site;
- Noise nuisance from operation of equipment and machinery on-site;
- Provision well maintenance on the storage facilities of chemicals/fuel and chemical waste/waste oil on-site;
- Maintenance of de-silting facilities and drainage system such as U-channels;
- Blockage of U-channel by accumulated silt;
- Ponding water generated in pre-drillings;
- Dust generation should be mitigated by adequate water spraying, especially in dry days;
- Silty surface runoff generated from the site area; and
- Silt and dust getting into the public area by the leaving site vehicles at the site exits without adequate wheel washing facilities.

### 9.2 According to the environmental audit performed in the reporting quarter, the following recommendations were made:

#### *Water Impact*

- To regularly check the sediment tank has adequate capacity for runoff discharge from the construction site;
- To provide the maintenance of the sediment tank regularly and make sure the sediment tank is non-malfunctioned;
- To avoid accumulation of stagnant / ponding water on site;
- To provide the bunding to prevent the wastewater flowing to the sewer and potential muddy runoff out of the construction site; and
- To place the dusty material far away the drainage.

#### *Air Quality*

- To remain good site practice on handling excavated or dusty material for dust suppression (e.g. stockpiles of material shall be covered by tarpaulin).

#### *Waste/Chemical Management*

- To provide proper rubbish bins / skips for waste collection;
- To provide proper and sufficient storage area or drip trays for oil containers on site;
- To well maintain the equipments and drip trays to avoid oil leakage;
- To avoid any discharge or accidental spillage of chemical waste or oil directly from the equipment; and
- To check for any accumulation of wasted materials or debris on site.

#### *Landscape and Visual*

- To avoid any heavy materials placed into tree protection zone; and
- To provide proper distance between vehicle parking and tree protection zone.

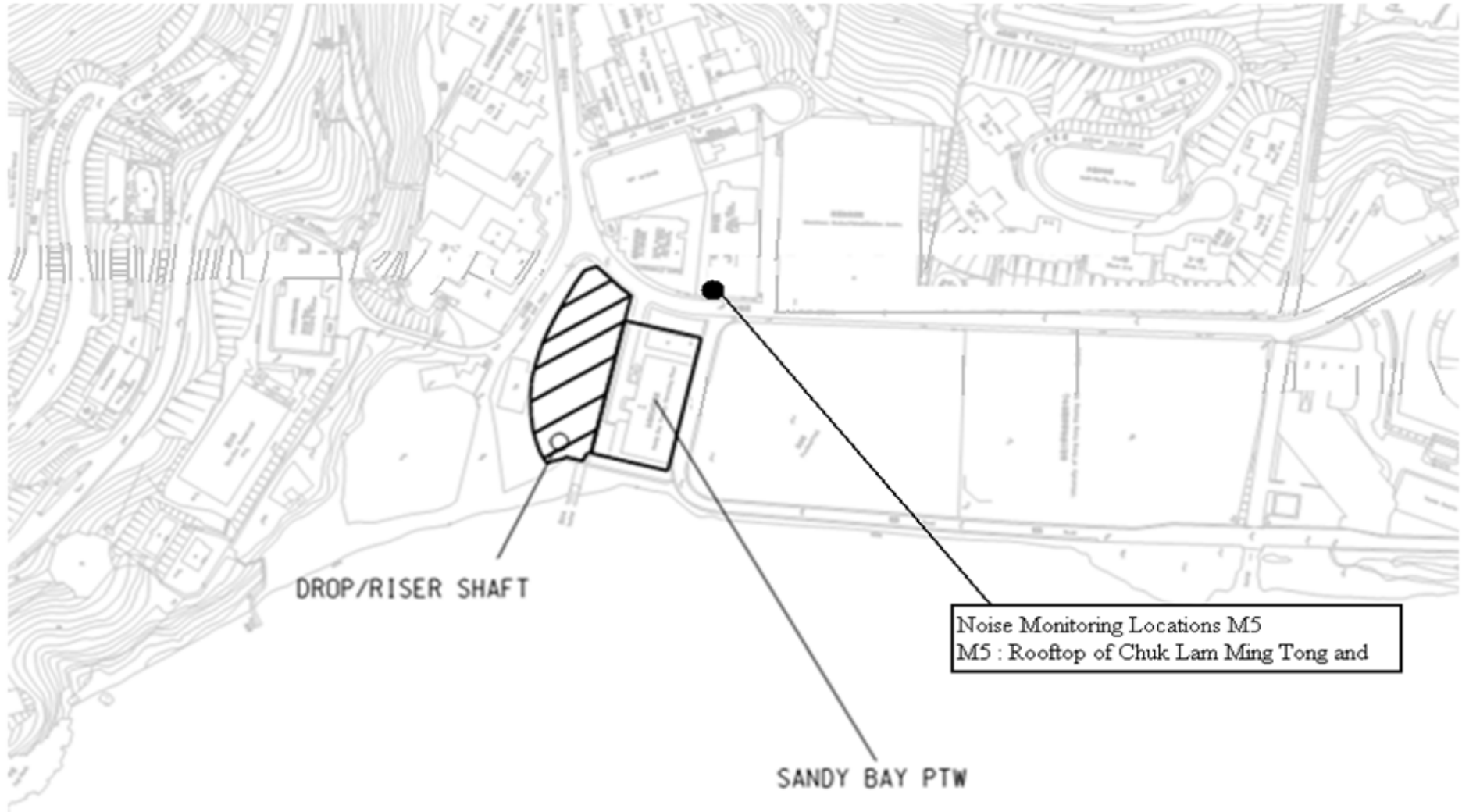
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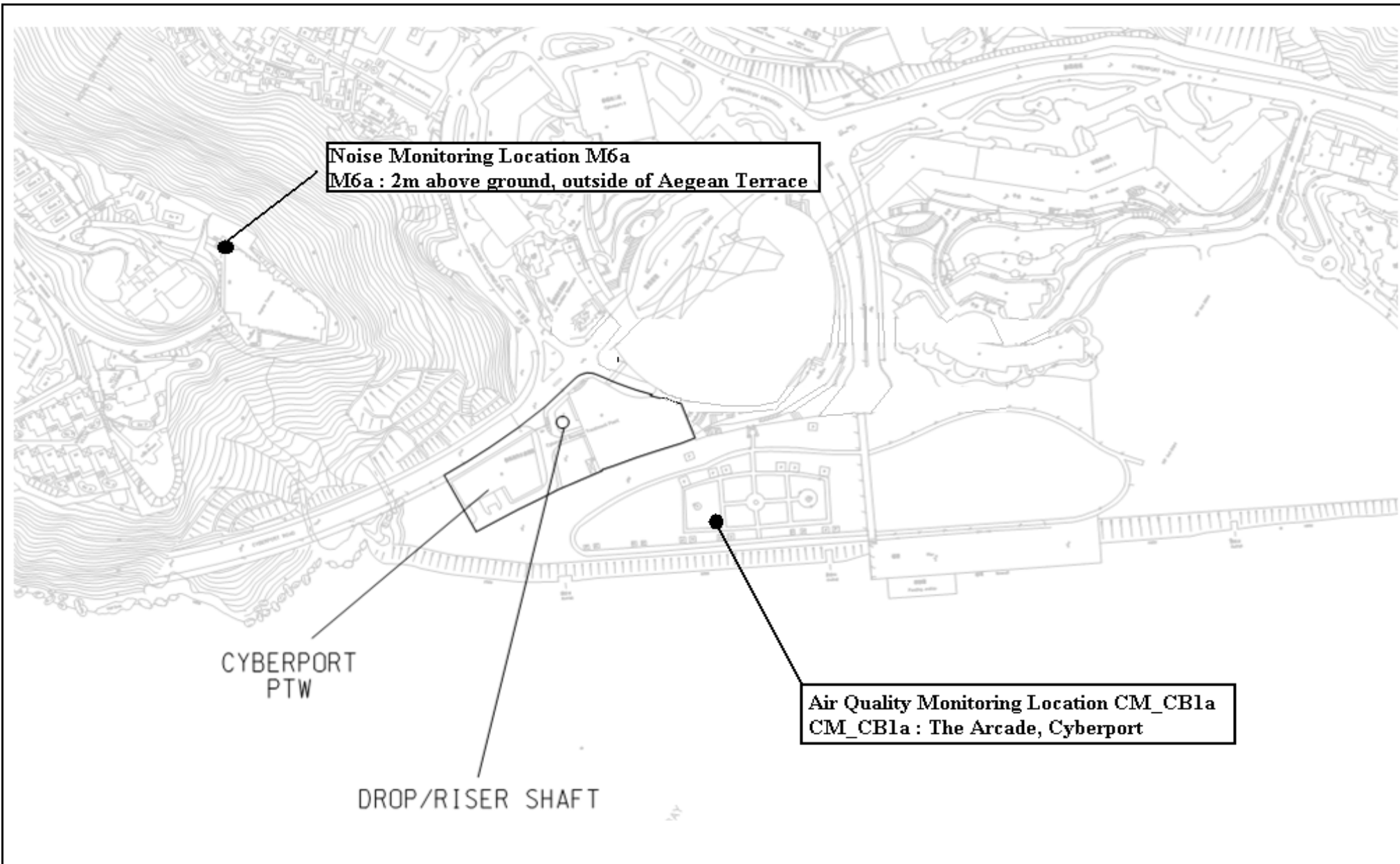
## FIGURES

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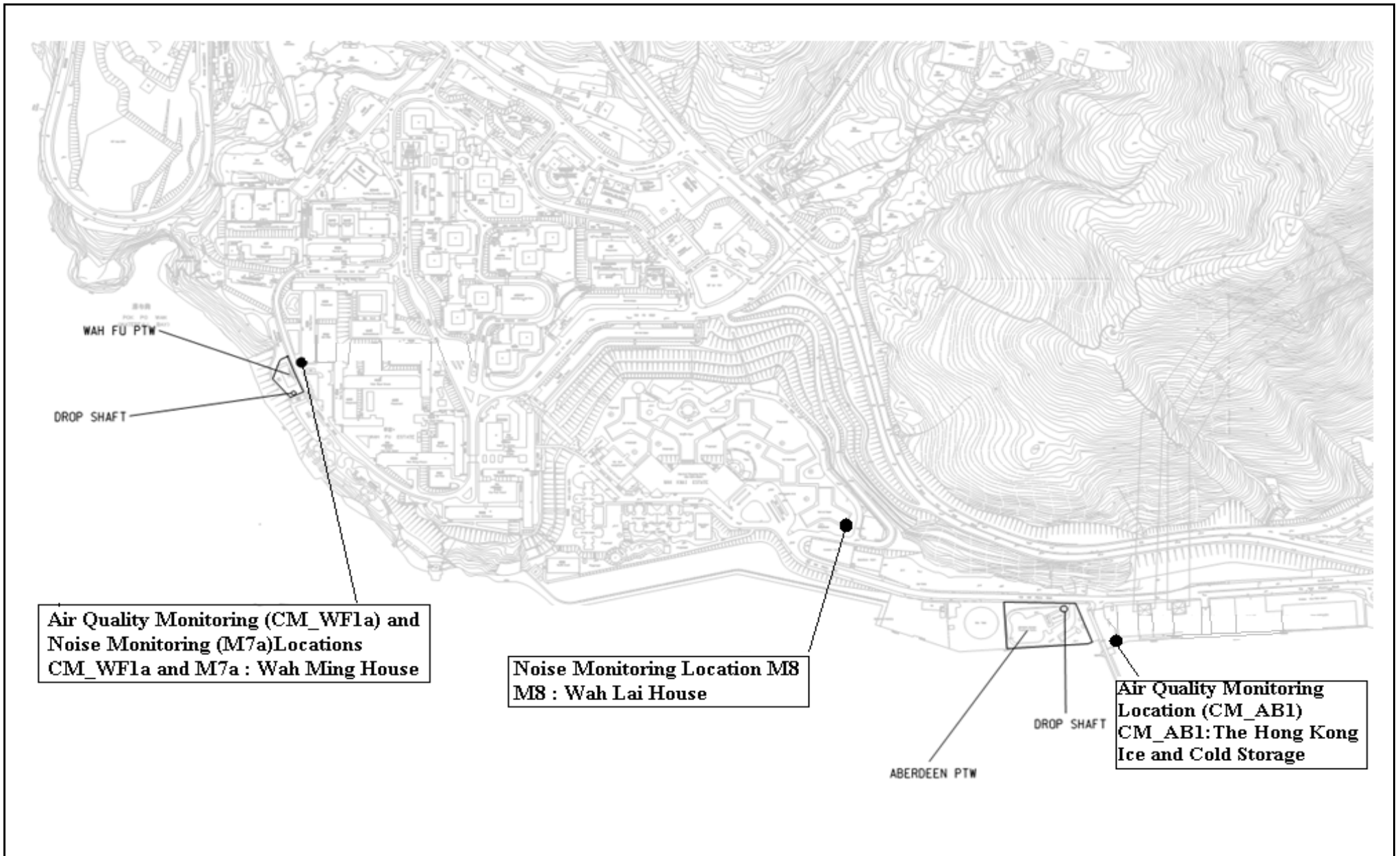
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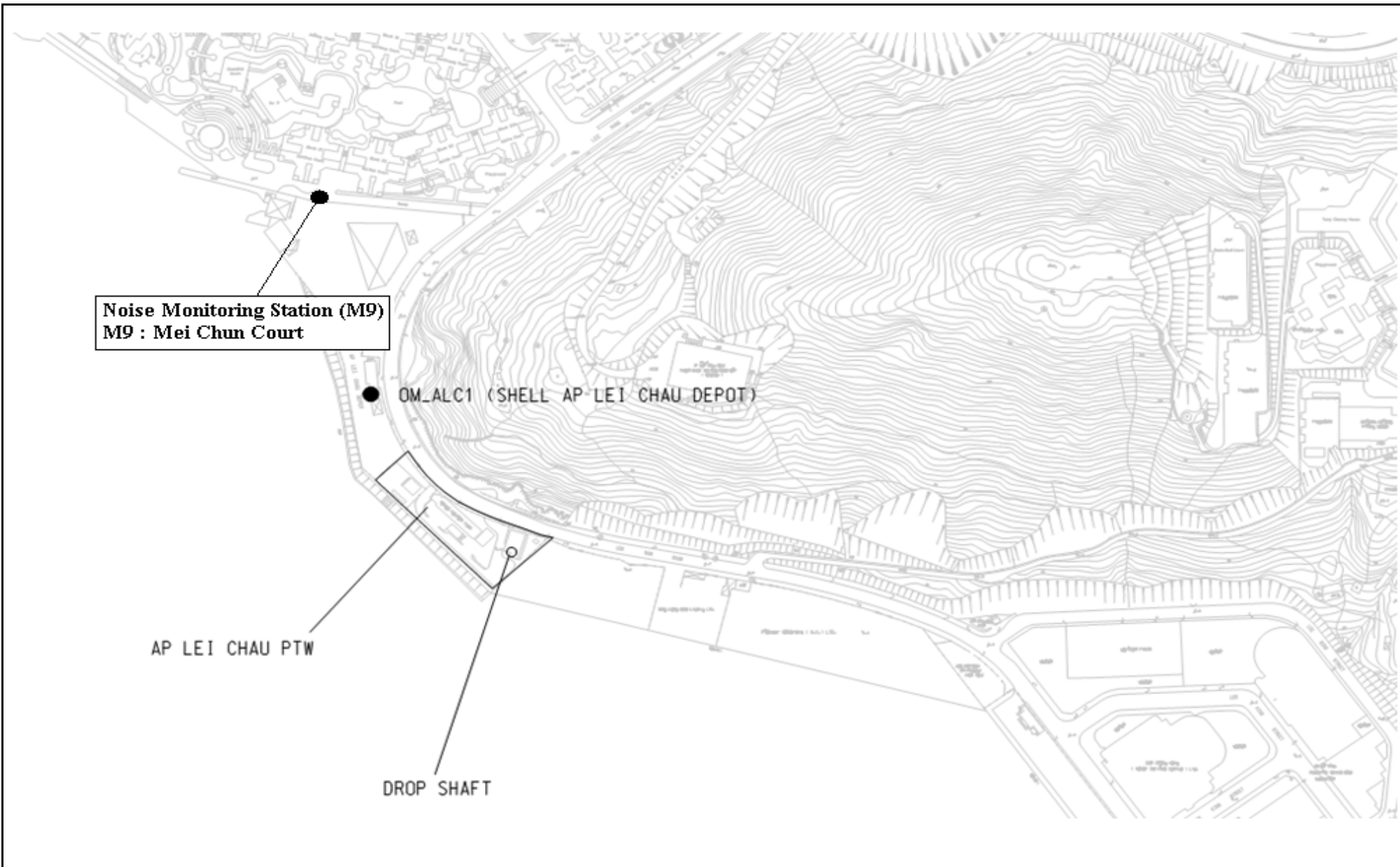
Title	Contract No: DC/2009/24	Scale	Project	CINOTECH
	HATS 2A - Upgrading of Preliminary Treatment Works at Sandy Bay, Cyberport, Wah Fu, Aberdeen and Ap Lei Chau	N.T.S	No. MA11060	
	General Location Plan of Sandy Bay PTW and Locations of Noise Monitoring Stations	Date	Figure	
		01/2012	1a	



Title	Contract No: DC/2009/24	Scale	Project	CINOTECH
	HATS 2A - Upgrading of Preliminary Treatment Works at Sandy Bay, Cyberport, Wah Fu, Aberdeen and Ap Lei Chau	N.T.S	No. MA11060	
	General Location Plan of Cyberport PTW and Locations of Air Quality and Noise Monitoring Stations	Date	Figure	
		01/2012	1B	

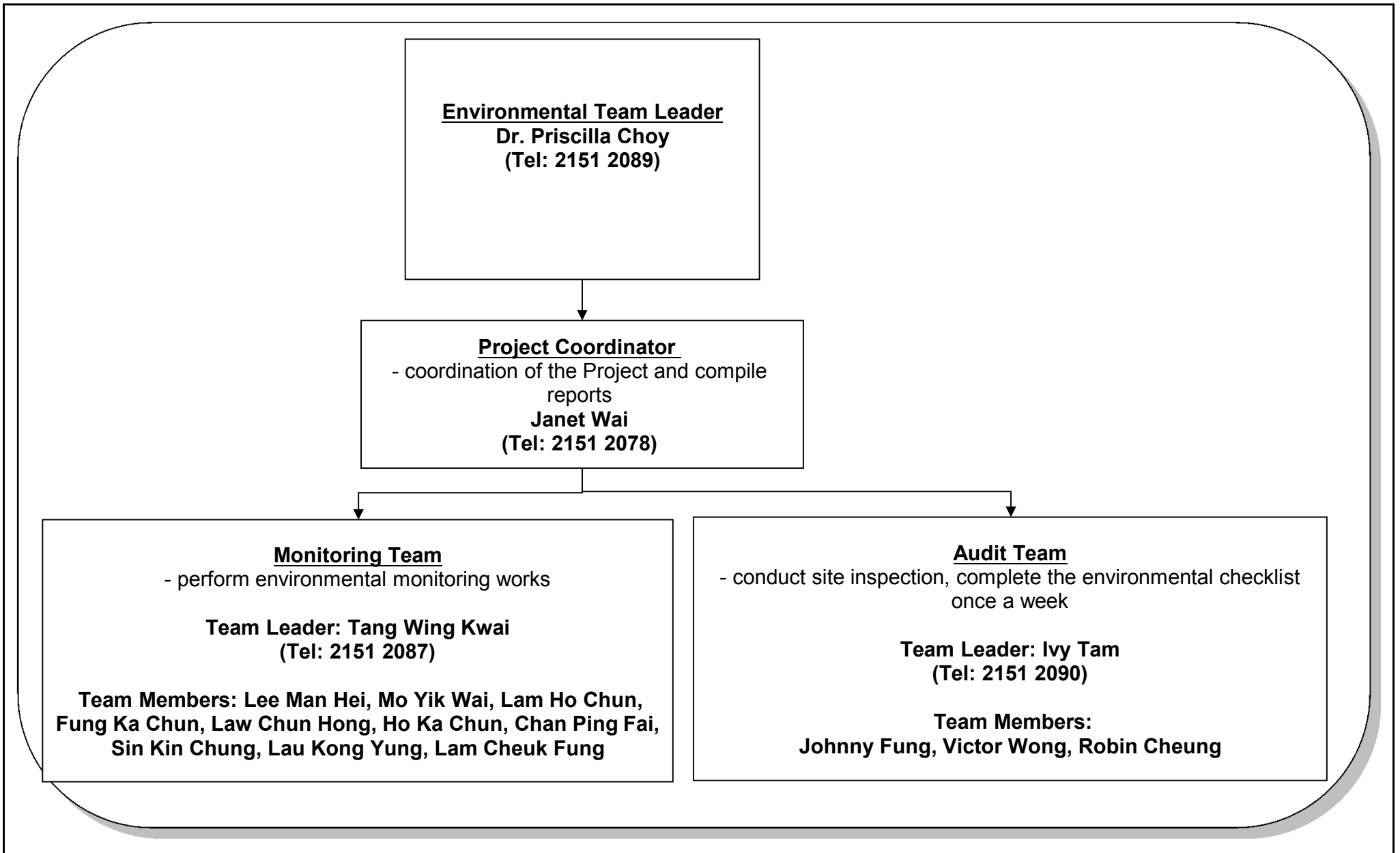


Title	Contract No: DC/2009/24	Scale	Project	CINOTECH
	HATS 2A - Upgrading of Preliminary Treatment Works at Sandy Bay, Cyberport, Wah Fu, Aberdeen and Ap Lei Chau	N.T.S	No. MA11060	
	Location of Wah Fu and Aberdeen PTW and Locations of Air Quality and Noise Monitoring Locations	Date	Figure	
		1/2012	1C	



Title	Contract No: DC/2009/24	Scale	Project	CINOTECH
	HATS 2A - Upgrading of Preliminary Treatment Works at Sandy Bay, Cyberport, Wah Fu, Aberdeen and Ap Lei Chau	N.T.S	No. MA11060	
	Locations of AP LEI CHAU PTW and the Noise Monitoring Location	Date	Figure	
		1/2012	1D	





Title	Contract No. DC/2009/24 HATS Stage 2A – Upgrading of Preliminary Treatment Works at Sandy Bay, Cyberport, Wah Fu, Aberdeen and Ap Lei Chau ET's Organization Chart	Scale	N.T.S	Project No.	MA11060	CINOTECH
		Date	Jul-13	Figure	2	

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**APPENDIX A  
CONTACT DETAILS OF THE PROJECT  
ORGANISATION**

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## Appendix A - Contact Details of the Project Organization

<b>Party</b>	<b>Role</b>	<b>Name</b>	<b>Position</b>	<b>Phone No.</b>
Drainage Services Department	Project Proponent	Mr. P. K. Kwok	Senior Engineer 2	2159 3403
Ove Arup & Partners Hong Kong Ltd	Engineer's Representative	Mr. Ted Tang	Principal Resident Engineer	2370-4311
	Coordinator	Ms. Natalie Kwok	Resident Engineer	6794 8844
Cinotech	Environmental Team	Dr. Priscilla Choy	ET Leader	2151 2089
		Ms. Janet Wai	Project Coordinator & Audit Team Leader	2151 2078
Mott MacDonald	Independent Environmental Checker	Dr. Anne Kerr	Independent Environmental Checker	2828 5757
Leader and JEC Joint Venture	Contractor	Mr. Wilson Chan	Site Agent	9656 8865
		Mr. Patrick Wong	Environmental Officer	9019 7270

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**APPENDIX B**  
**CONSTRUCTION PROGRAMME**

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Activity ID	Activity Name	% Comp	Original Duration	Early Start	Early Finish	June 2014					July 2014					August 2014					September 2014			
						26	02	09	16	23	30	07	14	21	28	04	11	18	25	01	08	15	22	
<b>DSD - HATSS2 Upgrading of PTW (DC/2009/24)</b>																								
<b>Particulars</b>																								
<b>Key Dates</b>																								
Commencement / Completion																								
24GEN00020	Time for Completion of Project	0%	1309	31-Aug-11 A	23-Oct-16																			
<b>Portion of the Site (MILESTONE)</b>																								
<b>Sandy Bay PTW</b>																								
Possession / Vacation of Portions																								
24MSBY00025	Vacation Date_SBY-T1 (30 days after H/O of ALC-T2)	0%	0	02-Jul-14	◆ Vacation Date_SBY-T1 (30 days after H/O of ALC-T2), Vacation Date_SBY-T1 (30 days after H/O of ALC-T2)																			
<b>Cyberport PTW</b>																								
Possession / Vacation of Portions																								
24MCPT00010	H/O Date_CP-1 (1035 days after start)	0%	0	30-Jun-14	◆ H/O Date_CP-1 (1035 days after start)																			
<b>Wah Fu PTW</b>																								
Possession / Vacation of Portions																								
24MWFU00030	H/O Date_WF-2 (914 days after start)	0%	0	24-Jun-14	◆ H/O Date_WF-2 (914 days after start)																			
<b>Civil &amp; Geo. Submission</b>																								
<b>Contractor's Design, Submission / Approval &amp; Procurement</b>																								
<b>Technical Information &amp; Drawings</b>																								
<b>Cyberport</b>																								
<b>Major Technical Data / Civil Works Design</b>																								
24DCPT00294	Review / Resubmit of Design for Flume Channels	0%	28	28-Jul-13 A	21-Jul-14	Review / Resubmit of Design for Flume Channels																		
24DCPT00295	Approval of Design for Flume Channels	0%	14	22-Jul-14	04-Aug-14	Approval of Design for Flume Channels																		
24DCPT00300	Prepare / Submission of Design for pipe trench from drop shaft to existing CPT PTW for odour pipe installation	0%	40	24-Apr-14 A	24-Jun-14	Prepare / Submission of Design for pipe trench from drop shaft to existing CPT PTW for odour pipe installation																		
24DCPT00310	Review / Approval of ICE Design for pipe trench from drop shaft to existing CPT PTW for odour pipe installation	0%	20	25-Jun-14	14-Jul-14	Review / Approval of ICE Design for pipe trench from drop shaft to existing CPT PTW for odour pipe installation																		
24DCPT00320	Comments / Approval of Design for pipe trench from drop shaft to existing CPT PTW for odour pipe installation	0%	28	15-Jul-14	11-Aug-14	Comments / Approval of Design for pipe trench from drop shaft to existing CPT PTW for odour pipe installation																		
24DCPT00330	Review / Resubmit of Design for pipe trench from drop shaft to existing CPT PTW for odour pipe installation	0%	28	12-Aug-14	08-Sep-14	Review / Resubmit of Design for pipe trench from drop shaft to existing CPT PTW for odour pipe installation																		
24DCPT00340	Approval of Design for pipe trench from drop shaft to existing CPT PTW for odour pipe installation	0%	14	09-Sep-14	22-Sep-14	Approval of Design for pipe trench from drop shaft to existing CPT PTW for odour pipe installation																		
24DCPT00346	Prepare / Submission of Design for permanent concrete plinth for new deodorization unit	0%	30	01-Mar-14 A	25-Jun-14	Prepare / Submission of Design for permanent concrete plinth for new deodorization unit																		
24DCPT00347	Review / Approval of ICE Design for permanent concrete plinth for new deodorization unit	0%	14	26-Jun-14	09-Jul-14	Review / Approval of ICE Design for permanent concrete plinth for new deodorization unit																		
24DCPT00348	Comments / Approval of Design for permanent concrete plinth for new deodorization unit	0%	14	10-Jul-14	23-Jul-14	Comments / Approval of Design for permanent concrete plinth for new deodorization unit																		
24DCPT00349	Review / Resubmit of Design for permanent concrete plinth for new deodorization unit	0%	14	24-Jul-14	06-Aug-14	Review / Resubmit of Design for permanent concrete plinth for new deodorization unit																		
24DCPT00350	Approval of Design for permanent concrete plinth for new deodorization unit	0%	7	07-Aug-14	13-Aug-14	Approval of Design for permanent concrete plinth for new deodorization unit																		
<b>Method Statement</b>																								
24DCPT02160	Prepare / Submission of Method Statement for Trench, Chambers and Channels	0%	60	23-Feb-14 A	01-Jul-14	Prepare / Submission of Method Statement for Trench, Chambers and Channels																		
24DCPT02170	Comments / Approval of Method Statement for Trench, Chambers and Channels	0%	28	24-Jun-14	21-Jul-14	Comments / Approval of Method Statement for Trench, Chambers and Channels																		
24DCPT02180	Review / Resubmit of Method Statement for Trench, Chambers and Channels	0%	14	22-Jul-14	04-Aug-14	Review / Resubmit of Method Statement for Trench, Chambers and Channels																		
24DCPT02190	Approval of Method Statement for Trench, Chambers and Channels	0%	14	05-Aug-14	18-Aug-14	Approval of Method Statement for Trench, Chambers and Channels																		
24DCPT02200	Prepare / Submission of Method Statement for pipe trench for odour pipe installation	0%	60	24-May-14 A	22-Jul-14	Prepare / Submission of Method Statement for pipe trench for odour pipe installation																		
24DCPT02210	Comments / Approval of Method Statement for pipe trench for odour pipe installation	0%	28	23-Jul-14	19-Aug-14	Comments / Approval of Method Statement for pipe trench for odour pipe installation																		
24DCPT02220	Review / Resubmit of Method Statement for pipe trench for odour pipe installation	0%	14	20-Aug-14	02-Sep-14	Review / Resubmit of Method Statement for pipe trench for odour pipe installation																		
24DCPT02230	Approval of Method Statement for pipe trench for odour pipe installation	0%	14	03-Sep-14	16-Sep-14	Approval of Method Statement for pipe trench for odour pipe installation																		

Start Date: 25-Jun-11  
 Finish Date: 23-Oct-17  
 Date Date: 23-Jun-14  
 Run Date: 24-Jun-14

- Primary Baseline
- Actual Work
- Critical Remaining Work
- Baseline Milestone
- Current Bar Labels
- Milestone

HATSS2A Contract No. DC/2009/24

**3 MONTHS ROLLING PROGRAMME**

**JUNE 2014**

DETAILED WORKS PROGRAMME - DC/2009/24			
Date	Revision	Checked	Approved
30-Mar-12	DWP - REVISION 0		
14-Dec-12	DWP - REVISION 2		
17-Jun-14	DWP - REVISION 3 (S5, 6 & 7)		
23-Jun-14	UDWP - REVISION 3		

Activity ID	Activity Name	% Comp	Original Duration	Early Start	Early Finish	June 2014					July 2014					August 2014					September 2014			
						26	02	09	16	23	30	07	14	21	28	04	11	18	25	01	08	15	22	
<b>Order / Manufacturing / Shipment / Delivery</b>																								
24DCPT02360	Manufacturing of 700Ø DI Pipe, valves and accessories	100%	90	11-Feb-14 A	12-Jun-14 A	Manufacturing of 700Ø DI Pipe, valves and accessories																		
24DCPT02370	Delivery of 700Ø DI Pipe, valves and accessories	0%	21	13-Jun-14 A	03-Jul-14	Delivery of 700Ø DI Pipe, valves and accessories																		
<b>Wah Fu</b>																								
<b>Major Technical Data / Civil Works Design</b>																								
24DWFU00160	Review / Approval of ICE for RC Design (Fine Screen & Grit Trap Building)	85%	20	08-Feb-12 A	25-Jun-14	Review / Approval of ICE for RC Design (Fine Screen & Grit Trap Building)																		
24DWFU00180	Review / Resubmit of RC Design (Fine Screen & Grit Trap Building)	85%	28	08-Feb-12 A	27-Jun-14	Review / Resubmit of RC Design (Fine Screen & Grit Trap Building)																		
24DWFU00190	Approval of RC Design (Fine Screen & Grit Trap Building)	50%	14	18-Jul-12 A	04-Jul-14	Approval of RC Design (Fine Screen & Grit Trap Building)																		
24DWFU00200	Prepare / Submission of Design for Finishing Works (Fine Screen & Grit Trap Building)	0%	40	01-Jun-14 A	10-Jul-14	Prepare / Submission of Design for Finishing Works (Fine Screen & Grit Trap Building)																		
24DWFU00210	Review / Approval of ICE for Design of Finishing Works (Fine Screen & Grit Trap Building)	0%	20	11-Jul-14	30-Jul-14	Review / Approval of ICE for Design of Finishing Works (Fine Screen & Grit Trap Building)																		
24DWFU00220	Comments / Approval of Design for Finishing Works (Fine Screen & Grit Trap Building)	0%	28	31-Jul-14	27-Aug-14	Comments / Approval of Design for Finishing Works (Fine Screen & Grit Trap Building)																		
24DWFU00230	Review / Resubmit of Design for Finishing Works (Fine Screen & Grit Trap Building)	0%	28	28-Aug-14	24-Sep-14	Review / Resubmit of Design for Finishing Works (Fine Screen & Grit Trap Building)																		
24DWFU00400	Prepare / Submission of Design for Flume Channels & Chambers	0%	40	08-Jun-14 A	17-Jul-14	Prepare / Submission of Design for Flume Channels & Chambers																		
24DWFU00410	Review / Approval of ICE for Design for Flume Channels & Chambers	0%	20	18-Jul-14	06-Aug-14	Review / Approval of ICE for Design for Flume Channels & Chambers																		
24DWFU00420	Comments / Approval of Design for Flume Channels & Chambers	0%	28	07-Aug-14	03-Sep-14	Comments / Approval of Design for Flume Channels & Chambers																		
24DWFU00430	Review / Resubmit of Design for Flume Channels & Chambers	0%	28	04-Sep-14	01-Oct-14	Review / Resubmit of Design for Flume Channels & Chambers																		
<b>Method Statement for Major Works</b>																								
24DWFU02100	Review / Resubmit of Method Statement for Structural Works	0%	14	11-Mar-14 A	07-Jul-14	Review / Resubmit of Method Statement for Structural Works																		
24DWFU02110	Approval of Method Statement for Structural Works	0%	14	24-Jun-14	07-Jul-14	Approval of Method Statement for Structural Works																		
24DWFU02120	Prepare / Submission of Method Statement for Finishing works	0%	60	01-Jun-14 A	30-Jul-14	Prepare / Submission of Method Statement for Finishing works																		
24DWFU02130	Comments / Approval of Method Statement for Finishing works	0%	28	04-Aug-14	31-Aug-14	Comments / Approval of Method Statement for Finishing works																		
24DWFU02140	Review / Resubmit of Method Statement for Finishing works	0%	14	01-Sep-14	14-Sep-14	Review / Resubmit of Method Statement for Finishing works																		
24DWFU02150	Approval of Method Statement for Finishing works	0%	14	15-Sep-14	28-Sep-14	Approval of Method Statement for Finishing works																		
24DWFU02160	Prepare / Submission of Method Statement for Trench, Chambers and Channels	0%	60	06-Jul-14	03-Sep-14	Prepare / Submission of Method Statement for Trench, Chambers and Channels																		
24DWFU02170	Comments / Approval of Method Statement for Trench, Chambers and Channels	0%	28	04-Sep-14	01-Oct-14	Comments / Approval of Method Statement for Trench, Chambers and Channels																		
<b>Material Submission / Approval</b>																								
24DWFU02320	Prepare / Submission of Material Approval for Roller Shutter	0%	28	01-Jun-14 A	28-Jun-14	Prepare / Submission of Material Approval for Roller Shutter																		
24DWFU02330	Review / Approval of Material Approval for Roller Shutter	0%	28	29-Jun-14	26-Jul-14	Review / Approval of Material Approval for Roller Shutter																		
24DWFU02340	Review / Resubmit of Material Approval for Roller Shutter	0%	14	27-Jul-14	09-Aug-14	Review / Resubmit of Material Approval for Roller Shutter																		
24DWFU02350	Approval of Material Approval for Roller Shutter	0%	14	10-Aug-14	23-Aug-14	Approval of Material Approval for Roller Shutter																		
<b>Order / Manufacturing / Shipment / Delivery</b>																								
24DWFU02400	Placing order for Roller Shutter	0%	10	14-Aug-14	23-Aug-14	Placing order for Roller Shutter																		
24DWFU02410	Manufacturing of Roller Shutter	0%	90	24-Aug-14	21-Nov-14	Manufacturing of Roller Shutter																		
24DWFU02430	Placing order for FRP cover/flooring	0%	10	24-Jun-14*	03-Jul-14	Placing order for FRP cover/flooring																		
24DWFU02440	Manufacturing of FRP cover/flooring	0%	90	04-Jul-14	01-Oct-14	Manufacturing of FRP cover/flooring																		
<b>Aberdeen</b>																								
<b>Temporary Works Design</b>																								
24DABN00650	Prepare / Submission of Tech. Data and Shop Drawings for Construction of Temp. Office	0%	20	24-Jun-14	13-Jul-14	Prepare / Submission of Tech. Data and Shop Drawings for Construction of Temp. Office																		
24DABN00660	Review / Approval of ICE Design for Construction of Temp. Office	0%	12	14-Jul-14	25-Jul-14	Review / Approval of ICE Design for Construction of Temp. Office																		
24DABN00670	Comments / Approval of Tech. Data and Shop Drawings for Construction of Temp. Office	0%	12	26-Jul-14	06-Aug-14	Comments / Approval of Tech. Data and Shop Drawings for Construction of Temp. Office																		
24DABN00680	Review / Resubmit of Tech. Data and Shop Drawings for Construction of Temp. Office	0%	14	07-Aug-14	20-Aug-14	Review / Resubmit of Tech. Data and Shop Drawings for Construction of Temp. Office																		
24DABN00690	Approval of Tech. Data and Shop Drawings for Construction of Temp. Office	0%	14	21-Aug-14	03-Sep-14	Approval of Tech. Data and Shop Drawings for Construction of Temp. Office																		
<b>Method Statement for Temporary Works</b>																								
24DABN02670	Prepare / Submission of Method Statement for construction of Temp. Office	0%	30	24-Jun-14	23-Jul-14	Prepare / Submission of Method Statement for construction of Temp. Office																		
24DABN02680	Comments / Approval of Method Statement for construction of Temp. Office	0%	14	24-Jul-14	06-Aug-14	Comments / Approval of Method Statement for construction of Temp. Office																		
24DABN02690	Review / Resubmit of Method Statement for construction of Temp. Office	0%	14	07-Aug-14	20-Aug-14	Review / Resubmit of Method Statement for construction of Temp. Office																		

Activity ID	Activity Name	% Comp	Original Duration	Early Start	Early Finish	June 2014					July 2014					August 2014					September 2014									
						26	02	09	16	23	30	07	14	21	28	04	11	18	25	01	08	15	22							
24DABN02700	Approval of Method Statement for construction of Temp. Office	0%	14	21-Aug-14	03-Sep-14																							Approval of Method Statement for construction of Te		
<b>Major Technical Data / Civil Works Design</b>																														
24DABN00180	Review / Resubmit of Piling Works Design for Workshop & Admin Building	0%	28	22-Dec-11 A	25-Jun-14																								Review / Resubmit of Piling Works Design for Workshop & Admin Building	
24DABN00190	Approval of Piling Works Design for Workshop & Admin Building	0%	14	24-Mar-12 A	02-Jul-14																								Approval of Piling Works Design for Workshop & Admin Building	
24DABN00230	Review / Resubmit of RC Design (Workshop & Admin Building)	0%	28	07-Feb-12 A	14-Jul-14																								Review / Resubmit of RC Design (Workshop & Admin Building)	
24DABN00240	Approval of RC Design (Workshop & Admin Building)	0%	14	18-Jul-12 A	21-Jul-14																								Approval of RC Design (Workshop & Admin Building)	
24DABN00250	Prepare / Submission of Design for Finishing Works (Workshop & Admin Building)	0%	40	22-Jul-14	30-Aug-14																								Prepare / Submission of Design for Finishing Works (Worksh	
24DABN00260	Review / Approval of ICE Design for Finishing Works (Workshop & Admin Building)	0%	20	31-Aug-14	19-Sep-14																								Review / Approval	
24DABN00270	Comments / Approval of Design for Finishing Works (Workshop & Admin Building)	0%	28	20-Sep-14	17-Oct-14																									
24DABN00300	Prepare / Submission of RC Design (Seawater Pumping Station)	0%	40	22-Jul-14*	30-Aug-14																								Prepare / Submission of RC Design (Seawater Pumping Stat	
24DABN00310	Review / Approval of ICE RC Design (Seawater Pumping Station)	0%	20	31-Aug-14	19-Sep-14																								Review / Approval	
24DABN00320	Comments / Approval of RC Design (Seawater Pumping Station)	0%	28	20-Sep-14	17-Oct-14																									
24DABN00380	Review / Resubmit of RC Design of Flume Channels & Chambers	0%	28	13-Jul-13 A	25-Jun-14																								Review / Resubmit of RC Design of Flume Channels & Chambers	
24DABN00390	Approval of RC Design of Flume Channels & Chambers	0%	14	26-Jun-14	09-Jul-14																								Approval of RC Design of Flume Channels & Chambers	
24DABN00450	Prepare / Submission of Design for Roadworks	0%	40	22-Jul-14	30-Aug-14																								Prepare / Submission of Design for Roadworks	
24DABN00460	Review / Approval of ICE Design for Roadworks	0%	20	31-Aug-14	19-Sep-14																								Review / Approval	
24DABN00470	Comments / Approval of Design for Roadworks	0%	28	20-Sep-14	17-Oct-14																									
<b>Method Statement for Major Works</b>																														
24DABN02180	Review / Resubmit of Method Statement for Trench, Chambers and Channels	0%	14	15-May-14 A	07-Jul-14																									Review / Resubmit of Method Statement for Trench, Chambers and Channels
24DABN02190	Approval of Method Statement for Trench, Chambers and Channels	0%	14	08-Jul-14	21-Jul-14																									Approval of Method Statement for Trench, Chambers and Channels
<b>Material Submission / Approval</b>																														
24DABN02360	Prepare / Submission of Material approval for Roller Shutter	0%	60	10-Aug-14	08-Oct-14																									
<b>Order / Manufacturing / Shipment / Delivery</b>																														
24DABN02600	Delivery of 1800Ø DI Drainage Pipe	100%	30	04-May-14 A	02-Jun-14 A																									Delivery of 1800Ø DI Drainage Pipe
<b>Ap Lei Chau</b>																														
<b>Major Tech. Data / Civil Works Design</b>																														
24DALC00130	Review / Resubmit of RC Design (Screening & Degritting Facilities and Effluent Pumping Station)	0%	28	01-Mar-14 A	21-Jul-14																									Review / Resubmit of RC Design (Screening & Degritting Facilities and Effluent Pumping Station)
24DALC00140	Approval of RC Design (Screening & Degritting Facilities and Effluent Pumping Station)	0%	14	22-Jul-14	04-Aug-14																									Approval of RC Design (Screening & Degritting Facilities and Effluent Pump
24DALC00150	Prepare / Submission of Finishing Works (Screening & Degritting Facilities and Effluent Pumping Station)	0%	40	24-Jun-14	02-Aug-14																									Prepare / Submission of Finishing Works (Screening & Degritting Facilities and Effluent Pumping Station)
24DALC00160	Review / Approval of ICE for Finishing Works (Screening & Degritting Facilities and Effluent Pumping Station)	0%	20	03-Aug-14	22-Aug-14																									Review / Approval of ICE for Finishing Works (Screening & Degritting Facilities
24DALC00170	Comments / Approval of Finishing Works (Screening & Degritting Facilities and Effluent Pumping Station)	0%	28	23-Aug-14	19-Sep-14																									Comments / Appro
24DALC00180	Review / Resubmit of Finishing Works (Screening & Degritting Facilities and Effluent Pumping Station)	0%	28	20-Sep-14	17-Oct-14																									
24DALC00200	Prepare / Submission of Design for Flume Channels & Chamber	0%	40	05-Aug-14	13-Sep-14																									
24DALC00210	Review / Approval of ICE for Design of Flume Channels & Chamber	0%	20	14-Sep-14	03-Oct-14																									
<b>Method Statement for Major Works</b>																														
24DALC02100	Review / Resubmit of Method Statement for Structural Works	100%	14	22-Oct-13 A	30-Jun-14																									Review / Resubmit of Method Statement for Structural Works
24DALC02110	Approval of Method Statement for Structural Works	0%	14	15-Feb-14 A	07-Jul-14																									Approval of Method Statement for Structural Works
24DALC02120	Prepare / Submission of Method Statement for Finishing works	0%	60	24-Jun-14	22-Aug-14																									Prepare / Submission of Method Statement for Finishing works
24DALC02130	Comments / Approval of Method Statement for Finishing works	0%	28	23-Aug-14	19-Sep-14																									Comments / Appro
24DALC02140	Review / Resubmit of Method Statement for Finishing works	0%	14	20-Sep-14	03-Oct-14																									
24DALC02160	Prepare / Submission of Method Statement for Flume Channel	0%	60	14-Sep-14	12-Nov-14																									
<b>Order / Manufacturing / Shipment / Delivery</b>																														
24DALC02610	Manufacturing of FRP covers/ flooring	0%	90	06-May-13 A	22-Aug-14																									Manufacturing of FRP covers/ flooring
24DALC02620	Delivery of FRP covers/ flooring	0%	30	23-Aug-14	21-Sep-14																									Delivery of FRP
<b>Electrical and Mechanical Submission</b>																														
<b>Contractor's Design, Submission / Approval and Procurement</b>																														

Activity ID	Activity Name	% Comp	Original Duration	Early Start	Early Finish	June 2014					July 2014					August 2014					September 2014			
						26	02	09	16	23	30	07	14	21	28	04	11	18	25	01	08	15	22	
<b>Technical Information &amp; Drawings</b>																								
<b>Cyberport</b>																								
<b>Major Technical Data / E&amp;M Works Design</b>																								
24DCPT03420	Review / Resubmit of Control Philosophy	0%	10	08-Feb-12 A	25-Jun-14	Review / Resubmit of Control Philosophy																		
24DCPT03430	Approval of Control Philosophy	100%	10	10-May-12 A	05-Jul-14	Approval of Control Philosophy																		
24DCPT03450	Review / Approval of ICE and Submitted to Client the DCS Detail Design	0%	12	06-Jul-14	17-Jul-14	Review / Approval of ICE and Submitted to Client the DCS Detail Design																		
24DCPT03470	Review / Resubmit of DCS Detail Design	0%	10	18-Jul-14	27-Jul-14	Review / Resubmit of DCS Detail Design																		
24DCPT03480	Approval of DCS Detail Design	0%	10	28-Jul-14	06-Aug-14	Approval of DCS Detail Design																		
24DCPT03484	Approval of combined services drawing	100%	30	09-Apr-13 A	27-May-14 A	Approval of combined services drawing																		
<b>Order / Manufacturing / Shipment / Delivery</b>																								
24PCPT01040	Manufacturing of Penstock	0%	140	26-Jan-14 A	09-Aug-14	Manufacturing of Penstock																		
24PCPT01050	Packaging / Delivery of Penstock	0%	30	10-Aug-14	08-Sep-14	Packaging / Delivery of Penstock																		
24PCPT01070	Manufacturing of Stoplog	0%	140	26-Jan-14 A	10-Sep-14	Manufacturing of Stoplog																		
24PCPT01080	Packaging / Delivery of Stoplog	0%	30	11-Sep-14	10-Oct-14	Packaging / Delivery of Stoplog																		
24PCPT01100	Manufacturing of Deodorization System	100%	160	11-Mar-13 A	30-May-14 A	Manufacturing of Deodorization System																		
24PCPT01105	FAT of Deodorization System	0%	30	31-May-14 A	29-Jun-14	FAT of Deodorization System																		
24PCPT01110	Packaging / Delivery of Deodorization System	0%	30	30-Jun-14	29-Jul-14	Packaging / Delivery of Deodorization System																		
24PCPT01120	Placing of Order on Control Panel	0%	10	30-Jul-14*	08-Aug-14	Placing of Order on Control Panel																		
24PCPT01130	Manufacturing of Control Panel	0%	50	09-Aug-14	27-Sep-14	Manufacturing of Control Panel																		
24PCPT01160	Manufacturing of Instruments	0%	110	18-Nov-13 A	06-Jul-14	Manufacturing of Instruments																		
24PCPT01170	Packaging / Delivery of Instruments	0%	30	07-Jul-14	05-Aug-14	Packaging / Delivery of Instruments																		
24PCPT01190	Manufacturing of DCS Control System	100%	75	18-Nov-13 A	22-Jul-14	Manufacturing of DCS Control System																		
24PCPT01200	FAT for DCS Control System	0%	6	23-Jul-14	28-Jul-14	FAT for DCS Control System																		
24PCPT01210	Packaging / Delivery of DCS Control System	0%	1	29-Jul-14	29-Jul-14	Packaging / Delivery of DCS Control System																		
24PCPT01230	Manufacturing of Weather & H2S Monitoring Station	0%	140	13-Nov-13 A	21-Jul-14	Manufacturing of Weather & H2S Monitoring Station																		
24PCPT01240	Packaging / Delivery of Weather & H2S Monitoring Station	0%	30	22-Jul-14	20-Aug-14	Packaging / Delivery of Weather & H2S Monitoring Station																		
24PCPT01243	Packaging / Delivery of Electrical Component for MCC (Switchboard) Modification	100%	30	01-May-14 A	30-May-14 A	Packaging / Delivery of Electrical Component for MCC (Switchboard) Modification																		
24PCPT01245	Manufacturing of Miscellaneous E&M Items	60%	90	08-Mar-14 A	26-Jul-14	Manufacturing of Miscellaneous E&M Items																		
24PCPT01246	Packaging / Delivery of Miscellaneous E&M Items	0%	30	27-Jul-14	25-Aug-14	Packaging / Delivery of Miscellaneous E&M Items																		
<b>Wah Fu</b>																								
<b>Major Technical Data / E&amp;M Works Design</b>																								
24DWFU04080	Prepare / Submit to ICE the Electrical Protection Equipment Calculation	0%	20	24-Jun-14	13-Jul-14	Prepare / Submit to ICE the Electrical Protection Equipment Calculation																		
24DWFU04090	Review / Approval of ICE and Submitted to Client the Electrical Protection Equipment Calculation	0%	12	14-Jul-14	25-Jul-14	Review / Approval of ICE and Submitted to Client the Electrical Protection Equipment Calculation																		
24DWFU04100	Comments / Approval of Electrical Protection Equipment Calculation	0%	28	26-Jul-14	22-Aug-14	Comments / Approval of Electrical Protection Equipment Calculation																		
24DWFU04110	Review / Resubmit of Electrical Protection Equipment Calculation	0%	15	23-Aug-14	06-Sep-14	Review / Resubmit of Electrical Protection Equipment Calculation																		
24DWFU04120	Approval of Electrical Protection Equipment Calculation	0%	15	07-Sep-14	21-Sep-14	Approval of Electrical Protection Equipment Calculation																		
24DWFU04160	Review / Resubmit of Control Philosophy	100%	15	08-Feb-12 A	26-Jun-14	Review / Resubmit of Control Philosophy																		
24DWFU04170	Approval of Control Philosophy	0%	15	08-May-12 A	03-Jul-14	Approval of Control Philosophy																		
24DWFU04180	Prepare / Submit to ICE the DCS Detail Design	0%	20	04-Jul-14	23-Jul-14	Prepare / Submit to ICE the DCS Detail Design																		
24DWFU04190	Review / Approval of ICE and Submitted to Client the DCS Detail Design	0%	12	24-Jul-14	04-Aug-14	Review / Approval of ICE and Submitted to Client the DCS Detail Design																		
24DWFU04200	Comments / Approval of DCS Detail Design	0%	28	05-Aug-14	01-Sep-14	Comments / Approval of DCS Detail Design																		
24DWFU04210	Review / Resubmit of DCS Detail Design	0%	15	02-Sep-14	16-Sep-14	Review / Resubmit of DCS Detail Design																		
24DWFU04220	Approval of DCS Detail Design	0%	15	17-Sep-14	01-Oct-14	Approval of DCS Detail Design																		
24DWFU04222	Comments / Approval of combined services drawing	50%	30	06-Jun-12 A	30-Jun-14	Comments / Approval of combined services drawing																		
24DWFU04223	Review / Resubmit of combined services drawing	0%	30	01-Jul-14	30-Jul-14	Review / Resubmit of combined services drawing																		
24DWFU04224	Approval of combined services drawing	0%	30	31-Jul-14	29-Aug-14	Approval of combined services drawing																		



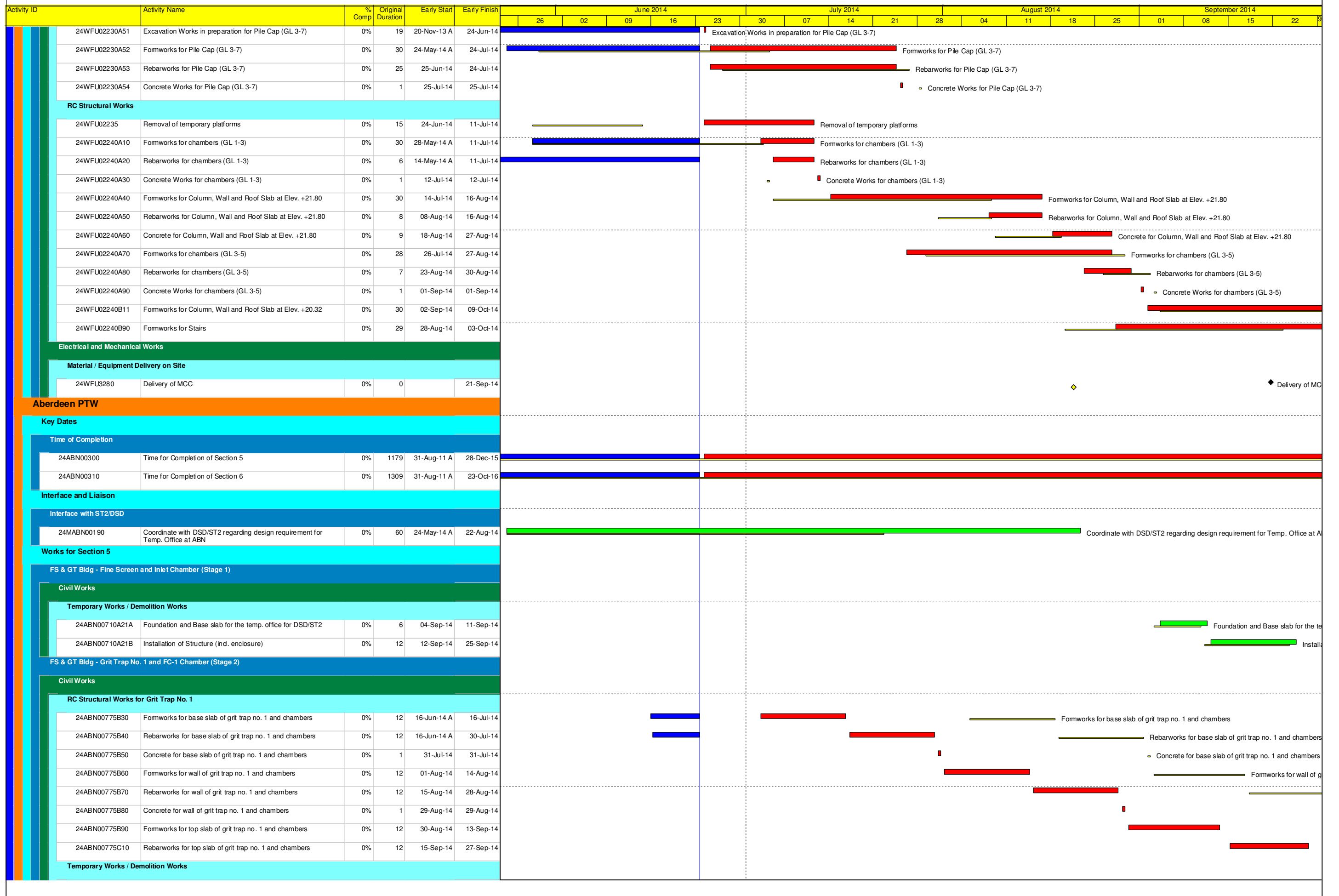
Activity ID	Activity Name	% Comp	Original Duration	Early Start	Early Finish	June 2014					July 2014					August 2014					September 2014			
						26	02	09	16	23	30	07	14	21	28	04	11	18	25	01	08	15	22	
24DWFU04226	Review / Approval of ICE and Submitted to Client the Design Drawing for New MCC (Switchboard)	0%	12	22-Sep-12 A	29-Jun-14																			
24DWFU04228	Review / Resubmit of Design Drawing for New MCC (Switchboard)	0%	15	22-Sep-12 A	06-Jul-14																			
24DWFU04229	Approval of Design Drawing for New MCC (Switchboard)	0%	15	12-Dec-12 A	13-Jul-14																			
24DWFU04232	Review / Resubmit of Design Drawing for Miscellaneous E&M Items	0%	30	08-Dec-13 A	02-Aug-14																			
24DWFU04233	Approval of Design Drawing for Miscellaneous E&M Items	0%	30	03-Aug-14	01-Sep-14																			
<b>Equipment Submission/Approval</b>																								
24DWFU03821	Prepare / Submission of Miscellaneous E&M Items	0%	40	02-Sep-14	11-Oct-14																			
<b>Order / Manufacturing / Shipment / Delivery</b>																								
24PWFU01190	Manufacturing of Coarse Screen	0%	145	08-May-13 A	01-Oct-14																			
24PWFU01220	Manufacturing of Fine Screen	0%	145	08-May-13 A	02-Aug-14																			
24PWFU01225	FAT of Fine Screen	0%	90	03-Aug-14	31-Oct-14																			
24PWFU01231	Placing of Order on Fine Screen Conveyor	100%	10	03-Jun-14 A	12-Jun-14 A																			
24PWFU01232	Manufacturing of Fine Screen Conveyor	0%	145	13-Jun-14 A	04-Nov-14																			
24PWFU01280	Manufacturing of Grit Removal Facilities	0%	175	22-Jul-13 A	11-Oct-14																			
24PWFU01340	Manufacturing of Penstock	0%	140	13-May-14 A	30-Oct-14																			
24PWFU01360	Placing of Order on Stoplog	0%	10	04-Jul-14*	13-Jul-14																			
24PWFU01370	Manufacturing of Stoplog	0%	140	14-Jul-14	30-Nov-14																			
24PWFU01400	Manufacturing of Deodorization System	100%	140	14-Mar-13 A	22-Jun-14 A																			
24PWFU01405	FAT of Deodorization System	0%	90	23-Jun-14 A	20-Sep-14																			
24PWFU01410	Packaging / Delivery of Deodorization System	0%	30	21-Sep-14	20-Oct-14																			
24PWFU01430	Manufacturing of MCC (Switchboard) Panel	0%	190	21-Jun-13 A	12-Aug-14																			
24PWFU01440	FAT for MCC (Switchboard) Panel	0%	10	13-Aug-14	22-Aug-14																			
24PWFU01450	Packaging / Delivery of MCC (Switchboard) Panel	0%	30	23-Aug-14	21-Sep-14																			
24PWFU01460	Placing of Order on Control Panel	0%	10	01-Sep-14*	10-Sep-14																			
24PWFU01470	Manufacturing of Control Panel	0%	50	11-Sep-14	30-Oct-14																			
24PWFU01490	Placing of Order on Instruments	0%	10	24-Jun-14*	03-Jul-14																			
24PWFU01500	Manufacturing of Instruments	0%	110	04-Jul-14	21-Oct-14																			
24PWFU01520	Placing of Order on DCS Control System	0%	10	24-Jun-14*	03-Jul-14																			
24PWFU01530	Manufacturing of DCS Control System	0%	75	04-Jul-14	16-Sep-14																			
24PWFU01540	FAT for DCS Control System	0%	30	17-Sep-14	16-Oct-14																			
24PWFU01560	Placing of Order on Lifting Appliance	0%	10	04-Jul-14*	13-Jul-14																			
24PWFU01570	Manufacturing of Lifting Appliance	0%	80	14-Jul-14	01-Oct-14																			
24PWFU01630	Manufacturing of Emergency Generator Set	20%	200	07-Apr-13 A	21-Oct-14																			
<b>Aberdeen</b>																								
<b>Major Technical Data / E&amp;M Works Design</b>																								
24DABN03780	Prepare / Submit to ICE the Electrical Protection Equipment Calculation	0%	20	25-Jul-13 A	24-Jun-14																			
24DABN03790	Review / Approval of ICE and Submitted to Client the Electrical Protection Equipment Calculation	0%	12	25-Jun-14	06-Jul-14																			
24DABN03800	Comments / Approval of Electrical Protection Equipment Calculation	0%	28	07-Jul-14	03-Aug-14																			
24DABN03810	Review / Resubmit of Electrical Protection Equipment Calculation	0%	15	20-Jul-14	03-Aug-14																			
24DABN03820	Approval of Electrical Protection Equipment Calculation	0%	15	04-Aug-14	18-Aug-14																			
24DABN03860	Review / Resubmit of Control Philosophy	0%	15	06-Jun-12 A	30-Jun-14																			
24DABN03870	Approval of Control Philosophy	0%	15	05-Apr-14 A	15-Jul-14																			
24DABN03880	Prepare / Submit to ICE the DCS Detail Design	0%	20	16-Jul-14	04-Aug-14																			
24DABN03890	Review / Approval of ICE and Submitted to Client the DCS Detail Design	0%	12	05-Aug-14	16-Aug-14																			
24DABN03900	Comments / Approval of DCS Detail Design	0%	28	17-Aug-14	13-Sep-14																			
24DABN03910	Review / Resubmit of DCS Detail Design	0%	15	14-Sep-14	28-Sep-14																			

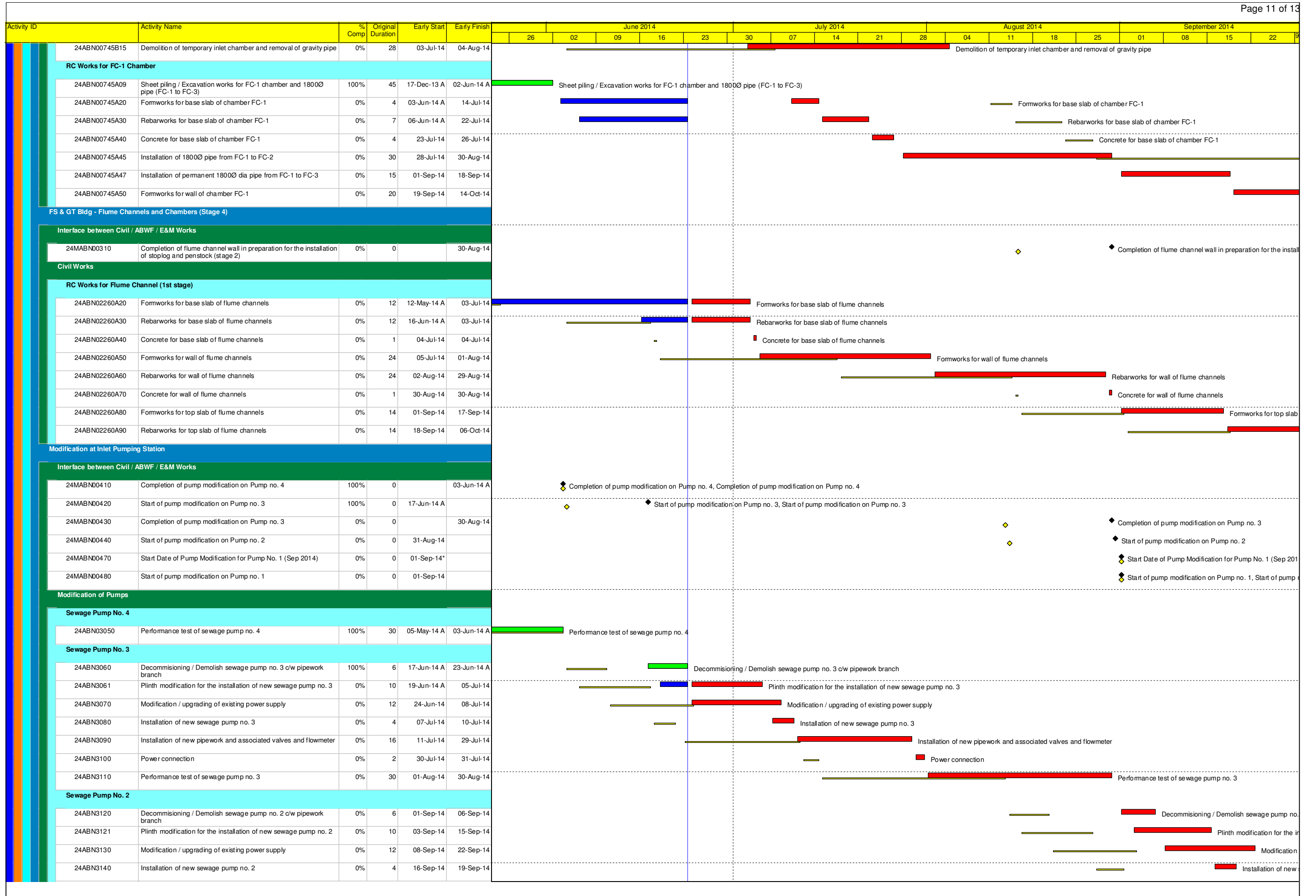
Activity ID	Activity Name	% Comp	Original Duration	Early Start	Early Finish	June 2014					July 2014					August 2014					September 2014			
						26	02	09	16	23	30	07	14	21	28	04	11	18	25	01	08	15	22	
24DABN03923	Review / Resubmit of combined services drawing	25%	30	05-Sep-12 A	24-Jun-14	Review / Resubmit of combined services drawing																		
24DABN03924	Approval of combined services drawing	25%	30	10-Oct-12 A	25-Jun-14	Approval of combined services drawing																		
24DABN03926	Review / Approval of ICE and Submitted to Client the Design Drawing for MCC (Switchboard) Modification	50%	12	22-Sep-12 A	28-Jun-14	Review / Approval of ICE and Submitted to Client the Design Drawing for MCC (Switchboard) Modification																		
24DABN03928	Review / Resubmit of Design Drawing for MCC (Switchboard) Modification	50%	10	22-Sep-12 A	30-Jun-14	Review / Resubmit of Design Drawing for MCC (Switchboard) Modification																		
24DABN03929	Approval of Design Drawing for MCC (Switchboard) Modification	0%	10	09-Jan-13 A	02-Jul-14	Approval of Design Drawing for MCC (Switchboard) Modification																		
24DABN03930	Prepare / Submit the Design Drawing for Miscellaneous E&M Items	0%	60	26-Jun-14	24-Aug-14	Prepare / Submit the Design Drawing for Miscellaneous E&M Items																		
24DABN03931	Comments / Approval of Design Drawing for Miscellaneous E&M Items	0%	30	25-Aug-14	23-Sep-14	Comments																		
<b>Order / Manufacturing / Shipment / Delivery</b>																								
24PABN01170	Manufacturing of Seawater Pump	0%	335	13-May-13 A	21-Oct-14	Manufacturing of Seawater Pump																		
24PABN01370	Packaging / Delivery of Instruments	0%	30	25-Jun-13 A	25-Jun-14	Packaging / Delivery of Instruments																		
<b>Ap Lei Chau</b>																								
<b>Major Technical Data / E&amp;M Works Design</b>																								
24DALC03780	Prepare / Submit to ICE the Electrical Protection Equipment Calculation	0%	20	17-Jul-14	05-Aug-14	Prepare / Submit to ICE the Electrical Protection Equipment Calculation																		
24DALC03790	Review / Approval of ICE and Submitted to Client the Electrical Protection Equipment Calculation	0%	12	06-Aug-14	17-Aug-14	Review / Approval of ICE and Submitted to Client the Electrical Protection Equipment Ca																		
24DALC03800	Comments / Approval of Electrical Protection Equipment Calculation	0%	28	18-Aug-14	14-Sep-14	Comments / Approval of Elec																		
24DALC03810	Review / Resubmit of Electrical Protection Equipment Calculation	0%	15	15-Sep-14	29-Sep-14	Review / Resubmit of Electrical Protection Equipment Calculation																		
24DALC03860	Review / Resubmit of Control Philosophy	100%	15	07-Jan-12 A	25-Jun-14	Review / Resubmit of Control Philosophy																		
24DALC03870	Approval of Control Philosophy	0%	15	27-Apr-12 A	26-Jun-14	Approval of Control Philosophy																		
24DALC03880	Prepare / Submit to ICE the DCS Detail Design	0%	20	27-Jun-14	16-Jul-14	Prepare / Submit to ICE the DCS Detail Design																		
24DALC03890	Review / Approval of ICE and Submitted to Client the DCS Detail Design	0%	12	17-Jul-14	28-Jul-14	Review / Approval of ICE and Submitted to Client the DCS Detail Design																		
24DALC03900	Comments / Approval of DCS Detail Design	0%	28	29-Jul-14	25-Aug-14	Comments / Approval of DCS Detail Design																		
24DALC03910	Review / Resubmit of DCS Detail Design	0%	15	26-Aug-14	09-Sep-14	Review / Resubmit of DCS Detail Design																		
24DALC03920	Approval of DCS Detail Design	0%	15	10-Sep-14	24-Sep-14	Approval																		
24DALC03923	Review / Resubmit of combined services drawing	0%	30	07-Jul-12 A	25-Jun-14	Review / Resubmit of combined services drawing																		
24DALC03924	Approval of combined services drawing	0%	30	25-Jul-12 A	25-Jul-14	Approval of combined services drawing																		
<b>Order / Manufacturing / Shipment / Delivery</b>																								
24PALC01130	Manufacturing of Grit Classifier	0%	145	18-Sep-12 A	23-Jul-14	Manufacturing of Grit Classifier																		
24PALC01140	Packaging / Delivery of Grit Classifier	0%	30	24-Jul-14	22-Aug-14	Packaging / Delivery of Grit Classifier																		
24PALC01160	Manufacturing of Effluent Pump	0%	335	01-Apr-13 A	18-Feb-15	Manufacturing of Effluent Pump																		
24PALC01250	Placing of Order on Deodorization System	0%	10	24-Jun-14*	03-Jul-14	Placing of Order on Deodorization System																		
24PALC01260	Manufacturing of Deodorization System	0%	160	04-Jul-14	10-Dec-14	Manufacturing of Deodorization System																		
24PALC01320	Placing of Order on Control Panel	0%	10	24-Jun-14	03-Jul-14	Placing of Order on Control Panel																		
24PALC01330	Manufacturing of Control Panel	0%	50	04-Jul-14	22-Aug-14	Manufacturing of Control Panel																		
24PALC01340	Packaging / Delivery of Control Panel	0%	15	23-Aug-14	06-Sep-14	Packaging / Delivery of Control Panel																		
24PALC01350	Placing of Order on Instruments	0%	10	24-Jun-14	03-Jul-14	Placing of Order on Instruments																		
24PALC01360	Manufacturing of Instruments	0%	110	04-Jul-14	21-Oct-14	Manufacturing of Instruments																		
<b>Sandy Bay PTW</b>																								
<b>Works for Section 1</b>																								
<b>PTW Building</b>																								
<b>Civil Works</b>																								
<b>Site Clearance and Preparation Works</b>																								
24SBY02050	Relocation of Temp. Works in ALC-T2 from SBY-T1	0%	25	18-Sep-12 A	02-Jul-14	Relocation of Temp. Works in ALC-T2 from SBY-T1																		
<b>Modification Works in PTW Building</b>																								
24SBY02576	Installation of handrail/railings on new staircase	0%	12	24-Jun-14	08-Jul-14	Installation of handrail/railings on new staircase																		
<b>Flume Channels and Chambers</b>																								
<b>Interface between Civil / ABWF / E&amp;M Works</b>																								

Activity ID	Activity Name	% Comp	Original Duration	Early Start	Early Finish	June 2014					July 2014					August 2014					September 2014				
						26	02	09	16	23	30	07	14	21	28	04	11	18	25	01	08	15	22		
24MSBY00080	Completion of E&M works at flume channel	0%	0		22-Jul-14																				
<b>Civil Works (incl. footing of existing fence modification)</b>																									
24SBY02707	Modification of Existing Effluent Chamber connected to new Flume Chamber	0%	12	24-Jun-14	08-Jul-14																				
24SBY02708	Drawpits and cable ducts	0%	12	24-Jun-14	08-Jul-14																				
24SBY02709	Installation of air tight multi-part cover in flume channels and chambers	0%	12	24-Jun-14	08-Jul-14																				
<b>Electrical and Mechanical Works</b>																									
24SBY02750A	Installation of hydrostatic pressure level transmitter at drop shaft	0%	2	09-Jul-14	10-Jul-14																				
24SBY02750B	Installation of level sensor at drop shaft	0%	2	11-Jul-14	12-Jul-14																				
24SBY02750C	Installation of level sensor c/w transmitter at flume channel measuring flume	0%	2	14-Jul-14	15-Jul-14																				
24SBY02750D	Cable laying via cable ducts and drawpits going to control room (including termination)	0%	6	16-Jul-14	22-Jul-14																				
<b>Preliminary Testing and Commissioning</b>																									
24SBY02751	Water test of penstock	0%	14	24-Jun-14	10-Jul-14																				
24SBY02752	Water test of stoplogs	0%	14	24-Jun-14	10-Jul-14																				
<b>Roadworks and Landscaping Works</b>																									
<b>Landscaping Works</b>																									
24SBY02780	Reinstatement of landscape after installation of odour duct from drop shaft to PTW building	0%	21	24-Jun-14	18-Jul-14																				
<b>Completion of Works in Section 1</b>																									
<b>Final Testing and Commissioning</b>																									
24SBY03010	Testing and Commissioning of flow via new flume channels to drop shaft	0%	30	23-Jul-14	21-Aug-14																				
<b>Submission of Manuals</b>																									
24SBY03050	Preparation / Submission of final O&M manual	0%	90	23-Jul-14	20-Oct-14																				
24SBY03060	As-Built Drawings Submission / Approval for Sandy Bay PTW	0%	60	24-Jun-14	22-Aug-14																				
<b>Cyberport PTW</b>																									
<b>Key Dates</b>																									
<b>Time of Completion</b>																									
24CPT01000	Time for Completion of Section 2	0%	1280	31-Aug-11 A	02-Mar-15																				
<b>Interface and Liaison</b>																									
<b>Interface with ST2/DSD</b>																									
24MCPT00090	Application of PMAC/SWAC for Modification of Existing Control Room	0%	0	30-Jul-14																					
24MCPT00100	Proposed Approval date of PMAC/SWAC for Modification of Existing Control Room	0%	0		12-Aug-14																				
<b>Interface with other contractors</b>																									
24MCPT00110	Liason with SCS Contractor for the modification of existing water pipe / drainage pipe and flume channel connection	0%	90	15-Mar-14 A	25-Jun-14																				
<b>Works for Section 2</b>																									
<b>Modification Inside Cyberport PTW Complex incl. Deodorization Room</b>																									
<b>Interface between Civil / ABWF / E&amp;M Works</b>																									
24MCPT00130	Completion of permanent concrete plinth for new deodorization unit	0%	0		13-Aug-14																				
<b>Civil Works</b>																									
<b>Construction of Plinth for DO Unit Installation</b>																									
24CPT02303	Construction of permanent concrete plinth for new deodorization unit	0%	29	11-Jul-14	13-Aug-14																				
<b>Electrical and Mechanical Works</b>																									
<b>Material / Equipment Delivery on Site</b>																									
24CPT02320	Delivery of Penstock	0%	0		08-Sep-14																				
24CPT02340	Delivery of Deodorization System	0%	0		29-Jul-14																				
24CPT02360	Delivery of Instruments	0%	0		05-Aug-14																				
24CPT02370	Delivery of DCS Control System	0%	0		29-Jul-14																				
24CPT02380	Delivery of Weather & H2S monitoring station	0%	0		20-Aug-14																				

Activity ID	Activity Name	% Comp	Original Duration	Early Start	Early Finish	June 2014					July 2014					August 2014					September 2014			
						26	02	09	16	23	30	07	14	21	28	04	11	18	25	01	08	15	22	
<b>Mechanical Works</b>																								
24CPT02400	Installation of new fine screen no. 2	100%	14	03-Jun-14 A	11-Jun-14 A	Installation of new fine screen no. 2																		
24CPT02410	Decommission existing fine screen no. 1	0%	5	09-Jul-14	14-Jul-14	Decommission existing fine screen no. 1																		
24CPT02420	Installation of new fine screen no. 1	0%	14	15-Jul-14	30-Jul-14	Installation of new fine screen no. 1																		
<b>Electrical Works</b>																								
24CPT02431	Cable tray for installation for the modification of existing MCC (Switchboard)	0%	12	17-May-14 A	08-Jul-14	Cable tray for installation for the modification of existing MCC (Switchboard)																		
24CPT02432	Cabling works for the modification of existing MCC (Switchboard)	0%	6	03-Jun-14 A	15-Jul-14	Cabling works for the modification of existing MCC (Switchboard)																		
24CPT02433	Megger test for the modification of existing MCC (Switchboard)	0%	2	16-Jun-14 A	17-Jul-14	Megger test for the modification of existing MCC (Switchboard)																		
24CPT02434	Cable termination for the modification of existing MCC (Switchboard)	0%	2	18-Jul-14	19-Jul-14	Cable termination for the modification of existing MCC (Switchboard)																		
24CPT02435	Cable tray for installation for installation of UPS system	0%	14	04-Aug-14	19-Aug-14	Cable tray for installation for installation of UPS system																		
24CPT02436	Cable laying for UPS system	0%	10	20-Aug-14	30-Aug-14	Cable laying for UPS system																		
24CPT02437	Megger test in cables of UPS system	0%	7	01-Sep-14	08-Sep-14	Megger test in cables of UPS system																		
24CPT02438	Cable termination for UPS system	0%	5	10-Sep-14	15-Sep-14	Cable termination for UPS system																		
24CPT02442	Cable laying for new fine screen no. 2	100%	7	22-May-14 A	14-Jun-14 A	Cable laying for new fine screen no. 2																		
24CPT02443	Megger test in cables of new fine screen no. 2	100%	3	16-Jun-14 A	18-Jun-14 A	Megger test in cables of new fine screen no. 2																		
24CPT02444	Cable termination for new fine screen no. 2	100%	3	19-Jun-14 A	23-Jun-14 A	Cable termination for new fine screen no. 2																		
24CPT02445	Disconnect and disposal of existing cabling for the fine screen no. 1	0%	4	15-Jul-14	18-Jul-14	Disconnect and disposal of existing cabling for the fine screen no. 1																		
24CPT02446	Cable laying for new fine screen no. 1	0%	7	19-Jul-14	26-Jul-14	Cable laying for new fine screen no. 1																		
24CPT02447	Megger test in cables of new fine screen no. 1	0%	3	28-Jul-14	30-Jul-14	Megger test in cables of new fine screen no. 1																		
24CPT02448	Cable termination for new fine screen no. 1	0%	3	31-Jul-14	02-Aug-14	Cable termination for new fine screen no. 1																		
24CPT02451	Cable tray for new deodorization unit	0%	20	30-Aug-14	23-Sep-14	Cable tray for new deodorization unit																		
<b>HVAC System (Deodorization / Air Conditioning / Ventilation)</b>																								
24CPT02482	Air ductwork diversion in temporary carbon filter incl. T&C	0%	14	12-May-14 A	27-Jun-14	Air ductwork diversion in temporary carbon filter incl. T&C																		
24CPT02483	Dismantle of existing chemical scrubber at existing DO Room	0%	11	24-Jun-14	07-Jul-14	Dismantle of existing chemical scrubber at existing DO Room																		
24CPT02490	Installation of new deodorization unit	0%	20	14-Aug-14	05-Sep-14	Installation of new deodorization unit																		
24CPT02491	Installation of accessories for deodorization system	0%	28	30-Aug-14	04-Oct-14	Installation of accessories for deodorization system																		
24CPT02500	Installation of air ductwork	0%	20	17-Sep-14	11-Oct-14	Installation of air ductwork																		
<b>Control and Monitoring Services incl. Instrumentation</b>																								
24CPT02529	Installation of supports / hangers for instrumentations	0%	4	24-Jun-14	27-Jun-14	Installation of supports / hangers for instrumentations																		
24CPT02530	Installation of instrumentations	0%	6	06-Aug-14	12-Aug-14	Installation of instrumentations																		
24CPT02531	Equipment installation for monitoring and control system	0%	14	13-Aug-14	28-Aug-14	Equipment installation for monitoring and control system																		
24CPT02539	Install cable tray for monitoring and control system	0%	21	13-Aug-14	05-Sep-14	Install cable tray for monitoring and control system																		
24CPT02540	Cable laying for monitoring and control system	0%	14	06-Sep-14	23-Sep-14	Cable laying for monitoring and control system																		
24CPT02560	Site investigation and cable verification for DCS upgarding works	0%	29	31-May-14 A	28-Jul-14	Site investigation and cable verification for DCS upgarding works																		
24CPT02561	DCS panel fabrication	0%	25	30-Jul-14	27-Aug-14	DCS panel fabrication																		
24CPT02562	Modification of existing DCS system	0%	14	28-Aug-14	13-Sep-14	Modification of existing DCS system																		
24CPT02564	Install cable tray for DCS outstation and instrumentation	0%	21	06-Sep-14	03-Oct-14	Install cable tray for DCS outstation and instrumentation																		
24CPT02569	DCS interface with contract DC/2009/10	0%	49	28-Aug-14	27-Oct-14	DCS interface with contract DC/2009/10																		
24CPT02571	Install cable tray for weather and H2S monitoring station	0%	21	06-Sep-14	03-Oct-14	Install cable tray for weather and H2S monitoring station																		
<b>Earthing and Lightning System</b>																								
24CPT02580	Modification and installation of earthing and lightning system for newly installed equipment	0%	14	15-Sep-14	30-Sep-14	Modification and installation of earthing and lightning system for newly installed equipment																		
<b>Preliminary Testing and Commissioning</b>																								
<b>Mechanical Works</b>																								
24CPT02590	SAT / T&C of fine screen no. 2	0%	15	24-Jun-14	08-Jul-14	SAT / T&C of fine screen no. 2																		
24CPT02600	SAT / T&C of fine screen no. 1	0%	15	03-Aug-14	17-Aug-14	SAT / T&C of fine screen no. 1																		
<b>Electrical Works</b>																								

Activity ID	Activity Name	% Comp	Original Duration	Early Start	Early Finish	June 2014					July 2014					August 2014					September 2014			
						26	02	09	16	23	30	07	14	21	28	04	11	18	25	01	08	15	22	
24CPT02610	Functional test of modified existing switchboard	0%	7	21-Jul-14	28-Jul-14																			
<b>Flume Channels, Chambers and Manhole incl. U/G Utility Works</b>																								
<b>Civil Works for Flume Channel, Chambers and Manhole</b>																								
24CPT03000	Excavation for installation of 700Ø drainage pipe, effluent chamber, flume channels and manholes	0%	7	09-Jul-14	16-Jul-14																			
24CPT03010	Installation 700Ø drainage pipe	0%	24	17-Jul-14	13-Aug-14																			
24CPT03020	Formworks for Base Slab of effluent chamber and flume channels	0%	4	31-Jul-14	04-Aug-14																			
24CPT03030	Rebarworks for Base Slab of effluent chamber and flume channels	0%	6	07-Aug-14	13-Aug-14																			
24CPT03040	Concrete for Base Slab of effluent chamber and flume channels	0%	5	14-Aug-14	19-Aug-14																			
24CPT03050	Formworks for walls of effluent chamber and flume channels	0%	4	20-Aug-14	23-Aug-14																			
24CPT03060	Rebarworks for walls of effluent chamber and flume channels	0%	10	03-Sep-14	15-Sep-14																			
24CPT03070	Concrete for walls of effluent chamber and flume channels	0%	8	16-Sep-14	24-Sep-14																			
24CPT03090	Formworks for base slab of manholes (2 nos)	0%	4	14-Aug-14	18-Aug-14																			
24CPT03100	Rebarworks for base slab of manholes (2 nos)	0%	4	14-Aug-14	18-Aug-14																			
24CPT03110	Concrete for base slab of manholes (2 nos)	0%	4	19-Aug-14	22-Aug-14																			
24CPT03120	Formworks for walls of manholes (2 nos)	0%	4	23-Aug-14	27-Aug-14																			
24CPT03130	Rebarworks for walls of manholes (2 nos)	0%	4	30-Aug-14	03-Sep-14																			
24CPT03140	Concrete for walls of manholes (2 nos)	0%	4	04-Sep-14	08-Sep-14																			
24CPT03150	Formworks for cover of manholes (2 nos)	0%	5	10-Sep-14	15-Sep-14																			
24CPT03160	Rebarworks for cover of manholes (2 nos)	0%	4	17-Sep-14	20-Sep-14																			
24CPT03170	Concrete for cover of manholes (2 nos)	0%	4	22-Sep-14	25-Sep-14																			
<b>U/G Utility Works</b>																								
24CPT03250	Excavation for reposition of water supply pipe to CEPT Complex	0%	7	30-Jun-14	08-Jul-14																			
24CPT03260	Installation of water supply pipe to CEPT Complex	0%	12	09-Jul-14	22-Jul-14																			
24CPT03270	Abandonment and Backfilling works on existing water pipe	0%	12	23-Jul-14	05-Aug-14																			
24CPT03280	Excavation for installation of U/G Odour Pipe from drop shaft	0%	7	17-Sep-14	24-Sep-14																			
<b>Roadworks and Landscaping Works</b>																								
<b>Landscaping Works</b>																								
24CPT04000	Shrubs and Tree planting at CP-3	0%	60	30-Jun-14	08-Sep-14																			
<b>Completion of Works in Section 2</b>																								
<b>Submission of Manuals</b>																								
24CPT05030	Preparation / Submission of draft O&M manuals	0%	90	07-Aug-14	04-Nov-14																			
<b>Wah Fu PTW</b>																								
<b>Key Dates</b>																								
<b>Time of Completion</b>																								
24WFU1010	Time for Completion of Section 4	0%	1255	31-Aug-11 A	05-Sep-15																			
<b>Statutory and Utility Applications and Approvals</b>																								
<b>Environmental Protection Department (EPD)</b>																								
24WFU1119	Statutory submission to EPD (Chimney Design)	0%	60	24-Jun-14*	02-Sep-14																			
24WFU1120	Comment & re-submission to EPD	0%	30	03-Sep-14	10-Oct-14																			
<b>Works for Section 4</b>																								
<b>Screen and Grit Trap Building</b>																								
<b>Interface between Civil / ABWF / E&amp;M Works</b>																								
24MWFU00205	Site possession of WF-2	0%	0		23-Jun-14*																			
24MWFU00210	Partial completion of structural works in preparation to start architectural works	0%	0		27-Aug-14																			
<b>Civil Works</b>																								
<b>Foundation Works</b>																								











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**APPENDIX C  
MONITORING REQUIREMENTS**

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## APPENDIX C – Monitoring Requirements

Type of Monitoring	Parameter	Frequency	Monitored by	Locations of Measurement
Air Quality	1-hour TSP	3 times / 6-day	DC/2007/24	<b>CM_CB1a<sup>(1)</sup></b> : The Arcade, Cyberport <b>CM_WF1a<sup>(1)</sup></b> : Wah Ming House, Wah Fu Estate <b>CM_AB1a</b> : The Hong Kong Ice and Cold Storage, formally known as Dairy Farm Ice and Cold Storage
	24-hour TSP	Once / 6-day		
Noise	$L_{eq}(30 \text{ min.})$ dB(A) (0700 to 1900 hrs. on weekdays) / $L_{eq}(5 \text{ min.})$ dB(A) (During restricted hours)	Once / week	DC/2007/24	M5 (Sandy Bay PTW): Chuk Lam Ming Tong M6a <sup>(1)</sup> (Cyberport PTW): Aegean Terrace M7a <sup>(1)</sup> (Wah Fu PTW): Wah Ming House M8 (Aberdeen PTW): Wah Lai House
			DC/2008/09	M9 (Ap Lei Chau PTW): Mei Chun Court, South Horizons

### Remarks:

1: Refer to the monthly report of DC/2007/24, revision to the original monitoring location in EM&A Manual was made and was verified by IEC on 19 November 2009 and subsequently approved by EPD on 27 November 2009.

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**APPENDIX D  
ACTION AND LIMIT LEVELS**

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## Appendix D Action and Limit Levels

**Table D-1 Action and Limit Levels for 1-Hour TSP and 24-Hour TSP**

Monitoring Stations	Action Level ( $\mu\text{g}/\text{m}^3$ )		Limit Level ( $\mu\text{g}/\text{m}^3$ )	
	1-hour	24-hour	1-hour	24-hour
CM_CB1a	280	178	500	260
CM_WF1a	285	185		
CM_AB1a	283	174		

**Table D-2 Action and Limit Level for Construction Noise**

Monitoring Stations	Time Period	Action Level	Limit Level in dB(A)
M5 M6a M7a M8 M9	0700-1900 hours on normal weekdays	When one documented complaint is received	75 <sup>(1)</sup>

Remark: 1: 70dB(A) and 65 dB(A) for schools during normal teaching periods and school examination periods, respectively.

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**APPENDIX E  
IMPLEMENTATION STATUS OF  
ENVIRONMENTAL MITIGATION  
MEASURES (EMIS)**

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**APPENDIX E IMPLEMENTATION SCHEDULE OF ENVIRONMENTAL MITIGATION MEASURES (EMIS)**

<b>EIA Ref.</b>	<b>Recommended Mitigation Measures</b>	<b>Location of the measure</b>	<b>Implementation Status</b>
<b>A</b>	<b>Air Quality</b>		
3.74	<p>Skip hoist for material transport should be totally enclosed by impervious sheeting.</p> <p>Vehicle washing facilities should be provided at every vehicle exit point.</p> <p>The area where vehicle washing takes place and the section of the road between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcore.</p> <p>Where a site boundary adjoins a road, streets or other areas accessible to the public, hoarding of not less than 2.4 m high from ground level should be provided along the entire length except for a site entrance or exit.</p> <p>Use of regular watering, with complete coverage, to reduce dust emissions from exposed site surfaces and unpaved roads, particularly during dry weather.</p> <p>Side enclosure and covering of any aggregate or dusty material storage piles to reduce emissions. Where this is not practicable owing to frequent usage, watering shall be applied to aggregate fines.</p> <p>Open stockpiles shall be avoided or covered. Where possible, prevent placing dusty material storage piles near ASRs.</p> <p>Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations.</p> <p>Imposition of speed controls for vehicles on unpaved site roads. Ten kilometers per hour is the recommended limit.</p> <p>Every stock of more than 20 bags of cement should be covered entirely by impervious sheeting placed in an area sheltered on the top and the 3 sides.</p> <p>Every vehicle should be washed to remove any dusty materials from its body and wheels before leaving the construction sites.</p>	All construction sites	<p>N/A</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>*</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p>
3.74	Instigation of an environmental monitoring and auditing program to monitor the construction process in order to enforce controls and modify method of work if dusty conditions arise.	All construction sites	^

EIA Ref.	Recommended Mitigation Measures	Location of the measure	Implementation Status
<b>B</b>	<b>Airborne Noise</b>		
4.56– 4.61	Use of quiet PME, movable barriers and acoustic mats.	All construction sites	^
4.67	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.		^
4.67	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.		^
<b>C</b>	<b>Water Quality</b>		
6.349 to 6.375	Construction Site Runoff and General Construction Activities The mitigation measures as outlined in the ProPECC PN 1/94 Construction Site Drainage should be adopted where applicable.	All construction sites	^
6.376	Effluent Discharge There is a need to apply to EPD for a discharge licence for discharge of effluent from the construction site under the WPCO. The discharge quality must meet the requirements specified in the discharge licence. If monitoring of the treated effluent quality from the works areas is required during the construction phase of the Project, the monitoring should be carried out in accordance with the WPCO license which is under the ambit of regional office (RO) of EPD. Minimum distances of 100 m should be maintained between the discharge points of construction site effluent and the existing saltwater intakes.		#
6.377	Accidental Spillage of Chemicals  Contractor must register as a chemical waste producer if chemical wastes would be produced from the construction activities. The Waste Disposal Ordinance (Cap 354) and its subsidiary regulations in particular the Waste Disposal (Chemical Waste) (General)		^



EIA Ref.	Recommended Mitigation Measures	Location of the measure	Implementation Status
	Regulation should be observed and complied with for control of chemical wastes.		
6.378	Any service shop and maintenance facilities should be located on hard standings within a bunded area, and sumps and oil interceptors should be provided. Maintenance of vehicles and equipment involving activities with potential for leakage and spillage should only be undertaken within the areas appropriately equipped to control these discharges.		*
6.379	<p>Disposal of chemical wastes should be carried out in compliance with the Waste Disposal Ordinance. The Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes published under the Waste Disposal Ordinance details the requirements to deal with chemical wastes. General requirements are given as follows:</p> <ul style="list-style-type: none"> <li>• Suitable containers should be used to hold the chemical wastes to avoid leakage or spillage during storage, handling and transport.</li> <li>• Chemical waste containers should be suitably labelled, to notify and warn the personnel who are handling the wastes, to avoid accidents.</li> <li>• Storage area should be selected at a safe location on site and adequate space should be allocated to the storage area.</li> </ul>		^
6.380	<p>Construction Works in Close Proximity of Storm Drains or Seafront:</p> <p>To minimize the potential water quality impacts from the construction works located at or near any watercourse, the practices outlined below should be adopted where applicable.</p> <ul style="list-style-type: none"> <li>• The use of less or smaller construction plants may be specified to reduce the disturbance to the storm water courses or marine environment.</li> <li>• Temporary storage of materials (e.g. equipment, filling materials, chemicals and fuel) and temporary stockpile of construction materials should be located well away from any water courses during carrying out of the construction works.</li> <li>• Stockpiling of construction materials and dusty materials should be covered and located away from any water courses.</li> <li>• Construction debris and spoil should be covered up and/or disposed of as soon as possible to avoid being washed into the nearby water receivers.</li> <li>• Construction activities, which generate large amount of wastewater, should be carried out in a distance away from the waterfront, where practicable.</li> <li>• Proper shoring may need to be erected in order to prevent soil/mud from slipping into the storm culvert or sea.</li> </ul>	All construction sites	^

EIA Ref.	Recommended Mitigation Measures	Location of the measure	Implementation Status
<b>D</b>	<b>Waste Management</b>		
9.107	Reusable steel or concrete panel shutters, fencing and hoarding and signboard should be used as a preferred alternative to items made of wood, to minimize wastage of wood. Attention should be paid to WBTC No. 19/2001 - Metallic Site Hoardings and Signboards to reduce the amount of timber used on construction sites. Metallic alternatives to timber are readily available and should be used rather than new timber. Precast concrete units should be adopted wherever feasible to minimize the use of timber formwork.	All construction sites	^
9.109	All waste materials should be segregated into categories covering: <ul style="list-style-type: none"> <li>• excavated materials suitable for reuse on-site;</li> <li>• excavated materials suitable for public filling facilities;</li> <li>• remaining C&amp;D waste for landfill;</li> <li>• chemical waste; and</li> <li>• general refuse for landfill.</li> </ul>	All construction sites	*
9.113	Sort C&D waste from demolition of existing facilities to recover recyclable portions such as metals.	All construction sites	^
	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.		*
	Encourage collection of aluminium cans, PET bottles and paper by providing separate labelled bins to enable these wastes to be segregated from other general refuse generated by the work force.		^
	Any unused chemicals or those with remaining functional capacity shall be recycled.		^
	Proper storage and site practices to minimize the potential for damage or contamination of construction materials.		^
9.115	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.	All construction sites	^
	Training of site personnel in proper waste management and chemical waste handling procedures.		^
9.115	Develop and provide toolbox talk for on-site sorting of C&D materials to enhance worker's awareness in handling, sorting, reuse and recycling of C&D materials.	All construction sites	^
	Provision of sufficient waste disposal points and regular collection of waste.		^
	Regular cleaning and maintenance programme for drainage systems, sumps and oil		^

EIA Ref.	Recommended Mitigation Measures	Location of the measure	Implementation Status
	interceptors.		
9.125	Bentonite slurries used in diaphragm wall construction should be reconditioned and reused wherever practicable. The disposal of residual used bentonite slurry should follow the good practice guidelines stated in ProPECC PN 1/94 "Construction Site Drainage".	All construction sites	N/A
9.131	Adequate number of portable toilets at temporary works areas or the PTWs to ensure that sewage from site staff would be properly collected.		^
9.133	General refuse should be stored in enclosed bins, skips or compaction units separating from C&D material and disposed of at designated landfill.		*
9.135	The recyclable component of the municipal waste generated by the workforce, such as aluminium cans, paper and cleansed plastic containers should be separated from other waste. Provision and collection of recycling bins for different types of recyclable waste should be set up by the Contractor. The Contractor should also be responsible for arranging recycling companies to collect these materials.		^
9.137	If chemical wastes are produced at the construction site, the Contractor would be required to register with the EPD as a chemical waste producer and to follow the guidelines stated in the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. Good quality containers compatible with the chemical wastes should be used, and incompatible chemicals should be stored separately. Appropriate labels should be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste, such as explosive, flammable, oxidizing, irritant, toxic, harmful, corrosive, etc. The Contractor shall use a licensed collector to transport and dispose of the chemical wastes, to either the approved Chemical Waste Treatment Centre, or another licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.		^
9.142	Prior to excavation of the marine deposit layer, the deposit should be tested in accordance with the ETWB TC(W) No. 34/2002 and the results should be presented in a Preliminary Sediment Quality Report. The marine deposit should be disposed of at the disposal site designated by the Marine Fill Committee (MFC) or Director of Environmental Protection (DEP) depending on the test results.		N/A

<b>EIA Ref.</b>	<b>Recommended Mitigation Measures</b>	<b>Location of the measure</b>	<b>Implementation Status</b>
<b>E</b>	<b>Terrestrial Ecology</b>		
10.94	To implement effective noise mitigation measures as recommended in Section 4 of EIA.	All construction sites	N/A
10.95	Dust control practices such as regular watering, complete coverage of any aggregate or dusty material storage piles, and re-schedule of dusty activities during high-wind conditions as well as other measures recommended in Section 3 of EIA, should be implemented.		*
10.96	Fences/hoardings should be erected and installed along the boundary of the works areas.		^
10.97	Standard good site practices as suggested in Section 10 of EIA should be implemented.		N/A
10.98	Provision of proper drainage system and runoff control measures such as use of sand/silt traps, oil/grease separators, sedimentation tanks, etc.		^
<b>F</b>	<b>Landscape and Visual</b>		
Table 13.7	Topsoil, where identified, should be stripped and stored for re-use in the construction of the soft landscape works, where practical.	All construction sites	^
	Existing trees to be retained on site should be carefully protected during construction.		*
	Trees unavoidably affected by the works should be transplanted where practical.		^
	Compensatory tree planting should be provided to compensate for felled trees.		^
	Control of night-time lighting.		^
Table 13.7	Erection of decorative screen hoarding compatible with the surrounding setting.	All construction sites	N/A
<b>G</b>	<b>Marine Ecology</b>		
11.137	To minimize the potential indirect impacts on water quality from construction site runoff and various construction activities, the practices outlined in ProPECC PN 1/94 Construction Site Drainage should be adopted.	All construction sites	^
<b>H</b>	<b>Hazard to Life</b>		
14A.201	Limiting use of cranes in terms of locations, lifting height, swing angle and setting up safety zone.	Exact location will be determined on construction site by the engineer	^

Remarks:	^ Compliance of mitigation measure;
	N/A Not Applicable;
	* Recommendation was made during site audit but improved/rectified by the contractor.
	# Recommendation was made during site audit and to be improved / rectified by the contractor.
	X Non-compliance of mitigation measure;
	● Non-compliance but rectified by the contractor;

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**APPENDIX F  
SUMMARY OF ENVIRONMENTAL  
LICENSES AND PERMITS**

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Appendix F - Summary of Environmental Licenses and Permits

Permit Number	Valid Period		Details	Status
	From	To		
<b>Water Discharge License</b>				
WT000116 29-2012	N/A	31/1/2017	Location: Sandy Bay PTW	Valid
WT000116 33-2012	N/A	31/1/2017	Location: Cyber Port PTW	
WT000116 32-2012	N/A	31/1/2017	Location: Ap Lei Chau	
WT000162 42-2013	N/A	31/3/2017	Location: Aberdeen PTW	
WT000168 37-2013	N/A	31/8/2018	Location: Wah Fu PTW	
WT000116 27-2012	N/A	31/1/2017	Location: Wah Fu PTW	Expiry
<b>Notification of Works Under APCO</b>				
334694	6/9/2011	N/A	All PTWs	N/A
<b>Registered Chemical Waste Producer</b>				
5218-171- L2783-01	14/12/2011	N/A	Location: Sandy Bay PTW	Valid
5218-171- L2783-02	30/12/2011	N/A	Location: Cyber Port PTW	
5218-174- L2783-03	30/12/2011	N/A	Location: Ap Lei Chau	
5218-173- L2783-04	30/12/2011	N/A	Location: Aberdeen PTW	
5218-172- L2783-05	30/12/2011	N/A	Location: Wah Fu PTW	
<b>Special Waste Admission Ticket</b>				
11196	24/2/2014	23/5/2014	Location: Ap Lei Chau	Expiry
11195	24/2/2014	23/5/2014	Location: Aberdeen PTW	
11197	24/2/2014	23/5/2014	Location: Wah Fu PTW	
11379	24/5/2014	23/8/2014	Location: Wah Fu PTW	Valid

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**APPENDIX G  
SUMMARY OF AMOUNT OF WASTE  
GENERATED IN THE REPORTING  
PERIOD**

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Name of Department: DSD

Name of Contract : Harbour Area Treatment Scheme Stage 2A – Upgrading of Preliminary Treatment Works  
at Sandy Bay, Cyberport, Wah Fu, Ap Lei Chau and Aberdeen

Contract No. : DC/2009/24

**APPENDIX G MONTHLY SUMMARY WASTE FLOW TABLE FOR 2014 (YEAR)**

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly					
	Total Quantity Generated	Hard Rock and Broken Concrete (4)	Reused in the Contract	Reused in other Projects	Disposal as Public Fill	Import Fill	Metals	Paper / Cardboard Packaging	Plastics (3)	Chemical Waste	Other, e.g. general refuse	Special Waste
	[in '000m <sup>3</sup> ]	[in '000m <sup>3</sup> ]	[in '000m <sup>3</sup> ]	[in '000m <sup>3</sup> ]	[in '000m <sup>3</sup> ]	[in '000m <sup>3</sup> ]	[in '000kg]	[in '000kg]	[in '000kg]	[in '000kg]	[in '000m <sup>3</sup> ]	[in '000ton]
Year2012	1.002910	0.000000	0.000000	0.000000	1.002910	0.000000	6.680000	0.070000	0.070000	0.100000	0.014000	2.406456
Year2013	4.264035	0.000000	0.000000	0.000000	4.264035	0.000000	10.750000	0.000000	0.000000	0.350000	0.064890	2.232710
JAN	0.433305	0	0	0	0.433305	0	0	0	0	0.06	0.00796	0.2032
FEB	0.040615	0	0	0	0.040615	0	0	0	0	0	0.00334	0.16182
MAR	1.061525	0	0	0	1.061525	0	0	0	0	0	0.00929	0.17807
APR	0.368995	0	0	0	0.368995	0	0	0	0	0	0.00434	0.15738
MAY	0.31617	0	0	0	0.316170	0	0	0	0	0	0.00862	0.15547
JUNE	0.07655	0	0	0	0.07655	0	0	0	0	0.39	0.01304	0.14019
SUB-TOTAL	2.297160	0.000000	0.000000	0.000000	2.297160	0.000000	0.000000	0.000000	0.000000	0.450000	0.046590	0.996130
JULY	0											
AUG	0											
SEPT	0											
OCT	0											
NOV	0											
DEC	0											
TOTAL	7.564105	0.000000	0.000000	0.000000	7.564105	0.000000	17.430000	0.070000	0.070000	0.900000	0.125480	5.635296

Forecast of Total Quantities of C&D materials to be Generated from the Contracts *											
Total Quantity Generated	Hard Rock and Broken Concrete (4)	Reused in the Contract	Reused in other Projects	Disposal as Public Fill	Import Fill	Metals	Paper / Cardboard Packaging	Plastics (3)	Chemical Waste	Other, e.g. general refuse	Special Waste
[in '000m <sup>3</sup> ]	[in '000m <sup>3</sup> ]	[in '000m <sup>3</sup> ]	[in '000m <sup>3</sup> ]	[in '000m <sup>3</sup> ]	[in '000m <sup>3</sup> ]	[in '000kg]	[in '000kg]	[in '000kg]	[in '000kg]	[in '000m <sup>3</sup> ]	[in '000ton]
8.31	1.544	1.73	0	8.496	0	30	1	1	4	0.956	9.6

- Notes :
- (1) The performance targets are given in PS Clause 6(14).
  - (2) Plastics refer to plastic bottles / containers, plastic sheets / foam from packaging material.
  - (3) The contractor shall also submit the latest forecast of the total amount of C&D materials expected to be generated from the Works, together with a breakdown of the nature where to total amount of C&D materials expected to be generated from the Works is equal to or exceeding 50,000m<sup>3</sup>. (PS Clause 5(4)(b) refers).  
[Delete Note (4) and the table above on the forecast, where inapplicable].

\* (4) The assumed density (kg/m<sup>3</sup>) for both C&D material and general refuse.

C&D material 2000kg/m<sup>3</sup>  
General refuse 1.0 tonnes/m<sup>3</sup>

(5) Conversion factors for reporting purpose:

in-situ: rock = 2.5 tonnes/m<sup>3</sup> ; soil = 2.0 tonnes/m<sup>3</sup>  
excavated: rock = 2.0 tonnes/m<sup>3</sup> ; soil = 1.8 tonnes/m<sup>3</sup>  
broken concrete and bitumen = 2.5 tonnes/m<sup>3</sup>  
C&D Waste = 1.0 tonnes/m<sup>3</sup>  
bentonite slurry = 2.8 tonnes/m<sup>3</sup>  
Paper = 800kg/m<sup>3</sup>  
Chemical = 800kg/m<sup>3</sup>

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**APPENDIX H  
COMPLAINT LOG**

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**APPENDIX H – COMPLAINT LOG**

**Reporting Period:** April to June 2014

**Remarks:** No environmental complaint was received in the reporting quarter.

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

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**APPENDIX I**  
**SUMMARY OF EXCEEDANCE**

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## **APPENDIX I – SUMMARY OF EXCEEDANCE**

**Reporting Period:** April to June 2014

- a) Exceedance Report for 1-hr TSP (NIL)**
- b) Exceedance Report for 24-hr TSP (NIL)**
- c) Exceedance Report for Construction Noise on normal week days (NIL)**