

Hip Hing – Ngo Kee Joint Venture

Hong Kong Convention and
Exhibition Centre Expansion
(Previously known as HKCEC
Atrium Link Extension):
*Monthly Environmental Monitoring
and Audit Report for November 2006*

December 2006

Environmental Resources Management

21/F Lincoln House
979 King's Road
Taikoo Place
Island East, Hong Kong
Telephone: (852) 2271 3000
Facsimile: (852) 2723 5660
E-mail: post.hk@erm.com
<http://www.erm.com>


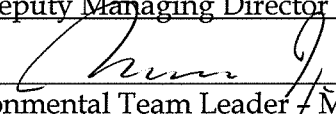
ENVIRONMENTAL MONITORING &
AUDIT REPORT

Hip Hing – Ngo Kee Joint Venture

Hong Kong Convention and
Exhibition Centre Expansion
(Previously known as HKCEC
Atrium Link Extension):
*Monthly Environmental Monitoring
and Audit Report for November 2006*

December 2006

Reference 0050690

For and on behalf of Environmental Resources Management	
Approved by:	Steve Duckworth
Signed:	
Position:	Deputy Managing Director
Certified by:	 (Environmental Team Leader - Marcus Ip)
Date:	14 December 2006

This report has been prepared by Environmental Resources Management the trading name of 'ERM Hong-Kong, Limited', with all reasonable skill, care and diligence within the terms of the Contract with the client, incorporating our General Terms and Conditions of Business and taking account of the resources devoted to it by agreement with the client.

We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.

This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies on the report at their own risk.



NATURE & TECHNOLOGIES (HK) LIMITED
科技環保(香港)有限公司

Unit 2 & 3, 4/F., Wellborne Commercial Centre, 8 Java Road, North Point, Hong Kong.
香港北角渣華道8號威邦商業中心4樓2及3室 Tel電話 : (852) 2877 3122 Fax傳真 : (852) 2511 0922
Email電郵: enquiry@nt.com.hk Web page網址 : http://www.nt.com.hk

Our Ref: 3.16/014/2006/it

14 December 2006

Maunsell Consultants Asia Ltd
Grand Central Plaza, Tower 2
138 Shatin Rural Committee Road
Shatin, N.T., Hong Kong

Attn: Ms Vera Chan

Dear Sir/Madam,

Hong Kong Convention Center Expansion Project
(Previously known as Hong Kong Convention and Exhibition Center, Atrium Link Extension)
Monthly EM&A Report for November 2006
(Environmental Permit No. EP-239/2006)

With reference to the captioned document concerning the Monthly EM&A report for November 2006 received from ERM dated 14 December 2006, we are pleased to provide our verification for the document pursuant to condition 3 of the Environmental Permit (EP) No. EP-239/2006.

Yours faithfully,
Nature & Technologies (HK) Limited

Ir Dr Gabriel C K Lam
Managing Director

- cc: - Hong Kong Trade Development Council (Attn: Mr. K. F. Chan)
- Hip Hing Ngo Kee Joint Venture (Attn: Mr. Eric Lau & Mr. William Tam)
- ERM (Attn: Mr. Marcus Ip)

CONTENTS

	<i>EXECUTIVE SUMMARY</i>	<i>I</i>
<i>1</i>	<i>INTRODUCTION</i>	<i>1</i>
<i>1.1</i>	<i>PURPOSE OF THE REPORT</i>	<i>1</i>
<i>1.2</i>	<i>STRUCTURE OF THE REPORT</i>	<i>1</i>
<i>2</i>	<i>PROJECT INFORMATION</i>	<i>3</i>
<i>2.1</i>	<i>BACKGROUND</i>	<i>3</i>
<i>2.2</i>	<i>SITE DESCRIPTION</i>	<i>3</i>
<i>2.3</i>	<i>CONSTRUCTION ACTIVITIES</i>	<i>4</i>
<i>2.4</i>	<i>PROJECT ORGANISATION</i>	<i>4</i>
<i>2.5</i>	<i>STATUS OF ENVIRONMENTAL APPROVAL DOCUMENTS</i>	<i>4</i>
<i>3</i>	<i>ENVIRONMENTAL MONITORING METHODOLOGY</i>	<i>6</i>
<i>3.1</i>	<i>AIR QUALITY MONITORING</i>	<i>6</i>
<i>3.2</i>	<i>WATER QUALITY MONITORING</i>	<i>9</i>
<i>4</i>	<i>IMPLEMENTATION STATUS ON ENVIRONMENTAL PROTECTION REQUIREMENTS</i>	<i>12</i>
<i>5</i>	<i>MONITORING RESULTS</i>	<i>13</i>
<i>5.1</i>	<i>AIR QUALITY</i>	<i>13</i>
<i>5.2</i>	<i>WATER QUALITY</i>	<i>13</i>
<i>5.3</i>	<i>WASTE MANAGEMENT</i>	<i>14</i>
<i>6</i>	<i>ENVIRONMENTAL SITE AUDITING</i>	<i>15</i>
<i>7</i>	<i>ENVIRONMENTAL NON-CONFORMANCE</i>	<i>17</i>
<i>7.1</i>	<i>SUMMARY OF ENVIRONMENTAL EXCEEDANCE</i>	<i>17</i>
<i>7.2</i>	<i>SUMMARY OF ENVIRONMENTAL NON-COMPLIANCE</i>	<i>17</i>
<i>7.3</i>	<i>SUMMARY OF ENVIRONMENTAL COMPLAINT</i>	<i>17</i>
<i>7.4</i>	<i>SUMMARY OF ENVIRONMENTAL SUMMONS AND PROSECUTION</i>	<i>17</i>
<i>8</i>	<i>FUTURE KEY ISSUES</i>	<i>18</i>
<i>8.1</i>	<i>KEY ISSUES FOR THE COMING MONTH</i>	<i>18</i>
<i>8.2</i>	<i>MONITORING SCHEDULE FOR THE COMING MONTHS</i>	<i>18</i>
<i>8.3</i>	<i>CONSTRUCTION PROGRAMME FOR THE NEXT THREE MONTHS</i>	<i>18</i>
<i>9</i>	<i>REVIEW OF THE EM&A DATA AND EIA PREDICTIONS</i>	<i>19</i>
<i>9.1</i>	<i>AIR QUALITY</i>	<i>19</i>
<i>9.2</i>	<i>WATER QUALITY</i>	<i>19</i>
<i>9.3</i>	<i>WASTE MANAGEMENT</i>	<i>19</i>

9.4	CONCLUSION OF REVIEW	20
10	CONCLUSION	21

LIST OF TABLES

Table 2.1	Summary of Construction Activities Undertaken from 1 November 2006 to 30 November 2006
Table 2.2	Summary of Environmental Licensing, Notification and Permit Status
Table 3.1	Air Monitoring Stations
Table 3.2	TSP Monitoring Parameter and Frequency
Table 3.3	Action and Limit Levels for Air Quality
Table 3.4	TSP Monitoring Equipment
Table 3.5	Water Quality Monitoring Locations
Table 3.6	Water Quality Monitoring Parameters & Frequency
Table 3.7	Action and Limit Levels for Water Quality
Table 5.1	Summary of Record of Exceedance recorded in October 2006
Table 5.2	Quantities of Waste Generated from the Project
Table 8.1	Construction Works to be Undertaken in the Coming Month
Table 9.1	Comparison of the HKAQO and Air Quality Monitoring Results
Table 9.3	Comparison of the Estimated Amount and the Actual Amount of Waste Generated

LIST OF ANNEXES

Annex A	Location of Works Areas
Annex B	Location of Construction Activities during the Reporting Month
Annex C	Project Organization Chart and Contact Detail
Annex D	Locations of Monitoring Stations
Annex E	Monitoring Schedule of the reporting period and next three month
Annex F	Calibration Reports for HVSs
Annex G	24-hour and 1-hour TSP Monitoring Results
Annex H	Calibration Certificates of Water Monitoring Equipment
Annex I	Water Quality Monitoring Results
Annex J	Event / Action Plans for Air and Water Quality Monitoring
Annex K	Summary of Implementation Status
Annex L	Waste Flow Table
Annex M	Construction Programme for Next Three Months

EXECUTIVE SUMMARY

The construction works for Hong Kong Convention and Exhibition Centre Expansion (previously known as HKCEC Atrium Link Extension) (EIAO Register No: AEIAR-100/2006) was commenced on 1 August 2006. This is the fourth monthly Environmental Monitoring and Audit (EM&A) report presenting the EM&A works carried out during the period from 1 November 2006 to 30 November 2006 in accordance with the EM&A Manual.

Summary of Construction Works undertaken during the Reporting Period

The major construction works taken during the reporting period were pre-bored H piles at southern and northern sides; mini piles for marine platform at southern and northern sides; marine pile installation; demolition of Phase II at Grid 16/B-D from upper roof down to Level 2; corrugated sheet and waterproofing work for west facade hoarding at west façade; hoarding erection; and demolition of sunshade canopy.

Environmental Monitoring and Audit Progress

A summary of the monitoring activities in this reporting period is listed below:

24-hour & 1-hour Total Suspended	
Particulates (TSP) monitoring	5 times
Water quality monitoring	13 times (mid-ebb)
	13 times (mid-flood)
Environmental site auditing	5 times

Air Quality

Five sets of 24-hour and fifteen sets of 1-hour TSP monitoring were carried out at the designated monitoring stations (AM1 & AM2) during the reporting period. No exceedance was recorded during the reporting month.

Water Quality

Eight sets of water quality measurements, recorded at mid-flood and mid-ebb tides, were carried out at the designated monitoring stations W3, W4 and W5.

Three Notifications of Exceedance (NOE) with detailed investigations reports were issued during the reporting month for water quality monitoring exceedances on turbidity of the monitoring stations recorded on 2 November 2006. Exceedance of Action Level of turbidity was likely due to natural fluctuation rather than Project works as no silty water was observed to be discharged from the site to the water channel. In addition, the gravimetric measurement of SS in the laboratory, which is considered a more accurate and quantitative measurement, complied with the Action Level, indicating the water quality was acceptable as compared with the Action Level. The

turbidity of water quality recorded after 2 November 2006 returned to levels in compliance with Action level.

Construction Waste Management

The major construction activities undertaken in the reporting month were demolition of existing Atrium Link, land-based piling works and marine piling works. A total of 3,153 tonnes of inert C&D materials (including 1 tonnes materials reused in this Project) and 116.5 tonnes of C&D wastes were generated during the reporting quarter. The C&D wastes and inert C&D materials generated from the Project were disposed of at SENT Landfill / Tseung Kwan O Area 137 temporary construction waste sorting facility and the public fill barging point at Quarry Bay respectively.

Environmental Site Auditing

Five weekly environmental site audits were carried out by the ET. Details of the audit findings and implementation status are presented in *Section 6*.

Environmental Non-conformance

No environmental non-compliance was identified during the reporting period.

No environmental complaint or summons was received during the reporting period.

Future Key Issues

Major works to be undertaken in the coming monitoring period are marine piling works and foundation works.

Potential environmental impacts arising from the construction activities in the coming month are mainly associated with dust, site runoff, marine water quality and waste.

ERM-Hong Kong, Limited (ERM) was appointed by Hip Hing – Ngo Kee Joint Venture as the Environmental Team (ET) to implement the Environmental Monitoring and Audit (EM&A) programme for Hong Kong Convention and Exhibition Centre Expansion (previously known as HKCEC Atrium Link Extension) (the Project).

1.1 PURPOSE OF THE REPORT

This is the fourth EM&A report which summarizes the impact monitoring results and audit findings for the EM&A programme during the reporting period from **1 November 2006 to 30 November 2006**.

1.2 STRUCTURE OF THE REPORT

The structure of the report is as follows:

Section 1 : Introduction

details the scope and structure of the report.

Section 2 : Project Information

summarizes background and scope of the Project, site description, project organization and contact details, construction programme, the construction works undertaken and the status of Environmental Permits/Licences during the reporting period.

Section 3 : Environmental Monitoring Requirement

summarizes the monitoring parameters, monitoring programmes, monitoring methodologies, monitoring frequency, monitoring locations, Action and Limit Levels and Event / Action Plans.

Section 4 : Implementation Status on Environmental Mitigation Measures

summarizes the implementation of environmental protection measures during the reporting period.

Section 5 : Monitoring Results

summarizes the monitoring results obtained in the reporting period.

Section 6 : Environmental Site Auditing

summarizes the audit findings of the weekly site inspections undertaken within the reporting period.

Section 7 : **Environmental Non-conformance**

summarizes any environmental exceedance, environmental complaints and environmental summons received within the reporting period.

Section 8 : **Future Key Issues**

summarizes the impact forecast and monitoring schedule for the next three months.

Section 9 : **Review of EM&A Data and EIA Predictions**

compares and contrasts the EM&A data in the month with the EIA predictions and annotates with explanation for any discrepancies.

Section 10 : **Conclusion**

2.1

BACKGROUND

The Hong Kong Trade Development Council (HKTDC) is expanding its existing facilities to provide additional space for Hong Kong's leading trade fairs to be held at the Hong Kong Convention and Exhibition Centre (HKCEC). The Project is located in the North Wan Chai and will occupy the aerial space between Phase I and Phase II of the HKCEC. The new Atrium Link Extension (ALE) will span across the water channel between Phase I and Phase II of the HKCEC to accommodate 3 main levels of Exhibition Hall Extensions. The level of the main roof of the Extension will be of similar height as that of the podium roof of the Phase I building. A northern row of permanent supporting columns will be located on land close to Expo Drive Central and similarly a southern row will land near to Convention Avenue. There will be no permanent intermediate columns in the waterway.

The major works activities for the ALE will comprise the following:

- Construction and demolition of the temporary footbridge;
- Demolition of the existing Atrium Link;
- Construction and demolition of a temporary working platform;
- Construction of foundations and pile caps for the ALE; and
- Construction of superstructure for the ALE.

The potential environmental impacts of the Project have been studied in the "*Hong Kong Convention and Exhibition Centre, Atrium Link Extension – Environmental Impact Assessment Report*" (EIAO Register No: AEIAR-100/2006). The EIA was approved on 21 April 2006 under the *Environmental Impact Assessment Ordinance* (EIAO) and an Environmental Permit (EP-239/2006) for the works was granted on 12 May 2006. Under the requirements of Condition 3.1 of Environmental Permit EP-239/2006, EM&A programme as set out in the EM&A Manual is required to be implemented.

The construction works commenced on 1 August 2006 and are scheduled to be completed by March 2009.

2.2

SITE DESCRIPTION

The works areas of the Project are illustrated in *Annex A*.

2.3 CONSTRUCTION ACTIVITIES

A summary of the major construction activities undertaken in this reporting period is shown in *Table 2.1*. The locations of the construction activities are shown in *Annex B*.

Table 2.1 *Summary of Construction Activities Undertaken from 1 November 2006 to 30 November 2006*

Construction Activities Undertaken
<ul style="list-style-type: none">• Pre-bored H piles at southern and northern sides• Mini piles for marine platform at southern and northern sides• Marine Pile Installation• Demolition of Phase II at Grid 16/B-D from upper roof down to Level 2• Corrugated sheet and waterproofing work for west facade hoarding at west facade• Hoarding Erection• Demolition of sunshade canopy

2.4 PROJECT ORGANISATION

The Project organisation chart and contact details are shown in *Annex C*.

2.5 STATUS OF ENVIRONMENTAL APPROVAL DOCUMENTS

A summary of the relevant permits, licences, and/or notifications on environmental protection for this Project since August 2006 is presented in *Table 2.2*.

Table 2.2 *Summary of Environmental Licensing, Notification and Permit Status*

Permit/ Licenses/ Notification	Reference	Validity Period	Remarks
Environmental Permit	EP-239/2006	Throughout the Contract	Permit granted on 12 May 2006
Notification of Construction Works under Air Pollution Control (Construction Dust) Regulation	--	--	Notification on 23 June 2006
Discharge Licence under Water Pollution Control Ordinance	EP860/W10/XY0145	N/A	-
Chemical Waste Producer Registration	WPN5213-134-H3125-01	N/A	Chemical waste types: spent paint, acid, alkaline, adhesive, diesel fuel, lubricating oil and bitumen.
Construction Noise Permit for area inside the Atrium Link	GW-RS0429-06	Valid from 25 July 2006 and will expire on 23	-

Permit/ Licenses/ Notification	Reference	Validity Period	Remarks
		December 2006	
	GW-RS0487-06	Valid from 21 August 2006 and will expire on 30 December 2006	-
	GW-RS0511-06	Valid from 29 August 2006 and will expire on 27 October 2006	-
	GW-RS0535-06	Valid from 11 September 06 and will expire on 30 January 07)	
	PP-RS0028-06	Valid from 14 September 06 and will expire on 14 November 06	
	GW-RS0646-06	Valid from 28 October 06 and will expire on 31 January 07	Contractor cancelled the CNP on 27 Nov 2006.
	GW-RS0649-06	Valid from 30 October 06 and will expire on 30 May 07	Contractor cancelled the CNP on 20 Nov 2006.
	GW-RS0694-06	Valid from 21 November 06 and will expire on 30 March 07	
	PP-RS0036-06	Valid from 15 November 06 and will expire on 14 January 07	
	GW-RS-0685-06	Valid from 15 November 06 and will expire on 14 April 07	Contractor cancelled the CNP on 1 Dec 2006.
	GW-RS0709-06	Valid from 27 November 06 and will expire on 31 January 07	
	GW-RS0722-06	Valid from 2 December 06 and will expire on 30 April 07	

3.1 AIR QUALITY MONITORING

3.1.1 Monitoring Location

In accordance with the EM&A Manual, 24-hour and 1-hour Total Suspended Particulates (TSP) levels were conducted at the monitoring stations listed in *Table 3.1*. Map and photographs showing the monitoring stations are presented in *Annex D*.

Table 3.1 *Air Monitoring Stations*

Monitoring Station	Description
AM1	Pedestrian Plaza
AM2	Renaissance Harbour View Hotel Hong Kong

3.1.2 Monitoring Parameters, Frequency and Programme

Air quality monitoring was conducted in accordance with the requirements stipulated in the EM&A Manual (*Table 3.2*). The monitoring programme for this and next three reporting period is shown in *Annex E*.

Table 3.2 *TSP Monitoring Parameter and Frequency*

Parameter	Frequency
24-hour TSP	Once every 6 days
1-hour TSP	3 times every 6 days

3.1.3 Action and Limit Levels

The Action and Limit levels were established in accordance with the EM&A Manual and are presented in *Table 3.3*.

Table 3.3 *Action and Limit Levels for Air Quality*

Parameter	Air Monitoring Station	Action Level, $\mu\text{g}/\text{m}^3$	Limit Level, $\mu\text{g}/\text{m}^3$
24-hour TSP	AM1	161	260
	AM2	168	260
1-hour TSP	AM1	327	500
	AM2	329	500

3.1.4 Monitoring Equipment

Continuous 24-hour and 1-hour TSP monitoring were performed using High Volume Samplers (HVS) with appropriate sampling inlets installed, located at the designated monitoring station. The performance specification of HVS complies with the standard method “*Determination of Suspended Particulate Matter in the Atmosphere (High Volume Method)*” as stipulated in US EPA Standard Title 40, Code of Federation Regulations Chapter 1 (Part 50 Appendix B).

Table 3.4 summarizes the equipment that was used in the 24-hour and 1-hour TSP monitoring.

Table 3.4 **TSP Monitoring Equipment**

Monitoring Station	Equipment	Model (HVS, Calibration Kit)
AM1 (for 24-hr TSP)	HVS, Calibration Kit	GMW-9503, Tisch TE-5025 A
AM2 (for 24-hr TSP)	HVS, Calibration Kit	GMW-9795, Tisch TE-5025A
AM1 (for 1-hr TSP)	HVS, Calibration Kit	GMW-9864, Tisch TE-5025A
AM2 (for 1-hr TSP)	HVS, Calibration Kit	GMW-8115, Tisch TE-5025 A

3.1.5 **Monitoring Methodology**

Installation

The HVSs at AM1 and AM2 were placed at about 1.3 m above local ground level and about 4.3 m above local ground respectively. All of the HVSs were free-standing with no obstruction.

The following criteria were considered in the installation of the HVSs:

- horizontal platform with appropriate support to secure the samplers against gusty wind were provided at AM1 & AM2;
- a minimum of 2 m separation from walls, parapets and penthouses was required for rooftop samplers;
- no furnace or incinerator flues were nearby;
- airflow around the sampler was unrestricted; and
- permission was obtained to set up the samplers and to gain access to the monitoring stations.

Preparation of Filter Papers by ETS-Test Consultant Ltd

- glass fibre filters were labeled and sufficient filters that were clean and without pinholes were selected;
- all filters were equilibrated in the conditioning environment for 24 hours before weighing. The conditioning environment temperature was around 25 °C and not variable by more than ± 3 °C; the relative humidity (RH) was 40%; and
- ETS-Test Consultant Ltd, a HOKLAS accredited laboratory, implements comprehensive quality assurance and quality control programmes.

Field Monitoring

- the power supply was checked to ensure that the HVSs were working properly;
- the filter holder and the area surrounding the filter were cleaned;

- the filter holder was removed by loosening the foul bolts and a new filter, with stamped number upward, on a supporting screen was aligned carefully;
- the filter was properly aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter;
- the swing bolts were fastened to hold the filter holder down to the frame. The pressure applied should be sufficient to avoid air leakage at the edges;
- then the shelter lid was closed and secured with the aluminum strip;
- the HVSs were warmed-up for about 5 minutes to establish run-temperature conditions;
- a new flowrate record sheet was set into the flow recorder;
- the flow rate of the HVSs was checked and adjust at around 0.6 -1.44 m³/min. The range specified in the EM&A Manual was between 0.6 – 1.7 m³/min;
- the programmable timer was set for a sampling period of 24 hours ± 1 hour, and the starting time, weather condition and the filter number were recorded;
- the initial elapsed time was recorded;
- at the end of sampling, the sampled filter was removed carefully and folded in half length so that only surfaces with collected particulate matter were in contact;
- it was then placed in a clean plastic envelope and sealed;
- all monitoring information was recorded on a standard data sheet; and
- filters were sent to ETS-Test Consultant Ltd for analysis.

3.1.6 *Maintenance and Calibration*

The HVSs and their accessories were maintained in good working condition, such as replacing motor brushes routinely and checking electrical wiring to ensure a continuous power supply.

The flow rate of each HVS with mass flow controller were calibrated using an orifice calibrator. Initial calibration of the dust monitoring equipments were conducted upon installation and prior to commissioning. Five-point calibration was carried out for HVSs using Tisch TE-5025 A Calibration Kit. The calibration records for the HVSs are given in *Annex F*.

3.1.7 *Event Action Plan*

The Event / Action Plan (EAP) for air quality monitoring is presented in *Annex J*.

3.2 *WATER QUALITY MONITORING*

3.2.1 *Monitoring Location*

In accordance with the EM&A Manual, the marine water quality monitoring was conducted at the designated monitoring stations during the installation and removal of temporary marine piles listed in *Table 3.5*. The map and photographs showing the monitoring stations are presented in *Annex D*.

Table 3.5 *Water Quality Monitoring Locations*

Station	Location	Intake Level	Easting	Northing
W3	Hong Kong Convention and Exhibition Centre Phase I Cooling Water Intake	7.5m below the existing pump house floor	835852.3	815907.0
W4	Wan Chai Tower/ Revenue Tower/ Immigration Tower Cooling Water Intake ⁽¹⁾	5m below the top of the existing sea wall	835944.1	815885.0
W5	Great Eagle Centre, China Resources Building Cooling Water Intake	5m below the top of the existing sea wall	835963.4	815886.5

Note:
⁽¹⁾ The cooling water intake for Wan Chai Tower / Revenue Tower/ Immigration Tower was partially relocated to the new pump house adjacent to Station W3.

3.2.2 *Monitoring Parameters, Frequency and Programme*

The water quality monitoring was conducted in accordance with *Table 3.6* during the period of installation and removal of temporary marine piles.

Table 3.6 *Water Quality Monitoring Parameters & Frequency*

Parameter	Frequency	No. of Samples per Monitoring Event	Duration
Dissolved Oxygen (DO) Suspended Solids (SS) Turbidity	3 days per week at mid-flood & mid-ebb tides	2	During installation and removal of temporary marine piles.

Reference was made to the predicted tides at Quarry Bay, which is the tidal station nearest to the Project Site, published on the web site of Hong Kong Observatory (<http://www.hko.gov.hk/tide/eQUBtide.htm>).

Measurements of suspended solids (SS), turbidity in Nephelometric Turbidity Units (NTU) and dissolved oxygen (DO) in mgL⁻¹ were undertaken at designated monitoring stations. The first parameter was determined in the laboratory with the latter three were measured in-situ.

3.2.3 *Action and Limit Levels*

The Action and Limit levels were established in accordance with the EM&A Manual and are presented in *Table 3.7*.

Table 3.7 *Action and Limit Levels for Water Quality*

Parameter	Tide	Action Level	Limit Level
Dissolved Oxygen (DO) in mgL ⁻¹	Mid-Ebb	3.26	3.23
	Mid-Flood	3.25	3.14
Suspended Solids (SS) in mgL ⁻¹	Mid-Ebb	9.00	10.00
	Mid-Flood	8.18	8.40
Turbidity (Tby) in NTU	Mid-Ebb	5.32	6.19
	Mid-Flood	4.76	5.79

3.2.4 *Monitoring Equipment and Methodology*

Dissolved oxygen and temperature measuring equipment

The portable and weatherproof dissolved oxygen (DO) measuring meter (YSI Model 95) was used in the impact monitoring.

The DO measuring meter has a membrane electrode with automatic temperature compensation complete with a 50-feet cable. Wet bulb calibration for a DO meter was carried out before measurement at each monitoring station.

Turbidity Measurement Instrument

The turbidity measurements were carried out on split water sample collected from the same depths of SS samples. A portable and weatherproof turbidity-measuring meter (HACH 2100P) was used in the impact monitoring. It has a photoelectric sensor capable of measuring turbidity between 0-1000 NTU. Response of the sensor was checked with certified standard turbidity solutions before the start of measurement.

Suspended Solids

Water samples for suspended solids measurement were collected by use of a transparent PVC cylinder (Kahlsico Water Sampler), packed in ice (cooled to 4°C without being frozen) and delivered to the laboratory as soon as possible after collection. The SS determination work was started within 24 hours after the collection of the water samples, and the testing method of SS was carried by ETS-Testconsult Ltd (HOKLAS accredited laboratory) in accordance with the APHA 19ed 2540D⁽¹⁾ and the lowest detection limit is 1 mgL⁻¹. The Quality Assurance/Quality Control (QA/QC) procedures were followed as required by HOKLAS.

⁽¹⁾ American Public Health Association Standard Methods for the Examination of Water and Wastewater.

Water Depth Detector

A portable, battery-operated echo sounder (Speedtech instrument SM-5A) was used for the determination of water depth at each designated monitoring station.

Location of the Monitoring Sites

A hand-held GPS (MLR SP24) and together with a suitably scaled map was used for locating the water quality monitoring stations.

Calibration of Equipment

All in-situ monitoring instruments were checked, calibrated and certified by a laboratory accredited under HOKLAS or any other international accreditation scheme before use, and subsequently re-calibrated at 3 monthly intervals throughout the water quality monitoring. The calibration records for the monitoring instruments are given in *Annex H*.

3.2.5

Event / Action Plan

The Event / Action Plan (EAP) for water quality monitoring is presented in *Annex J*.

IMPLEMENTATION STATUS ON ENVIRONMENTAL PROTECTION REQUIREMENTS

The Contractor has implemented environmental mitigation measures and requirements as stated in the EIA Report, the Environmental Permit and EM&A Manual. The implementation status of environmental mitigation and status of relevant required submissions under the EP are reported as part of the monthly EM&A report⁽¹⁾. Relevant submissions made on these measures and requirements during the reporting period are summarized in *Annex K*.

⁽¹⁾ The last Monthly EM&A Report for October 2006 was submitted to the EPD on 16 November 2006.

5.1 AIR QUALITY

The monitoring data at AM1 and AM2 were provided by ETS-Testconsult Ltd. Five sets of 24-hour and fifteen sets of 1-hour TSP monitoring were carried out at the designated monitoring stations (AM1 & AM2) during the reporting period. The monitoring data for 24-hour TSP and 1-hour TSP together with wind data and graphical presentations are presented in *Annex G*.

The weather condition during the monitoring period varied from sunny to rainy. The local impacts observed near the monitoring stations were mainly vehicle emissions along Convention Avenue and Fleming Road.

5.2 WATER QUALITY

Water quality monitoring was conducted in the reporting period and the results of water quality monitoring were provided by ETS-Testconsult Ltd. Thirteen sets of water quality measurement, recorded at mid-flood and mid-ebb tides, were carried out at the designated monitoring stations W3, W4 and W5. The monitoring data and graphical presentations are summarized in *Annex I*. In addition, the monitoring results can also be found in the web-site (<http://www.hkcecema.com/index.html>).

During the reporting month, exceedances of water quality parameter of the monitoring stations were summarized in *Table 5.1*.

Table 5.1 *Summary of Record of Exceedance recorded in October 2006*

Station	Record of Exceedance
W3	Exceedance of Action Level of Turbidity on 2 November 2006
W4	Exceedance of Action Level of Turbidity on 2 November 2006
W5	Exceedance of Action Level of Turbidity on 2 November 2006

Notification of Exceedances with detailed investigation reports were issued to IEC and EPD immediately when the exceedance was identified.

Exceedance of Action Level of turbidity recorded on 2 November 2006 was likely due to natural fluctuation rather than Project works as no silty water was observed to be discharged from the site to the water channel. In addition, the gravimetric measurement of SS in the laboratory, which is considered a more accurate and quantitative measurement, complied with the Action Level, indicating the water quality was acceptable as compared with the Action Level.

The turbidity of water quality recorded after 2 November 2006 returned to levels in compliance with Action level.

Waste generated from this Project includes inert construction and demolition (C&D) materials and non-inert C&D wastes. Reference has been made on the Monthly Summary Waste Flow Table prepared by Hip Hing – Ngo Kee Joint Venture (*Annex L*). With reference to relevant handling records and trip tickets of this Project, the quantities of different types of waste generated in the reporting quarter are summarized in *Table 5.2*. The C&D wastes and inert C&D materials generated from the Project were disposed of at SENT Landfill / Tseung Kwan O Area 137 temporary construction waste sorting facility and the public fill barging point at Quarry Bay respectively.

Table 5.2 *Quantities of Waste Generated from the Project*

Month / Year	Quantity	
	C&D Materials (inert) ^(a)	C&D Materials (non-inert) ^(b)
November 2006	2,091 tonnes	166.5 tonnes (excluding 100 tonnes steel material)

Notes:

(a) Inert C&D materials include bricks, concrete, building debris, rubble and excavated soil. 1 tonne of inert C&D materials was reused either in this Project. Non-reused inert C&D materials were disposed of at the public fill barging point at Quarry Bay.

(b) C&D wastes include steel materials generated from demolition of footbridge, the existing Atrium Link and working platform, paper / cardboard packaging waste, chemical waste and other wastes such as general refuse. A total of 100 tonnes of steel material were sent to recycler and the remaining C&D wastes other than general refuse were disposed of at SENT Landfill / Tseung Kwan O Area 137 temporary construction waste sorting facility.

Weekly site inspections were carried out by the ET. Five site inspections were conducted on 2, 9, 16, 23 and 30 November 2006. There was no non-compliance event recorded in the reporting month.

Major findings and recommendations are summarized as follows:

Site Specific

- (i) It was observed that water was accumulated at the western entrance of the northern site. The Contractor was recommended to remove the stagnant water and the corrective action was undertaken in the reporting period.
- (ii) Some of tarpaulins and sand bags provided at the southern site boundary of Northern Site were observed to be damaged after several months of piling activities. The Contractor was recommended to replace the damaged tarpaulins and sand bags to avoid muddy water entering the water channel via the gaps of damaged tarpaulins and sand bags, and the corrective action was undertaken in progress in the reporting period.
- (iii) Drilling fluid was observed to be leaking from a piling machine located at PB2 (Southern Site). The contractor was recommended to remove the drilling fluid and disposed it according to *Code of Practice on the Packaging, Handling and Storage of Chemical Wastes*, and the corrective action was undertaken in the reporting period.
- (iv) The Contractor was recommended to plug the pipe (located near to PB2) which was formerly used for the wastewater treatment facility to avoid muddy water entering public drains through this pipe, and the correction action was undertaken in the reporting period.
- (v) The Contractor was recommended to label all the containers / drums placed in the chemical storage according to *Code of Practice on the Packaging, Handling and Storage of Chemical Wastes*, and the corrective action was undertaken in the reporting period.
- (vi) The Contractor was recommended to remove the materials placed under the trees outside the site office and to provide protective fencing for the trees, and the corrective action was undertaken in the reporting period.

Water Discharge Sampling

In accordance with the discharge licence issued under WPCO, water sampling should be conducted quarterly to ensure the quality of treated effluent complying with the requirements of discharge license. The Contractor proposed to conduct the water sampling on a bi-monthly basis. Water

quality sampling was conducted in November 2006 and the results will be reported in next reporting period.

7 *ENVIRONMENTAL NON-CONFORMANCE*

7.1 *SUMMARY OF ENVIRONMENTAL EXCEEDANCE*

No exceedance of the Action and Limit Levels of 24-hour and 1-hour TSP was recorded at monitoring stations during the reporting period.

Three Notification of Exceedance with detailed investigations reports were issued during the reporting month for water quality monitoring exceedances regarding turbidity at the monitoring stations W3, W4 and W5. Details of the exceedances recorded were given in *Section 5.2*.

7.2 *SUMMARY OF ENVIRONMENTAL NON-COMPLIANCE*

No non-compliance event was recorded during the reporting period.

7.3 *SUMMARY OF ENVIRONMENTAL COMPLAINT*

No complaint was received during the reporting period.

7.4 *SUMMARY OF ENVIRONMENTAL SUMMONS AND PROSECUTION*

No summons or prosecution on environmental matters was received during the reporting period.

8.1 KEY ISSUES FOR THE COMING MONTH

Works to be taken for the coming monitoring period are summarized in *Table 8.1*.

Table 8.1 Construction Works to be Undertaken in the Coming Month

Work to be taken
<ul style="list-style-type: none"> • Pre-bored H piles at southern and northern sides • Pre-trenching for pre-bored H piles at southern side • Mini piles for marine platform at southern and northern sides • Marine Pile Installation • Demolition of Phase II at Grid 16/B-D from upper roof down to Level 2 • Corrugated sheet and waterproofing work for west facade hoarding at west facade • Hoarding Erection • Demolition of sunshade canopy and structural element

Potential environmental impacts arising from the above construction activities are mainly associated with dust, site runoff and waste management.

8.2 MONITORING SCHEDULE FOR THE COMING MONTHS

The tentative schedule of TSP monitoring for the next three months is presented in *Annex E*. The environmental monitoring will be conducted at the same monitoring locations in this reporting month. It is anticipated that the installation of temporary marine piles will still be carried out in December 2006 and the water monitoring will be conducted during the installation of temporary marine piles (*Annex E*). The monitoring programme has been reviewed and was considered as adequate to cater for the nature of works in progress.

8.3 CONSTRUCTION PROGRAMME FOR THE NEXT THREE MONTHS

The construction programme for the next three months is presented in *Annex M*.

9.1 AIR QUALITY

Since the EIA only have qualitative assessment of dust impact during construction phase, the comparison was made on monitoring results and the Hong Kong Air Quality Objectives (HKAQO) (*Table 9.1*).

Table 9.1 Comparison of the HKAQO and Air Quality Monitoring Results

Monitoring Stations	Corresponding ASR in EIA	HKAQO, ug/m ³	Measured 24 hour TSP Monitoring Results, ug/m ³ (2)	
		24 hour (1)	Average	Range
AM1	AM8	260	107	78 - 145
AM2	AM6	260	94	58 - 127

Remarks:

(1) Only 24 hours TSP monitoring results were compared as there is no maximum allowable concentration of 1 hour TSP in HKAQO.

(2) Average and range of data were calculated for the period of monitoring between August 2006 to September 2006

The monitoring results show that air quality impacts from construction activities during the reporting period were well below maximum allowable concentration stipulated in the HKAQO. Recommended mitigation measures in Section 4.24 of EIA were implemented during the reporting period and were considered as effective.

9.2 WATER QUALITY

The hydrodynamic modelling assessment undertaken in the approved EIA Report was targeted at assessing the potential effects of the marine works on the flushing capacity of the water channel during the construction phase and no prediction was made on the change in water quality, hence no comparison can be made with the monitoring results.

9.3 WASTE MANAGEMENT

The estimated amount of waste generated in this project and the quantities of waste generated during the reporting period are presented in *Table 9.2*. Recommended mitigation measures in Sections 6.35 to 6.41 of the EIA are implemented during the reporting period and regarded as effective.

Table 9.3 *Comparison of the Estimated Amount and the Actual Amount of Waste Generated*

Type of Material	Estimated Amount of C&D Materials in EIA (inert & non-inert)	Actual Amount of C&D Materials Recorded ⁽¹⁾ (inert & non-inert)
Demolition of temp. footbridge	585 tonnes	0
Demolition of existing Atrium Link	4,680 tonnes	130 tonnes
Demolition of temp. working platform	390 tonnes	0
Construction of foundations and pile caps	20,000 tonnes	6,191 tonnes
General Refuse	Insignificant	215 tonnes
Chemical Waste	Small	0
Remark: (1) The actual amount of C&D Materials was recorded since the commencement of construction works.		

9.4 CONCLUSION OF REVIEW

The EIA predictions and the monitoring results during the reporting period have been reviewed. The EIA concluded that the proposed HKCEE Atrium expansion would not pose adverse impacts to the environment, and the monitoring results also indicated that the construction of the project did not pose adverse impacts to the environment. Recommendations given in the EIA are also considered to be adequate and effective for minimising the environmental impacts.

The Environmental Monitoring and Audit (EM&A) Report presents the EM&A works undertaken during the period from 1 November to 30 November 2006 in accordance with EM&A Manual and the requirement under EP-239/2006.

No exceedance of the Action and Limit Levels of 24-hour and 1-hour TSP was recorded at the monitoring stations during the reporting month.

Three Notifications of Exceedance (NOE) with detailed investigations reports were issued during the reporting month for recording water quality monitoring exceedances on turbidity of the monitoring stations on 2 November 2006. Exceedance of Action Level of turbidity was likely due to natural fluctuation rather than Project works as no silty water was observed to be discharged from the site to the water channel. In addition, the gravimetric measurement of SS in the laboratory, which is considered a more accurate and quantitative measurement, complied with the Action Level, indicating the water quality was acceptable as compared with the Action Level. The turbidity of water quality recorded after 2 November 2006 returned to levels in compliance with Action level.

No non-compliance event was recorded during the reporting month

No complaint and summons/prosecution was received during the reporting period.

The ET will keep track of the EM&A programme to ensure compliance of environmental requirements and the proper implementation of all necessary mitigation measures.

Annex A

Locations of Works Areas

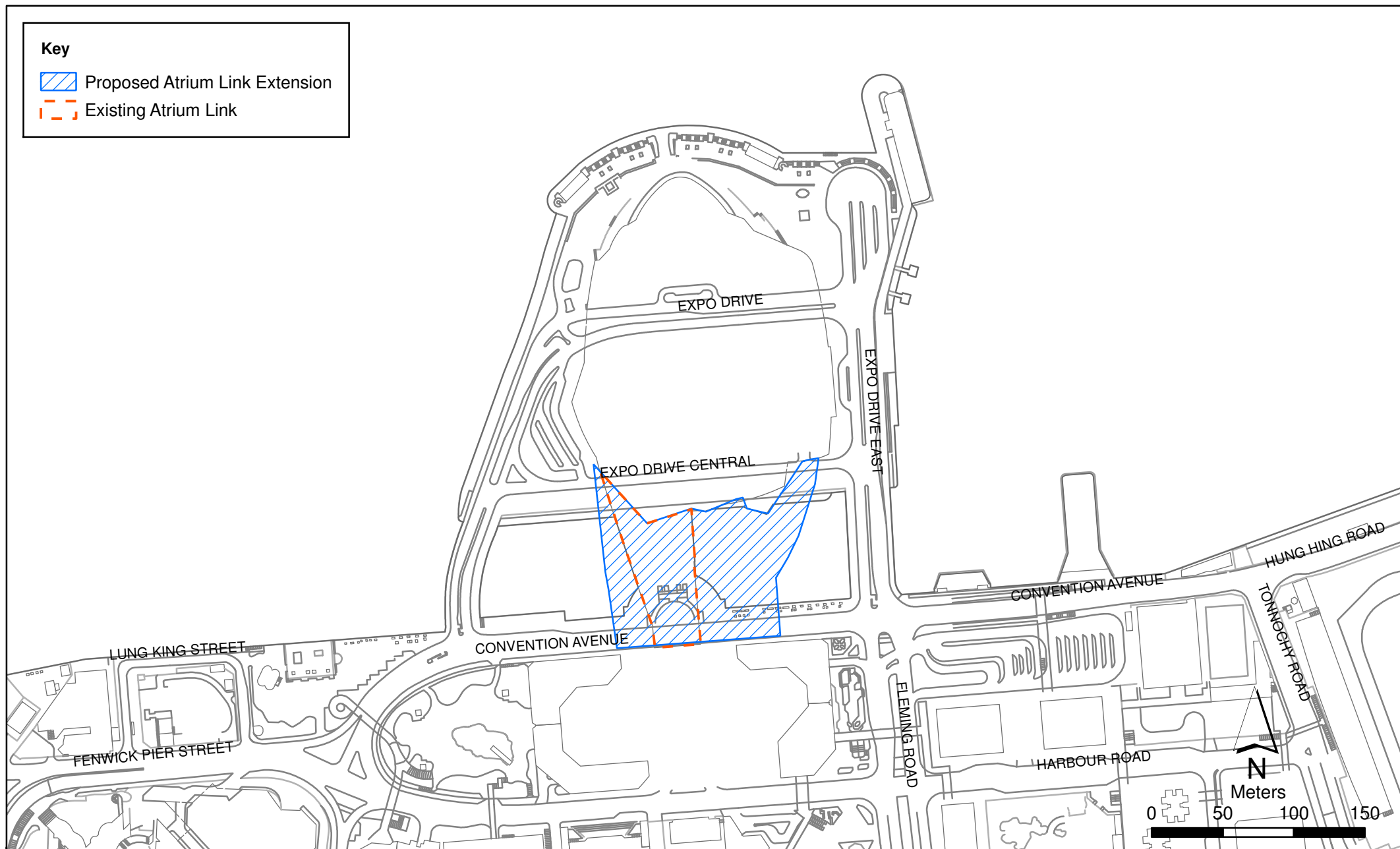
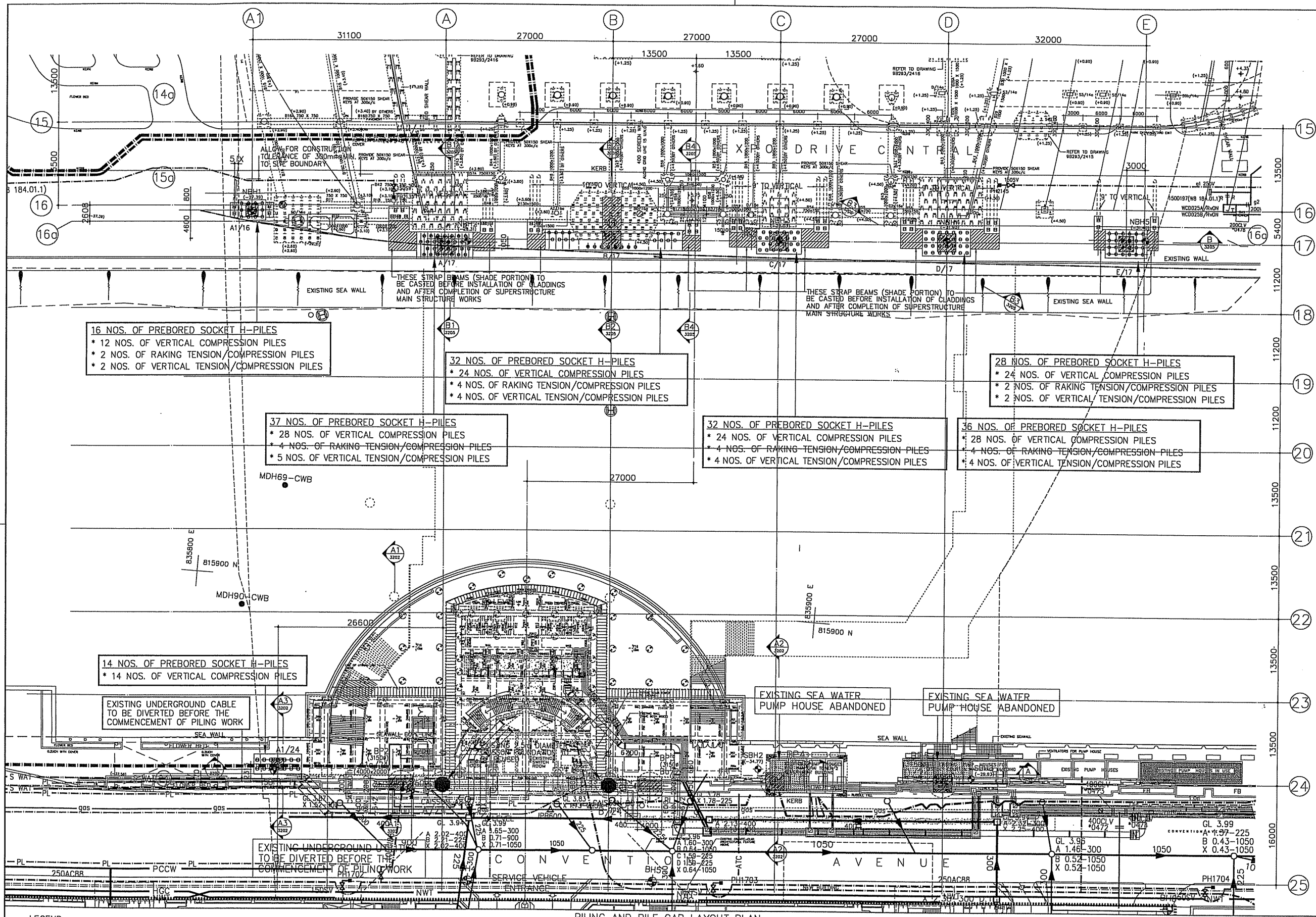


Figure A1

Location of Atrium Link Extension






Annex B

Location of Construction
Activities during the
Reporting Month



B.L.D. REF		
F.S.D. REF		
REVISIONS		
NUMBER	DESCRIPTION	DATE
-	FOR SUBMISSION	9-6-06
A	PIILING FOR COLUMNS A1/24, A16/24, A/24, B/24 & B2/24 REVISED.	20-7-06
	FOR AMENDMENT SUBMISSION	21-7-06
B	PIILING FOR COLUMNS A1/16, A/17, B/17, C/17, D/17 & E/17 REVISED.	25-7-06
	FOR AMENDMENT SUBMISSION	26-7-06
C	REVISE DETAILS FOR BP4, BP5	31-7-06
	FOR AMENDMENT SUBMISSION (MTR)	3-8-06
D	REVISE DETAILS FOR A1/16, A/17, B/17, C/17, D/17 & E/17	4-8-06
	REPLACE SUBMISSION AT 26-7-06	4-8-06
E	FOR SUBMISSION TO CEDD	10-8-06
F	COLUMN A/17 LOCATION REVISED.	18-8-06

AMENDED PLAN

CLIENT		
 香港貿易發展局 Hong Kong Trade Development Council		
MAIN CONTRACTOR		
 Hip Hing - Ngo Kee Joint Venture		
ARCHITECT		
 WONG & OUYANG (HK) LTD ARCHITECTS AND ENGINEERS		
STRUCTURAL ENGINEER		
 WONG & OUYANG (CIVIL) STRUCTURAL ENGINEERING LTD.		
BUILDING SERVICES ENGINEER		
 WONG & OUYANG (BUILDING SERVICES) LTD		
PROJECT		
HONG KONG CONVENTION & EXHIBITION CENTRE EXPANSION PROJECT		
DRAWING TITLE		
PILING AND PILE CAP LAYOUT PLAN (PREBORED H-PILE AND BORED PILE		
DESIGNER'S SIGNATURE FOR SUBMISSION		
SIGN	DATE	
INDEPENDENT DESIGN CHECKER'S SIGNATURE FOR SUBMISSION		
SIGN	DATE	
DRAWN BY	SIZE	DATE 24-2-06
ENTERED BY	CHK/PAX	PLOT DATE 26-7-06
CHECKED BY	LTW	DATE 26-7-06
SCALE	1:300	PRINT DATE 26-7-06
JOB NUMBER	DRAWING NUMBER	REVISION
2119	3201	F
DO NOT SCALE OFF DRAWING. THIS DRAWING IS NOT FOR CONSTRUCTION PURPOSES UNLESS EXPRESSLY STATED. ALL RIGHTS RESERVED AND REPRODUCTION IN ANY FORM MUST BE APPROVED BY WONG & OUYANG (HK) LTD.		

PROGRESS PRINT

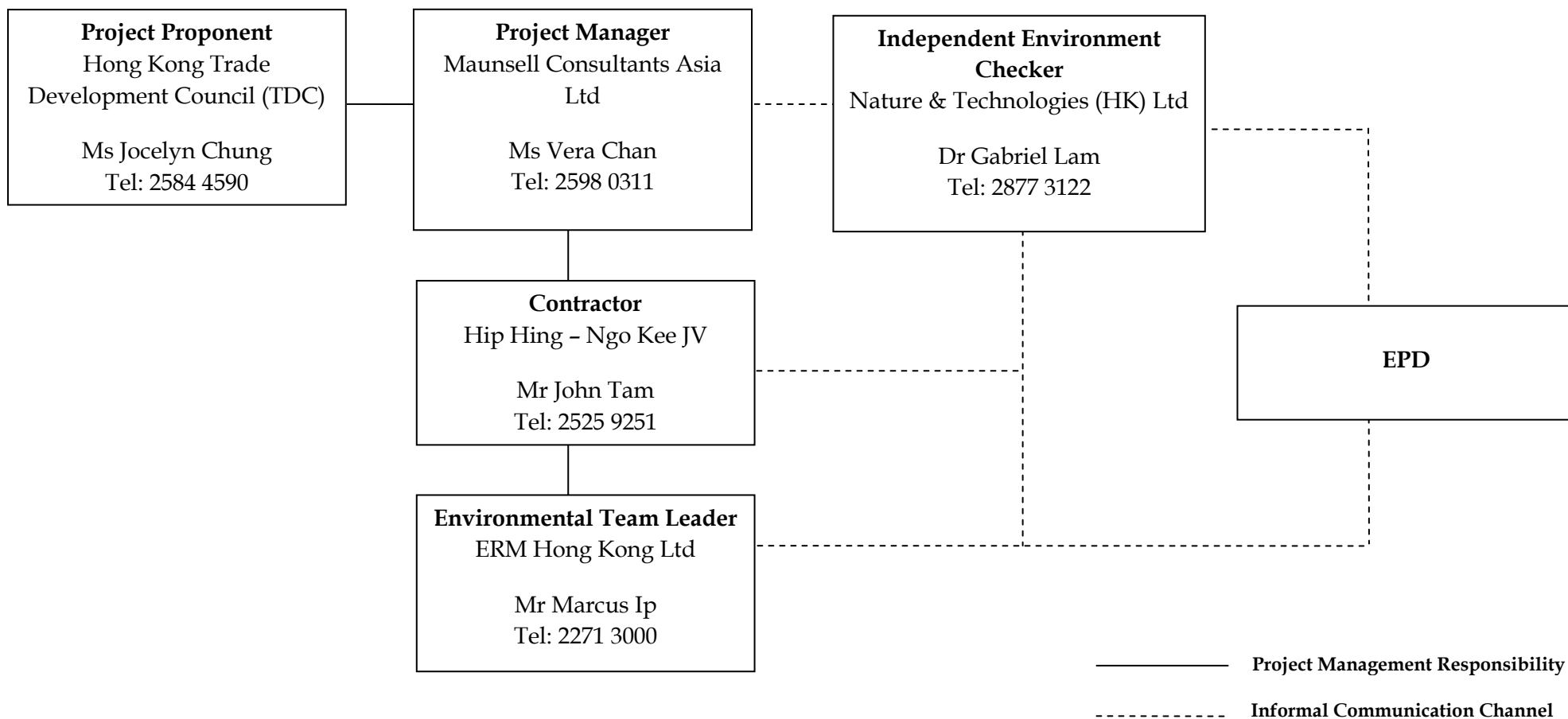
Progress Summary

Description	Location
Pre-bored H piles at southern and northern sides	(A/17), (A1/16), (A1/24), (B/17), (C/17), (D/17), (E17)
Mini piles for marine platform at southern and northern sides	G/F North & South Side (RP20-36)
Marine Pile Installation	Sea channel
Demolition of Phase II at Grid 16/B-D from upper roof down to Level 2	Grid 16/B-D, Upper roof to Level 2
Corrugated sheet and waterproofing work for west facade hoarding at west facade	West facade
Hoarding Erection	Levels 2-7
Demolition of sunshade canopy	West facade

Annex C

Project Organisation

Project Organization (with contact details)



Annex D

Locations of Air and Water Quality Monitoring Stations

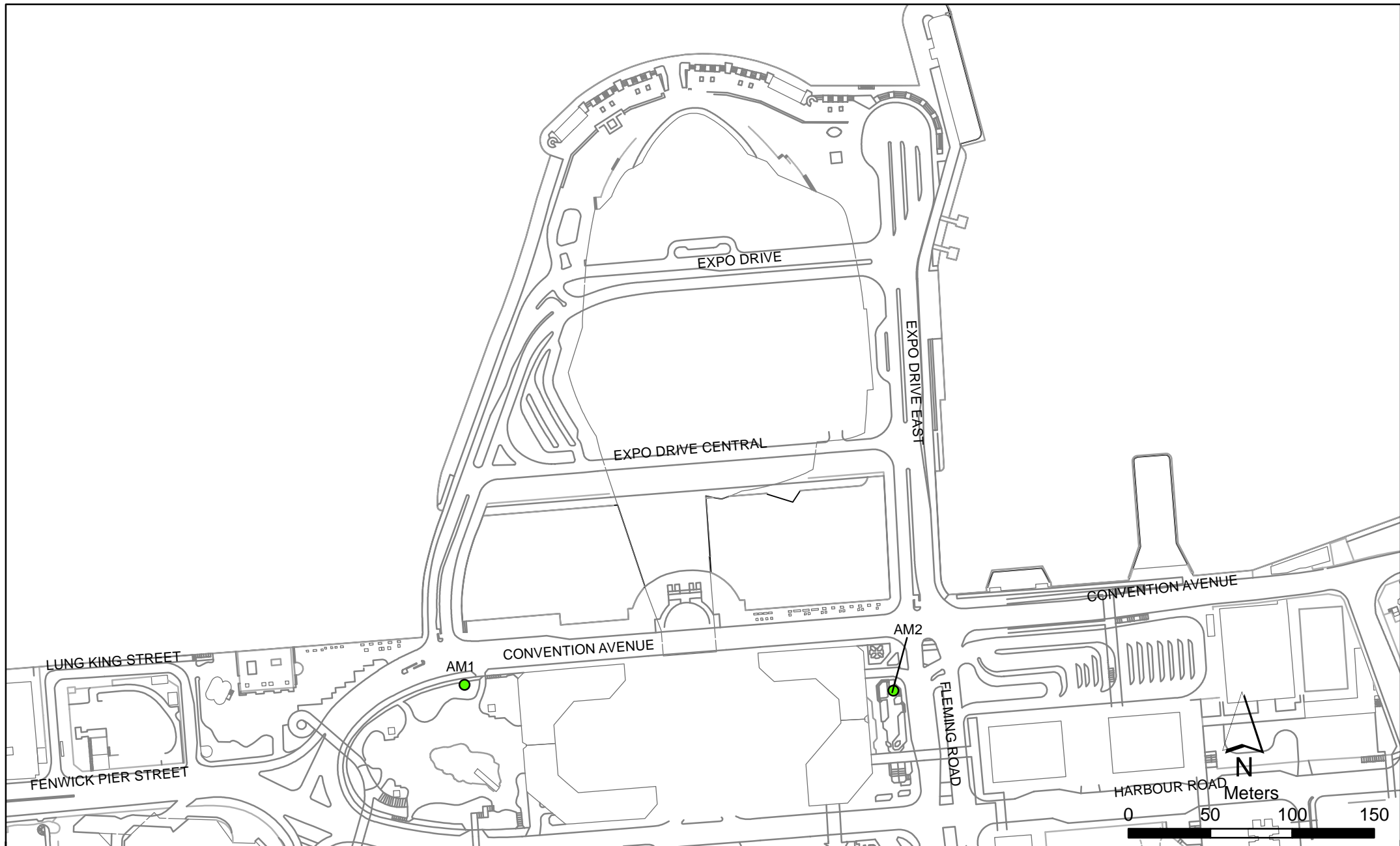


Figure D1

Air Quality Monitoring Station

Monitoring Station	Description	Easting	Northing
3	Hong Kong Convention and Exhibition Centre Phase I Cooling Water Intake	835852.3	815907.0
4	Wan Chai Tower/Revenue Tower/Immigration Towe Cooling Water Intake	835944.1	815885.0
5	Great Eagle Centre/China Resources Building Cooling Water Intake	835963.4	815886.5

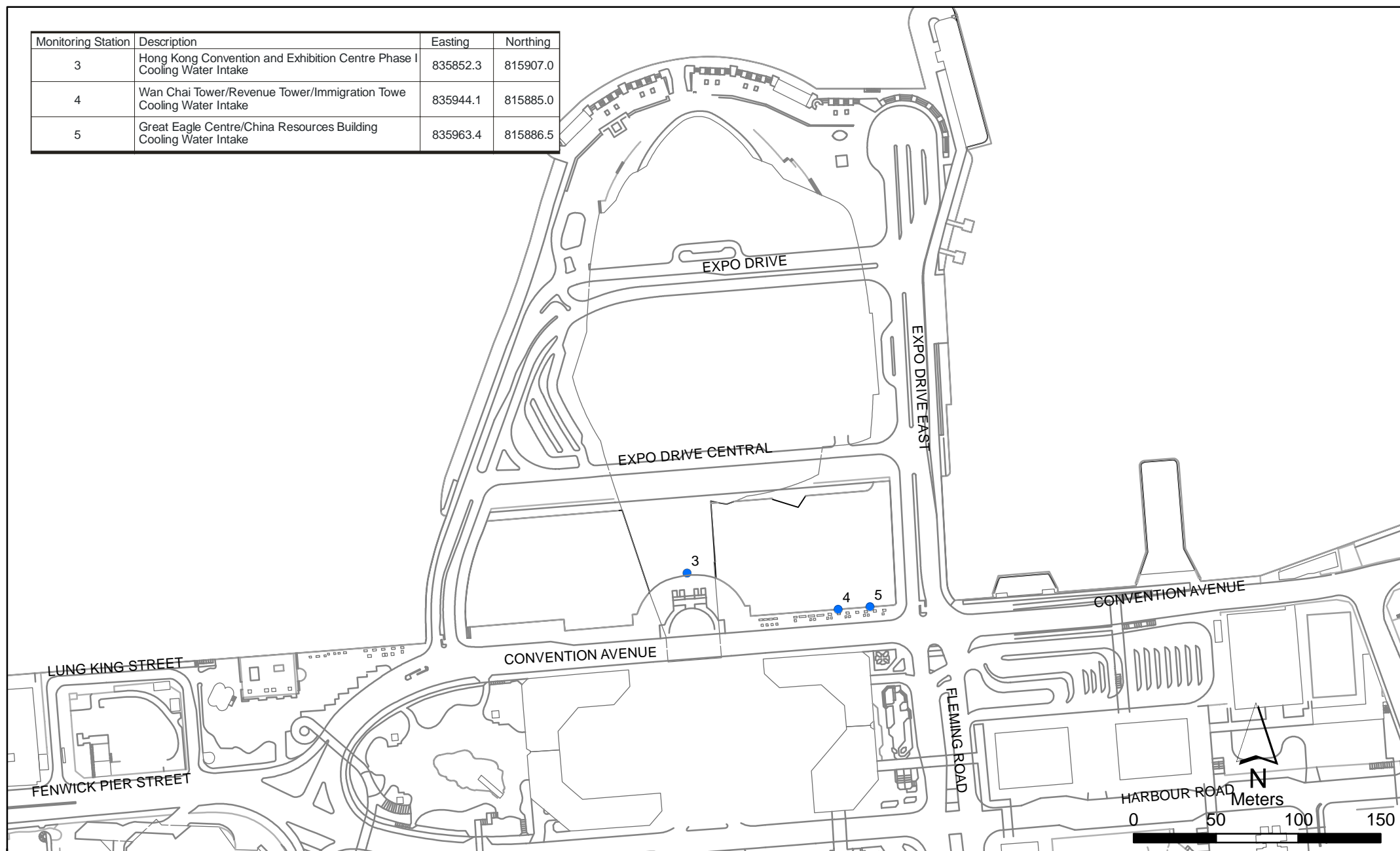
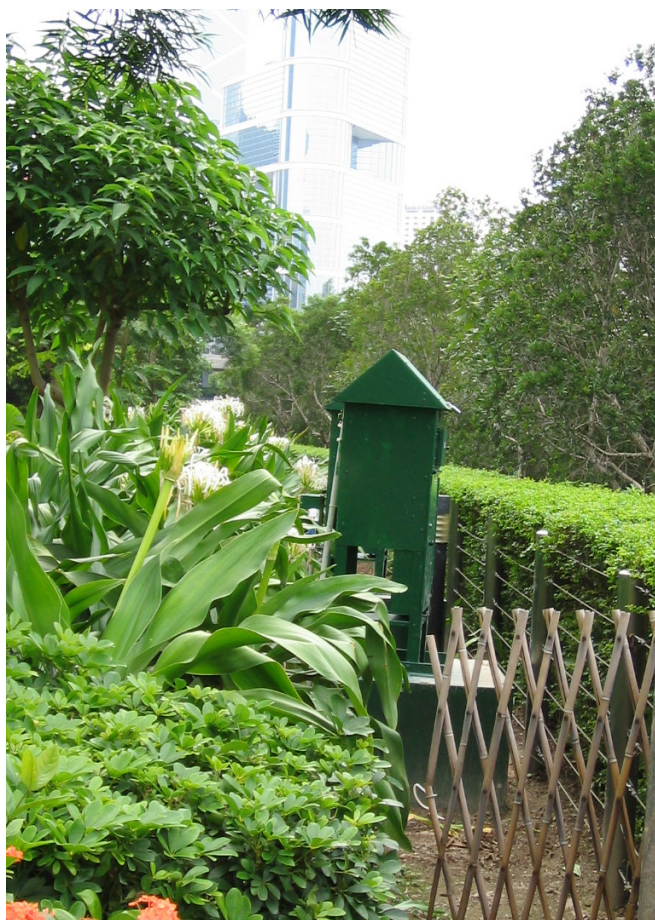


Figure D2

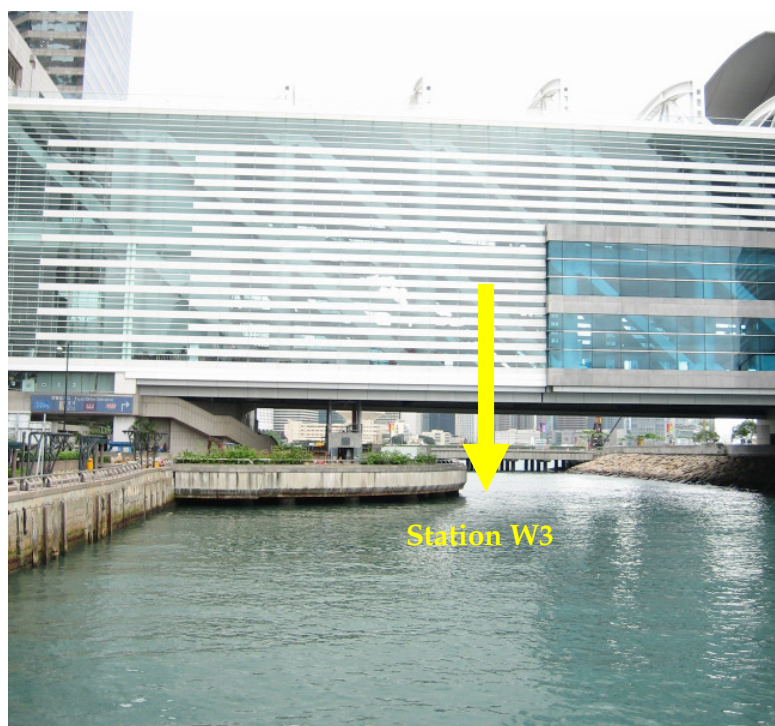
Marine Water Quality Monitoring Station



Air Quality Monitoring Station (AM1)



Air Quality Monitoring Station (AM2)



Water Quality Monitoring Location – Station W3



Water Quality Monitoring Location – Stations W4 and W5

Annex E

Monitoring Schedule for the reporting period and next three months

Hong Kong Convention and Exhibition Centre, Atrium Link Extension
Air Quality Monitoring Schedule - November 2006

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			01-Nov	02-Nov	03-Nov	04-Nov
				Air Monitoring		
05-Nov	06-Nov	07-Nov	08-Nov	09-Nov	10-Nov	11-Nov
			Air Monitoring			
12-Nov	13-Nov	14-Nov	15-Nov	16-Nov	17-Nov	18-Nov
		Air Monitoring				
19-Nov	20-Nov	21-Nov	22-Nov	23-Nov	24-Nov	25-Nov
	Air Monitoring					Air Monitoring
26-Nov	27-Nov	28-Nov	29-Nov	30-Nov		

Hong Kong Convention and Exhibition Centre, Atrium Link Extension
Air Quality Monitoring Schedule - December 2006

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					01-Dec	02-Dec
					Air Monitoring	
03-Dec	04-Dec	05-Dec	06-Dec	07-Dec	08-Dec	09-Dec
				Air Monitoring		
10-Dec	11-Dec	12-Dec	13-Dec	14-Dec	15-Dec	16-Dec
			Air Monitoring			
17-Dec	18-Dec	19-Dec	20-Dec	21-Dec	22-Dec	23-Dec
		Air Monitoring				Air Monitoring
24-Dec	25-Dec	26-Dec	27-Dec	28-Dec	29-Dec	30-Dec
					Air Monitoring	
31-Dec						

Hong Kong Convention and Exhibition Centre, Atrium Link Extension
Air Quality Monitoring Schedule - January 2007

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	01-Jan	02-Jan	03-Jan	04-Jan	05-Jan	06-Jan
				Air Monitoring		
07-Jan	08-Jan	09-Jan	10-Jan	11-Jan	12-Jan	13-Jan
			Air Monitoring			
14-Jan	15-Jan	16-Jan	17-Jan	18-Jan	19-Jan	20-Jan
		Air Monitoring				
21-Jan	22-Jan	23-Jan	24-Jan	25-Jan	26-Jan	27-Jan
	Air Monitoring					Air Monitoring
28-Jan	29-Jan	30-Jan	31-Jan			

Hong Kong Convention and Exhibition Centre, Atrium Link Extension
Air Quality Monitoring Schedule - February 2007

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				01-Feb	02-Feb	03-Feb
					Air Monitoring	
04-Feb	05-Feb	06-Feb	07-Feb	08-Feb	09-Feb	10-Feb
				Air Monitoring		
11-Feb	12-Feb	13-Feb	14-Feb	15-Feb	16-Feb	17-Feb
			Air Monitoring			
18-Feb	19-Feb	20-Feb	21-Feb	22-Feb	23-Feb	24-Feb
		Air Monitoring				
25-Feb	26-Feb	27-Feb				
	Air Monitoring					

Hong Kong Convention and Exhibition Centre, Atrium Link Extension
Water Quality Monitoring Schedule - November 2006

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			01-Nov	02-Nov	03-Nov	04-Nov
				Mid-Ebb 09:20 Mid-Flood 16:13		Mid-Ebb 11:04 Mid-Flood 17:10
05-Nov	06-Nov	07-Nov	08-Nov	09-Nov	10-Nov	11-Nov
		Proposed 13:00 Mid-Flood 18:42 Mid-Ebb 01:36 (out of piling hour)		Mid-Flood 09:46 Proposed 12:30 Mid-Ebb 03:15 (out of piling hour)		Proposed 08:30 Mid-Flood 16:29 Mid-Ebb - (out of piling hour)
12-Nov	13-Nov	14-Nov	15-Nov	16-Nov	17-Nov	18-Nov
		Mid-Ebb 09:00 Mid-Flood 15:17		Mid-Ebb 09:18 Mid-Flood 15:55		Mid-Ebb 10:43 Mid-Flood 16:28
19-Nov	20-Nov	21-Nov	22-Nov	23-Nov	24-Nov	25-Nov
		Proposed 12:30 Mid-Flood 17:23 Mid-Ebb 00:21 (out of piling hour)		Proposed 13:00 Mid-Flood 18:04 Mid-Ebb 01:26 (out of piling hour)		Proposed 16:30 Mid-Flood 19:10 Mid-Ebb 02:59 (out of piling hour)
26-Nov	27-Nov	28-Nov	29-Nov	30-Nov		
		Proposed 09:00 Mid-Flood 13:25 Mid-Ebb 05:12 (out of piling hour)		Mid-Ebb 08:15 Mid-Flood 14:43		

Hong Kong Convention and Exhibition Centre, Atrium Link Extension
Water Quality Monitoring Schedule - Dec 2006

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					01-Dec	02-Dec
						Mid-ebb 09:48 Mid-flood 15:52
03-Dec	04-Dec	05-Dec	06-Dec	07-Dec	08-Dec	09-Dec
	Mid-ebb 11:33 Mid-flood 16:58		Mid-flood 07:58 Mid-ebb 13:01		Mid-flood 09:41 Proposed 18:00 No mid-ebb	
10-Dec	11-Dec	12-Dec	13-Dec	14-Dec	15-Dec	16-Dec
	Proposed 08:00 Mid-flood 16:11 No mid-ebb		Mid-ebb 08:00 Mid-flood 13:39		Mid-ebb 08:01 Mid-flood 14:34	
17-Dec	18-Dec	19-Dec	20-Dec	21-Dec	22-Dec	23-Dec
	Proposed 10:48 Mid-flood 15:47 No mid-ebb		Proposed 12:08 Mid-flood 16:48 No mid-ebb		Proposed 13:25 Mid-flood 18:04 No mid-ebb	
24-Dec	25-Dec	26-Dec	27-Dec	28-Dec	29-Dec	30-Dec
			Mid-flood 12:08 Proposed 16:48 Mid-flood out of piling hour		Proposed 08:00 Mid-flood 13:34 Mid-ebb Out of piling hour	
31-Dec						

Annex F

Calibration Reports for HVS



東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED

8/F., Block B, Veristrong Industrial Centre, 34-36 Au Pui Wan Street, Fotan, Hong Kong
Tel. : 2695 8318 E-mail : etl@ets-testconsult.com
Fax : 2695 3944 Web site : www.ets-testconsult.com

TEST REPORT

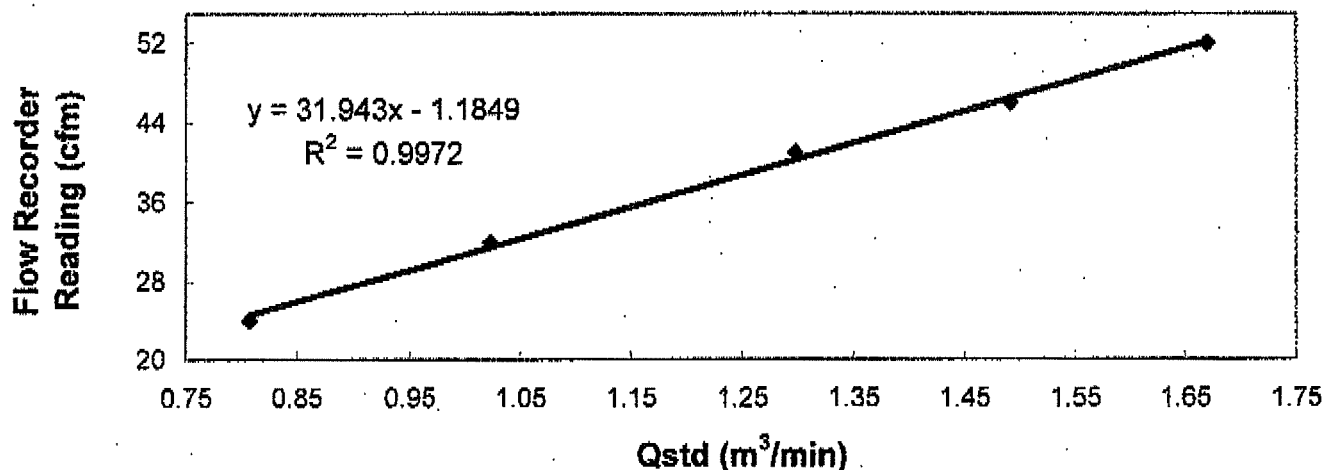
Calibration Report
of
High Volume Air Sampler

Manufacturer : Graseby GMW **Date of Calibration** : 26 October 2006
Serial No. : 9864 (ET / EA / 003 / 19) **Calibration Due Date** : 25 December 2006
Method : Based on Operations Manual for the 5-point calibration using standard calibration kit manufactured by Tisch TE-5025 A

Results

Flow recorder reading (cfm)	52	46	41	32	24
Qstd (Actual flow rate, m ³ /min)	1.67	1.49	1.30	1.02	0.81
Pressure :	754.56 mm Hg			Temp. :	301 K

Sampler 9864 Calibration Curve
Site: Wan Chai (AM-1)
Date of Calibration: 26 October 2006



Acceptance Criteria : Correlation coefficient (r) of the calibration curve greater than 0.990 after a 5-point calibration

The high volume sampler complies * / ~~does not comply~~ * with the specified requirements and is deemed acceptable * / unacceptable * for use.

Calibrated by : Kin
Kenneth CHIU
(Technician)

Approved by : H. T. Chow
H. T. CHOW
(Asst. Environmental Officer)



東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED

8/F, Block B, Veristrong Industrial Centre, 34-36 Au Pui Wan Street, Fotan, Hong Kong
Tel : 2695 8318 E-mail : eti@ets-testconsult.com
Fax : 2695 3944 Web site : www.ets-testconsult.com

TEST REPORT

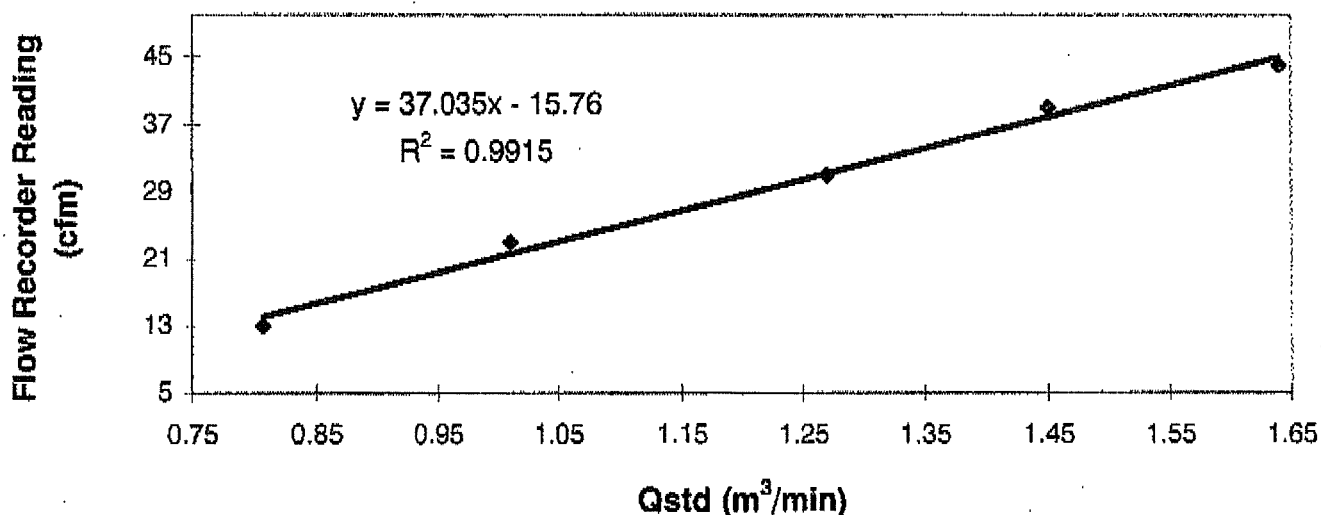
Calibration Report
of
High Volume Air Sampler

Manufacturer : Graseby GMW **Date of Calibration** : 26 October 2006
Serial No. : 9795 (ET / EA / 003 / 18) **Calibration Due Date** : 25 December 2006
Method : Based on Operations Manual for the 5-point calibration using standard calibration kit manufactured by Tisch TE-5025 A

Results

Flow recorder reading (cfm)	44	39	31	23	13
Qstd (Actual flow rate, m ³ /min)	1.64	1.45	1.27	1.01	0.81
Pressure :	754.56 mm Hg		Temp. :	301 K	

Sampler 9795 Calibration Curve
Site: Wan Chai (AM-2)
Date of Calibration: 26 October 2006



Acceptance Criteria : Correlation coefficient (r) of the calibration curve greater than 0.990 after a 5-point calibration

The high volume sampler complies * / ~~does not comply~~ * with the specified requirements and is deemed acceptable * / ~~unacceptable~~ * for use.

Calibrated by : Kin
Kenneth CHIU
(Technician)

Approved by : H. T. CHOW
H. T. CHOW
(Asst. Environmental Officer)

Annex G

24-hour and 1-hour TSP Monitoring Results

Figure G1 - Measured 24-hour TSP Concentration ($\mu\text{g}\text{m}^{-3}$) at AM1

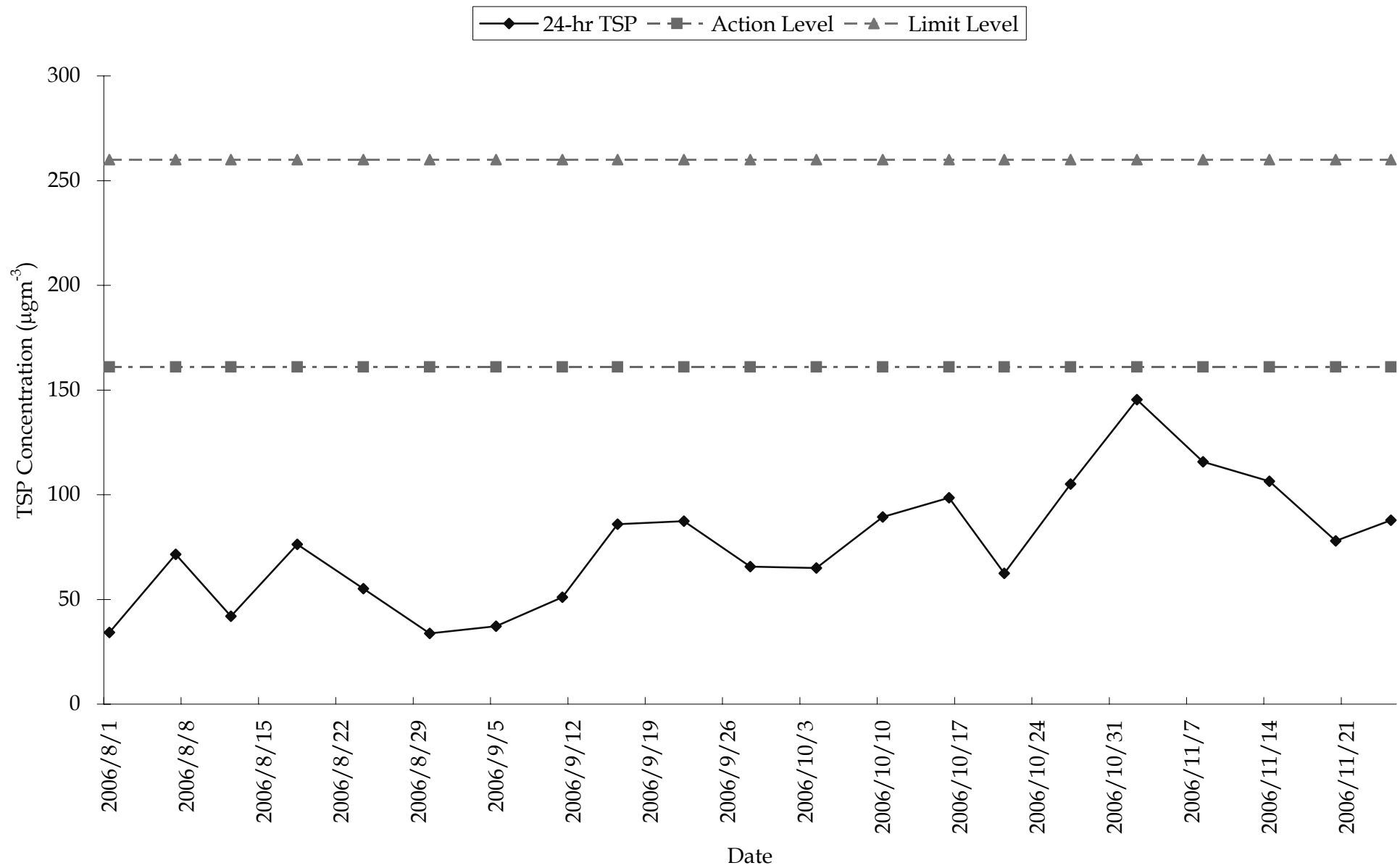


Figure G2 - Measured 24-hour TSP Concentration (μgm^{-3}) at AM2

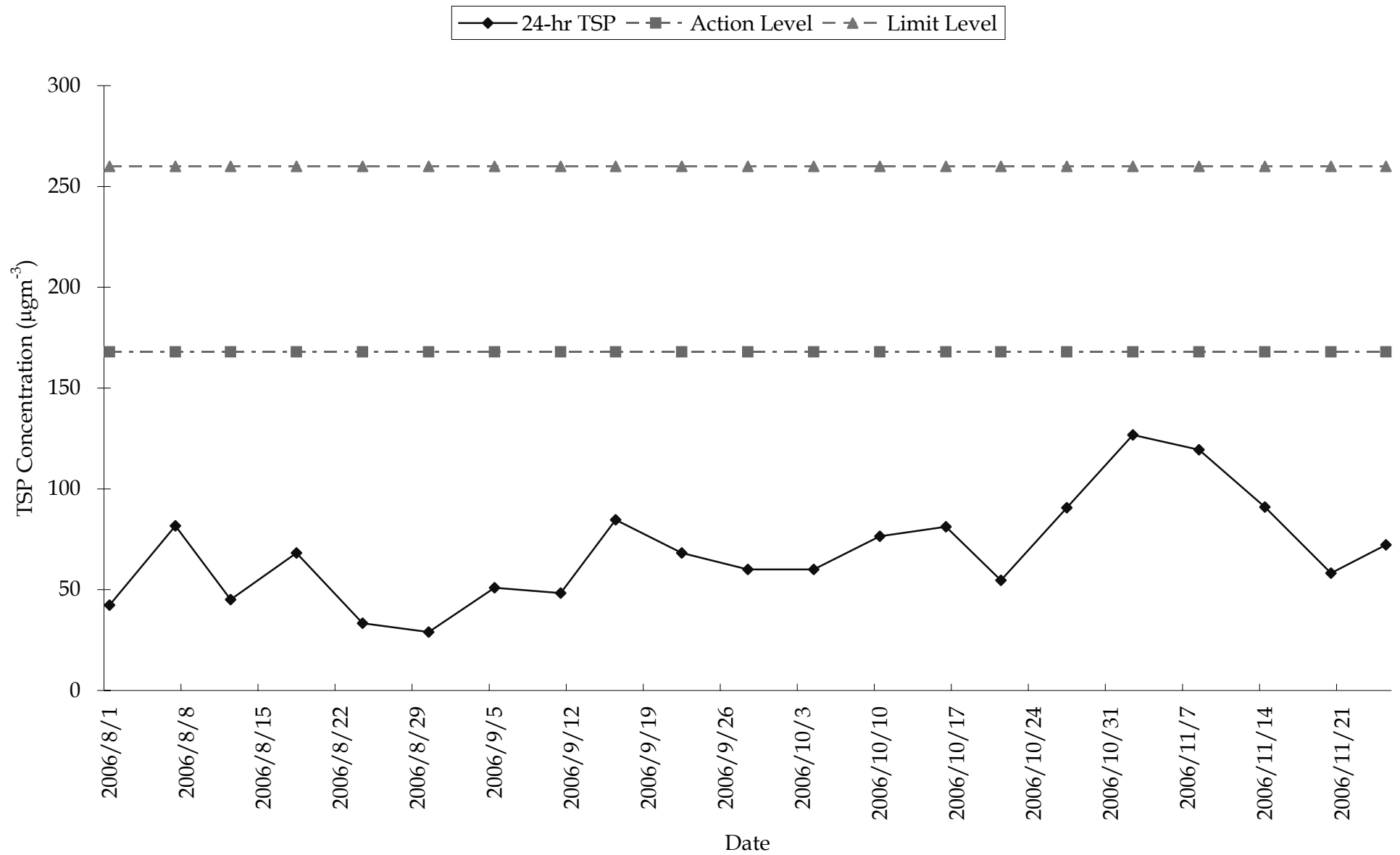


Figure G3 - Measured 1-hour TSP Concentration ($\mu\text{g}\text{m}^{-3}$) at AM1

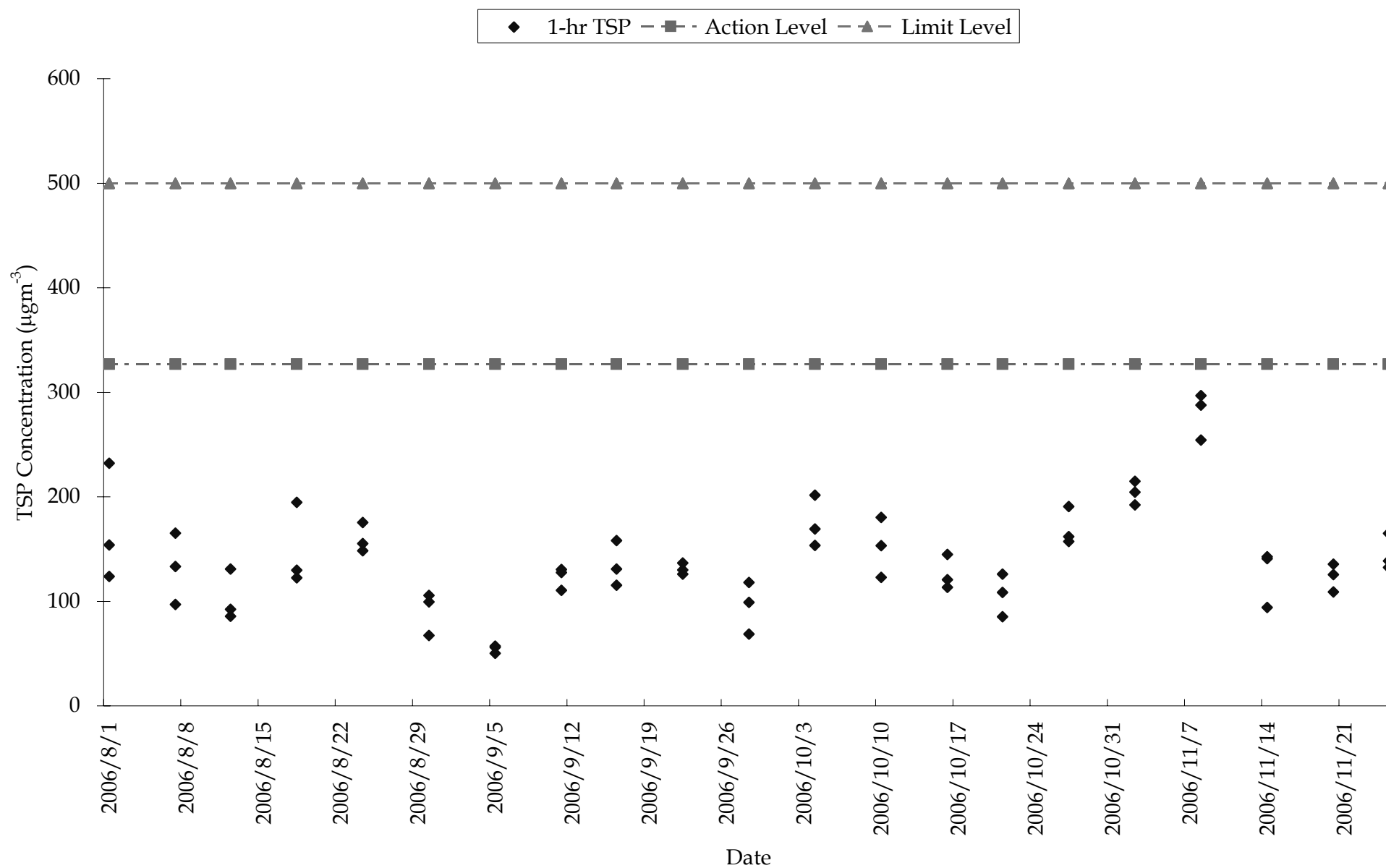
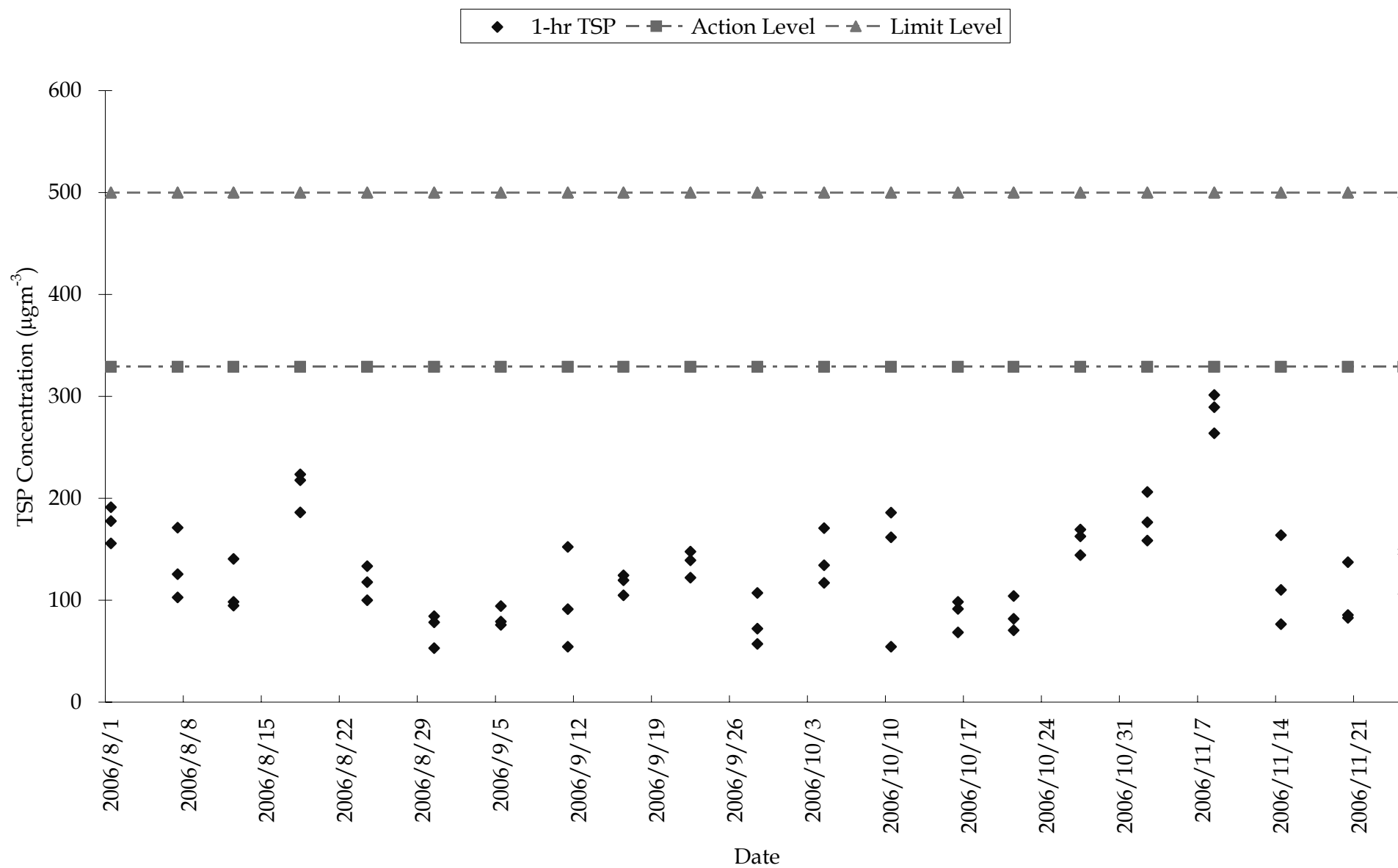


Figure G4 - Measured 1-hour TSP Concentration (μgm^{-3}) at AM2



24-hour TSP Monitoring Results

24-hour TSP Monitoring Results at Station AM1 (Nearby The Grand Hyatt)

Date	Filter Weight (g)		Flow Rate (m ³ /min.)		Elapse Time		Sampling Time(hrs.)	Conc. (µg/m ³)	Weather Condition	Ave. Air Temp. (°C)	Particulate weight(g)	Av. flow (m ³ /min)	Total vol. (m ³)
	Initial	Final	Initial	Final	Initial	Final							
02-Nov-06	2.8860	3.1166	1.10	1.10	10779.1	10803.1	24.0	145	Sunny	23.3	0.2306	1.10	1585.4
08-Nov-06	2.8599	3.0330	1.04	1.04	10806.1	10830.1	24.0	116	Fine	23.0	0.1731	1.04	1496.2
14-Nov-06	2.9421	3.1108	1.10	1.10	10833.1	10857.1	24.0	106	Sunny	24.0	0.1687	1.10	1585.4
20-Nov-06	2.8986	3.0187	1.07	1.07	10860.1	10884.1	24.0	78	Cloudy	23.1	0.1201	1.07	1540.2
25-Nov-06	2.9034	3.0387	1.07	1.07	10887.1	10911.1	24.0	88	Fine	22.4	0.1353	1.07	1540.8
								Min	78				
								Max	145				
								Average	107				

24-hour TSP Monitoring Results at Station AM2 (Nearby Renaissance Harbour View Hotel)

Date	Filter Weight (g)		Flow Rate (m ³ /min.)		Elapse Time		Sampling Time(hrs.)	Conc. (µg/m ³)	Weather Condition	Ave. Air Temp. (°C)	Particulate weight(g)	Av. flow (m ³ /min)	Total vol. (m ³)
	Initial	Final	Initial	Final	Initial	Final							
02-Nov-06	2.8819	3.1421	1.43	1.43	9204.9	9228.9	24.0	127	Sunny	23.3	0.2602	1.43	2052.0
08-Nov-06	2.9198	3.1648	1.43	1.43	9232.0	9256.0	24.0	119	Fine	23.0	0.2450	1.43	2052.0
14-Nov-06	2.9214	3.1081	1.43	1.43	9259.0	9283.0	24.0	91	Sunny	24.0	0.1867	1.43	2052.0
20-Nov-06	2.8824	3.0042	1.45	1.45	9286.0	9310.0	24.0	58	Cloudy	23.1	0.1218	1.45	2090.9
25-Nov-06	2.9057	3.0595	1.48	1.48	9313.0	9337.0	24.0	72	Fine	22.4	0.1538	1.48	2129.8
								Min	58				
								Max	127				
								Average	94				

1-hour TSP Monitoring Results

1-hour TSP Monitoring Results at Station AM1 (Nearby The Grand Hyatt)

Date	Filter Weight (g)		Flow Rate (m ³ /min.)		Elapse Time		Sampling Time(hrs.)	Conc. (µg/m ³)	Weather Condition	Ave. Air Temp. (°C)	Particulate weight(g)	Av. flow (m ³ /min)	Total vol. (m ³)
	Initial	Final	Initial	Final	Initial	Final							
02-Nov-06	2.8915	2.9042	1.10	1.10	10776.1	10777.1	1.0	192	Sunny	23.3	0.0127	1.10	66.1
02-Nov-06	2.8964	2.9110	1.13	1.13	10777.1	10778.1	1.0	215	Sunny	23.3	0.0146	1.13	68.0
02-Nov-06	2.8722	2.8861	1.13	1.13	10778.1	10779.1	1.0	204	Sunny	23.3	0.0139	1.13	68.0
08-Nov-06	2.8832	2.9000	1.10	1.10	10803.1	10804.1	1.0	254	Fine	23.0	0.0168	1.10	66.1
08-Nov-06	2.8652	2.8842	1.10	1.10	10804.1	10805.1	1.0	288	Fine	23.0	0.0190	1.10	66.1
08-Nov-06	2.8623	2.8819	1.10	1.10	10805.1	10806.1	1.0	297	Fine	23.0	0.0196	1.10	66.1
14-Nov-06	2.9168	2.9265	1.13	1.13	10830.1	10831.1	1.0	143	Sunny	24.0	0.0097	1.13	68.0
14-Nov-06	2.8952	2.9045	1.10	1.10	10831.1	10832.1	1.0	141	Sunny	24.0	0.0093	1.10	66.1
14-Nov-06	2.9394	2.9458	1.13	1.13	10832.1	10833.1	1.0	94	Sunny	24.0	0.0064	1.13	68.0
20-Nov-06	2.8959	2.9042	1.10	1.10	10857.1	10858.1	1.0	126	Cloudy	23.1	0.0083	1.10	66.1
20-Nov-06	2.8973	2.9043	1.07	1.07	10858.1	10859.1	1.0	109	Cloudy	23.1	0.0070	1.07	64.2
20-Nov-06	2.9065	2.9152	1.07	1.07	10859.1	10860.1	1.0	136	Cloudy	23.1	0.0087	1.07	64.2
25-Nov-06	2.8813	2.8902	1.07	1.07	10884.1	10885.1	1.0	139	Fine	22.4	0.0089	1.07	64.2
25-Nov-06	2.8943	2.9049	1.07	1.07	10885.1	10886.1	1.0	165	Fine	22.4	0.0106	1.07	64.2
25-Nov-06	2.8971	2.9056	1.07	1.07	10886.1	10887.1	1.0	132	Fine	22.4	0.0085	1.07	64.2
								Min	94				
								Max	297				
								Average	176				

1-hour TSP Monitoring Results at Station AM2 (Nearby Renaissance Harbour View Hotel)

Date	Filter Weight (g)		Flow Rate (m ³ /min.)		Elapse Time		Sampling Time(hrs.)	Conc. (µg/m ³)	Weather Condition	Ave. Air Temp. (°C)	Particulate weight(g)	Av. flow (m ³ /min)	Total vol. (m ³)
	Initial	Final	Initial	Final	Initial	Final							
02-Nov-06	2.8663	2.8814	1.43	1.43	9201.9	9202.9	1.0	177	Sunny	23.3	0.0151	1.43	85.5
02-Nov-06	2.8903	2.9076	1.40	1.40	9202.9	9203.9	1.0	206	Sunny	23.3	0.0173	1.40	83.9
02-Nov-06	2.8843	2.8976	1.40	1.40	9203.9	9204.9	1.0	159	Sunny	23.3	0.0133	1.40	83.9
08-Nov-06	2.8709	2.8926	1.37	1.37	9229.0	9230.0	1.0	264	Fine	23.0	0.0217	1.37	82.3
08-Nov-06	2.8908	2.9156	1.37	1.37	9230.0	9231.0	1.0	301	Fine	23.0	0.0248	1.37	82.3
08-Nov-06	2.8749	2.8987	1.37	1.37	9231.0	9232.0	1.0	289	Fine	23.0	0.0238	1.37	82.3
14-Nov-06	2.9198	2.9285	1.32	1.32	9256.0	9257.0	1.0	110	Sunny	24.0	0.0087	1.32	79.0
14-Nov-06	2.9102	2.9242	1.43	1.43	9257.0	9258.0	1.0	164	Sunny	24.0	0.0140	1.43	85.5
14-Nov-06	2.9107	2.9170	1.37	1.37	9258.0	9259.0	1.0	77	Sunny	24.0	0.0063	1.37	82.3
20-Nov-06	2.8898	2.9011	1.37	1.37	9283.0	9284.0	1.0	137	Cloudy	23.1	0.0113	1.37	82.3
20-Nov-06	2.9005	2.9073	1.37	1.37	9284.0	9285.0	1.0	83	Cloudy	23.1	0.0068	1.37	82.3
20-Nov-06	2.8954	2.9023	1.34	1.34	9285.0	9286.0	1.0	86	Cloudy	23.1	0.0069	1.34	80.6
25-Nov-06	2.9133	2.9254	1.34	1.34	9310.0	9311.0	1.0	150	Fine	22.4	0.0121	1.34	80.6
25-Nov-06	2.9069	2.9186	1.34	1.34	9311.0	9312.0	1.0	145	Fine	22.4	0.0117	1.34	80.6
25-Nov-06	2.8982	2.9071	1.40	1.40	9312.0	9313.0	1.0	106	Fine	22.4	0.0089	1.40	83.9
								Min	77				
								Max	301				
								Average	164				

Meteorological Data Extracted from King's Park Stations of the Hong Kong Observatory

Date	Weather	King's Park Station				
		Average Air Temperature (°C)	Average Wind Speed (km/h)	Average Relative Humidity (%)	Total Rainfall (mm)	Wind Direction
02-Nov-06	Sunny	23.3	12.0	52	0.0	N
08-Nov-06	Fine	23.0	10.3	67	0.0	E
14-Nov-06	Sunny	24.0	6.1	76	0.0	E
20-Nov-06	Cloudy	23.1	7.8	81	0.0	E
25-Nov-06	Fine	22.4	11.5	91	1.0	E

Annex H

Calibration Certificates of Water Monitoring Equipment



東榮德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED

Form E/C/E/R/12 Issue 6 (1/1) (05/05)

Internal Calibration Report of Dissolved Oxygen Meter

Equipment Ref. No. : ET/EN/003/001 Manufacturer : YSI
Model No. : 95 Serial No. : 97H 04071 AD
Date of Calibration : 22/8/06 Calibration Due Date : 21/11/06

Ref. No. of Reference Thermometer : ET/2403/01
Ref. No. of Potassium Dichromate : ET/0520/003/02

Temperature Verification

	Temperature (°C)
Thermometer reading	20.0
Meter reading	20.0

Linearity Checking

Purging time, min	DO meter reading, mg/L			Winkler Titration result, mg/L			Difference (%) of DO Content
	1	2	Average	1	2	Average	
2	7.64	7.66	7.65	7.58	7.60	7.59	0.79
5	5.54	5.56	5.55	5.46	5.44	5.45	1.82
10	3.14	3.16	3.15	3.27	3.29	3.28	4.04
Linear regression coefficient				0.9988			

Zero Point Checking

DO meter reading, mg/L	0.00
------------------------	------

Salinity Checking

Salinity (ppt)	DO meter reading, mg/L			Winkler Titration result, mg/L			Difference (%) of DO Content
	1	2	Average	1	2	Average	
10	7.29	7.31	7.30	7.24	7.26	7.25	0.69
30	6.99	6.97	6.98	6.89	6.87	6.88	1.44

Acceptance Criteria

- (1) Difference between temperature readings from temperature sensor of DO probe and reference thermometer : $< 0.5^{\circ}\text{C}$
- (2) Linear regression coefficient : > 0.99
- (3) Zero checking: 0.0mg/L
- (4) Difference (%) of DO content from the meter reading and by winkler titration : within $\pm 5\%$

The equipment complies * / ~~does not comply~~ * with the specified requirements and is deemed acceptable * / ~~unacceptable~~ * for use.

* Delete as appropriate

Calibrated by : PK

Approved by : Cida Lam

CEP/012/W



Internal Calibration Report of Dissolved Oxygen Meter

Equipment Ref. No. : <u>ET/EW/003/001</u>	Manufacturer : <u>YSI</u>
Model No. : <u>95</u>	Serial No. : <u>97H 0407/AD</u>
Date of Calibration : <u>20/11/06</u>	Calibration Due Date : <u>19/2/07</u>

Ref. No. of Reference Thermometer : ET/2403/01

Ref. No. of Potassium Dichromate : ET/0520/003/02

Temperature Verification

	Temperature (°C)
Thermometer reading	<u>20.0</u>
Meter reading	<u>20.0</u>

Linearity Checking

Purging time, min	DO meter reading, mg/L			Winkler Titration result, mg/L			Difference (%) of DO Content
	1	2	Average	1	2	Average	
2	<u>7.51</u>	<u>7.53</u>	<u>7.52</u>	<u>7.48</u>	<u>7.49</u>	<u>7.49</u>	<u>0.40</u>
5	<u>5.29</u>	<u>5.31</u>	<u>5.30</u>	<u>5.22</u>	<u>5.20</u>	<u>5.21</u>	<u>1.71</u>
10	<u>3.56</u>	<u>3.54</u>	<u>3.55</u>	<u>3.61</u>	<u>3.59</u>	<u>3.60</u>	<u>1.40</u>
Linear regression coefficient				<u>0.9990</u>			

Zero Point Checking

DO meter reading, mg/L	<u>0.00</u>
------------------------	-------------

Salinity Checking

Salinity (ppt)	DO meter reading, mg/L			Winkler Titration result, mg/L			Difference (%) of DO Content
	1	2	Average	1	2	Average	
10	<u>6.70</u>	<u>6.72</u>	<u>6.71</u>	<u>6.80</u>	<u>6.82</u>	<u>6.81</u>	<u>1.48</u>
30	<u>6.25</u>	<u>6.23</u>	<u>6.24</u>	<u>6.38</u>	<u>6.36</u>	<u>6.37</u>	<u>2.06</u>

Acceptance Criteria

- (1) Difference between temperature readings from temperature sensor of DO probe and reference thermometer : $< 0.5^{\circ}\text{C}$
- (2) Linear regression coefficient : > 0.99
- (3) Zero checking: 0.0mg/L
- (4) Difference (%) of DO content from the meter reading and by winkler titration : within $\pm 5\%$

The equipment complies * / ~~does not comply~~ * with the specified requirements and is deemed acceptable *
/ unacceptable * for use.

* Delete as appropriate

Calibrated by :

Approved by :



Internal Calibration Report of Turbidimeter

Equipment Ref. No. : EW10061001

Manufacturer : HACH

Model No. : HACH 2100P

Serial No. : 040500 035856

Date of Calibration : 22/8/06

Calibration Due : 21/11/06

Data

<u>5.60</u> 0 - 10 NTU Gelex Vial	<u>53.0</u> 10 - 100 NTU Gelex Vial	<u>540</u> 100 - 1000 NTU Gelex Vial
<u>5.65</u>	<u>52.9</u>	<u>542</u>

The equipment complies * / ~~does not comply~~ * with the specified requirements and is deemed acceptable * / ~~unacceptable~~ * for use.

* Delete as appropriate

Calibrated by : [Signature]

Approved by : [Signature]



Internal Calibration Report of Turbidimeter

Equipment Ref. No. : EW/006/001

Manufacturer : HACH

Model No. : HACH 2100P

Serial No. : 040500035856

Date of Calibration : 22/11/06

Calibration Due : 21/12/07

Data

<u>5.60</u> 0 - 10 NTU Gelex Vial	<u>53.0</u> 10 - 100 NTU Gelex Vial	<u>540</u> 100 - 1000 NTU Gelex Vial
<u>5.62</u>	<u>52.7</u>	<u>538</u>

The equipment complies * / ~~does not comply~~ * with the specified requirements and is deemed acceptable * / ~~unacceptable~~ * for use.

* Delete as appropriate

Calibrated by : [Signature]

Approved by : [Signature]



LABORATORY SHEET

Determination of Total Suspended Solids Dried at 103°C-105°C

Information provided by client

Client : ERM - Hong Kong Ltd
Client Ref. No. : E 60195 HK
Source : HK Convention & Exhibition Centre
Sample Type : Sea water
Date Sampled : 8 / 12 / 06
No. of Sample : 12
Description :

Laboratory Information

Lab. Ref. No. : W21044 (01-12)
W. I. No. : EN / 6 / 12 / 43
Date Received : 8 / 12 / 06
Date Tested : 9 / 12 / 06
Test Method : In-house Method TPE/006/W

$$\text{Recovery of Check} = \frac{109}{104.4} \times 100\% = 104.4\%$$

	Ref. No.
Drying oven used	ET / 0502 / 002
TSS standard used	J273

Lab. Ref. No.			W21044 (01)	(Dup)	(02)	(03)	(04)	(05)	(06)	(07)
Client sample ID	Blank	Check Std	F3	F3	F3-D	F4	F4-D	F5	F5-D	E3
Foil Bowl No.	B	C	1	D	2	3	4	5	6	7
Mass of Filter + Foil Bowl (mg) (B)	1332.3	1334.7	1321.9	1316.8	1329.7	1303.6	1301.7	1322.1	1329.8	1317.7
	1332.2	1334.6	1321.7	1316.7	1329.6	1303.4	1301.6	1321.9	1329.6	1317.6
Vol. of Sample (mL)	500	500	200	200	400	400	400	400	400	400
Mass of Filter + Foil Bowl	1332.2	1339.4	1322.8	1317.8	1331.8	1305.4	1303.6	1323.9	1331.6	1319.7
+ S. S. (mg) (A)	1332.1	1339.2	1322.7	1317.7	1331.6	1305.2	1303.4	1323.7	1331.4	1319.6
Total Suspended Solids (mg/L) *	-0.2	109	5.0	5.0	5.0	4.5	4.5	4.5	4.5	5.0
Chloride Check (✓)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Expanded uncertainty, Uexp										

* Total Suspended Solids (mg/L) = (A - B) / Vol. of Sample used x 1000

Acceptance criteria :

1. Blank : ≤ 0.5mg/L	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
2. Difference between duplicates : < 10%	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
3. Recovery of spike sample : 80% to 120%	Yes <input type="checkbox"/>	No <input type="checkbox"/>
4. Check Sample : 80(%) - 120(%)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>

PQL : 5.0mg/L (Seawater / Drinking water / Wastewater)

Remark : 32.2 mg Silica Gel H was added to 500ml distilled water as check. (104.4 mg/L)

Tested By : W/-

Checked By :



LABORATORY SHEET

Determination of Total Suspended Solids Dried at 103°C-105°C

Information provided by client

Client : ---
Client Ref. No. : ---
Vendor : ---
Sample Type : ---
Date Sampled : ---
No. of Sample : ---
Description : ---

Laboratory Information

Lab. Ref. No. : ---
W. I. No. : ---
Date Received : ---
Date Tested : ---
Test Method : In-house Method TPE/006/W

$$\text{Recovery of Spike} = \frac{33 - 5.0}{27.5} \times 100\% = 101.8\%$$

	Ref. No.
Drying oven used	ET / 0502 / 002
TSS standard used	J273

Lab. Ref. No.	W20044 (08)	(09)	(10)	(11)	(12)	(Spike)				
Client sample ID	E3-D	E4	E4-D	E5	E5-D	E5-D				
Foil Bowl No.	8	9	10	11	12	S				
Mass of Filter	1306.5	1330.7	1316.2	1302.6	1328.6	1314.7				
+ Foil Bowl (mg) (B)	1306.4	1330.6	1316.0	1302.4	1328.4	1314.6				
Vol. of Sample (mL)	400	400	400	400	200	200				
Mass of Filter	1308.3	1332.8	1318.2	1304.5	1329.6	1321.4				
+ Foil Bowl	1308.2	1332.6	1318.0	1304.4	1329.4	1321.2				
+ S. S. (mg) (A)										
Total Suspended Solids (mg/L) *	4.5	5.0	5.0	5.0	5.0	33				
Chloride Check (✓)	✓	✓	✓	✓	✓	✓				
Expanded uncertainty, Uexp										

* Total Suspended Solids (mg/L) = (A - B) / Vol. of Sample used x 1000

- Acceptance Criteria :
- | | | |
|---|---|-----------------------------|
| 1. Blank : ≤ 0.5mg/L | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 2. Difference between duplicates : < 10% | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| 3. Recovery of spike sample : 80% to 120% | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| 4. Check Sample : 80(%) - 120(%) | Yes <input type="checkbox"/> | No <input type="checkbox"/> |

REL : 5.0mg/L (Seawater / Drinking water / Wastewater)

Remark : 5.5 mg Silica Gel H was added to 200ml "E5-D" as spike ($\frac{27.5}{27.5} = 100\%$) mg/L

Tested By :

Checked By :

Annex I

Water Quality Monitoring Results

Figure I1 - Water Quality Monitoring Results (Mid Ebb)

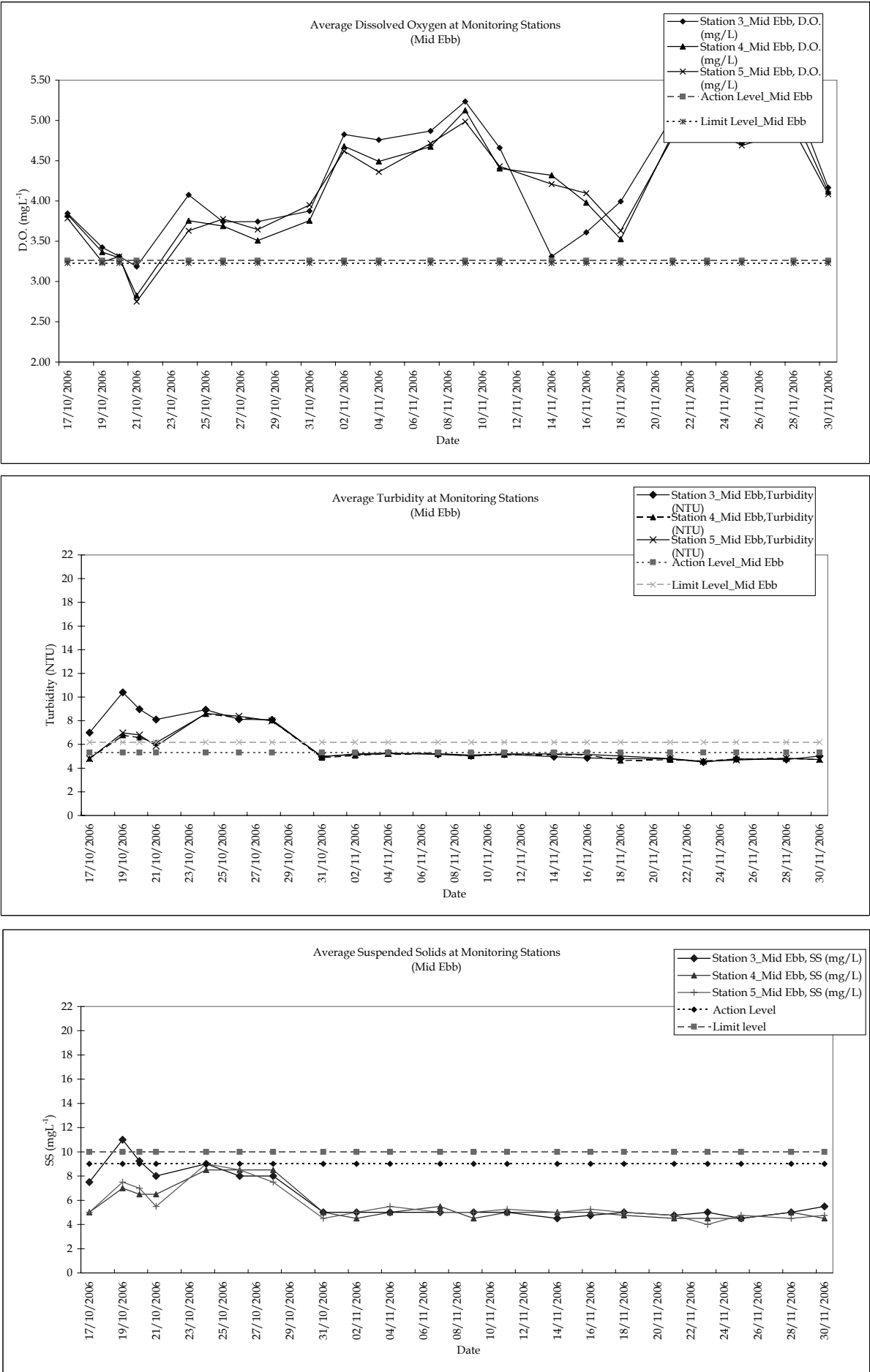
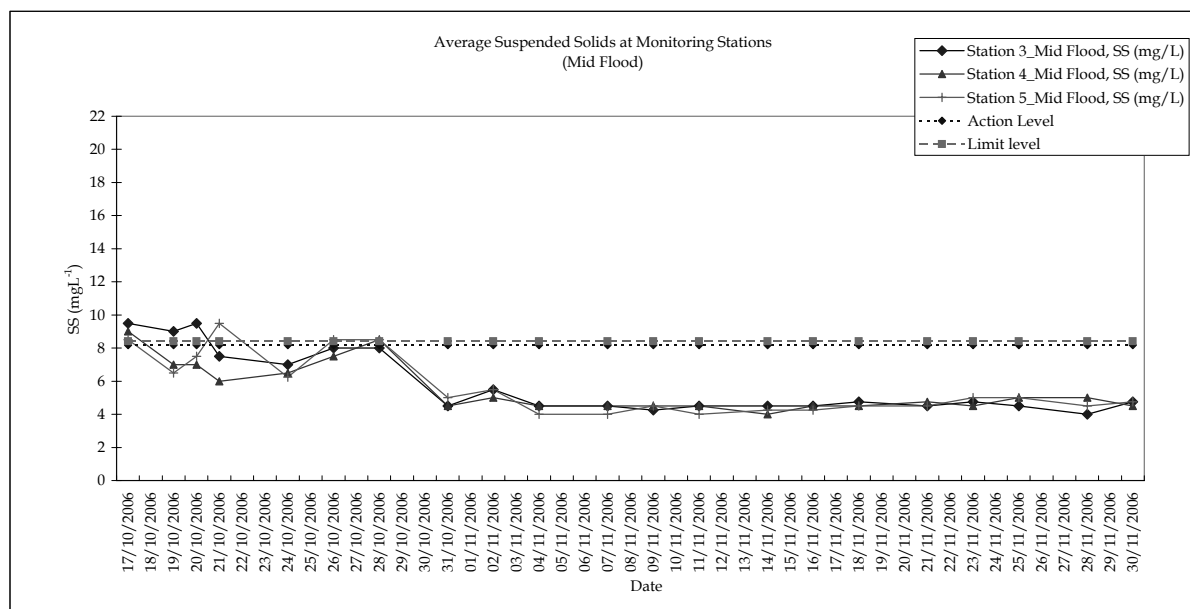
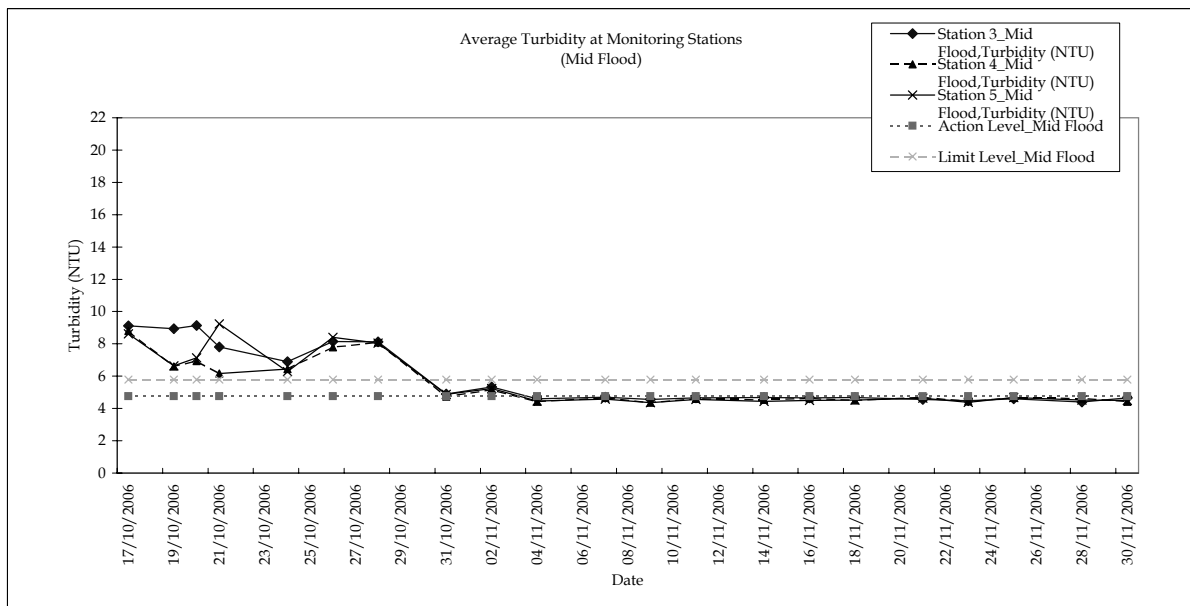
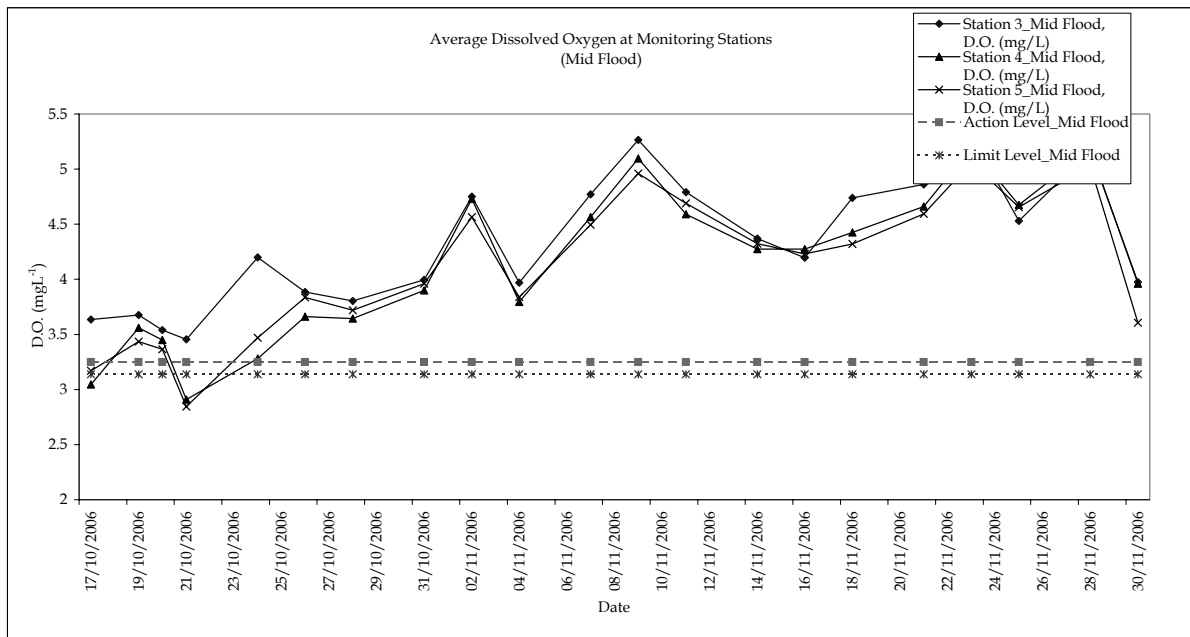


Figure I2 - Water Quality Monitoring Results (Mid Flood)



Water Quality Monitoring Results for Station 3

Date	02/11/2006			02/11/2006			04/11/2006			04/11/2006			07/11/2006			07/11/2006			09/11/2006			09/11/2006			11/11/2006			11/11/2006		
Time (hh:mm)	09:58 - 10:15			16:20 - 16:35			11:10 - 11:25			17:05 - 17:20			13:35 - 13:50			19:08 - 19:23			13:35 - 13:50			10:28 - 10:43			09:10 - 09:25			17:10 - 17:25		
Ambient Temperature	28			28			28			28			28			28			27			27			28			28		
Weather	Sunny			Fine			Sunny			Sunny			Sunny			Cloudy			Fine			Fine			Sunny			Sunny		
Water Depth (m)	8.00			8.20			8.00			8.20			7.90			8.10			7.80			8.20			8.00			8.20		
Monitoring Depth	7.50			7.50			7.50			7.50			7.50			7.50			7.50			7.50			7.50			7.50		
Tide	Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood		
Trial	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average
Water Temperature (°C)	26.3	26.3	26.3	27.0	27.0	27.0	26.6	26.6	26.6	27.1	27.1	27.1	26.4	26.5	26.5	26.7	26.7	26.7	25.8	26.0	25.9	25.6	25.6	25.6	26.0	26.1	26.1	26.4	26.4	26.4
Salinity (ppt)	32.5	32.5	32.5	32.4	32.5	32.5	32.2	32.4	32.3	32.5	32.3	32.4	32.2	32.3	32.3	32.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2	32.2	32.3	32.2	32.3	32.5	32.5	32.5
D.O. (mg/L)	4.86	4.79	4.8	4.73	4.77	4.8	4.80	4.72	4.8	4.00	3.94	4.0	4.89	4.85	4.9	4.74	4.80	4.8	5.20	5.27	5.2	5.29	5.24	5.3	4.62	4.70	4.7	4.77	4.81	4.8
D.O. Saturation (%)	73.0	71.9	72.5	70.9	71.6	71.3	72.0	70.8	71.4	60.0	59.1	59.6	73.4	72.8	73.1	71.1	72.0	71.6	75.4	76.4	75.9	76.7	76.5	76.6	66.9	68.2	67.6	69.1	69.7	69.4
Turbidity (NTU)	5.18	5.20	5.2	5.30	5.38	5.3	5.30	5.26	5.3	4.52	4.68	4.6	5.17	5.13	5.2	4.67	4.73	4.7	5.17	4.90	5.0	4.52	4.60	4.6	5.14	5.23	5.2	4.70	4.62	4.7
SS* (mg/L)	5.0	5.0	5.0	5.5	5.5	5.5	5.0	5.0	5.0	4.5	4.5	4.5	5.0	5.0	5.0	4.5	4.5	4.5	5.0	5.0	5.0	4.0	4.5	4.3	5.0	5.0	5.0	4.5	4.5	4.5
Remarks	No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed		

* For the values of suspended solids less than 5mg/L (PQL), the results are for reference only. PQL stands for practical quantitation Limit, or lowest reporting limit, which is estimated from the method detection limit (MDL). Normally PQL is about 5 times the MDL.

Within Action Level 1

Date	02/11/2006		
D.O. (mg/L)	Y	Y	Y
Turbidity (NTU)	Y	Y	Y
SS (mg/L)	Y	Y	Y

02/11/2006		
Y	Y	Y
N	N	N
Y	Y	Y

04/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

04/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

07/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

07/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

09/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

09/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

11/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

11/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

Within Limit Level 2

Date	02/11/2006		
D.O. (mg/L)	Y	Y	Y
Turbidity (NTU)	Y	Y	Y
SS (mg/L)	Y	Y	Y

02/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

04/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

04/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

07/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

07/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

09/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

09/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

11/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

11/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

Water Quality Monitoring Results for Station 3

Date	14/11/2006			14/11/2006			16/11/2006			16/11/2006			18/11/2006			18/11/2006			21/11/2006			21/11/2006			23/11/2006			23/11/2006		
Time (hh:mm)	08:40 - 08:55			15:57 - 16:12			10:00 - 10:15			16:35 - 16:50			11:25 - 11:40			17:07 - 17:22			13:10 - 13:25			18:03 - 18:18			13:40 - 13:55			18:45 - 19:00		
Ambient Temperature	27			27			27			27			28			28			25			25			26			26		
Weather	Sunny			Sunny			Fine			Fine			Sunny			Sunny			Cloudy			Cloudy			Sunny			Fine		
Water Depth (m)	7.60			7.90			7.70			8.00			7.70			8.00			7.80			8.20			7.70			8.00		
Monitoring Depth	7.50			7.50			7.50			7.50			7.50			7.50			7.50			7.50			7.50			7.50		
Tide	Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood		
Trial	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average
Water Temperature (°C)	25.6	25.7	25.7	26.0	26.0	26.0	25.4	25.5	25.5	25.7	25.7	25.7	25.6	25.6	25.6	26.2	26.1	26.2	24.8	24.7	24.8	25.0	25.0	25.0	24.7	24.8	24.8	25.0	25.0	25.0
Salinity (ppt)	31.9	31.8	31.9	32.2	32.2	32.2	32.4	32.2	32.3	32.6	32.5	32.6	32.4	32.3	32.4	32.5	32.4	32.5	32.4	32.4	32.4	32.6	32.7	32.7	32.7	32.6	32.7	32.8	32.7	32.8
D.O. (mg/L)	3.33	3.29	3.3	4.43	4.31	4.4	3.49	3.73	3.6	4.23	4.16	4.2	3.89	4.10	4.0	4.80	4.68	4.7	5.12	4.98	5.1	4.93	4.79	4.9	5.14	5.08	5.1	5.26	5.35	5.3
D.O. Saturation (%)	48.3	47.7	48.0	65.1	63.4	64.3	50.6	54.1	52.4	61.3	60.3	60.8	56.4	60.0	58.2	70.1	68.3	69.2	73.2	71.2	72.2	71.5	69.5	70.5	73.5	72.6	73.1	76.3	77.6	77.0
Turbidity (NTU)	5.00	4.93	5.0	4.71	4.66	4.7	4.79	4.93	4.9	4.70	4.62	4.7	4.88	4.73	4.8	4.73	4.64	4.7	4.80	4.75	4.8	4.50	4.61	4.6	4.58	4.42	4.5	4.44	4.52	4.5
SS* (mg/L)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	5.0	4.8	4.5	4.5	4.5	5.0	5.0	5.0	5.0	4.5	4.8	5.0	4.5	4.8	4.5	4.5	4.5	5.0	5.0	5.0	4.5	5.0	4.8
Remarks	No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed		

Within Action Level ?

Date	14/11/2006		14/11/2006		16/11/2006		16/11/2006		18/11/2006		18/11/2006		21/11/2006		21/11/2006		23/11/2006		23/11/2006	
D.O. (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Turbidity (NTU)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
SS (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Within Limit Level ?

Date	14/11/2006		14/11/2006		16/11/2006		16/11/2006		18/11/2006		18/11/2006		21/11/2006		21/11/2006		23/11/2006		23/11/2006	
D.O. (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Turbidity (NTU)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
SS (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Water Quality Monitoring Results for Station 3

Date	25/11/2006			25/11/2006			28/11/2006			28/11/2006			30/11/2006			30/11/2006		
Time (hh:mm)	15:39 - 15:54			11:00 - 11:15			09:40 - 09:55			14:05 - 14:20			08:55 - 09:10			15:25 - 15:40		
Ambient Temperature	26			26			22			22			22			22		
Weather	Fine			Fine			Fine			Fine			Fine			Fine		
Water Depth (m)	7.80			8.00			7.80			8.00			7.90			8.20		
Monitoring Depth	7.50			7.50			7.50			7.50			7.50			7.50		
Tide	Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood		
Trial	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average
Water Temperature (°C)	24.8	24.8	24.8	24.6	24.6	24.6	23.3	23.4	23.4	23.6	23.6	23.6	23.9	23.8	23.9	24.3	24.5	24.4
Salinity (ppt)	32.7	32.8	32.8	32.4	32.5	32.5	32.5	32.5	32.5	32.7	32.7	32.7	32.3	32.3	32.3	32.1	32.2	32.2
D.O. (mg/L)	4.89	4.80	4.8	4.49	4.57	4.5	5.32	5.26	5.3	5.23	5.10	5.2	4.13	4.20	4.2	4.03	3.92	4.0
D.O. Saturation (%)	70.9	69.6	70.3	64.7	65.9	65.3	76.1	75.2	75.7	75.3	73.4	74.4	59.1	60.1	59.6	58.0	56.4	57.2
Turbidity (NTU)	4.75	4.80	4.8	4.68	4.53	4.6	4.76	4.68	4.7	4.42	4.39	4.4	5.07	4.98	5.0	4.70	4.63	4.7
SS* (mg/L)	4.5	4.5	4.5	4.5	4.5	4.5	5.0	5.0	5.0	4.0	4.0	4.0	5.5	5.5	5.5	5.0	4.5	4.8
Remarks	No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed		

Within Action Level ?

Date	25/11/2006		
D.O. (mg/L)	Y	Y	Y
Turbidity (NTU)	Y	Y	Y
SS (mg/L)	Y	Y	Y

25/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

28/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

28/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

30/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

30/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

Within Limit Level ?

Date	25/11/2006		
D.O. (mg/L)	Y	Y	Y
Turbidity (NTU)	Y	Y	Y
SS (mg/L)	Y	Y	Y

25/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

28/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

28/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

30/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

30/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

Water Quality Monitoring Results for Station 4

Date	02/11/2006			02/11/2006			04/11/2006			04/11/2006			07/11/2006			07/11/2006			09/11/2006			09/11/2006			11/11/2006			11/11/2006					
Time (hh:mm)	09:41 - 09:56			16:02 - 16:17			10:50 - 11:05			16:47 - 17:02			13:18 - 13:33			18:50 - 19:05			13:18 - 13:33			10:09 - 10:25			08:50 - 09:05			16:50 - 17:05					
Ambient Temperature	28			28			28			28			28			28			27			27			28			28					
Weather	Sunny			Fine			Sunny			Sunny			Sunny			Cloudy			Fine			Fine			Sunny			Sunny					
Water Depth (m)	4.30			4.40			4.20			4.30			4.10			4.40			4.20			4.50			4.30			4.70					
Monitoring Depth	5.00			5.00			5.00			5.00			5.00			5.00			5.00			5.00			5.00			5.00					
Tide	Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood					
Trial	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average			
Water Temperature (°C)	26.3	26.3	26.3	27.0	27.0	27.0	26.6	26.6	26.6	27.1	27.1	27.1	26.4	26.4	26.4	26.7	26.6	26.7	26.0	26.0	26.0	25.7	25.6	25.7	26.0	26.0	26.0	26.3	26.3	26.3			
Salinity (ppt)	32.3	32.4	32.4	32.5	32.3	32.4	32.1	32.2	32.2	32.3	32.2	32.3	32.1	32.1	32.1	32.1	32.2	32.2	32.2	32.3	32.3	32.2	32.2	32.1	32.2	32.2	32.2	32.4	32.4	32.4			
D.O. (mg/L)	4.69	4.67	4.7	4.80	4.66	4.7	4.52	4.46	4.5	3.73	3.86	3.8	4.64	4.71	4.7	4.60	4.53	4.6	5.16	5.09	5.1	5.07	5.12	5.1	4.42	4.39	4.4	4.62	4.56	4.6			
D.O. Saturation (%)	70.3	70.1	70.2	72.0	69.9	71.0	67.8	66.9	67.4	55.9	57.9	56.9	69.6	70.7	70.2	69.0	68.0	68.5	74.8	73.8	74.3	73.5	74.2	73.9	64.1	63.7	63.9	66.9	66.1	66.5			
Turbidity (NTU)	5.08	5.06	5.1	5.13	5.19	5.2	5.23	5.19	5.2	4.39	4.45	4.4	5.20	5.26	5.2	4.62	4.70	4.7	5.08	4.97	5.0	4.34	4.38	4.4	5.10	5.19	5.1	4.62	4.56	4.6			
SS* (mg/L)	4.5	4.5	4.5	5.0	5.0	5.0	5.0	5.0	5.0	4.5	4.5	4.5	5.5	5.5	5.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	5.0	5.0	5.0	4.5	4.5	4.5			
Remarks	No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed		

* For the values of suspended solids less than 5mg/L (PQL), the results are for reference only. PQL stands for practical quantitation Limit, or lowest reporting limit, which is estimated from the method detection limit (MDL). Normally PQL is about 5 tim

Within Action Level 1

Date	02/11/2006			02/11/2006			04/11/2006			04/11/2006			07/11/2006			07/11/2006			09/11/2006			09/11/2006			11/11/2006			11/11/2006		
D.O. (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Turbidity (NTU)	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
SS (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Within Limit Level 2

Date	02/11/2006			02/11/2006			04/11/2006			04/11/2006			07/11/2006			07/11/2006			09/11/2006			09/11/2006			11/11/2006			11/11/2006		
D.O. (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Turbidity (NTU)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
SS (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Water Quality Monitoring Results for Station 4

Date	14/11/2006			14/11/2006			16/11/2006			16/11/2006			18/11/2006			18/11/2006			21/11/2006			21/11/2006			23/11/2006			23/11/2006		
Time (hh:mm)	08:20 - 08:35			15:37 - 15:52			09:40 - 09:55			16:15 - 16:30			11:05 - 11:20			16:48 - 17:03			12:50 - 13:05			17:43 - 17:58			13:20 - 13:35			18:24 - 18:39		
Ambient Temperature	27			27			27			27			28			28			25			25			26			26		
Weather	Sunny			Sunny			Fine			Fine			Sunny			Sunny			Cloudy			Cloudy			Sunny			Fine		
Water Depth (m)	3.80			4.10			4.00			4.30			4.00			4.50			4.30			4.60			4.00			4.50		
Monitoring Depth	5.00			5.00			5.00			5.00			5.00			5.00			5.00			5.00			5.00			5.00		
Tide	Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood		
Trial	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average
Water Temperature (°C)	25.6	25.6	25.6	26.0	26.0	26.0	25.4	25.4	25.4	25.8	25.7	25.8	25.6	25.6	25.6	26.1	26.1	26.1	24.7	24.7	24.7	24.9	24.9	24.9	24.8	24.8	24.8	25.1	25.1	25.1
Salinity (ppt)	31.7	31.7	31.7	32.1	32.1	32.1	32.4	32.4	32.4	32.6	32.6	32.6	32.3	32.3	32.3	32.4	32.4	32.4	32.3	32.3	32.3	32.5	32.6	32.6	32.5	32.5	32.5	32.7	32.7	32.7
D.O. (mg/L)	4.26	4.38	4.3	4.20	4.35	4.3	4.09	3.87	4.0	4.33	4.22	4.3	3.56	3.49	3.5	4.46	4.39	4.4	4.89	4.78	4.8	4.72	4.60	4.7	4.89	4.98	4.9	5.23	5.16	5.2
D.O. Saturation (%)	61.8	63.5	62.7	61.7	63.9	62.8	59.3	56.1	57.7	62.8	61.2	62.0	51.6	50.6	51.1	65.1	64.1	64.6	69.9	68.4	69.2	68.4	66.7	67.6	69.9	71.2	70.6	75.8	74.8	75.3
Turbidity (NTU)	5.13	5.19	5.2	4.59	4.48	4.5	5.14	5.08	5.1	4.58	4.64	4.6	4.58	4.70	4.6	4.56	4.43	4.5	4.70	4.69	4.7	4.73	4.65	4.7	4.67	4.55	4.6	4.38	4.49	4.4
SS* (mg/L)	5.0	5.0	5.0	4.0	4.0	4.0	5.0	5.0	5.0	4.5	4.5	4.5	4.5	5.0	4.8	4.5	4.5	4.5	4.5	4.5	4.5	5.0	4.5	4.8	4.5	4.5	4.5	4.5	4.5	4.5
Remarks	No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed		

Within Action Level ?

Date	14/11/2006		14/11/2006		16/11/2006		16/11/2006		18/11/2006		18/11/2006		21/11/2006		21/11/2006		23/11/2006		23/11/2006	
D.O. (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Turbidity (NTU)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
SS (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Within Limit Level ?

Date	14/11/2006		14/11/2006		16/11/2006		16/11/2006		18/11/2006		18/11/2006		21/11/2006		21/11/2006		23/11/2006		23/11/2006	
D.O. (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Turbidity (NTU)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
SS (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Water Quality Monitoring Results for Station 4

Date	25/11/2006			25/11/2006			28/11/2006			28/11/2006			30/11/2006			30/11/2006		
Time (hh:mm)	15:19 - 15:34			10:40 - 10:55			09:20 - 09:35			13:45 - 14:00			08:35 - 08:50			15:05 - 15:20		
Ambient Temperature	26			26			22			22			22			22		
Weather	Fine			Fine			Fine			Fine			Fine			Fine		
Water Depth (m)	4.00			4.30			4.40			4.60			4.30			4.50		
Monitoring Depth	5.00			5.00			5.00			5.00			5.00			5.00		
Tide	Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood		
Trial	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average
Water Temperature (°C)	24.9	24.8	24.9	24.6	24.5	24.6	23.4	23.5	23.5	23.6	23.6	23.6	24.0	24.0	24.0	24.3	24.2	24.3
Salinity (ppt)	32.7	32.7	32.7	32.3	32.4	32.4	32.5	32.5	32.5	32.6	32.7	32.7	32.2	32.3	32.3	32.0	32.0	32.0
D.O. (mg/L)	4.71	4.75	4.7	4.62	4.73	4.7	5.13	5.01	5.1	5.20	5.16	5.2	4.07	4.16	4.1	4.00	3.92	4.0
D.O. Saturation (%)	68.3	68.9	68.6	66.5	68.1	67.3	73.4	71.7	72.6	74.8	74.3	74.6	58.2	59.5	58.9	57.6	56.1	56.9
Turbidity (NTU)	4.83	4.70	4.8	4.62	4.70	4.7	4.80	4.86	4.8	4.54	4.68	4.6	4.79	4.64	4.7	4.36	4.47	4.4
SS* (mg/L)	4.5	4.5	4.5	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.5	4.5	4.5	4.5	4.5	4.5
Remarks	No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed		

Within Action Level 1

Date	25/11/2006		
D.O. (mg/L)	Y	Y	
Turbidity (NTU)	Y	Y	
SS (mg/L)	Y	Y	Y

25/11/2006		
Y	Y	
Y	Y	
Y	Y	Y

28/11/2006		
Y	Y	
Y	Y	
Y	Y	Y

28/11/2006		
Y	Y	
Y	Y	
Y	Y	Y

30/11/2006		
Y	Y	
Y	Y	
Y	Y	Y

30/11/2006		
Y	Y	
Y	Y	
Y	Y	Y

Within Limit Level 2

Date	25/11/2006		
D.O. (mg/L)	Y	Y	
Turbidity (NTU)	Y	Y	
SS (mg/L)	Y	Y	

25/11/2006		
Y	Y	
Y	Y	
Y	Y	

28/11/2006		
Y	Y	
Y	Y	
Y	Y	

28/11/2006		
Y	Y	
Y	Y	
Y	Y	

30/11/2006		
Y	Y	
Y	Y	
Y	Y	

30/11/2006		
Y	Y	
Y	Y	
Y	Y	

Water Quality Monitoring Results for Station 5

Date	02/11/2006			02/11/2006			04/11/2006			04/11/2006			07/11/2006			07/11/2006			09/11/2006			09/11/2006			11/11/2006			11/11/2006		
Time (hh:mm)	09:24 - 09:39			15:45 - 16:00			10:30 - 10:45			16:30 - 16:45			13:00 - 13:15			18:30 - 18:45			13:00 - 13:15			09:50 - 10:05			08:30 - 08:45			16:30 - 16:45		
Ambient Temperature	28			28			28			28			28			28			27			27			28			28		
Weather	Sunny			Fine			Sunny			Sunny			Sunny			Cloudy			Fine			Fine			Sunny			Sunny		
Water Depth (m)	4.60			4.80			4.40			4.70			4.40			4.70			4.50			4.80			4.50			4.90		
Monitoring Depth	5.00			5.00			5.00			5.00			5.00			5.00			5.00			5.00			5.00			5.00		
Tide	Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood		
Trial	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average
Water Temperature (°C)	26.3	26.3	26.3	27.0	27.0	27.0	26.6	26.7	26.7	27.0	27.1	27.1	26.4	26.4	26.4	26.7	26.7	26.7	26.0	26.0	26.0	25.6	25.6	25.6	26.0	26.0	26.0	26.3	26.3	26.3
Salinity (ppt)	32.5	32.4	32.5	32.3	32.4	32.4	32.0	32.2	32.1	32.3	32.3	32.3	32.0	32.1	32.1	32.2	32.0	32.1	32.2	32.1	32.2	32.1	32.0	32.1	32.2	32.1	32.2	32.5	32.4	32.5
D.O. (mg/L)	4.61	4.63	4.6	4.50	4.63	4.6	4.32	4.40	4.4	3.78	3.90	3.8	4.78	4.65	4.7	4.57	4.42	4.5	4.93	5.04	5.0	5.03	4.89	5.0	4.36	4.50	4.4	4.72	4.66	4.7
D.O. Saturation (%)	69.1	69.5	69.3	67.5	69.5	68.5	64.8	66.0	65.4	56.7	58.5	57.6	71.7	69.8	70.8	68.5	66.3	67.4	71.5	73.1	72.3	72.9	70.9	71.9	63.2	65.3	64.3	68.4	67.5	68.0
Turbidity (NTU)	5.14	5.15	5.1	5.21	5.26	5.2	5.26	5.19	5.2	4.42	4.51	4.5	5.18	5.24	5.2	4.56	4.59	4.6	5.13	5.06	5.1	4.40	4.32	4.4	5.23	5.17	5.2	4.52	4.58	4.6
SS* (mg/L)	5.0	5.0	5.0	5.5	5.5	5.5	5.5	5.5	5.5	4.0	4.0	4.0	5.0	5.0	5.0	4.0	4.0	4.0	5.0	5.0	5.0	4.5	4.5	4.5	5.5	5.0	5.3	4.0	4.0	4.0
Remarks	No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed		

* For the values of suspended solids less than 5mg/L (PQL), the results are for reference only. PQL stands for practical quantitation Limit, or lowest reporting limit, which is estimated from the method detection limit (MDL). Normally PQL is about 5 tim

Within Action Level 1

Date	02/11/2006		02/11/2006		04/11/2006		04/11/2006		07/11/2006		07/11/2006		09/11/2006		09/11/2006		11/11/2006		11/11/2006	
D.O. (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Turbidity (NTU)	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
SS (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Within Limit Level 2

Date	02/11/2006		02/11/2006		04/11/2006		04/11/2006		07/11/2006		07/11/2006		09/11/2006		09/11/2006		11/11/2006		11/11/2006	
D.O. (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Turbidity (NTU)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
SS (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Water Quality Monitoring Results for Station 5

Date	14/11/2006			14/11/2006			16/11/2006			16/11/2006			18/11/2006			18/11/2006			21/11/2006			21/11/2006			23/11/2006			23/11/2006		
Time (hh:mm)	08:00 - 08:15			15:17 - 15:32			09:18 - 09:33			15:55 - 16:10			10:45 - 11:00			16:28 - 16:43			12:30 - 12:45			17:23 - 17:38			13:00 - 13:15			18:04 - 18:19		
Ambient Temperature	27			27			27			27			28			28			25			25			26			26		
Weather	Sunny			Sunny			Fine			Fine			Sunny			Sunny			Cloudy			Cloudy			Sunny			Fine		
Water Depth (m)	4.00			4.30			4.20			4.40			4.40			4.80			4.50			4.80			4.30			4.80		
Monitoring Depth	5.00			5.00			5.00			5.00			5.00			5.00			5.00			5.00			5.00			5.00		
Tide	Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood		
Trial	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average
Water Temperature (°C)	25.6	25.6	25.6	26.0	25.9	26.0	25.4	25.4	25.4	25.7	25.7	25.7	25.6	25.6	25.6	26.1	26.1	26.1	24.7	24.7	24.7	24.9	25.0	25.0	24.9	24.8	24.9	25.1	25.1	25.1
Salinity (ppt)	31.7	31.8	31.8	32.0	32.1	32.1	32.3	32.4	32.4	32.6	32.6	32.6	32.3	32.2	32.3	32.4	32.4	32.4	32.4	32.3	32.4	32.6	32.6	32.6	32.5	32.6	32.6	32.7	32.7	32.7
D.O. (mg/L)	4.25	4.17	4.2	4.38	4.27	4.3	4.02	4.17	4.1	4.19	4.27	4.2	3.49	3.77	3.6	4.36	4.28	4.3	4.76	4.82	4.8	4.53	4.66	4.6	4.87	4.96	4.9	5.12	5.00	5.1
D.O. Saturation (%)	61.6	60.5	61.1	64.4	62.8	63.6	58.3	60.5	59.4	60.8	61.9	61.4	50.6	54.7	52.7	63.7	62.5	63.1	68.1	68.9	68.5	65.7	67.6	66.7	69.7	70.9	70.3	74.3	72.5	73.4
Turbidity (NTU)	5.24	5.17	5.2	4.37	4.52	4.4	5.20	5.13	5.2	4.53	4.47	4.5	4.97	5.06	5.0	4.49	4.56	4.5	4.84	4.76	4.8	4.68	4.59	4.6	4.53	4.59	4.6	4.46	4.31	4.4
SS* (mg/L)	5.0	5.0	5.0	4.0	4.5	4.3	5.0	5.5	5.3	4.0	4.5	4.3	5.0	5.0	5.0	4.5	4.5	4.5	5.0	4.5	4.8	4.5	4.5	4.5	4.0	4.0	4.0	5.0	5.0	5.0
Remarks	No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed		

Within Action Level ?

Date	14/11/2006		14/11/2006		16/11/2006		16/11/2006		18/11/2006		18/11/2006		21/11/2006		21/11/2006		23/11/2006		23/11/2006	
D.O. (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Turbidity (NTU)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
SS (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Within Limit Level ?

Date	14/11/2006		14/11/2006		16/11/2006		16/11/2006		18/11/2006		18/11/2006		21/11/2006		21/11/2006		23/11/2006		23/11/2006	
D.O. (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Turbidity (NTU)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
SS (mg/L)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

Water Quality Monitoring Results for Station 5

Date	25/11/2006			25/11/2006			28/11/2006			28/11/2006			30/11/2006			30/11/2006		
Time (hh:mm)	15:00 - 15:15			10:22 - 10:37			09:00 - 09:15			13:25 - 13:40			08:15 - 08:30			14:43 - 15:00		
Ambient Temperature	26			26			22			22			22			22		
Weather	Fine			Fine			Fine			Fine			Fine			Fine		
Water Depth (m)	4.40			4.60			4.30			4.50			4.50			4.70		
Monitoring Depth	5.00			5.00			5.00			5.00			5.00			5.00		
Tide	Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood			Mid-Ebb			Mid-Flood		
Trial	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average	Trial 1	Trial 2	Average
Water Temperature (°C)	24.8	24.8	24.8	24.6	24.6	24.6	23.4	23.4	23.4	23.7	23.6	23.7	24.0	23.9	24.0	24.3	24.2	24.3
Salinity (ppt)	32.7	32.7	32.7	32.4	32.4	32.4	32.5	32.6	32.6	32.7	32.7	32.7	32.3	32.3	32.3	32.0	32.1	32.1
D.O. (mg/L)	4.65	4.73	4.7	4.71	4.60	4.7	4.80	4.97	4.9	4.97	5.09	5.0	4.14	4.03	4.1	3.57	3.64	3.6
D.O. Saturation (%)	67.4	68.6	68.0	67.8	66.3	67.1	63.7	71.1	67.4	71.5	73.3	72.4	59.2	57.6	58.4	51.6	52.5	52.1
Turbidity (NTU)	4.65	4.73	4.7	4.73	4.64	4.7	4.79	4.87	4.8	4.49	4.56	4.5	4.68	4.75	4.7	4.43	4.56	4.5
SS* (mg/L)	4.5	5.0	4.8	5.0	5.0	5.0	4.5	4.5	4.5	4.5	4.5	4.5	4.5	5.0	4.8	4.5	5.0	4.8
Remarks	No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed			No construction activities were observed		

Within Action Level 1

Date	25/11/2006		
D.O. (mg/L)	Y	Y	Y
Turbidity (NTU)	Y	Y	Y
SS (mg/L)	Y	Y	Y

25/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

28/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

28/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

30/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

30/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

Within Limit Level 2

Date	25/11/2006		
D.O. (mg/L)	Y	Y	Y
Turbidity (NTU)	Y	Y	Y
SS (mg/L)	Y	Y	Y

25/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

28/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

28/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

30/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

30/11/2006		
Y	Y	Y
Y	Y	Y
Y	Y	Y

Annex J

Event Action Plans for Air and Water Quality Monitoring

Table J1 Event Action Plans for Air Quality

Event Action Level	Action			
	ET	Contractor	ER	IEC
Exceedance for one sample	<ol style="list-style-type: none"> 1. Identify source 2. Notify IEC, ER and Contractor within 1 working day after receiving the laboratory results. 3. Conduct additional monitoring to investigate the causes. 4. Report the investigation results and if exceedance is due to contractor's construction works to the IEC, ER and Contractor. 5. Increase monitoring frequency to once per 2 days for 24-hour TSP and daily for 1-hour TSP until exceedance stops if exceedances are considered related to contractor's construction works and report the results to IEC, ER and Contractor within 1 working day after receiving the laboratory results. 	<ol style="list-style-type: none"> 1. Take immediate action to avoid further exceedance and rectify any unacceptable practice. 2. Submit air mitigation proposal to IEC and ER for agreement within 3 working days if ET indicated that exceedance is related to the construction works 3. Implement agreed proposal within a time scale agreed with ER and IEC. 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing. 2. Notify Contractor. 3. Require Contractor to submit air mitigation proposal. 4. Ensure remedial measures are properly implemented. 	<ol style="list-style-type: none"> 1. Review monitoring data and investigation report submitted by ET. 2. Review Contractor's air mitigation proposal and advise the ER accordingly. 3. Supervise and confirm in writing the implementation of remedial measures within 2 working days after receipt of the mitigation proposal.
Exceedance for two or more consecutive samples	<ol style="list-style-type: none"> 1. Identify source 2. Notify EPD, IEC, ER and Contractor within 1 working day after receiving the laboratory results 3. Conduct additional monitoring to investigate the causes. 4. Report the investigation results and if exceedances are due to contractor's construction works to EPD, IEC, ER and Contractor within 3 working days after additional monitoring. 5. Increase monitoring frequency to daily for 24-hour TSP and 1-hour TSP if exceedances are considered related to contractor's construction works until exceedance stops, and report the results to EPD, IEC, ER and Contractor within 1 working day after receiving the laboratory results. 6. If exceedances continue after 1-week monitoring events, request ER to arrange meeting with ER, IEC and contractor to discuss remedial actions. 	<ol style="list-style-type: none"> 1. Take immediate action to avoid further exceedance and rectify any unacceptable practice 2. In consultation with the IEC, submit air mitigation proposal to IEC and ER for agreement within 3 working days of notification if ET indicated that exceedances are related to construction works 3. Implement agreed proposal within a time scale agreed with ER and IEC. 4. Amend working methods if appropriate. 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing. 2. Notify Contractor. 3. Require Contractor to submit air mitigation proposal. 4. Ensure remedial measures are properly implemented. 	<ol style="list-style-type: none"> 1. Review monitoring data and investigation report submitted by ET. 2. Discuss amongst ER, ET and Contractor in order to formulate air mitigation proposal. 3. Review Contractor's air mitigation proposal and advise the ER accordingly. 4. Supervise and confirm in writing the implementation of remedial measures within 2 working days after receipt of the mitigation proposal.

Event Limit Level	Action			
	ET	Contractor	ER	IEC
Exceedance for one sample	<ol style="list-style-type: none"> 1. Identify source 2. Notify EPD, IEC, ER and Contractor within 1 working day after receiving the laboratory results 3. Conduct additional monitoring to investigate the causes. 4. Report the investigation results and if exceedances are due to contractor's construction works to EPD, IEC, ER and Contractor within 3 working days after additional monitoring. 5. Increase monitoring frequency to daily if exceedances are considered related to contractor's construction works until exceedance stops, and report the results to EPD, IEC, ER and Contractor within 1 working day after receiving the laboratory results. 	<ol style="list-style-type: none"> 1. Take immediate action to avoid further exceedance and rectify any unacceptable practice 2. In consultation with the IEC, submit air mitigation proposal to IEC and ER for agreement within 3 working days of notification if ET indicated that exceedances are related to construction works 3. Implement agreed proposal within a time scale agreed with ER and IEC. 4. Amend working methods if appropriate. 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing. 2. Notify Contractor. 3. Require Contractor to submit air mitigation proposal. 4. Ensure remedial measures are properly implemented. 	<ol style="list-style-type: none"> 1. Review monitoring data and investigation report submitted by ET. 2. Discuss amongst ER, ET and Contractor in order to formulate air mitigation proposal. 3. Review Contractor's air mitigation proposal and advise the ER accordingly. 4. Supervise and confirm in writing the implementation of remedial measures within 2 working days after receipt of the mitigation proposal.
Exceedance for two or more consecutive samples	<ol style="list-style-type: none"> 1. Identify source 2. Notify EPD, IEC, ER and Contractor within 1 working day after receiving the laboratory results 3. Conduct additional monitoring to investigate the causes. 4. Report the investigation results and if exceedances are due to contractor's construction works to EPD, IEC, ER and Contractor within 3 working days after additional monitoring. 5. Increase monitoring frequency to daily if exceedances are considered related to contractor's construction works until exceedance stops, and report the results to EPD, IEC, ER and Contractor within 1 working day after receiving the laboratory results. 6. If exceedances continue after 2 consecutive monitoring events, request ER to arrange meeting with IEC and contractor to discuss remedial actions. 	<ol style="list-style-type: none"> 1. Take immediate action to avoid further exceedance and rectify any unacceptable practice 2. In consultation with the IEC, submit air mitigation proposal to IEC and ER for agreement within 3 working days of notification if ET indicated that exceedances are related to construction works 3. Implement agreed proposal within a time scale agreed with ER and IEC. 4. Amend working methods and proposal if appropriate. 5. Stop relevant portion(s) of works as required by ER, ET and IEC 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing. 2. Notify Contractor. 3. Require Contractor to submit air mitigation proposal. 4. Ensure remedial measures are properly implemented. 5. If exceedances continue arrange meeting with Contractor, IEC and ET and to consider what portion(s) of works should be further mitigated or have to stop. 	<ol style="list-style-type: none"> 1. Review monitoring data and investigation report submitted by ET. 2. Discuss amongst ER, ET and Contractor in order to formulate air mitigation proposal. 3. Review Contractor's air mitigation proposal and advise the ER accordingly. 4. Supervise and confirm in writing the implementation of remedial measures within 2 working days after receipt of the mitigation proposal.

Table J2 Event Action Plans for Water Quality

Event	Action			
	ET	IC(E)	ER	Contractor
Action level being exceeded by one sampling day	<ol style="list-style-type: none"> 1. Repeat in-situ measurement to confirm findings; 2. Identify source(s) of impact; 3. Inform IC(E) and Contractor; 4. Check monitoring data, all plant, equipment and Contractor's working methods; 5. Discuss mitigation measures with IC(E) and Contractor; 6. (The above actions should be taken within 1 working day after the exceedance is identified) 7. Repeat measurement on next day of exceedance. 	<ol style="list-style-type: none"> 1. Discuss with ET and Contractor on the mitigation measures; 2. Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly; 3. Assess the effectiveness of the implemented mitigation measures. 4. (The above actions should be taken within 1 working day after the exceedance is identified) 	<ol style="list-style-type: none"> 1. Discuss with IC(E) on the proposed mitigation measures; 2. Make agreement on the mitigation measures to be implemented. 3. (The above actions should be taken within 1 working day after the exceedance is identified) 	<ol style="list-style-type: none"> 1. Inform the ER and confirm notification of the non-compliance in writing; 2. Rectify unacceptable practice; 3. Check all plant and equipment; 4. Consider changes of working methods; 5. Discuss with ET and IC(E) and propose mitigation measures to IC(E) and ER; 6. Implement the agreed mitigation measures. 7. (The above actions should be taken within 1 working day after the exceedance is identified)
Action level being exceeded by more than one consecutive sampling days	<ol style="list-style-type: none"> 1. Identify source(s) of impact; 2. Inform IC(E) and Contractor; 3. Check monitoring data, all plant, equipment and Contractor's working methods; 4. Discuss mitigation measures with IC(E) and Contractor; 5. Ensure mitigation measures are implemented; 6. Prepare to increase the monitoring frequency to daily; 7. (The above actions should be taken within 1 working day after the exceedance is identified) 8. Repeat measurement on next working day of exceedance. 	<ol style="list-style-type: none"> 1. Discuss with ET and Contractor on the mitigation measures; 2. Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly; 3. Assess the effectiveness of the implemented mitigation measures. 4. (The above actions should be taken within 1 working day after the exceedance is identified) 	<ol style="list-style-type: none"> 1. Discuss with IC(E) on the proposed mitigation measures; 2. Make agreement on the mitigation measures to be implemented; 3. Assess the effectiveness of the implemented mitigation measures. 4. (The above actions should be taken within 1 working day after the exceedance is identified) 	<ol style="list-style-type: none"> 1. Inform the Engineer and confirm notification of the non-compliance in writing; 2. Rectify unacceptable practice; 3. Check all plant and equipment; 4. Consider changes of working methods; 5. Discuss with ET and IC(E) and propose mitigation measures to IC(E) and ER within 3 working days; 6. Implement the agreed mitigation measures. 7. (The above actions should be taken within 1 working day after the exceedance is identified)

Event	Action			
	ET	IC(E)	ER	Contractor
Limit level being exceeded by one sampling day	<ol style="list-style-type: none"> 1. Repeat in-situ measurement to confirm findings; 2. Identify source(s) of impact; 3. Inform IC(E), contractor and EPD; 4. Check monitoring data, all plant, equipment and Contractor's working methods; 5. Discuss mitigation measures with IC(E), ER and Contractor; 6. Ensure mitigation measures are implemented; 7. Increase the monitoring frequency to daily until no exceedance of Limit level. 8. (The above actions should be taken within 1 working day after the exceedance is identified) 	<ol style="list-style-type: none"> 1. Discuss with ET and Contractor on the mitigation measures; 2. Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly; 3. Assess the effectiveness of the implemented mitigation measures. 4. (The above actions should be taken within 1 working day after the exceedance is identified) 	<ol style="list-style-type: none"> 1. Discuss with IC(E), ET and Contractor on the proposed mitigation measures; 2. Request Contractor to critically review the working methods; 3. Make agreement on the mitigation measures to be implemented; 4. Assess the effectiveness of the implemented mitigation measures. 5. (The above actions should be taken within 1 working day after the exceedance is identified) 	<ol style="list-style-type: none"> 1. Inform the Engineer and confirm notification of the non-compliance in writing; 2. Rectify unacceptable practice; 3. Check all plant and equipment; 4. Consider changes of working methods; 5. Discuss with ET , IC(E) and ER and propose mitigation measures to IC(E) and ER within 3 working days; 6. Implement the agreed mitigation measures. 7. (The above actions should be taken within 1 working day after the exceedance is identified)
Limit level being exceeded by more than one consecutive sampling days	<ol style="list-style-type: none"> 1. Identify source(s) of impact; 2. Inform IC(E), contractor and EPD; 3. Check monitoring data, all plant, equipment and Contractor's working methods; 4. Discuss mitigation measures with IC(E), ER and Contractor; 5. Ensure mitigation measures are implemented; 6. Increase the monitoring frequency to daily until no exceedance of Limit level for two consecutive days. 7. (The above actions should be taken within 1 working day after the exceedance is identified) 	<ol style="list-style-type: none"> 1. Discuss with ET and Contractor on the mitigation measures; 2. Review proposals on mitigation measures submitted by Contractor and advise the ER accordingly; 3. Assess the effectiveness of the implemented mitigation measures. 4. (The above actions should be taken within 1 working day after the exceedance is identified) 	<ol style="list-style-type: none"> 1. Discuss with IC(E), ET and Contractor on the proposed mitigation measures; 2. Request Contractor to critically review the working methods; 3. Make agreement on the mitigation measures to be implemented; 4. Assess the effectiveness of the implemented mitigation measures; 5. Consider and instruct, if necessary, the Contractor to slow down or to stop all or part of the marine work until no exceedance of Limit level. 6. (The above actions should be taken within 1 working day after the exceedance is identified) 	<ol style="list-style-type: none"> 1. Inform the ER and confirm notification of the non-compliance in writing; 2. Rectify unacceptable practice; 3. Check all plant and equipment; 4. Consider changes of working methods; 5. Discuss with ET , IC(E) and ER and propose mitigation measures to IC(E) and ER within 3working days; 6. Implement the agreed mitigation measures; 7. As directed by the Engineer, to slow down or to stop all or part of the marine work or construction activities. 8. (The above actions should be taken within 1 working day after the exceedance is identified)

Annex K

Summary of Implementation Status

Annex K - Summary of Environmental Protection / Mitigation Activities

Environmental Permit No. EP-239/2006

EP Condition Ref	Submission	Action Required by the Permit Holder	Implementation Status
Measures for Mitigating Water Quality Impact			
2.4	Method statement on silt screens for seawater intakes (including design and maintenance requirements)	2 weeks before commencement of marine pile installation works	Method statement was submitted to the EPD on 21/6/06. Method statement (Revision A) was submitted to the EPD on 29/9/06.
2.5	Method statement on silt curtain system for marine piling works (including design and maintenance requirements)	2 weeks before commencement of marine pile installation works	Method statement was submitted to the EPD on 15/9/06.
2.8	Design drawings specifying pile dimension and layout	2 weeks before commencement of marine pile installation works	Revised method statement (Stage 2) was submitted to the EPD on 28/11/06. Method statement (final stage) was submitted to the EPD on 30/11/06.
Measures for Mitigating Air Quality Impact			
2.9	Design drawings of ventilation facility for fresh air intakes (req'd only before operation of Project)	2 weeks before commencement of installation of ventilation facility	---
Measures for Mitigating Landscape and Visual Impact			
2.10	Implementation programme for landscape and visual mitigation measures (for both construction and operational phases of Project)	Within 6 months after commencement of construction of Project	Implementation programme was submitted to the EPD on 8/12/06.
2.10	Details of each landscape and visual mitigation measures package (incl plans)	2 weeks before implementation of a particular mitigation package	Proposal on protection and transplantation of existing trees was submitted to the EPD on 8/12/06.
3.2	Baseline Monitoring Report	One week before the commencement of construction	Report was submitted to the EPD on 24 Jul 06 and comments from the EPD was received on 3 Aug 06. Revised report was submitted to EPD on 17 Aug 06 and no further comments received.

Summary of Mitigation Measures Implementation Schedule

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
<i>Construction Phase</i>			
Air Quality	<p>The Air Pollution Control (Construction Dust) Regulation shall be implemented and good site practices shall be incorporated in the contract clauses to minimize construction dust impact. A number of practical measures are listed below:</p> <ul style="list-style-type: none"> • skip hoist for material transport should be totally enclosed by impervious sheeting; • every vehicle should be washed to remove any dusty materials from its body and wheels before leaving a construction site; • 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 hardcores; • where a site boundary adjoins a road, streets or other 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; • 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; • all dusty materials should be sprayed with water prior to any loading, unloading or transfer operation so as to maintain the dusty materials wet; • the height from which excavated materials dropped should be controlled to a minimum practical height to limit fugitive dust generation from unloading; • the load of dusty materials carried by vehicle leaving a construction site should be covered entirely by clean impervious sheeting to ensure dust materials do not leak from the vehicle; and • instigation of an environmental monitoring auditing program to monitor the construction process in order to enforce controls and modify method of work if dusty conditions arise. 	Work site / during construction	√

Summary of Mitigation Measures Implementation Schedule

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
<i>Operational Phase</i>			
Air Quality	Some fresh air intakes of the Hong Kong Convention and Exhibition Centre Phase I, Renaissance Harbour View Hotel and Grand Hyatt Hotel (ASRs A4, A5 and A6) should be re-diverted to the new air vent shaft provided for Atrium Link Extension where fresh air intake located at +55.8mPD.	Location of ASRs A4, A5 & A6 / Design & Operation Stage (Long-term and Interim Scenario)	Measures not required until commencement of operational phase
Air Quality	Monitoring of NO ₂ concentration underneath the Atrium Link Extension should be conducted.	Underneath the deckover / The first six months upon completion of the ALE.	Measures not required until commencement of operational phase
<i>Construction Phase</i>			
Noise	<p>Good Site Practice:</p> <ul style="list-style-type: none"> only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction program; silencers or mufflers on construction equipment should be utilized and should be properly maintained during the construction program; mobile plant, if any, should be sited as far from NSRs as possible; machines and plant (such as trucks) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum; plant known to emit noise strongly in one direction should, wherever possible, be orientated so that the noise is directed away from the nearby NSRs; and material stockpiles and other structures should be effectively utilised, wherever practicable, in screening noise from on-site construction activities; <p>Environmental audit shall be carried out to ensure that appropriate noise control measures would be properly implemented.</p>	Construction work areas / Construction period	√

Summary of Mitigation Measures Implementation Schedule

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
<i>Operational Phase</i>			
Noise	<p>The following noise reduction measures should be considered as far as practicable during detailed design:</p> <ul style="list-style-type: none"> • choose quieter plant such as those which have been effectively silenced; • include noise levels specification when ordering new plant; • locate fixed plant away from any NSRs as far as practicable; • locate fixed plant in plant rooms with thick walls or specially designed enclosure; • locate noisy machines in basement or a completely separate building; and • develop and implement a regularly scheduled plant maintenance programme in order to maintain controlled level of noise. 	Plant Room / Design and Operation Stage	Relevant design and plant procurement procedures to commence at a later stage
<i>Construction Phase</i>			
Water Quality	There should be no permanent structure in the water channel.	At the ALE sea channel / during operational phase	√
Water Quality	No dredging and no reclamation should be carried out for the Project.	At work sites / during construction phase	√
Water Quality	The marine pile layout as shown in Figure 2.6 of the EIA report should be adopted. No more than approximately 80 numbers of temporary marine piles should be installed in the ALE sea channel during the construction phase. The dimension of each temporary marine pile should be 800mm nominal diameter. These piles should be driven into position and internal space should not be excavated, i.e. left as soil. No dredging or soil /sediment excavation should be carried out. Marine piles would be removed by reverse driving.	At work sites / during construction phase	Only Stage 1 marine piling works have commenced and relevant environmental measures were implemented
Water Quality	Two layers of silt curtain should be installed around each of the marine piling and pile extraction locations. The proposed silt curtain should be extended to seabed with sinker blocks and regularly inspected and maintained to ensure it is serviceable.	At marine work sites and nearby seawater intakes / during marine piling and marine pile extraction	√

Summary of Mitigation Measures Implementation Schedule

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
	All marine works should be carried out in a controlled manner such that release of sediments into the marine environment would be minimized. All wastewater generated from the piling activities should be collected and be treated before controlled discharge. Spoil should also be properly collected for proper disposal.		
Water Quality	In view of the close vicinity of the seawater intakes to the work site, silt screens are recommended to be deployed at the seawater intakes shown in Figure 5.2 of the EIA report during the whole construction period. Silt screens to be provided at seawater intakes should be regularly checked and maintained to ensure that they are serviceable. Refuse collection vessel should be mobilized on a need basis to collect any floating refuse lost from/ trapped at the work site during the construction period.	At seawater intakes / during the whole construction period	√
Water Quality	Surface run-off from construction sites should be discharged into storm drains via adequately designed sand/silt removal facilities such as sand traps, silt traps and sedimentation basins. Channels or earth bunds or sand bag barriers should be provided on site to properly direct stormwater to such silt removal facilities. Perimeter channels at site boundaries should be provided where necessary to intercept storm runoff from outside the site so that it will not wash across the site. Catchpits and perimeter channels should be constructed in advance of site formation works and earthworks. Silt removal facilities, channels and manholes should be maintained and the deposited silt and grit should be removed regularly, at the onset of and after each rainstorm to ensure that these facilities are functioning properly at all times. Any practical options for the diversion and re-alignment of drainage should comply with both engineering and environmental requirements in order to ensure adequate hydraulic capacity of all drains. Minimum distances of 100 m should be maintained between the discharge points of construction site runoff and the nearby saltwater intakes.	Works areas / construction period	√

Summary of Mitigation Measures Implementation Schedule

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
Water Quality	<p>There is a need to apply to EPD for a discharge license for discharge of effluent from the construction site under the WPCO. The discharge quality must meet the requirements specified in the discharge license. All the runoff and wastewater generated from the works areas should be treated so that it satisfies all the standards listed in the TM-DSS. Reuse and recycling of the treated effluent can minimize water consumption and reduce the effluent discharge volume. The beneficial uses of the treated effluent may include dust suppression, wheel washing and general cleaning. It is anticipated that only a small quantity of wastewater would be generated from the works areas. Any effluent discharge from the construction activities should be diverted away from the sea channel so as to avoid adverse water quality impact. Construction works should be programmed to minimize excavation works in rainy seasons (April to September). If excavation in soil could not be avoided in these months or at any time of year when rainstorms are likely, for the purpose of preventing soil erosion, temporary exposed slope surfaces should be covered e.g. by tarpaulin, and temporary access roads should be protected by crushed stone or gravel, as excavation proceeds. Intercepting channels should be provided (e.g. along the crest / edge of excavation) to prevent storm runoff from washing across exposed soil surfaces. Arrangements should always be in place to ensure that adequate surface protection measures can be safely carried out well before the arrival of a rainstorm.</p>	Works areas / construction period	√
Water Quality	<p>Earthworks final surfaces should be well compacted and the subsequent permanent work or surface protection should be carried out immediately after the final surfaces are formed to prevent erosion caused by rainstorms. Appropriate drainage like intercepting channels should be provided where necessary.</p> <p>Measures should be taken to minimize the ingress of rainwater into trenches. If excavation of trenches in wet seasons is necessary, they should be dug and backfilled in short sections. Rainwater pumped out from trenches or foundation excavations</p>	Works areas / construction period	√

Summary of Mitigation Measures Implementation Schedule

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
	<p>should be discharged into storm drains via silt removal facilities.</p> <p>Open stockpiles of construction materials (e.g. aggregates, sand and fill material) on sites should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system.</p> <p>Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system, and to prevent storm run-off from getting into foul sewers. Discharge of surface run-off into foul sewers must always be prevented in order not to unduly overload the foul sewerage system.</p>		
Water Quality	Good site practices should be adopted to remove rubbish and litter from construction sites so as to prevent the rubbish and litter from spreading from the site area. It is recommended to clean the construction sites on a regular basis.	Works areas / construction period	√
Water Quality	Under normal circumstances, groundwater pumped out of wells, etc. for the lowering of ground water level in basement or foundation construction should be discharged into storm drains after the removal of silt in silt removal facilities.	Works areas / construction period	√
Water Quality	Water used in ground boring and drilling or rock /soil anchoring should as far as practicable be re-circulated after sedimentation. When there is a need for final disposal, the wastewater should be discharged into storm drains via silt removal facilities.	Works areas / construction period	√
Water Quality	Wastewater generated from the washing down of mixing trucks and drum mixers and similar equipment should whenever practicable be recycled. The discharge of wastewater should be kept to a minimum.	Works areas / construction period	√

Summary of Mitigation Measures Implementation Schedule

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
	<p>To prevent pollution from wastewater overflow, the pump sump of any water recycling system should be provided with an on-line standby pump of adequate capacity and with automatic alternating devices.</p> <p>Under normal circumstances, surplus wastewater may be discharged into foul sewers after treatment in silt removal and pH adjustment facilities (to within the pH range of 6 to 10). Disposal of wastewater into storm drains will require more elaborate treatment.</p>		
Water Quality	<p>All vehicles and plant should be cleaned before they leave a construction site to ensure no earth, mud, debris and the like is deposited by them on roads.</p> <p>A wheel washing bay should be provided at every site exit if practicable and wash-water should have sand and silt settled out or removed before discharging into storm drains. The section of construction road between the wheel washing bay and the public road should be paved with backfall to reduce vehicle tracking of soil and to prevent site run-off from entering public road drains.</p>	Works areas / construction period	√
Water Quality	<p>Bentonite slurries used in diaphragm wall and bore-pile construction should be reconditioned and reused wherever practicable. If the disposal of a certain residual quantity cannot be avoided, the used slurry may be disposed of at the marine spoil grounds subject to obtaining a marine dumping licence from EPD on a case-by-case basis.</p> <p>If the used bentonite slurry is intended to be disposed of through the public drainage system, it should be treated to the respective effluent standards applicable to foul sewer, storm drains or the receiving waters as set out in the WPCO Technical Memorandum on Effluent Standards.</p>	Works areas / construction period	√

Summary of Mitigation Measures Implementation Schedule

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
	<p>Water used in water testing to check leakage of structures and pipes should be reused for other purposes as far as practicable. Surplus unpolluted water could be discharged into storm drains.</p> <p>Sterilization is commonly accomplished by chlorination. Specific advice from EPD should be sought during the design stage of the works with regard to the disposal of the sterilizing water. The sterilizing water should be reused wherever practicable.</p> <p>Discharge of sterilization effluent should be properly pre-treated for compliance with TM/WPCO requirements, such as but not limited to total residual chlorine.</p>	Works areas / construction period	
Water Quality	<p>Effluent discharges from building construction and other construction site activities are subject to WPCO control. Before commencing any demolition works, all sewer and drainage connections should be sealed to prevent building debris, soil, sand etc. from entering public sewers/drains.</p> <p>Wastewater generated from building construction activities including concreting, plastering, internal decoration, cleaning of works and similar activities should not be discharged into the stormwater drainage system. If the wastewater is to be discharged into foul sewers, it should undergo the removal of settleable solids in a silt removal facility, and pH adjustment as necessary.</p>	Works areas / construction period	√
Water Quality	<p>Acidic wastewater generated from acid cleaning, etching, pickling and similar activities should be neutralized to within the pH range of 6 to 10 before discharging into foul sewers. If there is no public foul sewer in the vicinity, the neutralized wastewater should be tinkered off site for disposal into foul sewers or treated to a standard acceptable to storm drains and the receiving waters.</p>	Works areas / construction period	No acidic wastewater will be generated.
Water Quality	<p>Wastewater collected from canteen kitchens, including that from basins, sinks and floor drains, should be discharged into foul</p>	Works areas / construction period	√

Summary of Mitigation Measures Implementation Schedule

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
	<p>sewer via grease traps capable of providing at least 20 minutes retention during peak flow.</p> <p>Drainage serving an open oil filling point should be connected to storm drains via a petrol interceptors with peak storm bypass.</p> <p>Vehicle and plant servicing areas, vehicle wash bays and lubrication bays should as far as possible be located within roofed areas. The drainage in these covered areas should be connected to foul sewers via a petrol interceptor. Oil leakage or spillage should be contained and cleaned up immediately. Waste oil should be collected and stored for recycling or disposal in accordance with the Waste Disposal Ordinance.</p>		
Water Quality	<p>It is recommended to provide sufficient chemical toilets in the works areas. The toilet facilities should be more than 30 m from the seafront or any watercourse. A licensed waste collector should be deployed to clean the chemical toilets on a regular basis.</p> <p>Notices should be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the nearby environment. Regular environmental audit on the construction site can provide an effective control of any malpractices and can encourage continual improvement of environmental performance on site.</p>	Works areas / construction period	√
Water Quality	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) Regulation should be observed and complied with for control of chemical wastes.	Works areas / construction period	√
Water Quality	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	Works areas / construction period	√

Summary of Mitigation Measures Implementation Schedule

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
	<p>equipment involving activities with potential for leakage and spillage should only be undertaken within the areas appropriately equipped to control these discharges.</p> <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"> • suitable containers should be used to hold the chemical wastes to avoid leakage or spillage during storage, handling and transport; • chemical waste containers should be suitably labelled, to notify and warn the personnel who are handling the wastes, to avoid accidents; and • storage area should be selected at a safe location on site and adequate space should be allocated to the storage area. 		
Water Quality	<p>To minimize the potential water quality impacts from the construction works located at or near the storm system or seafront, the following mitigation measures should be adopted:</p> <ul style="list-style-type: none"> • the use of less or smaller construction plants may be specified to reduce the disturbance to the seabed; • temporary sewerage system should be designed to prevent wastewater from entering the storm system and sea; • 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; • stockpiling of construction materials and dusty materials should be covered and located away from any water courses; • 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; • construction activities, which generate large amount of 	Works areas / construction period	√

Summary of Mitigation Measures Implementation Schedule

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
	<p>wastewater, should be carried out in a distance away from the waterfront, where practicable;</p> <ul style="list-style-type: none"> • mitigation measures to control site runoff from entering the nearby water environment should be implemented to minimize water quality impacts. Surface channels should be provided along the edge of the waterfront within the work sites to intercept the runoff; • construction effluent, site run-off and sewage should be properly collected and/or treated; • proper shoring may need to be erected in order to prevent soil/mud from slipping into the storm culvert/sea; and • supervisory staff should be assigned to station on site to closely supervise and monitor the works. 		
Water Quality	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. The contractor should submit detailed monitoring programme to EPD for approval before commencement of the construction activities.	Works areas / construction period	√
Water Quality	Monitoring of the water quality at the seawater intakes inside the ALE sea channel should be conducted.	ALE sea channel / Before construction period and during installation and removal of temporary marine piles.	√
Water Quality	All barges should be fitted with tight seals to their bottom opening to prevent leakage of materials. The decks of all vessels should be kept tidy and free of oil or other substances that might be accidentally or otherwise washed overboard. Loading of barges should be controlled to prevent splashing of materials to the surrounding environment and barges should under no circumstances be filled to a level which would cause overflowing of material or sediment laden water during loading and transportation. All barges should maintain adequate clearance between vessels and the seabed at all states of the tide and	Works areas / construction period	No barge will be required for the project.

Summary of Mitigation Measures Implementation Schedule

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
	should operate at a reduced speeds to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash.		
Water Quality	Connection of sewage generated from the ALE will be connected to the existing public sewer. For handling, treatment and disposal of other operational stage effluent, the practices outlined in ProPECC PN 5/93 should be adopted where applicable. Consensus from DSD should be sought on technical details of the drainage and sewerage proposals.	Project site / design and construction period	Relevant works have yet to be commenced / completed
<i>Construction Phase</i>			
Waste	<p>Recommendations for good site practices during the construction activities include:</p> <ul style="list-style-type: none"> • nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all Wastes generated at the site; • training of site personnel in proper waste management and chemical handling procedures; • provision of sufficient waste disposal points and regular collection of waste; • appropriate measures to minimize windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers; and • regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors. 	Work site / during the construction period	√
Waste	<p>Waste reduction is best achieved at the planning and design stage, as well as by ensuring the implementation of good site practices. Recommendations to achieve waste reduction include:</p> <ul style="list-style-type: none"> • sorting of demolition debris and excavated materials from demolition works to recover reusable/ recyclable portions (ie soil, broken concrete, metal, etc); • segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or 	Work site / during the construction period	√

Summary of Mitigation Measures Implementation Schedule

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
	<p>recycling of materials and their proper disposal;</p> <ul style="list-style-type: none"> encourage collection of aluminum cans by individual collectors by providing separate labeled bins to enable this waste to be segregated from other general refuse generated by the work force; proper storage and site practices to minimize the potential for damage to contamination of construction materials; and plan and stock construction materials carefully to minimize amount of waste generated and avoid unnecessary generation of waste. 		
Waste	<p><u>General Refuse</u></p> <p>General refuse should be stored in enclosed bins or compaction units separate from C&D material. A reputable waste collector should be employed by the contractor to remove general refuse from the site, separately from C&D material. Preferably an enclosed and covered area should be provided to reduce the occurrence of 'wind blown' light material.</p>	Work site / during the construction period	√
Waste	<p><u>Construction and Demolition Material</u></p> <ul style="list-style-type: none"> In order to minimize the impact resulting from collection and transportation of C&D material for off-site disposal, the C&D material from the following construction activities should be reused and recycled as far as possible to reduce the net amount of C&D material generated from the Project; a Waste Management Plan should be prepared in accordance with ETWB TCW No. 19/2005; a recording system for the amount of wastes generated, recycled and disposed (including the disposal sites) should be proposed; in order to monitor the disposal of C&D and solid wastes at public filling facilities and landfills and to control fly-tipping, a trip-ticket system should be included. One may make 	Work site / during the construction period	√

Summary of Mitigation Measures Implementation Schedule

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
	<p>reference to ETWB TCW No.31/2004 for details;</p> <ul style="list-style-type: none"> the large amount of C&D waste generated is mainly due to the piling works of large diameter piles' excavation at the sea front site. If however marine sediment is found during pile excavation, the handling and disposal of such wastes will be managed in accordance with the requirements of the DASO and the current ETWB Tech. Circular no. 34/2002. 		
Waste	<p><u>Chemical Wastes</u></p> <p>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 <i>Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes</i>. 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 explosives, 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 Chemical Waste Treatment Centre at Tsing Yi, or another licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation. For this Project, the amount of chemical wastes produced would be small.</p>	Work site / during the construction period	√
<i>Operational Phase</i>			
Waste	<p><u>General Refuse</u></p> <p>Similar to the existing situation, the main waste type generated during the operation stage of the Project will be general refuse generated by the public and staff. These include waste paper, food wrappings and beverage containers. The disposal of future waste arisings generated at the HKCEC would follow the existing handling and disposal arrangement. Provided proper</p>	Work site / during the construction period	Measures not required until commencement of operational phase

Summary of Mitigation Measures Implementation Schedule

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
	arrangements are made with licensed contractors to collect the generated waste, adverse waste-related impact is not anticipated during the operation stage. It is expected that there will be a 5-7% increase ratio in the future operations.		
<i>Construction Phase</i>			
Landscape & Visual	Due consideration of appearance and view to 'hide' the construction through careful use of: (a) hoarding design; (b) temporary partition walls; (c) screen for hotels; and (d) temporary footbridge.	Entire works area and adjacent hotels	√
Landscape & Visual	Due consideration to protect existing trees.	Entire works area	√
Landscape & Visual	Due consideration of visual impact from construction activities: (a) construction workers access to reach construction areas without passing through hotels and existing HKCEC; and (b) construction light.	Entire works area	√
<i>Operational Phase</i>			
Landscape & Visual	Sensitive soft and hard landscape design for exposed rooftop garden and shady covered area underneath the Atrium Link Extension. Maximize greening opportunity via various in-situ planting and potted planting to achieve 30% of the roof area as planting area for the project.	Roof top and area underneath the Atrium Link Extension	Mitigation measures to be implemented during operational phase
Landscape & Visual	Sensitive building architecture to visually reduce the bulkiness of the building structure, to visually break down the scale of the facades, and to create rooftops for greening opportunities.	Building of the Atrium Link Extension	Mitigation measures to be implemented during operational phase
Landscape & Visual	Appearance and view considerations: (a) avoid industrial feel of building service elements;	Entire proposed works and adjacent hotels	Mitigation measures to be implemented during operational phase

Summary of Mitigation Measures Implementation Schedule

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
	(b) interior visual screens for lower levels of the hotels; (c) consider relocation of facilities of interior spaces of hotels; and (d) careful lighting design at roofs and for building façade to avoid night-time glare.		
Landscape & Visual	Transplanting of trees to adjacent locations.	Convention Avenue	Mitigation measures to be implemented during operational phase
Landscape & Visual	Reinstatement of existing waterfront public footpaths along Convention Avenue and the existing open spaces near Fenwick Street.	Convention Avenue and Fenwick Street	Mitigation measures to be implemented during operational phase

Remark:

- √ Compliance of Mitigation Measures
- ◇ Compliance of Mitigation but need improvement
- x Non-compliance of Mitigation Measures
- ▲ Non-compliance of Mitigation Measures but rectified by Hip Hing – Ngo Kee JV
- Δ Deficiency of Mitigation Measures but rectified by Hip Hing – Ngo Kee JV

Annex L

Waste Flow Table

HKCEC – Atrium Link Extension Project

Name of Project Proponent: HKTDC

Project Commencement Date: 1 Aug 2006

Construction Completion Date: March 2009

Monthly Summary Waste Flow Table for Year 2006

Year	Actual Quantities of inert C&D Materials (in 10 ³ Kg) ⁽¹⁾					Actual Quantities of C&D Wastes (in 10 ³ Kg) ⁽⁴⁾									
	Total Quantity Generated	Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Steel Materials				Paper/cardboard packaging		Chemical Waste		General refuse	Other waste
						Demolition of existing Atrium Link		Demolition of existing working platform							
						(a)	(b)	(c)	(d)	(a)-(b)-(c)-(d)	Recycle	Disposal	Recycle	Disposal	Recycle
January	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
February	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
March	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
April	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
May	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
June	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
July	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
August	264	0	1	0	263	0	0	0	0	0	1	0	0	50	81
September	1509 ⁽²⁾	0	2	0	1507	0	0	0	0	0	1	0	0	60	215
October	1380	0	2 ⁽³⁾	0	1378	30 ⁽⁵⁾	0	0	0	0	1	0	0	55	532 ⁽⁶⁾
November	2091	0	1 ⁽³⁾	0	2090	100 ⁽⁵⁾	0	0	0	0	1.5	0	0	50	115 ⁽⁶⁾
December	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	5244	0	6	0	5238	130	0	0	0	0	4.5	0	0	215	943

Note: ⁽¹⁾ Inert C&D materials include bricks, concrete, building debris, rubble and excavated soil.

⁽²⁾ Inert C&D material mainly generated from construction of foundation.

⁽³⁾ Reused for building bunds and making sand bags.

⁽⁴⁾ C&D wastes include steel materials generated from demolition, paper / cardboard packaging waste, chemical waste and other wastes such as general refuse. Wastes other than general refuse will be disposed of at Tsung Kwan O Area 137 temporary construction waste sorting facility.

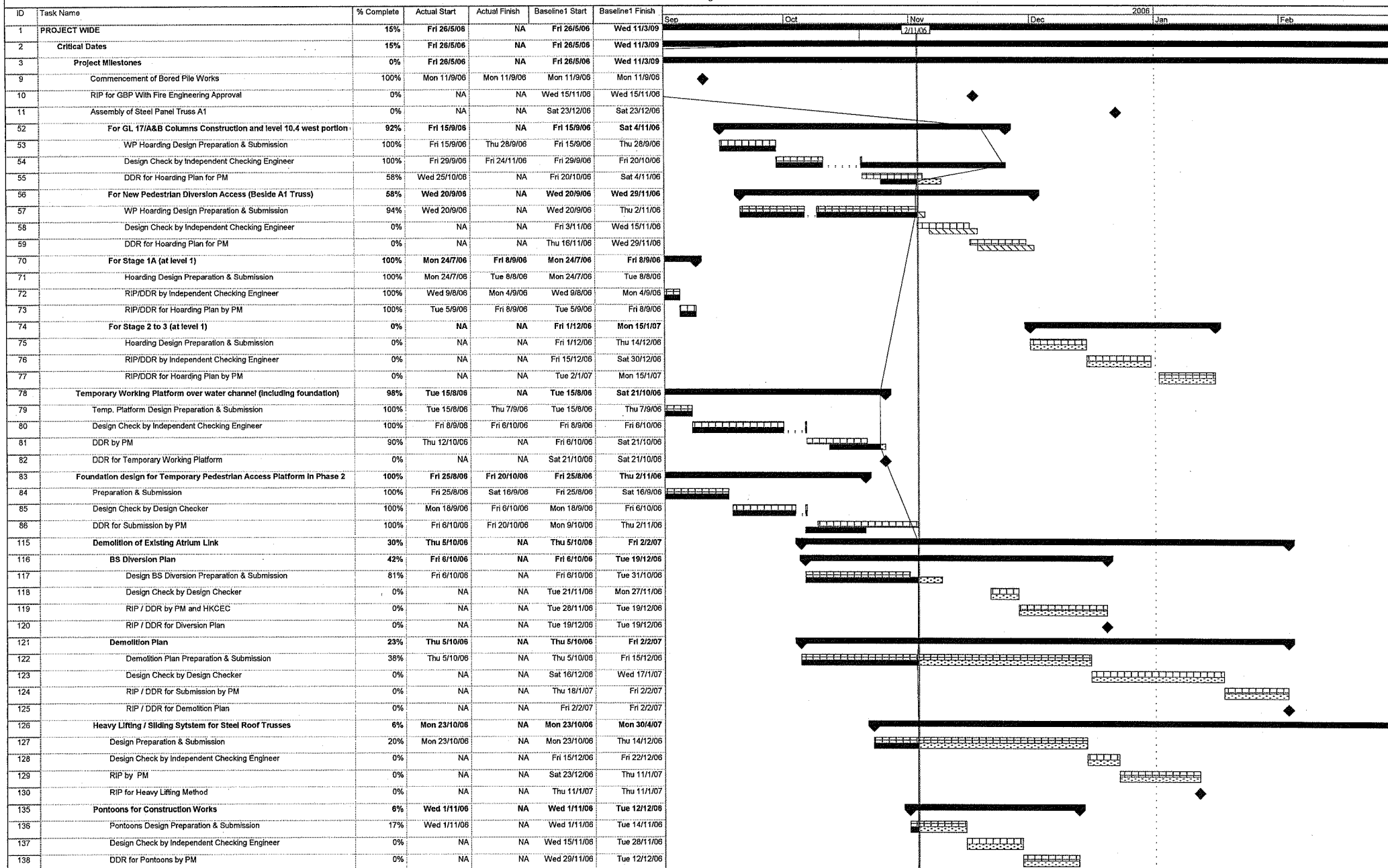
⁽⁵⁾ Waste from demolition of steel structure at existing Atrium Link of HKCEC (Phase 2).

⁽⁶⁾ Wastes include materials associated with additional and alternation (A&A) works of HKCEC (eg demolition of E&M equipment and finishing materials, bamboo scaffolding) and piling works.

Annex M

Construction Programme for Next Three Months

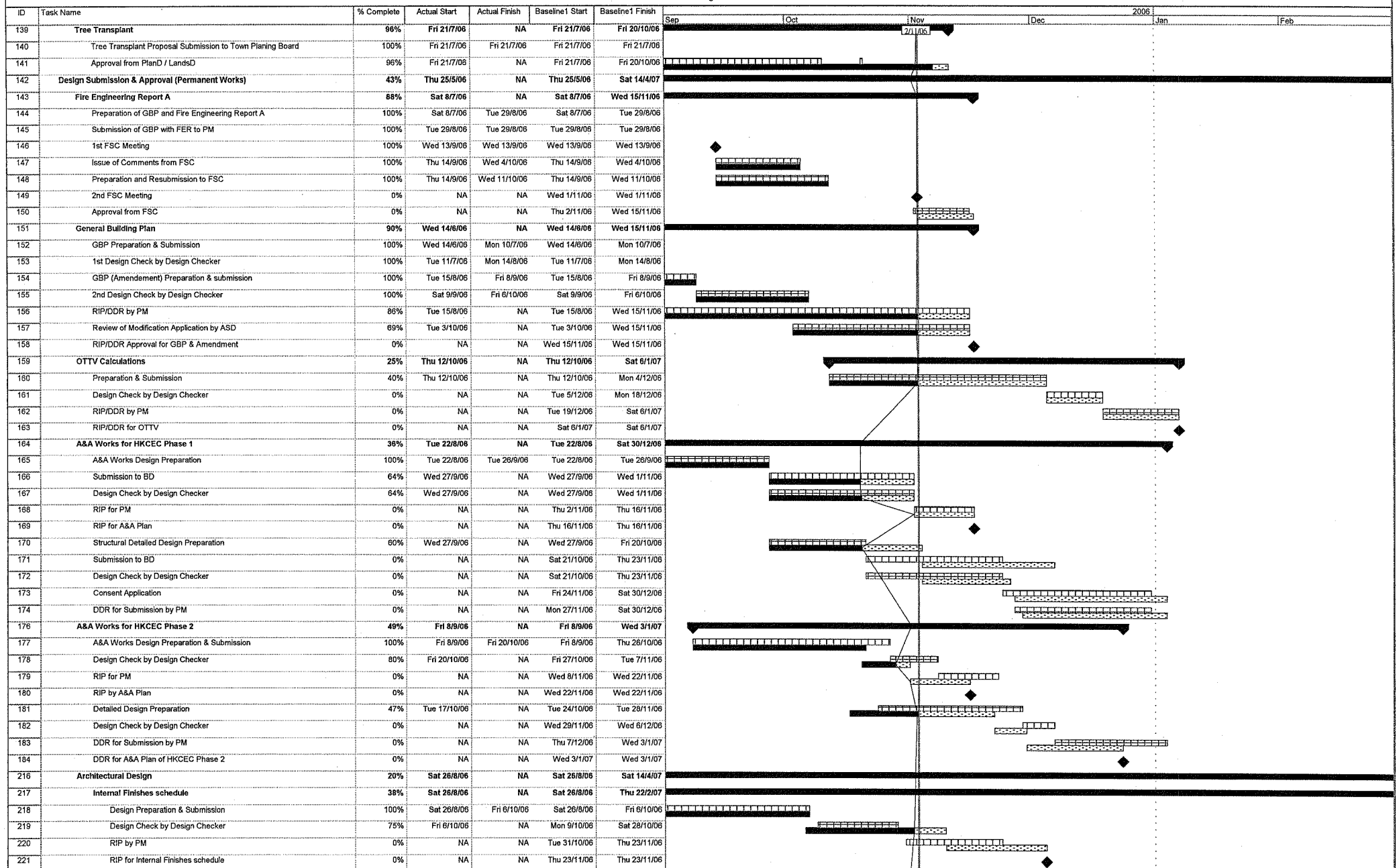
Hong Kong Convention and Exhibition Centre
Expansion Project
3 Months Rolling (2Sept06 to 2Jan06)
Based on Master Programme Rev. 1



Project: 3 Months Rolling Programme
Based on Master Programme Rev. 1
Date: 2/11/2006

Task Progress Summary External Tasks Group By Summary
Critical Task Milestone Split Project Summary Baseline 1

Hong Kong Convention and Exhibition Centre
Expansion Project
3 Months Rolling (2Sept06 to 2Jan06)
Based on Master Programme Rev. 1



Project: 3 Months Rolling Programme
Based on Master Programme Rev. 1
Date: 2/11/2006

Task  Progress  Summary  External Tasks  Group By Summary 
Critical Task  Milestone  Split  Project Summary  Baseline 1 

Hong Kong Convention and Exhibition Centre
Expansion Project
3 Months Rolling (2Sept06 to 2Jan06)
Based on Master Programme Rev. 1

ID	Task Name	% Complete	Actual Start	Actual Finish	Baseline1 Start	Baseline1 Finish	Sep	Oct	Nov	Dec	Jan	Feb
222	Detailed Design Preparation	0%	NA	NA	Wed 6/12/06	Thu 14/12/06						
223	Design Check by Design Checker	0%	NA	NA	Fri 15/12/06	Tue 21/1/07						
224	DDR by PM	0%	NA	NA	Wed 3/1/07	Thu 22/2/07						
225	DDR for Internal Finishes schedule	0%	NA	NA	Thu 22/2/07	Thu 22/2/07						
226	Fire curtain / Shutter and Smoke curtain schedule	43%	Mon 28/8/06	NA	Mon 28/8/06	Sat 27/1/07						
227	Design Preparation & Submission	100%	Mon 28/8/06	Sat 14/10/06	Mon 28/8/06	Sat 14/10/06						
228	Design Check by Design Checker	75%	Sat 14/10/06	NA	Mon 16/10/06	Sat 28/10/06						
229	RIP by PM	0%	NA	NA	Tue 31/10/06	Mon 13/11/06						
230	RIP for Fire curtain / Shutter and Smoke curtain schedule	0%	NA	NA	Mon 13/11/06	Mon 13/11/06						
231	Detailed Design Preparation	0%	NA	NA	Sat 25/11/06	Fri 29/12/06						
232	Design Check by Design Checker	0%	NA	NA	Sat 30/12/06	Sat 13/1/07						
233	DDR by PM	0%	NA	NA	Mon 15/1/07	Sat 27/1/07						
234	DDR for Fire curtain / Shutter and Smoke curtain schedule	0%	NA	NA	Sat 27/1/07	Sat 27/1/07						
235	Staircase (AST-3 & 4)	43%	Sat 26/8/06	NA	Sat 26/8/06	Fri 5/1/07						
236	Design Preparation & Submission	100%	Sat 26/8/06	Sat 21/10/06	Sat 26/8/06	Fri 20/10/06						
237	Design Check by Design Checker	0%	Mon 23/10/06	NA	Fri 20/10/06	Sat 4/11/06						
238	RIP by PM	0%	NA	NA	Sat 4/11/06	Sat 18/11/06						
239	RIP for Staircase	0%	NA	NA	Sat 18/11/06	Sat 18/11/06						
240	Detailed Design Preparation	0%	NA	NA	Sat 18/11/06	Tue 5/12/06						
241	Design Check by Design Checker	0%	NA	NA	Tue 5/12/06	Tue 19/12/06						
242	DDR by PM	0%	NA	NA	Tue 19/12/06	Fri 5/1/07						
244	Staircase	40%	Sat 26/8/06	NA	Sat 26/8/06	Thu 1/2/07						
245	Design Preparation & Submission	65%	Sat 26/8/06	NA	Sat 26/8/06	Thu 7/12/06						
246	Design Check by Design Checker	0%	NA	NA	Fri 8/12/06	Thu 21/12/06						
247	RIP by PM	0%	NA	NA	Fri 22/12/06	Thu 4/1/07						
248	RIP for Staircase	0%	NA	NA	Thu 4/1/07	Thu 4/1/07						
249	Detailed Design Preparation	0%	NA	NA	Thu 21/12/06	Thu 4/1/07						
250	Design Check by Design Checker	0%	NA	NA	Fri 5/1/07	Thu 18/1/07						
251	DDR by PM	0%	NA	NA	Fri 19/1/07	Thu 1/2/07						
252	DDR for Staircase	0%	NA	NA	Thu 1/2/07	Thu 1/2/07						
253	External Finishes schedule	35%	Mon 4/9/06	NA	Mon 4/9/06	Thu 8/3/07						
254	Design Preparation & Submission	92%	Mon 4/9/06	NA	Mon 4/9/06	Tue 7/11/06						
255	Design Check by Design Checker	0%	NA	NA	Wed 8/11/06	Tue 21/1/07						
256	RIP by PM	0%	NA	NA	Wed 22/11/06	Tue 5/12/06						
262	External façade and Gondola Design	35%	Fri 15/9/06	NA	Fri 15/9/06	Sat 30/12/06						
263	Design Preparation & Submission	97%	Fri 15/9/06	NA	Fri 15/9/06	Tue 31/10/06						
264	Design Check by Design Checker	0%	NA	NA	Wed 1/11/06	Tue 14/1/07						
265	RIP by PM	0%	NA	NA	Wed 15/11/06	Tue 28/11/06						
266	RIP for External façade and Gondola Design	0%	NA	NA	Tue 28/11/06	Tue 28/11/06						
267	Detailed Design Preparation	0%	NA	NA	Tue 7/11/06	Thu 30/1/07						
268	Design Check by Design Checker	0%	NA	NA	Fri 1/12/06	Thu 14/12/06						
269	DDR for DD Submission by PM	0%	NA	NA	Fri 15/12/06	Sat 30/12/06						
270	DDR for External façade and Gondola Design	0%	NA	NA	Sat 30/12/06	Sat 30/12/06						
271	Foyer and Lift Lobbies	28%	Mon 11/9/06	NA	Mon 11/9/06	Tue 3/4/07						
272	Design Preparation & Submission	93%	Mon 11/9/06	NA	Mon 11/9/06	Mon 6/11/06						
273	Design Check by Design Checker	0%	NA	NA	Tue 7/11/06	Mon 20/11/06						
274	RIP by PM	0%	NA	NA	Tue 21/11/06	Mon 4/12/06						
275	RIP for Foyer and Lift Lobbies Design	0%	NA	NA	Mon 4/12/06	Mon 4/12/06						
276	Detailed Design Preparation	0%	NA	NA	Sat 16/12/06	Fri 2/3/07						
280	Toilet and Sanitary Fitments	21%	Mon 25/9/06	NA	Mon 25/9/06	Sat 7/4/07						
281	Design Preparation & Submission	51%	Mon 25/9/06	NA	Mon 25/9/06	Thu 7/12/06						

Project: 3 Months Rolling Programme
Based on Master Programme Rev. 1
Date: 2/11/2006

Task
Critical Task

Progress
Milestone

Summary
Split

External Tasks
Project Summary

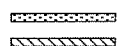
Group By Summary
Baseline 1

Hong Kong Convention and Exhibition Centre
Expansion Project
3 Months Rolling (2Sept06 to 2Jan06)
Based on Master Programme Rev. 1

ID	Task Name	% Complete	Actual Start	Actual Finish	Baseline1 Start	Baseline1 Finish	Sep	Oct	Nov	Dec	2006	Jan	Feb
282	Design Check by Design Checker	0%	NA	NA	Fri 8/12/06	Thu 21/12/06			21/1/06				
283	RIP by PM	0%	NA	NA	Fri 22/12/06	Mon 8/1/07							
284	RIP for Toilet and Sanitary Fittings	0%	NA	NA	Mon 8/1/07	Mon 8/1/07							
285	Detailed Design Preparation	0%	NA	NA	Sat 20/1/07	Tue 6/3/07							
286	Design Check by Design Checker	0%	NA	NA	Wed 7/3/07	Tue 20/3/07							
289	Exhibition Halls / Service Counters and Organiser's Offices	19%	Fri 29/9/06	NA	Fri 29/9/06	Thu 5/4/07							
290	Design Preparation & Submission	87%	Fri 29/9/06	NA	Fri 29/9/06	Tue 7/11/06							
291	Design Check by Design Checker	0%	NA	NA	Wed 8/11/06	Tue 21/11/06							
292	RIP by PM	0%	NA	NA	Wed 22/11/06	Tue 5/12/06							
293	RIP for Exhibition Halls / Service Counters and Organiser's Offices	0%	NA	NA	Tue 5/12/06	Tue 5/12/06							
294	Detailed Design Preparation	0%	NA	NA	Mon 18/12/06	Sat 3/3/07							
295	Design Check by Design Checker	0%	NA	NA	Mon 5/3/07	Sat 17/3/07							
298	Door and Ironmongery schedule	19%	Sat 30/9/06	NA	Sat 30/9/06	Thu 5/4/07							
299	Design Preparation & Submission	87%	Sat 30/9/06	NA	Sat 30/9/06	Tue 7/11/06							
300	Design Check by Design Checker	0%	NA	NA	Wed 8/11/06	Tue 21/11/06							
301	RIP by PM	0%	NA	NA	Wed 22/11/06	Tue 5/12/06							
302	RIP for Door and Ironmongery schedule	0%	NA	NA	Tue 5/12/06	Tue 5/12/06							
307	Maintenance access system / Catwalks	18%	Wed 4/10/06	NA	Wed 4/10/06	Thu 5/4/07							
308	Design Preparation & Submission	100%	Wed 4/10/06	Thu 2/11/06	Wed 4/10/06	Tue 7/11/06							
309	Design Check by Design Checker	1%	Thu 2/11/06	NA	Wed 8/11/06	Tue 21/11/06							
310	RIP by PM	0%	NA	NA	Wed 22/11/06	Tue 5/12/06							
311	RIP for Maintenance access system / Catwalks	0%	NA	NA	Tue 5/12/06	Tue 5/12/06							
316	Acoustic Operable Partition	21%	Mon 25/9/06	NA	Mon 25/9/06	Thu 5/4/07							
317	Design Preparation & Submission	100%	Mon 25/9/06	Sat 28/10/06	Mon 25/9/06	Tue 7/11/06							
318	Design Check by Design Checker	8%	Thu 2/11/06	NA	Wed 8/11/06	Tue 21/11/06							
319	RIP by PM	0%	NA	NA	Wed 22/11/06	Tue 5/12/06							
325	Miscellaneous Package I	0%	NA	NA	Thu 7/12/06	Sat 10/3/07							
326	Design Preparation & Submission	0%	NA	NA	Thu 7/12/06	Fri 19/1/07							
327	Design Check by Design Checker	0%	NA	NA	Sat 20/1/07	Fri 2/2/07							
328	RIP by PM	0%	NA	NA	Sat 3/2/07	Fri 16/2/07							
329	RIP for Miscellaneous Package I	0%	NA	NA	Fri 16/2/07	Fri 16/2/07							
330	Detailed Design Preparation	0%	NA	NA	Sat 27/1/07	Wed 7/2/07							
348	Signage	8%	Tue 24/10/06	NA	Tue 24/10/06	Sat 7/4/07							
349	Schematic Design Preparation & Submission	13%	Tue 24/10/06	NA	Tue 24/10/06	Fri 5/1/07							
350	Design Check by Design Checker	0%	NA	NA	Sat 6/1/07	Fri 19/1/07							
351	RIP by PM	0%	NA	NA	Sat 20/1/07	Fri 2/2/07							
357	Electronic Signage	6%	Tue 24/10/06	NA	Tue 24/10/06	Sat 7/4/07							
358	Schematic Design Preparation & Submission	13%	Tue 24/10/06	NA	Tue 24/10/06	Fri 5/1/07							
359	Design Check by Design Checker	0%	NA	NA	Sat 6/1/07	Fri 19/1/07							
360	RIP by PM	0%	NA	NA	Sat 20/1/07	Fri 2/2/07							
366	Miscellaneous Package II (Provisional Item)	0%	NA	NA	Wed 6/12/06	Fri 13/4/07							
367	Confirmation of Provision Item by PM	0%	NA	NA	Wed 6/12/06	Wed 6/12/06							
368	Schematic Design Preparation & Submission	0%	NA	NA	Thu 7/12/06	Fri 19/1/07							
369	Design Check by Design Checker	0%	NA	NA	Sat 20/1/07	Fri 26/1/07							
370	RIP by PM	0%	NA	NA	Sat 27/1/07	Mon 12/2/07							
376	A&A Works Details for Phase I	0%	NA	NA	Sat 25/11/06	Thu 8/2/07							
377	Detailed Design Preparation	0%	NA	NA	Sat 25/11/06	Mon 4/12/06							
378	Design Check by Design Checker	0%	NA	NA	Tue 5/12/06	Tue 19/12/06							
379	DDR for Detailed Design Preparation by PM	0%	NA	NA	Wed 20/12/06	Thu 8/2/07							
381	A&A Works Details for Phase II	0%	NA	NA	Sat 2/12/06	Thu 15/2/07							
382	Detailed Design Preparation	0%	NA	NA	Sat 2/12/06	Mon 11/12/06							

Project: 3 Months Rolling Programme
Based on Master Programme Rev. 1
Date: 2/11/2006

Task
Critical Task



Summary
Split



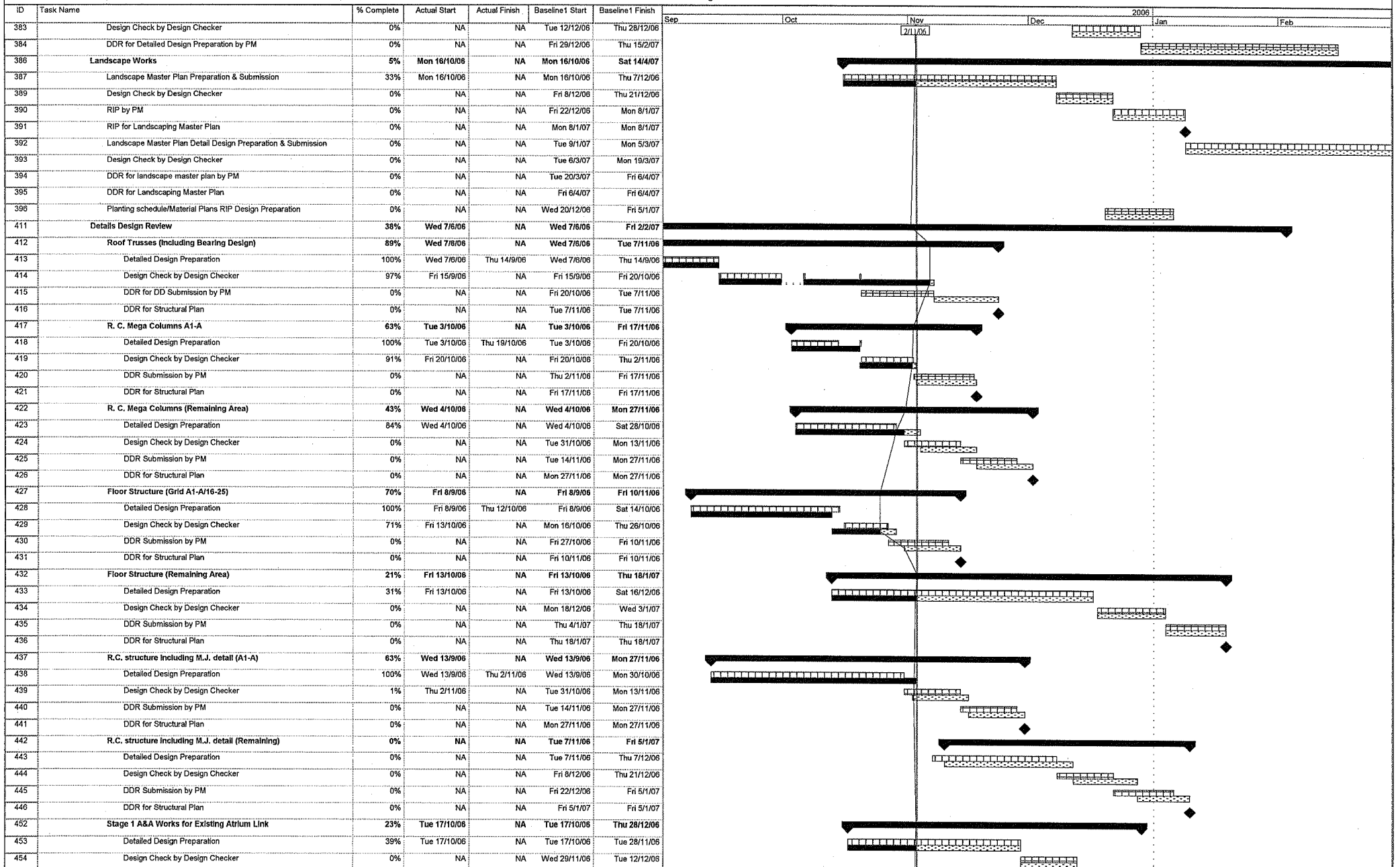
External Tasks
Project Summary



Group By Summary
Baseline 1



Hong Kong Convention and Exhibition Centre
Expansion Project
3 Months Rolling (2Sept06 to 2Jan06)
Based on Master Programme Rev. 1



Project: 3 Months Rolling Programme
Based on Master Programme Rev. 1
Date: 2/11/2006

Task
Critical Task

Progress
Milestone

Summary
Split

External Tasks
Project Summary

Group By Summary
Baseline 1

Hong Kong Convention and Exhibition Centre
Expansion Project
3 Months Rolling (2Sept06 to 2Jan06)
Based on Master Programme Rev. 1

ID	Task Name	% Complete	Actual Start	Actual Finish	Baseline 1 Start	Baseline 1 Finish	2006
455	RIP/DDR Submission by PM	0%	NA	NA	Wed 13/12/06	Thu 28/12/06	Sep Oct Nov Dec Jan Feb
456	RIP/DDR for Structural Plan	0%	NA	NA	Thu 28/12/06	Thu 28/12/06	
457	Stage 2 (Refer Demolition Plan)	23%	Thu 9/10/06	NA	Thu 5/10/06	Fri 2/2/07	
468	BS Design	60%	Wed 14/6/06	NA	Wed 14/6/06	Thu 8/2/07	
469	BS - HVAC	68%	Fri 14/7/06	NA	Fri 14/7/06	Thu 18/1/07	
470	Review In Principle	85%	Fri 14/7/06	NA	Fri 14/7/06	Wed 22/11/06	
471	Stage 1	100%	Fri 14/7/06	Mon 9/10/06	Fri 14/7/06	Mon 9/10/06	
472	Schematic Design of All HVAC Installation Preparation & Subr	100%	Fri 14/7/06	Wed 16/8/06	Fri 14/7/06	Wed 16/8/06	
473	Design Check by Design Checker	100%	Thu 17/8/06	Fri 15/9/06	Thu 17/8/06	Fri 15/9/06	
474	RIP by PM	100%	Mon 18/9/06	Mon 9/10/06	Mon 18/9/06	Mon 9/10/06	
475	RIP for Schematic Design	100%	Mon 9/10/06	Mon 9/10/06	Mon 9/10/06	Mon 9/10/06	
476	Stage 2	73%	Wed 16/8/06	NA	Wed 16/8/06	Wed 22/11/06	
477	Preliminary HVAC Installation Preparation & Submission	100%	Wed 16/8/06	Mon 18/9/06	Wed 16/8/06	Mon 18/9/06	
478	Design Check by Design Checker	89%	Thu 21/8/06	NA	Tue 19/9/06	Tue 31/10/06	
479	RIP by PM	0%	NA	NA	Wed 1/11/06	Wed 22/11/06	
480	RIP for Schematic Design	0%	NA	NA	Wed 22/11/06	Wed 22/11/06	
481	Details Design Review	43%	Tue 5/9/06	NA	Tue 5/9/06	Thu 18/1/07	
482	Detailed Design Preparation	69%	Tue 5/9/06	NA	Tue 5/9/06	Tue 28/11/06	
483	Design Check by Design Checker	0%	NA	NA	Wed 29/11/06	Wed 27/12/06	
484	DDR for HVAC Submission by PM	0%	NA	NA	Thu 28/12/06	Thu 18/1/07	
485	DDR for HVAC	0%	NA	NA	Thu 18/1/07	Thu 18/1/07	
486	BS - Electrical	64%	Fri 28/7/06	NA	Fri 28/7/06	Fri 12/1/07	
487	Review In Principle	83%	Fri 28/7/06	NA	Fri 28/7/06	Wed 22/11/06	
488	Stage 1	100%	Fri 28/7/06	Fri 6/10/06	Fri 28/7/06	Fri 6/10/06	
489	Electrical System Design Preparation & Submission	100%	Fri 28/7/06	Fri 25/8/06	Fri 28/7/06	Fri 25/8/06	
490	Design Check by Design Checker	100%	Sat 26/8/06	Fri 15/9/06	Sat 26/8/06	Fri 15/9/06	
491	RIP by PM	100%	Sat 16/9/06	Fri 6/10/06	Sat 16/9/06	Fri 6/10/06	
492	RIP for Electrical System Design	100%	Fri 6/10/06	Fri 6/10/06	Fri 6/10/06	Fri 6/10/06	
493	Stage 2	71%	Fri 25/8/06	NA	Fri 25/8/06	Wed 22/11/06	
494	Electrical Layouts Preparation & Submission	100%	Fri 25/8/06	Thu 28/9/06	Fri 25/8/06	Thu 28/9/06	
495	Design Check by Design Checker	86%	Fri 29/9/06	NA	Fri 29/9/06	Tue 31/10/06	
496	RIP by PM	0%	NA	NA	Wed 1/11/06	Wed 22/11/06	
497	RIP for Electrical Layouts	0%	NA	NA	Wed 22/11/06	Wed 22/11/06	
498	Details Design Review	35%	Mon 25/9/06	NA	Mon 25/9/06	Fri 12/1/07	
499	Detailed Design Preparation	63%	Mon 25/9/06	NA	Mon 25/9/06	Thu 23/11/06	
500	Design Check by Design Checker	0%	NA	NA	Fri 24/11/06	Tue 19/12/06	
501	DDR for Electrical Submission by PM	0%	NA	NA	Wed 20/12/06	Fri 12/1/07	
502	DDR for Electrical	0%	NA	NA	Fri 12/1/07	Fri 12/1/07	
503	BS - Lift and Escalator	68%	Wed 19/7/06	NA	Wed 19/7/06	Sat 23/12/06	
504	Schematic Design Preparation & Submission	100%	Wed 19/7/06	Tue 29/8/06	Wed 19/7/06	Tue 29/8/06	
505	Design Check by Design Checker	100%	Wed 30/8/06	Wed 13/9/06	Wed 30/8/06	Wed 13/9/06	
506	RIP by PM	100%	Thu 14/9/06	Wed 4/10/06	Thu 14/9/06	Wed 4/10/06	
507	RIP for Schematic Design	100%	Wed 4/10/06	Tue 10/10/06	Wed 4/10/06	Wed 4/10/06	
508	Detailed Design Preparation	93%	Mon 2/10/06	NA	Mon 2/10/06	Sat 4/1/06	
509	Design Check by Design Checker	0%	NA	NA	Mon 6/11/06	Fri 1/12/06	
510	DDR for Lift and Escalator Submission by PM	0%	NA	NA	Sat 2/12/06	Sat 23/12/06	
511	DDR for Lift and Escalator	0%	NA	NA	Sat 23/12/06	Sat 23/12/06	
512	BS - Fire Services	63%	Wed 14/6/06	NA	Wed 14/6/06	Sat 13/1/07	
513	Review In Principle	87%	Wed 14/6/06	NA	Wed 14/6/06	Fri 17/11/06	
514	Stage 1	100%	Wed 14/6/06	Mon 9/10/06	Wed 14/6/06	Mon 9/10/06	
515	Schematic Design Preparation & Submission	100%	Wed 14/6/06	Wed 23/8/06	Wed 14/6/06	Wed 23/8/06	

Project: 3 Months Rolling Programme
Based on Master Programme Rev. 1
Date: 2/11/2006

Task
Critical Task

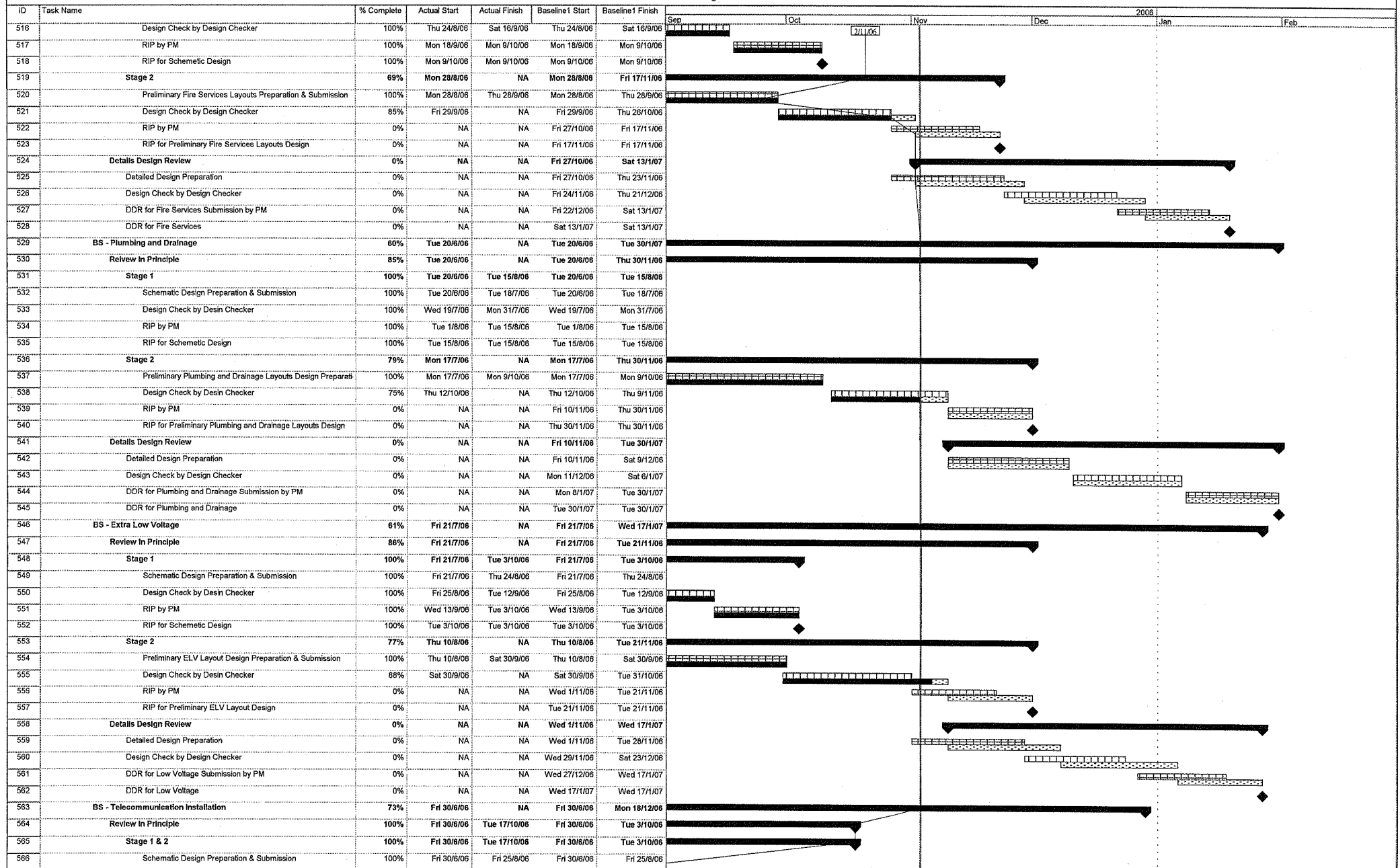
Progress
Milestone

Summary
Split











External Tasks
Project Summary

Group By Summary
Baseline 1

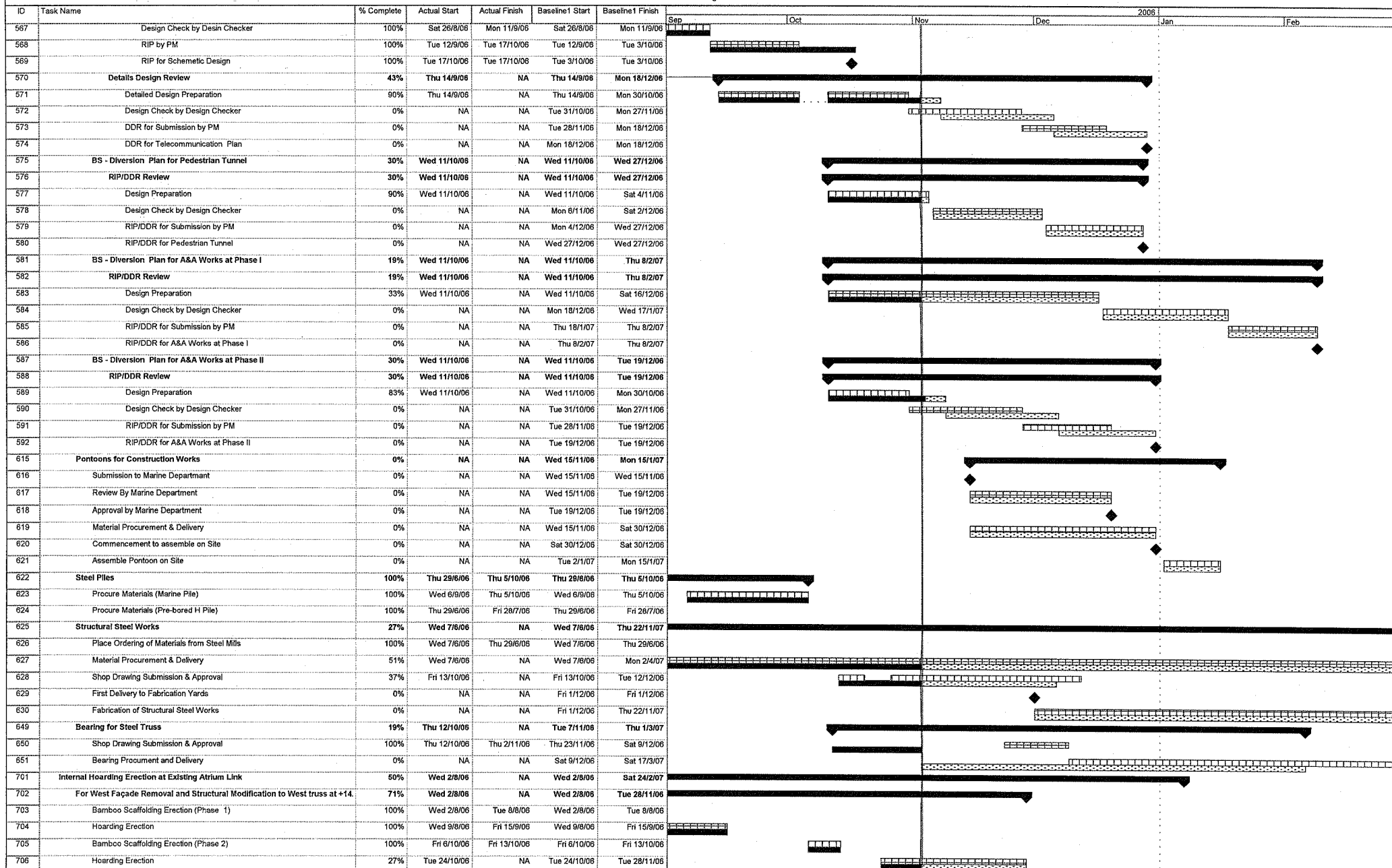
Hong Kong Convention and Exhibition Centre
Expansion Project
3 Months Rolling (2Sept06 to 2Jan06)
Based on Master Programme Rev. 1



Project: 3 Months Rolling Programme
Based on Master Programme Rev. 1
Date: 2/11/2006

Task  Progress  Summary  External Tasks  Group By Summary 
Critical Task  Milestone  Split  Project Summary  Baseline 1 

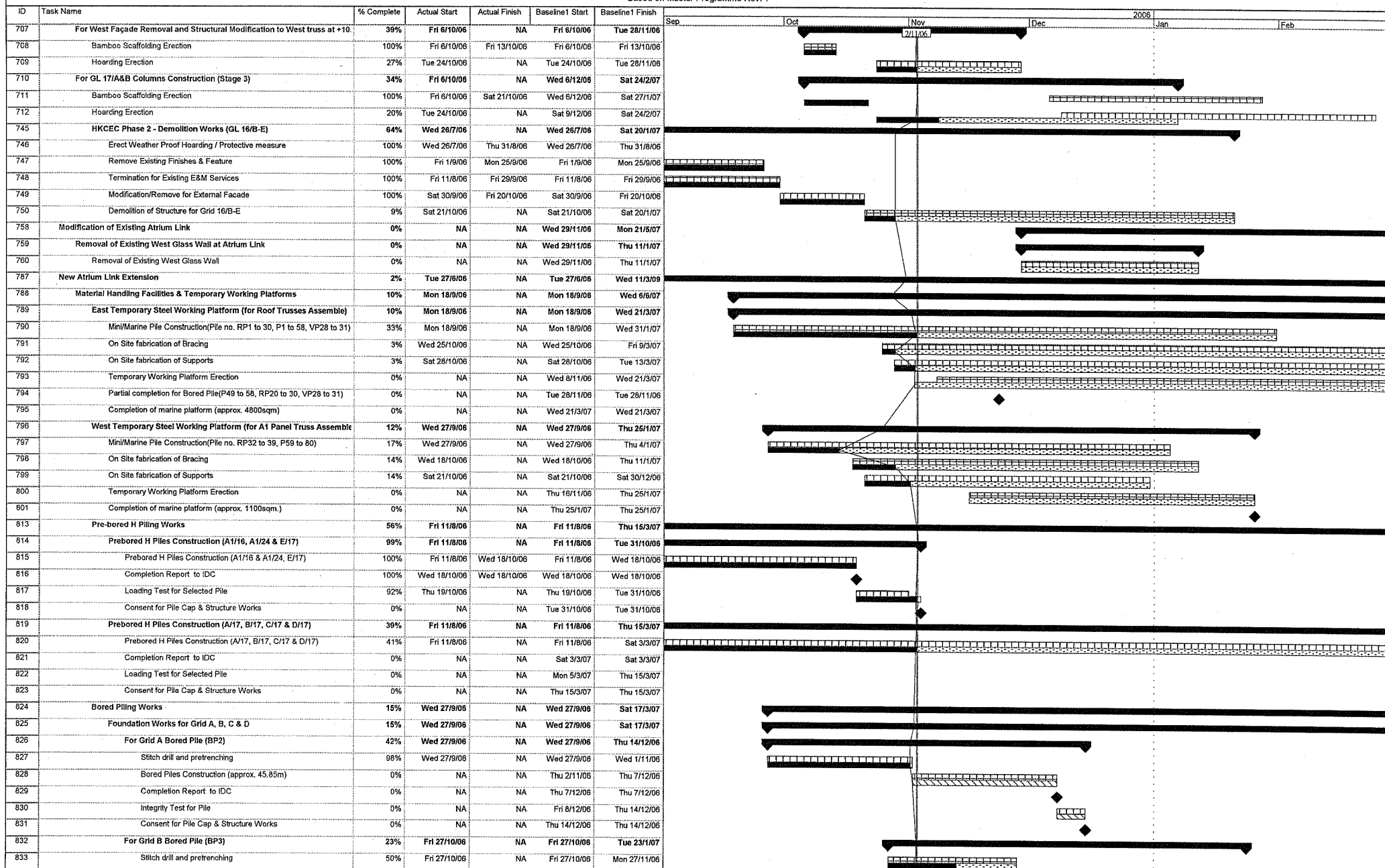
Hong Kong Convention and Exhibition Centre
Expansion Project
3 Months Rolling (2Sep06 to 2Jan06)
Based on Master Programme Rev. 1



Project: 3 Months Rolling Programme
Based on Master Programme Rev. 1
Date: 2/11/2006

Task: Progress (solid bar), Milestone (diamond), Summary (thick bar), Split (thin bar), External Tasks (dashed bar), Project Summary (dotted bar), Group By Summary (thick bar), Baseline 1 (dashed bar), Critical Task (hatched bar)

Hong Kong Convention and Exhibition Centre
Expansion Project
3 Months Rolling (2Sept06 to 2Jan06)
Based on Master Programme Rev. 1



Project: 3 Months Rolling Programme
Based on Master Programme Rev. 1
Date: 2/11/2006

Task
Critical Task

Progress
Milestone

Summary
Split

External Tasks
Project Summary

Group By Summary
Baseline 1

Hong Kong Convention and Exhibition Centre
Expansion Project
3 Months Rolling (2Sept06 to 2Jan06)
Based on Master Programme Rev. 1

ID	Task Name	% Complete	Actual Start	Actual Finish	Baseline1 Start	Baseline1 Finish	Sep	Oct	Nov	Dec	2006	Jan	Feb
834	Bored Piles Construction (approx. 44.85m)	0%	NA	NA	Fri 8/12/06	Tue 9/1/07							
835	Completion Report to IDC	0%	NA	NA	Tue 9/1/07	Tue 9/1/07							
836	Integrity Test for Pile	0%	NA	NA	Wed 17/1/07	Tue 23/1/07							
837	Consent for Pile Cap & Structure Works	0%	NA	NA	Tue 23/1/07	Tue 23/1/07							
838	For Grid C Bored Pile (BP4)	0%	NA	NA	Sat 9/12/06	Sat 17/3/07							
839	Stitch drill and pretrenching	0%	NA	NA	Sat 9/12/06	Tue 16/1/07							
841	Bored Piles Construction (approx. 41.15m)	0%	NA	NA	Wed 31/1/07	Sat 3/3/07							
842	Completion Report to IDC	0%	NA	NA	Sat 3/3/07	Sat 3/3/07							
843	Integrity Test for Piles	0%	NA	NA	Mon 12/3/07	Sat 17/3/07							
844	Consent for superstructure Works	0%	NA	NA	Sat 17/3/07	Sat 17/3/07							
845	For Grid D Bored Pile (BP5)	0%	NA	NA	Sat 18/1/06	Mon 12/2/07							
846	Stitch drill and pretrenching	0%	NA	NA	Sat 18/1/06	Sat 23/12/06							
848	Bored Piles Construction (approx. 40.5m)	0%	NA	NA	Wed 10/1/07	Mon 29/1/07							
849	Completion Report to IDC	0%	NA	NA	Mon 29/1/07	Mon 29/1/07							
850	Integrity Test for Piles	0%	NA	NA	Tue 6/2/07	Mon 12/2/07							
851	Consent for superstructure Works	0%	NA	NA	Mon 12/2/07	Mon 12/2/07							
852	Substructure Construction - Grid 16 & 17	2%	Fri 27/10/06	NA	Wed 1/11/06	Sat 28/4/07							
853	Pile Cap Construction (A1/16 & E/17)	4%	Fri 27/10/06	NA	Wed 1/11/06	Sat 9/12/06							
854	Pile Cap A1/16(29m3) & A1/24(63.5m3)	5%	Fri 27/10/06	NA	Wed 1/11/06	Thu 30/11/06							
855	Pile Cap E/17(100m3)	0%	NA	NA	Fri 1/12/06	Sat 9/12/06							
858	Substructure Construction - Grid 24	0%	NA	NA	Fri 15/12/06	Sat 3/2/07							
859	Pile Cap Construction (Grid A1a/24)	0%	NA	NA	Fri 15/12/06	Wed 27/12/06							
860	Pile Cap Construction(24m3)	0%	NA	NA	Fri 15/12/06	Wed 27/12/06							
863	Superstructure	0%	NA	NA	Thu 30/11/06	Sat 21/6/08							
864	Columns to Steel Truss - Grid 17	0%	NA	NA	Fri 1/12/06	Fri 5/10/07							
865	Column A1/16	0%	NA	NA	Fri 1/12/06	Fri 22/12/06							
866	R.C Mega Columns for A1/16(26m3)	0%	NA	NA	Fri 1/12/06	Tue 19/12/06							
867	Bearing Installation at Column A1/16	0%	NA	NA	Wed 20/12/06	Fri 22/12/06							
883	Columns to Steel Truss - Grid 24	0%	NA	NA	Fri 1/12/06	Thu 31/5/07							
884	Column A1/24	0%	NA	NA	Fri 1/12/06	Fri 22/12/06							
885	R.C. Mega Columns for A1/24(30m3)	0%	NA	NA	Fri 1/12/06	Tue 19/12/06							
886	Bearing Installation at Column A1/24	0%	NA	NA	Wed 20/12/06	Fri 22/12/06							
887	Column A1a/24	0%	NA	NA	Thu 28/12/06	Sat 24/2/07							
888	R.C. Mega Columns for A1a/24 (+4 to +14.4, 84m3)	0%	NA	NA	Thu 28/12/06	Mon 15/1/07							
889	R.C. Mega Columns for A1a/24 (+14.4 to +51.8, 300m3)	0%	NA	NA	Tue 16/1/07	Wed 21/2/07							
890	Bearing Installation at Column A1a/24	0%	NA	NA	Thu 22/2/07	Sat 24/2/07							
900	Steel Roof Trusses and Superstructure	0%	NA	NA	Thu 30/11/06	Sat 21/6/08							
901	Panel Truss A1	0%	NA	NA	Thu 30/11/06	Sat 21/6/08							
902	Assembly on Steel Truss A1(907tons)	0%	NA	NA	Sat 23/12/06	Thu 15/3/07							
942	BS Installation	0%	NA	NA	Thu 30/11/06	Sat 19/5/07							
943	Approval of Disable Hydraulic Lift	0%	NA	NA	Thu 30/11/06	Thu 30/11/06							
944	Disable Hydraulic Lift installation	0%	NA	NA	Fri 23/3/07	Fri 20/4/07							

Project: 3 Months Rolling Programme
Based on Master Programme Rev. 1
Date: 2/11/2006

Task  Progress -  Summary  External Tasks  Group By Summary 
Critical Task  Milestone  Split  Project Summary  Baseline 1 