

Hip Hing – Ngo Kee Joint Venture

Hong Kong Convention and
Exhibition Centre Expansion
Project:

*Monthly Environmental Monitoring
and Audit Report for September 2007*

October 2007

Environmental Resources Management

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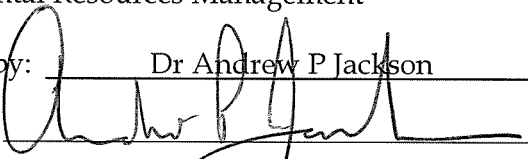
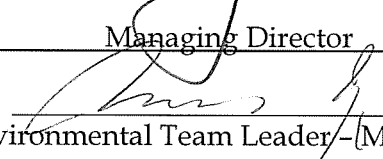
ENVIRONMENTAL MONITORING &
AUDIT REPORT

Hip Hing – Ngo Kee Joint Venture

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Exhibition Centre Expansion
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Reference 0050690

For and on behalf of	
Environmental Resources Management	
Approved by:	Dr Andrew P Jackson
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Position:	Managing Director
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Date:	12 October 2007

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EXECUTIVE SUMMARY

The construction works for Hong Kong Convention and Exhibition Centre Expansion Project (EIAO Register No: AEIAR-100/2006) commenced on 1 August 2006. This is the fourteenth monthly Environmental Monitoring and Audit (EM&A) report presenting the EM&A works carried out during the period from 1 September 2007 to 30 September 2007 in accordance with the EM&A Manual.

Summary of Construction Works undertaken during the Reporting Period

The major construction works undertaken during the reporting period included the construction of permanent mini-piles at northern shore, construction of RC column, removal of level 5 and level 7 structures of Atrium Link, removal of east primary truss (down to L5) and erection of transfer truss.

Environmental Monitoring and Audit Progress

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

24-hour Total Suspended Particulates (TSP) monitoring	4 sets
1-hour TSP monitoring	13 sets
Environmental site auditing	4 times

Air Quality

Four sets of 24-hour and thirteen 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

Water quality monitoring at the designated monitoring stations (W3, W4 and W5) was not conducted during the reporting month subsequent to the completion of installation of marine piles on 23 April 2007. Additional water quality monitoring was also completed on 21 May 2007.

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 309.5 tonnes of inert C&D materials and 295.5 tonnes of C&D wastes were generated during the reporting month. The C&D wastes and inert C&D materials generated from the Project were disposed of at SENT Landfill / Tseung Kwan O Area 137 Fill Bank and the public fill barging point at Quarry Bay respectively.

Environmental Site Auditing

Four 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 month are construction of permanent mini-piles at northern shore, construction of RC column, demolition of Level 5 structures of Atrium Link and erection of transfer truss.

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 Project (the Project).

1.1 PURPOSE OF THE REPORT

This is the fourteenth EM&A report which summarises the impact monitoring results and audit findings of the EM&A programme during the reporting period from **1 September 2007 to 30 September 2007**.

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

summarises background and scope of the Project, site description, project organisation 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

summarises 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

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

Section 5 : Monitoring Results

summarises the monitoring results obtained in the reporting period.

Section 6 : Environmental Site Auditing

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

Section 7 : Environmental Non-conformance

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

Section 8 : **Future Key Issues**

summarises 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 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). An Environmental Permit (EP-239/2006) for the works was granted on 12 May 2006. An application for variation of the Environmental Permit was made on 25 January 2007, an amended Environmental Permit (EP-239/2006/A) was granted on 12 February 2007. Under the requirements of Condition 3.1 of Environmental Permit EP-239/2006/A, an EM&A programme as set out in the EM&A Manual and its supplement 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 during the Reporting Month*

Construction Activities Undertaken
<ul style="list-style-type: none"> • Construction of permanent mini-piles at northern shore • Construction of RC column • Removal of Level 5 and Level 7 structures of Atrium Link • Removal of East Primary Truss (down to L5) • Erection of transfer truss

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/A	Throughout the Contract	Environmental Permit (EP) EP-239/2006 granted originally on 12 May 2006 but superseded by revised EP issued on 12 February 2007
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.

Permit/ Licenses/ Notification	Reference	Validity Period	Remarks
Valid Construction Noise Permit for area inside the Atrium Link	GW-RS0323-07	Valid from 8 June 2007 to 1 December 2007	
	GW-RS0394-07	Valid from 1 July 2007 to 31 October 2007	
	GW-RS0373-07	Valid from 20 June 2007 to 19 December 2007	
	GW-RS0535-07	Valid from 27 August 2007 to 30 November 2007	

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*. Maps 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 months 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 summarises 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 HVS's 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 HVS's were free-standing with no obstruction.

The following criteria were considered in the installation of the HVS's:

- 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 labelled 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 HVS's 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 aluminium strip;
- the HVS's 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 HVS's 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 HVS's 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 HVS's using Tisch TE-5025 A Calibration Kit. The calibration records for the HVS's are given in *Annex F*.

3.1.7 *Event Action Plan*

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

3.2 *WATER QUALITY MONITORING*

In accordance with the EM&A Manual, the marine water quality monitoring should be conducted at three designated monitoring stations during the installation and removal of temporary marine piles. The installation of temporary marine piles was completed on 23 April 2007 and therefore water quality monitoring was not conducted during the reporting month.

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 summarised in *Annex I*.

⁽¹⁾ The last Monthly EM&A Report for August 2007 was submitted to the EPD on 11 September 2007.

5.1 AIR QUALITY

The monitoring data at AM1 and AM2 were provided by ETS-Testconsult Ltd. Four sets of 24-hour and thirteen 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*. In addition, the monitoring results can also be found at the web-site (<http://www.hkcecema.com/index.html>).

The weather condition during the monitoring period was 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 not conducted during the reporting month at the designated monitoring stations (W3, W4 and W5) subsequent to the completion of installation of marine piles on 23 April 2007.

5.3 WASTE MANAGEMENT

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 J*). 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 summarised in *Table 5.1*. The C&D wastes and inert C&D materials generated from the Project were disposed of at SENT Landfill / Tseung Kwan O Area 137 Fill Bank and the public fill barging point at Quarry Bay respectively.

Table 5.1 Quantities of Waste Generated from the Project

Month / Year	Quantity		
	C&D Materials (inert) ^(a)	C&D Materials (non-inert) ^(b)	Chemical Waste
September 2007	309.5 tonnes	295.5 tonnes (excluding 514 tonnes of steel materials which were collected and recycled)	0
Notes:			
(a) Inert C&D materials include bricks, concrete, building debris, rubble and excavated soil. 0.5 tonne of inert C&D materials was reused 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. The 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. Four site inspections were conducted on 6, 13, 20 and 27 September 2007 respectively. There was no non-compliance event recorded in the reporting month.

Environmental issues observed during the site audits were related to the site tidiness. Major findings and recommendations are summarised as follows:

- (i) Floating debris was observed to be accumulated along a section of the eastern rubbish boom and a small amount of the debris was released into the marine channel. The Contractor is recommended to remove the accumulated debris ASAP. Corrective action was taken by the Contractor in the reporting period.
- (ii) A small amount of mud was observed on Expo Drive Central and it was suspected that the mud seep from sand bag barrier at Minipile MP 15. The Contractor is recommended to remove the mud left on the road and provide additional measure to prevent similar incident. Corrective action was taken by the Contractor in the reporting period.
- (iii) It was observed that the some of the drums placed in chemical waste store were not provided with chemical waste label. The Contractor is recommended to provide suitable label in accordance with *Code of Practice on the Packaging, Handling and Storage of Chemical Wastes*. Corrective action was taken by the Contractor 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 at three designated discharge points complies with the requirements of discharge license. Two water samples at Discharge Point 2 and Discharge Point 3 were conducted on 13 September 2007. *Table 6.1* shows that the effluent discharged from the project was in compliance with the discharge limit stipulated in the Water Discharge License. The laboratory testing reports of the water sampling and the map showing the locations of discharge points are presented in *Annex L*.

Table 6.1 *Results of Water Discharge Sampling*

Sampling Location	Parameter	Test Result	Discharge Limit
Discharge Point 2	pH	8.2	6-9
(H200605 WT-25)	Total Suspended Solids (TSS) Dried at 103-105°C (mg/L)	<3	≤30
	Chemical Oxygen Demand (COD) (mgO ₂ /L)	<50	≤80

Sampling Location	Parameter	Test Result	Discharge Limit
Discharge Point 3	pH	8.2	6-9
(H200605 WT-21)	Total Suspended Solids (TSS) Dried at 103-105°C (mg/L)	6.8	≤30
	Chemical Oxygen Demand (COD) (mgO ₂ /L)	<50	≤80

Landscape and Visual Monitoring

In accordance with *Section 6.7* of the EM&A Manual, bi-weekly landscape and visual monitoring is required to ensure that the design, implementation and maintenance of landscape and visual mitigation measures are fully achieved. The monitoring has commenced since January 2007 and is conducted by Earthasia Limited. Landscape and visual mitigation measures were implemented by the Contractor with the implementation status is given in *Annex I*.

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.

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 carried out for the coming monitoring period are summarised 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"> • Construction of permanent mini-piles at northern shore • Construction of RC column • Removal of Level 5 structures of Atrium Link • Transfer truss installation

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 next month is presented in *Annex E*. The environmental monitoring will be conducted at the same monitoring locations as those for this reporting month.

The installation of temporary marine piles was completed on 23 April 2007 and four weeks of additional water quality monitoring was also completed on 21 May 2007 after the completion of marine piling works. Four weeks of additional water quality will be conducted within the next dry season (ie November 2007 to March 2008) and the exact monitoring period will be determined in October 2007.

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

9.1 AIR QUALITY

Since the EIA only have qualitative assessment of dust impact during construction phase, the comparison was made between the 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	75	23 – 145
AM2	AM6	260	69	23 - 145

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 and the reporting month.

The monitoring results show that the 24-hour TSP levels during the reporting period were well below the 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 effective.

9.2 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 were implemented during the reporting period and regarded as effective.

Table 9.2 *Comparison of the Estimated and 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 temporary footbridge	585 tonnes	0
Demolition of existing Atrium Link	4,680 tonnes	2,339 tonnes
Demolition of temporary working platform	390 tonnes	0
Construction of foundations and pile caps	20,000 tonnes	15,622.5 tonnes
General Refuse	Insignificant	873 tonnes
Chemical Waste	Small	288 Litres
Remark: (1) The actual amount of C&D Materials was recorded since the commencement of construction works.		

9.3 CONCLUSION OF REVIEW

The EIA predictions and the monitoring results during the reporting period have been reviewed. The EIA concluded that the Project would not cause adverse impacts to the environment, and the monitoring results also indicated that the construction of the Project has not caused 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 work undertaken during the period from 1 September to 30 September 2007 in accordance with EM&A Manual and the requirements under EP-239/2006/A.

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.

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

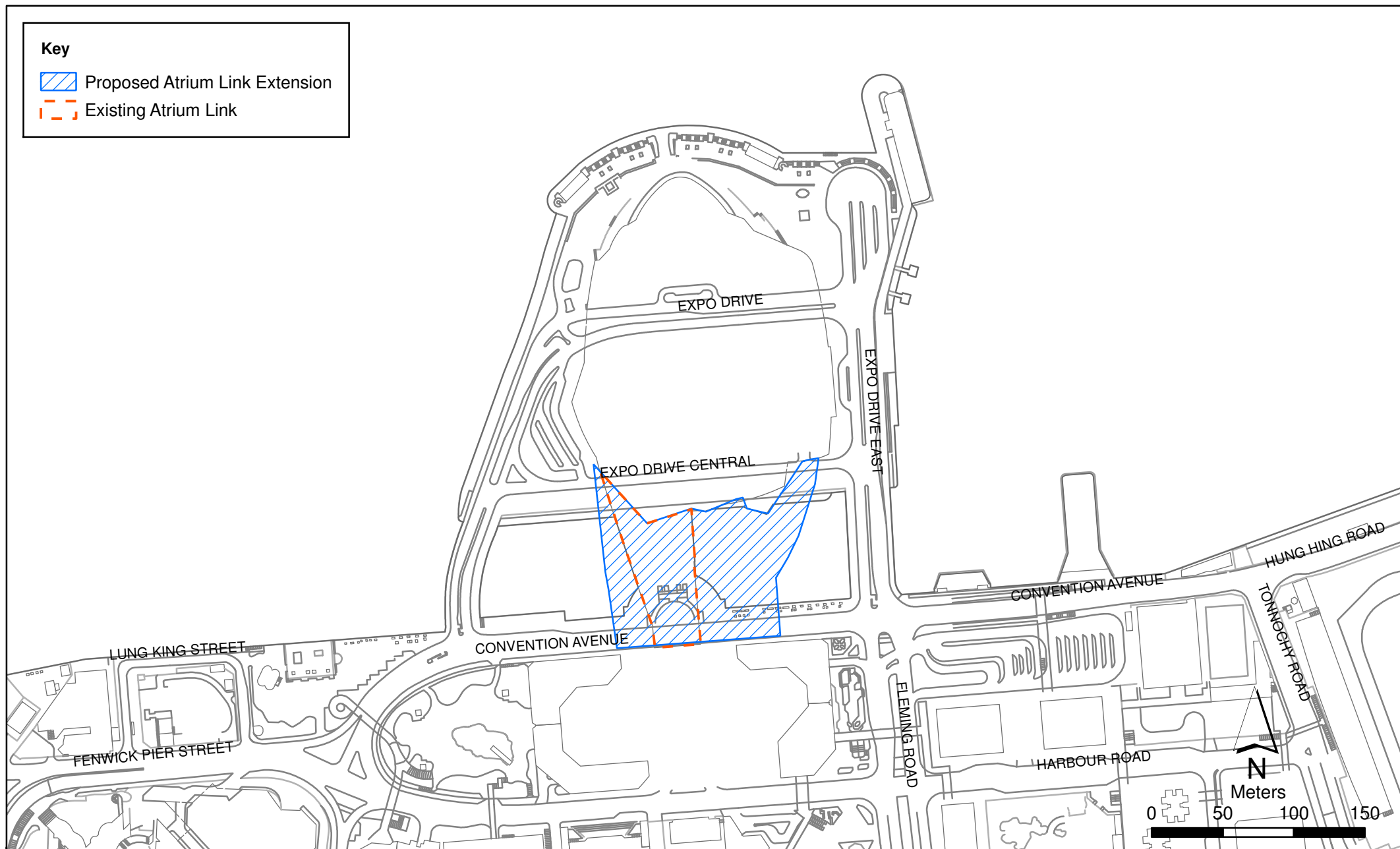
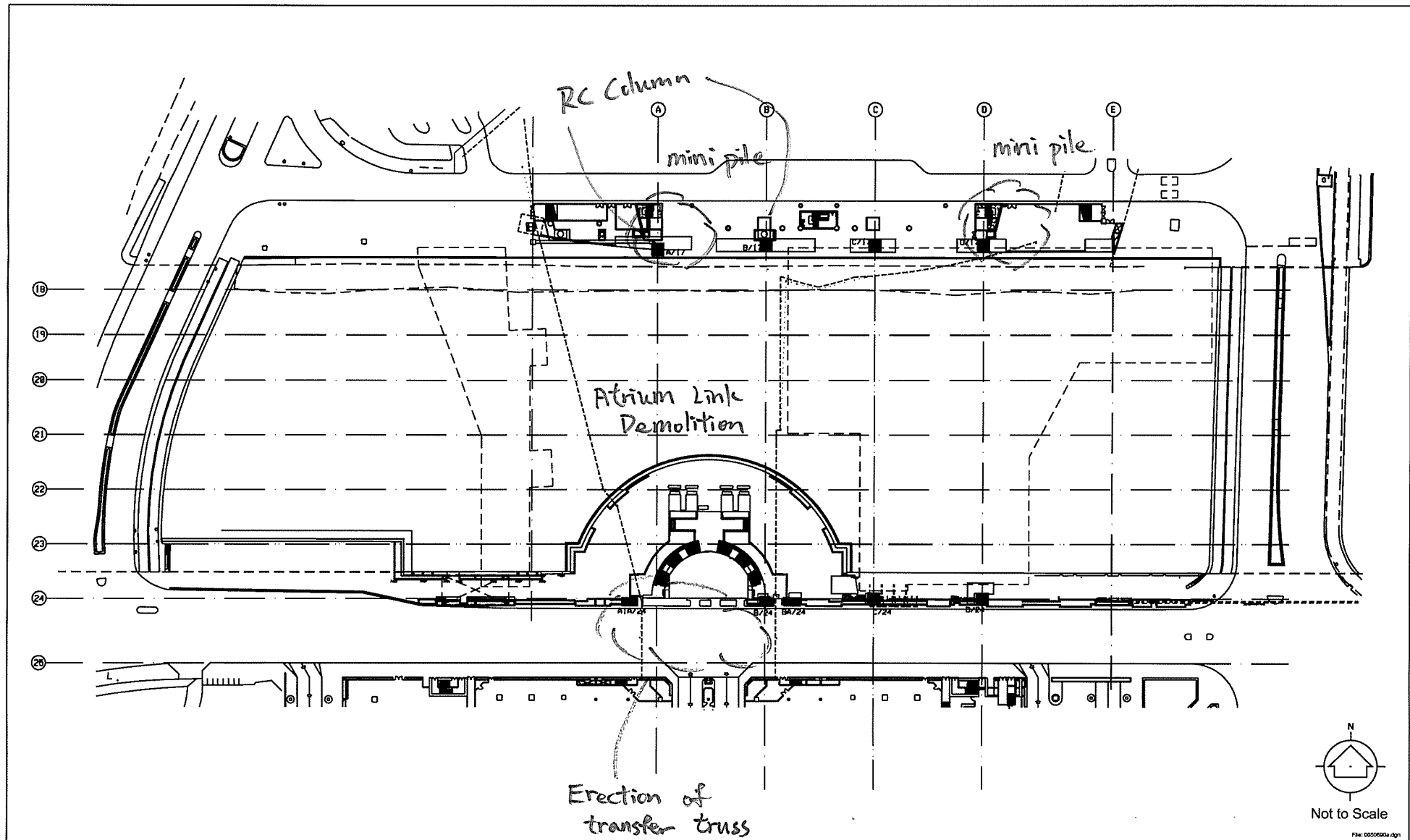


Figure A1

Location of Atrium Link Extension

Annex B

Location of Construction
Activities during the
Reporting Month



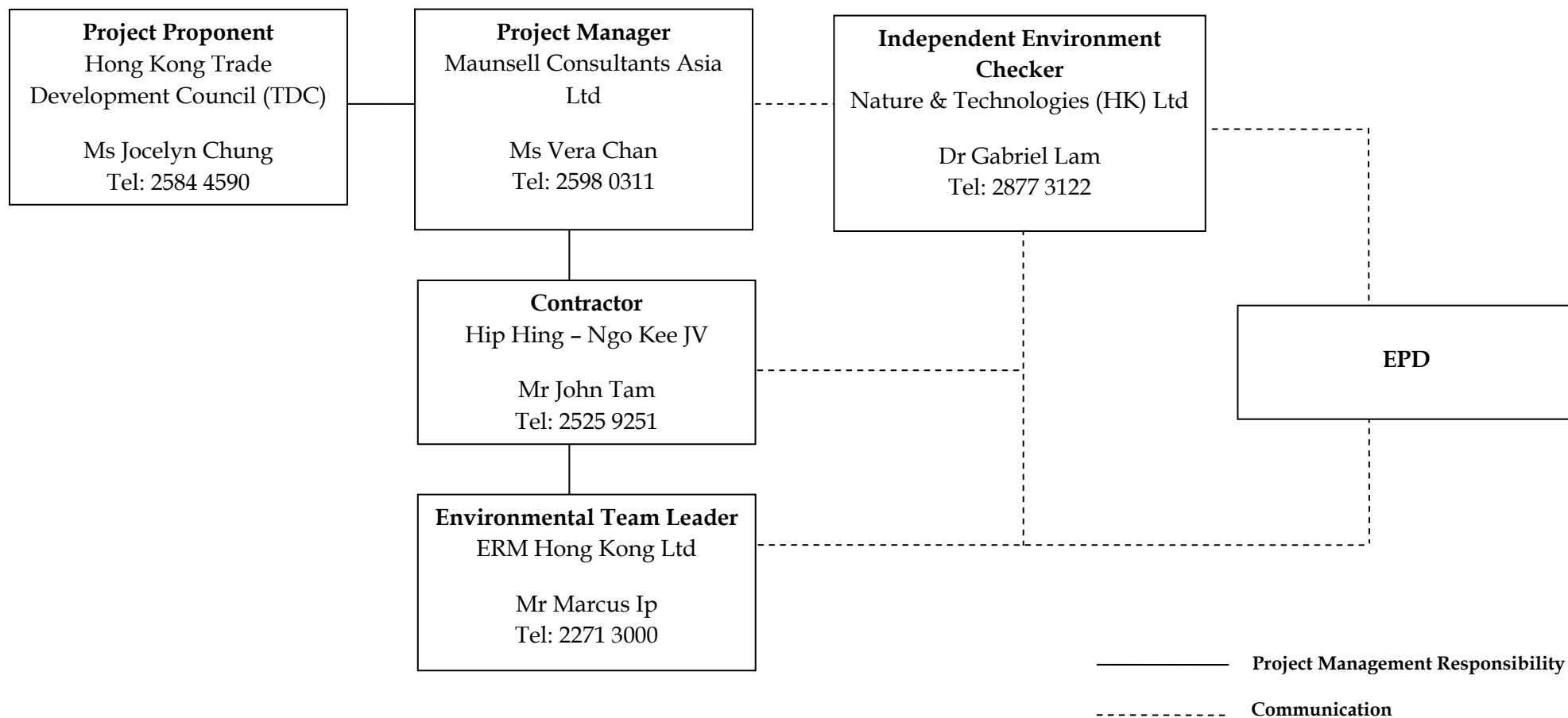
Summary of Works for September 2007

Description	Location
Construction of permanent mini-pile at North shore	Grid A1-A/16-17 Grid D-E/16-17
Construction of RC column	Grid A/17, B/17
Removal of Level 5 slabs	Grid 16.1-22
Removal of Level 5 (Backspan)	Grid 22-23
Removal of Level 7	Grid 16-23
Removal of East Primary Truss (down to L5)	Grid 16-23
Erection of transfer truss	Grid A-B/24

Annex C

Project Organization Chart and Contact Detail

Project Organization (with contact details)



Annex D

Location of Monitoring Stations

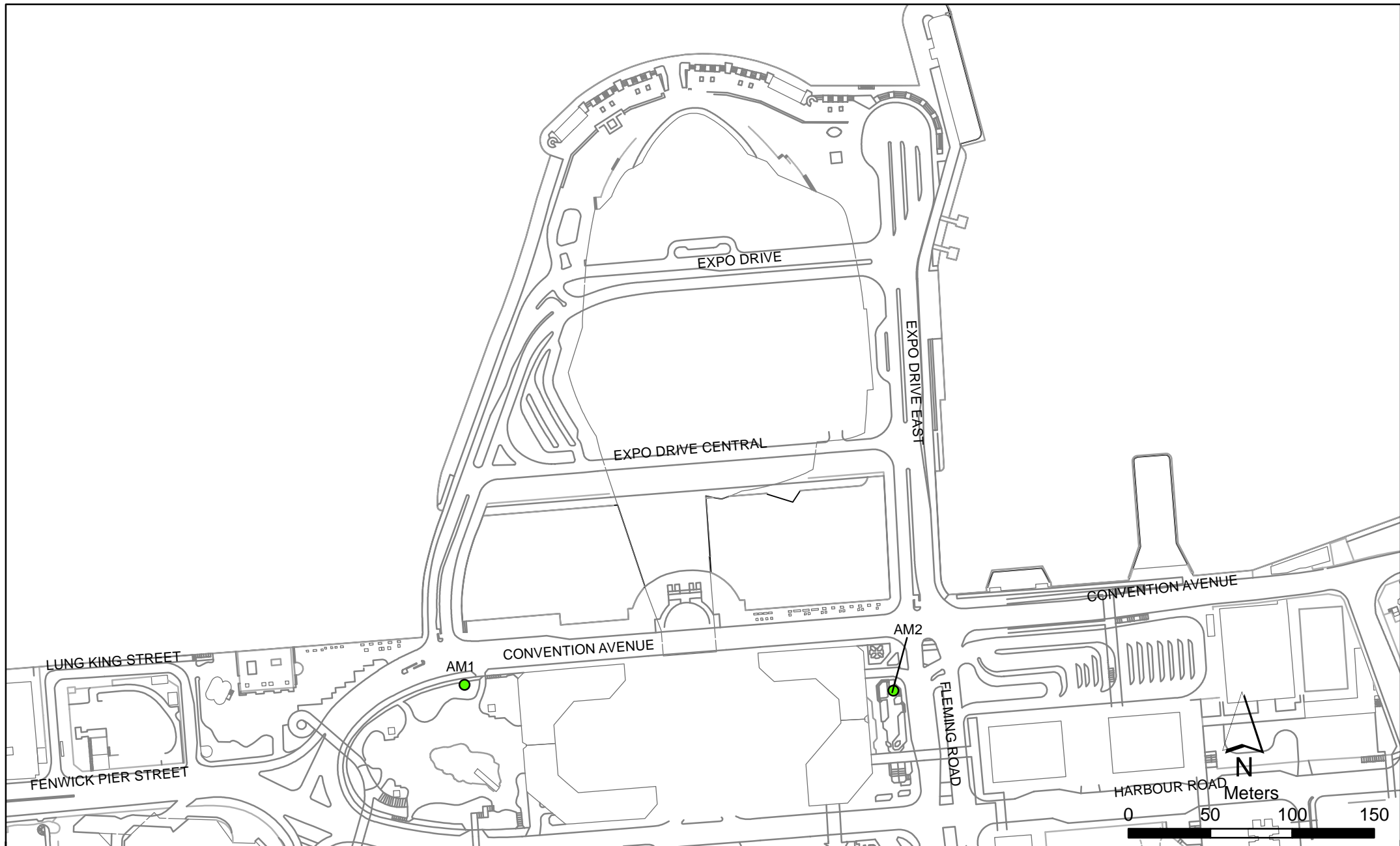


Figure D1

Air Quality Monitoring Station



Air Quality Monitoring Station (AM1)



Air Quality Monitoring Station (AM2)

Annex E

Monitoring Schedule for the Reporting Period and Next Month

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

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						01-Sep
02-Sep	03-Sep	04-Sep	05-Sep	06-Sep	07-Sep	08-Sep
			Air Monitoring 1 hr TSP		Air Monitoring 1 hr and 24 hr TSP	
09-Sep	10-Sep	11-Sep	12-Sep	13-Sep	14-Sep	15-Sep
	Air Monitoring 1 hr TSP		Air Monitoring 1 hr TSP	Air Monitoring 1 hr and 24 hr TSP	Air Monitoring 1 hr TSP	
16-Sep	17-Sep	18-Sep	19-Sep	20-Sep	21-Sep	22-Sep
	Air Monitoring 1 hr TSP		Air Monitoring 1 hr and 24 hr TSP		Air Monitoring 1 hr TSP	
23-Sep	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep	29-Sep
	Air Monitoring 1 hr TSP	Air Monitoring 1 hr and 24 hr TSP			Air Monitoring 1 hr TSP	
30-Sep						

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

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	01-Oct	02-Oct	03-Oct	04-Oct	05-Oct	06-Oct
		Air Monitoring 1 hr and 24 hr TSP		Air Monitoring 1 hr TSP		Air Monitoring 1 hr TSP
07-Oct	08-Oct	09-Oct	10-Oct	11-Oct	12-Oct	13-Oct
	Air Monitoring 1 hr and 24 hr TSP		Air Monitoring 1 hr TSP		Air Monitoring 1 hr TSP	Air Monitoring 1 hr and 24 hr TSP
14-Oct	15-Oct	16-Oct	17-Oct	18-Oct	19-Oct	20-Oct
	Air Monitoring 1 hr TSP		Air Monitoring 1 hr TSP	Air Monitoring 1 hr and 24 hr TSP		Air Monitoring 1 hr TSP
21-Oct	22-Oct	23-Oct	24-Oct	25-Oct	26-Oct	27-Oct
	Air Monitoring 1 hr TSP		Air Monitoring 1 hr and 24 hr TSP		Air Monitoring 1 hr TSP	
28-Oct	29-Oct	30-Oct	31-Oct			
	Air Monitoring 1 hr TSP	Air Monitoring 1 hr and 24 hr TSP	Air Monitoring 1 hr TSP			

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

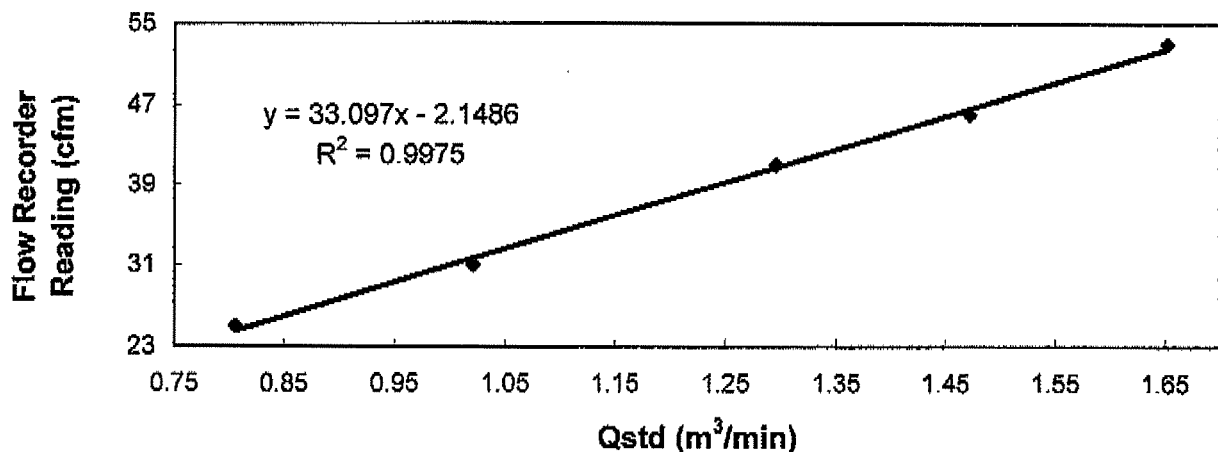
Calibration Report of High Volume Air Sampler

Manufacturer : Graseby GMW **Date of Calibration** : 27 August 2007
Serial No. : 9864 (ET/EA/003/19) **Calibration Due Date** : 26 October 2007
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)	53	46	41	31	25
Qstd (Actual flow rate, m ³ /min)	1.60	1.47	1.30	1.02	0.81
Pressure :	759.06 mm Hg			Temp. :	304 K

Sampler 9864 Calibration Curve Site: Wan Chai (AM-1) Date of Calibration: 27 August 2007



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 : Li Wan Lung
(Technician)

Approved by : 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, Foton, Hong Kong

Tel : 2695 8318

E-mail : etl@ets-testconsult.com

Fax : 2695 3944

Web site : www.ets-testconsult.com

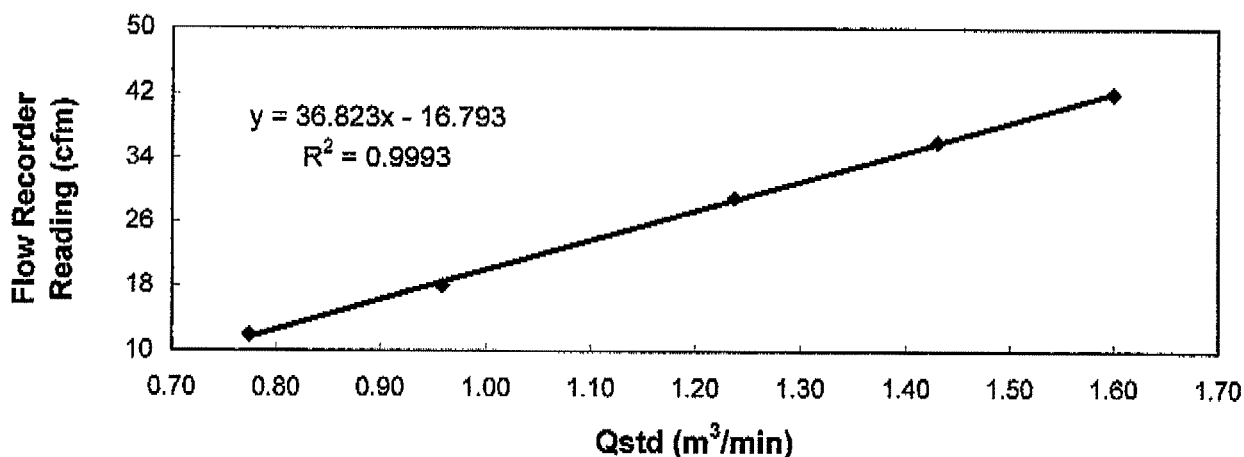
TEST REPORT

Calibration Report
of
High Volume Air Sampler

Manufacturer : Graseby GMW **Date of Calibration** : 27 August 2007
Serial No. : 9795 (ET/EA/003/18) **Calibration Due Date** : 26 October 2007
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)	42	36	29	18	12
	Qstd (Actual flow rate, m ³ /min)	1.60	1.43	1.24	0.96	0.77
	Pressure : 759.06 mm Hg	Temp. : 304 K				

Sampler 9795 Calibration Curve
Site: Wan Chai (AM-2)
Date of Calibration: 27 August 2007



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 : Li Wan Lung
 (Technician)

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

Annex G

24-hour and 1-hour TSP Monitoring Results

24-hour TSP Monitoring Results

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

Date	Filter Weight (g)		Flow Rate (m³/min.)		Elapse Time		Sampling Time(hrs.)	Conc. (µg/m³)	Weather Condition	Ave. Air Temp. (°C)	Particulate weight(g)	Av. flow (m³/min)	Total vol. (m³)
	Initial	Final	Initial	Final	Initial	Final							
07-Sep-07	2.8172	2.9155	0.88	0.88	12330.4	12354.4	24.0	78	Sunny	27	0.0983	0.88	1268.2
13-Sep-07	2.7991	2.9666	1.00	1.00	12357.4	12381.4	24.0	116	Sunny	28	0.1675	1.00	1442.3
19-Sep-07	2.8054	3.0075	1.06	1.06	12384.4	12408.4	24.0	132	Sunny	28	0.2021	1.06	1529.3
25-Sep-07	2.8178	2.9229	0.85	0.85	12412.4	12436.5	24.0	86	Rainy	27	0.1051	0.85	1225.2
								Min	78				
								Max	132				
								Average	103				

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

Date	Filter Weight (g)		Flow Rate (m³/min.)		Elapse Time		Sampling Time(hrs.)	Conc. (µg/m³)	Weather Condition	Ave. Air Temp. (°C)	Particulate weight(g)	Av. flow (m³/min)	Total vol. (m³)
	Initial	Final	Initial	Final	Initial	Final							
07-Sep-07	2.8149	2.9396	1.35	1.35	10659.0	10683.0	24.0	64	Sunny	27	0.1247	1.35	1947.2
13-Sep-07	2.8163	3.0206	1.41	1.41	10685.7	10709.7	24.0	101	Sunny	28	0.2043	1.41	2025.4
19-Sep-07	2.8263	3.0845	1.30	1.30	10712.7	10736.8	24.0	138	Sunny	28	0.2582	1.30	1869.8
25-Sep-07	2.8205	2.9386	1.35	1.35	10740.8	10764.8	24.0	61	Rainy	27	0.1181	1.35	1947.2
								Min	61				
								Max	138				
								Average	91				

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							
05-Sep-07	2.8069	2.8185	1.03	1.03	12328.4	12329.4	1.0	187	Sunny	27	0.0116	1.03	61.9
07-Sep-07	2.8159	2.8267	0.97	0.97	12329.4	12330.4	1.0	185	Sunny	27	0.0108	0.97	58.3
10-Sep-07	2.8068	2.8114	0.85	0.85	12354.4	12355.4	1.0	90	Sunny	28	0.0046	0.85	51.0
12-Sep-07	2.8004	2.8094	0.91	0.91	12355.4	12356.4	1.0	165	Sunny	27	0.0090	0.91	54.7
13-Sep-07	2.7751	2.7820	0.85	0.85	12356.4	12357.4	1.0	135	Sunny	28	0.0069	0.85	51.0
14-Sep-07	2.8312	2.8385	0.91	0.91	12381.4	12382.4	1.0	134	Sunny	29	0.0073	0.91	54.7
17-Sep-07	2.8401	2.8539	0.97	0.97	12382.4	12383.4	1.0	237	Sunny	29	0.0138	0.97	58.3
19-Sep-07	2.8438	2.8528	0.88	0.88	12383.4	12384.4	1.0	170	Sunny	28	0.0090	0.88	52.8
21-Sep-07	2.8035	2.8155	1.03	1.03	12408.4	12409.4	1.0	192	Rainy	27	0.0120	1.03	62.5
24-Sep-07	2.7890	2.7992	1.03	1.03	12409.4	12410.4	1.0	165	Rainy	26	0.0102	1.03	61.9
25-Sep-07	2.8257	2.8324	0.85	0.85	12410.4	12411.4	1.0	131	Rainy	27	0.0067	0.85	51.0
25-Sep-07	2.8459	2.8545	0.91	0.91	12411.4	12412.4	1.0	157	Rainy	27	0.0086	0.91	54.7
28-Sep-07	2.7926	2.7988	0.85	0.85	12436.5	12437.5	1.0	121	Sunny	28	0.0062	0.85	51.0
								Min	90				
								Max	237				
								Average	159				

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							
05-Sep-07	2.8144	2.8269	1.33	1.33	10657.0	10658.0	0.9	165	Sunny	27	0.0125	1.33	75.5
07-Sep-07	2.8240	2.8355	1.30	1.30	10658.0	10659.0	1.0	148	Sunny	27	0.0115	1.30	77.9
10-Sep-07	2.7809	2.7900	1.27	1.27	10683.0	10684.0	1.0	119	Sunny	28	0.0091	1.27	76.2
12-Sep-07	2.7916	2.8036	1.27	1.27	10684.0	10684.7	0.8	210	Sunny	27	0.0120	1.27	57.2
13-Sep-07	2.7879	2.7967	1.33	1.33	10684.7	10685.7	1.0	111	Sunny	28	0.0088	1.33	79.5
14-Sep-07	2.8189	2.8300	1.30	1.30	10709.7	10710.7	1.0	143	Sunny	29	0.0111	1.30	77.9
17-Sep-07	2.8196	2.8348	1.24	1.24	10710.7	10711.7	1.0	204	Sunny	29	0.0152	1.24	74.6
19-Sep-07	2.7828	2.7990	1.27	1.27	10711.7	10712.7	1.0	212	Sunny	28	0.0162	1.27	76.2
21-Sep-07	2.7892	2.8012	1.33	1.33	10736.8	10737.8	1.0	151	Rainy	27	0.0120	1.33	79.5
24-Sep-07	2.8339	2.8453	1.27	1.27	10737.8	10738.8	1.0	150	Rainy	26	0.0114	1.27	76.2
25-Sep-07	2.8350	2.8451	1.27	1.27	10738.8	10739.8	1.0	132	Rainy	27	0.0101	1.27	76.2
25-Sep-07	2.8362	2.8469	1.27	1.27	10739.8	10740.8	1.0	140	Rainy	27	0.0107	1.27	76.2
28-Sep-07	2.8219	2.8289	1.27	1.27	10764.8	10765.8	1.0	92	Sunny	28	0.0070	1.27	76.2
								Min	92				
								Max	212				
								Average	152				

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

Date	Weather	King's Park Station				
		Average Air Temperature (°C)	Average Relative Humidity (%)	Total Rainfall (mm)	Wind Direction (Degree)	Average Wind Speed (km/h)
05-Sep-07	Sunny	27	80	1.5	090	21.0
07-Sep-07	Sunny	27	77	0.1	090	21.0
10-Sep-07	Sunny	28	80	0.0	090	18.0
12-Sep-07	Sunny	27	76	0.0	090	18.0
13-Sep-07	Sunny	28	66	0.0	090	18.0
14-Sep-07	Sunny	29	71	0.0	090	19.0
17-Sep-07	Sunny	29	77	0.5	090	21.0
19-Sep-07	Sunny	28	55	0.0	090	23.0
21-Sep-07	Rainy	27	72	1.7	090	24.0
24-Sep-07	Rainy	26	93	60.1	090	24.0
25-Sep-07	Rainy	27	88	2.1	090	25.0
28-Sep-07	Sunny	28	73	0.0	090	27.0

Figure G1 - Measured 24-hour TSP Concentration (μgm^{-3}) at AM1

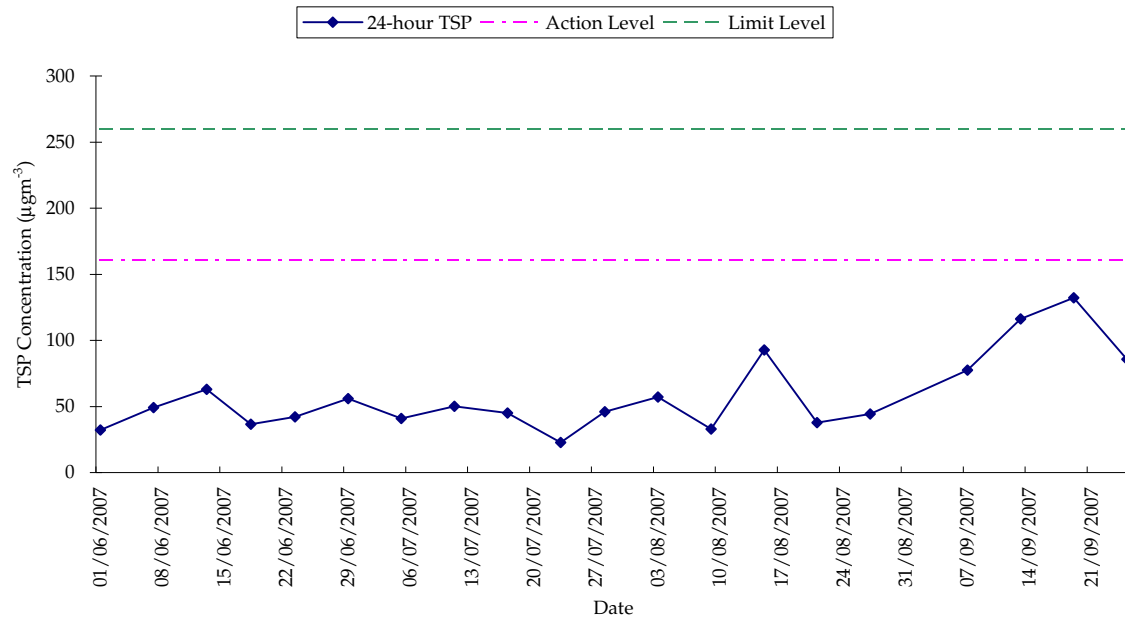


Figure G2 - Measured 24-hour TSP Concentration (μgm^{-3}) at AM2

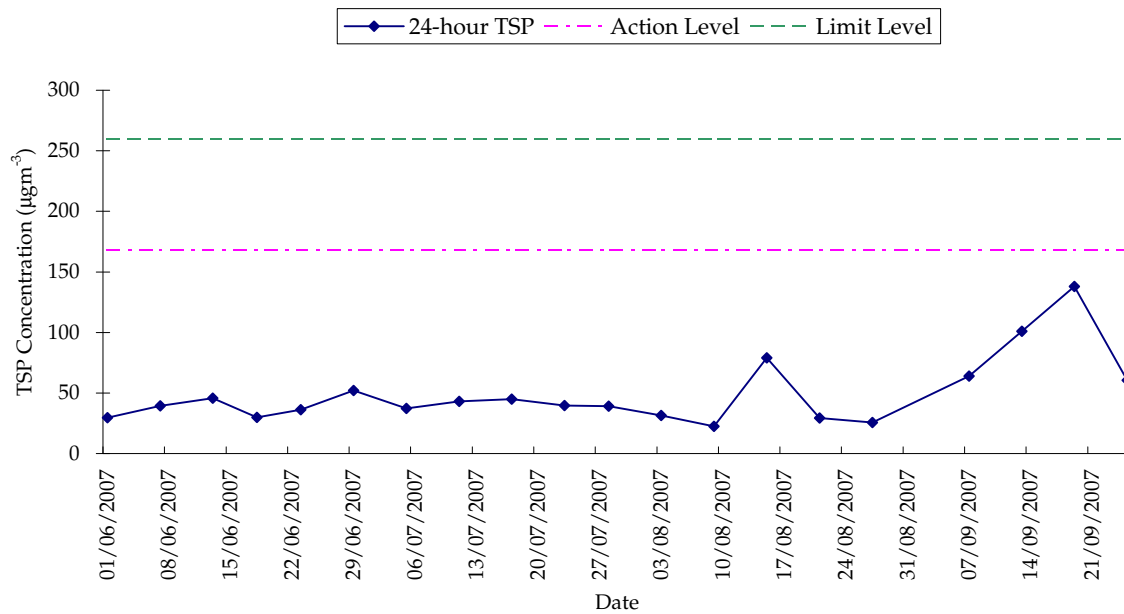


Figure G3 - Measured 1-hour TSP Concentration ($\mu\text{g}/\text{m}^3$) at AM1

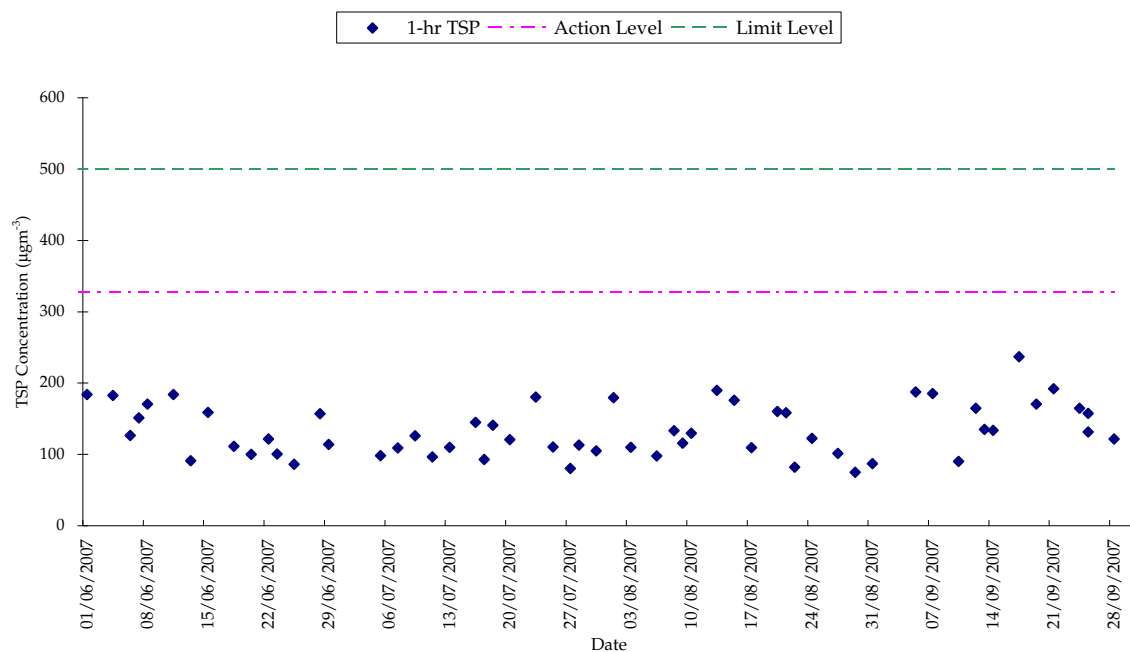
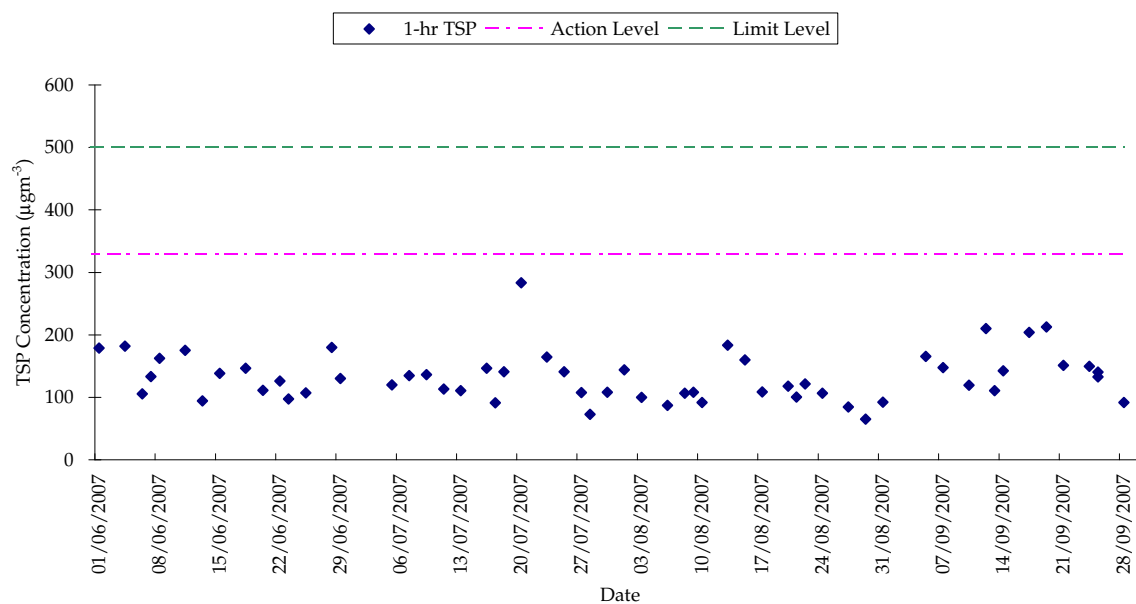


Figure G4 - Measured 1-hour TSP Concentration ($\mu\text{g}/\text{m}^3$) at AM2



Annex H

Event / Action Plans for Air Quality Monitoring

Table H1 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.

Annex I

Summary of Implementation Status

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	Δ

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 3 of the Environmental Permit 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	√
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	The installation of temporary marine piles was completed on 23 April 2007.

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	The installation of temporary marine piles was completed on 23 April 2007. Silt screens were removed as requested by the intake owners. Silt screens will be reinstalled at seawater intakes prior to the removal of marine piles.
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	Δ

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	Δ
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	Δ
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	Δ
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	Δ
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 J

Waste Flow Table

HKCEC – Expansion Project

Name of Project Proponent: HKTDC

Project Commencement Date: 1 Aug 2006

Construction Completion Date: March 2009

Monthly Summary Waste Flow Table for Year 2007

Year	Actual Quantities of inert C&D Materials (in 10 ³ Kg) ^{(1) (2)}					Actual Quantities of C&D Wastes (in 10 ³ Kg) ⁽⁴⁾									
	Total Quantity Generated	Broken Concrete ⁽³⁾	Reused in the Contract	Reused in other Projects ⁽³⁾	Disposed as Public Fill	Steel Materials				Paper/cardboard packaging		Chemical Waste (L)		General refuse	Other waste ⁽⁶⁾
						Demolition of existing Atrium Link		Demolition of existing working platform							
						(a)	(b)	(c)	(d)	(a)-(b)-(c)-(d)	Recycle	Disposal	Recycle	Disposal	Recycle
January	924	462	0.5	0	462	90 ⁽⁵⁾	0	0	0	0.2	0.05	0	0	60	80
February	814	110	0.5	0	704	5 ⁽⁵⁾	0	0	0	0.2	0.07	0	288	66	55
March	583	66	0.5	0	517	0	0	0	0	0	0.05	0	0	77	33
April	1034	165	0.5	0	867	0	0	0	0	0.4	0.05	0	0	55	44
May	275.5	33	0.5	0	242	10 ⁽⁵⁾	0	0	0	0.4	0.04	0	0	55	154
June	1654	0	0	0	1654	50	0	0	0	0.5	0.03	0	0	80	150
July	614	0	0.5	0	613.5	60	0	0	0	0.5	0.04	0	0	85	298
August	944	0	0.5	0	943.5	1400	0	0	0	0.6	0.01	0	0	70	380
Sep	310	0	0.5	0	309.5	514	0	0	0	0.5	0.02	0	0	50	245
October	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
November	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
December	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	7152.5	836	4.0	0	6312.5	2024	0	0	0	3.3	0.36	0	288	598	1439

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

⁽²⁾ Inert C&D material mainly generated from demolition of atrium link.

⁽³⁾ Broken concrete fro recycling into aggregates.

⁽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 (e.g. demolition of E&M equipment and finishing materials, bamboo scaffolding) and piling works.

Annex K

Construction Programme for Next Three Months

Hong Kong Convention and Exhibition Centre
Expansion Project
3 Month Rolling Programme based on revised master Programme Rev.1 Updating on 29 August 2007

ID	Task Name	% Complete	Actual Start	Actual Finish	Baseline Start	Baseline Finish	May	Jun	Jul	Aug	Sep	Oct	Nov
1	PROJECT WIDE	42%	Fri 26/5/06	NA	Fri 26/5/06	Wed 11/3/09					29/8/07		
2	Critical Dates	42%	Fri 26/5/06	NA	Fri 26/5/06	Wed 11/3/09							
40	DETAIL DESIGN	91%	Thu 26/5/06	NA	Thu 25/5/06	Mon 30/4/07							
126	Heavy Lifting / Sliding System for Steel Roof Trusses	75%	Fri 1/12/06	NA	Mon 23/10/06	Mon 30/4/07							
127	Design Preparation & Submission	100%	Fri 1/12/06	Fri 8/6/07	Mon 23/10/06	Thu 14/12/06							
141	Design Submission & Approval (Permanent Works)	90%	Thu 25/5/06	NA	Thu 25/5/06	Thu 19/4/07							
150	General Building Plan	99%	Wed 14/6/06	NA	Wed 14/6/06	Wed 15/11/06							
157	RIP/DDR by PM (2nd Amendment)	85%	Mon 2/4/07	NA	Wed 15/11/06	Wed 15/11/06							
158	OTTV Calculations	93%	Thu 12/10/06	NA	Tue 19/9/06	Sat 4/11/06							
159	Preparation & Submission	100%	Thu 12/10/06	Sat 30/12/06	Tue 19/9/06	Wed 11/10/06							
160	Design Check by Design Checker	100%	Fri 25/5/07	Sat 18/8/07	Thu 12/10/06	Wed 16/10/06							
161	RIP/DDR by PM	20%	Mon 20/8/07	NA	Thu 19/10/06	Sat 4/11/06							
162	RIP/DDR for OTTV	0%	NA	NA	Sat 4/11/06	Sat 4/11/06							
215	Architectural Design	83%	Sat 26/8/06	NA	Sat 26/8/06	Thu 19/4/07							
221	Fire curtain / Shutter and Smoke curtain schedule	99%	Mon 28/8/06	NA	Mon 28/8/06	Fri 23/2/07							
222	Design Preparation & Submission	100%	Mon 28/8/06	Sat 14/10/06	Mon 28/8/06	Mon 9/10/06							
223	Design Check by Design Checker	100%	Sat 14/10/06	Tue 5/12/06	Tue 10/10/06	Tue 31/10/06							
224	RIP by PM	100%	Wed 6/12/06	Thu 28/12/06	Wed 1/11/06	Fri 24/11/06							
226	RIP for Fire curtain / Shutter and Smoke curtain schedule	100%	Thu 28/12/06	Thu 28/12/06	Fri 24/11/06	Fri 24/11/06							
226	Detailed Design Preparation	100%	Wed 13/12/06	Fri 23/2/07	Thu 7/12/06	Fri 15/12/06							
227	Design Check by Design Checker	100%	Sat 24/2/07	Thu 7/6/07	Sat 16/12/06	Wed 3/1/07							
228	DDR by PM	90%	Fri 8/6/07	NA	Thu 4/1/07	Fri 23/2/07							
229	DDR for Fire curtain / Shutter and Smoke curtain schedule	0%	NA	NA	Fri 23/2/07	Fri 23/2/07							
230	Staircase (AST-1&2, 3&4, 5&6, 7&8)	99%	Sat 26/8/06	NA	Sat 26/8/06	Thu 22/2/07							
231	Design Preparation & Submission	100%	Sat 26/8/06	Sat 21/10/06	Sat 26/8/06	Sat 7/10/06							
232	Design Check by Design Checker	100%	Mon 23/10/06	Tue 21/11/06	Mon 9/10/06	Sat 28/10/06							
233	RIP by PM	100%	Mon 22/1/07	Fri 26/1/07	Tue 31/10/06	Thu 23/11/06							
234	RIP for Staircase	100%	Fri 26/1/07	Fri 26/1/07	Thu 23/11/06	Thu 23/11/06							
235	Detailed Design Preparation	100%	Fri 8/12/06	Sat 23/12/06	Wed 6/12/06	Thu 14/12/06							
236	Design Check by Design Checker	100%	Wed 27/12/06	Wed 21/2/07	Fri 15/12/06	Tue 2/1/07							
237	DDR by PM	100%	Thu 22/2/07	Mon 14/5/07	Wed 3/1/07	Thu 22/2/07							
239	Internal Staircase at (A,20 L2-6) (A,18 L7-7M)	93%	Sat 21/10/06	NA	Sat 26/8/06	Thu 22/2/07							
240	Design Preparation & Submission	100%	Sat 21/10/06	Fri 24/11/06	Sat 26/8/06	Sat 7/10/06							
241	Design Check by Design Checker	100%	Wed 23/5/07	Fri 6/7/07	Mon 9/10/06	Sat 28/10/06							
242	RIP/DDR by PM	60%	Sat 7/7/07	NA	Wed 3/1/07	Thu 22/2/07							
244	External façade Design	94%	Fri 15/9/06	NA	Fri 15/9/06	Fri 22/12/06							
245	Design Preparation & Submission	100%	Fri 15/9/06	Thu 9/11/06	Fri 15/9/06	Tue 31/10/06							
246	Design Check by Design Checker	100%	Fri 10/11/06	Sat 27/11/07	Wed 1/11/06	Thu 16/11/06							
247	RIP by PM	100%	Mon 29/1/07	Wed 21/2/07	Fri 17/11/06	Thu 30/11/06							
248	RIP for External façade Design	100%	Wed 21/2/07	Wed 21/2/07	Thu 30/11/06	Thu 30/11/06							
249	Detailed Design Preparation	100%	Tue 2/1/07	Thu 15/2/07	Tue 7/11/06	Thu 30/11/06							
250	Design Check by Design Checker	100%	Fri 16/2/07	Mon 23/4/07	Fri 1/12/06	Fri 8/12/06							

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ID	Task Name	% Complete	Actual Start	Actual Finish	Baseline Start	Baseline Finish	May	Jun	Jul	Aug	Sep	Oct	Nov
253	DDR for DD Submission by PM	0%	NA	NA	Sat 9/12/06	Fri 22/12/06			29/8/07				
254	DDR for External façade Design	0%	NA	NA	Fri 22/12/06	Fri 22/12/06							
255	Foyer Floors and Wall at Level 2,5 and 7	49%	Wed 30/5/07	NA	NA	NA							
256	Detailed Design Preparation	90%	Wed 30/5/07	NA	NA	NA							
257	Design Check by Design Checker	0%	NA	NA	NA	NA							
258	RIP/DDR by PM	0%	NA	NA	NA	NA							
259	RIP/DDR for Foyer Floors and Wall at Level 2,5 and 7	0%	NA	NA	NA	NA							
260	Feature Wall at Level 2 Foyer	8%	Fri 13/7/07	NA	NA	NA							
261	Detailed Design Preparation	15%	Fri 13/7/07	NA	NA	NA							
262	Design Check by Design Checker	0%	NA	NA	NA	NA							
263	RIP/DDR by PM	0%	NA	NA	NA	NA							
264	RIP/DDR for Feature Wall at Level 2 Foyer	0%	NA	NA	NA	NA							
265	Lift Lobbies at Level 2,3,5,6,7 and 7M	77%	Thu 28/6/07	NA	NA	NA							
266	Detailed Design Preparation	100%	Thu 28/6/07	Fri 17/8/07	NA	NA							
267	Design Check by Design Checker	80%	Fri 17/8/07	NA	NA	NA							
268	RIP/DDR by PM	0%	NA	NA	NA	NA							
269	RIP/DDR for Lift Lobbies at Level 2,3,5,6,7 and 7M	0%	NA	NA	NA	NA							
270	Foyer Floor and Walls at Level 3 and 6, Interior of Dressing i	44%	Fri 27/7/07	NA	NA	NA							
271	Detailed Design Preparation	80%	Fri 27/7/07	NA	NA	NA							
272	Design Check by Design Checker	0%	NA	NA	NA	NA							
273	RIP/DDR by PM	0%	NA	NA	NA	NA							
274	RIP/DDR for Foyer Floor and Walls at Level 3 and 6, Interic	0%	NA	NA	NA	NA							
275	Internal Aluminium Cladding	81%	Thu 7/8/07	NA	NA	NA							
276	Detailed Design Preparation	100%	Thu 7/8/07	Tue 14/8/07	NA	NA							
277	Design Check by Design Checker	80%	Tue 14/8/07	NA	NA	NA							
278	RIP/DDR by PM	0%	NA	NA	NA	NA							
279	RIP/DDR for Internal Aluminium Cladding	0%	NA	NA	NA	NA							
280	Foyer reflected ceiling plan	73%	Thu 31/5/07	NA	NA	NA							
281	Detailed Design Preparation	100%	Thu 31/5/07	Fri 6/7/07	NA	NA							
282	Design Check by Design Checker	80%	Sat 7/7/07	NA	NA	NA							
283	RIP by PM	0%	NA	NA	NA	NA							
284	RIP for Foyer reflected ceiling plan	0%	NA	NA	NA	NA							
285	Two Male, Two Female and Baby Room	72%	Wed 30/5/07	NA	NA	NA							
286	Detailed Design Preparation	100%	Wed 30/5/07	Thu 5/7/07	NA	NA							
287	Design Check by Design Checker	80%	Fri 6/7/07	NA	NA	NA							
288	RIP/DDR by PM	0%	NA	NA	NA	NA							
289	RIP/DDR for Two Male, Two Female and Baby Room	0%	NA	NA	NA	NA							
290	Remaining Washrooms	42%	Fri 27/7/07	NA	NA	NA							
291	Detailed Design Preparation	75%	Fri 27/7/07	NA	NA	NA							
292	Design Check by Design Checker	0%	NA	NA	NA	NA							
293	RIP/DDR by PM	0%	NA	NA	NA	NA							
294	RIP/DDR for Remaining Washrooms	0%	NA	NA	NA	NA							

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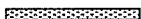



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ID	Task Name	% Complete	Actual Start	Actual Finish	Baseline Start	Baseline Finish	May	Jun	Jul	Aug	Sep	Oct	Nov
295	Exhibition Halls / Service Counters and Organiser's Offices	100%	Fri 29/9/06	Fri 9/2/07	Fri 29/9/06	Sat 31/3/07					29/8/07		
296	Design Preparation & Submission	100%	Fri 29/9/06	Tue 14/11/06	Fri 29/9/06	Sat 11/11/06							
297	Design Check by Design Checker	100%	Wed 15/11/06	Fri 12/1/07	Mon 13/11/06	Sat 2/12/06							
298	RIP by PM	100%	Sat 13/1/07	Fri 9/2/07	Mon 4/12/06	Fri 29/12/06							
299	RIP for Exhibition Halls / Service Counters and Organiser's	100%	Fri 9/2/07	Fri 9/2/07	Fri 29/12/06	Fri 29/12/06							
300	Service Counters and Organiser's Offices	96%	Wed 21/2/07	NA	NA	NA							
301	Detailed Design Preparation	100%	Wed 21/2/07	Mon 7/5/07	NA	NA							
302	Design Check by Design Checker	100%	Tue 8/5/07	Wed 15/8/07	NA	NA							
303	DDR by PM	60%	Thu 16/8/07	NA	NA	NA							
304	DDR for Service Counters and Organiser's Offices	0%	NA	NA	NA	NA							
305	Exhibition Halls	76%	Wed 30/5/07	NA	NA	NA							
306	Detailed Design Preparation	100%	Wed 30/5/07	Thu 5/7/07	NA	NA							
307	Design Check by Design Checker	95%	Sat 14/7/07	NA	NA	NA							
308	DDR by PM	0%	NA	NA	NA	NA							
309	DDR for Exhibition Halls	0%	NA	NA	NA	NA							
310	Hall Entrances of Level 2, 5 and 7	41%	Thu 14/6/07	NA	NA	NA							
311	Detailed Design Preparation	80%	Thu 14/6/07	NA	NA	NA							
312	Design Check by Design Checker	0%	NA	NA	NA	NA							
313	DDR by PM	0%	NA	NA	NA	NA							
314	DDR for Hall Entrances of Level 2, 5 and 7	0%	NA	NA	NA	NA							
315	Food Concession Area	22%	Thu 14/6/07	NA	NA	NA							
316	Design Preparation & Submission	80%	Thu 14/6/07	NA	NA	NA							
317	Design Check by Design Checker	0%	NA	NA	NA	NA							
318	RIP by PM	0%	NA	NA	NA	NA							
319	RIP for Food Concession Area	0%	NA	NA	NA	NA							
320	Detailed Design Preparation	0%	NA	NA	NA	NA							
321	Design Check by Design Checker	0%	NA	NA	NA	NA							
322	DDR by PM	0%	NA	NA	NA	NA							
323	DDR for Food Concession Area	0%	NA	NA	NA	NA							
324	Door schedule (incl. sliding and acoustic doors)	95%	Sat 30/9/06	NA	Sat 30/9/06	Mon 2/4/07							
325	Design Preparation & Submission	100%	Sat 30/9/06	Wed 29/11/06	Sat 30/9/06	Mon 13/11/06							
326	Design Check by Design Checker	100%	Tue 14/11/06	Mon 29/1/07	Tue 14/11/06	Mon 4/12/06							
327	RIP by PM	100%	Wed 31/1/07	Tue 27/2/07	Tue 5/12/06	Sat 30/12/06							
328	RIP for Door schedule	100%	Tue 27/2/07	Tue 27/2/07	Sat 30/12/06	Sat 30/12/06							
329	Detailed Design Preparation	100%	Mon 15/1/07	Tue 19/6/07	Sat 13/1/07	Mon 22/1/07							
330	Design Check by Design Checker	80%	Wed 20/6/07	NA	Tue 23/1/07	Tue 6/2/07							
331	DDR by PM	0%	NA	NA	NA	Mon 2/4/07							
332	DDR for Door schedule	0%	NA	NA	Mon 2/4/07	Mon 2/4/07							
333	Ironmongery schedule	83%	Wed 3/1/07	NA	NA	NA							
334	Design Preparation & Submission	100%	Wed 3/1/07	Tue 6/2/07	NA	NA							
335	Design Check by Design Checker	100%	Wed 7/2/07	Mon 19/3/07	NA	NA							
336	RIP by PM	100%	Tue 20/3/07	Fri 29/6/07	NA	NA							

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337	RIP for Ironmongery schedule	100%	Fri 29/6/07	Fri 29/6/07	NA	NA							
338	Detailed Design Preparation	80%	Sat 30/6/07	NA	NA	NA							
339	Design Check by Design Checker	0%	NA	NA	NA	NA							
340	DDR by PM	0%	NA	NA	NA	NA							
341	DDR for Ironmongery schedule	0%	NA	NA	NA	NA							
342	Maintenance access system - Gondola	94%	Wed 4/10/06	NA	Wed 4/10/06	Thu 5/4/07							
343	Design Preparation & Submission	100%	Wed 4/10/06	Thu 2/11/06	Wed 4/10/06	Wed 15/11/06							
344	Design Check by Design Checker	100%	Thu 2/11/06	Wed 3/1/07	Thu 16/11/06	Wed 6/12/06							
345	RIP by PM	100%	Thu 4/1/07	Wed 31/1/07	Thu 7/12/06	Wed 3/1/07							
346	RIP for Maintenance access system	100%	Wed 31/1/07	Wed 31/1/07	Wed 3/1/07	Wed 3/1/07							
347	Detailed Design Preparation	100%	Thu 1/2/07	Wed 11/7/07	Tue 16/1/07	Wed 24/1/07							
348	Design Check by Design Checker	80%	Thu 12/7/07	NA	Thu 25/1/07	Thu 8/2/07							
349	DDR by PM	0%	NA	NA	Fri 9/2/07	Thu 5/4/07							
350	DDR for Maintenance access system	0%	NA	NA	Thu 5/4/07	Thu 5/4/07							
351	Maintenance access system - Catwalks	77%	Wed 16/5/07	NA	NA	NA							
352	Detailed Design Preparation	100%	Wed 16/5/07	Wed 20/6/07	NA	NA							
353	Design Check by Design Checker	95%	Thu 21/6/07	NA	NA	NA							
354	RIP/DDR by PM	0%	NA	NA	NA	NA							
355	RIP/DDR for Maintenance access system / Catwalks	0%	NA	NA	NA	NA							
356	Acoustic Operable Partition	100%	Mon 25/9/06	Tue 31/7/07	Mon 9/10/06	Mon 9/4/07							
357	Design Preparation & Submission	100%	Mon 25/9/06	Fri 27/10/06	Mon 9/10/06	Sat 18/11/06							
358	Design Check by Design Checker	100%	Sat 28/10/06	Mon 20/11/06	Mon 20/11/06	Sat 9/12/06							
359	RIP by PM	100%	Wed 29/11/06	Fri 15/12/06	Mon 11/12/06	Sat 6/1/07							
360	RIP for Acoustic Operable Partition	100%	Fri 15/12/06	Fri 15/12/06	Sat 6/1/07	Sat 6/1/07							
361	Detailed Design Preparation	100%	Mon 18/12/06	Mon 23/4/07	Fri 19/1/07	Sat 27/1/07							
362	Design Check by Design Checker	100%	Tue 24/4/07	Tue 5/6/07	Mon 29/1/07	Mon 12/2/07							
363	DDR Acoustic Operable Partition by PM	100%	Wed 6/6/07	Tue 31/7/07	Tue 13/2/07	Mon 9/4/07							
364	DDR for Acoustic Operable Partition	100%	Tue 31/7/07	Tue 31/7/07	Mon 9/4/07	Mon 9/4/07							
365	Roofing and waterproofing system	100%	Wed 27/12/06	Mon 16/7/07	Wed 15/11/06	Mon 29/1/07							
366	Detailed Design Preparation	100%	Wed 27/12/06	Mon 8/1/07	Wed 15/11/06	Thu 23/11/06							
367	Design Check by Design Checker	100%	Sat 12/5/07	Tue 26/6/07	Fri 24/11/06	Fri 8/12/06							
368	DDR for Roofing and waterproofing system by PM	100%	Wed 27/6/07	Mon 16/7/07	Sat 9/12/06	Mon 29/1/07							
369	DDR for Roofing and waterproofing system	100%	Mon 16/7/07	Mon 16/7/07	Mon 29/1/07	Mon 29/1/07							
370	Glass Balustrade/Metal Railing	93%	Thu 26/10/06	NA	Sat 18/11/06	Thu 1/2/07							
371	Design Preparation	100%	Thu 26/10/06	Sat 2/12/06	Sat 18/11/06	Mon 27/11/06							
372	Design Check by Design Checker	100%	Sat 2/12/06	Mon 15/1/07	Tue 28/11/06	Tue 12/12/06							
373	RIP for Glass Balustrade / Metal Railing by PM	100%	Tue 16/1/07	Tue 6/2/07	Wed 13/12/06	Thu 1/2/07							
374	RIP by PM	100%	Tue 6/2/07	Tue 6/2/07	NA	NA							
375	DDR for Detailed Design Preparation	100%	Wed 7/2/07	Tue 5/6/07	Thu 1/2/07	Thu 1/2/07							
376	Design Check by Design Checker	90%	Tue 5/6/07	NA	Tue 28/11/06	Tue 12/12/06							
377	DDR by PM	0%	NA	NA	Wed 13/12/06	Thu 1/2/07							
378	DDR for Glass Balustrade / Metal Railing	0%	NA	NA	Thu 1/2/07	Thu 1/2/07							

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ID	Task Name	% Complete	Actual Start	Actual Finish	Baseline Start	Baseline Finish	May	Jun	Jul	Aug	Sep	Oct	Nov
389	Signage & Electronic Sign (Permanent)	36%	Tue 26/6/07	NA	NA	NA							
390	Detailed Design Preparation	70%	Tue 26/6/07	NA	NA	NA							
391	Design Check by Design Checker	0%	NA	NA	NA	NA							
392	RIP/DDR for Signage by PM	0%	NA	NA	NA	NA							
393	RIP/DDR for Signage	0%	NA	NA	NA	NA							
399	A&A Works Details for Phase II (L5 & L7 Additional Slab)	91%	Mon 19/3/07	NA	Sat 2/12/06	Thu 16/2/07							
400	Detailed Design Preparation	100%	Mon 19/3/07	Tue 17/7/07	Sat 2/12/06	Mon 11/12/06							
401	Design Check by Design Checker	90%	Wed 18/7/07	NA	Tue 12/12/06	Thu 28/12/06							
402	DDR for Detailed Design Preparation by PM	0%	NA	NA	Fri 29/12/06	Thu 15/2/07							
403	DDR for Detailed Design Preparation	0%	NA	NA	Thu 15/2/07	Thu 15/2/07							
404	Lift Car Interiors and Lift Landing	66%	Fri 12/1/07	NA	NA	NA							
405	Design Preparation & Submission	100%	Fri 12/1/07	Tue 12/6/07	NA	NA							
406	Design Check by Design Checker	90%	Wed 13/6/07	NA	NA	NA							
407	RIP by PM	0%	NA	NA	NA	NA							
408	RIP for Lift Car Interiors and Lift Landing	0%	NA	NA	NA	NA							
409	Detailed Design Preparation	0%	NA	NA	NA	NA							
410	Design Check by Design Checker	0%	NA	NA	NA	NA							
411	DDR by PM	0%	NA	NA	NA	NA							
412	DDR for Lift Car Interiors and Lift Landing	0%	NA	NA	NA	NA							
413	Miscellaneous Details	51%	Fri 6/4/07	NA	NA	NA							
414	Steel & Metal Works (Tx. Rm.; Lift Machine rm....etc)	47%	Thu 14/6/07	NA	NA	NA							
415	Detailed Design Preparation	90%	Thu 14/6/07	NA	NA	NA							
416	Design Check by Design Checker	0%	NA	NA	NA	NA							
417	RIP/DDR for Steel & Metal Works by PM	0%	NA	NA	NA	NA							
418	RIP/DDR for Steel & Metal Works	0%	NA	NA	NA	NA							
419	Disabled guide paths & Details	71%	Thu 31/5/07	NA	NA	NA							
420	Detailed Design Preparation	100%	Thu 31/5/07	Fri 6/7/07	NA	NA							
421	Design Check by Design Checker	80%	Sat 7/7/07	NA	NA	NA							
422	RIP/DDR for Disabled guide paths & Details by PM	0%	NA	NA	NA	NA							
423	RIP/DDR for Disabled guide paths & Details	0%	NA	NA	NA	NA							
424	Carpark, Driveway/loading and unloading areas	41%	Thu 14/6/07	NA	NA	NA							
425	Detailed Design Preparation	60%	Thu 14/6/07	NA	NA	NA							
426	Design Check by Design Checker	0%	NA	NA	NA	NA							
427	RIP/DDR for Carpark, Driveway/loading and unloading	0%	NA	NA	NA	NA							
428	RIP/DDR for Carpark, Driveway/loading and unloading	0%	NA	NA	NA	NA							
429	Expansion Joint and wall expansion details for Ph I & II	77%	Fri 6/4/07	NA	NA	NA							
430	Design Preparation & Submission	100%	Fri 6/4/07	Fri 11/6/07	NA	NA							
431	Design Check by Design Checker	100%	Sat 12/5/07	Fri 6/7/07	NA	NA							
432	RIP by PM	100%	Sat 7/7/07	Thu 9/8/07	NA	NA							
433	RIP for Expansion Joint	100%	Thu 9/8/07	Thu 9/8/07	NA	NA							
434	Detailed Design Preparation	50%	Thu 9/8/07	NA	NA	NA							
435	Design Check by Design Checker	0%	NA	NA	NA	NA							

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ID	Task Name	% Complete	Actual Start	Actual Finish	Baseline Start	Baseline Finish	May	Jun	Jul	Aug	Sep	Oct	Nov
436	DDR for Expansion Joint by PM	0%	NA	NA	NA	NA							
437	DDR for Expansion Joint	0%	NA	NA	NA	NA							
438	Internal Dry wall Partition Details	64%	Thu 14/6/07	NA	NA	NA							
439	Detailed Design Preparation	100%	Thu 14/6/07	Thu 19/7/07	NA	NA							
440	Design Check by Design Checker	50%	Thu 19/7/07	NA	NA	NA							
441	RIP/DDR for Internal Dry wall Partition Details by PM	0%	NA	NA	NA	NA							
442	RIP/DDR for Internal Dry wall Partition Details	0%	NA	NA	NA	NA							
443	Fixture furniture design & service counyer detail	44%	Thu 14/6/07	NA	NA	NA							
444	Detailed Design Preparation	85%	Thu 14/6/07	NA	NA	NA							
445	Design Check by Design Checker	0%	NA	NA	NA	NA							
446	RIP/DDR for Fixture furniture design & service counye	0%	NA	NA	NA	NA							
447	RIP/DDR for Fixture furniture design & service counye	0%	NA	NA	NA	NA							
457	Builder's work for escalators (remaining)	47%	Thu 14/6/07	NA	NA	NA							
458	Detailed Design Preparation	90%	Thu 14/6/07	NA	NA	NA							
459	Design Check by Design Checker	0%	NA	NA	NA	NA							
460	RIP/DDR for Builder's work for escalators (remaining) by PI	0%	NA	NA	NA	NA							
461	RIP/DDR for Builder's work for escalators (remaining)	0%	NA	NA	NA	NA							
462	Structural Design	95%	Fri 26/5/06	NA	Fri 26/5/06	Fri 2/2/07							
469	Details Design Review	95%	Wed 7/6/06	NA	Wed 7/6/06	Fri 2/2/07							
516	Stage 3 A&A Works Modification of Existing Atrium Lini	97%	Fri 17/11/06	NA	Fri 17/11/06	Sat 27/1/07							
517	Detailed Design Preparation	100%	Fri 17/11/06	Mon 12/2/07	Fri 17/11/06	Fri 29/12/06							
518	Design Check by Design Checker	100%	Tue 13/2/07	Fri 8/6/07	Sat 30/12/06	Sat 13/1/07							
519	RIP/DDR Submission by PM	50%	Thu 2/8/07	NA	Mon 15/1/07	Sat 27/1/07							
520	RIP/DDR for Structural Plan	0%	NA	NA	Sat 27/1/07	Sat 27/1/07							
521	A&A Works at Phase 2 Building	98%	Fri 2/2/07	NA	Fri 10/11/06	Sat 20/1/07							
522	Detailed Design Preparation	100%	Fri 2/2/07	Tue 13/3/07	Fri 10/11/06	Wed 20/12/06							
523	Design Check by Design Checker	100%	Tue 13/3/07	Sat 14/4/07	Thu 21/12/06	Sat 6/1/07							
524	RIP/DDR Submission by PM	90%	Mon 16/4/07	NA	Mon 8/1/07	Sat 20/1/07							
525	RIP/DDR for Structural Plan	0%	NA	NA	Sat 20/1/07	Sat 20/1/07							
526	BS Design	96%	Fri 26/5/06	NA	Wed 14/6/06	Tue 2/1/07							
527	BS - HVAC	94%	Fri 14/7/06	NA	Fri 14/7/06	Tue 2/1/07							
539	Details Design Review	83%	Tue 5/9/06	NA	Tue 5/9/06	Tue 2/1/07							
540	Detailed Design Preparation	100%	Tue 5/9/06	Sat 25/11/06	Tue 5/9/06	Mon 13/11/06							
541	Design Check by Design Checker	99%	Wed 9/5/07	NA	Tue 14/11/06	Mon 11/12/06							
542	DDR for HVAC Submission by PM	0%	NA	NA	Tue 12/12/06	Tue 2/1/07							
543	DDR for HVAC	0%	NA	NA	Tue 2/1/07	Tue 2/1/07							
544	BS - Electrical	93%	Fri 28/7/06	NA	Fri 28/7/06	Fri 29/12/06							
556	Details Design Review	84%	Mon 25/9/06	NA	Tue 22/8/06	Fri 29/12/06							
557	Detailed Design Preparation	100%	Mon 25/9/06	Fri 22/12/06	Tue 22/8/06	Thu 9/11/06							
558	Design Check by Design Checker	99%	Thu 28/12/06	NA	Fri 10/11/06	Fri 8/12/06							
559	DDR for Electrical Submission by PM	0%	NA	NA	Sat 9/12/06	Fri 29/12/06							
560	DDR for Electrical	0%	NA	NA	Fri 29/12/06	Fri 29/12/06							

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Task
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External Tasks
Project Summary



Group By Summary
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ID	Task Name	% Complete	Actual Start	Actual Finish	Baseline Start	Baseline Finish	May	Jun	Jul	Aug	Sep	Oct	Nov
582	Details Design Review	98%	Fri 26/5/06	NA	Thu 24/8/06	Fri 29/12/06							
583	Detailed Design Preparation	100%	Fri 3/11/06	Fri 24/11/06	Thu 24/8/06	Fri 10/11/06							
584	Design Check by Design Checker	100%	Mon 27/11/06	Mon 15/1/07	Sat 11/11/06	Thu 7/12/06							
585	DDR for Fire Services Submission by PM	100%	Mon 15/1/07	Thu 1/2/07	Fri 8/12/06	Fri 29/12/06							
586	DDR for Fire Services	100%	Thu 1/2/07	Thu 1/2/07	Fri 29/12/06	Fri 29/12/06							
587	Stage 2	93%	Fri 26/5/06	NA	NA	NA							
588	Detailed Design Preparation	100%	Thu 14/8/07	Wed 18/7/07	NA	NA							
589	Design Check by Design Checker	90%	Thu 19/7/07	NA	NA	NA							
590	DDR for Fire Services Submission by PM	0%	NA	NA	NA	NA							
591	DDR for Fire Services	0%	NA	NA	NA	NA							
644	BS - Diversion Plan for Pedestrian Tunnel	1%	Sat 25/8/07	NA	NA	NA							
645	RIP/DDR Review	5%	Sat 25/8/07	NA	NA	NA							
646	Design Preparation	0%	NA	NA	NA	NA							
647	Design Check by Design Checker	0%	NA	NA	NA	NA							
648	RIP/DDR for Submission by PM	0%	NA	NA	NA	NA							
649	RIP/DDR for Pedestrian Tunnel	0%	NA	NA	NA	NA							
662	Procurement	27%	Fri 26/5/06	NA	Fri 26/5/06	Mon 28/4/08							
663	Specialist Package	27%	Fri 26/5/06	NA	Fri 26/5/06	Mon 28/4/08							
664	Heavy Lifting for Steel Roof Trusses	66%	Mon 2/4/07	NA	Wed 20/12/06	Tue 10/7/07							
665	Slide Beam/Lifting Frame/Strand Jack/Temporary Works	66%	Mon 2/4/07	NA	Wed 20/12/06	Tue 10/7/07							
666	Procure Materials for Heavy Lifting System	85%	Mon 2/4/07	NA	Wed 20/12/06	Thu 28/4/07							
667	Procure Materials for Slide Beams & Tie Beams	85%	Mon 2/4/07	NA	Wed 20/12/06	Thu 26/4/07							
668	Pre-fabrication of Slide Beams and Tie Beams	25%	Wed 27/6/07	NA	Mon 19/3/07	Tue 10/7/07							
694	Structural Steel Works	76%	Wed 7/6/06	NA	Wed 7/6/06	Thu 22/11/07							
695	Place Ordering of Materials from Steel Mills	100%	Wed 7/6/06	Thu 29/5/06	Wed 7/6/06	Thu 29/6/06							
696	Material Procurement & Delivery	85%	Wed 7/6/06	NA	Wed 7/6/06	Mon 2/4/07							
697	Shop Drawing Submission & Approval	75%	Fri 13/10/06	NA	Tue 10/10/06	Fri 1/12/06							
698	First Delivery to Fabrication Yards	100%	Fri 1/12/06	Fri 1/12/06	Fri 1/12/06	Fri 1/12/06							
699	Fabrication of Structural Steel Works	30%	Fri 1/12/06	NA	Fri 1/12/06	Thu 22/11/07							
702	Curtain Wall / Cladding	15%	Fri 20/4/07	NA	Fri 1/12/06	Sat 17/11/07							
703	Subletting preparation (based on DDR submission)	100%	Fri 20/4/07	Fri 3/8/07	Fri 1/12/06	Mon 8/1/07							
704	Shop Drawing Submission & Approval	0%	NA	NA	Tue 9/1/07	Mon 5/3/07							
705	Visual and Performance Mock Up Test	0%	NA	NA	Tue 6/3/07	Mon 21/5/07							
706	Production & Delivery of Frames/Panels for west façade	0%	NA	NA	Tue 22/5/07	Sat 17/11/07							
710	M & E Long - Lead Items	0%	NA	NA	Fri 23/3/07	Wed 12/3/08							
711	MVAC Equipment Procurement	0%	NA	NA	Thu 26/4/07	Thu 29/11/07							
712	Electrical Equipment	0%	NA	NA	Tue 24/4/07	Tue 27/11/07							
713	Lift & Escalator Procurement & Delivery	0%	NA	NA	Fri 4/5/07	Thu 6/12/07							
714	Large Diameter Pipework & Fittings	0%	NA	NA	Sat 14/4/07	Sat 17/11/07							
715	Gondola Procurement	0%	NA	NA	Fri 23/3/07	Mon 24/9/07							
716	Lighting / Fire Shutter / Curtain / Smoke Curtain	0%	NA	NA	Mon 18/6/07	Wed 12/3/08							
717	Telecommunication Equipment	0%	NA	NA	Sat 14/4/07	Thu 31/11/08							

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Task Progress
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 Split

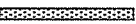
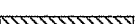
External Tasks
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Hong Kong Convention and Exhibition Centre
Expansion Project
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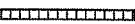
ID	Task Name	% Complete	Actual Start	Actual Finish	Baseline Start	Baseline Finish	May	Jun	Jul	Aug	Sep	Oct	Nov
718	Bearing for Steel Truss	42%	Thu 12/10/06	NA	Fri 20/10/06	Thu 8/2/07							
719	Shop Drawing Submission & Approval(10/11)	95%	Thu 12/10/06	NA	Fri 20/10/06	Mon 6/11/06							
720	Bearing Procurement and Delivery	30%	Fri 20/10/06	NA	Tue 7/11/06	Thu 8/2/07							
721	Contractor Submission	26%	Thu 25/5/06	NA	Thu 25/5/06	Tue 5/8/08							
752	CSWD / CBWD	0%	NA	NA	Wed 3/1/07	Tue 5/8/08							
753	CSW/CBW Submission/Comment/Re-submit/Approval	0%	NA	NA	Wed 3/1/07	Thu 31/1/08							
754	Review of Structural Plan for Building Services	0%	NA	NA	Mon 2/4/07	Thu 31/1/08							
755	Shop Drawing Submission/Comment/Re-submit/Approval	0%	NA	NA	Sat 10/3/07	Tue 5/8/08							
756	Site Works	18%	Mon 19/6/06	NA	Mon 19/6/06	Wed 11/3/09							
782	A & A Works to Existing HKCEC Phase 1 and 2	37%	Wed 26/7/06	NA	Wed 26/7/06	Wed 29/10/08							
783	A & A Works to HKCEC Phase 1	21%	Wed 27/12/06	NA	Mon 7/5/07	Wed 29/10/08							
786	HK CEC Phase 1 - New Atrium Link Connection	11%	Mon 30/4/07	NA	Mon 7/5/07	Wed 29/10/08							
787	Erect Internal Hoarding (G.L. 25/A1-A)	100%	Mon 30/4/07	Mon 18/6/07	Mon 7/5/07	Sat 23/6/07							
788	Remove Existing Internal Finishes & Feature	70%	Fri 22/6/07	NA	Mon 25/6/07	Mon 30/7/07							
789	Termination for Existing E&M Services	0%	NA	NA	Tue 31/7/07	Mon 3/9/07							
790	Modification Works for Existing Structure	0%	NA	NA	Tue 7/8/07	Mon 3/9/07							
808	A & A Works to HKCEC Phase 2	65%	Wed 26/7/06	NA	Wed 26/7/06	Fri 21/9/07							
809	HKCEC Phase 2 Area (Grid A1/14-16, level2) for Pedestrian c	100%	Sat 17/2/07	Thu 28/6/07	Mon 26/2/07	Tue 3/4/07							
810	Erect Internal Hoarding	100%	Tue 29/5/07	Tue 12/6/07	Mon 26/2/07	Sat 10/3/07							
811	Remove Existing Finishes & Feature	100%	Wed 13/6/07	Tue 19/6/07	Mon 12/3/07	Sat 17/3/07							
812	Termination for Existing E&M Services	100%	Sat 17/2/07	Tue 12/6/07	Wed 7/3/07	Wed 14/3/07							
813	Modification Works for External Façade	100%	Wed 13/6/07	Thu 28/6/07	Thu 15/3/07	Tue 3/4/07							
836	Demolition of Existing Atrium Link	88%	Wed 14/3/07	NA	Wed 14/3/07	Wed 23/1/08							
837	Removal Existing Eastern Glass Wall	100%	Fri 4/5/07	Sat 28/7/07	Fri 4/5/07	Mon 25/6/07							
838	Precution Measures Installation for Eastern Façade Removal	100%	Fri 4/5/07	Sat 9/6/07	Fri 4/5/07	Fri 25/5/07							
839	Bamboo Scaffolding Erection	100%	Wed 16/5/07	Sat 9/6/07	Fri 11/5/07	Fri 25/5/07							
840	Consent for Eastern Façade Removal	100%	Fri 8/6/07	Fri 6/7/07	Sat 26/5/07	Sat 26/5/07							
841	Removal of Existing Eastern Glass Wall	100%	Sat 9/6/07	Sat 28/7/07	Mon 28/5/07	Mon 25/5/07							
842	Demolition of Existing Atrium Link	83%	Wed 14/3/07	NA	Wed 14/3/07	Wed 23/1/08							
843	Diversion/Termination of Existing E&M Services to New Access	100%	Wed 14/3/07	Tue 5/6/07	Wed 14/3/07	Tue 22/5/07							
844	Removal Escalator Inside Existing Atrium Link	100%	Fri 1/6/07	Fri 15/6/07	Tue 29/5/07	Tue 19/6/07							
845	Removal Roof Floor Finishes & Non-Structural Elements	100%	Thu 31/5/07	Sat 30/6/07	Tue 29/5/07	Tue 12/6/07							
846	Bamboo Scaffolding Erection for Removal Internal Finishes and	100%	Tue 29/5/07	Thu 7/6/07	Tue 29/5/07	Tue 12/6/07							
847	Removal Internal Finishes, Cladding & E&M Fixing From Roof to	100%	Tue 29/5/07	Thu 12/7/07	Tue 29/5/07	Wed 11/7/07							
848	Propping & Precution Measures Installation for Demolition Wor	100%	Tue 29/5/07	Tue 10/7/07	Tue 29/5/07	Wed 11/7/07							
849	Consent for Demolition Works	100%	Fri 8/6/07	Fri 8/6/07	Thu 12/7/07	Thu 12/7/07							
850	Removal Slab From Roof to Level 2	100%	Sat 9/6/07	Sat 18/8/07	Fri 13/7/07	Tue 7/8/07							
851	Removal Steel Floor Trusses From Roof to Level 2	85%	Sat 9/6/07	NA	Fri 27/7/07	Sat 11/8/07							
852	Removal Existing Hanger Columns	100%	Fri 10/8/07	Sat 18/8/07	Mon 13/8/07	Tue 28/8/07							
853	Removal Existing Roof Trusses	85%	Sat 18/8/07	NA	Wed 29/8/07	Thu 13/9/07							
854	Modification Works of Existing Eastern Façade Truss level 29.4	0%	NA	NA	Thu 30/8/07	Mon 17/9/07							
855	Removal of remaining Existing Eastern & Western Façade Truss	0%	NA	NA	Sat 15/12/07	Wed 23/1/08							

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Task  Progress
Critical Task  Milestone

Summary 
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External Tasks 
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Hong Kong Convention and Exhibition Centre
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ID	Task Name	% Complete	Actual Start	Actual Finish	Baseline Start	Baseline Finish	May	Jun	Jul	Aug	Sep	Oct	Nov
856	New Atrium Link Extension	14%	Thu 22/6/06	NA	Tue 27/6/06	Wed 11/3/09							
921	Mini-piles near Grid 16/AI-A, 16/D-E and for additio	15%	Thu 22/6/06	NA	Fri 5/10/07	NA							
922	Mini-pile construction (102 nos)	70%	Thu 22/6/06	NA	NA	NA							
923	Completion Report to IDC	0%	NA	NA	NA	NA							
924	Load Test for the Selected Piles (2 nos)	0%	NA	NA	NA	NA							
925	Consent for Pile Cap & Structure Works	0%	NA	NA	NA	NA							
937	Superstructure	30%	Thu 30/11/06	NA	Wed 15/11/06	Wed 25/6/08							
938	Columns to Steel Truss - Grid 17	62%	Mon 4/12/06	NA	Fri 1/12/06	Fri 5/10/07							
942	Column E/17	0%	NA	NA	Fri 7/9/07	Fri 5/10/07							
943	R.C Mega Columns for E/17(91m3)	0%	NA	NA	Fri 7/9/07	Tue 2/10/07							
944	Bearing Installation at Column E/17	0%	NA	NA	Wed 3/10/07	Fri 5/10/07							
945	Column A/17	64%	Mon 21/5/07	NA	Wed 2/5/07	Mon 11/6/07							
946	R.C Mega Columns for A/17(338m3)	70%	Mon 21/5/07	NA	Wed 2/5/07	Thu 7/6/07							
947	Bearing Installation at Column A/17	0%	NA	NA	Fri 8/6/07	Mon 11/6/07							
948	Column B/17	23%	Tue 29/5/07	NA	Fri 20/4/07	Tue 12/6/07							
949	R.C Mega Columns for B/17(395m3)	25%	Tue 29/5/07	NA	Fri 20/4/07	Fri 8/6/07							
950	Bearing Installation at Column B/17	0%	NA	NA	Sat 9/6/07	Tue 12/6/07							
951	Column C/17	93%	Sat 5/5/07	NA	Fri 20/4/07	Tue 12/6/07							
952	R.C Mega Columns for C/17(442m3)	100%	Sat 5/5/07	Fri 22/6/07	Fri 20/4/07	Fri 8/6/07							
953	Bearing Installation at Column C/17	0%	NA	NA	Sat 9/6/07	Tue 12/6/07							
954	Column D/17	91%	Fri 18/5/07	NA	Wed 2/5/07	Mon 11/6/07							
955	R.C Mega Columns for D/17(342m3)	100%	Fri 18/5/07	Fri 22/6/07	Wed 2/5/07	Thu 7/6/07							
956	Bearing Installation at Column D/17	0%	NA	NA	Fri 8/6/07	Mon 11/6/07							
957	Columns to Steel Truss - Grid 24	94%	Thu 14/12/06	NA	Fri 1/12/06	Tue 29/5/07							
961	Column A1a/24	99%	Mon 8/1/07	NA	Thu 28/12/06	Sat 24/2/07							
962	R.C. Mega Columns for A1a/24 (+4 to +14.4, 84m3)	100%	Mon 8/1/07	Wed 24/1/07	Thu 28/12/06	Mon 15/1/07							
963	R.C. Mega Columns for A1a/24 (+14.4 to +51.8, 300m3)	100%	Thu 25/1/07	Wed 4/4/07	Tue 16/1/07	Wed 21/2/07							
964	Bearing Installation at Column A1a/24	70%	Thu 5/4/07	NA	Thu 22/2/07	Sat 24/2/07							
965	Column Ba/24	99%	Fri 2/3/07	NA	Sat 3/2/07	Wed 11/4/07							
966	R.C. Mega Columns for Ba/24 (364m3)	100%	Fri 2/3/07	Sat 26/5/07	Sat 3/2/07	Sat 7/4/07							
967	Bearing Installation at Column Ba/24	70%	Mon 28/5/07	NA	Mon 9/4/07	Wed 11/4/07							
968	Columns C/24	82%	Tue 8/5/07	NA	Fri 16/3/07	Tue 29/5/07							
969	R.C. Mega Columns for C/24(467m3)	86%	Tue 8/5/07	NA	Fri 16/3/07	Fri 25/5/07							
970	Bearing Installation at Column C/24	0%	NA	NA	Sat 26/5/07	Tue 29/5/07							
971	Columns D/24	94%	Wed 16/5/07	NA	Mon 12/2/07	Fri 27/4/07							
972	R.C. Mega Columns for D/24(369m3)	100%	Wed 16/5/07	Fri 13/7/07	Mon 12/2/07	Tue 24/4/07							
973	Bearing Installation at Column D/24	0%	NA	NA	Wed 25/4/07	Fri 27/4/07							
974	Steel Roof Trusses and Superstructure	20%	Thu 30/11/06	NA	Wed 16/11/06	Wed 25/6/08							
1038	Temporary Works for Sliding & Heavy Lifting	11%	Wed 18/7/07	NA	Wed 30/5/07	Mon 12/11/07							
1039	Heavy Lifting & Sliding System Installation	15%	Wed 18/7/07	NA	Wed 30/5/07	Thu 19/7/07							
1041	Transfer Truss for Grid 24/A-B	0%	NA	NA	Wed 30/5/07	Sat 29/9/07							
1042	Assembly Steel Transfer Truss on Column A1a/24 & B	0%	NA	NA	Wed 30/5/07	Thu 9/8/07							

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Date: 29/08/2007

Task  Progress
Critical Task  Milestone

Summary 
Split 

External Tasks  Group By Summary 
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Hong Kong Convention and Exhibition Centre
Expansion Project
3 Month Rolling Programme based on revised master Programme Rev.1 Updating on 29 August 2007

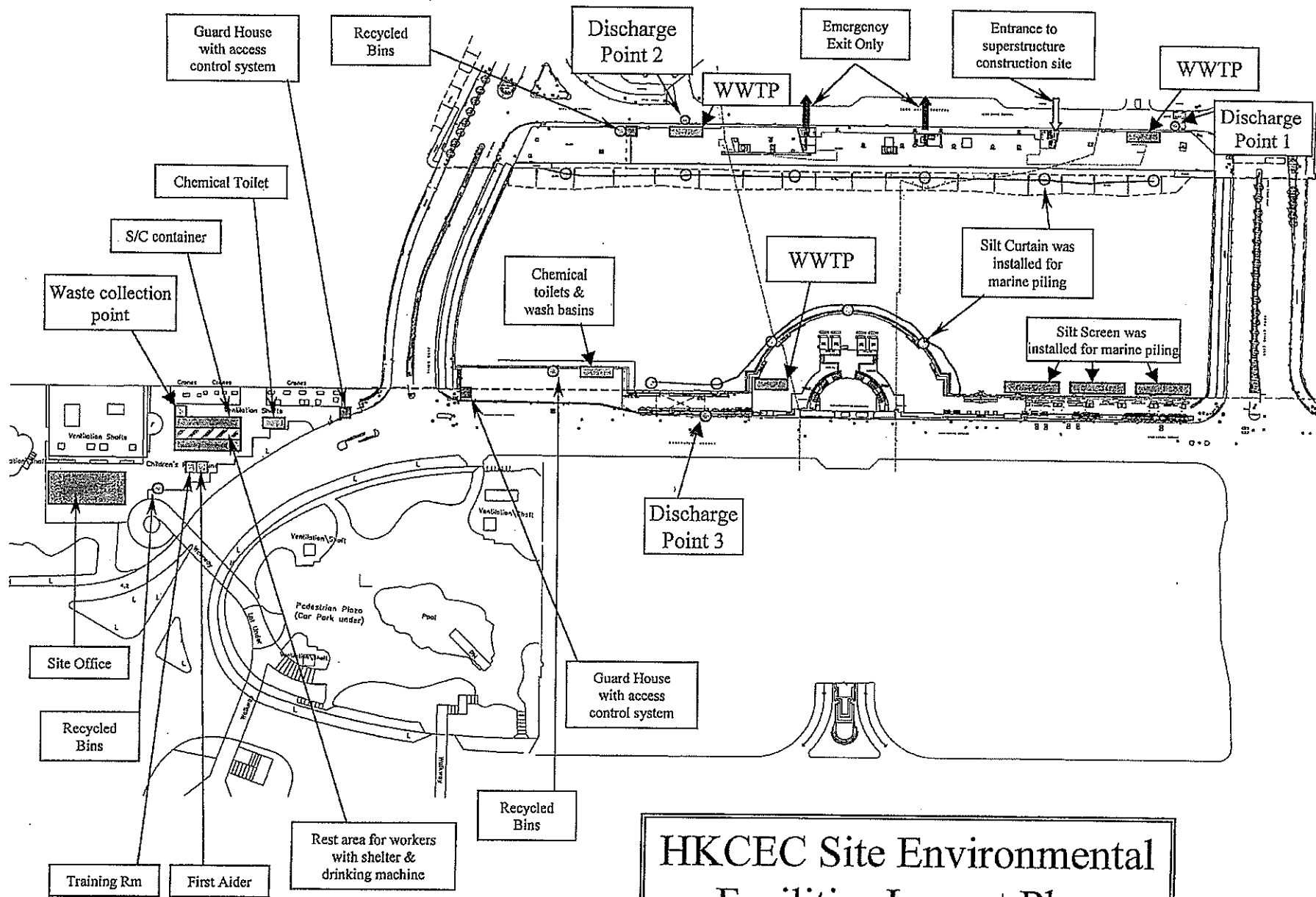
ID	Task Name	% Complete	Actual Start	Actual Finish	Baseline Start	Baseline Finish	May	Jun	Jul	Aug	Sep	Oct	Nov
1043	Connection of Roof Truss A	0%	NA	NA	Fri 10/8/07	Tue 14/8/07			29/8/07				
1044	Connection to Roof Truss B	0%	NA	NA	Wed 26/9/07	Sat 29/9/07							
1045	Roof Truss A(1288tons)	0%	NA	NA	Fri 1/6/07	Thu 1/11/07							
1046	Assembly of Steel Roof Truss A on Site	0%	NA	NA	Fri 1/6/07	Tue 31/7/07							
1047	Erect Temp Bracing between Roof Truss A & B	0%	NA	NA	Wed 25/7/07	Tue 31/7/07							
1048	Lifting Up to Grid C High Level	0%	NA	NA	Wed 1/8/07	Wed 8/8/07							
1049	Sliding to Permanent Position at Grid A	0%	NA	NA	Tue 18/9/07	Sat 22/9/07							
1050	Bracing for Roof Truss A & B	0%	NA	NA	Wed 26/9/07	Wed 10/10/07							
1051	Transfer Trusses from Truss A to Truss A1	0%	NA	NA	Thu 11/10/07	Thu 1/11/07							
1052	Assembly of Back Span for Steel Roof Truss A	0%	NA	NA	Wed 15/8/07	Fri 14/9/07							
1053	Roof Truss B(963tons)	0%	NA	NA	Fri 1/6/07	Fri 2/11/07							
1054	Assembly of Steel Roof Truss B on Site	0%	NA	NA	Fri 1/6/07	Tue 31/7/07							
1055	Erect Temp Bracing between Roof Truss A & B	0%	NA	NA	Wed 25/7/07	Tue 31/7/07							
1056	Lifting Up to Grid D High Level	0%	NA	NA	Wed 1/8/07	Wed 8/8/07							
1057	Sliding to Grid B	0%	NA	NA	Tue 18/9/07	Sat 22/9/07							
1058	Final Lifting of Transfer Truss & Roof Truss B	0%	NA	NA	Mon 24/9/07	Tue 25/9/07							
1059	Bracing for Roof Truss A & B	0%	NA	NA	Wed 26/9/07	Wed 10/10/07							
1060	Assembly of Back Span for Steel Roof Truss B	0%	NA	NA	Tue 2/10/07	Fri 2/11/07							

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

Annex L

Laboratory Report of Water Discharge Sampling



HKCEC Site Environmental Facilities Layout Plan

(1-Aug-06)



ENVIRO LABS LIMITED

環境化驗有限公司

TEST REPORT

JOB NO. : 709126

DATE OF ISSUE : 8 October 2007

PAGE : 1 of 1

1. Customer

Hip Hing - Ngo Kee Joint Venture
5/F, 38 Sheung On Street, Chai Wan, Hong Kong
Attn.: Mr. Ken Leung

2. Sample Identification

Sample Description : 2 batches of water sample said to be wastewater was received in cool condition
Quantity of Sample : 2 x 1L in plastic bottles (for TSS) and 2 x 250mL in plastic bottles (for COD)
Sampling : Conducted by the staff of the Enviro Labs Ltd.
Sampling Point : Outlet of Wastewater Treatment Facility (HKCEC Expansion Project, H200605)
Preservation : Stored under refrigerated condition, COD: conc. H₂SO₄ was added to pH < 2
Sampling Date : 13 Sep 2007
Received Date : 13 Sep 2007
Testing Period : 13 Sep - 5 Oct 2007

3. Test Method

Parameter	Reference Method
(i) pH	APHA ¹ 20e 4500 H ⁺ B
(ii) Total Suspended Solids (TSS) Dried at 103-105°C	APHA ¹ 17e 2540 D
(iii) Chemical Oxygen Demand (COD)	APHA ¹ 20e 5220 C

1. APHA Standard Methods for the Examination of Water and Wastewater

4. Test Result*

Label marked by customer	Test Parameter	Sample No.	Test Result	Discharge Limit **	Unit
HKCEC Expansion Project H200605 Discharge point	pH at 30 °C	709126-1	8.2	6 - 9	--
	TSS	709126-1	< 3	≤30	mg/L
	COD	709126-2	< 50	≤80	mgO ₂ /L
HKCEC Expansion Project H200605 WT-21	pH at 29 °C	709126-3	8.2	6 - 9	--
	TSS	709126-3	6.8	≤30	mg/L
	COD	709126-4	< 50	≤80	mgO ₂ /L

* Test results relate only to the items received.

** Information provided by the customer. (It is not a test result, information for reference only).

--- END of REPORT ---



APPROVED SIGNATORY:

Kenneth Kar Kin LAM
(Laboratory Manager)