#### ENVIRONMENTAL MONITORING & AUDIT REPORT

Hip Hing - Ngo Kee Joint Venture

Hong Kong Convention and Exhibition Centre Expansion Project: Monthly Environmental Monitoring and Audit Report for August 2008

August 2008

**Environmental Resources Management** 

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September 2008

Reference 0050690

For and on be	half of
Environmenta	al Resources Management
Approved by:	Dr. Robin Kennish
Signed:	Lotten Recherth
р. ч.	
Position:	Director
Certified by:	/hungh
(Eı	nvironmental Team Leader – Marcus Ip)
Date:	12 September 2008

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

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Our Ref: 3.16/014/2006/it

11 September 2008

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

Attn: Ms Vera Chan

Dear Sir/Madam,

Hong Kong Convention Centre Expansion Project Monthly EM&A Audit Report for August 2008 (Environmental Permit No. EP-239/2006/B)

With reference to the captioned document concerning the Monthly EM&A report for August 2008 received from ERM dated 10 September 2008, we are pleased to provide our verification for the document pursuant to condition 3 of the Environmental Permit (EP) No. EP-239/2006/B.

Yours faithfully, Nature & Technologies (HK) Limited

Ir Dr Gabriel C K Lam Independent Environmental Checker

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

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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 twenty-fifth monthly Environmental Monitoring and Audit (EM&A) report presenting the EM&A work carried out during the period from 1 to 31 August 2008 in accordance with the EM&A Manual.

#### Summary of Construction Works undertaken during the Reporting month

The major construction works undertaken during this reporting month included the installation of transfer truss, roof truss A, B, C, D and E assembly, floor structures and building service work for transformer room, the removal of façade for linkbridge connection, west façade truss and stage 1 tunnel and temporary deck and the construction of stage 2A tunnel.

#### Environmental Monitoring and Audit Progress

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

24-hour Total Suspended Particulates (TSP) monitoring	5 sets
1-hour TSP monitoring	15 sets
Environmental site auditing	4 times

#### Air Quality

Five sets of 24-hour and fifteen sets of 1-hour TSP monitoring were carried out at the designated monitoring stations (AM1 & AM2) during this reporting month. There were no exceedances recorded during this reporting month.

#### Water Quality

Water quality monitoring at the designated monitoring stations (W3, W4 and W5) was not conducted during this reporting month subsequent to the completion of installation of marine piles on 23 April 2007. Additional water quality monitoring for the dry season was also completed on 14 December 2007. There will not be any water quality monitoring until the next dry season or the removal of temporary marine piles, whichever is earlier.

#### Construction Waste Management

A total of 217.5 tonnes of inert C&D materials and 318.05 tonnes of C&D wastes were generated during this 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. 60 tonnes of steel materials generated from works within this reporting month were collected and recycled offsite.

#### 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 this reporting month.

No environmental complaint or summons was received during this reporting month.

#### Future Key Issues

Major works to be undertaken in the coming month will be the construction of floor structure (L2, L5 and L7), removal of facade for linkbridge connection and builder's work and building service work installation for transformer room.

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

#### 1 INTRODUCTION

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 twenty-fifth EM&A report which summarises the impact monitoring results and audit findings of the EM&A programme during the reporting month from **1 August 2008** to **31 August 2008**.

#### **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 month.

#### 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 month.

#### Section 5: Monitoring Results

summarises the monitoring results obtained in the reporting month.

Section 6 : **Environmental Site Auditing** summarises the audit findings of the weekly site inspections undertaken within the reporting month.

#### Section 7: Environmental Non-conformance

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

#### 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 (EP-239/2006/A) was granted on 12 February 2007. An application for further variation of the Environmental Permit (EP-239/2006/A) was granted on 18 April 2008, and an amended Environmental Permit (EP-239/2006/B) was granted on 12 May 2008. Under the requirements of Condition 3.1 of Environmental Permit EP-239/2006/B, 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 month is shown in *Table 2.1*. The locations of the construction activities are shown in *Annex B*.

#### Table 2.1Summary of Construction Activities Undertaken during the Reporting Month

#### **Construction Activities Undertaken**

- Transfer Truss Installation
- Roof Truss A Assembly
- Roof Truss B Assembly
- Roof Truss C Assembly
- Roof Truss D Assembly
- Roof Truss E Assembly
- Floor Structure (L3 & L5)
- Removal of Façade for Linkbridge Connection
- Linkbridge Corbel Installation
- Floor Structure Installation at L2
- Floor Structure Installation at L5
- Floor Structure Installation at L7
- Floor Structure Installation at R/F
- Removal of Stage 1 Tunnel and Temporary Deck
- Constrution of Stage 2A Tunnel
- Steel Post Erection for Façade
- Builder's work & BS Installation for Transformer Room

#### 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*.

Permit/ Licenses/ Notification	Reference	Validity Period	Remarks
Environmental Permit	EP-239/2006/B	Throughout the Contract	Environmental Permit (EP) EP-239/2006 granted originally on 12 May 2006. Since then the EP have been varied twice. The latest revised EP was issued on 12 May 2008
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/XY0 145	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.
Valid	GW-RS0220-08	Valid from 15 April	
Construction Noise Permit for area inside the	GW-RS0228-08	to 15 October 2008 Valid from 15 April to 14 October 2008	
Atrium Link	GW-RS0273-08	Valid from 1 May to 30 October 2008	
	GW-RS0343-08	Valid from 29 May 1 to 30 October 2008	
	GW-RS0382-08	Valid from 11 June to 30 September 2008	
	GW-RS0383-08	Valid from 10 June to 29 September 2008	
	GW-RS00385-08	Valid from 10 June to 31 August 2008	

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

#### 3 ENVIRONMENTAL MONITORING METHODOLOGY

#### 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 3.1Air 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 3.2TSP 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 3.3Action and Limit Levels for Air Quality

Parameter	Air Monitoring Station	Action Level, µgm <sup>-3</sup>	Limit Level, µgm <sup>-3</sup>
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 3.4TSP Monitoring Equipment

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

#### 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 runtemperature 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 m<sup>3</sup>/min. The range specified in the EM&A Manual was between 0.6 1.7 m<sup>3</sup>/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 was calibrated using an orifice calibrator. Initial calibration of the dust monitoring equipments was conducted upon installation and prior to commissioning. Five-point calibration was carried out for HVS's using Tisch TE-5025A 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

# 3.2.1 Marine Water Quality Monitoring during Installation and Removal of Marine Piles

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 for marine pile installation works was not conducted during this reporting month.

# 3.2.2 Additional Water Quality Monitoring in Marine Channel during Installation and Removal of Marine Piles

As part of the Application for Variation of Environmental Permit (Application No. VEP-227/2007) submitted on 25 January 2007, the Permit Holder undertook additional water quality monitoring in the marine channel in connection with the installation of temporary marine piles.

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. In accordance with the additional water quality programme submitted to the EPD on 4 April 2007, four weeks of additional water quality monitoring during the dry season was undertaken and was completed on 14 December 2007. There will not be any water quality monitoring until the next dry season or the removal of temporary marine piles, whichever is earlier.

#### 3.2.3 Event/Action Plan

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

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 <sup>(1)</sup>. Relevant submissions made on these measures and requirements during the reporting month are summarised in *Annex I*.

(1) The last Monthly EM&A Report for June 2008 was submitted to the EPD on 19 August 2008.

#### 5.1 AIR QUALITY

The monitoring data at AM1 and AM2 were provided by ETS-Testconsult Ltd. Five sets of 24-hour and fifteen sets of 1-hour TSP monitoring were carried out at the designated monitoring stations (AM1 & AM2) during this reporting month. The monitoring results from both 24-hour and 1-hour TSP monitoring were below the respective Action and Limit Levels. 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).

Monitoring of air samples were carried out under both sunny and rainy conditions. 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 for marine pile installation works was not conducted during this 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 5.1Quantities of Waste Generated from the Project

		Quantity	
Month / Year	C&D Materials (inert) (a)	C&D Materials (non-inert) <sup>(b)</sup>	Chemical Waste
August 2008	217.5 tonnes	318.05 tonnes (excluding 60 tonnes of steel materials which were collected and recycled)	0

- (a) Inert C&D materials include bricks, concrete, building debris, rubble and excavated soil. No inert C&D material was reused in this Project during the reporting period. 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.

#### 5.4 QUARTERLY EFFLUENT DISCHARGE SAMPLING

Quarterly effluent discharge samples were taken on 16 June 2008 by the Contractor with the results reported in the Monthly EM&A Report for June 2008, therefore no effluent discharge testing was required for this reporting month. The next sampling is scheduled to be conducted in September 2008. Weekly site inspections were carried out by the ET. Four site inspections were conducted on 7, 14, 21 and 28 August 2008 respectively. There was no non-compliance event recorded in this reporting month.

The following reminders were given to the Contractor during this reporting month:

- (i) On 7 August 2008, some tyre tracks were observed on the road surface adjacent to gate no.1. On 28 August 2008, some tyre tracks were also observed on the road surface adjacent to Gate no.2. The Contractor was reminded to ensure that vehicle wheels were properly washed before leaving the site and that the general cleanliness of road surface immediately adjacent to the site boundary should be maintained.
- (ii) On 7 and 28August 2008, floating wastes were spotted under the marine channel on the western end of the construction site. The Contractor was reminded to arrange waste collection to maintain cleanliness of the waterway.
- (iii) On 7 August 2008, a stagnant water pool was observed on the curbside near the bund at gate no.1. The Contractor was reminded to ensure the submergible pump is working properly for the clearance of stagnant water.
- (iv) On 7 August 2008, a drip tray near gate no.4 on the eastern end of construction site was observed to be full of water. The Contractor was reminded to check and clear stagnant water pools on site after rainy days.
- (v) On 28 August 2008, the waste skip near Gate no.1 at the western end of work site was observed to be full. The Contractor was reminded to arrange waste collection as soon as possible.

#### 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 this reporting period.

#### 7.2 SUMMARY OF ENVIRONMENTAL NON-COMPLIANCE

No non-compliance event was recorded during this reporting month.

#### 7.3 SUMMARY OF ENVIRONMENTAL COMPLAINT

No complaint was received during this reporting month.

#### 7.4 SUMMARY OF ENVIRONMENTAL SUMMONS AND PROSECUTION

No summons or prosecution on environmental matters was received during this reporting month.

#### 8 FUTURE KEY ISSUES

#### 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 8.1Construction Works to be Undertaken in the Coming Month

Work to be taken		
٠	Removal of Facade for Linkbridge Connection	
•	Floor Structure Installation on L2	

- Floor Structure Installation on L5
- Floor Structure Installation on L7
- Builder's Works & Building Service Work Installation for Transformer Room

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 for the dry season commenced on 19 November 2007 and was completed on 14 December 2007. There will not be any water quality monitoring until the next dry season or the removal of temporary marine piles, whichever is earlier.

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 9.1Comparison of the HKAQO and Air Quality Monitoring Results

Monitoring Stations	Corresponding ASR in EIA	HKAQO, ugm <sup>-3</sup>	Measured 24-hour TSP Monitoring Results, ugm <sup>-3 (a) (b)</sup>	
		24 hour <sup>(1)</sup>	Average	Range
AM1	AM8	260	77	23 - 145
AM2	AM6	260	68	14 - 145
Mataa				

Notes:

(a) Only 24-hour TSP monitoring results were compared as there is no 1 hour TSP criterion in HKAQO.

(b) Average and range of data were calculated between the commencement of construction works and this reporting month.

The monitoring results show that the average and range of 24-hour TSP levels recorded since the commencement of the construction works were well below the 24-hour TSP criterion in the HKAQO. Recommended mitigation measures in *Section 4.24* of EIA were implemented throughout the construction period and were considered effective.

#### 9.2 WASTE MANAGEMENT

The estimated amount of waste generated in this Project and the accumulated quantities of waste generated up to this reporting month are presented in *Table 9.2.* Recommended mitigation measures in *Sections 6.35 to 6.41* of the EIA were implemented during the construction stage and regarded as effective.

9

#### Table 9.2Comparison of Estimated and Actual Amounts of Waste Generated

Type of Material	Estimated Amount of C&D Materials in EIA (inert & non-inert)	Accumulated Actual Amount of C&D Materials Recorded <sup>(a)</sup> (inert & non-inert)
Demolition of temporary footbridge	585 tonnes	0
Demolition of existing Atrium Link	4,680 tonnes	2615.5 tonnes
Demolition of temporary working platform	390 tonnes	0
Construction of foundations and pile caps	20,000 tonnes	22292.1 tonnes
General Refuse	Insignificant	1319.4 tonnes
Chemical Waste	Small	288 Litres
Note: (a) The actual amount of C&D Materia	als was recorded since the com	mencement of construct

(a) 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 since the commencement of construction works 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 August to 31 August 2008 in accordance with EM&A Manual and the requirements under EP-239/2006/B.

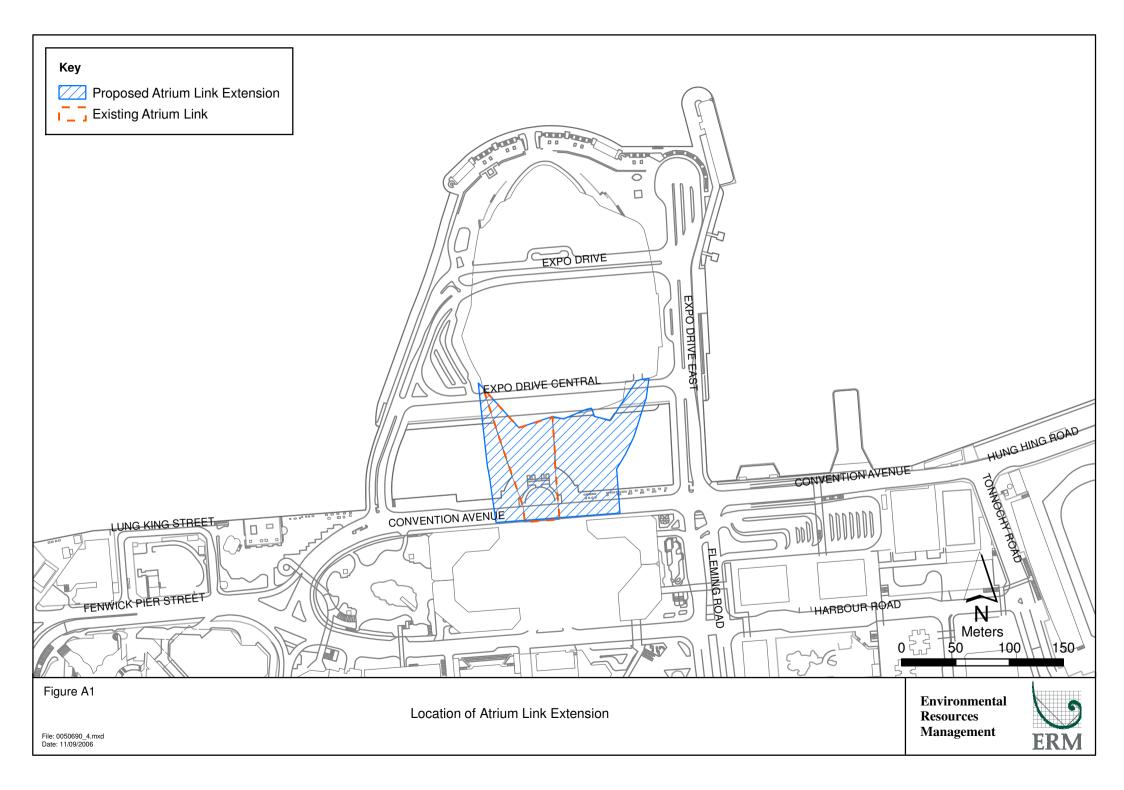
No exceedance of the Action and Limit Levels of 24-hour and 1-hour TSP was recorded at the monitoring stations during this reporting month.

No non-compliance event was recorded during this reporting month.

No complaint and summons/prosecution was received during this reporting month.

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

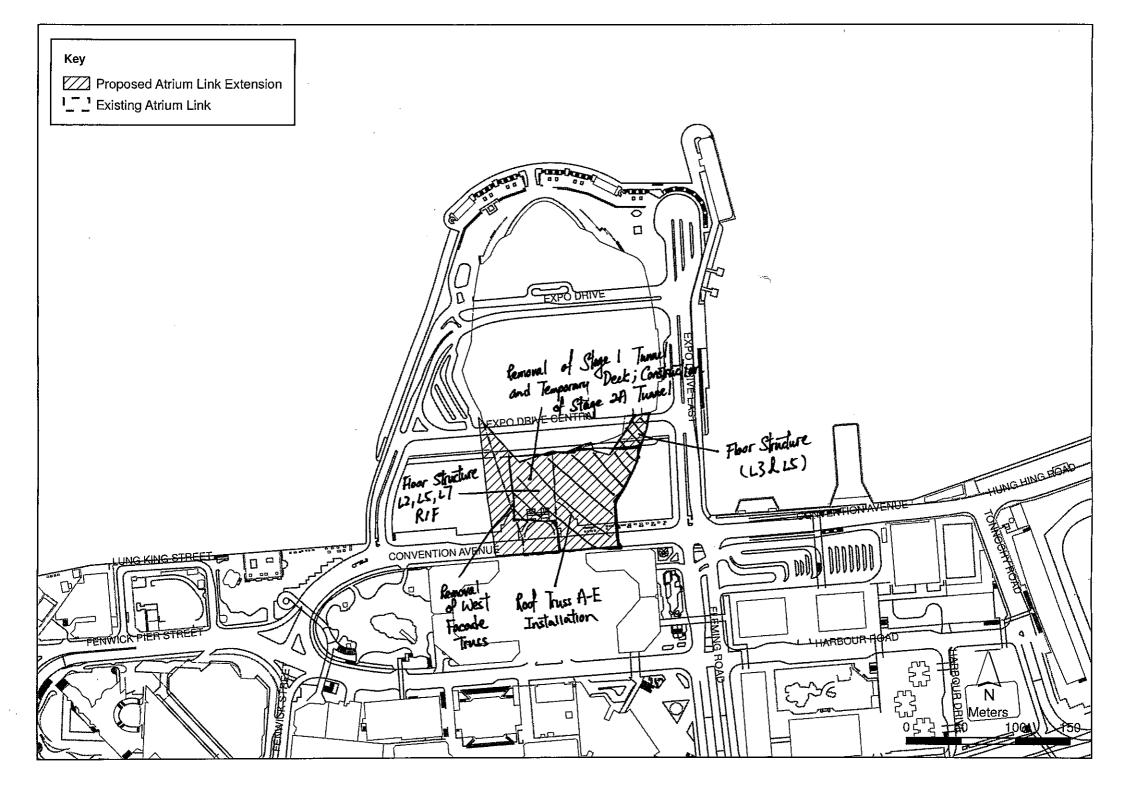


Annex B

Location of Construction Activities during the Reporting Month

### Summary of Works for August 2008

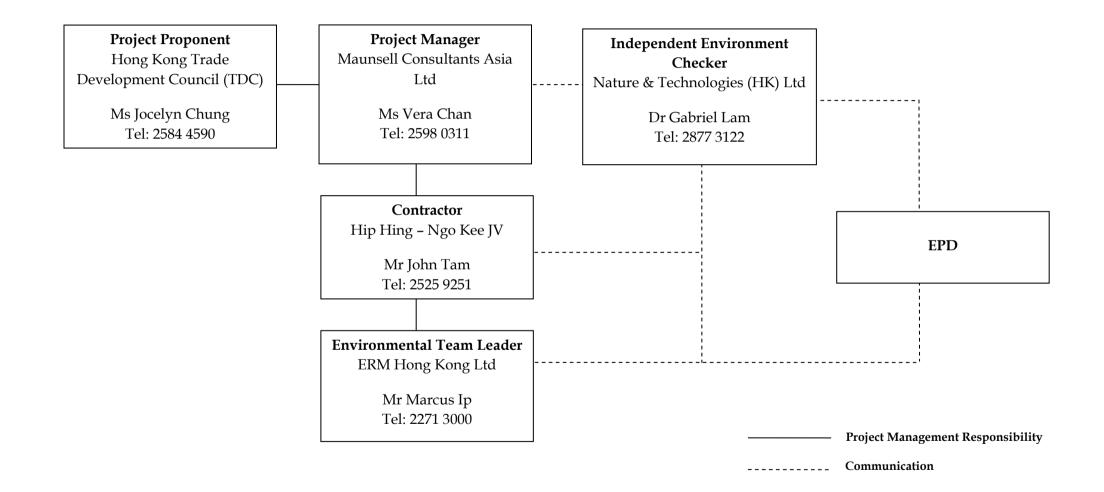
Description	Location	
Transfer Truss Installation	GridA-B/24	
Roof Truss A Assembly	Grid A	
Roof Truss B Assembly	Grid B	
Roof Truss C Assembly	Grid C	
Roof Truss D Assembly	Grid D	
Roof Truss E Assembly	Grid D-E	
Floor Structure (L3 & L5)	Grid D-E/15-19	
Removal of Façade for Linkbridge Connection	Façade Phase I	
Linkbridge Corbel Installation	Grid D-E/15-19	
Floor Structure (L2)	Grid A1-E	
Floor Structure (L5)	Grid A1-E	
Floor Structure (L7)	Grid A1-E	
Floor Structure (R/F)	Grid A1-E	
Removal of West Façade Truss (L2-L7)	Grid A1-A	
Removal of Stage 1 Tunnel and Temporary Deck		
Construction of Stage 2A Tunnel		
Steel Post Erection for Façade		
Builder's work & BS Installation for Transformer Room	L3, Grid D-E	



Annex C

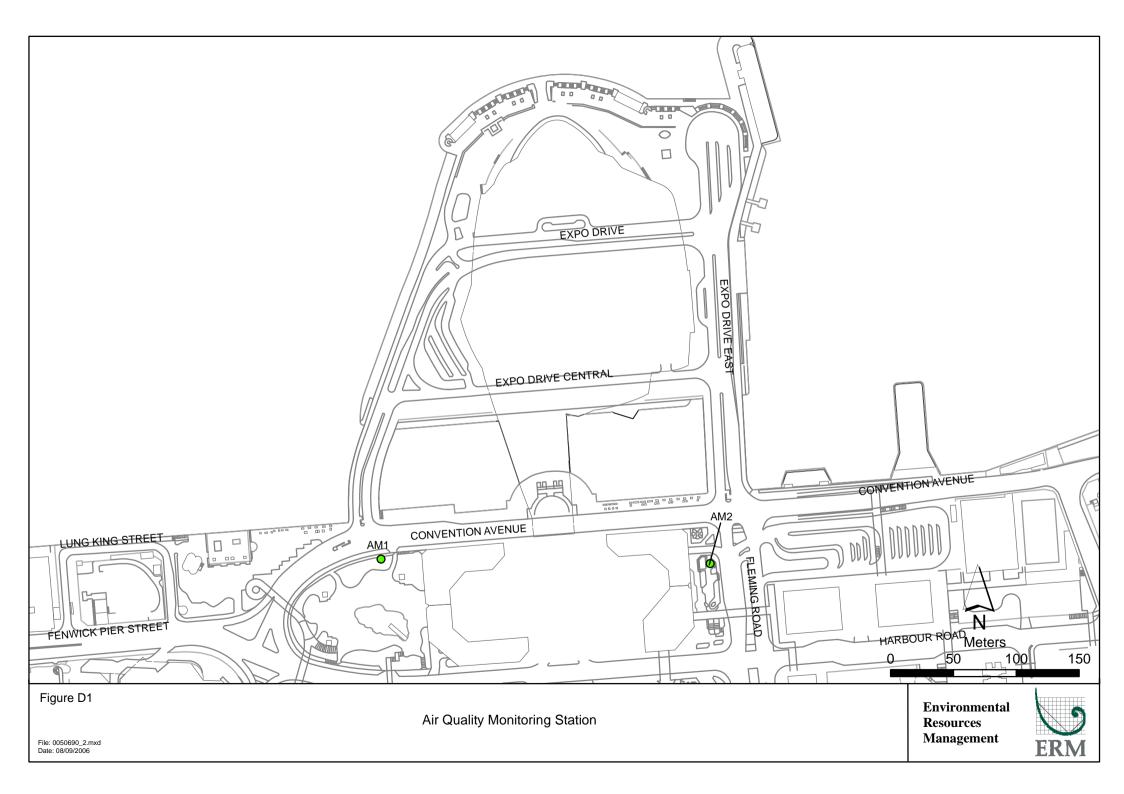
Project Organization Chart and Contact Detail

#### **Project Organization (with contact details)**



Annex D

Location of Air Quality Monitoring Stations





Air Quality Monitoring Station (AM1)



Air Quality Monitoring Station (AM2)

Annex E

Monitoring Schedule for the Reporting Month and Next Month

#### Hong Kong Convention and Exhibition Centre, Atrium Link Extension Air Quality Monitoring Schedule - June 2008

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

#### Hong Kong Convention and Exhibition Centre, Atrium Link Extension Air Quality Monitoring Schedule - July 2008

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

#### Hong Kong Convention and Exhibition Centre, Atrium Link Extension Air Quality Monitoring Schedule - August 2008

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1-Aug	2-Aug
					1hr TSP	
3-Aug	4-Aug	5-Aug	6-Aug	7-Aug	8-Aug	9-Aug
3-Aug	4-Auy	5-Aug	0-Aug	/-Aug	o-Aug	9-Aug
	1hr TSP		1 hr and 24 hr TSP		1hr TSP	
10-Aug	11-Aug	12-Aug	13-Aug	14-Aug	15-Aug	16-Aug
	_					
	1hr TSP	1 hr and 24 hr TSP	1 hr TSP		1hr TSP	
		1 111 anu 24 111 13F	THETOP		111 135	
17-Aug	18-Aug	19-Aug	20-Aug	21-Aug	22-Aug	23-Aug
	1 hr and 24 hr TSP		1 hr TSP		1 hr TSP	1 hr and 24 hr TSP
24-Aug	25-Aug	26-Aug	27-Aug	28-Aug	29-Aug	30-Aug
24-Aug	25-Aug	20-Aug	27-Aug	20-Auy	29-Aug	30-Aug
	1 hr TSP		1 hr TSP		1 hr and 24 hr TSP	
31-Aug						

#### Hong Kong Convention and Exhibition Centre, Atrium Link Extension Air Quality Monitoring Schedule - September 2008

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

Annex F

# Calibration Reports for HVSs



## 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

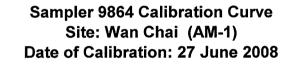
**TEST REPORT** 

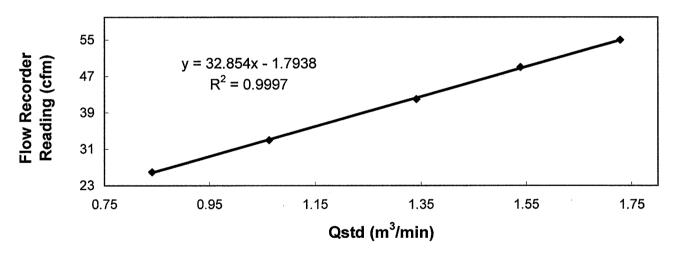
## **Calibration Report**

of

## High Volume Air Sampler

Manufacturer	:	Graseby GMW	Date of Calib	ration	:	<u>27</u> J							
Serial No.	:	9864 (ET/EA/003/19)	Calibration D	ue Date	:	26 A	ugust 200	8					
Method	:	Based on Operations Manual for the 5 manufactured by Tisch TE-5025 A	eed on Operations Manual for the 5-point calibration using standard calibration kit nufactured by Tisch TE-5025 A										
Results	:	Flow recorder reading (cfm)	55	49		42	33	26					
		Qstd (Actual flow rate, m <sup>3</sup> /min)	1.73	1.54		1.34	1.06	0.84					
		Pressure : 761.31 mm H	-lg	Temp. :		301	К						





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 CHOW, Hoi Tat

(Asst. Environmental Officer)



## 東業德勤測試顧問有限公司 ETS-TESTCONSULT LIMITED

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

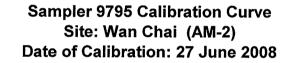
**TEST REPORT** 

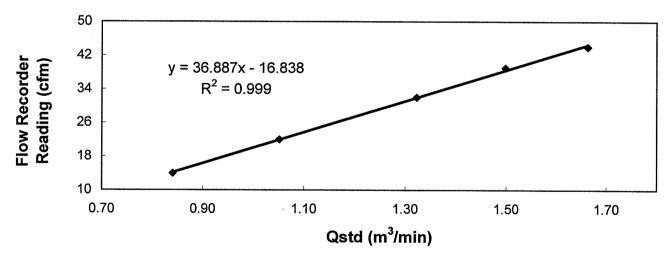
#### **Calibration Report**

of

## High Volume Air Sampler

Manufacturer	:	Graseby GMW	oration	:	27 June 2008			
Serial No.	:	9795 (ET/EA/003/18)	Calibration E	ue Date	:	26 A	August 200	8
Method	:	Based on Operations Manual for the 5 manufactured by Tisch TE-5025 A	5-point calibra	tion using s	stan	dard	calibration I	<b>kit</b>
Results	:	Flow recorder reading (cfm)	44	39		32	22	14
		Qstd (Actual flow rate, m <sup>3</sup> /min)	1.66	1.50	<u>·</u>	1.32	1.05	0.84
		Pressure : 761.31 mm H	Чg	Temp. :		301	К	





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 :

Ll, Wan Lung (Technician)

Approved by CHOW, Hoi Tat

(Asst. Environmental Officer)



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

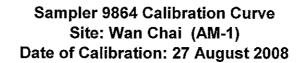
東 業 德 勤 測 試 顧 問 有 限 公 司

**TEST REPORT** 

## <u>Calibration Report</u> of <u>High Volume Air Sampler</u>

Manufacturer	:	Graseby GMW	Date of Calibr	ation	:	27 Au	8	
Serial No.	:	9864 (ET/EA/003/19)	Calibration Du	e Date	:	<u>26 O</u>	ctober 20	08
Method	;	Based on Operations Manual for the manufactured by Tisch TE-5025 A	5-point calibrati	on using	star	idard ca	alibration I	cit
Results	:	Flow recorder reading (cfm)	53	47		41	32	25
		Qstd (Actual flow rate, m <sup>3</sup> /min)	1.69	1.50		1.32	1.02	0.82

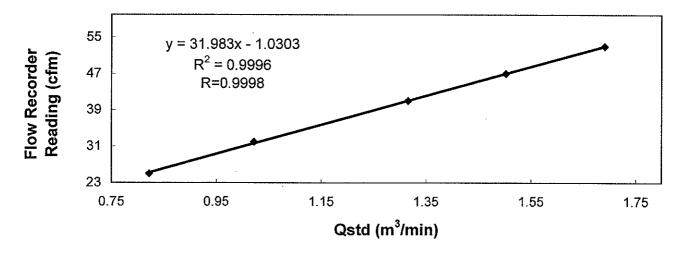
760.56 mm Hg



Temp. :

304

Κ



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 : <u>Mak</u> <u>Ka</u><u>Waj</u> MAK, Kei Wai (Senior Technician)

Pressure :

Approved by :

CHOW, Hoi Tat (Asst. Environmental Officer)



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

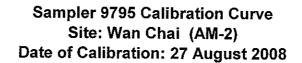
東業徳勤測試顧問有限公司

**TEST REPORT** 

## <u>Calibration Report</u> of <u>High Volume Air Sampler</u>

Manufacturer	:	Graseby GMW	ation	:	27 A	ugust 200	8	
Serial No.	:	9795 (ET/EA/003/18)	Calibration Du	ie Date	:	<u>26 O</u>	ctober 20	08
Method	:	Based on Operations Manual for the manufactured by Tisch TE-5025 A	5-point calibrati	on using :	star	idard c	alibration I	<b>kit</b>
Results	:	Flow recorder reading (cfm)	46	42		38	30	24
		Qstd (Actual flow rate, m <sup>3</sup> /min)	1.65	1.46		1.28	1.01	0.80

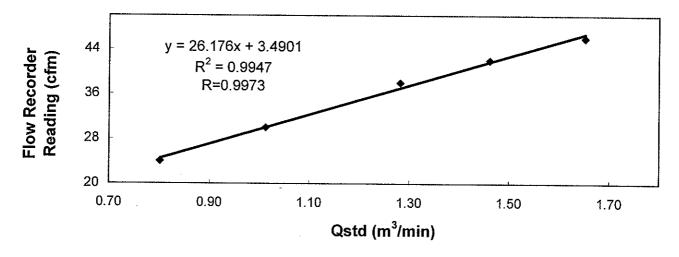
760.56 mm Hg



Temp. :

302

κ



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 : MAK, Kei Wai (Senior Technician)

Pressure :

Approved by :

CHOW, Hoi Tat

(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 W	eight (g)	Flow Rate	e (m <sup>3</sup> /min.)	Elapse	e Time	Sampling	Conc.	Weather	Ave. Air	Particulate	Av. flow	Total vol.
	Initial	Final	Initial	Final	Initial	Final	Time(hrs.)	(µg/m <sup>3</sup> )	Condition	Temp. (°C)	weight(g)	(m <sup>3</sup> /min)	(m <sup>3</sup> )
8/8/08-9/8/08	2.8339	2.9297	1.1199	1.1199	13869.30	13894.37	25.1	57	Rainy	25.7	0.0958	1.1199	1684.55
12/8/08-13/8/08	2.8000	2.8974	1.0895	1.0895	13896.37	13920.37	24.0	62	Sunny	27.8	0.0974	1.0895	1568.88
18/8/08-19/8/08	2.7658	2.8423	1.0590	1.0590	13923.37	13947.37	24.0	50	Sunny	29.3	0.0765	1.0590	1524.96
23/8/08-24/8/08	2.8398	2.9088	1.2721	1.2721	13950.37	13974.37	24.0	38	Rainy	25.1	0.0690	1.2721	1831.82
29/8/08-30/8/08	2.8091	2.8672	1.2203	1.2203	13977.37	14001.37	24.0	33	Sunny	28.8	0.0581	1.2203	1757.23
							Min	33					
							Max	62					
							Average	48					

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

Date	Filter W	eight (g)	Flow Rate	(m <sup>3</sup> /min.)	Elapse	e Time	Sampling	Conc.	Weather	Ave. Air	Particulate	Av. flow	Total vol.
	Initial	Final	Initial	Final	Initial	Final	Time(hrs.)	(µg/m <sup>3</sup> )	Condition	Temp. (°C)	weight(g)	(m <sup>3</sup> /min)	(m <sup>3</sup> )
8/8/08-9/8/08	2.8863	2.9387	1.3240	1.3240	12198.71	12222.13	23.4	28	Rainy	25.7	0.0524	1.3240	1860.48
12/8/08-13/8/08	2.8170	2.9129	1.3240	1.3240	12224.13	12248.13	24.0	50	Sunny	27.8	0.0959	1.3240	1906.56
18/8/08-19/8/08	2.7862	2.8306	1.2969	1.2969	12251.13	12275.13	24.0	24	Sunny	29.3	0.0444	1.2969	1867.54
23/8/08-24/8/08	2.8226	2.8973	1.4053	1.4053	12278.13	12302.13	24.0	37	Rainy	25.1	0.0747	1.4053	2023.63
29/8/08-30/8/08	2.8052	2.8658	1.0892	1.0892	12305.13	12329.13	24.0	39	Sunny	28.8	0.0606	1.0892	1568.45
							Min	24					
							Max	50					
							Average	36					

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

Date	Filter W	eight (g)	Flow Rate	e (m <sup>3</sup> /min.)	Elapse	e Time	Sampling	Conc.	Weather	Ave. Air	Particulate	Av. flow	Total vol.
	Initial	Final	Initial	Final	Initial	Final	Time(hrs.)	(µg/m <sup>3</sup> )	Condition	Temp. (°C)	weight(g)	(m <sup>3</sup> /min)	(m <sup>3</sup> )
01-Aug-08	2.8131	2.8205	1.3330	1.3330	13865.30	13866.30	1.00	93	Sunny	28	0.0074	1.3330	79.98
04-Aug-08	2.8063	2.8194	1.2721	1.2721	13866.30	13867.30	1.00	172	Sunny	29.4	0.0131	1.2721	76.33
06-Aug-08	2.7819	2.7946	1.1504	1.1504	13867.30	13868.30	1.00	184	Rainy	25.7	0.0127	1.1504	69.02
08-Aug-08	2.8670	2.8745	1.1199	1.1199	13868.30	13869.30	1.00	112	Rainy	25.7	0.0075	1.1199	67.19
11-Aug-08	2.7860	2.7990	1.1504	1.1504	13894.37	13895.37	1.00	188	Rainy	25.3	0.0130	1.1504	69.02
12-Aug-08	2.7898	2.7961	1.1504	1.1504	13895.37	13896.37	1.00	91	Sunny	27.8	0.0063	1.1504	69.02
13-Aug-08	2.8441	2.8490	0.9982	0.9982	13920.37	13921.37	1.00	82	Sunny	28.8	0.0049	0.9982	59.89
15-Aug-08	2.8420	2.8497	0.9982	0.9982	13921.37	13922.37	1.00	129	Sunny	28.7	0.0077	0.9982	59.89
18-Aug-08	2.8186	2.8256	0.9982	0.9982	13922.37	13923.37	1.00	117	Sunny	29.3	0.0070	0.9982	59.89
20-Aug-08	2.8508	2.8580	1.0286	1.0286	13947.37	13948.37	1.00	117	Sunny	29.5	0.0072	1.0286	61.72
22-Aug-08	2.8595	2.8622	1.0590	1.0590	13948.37	13949.37	1.00	42	Rainy	26.2	0.0027	1.0590	63.54
23-Aug-08	2.8336	2.8399	1.0590	1.0590	13949.37	13950.37	1.00	99	Rainy	25.1	0.0063	1.0590	63.54
25-Aug-08	2.7712	2.7768	1.1199	1.1199	13974.37	13975.37	1.00	83	Sunny	28.2	0.0056	1.1199	67.19
27-Aug-08	2.7580	2.7661	1.0640	1.0640	13975.37	13976.37	1.00	127	Sunny	28.3	0.0081	1.0640	63.84
29-Aug-08	2.7955	2.8045	1.0953	1.0953	13976.37	13977.37	1.00	137	Sunny	28.8	0.0090	1.0953	65.72
							Min	42					

Max 188 Average 118

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

Date	Filter W	eight (g)	Flow Rate	(m <sup>3</sup> /min.)	Elapse	e Time	Sampling	Conc.	Weather	Ave. Air	Particulate	Av. flow	Total vol.
	Initial	Final	Initial	Final	Initial	Final	Time(hrs.)	(µg/m <sup>3</sup> )	Condition	Temp. (°C)	weight(g)	(m <sup>3</sup> /min)	(m <sup>3</sup> )
01-Aug-08	2.7943	2.8004	1.2969	1.2969	12194.71	12195.71	1.00	78	Sunny	28	0.0061	1.2969	77.81
04-Aug-08	2.7817	2.7970	1.3511	1.3511	12195.71	12196.71	1.00	189	Sunny	29.4	0.0153	1.3511	81.07
06-Aug-08	2.8162	2.8297	1.3240	1.3240	12196.71	12197.71	1.00	170	Rainy	25.7	0.0135	1.3240	79.44
08-Aug-08	2.8907	2.8974	1.3240	1.3240	12197.71	12198.71	1.00	84	Rainy	25.7	0.0067	1.3240	79.44
11-Aug-08	2.8458	2.8600	1.2969	1.2969	12222.13	12223.13	1.00	182	Rainy	25.3	0.0142	1.2969	77.81
12-Aug-08	2.7900	2.7980	1.3240	1.3240	12223.13	12224.13	1.00	101	Sunny	27.8	0.0080	1.3240	79.44
13-Aug-08	2.8758	2.8836	1.3240	1.3240	12248.13	12249.13	1.00	98	Sunny	28.8	0.0078	1.3240	79.44
15-Aug-08	2.8321	2.8409	1.2969	1.2969	12249.13	12250.13	1.00	113	Sunny	28.7	0.0088	1.2969	77.81
18-Aug-08	2.8061	2.8140	1.2969	1.2969	12250.13	12251.13	1.00	102	Sunny	29.3	0.0079	1.2969	77.81
20-Aug-08	2.8194	2.8278	1.2969	1.2969	12275.13	12276.13	1.00	108	Sunny	29.5	0.0084	1.2969	77.81
22-Aug-08	2.8575	2.8604	1.3511	1.3511	12276.13	12277.13	1.00	36	Rainy	26.2	0.0029	1.3511	81.07
23-Aug-08	2.8116	2.8175	1.2698	1.2698	12277.13	12278.13	1.00	77	Rainy	25.1	0.0059	1.2698	76.19
25-Aug-08	2.7905	2.7975	1.2969	1.2969	12302.13	12303.13	1.00	90	Sunny	28.2	0.0070	1.2969	77.81
27-Aug-08	2.7857	2.7923	1.0892	1.0892	12303.13	12304.13	1.00	101	Sunny	28.3	0.0066	1.0892	65.35
29-Aug-08	2.7470	2.7552	1.0892	1.0892	12304.13	12305.13	1.00	125	Sunny	28.8	0.0082	1.0892	65.35
					-		Min	36					

Min	36
Max	189
Average	110

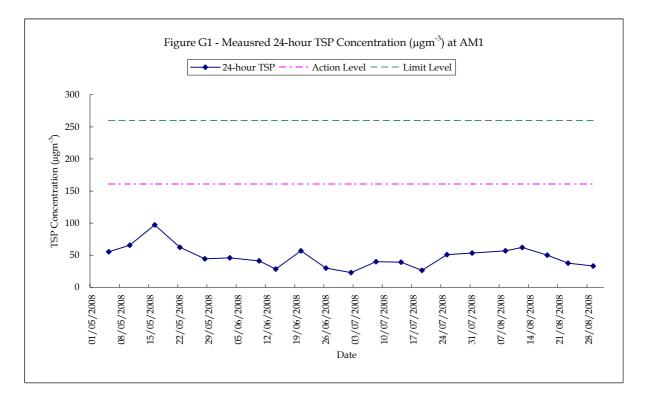
## Meteorological Data Extracted from King's Park Stations of the Hong Kong Observatory

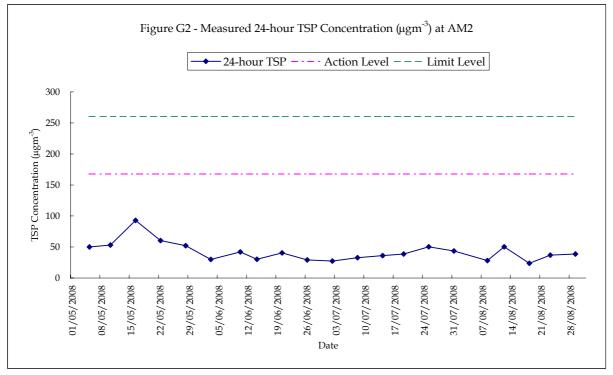
			King's Park Station			
Date	Weather	Average Air Temperature (° C)	Average Relative Humiditiy (%)	Total Rainfall (mm)	Wind Direction (Degree)	Average Wind Speed (km/h)
01-Aug-08	Sunny	28	84	0.0	110	9.9
04-Aug-08	Sunny	29.4	75	0.0	110	8.8
06-Aug-08	Rainy	25.7	92	6.0#	110	25.8
08-Aug-08	Rainy	25.7	95	52.0	100	7.1
11-Aug-08	Rainy	25.3	92	17.0	270	4.9
12-Aug-08	Sunny	27.8	84	0.0	170	7.9
13-Aug-08	Sunny	28.8	78	0.0	280	7.9
15-Aug-08	Sunny	28.7	80	0.0	270	10.0
18-Aug-08	Sunny	29.3	79	0.0	110	10.5
20-Aug-08	Sunny	29.5	77	0.0	270	9.7
22-Aug-08	Rainy	26.2	83	75.5	10	28.8
23-Aug-08	Rainy	25.1	84	42.5	220	14.7
25-Aug-08	Sunny	28.2	83	0.0	170	6.8
27-Aug-08	Sunny	28.3	76	0.0	270	7.3
29-Aug-08	Sunny	28.8	79	0.0	270	7.5

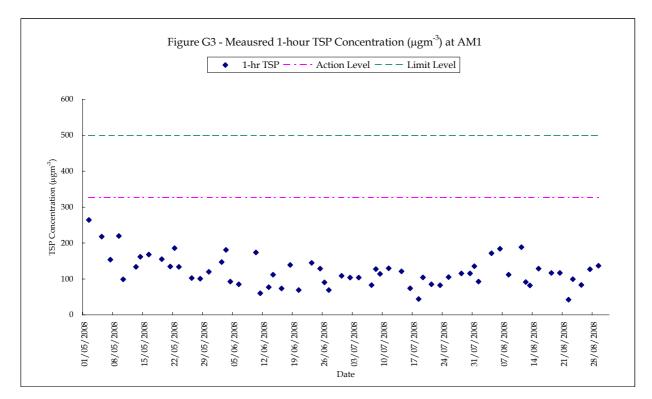
Notes:

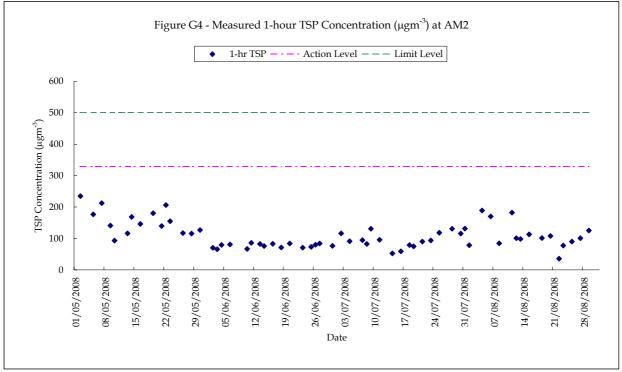
# - missing (less than 24 hourly observations a day)

NA - not available









Annex H

Event Action Plans for Air Quality Monitoring

Event Action				
Action Level	ET	Contractor	ER	IEC
Exceedance for one sample	<ol> <li>Identify source</li> <li>Notify IEC, ER and Contractor within 1 working day after receiving the laboratory results.</li> <li>Conduct additional monitoring to investigate the causes.</li> <li>Report the investigation results and if exceedance is due to contractor's construction works to the IEC, ER and Contractor.</li> <li>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.</li> </ol>	<ol> <li>Take immediate action to avoid further exceedance and rectify any unacceptable practice.</li> <li>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</li> <li>Implement agreed proposal within a time scale agreed with ER and IEC.</li> </ol>	<ol> <li>Confirm receipt of notification of failure in writing.</li> <li>Notify Contractor.</li> <li>Require Contractor to submit air mitigation proposal.</li> <li>Ensure remedial measures are properly implemented.</li> </ol>	<ol> <li>Review monitoring data and investigation report submitted by ET.</li> <li>Review Contractor's air mitigation proposal and advise the ER accordingly.</li> <li>Supervise and confirm in writing the implementation of remedial measures within 2 working days after receipt of the mitigation proposal.</li> </ol>
	<ol> <li>Identify source</li> <li>Notify EPD, IEC, ER and Contractor within 1 working day after receiving the laboratory results</li> <li>Conduct additional monitoring to investigate the causes.</li> <li>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.</li> <li>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.</li> <li>If exceedances continue after 1-week monitoring events, request ER to arrange meeting with ER, IEC and contractor to discuss remedial actions.</li> </ol>	<ol> <li>Take immediate action to avoid further exceedance and rectify any unacceptable practice</li> <li>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</li> <li>Implement agreed proposal within a time scale agreed with ER and IEC.</li> <li>Amend working methods if appropriate.</li> </ol>	<ol> <li>Confirm receipt of notification of failure in writing.</li> <li>Notify Contractor.</li> <li>Require Contractor to submit air mitigation proposal.</li> <li>Ensure remedial measures are properly implemented.</li> </ol>	<ol> <li>Review monitoring data and investigation report submitted by ET.</li> <li>Discuss amongst ER, ET and Contractor in order to formulate air mitigation proposal.</li> <li>Review Contractor's air mitigation proposal and advise the ER accordingly.</li> <li>Supervise and confirm in writing the implementation of remedial measures within 2 working days after receipt of the mitigation proposal.</li> </ol>

Event	Action			
Limit Level	ET	Contractor	ER	IEC
Exceedance for one sample	<ol> <li>Identify source</li> <li>Notify EPD, IEC, ER and Contractor within 1 working day after receiving the laboratory results</li> <li>Conduct additional monitoring to investigate the causes.</li> <li>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.</li> <li>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.</li> </ol>	<ol> <li>Take immediate action to avoid further exceedance and rectify any unacceptable practice</li> <li>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</li> <li>Implement agreed proposal within a time scale agreed with ER and IEC.</li> <li>Amend working methods if appropriate.</li> </ol>	mitigation proposal.	<ol> <li>Review monitoring data and investigation report submitted by ET.</li> <li>Discuss amongst ER, ET and Contractor in order to formulate air mitigation proposal.</li> <li>Review Contractor's air mitigation proposal and advise the ER accordingly.</li> <li>Supervise and confirm in writing the implementation of remedial measures within 2 working days after receipt of the mitigation proposal.</li> </ol>
Exceedance for two or more consecutive samples	<ol> <li>Identify source</li> <li>Notify EPD, IEC, ER and Contractor within 1 working day after receiving the laboratory results</li> <li>Conduct additional monitoring to investigate the causes.</li> <li>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.</li> <li>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.</li> <li>If exceedances continue after 2 consecutive monitoring events, request ER to arrange meeting with IEC and contractor to discuss remedial actions.</li> </ol>	<ol> <li>Take immediate action to avoid further exceedance and rectify any unacceptable practice</li> <li>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</li> <li>Implement agreed proposal within a time scale agreed with ER and IEC.</li> <li>Amend working methods and proposal if appropriate.</li> <li>Stop relevant portion(s) of works as required by ER, ET and IEC</li> </ol>	<ol> <li>Confirm receipt of notification of failure in writing.</li> <li>Notify Contractor.</li> <li>Require Contractor to submit air mitigation proposal.</li> <li>Ensure remedial measures are properly implemented.</li> <li>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.</li> </ol>	<ol> <li>Review monitoring data and investigation report submitted by ET.</li> <li>Discuss amongst ER, ET and Contractor in order to formulate air mitigation proposal.</li> <li>Review Contractor's air mitigation proposal and advise the ER accordingly.</li> <li>Supervise and confirm in writing the implementation of remedial measures within 2 working days after receipt of the mitigation proposal.</li> </ol>

Annex I

Summary of Implementation Status

## Annex I - Summary of Environmental Protection / Mitigation Activities

Environmental Permit No. EP-239/2006/B

EP Condition	Submission	Action Required by the Permit Holder	Implementation Status
Ref			
	litigating Water Quality Impact		
2.4	Method statement on silt screens for seawater intakes (including design and maintenance requirements)	2 weeks before commencement of marine pile installation works	Method statement was submitted to the EPD on 21/6/06. Method statement (Revision A) was submitted to the EPD on 29/9/06. Method statement (Revision B) and supplementary information was submitted to the EPD on 23/5/07 and 18/6/07 respectively.
2.5	Method statement on silt curtain system for marine piling works (including design and maintenance requirements)	2 weeks before commencement of marine pile installation works	Method statement was submitted to the EPD on 15/9/06.
2.8	Design drawings specifying pile dimension and layout	2 weeks before commencement of marine pile installation works	Marine pile layout (final stage) was submitted to the EPD on 15/2/07.
			Revised marine pile layout (final stage) was submitted to the EPD on $26/3/07$ .
Measures for N	litigating Air Quality Impact		
2.9	Design drawings of ventilation facility for fresh air intakes (req'd only before operation of Project)	2 weeks before commencement of installation of ventilation facility	
Measures for N	litigating Landscape and Visual Impact		
2.10	Implementation programme for landscape and visual mitigation measures (for both construction and operational phases of Project)	Within 6 months after commencement of construction of Project	Implementation programme (CM01, CM04 and CM05) was submitted to the EPD on 8/12/06.
2.10	Details of each landscape and visual mitigation measures package (incl plans)	2 weeks before implementation of a particular mitigation package	Proposal on protection and transplantation of existing trees was submitted to the EPD on 8/12/06. Proposal for CM03 was submitted to the EPD on 8/12/06. Proposal for CM01, CM04 and CM05 was submitted to the EPD on 15/12/06. CM01 Rev 1 was submitted to the EPD on 22/1/07. Proposal CM02 was submitted to the EPD on 13/3/07. Proposal for OM01 was submitted to the EPD on 15/11/07.
3.2	Baseline Monitoring Report	One week before the commencement of construction	

Type of	Environmental Protection Measures	Location/ Timing	Status
Impact			
Construction Pl Air Quality	<ul> <li>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:</li> <li>skip hoist for material transport should be totally enclosed by impervious sheeting;</li> <li>every vehicle should be washed to remove any dusty materials from its body and wheels before leaving a construction site;</li> <li>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;</li> <li>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;</li> <li>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;</li> <li>all dusty materials wet;</li> <li>the height from which excavated materials dropped should be controlled to a minimum practical height to limit fugitive dust generation from unloading;</li> <li>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</li> <li>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.</li> </ul>	Work site / during construction	

Type of	Environmental Protection Measures	Location/ Timing	Status
Impact Operational Ph			
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 <sub>2</sub> 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
Construction P	hase		
Noise	<ul> <li>Good Site Practice:</li> <li>only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction program;</li> <li>silencers or mufflers on construction equipment should be utilized and should be properly maintained during the construction program;</li> <li>mobile plant, if any, should be sited as far from NSRs as possible;</li> <li>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;</li> <li>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</li> <li>material stockpiles and other structures should be effectively utilised, wherever practicable, in screening noise from onsite construction activities;</li> <li>Environmental audit shall be carried out to ensure that appropriate noise control measures would be properly implemented.</li> </ul>	Construction work areas / Construction period	

Type of	Environmental Protection Measures	Location/ Timing	Status
Impact			
Operational I			
Noise	<ul> <li>The following noise reduction measures should be considered as far as practicable during detailed design:</li> <li>choose quieter plant such as those which have been effectively silenced;</li> <li>include noise levels specification when ordering new plant;</li> <li>locate fixed plant away from any NSRs as far as practicable;</li> <li>locate fixed plant in plant rooms with thick walls or specially designed enclosure;</li> <li>locate noisy machines in basement or a completely separate building; and</li> <li>develop and implement a regularly scheduled plant maintenance programme in order to maintain controlled level of noise.</li> </ul>	Plant Room / Design and Operation Stage	Relevant design and plant procurement procedures to commence at a later stage
Construction	Phase	1	
Water Quality	There should be no permanent structure in the water channel.	At the ALE sea channel / during operational phase	$\bigvee$
Water Quality	No dredging and no reclamation should be carried out for the Project.	At work sites / during construction phase	$\checkmark$
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.

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	

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
Water Quality	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 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.	Works areas / construction period	
Water Quality	<ul> <li>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.</li> <li>Measures should be taken to minimize the ingress of rainwater into trenches. If excavation of trenches in wet seasons is</li> </ul>	Works areas / construction period	$\checkmark$

#### Environmental Protection Measures Type of Location/ Timing Status Impact necessary, they should be dug and backfilled in short sections. Rainwater pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities. 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. 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. Water Good site practices should be adopted to remove rubbish and Works areas / construction period $\sqrt{}$ litter from construction sites so as to prevent the rubbish and Ouality litter from spreading from the site area. It is recommended to clean the construction sites on a regular basis. Under normal circumstances, groundwater pumped out of wells, Water Works areas / construction period $\sqrt{}$ Quality 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. Water Water used in ground boring and drilling or rock / soil anchoring Works areas / construction period $\sqrt{}$ should as far as practicable be re-circulated after sedimentation. Quality When there is a need for final disposal, the wastewater should be discharged into storm drains via silt removal facilities. Wastewater generated from the washing down of mixing trucks Water Works areas / construction period $\sqrt{}$ and drum mixers and similar equipment should whenever Quality practicable be recycled. The discharge of wastewater should be

Type of	Environmental Protection Measures	Location/ Timing	Status
Impact			
	kept to a minimum. 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.		
	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.		
Water Quality	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.	Works areas / construction period	$\checkmark$
	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.		
Water Quality	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.	Works areas / construction period	N
	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.		

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
	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.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 	Works areas / construction period	
Water Quality	<ul> <li>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.</li> <li>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</li> </ul>	Works areas / construction period	
Water Quality	necessary.         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.	Works areas / construction period	No acidic wastewater will be generated.

#### Type of Location/ Timing Environmental Protection Measures Status Impact Wastewater collected from canteen kitchens, including that from Works areas / construction period Water $\sqrt{}$ Ouality basins, sinks and floor drains, should be discharged into foul sewer via grease traps capable of providing at least 20 minutes retention during peak flow. Drainage serving an open oil filling point should be connected to storm drains via a petrol interceptors with peak storm bypass. 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. Water It is recommended to provide sufficient chemical toilets in the Works areas / construction period $\sqrt{}$ Quality 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. 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. Water Contractor must register as a chemical waste producer if Works areas / construction period $\sqrt{}$ chemical wastes would be produced from the construction Quality 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. Any service shop and maintenance facilities should be located on Works areas / construction period Water $\sqrt{}$

#### Impact Quality hard standings within a bunded area, and sumps and oil interceptors should be provided. Maintenance of vehicles and equipment involving activities with potential for leakage and spillage should only be undertaken within the areas appropriately equipped to control these discharges. 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: 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. To minimize the potential water quality impacts from the Water Works areas / construction period $\sqrt{}$ Quality construction works located at or near the storm system or seafront, the following mitigation measures should be adopted: 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 ٠ 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

Location/ Timing

Status

## Summary of Mitigation Measures Implementation Schedule

Environmental Protection Measures

Type of

Type of	Environmental Protection Measures	Location/ Timing	Status
Impact	<ul> <li>the nearby water receivers;</li> <li>construction activities, which generate large amount of wastewater, should be carried out in a distance away from the waterfront, where practicable;</li> <li>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;</li> <li>construction effluent, site run-off and sewage should be properly collected and/or treated;</li> <li>proper shoring may need to be erected in order to prevent soil/mud from slipping into the storm culvert/sea; and</li> <li>supervisory staff should be assigned to station on site to closely supervise and monitor the works.</li> </ul>	Works areas / construction period	
Quality	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.	$\checkmark$
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	Works areas / construction period	No barge will be required for the project.

#### Type of Location/ Timing Environmental Protection Measures Status Impact transportation. All barges should maintain adequate clearance between vessels and the seabed at all states of the tide and should operate at a reduced speeds to ensure that undue turbidity is not generated by turbulence from vessel movement or propeller wash. Connection of sewage generated from the ALE will be connected Project site / design and construction Relevant works have yet to be Water to the existing public sewer. For handling, treatment and commenced / completed Quality period 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. Construction Phase Waste Recommendations for good site practices during the construction Work site / during the construction period V activities include: nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all Wastes generated at the site; training of site personnel in proper waste management and chemical 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. Waste reduction is best achieved at the planning and design Work site / during the construction period Waste $\sqrt{}$ stage, as well as by ensuring the implementation of good site practices. Recommendations to achieve waste reduction include: sorting of demolition debris and excavated materials from demolition works to recover reusable/ recyclable portions (ie soil, broken concrete, metal, etc);

Type of	Environmental Protection Measures	Location/ Timing	Status
Impact	<ul> <li>segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal;</li> <li>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;</li> <li>proper storage and site practices to minimize the potential for damage to contamination of construction materials; and</li> <li>plan and stock construction materials carefully to minimize amount of waste.</li> </ul>		
Waste	General RefuseGeneral 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.	Work site / during the construction period	√
Waste	<ul> <li>Construction and Demolition Material</li> <li>In order to minimize the impact resulting from collection and transportation of C&amp;D material for off-site disposal, the C&amp;D material from the following construction activities should be reused and recycled as far as possible to reduce the net amount of C&amp;D material generated from the Project;</li> <li>a Waste Management Plan should be prepared in accordance with ETWB TCW No. 19/2005;</li> <li>a recording system for the amount of wastes generated, recycled and disposed (including the disposal sites) should be proposed;</li> <li>in order to monitor the disposal of C&amp;D and solid wastes at</li> </ul>	Work site / during the construction period	

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
	<ul> <li>public filling facilities and landfills and to control fly-tipping, a trip-ticket system should be included. One may make reference to ETWB TCW No.31/2004 for details;</li> <li>the large amount of C&amp;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.</li> </ul>		
Waste	Chemical Wastes	Work site / during the construction period	$\checkmark$
	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</i> <i>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.		
<i>Operational P</i> Waste	Phase General Refuse	Work site / during the construction period	Measures not required until
music	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		commencement of operational phase

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
	waste arisings generated at the HKCEC would follow the existing handling and disposal arrangement. Provided proper 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.		
Construction Ph	lase		
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	$\checkmark$
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	N
Operational Pha	se		
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

Type of Impact	Environmental Protection Measures	Location/ Timing	Status
Landscape & Visual	Appearance and view considerations: (a) avoid industrial feel of building service elements; (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.	Entire proposed works and adjacent hotels	Mitigation measures to be implemented during operational phase
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:

- $\sqrt{}$  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 2008

Year	Acti	ual Quantities of	inert C&D N	laterials (in 10	<sup>3</sup> Kg) <sup>(1) (2)</sup>				Actual Qua	ntities of C&D	Wastes (in 10	9 <sup>3</sup> Kg) <sup>(4)</sup>			
	Total Quantity	Broken	Reused in the	Reused in other	Disposed as	D I''		l Materials	c		ardboard		al Waste	General	Other
	Generated	Concrete <sup>(3)</sup>	Contract	Projects	Public Fill		n of existing m Link		n of existing platform	pack	aging	(	L)	refuse	waste (6)
	(a)	(b)	(c)	(d)	(a)-(b)-(c)-(d)	Recycle	Disposal	Recycle	Disposal	Recycle	Disposal	Recycle	Disposal	Disposal	Disposal
January	495	0	0	0	495	10 (5)	0	0	0	0.2	0.04	0	0	30	122
February	539	0	0	0	539	20 (5)	0	0	0	0.5	0.02	0	0	33.4	20
March	485	0	0	0	485	5	0	0	0	0.5	0.02	0	0	20.0	59
April	545	0	0	0	545	1	0	0	0	0.5	0.02	0	0	25.0	80
May	35	0	0	0	35	0	0	0	0	1.0	0.05	0	0	28.0	70
June	40	0	0	0	40	0	0	0	0	1.5	0.05	0	0	44.0	63.3
July	83	0	0	0	83	50	0	0	0	1.5	0.05	0	0	67.0	43.8
August	217.5	0	0	0	217.5	60	0	0	0	2.0	0.05	0	0	59.0	257.0
Sep															
October															
November															
December															
Total	2439.5	0	0	0	2439.5	146(5)	0	0	0	6.17	0.30	0	0	306.4	715.1

 <sup>(1)</sup> Inert C&D materials include bricks, concrete, building debris, rubble and excavated soil.
 <sup>(2)</sup> Inert C&D material mainly generated from demolition of atrium link. Note:

<sup>(3)</sup> Broken concrete fro recycling into aggregates.

<sup>(4)</sup> 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 <sup>(5)</sup> Waste from demolition of steel structure at existing Atrium Link of HKCEC (Phase 2).

<sup>(6)</sup> 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

	3 Month Rolling i		Exp	ention and Exhib ansion Project ed Master Progra		ting on 30 August 0	8					
ID	Task Name	% Compl 42%	Actual Start Fri 26/5/06	Actual Finish NA	Baseline Start 1 Fri 26/5/06	Baseline Finish 1 Fri 12/6/09	Jun	Jul	Aug	Sep	Oct	Νον
1	PROJECT WIDE	42%	Fri 26/5/06	NA	Fri 26/5/06	Fri 12/6/09				30/8/08		
2	Critical Dates		Fri 26/5/06	NA	Fri 26/5/06	Fri 12/6/09						
3	Project Milestones	99%			Thu 25/5/06					M		
155	Design Submission & Approval (Permanent Works)	98%	Thu 25/5/06	NA		Mon 24/12/07						
234	Architectural Design	98%	Sat 26/8/06 Mon 28/8/06	NA	Thu 17/8/06	Mon 24/12/07			V			
240	Fire curtain / Shutter and Smoke curtain schedule	100%		Wed 21/11/07	Mon 28/8/06	Sat 21/7/07						
249	DDR for Fire curtain / Shutter and Smoke curtain schedule	100%	Wed 21/11/07	Wed 21/11/07	Sat 21/7/07	Sat 21/7/07						
259	Amendment for AST 1&2, 5&6	100%	Tue 15/5/07	Thu 26/6/08	NA	NA		V				
261	Design Check by Design Checker	100%	Mon 24/9/07	Mon 24/12/07	NA	NA						
262	DDR by PM	100%	Fri 28/12/07	Thu 26/6/08	NA	NA						
264	Amendment for AST 7 & 8	100%	Mon 14/5/07	Thu 26/6/08	NA	NA		-W				
266	Design Check by Design Checker	100%	Thu 11/10/07	Thu 27/12/07	NA	NA						
267	DDR by PM	100%	Fri 28/12/07	Thu 26/6/08	NA	NA						
268	DDR for Staircase	100%	Thu 26/6/08	Thu 26/6/08	NA	ŅA		Ľ				
269	Internal Staircase at (A,20 L2-6) (A,18 L7-7M)	100%	Sat 21/10/06	Fri 1/8/08	Sat 21/10/06	Mon 23/7/07	en di dan		$\overline{\mathbf{v}}$			
274	Resubmit & DDR by PM	100%	Sat 19/1/08	Fri 1/8/08	NA	NA						
275	DDR for Staircase	100%	Fri 1/8/08	Fri 1/8/08	NA	NA			I			
287	Foyer Floors and Wall at Level 2,5 and 7	100%	Wed 30/5/07	Tue 27/5/08	Thu 17/8/06	Wed 18/7/07						
290	RIP/DDR by PM	100%	Tue 27/11/07	Tue 27/5/08	Thu 31/8/06	Thu 14/9/06						
291	RIP/DDR for Foyer Floors and Wall at Level 2,5 and 7	100%	Tue 27/5/08	Tue 27/5/08	Thu 14/9/06	Thu 14/9/06						
292	Feature Wall at Level 2 Foyer	100%	Fri 13/7/07	Thu 14/2/08	Fri 13/7/07	Fri 14/9/07						
296	RIP/DDR for Feature Wall at Level 2 Foyer	100%	Thu 14/2/08	Thu 14/2/08	Fri 14/9/07	Fri 14/9/07						
297	Lift Lobbies at Level 2,3,5,6,7 and 7M	100%	Thu 28/6/07	Thu 27/3/08	Thu 28/6/07	Fri 14/9/07		,				
301	RIP/DDR by PM	100%	Mon 28/1/08	Thu 27/3/08	Fri 31/8/07	Fri 14/9/07						
302	RIP/DDR for Lift Lobbles at Level 2,3,5,6,7 and 7M	100%	Thu 27/3/08	Thu 27/3/08	Fri 14/9/07	Fri 14/9/07						
303	Foyer Floor and Walls at Level 3 and 6, Interior of Dressing Rm	100%	Fri 27/7/07	Wed 20/8/08	Fri 27/7/07	Fri 28/9/07				<b>p</b>		
306	RIP/DDR by PM	100%	Thu 17/1/08	Wed 20/8/08	Fri 14/9/07	Fri 28/9/07						
307	RIP/DDR for Foyer Floor and Walls at Level 3 and 6, Interior of Dressing Rm	100%	Wed 20/8/08	Wed 20/8/08	Fri 28/9/07	Fri 28/9/07			4	•		
308	Internal Aluminium Cladding	100%	Thu 7/6/07	Fri 27/6/08	Thu 7/6/07	Thu 13/9/07						
311	RIP/DDR by PM	100%	Mon 4/2/08	Fri 27/6/08	Thu 30/8/07	Thu 13/9/07						
312	RIP/DDR for Internal Aluminium Cladding	100%	Frí 27/6/08	Fri 27/6/08	Thu 13/9/07	Thu 13/9/07			÷			
313	Foyer reflected ceiling plan	100%	Thu 31/5/07	Tue 11/3/08	Thu 31/5/07	Thu 13/9/07		v				
316	RIP by PM	100%	Thu 11/10/07	Tue 11/3/08	Fri 31/8/07	Thu 13/9/07						
310	RIP for Foyer reflected ceiling plan	100%		Tue 11/3/08	Thu 13/9/07	Thu 13/9/07						
324	Remaining Washrooms	100%	Fri 27/7/07	Tue 29/1/08	Fri 27/7/07	Fri 28/9/07						
324	RIP/DDR for Remaining Washrooms	100%	Tue 29/1/08	Tue 29/1/08	Fri 28/9/07	Fri 28/9/07						
320	Exhibition Halls / Service Counters and Organiser's Offices	97%	Fri 29/9/06	NA	Fri 29/9/06	Sat 15/9/07						
329		<i>41 70</i>	-11 20/0/00		.111 20/0100					L		
	3 Month Rolling Programme based on revised Task EXERCISENCE Progress 0/8/2008 Critical Task MILLING Milestone		>	Summary Split		External 1		TERRETATION		y Summary 🖣 1 E		I
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<u></u>	3 Month Rolling Pr		Exp	ention and Exhib ansion Project d Master Progra		ting on 30 August 0	•					
1D	Task Name	% Compi	Actual Start	Actual Finish	Baseline Start 1	Baseline Finish 1	Jun	Jul	Aug	Sep	Oct	Nov
340	Exhibition Halls	100%	Wed 30/5/07	Thu 24/4/08	Wed 30/5/07	Wed 15/8/07						
343	DDR by PM	100%	Sat 10/11/07	Thu 24/4/08	Tue 31/7/07	Wed 15/8/07						
344	DDR for Exhibition Halls	100%	Thu 24/4/08	Thu 24/4/08	Wed 15/8/07	Wed 15/8/07						
350	Food Concession Area	100%	Thu 14/6/07	Fri 25/4/08	Thu 14/6/07	Sat 15/9/07						
354	RIP for Food Concession Area	100%	Mon 31/3/08	Mon 31/3/08	Thu 16/8/07	Thu 16/8/07						
358	DDR for Food Concession Area	100%	Fri 25/4/08	Fri 25/4/08	Sat 15/9/07	Sat 15/9/07						
359	Door schedule (incl. sliding and acoustic doors)	100%	Sat 30/9/06	Wed 16/4/08	Sat 30/9/06	Thu 13/9/07						
367	DDR for Door schedule	100%	Wed 16/4/08	Wed 16/4/08	Thu 13/9/07	Thu 13/9/07			,			
368	Ironmongery schedule	100%	Wed 3/1/07	Tue 6/5/08	Wed 3/1/07	Thu 4/10/07						
374	Design Check by Design Checker	100%	Mon 25/2/08	Sat 19/4/08	Fri 31/8/07	Sat 15/9/07						
375	DDR by PM	100%	Mon 21/4/08	Tue 6/5/08	Mon 17/9/07	Thu 4/10/07						
376	DDR for Ironmongery schedule	100%	Tue 6/5/08	Tue 6/5/08	Thu 4/10/07	Thu 4/10/07						
377	Maintenance access system - Gondola + BMU	100%	Wed 4/10/06	Thu 24/4/08	Wed 4/10/06	Wed 15/8/07						
384	DDR by PM	100%	Wed 16/1/08	Thu 24/4/08	Thu 2/8/07	Wed 15/8/07						
385	DDR for Maintenance access system / Gondola	100%	Thu 24/4/08	Thu 24/4/08	Wed 15/8/07	Wed 15/8/07						
386	Maintenance access system - Catwalks	100%	Wed 16/5/07	Fri 13/6/08	Wed 16/5/07	Thu 9/8/07						
388	Design Check by Design Checker	100%	Thu 21/6/07	Mon 22/10/07	Thu 21/6/07	Wed 25/7/07						
389	RIP/DDR by PM	100%	Tue 23/10/07	Fri 13/6/08	Thu 26/7/07	Thu 9/8/07						
390	RIP/DDR for Maintenance access system / Catwalks	100%	Fri 13/6/08	Fri 13/6/08	Thu 9/8/07	Thu 9/8/07	<b></b>					
405	Glass Balustrade/Metal Railing	100%	Thu 26/10/06	Wed 30/1/08	Thu 26/10/06	Wed 1/8/07						
413	DDR for Glass Balustrade / Metal Railing	100%	Wed 30/1/08	Wed 30/1/08	Wed 1/8/07	Wed 1/8/07						
424	Signage & Electronic Sign (Permanent)	67%	Tue 26/6/07	NA	Tue 26/6/07	Sat 1/9/07						
426	Design Check by Design Checker	25%	Fri 28/3/08	NA	Wed 1/8/07	Thu 16/8/07						
439	Landscape Works	87%	Mon 16/10/06	NA	Mon 16/10/06	Mon 24/12/07						
445	Landscape Master Plan Detail Design Preparation & Submission	100%	Mon 12/11/07	Tue 11/12/07	Tue 25/9/07	Sat 17/11/07						
446	Design Check by Design Checker	100%	Wed 12/12/07	Fri 11/1/08	Mon 19/11/07	Sat 1/12/07						
454	Design Check by Design Checker	100%	Wed 12/12/07	Fri 11/1/08	Tue 27/11/07	Mon 10/12/07						
455	DDR for Landscape by PM	85%	Sat 12/1/08	NA	Tue 11/12/07	Mon 24/12/07						
456	DDR for Landscaping Plan	0%	NA	NA	Mon 24/12/07	Mon 24/12/07			•			
466	Miscellanous Details	97%	Fri 6/4/07	NA	Fri 6/4/07	Sat 15/9/07						
467	Steel & Metal Works (Tx. Rm.; Lift Machine rmetc)	100%	Thu 14/6/07	Wed 23/4/08	Thu 14/6/07	Sat 15/9/07			·			
470	RIP/DDR for Steel & Metal Works by PM	100%	Sat 8/3/08	Wed 23/4/08	Fri 31/8/07	Sat 15/9/07	/	/				
471	RIP/DDR for Steel & Metal Works	100%	Wed 23/4/08	Wed 23/4/08	Sat 15/9/07	Sat 15/9/07						
477	Carpark, Driveway/loading and unloading areas	100%	Thu 14/6/07	Tue 4/3/08	Thu 14/6/07	Sat 15/9/07	/					
480	RIP/DDR for Carpark, Driveway/loading and unloading areas by PM	100%	Wed 16/1/08	Tue 4/3/08	Fri 31/8/07	Sat 15/9/07	,					
481	RIP/DDR for Carpark, Driveway/loading and unloading areas	100%	Tue 4/3/08	Tue 4/3/08	Sat 15/9/07	Sat 15/9/07						
482	Expansion Joint and wall expansion details for Ph I & II	100%	Fri 6/4/07	Thu 14/8/08	Fri 6/4/07	Fri 14/9/07	i serie and a series of the					
Project: Date: 3	A Month Rolling Programme based on revised     Task     Critical Task     Critical Task     Critical Task		· •	Summary Split		External *			Group E	By Summary V		
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	3 Month Rolling Progr		ong Kong Conve Exp based on revise	ansion Proiect		ting on 30 August 0	8						
D		Compl	Actual Start Wed 27/2/08	Actual Finish Thu 12/6/08	Baseline Start 1 Tue 21/8/07	Baseline Finish 1 Wed 29/8/07	Jun	Jul	Aug		Sep	Oct	Nov
88	Design Check by Design Checker	100%	Fri 13/6/08	Thu 12/6/08	Thu 30/8/07	Fri 14/9/07	asayalan k						
189	DDR for Expansion Joint by PM	100%	Thu 14/8/08	Thu 14/8/08	Fri 14/9/07	Fri 14/9/07			4	4			
190	DDR for Expansion Joint	96%	Fri 26/5/06	NA	Fri 26/5/06	Thu 27/9/07		en ander ander ander ander ander ander	<i>•</i>				
515	Structural Design	96%	Wed 7/6/06	NA	Wed 7/6/06	Thu 27/9/07	Conceptual and an		a alayahan alaya arayan a				
522	Details Design Review	100%	Mon 5/2/07	Thu 21/8/08	Mon 5/2/07	Fri 31/8/07							
528	Roof Truss A to D and Transfer Truss A/B/24 - Amendment		Wed 31/10/07	Wed 20/8/08	Tue 31/7/07	Wed 15/8/07				~			
531	DDR for DD Submission by PM	100%	Thu 21/8/08	Thu 21/8/08	Thu 16/8/07	Fri 31/8/07			news with the first state of the	5253617			
532	DDR for Structural Plan	100%		Fri 15/2/08	Mon 29/1/07	Tue 28/8/07				Ĩ			
341	External façade Design (Structural)	100%	Mon 29/1/07 Tue 6/11/07	Thu 31/1/08	NON 25/1107 NA	NA							
549	Resubmit to IDC	100%	Fri 1/2/08	Fri 15/2/08	NA	NA							
350	Resubmit to PM	100% 100%	Fri 15/2/08	Fri 15/2/08	Tue 28/8/07	Tue 28/8/07					ł		
351	DDR for External façade Design	98%	Thu 1/6/06	NA	Thu 1/6/06	Wed 19/12/07	Station of the state of the						
352	BS Design		Frl 14/7/06	Mon 7/1/08	Fri 14/7/06	Wed 15/12/07 Wed 19/9/07		<b>V</b>					
653	BS - HVAC	100%	Tue 5/9/06	Mon 7/1/08 Mon 7/1/08	Tue 5/9/06	Wed 19/9/07							
665	Details Design Review	100%			Wed 30/5/07	Wed 19/9/07							
671	HVAC Layout	100%	Wed 30/5/07	Mon 7/1/08 Mon 7/1/08	Wed 30/5/07 Wed 19/9/07	Wed 19/9/07							
675	DDR for HVAC	100%	Mon 7/1/08		Fri 21/7/06	Wed 19/9/07							
676	BS - Electrical	100%	Fri 21/7/06	Wed 6/2/08 Wed 6/2/08	Fri 21/7/06	1							
677	Electrical loading calculation & Generator Sizing, Schematic design of electrical sy	100%	Fri 21/7/06	. Wed 6/2/08	FN 21///06	veu 26/5/07							
685	DDR for Electrical loading calculation & Generator Sizing, Schematic design of elect	100%	Wed 6/2/08	Wed 6/2/08	Wed 26/9/07	Wed 26/9/07							
695	Lighting Installation	100%	Frì 21/7/06	Thu 31/1/08	Fri 21/7/06	Mon 27/8/07							
703	DDR for Lighting Installation	100%	Thu 31/1/08	Thu 31/1/08	Mon 27/8/07	Mon 27/8/07							
723	BS - Fire Services	100%	Wed 14/6/06	Tue 13/11/07	Wed 14/6/06	Thu 27/9/07							
735	Details Design Review	100%	Fri 3/11/06	Tue 13/11/07	Fri 3/11/06	1							
	Stage 2	100%	Thu 14/6/07	Tue 13/11/07	Thu 14/6/07	Thu 27/9/07							
741	DDR for Fire Services	100%	Tue 13/11/07	Tue 13/11/07	Thu 27/9/07	1							
745	BS - Plumbing and Drainage	100%	Fri 2/6/06	Fri 7/12/07	Fri 2/6/06								
746		100%	Fri 2/6/06	Mon 27/11/06	Fri 2/6/06								
747	Reivew In Principle	92%	Thu 1/6/06	NA	Thu 1/6/06	1							
821	BS - Diversion DS Diversion Financian Department (Dhace 2)	99%	Fri 5/10/07	NA	Sat 25/8/07			¥ M					
847	BS Diversion Plan for Pedestrain Tunnel (Phase 2)	100%	Thu 21/2/08	Tue 11/3/08	Tue 2/10/07			¥					
849	Design Check by Design Checker RIP/DDR for Submission by PM (resubmission reg.)	100%	Wed 12/3/08	Fri 28/3/08	Thu 18/10/07	Sat 3/11/07							
850		50%	Sat 21/6/08	NA NA	NA								
851	Resubmit to IDC for review	0%	NA	NA NA	NA		1	l					
852	Resubmit for RIP/DDR	100%	Mon 24/9/07	Wed 20/2/08	Mon 24/9/07	1	/	,II					
874	BS Diversion Plan for A&A works at Phase II	100%	Fri 15/6/07	Mon 28/1/08	Fri 15/6/07								
884	BS Design for Additional Slab at Level 5 & 7 at Phase II	100%	FIL 13/0/01	MOI 201108			<u> </u>				_ <u>_</u>		
	3 Month Rolling Programme based on revised Task programme programme Programme			Summary		External	ľasks	<b>11111111111111</b>	Grr Grr	oup By S	Summary M		
	:3 Month Rolling Programme based on revised Task <u>Entrationations</u> Progress 00/8/2008 Critical Task Milestone			Split		Depicet S				iseline 1	•		æ

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	3 Month Rolling Pro		Exp	ention and Exhibi ansion Project d Master Program		ling on 30 August (	8				
		% Compl	Actual Start	Actual Finish	Baseline Start 1	Baseline Finish 1	Jun Jul	Aug	Sep	Oct	Nov
ID 937	rask Name Curtain Wall / Cladding	66%	Fri 20/4/07	NA	Fri 20/4/07	Fri 21/3/08			1		
	Shop Drawing Submission & Approval	80%	Thu 20/9/07	NA	Sat 4/8/07	Wed 3/10/07					
40	Visual and Performance Mock Up Test	95%	Wed 21/11/07	NA	Thu 4/10/07	Mon 3/12/07					
941 941	Production & Delivery of Steel Post & frames (transom + mullion), Aluminium components, gla	40%	Mon 7/4/08	NA	Tue 4/12/07	Fri 21/3/08					
42	Production & Delivery of Inserts & Anchors	60%	Mon 5/5/08	NA	Thu 4/10/07	Tue 22/1/08					
43	Commence Installation of Inserts & Anchors	8%	Mon 30/6/08	NA	Thu 13/12/07	Thu 13/12/07					
944	Production & Delivery of Steel Post & frames (transom + mullion), Aluminium components, gla	40%	Mon 7/4/08	NA	Tue 4/12/07	Fri 21/3/08					
945	M & E Long - Lead Items	37%	Sat 16/6/07	NA	Sat 16/6/07	Mon 15/9/08					$\overline{\mathbf{v}}$
46	HVAC Equipment Procurement	85%	Wed 15/8/07	NA	Fri 21/9/07	Sat 14/6/08					
947	Electrical Equipment	85%	Thu 1/11/07	NA	Thu 27/9/07	Sat 31/5/08	fuunna		ł		
948	Lift & Escalator Procurement & Delivery	85%	Mon 7/1/08	NA	Sat 3/11/07	Wed 14/5/08					
953	Bearing for Steel Truss	100%	Thu 12/10/06	Fri 20/6/08	Thu 12/10/06	Wed 5/9/07					
)55	Bearing Procument and Delivery	100%	Fri 20/10/06	Fri 20/6/08	Fri 20/10/06	. Wed 5/9/07					
87	CSWD / CBWD	72%	Fri 14/9/07	NA	Wed 15/8/07	Sat 27/9/08					$\neg$
88	CSW/CBW Submission/Comment/Re-submit/Approval	80%	Fri 14/9/07	NA	Wed 15/8/07						
90	Shop Drawing Submission/Comment/Re-submit/Approval	65%	Mon 29/10/07	NA	Wed 26/9/07	Sat 27/9/08				mm	22
91	Site Works	38%	Mon 19/6/06	NA	Mon 19/6/06	Fri 12/6/09			Second States and State		
017	A & A Works to Existing HKCEC Phase 1 and 2	79%	Wed 26/7/06	NA	Wed 26/7/06	Fri 10/10/08		i del Sectory subjects signices			
021	HK CEC Phase 1 - New Atrium Link Connection	56%	Mon 30/4/07	NA	Mon 30/4/07	Fri 10/10/08				den de la tel Comp	
032	Termination for Existing E&M Services	100%	Thu 5/6/08	Fri 20/6/08	Sat 19/1/08	Fri 15/2/08					
034	Modification Works for External Façade (level +10.40 to 51.80)	100%	Fri 9/5/08	Wed 16/7/08	Fri 29/2/08	Fri 18/4/08					
055	HKCEC Phase 2 - New Additional Slab At L5 & L7	98%	Thu 1/11/07	NA	Fri 16/11/07	Fri 11/4/08					
061	New Builders' & Finishing Works	100%	Sat 22/12/07	Fri 29/2/08	Fri 1/2/08	Fri 11/4/08					
062	E&M works	100%	Sat 22/12/07	Fri 29/2/08	Fri 1/2/08	Mon 24/3/08					
073	Demolition of Existing Artrium Link	96%	Wed 14/3/07	NA	Wed 14/3/07	Wed 28/5/08			1		
079	Demolition of Existing Atrium Link	95%	Wed 14/3/07	NA	Wed 14/3/07	Wed 28/5/08			in an		
088	Install Replacement Truss (RF to L2) and Remove L7/L5 Slab & secondary beam	100%	Fri 29/6/07	Sat 14/6/08	Fri 29/6/07	Mon 20/8/07					
091	Remove Top Portion of Existing Eastern Facade Truss	100%	Fri 7/9/07	Sat 29/9/07	Tue 4/9/07	Wed 19/9/07					
092	Removal of remaining Existing Eastern & Western Façade Truss	2%	Sun 31/8/08	NA	Wed 23/4/08	Wed 28/5/08	n			2222	
093	New Atrium Link Extension	32%	Tue 27/6/06	NA	Tue 27/6/06	Fri 12/6/09					elas atracas das sets
171	Substructure Construction - Gride 16 & 17 (Minipile locations)	100%	Mon 5/11/07	Wed 25/6/08	Sat 6/10/07	Wed 31/10/07					
172	Pile Cap Construction (Grid A1-A/16-17)	100%	Sat 24/11/07	Wed 25/6/08	Sat 6/10/07	Wed 31/10/07					
173	Pile Cap Construction /Tie Beams / Ground Slab	100%	Sat 24/11/07	Wed 25/6/08	Sat 6/10/07	Wed 31/10/07					
174	Pile Cap Construction (Grid D-E/16-17)	100%	Mon 5/11/07	Wed 19/3/08	Sat 6/10/07	Wed 31/10/07					
1175	Pile Cap Construction /The Beams / Ground Slab	100%	1	Wed 19/3/08	Sat 6/10/07	Wed 31/10/0	ř		-		
oject: ate: 30	Month Rolling Programme based on revised         Task         Exercise states         Progress           /8/2008         Critical Task         Intratructure         Milestone	E		Summary Split		External Project :	Tasks Distantionalise		ummary		
				Page 4							

	3 Month Rollin		Exp	ention and Exhib ansion Project ed Master Progra		ting on 30 August (	8				
ID 1176	Task Name Superstructure	% Comp!	Actual Start Thu 30/11/06	Actual Finish	Baseline Start 1 Thu 30/11/06	Baseline Finish 1 Thu 25/9/08	Jun	Jul	Aug	Sep Oct	Nov
1177	Columns to Steel Truss - Grid 17	100%	Mon 4/12/06	Mon 28/1/08	Mon 4/12/06	Tue 4/12/07		الأنسا	(0/10_1		
1181	Column E/17	100%	Fri 5/10/07	Mon 28/1/08	Thu 8/11/07	Tue 4/12/07					
1183	Bearing Installation at Column E/17	100%	Mon 28/1/08	Mon 28/1/08	Sat 1/12/07	Tue 4/12/07					
1193	Column D/17	100%	Fri 18/5/07	Wed 23/1/08	Fri 18/5/07	Sat 8/9/07					
1195	Bearing Installation at Column D/17	100%	Wed 23/1/08	Wed 23/1/08	Wed 5/9/07	Sat 8/9/07					
1196	Columns to Steel Truss - Grid 24	100%	Thu 14/12/06	Wed 23/1/08	Thu 14/12/06	Sat 8/9/07					
1210	Columns D/24	100%	Wed 16/5/07	Wed 23/1/08	Wed 16/5/07	Sat 8/9/07					
1212	Bearing Installation at Column D/24	100%	Wed 23/1/08	Wed 23/1/08	Wed 5/9/07	Sat 8/9/07					
1213	Additional Columns E/17a, E/17/b & connecting R.C Structures at L1M	100%	Tue 4/12/07	Tue 10/6/08	Thu 1/11/07	· Sat 12/4/08	39469566550				
1214	Ground Beams/Slab	100%	Tue 4/12/07	Wed 19/3/08	Tue 18/3/08	Tue 25/3/08	w.				
1215	L1M columns & floor structures	100%	Thu 20/3/08	Tue 10/6/08	Fri 28/3/08	Sat 12/4/08					
1216	Construction of Column E/17a	100%	Thu 20/3/08	Wed 9/4/08	Thu 1/11/07	Mon 31/12/07					
1217	Construction of Column E/17b	100%	Thu 20/3/08	Mon 7/4/08	Thu 1/11/07	Mon 31/12/07					
1218	Steel Roof Trusses and Superstructure	65%	Thu 30/11/06	NA	Thu 30/11/06	Thu 25/9/08	n da gandara san		a de la companya de l		
1219	Panel Truss A1	79%	Thu 30/11/06	NA	Thu 30/11/06	Thu 25/9/08					
1220	Assembly on Steel Truss A1(907tons)	100%	Thu 18/1/07	Sat 2/8/08	Thu 18/1/07	Wed 11/4/07			· /	¥ .	
1237	Level 5 +29,40 deferred portion GL24-25/A1	23%	Fri 11/7/08	NA	Tue 25/3/08	Thu 8/5/08					
1238	Main Floor Trusses for Level 5	100%	Fri 11/7/08	Sat 12/7/08	Tue 25/3/08	Thu 3/4/08	,	-		<b>Y</b>	
1239	Secondary Floor Trusses/Beams for Level 5	55%	Wed 30/7/08	NA	Fri 4/4/08	Wed 16/4/08					
1241	Level 6 +36.90	1%	Sun 13/7/08	NA	Tue 25/3/08	Tue 6/5/08				<b>W</b>	
1242	Main Floor Trusses for Level 6	4%	Sun 13/7/08	NA NA	Tue 25/3/08	Wed 2/4/08		<b>y</b>		•	
1243	Secondary Floor Trusses/Beams for Level 6	5%	Fri 25/7/08	NA	Thu 3/4/08	Tue 15/4/08		B ( Linit	Network		
1271	Tunnel for Pedestrian Re-Diversion Access to New Structure	61%	Fri 1/8/08	NA	Tue 3/6/08	Thu 25/9/08			President (		
1272	Tunnel erection	100%	Fri 1/8/08	Sat 30/8/08	Tue 3/6/08	Sat 26/7/08	<del>EED-TEE</del>		B		
1273	Floor Finish Insides Re-Diversion Tunnel	100%	Mon 25/8/08	Sat 30/8/08	Tue 5/8/08	Wed 20/8/08					
1274	BS Installation	75%	Fri 15/8/08	NA	Sat 28/6/08	Wed 6/8/08	-				
1275	HVAC Installation	100%	Fri 15/8/08	Sat 30/8/08	Sat 28/6/08	Wed 23/7/08			j w		
1276	FS Installation	100%	Fri 15/8/08	Sat 30/8/08	Tue 8/7/08	Wed 23/7/08		01116			
1278	Form 501 Submission	100%	Thu 21/8/08	Thu 21/8/08	Wed 6/8/08	Wed 6/8/08					
1281	Temporary Works for Sliding & Heavy Lifting	93%	Sat 8/9/07	NA	Sat 8/9/07	Wed 19/12/07			v		
1282	Heavy Lifting & Sliding System Installation	100%		Sun 6/1/08	Sat 8/9/07	Mon 22/10/07					
1283	Remove Sliding Beams & Equipment From HL	75%	Mon 2/6/08	NA	Sat 15/12/07	Wed 19/12/07					
1284	Transfer Truss for Grid 24/A-B	100%	Fri 14/9/07	Thu 19/6/08	Fri 14/9/07	Mon 17/12/07					
1285	Delivery of Materials	100%	Fri 14/9/07	Tue 18/9/07	Fri 14/9/07	Wed 26/9/07					
1286	Assembly Steel Transfer Truss on Column A1a/24 & Ba/24	100%	Mon 17/9/07	Wed 31/10/07	Mon 17/9/07	Mon 5/11/07					
1287	Connection of Roof Truss A	100%		Wed 4/6/08	Tue 11/12/07	Mon 17/12/07					
			1	I		1					
	Month Rolling Programme based on revised         Task         Excelent state         Progre           /8/2008         Critical Task         Internet state         Milester			Summary Split		- External	-			Summary	
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		3 Month Rolli		Ŭ Exp	ention and Exhit bansion Project ed Master Progra		ting on 30 August (	3					
	L												
ID 1288	Task Name Connection to Roof Truss	3 B	% Compl- 100%		Actual Finish Thu 19/6/08	Baseline Start 1 Tue 11/12/07	Baseline Finish 1 Mon 17/12/07	Jun	Jul	Aug	Sep	Oct	Nov
1289	Roof Truss A		100%	Sun 14/10/07	Sun 29/6/08	: Wed 10/10/07	Wed 20/2/08						
1293	Lifting Up to Grid C High	Level	100%	Mon 7/1/08	Tue 8/1/08	: Thu 15/11/07	Sat 17/11/07		¥				
1294	Sliding to Permanent Pos	iltion at Grid A	100%	Tue 22/1/08	Wed 20/2/08	Mon 19/11/07	Mon 10/12/07					•	
1295	-	ad Transfer / Bracing for Roof Truss A & B	100%	Thu 21/2/08	Wed 4/6/08	Tue 11/12/07	Wed 16/1/08						
297	Assembly of Back Span f	-	100%		Sun 29/6/08	Thu 17/1/08	Wed 20/2/08		<b>&amp;</b>				
298	Roof Truss B		100%		Sun 17/8/08	Wed 10/10/07	Wed 20/2/08	de la contra de la contra	V	an a			
1302	Lifting Up to Grid D High	Level	100%	Mon 7/1/08	Tue 8/1/08	Thu 15/11/07	Sat 17/11/07			V			
1303	Launch Truss B to Grid C		100%	Mon 21/1/08	Sat 2/2/08	Mon 19/11/07	Fri 7/12/07						
1304	Launch to Permanent Po		100%		Wed 20/2/08	Sat 8/12/07	Mon 10/12/07						
1305		ad Transfer / Bracing for Roof Truss A & B	100%		Thu 19/6/08	Tue 11/12/07	Wed 16/1/08						
1306	Assembly of Back Span f	-	100%		Sun 17/8/08	Thu 17/1/08	Wed 20/2/08						
1307	Roof Truss C		82%	1	NA	Wed 14/11/07	Thu 13/3/08		State and states	<b>.</b>			
1309	Assembly of Steel Roof T	russ C on Sile	100%		Tue 1/4/08	Mon 19/11/07	Mon 14/1/08		W				
1310	Lifting of Roof Truss C to		100%	]	Wed 9/4/08	Tue 15/1/08	Tue 22/1/08						
1311	Installation of Capitals / Id	pad transfer & Bracing for Roof Truss C & D	100%		Sat 7/6/08	Fri 25/1/08	Thu 7/2/08						
313	Roof Truss D		83%	-	NA	Wed 14/11/07	Thu 13/3/08		er en stat al spij				
1314	Delivery of Materials		100%		Tue 1/4/08	Wed 14/11/07	Sat 24/11/07	$\sim$	V				
1315	Assembly of Steel Roof T	russ D on Site	100%	<u> </u>	Fri 18/4/08	Mon 19/11/07	Thu 17/1/08						
1316	Lifting of Roof Truss D to		100%	1	Wed 30/4/08	Fri 18/1/08	Thu 24/1/08						
1317		pad transfer & Bracing for Roof Truss C & D	100%		Sat 7/6/08	Fri 25/1/08	Thu 7/2/08		$\backslash$				
1319	Panel Truss E		100%	[	Tue 3/6/08	Mon 21/1/08	Tue 25/3/08						
1320	Assembly of Steel Panel	Truss E with Back Span	100%	l	Tue 3/6/08	Mon 21/1/08	Tue 25/3/08	~		<b>`</b>			
1321	Steel Structure for Existing		33%	Tue 8/1/08	NA	Tue 4/9/07	Wed 2/7/08					and a state of the second second	
1322		Removal of Replacement Truss	64%	Tue 1/4/08	NA	Tue 4/9/07	Wed 28/5/08		NAME OF THE				V
1324		ttom Chord of Existing East Truss at L2	100%	Fri 18/4/08	Wed 30/7/08	Fri 14/3/08	Tue 8/4/08	allen kiniste	Mission and American Statistics			v	
1325	Remove Replaceme	ent Truss	100%	Mon 14/7/08	Tue 5/8/08	Fri 9/5/08	Thu 22/5/08		I I I I MARINA CARLEN				
1326	Remove Existing W	est Truss	2%	Sun 31/8/08	NA	Wed 23/4/08	Wed 28/5/08		2004/200				
1327	Hanger Columns and M	lain Truss () Erection	100%	Fri 9/5/08	Wed 16/7/08	Tue 29/1/08	Mon 24/3/08	an a					
1328	Hanger Columns Ins	stallation to Level 2 & Truss Along Grid A & B	100%	Fri 9/5/08	Wed 16/7/08	Tue 29/1/08	Mon 24/3/08		Withingtonia		Ν		
1329	Level 2 +14.40 (Existing	-	55%	<u> </u>	NA	Sat 19/4/08	Wed 2/7/08						
1330		ab and Install L2 Main Truss for Level 2	90%		NA	Sat 19/4/08	Tue 27/5/08				1_	Siteman and	W
1331		isses/Beams for Level 2	75%		NA	Sat 17/5/08	Fri 30/5/08		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Biomenetr		67)	
1332	Composite Decking		30%	Wed 27/8/08	NA	Tue 27/5/08	Sat 7/6/08	<b>EB</b>					
1334	Level 2 +14.40 (Grid A t			Wed 23/4/08	NA	Wed 9/4/08	Mon 28/4/08					التقتداه	
1335		isses/Beams for Level 2		Wed 23/4/08	Thu 31/7/08	Wed 9/4/08	Mon 21/4/08			× .			
1345	Level 5 +29.40		2%	Wed 27/8/08	NA	Thu 10/4/08	Mon 19/5/08	******	********				
	L			<u> </u>	L						41	<b>V</b>	
	3 Month Rolling Programme based on revised )/8/2008	Task Entertaintenting Progr	ess		Summary	ALCONTRACTOR OF	External	asks 🛛			Summary		
	1012000 	Critical Task Miles	tone		Split		Project S	mmary	a factoria di Sectoria di S	Baseline	1 🖽		3

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	3 Month Rolling I		Exp	ention and Exhil ansion Project d Master Progra	bition Centre amme Rev. 2 updat	ling on 30 August 0	8			
ID	Task Name	% Compl 6%	Actual Start Wed 27/8/08	Actual Finish NA	Baseline Start 1 Thu 10/4/08	Baseline Finish 1 Thu 24/4/08	Jun Jul	Aug	Sep Oct	Nov
346	Secondary Floor Trusses for Level 5	*****	Fri 20/6/08	NA	Sat 3/5/08	Tue 17/6/08		L30/ <u>B</u>	ADR LOS	
56	Level 7 +44.40	9%	Fri 20/6/08	NA	Sat 3/5/08	Fri 16/5/08	V			
57	Secondary Floor Trusses/Beams for Level 7	30% 15%	Mon 4/8/08	NA	Sat 3/5/08	Sat 21/6/08	<b>I</b>	· · · · · · · · · · · · · · · · · · ·	Marin Marine	
64	Roof Level +55.65 Secondary Floor Trusses for Roof	30%	Mon 4/8/08	NA	Sat 24/5/08	Sat 7/6/08		-		V
365 368	Steel Structure for Grid B to D	23%	Sun 1/6/08	NA	Fri 8/2/08	Mon 7/7/08				3
369	Hanger Columns and Main Truss Erection	68%	Mon 9/6/08	NA	Fri 8/2/08	Wed 2/4/08				
370	Hanger Columns and Main Truss Election from Roof to Level 2 at Grid C	60%	Mon 9/6/08	NA	Fri 8/2/08	Wed 2/4/08				
370	Hanger Columns and Main Truss Erection from Roof to Level 2 at Orid D	85%	Wed 11/6/08	NA	Fri 8/2/08	Wed 2/4/08				
372	Level 2 +14.40	6%	Wed 27/8/08	NA	Thu 3/4/08	Fri 2/5/08			Chinese Street and Street	
372	Secondary Floor Trusses for Level 2	12%	Wed 27/8/08	NA	Thu 3/4/08	Thu 17/4/08		•		
373	Level 5 +36.90	15%	Wed 30/7/08	NA	Thu 24/4/08	Thu 22/5/08	I	l.	4000	
381	Secondary Floor Trusses for Level 5	30%	Wed 30/7/08	NA	Thu 24/4/08	Thu 8/5/08				
388	Level 7 +44.35	9%	Tue 29/7/08	NA	Thu 15/5/08	Sat 28/6/08		Trankel L		el alto Marcola (c)
389	Secondary Floor Trusses for Level 7	30%	Tue 29/7/08	NA	Thu 15/5/08	Wed 28/5/08				
396	Roof Level +55.80	18%	Sun 1/6/08	NA	Thu 5/6/08	Mon 7/7/08		Topopolala IIII		
397	Secondary Floor Trusses for Roof	40%	Sun 1/6/08	NA	Thu 5/6/08	Wed 18/6/08				
399	Steel Structure for Grid D to E	17%	Sat 12/4/08	NA	Wed 5/3/08	Thu 31/7/08			.   <b>!</b>	الكيم ا
400	Transfer Trusses Installation at Level 6 (Grid E/15-19)	100%	Wed 23/4/08	Fri 2/5/08	Fri 18/4/08	Wed 30/4/08				
401	Hanger Columns and Main Beam Erection from Level 7 to Level 2 (GL D-E/15)	70%	Thu 22/5/08	NA	Fri 2/5/08	Thu 15/5/08				
403	Grid D to E	13%	Sat 12/4/08	NA	Tue 18/3/08	Thu 31/7/08				
404	Level 2 +14.40 and Below Level 2	0%	Fri 6/6/08	NA	Tue 18/3/08	Tue 17/6/08				
405	Main Floor Trusses for Level 2	2%	Fri 29/8/08	NA	Tue 18/3/08	Tue 25/3/08			-EZB-	
411	Level 3 +22.90	31%	Sat 12/4/08	NA	Mon 7/4/08	Thu 22/5/08				V
412	Main Floor Trusses for Level 3	68%	Sat 12/4/08	NA	Mon 7/4/08	Tue 15/4/08			E	•
413	Secondary Floor Trusses for Level 3	68%	Wed 16/4/08	NA	Wed 16/4/08	Thu 24/4/08			<u> </u>	
414	Composite Decking Slab for Level 3	55%	Sat 31/5/08	NA	Fri 25/4/08	Mon 28/4/08			·	
1416	Level 3M +24.90	19%	Tue 8/7/08	NA	Fri 25/4/08	Tue 10/6/08				
1417	Main Floor Trusses for Level 3M	40%	Tue 8/7/08	NA	Fri 25/4/08	Sat 3/5/08				-
418	Secondary Floor Trusses for Level 3M	40%	Tue 8/7/08	NA	Mon 5/5/08	Tue 13/5/08	_\			
1419	Composite Decking Slab for Level 3M	40%	Fri 11/7/08	NA	Wed 14/5/08	Fri 16/5/08				
1421		34%	Wed 14/5/08	NA	Wed 14/5/08	Fri 27/6/08				
1422	Main Floor Trusses for Level 5	75%	Wed 14/5/08	NA	Wed 14/5/08	Wed 21/5/08		<b>N</b>	T	·
1423	Secondary Floor Trusses for Level 5	75%	Wed 14/5/08	NA	Thu 22/5/08	Fri 30/5/08		nein		
424	Composite Decking Slab for Level 5	60%	Mon 2/6/08	NA	Sat 31/5/08	Tue 3/6/08				
426	Level 6 +36,90	15%	Fri 8/8/08	NA	Sat 31/5/08	Thu 17/7/08				ar an than the state of the state of the
1427	Main Floor Trusses for Level 6	38%	Fri 8/8/08	NA	Sat 31/5/08	Mon 9/6/08				
	J         3 Month Rolling Programme based on revised         Task         Entertaintietter         Progress           D/8/2008         Critical Task         Entertaintietter         Milestone			Summary Split		External Project S	Enter State Stat			8

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			3 Mon	th Rolling Programme	Exp	ention and Exhit ansion Project ad Master Progra		ting on 30 August	D8 ·				
ID	Task Name			% Comp	Actual Start	Actual Finish	Baseline Start 1	Baseline Finish 1	Jun Jul	Aug	Sep	Oct	Nov
1428	Secondary F	Floor Trusses for Level 6		38%	Fri 17/10/08	NA	Tue 10/6/08	Wed 18/6/08					
1429	Composite D	Decking Slab for Level 6		5%	Mon 27/10/08	NA	Thu 19/6/08	Mon 23/6/08			1		E
1431	Level 7 +41.0 & -	+44.35		10%	Thu 7/8/08	- NA	Thu 19/6/08	Fri 25/7/08	4 				
1432	Main Floor T	russes for L7		20%	Thu 7/8/08	NA	Thu 19/6/08	Thu 26/6/08					
1433	Secondary F	Floor Trusses for L7		20%	Sat 1/11/08	NA	Fri 27/6/08	Mon 7/7/08					
1434	Composite E	Decking Slab for L7		5%	Tue 11/11/08	NA	Tue 8/7/08	Fri 11/7/08					
1446	Architectural Finishes & Fittings			0%	Fri 25/4/08	NA	Fri 14/9/07	Sat 4/4/09					
1447	External Walling - Curtain Wal	ll / Glass Wall / Window		0%	Fri 18/7/08	NA	Mon 12/5/08	Tue 17/2/09		Contraction of the local division of the loc			
1448	West Side for Atrium Lini	k Extension		0%	Thu 31/7/08	NA	Mon 12/5/08	Thu 29/1/09					
1449	Stage 1 (GL 20 to 25)	)		0%	Mon 4/8/08	NA	Mon 12/5/08	Thu 29/1/09	•				
1450	Survey & Setting	out Works		5%	Mon 4/8/08	NA	Mon 12/5/08	Mon 19/5/08	-	K			
1451	Framing Installation	on for Curtain Wall and Cla	dding	1%	Thu 28/8/08	NA	Tue 20/5/08	Sat 4/10/08				<del></del>	*********************
1469	East Side & South Side F	açade for Atrium Link Ext	ension	1%	Fri 18/7/08	NA	Tue 29/7/08	Wed 7/1/09	-		Line		
1470	Survey & Setting out V	Vorks	***************************************	10%	Fri 18/7/08	NA	Tue 29/7/08	Tue 5/8/08	•	K H			
1471	Framing Installation for	r Curtain Wall and Cladd'g		4%	Thu 28/8/08	NA	Tue 29/7/08	Thu 11/9/08	•				
1600	Building Services Installation			17%	Thu 8/3/07	NA	Thu 8/3/07	Fri 5/6/09					
1610	Transformer Installation at Ph	ase 2 (For sea water pum	p room)	100%	Fri 28/12/07	Tue 29/1/08	Mon 3/12/07	Tue 22/1/08		·			
1611	Transformer Delivery & Inst	taliation (by HEC)		100%	Fri 28/12/07	Wed 2/1/08	Mon 3/12/07	Mon 10/12/07					
1612	Electrical Cable Installation	by HKE		100%	Sat 29/12/07	Wed 2/1/08	Mon 10/12/07	Thu 20/12/07					
1613	Engerisation	******		100%	Wed 2/1/08	Tue 22/1/08	Wed 2/1/08	Tue 22/1/08					
1614	Power On			100%	Tue 29/1/08	Tue 29/1/08	Tue 22/1/08	Tue 22/1/08	•				
1615	Transformer Installation Grid	D-E		25%	Fri 4/7/08	NA	Thu 5/6/08	Mon 15/12/08					ann a shine an air an an an an an an
1616	RC Works inside Room (To	op & Floor double slabs)		100%	Fri 4/7/08	Fri 25/7/08	Fri 6/6/08	Sat 5/7/08					
1617	Builder's Works for HKE Tr	ansformer Room		75%	Mon 28/7/08	NA	Thu 5/6/08	Thu 31/7/08			1		
1627	Transformer Installation at Le	vel 1 Phase 2		88%	Fri 1/6/07	NA	Fri 1/6/07	Mon 14/7/08					B
1633	A&A Works for Transforme	rroom		100%	Mon 15/10/07	Sat 5/4/08	Wed 1/8/07	Fri 30/11/07					•
1634	Buider's Works for Transfor	rmer room		100%	Mon 7/4/08	Tue 20/5/08	Sat 1/12/07	Thu 7/2/08			1000		
1635	Handover of Transformer F	Room to HKE		100%	Wed 11/6/08	Wed 11/6/08	Thu 14/2/08	Thu 14/2/08					
1636	Transformer Installation by	HKE		80%	Tue 24/6/08	NA	Fri 15/2/08	Mon 16/6/08					
1748	Heating / Ventilation and Air-C	Condition Installation		32%	Thu 8/3/07	NA	Thu 8/3/07	Mon 2/3/09	No. of Contract of				)
1749	Sea Water System (at Pha		•	100%		Mon 7/4/08	Mon 15/10/07	Mon 5/5/08			1		
1750	Plinth & Builders work:	-		100%	Mon 5/11/07	Sat 29/3/08	Mon 15/10/07	Mon 31/12/07					
1751	Electrical Installation			100%		Mon 28/1/08	Wed 7/11/07	Mon 31/12/07					
1752	Fire Service Installatio	n		100%	Thu 24/1/08	Wed 6/2/08	Tue 4/12/07	Mon 31/12/07			1		
1753	Upgrade the Phase 2	sea water pumps		100%	Tue 1/1/08	Mon 7/4/08	Sat 1/12/07	Mon 28/4/08					
1754	Electrochlorinator Syst			100%		Mon 7/4/08	Fri 1/2/08	Mon 31/3/08			1		
1755	Electrical & control Ins			100%		Mon 7/4/08	Thu 29/11/07	Fri 28/3/08					
Project	Month Rolling Programme based on revised	Task n=		Progress		Summary		External	Tasks	Group By S	ummary I		
Date: 30				Milestone		Split		Droject S	Later and	Baseline 1	•		
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		3 M	H onth Rolling Programme	Exr	ention and Exhit bansion Project ed Master Progra		ting on 30 August 08					
ID	Task Name		% Compl-	Actual Start	Actual Finish	Baseline Start 1	Baseline Finish 1	hia	u)	Aug	Sep Oct	
1756		ng & Commissioning and Handover	100%		Mon 7/4/08	Tue 29/4/08	Mon 5/5/08	<u>8</u>	u	TAug	Sep Oct	Nov
1757	Chiller Plant Room Insta	llation	50%	Wed 30/1/08	NA	NA	NA			Solitanii (Yoliaka kan		
1758	HVAC - Chiller Plant	t Room Works	48%	Wed 30/1/08	NA	NA	NA		Vide As der Antonio Maria			
1759	Pipework Prepar	ration / Diversion before Tee-off Works	100%	Wed 30/1/08	Wed 6/2/08	NA	NA					
1760	Heat Pump Disc	onnection / Dismantling works	100%	Thu 31/1/08	Tue 5/2/08	NA	NA					
1761	Pipe Tee-off Wo	rk	100%	Wed 6/2/08	Fri 7/3/08	NA	NA					
1762	Chiller, Pump & A	AHU Hoisting & Delivery	100%	Wed 30/4/08	Mon 7/7/08	NA	NA		615/			
1763	Chiller Installatio	n	100%	Thu 1/5/08	Fri 9/5/08	NA	NA					
1764	Water Pump Ins	tallation	100%	Sat 10/5/08	Thu 5/6/08	NA	NA					
1765	AHU Installation		100%	Sat 31/5/08	Mon 7/7/08	NA	NA					
1766	FCU Installation	<b>,</b>	100%	Sat 31/5/08	Mon 16/6/08	NA	NA					
1767	F & E Water Tar	nk Installation (at Phase II-L8)	0%	NA	NA	NA	NA .					
1768	Pipework Installa	ation,test & insulation	80%	Wed 20/2/08	NA	NA	NA .		-14-14-14-14-14-14-14-14-14-14-14-14-14-			
1769	Air Duct Installat	lion	20%	Tue 5/8/08	NA	NA	NA				1	
1770	LMCP / FI Instal	lation for Water Pumps	0%	NA	NA	NA	NA					
1773	CCMS System A	Alternation Works	30%	Fri 15/8/08	NA	NA	NA					<u></u>
1825	Emergency Generation Insta		25%		NA	Mon 2/6/08	Wed 15/10/08				2	
1826	Emergency Generator Insi		100%	Tue 1/4/08	Tue 8/7/08	Mon 2/6/08			g <del>unni</del>			
1827	Report Completion of DG		100%		Wed 9/7/08	Fri 15/8/08	Fri 15/8/08		<b>A</b>			
1828	DG Inspection	uuuuuuuuuuuuuuuuuuuuuuuuuuuuuuuuuuuuuu	100%		Fri 18/7/08	Mon 1/9/08	Tue 30/9/08		¥.		<u>(                                    </u>	
1830	DG Certificate Obtain		100%		Wed 23/7/08	Wed 15/10/08	Wed 15/10/08		I Y			
									,			
						CONTRACTOR DE LA CONTRACT		. Exception	Christian Colored and Land		nmany	
	3 Month Rolling Programme based on revised 1/8/2008	Task Entertaintering	E Progress		Summary		External Ta	sks		Group By Su	nmary	88 <b>2</b>