Chun Wo Construction & Engineering Co Ltd

Contract No HY/2005/06 Castle Peak Road Improvement – West of Tsing Lung Tau

Monthly Environmental Monitoring and Audit Report for Reclamation Works (EP No EP-219/2005) May 2007

Second Issue

Chun Wo Construction & Engineering Co Ltd

Contract No HY/2005/06 Castle Peak Road Improvement – West of Tsing Lung Tau

Monthly Environmental Monitoring and Audit Report for Reclamation Works (EP No EP-219/2005) May 2007

June 2007

Ove Arup & Partners Hong Kong Ltd Level 5, Festival Walk, 80 Tat Chee Avenue, Kowloon Tong, Kowloon, Hong Kong Tel +852 2528 3031 Fax +852 2268 www.arup.com is undertaken to any third party

This report takes into account the particular instructions and requirements of our client. It is not intended for and should not be relied upon by any third party and no responsibility



AECOM

MAUNSELL



ENSR Asia (HK) Ltd. (formerly Maunsell Environmental Management Consultant's Ltd) 11/F Grand Central Plaza Tower 2, 138 Shatin Rural Committee Read, Shatin, N.T., Hong Kong

安社亞洲(香港)有限公司

前炭磁電頻管型面积有限公司。
 香港新男評田郷事會路 138 號階域市中央版場 2 座 11 機
 T +852 2893 1551 F +852 2891 0305 www.ensr.aecom.com www.maunsell.aecom.com

Your Ref: --Our Ref: 60016757/c/cwhy706122

By Fax (2492 6201) and Post

Meinhardt Halcrow JV 4/F., Wah Ming Centre, 421 Queen's Road West, Hong Kong

Attn : Mr. Michael S Harfoot

12 June 2007

Dear Sir,

Contract No. HY/2005/06 Castle Peak Road Improvement – West of Tsing Lung Tau Monthly EM&A Report for Construction Works other than Reclamation – May 2007

We refer to the Monthly EM&A Report for Construction Works other than Reclamation – May 2007 received via email on 11 June 2007 from Ove Arup & Partners Hong Kong Ltd., the Environmental Team (ET) of Castle Peak Road Improvement – West of Tsing Lung Tau (Remaining Contract).

Having addressed the IEC's comment on 11 June 2007, the Monthly EM&A Report for Construction Works other than Reclamation – May 2007 is verified to be acceptable for onward submission to the Engineer, HyD, and EPD.

Should you have any inquiry or comment, please do not hesitate to contact the undersigned or our Miss Connie Wong at 3105 8530.

Yours faithfully, For and on behalf of ENSR Asia (HK) Ltd.

Y T Tang Independent Environmental Checker

CC	MHJV	•	Mr. Simon Illingworth	(Fax: 2559 1613)
	Arup	. .	Mr. Sam Tsoi / Mr. Samuel Chan	(Fax: 2268 3950)

Co-Ghairmen; T.C.K. Shum, R.G.Wübbz, President; M.Chan, Managing Diroctor, A.Y.Kwok Executive Directors, F.C.M.Chaung, M.C.Ko, Y.T.Tang, Associate J.J.K.W.Lam Offices : Bangkok, Boging, Guangzhou, Hong Kong, Kuela Lumpur, Kunühun, Manila, Nanchang, Shanghai, Shenzhen, Singapara, Tokyo, Maunsell AECOM, Group Chief Executive , T.C.K.Shum, Prosident/HK : D.D.S.Le, Chief Financial Officer : P.K.L.Wong

ARUP

Document Verification

Page 1 of 1

Job title	Contract No HY/2005/06 Castle Peak Road Improvement – West of Tsing Lung Tau	Job number 24583
Document title	Monthly Environmental Monitoring and Audit Report for Construction Works other than Reclamation – May 2007	File reference

Document ref

Revision	Date	Filename	38-Apr-07 (CW).doc	38-Apr-07 (CW).doc					
First Issue	11 /06/07	Description	Submit to IEC for comments						
			Prepared by	Checked by	Approved by				
		Name	Raymond Liu	Samuel Chan	Sam Tsoi				
		Signature							
Second	12/06/07	Filename	38-May-07(CW)(RevA	A).doc					
lssue		Description	Submit to ER with IEC	S's verification's letter					
			Prepared by	Checked by	Approved by				
		Name	Raymond Liu	Samuel Chan	Sam Tsoi				
		Signature	Roymond.	Sch	2				
		Filename							
		Description							
			Prepared by	Checked by	Approved by				
		Name							
		Signature							
		Filename							
		Description							
			Prepared by	Checked by	Approved by				
		Name							
		Signature							

Issue Document Verification with Document

 \checkmark

Contents

Execut	tive Sumn		Page i
1	Introduc	tion	1
	1.1	Project Background	1
	1.2	Project Organisation	2
	1.3	Impact EM&A Requirements	4
	1.4	Purpose of the Report	4
2	Scope o	f Construction Works	4
	2.1	Construction Programme	4
	2.2	Construction Activities of the Month	4
3	Summai	ry of EM&A Requirements	4
	3.1	Construction Noise	4
	3.2	Marine Water Quality	6
	3.3	Performance Limits and Event and Action Plan	7
	3.4	Site Inspection and Environmental Complaint Handling	13
4	Noise M	onitoring	16
	4.1	Monitoring Equipment	16
	4.2	Methodology	16
	4.3	Results and Observations	16
5	Marine \	Nater Quality Monitoring	17
	5.1	Marine Water Quality Monitoring Equipment	17
	5.2	Methodology	17
	5.3	Results and Observations	18
6		pection, Waste Disposal, environmental complaints, environmental licenses and apliance records	l 24
	6.1	Site Audit Findings	24
	6.2	Waste Disposal	25
	6.3	Complaint Record	25
	6.4	Exceedance	25
	6.5	Notification of Summons and Successful Prosecution	26
	6.6	Environmental Licenses	26
7	Conclus	ions	27
8	Referen	ces	27

<u>Tables</u>

- Table 3-1:
 Construction noise monitoring parameters and frequency
- Table 3-2: Construction noise monitoring locations
- Table 3-3: Marine water quality monitoring locations
- Table 3-4:
 Action and Limit Levels of construction noise
- Table 3-5: Event and Action Plan for construction noise
- Table 3-6:
 Action and Limit Levels of marine water quality established in Baseline Monitoring

 Report #
- Table 3-7: Marine water quality data obtained in the baseline check on 27 February 2006
- Table 3-8:
 Event-Action plan for marine water quality
- Table 5-1:
 Equipment list for construction noise monitoring
- Table 5-1: Marine water quality monitoring equipment
- Table 6-1: Findings of weekly environmental site audit in May 2007
- Table 6-2: Waste disposal quantity in May 2007
- Table 6-3:
 Summary of exceedances of marine water quality monitoring (related to construction works of the Project) in May 2007
- Table 6-4: Summary of valid environmental licences in May 2007

Figures

- Figure 1-1: Site location plan
- Figure 1-2: Project organisation chart
- Figure 3-1: Noise monitoring station
- Figure 3-2: Marine water quality monitoring locations
- Figure 3-3: Complaint procedure
- Figure 5-1: DO levels (surface and middle level) at mid-ebb tide in May 2007
- Figure 5-2: DO levels (bottom level) at mid-ebb tide in May 2007
- Figure 5-3: DO levels (surface and middle level) at mid-flood tide in May 2007
- Figure 5-4: DO levels (bottom level) at mid-flood tide in May 2007
- Figure 5-5: Turbidity levels at mid-ebb tide in May 2007
- Figure 5-6: Turbidity levels at mid-flood tide in May 2007
- Figure 5-7: SS levels at mid-ebb tide in May 2007
- Figure 5-8: SS levels at mid-flood tide in May 2007

Appendices

- Appendix A Construction programme
- Appendix B Monitoring schedule for May 2007 and June 2007
- Appendix C Calibration certificates of marine monitoring equipment
- Appendix D Marine water quality monitoring results
- Appendix E Records on disposal of C&D material by barge
- Appendix F Investigation summary on marine water quality exceedances
- Appendix G Silt curtain daily inpsection record

Executive Summary

This is the fifteenth monthly environmental monitoring and audit (EM&A) report presenting the progress of environmental monitoring and audit works for the reporting period between 01 and 31 May 2007. Noise monitoring at Grand Bay Villa was temporarily suspended as the premises were vacant. Marine water monitoring and weekly environmental site audit were carried out during the reporting period.

Marine Water Quality Monitoring

Impact marine water quality monitoring was conducted during mid-ebb and mid-flood tidal cycles at 10 designated locations including 5 impact and 5 control stations. A baseline check was conducted on 27 February 2006 prior to the commencement of marine works and a compliance checking mechanism was established in accordance with the criteria specified in Baseline Monitoring Report.

Summary of Mid-Ebb Tide

The lowest DO level for surface & middle position of 5.45 mg/L was recorded at WWFCZ2 on 02 and 21 May 2007 and the lowest DO level for bottom position of 5.38 mg/L was recorded at WWA3 on 23 May 2007. There was no exceedance of DO level during reporting period when compared with the established A/L Levels and baseline check criteria in Section 3.3 of this report.

The highest depth-averaged Tby level of 6.8 Nephelometric Turbidity Unit (NTU) was recorded at WWA2 on 16 May 2007. There was 1 exceedance of Tby Action Level on 16 May 2007 during reporting period when compared with the established A/L Levels and baseline check criteria in Section 3.3 of this report.

The highest SS level of 19.7 mg/L was recorded at WWA3 on 14 May 2007. There were 5 exceedances of SS Baseline Check Criteria on 14 and 16 May 2007 when compared with the established A/L Levels and baseline check criteria in Section 3.3 of this report.

The exceedances of Tby and SS Levels were likely attributed to the Project. The Contractor has provided mitigation measure by extending the silt curtain to cover a larger area, including shore of Slope 82, on 28 May 2007 and no exceedance was recorded in subsequent monitoring on 28 and 30 May 2007.

Summary of Mid-Flood Tide

The lowest DO level for surface & middle position of 5.43 mg/L was recorded at WWFCZ2 21 May 2007 and the lowest level for bottom position of 5.39 mg/L was recorded at WWA1 on 18 and 21 May 2007. There was no exceedance of DO level during reporting period when compared with the established A/L Levels and baseline check criteria in Section 3.3 of this report.

The highest depth-averaged Tby level of 5.7 NTU was recorded at WWA1 on 18 May 2007. There was no exceedance of Tby level during reporting period when compared with the established A/L Levels and baseline check criteria in Section 3.3 of this report.

The highest SS level of 18.5 mg/L was recorded at WWA3 on 07 May 2007. There was 3 exceedances of SS Baseline Check Criteria on 07, 14 and 16 May 2007 when compared with the established A/L Levels and baseline check criteria in Section 3.3 of this report.

The exceedances of SS Levels were likely attributed to the Project. The Contractor has provided mitigation measure by extending the silt curtain to cover a larger area, including shore of Slope 82, on 28 May 2007 and no exceedance was recorded in subsequent monitoring on 28 and 30 May 2007.

Environmental Auditing

A total of 5 environmental site audits were conducted in May 2007 CT was recommended to improve in the following areas:

Air Quality: Frequent watering during dusty works, provision of covers to stockpile and provision of wheel washing to vehicles leaving the site;

Water Quality: Extension of silt curtain;

Waste Management: Frequent clearing of general refuse and construction waste, provision of driptrays to oil drums.

Waste Disposal

A total of 21.22 tonnes of Construction & Demolition (C&D) waste and 10,377.5 tonnes of C&D materials (911 tonnes transported by trucks and 9,466.5 tonnes transported by barge) were disposed of at landfills and Public Filling Reception Facility at Tuen Mun Area 38 respectively during reporting period. No chemical waste was disposed of during the reporting period.

Complaint Records

There was no environmental complaint received in May 2007.

Exceedance

Exceedances of Tby and SS levels for marine water quality were recorded during reporting period when compared with A/L Levels and baseline check criteria.

Investigation has been conducted for the exceedances. The exceedances were likely attributed to the construction activities of the Project.

The maintenance of the original silt curtain was completed on 28 April 2007. However, muddy water was observed outside silt curtain in early May 2007. Marginal exceedances of turbidity and suspended solids were recorded on 7, 14 and 16 May 2007. Re-suspension of soil from the seabed and seepage of muddy water from Slope 82 were likely the sources of muddy plume. The Contractor was recommended to extend the silt curtain to cover a larger area, including the working area of Slope 82. The extension of the silt curtain was completed on 28 May 2007. The water quality has been improved and exceedance of A/L levels was not recorded in subsequent marine water quality monitoring on 28 and 30 May 2007.

Notification of Summons and Successful Prosecution

No notification of summon and prosecution was received during the reporting period.

Environmental Licences

No new environmental licence was granted during the reporting period.

1 Introduction

Ove Arup & Partners Hong Kong Limited (Arup) was appointed by the Contractor (CT) – Chun Wo Construction & Engineering Co. Ltd as the Environmental Team (ET) for *Contract No. HY/2005/06 Castle Peak Road Improvements – West of Tsing Lung Tau* (hereafter called the "Project"). The reclamation at west of Tsing Lung Tau is covered by an Environmental Permit (EP) No. EP-219/2005 issued in June 2005 with reference to Section 6 of the Technical Memorandum on Environmental Impact Assessment Ordinance (TM-EIAO). The EP was issued following the approval of the application to apply directly for an EP based upon the Project Profile. In accordance with the EM&A Manual, environmental monitoring for construction noise and marine water quality will be required during the construction and operational phases. The construction phase of the Project commenced on 28 February 2006.

1.1 Project Background

The Castle Peak Road (CPR) Improvement works consist of upgrading the existing CPR to provide a dual two-lane carriageway of "Rural Road A" classification between Area 2 (Tusen Wan) and Ka Loon Tsuen. The CPR Improvement project is divided into three contracts, namely HY/99/18 (West Contract), HY/99/19 (Middle Contract) and HY/2000/02 (East Contract).

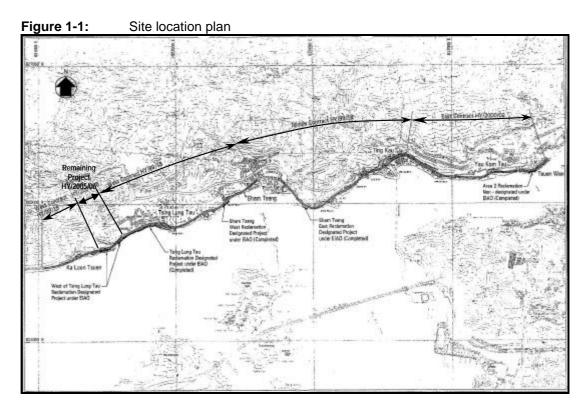
Prior to inviting tenders for Contract No. HY/99/18, a section of the proposed works, between Ch.1+800 and Ch.2+240, west of Tsing Lung Tau, was excised from the Project and entrusted to the Route 10 – North Lantau to Yuen Long Highway project. This 440m long section of CPR was located under the proposed Route 10 suspension bridge, and was to form part of the works area for the Route 10 project. The Route 10 project team revised the alignment of this section of CPR accordingly to suit the arrangement of the Route 10 suspension bridge.

Following subsequent developments, the Route 10 project was placed under review, and Government therefore decided to implement the excised section of CPR (the Remaining Project) under the original CPR Improvement project. **Figure 1-1** shows the site location plan.

Additional reclamation (0.58 ha) at west of Tsing Lung Tau is required to support part of the remaining section of road improvement works and the additional reclamation works constitutes a material change to the reclamation works at Tsing Lung Tau.

The scope of the construction works covered by this Project is summarised as follows:

- The area of reclamation to the east of Grand Bay Villa is about 0.12 ha. The length of this part of the reclamation, measured parallel to the road, is about 107 m, and the maximum width, measured from the existing High Water Mark (HWM) to the proposed toe of the scour apron is about 16 m, of which about 13 m is sloping revetment;
- The area of reclamation west of Grand Bay Villa is about 0.46 ha. The length of this part of the reclamation, measured parallel to the road, is about 172 m, and the maximum width, measured from the existing High Water Mark (HWM) to the proposed toe of the scour apron is about 38 m, of which about 15 m is sloping revetment.



1.2 Project Organisation

The project organisation chart for environmental management is shown in Figure 1.2.

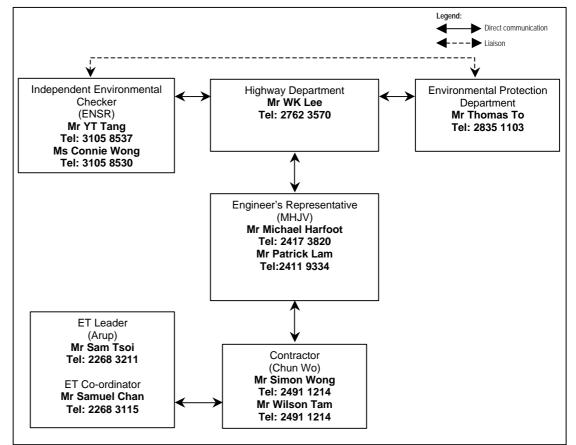


Figure 1-2: Project organisation chart

G:\ENV\PROJECT\24583\REPORTS\MONTHLY\2007-05\RECLAMATION WORKS\37-MAY-07 (RECLAMATION)-REVA.DOC 24583-37 The Project Proponent is Highway Department; the Engineer's Representative (ER) is Meinhardt Halcrow Joint Venture (MHJV); the Contractor (CT) is Chun Wo Construction & Engineering Co. Ltd; the Independent Environmental Checker (IEC) is ENSR Asia (HK) Ltd (ENSR) and the ET leader is Ove Arup & Partners Hong Kong Ltd (Arup).

The overall duties of ET Leader and the team are as follows:

- sampling, analysis and statistical evaluation of monitoring parameters with reference to the EIA study and subsequent reviews recommendations and requirements in respect of noise, dust and water quality;
- environmental site surveillance;
- audit of compliance with environmental protection and pollution prevention and control regulations;
- monitor the implementation of environmental mitigation measures;
- monitor compliance with the environmental protection clauses/specifications in the Contract;
- review construction programme and comment as necessary;
- review construction methodology and comment as necessary;
- complaint investigation, evaluation and identification of corrective measures;
- audit of the effectiveness of mitigation measures and EMS (if applicable) and recommend and implement any changes as appropriate.
- liaison with IEC on all environmental performance matters;
- advice to the CT on environmental improvement, awareness, enhancement matter, etc., on site; and
- Timely submission of the EM&A reports to the ER, IEC and DEP.

The duties of IEC include the followings:

- review and audit all aspects of the EM&A programme;
- validate and confirm the accuracy of monitoring results, monitoring equipment, monitoring locations, monitoring procedures and locations of sensitive receivers;
- carry out random sample check and audit on monitoring data and sampling procedures, etc;
- conduct random site inspection;
- audit the EIA, subsequent reviews and Environmental Permit recommendations and requirements against the status of implementation of environmental protection measures on site.
- review the effectiveness of environmental mitigation measures and project environmental performance;
- audit the CT's construction methodology and agree the least impact alternative in consultation with ET Leader and the CT;
- check compliant cases and the effectiveness of corrective measures;
- review EM&A report submitted by the ET Leader; and
- feedback audit results to ET Leader by signing off relevant EM&A proformas.

1.3 Impact EM&A Requirements

The impact environmental monitoring and audit for the Project included noise, marine water quality and environmental site audit.

1.4 Purpose of the Report

The purpose of the monthly EM&A report is to provide the information on monitoring methodology, monitoring results, environmental permit status, site audit findings, recommendations and conclusions for the scope of impact EM&A specified under EP No. EP-219/2005.

This is the fifteenth monthly EM&A report summarising the monitoring methodology, locations, periods, frequencies, results and any observation from the noise, marine water quality and environmental site audit from 01 May 2007 to 31 May 2007.

2 Scope of Construction Works

2.1 Construction Programme

The construction work was commenced on 28 February 2006. An up-to-date construction programme is attached in **Appendix A**.

2.2 Construction Activities of the Month

The major construction activities carried out by CT in May 2007 included:

- Construction of retaining wall at Seawall B
- Removal of stockpile at Seawall B; and
- Concreting at slope 82.

3 Summary of EM&A Requirements

Marine water quality and noise monitoring at Grand Bay Villa will be conducted by an ET at all specified monitoring locations during the construction stage. Environmental site audits will also be carried out.

The monitoring schedule for May 2007 and the tentative schedule for June 2007 are attached in **Appendix B**.

3.1 Construction Noise

3.1.1 Monitoring Parameters

Construction noise monitoring will be measured in terms of the A-weighted equivalent continuous sound pressure level (L_{eq}). L_{10} and L_{90} will also be recorded as supplementary reference information for data auditing.

3.1.2 Monitoring Frequency

Noise measurements will be conducted on a weekly basis. The monitoring time periods, monitoring parameters and frequency are summarised in **Table 3-1**.

Time Period (when construction activity is found)	Parameters	Monitoring Frequency	No. of Measurements for Each Monitoring
Between 0700-1900 hours on normal weekdays	Leq(30 min)		1
Between 1900-2300 hours on normal weekdays		Once per	
Between 2300-0700 hours of next day	Leq(5 min)*	week	3 (consecutive)
Between 0700-1900 hours on holidays			

Table 3-1. notruction nois monitoring parameters and fre

The L_{eq(5 min)} will only be measured if construction activities are conducted in holidays and between the period of 1900 and 0700 hours during normal weekdays.

3.1.3 Monitoring Location

Noise monitoring will be conducted at one designated location as shown in Figure 3-1. The details of the noise monitoring location are given in Table 3-2. The measurements will be taken at a position 1m from the exterior of building façade and at a position of 1.2m above ground.

Table 3-2:	Construction noise monitoring locations
------------	---

Noise Monitoring Station No.	Location	Monitoring Point	Remarks
WN5	Grand Bay Villa	G/F, House 1	Monitoring temporarily suspended *

Grand Bay Villa is currently vacant with no resident. Construction noise monitoring at WN5 temporarily suspended until the premises are occupied.

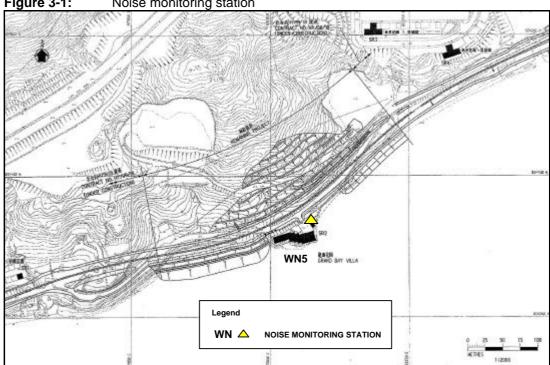


Figure 3-1: Noise monitoring station

3.2 Marine Water Quality

3.2.1 Monitoring Parameters

Marine water quality monitoring will include Turbidity (Tby) in the unit of NTU, Dissolved Oxygen (DO) in the unit of mg/L and Suspended Solids (SS) in the unit of mg/L. In addition to the water quality parameters, other relevant data such as monitoring location/position, time, water depth, water temperature, salinity, DO saturation, weather conditions, sea conditions, tidal stage will be recorded as far as practicable together with observations of any special phenomena, works underway at the construction site, etc.

3.2.2 Monitoring Frequency

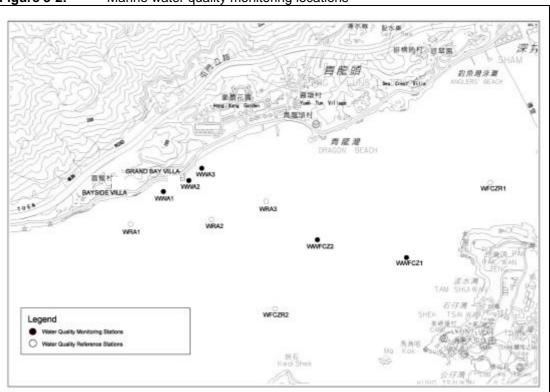
Impact marine water quality monitoring will be conducted three times per week, at mid-flood and mid-ebb tides and at 10 designated monitoring locations. The interval between two sets of monitoring will not be less than 36 hours.

3.2.3 Monitoring Locations

A total of 10 locations, 5 for impact and 5 for control were specified for marine water quality monitoring in accordance with the EM&A Manual, which are summarised in **Table 3-3** and shown in **Figure 3-2**.

Marine Water Quality	Locat	Location			
	Eastings	Northings			
West of Grand Bay Villa	WWA1 (Impact Location)	821981	824282		
West of Orana Day vina	WRA1 (Control Location)	821776	824078		
Grand Bay Villa	WWA2 (Impact Location)	822141	824352		
Grand Day Villa	WRA2 (Control Location)	822283	824107		
East of Grand Bay Villa	WWA3 (Impact Location)	822222	824429		
East of Grand Day Villa	WRA3 (Control Location)	822625	824222		
	WWFCZ1 (Impact Location)	823500	823870		
Ma Wan Fish Culture Zone	WWFCZ2(Impact Location)	822943	823983		
	WFCZR1 (Control Location)	824024	824333		
	WFCZR2 (Control Location)	822677	823547		

Table 3-3: Marine water quality monitoring locations





3.3 Performance Limits and Event and Action Plan

The monitoring results will be checked against appropriate standards and requirements. A two-tier system performance limits have been established in the Project specific EM&A Manual. The "Action Level" and the "Limit Level" (A/L) are established according to the EPD requirements. The ET, ER, IEC, and CT will take corresponding action in accordance with the Event-Action Plans if the monitoring results exceed the performance limits.

3.3.1 Construction Noise

The A/L Levels for the construction noise have been established during the baseline monitoring as summarised in **Table 3-4**.

Table 3-4: Action and Limit Levels of co	Instruction noise	
Time Period	Action Level	Limit Level
0700 - 1900 hours on any day not being a Sunday or public holiday	When one documented complaint is received	75dB(A)

Table 3-4: Action and Limit Levels of construction noise

The action required to be taken by different parties in the case of exceedance of A/L Levels are summarised in the Event and Action Plan in **Table 3-5**.

		on Plan for construction				
Event	ET Leader	IEC	ER	СТ		
Level	 Notify IEC and the CT. Carry out investigation. Report the results of investigation to the IEC and the CT. Discuss with the CT and formulate remedial measures. Increase monitoring frequency to check mitigation effectiveness. 	 Review with the analysed results submitted by ET. Review the proposed remedial measures by the CT and advise ER accordingly. Supervise the implementation of remedial measures. 	 Confirm receipt of notification of exceedance in writing. Notify the CT. Require the CT to propose remedial measures for the analysed noise problem. Ensure remedial measures are properly implemented. 	 Submit noise mitigation proposals to IEC. Implement noise mitigation proposals. 		
Level	 Notify the IEC, the ER, the DEP and the CT. Identify the source. Repeat measurement to confirm findings. Increase monitoring frequency. Carry out analysis of CT's working procedures to determine possible mitigation to be implemented. Inform the IEC, the ER, and the DEP the causes & actions taken for the exceedances. Assess effectiveness of the CT's remedial actions and keep the IEC, the DEP and the ER informed of the results. If exceedance stops, cease additional monitoring 	 Discuss amongst the ER, the ET Leader and the CT on the potential remedial actions. Review the CT's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly. Supervise the implementation of remedial measures. 	 Confirm receipt of notification of exceedance in writing. Notify the CT. Require the CT to propose remedial measures for the analysed noise problem. Ensure remedial measures are properly implemented. If exceedance continues, consider what activity of the work is responsible and instruct the CT to stop that activity of work until the exceedance is abated. 	 Take immediate action to avoid further exceedance. Submit proposals for remedial actions to IEC within 3 working days of notification. Implement the agreed proposals. Resubmit proposals if problem still not under control. Stop the relevant activity of works as determined by the ER until the exceedance is abated. 		

 Table 3-5:
 Event and Action Plan for construction noise

3.3.2 Marine Water Quality

Based on the baseline water quality monitoring data obtained. The A/L levels established using the baseline marine water quality monitoring data are shown in **Table 3-6**. If the water quality monitoring results at any impact stations exceeded the criteria, the actions in accordance with the Event-Action Plan in **Table 3-8** should be carried out.

As the baseline monitoring was conducted in September to October 2005, the established A/L Levels will be more representative to the marine water quality during summer months. To cope with any potential variation of baseline levels due to change in weather conditions, baseline check will be conducted in bi-annual basis in order to update any variation of the baseline water quality at the monitoring locations.

The first baseline check was conducted on 27 February 2006 prior to the commencement of marine works and the updated marine water quality monitoring data were summarised in **Table 3-7**. Compliance assessment for future impact monitoring data will be made against the updated baseline check criteria as follows:

- Tier 1 Comparison of water quality monitoring data at Impact Stations with the A/L Levels (Table 3-6) established in the Baseline Monitoring Report. If the data comply with A/L Levels, go to Tier 2. Otherwise, non-compliance will be reported and Event and Action Plan will be triggered.
- Tier 2 Comparison of water quality monitoring data at Impact Stations with the Baseline Check Level (80% of average values of baseline check data collected at 10 monitoring locations for DO and 120% of average values of baseline check data collected at 10 monitoring locations for Tby and SS) (Table 3-7). If the impact water quality is better than Baseline Check Level, compliance will be reported. Otherwise, go to Tier 3.
- Tier 3 Comparison of water quality monitoring data at Impact Stations with the respective Control Stations. If the impact water quality is better than the respective Control Station, compliance will be reported. Otherwise, non-compliance will be reported and Event-Action Plan will be triggered for implementation of action based on exceedance of Action Level.

						Monitoring		•			
Parameters		WWA1		WWA2		WWA3		WWFCZ1		WWFCZ2	
		Action Level	Limit Level								
					Mid	-ebb					
DO	Surface & middle	3.5	3.5	3.5	3.4	3.4	3.3	5.0 *	5.0	5.0 *	5.0
(mg/L)	Bottom	3.4	3.4	3.4	3.3	3.4	3.2	3.7	2.0	3.6	2.0
-	Tby (NTU)	7.4	7.7	6.7	6.9	7.8	8.3	6.4	8.6	6.7	7.0
	SS (mg/L)	25.3	26.0	22.2	23.1	24.6	25.2	26.3	30.3	22.6	22.9
					Mid-	flood					
DO	Surface & middle	3.3	3.3	3.4	3.3	3.5	3.3	5.0 *	5.0	5.0 *	5.0
(mg/L)	Bottom	3.2	3.2	3.2	3.2	3.2	3.2	3.3	2.0	3.5	2.0
-	Tby (NTU)	6.9	7.2	7.6	8.2	8.7	10.7	7.4	11.0	5.9	6.5
	SS (mg/L)	24.1	24.3	23.5	23.6	22.3	23.5	24.4	25.8	27.4	28.0

Table 3-6:	Action and Limit Levels of marine water quality established in Baseline Monitoring Report *

Notes:

[#] Action and Limit Level for marine water quality were extracted from Baseline Monitoring Report, April 2006.

* Based on the criteria in Table 4-6 of Baseline Monitoring Report, the originally established action levels of DO for fish culture zone at surface & middle level were all below the 5.0 mg/L.

	Parameters	Monitoring locations								
	r arameters	WWA1	WWA2	WWA3	WWFCZ1	WWFCZ2				
	Mid-ebb									
DO	Surface & middle	5.4	5.4	5.4	5.4	5.4				
(mg/L)	Bottom	5.4	5.4	5.4	5.4	5.4				
	Tby (NTU)	6.5	6.5	6.5	6.5	6.5				
	SS (mg/L)	13.0	13.0	13.0	13.0	13.0				
			Mid-f	lood						
DO	Surface & middle	5.3	5.3	5.3	5.3	5.3				
(mg/L)	Bottom 5.3		5.3	5.3	5.3	5.3				
	Tby (NTU)	6.6	6.6	6.6	6.6	6.6				
	SS (mg/L)	17.0	17.0	17.0	17.0	17.0				

Table 3-7: Marine water quality data obtained in the baseline check on 27 February 2006

Table 3-8: Event-Action plan for marine	water quality
---	---------------

Event			Action	
	ET Leader	IEC	ER	СТ
Action Level				
Action level being exceeded by one sampling day	 Repeat in-situ measurement to confirm findings. Identify source(s) of impact. Inform the IEC and the CT. Check monitoring data, all plant, equipment and the CT's working methods. Discuss mitigation measures with the IEC and the CT. Repeat measurement on next day of exceedance. 	 Discuss with the ET Leader and the CT on the mitigation measures. Review proposals on mitigation measures submitted by the CT and advised the ER accordingly. Assess the effectiveness of the implemented mitigation measures. 	 Discuss with the IEC on the proposed mitigation measures. Make agreement on the mitigation measures to be implemented. 	 Inform the ER and confirm notification of the non-compliance in writing. Rectify unacceptable practice. Check all plants and equipment. Consider changes of working methods. Discuss with the ET Leader and the IEC and propose mitigation measures to the IEC and the ER. Implement the agreed mitigation measures.
Action level being exceeded by more than one consecutive days	 Repeat in-situ measurement to confirm findings. Identify source(s) of impact. Inform the IEC and the CT. Inform the IEC and the CT. Check monitoring data, all plant, equipment and the CT's working methods. Discuss mitigation measures with the IEC and the CT. Ensure mitigation measures are implemented. Prepare to increase the monitoring frequency to daily. Repeat measurement on next day of exceedance. 	 Discuss with the ET Leader and the CT on the mitigation measures. Review proposals on mitigation measures submitted by the CT and advised the ER accordingly. Assess the effectiveness of the implemented mitigation measures. 	 Discuss with IEC on the proposed mitigation measures. Make agreement on the mitigation measures to be implemented. Assess the effectiveness of the implemented mitigation measures. 	 Inform the ER and confirm notification of the non-compliance in writing. Rectify unacceptable practice. Check all plants and equipment. Consider changes of working methods. Discuss with the ET Leader and the IEC and propose mitigation measures to the IEC and the ER within 3 working days. Implement the agreed mitigation measures.
Limit Level		•		
Limit level being exceeded by one sampling day	 Repeat in-situ measurement to confirm findings. Identify source(s) of impact. Inform the IEC, the CT and the DEP. Check monitoring data, all plant, equipment and the CT's working methods. Discuss mitigation measures with the IEC, the ER and the CT. Ensure mitigation measures are implemented. Increase the monitoring frequency to daily until no exceedance of the Limit Level. Repeat in a situ measurement to confirm 	 Discuss with the ET Leader and the CT on the mitigation measures. Review proposals on mitigation measures submitted by the CT and advised the ER accordingly. Assess the effectiveness of the implemented mitigation measures. 	 Discuss with IEC, the ET Leader and the CT on the proposed mitigation measures. Request the CT to critically review the working methods. Make agreement on the mitigation measures to be implemented. Assess the effectiveness of the implemented mitigation measures. Discuss with IEC, the ET Leader and the CT 	 Inform the ER and confirm notification of the non-compliance in writing. Rectify unacceptable practice. Check all plants and equipment. Consider changes of working methods. Discuss with the ET Leader, the IEC and the ER, and propose mitigation measures to the IEC and the ER within 3 working days. Implement the agreed mitigation measures. Inform the ER and confirm notification of
Limit level being exceeded by more than one consecutive days	 Repeat in-situ measurement to confirm findings. Identify source(s) of impact. Inform the IEC, the CT and the DEP. Check monitoring data, all plant, equipment and the CT's working methods. Discuss mitigation measures with the IEC, the ER and the CT. Ensure mitigation measures are implemented. Increase the monitoring frequency to daily until no exceedance of the Limit Level for two consecutive days. 	 Discuss with the ET Leader and the CT on the mitigation measures. Review proposals on mitigation measures submitted by the CT and advised the ER accordingly. Assess the effectiveness of the implemented mitigation measures. 	 Discuss with IEC, the ET Leader and the CT on the proposed mitigation measures. Request the CT to critically review the working methods. Make agreement on the mitigation measures to be implemented. Assess the effectiveness of the implemented mitigation measures. Consider and instruct, if necessary, the CT to slow down or to stop all or part of the marine work until no exceedance of Limit Level. 	 Inform the ER and confirm notification of the non-compliance in writing. Rectify unacceptable practice. Check all plants and equipment. Consider changes of working methods. Discuss with the ET Leader, the IEC and the ER, and propose mitigation measures to the IEC and the ER within 3 working days. Implement the agreed mitigation measures. As directed by the ER, slow down or stop all or part of the construction activities.

3.4 Site Inspection and Environmental Complaint Handling

3.4.1 Site Inspection Frequency and Areas Covered

Regular site inspections will be carried out on a weekly basis. The areas of inspection cover the different environmental impacts, such as air, noise, water and waste, and their pollution controls and mitigation measures for both within and outside the site area.

Ad hoc site inspection will be carried out if significant environmental non-compliance is identified. Inspections may also be carried out subsequent to receipt of any environmental complaints, or as part of the investigation work, as specified in the Event and Action Plans.

3.4.2 Site Inspection Procedures

- a) The CT and/or ER will advise the Environmental Auditor (EA) of the ET for all information on any environmental related aspects.
- b) The EA will discuss with the CT and/or ER to sort out and forecast any potential environmental impact.
- c) The EA will conduct a site walk with the CT and/or ER, particularly the areas with extensive construction works.
- d) The EA will conduct inspection for the main environmental facilities and measures such as wheel washing facilities located at site exits, water spraying truck, temporary noise barrier, and internal noise-reducing measures of the heavy equipment etc, to ensure that these environmental facilities operate normally and effectively.
- e) The EA will fill up a site inspection checklist during the site inspection for recording any special observations.
- f) The EA will conduct post-discussion with the CT and/or ER for the establishment of additional/special measures if any non-conformance is found. The completion date for such additional measures will be confirmed during the post-discussion.
- g) The EA will propose a reasonable timeframe together with the CT and/or ER, for the preparation of the proposal for remediation of environmental non-compliance.
- h) The completed site inspection checklist will be signed by the EA, the CT and/or ER, for reference and for taking action in accordance with the agreed procedures, reporting systems and time frame.

3.4.3 Environmental Complaints

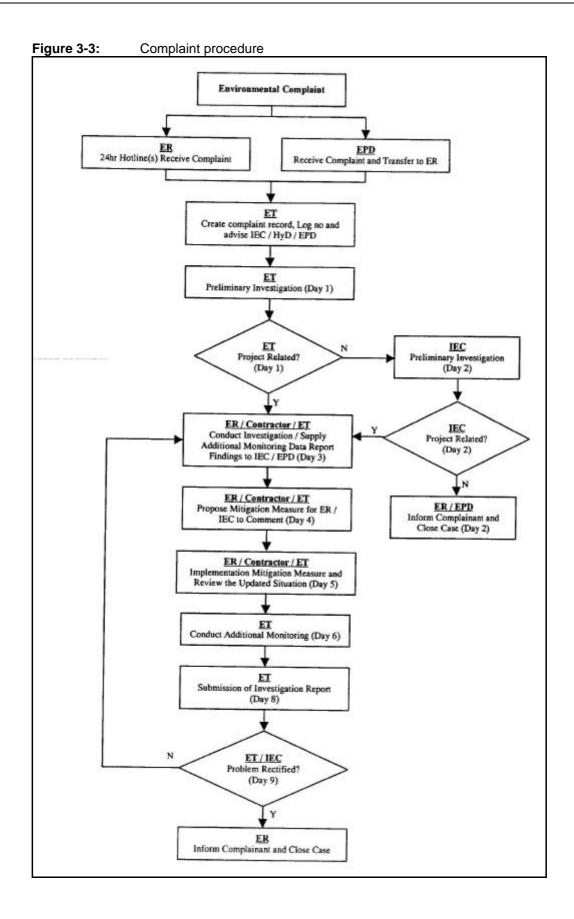
A 24-hour complaint hotline at 6277 7465 has been established for the Project. In accordance with the EM&A Manual, environmental complaints will be referred to the ET for initiation of the complaint investigation procedures. The ET will undertake the following procedures upon receipt of complaints:

- a) The ET will record the details of the complaint and the date of receipt into the complaint database, and inform ER immediately.
- b) The ET will perform compliant investigation to determine its validity and to assess whether the source of the problem is due to work activities.
- c) The ER will instruct the CT to identify mitigation measures in consultation with the ET, if the compliant is valid and due to works.
- d) The ET will liaise with the CT on their mitigation measure proposals and implementation, if required.

- e) The ET will conduct review of the CT's response on the identified mitigation measures, and of the updated situation.
- f) The ET will submit interim report to EPD if the complaint is received via EPD. The interim report will clearly state the status of the complaint investigation and the follow-up action within the time frame assigned by EPD.
- g) The ET will undertake additional monitoring and audit to verify the situation if necessary, and ensure that any valid reason for complaint does not recur.
- h) The ET will report on the investigation results and the subsequent actions to the source of complaint for responding to the complainant. If the source of complaint is via EPD, the results will be reported within the time frame assigned by EPD.
- i) The ET will record the details of the complaint, investigation, subsequent actions and results in the monthly EM&A report.

During the complaint investigation work undertaken by the ET, the CT and ER should cooperate with the ET on providing all the necessary information and assistance for completion of the investigation. If mitigation measures are identified as necessary after the investigation, the CT should promptly carry out the required mitigation to the satisfaction of ET. The ER should ensure that the CT has carried out such identified measures.

A flow chart of the complaint response procedures is shown in **Figure 3-3** for reference.



4 Noise Monitoring

4.1 Monitoring Equipment

Details of the integrating sound level meters used in the noise monitoring are shown in **Table 5-1**.

Equipment	Manufacturer & Model No.	Precision Grade	Qty.
Integrating sound level meter	Rion NA-27	IEC 451 Tupo 1	1
Windshield	Brüel & Kjær UA0237	IEC 651 Type 1 IEC 804 Type 1	1
Acoustical calibrator	Brü el & Kjær 4226	TEC 804 Type T	1
LCD wind speed indicator	Kestrel Vane Anemometer		1

Table 5-1: Equipment list for construction noise monitoring

4.2 Methodology

4.2.1 Occupancy Status of Grand Bay Villa

The property management company of Grand Bay Villa (WN5) will be coordinated a monthly basis within 10 working days of each month to confirm the occupancy status of these premises. Once this location is confirmed occupied, noise monitoring will be resumed within 1 week.

4.2.2 Field Measurement

- The sound level meter and battery were checked to ensure that they were in proper condition.
- The sound level meter was set on a tripod at 1.2m above ground and at 1m from the exterior of the building façade.
- Before conducting the measurement, the sound level meter was calibrated by an acoustical calibrator.
- The measurement parameter was set to A-weighted sound pressure level. The time weighting was set in fast response and the time period of measurement at 30 minutes.
- The wind speed was checked during noise monitoring to ensure the steady wind speed did not exceed 5m/s, or wind with gusts did not exceed 10m/s.
- Any abnormal conditions that generated intrusive noise during the measurement were recorded on the field record sheet.
- After each measurement, the equivalent continuous sound pressure level (L_{eq}), L_{10} and L_{90} were recorded on the field record sheet.
- The sound level meter was re-calibrated by the acoustical calibrator to confirm that there was no significant drift of reading.

4.2.3 Equipment Maintenance and Calibration

All sound level meters comply with the standards of IEC 651 (Fast, Slow, Impulse RMS detector tests) and IEC 804 (L_{eq} functions). The acoustical calibrator model no. 4226 complies with IEC 942.

4.3 Results and Observations

4.3.1 Occupancy Status of Grand Bay Villa

In the reporting period, Grand Bay Villa (WN5) was vacant with no resident and noise monitoring was temporarily suspended.

5 Marine Water Quality Monitoring

5.1 Marine Water Quality Monitoring Equipment

Monitoring of Turbidity (Tby) in NTU, Dissolved Oxygen (DO) in mg/L and Suspended Solids (SS) in mg/L was carried to ensure that any deteriorating water quality would be readily detected and timely action would be taken to rectify the situation. Tby and DO were measured in-situ while SS was determined in the laboratory. A list of the marine water quality monitoring equipment is summarised in **Table 5-1**.

Table 5-1: Marine water quality monitoring equipment

Equipment	Manufacturer & Model No.	Qty
Handheld DO, Temperature & Salinity Meter	YSI Model 85	1
pH meter	Hanna	1
Turbidimeter	HACH 2100P	1

5.2 Methodology

5.2.1 DO, Temperature and Salinity Measuring Equipment

The equipment to measure DO, temperature and salinity complied with the following:

- i. The instrument was a portable, weatherproof dissolved oxygen measuring instrument complete with cable and used a DC power source. It was capable of measuring:
 - A dissolved oxygen level in the range of 0-20 mg/L and 0-200% saturation;
 - A temperature of 0-45°C; and
 - A salinity level in the range of 0-40 ppt.
- ii. It had a membrane electrode with automatic temperature compensation complete with a cable.

5.2.2 Tby Measurement Instrument

The instrument was a portable, weatherproof turbidity-measuring instrument complete with comprehensive operations manual. The equipment used a DC power source. It had a photoelectric sensor capable of measuring turbidity between 0-1000 NTU and was complete with a cable.

5.2.3 SS

The following equipment was used to monitor the SS:

- (1) A water sampler comprised a transparent PVC cylinder, with a capacity of not less than 2 litres and which can be effectively sealed with latex cups at both ends. The sampler had a positive latching system to keep it open and prevent premature closure until released by a messenger when the sampler was at the selected water depth.
- (2) Water samples for SS measurement were collected in high density polythene bottles, packed in ice (cooled at 4°C without being frozen) and delivered to the laboratory as soon as possible after collection.

5.2.4 Water Depth Detector

A portable, battery-operated echo sounder was used for the determination of water depth at each designated monitoring.

5.2.5 Location of the Monitoring Site

A hand-held Global Positioning System (GPS) was used during monitoring to ensure the monitoring vessel was at the correct location before taking measurements.

5.2.6 Calibration and Accuracy of Instrumentation

All *in-situ* monitoring instruments were checked, calibrated and certified by a HOKLAS accredited laboratory or any other international accreditation scheme before use, and subsequently re-calibrated at 3 monthly intervals throughout all stages of the water quality monitoring. Response of sensors and electrodes were checked with certified standard solutions before each use. Wet bulb calibration for a DO meter was carried out before measurement at each monitoring location. The calibration certificates are attached in **Appendix C**. For the on site calibration of field equipment, the BS 1427:1993, "Guide to Field and on-site test methods for the analysis of waters" was followed.

5.3 Results and Observations

5.3.1 Weather Conditions and Other Factors

Amber rainstorm signal was issued on 19, 20 and 27 May 2007.

5.3.2 Summary of Results

Impact marine water quality monitoring was undertaking during mid-ebb and mid-flood tidal cycles at 10 designated locations including 5 impact and 5 control stations. A baseline check was conducted on 27 February 2006 prior to the commencement of marine works and a compliance checking mechanism was established in accordance with the Baseline Monitoring Report. Detailed water quality monitoring results are given in **Appendix D**. Graphical presentation of the monitoring results are illustrated in **Figures 5-1 to 5-8**.

Summary of Mid-Ebb Tide

The lowest DO level for surface & middle position of 5.45 mg/L was recorded at WWFCZ2 on 02 and 21 May 2007 and the lowest DO level for bottom position of 5.38 mg/L was recorded at WWA3 on 23 May 2007. There was no exceedance of DO level during reporting period when compared with the established A/L Levels and baseline check criteria in Section 3.3 of this report.

The highest depth-averaged Tby level of 6.8 Nephelometric Turbidity Unit (NTU) was recorded at WWA2 on 16 May 2007. There was 1 exceedance of Tby Action Level on 16 May 2007 during reporting period when compared with the established A/L Levels and baseline check criteria in Section 3.3 of this report.

The highest SS level of 19.7 mg/L was recorded at WWA3 on 14 May 2007. There were 5 exceedances of SS Baseline Check Criteria on 14 and 16 May 2007 when compared with the established A/L Levels and baseline check criteria in Section 3.3 of this report.

The exceedances of Tby and SS Levels were likely attributed to the Project. The Contractor has provided mitigation measure by extending the silt curtain to cover a larger area, including shore of Slope 82, on 28 May 2007 and no exceedance was recorded in subsequent monitoring on 28 and 30 May 2007.

Summary of Mid-Flood Tide

The lowest DO level for surface & middle position of 5.43 mg/L was recorded at WWFCZ2 21 May 2007 and the lowest level for bottom position of 5.39 mg/L was recorded at WWA1 on 18 and 21 May 2007. There was no exceedance of DO level during reporting period

when compared with the established A/L Levels and baseline check criteria in Section 3.3 of this report.

The highest depth-averaged Tby level of 5.7 NTU was recorded at WWA1 on 18 May 2007. There was no exceedance of Tby level during reporting period when compared with the established A/L Levels and baseline check criteria in Section 3.3 of this report.

The highest SS level of 18.5 mg/L was recorded at WWA3 on 07 May 2007. There was 3 exceedances of SS Baseline Check Criteria on 07, 14 and 16 May 2007 when compared with the established A/L Levels and baseline check criteria in Section 3.3 of this report.

The exceedances of SS Levels were likely attributed to the Project. The Contractor has provided mitigation measure by extending the silt curtain to cover a larger area, including shore of Slope 82, on 28 May 2007 and no exceedance was recorded in subsequent monitoring on 28 and 30 May 2007.

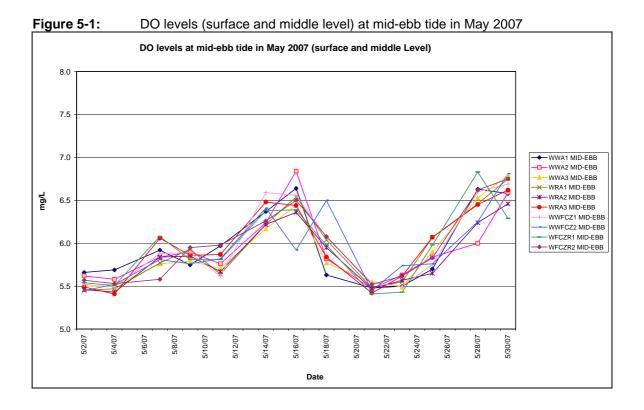
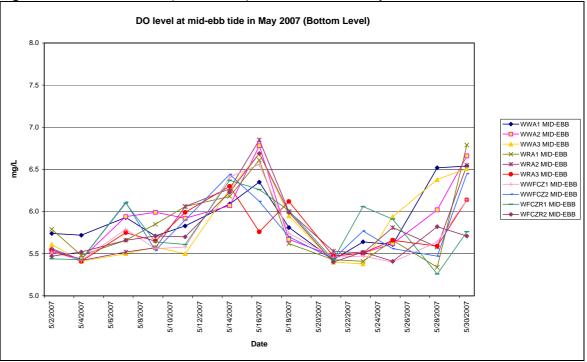
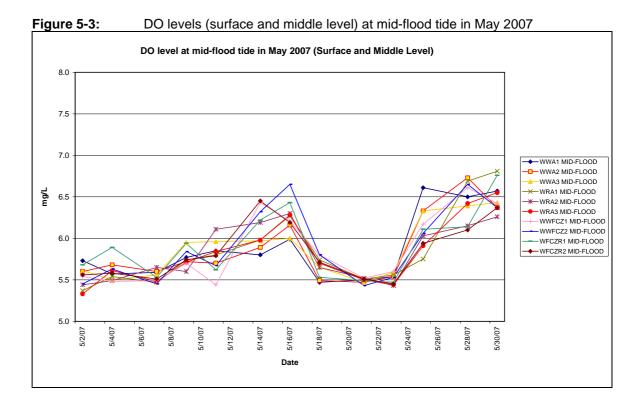


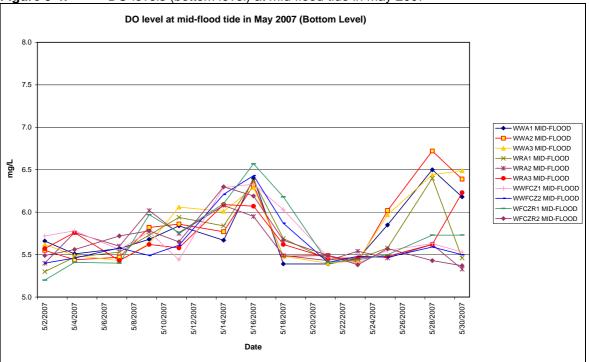
Figure 5-2: DO levels (bottom level) at mid-ebb tide in May 2007



G:\ENV\PROJECT\24583\REPORTS\MONTHLY\2007-05\RECLAMATION WORKS\37-MAY-07 (RECLAMATION)-REVA.DOC 24583-37







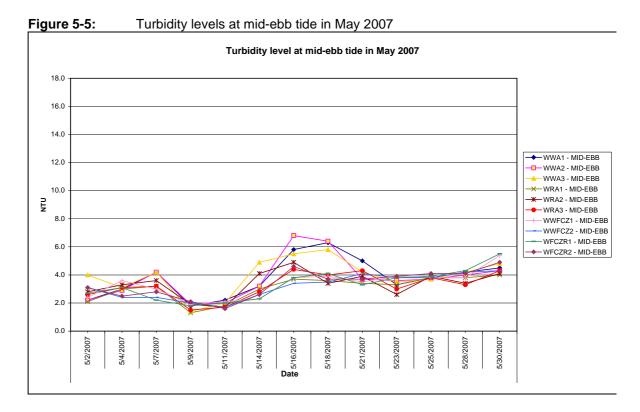
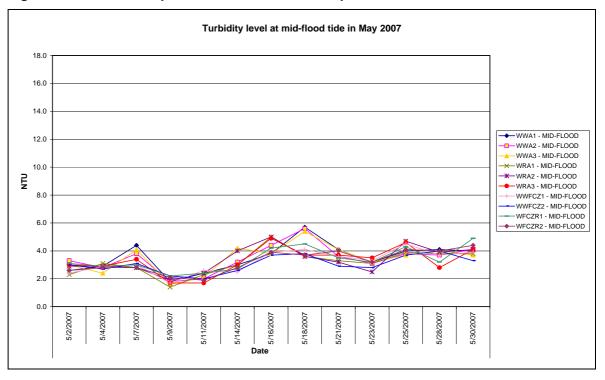


Figure 5-6: Turbidity levels at mid-flood tide in May 2007



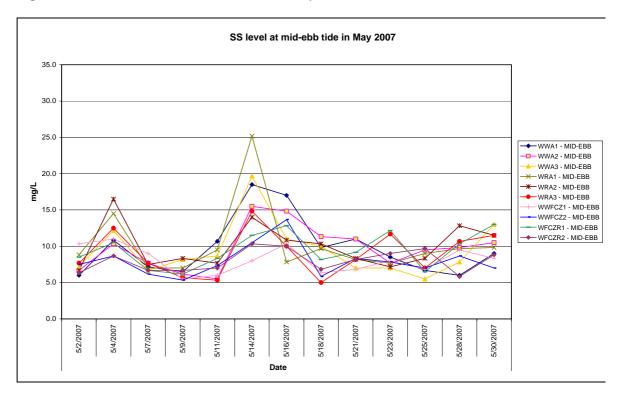
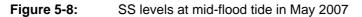
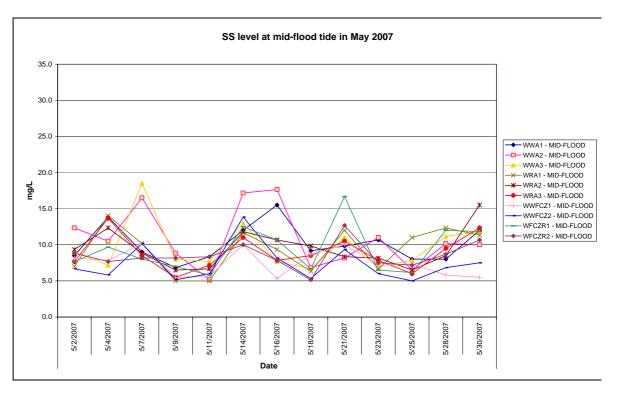


Figure 5-7: SS levels at mid-ebb tide in May 2007





G:\ENV\PROJECT\24583\REPORTS\MONTHLY\2007-05\RECLAMATION WORKS\37-MAY-07 (RECLAMATION)-REVA.DOC 24583-37

6 Site Inspection, Waste Disposal, environmental complaints, environmental licenses and non-compliance records

6.1 Site Audit Findings

Five weekly environmental site audits were carried out on 02, 09, 18, 23, and 30 May 2007. The findings of the site audits are summarised in **Table 6-1**.

	Findings of weekly environmental site addit if		Way 2007			
Date of Issue Raised	Observation	Advice from EA	CT's Response / Action	Closing Date		
Follow-up of last month's site audit	1. Exposed slope was not covered at Seawall A.	CT was reminded to cover the exposed slope.	Agreed with the ET's advice. The exposed slope was covered in early May 2007.	09 May 2007		
02 May 2007	1. Fugitive dust was		Agreed with the ET's	02 May		
(WTLT 066)	observed arising from rock breaking, rock dowel and soil nailing works.	provide water spraying during dusty works.	advice. CT provided water spraying over rock breaking works, rock dowel and soil nailing works immediately.	2007		
	2. Empty cement bags were observed near Seawall B.	CT was reminded to clear the empty cement bags.	Agreed with the ET's advice. CT had removed the waste.	09 May 2007		
	3. Muddy water was observed outside the silt curtain at the eastern end. This might due to re- suspension of soil at the seabed and seepage of muddy water from Slope 82. No excavation works and removal of C&D materials were observed during site audit.	CT was advised to extend the silt curtain to cover a larger area or install double silt curtain around the construction area.	to cover the outfall and shore of Slope 82 on 28	30 May 2007		
09 May 2007 (WTLT 067)	1. An oil drum was observed without driptray.	CT was reminded to provide driptray to the oil drum	Agreed with the ET's advice. Driptray was provided to the oil drum.	18 May 2007		
	2. C&D waste and general refuse were observed.	CT was reminded to clear the waste frequently.	Agreed with the ET's advice. The waste was being cleared during site audit.	18 May 2007		
18 May 2007 (WTLT 068)	1. General refuse was observed near site office.	CT was reminded to clear the waste.	Agreed to clear the waste. The waste had been cleared on 23 May 2007.	23 May 2007		

Table 6-1: Findings of weekly environmental site audit in May 2007

Date of Issue Raised	Observation	Advice from EA	CT's Response / Action	Closing Date
	2. Mud trails were observed at site exits.	CT was reminded to clear the mud trails frequently.	Agreed with ET's advice. CT cleared the mud trails immediately.	18 May 2007
	3. Driptray was not large enough for the generator near Grand Bay Villa.	CT was reminded to replace the driptray with a large one.	Agreed with the ET's advice. The driptray was replaced.	30 May 2007
23 May 2007 (WTLT 069)	1. Stockpile of sand was observed near outfall EA and EB.	CT was reminded to cover the stockpile.	Agreed with the ET's advice. The stockpile was covered.	30 May 2007
(WTLT 070) was observed without provide water s		provide water spraying during rock breaking	Agreed with ET's advice. CT provided water spraying immediately.	30 May 2007
	2. Wheel washing was not provided to the vehicle at the exit near Grand Bay Villa.	CT was reminded to provide wheel washing to all vehicles leaving the site.	5	06 June 2007

6.2 Waste Disposal

Disposal of waste material in the reporting period generally complied with the corresponding waste disposal requirements. The waste disposal quantity in the reporting period is summarised in **Table 6-2**. CT transported C&D material to Public Filling Reception Facility in Tuen Mun Area 38 by barge and truck during reporting period. The disposal record of C&D materials by barge in May 2007 is attached in **Appendix E**.

Table 6-2: Waste disposal quantity in May 2007

Type of waste or material		Disposal at	No. of loads or quantities	
C&D waste		SENT and WENT Landfill	21.22 tonnes	
C&D material	By barge	Public Filling Reception Facility in	9,466.5 tonnes	
	By truck	Tuen Mun Area 38	911 tonnes	
Chemical waste		Collected by licensed collector	0	

6.3 Complaint Record

There was no environmental complaint received in May 2007.

6.4 Exceedance

Exceedances of Tby and SS levels for marine water quality were recorded during reporting period when compared with A/L Levels and baseline check criteria.

Investigation has been conducted for the exceedances. The exceedances were likely attributed to the construction activities of the Project.

These exceedances are summarised in **Tables 6-3 and 6-4**. The details of the investigation was summarised in **Appendix F.**

Muddy water was observed outside silt curtain in early May 2007. Marginal exceedances of turbidity and suspended solids were recorded on 07, 14 and 16 May 2007. Re-suspension of soil from the seabed and seepage of muddy water from Slope 82 were likely the sources of muddy plume. The Contractor was recommended to extend the silt curtain to cover a larger area, including the working area of Slope 82. The extension of the silt curtain was completed on 28 May 2007. The water quality has been improved and exceedance of A/L levels was not recorded in subsequent marine water quality monitoring on 28 and 30 May 2007.

The details of the silt curtain inspection record were given in Appendix G.

	Tide	Location	Exceedances of monitoring data					
Date			Tby (NTU)		SS (mg/L)			
			Control Station	Impact Station	Exceedance of	Control Station	Impact Station	Exceedance of
07-May	Mid-flood	WWA3	-	-	-	8.5	18.5	Baseline Check
14-May	Mid-ebb	WWA2	-	-	-	14.0	15.5	Baseline Check
14-May	Mid-ebb	WWA3	-	-	-	14.8	19.7	Baseline Check
14-May	Mid-flood	WWA2	-	-	-	11.8	17.2	Baseline Check
16-May	Mid-ebb	WWA1	-	-	-	7.8	17.0	Baseline Check
16-May	Mid-ebb	WWA2	4.9	6.8	Action Level	10.8	14.8	Baseline Check
16-May	Mid-ebb	WWFCZ2	-	-	-	10.0	13.7	Baseline Check
16-May	Mid-flood	WWA2	-	-	-	10.7	17.7	Baseline Check

 Table 6-3:
 Summary of exceedances of marine water quality monitoring (related to construction works of the Project) in May 2007

6.5 Notification of Summons and Successful Prosecution

No notification of summons and prosecution was received in May 2007.

6.6 Environmental Licenses

No new environmental licence was granted in the reporting period. A summary of the valid environmental licences is given in **Table 6-4**.

Table 6-4:	Summary of valid environmental licences in May 2007
------------	---

Type of Licence	Reference No.	Valid from	Valid to
Environmental Permit	EP-219/2005	20 Jun 2005	Not applicable
Registration of Chemical Waste Producer	5111-336-C2869-49	16 Feb 2006	Not applicable
Water Discharge Licence	EP760/336/011348 I	31 Mar 2006	31 Mar 2011
Construction Noise Permit	GW-RW 0155-07	04 Apr 2007	15 Aug 2007
Delivery of C&D Materials to PFRF at Tuen Mun Area 38 by Barge	Application No.: CEDD00160	30 Jan 2007	30 Jun 2007

7 Conclusions

The construction phase of the Project was commenced on 28 February 2006. The EM&A programme has been implemented since then, including marine water quality monitoring and environmental site audits. Noise monitoring at Grand Bay Villa was temporarily suspended as these premises were vacant with no resident.

Exceedances of marine water quality were recorded during reporting period and they were likely attributed to construction activities of the Project during the reporting period. The Contractor has provided mitigation measure by extending the silt curtain to cover a larger area, including shore of Slope 82, on 28 May 2007 and no exceedance was recorded in subsequent monitoring on 28 and 30 May 2007.

No complaint, summons or prosecution related to environmental issues was received during the reporting month.

Weekly environmental site audit was carried out during the reporting month. Environmental improvements on air quality, water quality and waste management have been recommended.

C&D materials were transported to PFRF at Tuen Mun Area 38 by barge and truck during the reporting period.

8 References

- [1] Mouchel Halcrow Joint Venture. January 2006. Supplementary Agreement No.1 Remaining Project EM&A Manual for Construction of Reclamation West of Tsing Lung Tau.
- [2] Ove Arup & Partners Hong Kong Limited. April 2006. Contract No.HY2005/06 Castle Peak Road Improvement – West of Tsing Lung Tau. Environmental Baseline Monitoring Report for Reclamation Works (EP No. EP-219/2005) (Second Issue)

Appendix A Construction programme

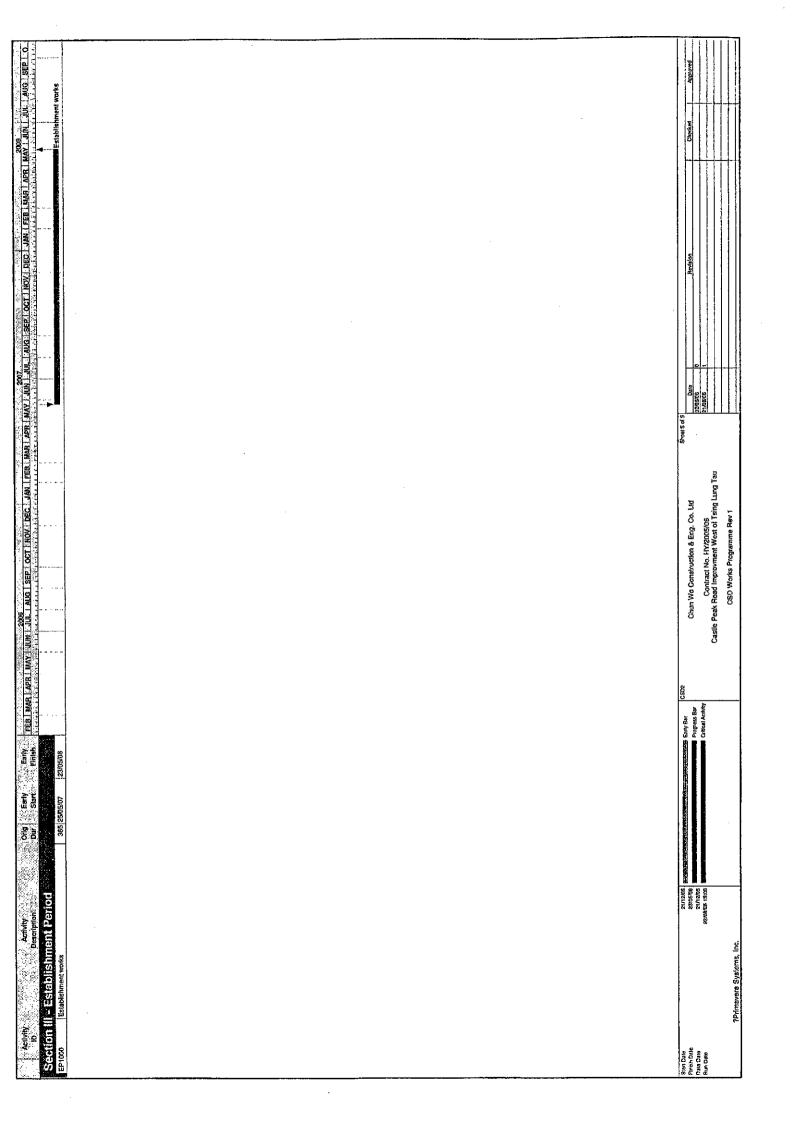
		a state of the second	Dur Dur	USIU			E. C. M. R. M. Scholled and Scholleding and C. M. Scholleding and C. M. Scholleding and Sch		1 1 1 2 2 2 1 1 1 1 2				
DDIALS Control Control <th< td=""><td>ENERAL</td><td></td><td></td><td></td><td></td><td> </td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	ENERAL					 							
0 0	EY DATE							• • •					
District Consider District Consider <thdistrict consinter<="" th=""> Distric Consinter</thdistrict>		Commencement of Works	0 21/12/02										•••
Image: control		Contract Completion Dates	885 21/12/05	53/20/52		·						Contract C	Contract Completion Dates
D Description Option Option<		Section I - Construction Works	490 21/12/05	24/04/07			- 	Sect.	ken - Construct	on Works			
0 0		Portion A Site Possession	0 21/12/05			•••							
0 Control Cont		Portion 8 Site Possession	0 21/12/05				1 APD PLA Demonstration	-					
0 0		Portion Cab Site Possession	- 2//09/02			5		**.~~~ , .			* *	ų., mr.	
		Portion E Site Possession	0:21/12/05						dion 1 combination				
0 memory mercy frager (array frager) solution		Section I completion	0	24/04/07	- er ba							intenan Maintenan	Maintanance Period (Saction] & []
0 Second in classification of the cl		Maintenance Period (Section 1 & II)	395 25/04/07	23/05/08	•		4. 4.		Sector 1	i i i i i i i i i i i i i i i i i i i	~ •		
0 Secteral resolution 0 Secteral resolution 0 0 Secteral resolution 0 Secteral resolution 0 1 A Constrained in the Resolution 0 Secteral resolution 0 1 A Constrained in the Resolution 0 Secteral resolution 0 1 A Constrained in the Resolution 0 Secteral resolution 0 1 A Constrained in the Resolution 0 1 Constrained in the Resolution 0 1 A Constrained in the Resolution 0 1 1 Constrained in the Resolution 0 10 Constrained in the Resolution 1 1 1 Constrained in the Resolution 1 10 Constrained in the Resolution 1 1 1 1 1 10 Constrained in the Resolution 1 1 1 1 1 10 Constrained in the Resolution 1 1 1 1 1 10 Constrained in the Resolution 1 1 1 1 1 10 Constrained in the Resolution 1 1 1 1 1 10 Constrained in the Resolutin the Resolutin the Resolution the Resolution the Resolut		Section R - Landscaping Works	520 21/12/05	24/05/07					Sertion II con	noscapting works			
0 Second Second Second Second 1 Constraction and the Resonance and the Resonance 2 Second in Resonance and the Resonance and the Resonance 2 Second in Resonance and the Resonance and the Resonance 2 Second in Resonance and the Resonance and the Resonance 2 Second in Resonance and the Resonance and the Resonance 3 Second in Resonance and the Resonance and the Resonance 3 Second in Resonance and the Resonance and the Resonance 3 Second in Resonance and the Resonance and the Resonance 3 Second in Resonance and the Resonance and the Resonance 3 Second in Resonance and the Resonance and the Resonance 3 Second in Resonance and the Resonance and the Resonance 3 Second in Resonance and the Resonance and the Resonance 3 Second in Resonance and the Resonance and the Resonance 3 Second in Resonance and the Resonance and the Resonance 3 Second in Resonance and the Resonance and the Resonance 3 Second in Resonance and		Section II completion	0	24/05/07			-					Section II	Section III- Establishment
0 0		Section III- Establishment	C0/21/12/089	80/20/27			· · ·		• •			Section I	Section III completion
Image: constraint in Sharman Disample in Sh	00/		6	anoora				*					
Image: selection of solution for specific metal statisticity and selection of selectio	HIMIN												
Saturi TIVI Shamule Dunient TIVII Shamule Dunient		Sile establishment & plant mobilization	40 21/12/05										
4 Constitutedion (Gh2-4050) to Ch2-4150) 4 Constitutedion (Gh2-4050) to Ch2-4150) 2 Montal Restriction (Gh2-4050) to Ch2-4150) 2 Montal Restriction (GH2-4050) to Ch2-4150) 2 Montal Restriction (GH2) Properties (FH2) 2 Montal Restriction (GH2) Properties (FH2) 2 Montal Restriction (GH2) Properties (FH2) 2 Montal Restriction (GH2) Properties (FH2) 2 Montal Restriction (GH2) Properties (FH2) 2 Montal Restriction (GH2) Properties (FH2) 2 Montal Restriction (GH2) Properties (FH2) 2 Montal Restriction (GH2) Properties (FH2) 2 Montal Restriction (GH2) Properties (FH2) 2 Montal Restriction (GH2) Properties (FH2) 2 Montal Restriction (GH2) Properties (FH2) 2 Montal Restriction (GH2) Properties (FH2) 2 Montal Restriction (GH2) Properties (FH2) 2 Montal Restriction (GH2) Properties (FH2) 2 Montal Restriction (GH2) Properties (FH2) 2 Montal Restriction (GH2) Properties (FH2) 2 Montal Restriction (GH2) Properties (FH2) 2 Montal Restriction (GH2) 2 Montal Restriction (GH2) 2 Montal Restriction (GH2) 2 Montal Restriction (GH2) 2 Montal Restriction (GH2) 2 Montal Restriction (GH2) 2 Montal Restriction (GH2) 2 Montal Restriction (GH2) 2 Montal Restriction (GH2) 2 Montal Restriction (GH2) 2 Montal Restriction (GH2) 2 Montal Restriction (GH2) 2 Montal Restriction (GH2) 2 Montal Restriction (GH2) 2 Montal Restriction (GH2) 2 Montal Re		Submit TTM Schematic Drawing (PS1.15S(16))		20/12/05			· · · · ·						
Concert H-Filler Wolf at Bonh Ends at GL Concert H-Filler Wolf at Bonh Ends at GL Concert H-Filler Wolf at Bonh Ends at GL 10 Fund Statistics of CGD Preparation 2 (2000)	a 4 Co	nstruction(Ch2+030 to Ch2+15				• •							
Operating multiple Consider of the part of the par	-Bored	H-Pile Wall at Both Ends at GL					 	6. () 86 (947) - 14 - 1					
000 Image: Section of Control 7 Control Contro Control	Construc	N 1	重 的复数的 计图 网络外外	が、二の、東部			· · · · ·	jac 10c 1					
(10) Fram Sherington of CSD Propertial (1) Second Second <td>0100</td> <td>ed Deston of Perm and Temp CSD Works</td> <td>72 02/05/06*</td> <td>27/07/06</td> <td></td> <td>Detailed De</td> <td>sign of Perm and Temp CSD We</td> <td>2<u>5</u></td> <td></td> <td>• •</td> <td></td> <td></td> <td></td>	0100	ed Deston of Perm and Temp CSD Works	72 02/05/06*	27/07/06		Detailed De	sign of Perm and Temp CSD We	2 <u>5</u>		• •			
(b) (c) (c) <th(c)< th=""> <th(c)< th=""> <th(c)< th=""></th(c)<></th(c)<></th(c)<>	0110	Formal Submission of CSD Proposal	1 28/07/06	26/07/06		Formal Sub	mission of CSD Proposal						
00 Manual of CSR Properties of CSR Properint Properties of CSR Propertification CSR Properties of		Charking hy Engineer	23 29/07/08	24/08/06		Check	king by Engineer,		• •				
1 1	Γ	Approval of CSD Protosal by Engineer	1 25/08/06	25/08/06		Journa -	oval of CSD Proposal by Engine						
(1) Constrated Denker (Cherger ID-RA). Partie UP (EVI) (1) (2010) (2) (2010) (2) (2010) (2) (2) (2) (2) (2) (2) (2) (2) (2) (2)	ſ	Consent to Temp Work by Engineer	1 21/08/06	21/08/06		Const	mi to Temp Work by Engineer 🦂	• •					
(6) Constant is how Words by Explored (1)(0)(0)(6) (1)(0)(1)(6) (1)(0)(1)(6) (1)(0)(1)(6) (1)(0)(1)(6) (1)(0)(1)(6) (1)(0)(1)(6) (1)(0)(1)(6) (1)(0)(1)(6) (1)(0)(1)(6) (1)(0)(1)(6) (1)(0)(1)(6) (1)(0)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)(1)		Circulate Detailed Design to Rel. Parties by ENG	31 26/08/05	30/60/08			Circulate Detailed Design to	Rel. Parties by ENG					
Microsofte Microso	0155	Consent to Perm Works by Engineer	1 03/10/06	03/10/06			Consent to Perm Works by	Englineer					
Intellentii villesi Slos Intellentii villesi Slos Intellentii villesi Slos 2020 Prices Perio Cut Stops Stabilisatiii Perio Cut Stops Stabilisatiii 2030 Prices Perio Cut Stops Stabilisatiii Perio Cut Stops Stabilisatiii 2030 Prices Perio Cut Stops Stabilisatiii Perio Cut Stops Stabilisatiii 2030 Prices Perio Cut Stops Stabilisatiii Perio Cut Stops Stabilisatiii 2030 Prices Perio Cut Stops Stabilisatiii Perio Cut Stops Stabilisatiii 2030 Prices Perio Cut Stops Stabilisatiii Perio Cut Stops Stabilisatiii 2030 Prices Perio Cut Stops Stabilisatiii Perio Cut Stops Stabilisatiii 2030 Prices Perio Cut Stops Stabilisatiii Perio Cut Stops Stabilisatiii 2030 Prices Perio Cut Stops Stabilisatiii Perio Cut Stops Stabilisatiii 2030 Prices Perio Cut Stops Stabilisatii Perio Cut Stops Stabilisatii 2030 Prices Perio Cut Stops Stabilisatii Perio Cut Stops Stabilisatii 2030 Prices Perio Cut Stops Stabilisatii Perio Cut Stops Stabilisatii 2030 Prices Perio Cut Stops Stabilisatii Perio Cut Stops Stabilisatii 2030 Prices Prices Perio Cut Stops Stabilisatii		Construction Drawings	7 03/10/06	11/10/06			Mconstruction Drawings						
Flugg Procent State Section State <td>. ≃[</td> <td>West Side</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>·</td> <td></td> <td></td> <td></td>	. ≃ [West Side								·			
Fridds Biology Biology <th< td=""><td></td><td>Temp Cut / Slope Stabilisatoln (Ch 2030-2100)</td><td>55 21/08/05</td><td>25/10/06</td><td></td><td></td><td>Temp Cut / Slope Stab</td><td>lisetoin (Ch 2030-2100)</td><td></td><td></td><td></td><td></td><td></td></th<>		Temp Cut / Slope Stabilisatoln (Ch 2030-2100)	55 21/08/05	25/10/06			Temp Cut / Slope Stab	lisetoin (Ch 2030-2100)					
Other Difficult Difficult <thdifficult< th=""></thdifficult<>	-1	Rock Cetting to Road Formation	22 26/10/06	21/11/06			Rock Cutting to			• • •			
000 Bal Concernel Well Construction 00 30/10/107 1203007 1203007 000 Balo Reventation Wells 20 30/10/107 1203007 1203007 000 Balo Reventation Wells 20 30/10/107 1203007 1203007 000 Balo Reventation Wells 20 30/10/107 1203007 1203007 000 Ferringin Prevint Intentiation 20 30/10/107 1203007 1203007 000 Ferringin Prevint Intentiation 20 30/10/107 1000/107 1400/107 000 Ferringin Prevint Intentiation 20 10/10/107 1400/107 1400/107 000 Biol Compone Bean K C Well Constitution 20 10/10/107 1400/107 1400/107 000 Biol Compone Bean K C Well Constitution 20 10/10/107 1400/107 1400/107 000 Biol Compone Bean K C Well Constitution 20 10/10/107 1400/107 1400/107 000 Biol Compone Bean K C Well Constitution 20 10/10/107 1400/107 1400/107 101 Robit Reversion Noted Bean K C Well Constitution 20 10/10/107 1400/107 101 Noted Bean K C Well Constitution 20 10/10/107 1400/107 101 Noted Bean K C Well Constitution 21 10/10/107 1400/107 101 State Bea		Driffing Pre-bored H-Pile (34nos)	68 22/11/06	13/02/07		 		H Davorau Builling	FII6 (34/10\$)				
050 00 Mass Concretor Wall Construct 03 (310)(7) (3200)		Bot Capping Beam & RC Wall Construction	30/31/01/07	12/03/07				Boi Capping E	Learn & HC Wall (Construction			
060 State Re-Instantion Motion 22 (20007) Torono 23 (20007) 200007		Mass Concrete Wall Construct	30 31/01/07	12/03/07				Mass Concret	a Wall Construct				
Old Wait Rearg Prant Institution 40 (000007 200000 21000000 2100000 210		Stope Re-Instatement Works	22 13/03/07	07/04/07				National R	e-Inștatement Wo				
etitication: Easi titististi 000 Tracy Curr States statististication: 51 (2010) 10100 10100 000 Exervation to Road 10100 1110100 10100 101000 000 Exervation to Road 21 (20100 21 (20100 100000 000 Electroneral work 21 (20100 100000 100000 000 Electroneral work 21 (20100 21 (202000 100000 100 Road and Construction 21 (201000 21 (202000 1000000 100 Road and Construction 21 (202000 22 (202000 22 (202000 110 Formation of Tampoort Vorking Pattorm 21 (202000 22 (202000 22 (202000 111 Statisting up for Elevel Plac Construction 21 (202000 22 (202000 22 (202000 111 Statisting up for Elevel Plac Construction 21 (202000 22 (202000 22 (202000 111 Statisting up for Elevel Plac Construction 21 (202000 22 (202000 22 (202000 111 Statisting up for Elevel Plac Construction 21 (202000 22 (202000 22 (202000 111 Statisting up for Elevel Plac Construction 21 (202000 22 (202000 22 (202000 111 Statistitelevel Plac Construction (Elot1		Walt Facing Parts Installation	40 03/03/07	23/04/07					Facing Panel In	stallation			
000 Terror Cut / Store Stadification (Ch 2130-2200) 53 2600/to 3110/107 1110/107 111110/107 11110/107<	nstruction												
Cold Execution (a Road Infing Predend HPR (20 Incs)) Call (21/10/16) 15/11/16 15/11/16 15/11/16 16/11/17 10/10		Temp Cut / Stope Stabilisation (Ch 2130-2200)	53 28/08/06	31/10/05			Entry Temp Cut / Stope Sta	Hisation (Ch 2130-220)					
000 Drifting free Bored H PRe (20 nes) 66) 271/006 100/007	2020	Excavation to Road Formation	28 13/10/06	15/11/06		•	Excavation to Ros	d Formation					
Old Bot Capping Beam & R.C. Wall Construction 20 1101/07 1402/07 1402/07 1402/07 1402/07 10 Miss Concerne Wall Construct 24 1101/07 07/02/07 1402/07 1402/07 11 Stope Re-Institution 22 150/07 17/03/07 1402/07 1400/07 12 Stope Re-Institution 22 150/07 17/03/07 1400/07 1400/07 12 Stope Re-Institution 2 150/07 17/03/07 1400/07 1400/07 13 Construction 2 2 150/07 21/03/06 1400/07 14 Plant Mobilization & Testing 2 2 2000/06 2 1400/07 14 Faint Mobilization & Testing 2 2 2003/06 1 16 Faint Mobilization & Testing 2 2 2 17 Faint 1 2 2 2 2 18 Faint 1 1 1 1 1 19 Construction 1 2 2 2 2 2 100 Faint 1 1 1 1 1 1 101 2 <td>2030</td> <td>Drifting Pre-Bored H-Pile (30 nos)</td> <td>60 27/10/06</td> <td>10/01/07</td> <td>• •</td> <td></td> <td></td> <td>ug Pre-Boned H-Pile (30</td> <td>(sou</td> <td></td> <td></td> <td></td> <td></td>	2030	Drifting Pre-Bored H-Pile (30 nos)	60 27/10/06	10/01/07	• •			ug Pre-Boned H-Pile (30	(sou				
(10) Mass Concrete Wall Construct 24 110/107 07020/T 110/107 07020/T 110/107 07020/T 110/107 07020/T 110 Stope He-Insistoment Wolds 22 15/20/07 10/104/10 20 20 10/104/10 10/104/10 110 Stope He-Insistoment Wolds 22 15/20/07 10/104/07 10/104/07 10/104/10 110 Rest Modification & Temposity Working Feltom 2 2 2000/106 10/104/10 1 10/104/104 110 Formation of Temposity Working Feltom 3 2 2000/106 10/104/104 1 1 110 Formation of Temposity Working Feltom 3 2 2000/106 1 1 1 1 111 Formation of Temposity Working Feltom 3 2 2000/106 1 1 1 1 111 Formation of Temposity Working Feltom 3 2 2 2 1 1 1 1 111 Formation of Temposity Working Feltom 3 1 1 1 1 1 1 111 Formation of Temposity Working Feltom 3 2 2 2 2 2 2 2 2 2 </td <td></td> <td>Bot Capping Beam & R.C Walt Construction</td> <td>30 11/01/07</td> <td>14/02/07</td> <td></td> <td><u>.</u></td> <td></td> <td>Bot Capping Beam &</td> <td>k R.C Wall Const</td> <td>ruction</td> <td></td> <td></td> <td></td>		Bot Capping Beam & R.C Walt Construction	30 11/01/07	14/02/07		<u>.</u>		Bot Capping Beam &	k R.C Wall Const	ruction			
110 Stope Re-Instalement Works 22 1502/07 1702/07 1702/07 1702/07 120 Walif Texing Prinei Instalement Works 20 155/207 1004/07 1702/07 1702/07 121 Clinification A 156/207 1004/07 156/207 1004/07 156/207 121 Clinification A 156/207 1004/07 156/207 1004/07 121 Clinification A 156/207 1004/07 156/207 1004/07 121 Clinification A 156/207 1004/07 1001/201 1 121 Clinification A 156/207 115/202/05 156/207 1001/201 121 Clinification A 126/207 116/202/05 126/2076 1001/201 121 Clinification A 126/2076 126/2076 126/2076 126/2076 121 Clinification A 156/2076 126/2076 126/2076 126/2076 121 Clinification A 126/2076 126/2076 126/2076 126/2076 121 Clinification A 126/2076 126/2076 126/2076 126/2076 121 Clinification A 126/2076 126/2076 126/2076 126/2076 121 Clinification A </td <td></td> <td>Mass Concrete Wall Construct</td> <td>24 11/01/07</td> <td>07/02/07</td> <td></td> <td></td> <td></td> <td>Thiass Concrete Wall C</td> <td>anstruct</td> <td></td> <td></td> <td></td> <td></td>		Mass Concrete Wall Construct	24 11/01/07	07/02/07				Thiass Concrete Wall C	anstruct				
Table Walit Tacing Parter Installation 40 [15:0207 10:04:07 15:0207 10:04:07 10:04:07 10:04:07 10:04:07 10:04:07 10:04:04:07 10:07:05 10:04:04:07 10:07:05 10:07:05 10:07:05 10:07:05 10:07:05 10:07:05 10:07:05 10:07:05 10:07:05 10:07:05 10:07:05 10:07:05 10:07:05 10:07:05 10:07:05 10:07:05 10:07:05 10:07:05	1	Slope Re-Instatement Works	22 15/02/07	17/03/07				A Stope Re-Ins.	bstement Works				
41 Pile Retaining Wall Construction 2 2003005 2103206 Plant Molitration a Testing 000 Plant Molitration a Testing 2 2003005 2103206 000 Plant Molitration a Testing 2 2003005 2203006 000 Plant Molitration a Testing 2 2003005 2203006 000 Plant Molitration a Testing 2 2003006 230306 000 2.5 Cla stored Pla Construction (801.23) 41 300306 2303066 000 2.5 Cla stored Pla Construction (801.23) 43 300506 2205056 000 2.5 Cla stored Pla Construction (801.23) 13 000506 200506 000 2.5 Cla stored Pla Construction (801.23) 13 000506 200506 000 2.5 Cla stored Pla Construction (801.23) 13 000506 200506 000 2.5 Cla stored Pla Construction (801.23) 13 000506 200506 000 2.5 Cla stored Pla Construction (801.23) 13 000506 200506 000 2.5 Cla stored Pla Construction (801.23) 13 000506 200506 000 2.5 Cla stored Pla Construction (801.23) 13 000506 200506 000 2.5 Cla stored Pla Construction (801.23) 13 000506 200706 000 2.5 Cla stored Pla Construction (801.24) 28 15007106 200506 <tr< td=""><td>I</td><td>Walt Facing Panel Instellation</td><td>40 15/02/07</td><td>10/10/00</td><td></td><td>:: </td><td></td><td>Free Wall Fer</td><td>chng Panel Instal</td><td>lation</td><td></td><td></td><td></td></tr<>	I	Walt Facing Panel Instellation	40 15/02/07	10/10/00		:: 		Free Wall Fer	chng Panel Instal	lation			
d File Construction: E01:33	red Pile							·					
000 Plant Mobilization 6 Testing 2 2003005 2403006 2103005 2203006 220300 2203006	red Pile Co	nstruction - Bo1.23 - B01.33	翻える「そう」										
OIO Formation of Tampoary Vorking Pation 2/200306 240(30/6	3000	Plant Mobilization & Testing	2 20/03/06*	21/03/06	Plam Mobilization & Testir			 					
020 Initial Setting up for Bored Pia Construction 5 24/03/06 29/03/06 29/03/06 29/03/06 29/03/06 20/05/06		Formation of Tempoary Working Platform	3 22/03/05	24/03/06		orking Platforr				•••	•••••		
030 2.5 Cla Bored Pile Construction (B01.25) 41 3200306 2200505 20050506 2005	1	initial Setting up for Bored Pile Construction	5 24/03/06	29/03/06	Initial Setting up for Bore	d Pile Constru	toffon -	••					
040 2.6 Dia Baved Pla Construction (601.23) 4.3 (2005/06 2205/06 4.3 (2005/06 2205/06 4.3 (2005/06		2.5 Dia Bored Pile Construction (B01.25)	41 30/03/06	23/05/06		d Pile Constru	ction (Boj.25)	••					
050 2.5 Dia Bored Pile Construction (B01.27) 31 (300506 0600706 550706 0607705 050 2.5 Dia Bored Pile Construction (B01.24) 15 (0807706 5507706 5507706 070 2.5 Dia Bored Pile Construction (B01.24) 28 (1807706 5507706 5507706 070 2.5 Dia Bored Pile Construction (B01.24) 28 (1807706 5507706 5507706 070 2.5 Dia Bored Pile Construction (B01.24) 28 (1807706 5507706 070 2.5 Dia Bored Pile Construction (B01.24) 28 (1807706 5507 070 2.5 Dia Bored Pile Construction (B01.24) 28 (1807706 5507 070 2.5 Dia Bored Pile Construction (B01.24) 28 (1807706 5507 070 2.5 Dia Bored Pile Construction (B01.24) 28 (1807706 5507 070 2.5 Dia Bored Pile Construction (B01.24) 28 (1807706 5507 071 2.5 Dia Bored Pile Construction (B01.24) 28 (1807706 5507 2.5 Dia Bored Pile Construction (B01.24) 2.5 Dia Bored Pile Construction (B01.24) 5507 2.5 Dia Bored Pile Construction (B01.24) 2.5 Dia Bored Pile Construction (B01.24) 5507 2.5 Dia Bored Pile Construction (B01.24) 2.5 Dia Bored Pile Construction (B01.24) 5507 2.5 Dia Bored Pile Construction (B01.24) 2.5 Dia Bored P		2.5 Dia Bored Pila Construction (801.23)	43 02/05/06	22/05/06		a Bored Pile C	onstruction (B01.23)				4:		
050 2.5 Dia Bored Pile Construction (B01.24) 15 (28/07/06 55/07/05 15 (28/07/06 15 (28/07/06 15 (28/07/06 15 (28/07/06 16 (201.24) 1 070 2.5 Dia Bored Pile Construction (B01.24) 28 (38/07/06 18/05/06 1 1 1 070 2.5 Dia Bored Pile Construction (B01.24) 28 (38/07/06 18/05/06 1 1 1 070 2.5 Dia Bored Pile Construction (B01.24) 28 (38/07/06 18/05/06 1 1 1 2.1 Abiti 2.1 Abiti 2.5 Dia Bored Pile Construction (B01.24) 1 1 1 1 2.1 Abiti 2.1 Abiti 2.5 Dia Bored Pile Construction (B01.24) 1 1 1 1 2.1 Abiti 2.5 Dia Bored Pile Construction (B01.24) 2 1 1 1 1 2.1 Abiti 2.5 Dia Bored Pile Construction (B01.24) 1 1 1 1 1 2.1 Abiti 2.5 Dia Bored Pile Construction (B01.24) 1 1 1 1 1 2.1 Abiti 2.5 Dia Bored Pile Construction & Eng. Co. Ltd 2 2 2 2 2 2 2 2.1 Abiti 2.5 Dia Bored Pile Construction & Eng. Co. Ltd 2 2 2 2 2 2<		2.5 Dia Bored Pile Construction (B01.27)	31 30/05/06	06/07/06		5 Dia Bored Pi	le Construction (B01.27)						
070 2.5 Dia Bared Pile Construction (B01.24) 28 (1807/06) 18/08/05 18/08/05 1 1 1 2.5 Dia Bared Pile Construction (B01.24) 28 (1807/06) 18/08/05 1 1 1 1 2.5 Dia Bared Pile Construction (B01.24) 28 (1807/06) 18/08/05 1 1 1 1 2.5 Dia Bared Pile Construction (B01.24) 28 (1807/06) 18/08/05 1 1 1 1 2.5 Dia Bared Pile Construction (B01.24) 20 (1000/06) 20 (1000/06) 1 1 1 1 2.1 Dia Bareta Hauto 20 (1000/06) 20 (1000/06) 2		2.5 Dia Bored Pile Construction (B01.26)	15 08/07/06	25/07/06	191	12,5 Dia Bore	vd Pile Construction (B01.26)			•••			
21/10/05 Extract Instruction Early Derivation 5500 Chun Wo Construction & Eng. Co. Ltd 51xed 1 d 5 21/2005 Extract No. HY/2005/06 Extract No. HY/2005/06 Extract No. HY/2005/06 Extract No. HY/2005/06 22/2005 Extract No. HY/2005/06 Extract No. HY/2005/06 Extract No. HY/2005/06 Extract No. HY/2005/06 27/2005 Extract No. HY/2005/06 Extract No. HY/2005/06 Extract No. HY/2005/06 Extract No. HY/2005/06 27/2005 Extract No. HY/2005/06 Extract No. HY/2005/06 Extract No. HY/2005/06 Extract No. HY/2005/06		2.5 Dia Bored Pile Construction (B01.24)	28 19:07/08	18/08/06	•		1 Bored Pile Construction (Bp1.4	; • •					
2010 Contract Society Section					hem			Charle are					
22/19/03 15:00 22/19/03 15:00 20/1/material Sustemns. Inc.	. #			Provess Bar		Chun Wo Con	istruction & Eng. Co. Ltd		Date	Ĥov	fston	Checked	Pavoiddy
Oante Cante		22/12/05		Crifical Activity		Contra	nt No. HV/2005/06		1 90808				
					Castle F	eak Road Imp	provment West of Tsing Lung T	L.					
	5	himavera Svstems. Inc.				CSD Wo	ks Programme Hev 1	ь,I.			and and an interest of the second		

, 10		Dur Start	्र	JUL AIG SEP OCT NOV DEC	<u>giai Teee Taar Taar Paar Kuartsun Laugtaaki Leet Loot Laon D</u> eel Jaari Eeb Laos Label aari Luu Luu Luu Luu Seel Lo Biraa aasterine teatre ee ontside ontsid street street aan aan daa aan artikka street aan aan aan aan aan aan aa	EB_MART_APR_MAY_UUV_UUV_UAUS_SEP	0
Γ	Plant Mobilization & Testing	2 18/04/06*	19/04/05	Iplant Mobilization & Testing #			
	Formation of Tempoary Working Platform 31-33	3 20/04/06	22/04/05	I-formation of Lamboary Working Filepoim 31-55			
	Initial Setting up for Bored Pile Construction	5 24/04/06	28/04/05				
48P3110	2.5 Dig Bored Pile Construction (B01.33) Set the for Raned Pile Rot 31	15 23004/05	18/05/081	Set Up for Bored Pile B01.31			
	2.5 Dia Bored Pile Construction (B01.31)	18 20/05/06	10/06/06	2.5 Die Borèd Pile Construction (B01.31)			
	Set Up for Bored Pile 801.32	1 12/06/06	12/06/06	Set Up for Bored Pile Boi 32	· · · · · · · · · · · · · · · · · · ·		
	2.5 Dia Bored Pile Construction (B01.32)	14 13/06/06	28/08/06	25 Dia Bared Pile Construction (B01.32)			
48F3131	Formation of Tempoary Working Platform 28-30	5 23/05/06	90/108	internation of Lemparty Verticing Prediorn 25-34		,	
	2.5 Dia 20140 File Construction (ad 1.29) Sat the for Bored Pile Brit.30	1 21/07/08	21/07/06	Set Up for Bored Pile B01.20			
	2.5 Dia Bored Pilo Construction (B01.30)	11 22/07/06	90/80/60	E2.5 Dia Bored Pile Construction (B01.30)			
	Set Up for Bored Pile B01.28	1 04/08/06	04/08/06	Set Up for Bored Pile 801.28			
	2.5 Dia Bored Pile Construction (801.28)	16 05/08/06	53/08/06	Est Dia Bored Pile Construction (B01/28)			
	Excavation to Road Formation & Rock Cut	60 01/09/06	13/11/06				
4813160	Bored Pile Lagging Wall Construct (23-33)	40 14/11/06	03/01/07		Sorred Pile Lagging Wall Constitute (23-33)		
Т	Vafi Facho Panel Installation	40 30/01/07	22/03/07		berthered Walt Faching Panel (Installation)		
Roadworke	Roadworks Construction						
4FW4100	Construct E/B U/G drainage & watermain	70/23/10/06	17/01/07		Construct EDB U/G drainage & watermisin		
6	1m Watermain Ch2030 to Ch2150 (120 m) E/B	50 10/11/06	11/01/07		2011 11 11 11 11 11 11 11 11 11 11 11 11		
	Utilities Laying E/B	35' 06/01/07	15/02/07		www.manulilities Laying EVB		
	Construct E/B Rd Kerb, Barner& Surfacing	18 18/01/07	02/02/01		Construct E/B Rd Kerb, Bartler& Surfacing		
4RW4500	Divert the original road to the E/B	1 08/02/07	08/02/07		Drvert the original road to the ErB		
	Construct E/B Beam Bartler & Footpath	30 24/02/07	30/03/07		Base Construct EVB Beam Barrier & Footpath		
	Construct W/B LVG drainage & watermain	40 09/02/07	02/04/07		The second truck with UVG draitingle & watermain		
g	Unities Laying W/B	48* 15/02/07	21/04/07		Presenting Conflicted Laying W/B		
	Construct W/B Pid Kerb, Barrier& Surfacing	26 21/03/07	24/04/07		Construct W/B Rd Kerb, Barrier& Surfacing		
Τ	Construct W/B Beam Barrier & Foolpalh	15 03/04/07	24/04/07		a Re-Construct W/B Beam Barrier & Footpath		
	TTM Staging Proparation	19 07/12/09	02/01/07		I I M Staging Preparation		
4HW4530 ADMARAN F	INLLG MEBING BIATVR.network Actines		15/01/07		Inturu menung		
Output the							-
Areasto	Area 3 Construction Chil+825 to Cri2+030	su)					••••
4	Seawall A Construction						
	Seawell A construction	266" 04/02/06					
T	Notification to Marine Depl. & EPD	28 07/01/06		Notification to Ranne Dept. & EPD			
	Install Sit Curtain	4 04/02/05				-4	
35WA1000	urenging / Hockink/ou/	30104/02/06	03/04/06				
	Place nock armony	21 03/06/06	27/06/06				j
T	Construct lower RC retaining walf (Bay 1-18)	70 26/06/06	15/09/06	Construct lower RC rela	tring wall (Bey 1-18) 1		
3SWA1400	Place rockfil(200)	32 25/08/06	30/09/05	Place rockfilt(200)			
3SWA1500 0	Complete rock armour	22 15/09/06	13/10/06	Complete took armour			
	Construct upper RC retaining wall (Bay 1-17)	64 28/09/06	14/12/08		truci upper RC retainting wall (Bay 1-57)		
3SWA1700	Backfilting j j	\$58,19/10/06	27/12/06				
ŝ	53						
	Cut Proposed Slope B, D & E	55 28/05/08	31/08/06	sciences and a second stop at D & E			
	FILL & SIGPO STADIIISATION WORKS	4 uj 16/08/06	SOLEVIDE			-	
ork	Toadworks Construction	colncHame	La foto				
3RW2110	Construct W/B Pd Kerb. Barrier& Surfaction	18 23/12/08	16/01/07		zeronaniuut mie voluennege z spelennen Zeron Construct WUR Rath Bantier & Sintanin		
ç	1m Watermein CH1825 to Ch2030 (205 m) W/B	35 01/11/05	11/12/06		reasonability Watermain CH1825 to Ch2030 (205 m) W/B		
	GAS PIPE LAYING W/B	42 07/11/06	28/12/06		CHERTHONDECAS PIPE LAYING WIE		
	Cross Road Duct Laying W/B	32* 18/11/06	28/12/06		REPERSION Cross Road Duct Laying Will	j.a.	
g	Utilities Laying W/B	56* 04/01/07	15/03/07				
3RW2500 [Divert the original road to the W/B	1 17/01/07	12/10/107		Divert the original road to the WB		
Start Date Finkh Date		Press year and a second s		csor	Steel 2 of 5		
Data Date	21/12/02		Prog	Progress Bar Arcent 6 Andrew	0208 D Martison	Checked Approved	
Died Trail	220300 15:00			Contract No. HY/2005/06 Castle Peak Road Improvement West of Taine 4 your Tay	21/08/06 1 1 101 Tau		
đć	?Primavera Systems, Inc.			CSD Works Programme Rev 1		a bar ya bar	

•

Activity ID	Adivity - A	Orig Early Dur :: Start	Eerly Finish	1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	2007 2 Decijan Feb MAB APH MAY JUN ULL A	2007 JUN 101 AUG SER LOCT ROV DEC LAN FEE ABR APT AV LAN JUN JUL AUG SED 101 AUG SET AUG SED AUG AUG SED		G SEP O
	Construct W/B Beam Barrier & Footpath	35 18/01/07	T		Construct W/B Beam Barrier & Footpath	the set of		>.v
	Construct E/B U/G drainage & walermain	56 18/01/07	20/03/02		Construct E/B.U/G drainage & watermain		ender sker	
8	Utilities Laying Ede	36' 06/03/07	20104/07		Let a support and the second s	autoria da serie de la compania de La compania de la comp		
	Construct EXB No Nero, Definedo Surfacing Construct EXB Brown Derrier & Evolveth		24/04/07			Beam Barrier & Foolperin		
	TTM Steparation	19 21/11/06	12/12/06		TTM Skight Preparation			-*+++
Ī	TMLG Meeting	1 13/12/06	13/12/06		That G Meeting	a		
3FW2630 F	RMC/Roadwork Advice	10 14/12/05	28/12/06		BEN RIKO/Roadwork Advice			
Area 5 Col	Area 5 Construction(Ch2+150 to Ch2+300)							
Seawall B	Seawall B Construction							
25WB0500 5	Seawall B construction	204 04/02/06	11/10/06	atter and the second	construction			w- ov b
A025WB100	Install Silt Curtain	3 04/02/06	Ĩ	Install Sid Curtain				
	Dredging / Rockfill (780)	50 04/02/06	03/04/06	Dredging / Rockfill (700)				
2SWB1100	Place rockfil	28 04/04/06	12/05/06					
	Place rock amour	14 13/05/06	29/05/06			то т		
	Construct RC relaining wall (Bay 6-12)	60 30/05/06	01/00/00		(ng wall (Bry 6-12)			
25WB1400 B	Backelling	28 22/08/06	22/08/06					
Ę	Comparies toos autoon Construct PC Poteinion Welf (Bay 1-5)	45 26/h1/17			Construct RC Retaining Well (Boy 1-5)			
	Reckfilling	10,09,03/07	20/03/07					
1	Complete Rock Amour	5 21/03/07	26/03/07		Complete Rock Amour			
Boadworks	Roadworks Construction					· · ·		
A02RW0100	Approval of Tempoary Diversion Scheme	90/20/03/06+	11/07/06	2010 - 2000 - 2010 - 20	Soheme			
A02RW0500 J	Temporary Diversion of Water Main	50 12/07/06	07/09/06	Editorissume and Lemporary Diversion of Water Main	on of Water Main	-		
	Construct WB LI/G drainage & watermain(Bay 6-12)	30 15/09/05	21/10/06		l Construct WB U/G drainage & watermain (Bay 8-12)			
A02RW1900 G	Gas Pipe Laying W/B	14 21/09/06	09/10/06	EXAMPLE A Pipe Laying W/B	ElW Buyk	· · ·		
	Cross Road Duct Laying W/B	4" 10/10/06	13/10/05	Ecross Road	ECross Read Duct Laying W/B	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		
8	Utilities Laying W/B	45* 06/11/06	30/12/06		executive Laying W/B			····
Ì	Construct W/B Rd Kerb, Berner& Surfacing	18 14/10/06	04/11/06		Construct W/B Rd Kerb, Earner Surgering			
2HW3501 C	Divert the original road to the VV/B	1 06/11/06	06/11/08		Leven me original road loune wide s		. # .	
	Construct W/6 Beam Damor & Foonpain Crustruct F/8 1/16 chainage & watermain	30 UG/11/UB	16/01/07		Construct E/B U/G drainage & vourpeur			
la	1m Watermain Ch2150 to Ch2300 (150 m) E/B	50 27/10/05	28/12/06		215622301 1 Vaternain Ch2150 to Ch2800 (150 m) E/B			
A02RW2100 G	Gas Pipo Laying E/B	28 15/11/06	16/12/06		Enternitions Pipe Laying Eris			
. 1	Cross Road Duct Laying E/B	4* 18/12/05	22/12/06		Cross Road Duici Laying E/B			
8	Utilities Laying E/B	28* 15/12/05	20/01/02		scortsecutificates Laying E/B			
Ţ	Construct E/B Hd Kerb , Barrier& Surfacing	15 09/01/07	24/01/07		Construct E/B Rd Kerb, Banler& Surfacing			
ZHW3500 E	Divert the original road to the E/B	10/0/021	25/01/07					
20002000	Construct et a dean betrier & rootpate TTM Staning Disconsting	10/10/01/01	130/01/07		Titl Stering Branshim * *			
	TMLC Meeting	1 22/12/06	22/12/06		This Compared the second s			
2RW3720	PhilOfRoadwork Acivice	10 23/12/05	06/01/07		HURNG Poadwork Advice			ø
A02HW1100 C	Construct WB U/G drainage & watermah(Bay 1-5)		07/04/07		End Construct WB LvG drainage & watermain(Bay 1-5)	& welermain(Bay 1-5)	an de la companya de	
A02RW1300 C	Construct W/B Rd Kerb, Barrier& Surfacing(81-5)		23/04/07	· · · · · · · · · · · · · · · · · · ·	Construct W/B Rd Kerb, Barrier& Surfacting(B1-5)	Barrier& Surfacing(B1-5)		
A02RW1200 1	Utilities Laying for B1-5 Construct W/R Ream Berrier & Englisheith/B151	13 04/04/07 5 10/04/07	23/04/07	· · · · · · · · · · · · · · · · · · ·	Erenstruct W/8 Beam Rantier & Fruchmath/B1.51	teler & Fruthmath (PrR)		
								{
30F1689	.over section construction (Seaside - CPR)	120128/06/06	16/11/06		Lower section construction (Seaside - CPR)			
30F1100 C	Construct Infet & outlets	70 28/06/06	15/09/06		() .			
30F1200 0	Construct cascades & pipes	8	16/11/06		ceecades			
30F2000 U	Upper section pipe construction (Remaining)		02/03/07		Matter at Upper section pipe construction (Remaining)	inairing)		
30F210D F	Pipe Construction (At Carriageway Portion)	35 18/01/07	05/03/07	· · · · ·	The Construction (At Carriageway Portion)	2ortion)		
	construction (Gm+500 to Cn1+705)					· · · · ·		
	W/8: Clear existing road surface	12 03/02/07	16/02/07		Series Clear existing road surface			
12 1200 100	Construct Wile Carriageway road surfacing	6 17/02/07	20/E0/10		Factoriatruct Wild carriageway road surfacting	lacing		
Start Date	ZIVIZION DE CONTRACTORIO DE CONTRACTORICO DE CONTRACTORICO DE CONTRACTORICO DE CONTRACTORICO DE CONTRACTORIO DE CONTRACTORIO DE CONTRACTORICO DE CONTRAC	and the second	CONTRACTOR Early Bu	CSD2	Shear 3 of 5	الله من الله عن الله عن الله عن الله الله الله الله الله الله الله الل		
Finish Cale Dale Date			Progress Bar	ts Bar Chun Wo Construction & Eng. Co. Ltd	Co. Ltd 02/08/06 0	Revision	Checked	Aspiceros
Run Date	22/08/26 19:00		Critical Activity		<u></u>			
				Cashe Fear Todo Right Weel O	01 Sing Curity 140			
31	Primaveta Systems, Inc.			COD WORKS Frogramme Hev 1	1 194			

Answerse Construction 1 2	■ - - - - - - - - - - - - -	one and the state of a local property of the state of the	5000010		-		▲ 10 vert the	a cricinal road to the	i new'road (W/B)			
	1	LUVERT IN ONGRAPH FOR UN THE REAL FOR THE FOR	1 10,000,00					lancing the model of the	mars -			
		ever clear axis ing road surface		10/00/01				struct E/8 carriaden	av road sortacing	•• • • •• • •		
0 Functional	Τ	construct and castrageney toau autaung	10/00/10	64104107			BERGITU Stanford Pren	atation				
		i i su suagung ruspananon. 1441 C. Maasina	5 DEM107	Delin+In7			ATTAL G Meeting					
	T	ald/DReadsmitk Advice	10/26/01/07	06(02/07			E RMO/Roadworl	k Advice		-	6 biger y - 1	
										• •		
	Areauco										•,,	****
		W/B. clear existing road surface, 1 lane	12 14/10/06	27/10/05			atstring road surface, I ian	e l'	~ -	•••		
		Construct W/B carriageway road surfacing, 1 lane	6 28/10/06	04/11/06			W/D CBITIBGEWBY FOED SUR					• baard
		Divert the original road to the new lane	1 06/11/06	06/11/06		TO THE TRANSPORT	original road to the new I					
		W/B: clear existing road surface, 1 lane	12 07/11/05	20/11/05			abar existing road surrace.					
		Construct W/B carriageway road surfacing, 1 lane	6 21/11/06	27/11/06			sinuct wird carriageway roa	a suracing, 1 mm				
		E/B: Clear existing road surface, 1 lane	2011/02/21	11/12/Ub	••••		Concision examined road and Concision F/B carrianewe	road surfacing. 11				
		Construct 2/5 carriageway road surface, 1 hare	121210				Construct	riverse and the second		•- •		
		EUC: Creat existing road surface, 1 land	20021/12 21				BContention Fill Carrie	one in the second sector	w.1 Iana			
		Construct cris carnageway road sunacing, 1 lane		13/01/07								
		I I M Staging Freparation	1 103/09	1011-200	-		Divertified the minimal med to	the new lane	,			
Image: constraint of status Image: constraint of status <t< td=""><td></td><td>Durature original toda to the rest land</td><td>1 04/10/06</td><td>104/10/06</td><td></td><td>TULG Meeting</td><td></td><td></td><td></td><td></td><td></td><td>nga (konser)</td></t<>		Durature original toda to the rest land	1 04/10/06	104/10/06		TULG Meeting						nga (konser)
Control Control <t< td=""><td></td><td>RMO/Hoadwork Advice</td><td>10 05/10/06</td><td>17/10/06</td><td></td><td>ALL REAL OF LOURD AND</td><td>rk Advice</td><td></td><td></td><td></td><td></td><td></td></t<>		RMO/Hoadwork Advice	10 05/10/06	17/10/06		ALL REAL OF LOURD AND	rk Advice					
1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1											
Image: consistence of consis					COMMUN-	ĵ						
(i) (i) <td></td> <td>W/B: Excavation & demolish existing road surface</td> <td>12 21/04/06</td> <td>06/05/06</td> <td></td> <td>8</td> <td></td> <td></td> <td></td> <td>•••</td> <td></td> <td></td>		W/B: Excavation & demolish existing road surface	12 21/04/06	06/05/06		8				•••		
	1	The Watermann Connection to Critikes (25 m) Edg	BU/CU/CZ	20/08/06					· · · ·	•••••		
0000 000000000000000000000000000000000000		Cross Road Duct Laying E, W/B	8 2309/06	03/10/06				. 6				
Image: Contraction of the co		unives Laying E/B	ad structur	13/04/07	2 Contractor	Activity in Weterman Connection	n in Chitters (25 m) With				*****	
Image: contracting (EV) (C) (C) (C) (C) (C) (C) (C) (C) (C) (C	Ţ			20100102			EN CHARLEN L	MB				
0 0		Trastrict WR. E.R. (WG drain, watermain, etc.	115 06/05/06	20/09/06	CALL NO. OF CONTRACT, NO.	Antoine March Construct W/B, E/B;	U/G drain, watermain, etc					
0 Description (bit in the standard) (c) (10000 (1000		Construct W/B, E/B Kerb, Berrier&road surfacing	19 21/09/06	14/10/06		Construct W/B,	E/B Kerb;Barrler&road eu	rtacing				n
0 0		Divert the original read to the new road (E,W/B)	1 16/10/06	16/10/06		Divert the orig	Insi road to the new road (E,WB)				
0 1000 Elsense A emeralent in enablisherten 101/10/06 101/		Construct W/B, E/B Beam Barrier & Foolpath	24 17/10/08	14/11/06		a constru-	ici WiB, Eiß Beam Barrier	& Footpath				
0 300-number of allows 600000 0000000 0		Slip Rd: Excev & demolish exist road surface	12 17/10/06	31/10/06		E Stip Rd: Ex	cav & demolish exist road	surface		 		
ODD Contract SPR statelling (w. c. statellin		Slip Ad: U/G drainage & utilities	82 01/11/06	08/02/07	11		ji –	rainage & utilities		 		
Mark Mark <th< td=""><td></td><td>Construct Stip Rd surfacing work</td><td>18 09/02/07</td><td>20/60/20</td><td></td><td></td><td>- TETERCONSTR </td><td>ci siip ra suracing</td><td>Work</td><td></td><td></td><td></td></th<>		Construct Stip Rd surfacing work	18 09/02/07	20/60/20			- TETERCONSTR 	ci siip ra suracing	Work			
0 Introduction interfactor in	İ	Construction of Car Park	50 21/09/06	21/11/06								
Bit Inclusioned Algo: Distributioned Algo: Distributioned Algo: Distributioned Algo: CE1FRIEGIDI WURKS Final Journal 121,0000 577(300107 177(300107 177(301077 CE1BI WURKS Final Journal 122,0000 Final Journal 122,0000 Explorimental Algo: CE1BI WURKSSND-2FF2/255 Final Journal 127(301077 127(301077 127(301077 127(301077 CE1BI WURKSSND-2FF2/255 Final Journal 127(301077 127(301077 127(301077 127(301077 CE1BI WURKSSND-2FF2/255 Final Journal 127(301077 127(301077 127(301077 127(301077 CE1BI WURKSSND-2FF2/255 Final Journal 127(301026 120(10266 120(1026 120(10266 CE1BI WURKSSND-2FF2/255 Final Journal 127(301026 120(10266 120(1026 120(10266 CE1BI WURKSSND-2FF2/255 Final Journal 127(10266 120(10266 120(10266 CE1BI WURKSSND-2FF2/255 Final Journal 127(101056 120(10266 120(10266 CE1BI WURKSSND-2FF3/255 Final Journal 127(10266 120(10266 120(10266 CE1BI WURKSSND-2FF3/255 Final Journal Final Journal 127(10266 120(10266 CE1BI WURKSSND-2FF3/255 Final Journal Final Journ		I I M Staging Freeparation	10/20/00/00	12/09/06		TTAL O BARGES						
E Ralinedrial Work SSW-0153 Eristotur Izoleti Iz		Induce medanig MACMEnantwork Article	10 10/00/06	10/10/06		BERKORDORDWORK Ad	vice					
Calibration World's Figure Market					-							-
Edital Work SSW-D/ET/2010 F7: 300.107 120.4007 F7: 300.107 120.4007 Edital Work SSW-D/ET/2016 F7: 300.107 120.4007 87: 300.107 120.4007 Edital Work SSW-D/ET/2016 F7: 300.107 120.4007 80: 10.100 80: 10.100 01 Remediat work to Step No. SW-D/ET/2016 107: 100 80: 10.100 80: 10.100 01 Remediat work to Step No. SW-D/ET/2016 107: 100 80: 10.100 80: 10.100 01 Remediat work to Step No. SW-D/ET/2016 107: 100 80: 10.100 80: 10.100 01 Remediat work to Step No. SW-D/ET/2016 20: 10.100 80: 10.100 80: 10.100 01 Remediat work to Step No. SW-D/ET/2016 20: 10.100 20: 10.100 80: 10.100 01 Remediat work to Step No. SW-D/ET/2016 20: 10.100 20: 10.100 20: 10.100 01 Remediat work to Step No. SW-D/ET/2016 20: 10.100 20: 10.100 20: 10.100 01 Remediat work to Step No. SW-D/ET/2016 20: 10.100 20: 10.100 20: 10.100 01 Remediat work to Step No. SW-D/ET/2016 20: 10.100 20: 10.100 20: 10.100 01 Remediat work to Step No. SW-D/ET/2016 20: 10.100 20: 10.100 20: 10.100 01 Remediat work to Step No	Siope Hen					•		h n n	1	· •• • •	4	
Biological Memory Mercanical Memory Mercanical Memory	6121					•			Plane Mar Brown			
Cell Internedit worder 50 SetW.DFR285 101/1004006 101/005 Extension encoder worder to Signe I/o. 65W.UFR295 101/100406 Cell WOrld SSW.DFR285 100'1200-00 101/0105 Extension encoder worder to Signe I/o. 65W.UFR295 100'1200-00 Cell WOrld SSW.DFR285 100'1200-05 100'1200-05 100'1200-05 100'1200-05 Cell WOrld SSW.DFR285 100'1200-05 100'1200-05 100'1200-05 100'1200-05 Cell WOrld SSW.DFR285 120'1210-05 120'1210-05 120'1210-05 120'1210-05 Cell Landberlah world to Signe M. SKW.DFR28 120'1210-05 120'1210-05 120'1210-05 Cell Landberlah world to Signe M. SKW.DFR28 120'1210-05 120'1210-05 120'1210-05 Cell Landberlah world to Signe M. SKW.DFR28 120'1210-05 120'1210-05 120'1210-05 <t< td=""><td></td><td>92W-U/U/170</td><td>- ar jammar</td><td>12/04/07</td><td></td><td></td><td></td><td>Hernedia Works 10</td><td>alope 140. baw-trict / U</td><td></td><td></td><td></td></t<>		92W-U/U/170	- ar jammar	12/04/07				Hernedia Works 10	alope 140. baw-trict / U			
With Garward and Market Ward and Salve Drifts Invite Market Ward and Salve Drifts Invite Market Ward Salve Drifts Invite Ward Salve Drifts I	dia	VOTK 6SW-D/FH286	10 Tring to the	21/12/12	Contraction of the second s		interto Stone No. 65W. No					
Territorial Internetial Work 6 Style DF 73 1001 (1306-06 1001006 1001006 Remedial works to Stype No. 2001 (1306-06 1001006 220107 Remedial works to Stype No. 2001 (1306-06 200107 200107 Remedial works to Stype No. 2001 (1306-06 200107 200107 Remedial works to Stype No. 2001 (1306-06 200107 200000000 Remedial works to Stype No. 2001 (1300-00 200107 200000000 Remedial works to Stype No. 2001 (1300-00 200107 200000000 Remedial works to Stype No. 2001 (1300-00 200000000 200000000 Remedial works to Stype No. 2000 (1000000 2000000000 200000000 Remedial works to Stype No. 2000 (100000000000000 2000 (1000000000000000000000000000000000				2						•		
Cellal Work 6SW-DFER3 april 15/16/06 [201(17) [201(27)	1910	VOIR OO VI-L// TOU	1001112000			CALCULAR DATA CONTRACTOR	the Since No. 65W/D/F89				- -	
Internation works to Struct Dispected 2011/07	Les 1				• • • •	1						
Certial Work 65W-D/F92 Test 55W-D/F92 Test 55W-D/F92 Test 55W-D/F92 Test 55W-D/F92 00 Remoted a work to Stope No. 65W-D/F92 120°//11 120°//11 120°//11 00 Remoted a work to Stope No. 65W-D/F92 120°//11 120°//11 00 Remoted a work to Stope No. 65W-D/F92 120°//11 120°//11 00 Remoted a work to Stope No. 65W-D/F92 120°//11 120°//11 00 Remoted a work to Stope No. 65W-D/F92 120°//11 120°//11 01 Remoted a work to Stope No. 65W-D/F92 120°//11 120°//11 01 Interfactorial works to Stope No. 65W-D/F92 120°//11 120°//11 01 Interfactorial works to Stope No. 65W-D/F92 120°//11 120°//11 01 Interfactorial works to Stope No. 65W-D/F92 120°//11 120°//11 01 Interfactorial works to Stope No. 65W-D/F92 120°//11 120°//11 1 -13//10 200 120°//11 120°//11 1 -13//10 200 120°//11 120°//11 1 -100 200 120°//11 120°//11 1 -100 200 120°//11 120°//11 1 -100 200 120°//11 1 -100 <td></td> <td>Terredial works to Stope No. 65W-D/FR83</td> <td>80*115/10/06</td> <td>22/01/07</td> <td></td> <td></td> <td>Planen Hemedial works to</td> <td>Stope No. 65W-Dif</td> <td>1.1.1</td> <td></td> <td></td> <td></td>		Terredial works to Stope No. 65W-D/FR83	80*115/10/06	22/01/07			Planen Hemedial works to	Stope No. 65W-Dif	1.1.1			
00 [edita] Work to Store Ho GSW-DFR2 120*150:606 [06/11/06 [edita] Work to SW-DFR2 120*150:606 [06/11/06 [edita] Work GSW-DFR1 87*121:20:50 [02/04/07 87*121:20:50 [02/04/07 87*121:20:50 [02/04/07 00 Reneotial works to Stope Ho. GSW-DFR1 87*121:20:50 [02/04/07 87*121:20:50 [02/04/07 85*05*0* 85*05*0* 85*05*0* 00 Tree Transplant 200/050:50 24/05:50*0 24/05:50*0 24/05:50*0 8*0*0*0* 8*0*0*0* 10:11 L = L3110GSGED10G WOrk 200/050:50*0 24/05:50*0 24/05:50*0 8*0*0*0* 8*0*0*0* 8*0*0*0* 00 Tree Transplant 200/050:50*0 24/05:50*0 24/05:50*0 24/05:50*0 8*0*0*0* 1 -13110GSGED10G WOrk 90/14:0*0 8*0*0*0*0*0*0*0*0*0*0*0*0*0*0*0*0*0*0*0	dial	Work 6SW-D/F82							· · · · · · · · · · · · · · · · · · ·			
Certial Work GSW-DIA Interestitation works to Store No. SSW-DR1 Error 00 Remetiation works to Store No. SSW-DR1 Error 00 Remetiation works to Store No. SSW-DR1 Error 121/205 (0210407 00 Tree Transplant 200 (SER205* (061005 Interestination works to Store No. SSW-DR1 00 Tree Transplant 200 (SER205* (061005 Interestination works to Store No. SSW-DR1 00 Tree Transplant 200 (SER205* (061005 Interestination works to Store No. SSW-DR1 01 Tree Transplant 200 (SER205* (061005 Interestination works to Store No. SSW-DR1 01 Interested No. N/2005(05 Interested No. N/2005(05 Interested No. N/2005(05 0210505 Construction & Eng. Co. Ltd Interested No. N/2005(05 0210505 Construction & Eng. Co. Ltd Interested No. N/2005(05 0210505 Construction & Eng. Co. Ltd Interested No. N/2005(05 0210505 Construction & Eng. Co. Ltd Interested No. N/2005(05 0310505 Interested No. N/2005(05 Interested No. N/2005(05 0310505 Interested No. N/2005(05 Interested No. N/2005(05 01000 Interested No. N/2005(05 Interested No. N/2005(05 0200505 Interested No. N/2005(05 Interested No. N/2005(05 <td></td> <td>No. 6SW-D/F82</td> <td>120* 15/06/06</td> <td>06/11/06</td> <td></td> <td></td> <td>works to Stope No. 65W-1</td> <td>D/F82</td> <td></td> <td></td> <td></td> <td></td>		No. 6SW-D/F82	120* 15/06/06	06/11/06			works to Stope No. 65W-1	D/F82				
00 Remeterial works to Stope No. SSW-DR1 Er? 12/12/16 02/10/407 E2/0004114 E2/0004144	Remedial V									- <i>.</i>		A 114 A
Contine - Landscaping Works Zandscaping Works 00 Tree Transplant 200 (strotos' 0strotos' 0strotos' 0strotos' 0strotos 1 2400507 240507 2 2400507 240507 2 2400507 240507 2 240507 240507 2 240507 240507 2 240507 240507 2 240507 240507 2 240507 240507 2 240507 240507 2 240507 240507 2 240507 240507 2 240500 240207 2 2400505 240207 2 2400505 240207 2 2400505 240207	SW6000	Remedial works to Stope No. 65W-D/R1	87* 12/12/06	02/04/07	• • •		CANANA STRATE HUGE HARSON LEVEL	emedial works to \$t	ape No. 8SW-DRH			
OD Tree Transplant 200 (Set02/05* 066 (10/06 Transplant Leardscepting Work 30/24/02/07 24/05/07 24/05/07 24/05/07 2010 Minustries 2010 Minustries 30/24/02/07 24/05/07 24/05/07 2010 Minustries 2010 Minustries 2010 Minustries 24/05/07 24/05/07 2010 Minustries 2010 Minustries 2010 Minustries 2010 Minustries 2010 Minustries 2010 Minustries Chlun Wo Construction & Erg. Co. Ltd Strete et et et al. 2010 Minustries 2000 Minustries Construction & Erg. Co. Ltd Strete et et al. 2010 Minustries Construction & Erg. Co. Ltd Strete et al. Construction & Erg. Co. Ltd 2010 Minustries Construction & Erg. Co. Ltd Strete et al. Construction & Erg. Co. Ltd 2010 Minustries Construction & Erg. Co. Ltd Strete et al. Construction & Erg. Co. Ltd 2010 Minustries Construction & Erg. Co. Ltd Strete et al. Construction & Erg. Co. Ltd 2010 Minustries Construction & Erg. Co. Ltd Strete et al. Construction & Erg. Co. Ltd 2010 Minustries Construction & Erg. Co. Ltd Strete et al. Construction & Erg. Co. Ltd 2010 Minustries Construction & Erg. Co. Ltd Strete et al. Construction & Erg. C	Section II-							·				, she can bear
Intractecepting Work 90/24/02/07 24/05/07 24/05/07 24/05/07 24/05/07 21/12/09 21/12/09 21/12/09 21/12/09 21/12/09 21/12/09 21/12/09 21/12/09 21/12/09 21/12/09 21/12/09 21/12/09 21/12/09 21/12/09 21/12/09 21/12/09 21/12/09 21/12/09 21/12/09 21/12/09 21/12/09 21/12/09 21/12/09 21/12/09 21/12/09 21/12/09 21/12/09 21/12/09 21/12/09 21/12/09 21/11/14/04 Contract No. HY/2005/06 Contract No. HY/2005/06 21/12/09 21/12/09 21/11/14/04 Contract No. HY/2005/06 Contract No. HY/2005/06 21/12/09 21/12/09 21/11/14/04 Contract No. HY/2005/06 Contract No. HY/2005/06 21/12/19 21/12/19 21/11/14/04 Contract No. HY/2005/06 Contract No. HY/2005/06 21/12/19 21/11/14/14/14 Contract No. HY/2005/06 Contract No. HY/2005/06 21/12/19 21/11/14/14 Contract No. HY/2005/06 Contract No. HY/2005/06 21/12/19 21/11/14/14 Contract No. HY/2005/06 Contract No. HY/2005/06 21/12/19	AOLW1900	Tree Transplant	200 06/02/06	["]	14	ware an	-					
2117-005 2117-005 Carter of a construction & Eng. Co. Ltd Ensert et al. Construction & Eng. Co. Ltd Ensert et al. 2120500 22000000 20000000 2 20000000 2 20000000 2117-0000 20000000 2 2 China Wo Construction & Eng. Co. Ltd 2 2 2117-0000 2 2 China Wo Construction & Eng. Co. Ltd 2 2 2 2 2200000 2 2 Construction & Eng. Co. Ltd 2 2 2 2 2 2 Construction & Eng. Most of Tsing Lung Tau 2 2 2 2 2 7 2 Construction & Eng. Most of Tsing Lung Tau 2 2 2 2 2		Lericlscaping Work	90 24/02/07	24/05/07		· · ·		service and scop	ing Work	 - 		
2201400 Marrie Supervisioner and anti-operation anti-o	tari Date				[CSD2		and?	1 4 4 6 4				
22/06/04 14:00 Castle 22/06/04 14:00 Castle 22/06/04 14:00 Castle	inter Date Date Date			Program Bar	1	Chure Wo Construction & Eng. Co.	-	Date 02/08/06	0	Revision	Chocked	Approved
	tun Date	22/08/19 V 5-00		Critical Acity		Contract No. HY/2005/06	1	21/02/06				
						e pezk moad kinprovinent west of 15,	ng Lung Fau					
	dź.	nimavera Systems, Inc.				CSD Works Programme Rev 1				مرد الله المراجع المراجع المراجعة المراجعة المراجعة المراجع المراجع المراجع المراجع المراجع المراجع المراجع		



Appendix B Monitoring schedule for May 2007 and June 2007

Environmental Monitoring and Audit Schedule - May 2007

- MV denotes marine water monitoring L&V denotes Landscape and Visual audit and monitoring Note 1: L30 denotes L_{eq(30 min}) monitoring Note 2: TSP denotes Total Suspended Particulate monitoring Note 3: MV denotes marine water monitoring Note 4: L&V denotes Landscape and Visual aurith and monitorin

			May-2007			
Sunday	Monday	Tuesday		Thursday	Friday	Saturday
			2 Site inspection	3	4 24-hour TSP	Ω ا
Ū.	7	8	9 Site Inspection+L&V	10 3 x 1-hour TSP	Ŧ	12
	<u></u>	3 x 1-hour TSP	24-hour TSP			
<u>.</u>	14	15 24-hour TSP	16	17 L30	18 Site Inspection	6
				3 x 1-hour TSP		
50	21 24-hour TSP	22 L30	23 Site Inspection+L&V	2	25	26
		3 x 1-hour TSP				
27	28 24-hour TSP	29	30 Site Inspection	31		
		3 x 1-hour TSP				

Ove Arup Partners Hong Kong Ltd

Tentative Environmental Monitoring and Audit Schedule - June 2007

- Note 1: L30 denotes L_{eq(30 min)} monitoring Note 2: TSP denotes Total Suspended Particulate monitoring
- MV denotes marine water monitoring L&V denotes Landscape and Visual audit and monitoring Note 2: Note 3: Note 4:

			Jun-2007			
Sunday	Monday	Tuesday		Thursday	Friday	Saturday
					+	2
р	4	2	6 Site Inspection 24-hour TSP	Z L30 3 x 1-hour TSP	8 L&V	6
10	11 24-hour TSP	12 L30 3 x 1-hour TSP	13 Site Inspection	4	15	16 24-hour TSP
21	18 L30 3 x 1-hour TSP	19	20 Site Inspection+L&V	21 24-hour TSP	22 3 x 1-hour TSP	23
24	25	26 24-hour TSP	27 Site Inspection L30 3 x 1-hour TSP	28	29	30

Appendix C Calibration certificates of 24-hour TSP monitoring equipment



TISCH ENVIROMENTAL, INC. 145 SOUTH MIAMI AVE. VILLAGE OF CLEVES, OH 45002 513.467.9000 877.263.7610 TOLL FREE 513.467.9009 FAX WWW.TISCH-ENV.COM

AIR POLLUTION MONITORING EQUIPMENT

	ORIFICE 1	RANSFER STAN	IDARD CERTI	FICATION	WORKSHEET 1	E-5025A
	r 20, 2007 Tisch	Rootsmeter Orifice I.I	- /	33620 1378	'Ta (K) - Pa (mm) -	293 760.73
PLATE OR Run #	VOLUME START (m3)	VOLUME STOP (m3)	DIFF VOLUME (m3)	DIFF TIME (min)	METER DIFF Hg (mm)	ORFICE DIFF H2O (in.)
1 2 3 4 5	NA NA NA NA NA	NA NA NA NA NA	1.00 1.00 1.00 1.00 1.00	1.4080 0.9920 0.8880 0.8470 0.6980	3.2 6.4 8.0 8.8 12.9	2.00 4.00 5.00 5.50 8.00

DATA TABULATION

Vstd	(x axis) Qstd	(y axis)		Va	(x axis) Qa	(y axis)
1.0137 1.0095 1.0072 1.0062 1.0007	0.7200 1.0176 1.1343 1.1880 1.4338	1.4269 2.0180 2.2561 2.3663 2.8538		0.9958 0.9916 0.9894 0.9884 0.9830	0.7072 0.9996 1.1142 1.1670 1.4083	0.8777 1.2412 1.3877 1.4555 1.7553
Qstd slop intercep coeffici	t (b) =	2.00163 -0.01513 0.99997		Qa slop intercep coeffici	t (b) =	1.25339 -0.00931 0.99997
y axis =	SQRT [H20 ()	Pa/760) (298/	Ta)]	'y axis =	SQRT [H20 (7	[a/Pa)]

CALCULATIONS

Vstd = Diff. Vol[(Pa-Diff. Hg)/760](298/Ta)
Qstd = Vstd/Time

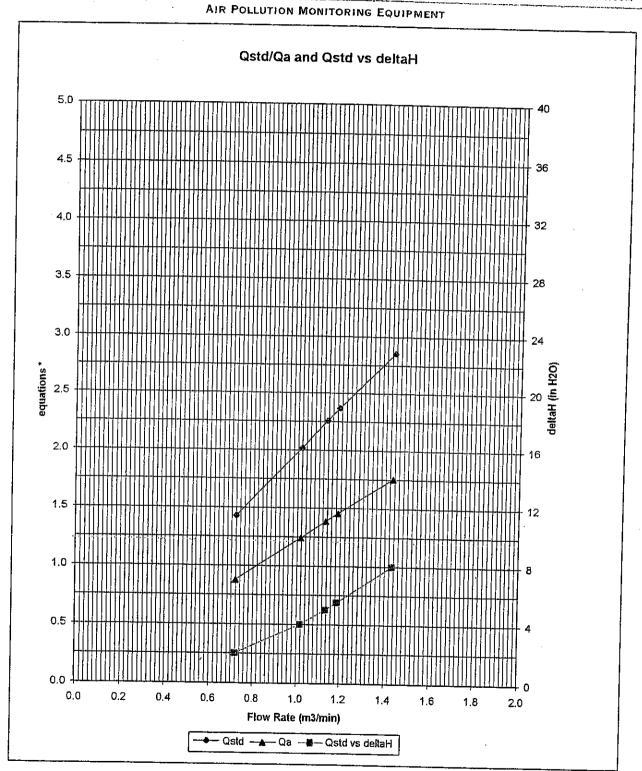
Va = Diff Vol [(Pa-Diff Hg)/Pa] Qa = Va/Time

For subsequent flow rate calculations:

Qstd = $1/m\{[SQRT(H2O(Pa/760)(298/Ta))] - b\}$ Qa = $1/m\{[SQRT H2O(Ta/Pa)] - b\}$



TISCH ENVIROMENTAL, INC. 145 SOUTH MIAMI AVE. VILLAGE OF CLEVES, OH 45002 513.467.9000 877.263.7610 TOLL FREE 513.467.9009 FAX WWW.TISCH-ENV.COM



* y-axis equations: Qstd series:

 $\sqrt{\Delta H \left(\frac{Pa}{Pstd}\right) \left(\frac{Tstd}{Ta}\right)}$ $\sqrt{(\Delta H (Ta / Pa))}$

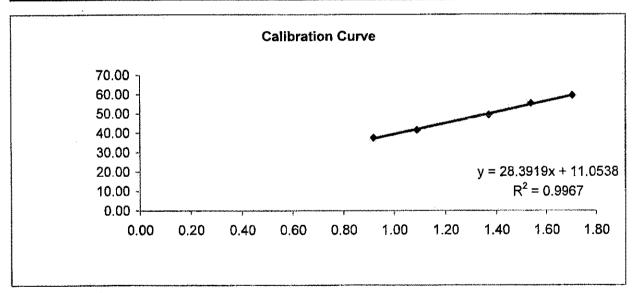
[#]1378

Qa series:

Ove Arup Partners (Hong Kong) Limited High Volume Air Sampler Calibration Worksheet

Calibration date	2-Apr-07		Barometric pressure	758 mm Hg
Calibration due date	1-Jun-07		Tempature (°C)	26 °C
Sampler location	WA3 - Hong Kor (Savoy Heights)		Tempature (K)	299 K
Sampler model	TE-5170		Pstd	760 mm Hg
Sampler serial number	1378		T _{std}	293 K
Calibrator model		GMW-2535		
Calibrator serial number		1378		
Slope of the standard cur	ve, m _s	2.00163		
Intercept of the standard	curve, b _s	-0.01513		

Resistance Plate No.	Manometer Reading (inch H₂O)	Flow Recorder Reading (CFM)	Calculated Q _{std} (m ³ /min)	Continuous Flow Recorder Reading IC (CFM)
5	3.40	38.00	0.92	37.57
7	4.80	42.00	1.09	41.52
10	7.60	50.00	1.37	49.43
13	9.60	56.00	1.54	55.36
18	11.80	60.00	1.70	59.32



Linear Regression

Sampler slope (m) :	28.3919
Sampler intercept (b) :	11.0538
Correlation coefficient (R ²) :	0.9967

Correlation coefficient is greater than 0.9900 and the calibration result is accepted.

Performed by:	Lam	
Checked by:	ki	

2-4-57 Date: 3-4-07 Date:

·

and the second s

Appendix D Calibration certificates of 1-hour TSP monitoring equipment

MASTER # D325 LAST CALIBRATED : 3/14/06

an series and a second seco

THERMO ELECTRON 27 FORGE PARKWAY FRANKLIN MA 02038 TOLL-FREE: 866-282-0430 TEL: 508-553-1211 FAX: 508-541-8366 <u>WWW.THERMO.COM</u>

and the second second second

PDR-1000 CALIBRATION

日本などのたちでは

ĕ

CERTIFICATE

.

This calibration is traceable to the National Institute of Standards and Testing

SERIAL NUMBER: 470	<u>)5</u>
CALIBRATION RATIO: 1.0	11
AVG. PDR-1000 CONCENTRATION:1.93 mg/	<u>'m3</u>
CALIBRATION MASTER AVG. CONCENTRATION: 1.68 mg/	<u>′m3</u>
DR BACKROUND CONCENTRATION: 211 mg/	<u>'m3</u>
TEMPERATURE: 73.	<u>8</u> F
HUMIDITY:	24%

TECHNICIAN: -- DON MCELMAN DATE: ---- 4/11/06

THERMO ELECTRON 27 FORGE PARKWAY FRANKLIN MA 02038 TOLL-FREE: 866-282-0430 TEL: 508-553-1211 FAX: 508-541-8366 WWW.THERMO.COM

MASTER # D325 LAST CALIBRATED : 3/14/06

PDR-1000 CALIBRATION

CERTIFICATE

This calibration is traceable to the National Institute of Standards and Testing

SERIAL NUMBER: 4715
CALIBRATION RATIO: <u>1.007</u>
AVG. PDR-1000 CONCENTRATION:1.83 <u>mg/m3</u>
CALIBRATION MASTER AVG. CONCENTRATION: 1.52 mg/m3
DR BACKROUND CONCENTRATION:255 mg/m3
TEMPERATURE:
HUMIDITY: 24%

TECHNICIAN:	DON MCELMAN	DATE:	4/10/06

Appendix E Detailed air quality (1-hour TSP) monitoring results

....

a shekara shekara

an See

Date	Receptor No.	Set No.	Time p Start	eriods Finish	Weather condition	Site condition	Temp. (°C)	Pressure (mmHg)	1-hour TSP Level (µg/m*)	Remarks
8-May-07	WA3	1	9:00	10:00	Sunny	Normal Operation	29.0	760.0	229.9	
8-May-07	WA3	2	10:00	11:00	Sunny	Normal Operation	29.0	760.0	192,5	
8-May-07	WA3	3	11:00	12:00	Sunny	Normal Operation	29.0	760.0	177.9	
10-May-07	WA3	1	15:21	16:21	Fine	Normal Operation	27.0	759.0	196.5	
10-May-07	WA3	2	16:21	17:21	Fine	Normal Operation	27.0	759.0	194.0	
10-May-07	WA3	3	17:21	18:21	Fine	Normal Operation	27.0	759.0	180.1	
17-May-07	WA3	1	14:14	15:14	Fine	Normal Operation	30.0	758.0	303.1	
17-May-07	WA3	2	15:14	16:14	Fine	Normal Operation	30.0	758.0	313.0	
17-May-07	WA3	3	16:14	17:14	Fine	Normal Operation	30,0	758.0	290,8	
22-May-07	WA3	1	15:10	16:10	Cloudy	Normal Operation	25.0	754.0	231.7	
22-May-07	WA3	2	16:10	17:10	Cloudy	Normal Operation	25.0	754.0	197.5	
22-May-07	WA3	3	17:10	18:10	Cloudy	Normal Operation	25.0	754.0	199.1	
29-May-07	WA3	1	8:52	9:52	Sunny	Normal Operation	28.0	756.0	259.7	
29-May-07	WA3	2	9:52	10:52	Sunny	Normal Operation	28.0	756.0	171.3	
29-May-07	WA3	3	10:52	11:52	Sunny	Normal Operation	28,0	756.0	179.7	

Details of 1-Hour TSP Monitoring

Appendix F Detailed air quality (24hour TSP) monitoring results

•

Ove Arup & Partners

Contract No. HY/2005/06 Castle Peak Road Improvement - West of Tsing LungTau Environmental Monitoring and Audit

Details of 24-Hour TSP Monitoring

						
	Remarks					
24-hour TSP	1 evel (undm ³)	101.2	70.7	88.5	109.5	55,9
Total	vol. (m ³)	1114.34	1290.60	1662.77	1257.12	1099.73
Sampling	Time (mins.) vn	1440.00	1440.00	1440.00	1440.00	1440.00
Average Flow Elapse Time	Start Finish	9692.05 9716.05	9716.05 9740.05	9740.05 9764.05	9764.05 9788.05	9788.05 9812.05
Average Flow	. Rate (m ³ /min)	0.7739	0.8963	1.1547	0,8730	0.7637
Flow Rate (m ³ /min)	Final	0.8107	0.9139	1.2244	0.8736	0.7291
Flow Rate	Initial	0,7370	0.8786	1.0850	0.8724	0.7983
TSP	weight (g)			0.1472		0.0615
Filter Weight (g)	Final	2.9737	2.9398	2.8613 3.0085	2.9951	2.9080
Filter W	Initial	2.8609	2.8485	2.8613	2.8575	2.8465
Site	condition	Normal Operation				
Weather Site Filter	condition	Cloudy	Fine	Fine	Fine	Cloudy
Receptor	No.	WA3	WA3	WA3	WA3	WA3
	Date	4-May-07	9-May-07	15-May-07	21-May-07	28-May-07

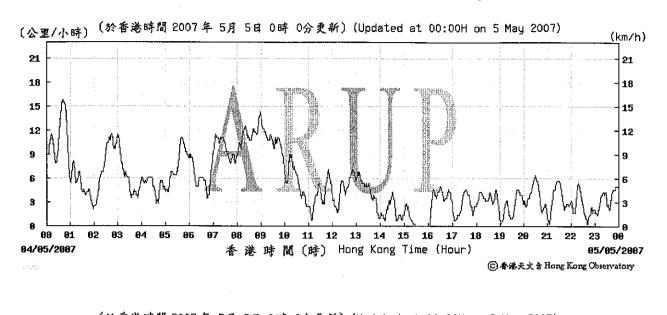
G:\env\project\24583\env_data\dust\24-hr TSP Data

Page1 of 1

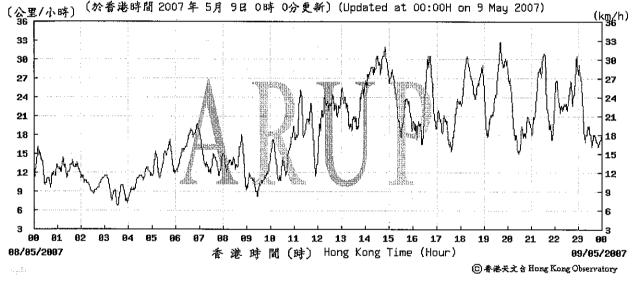
Appendix G

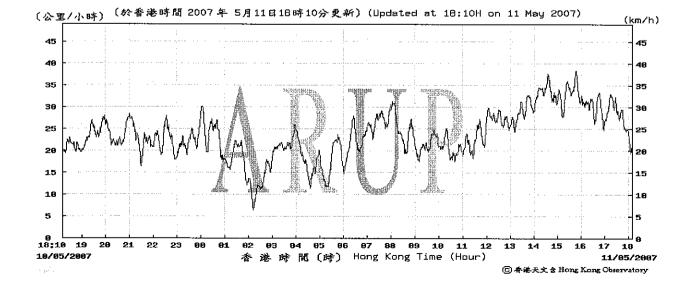
.

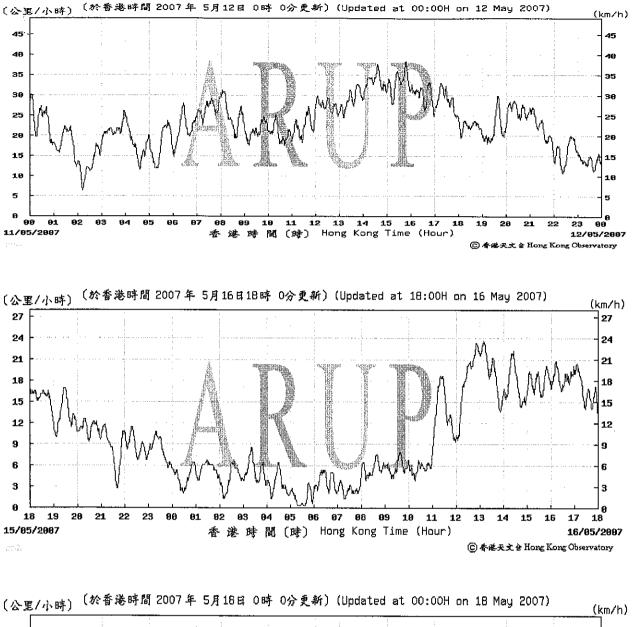
Detailed wind monitoring data for the air quality monitoring period

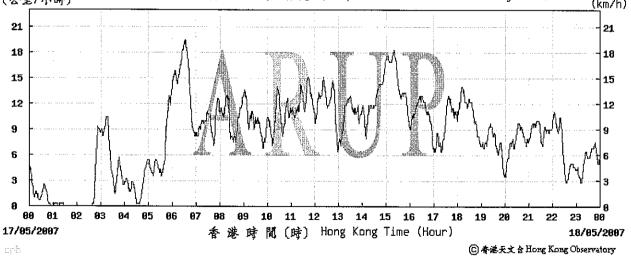


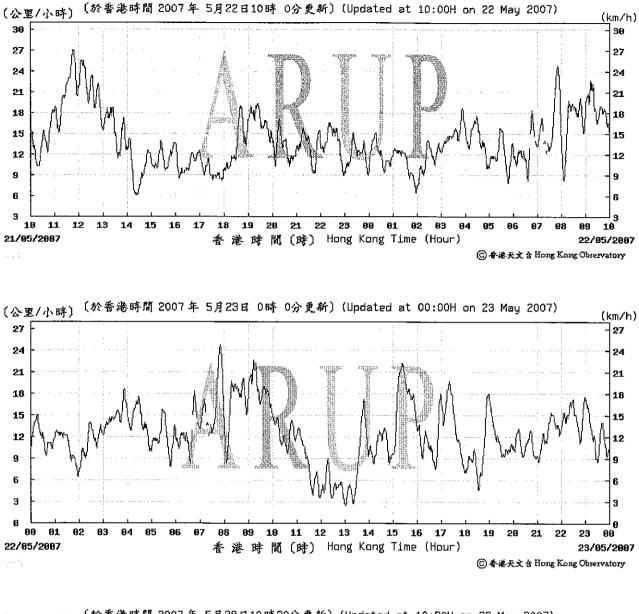
Wind Monitoring Data – Wind Speed during air quality monitoring in May 2007

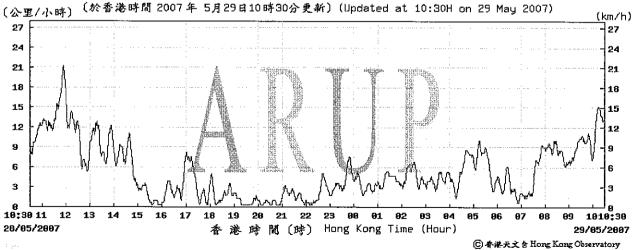


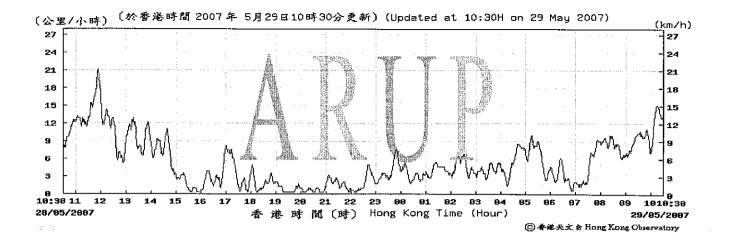


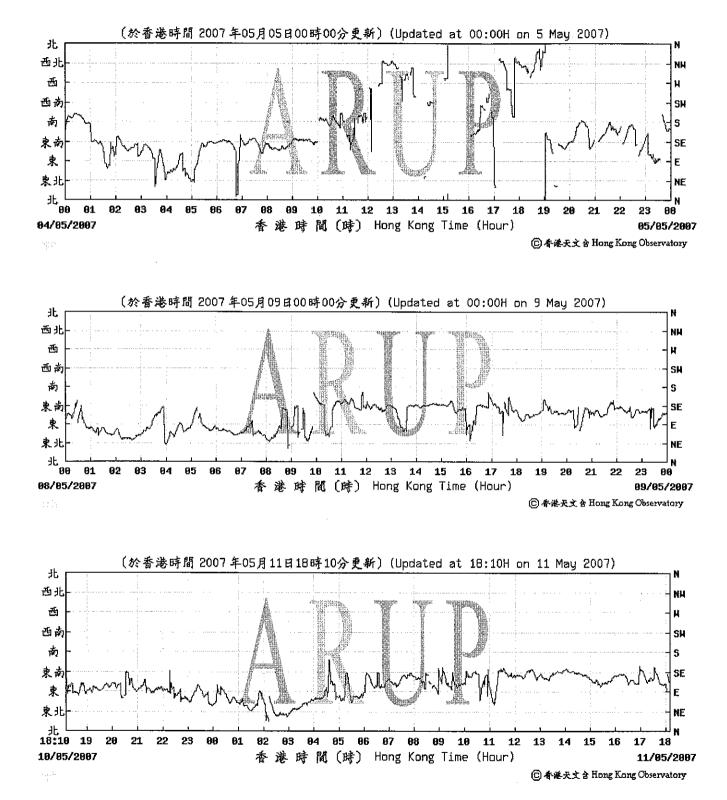




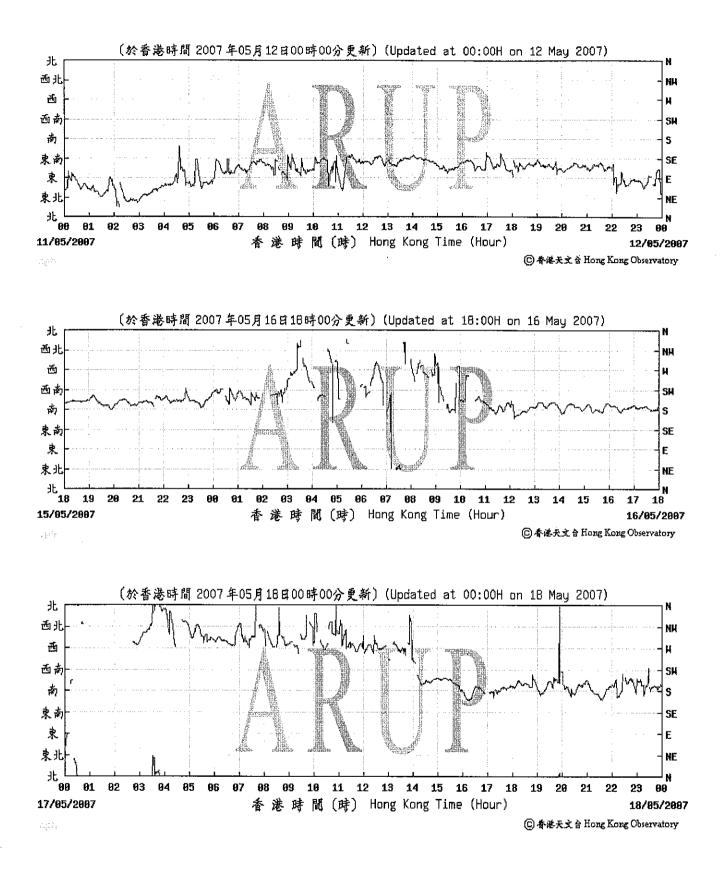


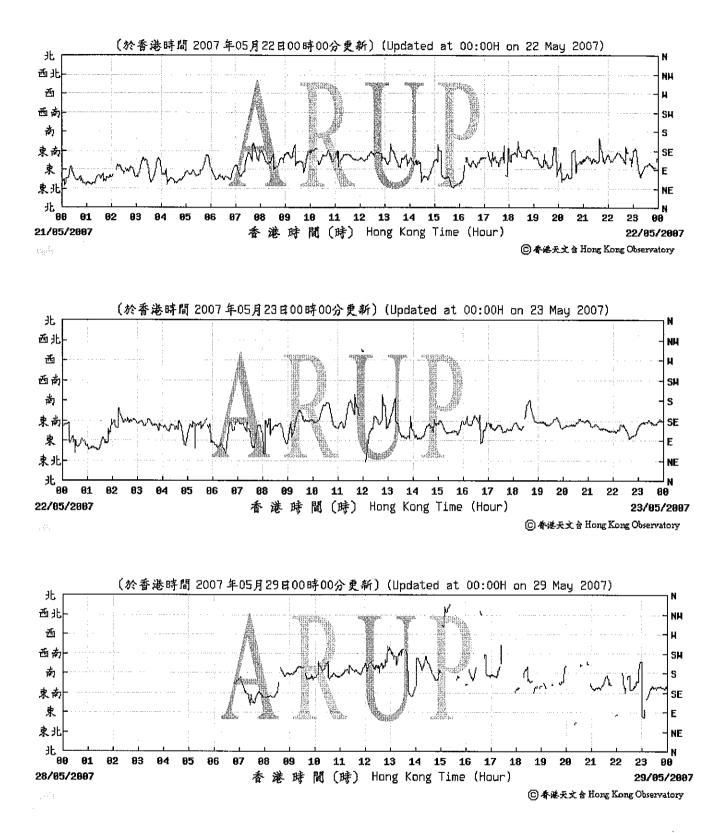


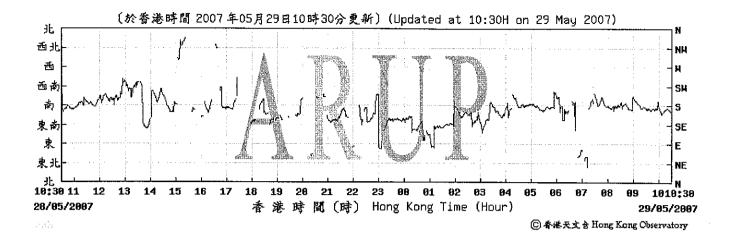




Wind Monitoring Data – Wind direction during air quality monitoring in May 2007







Appendix H Calibration certificates

.

of noise monitoring equipment

Arup**Acoustics**

. .

ARUP

Level 5 Festival Walk 80 Tat Chee Avenue			AAc Certificate No. 2006005
Kowloon Tong, Kowloon HONG KONG	Tel: +85	2 2268 3216	Fax: +852 2268 3950
	CERTIFICATE		1
Description of Test Instrument		Type No	Serial No
Brüel & Kjær Sound Level Mete	r Kit	2238	2320707
Brüel & Kjær ½ " Microphone Ki		4188	2179479
Date of Test: 11 September 2	2006		
Carried out by: Cissy Chan		Approved by: Wil	liam Ng
Signature: (Li)		Signature:	why
	Ambient Conditi	ons During Test	
малар малар	Atmospheric Pressur	e: 1KPa	-
	Air Temperature: Relative Humidity:	21°C 58%	L
specification on the date of the	e test. Any adjustmen	its that were required	form to the manufacturer's original I to bring the instrumentation back I out using the reference calibrator
Description of Reference Calibr	ator	Type No	<u>Serial No</u>
Brüel & Kjær Multi Frequency C Brüel & Kjær Coupler	Calibrator	4226 UA0915	1531372 1531372
Certificate of Calibration Serial By Brüel & Kjær (UK) Ltd Calib NAMAS Accredited Calibration	ration Date:	14260 21 September 2005 0174	5
The reference calibrator, Type such it is used as Arup Acousti tests on all sound measuring er	cs own 'Primary Stand	ard' and is used only	ional Measurement Standards. As for controlled laboratory calibration
Footnote;	<u> </u>	<u></u>	
Arup Acoustics is not a register only (unless otherwise authoris procedures.	ed NAMAS accredited ed) and is part of Arup	calibration laborator Acoustics developm	y. This certificate is for internal use ent and commitment to QC and QA

Appendix I Detailed noise monitoring results

Details of Noise Impact Monitoring

	NSR	Time periods		Weather	Avg. wind	Nois	se Level di	B(A)	Influencing factors/
Date	No.	Start	Finish	condition	speed (m/s)	L _{eq}	L ₁₀	L ₉₀	Site condition
8-May-07	WN6	11:00	11:30	Sunny	1.9	67.7	69.5	62.5	Normal operation
17-May-07	WN6	15:10	15:40	Fine	1.7	66.4	68.0	65.0	Normal operation
22-May-07	WN6	15:30	16:00	Cloudy	2.2	64.2	65,5	63.0	Normal operation
29-May-07	WN6	9:00	9:30	Sunny	1.2	63.5	66.0	59.0	Normal operation

Appendix J

Landscape and visual monitoring and audit report

Contract No. HY/2005/06 Castle Peak Road Improvements -West of Tsing Lung Tau

Landscape & Visual Audit and Monitoring

Monthly Inspection Report No. 15

(May 2007)

Prepared by

URBIS LIMITED

ared by :	Tran Tuan Huy	1	4 th June 2007
oved by :	Alexander Duggie	Zm	4 th June 2007

Prepa

Appro

1.0 INTRODUCTION

This is a Landscape and Visual Audit conducted to fulfill the requirements of the EIA during the Construction and Operational Phases of the project, and is based on the procedures and requirements as set out in the Castle Peak Road Improvements – West of Tsing Lung Tau, Environmental Monitoring and Audit Manual.

Under the EIA, the proposed mitigation measures include both the planting works and treatment to structures. As stated in Section 6.4 of the EM & A, all measures undertaken by both the Contractor and the Landscape Contractor during the construction phase and the first 12 months of the operational phase shall be audited on a bi-weekly and bi-monthly basis respectively to ensure compliance with the intended aims of the mitigation measures.

2.0 SCOPE OF AUDIT

The broad scope of the audit on mitigation measures is as detailed below:

2.1 Planting Proposals

- Regular inspection of the agreed works areas to ensure no unnecessary intrusion by the Contractor outside the limit of the works;
- Regular review of the progress of engineering works to identify the earliest practical opportunity for the landscape works;
- Monitoring of tree transplanting and planting operations;
- Monitoring of works around the area of existing trees to be retained and protected;
- Monitoring of protection works for existing trees;
- Ensure planting works are carried out in accordance with the Specification and within the right planting season;
- Monitoring of the maintenance operations during the Establishment Period to ensure all plants are well watered and nutrients applied.

2.2 Standard Treatment to Structures

• Monitoring and review to ensure the proposed architectural treatments to retaining walls, viaducts, bridges, and noise barriers are implemented in accordance with the approved design, and where appropriate, to soften the hard edges to structures with planting works.

Contract No. HY/2005/06 Castle Peak Road Improvements – West of Tsing Lung Tau Landscape & Visual Audit and Monitoring

3.0 INSPECTIONS

3.1 Summary of Inspection – 9th May 2007

3.1.1 Matters Arising from Previous Inspections

- The Contractor had cleared away the scattered construction waste and garbage piles previously found outside of Maeda site office. However, a new construction waste pile was observed and the Contractor was requested to clear it away as soon as possible.
- Clearance of scattered construction waste piles at the base of RW-02 and top of RW-03 was outstanding. The Contractor was reminded to clear it away as soon as possible.
- Dry surface condition was observed at some parts of the Site. The Contractor was reminded to carry out more watering of the surface to prevent dust nuisance.

3.1.2 Site Clearance and Formation Works

- Scattered construction waste and garbage pile was observed within the central median planter in front of Maeda site office. The Contractor was requested to clear it away as soon as possible.
- Scrap wood pile was observed near Seawall 'B' area. The Contractor was requested to clear it away as soon as possible.

3.1.3 Tree Felling and Transplanting Works

• All trees to be felled and transplanted were completed.

3.1.4 <u>Recommendations</u>

- The Contractor was reminded to clear away all construction waste, scattered litter, garbage, etc as found on site, and to keep the site in a tidy condition at all times.
- The Contractor was recommended to carry out watering of the site to prevent dust nuisance during dry periods.

Contract No. HY/2005/06 Castle Peak Road Improvements – West of Tsing Lung Tau Landscape & Visual Audit and Monitoring

3.2 Summary of Inspection – 23rd May 2007

с,

3.2.1 Matters Arising from Previous Inspections

- The Contractor had cleared away the scattered construction waste piles at the base of RW-02 and top of RW-03.
- The Contractor had cleared away the scattered construction waste and garbage piles previously observed within the central median planter and the area in front Maeda site office.
- The Contractor had cleared away the scrap wood pile previously observed near Seawall 'B' area.

3.2.2 Site Clearance and Formation Works

• Several tree identification tags for the existing trees to be retained were found to be faded out. The Contractor was requested to rectify the tags as soon as possible.

3.2.3 <u>Tree Felling and Transplanting Works</u>

• All trees to be felled and transplanted were completed.

3.2.4 <u>Recommendations</u>

• The Contractor was reminded to clear away all construction waste, scattered litter, garbage, etc as found on site, and to keep the site in a tidy condition at all times.

4.0 AUDIT SCHEULE

4.1 Audit Schedule for June 2007

The next audits are scheduled to be conduct on 8th and 20th June 2007.

Appendix K

Records on disposal of C&D material by barge

Fax from : 29836785	Shun Tat Construction Engineering Limited 信達建於工程有限公司	BARGE DELIVERY I		Type of materials 物料為助出: Barge name 施始允衡:	Barge registration no. 藝術登記時時: Arrival ture 劉幾時間: (伝、 5、 a 7	0/10 Lo.	Decit ievel before loading 雪銀 (1): 細頭 松 5.2 m 船尾 松 4.0 m Decit ievel before loading 盗戮 (2): 船蘭 松 / 1 m 船尾 縦 0.4 m Deck level after loading 溢骸 (2): 船蘭 紅 / .0 m 船尾 粒 0.8 m	Estimated quantity (Base on Barge Information)物粉輻散: 23.5 . 312 * 花気 Destination (of Materials) 目的地: 在内アリ 53) 近	bester Fax Note 76:1 0 100 10:1 0 100 100 100 100 100 100
88-86-87 10:25 Pg: 2	Shun Tat Construction Engineering Limited 信達建設工程有限公司	BARGE DELIVERY RECORD	華船戦後記録 [13] [13] [14] [2010]	iller les sur	しって、フィン・コックン・ション・ション・ション・ション・ション・ション・ション・ション・ション・ショ			Internation) 物料暖暖: 2300.24746。	Agreed by Count Wo Const.
from : 29836785		Date日期:	Source 來源:	Type of materials 物料预别: Barge name 遵船名稱:	Barge registration no. 遺給登記時間: Arrivat time 單隱時間	Loading time 開始被料時阀. Denature time 挑略的翻翻。	Deck level before loading 百載 (1): Deck level after loading 新教 (2):	Estimated quantity (Base on Barge Destination (of Materials) EBD#:	(1) Trepared by N. V. Y. TI. T. Ship Tat Canst Edg. Ltd

)

Э.

Fax from : 29836785

ŀ

Fax from : 29836785

,

:

:

88-86-67 18:25 Pg: 4

Fax from : 29836785

÷

Pg: 08-06-07 10:25

m

	Y RECORD	Tsing lung Tam	····	821696V	-geo 9.5.07			<u></u>	● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●	25.25 . 058 atta	403 86		 8	Agreed By Committee Afree. Co. Lei
Shun Tat Constructic 信達建設」	Latel Har	Somera 朱載:	Type of materials Wild MBI:	Lattice taken and taken		Uniterating time Wild Straft Hill W.	Departure time New New Sec.	Deck level before houting #200 (1):	Dock level after brafing 355 (3):	Estimated quantity (Base on Barge Information) 2951992	Destination (of Mistarials) Elfshift:)	2	Agreed By) weed From Shundlar Construction Eng. Lat

60/20, 部国 & Eng. Ca. Lid 4回 株 5.7 = 4昭 推 4.6 4回 転 5.5 = 4昭 車 4.6 4回 株 1.0.6 田 4R 推 0.7 8 ICA M 242 4 John we Shun Tat Construction Engineering Limited Duting Kok No. 727 Tsing Lung an Wo Constr S.5.07 75.07 Bribbby 2.5 信達建設工程有限公司 BARGE DELIVERY RECORD 1 200 103~ 0 9 20 Agreed By 基的戰略這一級 âsinated quantity (Base on Barge Infrantion) \$5\$\$4836. Agreed By Van Tar Construction Eng. Lide ge registration no. Militäringen with loved before loveding 2000 (1): Act Lovel after loading WW. (2): bestitution (of Meterials) [[[[]]] Inloading time 開始放料研究 lype of mutatives 物种规则: suture time Reput N: ſ Devel 1 25.01 urival time 到建時間 ange name 更优化粉 Source 米版: 8

ļ

)