CWE-ZHEC Joint Venture

Contract No. CV/2004/03 – Maintenance and Repairs to Franchised and Licensed Ferry Pier (2005-2008) Construction of Yung Shue Wan Helipad – Works Order No. YSW/01/03

Environmental Monitoring and Audit Monthly Report (Version 1)

September 2007

Certified By _____

(Environmental Team Leader)

REMARKS:

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

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

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ABBREVIATION AND ACRONYM

AL Levels	Action and Limit Levels
CEDD	Civil Engineering & Development Department
E / ER	Engineer/Engineer's Representative
EIA	Environmental Impact Assessment
EM&A	Environmental Monitoring and Audit
EMIS	Environmental Mitigation Implementation Schedule
EP	Environmental Permit
EPD	Environmental Protection Department
ET	Environmental Team
HVS	High Volume Sampler
IEC	Independent Environmental Checker
RE	Resident Engineer
RH	Relative Humidity
TSP	Total Suspended Particulates
QA/QC	Quality Assurance / Quality Control
SLM	Sound Level Meter
WMP	Waste Management Plan

EXECUTIVE SUMMARY

Introduction

1. This is the 1st Environmental Monitoring and Audit (EM&A) Report prepared by Cinotech Consultants Limited for the "Construction of Yung Shue Wan Helipad – Works order No. YSW/01/03 under Contract No. CV/2004/03" (the Project). This report documents the findings of EM&A Works conducted in September 2007.

2. The site activities undertaken in the reporting month included:

- Fabrication of Piles;
- Ground Investigation Works; and
- Setup Piling Machine.

Environmental Monitoring Works

3. Environmental monitoring for the Project was performed in accordance with the updated EM&A Manual and the monitoring results were checked and reviewed. Site audits were conducted once per week. The implementation of the environmental mitigation measures, Event Action Plans and environmental complaint handling procedures were also checked.

4. Summary of the non-compliance of the reporting month is tabulated in Table I.

Table I Summary Table for Non-compliance Recorded in the Reporting Month

Parameter	No. of Exceedance		No. of Exceedance Due to the Project		Action Taken
	Action Level	Limit Level	Action Level	Limit Level	
Noise	0	0	0	0	N/A
Water	2	4	0	0	N/A

Construction Noise

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

Water Quality

6. All water quality monitoring was conducted as scheduled in the reporting month. Six Action/Limit level exceedances were recorded.

Environmental Licenses and Permits

7. Licenses/Permits granted to the Project include the Environmental Permit (EP) for the Project, An Environmental Permit No. EP-242/2006 was issued on 13 March 2006 for this Project (EP) to the CEDD as Permit Holder.

Key Information in the Reporting Month

8. Summary of key information in the reporting month is tabulated in Table II.

Table II Summary Table for Key Information in the Reporting Month

Event	Event Details		Action Taken	Status	Remark
	Number	Nature			
Complaint received	0	---	N/A	N/A	---
Changes to the assumptions and key construction / operation activities recorded	0	---	N/A	N/A	---
Status of submissions under EP	0	---	N/A.	N/A	---
Notifications of any summons & prosecutions received	0	---	N/A	N/A	---

Future Key Issues:

Major site activities for the coming two months include:

- Piling Works;
- Fabrication of Pre-cast Unit Mainland; and
- Erection of Bracing Beam to Piles.

1. INTRODUCTION

Background

1.1 The Project "Construction of Yung Shue Wan Helipad" (Works order No.YSWH/01/03) under Contract No. CV/2004/03 was awarded to CWE-ZHEC Joint Venture (hereinafter called the "Contractor") by the Civil Engineering and Development Department (CEDD) of the Hong Kong Special Administrative Region (HKSAR).

1.2 The Project has been planned and managed in-house by the Land Works Division of CEDD on behalf of the Home Affairs Department (HAD). The Project mainly comprises the construction works of a helipad used solely for emergency purpose with diameter of 25 metres and an Emergency Vehicular Access of about 25 metres long and 3.5 metres wide connecting the helipad with existing road. The general layout of the Project is shown in Figure 1.1.

1.3 The Project is a 'designated project' under Item B.2, Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO) by virtue of being: "*A helipad within 300m of existing or planned residential development*". An environmental impact assessment (EIA) report has been prepared in 2005 for the Project to consider the key issues of noise, air quality, water quality, construction waste, ecological and cultural impacts, and identify possible mitigation measures.

1.4 An Environmental Permit No. EP-242/2006 was issued on 13 March 2006 for this Project (EP) to the CEDD as the Permit Holder. An updated Environmental Monitoring and Audit Manual (the EM&A Manual) was prepared to fulfill requirements stipulated in Condition 2.4 of the EP.

1.5 Cinotech Consultants Limited was commissioned by the CWE-ZHEC Joint Venture (the Contractor) to undertake the Environmental Monitoring and Audit (EM&A) works for the Project. This Updated EM&A Manual was prepared by Cinotech to fulfill the requirements of the EP This is the 1st monthly EM&A report summarizing the EM&A works for the Project in September 2007.

Project Organizations

1.6 Different parties with different levels of involvement in the project organization include:

- Project Proponent –Civil Engineering and Development Department (CEDD)
- The Engineer of the Engineer's Representative (ER) –Civil Engineering and Development Department (CEDD)
- Environmental Team (ET) – Cinotech Consultants Limited.
- Independent Environmental Checker (IEC) – Manningsasia Company Limited
- Environmental Protection Department (EPD) – Environmental Regulations Enforcer
- Contractor - CWE-ZHEC Joint Venture

1.7 The responsibilities of respective parties are detailed in Sections 1.21 to 1.38 of the Updated EM&A Manual of the Project.

1.8 The key contacts of the Project are shown in Table 1.1 and the organization chart of ET is shown in Figure 2.1.

Table 1.1 Key Project Contacts

Party	Role	Name	Position	Phone No.	Fax No.
CEDD	Permit Holder	Mr. K.S Cheng	Engineer	2762 5455	2714 2054
		Mr. M.O Chiu	Senior Inspector of Works	2762 5552	
CEDD	Engineer	Mr. Fung Ping Lun	Engineer	2762 5068	27142054
		Mr. K.S Cheng	Engineer	2762 5455	
Cinotech	Environmental Team	Dr. Priscilla Choy	ET Leader	2151 2089	3107 1388
		Ms. Ivy Tam	Project Coordinator & Audit Team Leader	2151 2095	
		Mr. Henry Leung	Monitoring Team Leader	2151 2087	
Manningsasia	Independent Environmental Checker	Mr. Mark Cheung	Independent Environmental Checker	31682028	31682022
		Mr. Simon Ng	Assistant Independent Environmental Checker		
CWE-ZHEC Joint Venture	Contractor	Mr. Alan Mong	Site Agent	2727 0128	2379 5931
		Mr. Y.F. Chao	Project Manager	2727 0128	2379 5931

Construction Programme

1.9 The site activities undertaken in the reporting month included:

- Fabrication of Piles;
- Ground Investigation Works; and
- Setup Piling Machine.

Summary of EM&A Requirements

1.10 The EM&A programme requires construction phase monitoring construction noise and water quality and environmental site audit. The EM&A requirements for each parameter are described in the following sections, including:

- All monitoring parameters;
- Action and Limit levels for all environmental parameters;
- Event Action Plans;
- Environmental mitigation measures, as recommended in the project EIA study final report; and
- Environmental requirements in contract documents.

1.11 The advice on the implementation status of environmental protection and pollution control/mitigation measures is summarized in Section 4 of this report.

1.12 This report presents the monitoring results, observations, locations, equipment, period, methodology and QA/QC procedures of the required monitoring parameters, namely water and noise levels and audit works for the Project in September 2007.

2. NOISE

Monitoring Requirements

2.1 Two noise monitoring stations, namely N3 and N5 were designated in the Updated EM&A Manual for impact monitoring. Appendix A shows the established Action and Limit Levels for the environmental monitoring works.

Monitoring Locations

2.2 Noise monitoring was conducted at two designated monitoring stations as listed in Table 2.1. Figure 3.1 shows the locations of these stations.

Table 2.1 Noise Monitoring Stations

Monitoring Stations	Locations
N3	North Lamma Clinic
N5	No. 105 Yung Shue Wan Main Street

Monitoring Equipment

2.3 Table 2.2 summarizes the noise monitoring equipment. Copies of calibration certificates are provided in Appendix B.

Table 2.2 Noise Monitoring Equipment

Equipment	Model and Make	Qty.
Integrating Sound Level Meter	B&K Model 2238	3
Calibrator	B&K 4231	2

Monitoring Parameters, Frequency and Duration

2.4 Table 2.3 summarizes the monitoring parameters, frequency and total duration of monitoring. The noise monitoring schedule is shown in Appendix D.

Table 2.3 Noise Monitoring Parameters, Frequency and Duration

Monitoring Stations	Parameter	Period	Frequency	Measurement
N3 N5	L_{10}(30 min.) dB(A) L_{90}(30 min.) dB(A) L_{eq}(30 min.) dB(A)	0700-1900 hrs on normal weekdays	Once per week	Façade

Monitoring Methodology and QA/QC Procedures

- The Sound Level Meter was set on a tripod at a height of 1.2 m above the ground.
- For free field measurement, the meter was positioned away from any nearby reflective surfaces. All records for free field noise levels were adjusted with a correction of +3 dB(A).
- The battery condition was checked to ensure the correct functioning of the meter.
- Parameters such as frequency weighting, the time weighting and the measurement time were set as follows:
  - frequency weighting : A
  - time weighting : Fast
  - time measurement : 30 minutes / 5 minutes
- Prior to and after each noise measurement, the meter was calibrated using a Calibrator for 94.0 dB at 1000 Hz. If the difference in the calibration level before and after measurement was more than 1.0 dB, the measurement would be considered invalid and repeat of noise measurement would be required after re-calibration or repair of the equipment.
- The wind speed was frequently checked with the portable wind meter.
- At the end of the monitoring period, the L_{eq}, L_{90} and L_{10} were recorded. In addition, site conditions and noise sources were recorded on a standard record sheet.
- Noise measurement was paused temporarily during periods of high intrusive noise if possible and observation was recorded when intrusive noise was not avoided.
- Noise monitoring was cancelled in the presence of fog, rain, and wind with a steady speed exceeding 5 m/s, or wind with gusts exceeding 10 m/s.

Maintenance and Calibration

2.5 The microphone head of the sound level meter and calibrator was cleaned with soft cloth regularly.

2.6 The meters were sent to the supplier to check and calibrate on a yearly interval.

Results and Observations

2.7 Noise monitoring at the two designated locations was conducted as scheduled in the reporting month.

2.8 All the Construction Noise Levels (CNLs) reported in this report were adjusted with the corresponding baseline level (i.e. Measured Leq – Baseline Leq = Measured CNL), in order to facilitate the interpretation of the noise exceedance. The baseline noise level and the allowed CNL at each designated noise monitoring station are presented at Table 3.4.

2.9 No Action/Limit Level exceedance was recorded.

2.10 Noise monitoring results and graphical presentations are shown in Appendix E. In accordance with Condition 5.2 of the EP, all environmental monitoring data was made available to the public via internet access at the website http://nteema.cedd.gov.hk/YSWHelipad/.

2.11 The major noise source identified at the designated noise monitoring stations was the activities around Yung Shue Wan Playground.

Table 2.4 Baseline Noise Level and Allowed Construction Noise Level for Monitoring Stations

Station	Baseline Noise Level, dB (A)	Allowed CNL, dB (A)
N3 – North Lamma Clinic	60.8 (at 0700 – 1900 hrs on normal weekdays)	75 (at 0700 – 1900 hrs on normal weekdays)
	59.7 (at 1900 – 2300 hrs on all days & 0700 – 1900 hrs on holidays)	
	59.4 (at 2300 – 0700 hrs of the next day)	
N4 – Yung Shue Wan Playground	63.8 (at 0700 – 1900 hrs on normal weekdays)	75 (at 0700 – 1900 hrs on normal weekdays)
	61.4 (at 1900 – 2300 hrs on all days & 0700 – 1900 hrs on holidays)	
	63.6 (at 2300 – 0700 hrs of the next day)	

3. WATER QUALITY

Monitoring Requirements

3.1 Dissolved oxygen (DO concentration in mg/L and DO saturation in percentage), Turbidity (Tby in NTU), Suspended Solid (SS in mg/L), pH, salinity and both water and ambient temperature monitoring were conducted to monitor the water quality. Appendix A shows the established Action/Limit Levels for the environmental monitoring works.

Monitoring Locations

3.2 Locations of designated Water Quality Monitoring Stations are shown in **Figure 3.1** and described in Table 3.1. Samples shall be taken at all designated Monitoring and Control Stations.

Table 3.1 Locations for Water Quality Monitoring

Monitoring Stations	Coordinates	
	Northing (m)	Easting (m)
Control Station		
C1	809 608.0	829 207.7
Impact Stations		
M1	809 544.0	829 213.0
M2	809 559.2	829 243.0

Monitoring Equipment

3.3 Table 3.2 summarizes the equipment used in the water quality monitoring program. All the monitoring equipment complied with the specifications is stipulated in the Updated EM&A Manual. Copies of the calibration certificates of the equipment are shown in Appendix B.

Table 3.2 Water Quality Monitoring Equipment

Equipment	Model and Make	Qty.
Multi-parameter Water Quality System	YSI 6820-C-M	2
Monitoring Position Equipment	"Magellan" Handheld GPS Model GPS-320	1

Monitoring Parameters, Frequency and Duration

3.4 Table 3.3 summarizes the monitoring parameters, monitoring period and frequencies of water quality monitoring.

Table 3.3 Frequency and Parameters of Water Quality Monitoring

Station	Parameters	Frequency
C1	DO, SS, turbidity, salinity, pH & temperature	1 day per week, at mid-flood and mid-ebb, during the marine work
M1		
M2		

Monitoring Methodology, Calibration Details and QA/QC Procedures

Instrumentation

3.5 A multi-parameter meter (Model YSI 6820 C-M) was used to measure DO, DO saturation, turbidity, salinity and temperature.

Operating/Analytical Procedures

3.6 At each measurement, two consecutive measurements of DO concentration, DO saturation, salinity, turbidity and temperature were taken. Where the difference in the value between the first and second readings of each set was more than 25% of the value of the first reading, the reading was discarded and further readings were taken.

3.7 For SS measurement, duplicate water samples for SS were taken and analysed at each monitoring station at each sample depth. The sample bottles were then packed in cool-boxes (without being frozen), and delivered to a HOKLAS accredited laboratory for analysis of suspended solids concentrations within 24 hours.

Maintenance and Calibration

3.8 Before each round of monitoring, a zero check in distilled water was performed with the turbidity probe of YSI 6820-C-M. The probe was then calibrated with a solution of known NTU.

3.9 QA/QC procedures as attached in Appendix C are available for the SS analyzed in the HOKLAS-accredited laboratory, WELLAB Ltd.

Results and Observations

3.10 Water quality monitoring was conducted as scheduled in the reporting month. The monitoring data and graphical presentations of the monitoring results are shown in Appendix F. Details of the Exceedance Report are shown in **Appendix G**.

3.11 In accordance with Condition 5.2 of the EP, all environmental monitoring data was made available to the public via internet access at the website http://nteema.cedd.gov.hk/YSWHelipad/.

3.12 A total of 2 Action level and 4 Limit exceedances were recorded in the reporting month. All exceedances were considered not due to the project as no marine working activities were

undertaken during the monitoring. In addition, all measured data were not exceeded the absolute value for Action/Limit Levels derived from the baseline monitoring results.

3.13 There was no major marine construction activities, such as marine piling work has been conducted in the reporting month. The marine water quality monitoring data obtained in the reporting were assessed, statistical analyzed and further compared with the baseline monitoring data as shown in the following paragraphs.

Statistical Analysis

3.14 One way Analysis of Variance (ANOVA) was applied to test the differences in the water quality monitoring data of Dissolved oxygen, Turbidity and Suspended Solids in September 2007 between the 3 designated water quality monitoring location. The analysis results, as presented in Table 3.4, show that no signification difference can be found among the 3 monitoring locations

Table 3.4 Summary of the Results of ANOVA

Parameter	Stations involved	Sample Size	Degree of Freedom	P-value	F-value
DO (surface and middle)	All	36	2	0.994	0.006
DO (bottom)	All	36	2	0.665	0.412
SS	All	36	2	0.826	0.192
Turbidity	All	36	2	0.263	0.083

3.15 The monitoring data obtained in September 2007 were further analysis and compared with data obtained from Baseline Monitoring Period and the results are summarized in the following table:

Table 3.5 Summary of the Percentile Analysis

Parameter (unit)		September 07		Baseline			
		5%-ile	1%-ile	5%-ile		1%-ile	
Dissolved Oxygen (mg/L)	Surface and middle	4.90	4.80	5.10		4.40	
	Bottom	4.60	4.60	C1: 4.10	M1&M2: 5.20	C1: 3.60	M1&M2: 4.30
		95%-ile	99%ile	95%-ile		99%ile	
SS (mg/L)		28.9	35.4	30.8		40.6	
Turbidity(mg/L)		10.90	11.0	4.60		7.40	

4. ENVIRONMENTAL AUDIT

Site Audits

4.1 Site audits were carried out on a weekly basis to monitor the timely implementation of proper environmental management practices and mitigation measures in the Project site. The summaries of site audits are attached in Appendix H.

4.2 Site audits were conducted on 7th, 12th, 17th & 25th September 2007. No non-compliance was observed during the site audits.

Review of Environmental Monitoring Procedures

4.3 The monitoring works conducted by the monitoring team were inspected regularly. The following observations have been recorded for the monitoring works:

Noise Monitoring

- The monitoring team recorded all observations around the monitoring stations, which might affect the monitoring result.
- Major noise sources were identified and recorded. Other intrusive noise attributing to the result was trimmed off by pausing the monitoring temporarily.

Water Quality Monitoring

- The monitoring team recorded all observations around the monitoring stations, which might affect the monitoring result.
- The monitoring team recorded the weather condition on the monitoring day.

Status of Environmental Licensing and Permitting

4.4 All permits/licenses obtained for the Project are summarized in Table 4.1.

Status of Waste Management

4.5 The amount of wastes generated by the activities of the Project in September 2007 is shown in Appendix I.

Table 4.1 Summary of Environmental Licensing and Permit Status

Permit No.	Valid Period		Section	Status
	From	To		
Environmental Permit (EP)				
EP-242/2006	13/3/2006	N/A	A helipad used solely for emergency purpose with diameter of 25 metres and an Emergency Vehicular Access of about 25 metres long and 3.5 metres wide connecting the helipad with existing road.	Valid

Implementation Status of Environmental Mitigation Measures

4.6 According to the *EIAO Guidance Note No. 14/2003*, the key information in the EIA Report is summarized in Table 4.2. According to the EIA Report, air quality, noise and water quality would be the key issues during the construction and operation of the Yung Shue Wan Helipad. Details of the implementation of mitigation measures are provided in the Appendix K.

Table 4.2 Key Information in the EIA Report and the Status of EMIS

	Issues	Assumptions and Assessment	Recommended Mitigation Measures
Construction	Air	With the implementation of dust suppression mitigation measures, the level of construction dust would comply with the relevant AQO.	• Restricting heights from which material are dropped • Covering the materials on truck with tarpaulin sheet • Watering of the dusty areas, at least twice a day • Provide wheel-washing facilities at site exit(s) • Traveling speeds should be controlled
	Noise	Noise level at most of NSRs would exceed the noise criteria without mitigation measures.	Good site practice, adoption of quiet construction plant, reduction of on-time operation of plant, movable noise barrier and avoid simultaneous noisy activities.
	Water	Adverse impacts on the water quality	Good site practice, adoption of use holding tank that should be fitted with a tight fitting seal, excavator grab seal is tightly closed and the hoist speed is suitably low, large objects should be removed from the excavator grab and use small diameter pre-bored piling instead of dredging and reclamation for construction of helipad
	Ecology	Ecology concentration, if unmitigated, it would not comply with the animals & Plants Ordinance (Protection of Endangered Species) (Cap. 187)	Silt curtain should be installed Good site practice measures: • Particular care should be taken when demolishing the existing concrete planter and decommissioning the silt curtain • Materials storage areas should be located well away from the seawall and covered during the works. • Holding tank that should be fitted with a tight fitting seal • Excavator seal is tightly closed and the hoist speed is suitably low • Large objects should be removed from the excavator grab and use small diameter pre-

	Issues	Assumptions and Assessment	Recommended Mitigation Measures
			bored piling instead of dredging and reclamation for construction of helipad
	Waste	Potential for environmental impacts (Visual impacts and nuisance)	Good site practice, adoption of proper on-site handling and storage (covered containers), reuse (of inert C&D materials) and off-site disposal (via approved waste collectors to approved waste facilities and/or disposal grounds) the generation.
Operation	Noise	NSRs along the alignment would be exposed to noise level exceeding the noise limit without mitigation measures.	• Use of quieter helicopter type EC155B1 in priority • Reduce the angle of the helicopter flights path • The helipad will be solely for emergency use
	Waste	Potential for environmental impacts without mitigation measures.	• The helipad will only be used for emergency purposes. • No equipment will be placed on the landing pad or along the EVA

4.7 During the weekly environmental site inspections in the reporting period, no non-conformance was identified. There are no observations and recommendations.

Implementation Status of Event Action Plans

4.8 The Event Action Plans for noise and water quality are presented in Appendix J.

Construction Noise

4.9 No Action/Limit Level exceedance was recorded for construction noise.

Water Quality

4.10 Six Action/Limit Level exceedance was recorded for water quality. All exceedances were not considered due to the Project.

Summary of Complaints and Prosecutions

4.11 No environmental prosecution and complaint was received in the reporting month.

4.12 No environmental prosecution was received in the reporting month.

4.13 There were no environmental complaints and no prosecution received since the commencement of the Project. The Complaint Log is attached in Appendix M.

5. FUTURE KEY ISSUES

Key Issues for the Coming Month

5.1 Key environmental issues in the coming month include:

- Generation of dust from operation of equipment.
- Noise from operation equipment and machinery on-site.
- Storage of chemicals/fuel and chemical waste/waste oil on site.
- Contamination of marine water.

Monitoring Schedule for the Next Month

5.2 The tentative environmental monitoring schedules for the next month are shown in Appendix D.

Construction Program for the Next Month

5.3 The tentative construction program for the Project is provided in **Appendix L**.

6. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

6.1 Environmental monitoring works were performed in the reporting month and all monitoring results were checked and reviewed.

Construction Noise Monitoring

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

Water Quality Monitoring

6.3 All water quality monitoring was performed as scheduled. Six Action/Limit Level exceedances were recorded. All exceedances were not considered due to the Project.

Complaint and Prosecution

6.4 No environmental prosecution and complaint was received in the reporting month.

Recommendations

6.5 According to the environmental audit performed in the reporting month, the following recommendations were made:

Dust Impact

- To prohibit any open burning on site.
- To regularly maintain the machinery and vehicles on site.
- To follow up any exceedance caused by the construction works.
- To implement dust suppression measures on all haul roads, stockpiles, dry surfaces and excavation works.
- To provide hoarding

Noise Impact

- To inspect the noise sources inside the site.
- To follow up any exceedance caused by the construction works.
- To space out noisy equipment and position the equipment as far away as possible from sensitive receivers.
- To provide temporary noise barriers for operations of noisy equipment near the noise sensitive receivers in an appropriate location.

Water Impact

- To identify any wastewater discharges from site.
- To provide silt curtain surrounding the whole of the piling site.
- To check the holding tank should be fitted with a tight fitting seal.
- To ensure the excavator grab seal is tightly closed.

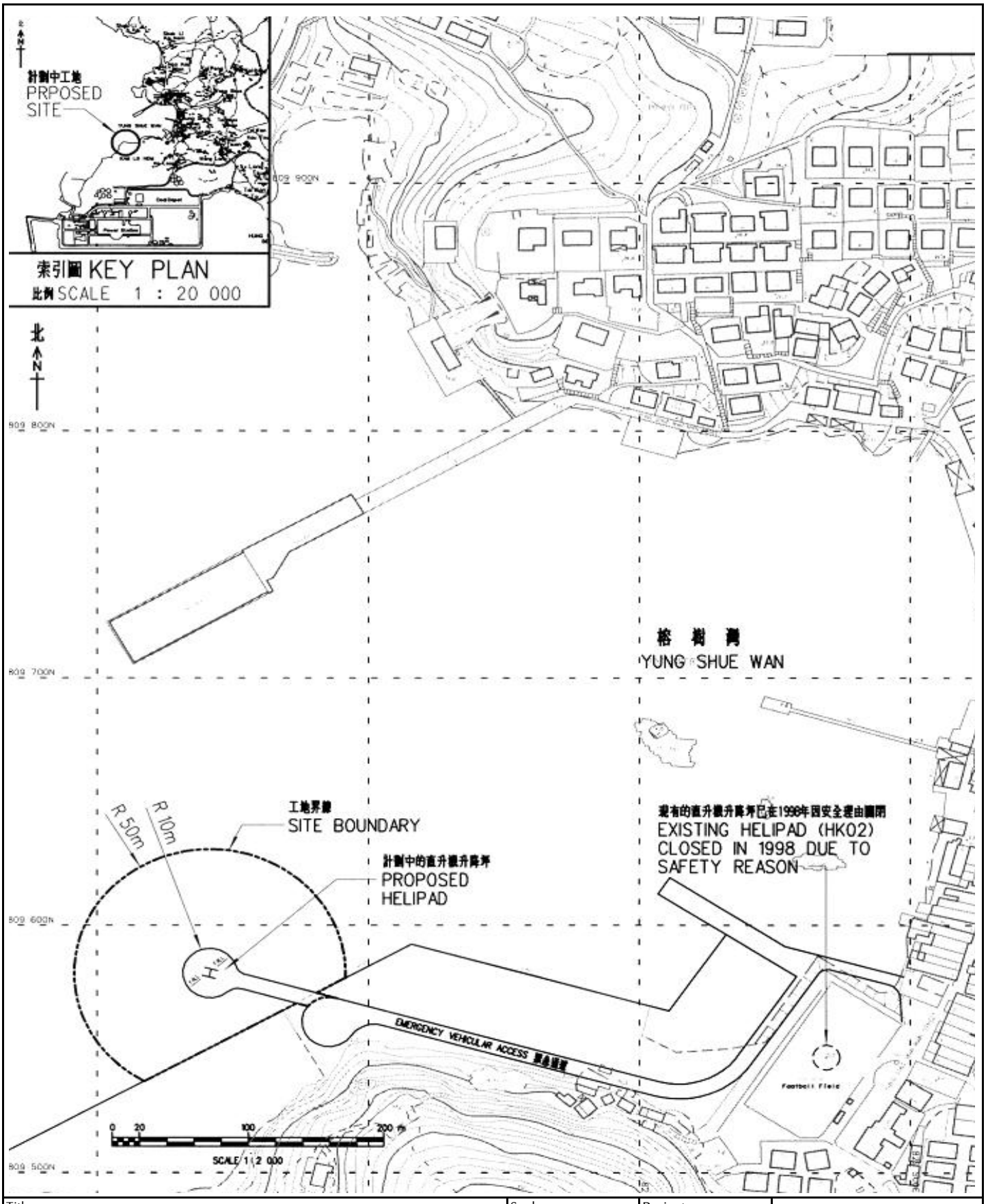
Waste/Chemical Management

- To check for any accumulation of waste materials or rubbish on site.
- To avoid any discharge or accidental spillage of chemical waste or oil directly from the site.
- To avoid improper handling or storage of oil drum on site.

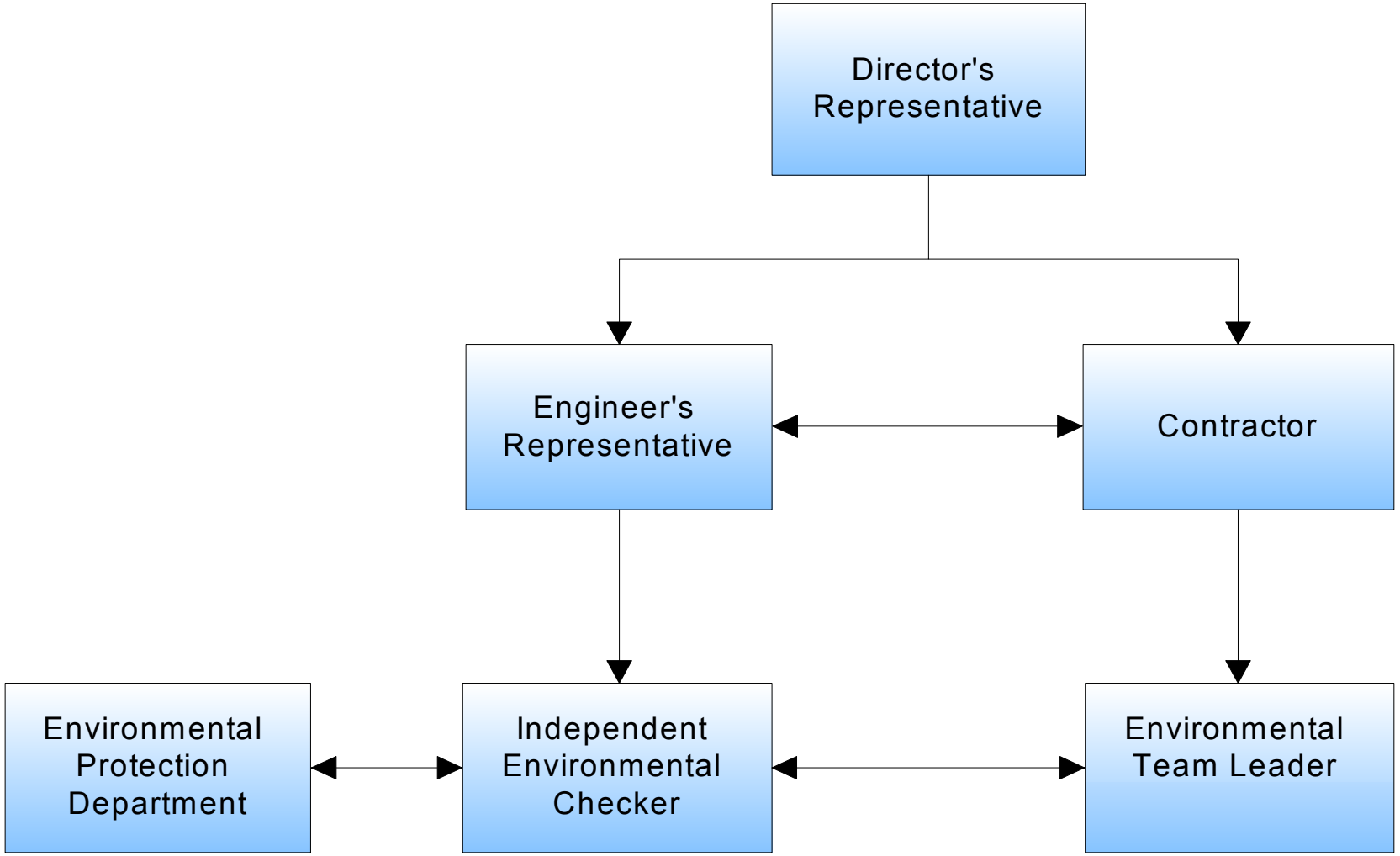
Ecology

- To provide silt curtain, checked and maintenance throughout the construction period

FIGURES

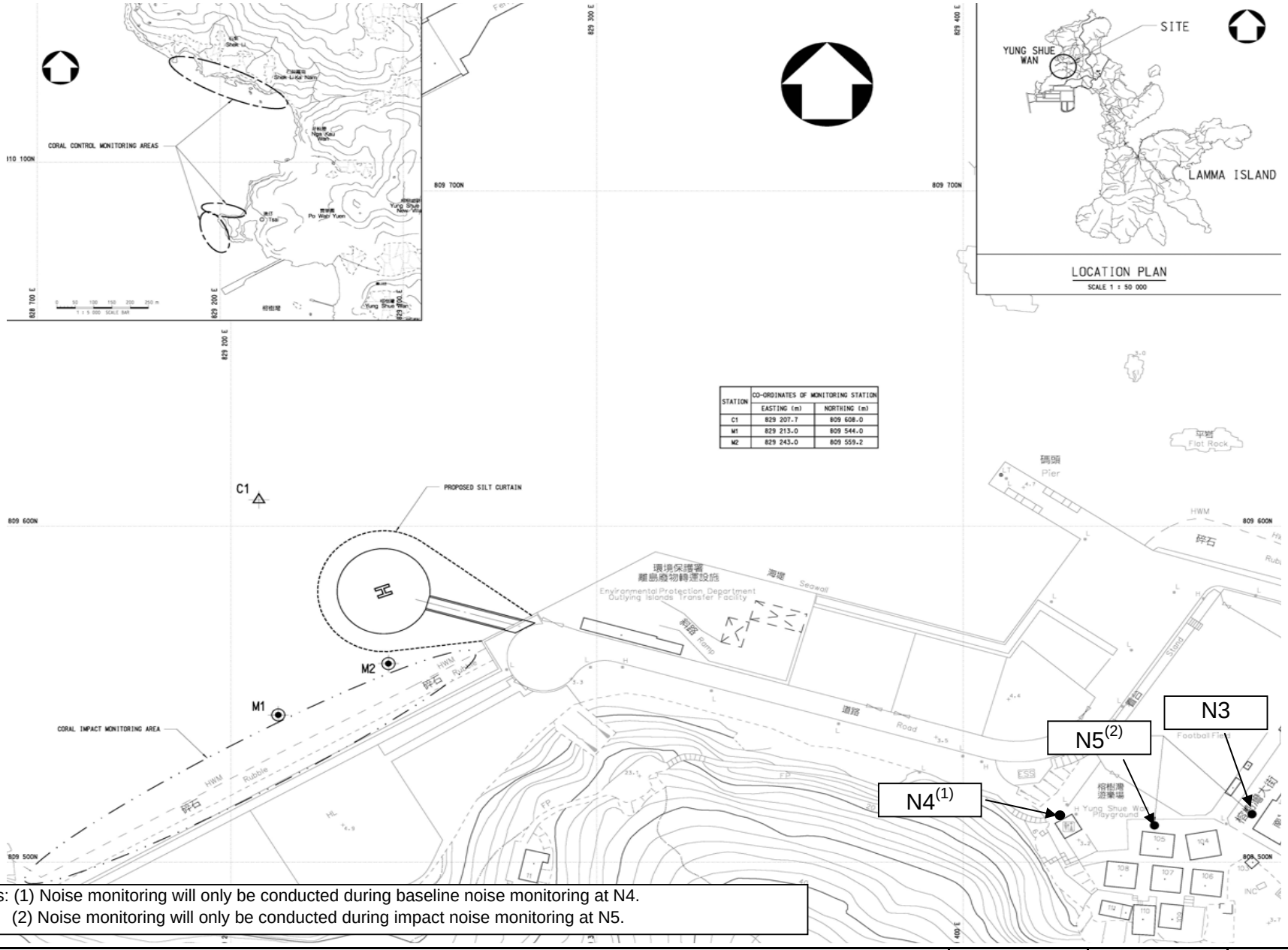


Title Contract No. CV/2004/03 Maintenance and Repairs to Franchised and Licensed Ferry Piers (2005 – 2008) Construction of Yung Shue Wan Helipad – Works Order No. YSWH/01/03 Site Layout Plan	Scale N.T.S Date Jul 07	Project No. MA7018 Figure 1.1	CINOTECH



Title	Contract No. CV/2004/03 Maintenance and Repairs to Franchised and Licensed Ferry Piers (2005 – 2008) Construction of Yung Shue Wan Helipad – Works Order No. YSWH/01/03 Project Organization Chart	Scale: N.T.S Date: Jul 07	Propos No.: MA7018 Figure: 2.1

CINOTECH



STATION	CO-ORDINATES OF MONITORING STATION	
	EASTING (m)	NORTHING (m)
C1	829 207.7	809 608.0
M1	829 213.0	809 544.0
M2	829 243.0	809 559.2

Remarks: (1) Noise monitoring will only be conducted during baseline noise monitoring at N4.
(2) Noise monitoring will only be conducted during impact noise monitoring at N5.

Title	Contract No. CV/2004/03 Maintenance and Repairs to Franchised and Licensed Ferry Piers (2005 – 2008) Construction of Yung Shue Wan Helipad – Works Order No. YSWH/01/03	Scale: N.T.S	Project No.: MA7018
	Location of Noise and Water Quality Monitoring Stations	Date: Jun-07	Figure: 3.1

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APPENDIX A
ACTION AND LIMIT LEVELS

Action and Limit Levels

Table A-1 Action and Limit Level for Construction Noise

Time Period	Action Level	Limit Level
0700-1900 hrs on normal weekdays	When one documented complaint is received	75 dB(A)

Table A-2 Action and Limit Level for Water Quality

Parameter (unit)	Action	Limit
Dissolved Oxygen (mg/L) (surface, middle, bottom)	*Surface and middle* 5%-ile of baseline for surface and middle layers *Bottom* 5%-ile of baseline for bottom layer	*Surface and middle* 4 mg/L or 1%-ile of baseline for surface and middle layers *Bottom* 2 mg/L or 1%-ile of baseline for bottom layer
SS (mg/L) Depth average	95%-ile of baseline data or 120% of upstream control station's SS at the same tide of the same day.	99%-ile of baseline or 130% of SS readings at the upstream control station at the same tide of same day and specific sensitive receiver water quality requirements.
Turbidity (NTU) (depth average)	95%-ile of baseline data or 120 % of upstream control station's turbidity at the same tide of the same day.	99%-ile of baseline or 130% of turbidity at the upstream control station at the same tide of same day.

Notes:
- "Depth-averaged" is calculated by taking the arithmetic means of reading all three depths.
- For DO, non-compliance of the water quality limit occurs when monitoring result is lower than the limit.
- For SS & turbidity non-compliance of the water quality limits occur when monitoring result is higher than the limits.
- All the figures given in the table are used for reference only and the Engineer may amend the figures whenever it is considered as necessary

APPENDIX B
COPIES OF CALIBRATION CERTIFCATES

WELLAB LTD.

Unit C, 1/F, Goldlion Holdings Center
13-15 Yuen Shun Circuit,
Shatin, Hong Kong.
Tel: (852) 2898 7388
Fax: (852) 2898 7076

TEST REPORT

APPLICANT: **Cinotech Consultants Limited**
1602-1610 Delta House,
3 On Yiu Street,
Shatin, N.T.

ATTN: **Mr. Henry Leung**

Test Report No.:	C/N/51216/1
Date of Issue:	2005-12-16
Date Received:	2005-12-15
Date Tested:	2005-12-15
Date Completed:	2005-12-16
Next Due Date:	2006-12-15
Page:	1 of 1

Certificate of Calibration

Item for calibration:

Description	: Integrating Sound Level Meter
Manufacturer	: Brüel & Kjær
Model No.	: B&K 2238
Serial No.	: 2337665
Microphone No.	: 2289749
Equipment No.	: N-01-01

Test conditions:

Room Temperatre	: 20 degree Celsius
Relative Humidity	: 63%

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

Reference Set Point, dB	Instrument Readings, dB
94	94.0
114	114.0

PREPARED AND CHECKED BY:
For and On Behalf of **WELLAB Ltd.**

Patrick

PATRICK TSE
Operation Manager

WELLAB 匯力
Testing and Research

Unit C, 1/F., Goldlion Holdings Center,
13-15 Yuen Shun Circuit, Shatin, NT, HK.
Tel: 2898 7388 Fax: 2898 7076
Website: www.wellab.com.hk

TEST REPORT

APPLICANT: **Cinotech Consultants Limited**
1601-1610 Delta House,
3 On Yiu Street,
Shatin, N.T.

ATTN: **Mr. Henry Leung**

Test Report No.:	C/N/70903-1
Date of Issue:	2007-09-03
Date Received:	2007-09-01
Date Tested:	2007-09-03
Date Completed:	2007-09-03
Next Due Date:	2008-09-02
Page:	1 of 1

Certificate of Calibration

Item for calibration:

Description	: Integrating Sound Level Meter
Manufacturer	: Brüel & Kjær
Model No.	: B&K 2238
Serial No.	: 2359311
Microphone No.	: 2346382
Equipment No.	: N-01-03

Test conditions:

Room Temperatre	: 22 degree Celsius
Relative Humidity	: 62%

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

Reference Set Point, dB	Instrument Readings, dB
94	94.0
114	114.0

PREPARED AND CHECKED BY:
For and On Behalf of **WELLAB Ltd.**

PATRICK TSE
Senior Chemist

WELLAB 匯力
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13-15 Yuen Shun Circuit, Shatin, NT, HK.
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Website: www.wellab.com.hk

TEST REPORT

APPLICANT: **Cinotech Consultants Limited**
1602-1610 Delta House,
3 On Yiu Street,
Shatin, N.T.

ATTN: **Mr. Henry Leung**

Test Report No.:	C/N/70903-2
Date of Issue:	2007-09-03
Date Received:	2007-09-01
Date Tested:	2007-09-03
Date Completed:	2007-09-03
Next Due Date:	2008-09-02
Page:	1 of 1

Certificate of Calibration

Item for calibration:

Description	: Integrating Sound Level Meter
Manufacturer	: Brüel & Kjær
Model No.	: B&K 2238
Serial No.	: 2359303
Equipment No.	: N-01-04

Test conditions:

Room Temperatre	: 22 degree Celsius
Relative Humidity	: 62%

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

Reference Set Point, dB	Instrument Readings, dB
94	94.0
114	114.0

PREPARED AND CHECKED BY:
For and On Behalf of **WELLAB Ltd.**

Patrick Tse

PATRICK TSE
Senior Chemist

WELLAB LTD.
Unit C, 1/F, Goldlion Holdings Center
13-15 Yuen Shun Circuit,
Shatin, Hong Kong.
Tel: (852) 2898 7388
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TEST REPORT

APPLICANT: **Cinotech Consultants Limited**
1602-1610 Delta House,
3 On Yiu Street,
Shatin, N.T.

Test Report No.:	C/N/61116/2
Date of Issue:	2006-11-16
Date Received:	2006-11-15
Date Tested:	2006-11-15
Date Completed:	2006-11-16
Next Due Date:	2007-11-15
Page:	1 of 1

ATTN: **Mr. Henry Leung**

Item for calibration:

Description	: Acoustical Calibrator
Manufacturer	: Brüel & Kjær
Model No.	: 4231
Serial No.	: 2326353
Project No.	: C13
Equipment No.	: N-02-01

Test conditions:

Room Temperatre	: 20 degree Celsius
Relative Humidity	: 59%
Pressure	: 1015.2 hPa

Methodology:

The sound calibrator has been calibrated in accordance with the documented procedures and using standard(s) and instrument(s) which are recommended by the manufacturer, or equivalent.

Results:

Sound Pressure Level	Measured SPL	Tolerance
At 94 dB SPL	94.0	94.0 ± 0.1 dB

PREPARED AND CHECKED BY:
For and On Behalf of **WELLAB Ltd.**

Patrick.

PATRICK TSE
Operation Manager

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Website: www.wellab.com.hk

TEST REPORT

APPLICANT: **Cinotech Consultants Limited**
1602-1610 Delta House,
3 On Yiu Street,
Shatin, N.T.

Test Report No.:	C/N/70903-3
Date of Issue:	2007-09-03
Date Received:	2007-09-01
Date Tested:	2007-09-03
Date Completed:	2007-09-03
Next Due Date:	2008-09-02
Page:	1 of 1

ATTN: **Mr. Henry Leung**

Item for calibration:

Description	: Acoustical Calibrator
Manufacturer	: Brüel & Kjær
Model No.	: 4231
Serial No.	: 2412367
Equipment No.	: N-02-03

Test conditions:

Room Temperatre	: 22 degree Celsius
Relative Humidity	: 62%

Methodology:

The Sound Level Calibrator has been calibrated in accordance with the documented procedures and using standard(s) and instrument(s) which are recommended by the manufacturer, or equivalent.

Results:

Sound Pressure Level (1kHz)	Measured SPL	Tolerance
At 94 dB SPL	94.0	94.0 ± 0.1 dB
At 114 dB SPL	114.0	114.0 ± 0.1 dB

PREPARED AND CHECKED BY:
For and On Behalf of **WELLAB Ltd.**

PATRICK TSE
Senior Chemist

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Testing and Research 力

Unit C, 1/F., Goldlion Holdings Center,
13-15 Yuen Shun Circuit, Shatin, NT, HK.
Tel: 2898 7388 Fax: 2898 7076
Website: www.wellab.com.hk

TEST REPORT

APPLICANT: **Cinotech Consultants Limited**
1602-1610 Delta House,
3 On Yiu Street,
Shatin, N.T.

ATTN: **Mr. Henry Leung**

Test Report No.:	C/W/70811-1
Date of Issue:	2007-08-11
Date Received:	2007-08-10
Date Tested:	2007-08-10
Date Completed:	2007-08-11
Next Due Date:	2007-11-10
Page:	1 of 2

Certificate of Calibration

Item for calibration:

Description	: Sonde Environmental Monitoring System
Manufacturer	: YSI
Model No.	: 6820-C-M
Serial No.	: 02D0126AA
Equipment No.	: W.03.01
Project No.	: C013

Test conditions:

Room Temperature	: 22 degree Celsius
Relative Humidity	: 62%

Test Specifications:

Conductivity & Salinity Sensor, Model: 6560, S/N: 05A1209
1. Conductivity performance check with Potassium Chloride standard solution
2. Salinity performance check with Sodium Chloride standard solution

Dissolved Oxygen Sensor, Model: 6562, S/N: 04A0145
1. Performance check against Winkler titration

Turbidity Sensor, Model: 6136, S/N: 05A1610AJ
1. Calibration check with Formazin standard solution

pH Meter, Model: 6561, S/N: 01J
1. Calibration check with standard pH buffer

Depth Meter
1. Calibration check at 1m water level depth

Methodologies:

1. YSI 6-Series Sonde Environmental Monitoring System Instruction Manual
2. In-house method with reference to APHA and ISO standards

PREPARED AND CHECKED BY:
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TEST REPORT

Test Report No.:	C/W/70811-1
Date of Issue:	2007-08-11
Date Received:	2007-08-10
Date Tested:	2007-08-10
Date Completed:	2007-08-11
Next Due Date:	2007-11-10
Page:	2 of 2

Results:

1. Conductivity performance check

Specific Conductivity, μS/cm		Correction, μS/cm	Acceptable range
Salinity Meter (C1)	Theoretical Value (C2)	D = C1 - C2	
1422	1420	2	1420 ± 20

2. Salinity Performance check

Salinity, ppt		Correction, ppt	Acceptable range
Instrument Reading	Theoretical Value		
30.1	30.0	0.1	30.0 ± 3

3. Dissolved Oxygen check

Oxygen level in water at 20°C	Dissolved Oxygen, mg O_2/L		Correction, mg O_2/L	Acceptable range
	D.O. Meter	Winkler Titration		
Saturated	9.1	9.1	0.0	± 0.2
Half-saturated	5.6	5.6	0.0	± 0.2
Zero	0.0	0.0	0.0	± 0.2

4. Turbidity check

Turbidity value in solution, NTU	Calibration Value, NTU	Correction, NTU	Acceptable range
0.00	0.00	0.00	0.00 ± 0.05
100	100	0	100 ± 5

5. pH Meter check

Test Parameters	Performance characteristic	Acceptable range
Liquid junction error ΔpH_j , pH unit	0.01	Less than 0.05
Shift on stirring ΔpH_s , pH unit	0.01	Less than 0.02
Noise ΔpH_n , pH unit	0.00	Less than 0.02

6. Depth Meter check

Instrument Reading, m	Calibration Value, m	Correction, m	Acceptable range
1.0	1.00	0.00	1.00 ± 0.05

**********END OF REPORT**********

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Testing and Research

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13-15 Yuen Shun Circuit, Shatin, NT, HK.
Tel: 2898 7388 Fax: 2898 7076
Website: www.wellab.com.hk

TEST REPORT

APPLICANT: **Cinotech Consultants Limited**
1602-1610 Delta House,
3 On Yiu Street,
Shatin, N.T.

ATTN: **Mr. Henry Leung**

Test Report No.:	C/W/70811-2
Date of Issue:	2007-08-11
Date Received:	2007-08-10
Date Tested:	2007-08-10
Date Completed:	2007-08-11
Next Due Date:	2007-11-10
Page:	1 of 2

Certificate of Calibration

Item for calibration:

Description	: Sonde Environmental Monitoring System
Manufacturer	: YSI
Model No.	: 6820-C-M
Serial No.	: 02D0293AA
Equipment No.	: W.03.02
Project No.	: C013

Test conditions:

Room Temperature	: 22 degree Celsius
Relative Humidity	: 62%

Test Specifications:

Conductivity & Salinity Sensor, Model: 6560, S/N: 02C0886
1. Conductivity performance check with Potassium Chloride standard solution
2. Salinity performance check with Sodium Chloride standard solution

Dissolved Oxygen Sensor, Model: 6562, S/N: 0261137
1. Performance check against Winkler titration

Turbidity Sensor, Model: 6136, S/N: 05F2030AQ
1. Calibration check with Formazin standard solution

pH Meter, Model: 6561, S/N: 02A
1. Calibration check with standard pH buffer

Depth Meter
1. Calibration check at 1m water level depth

Methodologies:

1. YSI 6-Series Sonde Environmental Monitoring System Instruction Manual
2. In-house method with reference to APHA and ISO standards

PREPARED AND CHECKED BY:
For and On Behalf of **WELLAB Ltd.**

Patrick Tse

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TEST REPORT

Test Report No.:	C/W/70811-2
Date of Issue:	2007-08-11
Date Received:	2007-08-10
Date Tested:	2007-08-10
Date Completed:	2007-08-11
Next Due Date:	2007-11-10

Results:

1. Conductivity performance check

Specific Conductivity, μS/cm		Correction, μS/cm	Acceptable range
Salinity Meter (C1)	Theoretical Value (C2)	D = C1 - C2	
1420	1419	1	1418 ± 20

2. Salinity Performance check

Salinity, ppt		Correction, ppt	Acceptable range
Instrument Reading	Theoretical Value		
30.1	30.0	0.1	30.0 ± 3

3. Dissolved Oxygen check

Oxygen level in water at 20°C	Dissolved Oxygen, mg O_2/L		Correction, mg O_2/L	Acceptable range
	D.O. Meter	Winkler Titration		
Saturated	9.0	9.0	0.0	± 0.2
Half-saturated	5.8	5.8	0.0	± 0.2
Zero	0.0	0.0	0.0	± 0.2

4. Turbidity check

Turbidity value in solution, NTU	Calibration Value, NTU	Correction, NTU	Acceptable range
0.00	0.00	0.00	0.00 ± 0.05
100	100	0	100 ± 5

5. pH Meter check

Test Parameters	Performance characteristic	Acceptable range
Liquid junction error ΔpH_j , pH unit	0.01	Less than 0.05
Shift on stirring ΔpH_s , pH unit	0.01	Less than 0.02
Noise ΔpH_n , pH unit	0.01	Less than 0.02

6. Depth Meter check

Instrument Reading, m	Calibration Value, m	Correction, m	Acceptable range
1.0	1.00	0.00	1.00 ± 0.05

**********END OF REPORT**********

APPENDIX C
QUALITY CONTROL REPORTS FOR SS LABORATORY ANALYSIS

WELLAB 匯力
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Unit C, 1/F., Goldlion Holdings Center,
13-15 Yuen Shun Circuit, Shatin, NT, HK.
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Website: www.wellab.com.hk

TEST REPORT
QC REPORT

APPLICANT: Cinotech Consultants Limited
1602-1610 Delta House,
3 On Yiu Street,
Shatin, N.T.

Laboratory No.:	05360
Date of Issue:	2007/09/04
Date Received:	2007/09/03
Date Tested:	2007/09/03
Date Completed:	2007/09/04
Page:	1 of 1

ATTN: Mr. Henry Leung

Sampling Site: Construction of Yung Shue Wan Helipad
Project No.: MA7018
Sampling Date: 2007/09/03
Number of Sample: 28
Custody No.: MA7018/70903

****

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1, mg/L	Trial 2, mg/L	Difference, %	
C1BF	9	7	19	90

**********END OF REPORT**********

PREPARED AND CHECKED BY:
For and On Behalf of **WELLAB Ltd.**

PATRICK TSE
Senior Chemist

WELLAB 匯力
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13-15 Yuen Shun Circuit, Shatin, NT, HK.
Tel: 2898 7388 Fax: 2898 7076
Website: www.wellab.com.hk

TEST REPORT
QC REPORT

APPLICANT: Cinotech Consultants Limited
1602-1610 Delta House,
3 On Yiu Street,
Shatin, N.T.

Laboratory No.:	05370
Date of Issue:	2007/09/06
Date Received:	2007/09/05
Date Tested:	2007/09/05
Date Completed:	2007/09/06
Page:	1 of 1

ATTN: Mr. Henry Leung

Sampling Site: Construction of Yung Shue Wan Helipad
Project No.: MA7018
Sampling Date: 2007/09/05
Number of Sample: 28
Custody No.: MA7018/70905

****

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1, mg/L	Trial 2, mg/L	Difference, %	
C1MF	9	9	8	96

**********END OF REPORT**********

PREPARED AND CHECKED BY:
For and On Behalf of **WELLAB Ltd.**

PATRICK TSE
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WELLAB 匯力
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13-15 Yuen Shun Circuit, Shatin, NT, HK.
Tel: 2898 7388 Fax: 2898 7076
Website: www.wellab.com.hk

TEST REPORT
QC REPORT

APPLICANT: Cinotech Consultants Limited
1602-1610 Delta House,
3 On Yiu Street,
Shatin, N.T.

Laboratory No.:	05387
Date of Issue:	2007/09/10
Date Received:	2007/09/07
Date Tested:	2007/09/07
Date Completed:	2007/09/10
Page:	1 of 1

ATTN: Mr. Henry Leung

Sampling Site: Construction of Yung Shue Wan Helipad
Project No.: MA7018
Sampling Date: 2007/09/07
Number of Sample: 28
Custody No.: MA7018/70907

****

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1, mg/L	Trial 2, mg/L	Difference, %	
C1BF	28	24	14	93

**********END OF REPORT**********

PREPARED AND CHECKED BY:
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PATRICK TSE
Senior Chemist

WELLAB 匯力
Testing and Research

Unit C, 1/F., Goldlion Holdings Center,
13-15 Yuen Shun Circuit, Shatin, NT, HK.
Tel: 2898 7388 Fax: 2898 7076
Website: www.wellab.com.hk

TEST REPORT
QC REPORT

APPLICANT: Cinotech Consultants Limited
1602-1610 Delta House,
3 On Yiu Street,
Shatin, N.T.

Laboratory No.:	05397
Date of Issue:	2007/09/11
Date Received:	2007/09/10
Date Tested:	2007/09/10
Date Completed:	2007/09/11
Page:	1 of 1

ATTN: Mr. Henry Leung

Sampling Site: Construction of Yung Shue Wan Helipad
Project No.: MA7018
Sampling Date: 2007/09/10
Number of Sample: 28
Custody No.: MA7018/70910

****

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1, mg/L	Trial 2, mg/L	Difference, %	
C1BF	19	17	15	100

**********END OF REPORT**********

PREPARED AND CHECKED BY:
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Senior Chemist

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Unit C, 1/F., Goldlion Holdings Center,
13-15 Yuen Shun Circuit, Shatin, NT, HK.
Tel: 2898 7388 Fax: 2898 7076
Website: www.wellab.com.hk

TEST REPORT
QC REPORT

APPLICANT: Cinotech Consultants Limited
1602-1610 Delta House,
3 On Yiu Street,
Shatin, N.T.

Laboratory No.:	05434
Date of Issue:	2007/09/18
Date Received:	2007/09/17
Date Tested:	2007/09/17
Date Completed:	2007/09/18
Page:	1 of 1

ATTN: Mr. Henry Leung

Sampling Site: Construction of Yung Shue Wan Helipad
Project No.: MA7018
Sampling Date: 2007/09/17
Number of Sample: 28
Custody No.: MA7018/70917

****

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1, mg/L	Trial 2, mg/L	Difference, %	
C1BF	16	15	8	96

**********END OF REPORT**********

PREPARED AND CHECKED BY:
For and On Behalf of **WELLAB Ltd.**

PATRICK TSE
Senior Chemist

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Unit C, 1/F., Goldlion Holdings Center,
13-15 Yuen Shun Circuit, Shatin, NT, HK.
Tel: 2898 7388 Fax: 2898 7076
Website: www.wellab.com.hk

TEST REPORT
QC REPORT

APPLICANT: Cinotech Consultants Limited
1602-1610 Delta House,
3 On Yiu Street,
Shatin, N.T.

Laboratory No.:	05470
Date of Issue:	2007/09/27
Date Received:	2007/09/25
Date Tested:	2007/09/25
Date Completed:	2007/09/27
Page:	1 of 1

ATTN: Mr. Henry Leung

Sampling Site: Construction of Yung Shue Wan Helipad
Project No.: MA7018
Sampling Date: 2007/09/25
Number of Sample: 28
Custody No.: MA7018/70925

****

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1, mg/L	Trial 2, mg/L	Difference, %	
C1BF	24	21	15	89

**********END OF REPORT**********

PREPARED AND CHECKED BY:
For and On Behalf of **WELLAB Ltd.**

PATRICK TSE
Senior Chemist

APPENDIX D
ENVIRONMENTAL MONITORING SCHEDULE

Contract No. CV/2004/03 - Maintenance and Repairs to Franchised and Licensed Ferry Piers (2005 – 2008)
Construction of Yung Shue Wan Helipad – Works Order No. YSWH/01/03
Tentative Impact Noise Monitoring Schedule for September 2007

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1-Sep
2-Sep	3-Sep	4-Sep	5-Sep	6-Sep	7-Sep	8-Sep
9-Sep	10-Sep	11-Sep	12-Sep	13-Sep	14-Sep	15-Sep
			Noise Monitoring at N3 and N5			
16-Sep	17-Sep	18-Sep	19-Sep	20-Sep	21-Sep	22-Sep
	Noise Monitoring at N3 and N5					
23-Sep	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep	29-Sep
		Noise Monitoring at N3 and N5				

The schedule may be changed due to unforeseen circumstances (adverse weather, etc)

Contract No. CV/2004/03 - Maintenance and Repairs to Franchised and Licensed Ferry Piers (2005 – 2008)
Construction of Yung Shue Wan Helipad – Works Order No. YSWH/01/03
Tentative Impact Water Quality Monitoring Schedule for September 2007

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						1-Sep
2-Sep	3-Sep	4-Sep	5-Sep	6-Sep	7-Sep	8-Sep
			Mid-Ebb 8:00 Mid-Flood 16:00		Mid-Ebb 9:32 Mid-Flood 17:00	
9-Sep	10-Sep	11-Sep	12-Sep	13-Sep	14-Sep	15-Sep
	Mid-Ebb 11:50 Mid-Flood 17:00					
16-Sep	17-Sep	18-Sep	19-Sep	20-Sep	21-Sep	22-Sep
	Mid-Flood 9:45 Mid-Ebb 15:14					
23-Sep	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep	29-Sep
		Mid-Ebb 11:08 Mid-Flood 17:00				

The schedule may be changed due to unforeseen circumstances (adverse weather, etc)
NA indicated favourable tide occurs during non-working hours

Contract No. CV/2004/03 - Maintenance and Repairs to Franchised and Licensed Ferry Piers (2005 – 2008)
Construction of Yung Shue Wan Helipad – Works Order No. YSWH/01/03
Tentative Impact Noise Monitoring Schedule for October 2007

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1-Oct	2-Oct	3-Oct	4-Oct	5-Oct	6-Oct
		Noise Monitoring at N3 and N5				
7-Oct	8-Oct	9-Oct	10-Oct	11-Oct	12-Oct	13-Oct
	Noise Monitoring at N3 and N5					
14-Oct	15-Oct	16-Oct	17-Oct	18-Oct	19-Oct	20-Oct
				Noise Monitoring at N3 and N5		
21-Oct	22-Oct	23-Oct	24-Oct	25-Oct	26-Oct	27-Oct
			Noise Monitoring at N3 and N5			
28-Oct	29-Oct	30-Oct	31-Oct			
		Noise Monitoring at N3 and N5				

The schedule may be changed due to unforeseen circumstances (adverse weather, etc)

Contract No. CV/2004/03 - Maintenance and Repairs to Franchised and Licensed Ferry Piers (2005 – 2008)
Construction of Yung Shue Wan Helipad – Works Order No. YSWH/01/03
Tentative Impact Water Quality Monitoring Schedule for October 2007

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1-Oct	2-Oct	3-Oct	4-Oct	5-Oct	6-Oct
		Mid-Flood 11:19 Mid-Ebb 16:04				
7-Oct	8-Oct	9-Oct	10-Oct	11-Oct	12-Oct	13-Oct
	Mid-Ebb 10:45 Mid-Flood 17:23					
14-Oct	15-Oct	16-Oct	17-Oct	18-Oct	19-Oct	20-Oct
				Mid-Flood 9:00 Mid-Ebb 17:00		
21-Oct	22-Oct	23-Oct	24-Oct	25-Oct	26-Oct	27-Oct
			Mid-Ebb 10:32 Mid-Flood 16:55			
28-Oct	29-Oct	30-Oct	31-Oct			
		Mid-Flood 10:08 Mid-Ebb 15:03				

The schedule may be changed due to unforeseen circumstances (adverse weather, etc)
NA indicated favourable tide occurs during non-working hours

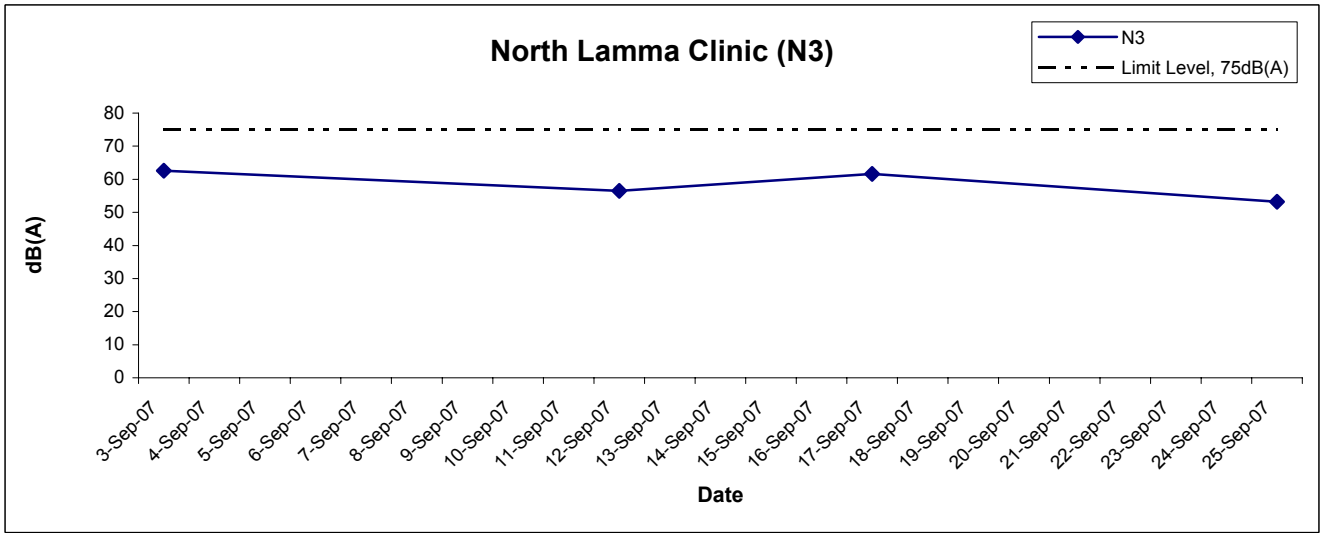
APPENDIX E
NOISE MONITORING RESULTS AND GRAPHICAL PRESENTATION

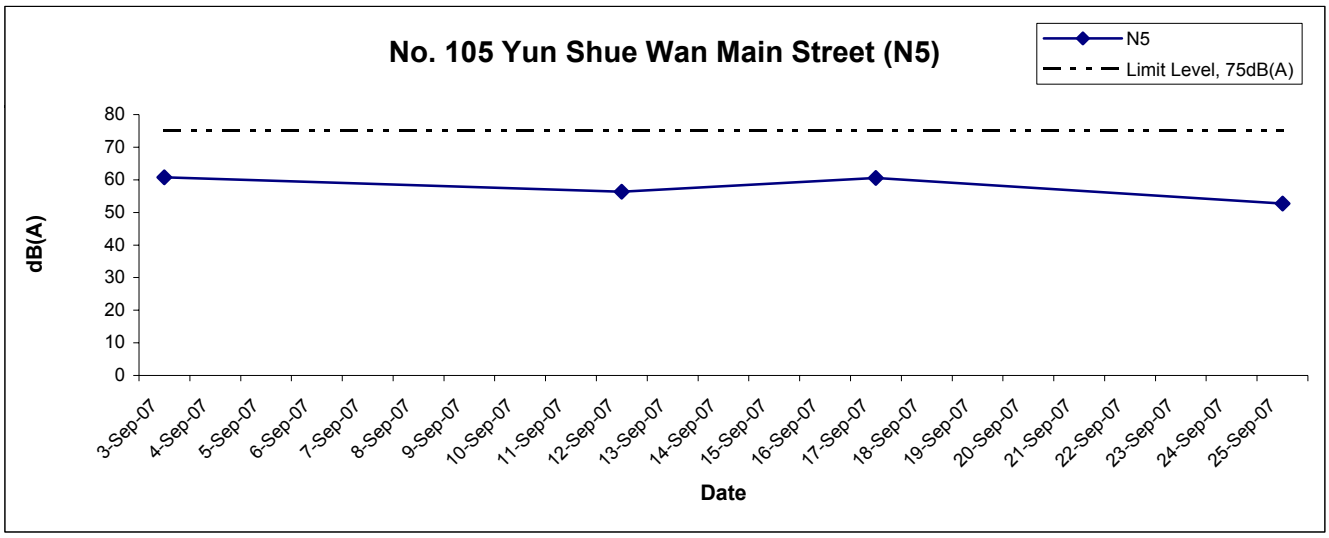
Appendix E - Noise Monitoring Results

Location N3 - North Lamma Clinic					
Date	Time	Weather	dB (A) (30-min)		
			L_{eq}	L_{10}	L_{90}
3-Sep-07	13:00	Sunny	62.6	65.0	56.5
12-Sep-07	13:45	Sunny	56.5	58.0	53.5
17-Sep-07	13:00	Sunny	61.6	65.5	58.0
25-Sep-07	11:35	Cloudy	53.2	55.0	47.5
		Average	59.9	62.8	55.3
		Minimum	53.2	55.0	47.5
		Maximum	62.6	65.5	58.0

Location N5 - No. 105 Yun Shue Wan Main Street					
Date	Time	Weather	dB (A) (30-min)		
			L_{eq}	L_{10}	L_{90}
3-Sep-07	13:40	Sunny	60.8	62.0	55.5
12-Sep-07	13:00	Sunny	56.3	59.0	51.0
17-Sep-07	13:40	Sunny	60.6	63.5	56.0
25-Sep-07	13:00	Cloudy	52.7	54.0	47.5
		Average	58.7	60.9	53.7
		Minimum	52.7	54.0	47.5
		Maximum	60.8	63.5	56.0

Noise Levels





Title: Contract No. CV/2004/03 Maintenance and Repairs to Franchised and Licensed Ferry Piers (2005 - 2008) Construction of Yung Shue Wan Helipad - Works Order No. YSWH/01/03 Graphical Presentation of Construction Noise Monitoring Results	Scale: N.T.S Date: Sep 07	Project No.: MA7018 Appendix: E	CINOTECH

APPENDIX F
WATER QUALITY MONITORING RESULTS AND GRAPHICAL PRESENTATION

Water Quality Monitoring Results at C1 - Mid-Ebb Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Water Temperature (°C)		Ambient Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
3-Sep-07	Sunny	Calm	16:12	Surface	1	27.9	27.9	26.6	26.6	6.6	6.7	29.1	29.1	108.2	103.4	7.3	7.3	7.4	3.5	3.5	4.4	13.0	12.5	11.0
						27.9		26.6		6.7		29.1		98.6		7.3			3.4			12.0		
				Middle	3	27.7	27.7	26.6	26.6	6.5	6.5	29.4	29.4	109.1	108.8	7.3	7.4		3.9	4.0		11.0	11.0	
						27.7		26.6		6.5		29.4		108.5		7.4			4.1			11.0		
				Bottom	5	28.4	28.4	26.6	26.6	6.5	6.5	30.7	30.7	108.7	109.3	7.4	7.4	7.4	5.7	5.7		9.0	9.5	
						28.4		26.6		6.4		30.7		109.8		7.4			5.6			10.0		
5-Sep-07	Sunny	Calm	08:01	Surface	1	27.9	28.4	29.4	29.4	6.5	6.5	29.5	29.6	90.6	93.1	8.5	8.6	8.7	5.6	5.4	5.8	6.0	6.0	13.2
						28.9		29.4		6.4		29.6		95.5		8.7			5.1			6.0		
				Middle	3	28.8	28.4	29.4	29.4	6.3	6.3	28.7	28.7	96.3	94.2	8.8	8.7		5.1	5.3		11.0	11.0	
						27.9		29.4		6.3		28.7		92.1		8.5			5.5			11.0		
				Bottom	5	27.7	28.3	29.4	29.4	6.4	6.4	28.7	28.7	89.9	89.8	8.0	8.2	8.2	6.6	6.7		23.0	22.5	
						28.8		29.4		6.3		28.7		89.6		8.3			6.7			22.0		
7-Sep-07	Sunny	Calm	09:11	Surface	1	26.8	26.8	27.5	27.5	6.5	6.6	28.9	28.9	78.5	78.4	5.3	5.3	5.3	8.2	8.1	10.8	39.0	39.0	37.8
						26.8		27.5		6.6		28.9		78.2		5.3			7.9			39.0		
				Middle	3	26.8	26.9	27.5	27.5	6.4	6.4	29.1	29.3	77.7	76.4	5.3	5.2		9.3	9.3		48.0	48.0	
						26.9		27.5		6.4		29.5		75.0		5.1			9.3			48.0		
				Bottom	5	26.9	26.9	27.5	27.5	6.6	6.6	29.8	29.7	69.1	69.5	4.7	4.7	4.7	15.4	14.9		27.0	26.5	
						26.9		27.5		6.6		29.6		69.8		4.7			14.3			26.0		
10-Sep-07	Sunny	Calm	11:41	Surface	1	24.4	24.5	27.9	27.9	6.7	6.7	27.6	27.7	71.7	71.7	5.3	5.3	5.3	9.3	9.3	10.0	8.0	8.0	17.7
						24.5		27.9		6.7		27.7		71.7		5.3			9.2			8.0		
				Middle	3	23.5	23.5	27.9	27.9	6.6	6.6	29.6	29.7	71.6	71.7	5.3	5.3		10.5	10.5		25.0	24.5	
						23.5		27.9		6.6		29.7		71.7		5.3			10.4			24.0		
				Bottom	5	23.2	23.2	27.9	27.9	6.7	6.7	30.1	30.1	72.5	72.7	5.4	5.4	5.4	10.1	10.3		21.0	20.5	
						23.1		27.9		6.7		30.1		72.9		5.4			10.4			20.0		
17-Sep-07	Sunny	Calm	15:02	Surface	1	26.7	26.7	27.7	27.7	7.6	7.6	29.5	29.5	73.5	73.4	5.3	5.3	5.2	4.1	4.0	6.7	11.0	11.0	14.3
						26.7		27.7		7.6		29.4		73.2		5.2			3.8			11.0		
				Middle	3	26.7	26.8	27.7	27.7	7.3	7.3	29.7	29.9	72.7	71.4	5.2	5.1		5.2	5.3		18.0	18.0	
						26.8		27.7		7.3		30.0		70.0		5.0			5.3			18.0		
				Bottom	5	26.8	26.8	27.7	27.7	7.5	7.5	30.3	30.3	64.1	64.5	4.6	4.6	4.6	11.3	10.8		14.0	14.0	
						26.8		27.7		7.4		30.2		64.8		4.6			10.2			14.0		
25-Sep-07	Cloudy	Calm	10:57	Surface	1	27.4	27.4	26.2	26.2	7.6	7.6	29.6	29.6	75.1	75.0	5.4	5.4	5.4	3.7	3.7	4.4	21.0	21.0	21.2
						27.3		26.2		7.6		29.6		74.8		5.4			3.6			21.0		
				Middle	3	27.2	27.2	26.2	26.2	7.3	7.3	29.8	29.8	74.4	74.4	5.3	5.3		4.9	4.9		22.0	21.5	
						27.2		26.2		7.3		29.8		74.4		5.2			4.8			21.0		
				Bottom	5	26.5	26.5	26.2	26.2	7.5	7.5	29.9	29.9	74.4	74.5	5.1	5.1	5.1	4.5	4.7		21.0	21.0	
						26.5		26.2		7.5		29.9		74.5		5.1			4.8			21.0		

Remarks: The reporting limit for laboratory analysis of suspended solids is 2.5 mg/L. For the results below the reporting limit, the SS level will be taken as 2.5 mg/L.

Remarks: * DA: Depth-Averaged
** Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
*** Cancelled due to Thunderstorm Warning

Water Quality Monitoring Results at C1 - Mid-Flood Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Water Temperature (°C)		Ambient Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
3-Sep-07	Sunny	Calm	10:42	Surface	1	27.1 27.1	27.1	28.7 28.7	28.7	6.4 6.5	6.5	29.1 29.1	29.1	111.9 111.9	111.9	8.2 8.2	8.2	8.5	4.7 4.1	4.4	4.9	15.0 14.0	14.5	12.7
				Middle	3	27.5 27.4	27.5	28.7 28.7	28.7	6.6 6.7	6.7	30.0 30.0	30.0	118.0 124.1	121.1	8.6 9.0	8.8		4.1 4.9	4.5		14.0 14.0	14.0	
				Bottom	5	26.9 26.9	26.9	28.7 28.7	28.7	6.4 6.4	6.4	30.5 30.6	30.6	119.6 119.5	119.6	8.7 8.7	8.7	8.7	5.7 5.9	5.8		9.0 10.0	9.5	
5-Sep-07	Sunny	Calm	16:02	Surface	1	27.8 27.9	27.9	28.6 28.6	28.6	6.4 6.4	6.4	29.6 29.6	29.6	89.7 90.5	90.1	6.9 7.0	7.0	7.0	4.3 4.6	4.5	5.6	9.0 9.0	9.0	9.3
				Middle	3	27.5 27.4	27.5	28.6 28.6	28.6	6.5 6.5	6.5	29.6 29.7	29.7	90.1 88.1	89.1	7.0 6.9	7.0		5.5 4.9	5.2		9.0 9.0	9.0	
				Bottom	5	27.4 27.4	27.4	28.6 28.6	28.6	6.4 6.4	6.4	29.7 29.7	29.7	84.7 84.6	84.7	6.6 6.6	6.6	6.6	6.7 7.6	7.2		10.0 10.0	10.0	
7-Sep-07	Sunny	Calm	16:42	Surface	1	28.3 28.3	28.3	27.2 27.2	27.2	6.3 6.4	6.4	29.5 29.6	29.6	107.1 108.1	107.6	7.1 7.1	7.1	6.8	7.3 7.6	7.5	11.0	20.0 20.0	20.0	26.0
				Middle	3	27.7 27.7	27.7	27.2 27.2	27.2	6.5 6.5	6.5	29.8 29.8	29.8	96.9 95.2	96.1	6.5 6.3	6.4		9.0 9.2	9.1		30.0 30.0	30.0	
				Bottom	5	25.9 25.9	25.9	27.2 27.2	27.2	6.4 6.4	6.4	32.5 32.6	32.6	72.3 64.5	68.4	4.9 4.4	4.7	4.7	16.6 15.9	16.3		28.0 28.0	28.0	
10-Sep-07	Sunny	Calm	17:01	Surface	1	22.5 22.5	22.5	27.0 27.0	27.0	6.4 6.5	6.5	28.0 28.0	28.0	69.6 69.6	69.6	5.1 5.1	5.1	5.1	8.2 8.4	8.3	9.2	14.0 14.0	14.0	17.7
				Middle	3	22.2 22.2	22.2	27.0 27.0	27.0	6.6 6.7	6.7	28.3 28.3	28.3	69.5 69.6	69.6	5.1 5.1	5.1		9.1 9.3	9.2		20.0 20.0	20.0	
				Bottom	5	22.2 22.2	22.2	27.0 27.0	27.0	6.4 6.3	6.4	29.4 29.4	29.4	70.4 70.8	70.6	5.2 5.2	5.2	5.2	9.9 10.2	10.1		19.0 19.0	19.0	
17-Sep-07	Sunny	Calm	09:21	Surface	1	28.2 28.2	28.2	28.0 28.0	28.0	7.4 7.5	7.5	30.0 30.1	30.1	102.1 103.1	102.6	7.1 7.1	7.1	6.8	3.2 3.5	3.4	6.9	14.0 14.0	14.0	13.8
				Middle	3	27.6 27.6	27.6	28.0 28.0	28.0	7.5 7.6	7.6	30.3 30.3	30.3	91.9 90.2	91.1	6.4 6.3	6.4		4.9 5.1	5.0		11.0 12.0	11.5	
				Bottom	5	25.8 25.7	25.8	28.0 28.0	28.0	7.4 7.4	7.4	33.0 33.1	33.1	67.3 59.5	63.4	4.8 4.3	4.6	4.6	12.5 11.8	12.2		16.0 16.0	16.0	
25-Sep-07	Cloudy	Calm	17:20	Surface	1	25.4 25.5	25.5	25.7 25.7	25.7	7.3 7.4	7.4	29.7 29.7	29.7	76.1 75.3	75.7	5.9 5.9	5.9	5.9	2.6 2.8	2.7	3.6	22.0 21.0	21.5	22.5
				Middle	3	26.8 26.8	26.8	25.7 25.7	25.7	7.5 7.5	7.5	29.8 29.8	29.8	75.3 75.5	75.4	5.8 5.8	5.8		3.5 3.7	3.6		22.0 21.0	21.5	
				Bottom	5	25.7 25.6	25.7	25.7 25.7	25.7	7.4 7.4	7.4	29.7 29.7	29.7	74.8 74.9	74.9	5.8 6.0	5.9	5.9	4.3 4.6	4.5		24.0 25.0	24.5	

Remarks: The reporting limit for laboratory analysis of suspended solids is 2.5 mg/L. For the results below the reporting limit, the SS level will be taken as 2.5 mg/L.

Remarks: * DA: Depth-Averaged
** Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
*** Cancelled due to Thunderstorm Warning

Water Quality Monitoring Results at M1 - Mid-Ebb Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Water Temperature (°C)		Ambient Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
3-Sep-07	Sunny	Calm	16:21	Surface	1	27.9 27.9	27.9	26.6 26.6	26.6	6.5 6.5	6.5	29.2 29.2	29.2	106.6 102.5	104.6	7.2 7.2	7.2	7.2	3.7 3.4	3.6	4.0	13.0 13.0	13.0	15.5
				Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	27.6 27.6	27.6	26.6 26.6	26.6	6.6 6.6	6.6	29.3 29.4	29.4	107.9 107.2	107.6	7.3 7.2	7.3	7.3	4.5 4.3	4.4		18.0 18.0	18.0	
5-Sep-07	Sunny	Calm	08:11	Surface	1	28.8 28.3	28.6	29.4 29.4	29.4	6.5 6.6	6.6	28.7 29.4	29.1	91.7 95.8	93.8	8.5 8.8	8.7	8.7	5.7 5.5	5.6	5.4	9.0 8.0	8.5	8.3
				Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	28.2 28.9	28.6	29.4 29.4	29.4	6.7 6.7	6.7	29.5 28.6	29.1	94.5 96.5	95.5	8.8 8.8	8.8	8.8	5.4 4.9	5.2		8.0 8.0	8.0	
7-Sep-07	Sunny	Calm	09:21	Surface	1	26.9 26.9	26.9	27.5 27.5	27.5	6.3 6.3	6.3	29.1 29.2	29.2	72.8 73.2	73.0	4.9 5.0	5.0	5.0	10.7 10.3	10.5	10.4	32.0 32.0	32.0	30.8
				Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	26.9 26.9	26.9	27.5 27.5	27.5	6.6 6.6	6.6	29.2 29.3	29.3	73.0 72.3	72.7	5.0 4.9	5.0	5.0	10.3 10.3	10.3		29.0 30.0	29.5	
10-Sep-07	Sunny	Calm	11:47	Surface	1	24.9 24.9	24.9	27.9 27.9	27.9	6.4 6.4	6.4	27.6 27.6	27.6	80.4 78.9	79.7	6.0 5.9	6.0	6.0	9.5 9.4	9.5	10.9	24.0 24.0	24.0	21.8
				Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	23.1 23.1	23.1	27.9 27.9	27.9	6.5 6.5	6.5	30.0 30.0	30.0	76.4 75.6	76.0	5.7 5.6	5.7	5.7	11.9 12.6	12.3		19.0 20.0	19.5	
17-Sep-07	Sunny	Calm	15:11	Surface	1	26.7 26.8	26.8	27.7 27.7	27.7	7.4 7.4	7.4	29.6 29.7	29.7	67.8 68.2	68.0	4.9 4.9	4.9	4.9	6.6 6.2	6.4	6.3	10.0 11.0	10.5	9.3
				Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	26.8 26.8	26.8	27.7 27.7	27.7	7.5 7.5	7.5	29.8 29.8	29.8	68.0 67.3	67.7	4.9 4.8	4.9	4.9	6.2 6.2	6.2		8.0 8.0	8.0	
25-Sep-07	Cloudy	Calm	11:03	Surface	1	26.0 26.0	26.0	26.2 26.2	26.2	7.4 7.4	7.4	29.7 29.7	29.7	71.8 71.5	71.7	5.4 5.4	5.4	5.4	3.9 3.8	3.9	5.3	20.0 20.0	20.0	21.3
				Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	25.0 25.0	25.0	26.2 26.2	26.2	7.5 7.5	7.5	29.7 29.7	29.7	70.5 70.4	70.5	5.4 5.4	5.4	5.4	6.3 7.0	6.7		22.0 23.0	22.5	

Remarks: The reporting limit for laboratory analysis of suspended solids is 2.5 mg/L. For the results below the reporting limit, the SS level will be taken as 2.5 mg/L.

Remarks: * DA: Depth-Averaged
** Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
*** Cancelled due to Thunderstorm Warning

Water Quality Monitoring Results at M1 - Mid-Flood Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Water Temperature (°C)		Ambient Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
3-Sep-07	Sunny	Calm	10:51	Surface	1	27.0 27.0	27.0	28.7 28.7	28.7	6.6 6.5	6.6	29.1 29.1	29.1	111.2 111.3	111.3	8.1 8.1	8.1	8.1	3.5 3.5	3.5	3.6	13.0 13.0	13.0	14.0
				Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	27.2 27.1	27.2	28.7 28.7	28.7	6.7 6.6	6.7	29.9 29.9	29.9	112.8 109.2	111.0	8.2 8.0	8.1	8.1	3.5 3.6	3.6		15.0 15.0	15.0	
5-Sep-07	Sunny	Calm	16:11	Surface	1	27.8 27.7	27.8	28.6 28.6	28.6	6.4 6.5	6.5	29.6 29.6	29.6	90.3 91.1	90.7	7.0 7.0	7.0	7.0	4.7 4.6	4.7	4.9	4.0 4.0	4.0	5.5
				Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	27.5 27.5	27.5	28.6 28.6	28.6	6.7 6.6	6.7	29.6 29.6	29.6	88.3 88.0	88.2	6.8 6.8	6.8	6.8	5.0 5.1	5.1		7.0 7.0	7.0	
7-Sep-07	Sunny	Calm	16:51	Surface	1	27.7 28.0	27.9	27.2 27.2	27.2	6.7 6.6	6.7	29.4 29.5	29.5	93.4 96.7	95.1	6.2 6.4	6.3	6.3	8.6 8.6	8.6	8.9	31.0 30.0	30.5	28.3
				Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	27.8 27.8	27.8	27.2 27.2	27.2	6.4 6.4	6.4	29.8 29.8	29.8	93.6 91.1	92.4	6.2 6.1	6.2	6.2	9.2 9.1	9.2		26.0 26.0	26.0	
10-Sep-07	Sunny	Calm	17:06	Surface	1	22.2 22.2	22.2	27.0 27.0	27.0	6.7 6.6	6.7	28.1 28.1	28.1	78.3 76.8	77.6	5.8 5.7	5.8	5.8	9.2 9.1	9.2	9.8	16.0 16.0	16.0	21.8
				Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	22.2 22.2	22.2	27.0 27.0	27.0	6.5 6.4	6.5	28.2 28.2	28.2	74.3 73.5	73.9	5.5 5.4	5.5	5.5	10.2 10.3	10.3		15.0 16.0	15.5	
17-Sep-07	Sunny	Calm	09:31	Surface	1	27.6 27.9	27.8	28.0 28.0	28.0	7.5 7.4	7.5	29.9 30.1	30.0	88.4 91.7	90.1	6.2 6.3	6.3	6.3	4.0 4.0	4.0	4.6	18.0 18.0	18.0	18.5
				Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	27.7 27.7	27.7	28.0 28.0	28.0	7.5 7.5	7.5	30.3 30.3	30.3	88.6 86.1	87.4	6.1 6.0	6.1	6.1	5.1 5.1	5.1		19.0 19.0	19.0	
25-Sep-07	Cloudy	Calm	17:26	Surface	1	25.6 25.6	25.6	25.7 25.7	25.7	7.6 7.5	7.6	29.8 29.8	29.8	74.9 74.7	74.8	6.0 6.0	6.0	6.0	3.6 3.5	3.6	4.2	13.0 12.0	12.5	13.3
				Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	27.7 27.7	27.7	25.7 25.7	25.7	7.4 7.4	7.4	29.8 29.8	29.8	78.2 78.3	78.3	6.0 5.9	6.0	6.0	4.6 4.7	4.7		14.0 14.0	14.0	

Remarks: The reporting limit for laboratory analysis of suspended solids is 2.5 mg/L. For the results below the reporting limit, the SS level will be taken as 2.5 mg/L.

Remarks: * DA: Depth-Averaged
** Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
*** Cancelled due to Thunderstorm Warning

Water Quality Monitoring Results at M2 - Mid-Ebb Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Water Temperature (°C)		Ambient Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
3-Sep-07	Sunny	Calm	16:32	Surface	1	27.8 27.9	27.9	26.6 26.6	26.6	6.4 6.5	6.5	29.1 29.1	29.1	104.0 106.6	105.3	7.0 7.2	7.1	7.1	3.8 3.6	3.7	3.8	5.0 5.0	5.0	6.5
				Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	27.6 27.6	27.6	26.6 26.6	26.6	6.5 6.5	6.5	29.3 29.4	29.4	107.1 105.0	106.1	7.2 7.1	7.2	7.2	3.8 4.0	3.9		8.0 8.0	8.0	
5-Sep-07	Sunny	Calm	08:22	Surface	1	28.7 28.0	28.4	29.4 29.4	29.4	6.5 6.5	6.5	28.6 28.7	28.7	97.0 97.0	97.0	8.9 8.9	8.9	8.9	5.4 5.9	5.7	5.7	8.0 8.0	8.0	8.5
				Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	28.6 28.6	28.6	29.4 29.4	29.4	6.4 6.4	6.4	29.8 29.8	29.8	87.8 89.7	88.8	7.5 7.6	7.6	7.6	5.6 5.8	5.7		9.0 9.0	9.0	
7-Sep-07	Sunny	Calm	09:32	Surface	1	26.9 26.9	26.9	27.5 27.5	27.5	6.5 6.5	6.5	28.9 28.9	28.9	71.8 72.1	72.0	4.9 4.9	4.9	4.9	8.6 8.0	8.3	9.2	35.0 35.0	35.0	26.0
				Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	26.9 26.9	26.9	27.5 27.5	27.5	6.5 6.4	6.5	29.3 29.3	29.3	69.6 68.6	69.1	4.7 4.6	4.7	4.7	10.1 10.1	10.1		17.0 17.0	17.0	
10-Sep-07	Sunny	Calm	11:53	Surface	1	24.2 24.2	24.2	27.9 27.9	27.9	6.3 6.4	6.4	28.4 28.5	28.5	75.4 75.2	75.3	5.6 5.6	5.6	5.6	8.9 8.8	8.9	10.3	27.0 27.0	27.0	20.0
				Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	23.1 23.1	23.1	27.9 27.9	27.9	6.5 6.4	6.5	30.1 30.1	30.1	81.4 81.1	81.3	6.0 6.0	6.0	6.0	11.8 11.4	11.6		13.0 13.0	13.0	
17-Sep-07	Sunny	Calm	15:22	Surface	1	26.8 26.8	26.8	27.7 27.7	27.7	7.6 7.6	7.6	29.4 29.4	29.4	66.8 67.1	67.0	4.8 4.8	4.8	4.8	4.5 3.9	4.2	5.2	17.0 16.0	16.5	14.8
				Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	26.8 26.8	26.8	27.7 27.7	27.7	7.6 7.5	7.6	29.8 29.9	29.9	64.6 63.6	64.1	4.6 4.6	4.6	4.6	6.1 6.1	6.1		13.0 13.0	13.0	
25-Sep-07	Cloudy	Calm	11:09	Surface	1	26.7 26.5	26.6	26.2 26.2	26.2	7.5 7.5	7.5	29.8 29.8	29.8	69.9 70.0	70.0	5.9 5.9	5.9	5.9	3.3 3.2	3.3	4.7	24.0 24.0	24.0	23.8
				Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	25.6 25.7	25.7	26.2 26.2	26.2	7.5 7.4	7.5	29.6 29.7	29.7	75.8 75.9	75.9	5.9 5.9	5.9	5.9	6.2 5.8	6.0		24.0 23.0	23.5	

Remarks: The reporting limit for laboratory analysis of suspended solids is 2.5 mg/L. For the results below the reporting limit, the SS level will be taken as 2.5 mg/L.

Remarks: * DA: Depth-Averaged
** Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
*** Cancelled due to Thunderstorm Warning

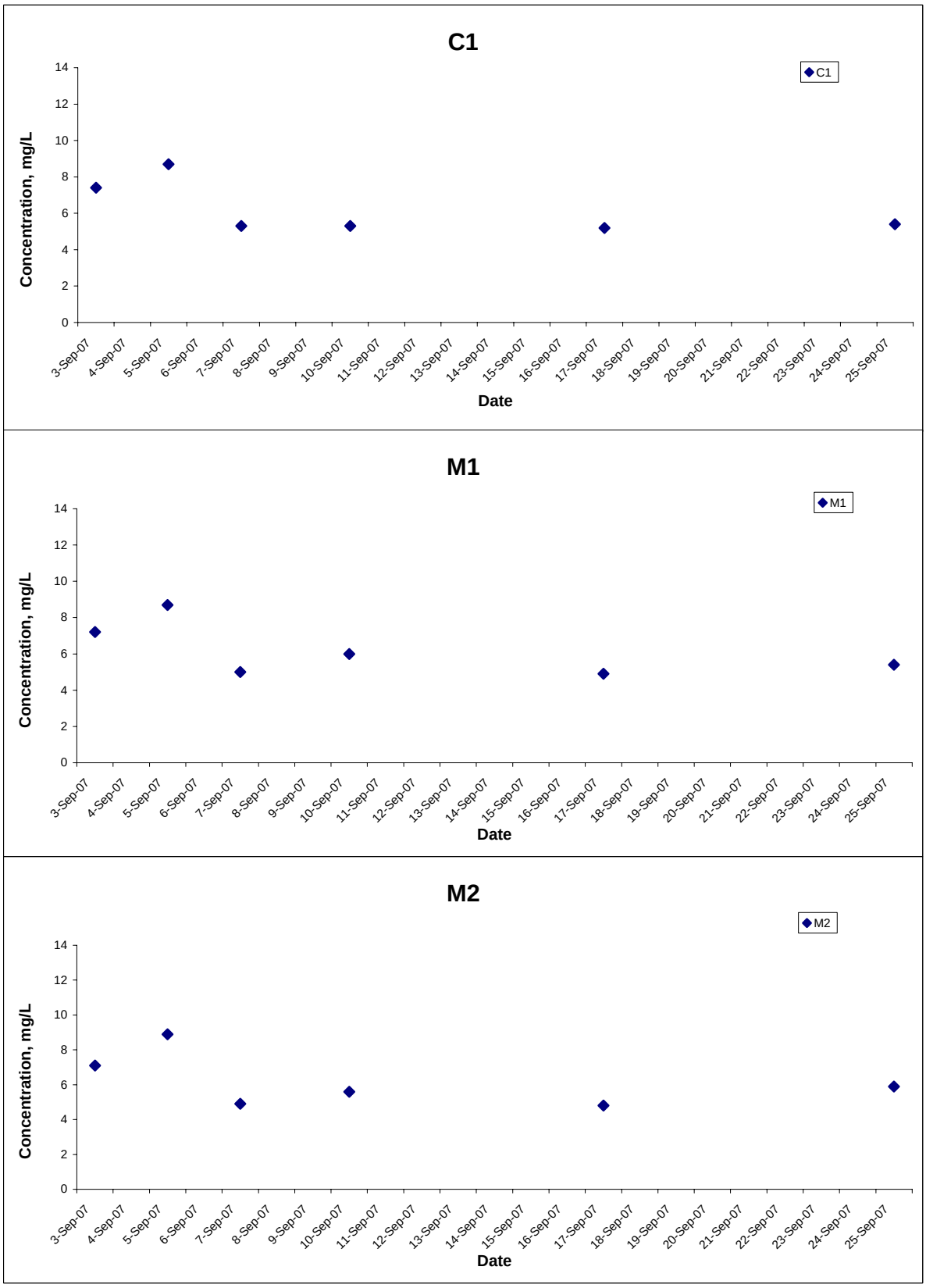
Water Quality Monitoring Results at M2 - Mid-Flood Tide

Date	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Water Temperature (°C)		Ambient Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
3-Sep-07	Sunny	Calm	11:02	Surface	1	27.0 27.0	27.0	28.7 28.7	28.7	6.4 6.5	6.5	29.1 29.1	29.1	117.8 118.0	117.9	8.6 8.6	8.6	8.6	3.6 3.5	3.6	3.6	9.0 9.0	9.0	10.5
				Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	27.0 26.9	27.0	28.7 28.7	28.7	6.7 6.7	6.7	29.6 29.6	29.6	115.5 114.3	114.9	8.4 8.4	8.4	8.4	3.5 3.4	3.5		12.0 12.0	12.0	
5-Sep-07	Sunny	Calm	16:22	Surface	1	27.8 27.8	27.8	28.6 28.6	28.6	6.3 6.3	6.3	29.5 29.5	29.5	91.0 92.3	91.7	7.0 7.1	7.1	7.1	4.6 4.4	4.5	4.9	13.0 12.0	12.5	9.5
				Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	27.5 27.5	27.5	28.6 28.6	28.6	6.6 6.6	6.6	29.6 29.7	29.7	91.8 89.3	90.6	7.1 6.9	7.0	7.0	4.8 5.6	5.2		6.0 7.0	6.5	
7-Sep-07	Sunny	Calm	17:02	Surface	1	28.1 28.0	28.1	27.2 27.2	27.2	6.7 6.7	6.7	29.5 29.5	29.5	95.8 96.8	96.3	6.4 6.4	6.4	6.4	7.4 7.4	7.4	10.0	21.0 21.0	21.0	18.3
				Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	27.5 27.0	27.3	27.2 27.2	27.2	6.6 6.5	6.6	30.3 30.7	30.5	95.4 84.5	90.0	6.4 5.7	6.1	6.1	12.5 12.5	12.5		15.0 16.0	15.5	
10-Sep-07	Sunny	Calm	17:13	Surface	1	22.3 22.3	22.3	27.0 27.0	27.0	6.6 6.6	6.6	28.6 28.7	28.7	73.3 73.1	73.2	5.4 5.4	5.4	5.4	11.0 11.1	11.1	11.0	32.0 32.0	32.0	20.0
				Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	22.2 22.2	22.2	27.0 27.0	27.0	6.7 6.7	6.7	28.0 28.0	28.0	79.3 79.0	79.2	5.8 5.8	5.8	5.8	10.9 10.8	10.9		19.0 20.0	19.5	
17-Sep-07	Sunny	Calm	09:42	Surface	1	28.0 27.9	28.0	28.0 28.0	28.0	7.5 7.6	7.6	30.0 30.2	30.1	90.8 91.8	91.3	6.3 6.4	6.4	6.4	3.3 3.3	3.3	5.4	22.0 22.0	22.0	20.0
				Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	27.4 26.9	27.2	28.0 28.0	28.0	7.7 7.7	7.7	30.8 31.2	31.0	90.4 79.5	85.0	6.3 5.6	6.0	6.0	7.3 7.4	7.4		18.0 18.0	18.0	
25-Sep-07	Cloudy	Calm	17:32	Surface	1	26.8 26.7	26.8	25.7 25.7	25.7	7.6 7.6	7.6	29.7 29.7	29.7	76.3 76.1	76.2	5.9 5.9	5.9	5.9	5.4 5.1	5.3	5.3	16.0 16.0	16.0	17.0
				Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	25.1 25.1	25.1	25.7 25.7	25.7	7.7 7.6	7.7	29.7 29.7	29.7	75.8 75.7	75.8	7.4 6.4	6.9	6.9	5.3 5.2	5.3		18.0 18.0	18.0	

Remarks: The reporting limit for laboratory analysis of suspended solids is 2.5 mg/L. For the results below the reporting limit, the SS level will be taken as 2.5 mg/L.

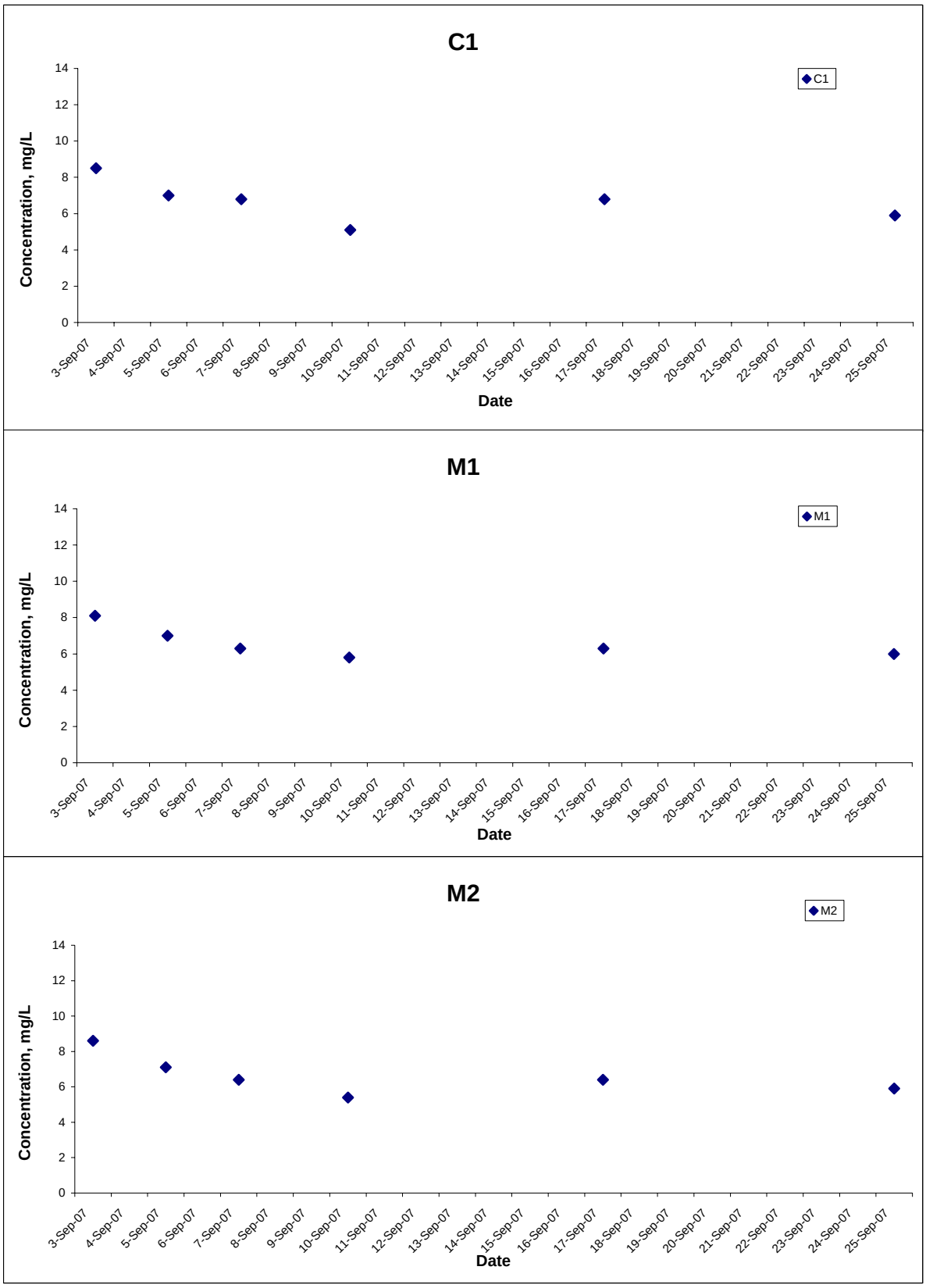
Remarks: * DA: Depth-Averaged
** Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher
*** Cancelled due to Thunderstorm Warning

Dissolved Oxygen (Surface & Middle) at Mid-Ebb Tide



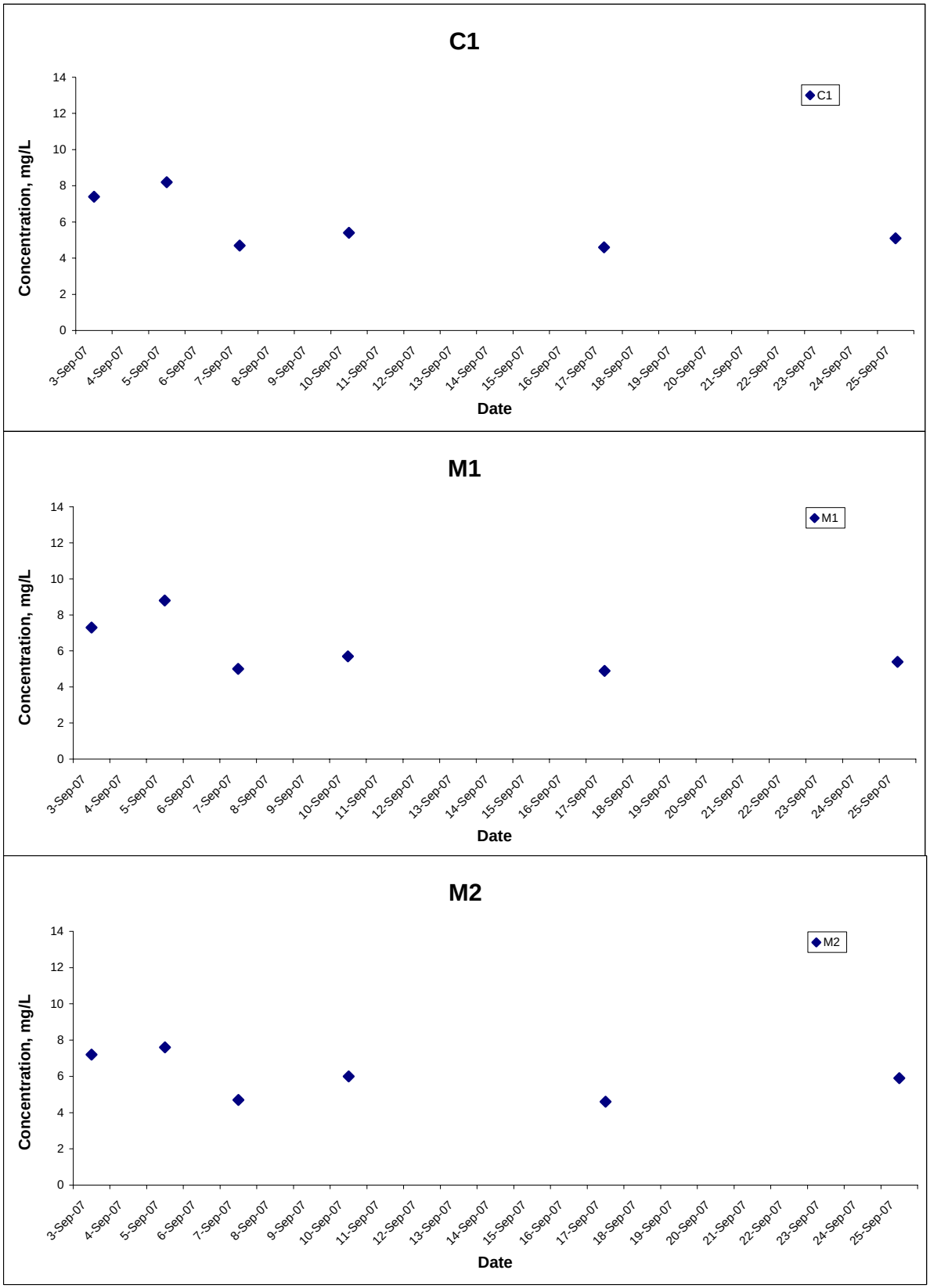
Title	Contract No. CV/2004/03 Maintenance and Repairs to Franchised and Licensed Ferry Piers (2005 - 2008) Construction of Yung Shue Wan Helipad - Works Order No. YSWH/01/03 Graphical Presentation of Water Quality Monitoring Results	Scale: N.T.S Date: Sep 07	Project No.: MA7018 Appendix: F	CINOTECH

Dissolved Oxygen (Surface & Middle) at Mid-Flood Tide



Title	Contract No. CV/2004/03 Maintenance and Repairs to Franchised and Licensed Ferry Piers (2005 - 2008) Construction of Yung Shue Wan Helipad - Works Order No. YSWH/01/03 Graphical Presentation of Water Quality Monitoring Results	Scale: N.T.S Date: Sep 07	Project No.: MA7018 Appendix: F	CINOTECH

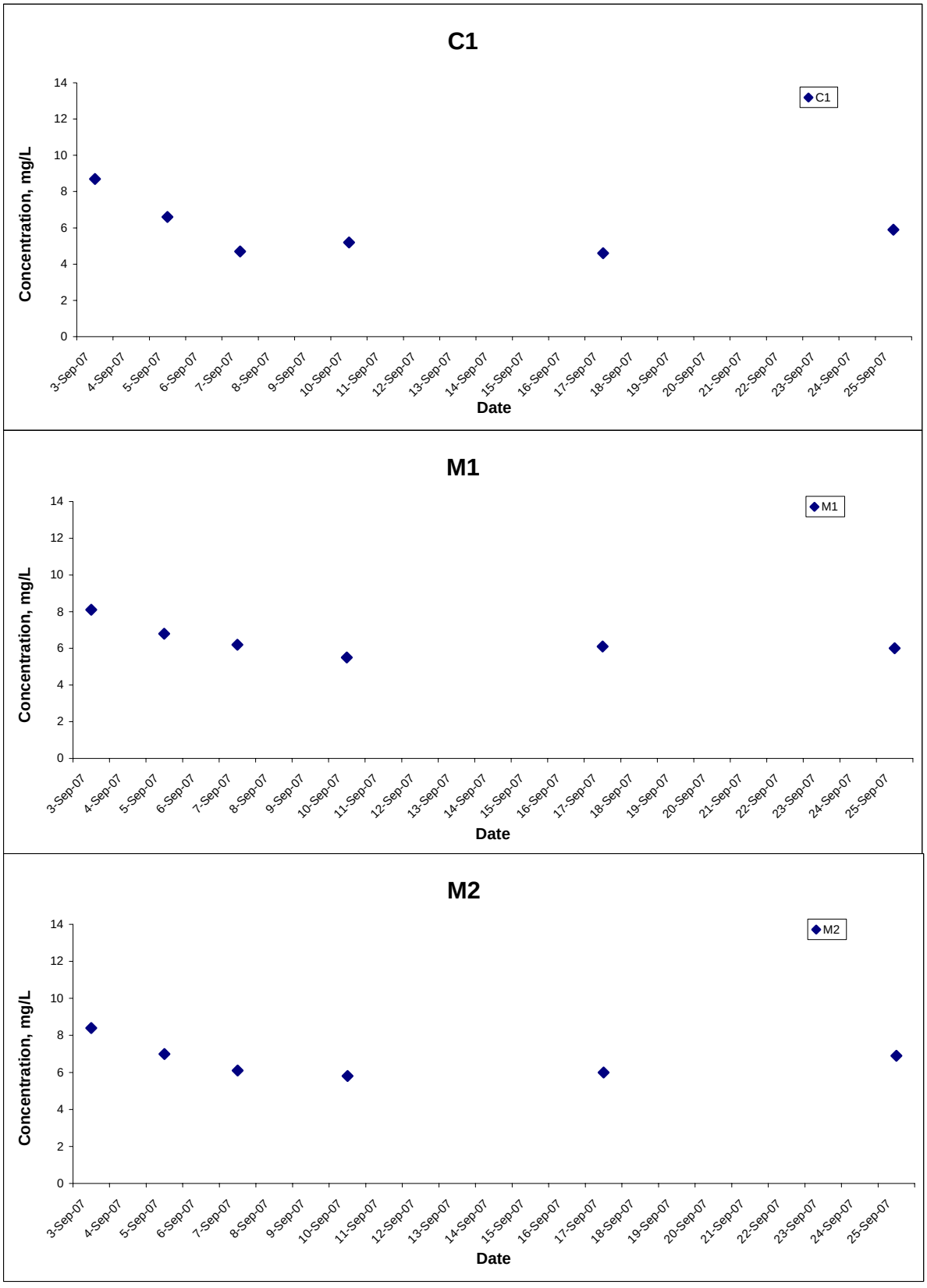
Dissolved Oxygen (Bottom) at Mid-Ebb Tide



Title		Scale	Project No.
	Contract No. CV/2004/03 Maintenance and Repairs to Franchised and Licensed Ferry Piers (2005 - 2008) Construction of Yung Shue Wan Helipad - Works Order No. YSWH/01/03	N.T.S	MA7018
	Graphical Presentation of Water Quality Monitoring Results	Date: Sep 07	Appendix: F

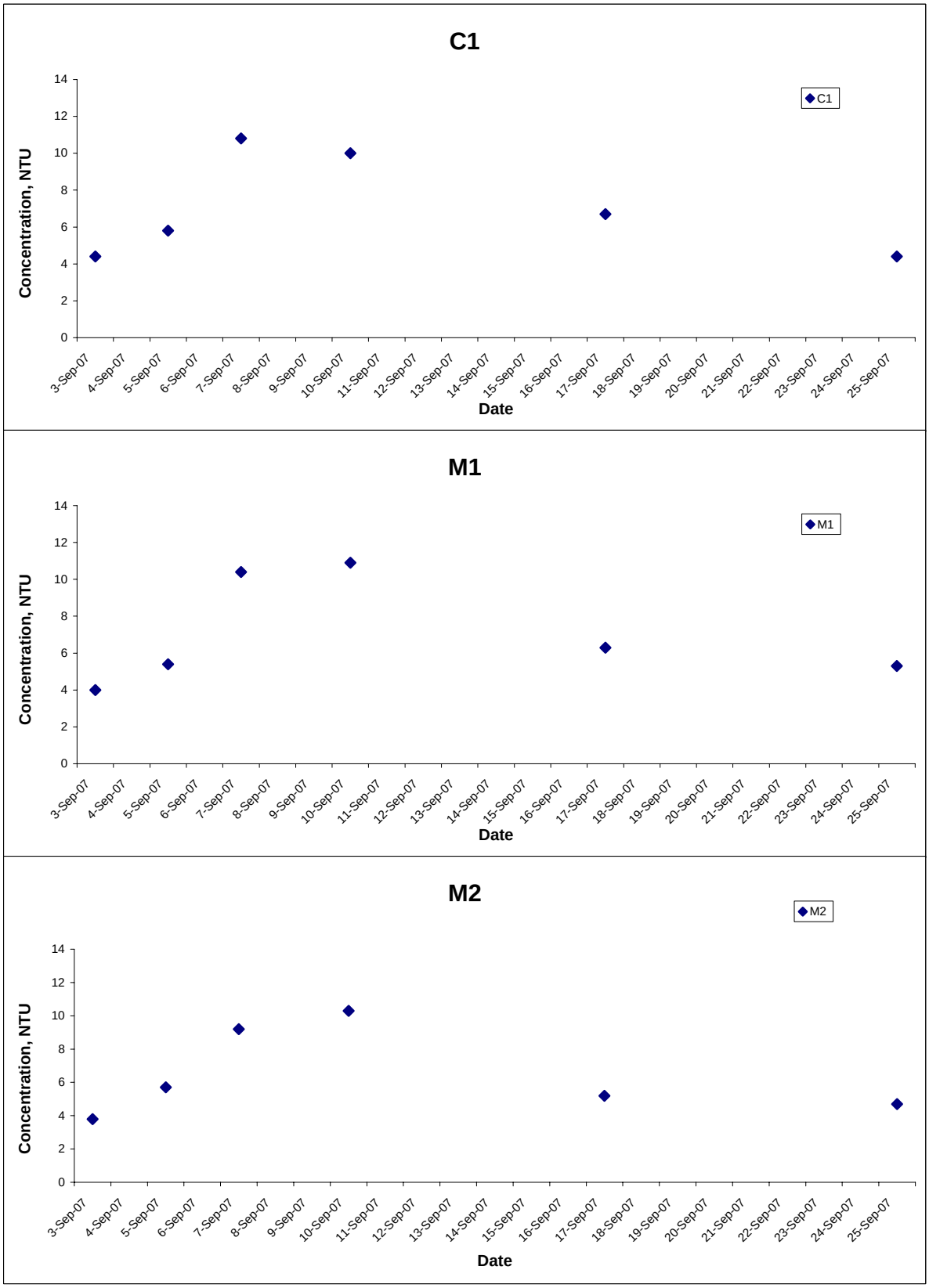
CINOTECH

Dissolved Oxygen (Bottom) at Mid-Flood Tide



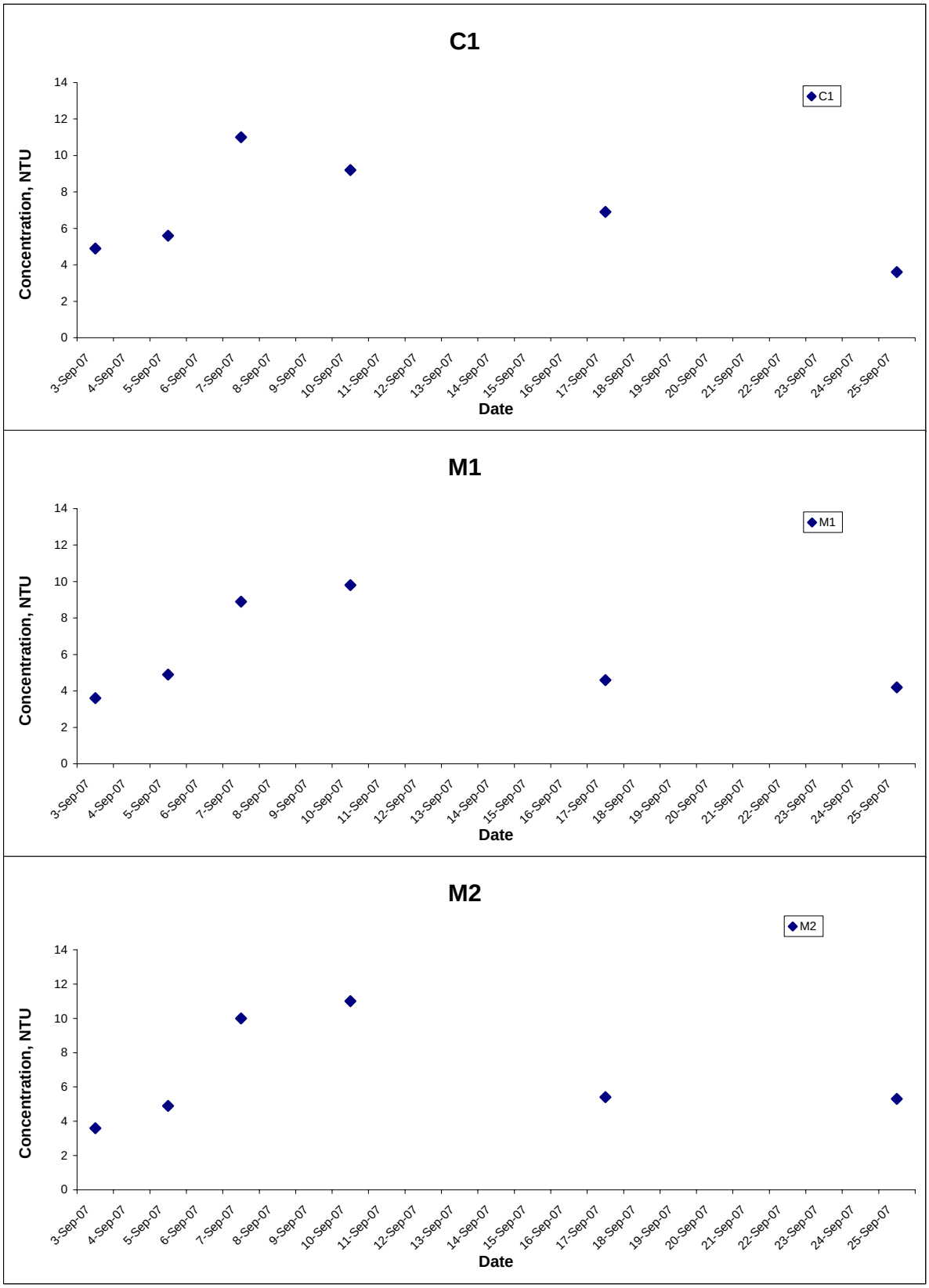
Title		Scale	Project No.
	Contract No. CV/2004/03 Maintenance and Repairs to Franchised and Licensed Ferry Piers (2005 - 2008) Construction of Yung Shue Wan Helipad - Works Order No. YSWH/01/03	N.T.S	MA7018
	Graphical Presentation of Water Quality Monitoring Results	Date: Sep 07	Appendix: F

Turbidity (Depth-averaged) at Mid-Ebb Tide



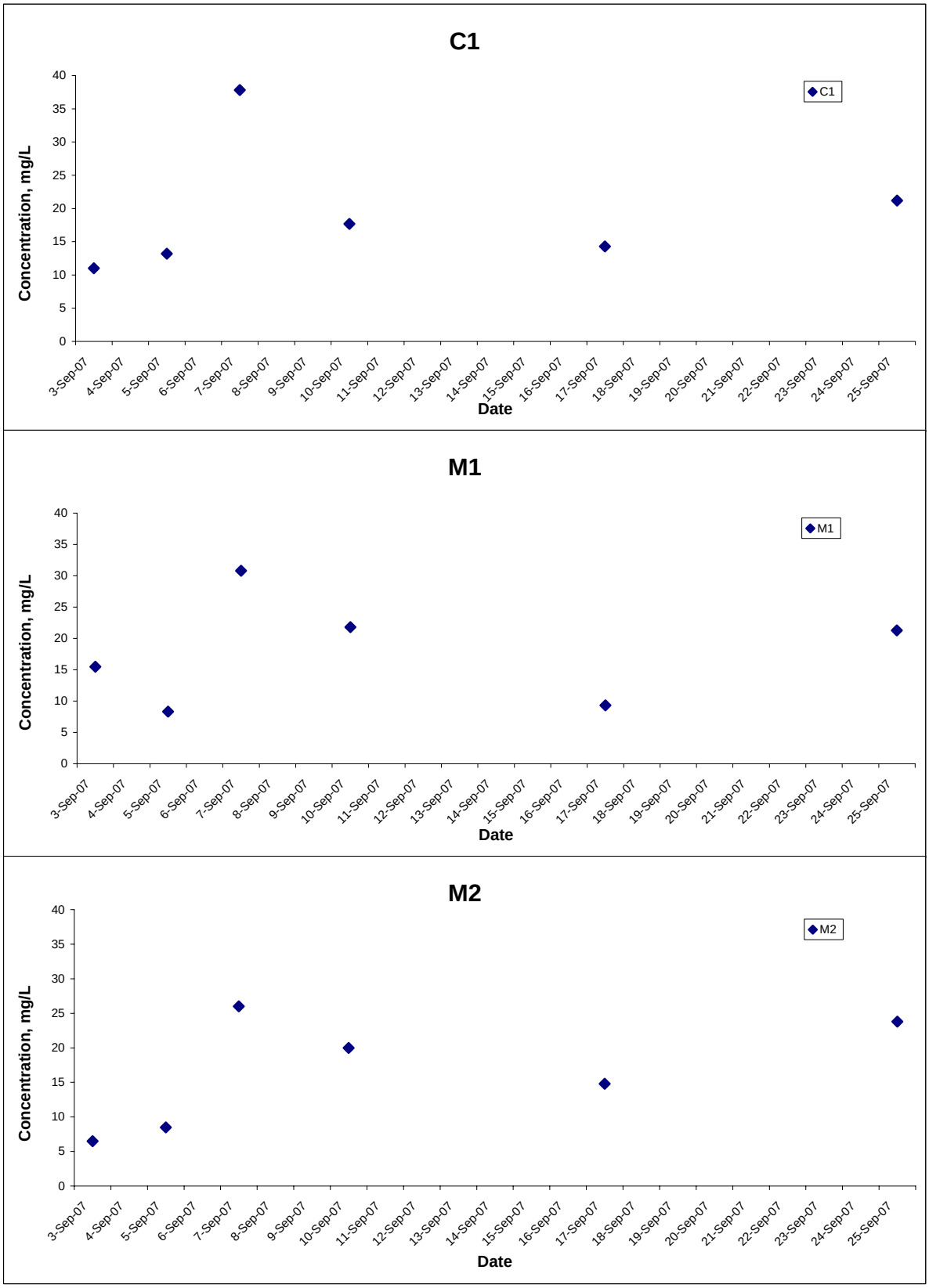
Title	Contract No. CV/2004/03 Maintenance and Repairs to Franchised and Licensed Ferry Piers (2005 - 2008) Construction of Yung Shue Wan Helipad - Works Order No. YSWH/01/03 Graphical Presentation of Water Quality Monitoring Results	Scale: N.T.S Date: Sep 07	Project No.: MA7018 Appendix: F	CINOTECH

Turbidity (Depth-averaged) at Mid-Flood Tide



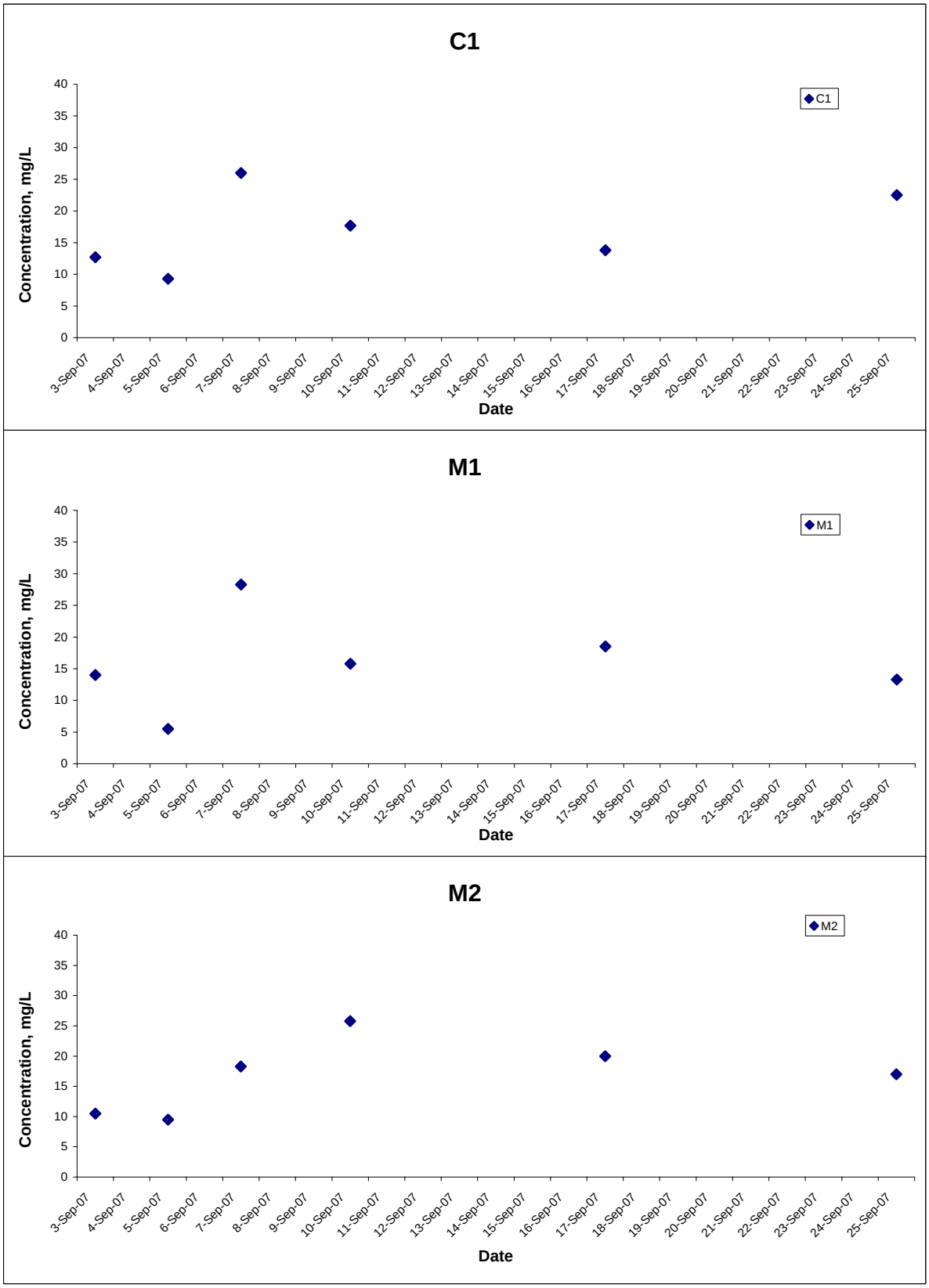
Title	Contract No. CV/2004/03 Maintenance and Repairs to Franchised and Licensed Ferry Piers (2005 - 2008) Construction of Yung Shue Wan Helipad - Works Order No. YSWH/01/03 Graphical Presentation of Water Quality Monitoring Results	Scale: N.T.S Date: Sep 07	Project No.: MA7018 Appendix: F	CINOTECH

Suspended Solids (Depth-averaged) at Mid-Ebb Tide



Title	Contract No. CV/2004/03 Maintenance and Repairs to Franchised and Licensed Ferry Piers (2005 - 2008) Construction of Yung Shue Wan Helipad - Works Order No. YSWH/01/03 Graphical Presentation of Water Quality Monitoring Results	Scale: N.T.S Date: Sep 07	Project No.: MA7018 Appendix: F	CINOTECH

Suspended Solids (Depth-averaged) at Mid-Flood Tide



Title	Contract No. CV/2004/03 Maintenance and Repairs to Franchised and Licensed Ferry Piers (2005 - 2008) Construction of Yung Shue Wan Helipad - Works Order No. YSWH/01/03 Graphical Presentation of Water Quality Monitoring Results	Scale: N.T.S Date: Sep 07	Project No.: MA7018 Appendix: F	CINOTECH

APPENDIX G
SUMMARY OF EXCEEDANCE

Contract No. CV/2004/03 – Maintenance and Repairs to Franchised and Licensed Ferry Piers (2005-2008)
Construction of Yung Shue Wan Helipad – Works Order No. YSWH/01/03

Exceedance Report

(A) Exceedance Report for Construction Noise
(NIL in the reporting month)

(B) Exceedance Report for water quality monitoring
(Six in the reporting month)

Maintenance and Repairs to Franchised and Licensed Ferry Piers (2005-2008)
Construction of Yung Shue Wan Helipad – Works Order No. YSWH/01/03

Impact Monitoring - Exceedance Report

Report No. YSW/70910_ss

(a) Statement of exceedances
• Two exceedance of Action Level of SS was recorded at M1 during mid-ebb tide and M2 during mid-flood tide. • Cases showing exceedance are indicated by the shaded cells on the attached data sheets.
(b) Cause of exceedances
• According to our investigations, such exceedance was due to natural fluctuation but not due to the Project because of the following reasons: 1. The exceeded SS data (21.8mg/L & 25.8mg/L) is well within the fluctuation of SS data (min: 4.2mg/L & max: 62mg/L) obtained during baseline monitoring period.
(c) Action required under the action plan N/A
(d) Action taken under the action plan N/A
(e) ET's conclusions and recommendations for mitigation N/A
(f) Contractor's actions to implement the mitigation N/A
(g) Contractor's comment N/A

Water Quality Monitoring Results on 10 September 2007 at Mid-Ebb Tide

Location	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Water Temperature (°C)		Ambient Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
C1	Sunny	Calm	11:41	Surface	1	24.4 24.5	24.5	27.9 27.9	27.9	6.7 6.7	6.7	27.6 27.7	27.7	71.7 71.7	71.7	5.3 5.3	5.3	5.3	9.3 9.2	9.3	10.0	8.0 8.0	8.0	17.7
				Middle	3	23.5 23.5	23.5	27.9 27.9	27.9	6.6 6.6	6.6	29.6 29.7	29.7	71.6 71.7	71.7	5.3 5.3	5.3		10.5 10.4	10.5		25.0 24.0	24.5	
				Bottom	5	23.2 23.1	23.2	27.9 27.9	27.9	6.7 6.7	6.7	30.1 30.1	30.1	72.5 72.9	72.7	5.4 5.4	5.4	5.4	10.1 10.4	10.3		21.0 20.0	20.5	
M1	Sunny	Calm	11:47	Surface	1	24.9 24.9	24.9	27.9 27.9	27.9	6.4 6.4	6.4	27.6 27.6	27.6	80.4 78.9	79.7	6.0 5.9	6.0	6.0	9.5 9.4	9.5	10.9	24.0 24.0	24.0	21.8
				Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	23.1 23.1	23.1	27.9 27.9	27.9	6.5 6.5	6.5	30.0 30.0	30.0	76.4 75.6	76.0	5.7 5.6	5.7	5.7	11.9 12.6	12.3		19.0 20.0	19.5	
M2	Sunny	Calm	11:53	Surface	1	24.2 24.2	24.2	27.9 27.9	27.9	6.3 6.4	6.4	28.4 28.5	28.5	75.4 75.2	75.3	5.6 5.6	5.6	5.6	8.9 8.8	8.9	10.3	27.0 27.0	27.0	20.0
				Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	23.1 23.1	23.1	27.9 27.9	27.9	6.5 6.4	6.5	30.1 30.1	30.1	81.4 81.1	81.3	6.0 6.0	6.0	6.0	11.8 11.4	11.6		13.0 13.0	13.0	

Water Quality Monitoring Results on 10 September 2007 at Mid-Flood Tide

Location	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Water Temperature (°C)		Ambient Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
C1	Sunny	Calm	17:01	Surface	1	22.5 22.5	22.5	27.0 27.0	27.0	6.4 6.5	6.5	28.0 28.0	28.0	69.6 69.6	69.6	5.1 5.1	5.1	5.1	8.2 8.4	8.3	9.2	14.0 14.0	14.0	17.7
				Middle	3	22.2 22.2	22.2	27.0 27.0	27.0	6.6 6.7	6.7	28.3 28.3	28.3	69.5 69.6	69.6	5.1 5.1	5.1		9.1 9.3	9.2		20.0 20.0	20.0	
				Bottom	5	22.2 22.2	22.2	27.0 27.0	27.0	6.4 6.3	6.4	29.4 29.4	29.4	70.4 70.8	70.6	5.2 5.2	5.2	5.2	9.9 10.2	10.1		19.0 19.0	19.0	
M1	Sunny	Calm	17:06	Surface	1	22.2 22.2	22.2	27.0 27.0	27.0	6.7 6.6	6.7	28.1 28.1	28.1	78.3 76.8	77.6	5.8 5.7	5.8	5.8	9.2 9.1	9.2	9.8	16.0 16.0	16.0	15.8
				Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	22.2 22.2	22.2	27.0 27.0	27.0	6.5 6.4	6.5	28.2 28.2	28.2	74.3 73.5	73.9	5.5 5.4	5.5	5.5	10.2 10.3	10.3		15.0 16.0	15.5	
M2	Sunny	Calm	17:13	Surface	1	22.3 22.3	22.3	27.0 27.0	27.0	6.6 6.6	6.6	28.6 28.7	28.7	73.3 73.1	73.2	5.4 5.4	5.4	5.4	11.0 11.1	11.1	11.0	32.0 32.0	32.0	25.8
				Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	22.2 22.2	22.2	27.0 27.0	27.0	6.7 6.7	6.7	28.0 28.0	28.0	79.3 79.0	79.2	5.8 5.8	5.8	5.8	10.9 10.8	10.9		19.0 20.0	19.5	

Remarks: The reporting limit for laboratory analysis of suspended solids is 2.5 mg/L. For the results below the reporting limit, the SS level will be taken as 2.5 mg/L.

Remarks: * DA: Depth-Averaged
**** Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher**
***** Cancelled due to Thunderstorm Warning**

Contract No. CV/2004/03 – Maintenance and Repairs to Franchised and Licensed Ferry Piers (2005-2008) – Construction of Yung Shue Wan Helipad – Works Order No. YSWH/01/03

Impact Monitoring - Exceedance Report

Report No. YSWH/70917_ss

(a) Statement of exceedances
• Two exceedances of Action Level of SS were recorded at M1 and M2 during mid-flood tide. • Cases showing exceedance are indicated by the shaded cells on the attached data sheets.
(b) Cause of exceedances
• According to our investigations, such exceedances were due to natural fluctuation but not due to the Project because of the following reasons: 1. No marine construction activity was carried out on site.
(c) Action required under the action plan N/A
(d) Action taken under the action plan N/A
(e) ET's conclusions and recommendations for mitigation N/A
(f) Contractor's actions to implement the mitigation N/A
(g) Contractor's comment N/A

Parameter	Action	Limit
SS (mg/L)	30.8 of 120% of upstream control station's SS at the same tide of the same day	40.6 of 130% of SS reading at the upstream control station at the same tide of same day and specific sensitive receiver water quality requirements

ETL Signature: _____ Date: 19 September 2007

Reviewed by
IEC Signature: _____ Date: _____

Water Quality Monitoring Results on 17 September 2007 at Mid-Ebb Tide

Location	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Water Temperature (°C)		Ambient Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
C1	Sunny	Calm	15:02	Surface	1	26.7 26.7	26.7	27.7 27.7	27.7	7.6 7.6	7.6	29.5 29.4	29.5	73.5 73.2	73.4	5.3 5.2	5.3	5.2	4.1 3.8	4.0	6.7	11.0 11.0	11.0	14.3
				Middle	3	26.7 26.8	26.8	27.7 27.7	27.7	7.3 7.3	7.3	29.7 30.0	29.9	72.7 70.0	71.4	5.2 5.0	5.1		5.2 5.3	5.3		18.0 18.0	18.0	
				Bottom	5	26.8 26.8	26.8	27.7 27.7	27.7	7.5 7.4	7.5	30.3 30.2	30.3	64.1 64.8	64.5	4.6 4.6	4.6	4.6	11.3 10.2	10.8		14.0 14.0	14.0	
M1	Sunny	Calm	15:11	Surface	1	26.7 26.8	26.8	27.7 27.7	27.7	7.4 7.4	7.4	29.6 29.7	29.7	67.8 68.2	68.0	4.9 4.9	4.9	4.9	6.6 6.2	6.4	6.3	10.0 11.0	10.5	9.3
				Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	26.8 26.8	26.8	27.7 27.7	27.7	7.5 7.5	7.5	29.8 29.8	29.8	68.0 67.3	67.7	4.9 4.8	4.9	4.9	6.2 6.2	6.2		8.0 8.0	8.0	
M2	Sunny	Calm	15:22	Surface	1	26.8 26.8	26.8	27.7 27.7	27.7	7.6 7.6	7.6	29.4 29.4	29.4	66.8 67.1	67.0	4.8 4.8	4.8	4.8	4.5 3.9	4.2	5.2	17.0 16.0	16.5	14.8
				Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	26.8 26.8	26.8	27.7 27.7	27.7	7.6 7.5	7.6	29.8 29.9	29.9	64.6 63.6	64.1	4.6 4.6	4.6	4.6	6.1 6.1	6.1		13.0 13.0	13.0	

Water Quality Monitoring Results on 17 September 2007 at Mid-Flood Tide

Location	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Water Temperature (°C)		Ambient Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
C1	Sunny	Calm	09:21	Surface	1	28.2 28.2	28.2	28.0 28.0	28.0	7.4 7.5	7.5	30.0 30.1	30.1	102.1 103.1	102.6	7.1 7.1	7.1	6.8	3.2 3.5	3.4	6.9	14.0 14.0	14.0	13.8
				Middle	3	27.6 27.6	27.6	28.0 28.0	28.0	7.5 7.6	7.6	30.3 30.3	30.3	91.9 90.2	91.1	6.4 6.3	6.4		4.9 5.1	5.0		11.0 12.0	11.5	
				Bottom	5	25.8 25.7	25.8	28.0 28.0	28.0	7.4 7.4	7.4	33.0 33.1	33.1	67.3 59.5	63.4	4.8 4.3	4.6	4.6	12.5 11.8	12.2		16.0 16.0	16.0	
M1	Sunny	Calm	09:31	Surface	1	27.6 27.9	27.8	28.0 28.0	28.0	7.5 7.4	7.5	29.9 30.1	30.0	88.4 91.7	90.1	6.2 6.3	6.3	6.3	4.0 4.0	4.0	4.6	18.0 18.0	18.0	18.5
				Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	27.7 27.7	27.7	28.0 28.0	28.0	7.5 7.5	7.5	30.3 30.3	30.3	88.6 86.1	87.4	6.1 6.0	6.1	6.1	5.1 5.1	5.1		19.0 19.0	19.0	
M2	Sunny	Calm	09:42	Surface	1	28.0 27.9	28.0	28.0 28.0	28.0	7.5 7.6	7.6	30.0 30.2	30.1	90.8 91.8	91.3	6.3 6.4	6.4	6.4	3.3 3.3	3.3	5.4	22.0 22.0	22.0	20.0
				Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	27.4 26.9	27.2	28.0 28.0	28.0	7.7 7.7	7.7	30.8 31.2	31.0	90.4 79.5	85.0	6.3 5.6	6.0	6.0	7.3 7.4	7.4		18.0 18.0	18.0	

Remarks: The reporting limit for laboratory analysis of suspended solids is 2.5 mg/L. For the results below the reporting limit, the SS level will be taken as 2.5 mg/L.

Remarks: * DA: Depth-Averaged
**** Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher**
***** Cancelled due to Thunderstorm Warning**

Contract No. CV/2004/03 – Maintenance and Repairs to Franchised and Licensed Ferry Piers (2005-2008) – Construction of Yung Shue Wan Helipad – Works Order No. YSWH/01/03

Impact Monitoring - Exceedance Report

Report No. YSWH/70928_tur

(a) Statement of exceedances
• One exceedance of Action Level of turbidity was recorded at M1 during mid-ebb tide. • One exceedance of Action Level of turbidity was recorded at M2 during mid-flood tide. • Cases showing exceedance are indicated by the shaded cells on the attached data sheets.
(b) Cause of exceedances • According to our investigations, such exceedances are considered not due to the project but may due to natural fluctuation because of the following reasons: 1. No marine construction activity was carried out on site.
(c) Action required under the action plan N/A
(d) Action taken under the action plan N/A
(e) ET's conclusions and recommendations for mitigation N/A
(f) Contractor's actions to implement the mitigation N/A
(g) Contractor's comment N/A

Parameter	Action	Limit
Turbidity (NTU)	4.60 or 120% of upstream control station's turbidity at the same tide of the same day.	7.40 of 130% of turbidity at the upstream control station at the same day.

ETL Signature: _____ Date: 28 September 2007

Reviewed by
IEC Signature: _____ Date: _____

Water Quality Monitoring Results on 25 September 2007 at Mid-Ebb Tide

Location	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Water Temperature (°C)		Ambient Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
C1	Cloudy	Calm	10:57	Surface	1	27.4 27.3	27.4	26.2 26.2	26.2	7.6 7.6	7.6	29.6 29.6	29.6	75.1 74.8	75.0	5.4 5.4	5.4	5.4	3.7 3.6	3.7	4.4	21.0 21.0	21.0	21.2
				Middle	3	27.2 27.2	27.2	26.2 26.2	26.2	7.3 7.3	7.3	29.8 29.8	29.8	74.4 74.4	74.4	5.3 5.2	5.3		4.9 4.8	4.9		22.0 21.0	21.5	
				Bottom	5	26.5 26.5	26.5	26.2 26.2	26.2	7.5 7.5	7.5	29.9 29.9	29.9	74.4 74.5	74.5	5.1 5.1	5.1	5.1	4.5 4.8	4.7		21.0 21.0	21.0	
M1	Cloudy	Calm	11:03	Surface	1	26.0 26.0	26.0	26.2 26.2	26.2	7.4 7.4	7.4	29.7 29.7	29.7	71.8 71.5	71.7	5.4 5.4	5.4	5.4	3.9 3.8	3.9	5.3	20.0 20.0	20.0	21.3
				Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	25.0 25.0	25.0	26.2 26.2	26.2	7.5 7.5	7.5	29.7 29.7	29.7	70.5 70.4	70.5	5.4 5.4	5.4	5.4	6.3 7.0	6.7		22.0 23.0	22.5	
M2	Cloudy	Calm	11:09	Surface	1	26.7 26.5	26.6	26.2 26.2	26.2	7.5 7.5	7.5	29.8 29.8	29.8	69.9 70.0	70.0	5.9 5.9	5.9	5.9	3.3 3.2	3.3	4.7	24.0 24.0	24.0	23.8
				Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	3	25.6 25.7	25.7	26.2 26.2	26.2	7.5 7.4	7.5	29.6 29.7	29.7	75.8 75.9	75.9	5.9 5.9	5.9	5.9	6.2 5.8	6.0		24.0 23.0	23.5	

Water Quality Monitoring Results on 25 September 2007 at Mid-Flood Tide

Location	Weather Condition	Sea Condition**	Sampling Time	Depth (m)		Water Temperature (°C)		Ambient Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)			Turbidity(NTU)			Suspended Solids (mg/L)		
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	DA*	Value	Average	DA*	Value	Average	DA*
C1	Cloudy	Calm	17:20	Surface	1	25.4 25.5	25.5	25.7 25.7	25.7	7.3 7.4	7.4	29.7 29.7	29.7	76.1 75.3	75.7	5.9 5.9	5.9	5.9	2.6 2.8	2.7	3.6	22.0 21.0	21.5	22.5
				Middle	3	26.8 26.8	26.8	25.7 25.7	25.7	7.5 7.5	7.5	29.8 29.8	29.8	75.3 75.5	75.4	5.8 5.8	5.8		3.5 3.7	3.6		22.0 21.0	21.5	
				Bottom	5	25.7 25.6	25.7	25.7 25.7	25.7	7.4 7.4	7.4	29.7 29.7	29.7	74.8 74.9	74.9	5.8 6.0	5.9	5.9	4.3 4.6	4.5		24.0 25.0	24.5	
M1	Cloudy	Calm	17:26	Surface	1	25.6 25.6	25.6	25.7 25.7	25.7	7.6 7.5	7.6	29.8 29.8	29.8	74.9 74.7	74.8	6.0 6.0	6.0	6.0	3.6 3.5	3.6	4.2	13.0 12.0	12.5	13.3
				Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	27.7 27.7	27.7	25.7 25.7	25.7	7.4 7.4	7.4	29.8 29.8	29.8	78.2 78.3	78.3	6.0 5.9	6.0	6.0	4.6 4.7	4.7		14.0 14.0	14.0	
M2	Cloudy	Calm	17:32	Surface	1	26.8 26.7	26.8	25.7 25.7	25.7	7.6 7.6	7.6	29.7 29.7	29.7	76.3 76.1	76.2	5.9 5.9	5.9	5.9	5.4 5.1	5.3	5.3	16.0 16.0	16.0	17.0
				Middle	-	- -	-	- -	-	- -	-	- -	-	- -	-	- -	-		- -	-		- -	-	
				Bottom	4	25.1 25.1	25.1	25.7 25.7	25.7	7.7 7.6	7.7	29.7 29.7	29.7	75.8 75.7	75.8	7.4 6.4	6.9	6.9	5.3 5.2	5.3		18.0 18.0	18.0	

Remarks: The reporting limit for laboratory analysis of suspended solids is 2.5 mg/L. For the results below the reporting limit, the SS level will be taken as 2.5 mg/L.

Remarks: * **DA: Depth-Averaged**
** **Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher**
*** **Cancelled due to Thunderstorm Warning**

APPENDIX H
SITE AUDIT SUMMARY

Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	70907
Date	7 September 2007
Time	9:15

Ref. No.	Non-Compliance	Related Item No.
-	None	-

Ref. No.	Remarks/Observations	Related Item No.
	Water Quality • No environmental deficiency was identified during site inspection. *Air Quality* • No environmental deficiency was identified during site inspection. *Noise* • No environmental deficiency was identified during site inspection. *Waste / Chemical Management* • No environmental deficiency was identified during site inspection. *Permit / Licenses* • No environmental deficiency was identified during site inspection.	

	Name	Signature	Date
Recorded by	Tsang Tsz Keung		7 September 2007
Checked by	Dr. Priscilla Choy		7 September 2007

Maintenance and Repairs to Franchised and Licensed Ferry Piers (2005 – 2008)

Contract No. CV/2004/03
Construction of Yung Shue Wan Helipad

Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	70912
Date	12 September 2007
Time	13:45

Ref. No.	Non-Compliance	Related Item No.
-	None	-

Ref. No.	Remarks/Observations	Related Item No.
	Water Quality • No environmental deficiency was identified during site inspection. *Air Quality* • No environmental deficiency was identified during site inspection. *Noise* • No environmental deficiency was identified during site inspection. *Waste / Chemical Management* • No environmental deficiency was identified during site inspection. *Permit / Licenses* • No environmental deficiency was identified during site inspection. *Others* • Follow-up on previous site audit session (Ref. No. 70907), there are no environmental deficiency was identified during site inspection.	

	Name	Signature	Date
Recorded by	Yeung Wing Kan		12 September 2007
Checked by	Dr. Priscilla Choy		12 September 2007

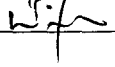
Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	70917
Date	17 September 2007
Time	10:00

Ref. No.	Non-Compliance	Related Item No.
-	None	-

Ref. No.	Remarks/Observations	Related Item No.
	Water Quality • No environmental deficiency was identified during site inspection. ***Air Quality*** • No environmental deficiency was identified during site inspection. ***Noise*** • No environmental deficiency was identified during site inspection. ***Waste / Chemical Management*** • No environmental deficiency was identified during site inspection. ***Permit / Licenses*** • No environmental deficiency was identified during site inspection. ***Others*** • Follow-up on previous site audit session (Ref. No. 70912), there are no environmental deficiency was identified during site inspection.	

	Name	Signature	Date
Recorded by	Chan Hon Kwan		17 September 2007
Checked by	Dr. Priscilla Choy		17 September 2007

Maintenance and Repairs to Franchised and Licensed Ferry Piers (2005 – 2008)

Contract No. CV/2004/03
Construction of Yung Shue Wan Helipad

Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	70925
Date	25 September 2007
Time	

Ref. No.	Non-Compliance	Related Item No.
-	None	-

Ref. No.	Remarks/Observations	Related Item No.
	Water Quality • No environmental deficiency was identified during site inspection. ***Air Quality*** • No environmental deficiency was identified during site inspection. ***Noise*** • No environmental deficiency was identified during site inspection. ***Waste / Chemical Management*** • No environmental deficiency was identified during site inspection. ***Permit / Licenses*** • No environmental deficiency was identified during site inspection. ***Others*** • Follow-up on previous site audit session (Ref. No. 70917), there are no environmental deficiency was identified during site inspection.	

	Name	Signature	Date
Recorded by	Tsang Tsz Keung		25 September 2007
Checked by	Dr. Priscilla Choy		25 September 2007

APPENDIX I
SUMMARY OF AMOUNT OF WASTE GENERATED

Appendix I

Name of Department: CWE-ZHEC Joint Venture

Contract No.: CV/2004/03

Monthly Summary Waste Flow Table For Sep 2007 (year)

Month	Actual Quantities of Inert C&D Materials Generated Monthly					Actual Quantities of C&D Waste Generated Monthly				
	Total Quantity Generated	Broken Concrete (see Note 2)	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 1)	Chemical Waste	Others, e.g. general refuse
	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m^3)
Sept	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Oct										
Nov										
Dec										
Jan										
Feb										
Sub-total	**0.000**	**0.000**	**0.000**	0.000	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**
Mar										
Apr										
May										
June										
July										
Aug										
Total	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**

Notes: (1) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.

(2) Broken concrete for recycling into aggregates.

APPENDIX J
EVENT ACTION PLANS

APPENDIX J – Event / Action Plan

Table J-1 Event / Action Plan Construction Noise

Event	ACTION			
	ET Leader	**IC (E)**	**ER**	**Contractor**
Action Level	1. Notify IC(E) and Contractor 2. Carry out investigation 3. Report the results of investigation to the IC(E) and Contractor 4. Discuss with the Contractor and formulate remedial measures 5. Increase monitoring frequency to check mitigation effectiveness	1. Review the analysed results submitted by the ET 2. Review the proposed remedial measures by the Contractor and advise the ER accordingly 3. Supervise the implementation of remedial measures	1. Confirm receipt of notification of failure in writing 2. Notify Contractor 3. Require Contractor to propose remedial measures for the analysed noise problem 4. Ensure remedial measures are properly implemented	1. Submit noise mitigation proposal to IC(E) 2. Implement noise mitigation proposals

Limit Level	1. Notify IC(E), ER, EPD and Contractor 2. Identify source 3. Repeat measurement to confirm findings 4. Increase monitoring frequency 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented 6. Inform IE(E), ER and EPD the causes & actions taken for the exceedances 7. Assess effectiveness of Contractor's remedial actions and keep IC(E), EPD and ER informed of the results 8. If exceedance stops, cease additional monitoring	1. Discuss amongst ER, ET, and Contractor on the potential remedial actions 2. Review Contractor's remedial actions whenever necessary to assure their the ER accordingly 3. Supervise the implementation of remedial measures	1. Confirm receipt of notification of failure in writing 2. Notify Contractor 3. Require Contractor to propose remedial measures for the analysed noise problem 4. Ensure remedial measures are properly implemented 5. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated	1. Take immediate action to avoid further exceedance 2. Submit proposal for remedial actions to IC(E) within 3 working days of notification 3. Implement the agreed proposals 4. Resubmit proposals if problem still not under control 5. Stop the relevant portion of works as determined by the ER until the exceedance is abated

Table J-2 Event / Action Plan for Water Quality Monitoring

EVENT	ACTION			
	ET	**IEC**	**ER**	**CONTRACTOR**
ACTION LEVEL				
1.Exceedance for one sample	1. Identify source 2. Inform ER & IEC 3. Repeat measurement to confirm finding 4. Increase monitoring frequency to daily	1. Check monitoring data submitted by ET	1.Notify Contractor 2.Check monitoring data and Contractor's working methods	1.Rectify any unacceptable practice 2.Amend working methods if appropriate
2.Exceedance for two or more consecutive samples	1. Identify source 2. Inform ER & IEC 3. Repeat measurements to confirm findings 4. Increase monitoring frequency to daily 5. Discuss with ER & IEC for remedial actions required 6. If exceedance continues, arrange meeting with ER & IEC 7. If exceedance stops, cease additional monitoring	1.Checking monitoring data submitted by ET 2.Advise the ER & ET on the effectiveness of the proposed remedial measures 3.Supervise the implementation of the remedial measures	1.Confirm receipt of notification of failure in writing 2.Notify Contractor 3.Check Contractor's working methods 4.Discuss with ET, IEC and Contractor on proposed remedial actions 5.Ensure remedial actions properly implemented	1.Submit proposals for remedial actions to ER within 3 working days of notification 2.Implement the agreed proposals 3.Amend proposal if appropriate
LIMIT LEVEL				
1.Exceedance for one sample	1. Identify source 2. Inform ER & IEC and EPD 3. Repeat measurement to confirm finding 4. Increase monitoring frequency to daily 5. Assess effectiveness of Contractor's remedial actions and keep EPD and ER & IEC informed of the results	1.Check monitoring data submitted by ET 2.Advise the ER & ET on the effectiveness of the proposed remedial measures 3.Supervise the implementation of the remedial measures	1.Confirm receipt of notification of failure in writing 2.Notify Contractor 3.Check monitoring data and Contractor's working methods 4.Discuss with ET, IEC and Contractor on proposed remedial actions 5.Ensure remedial actions properly implemented	1.Take immediate action to avoid further exceedance 2.Submit proposals for remedial actions to ER within 3 working days of notification 3.Implement the agreed proposals 4.Amend proposal if appropriate
2.Exceedance for two or more consecutive	1. Identify source 2. Inform ER, IEC and EPD the causes & actions taken for the exceedances	1.Check monitoring data submitted by ET 2.Review Contractor’s remedial actions	1.Confirm receipt of notification of failure in writing 2.Notify Contractor	1. Take immediate action to avoid further exceedance 2. Submit proposals for remedial

EVENT	ACTION			
	ET	**IEC**	**ER**	**CONTRACTOR**
samples	3. Repeat measurement to confirm findings 4. Increase monitoring frequency to daily 5. Investigate the causes of exceedance 6. Arrange meeting with & IEC and ER to discuss the remedial actions to be taken 7. Assess effectiveness of Contractor's remedial actions and keep ER, IEC and EPD informed of the results 8. If exceedance stops, cease additional monitoring	to assure their effectiveness and advise the ER accordingly 3.Supervise the implementation of the remedial measures	3.Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented 4.Discuss amongst ET, IEC and the Contractor on proposed remedial actions 5.Ensure remedial measure are properly implemented 6.If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated	actions to ER within 3 working days of notification 3. Implement the agreed proposals 4. Resubmit proposals if problem still not under control 5. Stop the relevant portion of works as determined by the ER until the exceedance is abated

APPENDIX K
ENVIRONMENTAL MITIGATION
IMPLEMENTATION SCHEDULE (EMIS)

Appendix K - Implementation Schedule of Recommended Mitigation Measures – Construction of Yung Shue Wan Helipad

Air Quality Mitigation Measures

EIA Ref.	EM&A Ref.	Recommended Environmental Protection Measures / Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
S.3.5.1	S.2.5	All the dust control measures as recommended in the Air Pollution Control (Construction Dust) Regulation, where applicable, should be implemented.	Air Quality During Construction	Contractors	At all construction work sites, throughout the whole duration of the construction period	EIAO-TM, Air Pollution Control (Construction Dust) Regulation
S.3.5.1	S.2.4	Typical dust control measures include: • Restricting heights from which materials are dropped, as far as practicable to minimise the fugitive dust arising from unloading / loading.	Air Quality During Construction	Contractors	At all construction work sites, throughout the whole duration of the construction period	EIAO-TM, Air Pollution Control (Construction Dust) Regulation
S.3.5.1	S.2.4	• All stockpiles of excavated materials or spoil of more than 50 m^3 should be enclosed, covered or dampened during dry or windy conditions.	Air Quality During Construction	Contractors	At all construction work sites, throughout the whole duration of the construction period	EIAO-TM, Air Pollution Control (Construction Dust) Regulation
S.3.5.1	S.2.4	• Effective water sprays should be used to control potential dust emission sources such as unpaved haul roads and active construction areas.	Air Quality During Construction	Contractors	At all construction work sites, throughout the whole duration of the construction period	EIAO-TM, Air Pollution Control (Construction Dust) Regulation

EIA Ref.	EM&A Ref.	Recommended Environmental Protection Measures / Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
S.3.5.1	S.2.4	• All spraying of materials and surfaces should avoid excessive water usage.	Air Quality During Construction	Contractors	At all construction work sites, throughout the whole duration of the construction period	EIAO-TM, Air Pollution Control (Construction Dust) Regulation
S.3.5.1	S.2.4	• Vehicles that have the potential to create dust while transporting materials should be covered, with the cover properly secured and extended over the edges of the side and tail boards.	Air Quality During Construction	Contractors	At all construction work sites, throughout the whole duration of the construction period	EIAO-TM, Air Pollution Control (Construction Dust) Regulation
S.3.5.1	S.2.4	• Materials should be dampened, if necessary, before transportation.	Air Quality During Construction	Contractors	At all construction work sites, throughout the whole duration of the construction period	EIAO-TM, Air Pollution Control (Construction Dust) Regulation
S.3.5.1	S.2.4	• Travelling speeds should be controlled to reduce traffic induced dust dispersion and re-suspension from the operating haul trucks.	Air Quality During Construction	Contractors	At all construction work sites, throughout the whole duration of the construction period	EIAO-TM, Air Pollution Control (Construction Dust) Regulation
S.3.5.1	S.2.4	• Vehicle washing facilities will be provided to minimise the quantity of material deposited on public roads.	Air Quality During Construction	Contractors	At all construction work sites, throughout the whole duration of the construction period	EIAO-TM, Air Pollution Control (Construction Dust)

EIA Ref.	EM&A Ref.	Recommended Environmental Protection Measures / Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
						Regulation
S.3.5.1	S.2.4	• Erection of hoarding not less than 2.4m high from ground level along the site boundary.	Air Quality During Construction	Contractors	At all construction work sites, throughout the whole duration of the construction period	EIAO-TM, Air Pollution Control (Construction Dust) Regulation

Noise Mitigation Measures

EIA Ref.	EM&A Ref.	Recommended Environmental Protection Measures / Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
-	S.3.29	Use of silenced plant, or plant equipped with mufflers or dampers in substitute of ordinary plant.	Noise During Construction	Contractors	At all construction work sites, throughout the whole duration of the construction period.	Annex 5 of EIAO-TM
-	S.3.29	Movable noise barriers positioned as close as possible to PMEs such that none of the PMEs will be visible when viewed from any noise sensitive façades.	Noise During Construction	Contractors	At all construction work sites, throughout the whole duration of the construction period.	Annex 5 of EIAO-TM
S.4.5.7	S.3.29	Adopt good working practices in order to minimise construction noise as far as possible: • Noisy equipment and noisy activities should be located as far away from the NSRs as is practical.	Noise control during construction	Contractors	At all construction work sites, throughout the whole duration of the construction period.	Annex 5 of EIAO-TM
S.4.5.7	S.3.29	• Unused equipment should be turned off.	Noise control during construction	Contractors	At all construction work sites, throughout the whole duration of the construction period	Annex 5 of EIAO-TM

EIA Ref.	EM&A Ref.	Recommended Environmental Protection Measures / Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
S.4.5.7	S.3.29	• Number of powered mechanical equipment • (PME) should be kept to minimum and the parallel use of noisy equipment / machinery should be avoided.	Noise control during construction	Contractors	At all construction work sites, throughout the whole duration of the construction period	Annex 5 of EIAO-TM
S.4.5.7	S.3.29	• Regular maintenance of all plant and equipment.	Noise control during construction	Contractors	At all construction work sites, throughout the whole duration of the construction period	Annex 5 of EIAO-TM
S.4.5.7	S.3.30	• Observe and comply with the statutory requirements and guidelines.	Noise control during construction	Contractors	At all construction work sites, throughout the whole duration of the construction period	Annex 5 of EIAO-TM
S.4.6.33	-	• Use of quieter helicopter type EC155 B1 in priority.	Noise control during operation	GFS	At all time during operations	-
S.4.6.34	-	• Reduce the angle of the helicopter flight path from the standard 150 degrees to 80 degrees for the 'EC155 B1' and to 70 degrees for the 'Super Puma AS332 L2' helicopter	Noise control during operation	GFS	At all time during operations	-
S.1.2.3	-	• The helipad will be solely for emergency use.	Noise control during operation	GFS/HAD	At all time during operations	-

Waste Management Mitigation Measures

EIA Ref.	EM&A Ref.	Recommended Environmental Protection Measures / Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
S.5.8.1	S.4.2	Ensure that proper handling, storage, transportation and disposal of materials is implemented at the outset and throughout the construction phase of the helipad.	Waste Management During Construction	Contractors	At all construction work sites, throughout the whole duration of the construction period.	Annex 7 of EIAO-TM
S.5.8.1	S.4.4	In line with Government's position on waste minimization, the practice of avoiding and minimizing waste generation and waste recycling should be adopted as far as practicable.	Waste Management During Construction	Contractors	At all construction work sites, throughout the whole duration of the construction period.	Annex 7 of EIAO-TM
S.5.8.2	-	Recommended mitigation measures to be implemented include: • An on-site environmental co-ordinator should be identified at the outset of the works. The co-ordinator shall prepare a Waste Management Plan.	Waste Management During Construction	Contractors	At all construction work sites, throughout the whole duration of the construction period	Environmental, Transport and Works Bureau Technical Circular (ETWBTC) No. 15/2003
S.5.8.2	S.4.4	• Spoil generated from the piling activities will need to be properly handled to minimize contamination to the marine water and any exposed ground areas due to leakage or improper storage (i.e. onto bare ground instead of into tanks).	Waste Management During Construction	Contractors	At all construction work sites, throughout the whole duration of the construction period	Environment, Transport and Works Bureau Technical Circular (Works) (ETWBTCW) No. 34/2002

EIA Ref.	EM&A Ref.	Recommended Environmental Protection Measures / Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
S.5.8.2	S.4.4	• The reuse/recycling of all materials on site shall be investigated prior to treatment/disposal off site.	Waste Management During Construction	Contractors	At all construction work sites, throughout the whole duration of the construction period	ETWBTCW No. 33/2002, ETWBTC No. 15/2003
S.5.8.2	S.4.4	• Good site practices shall be adopted from the commencement of works to avoid the generation of waste and to promote waste minimization practices.	Waste Management During Construction	Contractors	At all construction work sites, throughout the whole duration of the construction period	ETWBTCW No. 33/2002
S.5.8.2	S.4.4	• All waste materials shall be sorted on site into inert and non-inert C&D materials, and where the materials will be recycled or reused, these shall be further segregated. The Contractor shall be responsible for identifying which materials can be recycled/reused, whether on site or off site. In the event of the latter, the Contractor shall make arrangements for the collection of the recyclable materials. Any remaining non-inert waste shall be collected and disposed of to the refuse transfer station whilst any non-inert C&D material shall be re-used on site as far as possible. If no use of the material can be found on site, the inert C&D material can be delivered to a public filling area,	Waste Management During Construction	Contractors	At all construction work sites, throughout the whole duration of the construction period	ETWBTCW No. 33/2002, ETWBTCW No. 34/2002

EIA Ref.	EM&A Ref.	Recommended Environmental Protection Measures / Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
		public barging point or public stockpile area after obtaining the appropriate licence.				
S.5.8.2	S.4.4	• A trip ticket system should be established at the outset of the construction of the helipad to monitor the disposal of C&D and solid wastes from the site to public filling facilities and landfills.	Monitor the disposal of C&D and solid wastes from the site	Contractors	At the outset of the construction of the helipad	ETWBTC (W) No.31/2004
S.5.8.2	S.4.4	• The Contractor shall register with EPD as a Chemical Waste Producer if there is any use of chemicals on site including lubricants, paints, diesel fuel, etc. Only licensed chemical waste collectors shall be employed to collect any chemical waste generated at site. The handling, storage, transportation and disposal of chemical wastes shall be conducted in accordance with the relevant guidelines as published by Government.	Waste Management During Construction	Contractors	At all construction work sites, throughout the whole duration of the construction period	Waste Disposal (Chemical Waste) (General) Regulation, Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes, Guide to the Chemical Waste Control Scheme
S.5.8.2	S.4.4	• A sufficient number of covered bins shall be provided on site for the containment of general refuse to prevent visual impacts and nuisance to sensitive receivers. These bins shall be cleared daily and the collected waste disposed of to the	Waste Management During Construction	Contractors	At all construction work sites, throughout the whole duration of the construction period	ETWBTCW No. 6/2002A, ETWBTC No. 15/2003

EIA Ref.	EM&A Ref.	Recommended Environmental Protection Measures / Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
		refuse transfer station. Further to the issue of Environment, Transport and Works Bureau Technical Circular (Works) No. 6/2002A, Enhanced Specification for Site Cleanliness and Tidiness, the Contractor is required to maintain a clean and hygienic site throughout the Project works.				
S.5.8.2	S.4.4	• All chemical toilets shall be regularly cleaned and the nightsoil collected and transported by a licensed contractor to a Government Sewage Treatment Works facility for disposal.	Waste Management During Construction	Contractors	At all construction work sites, throughout the whole duration of the construction period	ETWBTCW No. 6/2002A, ETWBTC No. 15/2003
S.5.8.2	S.4.4	• Tool box talks shall be provided to workers about the concepts of site cleanliness and appropriate waste management procedures, including waste reduction, reuse and recycling.	Waste Management During Construction	Contractors	Throughout construction period	ETWBTCW No. 15/2003
S.5.8.3	S.4.5	Contractor shall comply with all relevant statutory requirements and guidelines and their updated versions.	Waste Management During Construction	Contractors	Throughout construction period	EIAO - TM
S.2.2.33	-	The helipad shall be constructed by using small diameter pre-bored piling instead of dredging and reclamation.	Construction method	Contractors	At all construction work sites, throughout construction period	-
S.5.6.30	-	The helipad will only be used for emergency purposes. No equipment will be placed on the landing pad or along	Operation	GFS/HAD	At all time during operations	-

EIA Ref.	EM&A Ref.	Recommended Environmental Protection Measures / Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
		the EVA. Helicopters will not be parked at the landing pad and all repair and maintenance works (on the helicopters) will be conducted off site. As such the only source of waste generation during the operation of the helipad is anticipated to be from the long-term maintenance of the pad.				

Water Quality Mitigation Measures

EIA Ref.	EM&A Ref.	Recommended Environmental Protection Measures / Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
S.6.7.2	S.5.39	Silt curtain to be installed surrounding the whole of the piling site.	Water Quality During Construction	Contractors	Around the whole works area , prior to commencement of the piling works.	Water Pollution Control Ordinance (Cap. 358), Water Quality Objectives for Southern WCZ if direct discharge to sea is adopted.
S.6.7.3	S.5.40	The following good site practices are recommended: • The holding tank should be fitted with a tight fitting seal to prevent sediment leakage.	Water Quality During Construction	Contractors	At all construction work sites, throughout the whole duration of the construction period.	Not applicable (good practice only)
S.6.7.3	-	• Ensure that excavator grab seal is tightly closed and the hoist speed is suitably low.	Water Quality During Construction	Contractors	At all construction work sites, throughout the whole duration of the construction period	Not applicable (good practice only)
S.6.7.3	S.5.40	• The holding tank should not be filled to a level which will cause overflow of sediment during loading and transportation.	Water Quality During Construction	Contractors	At all construction work sites, throughout the whole duration of the construction period	Not applicable (good practice only)
S.6.7.3	-	• Large objects should be removed from the excavator grab to avoid sediment spills.	Water Quality During Construction	Contractors	At all construction work sites, throughout the whole duration	Not applicable

EIA Ref.	EM&A Ref.	Recommended Environmental Protection Measures / Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
					of the construction period	(good practice only)
S.2.2.33	-	• The helipad shall be constructed by using small diameter pre-bored piling instead of dredging and reclamation.	Construction method	Contractors	At all construction work sites, throughout construction period	-

Ecology Mitigation Measures

EIA Ref.	EM&A Ref.	Recommended Environmental Protection Measures / Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
S.7.6.1	S.6.36	Sub-tidal Ecology Silt curtain to be installed surrounding the whole of the piling site.	Ecology During Construction	Contractors	Around the whole works area prior to commencement of the piling works.	Animals & Plants Ordinance (Protection of Endangered Species) (Cap. 187)
S.7.6.2	S.6.37	Good practice measures to control water quality-induced ecological impacts: • Particular care should be taken when demolishing the existing concrete planter to ensure no waste enters the water column.	Ecology During Construction	Contractors	At the existing concrete planter, throughout the whole duration of the construction period.	Not applicable (good practice only)
S.7.6.2	S.6.37	• Particular care should be taken when decommissioning the silt curtain to avoid sudden dispersion of muddy water which may cause adverse impact to the nearby marine life;	Ecology During Construction	Contractors	Along the western side of the Project boundary, on the completion of piling.	Not applicable (good practice only)
S.7.6.2	S.6.37	• Materials storage areas should be located well away from the seawall, and any such areas should be covered during the works.	Ecology During Construction	Contractors	At all construction work sites, throughout the whole duration of the construction period	ProPECC Note PN 1/94 on *Construction Site Drainage*

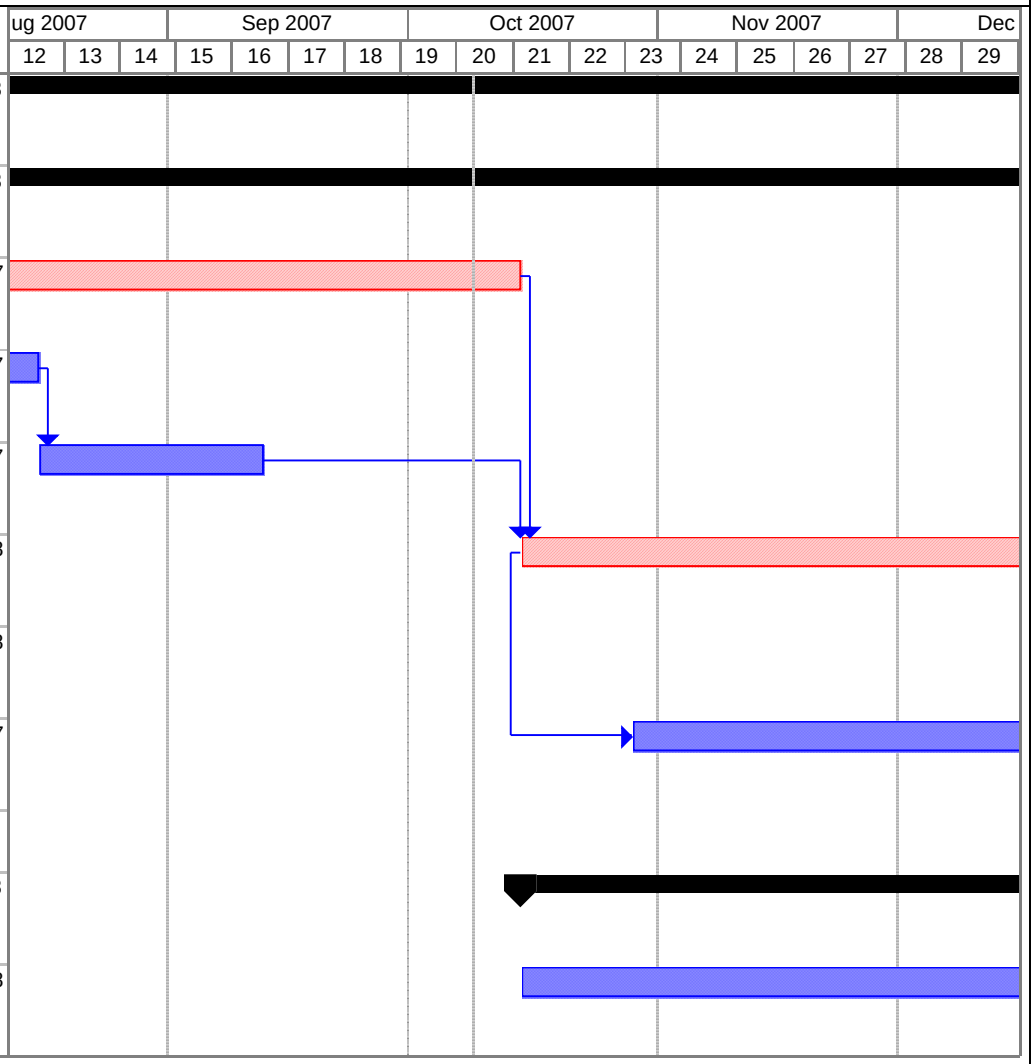
EIA Ref.	EM&A Ref.	Recommended Environmental Protection Measures / Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
S.7.6.2	S.5.40	• The holding tank for sediment excavated from within the pile casing should be fitted with a tight fitting seal to prevent leakage.	Ecology During Construction	Contractors	At the piling areas, throughout the whole duration of the piling period	Not applicable (good practice only)
S.7.6.2	-	• Ensure that excavator seal is tightly closed and the hoist speed is suitably low.	Ecology During Construction	Contractors	At the marine areas, throughout the whole duration of the construction period	Not applicable (good practice only)
S.7.6.2	S.5.40	• The holding tank should not be filled to a level that will cause overflow of sediment during loading and transportation.	Ecology During Construction	Contractors	At the marine areas, throughout the whole duration of the construction period	Not applicable (good practice only)
S.7.6.2	-	• Large objects should be removed from the excavator grab to avoid sediment spills.	Ecology During Construction	Contractors	At all construction work areas, throughout the whole duration of the construction period	Not applicable (good practice only)
S.2.2.33	-	• The helipad shall be constructed by using small diameter pre-bored piling instead of dredging and reclamation.	Construction method	Contractors	At all construction work sites, throughout construction period	-

APPENDIX L
CONSTRUCTION PROGRAMME

Contract No: CV200403
Maintenance and Repairs to Franchised
and Licensed Ferry Pier (2005-2008)

Works Order No. YSWH/01/03
Three Month Rolling Programme of Yung Shue Wan Helipad Sept to Nov 2007

識別碼	Task Name	工期	開始時間	完成時間
1	**Construction of Yubg Shue Wan Helipad**	**208 days**	**2/8/2007**	**25/2/2008**
2	**Piling Works**	**208 days**	**2/8/2007**	**25/2/2008**
3	Fabrication of Steel Casing	72 days	4/8/2007	14/10/2007
4	Erection of Silt Curtain	14 days	2/8/2007	15/8/2007
5	Ground Investigation (Pre-Drilling)	28 days	16/8/2007	12/9/2007
6	Pre-bored H-Pile Works (22nos.)	120 days	15/10/2007	11/2/2008
7	Piling Test	14 days	12/2/2008	25/2/2008
8	Erection of Bracing Beam to Piles	60 days	29/10/2007	27/12/2007
9				
10	**Superstructure Works**	**90 days**	**15/10/2007**	**12/1/2008**
11	Fabrication of Pre-cast Concrete Unit	90 days	15/10/2007	12/1/2008



Project: Yueng Shue Wan Helipad - R0
Date: 9/10/2007

Task
Split
Progress
Milestone
Summary
Project Summary
External Tasks
External Milestone
Deadline
Critical Path

APPENDIX M
COMPLAINT LOG

APPENDIX M – COMPLAINT LOG

Reporting Month: September 2007

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

Remarks: No environmental complaint was received in the reporting month.