Stanger Asia

ENVIRONMENTAL MONITORING AND AUDIT REPORT

FOR

CONTRACT No. CV/2004/02

RECONSTRUCTION OF WONG SHEK AND KO LAU WAN PUBLIC PIERS

MAY 2005

Report No.: ET 12532 (A)

Certified by: _____ Date: 20/6/05

Mr. Wilson Fok
Environmental Specialist

Verified by: _____ Date: 20/6/05

Mr. Joseph Poon
Independent Checker (Environment)

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EXECUTIVE SUMMARY

This is the 3rd monthly Environmental Monitoring and Audit (EM&A) report for Contract No. CV/2004/02 – Reconstruction of Wong Shek and Ko Lau Wan Public Piers and it covers the environmental monitoring works conducted in May 2005. As requested by CEDD, two-separated reports will be issued for monitoring result for Wong Shek and Ko Lau Wan, with respectively. In this report it only covers the monitoring result for Wong Shek Public Pier.

Construction Activities for the Reported Period

Major construction works carried out this month included:

Wong Shek

- Piling work for temporary berth

Water Quality Monitoring

Water quality monitoring in terms of turbidity, dissolved oxygen, suspended solids, temperature, and salinity was carried out on twelve occasions at MW1, MW2, CW1 and CW2 at Wong Shek Pier. Due to the thunderstorm signal was hosted for whole day on 19 May 2005, the water quality monitoring was cancelled and therefore only two monitoring were conducted on that week. There were no exceedances to the Action Levels and Limit Levels for all parameters except the dissolved oxygen level during the reported period. All the dissolved oxygen concentration exceeded the limit level.

The exceedances were due to increasing temperature of the marine water during the summer period. The temperatures ranged from 24 ^{o}C to 29 ^{o}C were recorded during May 2005. At these temperature the solubility of dissolved oxygen in marine water exposed to water saturated air at 760mmHg can be achieved are ~6.96 mg/L (24^{o}C) & 6.51 mg/L (29^{o}C). Therefore the "limit level" of dissolved oxygen for Wong Shek Public Pier constructed from baseline period from January to February 2005 (water temperature: 16 - 17 ^{o}C) cannot be met event the dissolved oxygen in marine water was saturated.

The dissolved oxygen levels for all the monitoring locations were comparable to the control point. There was no significant diminish of dissolved oxygen level for all monitoring locations at Wong Shek Public Pier. In terms of dissolved oxygen, the water quality for all the monitoring locations was satisfactory.

Waste Management

No C&D material, general refuse or chemical waste was transported off site in this reported period.

Complaints, Notifications of Summons and Successful Prosecutions

No complaints, notifications of summons and successful prosecutions were received this month.

Site Inspections

Four site inspections were conducted by Environmental Specialist (ES) in this reported period. Due to low level of works in the reporting period, no major deficiency was identified

An audit by the Independent Environmental Checker (IEC) was conducted on 27 May 2005 with the CEDD Representative and the Environmental Team. No major comment was made by IEC during the course of inspection.

Future Key Issues

The tentative works activities, predicted impacts and areas of environmental concern for the month following this reported period are summarized in the following table.

Works Activities	Predicted Impacts	Proposed Mitigation Measures
Piling work for temporary berth.	· Water	· The silt curtain should be properly installed before carrying out the piling work.
Construction of preliminary pile and pile loading test	· Noise · Waste	· Avoid concurrent noisy operation during the erection of deck for the temporary berth · Construction and demolition materials should be sorted
Erection of deck for temporary berth	· Noise · Waste	· Avoid concurrent noisy operation during the erection of deck for the temporary berth · Construction and demolition materials should be sorted
Construction of main piles	· Noise · Waste	· Avoid concurrent noisy operation during the erection of deck for the temporary berth · Construction and demolition materials should be sorted

Reporting of Changes

Generally, the baseline monitoring was conducted according to the Particular Specification (PS) Section 26 - Environmental Mitigation Measures and Monitoring Requirements and hence no revision to the EM&A requirements was made.

1. INTRODUCTION

1.1 Background

Stanger Asia Ltd. has been commissioned by Kin Shing Construction Company Limited to provide an Environmental Specialist (ES) to carry out the environmental monitoring and audit works for the Contract No. CV/2004/02 Reconstruction of Wong Shek and Ko Lau Wan Public Piers. The team is to take a pro-active role in all issues, which may be of environmental concern during the construction period of the Project.
As requested by CEDD, two-separated reports will be issued for monitoring result for Wong Shek and Ko Lau Wan, with respectively. In this report it only covers the monitoring result for Wong Shek Public Pier.

In this report, the water quality monitoring works conducted in May 2005 will be detailed and reviewed. This report has been produced with reference to the Section 26 of the Particular Specification, Project Profile (PP-191/2003) and Environmental Permit (EP-186/2004) produced for this Project.

1.2 Report Structure

The purpose of this report is to detail and review the water quality monitoring works undertaken for May 2005. The impact forecast for the next reporting month and the schedules of monitoring works for the following month are also given.

The report follows the format given below:

Section 1:	Introduction and background information to the content of this report
Section 2:	This section gives the information of the project
Section 3:	This section summarizes all the environmental permits and licenses
Section 4:	Summary of the EM&A requirements is presented
Section 5:	This section details the implemented mitigation measures
Section 6:	Details monitoring results
Section 7:	Audit the monitoring results
Section 8:	The status for solid and liquid waste management for the site is overviewed
Section 9:	Complaints, notifications of summons and successful prosecutions are summarized
Section 10:	This section gives the predicted impacts of the construction activities
Section 11:	This section gives a conclusion in relation to all monitoring activities.

2. PROJECT INFORMATION

2.1 Site Description

The construction works, Contract No. CV/2004/02, is to be carried out under the direction of the Civil Engineering Office, Civil Engineering and Development Department. It comprises demolition of the existing piers and construction of reinforced concrete piers with roof covers at Wong Shek and Ko Lau Wan.

The construction of the Project is scheduled to commence in November 2004 for completion in August 2006. The construction period is 630 days for the entire construction.

2.2 Project Organization

The Project Proponent and the Engineer is Civil Engineering Office, Civil Engineering and Development Department. The Resident Engineer is Mr. W H Lee.
(Tel: 2760 5737; Fax: 2714 2054; Mobile Phone No: 9630 1235)

The Main Contractor for this project is Kin Shing Construction Company Limited. The Site Agent is Mr. Simon Fok
(Tel: 2729 6779; Fax: 2729 7858; Mobile Phone No: 6010 8730).

The Independent Checker (Environment) is MateriaLab Consultants Limited. The Manager is Mr. Joseph T L Poon.
(Tel: 2452 7140; Fax: 2450 6138; Mobile Phone No: 9450 1968)

The Environmental Specialist proposed for this project is Stanger Asia Limited. The Environmental Specialist is Mr. Wilson Fok.
(Tel: 2682 1203; Fax: 2682 0046; Mobile Phone No: 6105 4260)
The environmental organization chart is attached in Appendix I

2.3 Construction Programme

Details of the construction activities carried out in May 2005 are summarized below. The master construction programme is given in Appendix IX.

Wong Shek

- Piling work for temporary berth

3. ENVIRONMENTAL PERMITS AND LICENSES

The summary of the status of all environmental permits, licenses and notification for this project as of May 2005 is summarized in the following table.

Table 3.1 Summary of the Environmental Permits and Licenses

Description	Licence/ Permit No.	Issued Date	Expiry Date	Status
Environmental Permit	EP-186/2004	16 Mar 04	--	Issued
Registration of Chemical Waste Producer	WPN5213-742-K1081-05	12 May 05	--	Issued

4. SUMMARY OF EM&A REQUIREMENTS

4.1 Monitoring Locations

For Wong Shek, MW1 and MW2 are the two designated monitoring stations whereas CW1 and CW2 are the two designated control stations. CW1 is the control stations during flood tides whereas CW2 is the control stations during ebb tides.

The locations of each station are given Figure 4.1, their coordinates are given in Table 4.1 below.

Table 4.1 Coordinates of Water Quality Monitoring Locations

Station	HK Metric Grid – Easting	HK Metric Grid - Northing
Wong Shek Public Pier		
MW1	852 789.231	832 978.476
MW2	852 844.187	832 878.676
CW1	852 922.540	833 067.718
CW2	852 992.314	832 853.794

4.2 Monitoring Parameters

Water quality shall be monitored in terms of: dissolved oxygen (mg/L and % saturation), salinity (ppt), turbidity (NTU), and suspended solids (mg/L).

The parameters of dissolved oxygen, salinity and turbidity were measured on-site with portable instruments. Other relevant data was also recorded, including monitoring location / position, time, water depth, salinity, temperature, tidal stages, weather conditions and any special phenomena or work underway at the construction site.

The measurement of suspended solids was carried out in the laboratory of Stanger Asia Ltd. within 24 hours of sampling. The laboratory is HOKLAS accredited to determine suspended solids content in accordance with APHA Method No. 2540D, 20th Edition.

4.3 Monitoring Frequency

Impact Monitoring – piling and demolition works

Monitoring shall be undertaken three days per week, at mid-flood and mid-ebb. The interval between two sets of monitoring shall not be less than 36 hours except where there are exceedances of Action and /or Limit levels, in which case the monitoring frequency shall be increased.

Impact Monitoring – marine works other than piling and demolition works

Monitoring shall be undertaken one day per week, at mid-flood and mid-ebb. The interval between two sets of monitoring shall not be less than 36 hours except where there are exceedances of Action and /or Limit levels, in which case the monitoring frequency shall be increased.

4.4 Monitoring Equipment

Monitoring of marine water quality shall be carried out employing the following equipment.

Dissolved Oxygen, Salinity and Temperature Measuring Equipment

A YSI model 85 Handheld Dissolved Oxygen, Conductivity, Salinity and Temperature System was employed.
The instrument is portable, weatherproof instrument complete with cable, sensor, comprehensive operation manuals and operates from a DC power source. It is capable of measuring:

(a) dissolved oxygen in the range of 0-20mg/L and 0-200% saturation

(b) temperature in the range of 5 - 65^{o}C

(c) salinity in the range of 0-80ppt

The instrument has a membrane electrode with automatic temperature and salinity compensation, complete with a cable of sufficient length. Sufficient stocks of spare electrodes and cables are available for replacement where necessary.

Turbidity Measurement Instrument

A Hach 2100P turdimeter shall be employed

This instrument measures turbidity on-site by the nephelometric method. The instrument is portable, weatherproof turbidity-measuring instrument complete with comprehensive operation manual. The equipment operates from a DC power source and has a photoelectric sensor capable of measuring turbidity between 0-1000NTU.

Suspended Solids

A Kahlisco Water Sampler 135WB203 was employed. This is a "Van Dorn" type of sampler, which has a transparent PVC cylinder (of a capacity not less than 2 litres) and can be effectively sealed with cups at both ends, shall be used for sampling. The sampler has a positive latching system to keep it open and prevent premature closure until released by a messenger when the sampler is to the selected water depth.

Water samples for suspended solids measurements shall be collected in high-density polythene bottles, packed in ice (cooled to 4^{o}C without being frozen), and delivered to the laboratory as soon as possible after collection.

Water Depth

A Hummingbird 100SX digital echo-sounder was employed. This is a portable, battery-operated Echo Sounder to be used for the determination of water depth at each water quality monitoring and control station. This unit can be either be hand-held or affixed to the bottom of the work boat if the same vessel is used throughout the monitoring programme.

Vessel Positioning Device

A Trimble NT200D Differential Global Positioning (DGPS) was employed. This is a portable or boat fixed and has an accuracy of ±1m and can be programmed with waypoints to ensure the correct and repeated positioning of a vessel at a given monitoring location.

4.5 Monitoring Equipment Calibration Requirements

All on-site monitoring equipment shall be checked, verified and calibrated by Stanger Asia Limited, a HOKLAS accredited laboratory, prior to use on the Works and subsequently thereafter every three months throughout all stages of the water quality monitoring. Responses of the sensors and electrodes shall be checked with certified standard solutions before each use. Wet bulb calibration for a DO meter shall be carried out before measurement.

For on-site calibration of field equipment, the BS 1427: 1993 "Guide to Field and on-site test methods for the analysis of waters" shall be observed.

A set of backup monitoring instruments and equipment shall be made available so that the monitoring can proceed uninterrupted in case of apparatus malfunction or if equipment has been returned to the laboratory for calibration.

4.6 Monitoring Methodology

Measurements were be taken under two tidal conditions (mid-flood and mid-ebb) at 3 water depths, namely 1m below the water surface, mid-depth and 1m above the seabed, except where the water depth is less than 6m, the mid-depth sample may be omitted. If the water depth is less than 3m, only the mid-depth will be monitored.

Replicate in-situ measurements and samples were collected from each independent sampling event are required for all parameters to ensure a robust statistical interpretable dataset.

For the measurement of dissolved oxygen the probe shall be removed from the water column between each duplicate measurement. If the difference between each duplicate measurement is greater than a 25% then the two sets of data shall be rejected and the measurements re-taken.

4.7 Action and Limit Levels

Water quality criteria, namely Action and Limit levels were based on the results of the baseline monitoring programme. The Action and Limit levels were calculated according to the following table.

Table 4.2 Action and Limit Levels for Water Quality Monitoring

Parameter	Action Level	Limit Level
Dissolved Oxygen in mg/L (Surface, Middle & Bottom)	Surface & Middle For Wong Shek - 6.96 Bottom For Wong Shek - 6.93	Surface & Middle For Wong Shek - 6.69 Bottom For Wong Shek - 6.71
SS in mg/L (depth-averaged)	For Wong Shek - 6.85 or 120% of upstream control station's SS at the same tide of same day, whichever is lower	For Wong Shek - 8.85 or 130% of upstream control station's SS at the same tide of same day, whichever is lower
Turbidity (Tby) in NTU (depth-averaged)	For Wong Shek - 1.47 or 120% of upstream control station's Tby at the same tide of same day, whichever is lower	For Wong Shek - 4.05 or 130% of upstream control station's Tby at the same tide of same day, whichever is lower

Notes: (a) "depth-averaged" is calculated by taking the arithmetic means of reading all three depths.

(b) For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits.

(c) For SS and Tby, non-compliance of the water quality limits occurs when monitoring result is higher than the limits.

(d) 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.

4.8 Event and Action Plans

The Event and Action Plans for air, noise and water are attached in Appendix III of this report.

5. IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES

The contractor implemented various environmental mitigation measures as recommended in the Particular Specification and Environmental Permit. The implementation status is attached in Appendix IV.

6. MONITORING RESULTS

6.1 Completed Monitoring Works

Table 6.1 gives the completed monitoring works for the reported period.

Table 6.1 Completed Monitoring Works for May 2005

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3 WQM (Ebb: 08:35) (Flood: 13:48)	4	5 WQM (Ebb: 10:18) (Flood: 16:16)	6	7 WQM (Ebb: 11:49) (Flood: 17:30)
8	9 WQM (Ebb: 13:08) (Flood: 07:35)	10	11 WQM (Ebb: 12:50) (Flood: 06:47)	12	13 WQM (Ebb: 14:12) (Flood: 07:45)	14
15	16	17 WQM (Flood: 08:25)	18	19 Cancelled due to the thunderstorm signal was hosted	20	21 WQM (Ebb: 10:42) (Flood: 17:02)
22	23 WQM (Ebb: 11:59) (Flood: 18:00)	24	25 WQM (Ebb: 13:28) (Flood: 07:31)	26	27 WQM (Ebb: 15:08) (Flood: 07:38)	28
29	30 WQM (Ebb: 17:03) (Flood: 10:28)	31				

Notes: WQM - water quality monitoring on mid-flood and mid-ebb tides at Wong Shek (CW1, CW2, MW1 & MW2)

6.2 Water Quality Monitoring

Water quality monitoring in terms of turbidity, dissolved oxygen, suspended solids, temperature, and salinity was carried out on twelve occasions at MW1, MW2, CW1 and CW2 at Wong Shek Pier. Results for water quality monitoring are summarised in the following table. Detailed monitoring results are presented in Appendix V. Graphical presentations of the results are shown in Figure 6.1 – Figure 6.8.

Table 6.2 Summary of Water Quality Monitoring Data

Sample Location	Surface & Middle Averaged DO, mg/L	Bottom Averaged DO, mg/L	Averaged Turbidity, NTU	Averaged Suspended Solids, mg/L
Wong Shek - Flood Tide				
MW1	6.64	6.56	1.10	3.4
MW2	6.64	6.51	1.14	3.7
CW1	6.68	6.60	1.13	4.2
CW2	6.56	6.56	1.11	3.7
Wong Shek- Ebb Tide				
MW1	6.60	6.51	1.11	3.7
MW2	6.62	6.57	1.13	3.6
CW1	6.61	6.56	1.10	3.7
CW2	6.00	6.58	1.13	3.8

7. AUDIT REPORT

7.1 Water Quality Monitoring

During the reported period, there were no exceedances to Trigger, Action and Target Level for all parameters except the dissolved oxygen level.

All the dissolved oxygen concentration exceeded the limit level. The exceedances were due to increasing temperature of the marine water during the summer period. The temperatures ranged from 24 ^{o}C to 29 ^{o}C were recorded during May 2005. At these temperature the solubility of dissolved oxygen in marine water exposed to water saturated air at 760mmHg can be achieved are ~6.96 mg/L (24^{o}C) & 6.51 mg/L (29^{o}C). Therefore the "limit level" of dissolved oxygen for Wong Shek Public Pier constructed from baseline period from January to February 2005 (water temperature: 16 - 17 ^{o}C) cannot be met event the dissolved oxygen in marine water was saturated.

The dissolved oxygen levels for all the monitoring locations were comparable to the control point. And there was no significant diminish of dissolved oxygen level for all monitoring locations at Wong Shek Public Pier so in terms of dissolved oxygen, the water quality for all the monitoring locations was satisfactory.

7.2 Site Inspections

Four site inspections were conducted by Environmental Specialist (ES) in this reported period. Due to low level of works in the reporting period, no major deficiency was identified.

An audit by the Independent Environmental Checker (IEC) was conducted on 27 May 2005 with the CEDD Representative and the Environmental Team. No major comment was made by IEC during the course of inspection.

8. WASTE MANAGEMENT

No C&D material, general refuse or chemical waste was transported off site in this reported period.

9. COMPLAINTS, NOTIFICATIONS OF SUMMONS AND SUCCESSFUL PROSECUTIONS

No complaints, notifications of summons and successful prosecutions were received.

Complaint Log is attached in Appendix VI. Cumulative statistics on complaints, notifications of summons and successful prosecutions are attached in Appendix VII.

10. FUTURE KEY ISSUES

The following are the scheduled construction activities for the next reported period. Scheduled monitoring activities for the following month is given in Appendix VIII.

Table 10.1 Works Programme for June 2005

Works Activities	Predicted Impacts	Proposed Mitigation Measures
Piling work for temporary berth.	· Water	· The silt curtain should be properly installed before carrying out the piling work.
Construction of preliminary pile and pile loading test	· Noise · Waste	· Avoid concurrent noisy operation during the erection of deck for the temporary berth · Construction and demolition materials should be sorted
Erection of deck for temporary berth	· Noise · Waste	· Avoid concurrent noisy operation during the erection of deck for the temporary berth · Construction and demolition materials should be sorted
Construction of main piles	· Noise · Waste	· Avoid concurrent noisy operation during the erection of deck for the temporary berth · Construction and demolition materials should be sorted

11. CONCLUSION

For water quality monitoring, there were no exceedances to the Action Level and Limit Levels recorded during the reported period except the dissolved oxygen level. The exceedances were due to the increasing temperature of the marine water during summer period. The dissolved oxygen levels for all the monitoring locations were comparable to the control point and without any significant diminish of dissolved oxygen level. Therefore these events were not considered to be site-related.

No complaints, notifications of summons and successful prosecutions were received in this month.

Figures

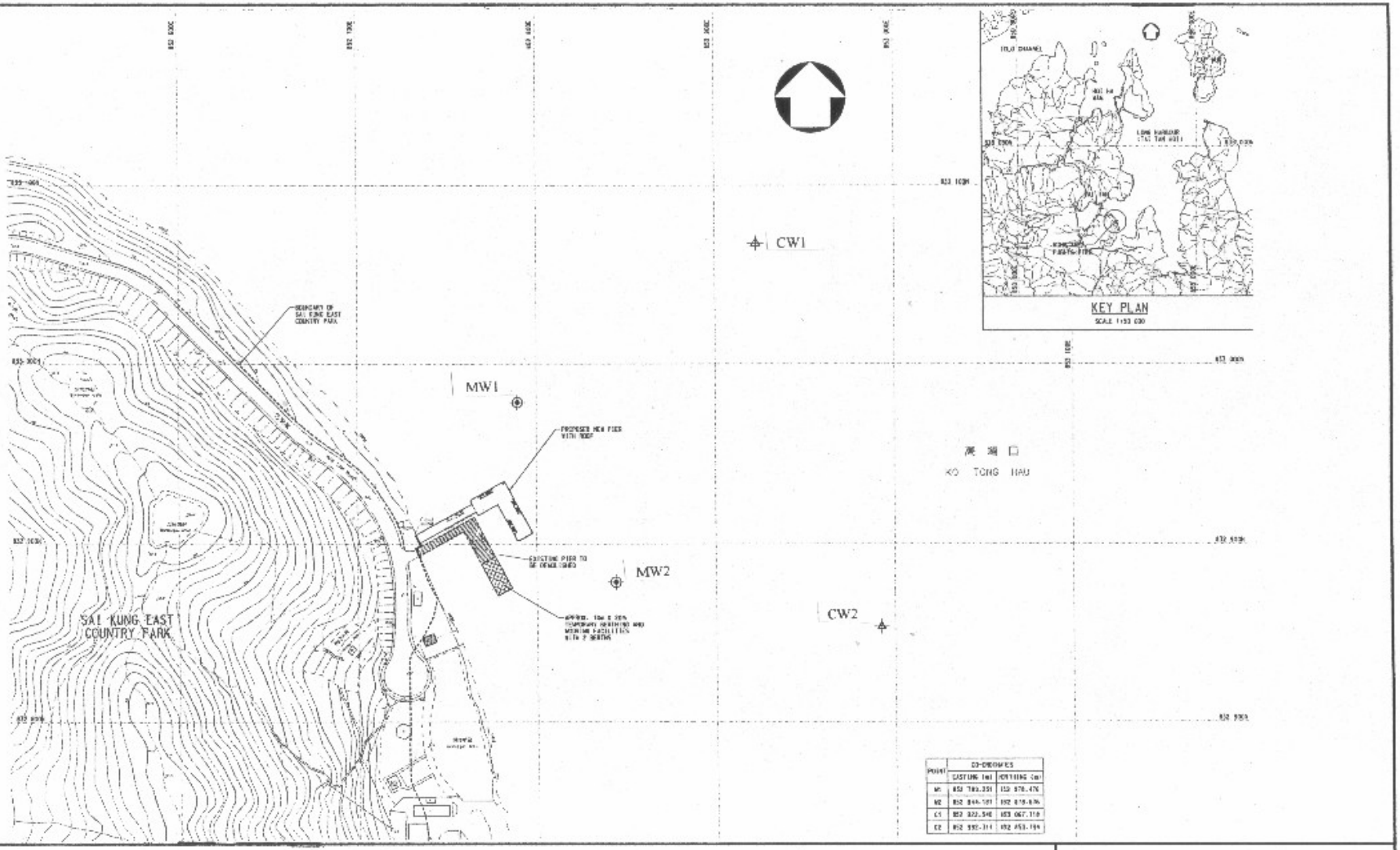


Figure 4.1 - Water Quality Monitoring Stations (Wong Shek)

Stanger Asia

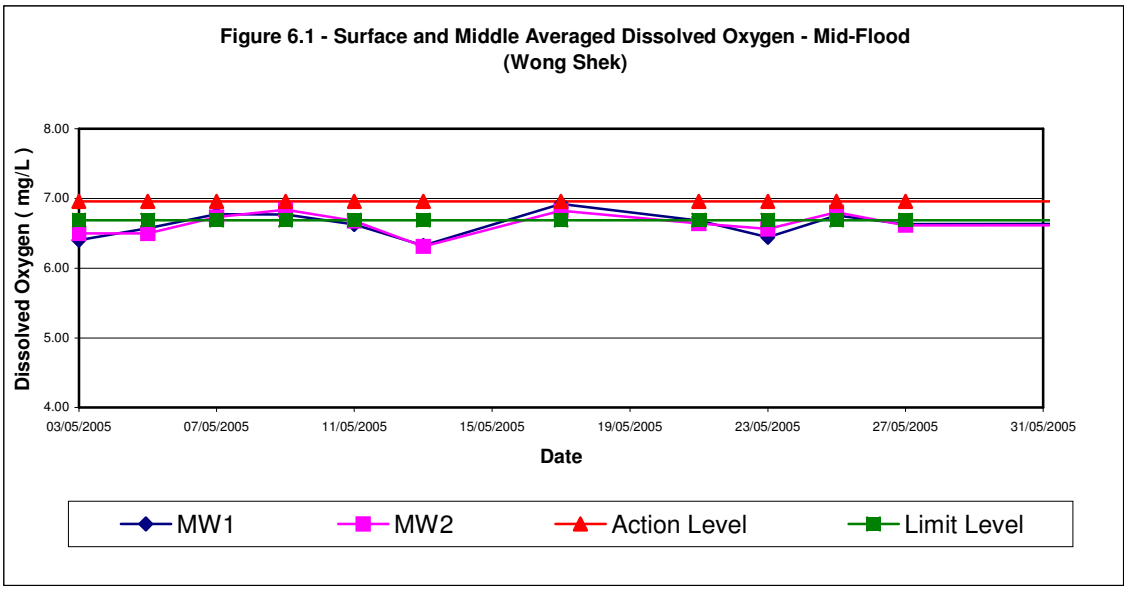


Figure 6.1 - Surface and Middle Averaged Dissolved Oxygen - Mid-Flood
(Wong Shek)
Dissolved Oxygen (mg/L)
8.00
7.00
6.00
5.00
4.00
03/05/2005
07/05/2005
11/05/2005
15/05/2005
19/05/2005
23/05/2005
27/05/2005
31/05/2005
Date
MW1
MW2
Action Level
Limit Level

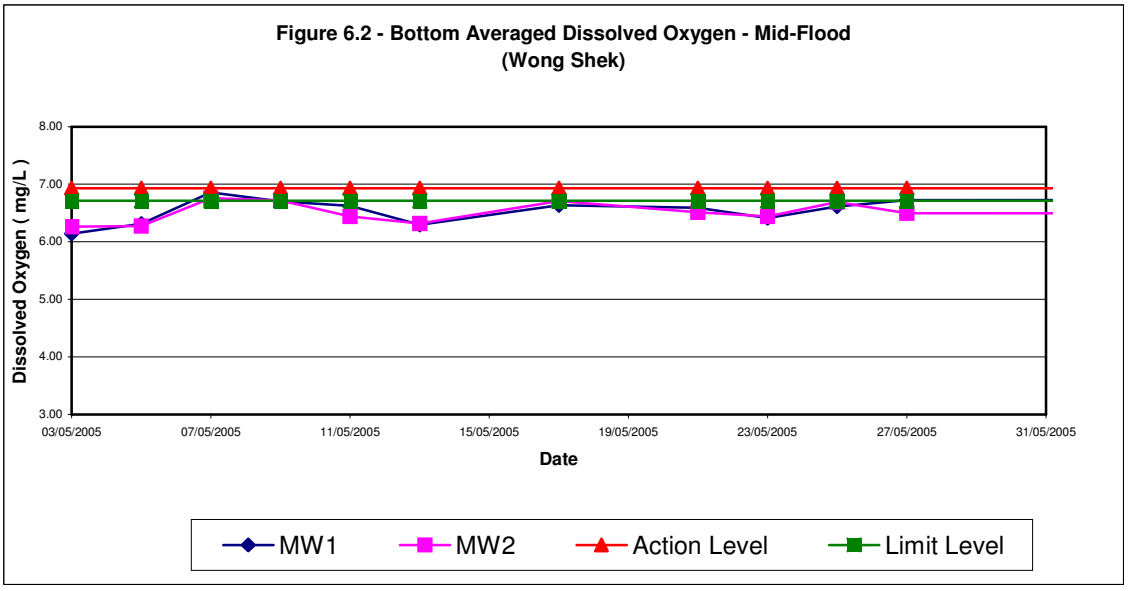


Figure 6.2 - Bottom Averaged Dissolved Oxygen - Mid-Flood
(Wong Shek)
Dissolved Oxygen (mg/L)
8.00
7.00
6.00
5.00
4.00
3.00
03/05/2005
07/05/2005
11/05/2005
15/05/2005
19/05/2005
23/05/2005
27/05/2005
31/05/2005
Date
MW1
MW2
Action Level
Limit Level

Figure 6.3 - Depth Averaged Turbidity - Mid-Flood (Wong Shek)

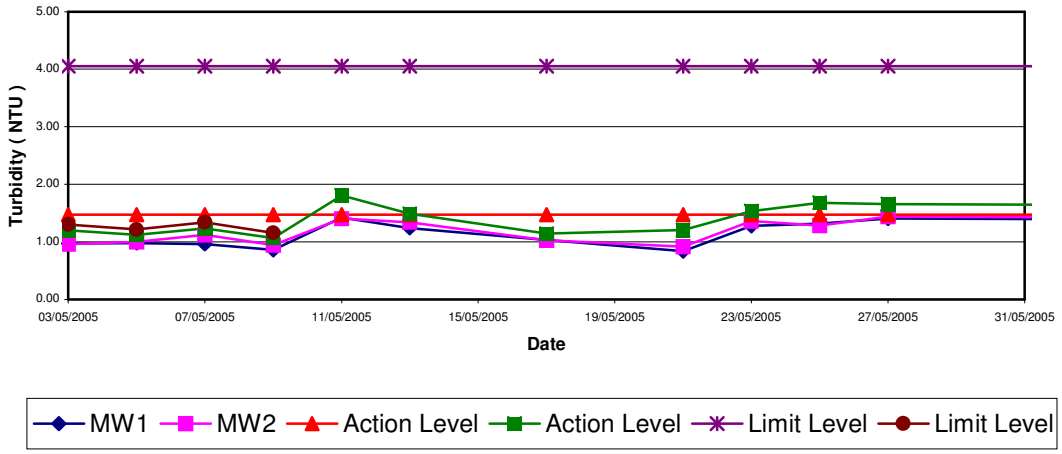


Figure 6.4 - Depth Averaged Suspended Solids - Mid-Flood (Wong Shek)

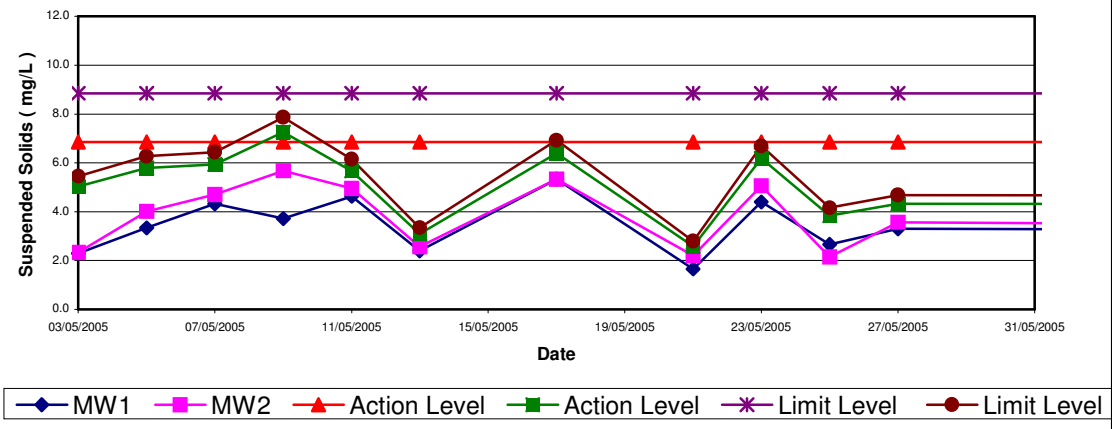


Figure 6.5 - Surface and Middle Averaged Dissolved Oxygen - Mid-Ebb (Wong Shek)

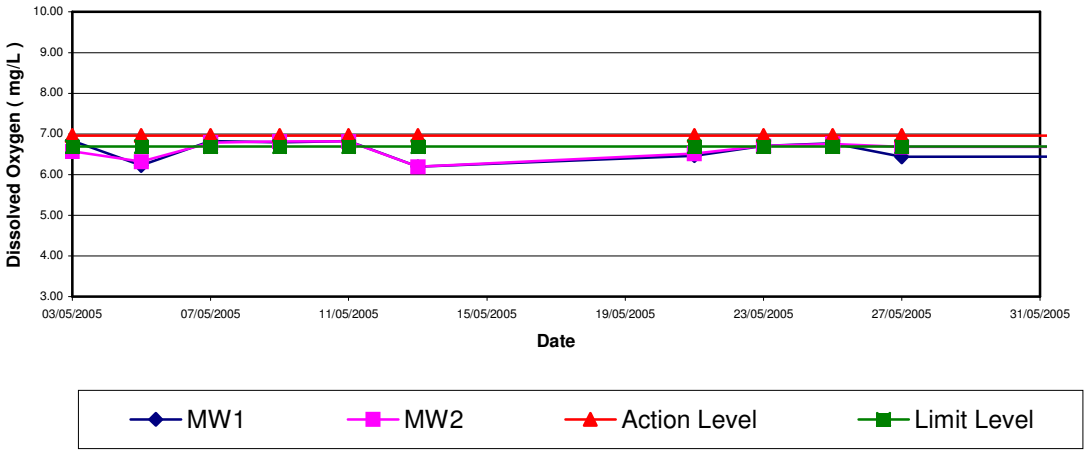


Figure 6.6 - Bottom Averaged Dissolved Oxygen - Mid-Ebb (Wong Shek)

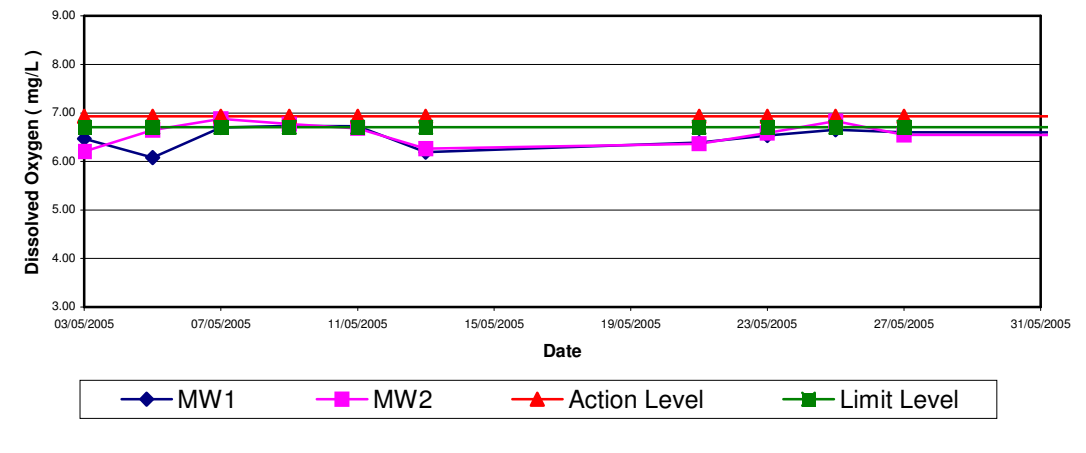


Figure 6.7 - Depth Averaged Turbidity - Mid-Ebb (Wong Shek)

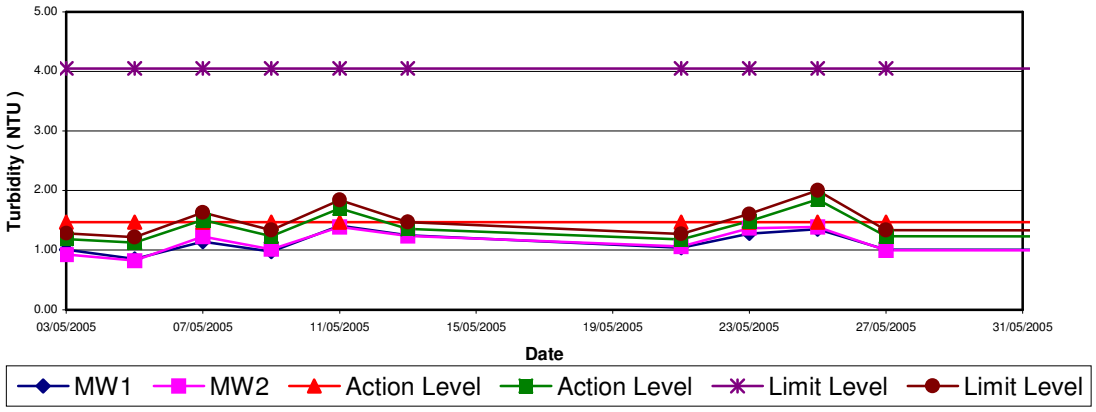
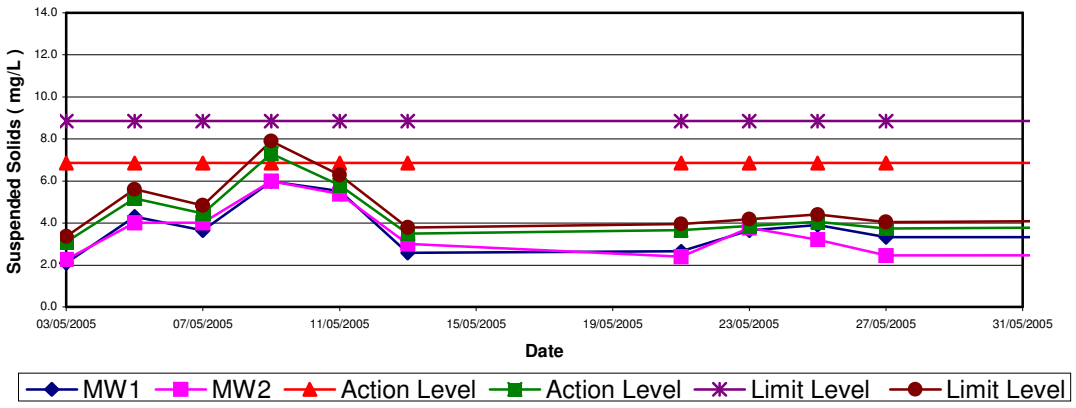


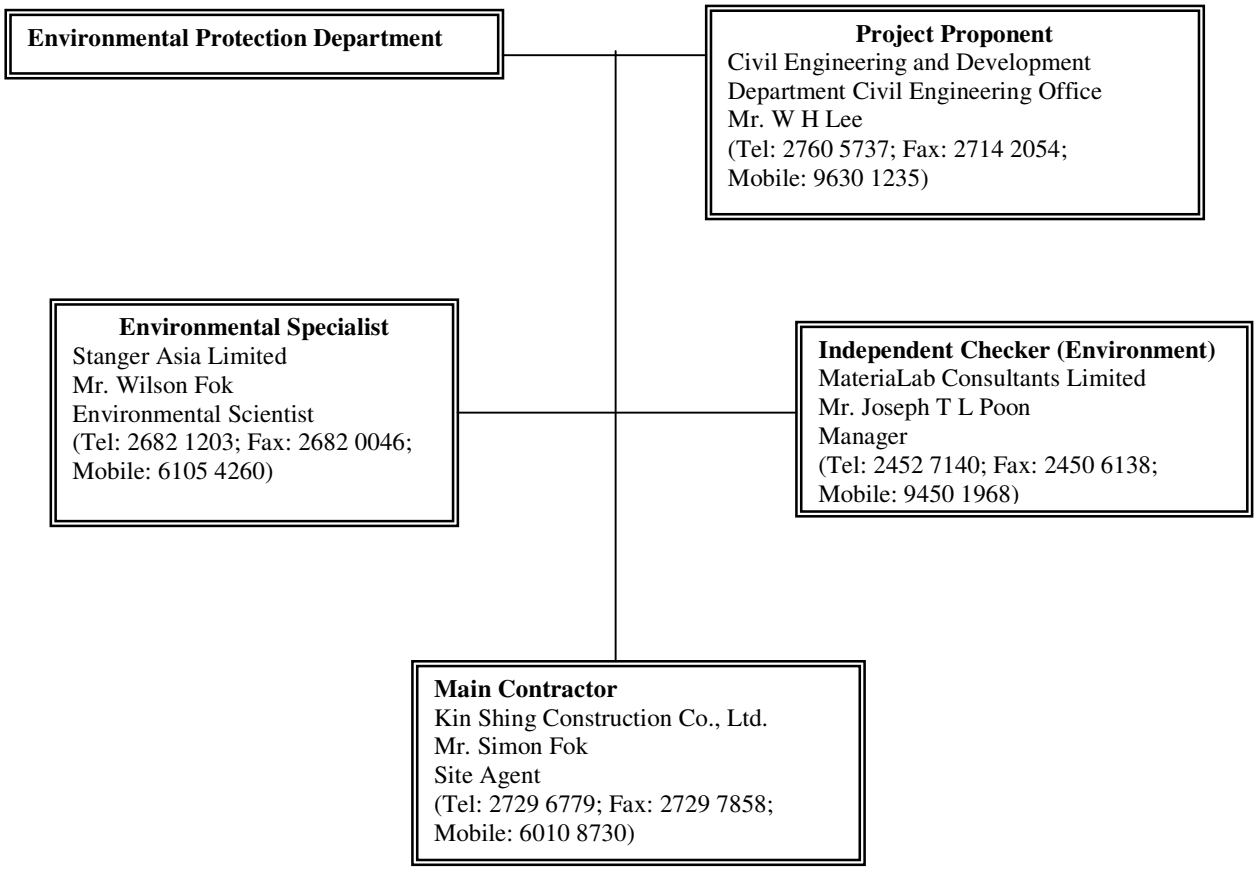
Figure 6.8 - Depth Averaged Suspended Solids - Mid-Ebb (Wong Shek)



Appendix I

Organisation Chart

Contract No. CV/2004/02
Reconstruction of Wong Shek and Ko Lau Wan Public Piers
Environmental Organization Chart



Appendix II

Calibration Certificates of the Monitoring Equipment

SOMP ENV071: CALIBRATION RECORD OF DISSOLVED OXYGEN, SALINITY, CONDUCTIVITY, TEMPERATURE SYSTEM

Equipment No.: EM 6167

Model No.: YSI 85

Equipment Serial No.: 04L1806

Date of Calibration.: 04-04-2005

Due Date of Next Calibration.: 04-07-2005

Molarity of sodium thiosulphate solution: 0.0250M

Potassium Bi-iodate No.: 480

Stock Calibration Standard Potassium Chloride No. 625

Stock Calibration Check Potassium Chloride No. 648

Reference Thermometer No. RF2358

Calibration Check for Dissolved Oxygen

Standardisation of Sodium Thiosulphate Solution			
Standard Solution	Initial burette reading B, mL	Final burette reading C, mL	Vol. of $Na_2S_2O_3$ used A, mL = (C – B)
Standard 1	0.00	20.10	20.10
Standard 2	0.00	20.00	20.00
Standard 3	0.00	20.00	20.00
		Average Value	20.03

Calibration of the Dissolved Oxygen					
Standard Solutions	Initial burette reading B, mL	Final burette reading C, mL	Vol. of $Na_2S_2O_3$ used A, mL = (C – B)	D.O. by titration, mg/L	Meter reading, mg/L
A	0.00	0.00	0.00	0.00	0.00
B	0.00	2.96	2.96	2.96	3.00
C	0.00	5.50	5.50	5.50	5.80
D	0.00	8.98	8.98	9.00	8.90
Allowing deviation : ± 10%					

Calibration Check for Salinity

Calibration Check of the Salinity	
Calibration Check Solutions, ppt	Meter reading, ppt
0.0	0.0
10.0	9.9
20.0	19.6
30.0	30.5
40.0	41.1
Allowing deviation : ± 10%	

Calibration Check for Temperature

Calibration Check of the Temperature	
Reference Thermometer reading, °C	Meter reading, °C
0.00	0.0
15.10	15.0
25.10	25.0
29.97	30.1
Allowing deviation : ± 0.5 °C	

Tested by : _____ Anthony Ma

Checked By : _____ Catherine Hung

SOMP ENV062: CALIBRATION RECORD OF TURBIDIMETER

Date of Calibration: 29/03/2005

Due Date of Next Calibration: 29/06/2005

Equipment No.: EM 2365

Manufacturer: HACH

Model: 2100 P

Serial No.: 970500014289

Turbidimeter Calibration standard (HACH): No. 1: 20 NTU
No. 2: 100 NTU
No. 3: 800 NTU

Stock Calibration No.: 896

Three-point calibration accepted: (Y) / N

Stock Calibration checking standards No. #895

Turbidity value - Checking standards (NTU)		
Actual value	Measured value	Accepted*: Y/N
0	0	Y
5	5.09	Y
10	10.4	Y
50	51.4	Y
100	99.2	Y
400	389	Y

*Allowing Deviation: +/- 10%

Tested by: Anthony Ma

Checked by: Catherine Hung

Appendix III

Event and Action Plans

Event/Action Plan for Water Quality

EVENT	ACTION			
	ES	IC(E)	ER	CONTRACTOR
Action level				
Action level being exceeded by one sampling day.	1. Repeat in-situ measurements to confirm findings; 2. Identify source(s) of impacts; 3. Inform IC(E) and ER; 4. Check monitoring data, all plant, equipment and Contractor's working methods; 5. Discuss mitigation measures with IC(E), ER and Contractor; 6. Repeat measurements on next day of exceedance.	1. Discuss with ES and Contractor on the mitigation measures; 2. Review proposals on mitigation measures submitted by Contractor and advise ER accordingly; 3. Assess the effectiveness of implemented mitigation measures.	1. Discuss with IC(E) on the proposed mitigation measures; 2. Make agreement on the mitigation measures to be implemented.	1. Inform the ER and confirm notification of the non-compliance in writing; 2. Rectify unacceptable practice; 3. Check all plant and equipment; 4. Consider changes of working methods; 5. Discuss with ES and IC(E) and propose mitigation measures to IC(E) and ER; 6. Implement the agreed mitigation measures.
Action level being exceeded by more than one consecutive sampling day.	1. Repeat in-situ measurements to confirm findings; 2. Identify source(s) of impact; 3. Inform contractor, IC(E) and ER 4. Check monitoring data, all plant, equipment and Contractor's working methods; 5. Discuss mitigation measures with IC(E), ER and Contractor; 6. Ensure mitigation measures are implemented; 7. Prepare to increase the monitoring frequency to daily; 8. Repeat measurements on next day of exceedance.	1. Discuss with ES and Contractor on the proposed mitigation measures; 2. Review proposals on mitigation measures submitted by Contractor advise ER accordingly; 3. Assess the effectiveness of the implemented mitigation measures.	1. Discuss with IC(E) on the proposed mitigation measures; 2. Make agreement on the mitigation measures to be implemented; 3. Assess the effectiveness of the implemented mitigation measures.	1. Inform the Engineer and confirm notification of the non-compliance in writing; 2. Rectify unacceptable practice; 3. Check all plant and equipment; 4. Consider changes of working methods; 5. Discuss with the ES and IC(E) and propose mitigation measures to IC(E) and ER within 3 working days; 6. Implement the agreed mitigation measures.

Event/Action Plan for Water Quality (Cont'd)

EVENT	ACTION			
	ES	IC(E)	ER	CONTRACTOR
Limit level				
Limit level being exceeded by one sampling day.	1. Repeat in-situ measurements to confirm findings; 2. Identify source(s) of impact; 3. Inform contractor IC(E) and ER; 4. Check monitoring data, all plant, equipment and Contractor's working methods; 5. Discuss mitigation measures with IC(E), ER and Contractor; 6. Ensure mitigation measures are implemented; 7. Increase the monitoring frequency to daily until no exceedance of Limit level.	1. Discuss with ES and Contractor on the mitigation measures; 2. Review proposals on mitigation measures submitted by the Contractor and advise the ER accordingly; 3. Assess the effectiveness of implemented mitigation measures.	1. Discuss with IC(E), ES and Contractor on the proposed mitigation measures; 2. Request Contractor to critically review the working methods; 3. Make agreement on the mitigation measures to be implemented; 4. Assess the effectiveness of the implemented mitigation measures.	1. Inform the Engineer and confirm notification of the non-compliance in writing; 2. Rectify unacceptable practice; 3. Check all plant and equipment; 4. Consider changes of working methods; 5. Discuss with the ES IC(E) and ER and Propose mitigation measures to IC(E) and ER within 3 working days; 6. Implement the agreed mitigation measures.
Limit level being exceeded by more than one consecutive sampling day.	1. Repeat in-situ measurements to confirm findings; 2. Identify source(s) of impact; 3. Inform contractor, IC(E) and ER; 4. Check monitoring data, all plant, equipment and Contractor's working methods; 5. Discuss mitigation measures with IC(E), ER and Contractor; 6. Ensure mitigation measures are implemented; 7. Increase the monitoring frequency to daily until no exceedance of Limit level for two consecutive days.	1. Discuss with ES and Contractor on the mitigation measures; 2. Review proposals on mitigation measures submitted by the Contractor and advise ER accordingly; 3. Assess the effectiveness of implemented mitigation measures.	1. Discuss with IC(E) ES and Contractor on the proposed mitigation measures; 2. Request Contractor to critically review the working methods; 3. Make agreement on the mitigation measures to be implemented; 4. Assess the effectiveness of the implemented mitigation measures. 5. Consider and instruct, if necessary, the Contractor to slow down or to stop all or marine work until no exceedance of Limit level.	1. Inform the Engineer and confirm notification of the non-compliance in writing; 2. Rectify unacceptable practice; 3. Check all plant and equipment; 4. Consider changes of working methods; 5. Discuss with the ES, IC(E) and ER and propose mitigation measures to IC(E) and ER within 3 working days; 6. Implement the agreed mitigation measures; 7. As directed by the Engineer, slow down or stop all or part of the marine works or construction activities.

Appendix IV

Implementation Status of Mitigation Measures

IMPLEMENTATION STATUS OF MITIGATION MEASURES

Area	Mitigation Measures	Implementation Status
Air Quality	Provide a washpit or a wheel washing and/or vehicle cleaning facility at the exits.	Not applicable in this stage
	Provide a hard surfaced road between the wheel washing facilities and any finished road.	Not applicable in this stage
	No burning of construction wastes or vegetation shall be allowed on the Site.	Implemented
	In the process of material handling, any material which has the potential to create dust shall be treated with water or sprayed with wetting agent.	Not applicable in this stage
	Any vehicle with an open load carrying area used for moving materials which has the potential to create dust shall have properly fitting side and tail boards.	Not applicable in this stage
	Materials having the potential to create dust shall not be loaded to a level higher than the side and tail boards, and shall be covered by a clean tarpaulin.	Not applicable in this stage
	Stockpiles of sand, aggregate and construction and demolition material greater than $20m^3$ shall be enclosed on three sides, with walls extending above the pile and 2 meters beyond the front of the pile.	Not applicable in this stage
	Water sprays shall be provided and used both to dampen stored materials and when receiving raw materials.	Not applicable in this stage
	Clean and water the Site to minimize the fugitive dust emissions.	Implemented
	Furnace, boiler or other plant or equipment or use any fuel that might in any circumstances produce smoke or any other air pollution should not be installed.	Implemented
Noise	All plant and equipment to be used on Site are properly maintained in good operating condition and noisy construction activities shall be effectively sound-reduced by means of silencers, mufflers, acoustic linings or shields, acoustic sheds or screens or other means to avoid disturbance to any nearby noise sensitive receivers.	Implemented
	No excavator mounted breaker shall be used within 125m from any nearby noise sensitive receivers. Use hydraulic concrete crusher whenever applicable.	Implemented
	All construction works should stop on Sundays and General Holidays.	Implemented
Water Quality	Water in wheel washing facilities shall be changed at frequent intervals and sediments shall be removed regularly.	Not applicable in this stage
	The polluted water from the wheel washing facilities would not be discharged into all existing stream courses/drains and nearby waterbodies.	Not applicable in this stage
	All existing stream courses and drains within, and adjacent to the Site should be kept free from any debris and any excavated materials arising from the Works	Implemented
	Chemicals and concrete agitator washings should not be deposited in watercourses.	Implemented
	The effluent shall comply with the standards stated in the "Technical Memorandum on Standards and Effluent discharges into Drainage and Sewerage Systems, Inland and Coastal Waters" for the appropriate Water Control Zone.	Implemented
	No spoil or debris of any kind is allowed to be pushed, washed down, fall or be deposited on land or on the seabed adjacent to the Site.	Implemented

IMPLEMENTATION STATUS OF MITIGATION MEASURES

Area	Mitigation Measures	Implementation Status
	Maintain any existing site drainage system at all times including removal of solids in sand traps, manholes and stream beds.	Implemented
	Material from any earthworks should not be washed into the drainage system.	Implemented
	Silt curtain shall be provided during all demolition works and piling works with the Site.	Not applicable in this stage
	Silt curtain shall be formed from tough, abrasion-resistant permeable membranes suitable for the purpose, supported on floating booms in such a way as to ensure that the passage of turbid water to the surrounding water shall be restricted.	Not applicable in this stage
	No dredging and spoil dumping shall be conducted.	Not applicable in this stage
Ecology	Marker buoys shall be set up to indicate the location of the "Coral Exclusion Zone". All working vessels shall be restricted to encroach the "Coral Exclusion Zone"	Implemented
	No overloading of the working barges during operation and no movement of the working barges, particularly close to the pier and shallow areas, during low tide should be allowed.	Not applicable in this stage
	No coral shall be enclosed by the silt curtain.	Not applicable in this stage
Waste	All excavated materials should be sorted to recover the inert portions for reuse on site or disposal to designated outlets.	Not applicable in this stage
	All metals should be recovered on site for collection by recycling contractors.	Not applicable in this stage
	All cardboard and paper packaging should be recovered on site, properly stockpiled in dry condition and covered to prevent cross contamination by other C&D materials.	Not applicable in this stage
	All demolition debris from demolition works should be sorted to recover on site broken concrete, reinforcement bars, mechanical and electrical fittings as well as other building services fittings/materials that have established recycling outlets.	Not applicable in this stage

Appendix V

Water Quality Monitoring Data

Project: Contract No. CV/2004/02 Reconstruction of Wong Shek and Ko Lau Wan Public Piers Client: Kin Shing Construction Co., Ltd. Job No.: 1618.3

Date of Sampling : 03/05/2005 Weather Condition: Sunny Ambient Temperature, °C 29 Tide State: Mid-Flood

Station	Time	Sea Condition	Overall Depth, m	Sampling Depth,m	Temperature, °C		Dissolved Oxygen, mg/L			Dissolved Oxygen, %			Salinity, ppt		Turbidity, NTU			Suspended Solids, mg/L			Remarks
					a	b	a	b	Average	a	b	Average	a	b	a	b	Average			Depth Average	
MW1 S		Small Wave	7	1	24.8	24.8	6.36	6.40	6.40	91.0	91.2	90.7	33.3	33.2	1.02	1.01	0.97	4	3	2	
MW1 M	15:05			3.5	24.1	24.0	6.45	6.40		90.2	90.5		33.3	33.3	0.92	0.95		1	1		
MW1 B				6	23.2	23.2	6.16	6.12	6.14	89.3	89.7	89.5	33.3	33.2	0.96	0.98		3	3		
MW2 S		Small Wave	10	1	24.7	24.6	6.60	6.63	6.50	93.5	94.1	92.9	33.2	33.3	0.93	0.95	0.96	3	2	2	
MW2 M	13:50			5	24.0	24.2	6.41	6.36		91.8	92.0		33.3	33.3	0.89	0.90		3	3		
MW2 B				9	23.2	23.1	6.25	6.27	6.26	91.0	91.1	91.1	33.3	33.2	1.02	1.07		2	2		
CW1 S		Small Wave	5	1	24.8	24.8	6.77	6.72	6.75	94.2	94.5	94.4	33.2	33.3	1.08	1.10	1.00	6	7	4	
CW1 M	14:40																				
CW1 B				4	24.2	24.2	6.01	6.05	6.03	92.7	92.3	92.5	33.2	33.3	0.90	0.91		2	2		
CW2 S		Small Wave	11	1	24.8	24.7	6.70	6.73	6.60	93.6	93.3	92.8	33.3	33.2	0.95	0.96	0.95	1	1	2	
CW2 M	14:15			5.5	24.1	24.1	6.46	6.50		91.9	92.2		33.3	33.3	0.88	0.92		4	4		
CW2 B				10	23.2	23.3	6.39	6.43	6.41	90.5	90.8	90.7	33.3	33.3	0.96	1.03		2	2		

Equipment used:
- Dissolved Oxygen Meter: EM 6167 Calibration Check: 0mg/L: OK 100%: OK
- Turbidity Meter: EM 2365 Calibration Check: 4.61, 43.1, 458 NTU
- Salinity Meter: EM 6167 Calibration Check: 58.8 mS
- Thermometer: EM 6167

Sampled By: Daniel Yim
Checked By: Catherine Hung
Date: 5 May 05

Project: Contract No. CV/2004/02 Reconstruction of Wong Shek and Ko Lau Wan Public Piers Client: Kin Shing Construction Co., Ltd. Job No.: 1618.3

Date of Sampling : 03/05/2005 Weather Condition: Sunny Ambient Temperature, °C 26 Tide State: Mid-Ebb

Station	Time	Sea Condition	Overall Depth, m	Sampling Depth,m	Temperature, °C		Dissolved Oxygen, mg/L			Dissolved Oxygen, %			Salinity, ppt		Turbidity, NTU			Suspended Solids, mg/L			Remarks
					a	b	a	b	Average	a	b	Average	a	b	a	b	Average			Depth Average	
MW1 S		Small Wave	6	1	24.3	24.3	6.89	6.83	6.84	90.4	90.7	92.5	33.2	33.2	0.83	0.88	1.01	1	1	2	
MW1 M	09:50			3	24.0	24.0	6.80	6.84		94.1	94.6		33.2	33.3	1.02	1.10		2	2		
MW1 B				5	23.1	23.2	6.46	6.48	6.47	88.6	88.8	88.7	33.2	33.2	1.12	1.08		4	4		
MW2 S		Small Wave	9	1	24.2	24.3	6.71	6.75	6.57	92.1	91.7	92.7	33.2	33.2	0.92	0.94	0.92	2	3	2	
MW2 M	08:35			4.5	24.1	24.0	6.43	6.40		93.6	93.2		33.2	33.2	0.86	0.81		2	2		
MW2 B				8	23.2	23.2	6.18	6.23	6.21	90.7	90.2	90.5	33.3	33.2	0.99	1.02		3	2		
CW1 S		Small Wave	4	1	24.3	24.3	6.79	6.72	6.76	93.0	93.6	93.3	33.2	33.2	1.03	1.07	0.98	4	3	3	
CW1 M	09:25																				
CW1 B				3	24.0	24.0	6.51	6.44	6.48	92.2	91.8	92.0	33.2	33.2	0.89	0.94		3	4		
CW2 S		Small Wave	10	1	24.3	24.3	6.60	6.64	6.55	93.0	93.4	93.5	33.2	33.2	0.90	0.93	0.99	2	2	3	
CW2 M	09:00			5	24.0	24.0	6.49	6.47		93.7	94.0		33.2	33.2	1.00	1.06		3	2		
CW2 B				9	23.2	23.2	6.30	6.33	6.32	91.7	91.3	91.5	33.2	33.1	1.01	1.03		4	3		

Equipment used:
Dissolved Oxygen Meter: EM 6167 Calibration Check: 0mg/L: OK 100%: OK
Turbidity Meter: EM 2365 Calibration Check: 4.61, 43.1, 458 NTU
Salinity Meter: EM 6167 Calibration Check: 58.8 mS
Thermometer: EM 6167

Sampled By: Daniel Yim
Checked By: Catherine Hung
Date: 5 May 05

Project: Contract No. CV/2004/02 Reconstruction of Wong Shek and Ko Lau Wan Public Piers Client: Kin Shing Construction Co., Ltd. Job No.: 1618.3

Date of Sampling : 05/05/2005 Weather Condition: Cloudy Ambient Temperature, °C 30 Tide State: Mid-Flood

Station	Time	Sea Condition	Overall Depth, m	Sampling Depth,m	Temperature, °C		Dissolved Oxygen, mg/L			Dissolved Oxygen, %			Salinity, ppt		Turbidity, NTU			Suspended Solids, mg/L			Remarks
					a	b	a	b	Average	a	b	Average	a	b	a	b	Average			Depth Average	
MW1 S		Small wave	7	1	25.0	24.9	6.69	6.74	6.58	93.2	93.5	92.1	33.3	33.4	0.82	0.90	0.98	5	4	3	
MW1 M	17:30			3.5	24.2	24.2	6.42	6.45		91.0	90.8		33.4	33.4	0.96	1.02		4	4		
MW1 B				6	23.9	23.9	6.29	6.34	6.32	89.1	88.8	89.0	33.3	33.4	1.06	1.10		2	2		
MW2 S		Small wave	10	1	24.9	24.9	6.56	6.60	6.50	92.2	92.5	91.4	323.4	33.4	1.02	1.00	1.00	4	4	4	
MW2 M	16:20			5	24.2	24.3	6.43	6.41		90.6	90.3		33.4	33.4	1.03	1.05		5	4		
MW2 B				9	23.9	23.9	6.29	6.25	6.27	89.4	89.0	89.2	33.4	33.4	0.92	0.99		4	4		
CW1 S		Small wave	5	1	24.9	24.8	6.42	6.50	6.46	91.3	91.9	91.6	33.4	33.4	0.86	0.90	0.94	6	6	5	
CW1 M	17:10																				
CW1 B				4	24.2	24.3	6.63	6.65	6.64	93.0	93.4	93.2	33.4	33.4	0.96	1.02		4	4		
CW2 S		Small wave	11	1	24.9	25.0	6.26	6.27	6.39	89.0	89.2	90.5	33.4	33.4	1.07	1.10	0.98	3	2	4	
CW2 M	16:45			5.5	24.3	24.3	6.49	6.52		91.7	92.0		33.4	33.4	0.95	0.96		5	5		
CW2 B				10	23.9	23.9	6.29	6.28	6.29	89.8	90.3	90.1	33.4	33.3	0.90	0.91		4	4		

Equipment used:
Dissolved Oxygen Meter: EM 6167 Calibration Check: 0mg/L: OK 100%: OK
Turbidity Meter: EM 2365 Calibration Check: 4.50, 46.0, 450 NTU
Salinity Meter: EM 6167 Calibration Check: 58.5 mS
Thermometer: EM 6167

Sampled By: Daniel Yim
Checked By: Catherine Hung
Date: 7 May 05

Project: Contract No. CV/2004/02 Reconstruction of Wong Shek and Ko Lau Wan Public Piers Client: Kin Shing Construction Co., Ltd. Job No.: 1618.3

Date of Sampling : 05/05/2005 Weather Condition: Cloudy Ambient Temperature, °C 29 Tide State: Mid-Ebb

Station	Time	Sea Condition	Overall Depth, m	Sampling Depth,m	Temperature, °C		Dissolved Oxygen, mg/L			Dissolved Oxygen, %			Salinity, ppt		Turbidity, NTU			Suspended Solids, mg/L			Remarks
					a	b	a	b	Average	a	b	Average	a	b	a	b	Average			Depth Average	
MW1 S		Small Wave	6	1	24.1	24.1	6.27	6.28	6.23	87.9	88.5	89.3	33.4	33.4	0.74	0.80	0.86	4	4	4	
MW1 M	11:25			3	23.8	23.8	6.17	6.19		90.5	90.3		33.4	33.4	0.83	0.79		4	5		
MW1 B				5	23.5	23.5	6.06	6.10	6.08	92.1	92.5	92.3	33.4	33.4	0.96	1.02		5	5		
MW2 S		Small Wave	9	1	23.9	23.9	6.14	5.93	6.32	93.9	94.0	94.3	33.3	33.3	0.77	0.82	0.83	5	5	4	
MW2 M	10:20			4.5	23.4	23.4	6.59	6.61		94.3	95.0		33.4	33.4	0.74	0.75		3	3		
MW2 B				8	23.2	2.2	6.67	6.62	6.65	96.6	96.9	96.8	33.4	33.4	0.91	0.96		4	4		
CW1 S		Small Wave	4	1	23.9	23.9	6.32	6.34	6.33	91.5	91.8	91.7	33.4	33.4	0.88	0.93	0.91	6	5	4	
CW1 M	11:05																				
CW1 B				3	23.5	23.5	6.72	6.65	6.69	94.7	95.0	94.9	33.4	33.4	0.90	0.94		3	2		
CW2 S		Small Wave	10	1	24.1	24.1	6.45	6.39	6.26	91.0	91.3	93.6	33.3	33.3	0.95	1.05	0.94	5	5	4	
CW2 M	10:45			5	23.3	23.3	6.11	6.10		95.9	96.2		33.4	33.4	0.86	0.91		3	3		
CW2 B				9	23.2	23.2	6.62	6.65	6.64	92.9	93.2	93.1	33.4	33.4	0.94	0.92		5	5		

Equipment used:
Dissolved Oxygen Meter: EM 6167 Calibration Check: 0mg/L: OK 100%: OK
Turbidity Meter: EM 2365 Calibration Check: 4.50, 46.0, 450 NTU
Salinity Meter: EM 6167 Calibration Check: 58.5 mS
Thermometer: EM 6167

Sampled By: Daniel Yim
Checked By: Catherine Hung
Date: 7 May 05

Project: Contract No. CV/2004/02 Reconstruction of Wong Shek and Ko Lau Wan Publi Client: Kin Shing Construction Co., L Job No.: 1618.3

Date of Sampling : 07/05/2005 Weather Condition: Cloudy Ambient Temperature, °C 28 Tide State: Mid-Flood

Station	Time	Sea Condition	Overall Depth, m	Sampling Depth,m	Temperature, °C		Dissolved Oxygen, mg/L			Dissolved Oxygen, %			Salinity, ppt		Turbidity, NTU			Suspended Solids, mg/L			Remarks
					a	b	a	b	Average	a	b	Average	a	b	a	b	Average			Depth Average	
MW1 S		Middle Wave	7	1	24.8	24.8	6.72	6.75	6.78	99.8	99.7	100.0	33.2	33.3	0.97	1.02	0.96	5	5	4	
MW1 M	18:45			3.5	24.3	24.4	6.80	6.84		100.1	100.4		33.3	33.3	0.99	1.00		5	4		
MW1 B				6	24.1	24.1	6.85	6.87	6.86	100.4	100.3	100.4	33.3	33.3	0.88	0.92		4	4		
MW2 S		Middle Wave	10	1	24.7	24.8	6.80	6.78	6.73	100.0	100.2	99.2	33.3	33.4	1.02	1.04	1.12	4	4	5	
MW2 M	17:30			5	24.5	24.4	6.66	6.69		98.4	98.1		33.3	33.3	1.10	1.11		5	5		
MW2 B				9	24.2	24.2	6.75	6.77	6.76	99.6	99.5	99.6	33.3	33.4	1.22	1.24		5	5		
CW1 S		Middle Wave	5	1	24.7	24.7	6.84	6.85	6.85	100.5	100.7	100.6	33.4	33.3	1.06	1.05	1.03	5	5	5	
CW1 M	18:20																				
CW1 B				4	24.5	24.5	6.76	6.73	6.75	99.8	99.6	99.7	33.3	33.4	1.01	1.00		5	5		
CW2 S		Middle Wave	11	1	24.8	24.7	6.78	6.80	6.70	99.5	99.7	99.1	33.4	33.4	0.94	0.96	0.95	4	3	4	
CW2 M	17:55			5.5	24.4	24.4	6.60	6.62		98.4	98.6		33.3	33.3	0.87	0.90		5	5		
CW2 B				10	24.2	24.2	6.85	6.84	6.85	100.0	100.2	100.1	33.3	33.3	0.99	1.03		3	3		

Equipment used:

Dissolved Oxygen Meter: EM 6167 Calibration Check: 0mg/L: OK 100%: OK

Turbidity Meter: EM 2365 Calibration Check: 4.50, 45.0, 440 NTU

Salinity Meter: EM 6167 Calibration Check: 58.6 mS

Thermometer: EM 6167

Sampled By: Daniel Yim

Checked By: Catherine Hung

Date: 10 May 05

Project: Contract No. CV/2004/02 Reconstruction of Wong Shek and Ko Lau Wan Public Piers Client: Kin Shing Construction Co., Ltd. Job No.: 1618.3

Date of Sampling : 07/05/2005 Weather Condition: Cloudy Ambient Temperature, °C 26 Tide State: Mid-Ebb

Station	Time	Sea Condition	Overall Depth, m	Sampling Depth,m	Temperature, °C		Dissolved Oxygen, mg/L			Dissolved Oxygen, %			Salinity, ppt		Turbidity, NTU			Suspended Solids, mg/L			Remarks
					a	b	a	b	Average	a	b	Average	a	b	a	b	Average			Depth Average	
MW1 S		Middle Wave	6	1	24.4	24.4	6.78	6.80	6.82	98.2	98.1	97.3	33.3	33.3	1.02	1.10	1.14	3	4	4	
MW1 M	13:05			3	24.2	24.2	6.79	6.92		96.2	96.5		33.3	33.3	1.16	1.19		4	5		
MW1 B				5	24.2	24.2	6.69	6.71	6.70	94.0	94.4	94.2	33.3	33.3	1.20	1.18		3	3		
MW2 S		Middle Wave	9	1	24.5	24.5	6.77	6.79	6.79	98.8	98.6	99.0	33.1	33.2	1.31	1.32	1.23	3	4	4	
MW2 M	11:50			4.5	24.1	24.1	6.78	6.81		99.3	99.1		33.3	33.3	1.17	1.15		4	3		
MW2 B				8	23.9	24.0	6.88	6.89	6.89	98.8	98.9	98.9	33.3	33.3	1.22	1.19		6	5		
CW1 S		Middle Wave	4	1	24.4	24.4	6.60	6.62	6.61	98.3	98.4	98.4	33.3	33.3	1.05	1.04	1.03	3	3	3	
CW1 M	12:40																				
CW1 B				3	24.2	24.2	6.63	6.65	6.64	97.3	97.5	97.4	33.3	33.3	1.00	1.02		4	3		
CW2 S		Middle Wave	10	1	24.4	24.4	6.66	6.70	6.75	100.0	100.4	99.8	33.3	33.3	1.22	1.24	1.26	3	3	4	
CW2 M	12:15			5	24.0	24.0	6.81	6.84		99.2	99.4		33.4	33.4	1.31	1.26		4	4		
CW2 B				9	23.9	23.9	6.80	6.82	6.81	101.0	101.5	101.3	33.3	33.3	1.25	1.26		4	4		

Equipment used:
Dissolved Oxygen Meter: EM 6167 Calibration Check: 0mg/L: OK 100%: OK
Turbidity Meter: EM 2365 Calibration Check: 4.50, 45.0, 440 NTU
Salinity Meter: EM 6167 Calibration Check: 58.6 mS
Thermometer: EM 6167

Sampled By: Daniel Yim
Checked By: Catherine Hung
Date: 10 May 05

Project: Contract No. CV/2004/02 Reconstruction of Wong Shek and Ko Lau Wan Publi Client: Kin Shing Construction Co., L Job No.: 1618.3

Date of Sampling : 09/05/2005 Weather Condition: Raining Ambient Temperature, °C 24 Tide State: Mid-Flood

Station	Time	Sea Condition	Overall Depth, m	Sampling Depth,m	Temperature, °C		Dissolved Oxygen, mg/L			Dissolved Oxygen, %			Salinity, ppt		Turbidity, NTU			Suspended Solids, mg/L			Remarks
					a	b	a	b	Average	a	b	Average	a	b	a	b	Average			Depth Average	
MW1 S		Small Wave	7	1	23.2	23.2	6.80	6.82	6.77	98.6	87.9	95.5	33.2	33.2	0.81	0.84	0.86	3	4	4	
MW1 M	08:45			3.5	23.0	23.0	6.74	6.73		97.7	97.6		33.2	33.2	0.92	0.90		4	4		
MW1 B				6	22.9	22.8	6.71	6.69	6.70	97.3	97.0	97.2	33.2	33.2	0.82	0.85		4	4		
MW2 S		Small Wave	10	1	23.2	23.2	6.85	6.87	6.84	99.3	99.6	99.2	33.3	33.3	0.88	0.90	0.94	7	6	6	
MW2 M	07:35			5	23.0	23.0	6.81	6.83		98.7	99.0		33.2	33.3	0.96	0.94		5	6		
MW2 B				9	22.9	22.9	6.70	6.73	6.72	97.2	97.6	97.4	33.2	33.2	0.99	0.98		5	6		
CW1 S		Small Wave	5	1	23.2	23.2	6.80	6.79	6.80	98.6	98.5	98.6	33.2	33.2	0.87	0.87	0.89	6	6	6	
CW1 M	08:25																				
CW1 B				4	23.0	23.0	6.76	6.78	6.77	98.0	98.3	98.2	33.2	33.2	0.90	0.92		6	6		
CW2 S		Small Wave	11	1	23.2	23.2	6.85	6.87	6.78	99.3	99.6	98.3	33.2	33.3	0.83	0.83	0.86	6	6	6	
CW2 M	08:00			5.5	23.0	23.0	6.70	6.68		97.2	96.9		33.2	33.2	0.81	0.82		6	6		
CW2 B				10	22.9	22.9	6.64	6.64	6.64	96.3	96.3	96.3	33.2	33.2	0.90	0.94		5	5		

Equipment used:

Dissolved Oxygen Meter: EM 6167 Calibration Check: 0mg/L: OK 100%: OK

Turbidity Meter: EM 2365 Calibration Check: 4.60, 45.0, 440 NTU

Salinity Meter: EM 6167 Calibration Check: 58.7 mS

Thermometer: EM 6167

Sampled By: Daniel Yim

Checked By: Catherine Hung

Date: 11 May 05

Project: Contract No. CV/2004/02 Reconstruction of Wong Shek and Ko Lau Wan Publi Client: Kin Shing Construction Co., L Job No.: 1618.3

Date of Sampling : 09/05/2005 Weather Condition: Raining Ambient Temperature, °C 26 Tide State: Mid-Ebb

Station	Time	Sea Condition	Overall Depth, m	Sampling Depth,m	Temperature, °C		Dissolved Oxygen, mg/L			Dissolved Oxygen, %			Salinity, ppt		Turbidity, NTU			Suspended Solids, mg/L			Remarks
					a	b	a	b	Average	a	b	Average	a	b	a	b	Average			Depth Average	
MW1 S				1	23.1	23.1	6.79	6.83		95.1	95.6		33.3	33.3	0.96	0.99		6	6		
MW1 M	14:15	Small Wave	6	3	22.9	22.9	6.74	6.80	6.79	94.4	95.2	95.1	33.3	33.2	1.02	1.03	0.97	6	6	6	
MW1 B				5	22.8	22.8	6.72	6.75	6.74	94.1	94.5	94.3	33.3	33.2	0.90	0.94		6	6		
MW2 S				1	23.1	23.1	6.81	6.82		95.3	95.5		33.3	33.3	0.97	0.98		6	6		
MW2 M	13:10	Small Wave	9	4.5	22.9	23.0	6.80	6.82	6.81	95.2	95.5	95.4	33.2	33.2	1.07	1.08	1.02	6	6	6	
MW2 B				8	22.8	22.8	6.72	6.82	6.77	94.1	95.5	94.8	33.2	33.2	1.02	0.99		6	6		
CW1 S				1	23.1	23.0	6.86	6.85		96.0	95.9		33.3	33.3	0.95	0.97		6	6		
CW1 M	13:55	Small Wave	4						6.86			96.0					0.91			6	
CW1 B				3	22.9	22.9	6.73	6.74	6.74	94.2	94.4	94.3	33.2	33.2	0.84	0.88		6	6		
CW2 S				1	23.1	23.1	6.70	6.68		93.8	93.5		33.3	33.2	1.09	1.12		5	5		
CW2 M	13:35	Small Wave	10	5	22.9	22.9	6.77	6.81	6.74	94.8	95.3	94.4	33.2	33.2	1.06	1.04	1.03	7	6	6	
CW2 B				9	22.8	22.7	6.75	6.74	6.75	94.5	94.4	94.4	33.2	33.2	0.92	0.93		6	7		

Equipment used:

Dissolved Oxygen Meter: EM 6167 Calibration Check: 0mg/L: OK 100%: OK

Turbidity Meter: EM 2365 Calibration Check: 4.60, 45.0, 440 NTU

Salinity Meter: EM 6167 Calibration Check: 58.7 mS

Thermometer: EM 6167

Sampled By: Daniel Yim

Checked By: Catherine Hung

Date: 11 May 05

Project: Contract No. CV/2004/02 Reconstruction of Wong Shek and Ko Lau Wan Publi Client: Kin Shing Construction Co., L Job No.: 1618.3

Date of Sampling : 11/05/2005 Weather Condition: Fine Ambient Temperature, °C 23 Tide State: Mid-Flood

Station	Time	Sea Condition	Overall Depth, m	Sampling Depth,m	Temperature, °C		Dissolved Oxygen, mg/L			Dissolved Oxygen, %			Salinity, ppt		Turbidity, NTU			Suspended Solids, mg/L			Remarks
					a	b	a	b	Average	a	b	Average	a	b	a	b	Average			Depth Average	
MW1 S				1	23.6	23.6	6.54	6.56		94.1	94.4		29.8	29.9	1.32	1.32		6	5		
MW1 M	08:00	Small Wave	7	3.5	23.2	23.2	6.71	6.70	6.63	96.2	96.3	95.3	29.8	29.9	1.44	1.45	1.42	5	6	5	
MW1 B				6	23.0	23.0	6.62	6.63	6.63	95.0	94.9	95.0	29.9	29.9	1.50	1.50		3	3		
MW2 S				1	23.6	23.6	6.73	6.75		96.3	96.5		30.0	30.0	1.40	1.41		6	5		
MW2 M	06:45	Small Wave	10	5	23.2	23.2	6.60	6.62	6.68	95.0	94.8	95.7	30.0	30.0	1.32	1.32	1.40	4	5	5	
MW2 B				9	23.0	22.9	6.43	6.45	6.44	93.2	93.3	93.3	30.0	30.0	1.49	1.48		5	5		
CW1 S				1	23.6	23.7	6.69	6.72		95.8	95.7		29.9	29.9	1.52	1.53		6	6		
CW1 M	07:35	Small Wave	5						6.71			95.8					1.51			5	
CW1 B				4	23.2	23.3	6.54	6.56	6.55	94.8	94.6	94.7	29.8	30.0	1.49	1.48		3	4		
CW2 S				1	23.6	23.6	6.49	6.52		93.7	93.9		30.0	30.0	1.46	1.46		5	4		
CW2 M	07:10	Small Wave	11	5.5	23.2	23.2	6.57	6.56	6.54	94.8	95.0	94.4	29.9	30.0	1.40	1.41	1.43	4	3	4	
CW2 B				10	23.0	23.0	6.62	6.60	6.61	95.5	95.7	95.6	30.0	30.0	1.42	1.42		6	5		

Equipment used:

Dissolved Oxygen Meter: EM 6167 Calibration Check: 0mg/L: OK 100%: OK

Turbidity Meter: EM 2365 Calibration Check: 4.60, 45.0, 450 NTU

Salinity Meter: EM 6167 Calibration Check: 58.6 mS

Thermometer: EM 6167

Sampled By: Daniel Yim

Checked By: Catherine Hung

Date: 13 May 05

Project: Contract No. CV/2004/02 Reconstruction of Wong Shek and Ko Lau Wan Publi Client: Kin Shing Construction Co., L Job No.: 1618.3

Date of Sampling : 11/05/2005 Weather Condition: Sunny Ambient Temperature, °C 26 Tide State: Mid-Ebb

Station	Time	Sea Condition	Overall Depth, m	Sampling Depth,m	Temperature, °C		Dissolved Oxygen, mg/L			Dissolved Oxygen, %			Salinity, ppt		Turbidity, NTU			Suspended Solids, mg/L			Remarks
					a	b	a	b	Average	a	b	Average	a	b	a	b	Average			Depth Average	
MW1 S				1	24.0	24.0	6.84	6.87	6.82	99.0	99.2	98.5	30.3	30.3	1.37	1.37		5	6		
MW1 M	14:05	Small Wave	6	3	23.3	23.4	6.78	6.80		97.8	97.9		30.3	30.4	1.32	1.32	1.41	6	6	6	
MW1 B				5	23.1	23.1	6.72	6.73	6.73	96.8	96.6	96.7	30.3	30.3	1.53	1.54		6	6		
MW2 S				1	24.0	24.1	6.77	6.80	6.81	97.1	97.3	98.1	30.3	30.3	1.40	1.42		5	5		
MW2 M	12:50	Small Wave	9	4.5	23.3	23.4	6.85	6.83		98.9	99.1		30.3	30.3	1.42	1.41	1.39	5	6	5	
MW2 B				8	23.1	23.1	6.70	6.67	6.69	96.4	96.5	96.5	30.3	30.4	1.34	1.35		5	6		
CW1 S				1	24.1	24.1	6.70	6.69	6.70	96.1	96.3	96.2	30.4	30.4	1.50	1.49		5	6		
CW1 M	13:40	Small Wave	4														1.46			6	
CW1 B				3	23.3	23.3	6.64	6.65	6.65	95.5	95.7	95.6	30.3	30.4	1.42	1.42		6	6		
CW2 S				1	24.1	24.1	6.80	6.81	6.84	98.0	98.2	98.8	30.2	30.3	1.45	1.46		5	4		
CW2 M	13:15	Small Wave	10	5	23.3	23.3	6.85	6.88		99.4	99.7		30.3	30.3	1.40	1.38	1.42	5	5	5	
CW2 B				9	23.1	23.1	6.72	6.74	6.73	96.9	96.8	96.9	30.3	30.3	1.39	1.41		5	6		

Equipment used:

Dissolved Oxygen Meter: EM 6167 Calibration Check: 0mg/L: OK 100%: OK

Turbidity Meter: EM 2365 Calibration Check: 4.60, 45.0, 450 NTU

Salinity Meter: EM 6167 Calibration Check: 58.6 mS

Thermometer: EM 6167

Sampled By: Daniel Yim

Checked By: Catherine Hung

Date: 13 May 05

Project: Contract No. CV/2004/02 Reconstruction of Wong Shek and Ko Lau Wan Publi Client: Kin Shing Construction Co., L Job No.: 1618.3

Date of Sampling : 13/05/2005 Weather Condition: Fine Ambient Temperature, °C 27 Tide State: Mid-Flood

Station	Time	Sea Condition	Overall Depth, m	Sampling Depth,m	Temperature, °C		Dissolved Oxygen, mg/L			Dissolved Oxygen, %			Salinity, ppt		Turbidity, NTU			Suspended Solids, mg/L			Remarks
					a	b	a	b	Average	a	b	Average	a	b	a	b	Average			Depth Average	
MW1 S		Normal Wave	7	1	24.0	24.0	6.25	6.26	6.33	88.7	89.0	89.6	32.7	32.8	1.28	1.30	1.24	2	2	2	
MW1 M	08:50			3.5	23.8	23.8	6.39	6.40		90.3	90.4		32.8	32.8	1.19	1.20		3	2		
MW1 B				6	23.5	23.5	6.29	6.30	6.30	89.7	89.8	89.8	32.8	32.9	1.22	1.25		3	3		
MW2 S		Normal Wave	10	1	24.0	24.0	6.40	6.41	6.31	91.0	91.1	90.0	32.7	32.8	1.36	1.37	1.34	3	3	3	
MW2 M	07:45			5	23.8	23.8	6.22	6.22		89.0	88.8		32.8	32.8	1.40	1.40		3	3		
MW2 B				9	23.5	23.4	6.31	6.33	6.32	80.7	80.8	80.8	32.9	32.9	1.25	1.25		2	2		
CW1 S		Normal Wave	5	1	24.0	24.0	6.29	6.30	6.30	90.0	89.8	89.9	32.8	32.8	1.29	1.30	1.24	2	2	3	
CW1 M	08:30																				
CW1 B				4	23.7	23.8	6.41	6.42	6.42	91.4	91.3	91.4	32.8	32.8	1.19	1.18		3	4		
CW2 S		Normal Wave	10	1	24.0	24.0	6.33	6.34	6.41	89.0	89.4	91.0	32.8	32.8	1.22	1.23	1.25	3	3	2	
CW2 M	08;05			5	23.8	23.7	6.50	6.48		92.8	92.6		32.9	32.9	1.37	1.37		3	3		
CW2 B				9	23.5	23.5	6.25	6.28	6.27	88.5	88.6	88.6	32.9	32.9	1.15	1.15		2	2		

Equipment used:
Dissolved Oxygen Meter: EM 6167 Calibration Check: 0mg/L: OK 100%: OK Sampled By: Daniel Daniel
Turbidity Meter: EM 2365 Calibration Check: 4.40, 40.5, 435 NTU Checked By: Catherine Hung
Salinity Meter: EM 6167 Calibration Check: 58.6 mS Date: 16 May 05
Thermometer: EM 6167

Project: Contract No. CV/2004/02 Reconstruction of Wong Shek and Ko Lau Wan Publi Client: Kin Shing Construction Co., L Job No.: 1618.3

Date of Sampling : 13/05/2005 Weather Condition: Sunny Ambient Temperature, °C: 30 Tide State: Mid-Ebb

Station	Time	Sea Condition	Overall Depth, m	Sampling Depth,m	Temperature, °C		Dissolved Oxygen, mg/L			Dissolved Oxygen, %			Salinity, ppt		Turbidity, NTU			Suspended Solids, mg/L			Remarks
					a	b	a	b	Average	a	b	Average	a	b	a	b	Average			Depth Average	
MW1 S				1	24.6	24.6	6.25	6.27		89.0	89.1		32.9	33.0	1.25	1.30		3	3		
MW1 M	15:40	Normal Wave	6	3	24.1	24.1	6.10	6.14	6.19	87.2	87.3	88.2	33.0	33.0	1.29	1.29	1.25	2	2	3	
MW1 B				5	23.9	23.9	6.20	6.19	6.20	88.3	88.5	88.4	33.0	33.0	1.17	1.18		3	3		
MW2 S				1	24.6	24.6	6.16	6.14		88.1	88.3		32.5	32.5	1.25	1.26		3	3		
MW2 M	14:30	Normal Wave	9	4.5	24.2	24.2	6.23	6.23	6.19	88.9	89.3	88.7	32.8	32.8	1.10	1.11	1.24	3	3	3	
MW2 B				8	24.0	24.0	6.26	6.27	6.27	88.2	88.3	88.3	32.9	32.9	1.36	1.36		3	4		
CW1 S				1	24.6	24.6	6.30	6.29		91.0	90.8		33.0	33.0	1.30	1.30		3	4		
CW1 M	15:15	Normal Wave	4						6.30			90.9					1.28			3	
CW1 B				3	24.2	24.1	6.17	6.19	6.18	88.3	88.5	88.4	33.0	33.0	1.25	1.26		2	2		
CW2 S				1	24.6	24.6	6.01	6.01		86.0	86.0		32.9	32.9	1.11	1.12		3	2		
CW2 M	14:50	Normal Wave	10	5	23.9	23.9	6.37	6.57	6.24	87.1	88.1	86.8	33.0	33.0	1.20	1.21	1.13	2	2	3	
CW2 B				9	23.8	23.7	6.46	6.50	6.48	89.2	89.0	89.1	33.0	33.0	1.06	1.08		4	5		

Equipment used:

Dissolved Oxygen Meter: EM 6167 Calibration Check: 0mg/L: OK 100%: OK

Turbidity Meter: EM 2365 Calibration Check: 4.40, 40.5, 435 NTU

Salinity Meter: EM 6167 Calibration Check: 58.6 mS

Thermometer: EM 6167

Sampled By: Daniel Daniel

Checked By: Catherine Hung

Date: 16 May 05

Project: Contract No. CV/2004/02 Reconstruction of Wong Shek and Ko Lau Wan Publi Client: Kin Shing Construction Co., L Job No.: 1618.3

Date of Sampling : 17/05/2005 Weather Condition: Sunny Ambient Temperature, °C 27 Tide State: Mid-Flood

Station	Time	Sea Condition	Overall Depth, m	Sampling Depth,m	Temperature, °C		Dissolved Oxygen, mg/L			Dissolved Oxygen, %			Salinity, ppt		Turbidity, NTU			Suspended Solids, mg/L			Remarks
					a	b	a	b	Average	a	b	Average	a	b	a	b	Average			Depth Average	
MW1 S		Mid-Wave	7	1	25.2	25.2	6.89	6.92	6.93	98.2	98.5	99.1	31.1	31.1	1.06	1.10	1.03	5	6	5	
MW1 M	09:25			3.5	24.3	24.3	6.94	6.95		99.8	99.9		31.0	31.0	1.02	1.03		6	5		
MW1 B				6	24.0	24.0	6.62	6.65	6.64	96.0	95.7	95.9	31.1	31.1	0.98	0.99		5	5		
MW2 S		Mid-Wave	10	1	25.2	25.2	6.77	6.79	6.82	97.2	97.3	97.6	31.0	31.1	1.00	1.00	1.03	6	6	5	
MW2 M	08:25			5	24.3	24.3	6.85	6.88		97.9	97.8		31.0	31.0	1.02	1.02		5	5		
MW2 B				9	24.0	24.0	6.70	6.71	6.71	96.2	96.4	96.3	31.0	31.0	1.06	1.07		5	5		
CW1 S		Mid-Wave	5	1	25.2	25.2	6.60	6.63	6.62	95.2	95.5	95.4	31.0	31.0	0.95	0.94	0.95	6	5	5	
CW1 M	09:10																				
CW1 B				4	24.3	24.4	6.75	6.75	6.75	97.3	97.5	97.4	31.1	31.0	0.96	0.96		5	6		
CW2 S		Mid-Wave	11	1	25.2	25.2	6.84	6.83	6.80	97.9	97.8	97.6	31.0	31.0	0.98	0.99	1.02	5	5	5	
CW2 M	08:45			5.5	24.3	24.4	6.76	6.77		97.1	97.4		31.0	31.0	1.02	1.02		5	5		
CW2 B				10	24.1	24.0	6.83	6.84	6.84	98.1	98.2	98.2	31.1	31.1	1.05	1.03		5	5		

Equipment used:
Dissolved Oxygen Meter: EM 6167 Calibration Check: 0mg/L: OK 100%: OK
Turbidity Meter: EM 2365 Calibration Check: 4.30, 38.5, 440 NTU
Salinity Meter: EM 6167 Calibration Check: 58.1 mS
Thermometer: EM 6167

Sampled By: Daniel Yim
Checked By: Catherine Hung
Date: 19 May 05

Project: Contract No. CV/2004/02 Reconstruction of Wong Shek and Ko Lau Wan Publi Client: Kin Shing Construction Co., L Job No.: 1618.3

Date of Sampling : 21/05/2005 Weather Condition: Cloudy Ambient Temperature, °C 30 Tide State: Mid-Flood

Station	Time	Sea Condition	Overall Depth, m	Sampling Depth,m	Temperature, °C		Dissolved Oxygen, mg/L			Dissolved Oxygen, %			Salinity, ppt		Turbidity, NTU			Suspended Solids, mg/L			Remarks
					a	b	a	b	Average	a	b	Average	a	b	a	b	Average			Depth Average	
MW1 S		Middle Wave	7	1	26.8	26.8	6.72	6.74	6.68	100.2	100.4	99.5	30.0	30.0	0.82	0.82	0.84	2	2	2	
MW1 M	18:15			3.5	26.4	26.3	6.63	6.64		98.5	98.8		30.0	30.0	0.88	0.90		2	2		
MW1 B				6	26.0	26.0	6.60	6.58	6.59	98.0	97.5	97.8	30.0	30.0	0.81	0.80		2	2		
MW2 S		Middle Wave	10	1	26.8	26.8	6.69	6.71	6.64	99.8	99.9	98.8	30.0	30.0	0.92	0.95	0.92	2	2	2	
MW2M	17:05			5	26.4	26.4	6.58	6.58		97.6	97.8		29.9	30.0	0.88	0.86		3	2		
MW2 B				9	26.1	26.0	6.52	6.51	6.52	96.9	96.6	96.8	30.0	30.0	0.94	0.94		2	2		
CW1 S		Middle Wave	5	1	26.8	26.8	6.77	6.78	6.78	101.0	101.3	101.2	29.9	29.9	1.02	1.01	1.00	2	2	2	
CW1 M	17:50																				
CW1 B				4	26.4	26.4	6.62	6.63	6.63	98.5	98.8	98.7	30.0	29.9	1.00	0.98		3	2		
CW2 S		Middle Wave	11	1	26.8	29.8	6.69	6.71	6.65	98.7	98.8		29.9	30.0	0.90	0.88	0.94	2	2	2	
CW2 M	17:25			5.5	26.4	26.4	6.60	6.61		97.8	98.1		30.0	30.0	0.94	0.95		2	2		
CW2 B				10	26.1	26.1	6.49	6.51	6.50	96.4	96.7	96.6	30.0	30.0	0.99	1.00		2	1		

Equipment used:
Dissolved Oxygen Meter: EM 6167 Calibration Check: 0mg/L: OK 100%: OK
Turbidity Meter: EM 2365 Calibration Check: 4.35, 38.6, 441 NTU
Salinity Meter: EM 6167 Calibration Check: 58.6 mS
Thermometer: EM 6167

Sampled By: Daniel Yim
Checked By: Catherine Hung
Date: 23 May 05

Project: Contract No. CV/2004/02 Reconstruction of Wong Shek and Ko Lau Wan Publi Client: Kin Shing Construction Co., L Job No.: 1618.3

Date of Sampling : 21/05/2005 Weather Condition: Cloudy Ambient Temperature, °C 29 Tide State: Mid-Ebb

Station	Time	Sea Condition	Overall Depth, m	Sampling Depth,m	Temperature, °C		Dissolved Oxygen, mg/L			Dissolved Oxygen, %			Salinity, ppt		Turbidity, NTU			Suspended Solids, mg/L			Remarks
					a	b	a	b	Average	a	b	Average	a	b	a	b	Average			Depth Average	
MW1 S		Middle wave	6	1	26.6	26.6	6.42	6.44	6.47	94.2	94.5	95.6	29.4	29.4	1.09	1.10	1.04	2	3	3	
MW1 M	11:55			3	26.2	26.1	6.51	6.51		96.9	96.7		29.5	29.5	1.02	1.02		3	3		
MW1 B				5	25.9	26.0	6.40	6.38	6.39	93.9	93.6	93.8	29.5	29.5	1.00	1.02		3	3		
MW2 S		Middle wave	9	1	26.6	26.6	6.55	6.56	6.52	97.4	97.6	96.5	29.4	29.4	1.11	1.12	1.06	3	4	2	
MW2 M	10:45			4.5	26.2	26.2	6.47	6.48		95.3	95.6		29.5	29.5	1.06	1.06		3	2		
MW2 B				8	26.0	26.0	6.36	6.37	6.37	93.2	93.5		29.5	29.5	1.02	1.01		2	2		
CW1 S		Middle wave	4	1	26.6	26.6	6.60	6.61	6.61	98.2	98.5	98.4	29.4	29.4	1.00	0.98	0.96	2	3	2	
CW1 M	11:30																				
CW1 B				3	26.2	26.2	6.52	6.54	6.53	97.1	97.5	97.3	29.5	29.6	0.92	0.93		2	2		
CW2 S		Middle wave	10	1	26.6	26.6	6.49	6.51		96.0	96.4		29.4	29.4	0.99	1.01	0.98	3	3	3	
CW2 M	11:10			5	26.2	26.2	6.42	6.43		94.5	94.7		29.5	29.5	1.00	1.00		3	4		
CW2 B				9	26.0	26.0	6.38	6.39	6.39	93.5	93.8	93.7	29.5	29.5	0.94	0.95		3	3		

Equipment used:

Dissolved Oxygen Meter: EM 6167 Calibration Check: 0mg/L: OK 100%: OK

Turbidity Meter: EM 2365 Calibration Check: 4.35, 38.6, 441 NTU

Salinity Meter: EM 6167 Calibration Check: 58.6 mS

Thermometer: EM 6167

Sampled By: Daniel Yim

Checked By: Catherine Hung

Date: 23 May 05

Project: Contract No. CV/2004/02 Reconstruction of Wong Shek and Ko Lau Wan Publi Client: Kin Shing Construction Co., L Job No.: 1618.3

Date of Sampling : 23/05/2005 Weather Condition: Fine Ambient Temperature, °C 31 Tide State: Mid-Flood

Station	Time	Sea Condition	Overall Depth, m	Sampling Depth,m	Temperature, °C		Dissolved Oxygen, mg/L			Dissolved Oxygen, %			Salinity, ppt		Turbidity, NTU			Suspended Solids, mg/L			Remarks
					a	b	a	b	Average	a	b	Average	a	b	a	b	Average			Depth Average	
MW1 S		Middle wave	7	1	28.9	28.9	6.39	6.40	6.44	86.4	86.8	87.6	30.0	30.0	1.28	1.30	1.28	5	5	4	
MW1 M	19:15			3.5	28.0	28.0	6.48	6.50		88.3	88.7		30.0	30.0	1.25	1.25		5	5		
MW1 B				6	27.6	27.6	6.41	6.42	6.42	87.6	87.8	87.7	30.0	30.0	1.29	1.31		3	4		
MW2 S		Middle wave	10	1	28.9	29.0	6.50	6.52	6.57	88.7	89.0	89.6	30.0	29.9	1.36	1.37	1.36	4	4	5	
MW2 M	18:20			5	28.0	28.0	6.61	6.63		90.1	90.5		30.0	30.0	1.42	1.41		5	5		
MW2 B				9	27.6	27.7	6.45	6.43	6.44	88.2	88.0	88.1	30.0	30.0	1.31	1.31		7	6		
CW1 S		Middle wave	5	1	28.9	29.0	6.44	6.46	6.45	88.0	8.4	48.2	30.0	30.0	1.22	1.23	1.28	5	5	5	
CW1 M	18:50																				
CW1 B				4	28.0	28.1	6.55	6.58	6.57	89.9	89.9	89.9	30.0	30.0	1.34	1.33		5	6		
CW2 S		Middle wave	11	1	28.9	28.9	6.59	6.60	6.54	89.8	89.9	89.3	30.0	29.9	1.25	1.26	1.19	6	6	5	
CW2 M	18:25			5.5	28.0	28.0	6.47	6.48		88.6	88.9		29.9	30.0	1.19	1.18		5	5		
CW2 B				10	27.6	27.6	6.40	6.42	6.41	87.5	87.8	87.7	30.0	30.0	1.11	1.12		4	4		

Equipment used:

Dissolved Oxygen Meter: EM 6167 Calibration Check: 0mg/L: OK 100%: OK

Turbidity Meter: EM 2365 Calibration Check: 4.40, 38.7, 442 NTU

Salinity Meter: EM 6167 Calibration Check: 58.7 mS

Thermometer: EM 6167

Sampled By: Daniel Yim

Checked By: Catherine Hung

Date: 25 May 05

Project: Contract No. CV/2004/02 Reconstruction of Wong Shek and Ko Lau Wan Publi Client: Kin Shing Construction Co., L Job No.: 1618.3

Date of Sampling : 23/05/2005 Weather Condition: Sunny Ambient Temperature, °C 30 Tide State: Mid-Ebb

Station	Time	Sea Condition	Overall Depth, m	Sampling Depth,m	Temperature, °C		Dissolved Oxygen, mg/L			Dissolved Oxygen, %			Salinity, ppt		Turbidity, NTU			Suspended Solids, mg/L			Remarks
					a	b	a	b	Average	a	b	Average	a	b	a	b	Average			Depth Average	
MW1 S		Middle wave	6	1	28.7	28.7	6.78	6.80	6.71	91.8	91.9	91.0	29.7	29.7	1.24	1.24	1.28	4	4	4	
MW1 M	13:10			5	27.9	27.9	6.62	6.63		90.1	90.3		29.7	29.8	1.31	1.32		4	4		
MW1 B				3	27.5	27.5	6.54	6.53	6.54	88.8	88.5	88.7	29.8	29.8	1.29	1.28		4	4		
MW2 S		Middle wave	9	1	28.7	28.6	6.67	6.69	6.71	91.2	91.4		29.7	29.8	1.45	1.47	1.37	5	5	4	
MW2 M	12:00			4.5	28.0	28.0	6.72	6.74		92.2	92.5		29.8	29.8	1.40	1.39		4	4		
MW2 B				8	27.5	27.5	6.58	6.60	6.59	89.8	89.9	89.9	29.8	29.8	1.25	1.27		3	3		
CW1 S		Middle wave	4	1	28.6	28.6	6.71	6.71	6.71	92.1	92.0	92.1	29.7	29.7	1.30	1.28	1.25	3	3	3	
CW1 M	12:50																				
CW1 B				3	28.1	28.0	6.60	6.62	6.61	89.9	90.3	90.1	29.8	29.8	1.20	1.21		4	4		
CW2 S		Middle wave	10	1	28.6	28.6	6.66	6.67	6.60	91.0	91.3		29.7	29.7	1.28	1.29	1.24	4	3	3	
CW2 M	12:25			5	28.1	28.1	6.52	6.53		88.6	88.9		29.8	29.8	1.17	1.18		3	4		
CW2 B				9	27.5	27.6	6.47	6.49	6.48	88.0	88.2	88.1	29.8	29.8	1.25	1.25		3	3		

Equipment used:
Dissolved Oxygen Meter: EM 6167 Calibration Check: 0mg/L: OK 100%: OK
Turbidity Meter: EM 2365 Calibration Check: 4.40, 38.7, 442 NTU
Salinity Meter: EM 6167 Calibration Check: 58.7 mS
Thermometer: EM 6167

Sampled By: Daniel Yim
Checked By: Catherine Hung
Date: 25 May 05

Project: Contract No. CV/2004/02 Reconstruction of Wong Shek and Ko Lau Wan Publi Client: Kin Shing Construction Co., L Job No.: 1618.3

Date of Sampling : 25/05/2005 Weather Condition: cloudy Ambient Temperature, °C 27 Tide State: Mid-Flood

Station	Time	Sea Condition	Overall Depth, m	Sampling Depth,m	Temperature, °C		Dissolved Oxygen, mg/L			Dissolved Oxygen, %			Salinity, ppt		Turbidity, NTU			Suspended Solids, mg/L			Remarks
					a	b	a	b	Average	a	b	Average	a	b	a	b	Average			Depth Average	
MW1 S		Middle wave	7	1	26.8	26.8	6.81	6.82	6.76	98.2	98.5	97.6	28.7	28.7	1.07	1.08	1.31	2	2	3	
MW1 M	09:00			3.5	26.1	26.1	6.70	6.70		97.0	96.8		29.8	29.8	1.50	1.50		3	3		
MW1 B				6	25.7	25.7	6.62	6.61	6.62	96.1	95.9	96.0	29.5	29.5	1.37	1.36		3	3		
MW2 S		Middle wave	10	1	26.8	26.8	6.85	6.86	6.80	98.8	98.6	98.3	29.7	29.7	1.49	1.51	1.28	3	2	2	
MW2 M	07:30			5	26.1	26.1	6.74	6.75		97.8	97.9		29.8	29.8	1.03	1.03		2	2		
MW2 B				9	25.7	25.8	6.69	6.69	6.69	97.0	96.8	96.9	29.8	29.8	1.33	1.31		2	3		
CW1 S		Middle wave	5	26.8	26.8	7.5	6.86	6.86	6.86	98.0	98.2	98.1	29.7	29.7	1.52	1.55	1.40	4	3	3	
CW1 M	08:30																				
CW1 B				4	26.1	26.2	6.82	6.81	6.82	98.1	98.0	98.1	29.8	29.8	1.25	1.28		3	3		
CW2 S		Middle wave	11	1	26.8	26.8	6.81	3.82	6.04	99.5	99.8	99.0	29.7	29.7	1.43	1.44	1.37	3	2	2	
CW2 M	08:00			5.5	26.1	26.1	6.75	6.76		98.2	98.5		29.8	29.8	1.29	1.29		2	2		
CW2 B				10	25.7	25.7	6.62	6.63	6.63	96.0	96.3	96.2	29.8	29.8	1.37	1.38		3	3		

Equipment used:
Dissolved Oxygen Meter: EM 6167 Calibration Check: 0mg/L: OK 100%: OK
Turbidity Meter: EM 2365 Calibration Check: 4.41, 38.8, 442 NTU
Salinity Meter: EM 6167 Calibration Check: 58.5 mS
Thermometer: EM 6167

Sampled By: Daniel Yim
Checked By: Catherine Hung
Date: 27 May 05

Project: Contract No. CV/2004/02 Reconstruction of Wong Shek and Ko Lau Wan Publi Client: Kin Shing Construction Co., L Job No.: 1618.3

Date of Sampling : 25/05/2005 Weather Condition: Cloudy Ambient Temperature, °C 29 Tide State: Mid-Ebb

Station	Time	Sea Condition	Overall Depth, m	Sampling Depth,m	Temperature, °C		Dissolved Oxygen, mg/L			Dissolved Oxygen, %			Salinity, ppt		Turbidity, NTU			Suspended Solids, mg/L			Remarks
					a	b	a	b	Average	a	b	Average	a	b	a	b	Average			Depth Average	
MW1 S		Middle wave	6	1	27.1	27.1	6.81	6.82	6.77	98.7	98.9	98.2	29.7	29.6	1.42	1.44	1.35	5	4	4	
MW1 M	14:50			3	26.3	26.3	6.72	6.73		97.4	97.6		29.6	29.6	1.60	1.60		4	4		
MW1 B				5	25.9	25.9	6.65	6.66	6.66	96.4	96.9	96.7	29.6	29.6	1.01	1.02		3	3		
MW2 S		Middle wave	9	1	27.1	27.1	6.80	6.82	6.76	98.6	98.9	98.0	29.5	29.5	1.42	1.43	1.39	4	4	3	
MW2 M	13:30			4.5	26.3	26.3	6.69	6.71		97.0	97.3		29.5	29.5	1.30	1.32		3	3		
MW2 B				8	25.9	25.9	6.84	6.83	6.84	99.2	99.0	99.1	29.6	29.5	1.44	1.43		2	2		
CW1 S		Middle wave	4	1	27.1	27.0	6.76	6.77	6.77	98.0	98.2	98.1	29.5	29.5	1.71	1.70	1.57	3	4	4	
CW1 M	14:25																				
CW1 B				3	26.3	26.3	6.85	6.87	6.86	99.3	99.6	99.5	29.5	29.5	1.42	1.44		4	4		
CW2 S		Middle wave	10	1	27.1	27.1	6.82	6.80	6.81	98.9	98.6	98.7	29.5	29.5	1.66	1.68	1.54	3	2	3	
CW2 M	14:00			5	26.3	26.3	6.79	6.81		98.5	98.7		29.5	29.5	1.50	1.52		3	4		
CW2 B				9	25.9	26.0	6.76	6.74	6.75	98.0	97.7	97.9	29.5	29.6	1.43	1.45		5	5		

Equipment used:
Dissolved Oxygen Meter: EM 6167 Calibration Check: 0mg/L: OK 100%: OK
Turbidity Meter: EM 2365 Calibration Check: 4.41, 38.8, 442 NTU
Salinity Meter: EM 6167 Calibration Check: 58.5 mS
Thermometer: EM 6167

Sampled By: Daniel Yim
Checked By: Catherine Hung
Date: 27 May 05

Project: Contract No. CV/2004/02 Reconstruction of Wong Shek and Ko Lau Wan Publi Client: Kin Shing Construction Co., L Job No.: 1618.3

Date of Sampling : 27/05/2005 Weather Condition: cloudy Ambient Temperature, °C 25 Tide State: Mid-Flood

Station	Time	Sea Condition	Overall Depth, m	Sampling Depth,m	Temperature, °C		Dissolved Oxygen, mg/L			Dissolved Oxygen, %			Salinity, ppt		Turbidity, NTU			Suspended Solids, mg/L			Remarks
					a	b	a	b	Average	a	b	Average	a	b	a	b	Average			Depth Average	
MW1 S		Middle wave	7	1	24.3	24.3	6.57	6.58	6.64	95.7	96.0	96.4	29.3	29.3	1.32	1.33	1.40	3	4	3	
MW1 M	08:55			3.5	23.6	23.6	6.69	6.70		96.8	97.0		29.3	29.3	1.47	1.48		4	3		
MW1 B				6	23.2	23.3	6.72	6.73	6.73	97.4	97.5	97.5	29.3	29.4	1.41	1.41		3	3		
MW2 S		Middle wave	10	1	24.3	24.3	6.66	6.67	6.62	96.2	96.5	95.9	29.3	29.3	1.35	1.37	1.44	3	2	4	
MW2 M	07:40			5	23.6	23.6	6.56	6.57		95.4	95.6		29.4	29.4	1.50	1.53		4	4		
MW2 B				9	23.3	23.3	6.49	6.50	6.50	94.6	94.7	94.7	29.4	29.4	1.46	1.44		5	4		
CW1 S		Middle wave	5	1	24.3	24.3	6.74	6.75	6.75	97.7	97.9	97.8	29.3	29.3	1.39	1.39	1.38	3	3	4	
CW1 M	08:30																				
CW1 B				4	23.6	23.6	6.62	6.63	6.63	96.3	96.6	96.5	29.4	29.4	1.36	1.37		4	5		
CW2 S		Middle wave	11	1	24.3	24.3	6.59	6.60	6.52	95.5	95.7	94.7	29.3	29.3	1.41	1.41	1.39	4	5	3	
CW2 M	08:05			5.5	23.6	23.6	6.43	6.44		93.6	93.8		29.4	29.4	1.40	1.40		2	2		
CW2 B				10	23.3	23.3	6.49	6.50	6.50	94.7	94.9	94.8	29.4	29.4	1.36	1.37		3	3		

Equipment used:

Dissolved Oxygen Meter: EM 6167 Calibration Check: 0mg/L: OK 100%: OK

Turbidity Meter: EM 2365 Calibration Check: 4.39, 39.9, 439 NTU

Salinity Meter: EM 6167 Calibration Check: 58.7 mS

Thermometer: EM 6167

Sampled By: Daniel Yim

Checked By: Catherine Hung

Date: 30 May 05

Project: Contract No. CV/2004/02 Reconstruction of Wong Shek and Ko Lau Wan Publi Client: Kin Shing Construction Co., L Job No.: 1618.3

Date of Sampling : 27/05/2005 Weather Condition: cloudy Ambient Temperature, °C 26 Tide State: Mid-Ebb

Station	Time	Sea Condition	Overall Depth, m	Sampling Depth,m	Temperature, °C		Dissolved Oxygen, mg/L			Dissolved Oxygen, %			Salinity, ppt		Turbidity, NTU			Suspended Solids, mg/L			Remarks
					a	b	a	b	Average	a	b	Average	a	b	a	b	Average			Depth Average	
MW1 S		Middle wave	6	1	26.4	26.4	6.49	6.50	6.44	94.0	94.1	93.2	29.6	29.6	1.02	1.02	1.01	3	3	3	
MW1 M	15:15			3	26.1	26.1	6.37	6.39		92.2	92.5		29.7	29.7	1.01	1.02		2	2		
MW1 B				5	25.7	25.7	6.60	6.61	6.61	96.2	96.5	96.4	29.7	29.7	0.99	0.97		5	5		
MW2 S		Middle wave	9	1	26.3	26.3	6.74	6.75	6.69	98.0	98.1	97.2	29.6	29.6	0.98	0.99	1.00	3	3	2	
MW2 M	14:50			4.5	26.0	26.0	6.61	6.64		96.2	96.4		29.7	29.7	1.06	1.07		2	3		
MW2 B				8	25.7	25.7	6.54	6.55	6.55	94.6	94.5	94.6	29.7	29.7	0.94	0.95		2	2		
CW1 S		Middle wave	4	1	26.5	26.5	6.55	6.56	6.56	95.0	95.2	95.1	29.7	29.7	0.89	0.90	0.91	4	4	4	
CW1 M	15:30																				
CW1 B				3	26.1	26.1	6.42	6.43	6.43	93.0	93.3	93.2	29.7	29.7	0.91	0.92		3	3		
CW2 S		Middle wave	10	1	26.4	26.4	6.52	6.53	6.57	94.2	94.5	95.2	29.6	29.6	0.96	0.99	1.03	2	2	3	
CW2 M	15:06			5	26.0	26.1	6.60	6.61		96.0	96.1		29.7	29.7	1.02	1.04		5	5		
CW2 B				9	25.7	25.7	6.44	6.46	6.45	93.2	93.0	93.1	29.7	29.7	1.09	1.07		3	3		

Equipment used:
Dissolved Oxygen Meter: EM 6167 Calibration Check: 0mg/L: OK 100%: OK
Turbidity Meter: EM 2365 Calibration Check: 4.39, 39.9, 439 NTU
Salinity Meter: EM 6167 Calibration Check: 58.7 mS
Thermometer: EM 6167

Sampled By: Daniel Yim
Checked By: Catherine Hung
Date: 30 May 05

Project: Contract No. CV/2004/02 Reconstruction of Wong Shek and Ko Lau Wan Publi Client: Kin Shing Construction Co., L Job No.: 1618.3

Date of Sampling : 30/05/2005 Weather Condition: Sunny Ambient Temperature, °C 28 Tide State: Mid-Flood

Station	Time	Sea Condition	Overall Depth, m	Sampling Depth,m	Temperature, °C		Dissolved Oxygen, mg/L			Dissolved Oxygen, %			Salinity, ppt		Turbidity, NTU			Suspended Solids, mg/L			Remarks
					a	b	a	b	Average	a	b	Average	a	b	a	b	Average			Depth Average	
MW1 S				1	27.3	27.3	6.83	6.85		99.7	99.9		30.1	30.1	0.84	0.84		3	3		
MW1 M	10:30	Middle wave	7	3.5	26.7	26.7	6.70	6.71	6.77	97.9	98.1	98.9	30.2	30.2	0.89	0.91	0.89	3	3	2	
MW1 B				6	26.5	26.5	6.77	6.76	6.77	98.6	95.5	97.1	30.1	30.2	0.94	0.94		2	2		
MW2 S				1	27.3	27.3	6.70	6.71		98.0	98.2		30.1	30.1	0.80	0.82		2	2		
MW2 M	10:55	Middle wave	10	5	26.7	26.7	6.68	6.66	6.69	97.5	97.1	97.7	30.1	30.1	0.86	0.87	0.86			2	
MW2 B				9	26.5	26.5	6.47	6.46	6.47	95.0	94.7	94.9	30.1	30.1	0.91	0.92		1	1		
CW1 S				1	27.3	27.3	6.93	6.91		100.7	100.3		30.1	30.1	0.88	0.90		1	2		
CW1 M	11:45	Middle wave	5						6.92			100.5					0.92	4	4	3	
CW1 B				4	26.7	26.8	6.70	6.71	6.71	98.3	98.6	98.5	30.1	30.1	0.94	0.97		5	4		
CW2 S				1	27.3	27.3	6.64	6.66		97.0	97.5		30.1	30.1	0.99	1.00		6	6		
CW2 M	11:20	Middle wave	11	5.5	26.7	26.7	6.81	6.83	6.74	99.2	99.5	98.3	30.2	30.2	1.01	1.02	1.02	3	4	5	
CW2 B				10	26.5	26.5	6.77	6.74	6.76	98.5	98.0	98.3	30.2	30.2	1.04	1.03		7	6		

Equipment used:

Dissolved Oxygen Meter: EM 6167 Calibration Check: 0mg/L: OK 100%: OK

Turbidity Meter: EM 2365 Calibration Check: 4.39, 40.0, 439 NTU

Salinity Meter: EM 6167 Calibration Check: 58.3 mS

Thermometer: EM 6167

Sampled By: Daniel Yim

Checked By: Catherine Hung

Date: 1 Jun 05

Project: Contract No. CV/2004/02 Reconstruction of Wong Shek and Ko Lau Wan Publi Client: Kin Shing Construction Co., L Job No.: 1618.3

Date of Sampling : 30/05/2005 Weather Condition: Sunny Ambient Temperature, °C 28 Tide State: Mid-Ebb

Station	Time	Sea Condition	Overall Depth, m	Sampling Depth,m	Temperature, °C		Dissolved Oxygen, mg/L			Dissolved Oxygen, %			Salinity, ppt		Turbidity, NTU			Suspended Solids, mg/L			Remarks
					a	b	a	b	Average	a	b	Average	a	b	a	b	Average			Depth Average	
MW1 S		Middle wave	6	1	27.5	27.5	6.61	6.62	6.58	96.5	96.6	96.0	30.3	30.3	0.89	0.90	0.93	4	3	3	
MW1 M	17:00			3	26.8	26.8	6.53	6.54		95.4	95.5		30.3	30.3	0.92	0.92		4	4		
MW1 B				5	26.6	26.6	6.49	6.50	6.50	94.9	95.1	95.0	30.3	30.2	0.98	0.97		3	3		
MW2 S		Middle wave	9	1	27.5	27.5	6.69	6.67	6.62	96.6	96.4	96.2	30.2	30.3	1.02	1.00	1.00	2	2	3	
MW2 M	17:25			4.5	26.8	26.8	6.55	6.57		95.7	96.0		30.2	30.3	1.01	1.01					
MW2 B				8	26.6	26.6	6.46	6.45	6.46	94.6	94.3	94.5	30.3	30.3	0.96	0.97		3	3		
CW1 S		Middle wave	4	1	27.5	27.5	6.48	6.50	6.49	95.0	95.3	95.2	30.2	30.2	0.95	0.96	0.89	3	4	3	
CW1 M	18:10																	2	2		
CW1 B				3	26.8	26.8	6.40	6.41	6.41	93.9	94.1	94.0	30.3	30.3	0.81	0.82		4	4		
CW2 S		Middle wave	10	1	27.5	27.5	6.72	6.74	6.70	98.0	98.3	97.8	30.3	30.3	0.86	0.90	0.91	3	4	5	
CW2 M	17:50			5	26.8	26.8	6.66	6.68		97.3	97.6		30.3	30.3	0.94	0.95		6	6		
CW2 B				9	26.6	26.6	6.59	6.57	6.58	96.2	96.0	96.1	30.3	30.3	0.89	0.90		5	5		

Equipment used:
Dissolved Oxygen Meter: EM 6167 Calibration Check: 0mg/L: OK 100%: OK
Turbidity Meter: EM 2365 Calibration Check: 4.39, 40.0, 439 NTU
Salinity Meter: EM 6167 Calibration Check: 58.3 mS
Thermometer: EM 6167

Sampled By: Daniel Yim
Checked By: Catherine Hung
Date: 1 Jun 05

Date of Analysis	Blank		Quality Control		Duplicate Analysis		Spike Recovery Analysis	
	Acceptable Range g	Analysis Results g	Acceptable Range mg/L	Analysis Results mg/L	Acceptable Range %	Analysis Results %	Acceptable Range %	Analysis Results %
03/05/2005	-0.0003 to 0.0003	0.0000 to 0.0001	43 to 55	49 to 51	less than 15	0 to 5	78 to 114	93 to 103
05/05/2005	-0.0003 to 0.0003	0.0001 to 0.0002	43 to 55	50 to 53	less than 15	0 to 7	78 to 114	100 to 107
07/05/2005	-0.0003 to 0.0003	0.0000 to 0.0003	43 to 55	47 to 51	less than 15	0 to 8	78 to 114	95 to 103
09/05/2005	-0.0003 to 0.0003	0.0000 to 0.0001	43 to 55	49 to 53	less than 15	2 to 7	78 to 114	92 to 110
11/05/2005	-0.0003 to 0.0003	0.0000 to 0.0001	43 to 55	51 to 54	less than 15	4 to 8	78 to 114	100 to 103
13/05/2005	-0.0003 to 0.0003	0.0001 to 0.0002	43 to 55	51 to 52	less than 15	0 to 12	78 to 114	94 to 104
17/05/2005	-0.0003 to 0.0003	0.0000 to 0.0001	43 to 55	49 to 51	less than 15	0 to 9	78 to 114	78 to 100
21/05/2005	-0.0003 to 0.0003	-0.0001 to 0.0000	43 to 55	48 to 51	less than 15	7 to 14	78 to 114	97 to 103
23/05/2005	-0.0003 to 0.0003	-0.0001 to 0.0000	43 to 55	48 to 51	less than 15	7 to 14	78 to 114	97 to 103
25/05/2005	-0.0003 to 0.0003	-0.0003 to 0.0001	43 to 55	48 to 50	less than 15	8 to 13	78 to 114	88 to 96
27/05/2005	-0.0003 to 0.0003	0.0001 to 0.0002	43 to 55	49 to 54	less than 15	0 to 4	78 to 114	98 to 110
30/05/2005	-0.0003 to 0.0003	0.0000 to 0.0001	43 to 55	49 to 52	less than 15	8 to 12	78 to 114	100 to 105

*Limit of Detection:1mg/L

APPENDIX VI

COMPLAINT LOG

Contract No. CV/2004/02 Reconstruction of Wong Shek and Ko Lau Wan Public - Complaints Log						
Complaint Log No.	Date of Receipt	Received From and Received By	Nature of Complaint	Date Investigated	Outcome	Date of Reply and to Whom

APPENDIX VII

Cumulative Statistics on Complaints, Notifications of Summonses and Successful Prosecutions

Contract No. CV/2004/02 Reconstruction of Wong Shek and Ko Lau Wan Public Cumulative Statistics on Complaints			
Environmental Parameters	Cumulative No. Brought Forward	No. of Complaints This Month	Cumulative Number to Date
Air	-	-	-
Noise	-	-	-
Water	-	-	-
Waste	-	-	-
Total	-	-	-

Contract No. CV/2004/02 Reconstruction of Wong Shek and Ko Lau Wan Public Cumulative Statistics on Successful Prosecutions			
Environmental Parameters	Cumulative No. Brought Forward	No. of Successful Prosecutions this month (Offence Date)	Cumulative Number to Date
Air	-	-	-
Noise	-	-	-
Water	-	-	-
Waste	-	-	-
Total	-	-	-

Contract No. CV/2004/02 Reconstruction of Wong Shek and Ko Lau Wan Public Cumulative Statistics on Notification of Summons			
Environmental Parameters	Cumulative No. Brought Forward	No. of Notification of Summons	Cumulative Number to Date
Air	-	-	-
Noise	-	-	-
Water	-	-	-
Waste	-	-	-
Total	-	-	-

APPENDIX VIII

Monitoring Schedule for Next Month

CEDD Contract No. CV/2004/02
Reconstruction of Wong Shek and Ko Lau Wan Public Piers
Water Quality Monitoring Schedule
June 2005

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 WQM[3] (Ebb: 07:59) (Flood: 13:39)	**2**	**3** WQM[3] (Ebb: 09:58) (Flood: 16:07)	**4**
5	**6** WQM[3] (Ebb: 12:11) (Flood: 16:43)	**7**	**8** WQM[3] (Ebb: 13:30) (Flood: 07:11)	**9**	**10** WQM[3] (Ebb: 13:20) (Flood: 06:39)	**11**
12	**13**	**14** WQM[3] (Ebb: 16:03)	**15**	**16** WQM[3] (Ebb: 07:16) (Flood: 12:42)	**17**	**18** WQM[3] (Ebb: 09:17) (Flood: 15:44)
19	**20** WQM[3] (Ebb: 10:37) (Flood: 16:42)	**21**	**22** WQM[3] (Ebb: 11:17) (Flood: 18:19)	**23**	**24** WQM[3] (Ebb: 14:09) (Flood: 07:48)	**25**
26	**27**	**28** WQM[3] (Ebb: 17:30) (Flood: 10:46)	**29**	**30** WQM[3] (Ebb: 07:25) (Flood: 13:22)		

Notes:

1. WQM - water quality monitoring on mid-flood and mid-ebb tides at Wong Shek (CW1, CW2, MW1 & MW2)
2. WQM - water quality monitoring on mid-flood and mid-ebb tides at Ko Lau Wan (CK1, CK2, MK1, MK2, MK3 & MK4)
3. WQM - water quality monitoring on mid-flood and mid-ebb tides at Ko Lau (CK1, CK2, MK1, MK2, MK3 & MK4) and Wong Shek (CW1, CW2, MW1 & MW2))

APPENDIX IX

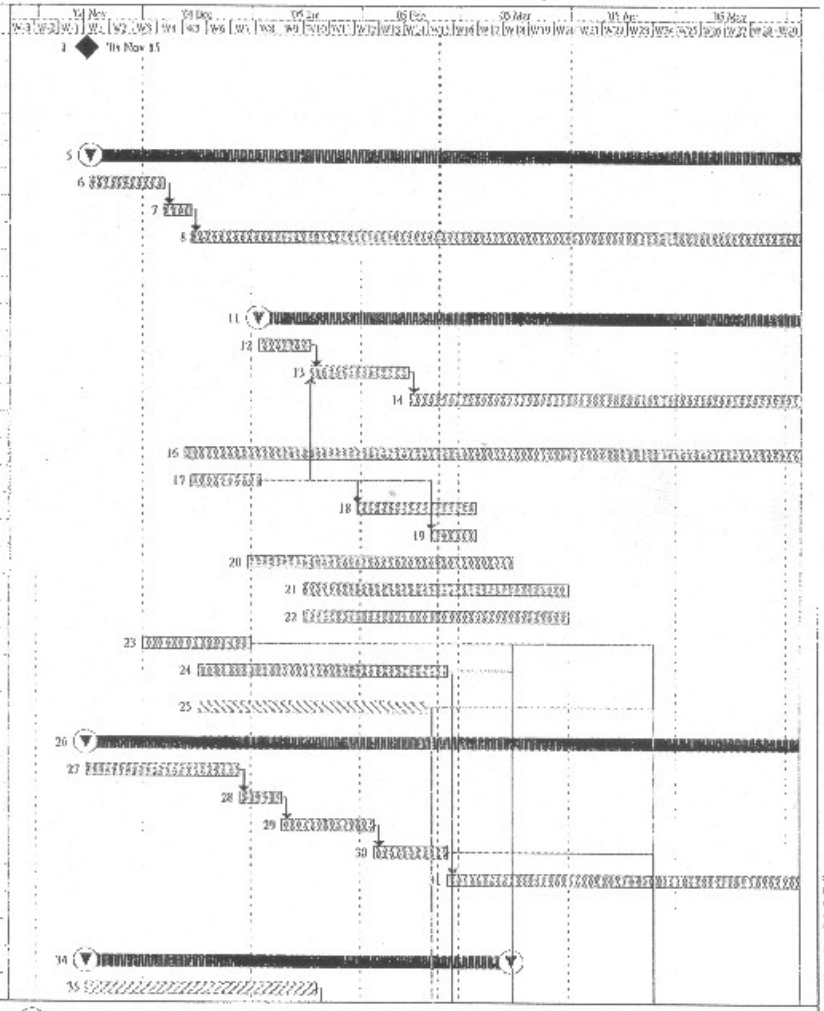
Master Construction Programme

Contract No.: CV/2004/02
Reconstruction of Wong Shek and
Ko Lau Wan Public Piers

Master Programme
(Version 2)

Contractor: Kin Shing Construction Co. Ltd.
Commencement Date: 15th Nov 2004
Completion Date: 6th Aug 2006
Programme Date: 21st Feb 2005

ID	Task Name	Duration	Start	Finish	Predecessors
1	Commencement of the Works	1 day	Mon 04/11/15	Mon 04/11/15	
2	Completion of Section 1 (Wong Shek Public Pier)	1 day	Sun 06/8/6	Sun 06/8/6	
3	Completion of Section 2 (Ko Lau Wan Public Pier)	1 day	Sun 06/8/6	Sun 06/8/6	
4	Preliminary				
5	Establishment of Engineer's Principal Site Office	994 days	Tue 04/11/16	Mon 07/8/6	
6	Submission and approval	21 days	Tue 04/11/16	Mon 04/12/6	
7	Provision	8 days	Tue 04/12/7	Tue 04/12/14	6
8	Servicing during construction period	600 days	Wed 04/12/15	Sun 06/8/6	7
9	Servicing during maintenance period	364 days	Mon 06/8/7	Sun 07/8/5	8
10	Decommissioning	1 day	Mon 07/8/6	Mon 07/8/6	9
11	Secondary Office	582 days	Mon 05/1/3	Mon 06/8/7	
12	Submission and approval	15 days	Mon 05/1/3	Mon 05/1/17	
13	Provision	28 days	Tue 05/1/18	Mon 05/2/14	12,13
14	Servicing	538 days	Tue 05/2/15	Sun 06/8/6	13
15	Decommissioning	1 day	Mon 06/8/7	Mon 06/8/7	14
16	Provision of Contractor's accommodation	602 days	Mon 04/12/13	Sun 06/8/6	
17	Initial survey	20 days	Wed 04/12/15	Mon 05/1/3	
18	Erection of hoarding and project signboard at Por. A	34 days	Mon 05/1/31	Sat 05/3/5	17
19	Erection of hoarding and project signboard at Por. B	13 days	Mon 05/2/21	Sat 05/3/5	17
20	Application and installation of electrical system	75 days	Fri 04/12/31	Tue 05/3/15	
21	Application and installation of water supply system	75 days	Sun 05/1/16	Thu 05/3/31	
22	Application and installation of telephone lines	75 days	Sun 05/1/16	Thu 05/3/31	
23	Notification of parties in concern	31 days	Wed 04/12/1	Fri 04/12/31	
24	Application for promulgation of Marine Department Notice for Wong Shek	71 days	Fri 04/12/17	Fri 05/2/25	
25	Application for promulgation of Marine Department Notice for Ko Lau Wan	65 days	Fri 04/12/17	Sat 05/2/19	
26	Environmental Monitoring	658 days	Mon 04/11/15	Sun 06/9/3	
27	Submission and approval of EIS and IC (Env)	44 days	Mon 04/11/15	Tue 04/12/28	
28	Endorsement of EM&A proposal	12 days	Wed 04/12/29	Sun 05/1/9	27
29	Baseline water quality monitoring	26 days	Mon 05/1/10	Fri 05/2/4	28
30	Preparation and approval of baseline report	21 days	Sat 05/2/5	Fri 05/2/25	29
31	Impact monitoring	527 days	Sat 05/2/26	Sun 06/8/6	30
32	Post-construction monitoring	28 days	Mon 06/8/7	Sun 06/9/3	31,110,202
33	Section 1 (Wong Shek Public Pier)				
34	Temporary cover to existing pier	121 days	Mon 04/11/15	Tue 05/3/15	
35	Design and ICE checking	66 days	Mon 04/11/15	Wed 05/1/19	



Project: CV/2004/02
Master Programme (Version 2)

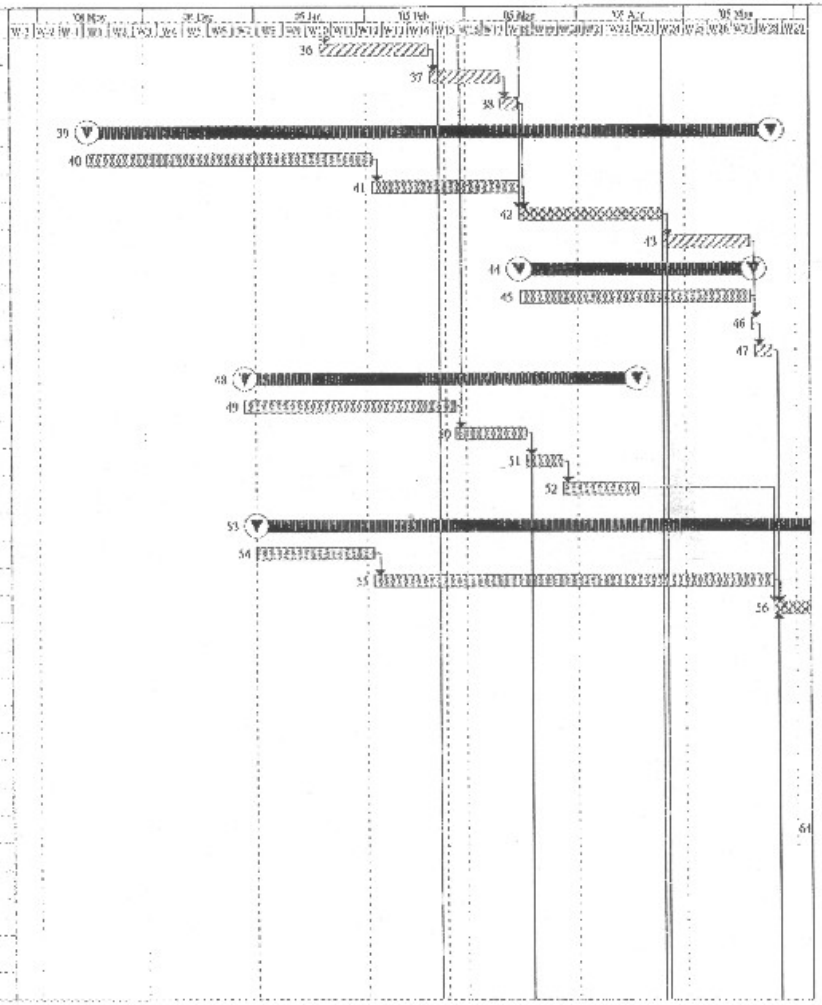
Round Task | Progress | Summary | Critical Task (Sec 1 & 3) | Critical Task (Sec 2)
Split | Commencement Milestone | Completion Milestone | Critical Task (Sec 1) | Maintenance Period

Contract No.: CV/2004/02
Reconstruction of Wong Shek and
Ko Lau Wan Public Piers

Master Programme
(Version 2)

Contractor: Kin Shing Construction Co. Ltd.
Commencement Date: 15th Nov 2004
Completion Date: 6th Aug 2006
Programme Date: 21st Feb 2005

ID	Task Name	Duration	Start	Finish	Predecessors
34	Submission for Engineer's comment	30 days	Thu 05/1/20	Fri 05/2/18	33
35	Erection	20 days	Sat 05/2/19	Thu 05/3/10	34
36	Certified by ICE and commissioning	5 days	Fri 05/3/11	Tue 05/3/15	35
37	Provision of temporary berth	192 days	Mon 04/11/15	Wed 05/5/25	
38	Design and ICE checking of temporary berth	80 days	Mon 04/11/15	Wed 05/2/2	
39	Submission for Engineer's comment	41 days	Thu 05/2/3	Tue 05/3/15	40
40	Piling	40 days	Wed 05/3/16	Sun 05/4/24	34,36,23,41,38
41	Deck construction and installation of fenders	25 days	Mon 05/4/25	Thu 05/5/19	42
42	Relocation of navigation light by Marine Dept.	66 days	Wed 05/3/16	Fri 05/5/20	
43	Application to Marine Department	65 days	Wed 05/3/16	Thu 05/5/19	
44	Relocation works	1 day	Fri 05/5/20	Fri 05/5/20	43,45
45	Certified by ICE, testing and commissioning of berth	5 days	Sat 05/5/21	Wed 05/5/25	44
46	Ground Investigation	110 days	Wed 04/12/29	Sun 05/4/17	
47	Submission for Engineer's comment	59 days	Wed 04/12/29	Fri 05/2/25	
48	Ground investigation works on site	20 days	Sat 05/2/26	Thu 05/3/17	49,34,36
49	Preparation and approval of reports	10 days	Fri 05/3/18	Sun 05/3/27	48
50	Submission of reports and determine pile founding levels	21 days	Mon 05/3/28	Sun 05/4/17	51
51	Piling for permanent pier	282 days	Sat 05/1/1	Sun 05/10/9	
52	Compilation of method statement for piling	33 days	Sat 05/1/1	Wed 05/2/2	
53	Submission for Engineer's comment	112 days	Thu 05/2/3	Wed 05/5/25	54
54	Vertical preliminary pile and testing	15 days	Thu 05/5/26	Thu 05/6/9	47,52,55,127
55	Vertical main piles using land plant (E1, H1, E2, H2)	30 days	Tue 05/6/28	Wed 05/7/27	
56	Vertical main piles (A11, B8, B11, C8, C11, D8, D11)	18 days	Sun 05/6/19	Wed 05/7/6	128
57	Temporary platform for raking pile	21 days	Thu 05/7/7	Wed 05/7/27	13
58	Vertical main piles (remaining 14 nos.)	35 days	Thu 05/7/7	Wed 05/8/10	14
61	Raking preliminary piles and testing (B10)	15 days	Thu 05/7/28	Thu 05/8/11	55,59
62	Raking main piles (15 nos)	44 days	Fri 05/8/12	Sat 05/9/24	61
63	Pile test for main piles	15 days	Sun 05/9/25	Sun 05/10/9	62
64	Construction of pile cap and deck	212 days	Fri 05/6/10	Sat 06/1/7	
65	Submission and approval of precast yard	61 days	Fri 05/6/10	Tue 05/8/9	
66	Casting of precast units at precast yard	61 days	Wed 05/8/10	Sun 05/10/9	65
67	Design and ICE checking of falsework for pile cap and deck construction	62 days	Sun 05/7/10	Fri 05/9/9	
68	Submission of calculation and method statement for Engineer's approval	30 days	Sat 05/9/10	Sun 05/10/9	67
69	Erection of falsework for installation of precast units	20 days	Mon 05/10/10	Sat 05/10/29	66,63



Contract No. CV/2004/02
Master Programme Version 21

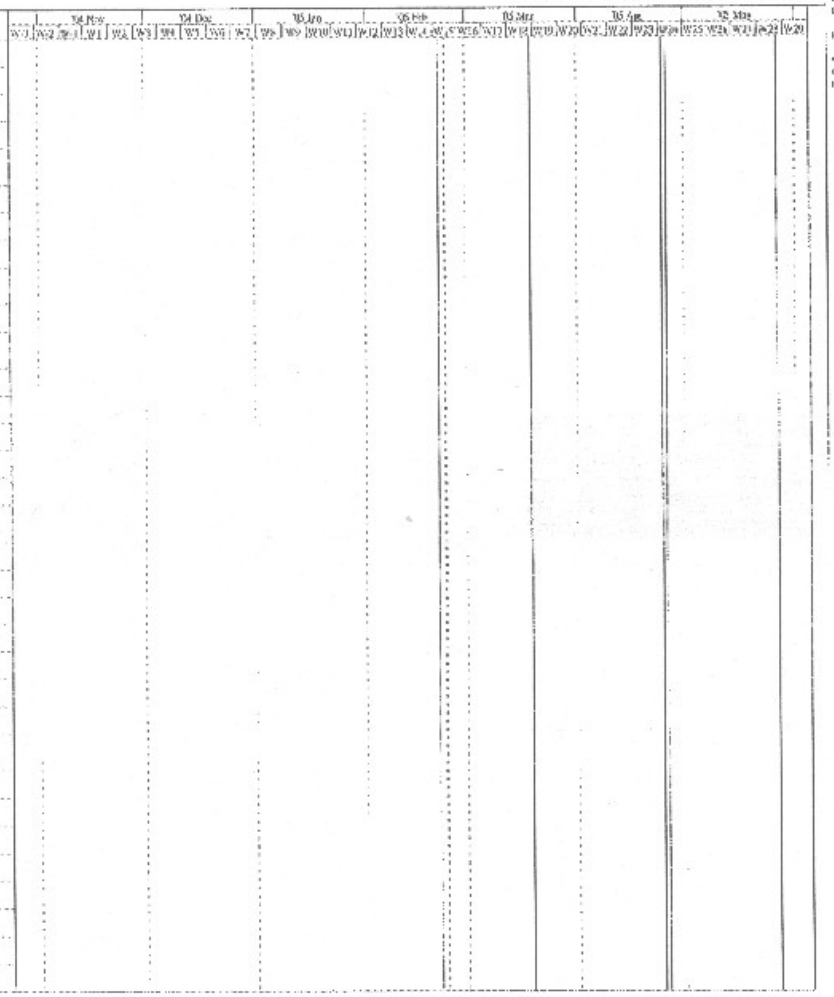
Actual Task | Progress | Summary | Critical Task (Sec 1 & 2) | Critical Task (Sec 2)
Split | Commencement Milestone | Completion Milestone | Critical Task (Sec 1) | Maintenance Period

Contract No.: CV/2004/02
Reconstruction of Wong Shek and
Ko Lau Wan Public Piers

Master Programme
(Version 2)

Contractor: Kin Shing Construction Co. Ltd.
Commencement Date: 15th Nov 2004
Completion Date: 6th Aug 2006
Programme Date: 21st Feb 2005

ID	Task Name	Duration	Start	Finish	Predecessors
80	Installation of precast units with in-situ pile caps	60 days	Mon 05/10/10	Thu 05/12/8	68,68,63
81	Casting of in-situ pier deck	30 days	Fri 05/12/9	Sat 06/1/7	78,78
82	Construction of bollards	30 days	Fri 05/12/9	Sat 06/1/7	78
83	Installation of corrosion monitoring system	91 days	Sun 05/10/9	Sat 06/1/7	
84	Approval of specialist contractor and method statement	61 days	Sun 05/10/9	Thu 05/12/8	
85	Installation of corrosion monitoring system	30 days	Fri 05/12/9	Sat 06/1/7	78,74
86	Roof cover system	272 days	Tue 05/8/9	Sun 06/5/7	
87	Approval of specialist contractor	61 days	Tue 05/8/9	Sat 05/10/8	
88	Submission of workshop drawings for connection details with deck	61 days	Sun 05/10/9	Thu 05/12/8	77
89	Material submissions	91 days	Sun 05/10/9	Sat 06/1/7	77
90	Submission of workshop drawing for remaining roof system	91 days	Sun 05/10/9	Sat 06/1/7	77
91	Construction of steel works	60 days	Sun 06/1/8	Wed 06/3/8	71,80,79
92	Erection of roof covers	60 days	Thu 06/3/9	Sun 06/5/7	91
93	Marrying-in to landside	121 days	Wed 06/3/8	Thu 06/7/6	
94	Application of Excavation Permit	90 days	Wed 06/3/8	Mon 06/6/5	
95	Site works	31 days	Tue 06/6/6	Thu 06/7/6	94,93
96	Electrical system, CLP meter box and lighting system	220 days	Mon 05/10/10	Wed 06/5/17	
97	Approval of specialist contractor	30 days	Mon 05/10/10	Tue 05/11/8	
98	Liaison with CLP and EMSD	60 days	Wed 05/11/9	Sat 06/1/7	97
99	Installation	120 days	Sun 06/1/8	Sun 06/5/7	71,98
100	Testing	10 days	Mon 06/5/8	Wed 06/5/17	99
101	Construction of floor finish	121 days	Wed 06/3/8	Thu 06/7/6	
102	Material submissions	61 days	Wed 06/3/8	Sun 06/5/7	
103	Site works	60 days	Mon 06/5/8	Thu 06/7/6	82,92
104	Construction of hand railing,seating beaches and notice boards	150 days	Tue 06/2/7	Thu 06/7/6	
105	Material submission	60 days	Tue 06/2/7	Fri 06/4/7	
106	Construction	90 days	Sat 06/4/8	Thu 06/7/6	71,99
107	Installation of fender system	190 days	Thu 05/12/29	Thu 06/7/6	
108	Material submission	31 days	Thu 05/12/29	Sat 06/1/28	
109	Ordering of material	59 days	Sun 06/1/29	Tue 06/3/28	98
110	Site works	100 days	Wed 06/3/29	Thu 06/7/6	71,99
111	Relocation of navigation light by Marine Dept.	92 days	Fri 06/4/7	Fri 06/7/7	
112	Application to Marine Department	91 days	Fri 06/4/7	Thu 06/7/6	



Contract No. CV/2004/02
Master Programme Version 2

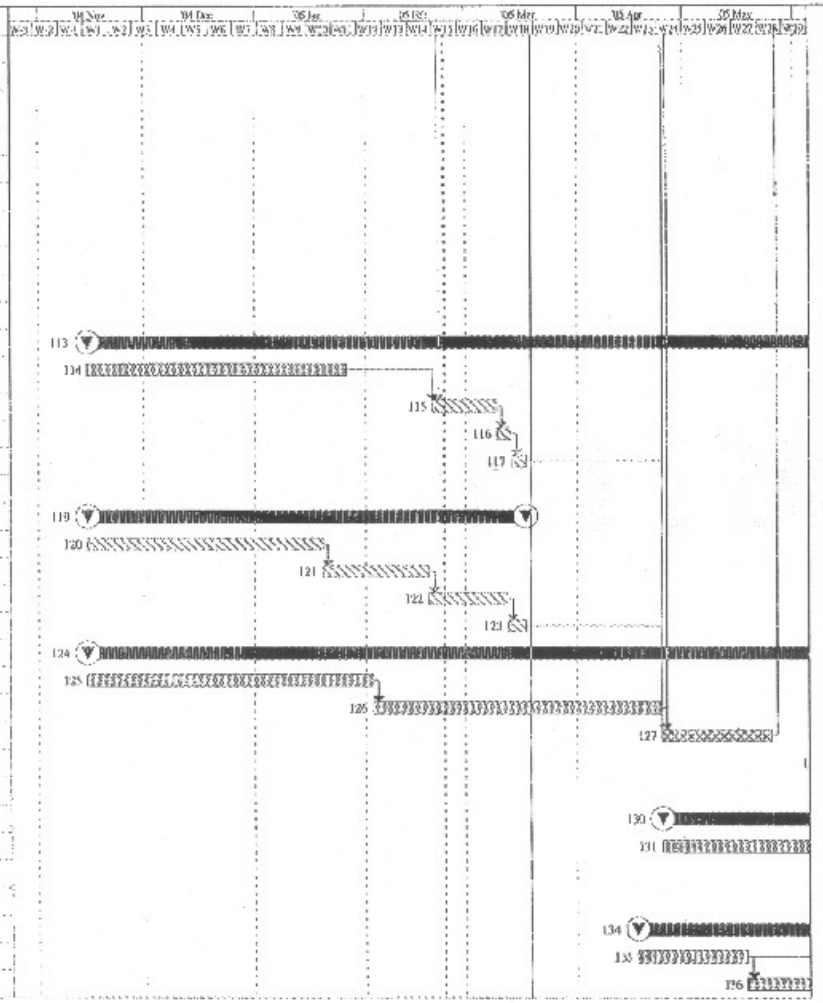
Normal Task | Progress | Summary | Critical Task (Sec 1 & 2) | Critical Task (Sec 3)
Split | Commencement Milestone | Completion Milestone | Critical Task (Sec 1) | Maintenance Period

Contract No.: CV/2004/02
Reconstruction of Wong Shek and Ko Lau Wan Public Piers

Master Programme
(Version 2)

Contractor: Kin Shing Construction Co. Ltd.
Commencement Date: 15th Nov 2004
Completion Date: 6th Aug 2006
Programme Date: 21st Feb 2005

	Task Name	Duration	Start	Finish	Predecessors
97	Relocation	1 day	Fri 06/7/7	Fri 06/7/7	105,93,81,85,109,86
127	Commissioning of the pier	1 day	Sat 06/7/8	Sat 06/7/8	103
128	Demolition of the temporary berth and the existing pier	151 days	Thu 06/3/9	Sun 06/8/6	
129	Survey of existing structures	31 days	Thu 06/3/9	Sat 06/4/8	
130	Design and ICE checking of demolition plan	61 days	Sun 06/4/9	Thu 06/6/8	106
131	Submission for Engineer's comments	30 days	Fri 06/6/9	Sat 06/7/8	107
132	Obtain consent from Country and Marine Park Authority	30 days	Fri 06/6/9	Sat 06/7/8	107
133	Demolition	29 days	Sun 06/7/9	Sun 06/8/6	104,109,108
111	Maintenance Period for the Works	365 days	Mon 06/8/7	Mon 07/8/6	110
112	Section 2 (Ko Lau Wan Public Pier)				
113	Coral Survey	626 days	Mon 04/11/15	Wed 06/8/2	
114	Submission and approval of specialist and method statement	73 days	Mon 04/11/15	Wed 05/1/26	
115	Initial coral survey and approval by AFCD	18 days	Sun 05/2/20	Wed 05/3/9	114,25
116	Coral translocation	4 days	Thu 05/3/10	Sun 05/3/13	115
117	Post translocation survey	4 days	Mon 05/3/14	Thu 05/3/17	116
118	Post pier construction survey	15 days	Wed 06/7/19	Wed 06/8/2	397
119	Temporary cover to existing pier	123 days	Mon 04/11/15	Thu 05/3/17	
120	Design and ICE checking	66 days	Mon 04/11/15	Wed 05/1/19	
121	Submission for Engineer's comment	30 days	Thu 05/1/20	Fri 05/2/18	120
122	Erection	22 days	Sat 05/2/19	Sat 05/3/12	121
123	Certified by ICE and commissioning	5 days	Sun 05/3/13	Thu 05/3/17	122
124	Provision of temporary berth	247 days	Mon 04/11/15	Tue 05/7/19	
125	Design and ICE checking of temporary berth	80 days	Mon 04/11/15	Wed 05/2/2	
126	Submission for Engineer's comment	81 days	Thu 05/2/3	Sun 05/4/24	125
127	Piling (phase 1)	31 days	Mon 05/4/25	Wed 05/5/25	123,126,117,23,30,25,42
128	Piling (Phase 2)	9 days	Fri 05/6/10	Sat 05/6/18	56
129	Deck construction and installation of fenders	25 days	Sun 05/6/19	Wed 05/7/13	128
130	Relocation of navigation light by Marine Dept.	81 days	Mon 05/4/25	Thu 05/7/14	
131	Application to Marine Department	80 days	Mon 05/4/25	Wed 05/7/13	
132	Relocation works	1 day	Thu 05/7/14	Thu 05/7/14	129,131
133	Certified by ICE, testing and commissioning of berth	5 days	Fri 05/7/15	Tue 05/7/19	132
134	Demolition of part of the existing pier	115 days	Mon 05/4/18	Wed 05/8/10	
135	Survey of existing structures	31 days	Mon 05/4/18	Wed 05/5/18	
136	Design and ICE checking of demolition plan	32 days	Thu 05/5/19	Sun 05/6/19	135



Contract No: CV/2004/02
Master Programme (Version 2)

Normal Task | Progress | Summary | Critical Task (Sec 1 & 2) | Critical Task (Sec 2)
Split | Concurrent Milestone | Completion Milestone | Critical Task (Sec 1) | Maintenance Period

Contract No.: CV/2004/02
Reconstruction of Wong Shek and
Ko Lau Wan Public Piers

Master Programme
(Version 2)

Contractor: Kin Shing Construction Co. Ltd.
Commencement Date: 15th Nov 2004
Completion Date: 6th Aug 2006
Programme Date: 21st Feb 2005

	Task Name	Duration	Start	Finish	Predecessors
135	Submission for Engineer's comments	30 days	Mon 05/6/20	Tue 05/7/19	134
136	Liaison with local residents	30 days	Mon 05/6/20	Tue 05/7/19	135
139	Demolition	22 days	Wed 05/7/20	Wed 05/8/10	133,138,137
140	Ground investigation	129 days	Wed 04/12/29	Fri 05/5/6	
141	Submission for Engineer's comment	68 days	Wed 04/12/29	Sun 05/3/6	
142	Ground investigation works on site	20 days	Fri 05/3/18	Wed 05/4/6	141,30,117
143	Preparation and approval of reports	10 days	Thu 05/4/7	Sat 05/4/16	142
144	Submission of reports to determine pile founding levels	20 days	Sun 05/4/17	Fri 05/5/6	143
145	Piling for permanent pier	342 days	Sat 05/1/1	Thu 05/12/8	
146	Compilation of method statement for piling	33 days	Sat 05/1/1	Wed 05/2/2	
147	Submission for Engineer's comment	189 days	Thu 05/2/3	Wed 05/8/10	146
148	Vertical preliminary pile and testing	15 days	Thu 05/8/11	Thu 05/8/25	147,139,65,144
149	Vertical main piles (E1,E4,D1,D4,C1,C4)	20 days	Fri 05/8/26	Wed 05/9/14	148
150	Temporary platform for raking pile	21 days	Thu 05/9/15	Wed 05/10/5	149
151	Vertical main pile (remaining 15 nos)	45 days	Thu 05/9/15	Sat 05/10/29	149
152	Raking preliminary piles and testing	16 days	Thu 05/10/6	Fri 05/10/21	150,62
154	Raking main piles (remaining 9 nos)	33 days	Sat 05/10/22	Wed 05/11/23	152
155	Pile tests for main piles	15 days	Thu 05/11/24	Thu 05/12/8	151,153
156	Construction of pile cap and deck	201 days	Wed 05/8/10	Sun 06/2/26	
157	Submission and approval of precast yard	60 days	Wed 05/8/10	Sat 05/10/8	
158	Casting of precast units at precast yard	60 days	Mon 05/10/10	Thu 05/12/8	156
159	Design and ICE checking of falsework for pile cap and deck construction	60 days	Sat 05/9/10	Tue 05/11/8	
160	Submission of calculation and method statement for Engineer's approval	30 days	Wed 05/11/9	Thu 05/12/8	158
161	Erection of falsework for installation of precast units	20 days	Fri 05/12/9	Wed 05/12/28	159,154
162	Installation of precast units with in-situ pile caps	55 days	Fri 05/12/9	Wed 06/2/1	157,154
163	Casting of in-situ pier deck	25 days	Thu 06/2/2	Sun 06/2/26	161,154
164	Construction of bollards	25 days	Thu 06/2/2	Sun 06/2/26	161
165	Installation of corrosion monitoring system	85 days	Sun 05/12/4	Sun 06/2/26	
166	Approval of specialist contractor and method statement	60 days	Sun 05/12/4	Wed 06/2/1	
167	Installation of corrosion monitoring system	25 days	Thu 06/2/2	Sun 06/2/26	161,165
168	Construction of villa	110 days	Fri 06/2/17	Tue 06/6/6	
169	Concrete structure	50 days	Mon 06/2/27	Mon 06/4/17	162
170	Fitting	110 days	Fri 06/2/17	Tue 06/6/6	
170	Material submission	60 days	Fri 06/2/17	Mon 06/4/17	
171	Construction	50 days	Tue 06/4/18	Tue 06/6/6	168,170

Timescale: 15 Nov, 24 Dec, 05 Feb, 26 Mar, 15 Apr, 16 May

Project: CV2004-02
Master Programme Version 2

Inactive Task | Progress | Summary | Critical Task (Sec 1 & 2) | Critical Task (Sec 2)
Split | Commencement Milestone | Completion Milestone | Critical Task (Sec 1) | Maintenance Period

Contract No.: CV/2004/02
Reconstruction of Wong Shek and
Ko Lau Wan Public Piers

Master Programme
(Version 2)

Contractor: Kin Shing Construction Co. Ltd.
Commencement Date: 15th Nov 2004
Completion Date: 6th Aug 2006
Programme Date: 21st Feb 2005

ID	Task Name	Duration	Start	Finish	Predecessors
127	Construction of walking cover 1 & 2	245 days	Wed 05/10/5	Tue 06/6/6	
128	Approval of specialist contractor	60 days	Wed 05/10/5	Sat 05/12/3	
129	Submission of workshop drawings for connection details with deck	60 days	Sun 05/12/4	Wed 06/2/1	173
130	Material submissions	85 days	Sun 05/12/4	Sun 06/2/26	173
131	Submission of workshop drawing for remaining roof system	85 days	Sun 05/12/4	Sun 06/2/26	173
132	Construction of steel works	50 days	Mon 06/2/27	Mon 06/4/17	176,182,175
133	Erection of roof covers	50 days	Tue 06/4/18	Tue 06/6/6	179
134	Electrical system, CLP meter box and lighting system	200 days	Tue 05/11/29	Fri 06/6/16	
135	Approval of specialist contractor	30 days	Tue 05/11/29	Wed 05/12/28	
136	Liaison with CLP and EMSD	60 days	Thu 05/12/29	Sun 06/2/26	185
137	Installation	100 days	Mon 06/2/27	Tue 06/6/6	162,181
138	Testing	10 days	Wed 06/6/7	Fri 06/6/16	182
139	Construction of floor finish	130 days	Thu 06/3/9	Sun 06/7/16	
140	Material submissions	90 days	Thu 06/3/9	Tue 06/6/6	
141	Site works	40 days	Wed 06/6/7	Sun 06/7/16	123,135,171
142	Construction of hand railing, seating benches and notice boards	150 days	Fri 06/2/17	Sun 06/7/16	
143	Material submission	60 days	Fri 06/2/17	Mon 06/4/17	
144	Construction	90 days	Tue 06/4/18	Sun 06/7/16	188
145	Installation of fender system	190 days	Sun 06/1/8	Sun 06/7/16	
146	Material submission	31 days	Sun 06/1/8	Tue 06/2/7	
147	Ordering of material	59 days	Wed 06/2/8	Fri 06/4/7	191
148	Site works	100 days	Sat 06/4/8	Sun 06/7/16	192
149	Relocation of navigation light by Marine Dept.	92 days	Mon 06/4/17	Mon 06/7/17	
150	Application to Marine Department	91 days	Mon 06/4/17	Sun 06/7/16	
151	Relocation	1 day	Mon 06/7/17	Mon 06/7/17	183,193,195,196,169
152	Commissioning of the pier	1 day	Tue 06/7/18	Tue 06/7/18	196
153	Demolition of the temporary berth and the existing pier	141 days	Sun 06/3/19	Sun 06/8/6	
154	Survey to existing structure	31 days	Sun 06/3/19	Tue 06/4/18	
155	Design and ICE checking of demolition plan	61 days	Wed 06/4/19	Sun 06/6/18	199
156	Submission for Engineer's comments	30 days	Mon 06/6/19	Tue 06/7/18	200
157	Liaison with local residents	30 days	Mon 06/6/19	Tue 06/7/18	200
158	Demolition	19 days	Wed 06/7/19	Sun 06/8/6	103,202,201
159	Maintenance Period for the Works	365 days	Mon 06/8/7	Mon 07/8/6	203

Y5 Nov | Y6 Dec | Y6 Jan | Y6 Feb | Y6 Mar | Y6 Apr | Y6 May

Contract No.: CV/2004/02
Master Programme (Version 2)

Normal Task | Progress | Summary | Critical Task (Sec 1 & 2) | Critical Task (Sec 2)
Split | Commencement Milestone | Completion Milestone | Critical Task (Sec 1) | Maintenance Period

Contract No.: CV/2004/02
Reconstruction of Wong Shek and
Ko Lau Wan Public Piers

Master Programme
(Version 2)

Contractor: Kin Shing Construction Co. Ltd.
Commencement Date: 15th Nov 2004
Completion Date: 6th Aug 2006
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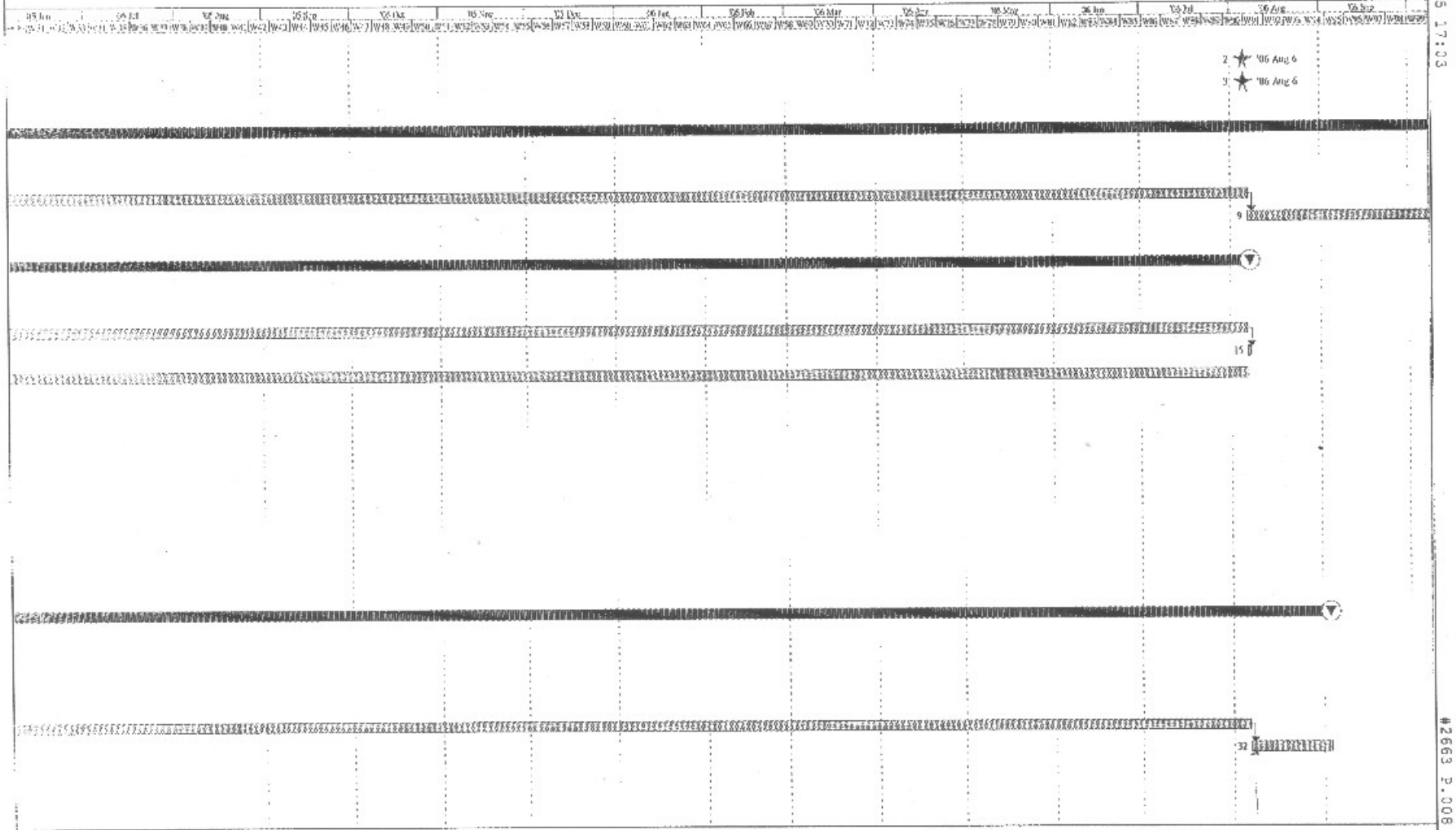


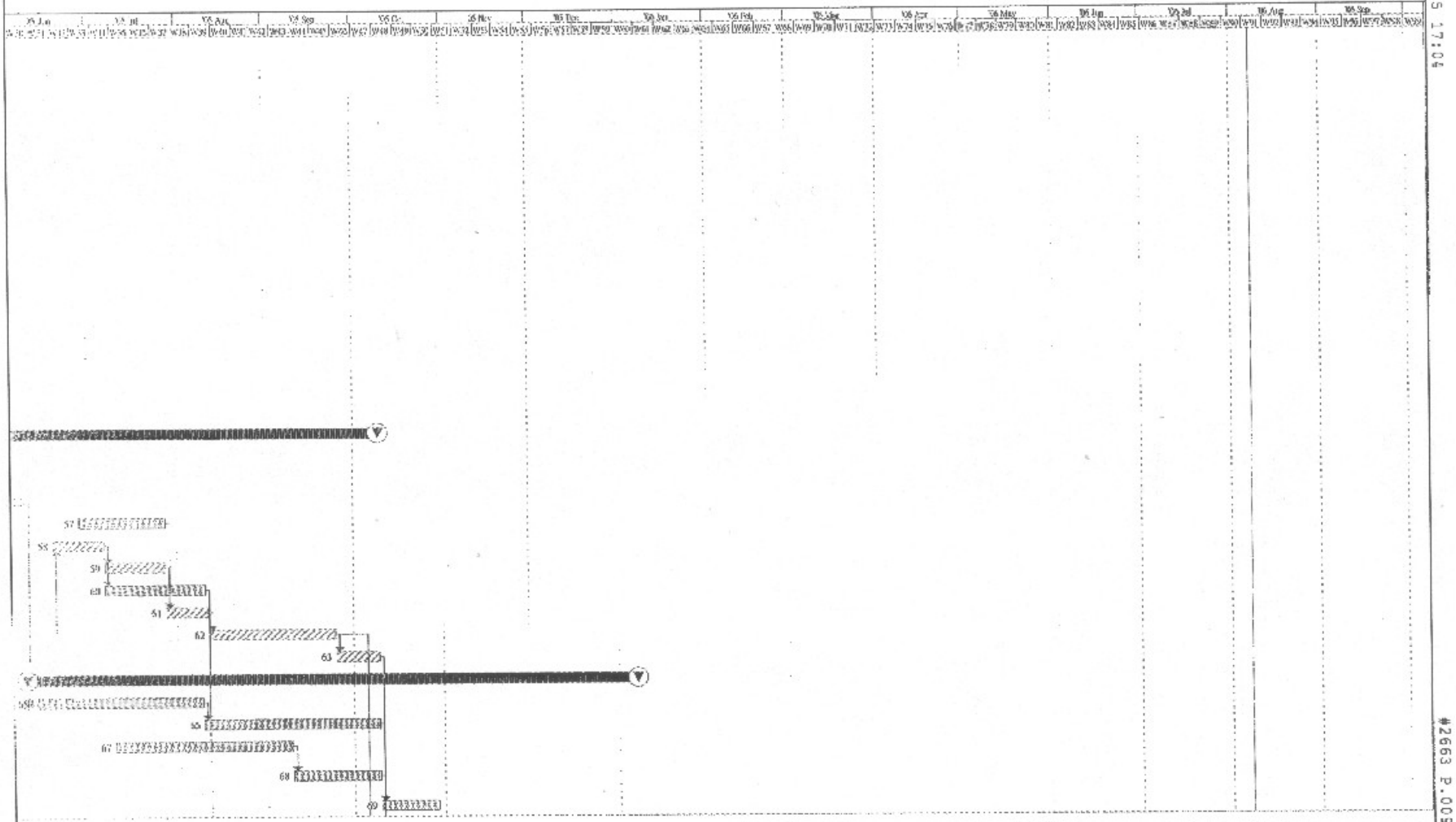
Contract No. CV/2004/02
Master Programme Version 21

Normal Task | Progress | Summary | Critical Task (Sec 1 & 2) | Critical Task (Sec 2)
Split | Commencement Milestone | Completion Milestone | Critical Task (Sec 1) | Maintenance Period

Contract No.: CV/2004/02
Reconstruction of Wong Shek and
Ko Lau Wan Public Piers

Master Programme
(Version 2)

Contractor: Kin Shing Construction Co. Ltd.
Commencement Date: 15th Nov 2004
Completion Date: 6th Aug 2006
Programme Date: 21st Feb 2005



Contract No: CV/2004/02
Master Programme (Version 2)

Normal Task
Progress
Summary
Critical Task (Sec 1 & 2)
Critical Task (Sec 2)
Split
Commencement Milestone
Completion Milestone
Critical Task (Sec 1)
Maintenance Period

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Contract No.: CV/2004/02
Reconstruction of Wong Shek and
Ko Lau Wan Public Piers

Master Programme
(Version 2)

Contractor: Kin Shing Construction Co. Ltd.
Commencement Date: 15th Nov 2004
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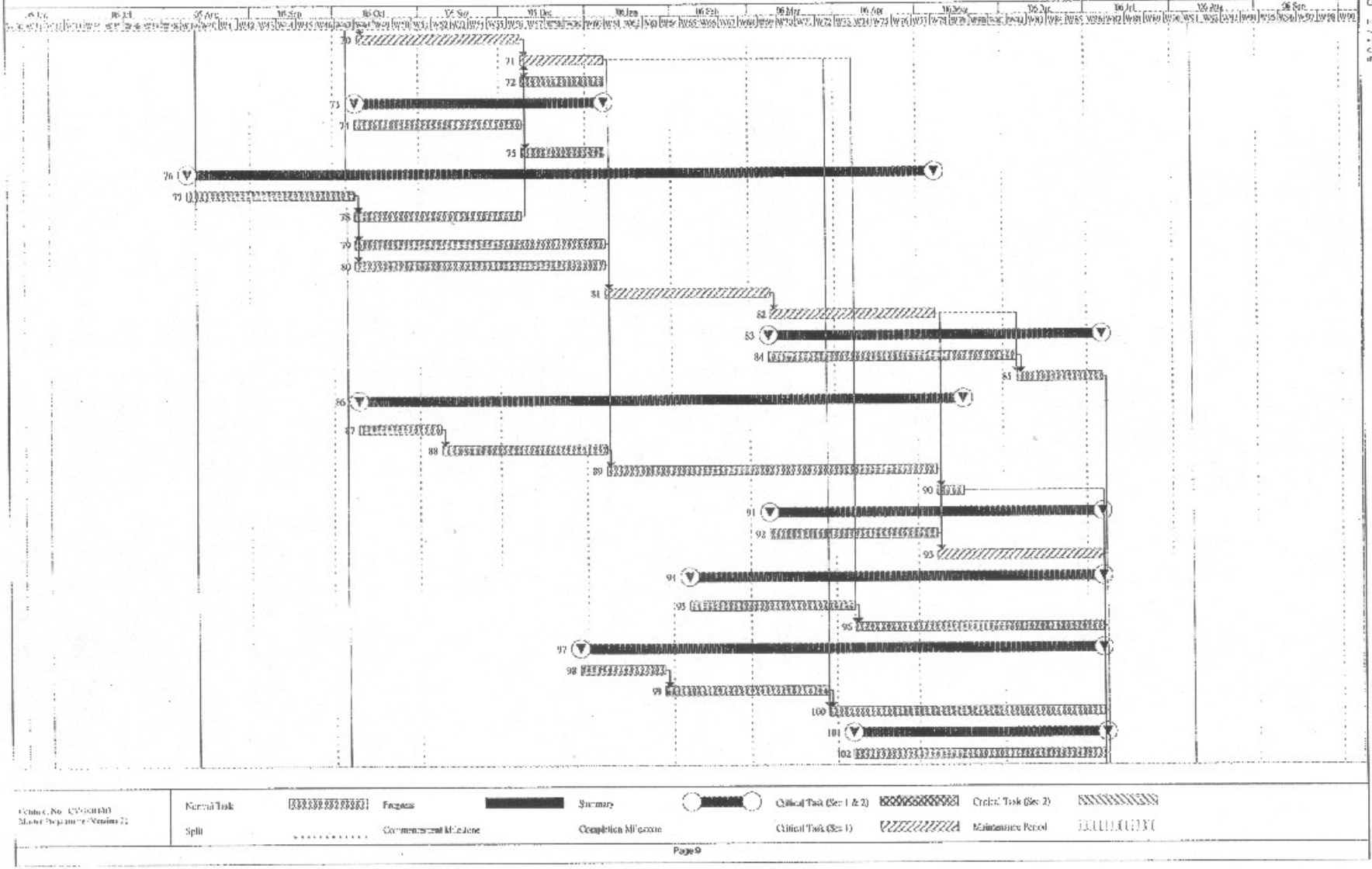

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Contract No.: CV/2004/02
Reconstruction of Wong Shek and
Ko Lau Wan Public Piers

Master Programme
(Version 2)

Contractor: Kin Shing Construction Co. Ltd.
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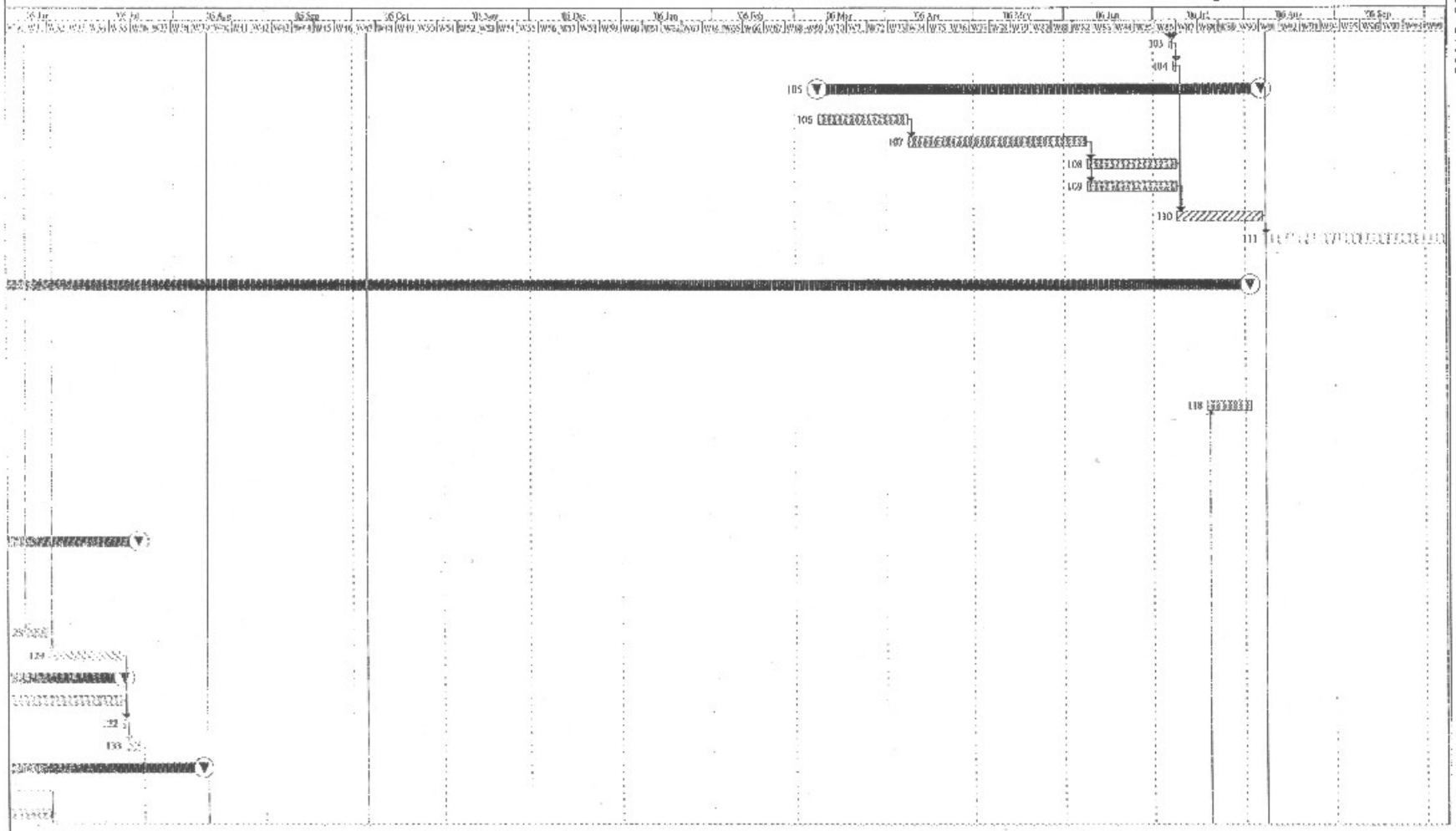

Normal Task | Progress | Summary | Critical Task (Sec 1 & 2) | Critical Task (Sec 2) | Critical Task (Sec 3)
Sp.1 | Commencement Milestone | Completion Milestone | Critical Task (Sec 3) | Maintenance Period

Contract No.: CV/2004/02
Reconstruction of Wong Shek and
Ko Lau Wan Public Piers

Master Programme
(Version 2)

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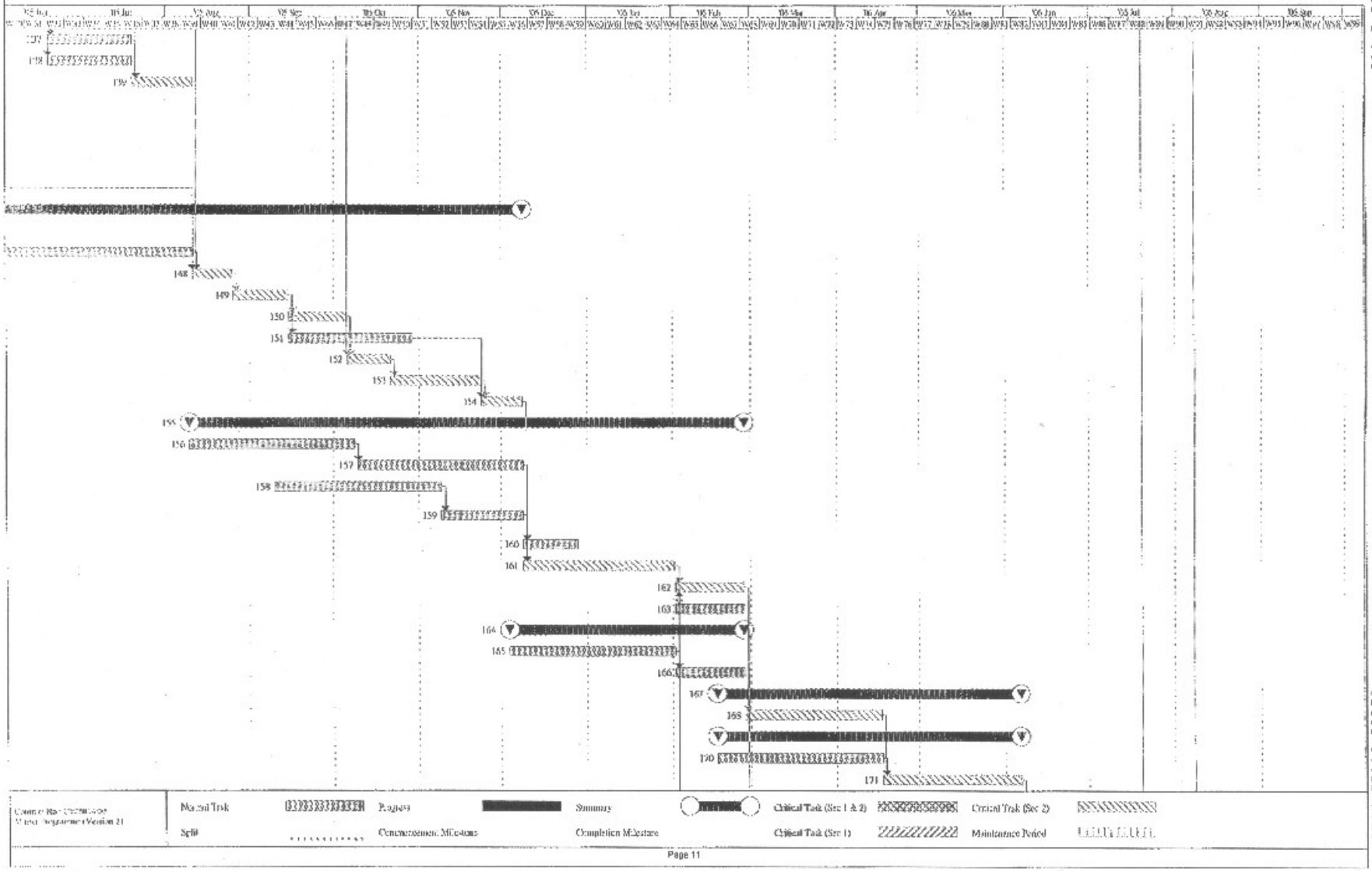

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Reconstruction of Wong Shek and
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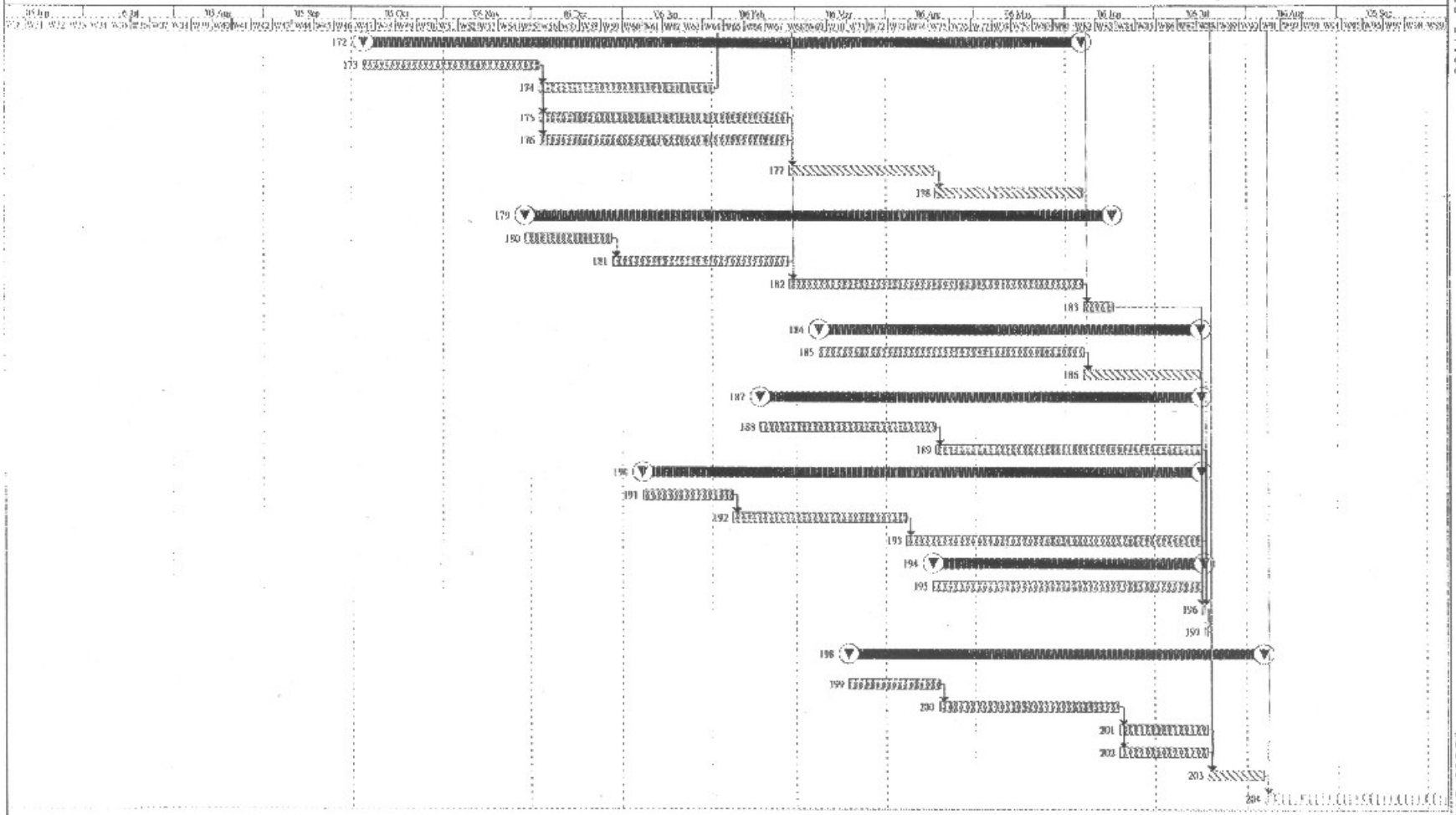

Normal Task | Progress | Summary | Critical Task (Sec 1 & 2) | Critical Task (Sec 2)
Split | Commencement Milestone | Completion Milestone | Critical Task (Sec 1) | Miscellaneous Period