Maeda Corporation

Castle Peak Road Improvement Between Sham Tseng and Ka Loon Tsuen, Tsuen Wan West Contract No. HY/99/18

Quarterly Environmental Monitoring and Audit Summary Report August 2003 to October 2003

First Issue

Maeda Corporation

West Contract No. HY/99/18
Castle Peak Road Improvement Between Sham Tseng and Ka Loon Tsuen, Tsuen Wan

Environmental Monitoring and Audit

Quarterly Environmental Monitoring and Audit Summary Report

August 2003 to October 2003

November 2003

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For attention of: Mr. Sam Tsoi

Dear Mr. Tsoi

Contract HY/99/18 West Contract
Castle Peak Road Improvement between Sham Tseng and Ka Loon Tsuen, Tsuen Wan
Quarterly EM&A Summary Report (Aug to Oct 03)

We refer to the electronic version of the captioned report submitted by your Mr. Laurent Cheung via e-mail on 10 November 2003, we have no comment and endorse the report.

Please do not hesitate to contact the undersigned on 2911-2719 if you wish to discuss any further issues.

Yours sincerely

Coleman Ng
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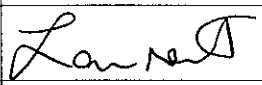
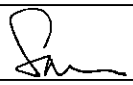
		Signature			
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ABBREVIATIONS AND ACTONYMS

A/L	Action or Limit Levels
AQO	Air Quality Objectives
Arup	Ove Arup & Partners Hong Kong Limited
ASR	Area Sensitive Rating
B&K	Brüel & Kjær
CFM	Cubic Feet per Minute
CNP	Construction Noise Permit
CT	Contractor
DO	Dissolved Oxygen
DGPS	Differential Global Positioning System
EA	Environmental Auditor
EIA	Environmental Impact Assessment
EM&A	Environmental Monitoring and Audit
EP	Environmental Permit
EPD	Environmental Protection Department
ER	Engineer / Engineer's Representative
ET	Environmental Team
HKPSG	Hong Kong Planning Standards and Guidelines
HKSAR	Hong Kong Special Administrative Region
HOKLAS	The Hong Kong Laboratory accreditation Scheme
HVS	High Volume Sampler
IEC	International Electrotechnical Commission Publications
K	Degrees Kelvin
MC	Maeda Corporation
MHJV	Mouchel Halcrow Joint Venture
NAMAS	National Measurement accreditation Service
NTU	Nephelometric Turbidity Unit
NSR	Noise Sensitive Receiver
SCFM	Standard Cubic Feet per Minute
SS	Suspended Solids
TSP	Total Suspended Particulates
Tby	Turbidity

EXECUTIVE SUMMARY

This is the seventh quarterly environmental monitoring and audit (EM&A) summary report summarising the site inspection findings, air quality, noise impact, marine water quality monitoring, and landscape and visual monitoring and audit works for the period from August 2003 to October 2003.

Monitoring works included air quality monitoring at 11 locations, noise monitoring at 16 locations, and marine water quality monitoring at 16 locations. Air quality was recorded in terms of 1-hour Total Suspended Particulates (TSP) and 24-hour TSP. Noise was measured in terms of $L_{eq(30min)}$ with L_{10} and L_{90} measurements as references. Water quality was measured in terms of Dissolved Oxygen (DO), Turbidity (Tby) and Suspended Solids (SS).

Air Quality

The highest 1-hour TSP level was 347.5μg/m^3 recorded at G/F of Tsing Lung Tau Tin Hau Temple (WA6) on 18 September 2003 and the lowest 1-hour TSP level was 92.8μg/m^3 recorded at Hong Kong Garden G/F Regent Heights (WA3) on 1 August 2003. There was no exceedance on Action and Limit Levels in the reporting period.

The highest 24-hour TSP level was 149.4μg/m^3 recorded at Sea Crest Villa Phase 1 Block 1 (WA10) on 23 October 2003 and the lowest 24-hour TSP level was 30.0μg/m^3 recorded at G/F of Hong Kong Garden Regent Heights (WA3) on 11 October 2003. There was no exceedance on Action and Limit Levels in the reporting period.

Noise

The highest noise level was 74.8dB(A) recorded at House 1, Tsing Lung Tau Village (WN9) on 9th and 31st October 2003 and the lowest noise level was 61.1dB(A) recorded at Podium of Sea Crest Villa Phase 4 Block 12 (WN12) on 24 October 2003. There was no exceedance on the Limit Level in the reporting period.

Marine Water Quality

DESIGNATED PROJECT – A total of 12 monitoring locations, 8 for impact and 4 for control were selected for the marine water quality monitoring programme.

EPD and IC(E) had agreed on 10 April 2003 to apply the "Direct Comparison" method for evaluation of the marine water quality exceedance.

In order to better differentiate between exceedance caused by the contract works and elevated readings arising from causes unrelated to contract works, all parties had agreed to introduce a term "Reaching of Trigger Value" to represent the scenario where the A/L levels were exceeded by the "Direct Comparison" evaluation method. Upon the detection of "Reaching of Trigger Value", an initial analysis would be carried out to determine whether it was caused by contract works. Exceedance and non-compliance should only be recorded in case where the "Reaching of Trigger Value" was caused by the contract works.

As reported by the Contractor, major sea works at level below +2.5mPD had been completed in July 2003. The proposal on suspension of marine monitoring was submitted to IC(E), HyD, EPD and AFCD for comments on 25 September 2003. It was confirmed with IC(E) and AFCD that suspension of marine monitoring was acceptable if there is no "active" marine work being carried out. In future, if there is any marine work on or below +2.5mPD, the Contractor shall notify the relevant parties one month in advance and resume the marine monitoring. Subsequently, as instructed by the Contractor/ HyD, the marine monitoring was suspended from 10 October 2003.

- **Summary of Mid-Ebb Tide from August 2003 to October 2003**

The lowest Dissolved Oxygen (DO) levels of impact stations at surface & middle and bottom positions were 2.89mg/L at WW1 on 24 September 2003, and 2.74mg/L at WW4 on 24 September 2003 respectively.

The highest depth-averaged Turbidity (Tby) result of impact stations was 124.8 Nephelometric Turbidity Unit (NTU) at WW3 on 29 September 2003.

The highest depth-averaged Suspended Solids (SS) result of impact stations was 33mg/L at WW1 on 29 September 2003.

- **Summary of Mid-Flood Tide from August 2003 to October 2003**

The lowest DO levels of impact stations at surface & middle and bottom positions were 2.82mg/L at WW8 on 22 September 2003, and 2.78mg/L at WW6/7 on 22 September 2003 respectively..

The highest depth-averaged Tby result of impact stations was 24.0NTU at WW5 on 29 September 2003.

The highest depth-averaged SS result of impact stations was 30.9mg/L at WW5 on 29 September 2003.

There were occasional "Reaching of Trigger value" of DO, Tby and SS of marine water quality monitoring from August 2003 to October 2003. The "Reaching of Trigger Value" of DO, Tby and SS from August 2003 to October 2003 are summarized in the following table.

Summary of "Reaching of Trigger Value" of Marine Water Quality Monitoring from August 2003 to October 2003

Monitoring Stations	Level of "Reaching of Trigger Value" (i.e. exceeded the Action or Limit Levels)	DO (mg/L)		Turbidity (NTU)		SS (mg/L)		Total	
		Mid-Ebb	Mid-Flood	Mid-Ebb	Mid-Flood	Mid-Ebb	Mid-Flood	Mid-Ebb	Mid-Flood
WW1	Action	1	7	1	0	2	0	**4**	**7**
	Limit	42	28	3	0	1	0	**46**	**28**
WW2	Action	1	9	0	0	0	0	**1**	**9**
	Limit	43	26	2	0	1	0	**46**	**26**
WW3	Action	1	5	1	0	0	0	**2**	**5**
	Limit	44	31	1	0	1	0	**46**	**31**
WW4	Action	0	2	1	0	1	0	**2**	**2**
	Limit	45	33	2	0	1	0	**48**	**33**

Monitoring Stations	Level of "Reaching of Trigger Value" (i.e. exceeded the Action or Limit Levels)	DO (mg/L)		Turbidity (NTU)		SS (mg/L)		Total	
		Mid-Ebb	Mid-Flood	Mid-Ebb	Mid-Flood	Mid-Ebb	Mid-Flood	Mid-Ebb	Mid-Flood
WW5	Action	0	4	0	0	0	0	**0**	**4**
	Limit	50	40	1	0	0	1	**51**	**41**
WW6/7	Action	0	6	1	0	1	0	**2**	**6**
	Limit	48	37	1	0	0	0	**49**	**37**
WW8	Action	0	6	1	0	0	1	**1**	**7**
	Limit	48	39	1	0	0	0	**49**	**39**
FCZ1	Action	2	1	0	0	0	0	**2**	**1**
	Limit	25	40	***(1)***	1	0	1	**25+*(1)***	**42**
Total	**Action**	**5**	**40**	**5**	**0**	**4**	**1**	**55**	
	Limit	**345**	**274**	**11 + *(1)***	**1**	**4**	**2**	**637 + *(1)***	

Note: - Numbers that are bold, italic and underlined (e.g. ***2***) represents monitoring results exceed both EPD and AFCD criteria.
- Numbers that are bold, italic, underlined and in brackets (e.g. ***(2)***) represents monitoring results exceed the Limit Level of EPD criteria but only the Action Level of AFCD criteria.

All "Reaching of Trigger Value" of DO, Tby and SS in the reporting period were caused by the natural variation of the marine water quality rather than by the construction activities.

The "Reaching of Trigger Value" of DO, recorded at FCZ1 on 1st, 4th, 6th, 8th, 11th, 13th, 15th, 18th, 26th, 28th and 30th August 2003, were likely caused by the natural variation of marine water quality rather than the marine works of West Contract, as relatively low DO results were also recorded at all other control and impact stations.

The "Reaching of Trigger Value" of DO recorded at FCZ1 throughout September 2003, of Tby on 8th, 10th 24th, 26th and 29th, and of SS on 10th and 29th September 2003 were likely caused by the natural variation of marine water quality rather than the marine works of West Contract, as relatively low DO, high Tby and SS results were also recorded at all other control and impact stations.

The "Reaching of Trigger Value" of DO recorded at FCZ1 on 2nd and 6th October 2003 were likely caused by the natural variation of marine water quality rather than the marine works of West Contract, as relatively low DO results were also recorded at all other control and impact stations.

The quarterly mean of SS level recorded from August 2003 to October 2003 is lower than the 1.3 times ambient mean value. Therefore, the construction impacts on suspended solids are insignificant.

Landscape and Visual

A total of 7 times of the landscape and visual monitoring and audits had been carried out in the reporting period by a Registered Landscape Architect. Frequently watering and tidying up of the construction site had been suggested after the landscape and visual monitoring and audits. The CT was informed of the recommendations for action.

Waste Disposal

A total of 74 loads of Construction & Demolition (C&D) waste had been disposed of at WENT Landfill in the reporting period. A total of 4,312 loads of C&D fill materials (Public Fill) had been disposed of at Public Filling Area in Tuen Mun by dump trucks in the reporting period. A total of 24 drums (4,312L) of spent lube oil and 3 drums (600L) of Sludge contaminated with spent lube oil had been collected by licensed collector in the reporting period.

Complaint Records

A total of 3 environmental complaints were received in the reporting period. One regarding the felling of all old trees along section of Castle Peak Road near Ma Wan Pier, one regarding general refuse being accumulating on the pedestrian walkway between Phase III and Phase II and the drainage channel at Pai Min Kok Village. All had been solved after investigation.

Non-compliance

There was no non-compliance for air quality, noise, and marine water quality monitoring during the monitoring period.

DESIGNATED PROJECT – In accordance with the revised "Direct Comparison" method, there were occasional "Reaching of Trigger value" of DO, Tby and SS of marine water quality monitoring in the reporting period. However, all "Reaching of Trigger Value" of DO, Tby and SS in the reporting period were caused by the natural variation of the marine water quality rather than by the construction activities. There was no non-compliance for water quality monitoring in the reporting period.

Comments

The environmental performance of the CT during the reporting period was acceptable. Remedial measures had been taken to mitigate the environmental impacts caused by the construction activities upon advised by the ET. EM&A programme had been conducted as planned in the reporting period.

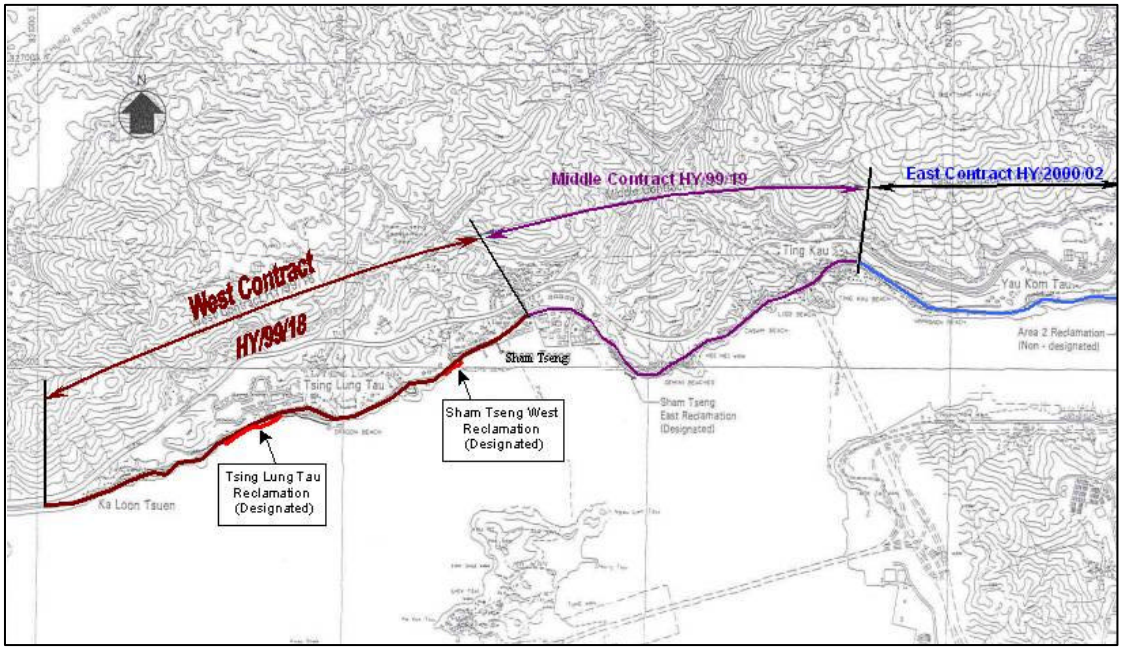
1. INTRODUCTION

Ove Arup & Partners Hong Kong Limited (Arup) was appointed by the Contractor - Maeda Corporation (MC) as the Environmental Team (ET) for *Contract No. HY/99/18 Castle Peak Road Improvements between Sham Tseng and Ka Loon Tsuen, Tsuen Wan* (hereafter called the "Project"). Environmental parameters including air quality, construction noise, water quality and landscape & visual issues were selected for impact monitoring for the Project. The contract period of the Project are anticipated as 36 months from December 2001 to November 2004.

1.1 Project Background

The Castle Peak Road improvements works consists of upgrading the existing Castle Peak Road to provide a dual two-lane carriageway of "Rural Road A" classification between Area 2, Tsuen Wan and Ka Loon Tsuen, and all associated utility, junction and pedestrian facilities. The Castle Peak Improvement project is divided into three contracts. This Environmental Monitoring and Audit (EM&A) exercise only concerns the West Contract No. HY/99/18 between Sham Tseng and Ka Loon Tsuen, Tsuen Wan. Figure 1-1 shows the site location plan.

Figure 1-1 Site location plan



The scope of the construction work includes:

- Improvement to Castle Peak Road between Area 2 and Ka Loon Tsuen, Tsuen Wan to a dual two-lane carriageway;
- Provision of pedestrian facilities in the form of footpaths, subways, footbridges and Crossings;
- Road junction and signal design and the re-provision of access roads and connections to existing road networks;
- Construction of associated drainage and landscaping works;
- Environmental mitigation measures;
- Design and construction of watermains;
- Construction of entrusted sewerage works; and
- Dredging and reclamation (designated project – see also Section 1.2)

1.2 Designated Project

The marine reclamation and the construction of the associated seawall at Tsing Lung Tau and Sham Tseng West within Contract No. HY/99/18 are classified as designated projects under the Environmental Permits No. EP-093/2001 and EP-094/2001 respectively.

1.3 Impact EM&A Requirements

The impact environmental monitoring and audit included air quality monitoring (both 1-hour and 24-hour TSP), noise, water quality, landscape and visual monitoring, and environmental audit.

1.4 Purpose of the Report

The purpose of the quarterly EM&A summary report is to summarise and provide the information on monitoring methodology, monitoring results, environmental permit status, site audit findings, recommendations and conclusions for the period from May 2003 to July 2003.

2. ENVIRONMENTAL STATUS

2.1 Construction Programme

The construction work was commenced in February 2002. The updated construction programme is given in Appendix A.

2.2 Construction Activities of the Quarter

The major construction activities carried out by the Contractor (CT) in the reporting period included excavation, rock breaking, rock drilling, chemical blasting and hydroseeding for slope formation, bored piling, construction of outfalls and base-slab; and installation of retaining walls and filling of sub-base.

The major sea works (Designated Projects) included marine dredging, manoeuvring of rock boulders and reclamation for the construction of Seawall; compaction, pre-drilling and pre-drilling, bored piling for the construction of footbridge; construction of base slab for retaining wall.

3. SUMMARY OF EM&A REQUIREMENTS

Air quality, construction noise, marine water quality and landscape issues are significant environmental impacts identified for the construction period of the project. In accordance with the Project specific EM&A Manual[1], air quality, noise, water quality, landscape impact monitoring, and audit shall be performed by an ET at all specified monitoring locations during the construction and operational stages.

3.1 Air Quality Monitoring

3.1.1 Monitoring Parameters

Air monitoring was measured in terms of the TSP levels for both 24-hour and 1-hour periods.

3.1.2 Monitoring Frequency

24-hour TSP and 1-hour TSP levels were monitored during the course of construction according to the EM&A Manual. The monitoring parameters and frequencies are specified in Table 3-1.

Table 3-1 TSP monitoring parameters and frequency

Parameters	Monitoring Frequency	Time Period	No. of measurement for each monitoring
24-hour TSP	Once every six days	0000 – 2400	1
1-hour TSP	Three times per every six days	0700 – 1900	1

3.1.3 Monitoring Locations

A total of eleven locations were specified for the air quality monitoring and they are given in Table 3-2 and presented in Figures 3-1a to 3-1d.

Table 3-2 Air quality monitoring locations

Air Monitoring Station No.	Location	Location description
~~WA1~~	~~Bayside Villas~~	~~G/F, Bayside Villas~~ (Temporary Suspended)
~~WA2~~	~~Grand Bay Villas~~	~~G/F, Grand Bay Villas~~ (Temporary Suspended)
WA3	Hong Kong Garden	G/F, Hong Kong Garden (Regent Heights)
WA4	Hong Kong Garden	G/F, Hong Kong Garden (Between Blk 1 & 2)
WA5	Hong Kong Garden	G/F, Hong Kong Garden (Block 4)
WA6	Tsing Lung Tau Tin Hau Temple	G/F, Tsing Lung Tau Tin Hau Temple
WA7	Sea Crest Villa	Podium, Sea Crest Villa (Phase 4 Block 12)
WA8	Sea Crest Villa	Podium, Sea Crest Villa (Phase 3 Block 8)
WA9	Sea Crest Villa	Car Park (L3), Sea Crest Villa (Phase 2 Block 6)
WA10	Sea Crest Villa	Podium, Sea Crest Villa (Phase 1 Block 1)
WA11	Lido Garden	G/F, Carpark, Lido Garden Tower 1

Note: Bayside Villas (WA1) and Grand Bay Villas (WA2) are no longer the air sensitive receivers as all residents of Bayside Villas and Grand Bay Villas had been evacuated since September 2002. Therefore, the air quality monitoring at Bayside Villas and Grand Bay Villas were temporary suspended since October 2002 after approval from IC(E) and EPD.

3.2 Construction Noise Monitoring

3.2.1 Monitoring Parameters

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

3.2.2 Monitoring Frequency

Construction noise measurements were required to be taken on a weekly basis according to the EM&A Manual. The monitoring time periods, monitoring parameters and frequency are specified in Table 3-3.

Table 3-3 Construction noise monitoring parameters and frequency

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

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

3.2.3 Monitoring Locations

A total of sixteen noise monitoring locations were specified. They are given in Table 3-4 and presented in Figures 3-1a to 3-1d. The measurements shall be taken at a position 1m from the exterior of building façade and at a position of 1.2m above ground.

Table 3-4 Construction noise monitoring locations

Noise Monitoring Station No.	Location	Monitoring Point
WN1	Ka Loon Tsuen	House No.3, Ka Loon Tsuen
WN2	Ka Loon Tsuen	House No.15, Ka Loon Tsuen
~~WN3~~	~~Bayside Villas~~	~~Upper G/F, Bayside Villas~~ (Temporary Suspended)
~~WN4~~	~~Bayside Villas~~	~~Lower G/F, Bayside Villas~~ (Temporary Suspended)
~~WN5~~	~~Grand Bay Villas~~	~~G/F, Grand Bay Villas~~ (Temporary Suspended)
WN6	Hong Kong Garden	G/F, Hong Kong Garden (Regent Heights)
WN7	Hong Kong Garden	G/F, Hong Kong Garden (Between Blk 1 & 2)
WN8	Hong Kong Garden	G/F, Hong Kong Garden (Block 4)
WN9	Tsing Lung Tau Village	House 1,Tsing Lung Tau Village
WN10	Tsing Lung Tau Village	House 60-64,Tsing Lung Tau Village
WN11	Villa Alfavista	G/F, Villa Alfavista
WN12	Sea Crest Villa	Podium, Sea Crest Villa (Phase 4 Block 12)
WN13	Sea Crest Villa	Podium, Sea Crest Villa (Phase 3 Block 8)
WN14	Sea Crest Villa	Car Park (L3), Sea Crest Villa (Phase 2 Block 6)
WN15	Sea Crest Villa	Podium, Sea Crest Villa (Phase 1 Block 1)
WN16	Lido Garden	G/F, Carpark, Lido Garden Tower 1

Note: Bayside Villas (WN3 and WN4) and Grand Bay Villas (WN5) are no longer the noise sensitive receivers as all residents of Bayside Villas and Grand Bay Villas had been evacuated since September 2002. Therefore, the noise monitoring at Bayside Villas and Grand Bay Villas were temporary suspended since October 2002 after approval from IC(E) and EPD.

3.3 Water Quality (Designated Project)

3.3.1 Monitoring Parameters

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

3.3.2 Monitoring Frequency

Water quality monitoring during the impact stage will be conducted thrice per week, during mid-flood and mid-ebb tides and at sixteen designated sampling locations. The interval between two sets of monitoring will not be less than 36 hours except where exceedances above the Action Level or Limit Level were detected (see also section 3.4). In these cases, the monitoring frequency will be increased.

3.3.3 Monitoring Locations

A total of sixteen locations, 9 for impact and 7 for control had been selected for marine water quality monitoring and the locations are given in Table 3-5 and presented in Figure 3-1b to 3-1e.

Table 3-5 Water quality monitoring locations

Water Monitoring Station No.		Location	
		Eastings	Northings
Tsing Lung Tau	WW1 (Impact Station)	822306	824405
	WW2 (Impact Station)	822377	824462
	WW3 (Impact Station)	822529	824500
	WW4 (Impact Station)	822775	824560
	WR-E-1234 (Control Station for Mid-Ebb Tide)	822204	824312
	WR-F-1234 (Control Station for Mid-Flood Tide)	822850	824519
Angler's Beach: Sham Tseung West	WW5 (Impact Station)	823700	824905
	WW6/7 (Impact Station)	823797	824964
	WW8 (Impact Station)	823900	825023
	WR-E-5678 (Control Station for Mid-Ebb Tide)	823590	824830
	WR-F-5678 (Control Station for Mid-Flood Tide)	823994	825034
Ma Wan Fish Culture Zone	FCZ1 (Impact Station)	823500	823870

Figure 3-1a Monitoring locations

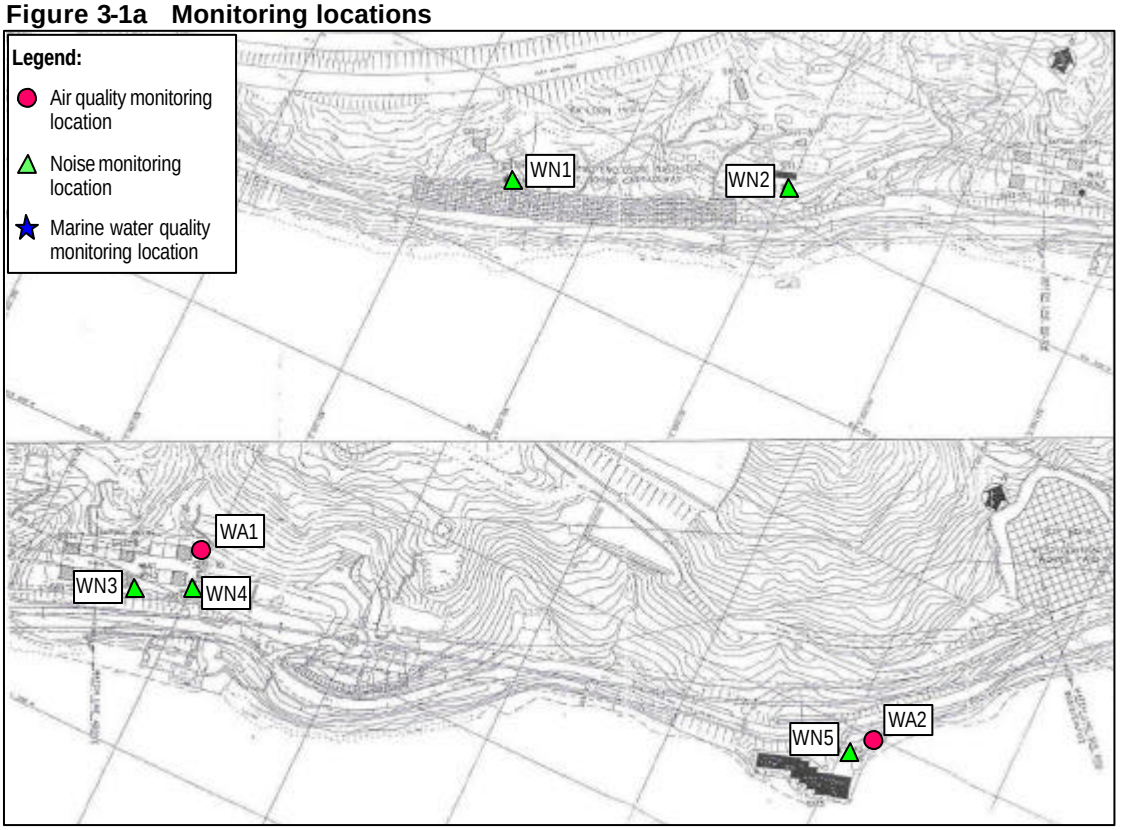


Figure 3-1b Monitoring locations

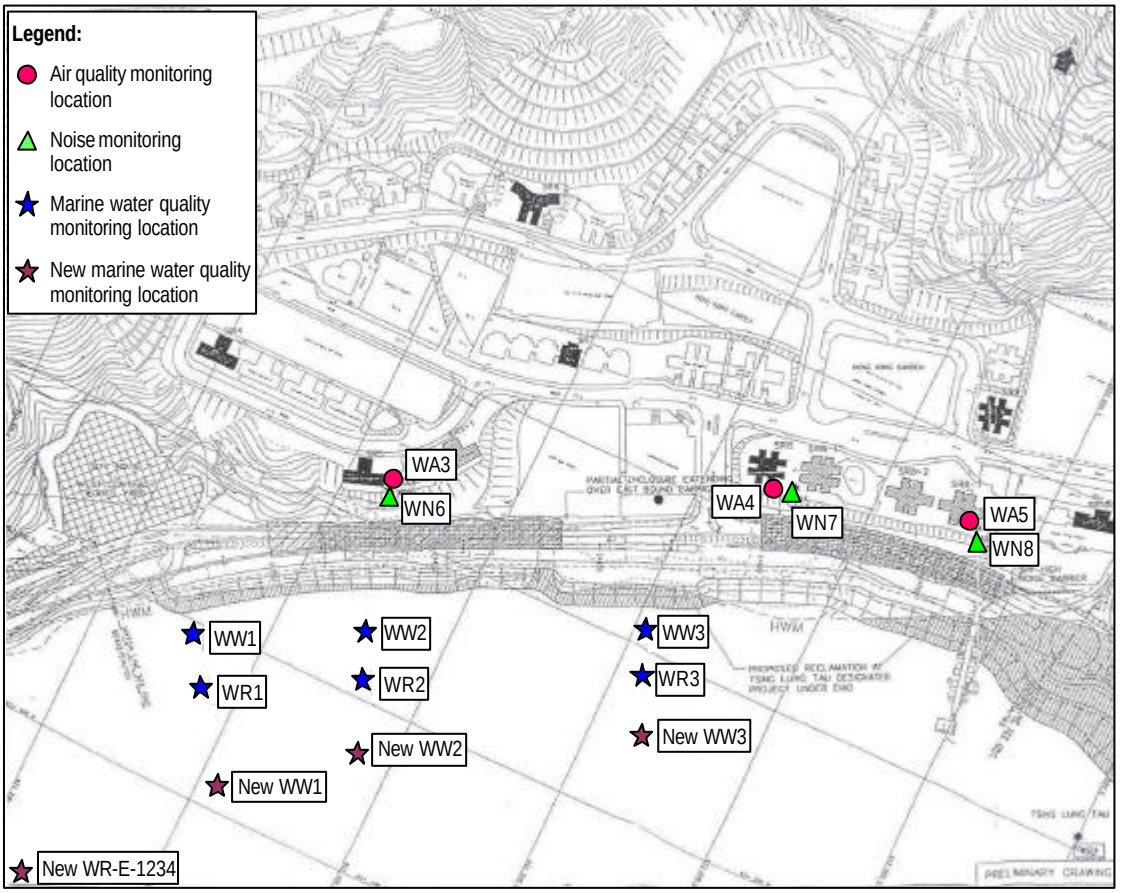


Figure 3-1c Monitoring locations

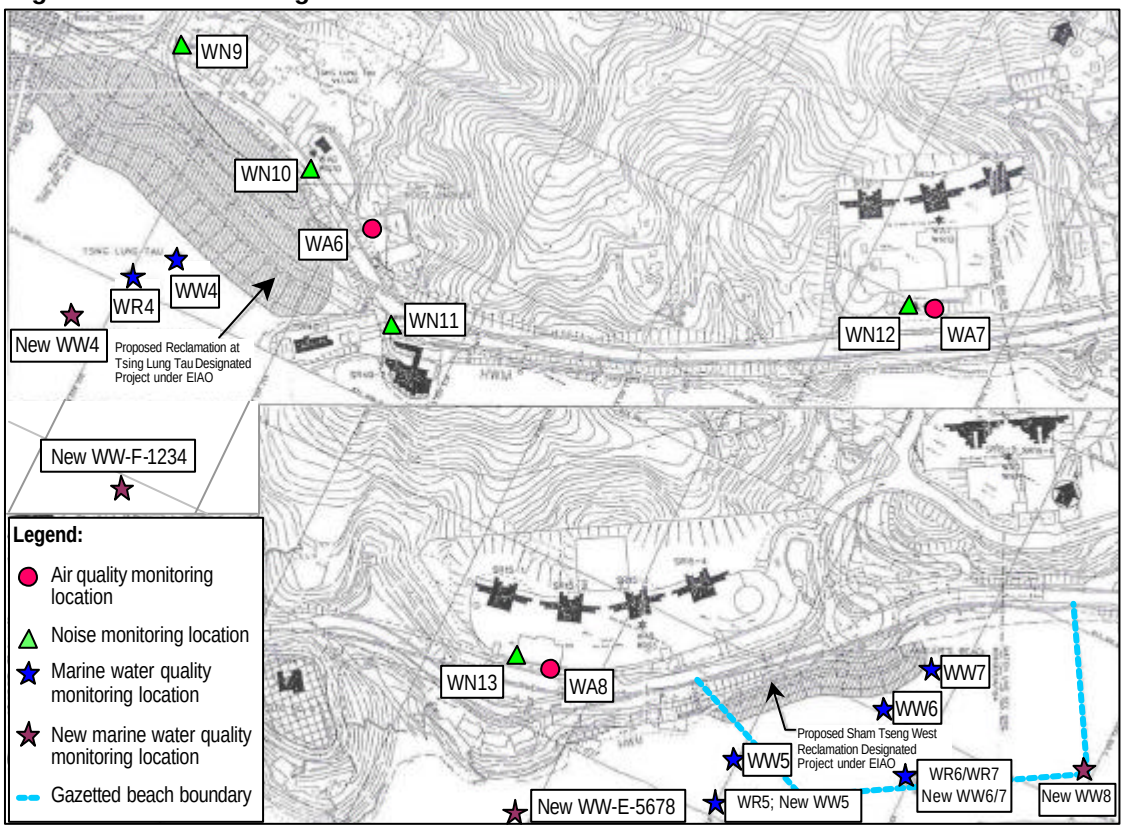


Figure 3-1d Monitoring locations

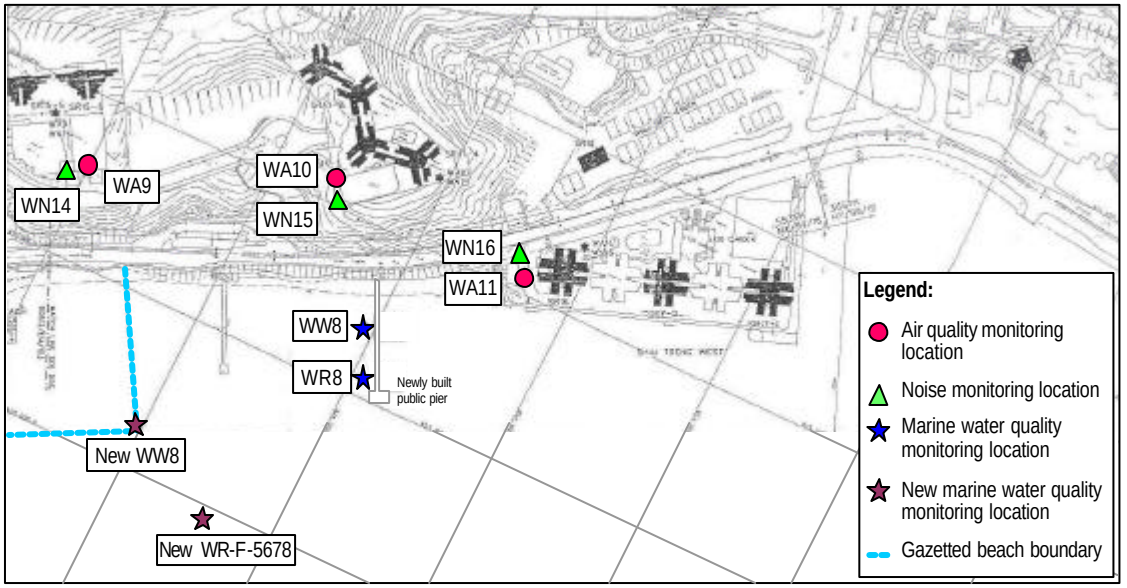
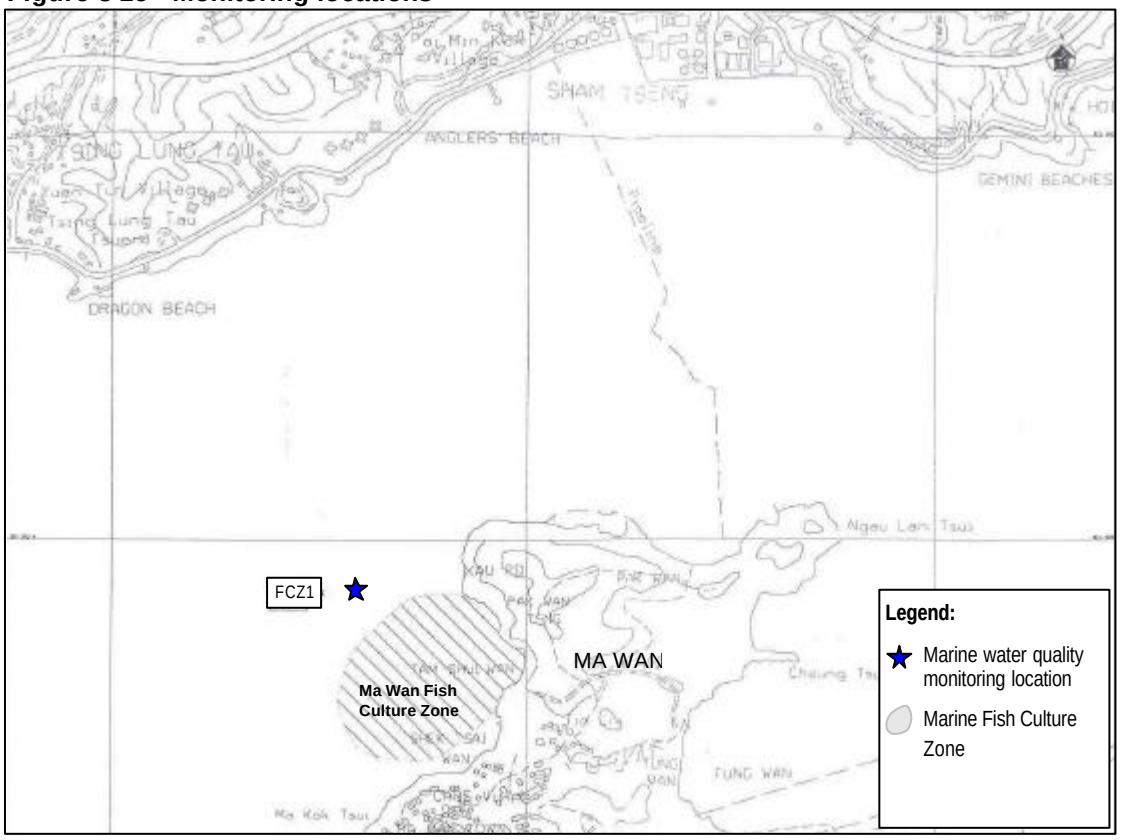


Figure 3-1e Monitoring locations



3.4 Landscape and Visual Monitoring and Audit

3.4.1 Audit Parameters

All landscape and visual mitigation measures undertaken by both the CT and the Landscape Contractor during the construction phase and during the first year of the operational phase were audited by a Registered Landscape Architect, to ensure compliance with the intended aims of the mitigation measures.

3.4.2 Audit Frequency

The landscape and visual monitoring and audit was undertaken at least once every two weeks throughout the construction period and once every two months during the operational phase.

3.4.3 Audit Location

The landscape and visual monitoring and audit was conducted throughout the entire site area.

3.5 Performance Limits and Event-Action Plans

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

3.5.1 Air Quality

The action and limit levels for air quality have been established during the baseline monitoring and are provided in Table 3-6.

Table 3-6 Action and Limit Level for air quality

Air Monitoring Station No.	1-hour TSP Level in $\mu g/m^3$		24-hour TSP Level in $\mu g/m^3$	
	Action Level	Limit Level	Action Level	Limit Level
WA1	350	500	187	260
WA2	362		192	
WA3	353		190	
WA4	362		187	
WA5	346		185	
WA6	362		204	
WA7	351		187	
WA8	347		188	
WA9	345		182	
WA10	352		183	
WA11	357		195	

Table 3-7 details the actions required to be carried out by different parties in case of an exceedance of performance limits being detected.

Table 3-7 Event/Action plan for air quality

Event	Action			
	ET Leader	IC(E)	ER	Contractor
Action Level				
1. Exceedance for one sample	1. Identify the source. 2. Inform the IC(E) and the ER. 3. Repeat measurement to confirm finding. 4. Increase monitoring frequency to daily.	1. Check monitoring data submitted by the ET Leader. 2. Check Contractor's working method.	1. Notify Contractor.	1. Rectify any unacceptable practice. 2. Amend working methods if appropriate.
2. Exceedance for two or more consecutive samples	1. Identify the source. 2. Inform the IC(E) and the ER. 3. Repeat measurements to confirm findings. 4. Increase monitoring frequency to daily. 5. Discuss with the IC(E) and the Contractor on remedial actions required. 6. If exceedance continues, arrange meeting with the IC(E) and the ER. 7. If exceedance stops, cease additional monitoring.	1. Check monitoring data submitted by the ET Leader. 2. Check the Contractor's working method. 3. Discuss with the ET Leader and the Contractor on possible remedial measures. 4. Advise the ER on the effectiveness of the proposed remedial measures. 5. Supervisor implementation of remedial measures.	1. Confirm receipt of notification of failure in writing. 2. Notify the Contractor. 3. Ensure remedial measures properly implemented.	1. Submit proposals for remedial actions to IC(E) within 3 working days of notification. 2. Implement the agreed proposals. 3. Amend proposal if appropriate.
Limit Level				
1. Exceedance for one sample	1. Identify the source. 2. Inform the ER and the EPD. 3. Repeat measurement to confirm finding. 4. Increase monitoring frequency to daily. 5. Assess effectiveness of Contractor's remedial actions and keep the IC(E), the EPD and the ER informed of the results.	1. Check monitoring data submitted by the ET Leader. 2. Check the Contractor's working method. 3. Discuss with the ET Leader and the Contractor on possible remedial measures. 4. Advise the ER on the effectiveness of the proposed remedial measures. 5. Supervisor implementation of remedial measures.	1. Confirm receipt of notification of failure in writing. 2. Notify the Contractor. 3. Ensure remedial measures properly implemented.	1. Take immediate action to avoid further exceedance. 2. Submit proposals for remedial actions to IC(E) within 3 working days of notification. 3. Implement the agreed proposals. 4. Amend proposal if appropriate.
2. Exceedance for two or more consecutive samples	1. Notify the IC(E), the ER, the EPD and the Contractor. 2. Identify the source. 3. Repeat measurements to confirm findings. 4. Increase monitoring frequency to daily. 5. Carry out analysis of the Contractor's working procedures to determine possible mitigation to be implemented. 6. Arrange meeting the IC(E) and the ER to discuss the remedial actions to be taken. 7. Assess effectiveness of the Contractor's remedial actions and keep the IC(E), the EPD and the ER informed of the results. 8. If exceedance stops, cease additional monitoring.	1. Discuss amongst the ER, the ET Leader and the Contractor on the potential remedial actions. 2. Review the Contractor's remedial actions whenever necessary and advise the ER accordingly. 3. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of failure in writing. 2. Notify the Contractor. 3. In consultation with the IC(E), agree with the remedial measures to be implemented. 4. Ensure remedial measures are properly implemented. 5. If exceedance continues, consider what activity of the work is responsible and instruct the Contractor to stop that activity of work until the exceedance is abated.	1. Take immediate action to avoid further exceedance. 2. Submit proposals for remedial actions to IC(E) within 3 working days of notification. 3. Implement the agreed proposals. 4. Resubmit proposals if problem still not under control. 5. Stop the relevant activity of works as determined by the ER until the exceedance is abated.

3.5.2 Construction Noise Impact

The action and limit levels for the construction noise have been established in accordance with the Baseline Monitoring Report[2] and are tabulated in Table 3-8.

Table 3-8 Action and Limit Levels for construction noise

Time Period	Action	Limit
0700 – 1900 hours on any day not being a Sunday or public holiday	When one documented complaint is received	75dB(A)(1)
19:00 – 23:00 hours on all days and 07:00 – 23:00 on general holidays (including Sundays)		55(2) / 70(3)
23:00 – 07:00 hours on all days		40(2) / 55(3)

Remarks:
(1) For educational establishments the limit level shall be 70dB(A) and reduced to 65dB(A) during examination periods.
(2) Refers to the types of Plant regulated under the Technical Memorandum on Noise from Construction Work in Designated Areas (DA-TM).
(3) Refers to the types of Plant regulated under the Technical Memorandum on Noise Other than Percussive Piling (GW-TM).
(4) Owing to the high background noise level recorded at WN5, WN9, and WN10, the noise impact monitoring results at these 3 locations will be corrected by its background using the following background correction equation: $L_{eq(30min)=}$ 10 log ($10^{m/10}$ –$10^{b/10}$) as m= Measured $L_{eq(30min),}$ b=Average Baseline $L_{eq(30min)}$.
Only up to the maximum of 3dB(A) is allowed to be deducted after the background correction.

Table 3-9 details the actions required to be carried out by different parties in the case of an exceedance of performance limits being detected.

Table 3-9 Event/Action plan for construction noise

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

3.5.3 Water Quality

The action and limit levels for the water quality have been established in accordance with the EM&A Manual and approved by EPD on 15 October 2002. EPD and IC(E) had agreed on 10 April 2003 to apply the "Direct Comparison" method for evaluation of the marine water quality exceedance. The A/L levels had been revised in April 2003 and are presented in Table 3-10.

Table 3-10 Action and Limit Levels of water quality

Parameters		Monitoring Location			
		WW1 to WW8		FCZ1	
		Action Level	Limit Level	Action Level	Limit Level
Mid-Ebb					
DO (mg/L)	Surface & Middle	**4.9**	**4.8**	**4.7**	**4.6**
	Bottom	**4.8**	**4.8**	**4.0**	**4.0**
SS (mg/L) (Depth-averaged)		**17.0**	**23.4**	For EPD: **12.9** For AFCD: **12.9 and 120%** of upstream control station's SS at the same tide of the same day	For EPD: **14.0** For AFCD: **14.0 and 130%** of upstream control station's SS at the same tide of the same
Tby (NTU) (Depth-averaged)		**12.0**	**13.6**	For EPD: **9.1** For AFCD: **9.1 and 120%** of upstream control station's Tby at the same tide of the same day	For EPD: **10.3** For AFCD: **10.3 and 130%** of upstream control station's Tby at the same tide of the same day.
Mid-Flood					
DO (mg/L)	Surface & Middle	**4.3**	**4.2**	**4.5**	**4.4**
	Bottom	**4.3**	**4.1**	**4.1**	**4.1**
SS (mg/L) (Depth-averaged)		**25.3**	**28.7**	For EPD: **23.3** For AFCD: **23.3 and 120%** of upstream control station's SS at the same tide of the same day	For EPD: **25.9** For AFCD: **25.9 and 130%** of upstream control station's SS at the same tide of the same
Tby (NTU) (Depth-averaged)		**25.2**	**31.5**	For EPD: **18.7** For AFCD: **18.7 and 120%** of upstream control station's Tby at the same tide of the same day	For EPD: **22.3** For AFCD: **22.3 and 130%** of upstream control station's Tby at the same tide of the same day.

Notes: "Depth-averaged" is calculated by taking the arithmetic means of reading of all three depths.
For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits.

In order to better differentiate between exceedance caused by the contract works and elevated readings arising from causes unrelated to contract works, all parties had agreed to introduce a term "Reaching of Trigger Value" to represent the scenario

where the A/L levels were exceeded by the "Direct Comparison" evaluation method. Upon the detection of "Reaching of Trigger Value", an initial analysis would be carried out to determine whether it was caused by contract works. Exceedance and non-compliance should only be recorded in case where the "Reaching of Trigger Value" was caused by the contract works.

Table 3-11 details the actions required to be carried out by different parties in the case of water quality exceedance of performance limits being detected. The revised Event/Action Plan for water quality has been endorsed by IC(E) in May 2003, and will be finalised subject to agreement with EPD.

Table 3-11 Event/Action plan for water quality

Event	Action			
	ET Leader	IC(E)	ER	Contractor
Trigger Value				
1. Trigger Value being surpassed for one sampling day	1. Repeat in-situ measurement to confirm findings. 2. Conduct investigation to identify the source(s) of impact. 3. Check monitoring data, all plant, equipment, mitigation measures and the Contractor's working methods. 4. Inform the IC(E), ER, EPD, HyD, Contractor and AFCD (if required) the investigation results. 5. If exceedance is confirmed as caused by the construction works, take relevant actions as detailed in **"Action Level"** and **"Limit Level"**	1. If exceedance is confirmed as caused by the construction works, take relevant actions as detailed in **"Action Level"** and **"Limit Level"**	1. If exceedance is confirmed as caused by the construction works, take relevant actions as detailed in **"Action Level"** and **"Limit Level"**	1. If exceedance is confirmed as caused by the construction works, take relevant actions as detailed in **"Action Level"** and **"Limit Level"**
Action Level				
1. Action level being exceeded by one sampling day and is caused by the construction works	1. Discuss the current mitigation measures with the IC(E) and the Contractor. 2. Pay attention on the monitoring results collected on the subsequent scheduled monitoring date to see if an exceedance, caused by the same or related construction works, is recurring.	1. Discuss with the ET Leader and the Contractor on the current mitigation measures. 2. Assess the effectiveness of the current mitigation measures and advised the ER accordingly.	1. Discuss with the IC(E) on the current mitigation measures.	1. Inform the ER and confirm notification of the exceedance in writing. 2. Rectify unacceptable practice. 3. Check all plants and equipment. 4. Consider changes of working methods. 5. Discuss with the ET Leader and the IC(E) on the current mitigation measures.
2. Action level being exceeded by more than one consecutive days and is cause by the construction works	1. Discuss mitigation measures with the IC(E) and the Contractor. 2. Ensure the proposed mitigation measures are implemented. 3. Further evaluation of the monitoring results on the next scheduled monitoring day and report to all concerned parties, if the affected monitoring stations are still being affected (or are no longer affected) by the construction works. 4. Prepare to increase the monitoring frequency to daily, if the Limit Level is exceeded as below.	1. Discuss with the ET Leader and the Contractor on the proposed mitigation measures. 2. Review proposals on mitigation measures submitted by the Contractor and advised the ER accordingly. 3. Assess the effectiveness of the implemented mitigation measures.	1. Discuss with IC(E), the ET Leader and the Contractor on the proposed mitigation measures. 2. Make agreement on the proposed mitigation measures to be implemented. 3. Assess the effectiveness of the implemented mitigation measures.	1. Inform the ER and confirm notification of the consecutive exceedance in writing. 2. Rectify unacceptable practice. 3. Check all plants and equipment. 4. Consider changes of working methods. 5. Discuss with the ET Leader and the IC(E) and propose mitigation measures to the IC(E) and the ER within 3 working day. 6. Implement the agreed mitigation measures.
Limit Level				
1. Limit level being exceeded by one sampling day and is cause by the construction works	1. Discuss mitigation measures with the IC(E), the ER and the Contractor. 2. Ensure the proposed mitigation measures are implemented. 3. Prepare to increase the monitoring frequency to daily if further exceedances of the Limit Level are detected on the next sampling day.	1. Discuss with the ET Leader and the Contractor on the proposed mitigation measures. 2. Review proposals on mitigation measures submitted by the Contractor and advised the ER accordingly. 3. Assess the effectiveness of the implemented mitigation measures.	1. Discuss with IC(E), the ET Leader and the Contractor on the proposed mitigation measures. 2. Request the Contractor to Critically review the working methods. 3. Make agreement on the proposed mitigation measures to be implemented. 4. Assess the effectiveness of the implemented mitigation measures.	1. Inform the ER and confirm notification of the exceedance in writing. 2. Rectify unacceptable practice. 3. Check all plants and equipment. 4. Consider changes of working methods. 5. Discuss with the ET Leader, the IC(E) and the ER, and propose mitigation measures to the IC(E) and the ER within 3 working days. 6. Implement the agreed mitigation measures.

Event	Action			
	ET Leader	IC(E)	ER	Contractor
2. Limit level being exceeded by more than one consecutive days and is cause by the construction works	1. Discuss further mitigation measures with the IC(E), the ER and the Contractor. 2. Ensure the proposed further mitigation measures are implemented. 3. Increase the monitoring frequency to daily until no exceedance of the Limit Level.	1. Discuss with the ET Leader and the Contractor on the proposed further mitigation measures. 2. Review proposals on further mitigation measures submitted by the Contractor and advised the ER accordingly. 3. Assess the effectiveness of the implemented further mitigation measures.	1. Discuss with IC(E), the ET Leader and the Contractor on the proposed further mitigation measures. 2. Request the Contractor to Critically review the working methods. 3. Make agreement on the further mitigation measures to be implemented. 4. Assess the effectiveness of the implemented further mitigation measures. 5. Consider and instruct, if necessary, the Contractor to slow down or to stop all or part of the marine work until no exceedance of Limit Level.	1. Inform the ER and confirm notification of the consecutive exceedance in writing. 2. Rectify unacceptable practice. 3. Check all plants and equipment. 4. Consider changes of working methods. 5. Discuss with the ET Leader, the IC(E) and the ER, and propose further mitigation measures to the IC(E) and the ER within 3 working days. 6. Implement the agreed further mitigation measures. 7. As directed by the ER, slow down or stop all or part of the construction activities.

3.5.4 Landscape and Visual

The Final Tree Survey Report[3] approved in April 2001 was adopted as the framework of the baseline landscape condition of this road section. In addition, a supplementary tree survey has been carried out in December 2001. The Supplementary Tree Survey Report (Revision A)[4] completed in March 2002 is also adopted to provide supplementary information of the baseline landscape condition of this road section.

If any non-conformity on landscape and visual issue is observed, the actions in accordance with Event/Action Plan shown in Table 3-12 shall be carried out.

Table 3-12 Event/Action plan for landscape and visual impact

Event	Action			
	ET Leader	IC(E)	ER	Contractor
Non-conformity on one occasion	1. Identify Source(s). 2. Inform the IC(E) and the ER. 3. Discuss mitigation actions with the IC(E), the ER and the Contractor. 4. Monitor remedial actions until rectification has been completed.	1. Check report. 2. Check the Contractor's working method. 3. Discuss with the ET Leader and the Contractor on possible remedial measures. 4. Advise the ER on effectiveness of proposed remedial measures. 5. Check implementation of remedial measures.	1. Notify Contractor. 2. Ensure remedial measures are properly implemented.	1. Amend working method. 2. Rectify damage and undertaken any necessary replacement.
Repeated Non-conformity	1. Identify Source(s). 2. Inform the IC(E) and the ER.I 3. Increase monitoring frequency 4. Discuss mitigation actions with the IC(E) , the ER and the Contractor. 5. Monitor remedial actions until rectification has been completed. 6. If exceedance stops, cease additional monitoring	1. Check monitoring report 2. Check the Contractor's working method 3. Discuss with the ET Leader and the Contractor on possible remedial measures. 4. Advise the ER on effectiveness of proposed remedial measures. 5. Supervise implementation of remedial measures.	1. Notify the Contractor. 2. Ensure remedial measures are properly implemented.	1. Amend working method. 2. Rectify damage and undertaken any necessary replacement.

4. AIR QUALITY

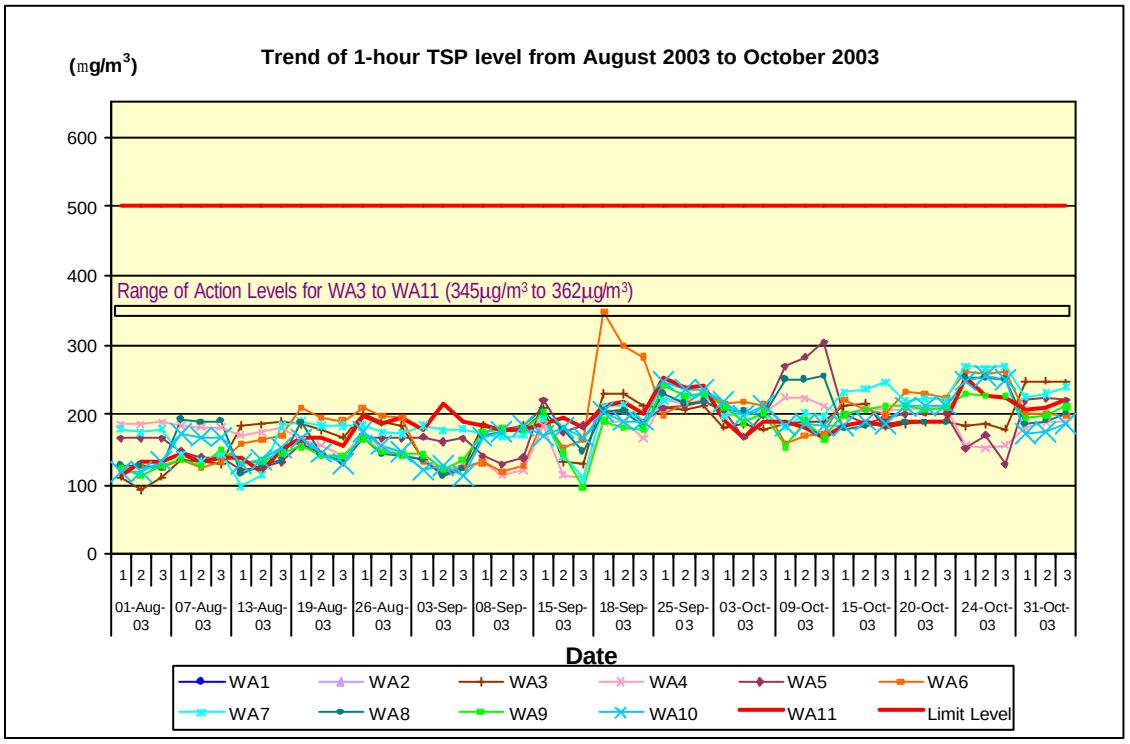
4.1 1-hour TSP Monitoring Results

The highest 1-hour TSP level was 347.5µg/m^3 recorded at G/F of Tsing Lung Tau Tin Hau Temple (WA6) on 18 September 2003 and the lowest 1-hour TSP level was 92.8µg/m^3 recorded at Hong Kong Garden G/F Regent Heights (WA3) on 1 August 2003.

There was no exceedance on Action and Limit Levels in the reporting period.

The trend of 1-hour TSP levels at each monitoring location are plotted and presented in Figure 4-1.

Figure 4-1 Trend of 1-hour TSP levels from August 2003 to October 2003



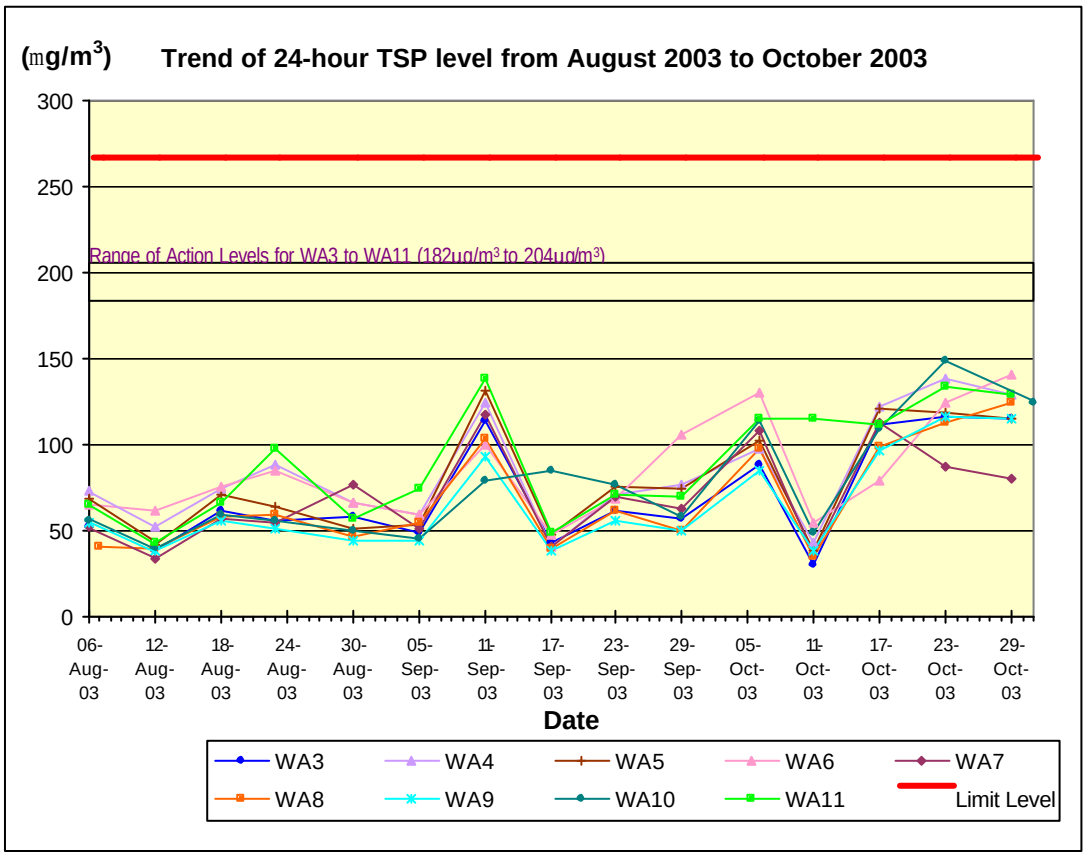
4.2 24-hour TSP Monitoring Results

The highest 24-hour TSP level was 149.4µg/m^3 recorded at Sea Crest Villa Phase 1 Block 1 (WA10) on 23 October 2003 and the lowest 24-hour TSP level was 30.0µg/m^3 recorded at G/F of Hong Kong Garden Regent Heights (WA3) on 11 October 2003.

There was no exceedance on Action and Limit Levels in the reporting period.

The trend of 24-hour TSP levels at each monitoring location are plotted and presented in Figure 4-2.

Figure 4-2 Trend of 24-hour TSP level from August 2003 to October 2003



5. NOISE

5.1 Noise Monitoring Results

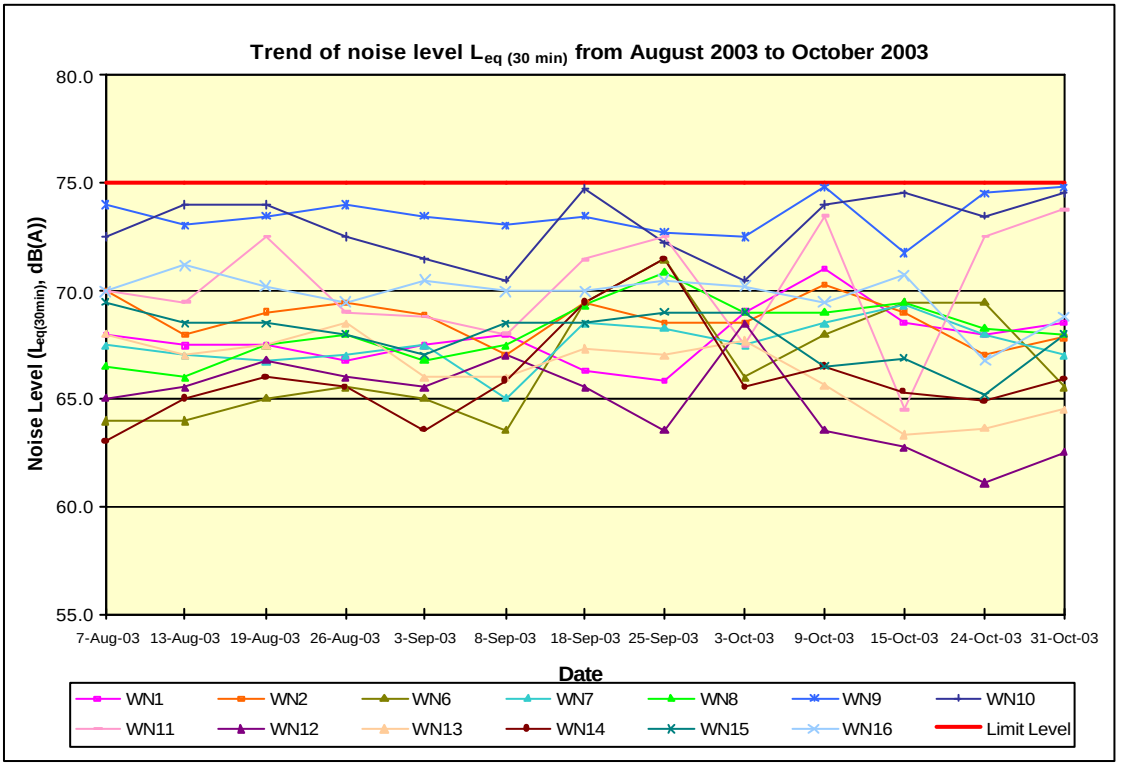
All the noise measurements were taken between 0700-1900 hours on normal weekdays during which the construction site was under normal operation.

The highest noise level was 74.8dB(A) recorded at House 1, Tsing Lung Tau Village (WN9) on 9th and 31st October 2003 and the lowest noise level was 61.1dB(A) recorded at Podium of Sea Crest Villa Phase 4 Block 12 (WN12) on 24 October 2003.

There was no exceedance on the Limit Level in the reporting period.

The trend of the noise levels at each monitoring location are plotted and presented in Figure 5-1.

Figure 5-1 Trend of noise level from August 2003 to October 2003



6. WATER QUALITY (DESIGNATED PROJECT)

6.1 Suspension of Marine Monitoring

As reported by the Contractor, major sea works at level below +2.5mPD had been completed in July 2003. The proposal on suspension of marine monitoring was submitted to IC(E), HyD, EPD and AFCD for comments on 25 September 2003. It was confirmed with IC(E) and AFCD that suspension of marine monitoring was acceptable if there is no "active" marine work being carried out. In future, if there is any marine work on or below +2.5mPD, the Contractor shall notify the relevant parties one month in advance and resume the marine monitoring. Subsequently, as instructed by the Contractor/ HyD, the marine monitoring was suspended from 10 October 2003.

6.2 Marine Water Quality Monitoring Results

The monitoring results from August 2003 to October 2003 are plotted and presented in Figure 6-1 to Figure 6-8.

Figure 6-1 Turbidity levels during mid-ebb from August 2003 to October 2003

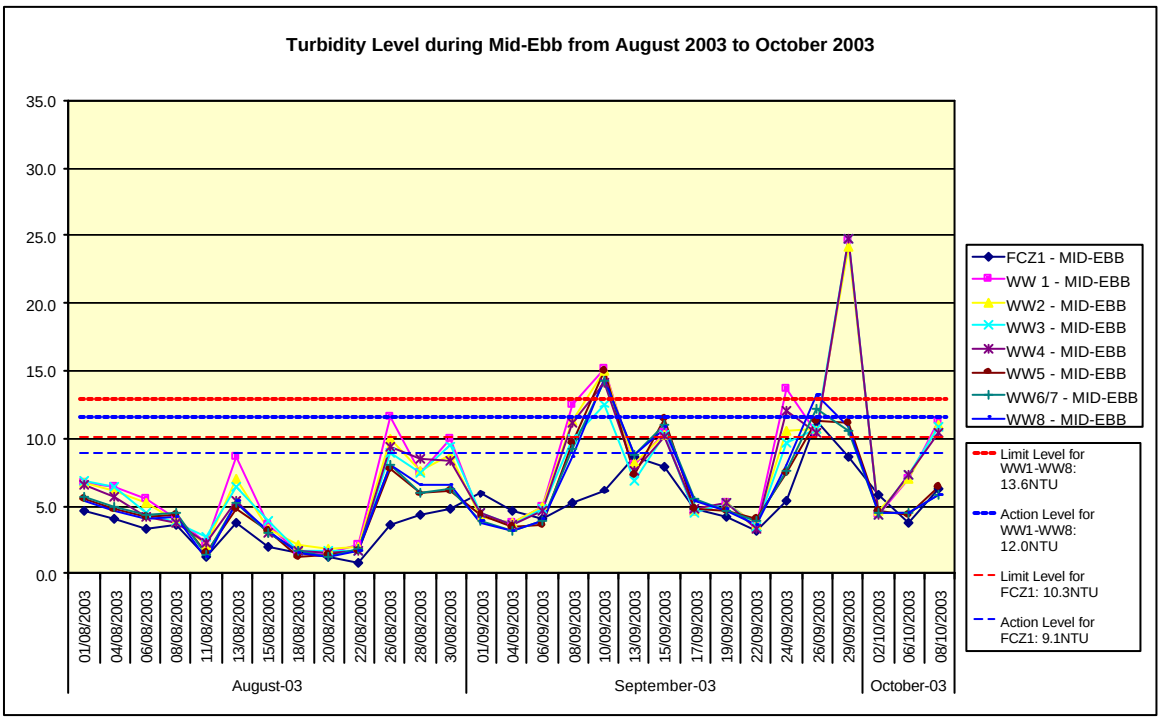


Figure 6-2 Turbidity levels during mid-flood from August 2003 to October 2003

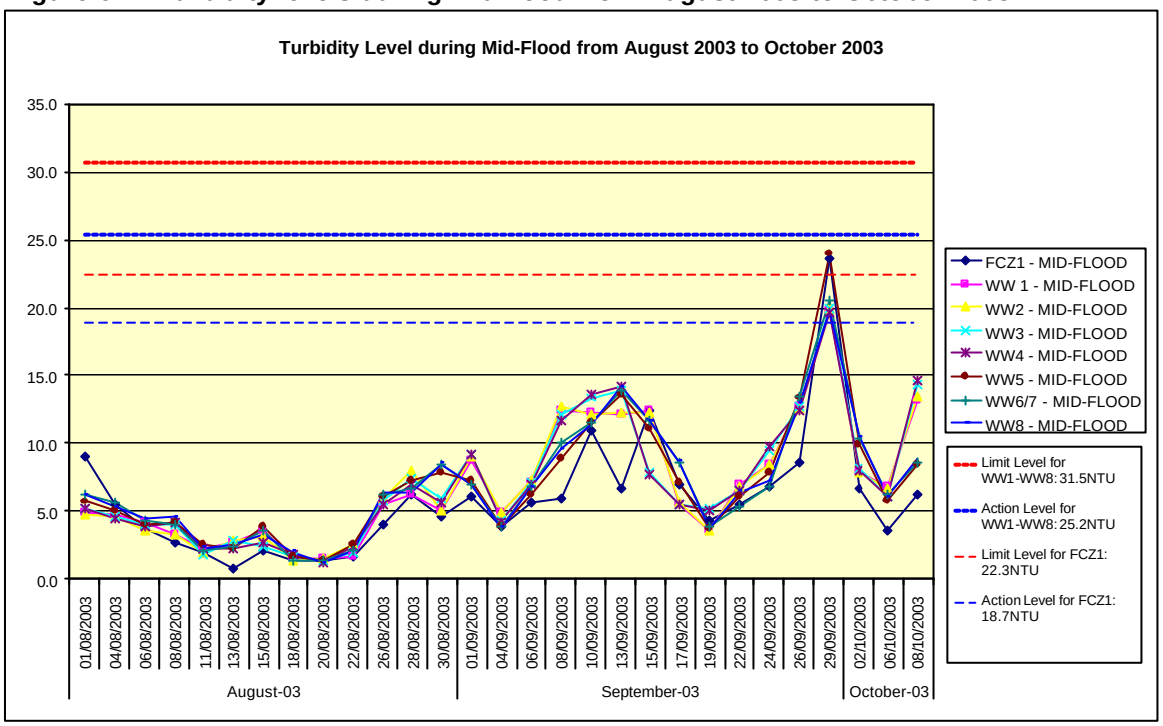


Figure 6-3 SS during mid-ebb from August 2003 to October 2003

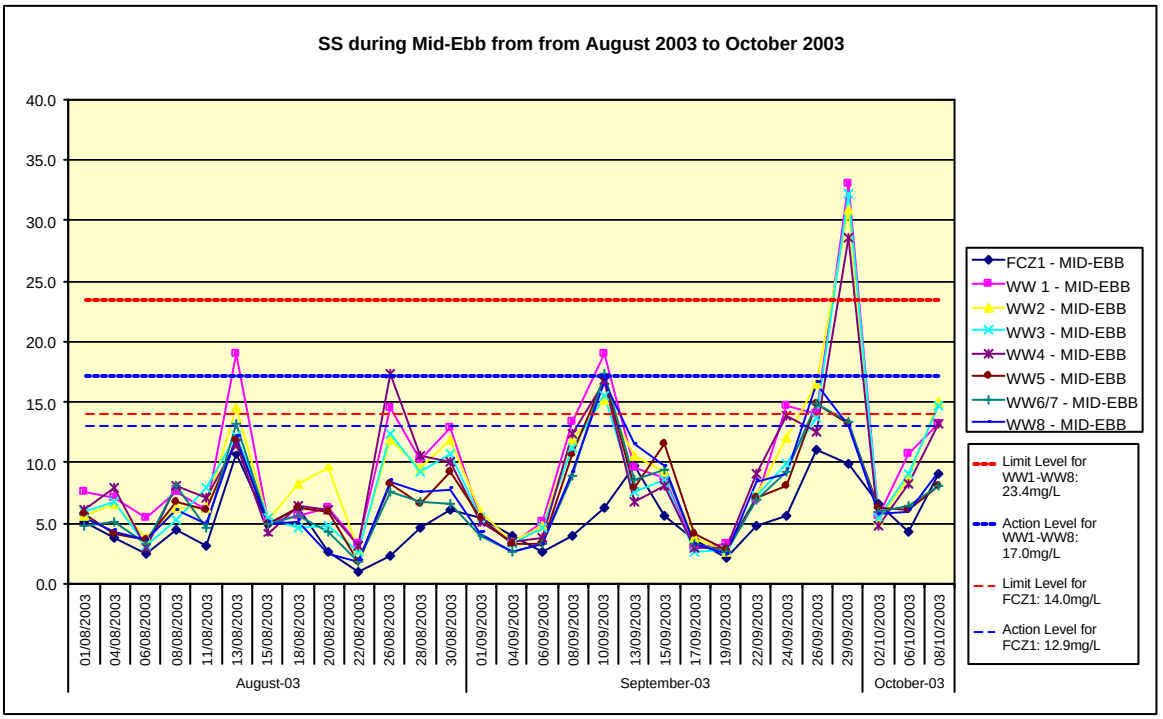


Figure 6-4 SS during mid-flood from August 2003 to October 2003

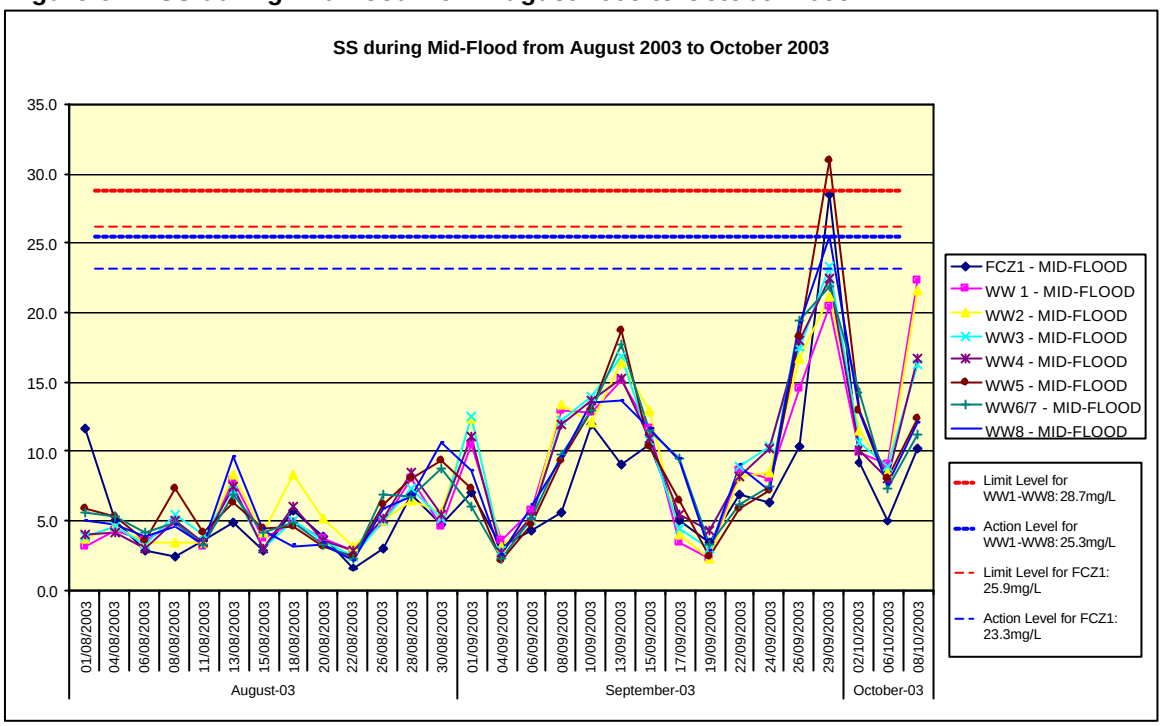


Figure 6-5 DO at surface and middle level during mid-ebb from August 2003 to October 2003

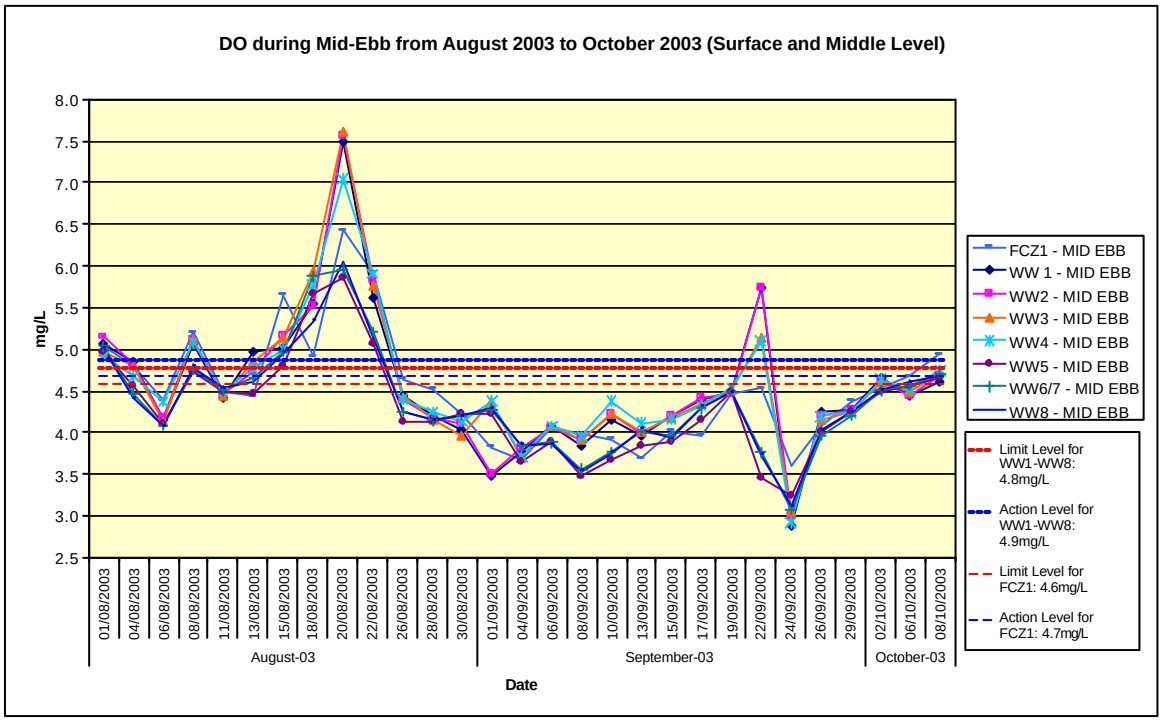


Figure 6-6 DO at surface and middle level during mid flood from August 2003 to October 2003

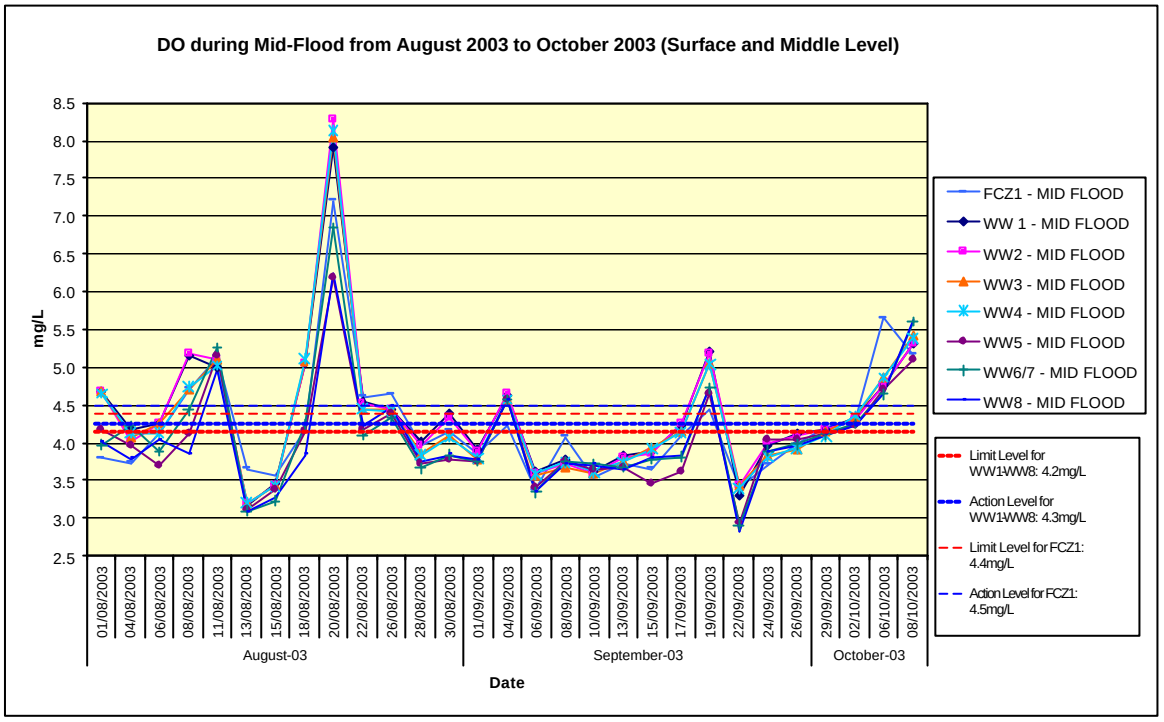


Figure 6-7 DO at bottom level during mid-ebb from August 2003 to October 2003

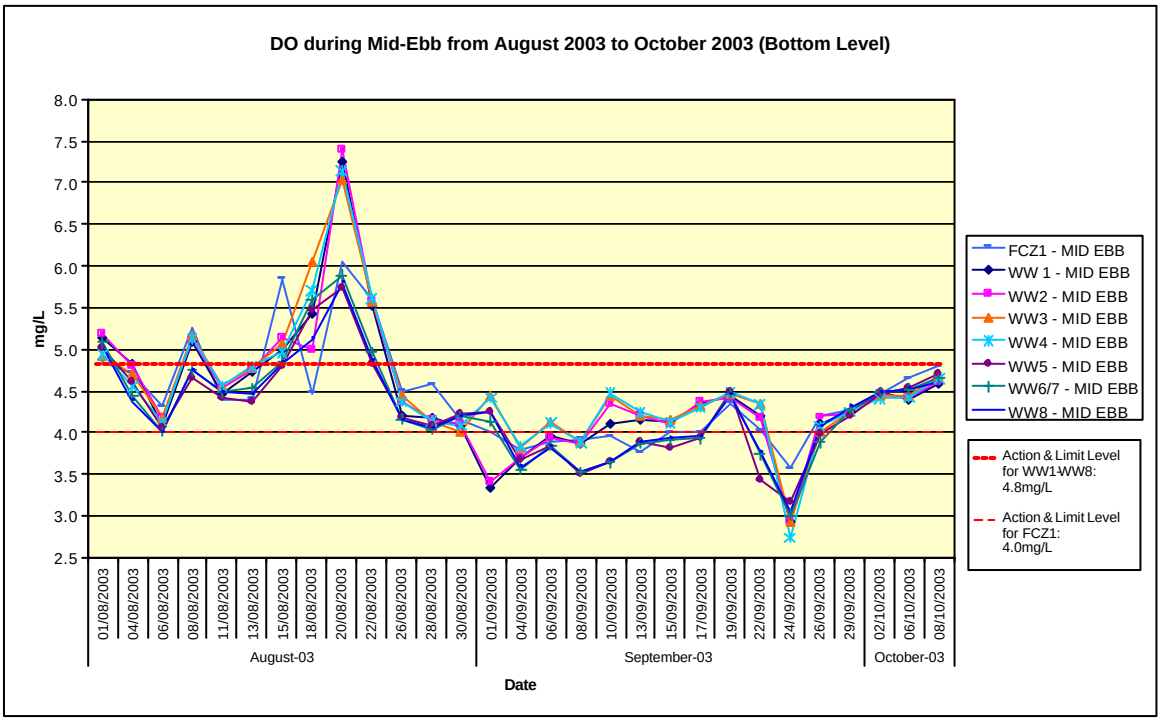
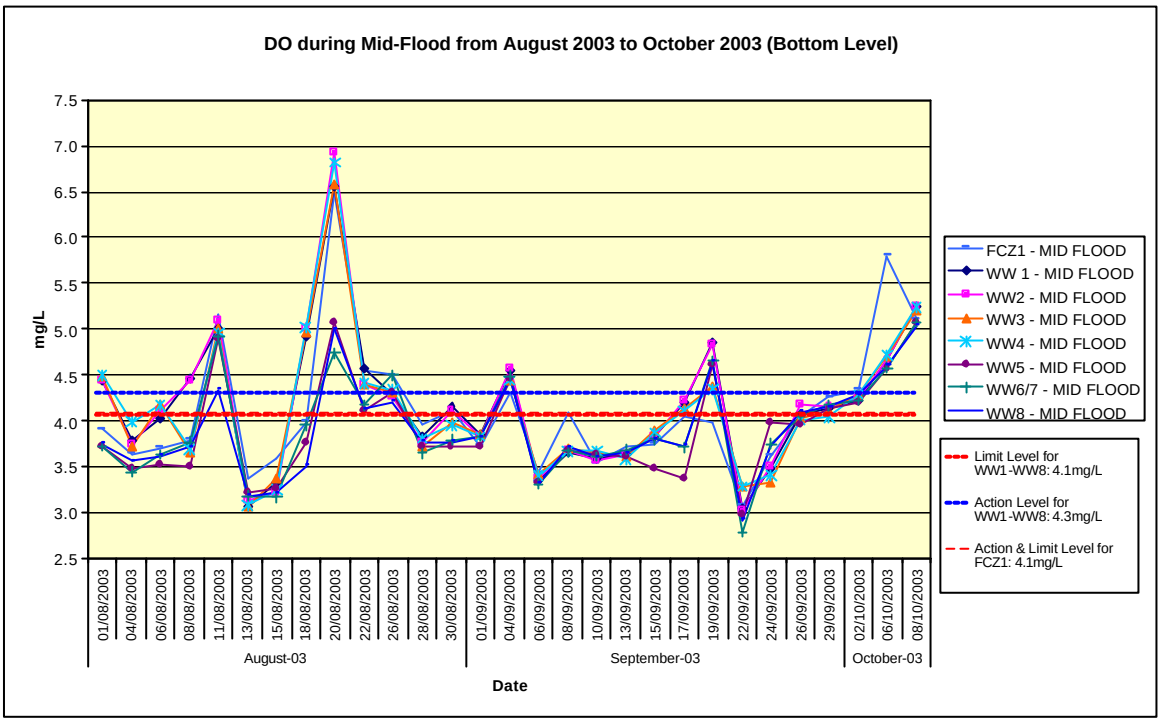


Figure 6-8 DO at bottom level during mid-flood from August 2003 to October 2003



There were occasional "Reaching of Trigger Value" of Dissolved Oxygen (DO), Turbidity (Tby) and Suspended Solids (SS) of marine water quality monitoring in the reporting period. However, all "Reaching of Trigger Value" of DO, Tby and SS in the reporting period were caused by the natural variation of the marine water quality rather than by the construction activities.

7. LANDSCAPE AND VISUAL MONITORING AND AUDIT

A total of 7 times of the landscape and visual monitoring and audits had been carried out in the reporting period by a Registered Landscape Architect. Frequently watering and tidy up the construction site have been suggested after the landscape and visual monitoring and audits. The CT was informed of the recommendations for action.

8. QUARTERLY SUMMARY, ENVIRONMENTAL COMPLAINT AND NON-COMPLIANCE RECORDS

8.1 Summary of Waste Disposal

Table 8-1 summarises the waste disposal quantity in the reporting period.

Table 8-1 Waste disposal quantity in the period from August 2003 to October 2003

Type of waste or material		Disposal at	No. of loads or quantities			
			Aug-03	Sep-03	Oct-03	Total
C&D waste		WENT Landfill	63 loads	8 loads	3 loads	**74 loads**
C&D material		Public Filling Area in Tuen Mun	2,266 loads	1,042 loads	1,054 loads	**4,312 loads**
Grease trap waste		Interim Grease Trap Waste Treatment Facility at WENT Landfill	0	0	0	**0**
Chemical waste	Spent lube oil	Collected by licenced collector	0	12 drums (2,036L)	12 drums (2,036L)	**24 drums (4,072L)**
	Sludge contaminated with spent lube oil	Collected by licenced collector	0	0	3 drums (600L)	**3 drums (600L)**

8.2 Complaint Record

A total of 3 environmental complaints were received in the reporting period. One regarding the felling of all old trees along section of Castle Peak Road near Ma Wan Pier, one regarding general refuse being accumulating on the pedestrian walkway between Phase III and Phase II and the drainage channel at Pai Min Kok Village. All had been solved after investigation. A log record on the environmental complaints is given in Appendix B.

8.3 Reaching of Trigger Value for Marine Water Quality

DESIGNATED PROJECT – In accordance with the revised "Direct Comparison" method, there were occasional "Reaching of Trigger value" of DO, Tby and SS of marine water quality monitoring in the reporting period. However, all "Reaching of

Trigger Value" of DO, Tby and SS in the reporting period were caused by the natural variation of the marine water quality rather than by the construction activities. There was no non-compliance for water quality monitoring in the reporting period.

Table 8-2 Summary of "Reaching of Trigger Value" of marine water quality monitoring from August 2003 to October 2003

Monitoring Stations	Level of "Reaching of Trigger Value" (i.e. exceeded the Action or Limit Levels)	DO (mg/L)		Turbidity (NTU)		SS (mg/L)		Total	
		Mid-Ebb	Mid-Flood	Mid-Ebb	Mid-Flood	Mid-Ebb	Mid-Flood	Mid-Ebb	Mid-Flood
WW1	Action	1	7	1	0	2	0	**4**	**7**
	Limit	42	28	3	0	1	0	**46**	**28**
WW2	Action	1	9	0	0	0	0	**1**	**9**
	Limit	43	26	2	0	1	0	**46**	**26**
WW3	Action	1	5	1	0	0	0	**2**	**5**
	Limit	44	31	1	0	1	0	**46**	**31**
WW4	Action	0	2	1	0	1	0	**2**	**2**
	Limit	45	33	2	0	1	0	**48**	**33**
WW5	Action	0	4	0	0	0	0	**0**	**4**
	Limit	50	40	1	0	0	1	**51**	**41**
WW6/7	Action	0	6	1	0	1	0	**2**	**6**
	Limit	48	37	1	0	0	0	**49**	**37**
WW8	Action	0	6	1	0	0	1	**1**	**7**
	Limit	48	39	1	0	0	0	**49**	**39**
FCZ1	Action	2	1	0	0	0	0	**2**	**1**
	Limit	25	40	***(1)***	1	0	1	**25+*(1)***	**42**
Total	**Action**	**5**	**40**	**5**	**0**	**4**	**1**	**55**	
	Limit	**345**	**274**	**11 + *(1)***	**1**	**4**	**2**	**637 + *(1)***	

Note: Numbers that are bold, italic and underlined (e.g. ***2***) represents monitoring results exceed both EPD and AFCD criteria.
Numbers that are bold, italic, underlined and in brackets (e.g. ***(2)***) represents monitoring results exceed the Limit Level of EPD criteria but only the Action Level of AFCD criteria.

All "Reaching of Trigger Value" of DO, Tby and SS in the reporting period were caused by the natural variation of the marine water quality rather than by the construction activities.

The "Reaching of Trigger Value" of DO, recorded at FCZ1 on 1st, 4th, 6th, 8th, 11th, 13th, 15th, 18th, 26th, 28th and 30th August 2003, were likely caused by the natural variation of marine water quality rather than the marine works of West Contract, as relatively low DO results were also recorded at all other control and impact stations.

The "Reaching of Trigger Value" of DO recorded at FCZ1 throughout September 2003, of Tby on 8th, 10th, 24th, 26th and 29th, and of SS on 10th and 29th September 2003 were likely caused by the natural variation of marine water quality rather than

the marine works of West Contract, as relatively low DO, high Tby and SS results were also recorded at all other control and impact stations.

The "Reaching of Trigger Value" of DO recorded at FCZ1 on 2nd and 6th October 2003 were likely caused by the natural variation of marine water quality rather than the marine works of West Contract, as relatively low DO results were also recorded at all other control and impact stations.

8.4 Non-compliance Assessment of Construction Impacts on Suspended Solids

The comparison of the SS difference between the quarterly mean from August 2003 to October 2003 and 1.3 times ambient mean value (i.e. 30% increase of the baseline data) in mid ebb and mid flood tides is summarised in Table 8-3.

Table 8-3 Summary of SS difference between the quarterly mean and 1.3 times ambient mean value in mid ebb tide

Tidal Stage	Monitoring Location	Baseline Data Mean (BDM) in mg/L	1.3 times ambient mean value (1.3 BDM) in mg/L	Quarterly Mean (QM) from August 2003 to October 2003 (in mg/L)	Percentage Difference (PD)*
Mid Ebb	WW1 to WW8	9.0	11.7	8.2	-29.9%
	FCZ1	8.6	11.2	5.2	-53.6%
Mid Flood	WW1 to WW8	10.0	13.0	8.2	-36.9%
	FCZ1	14.3	18.6	6.7	-64.0%

Note*: The Percentage Difference (PD) is calculated as PD = ((QM – 1.3 BDM) X 100%) /1.3 BDM

The quarterly mean of SS level recorded from August 2003 to October 2003 is lower than the 1.3 times ambient mean value. Therefore, the construction impacts on suspended solids are insignificant.

8.5 Non-compliance

There was no non-compliance for air quality, noise, and marine water quality monitoring during the monitoring period.

8.6 Notification of Summons and Successful Prosecution

There was no notification of summons or prosecution received during the reporting period.

8.7 Environmental Licenses

No new environmental license was granted in the reporting period.

9. COMMENTS, RECOMMENDATION AND CONCLUSION

9.1 Comments and Recommendations

Regarding the water quality issue, there had been occasional accumulation of silt, construction debris or sands inside the existing and temporary drainage systems and desilting facilities. As advised, the CT had cleaned the drainage systems and desilting facilities and provided more sandbags to avoid unsatisfactory discharge. In addition, stagnant water had always been found within the construction site, but was cleared up immediately by the CT.

Regarding the air quality issue, dust had been occasionally spotted from the activities of rock breaking and vehicle movement on dry and dusty haul road and on the public road due to mud trails caused by dump trucks leaving the site. The CT had therefore implemented mitigation measures for dust suppression upon requested by the ET. These included spraying water onto rock breaking activities, and onto the dry and dusty haul road; provision of wheel washing facilities and cleaning the public road when necessary. Construction dust impact was minor in the reporting period and gradually alleviated.

Construction noise impact was insignificant in the reporting period. It was once spotted that the door of compressor was opened during operation but closed immediately after verbal warning.

Accumulation of general refuse, C&D waste and chemical or oil containers had been occasionally spotted by the ET. Upon advised, the CT had disposed of the waste, removed the containers, cleaned up the area and provided drip tray for the chemical or oil containers accordingly. Oil stain was occasionally spotted and the CT was advised to remove the contaminated soil. Portion 7 was generally untidy and good housekeeping was recommended and pending reinspection.

No significant landscape and visual impacts had been recorded in the reporting period.

The EM&A programme including landscape and visual monitoring and audit for the period from August 2003 to October 2003 had been conducted as planned to avoid significant environmental and visual impacts to the sensitive receivers.

9.2 Conclusion

The environmental performance of the CT during the reporting period was acceptable. Remedial measures had been taken to mitigate the environmental impacts caused by the construction activities upon advised by the ET. As a whole, EM&A programme had been well conducted in the reporting period.

10. REFERENCES

[1] Mouchel Halcrow Joint Venture. 2001. Castle Peak Road Improvement between Area 2 and Ka Loon Tsuen, Tsuen Wan West Contract No. HY/99/18, Environmental Monitoring & Audit Manual.

[2] Ove Arup & Partners Hong Kong Limited. July 2002. Contract No. HY/99/18 Castle Peak Road Improvement between Shem Tseng and Ka Lung Tsuen, Tsuen Wan, Environmental Baseline Monitoring Report (Second Issue).

[3] Mouchel Halcrow Joint Venture. 2001. D&C Consultancy Agreement No. CE 1/96 Castle Peak Road Improvement between Area 2 and Ka Loon Tsuen, Tsuen Wan, Tree Survey Report & Tree Felling Application Revision D.

[4] Mouchel Halcrow Joint Venture. Contract No. HY/99/18 March 2002. D&C Consultancy Agreement No. CE 1/96 Castle Peak Road Improvement between Area 2 and Ka Loon Tsuen, Tsuen Wan, Supplementary Tree Survey Report & Tree Felling Application Revision A.

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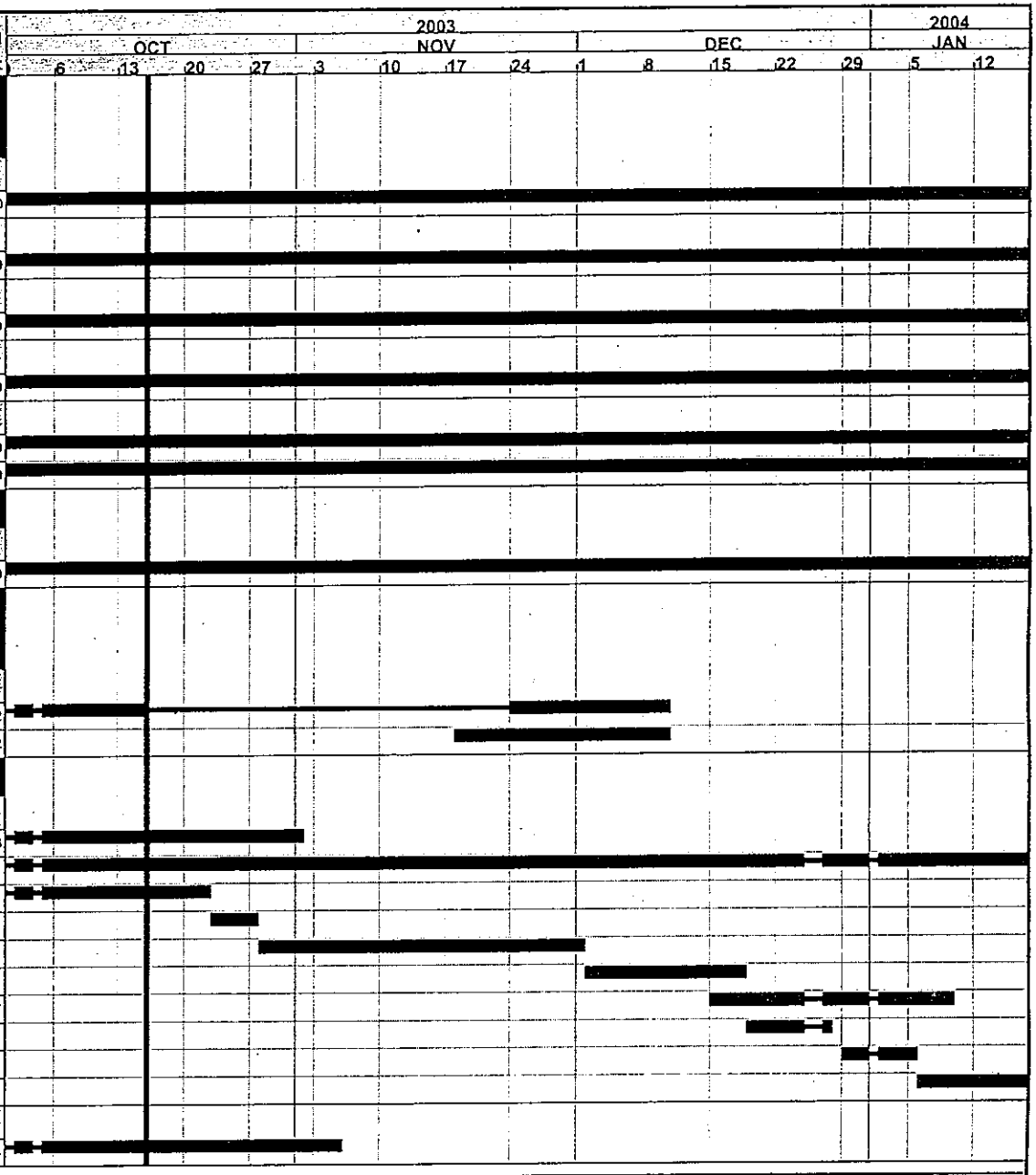
APPENDIX A

Construction programme

Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	% Comp	Total Float
CPR Improvement bet Sham Tseng & Ka Loon Tsuen						
1. Preliminaries						
Planning & Programming						
01-0108	Maintain Programming & Submit Progress Reports	1,236	24NOV01A	13APR05	56	0
Waste Management						
01-1166	Implement & Monitor WMP	1,171	21DEC01A	07FEB05	59	0
Maintenance of Traffic Flow						
01-1153	Maintain Traffic Flow	1,171	24NOV01A	07FEB05	59	0
Environmental Monitoring & Audit						
01-11702	Implement & Maintin Impact Monitor & Audit	1,501	08MAR02A	13APR06	43	0
Interfacing and Coordination						
01-1173	Coordination/Integration with Interfacing Works	1,171	01DEC01A	07FEB05	59	0
01-1174	Provide Reasonable Access to Other Contractors	1,171	01DEC01A	07FEB05	59	0
16. Site Safety						
Safety Management System						
16-1612	Implement & Maintain Safety Management System	1,151	14DEC01A	07FEB05	58	0
CPR from Chainage 0+900 to Chainage 1+870						
1. Preliminaries						
Proposed Utility Works						
01-1203	Proposed Gasmain on E/B C. way CH1070-1350	40	13AUG03A	10DEC03	63	-172
01-1204	Additional Gasmain on E/B C. way CH950-1070	20	18NOV03	10DEC03	0	-172
3. Roadworks						
Earthworks						
03-3015	Excavate to Future Road level at BPRW03: 1-30	50	01SEP03A	01NOV03	70	-33
03-30140	Add. retaining wall at House no. 6; VO 214	119*	18SEP03A	12FEB04	19	-221
03-30141	Review/agree on temporary works	30	18SEP03A	22OCT03	80	-221
03-30142	Working platform for soldier piling	4	23OCT03	27OCT03	0	-221
03-30143	Soldier piling	30	28OCT03	01DEC03	0	-221
03-30144	Excavation	15	02DEC03	18DEC03	0	-221
03-3016	Excavate to Future Road Level at BPRW03: 31-37	20	15DEC03	09JAN04	0	-57
03-30145	Rock maping/confirm rock dowels	6	19DEC03	27DEC03	0	-221
03-30146	Install rock dowels	6	29DEC03	05JAN04	0	-221
03-30147	Construct buttress wall	12	06JAN04	19JAN04	0	-221
Drainage Works						
03-3136	Drill/excavate for drainage at E/B CH1100-1205	26	23SEP03A	05NOV03	31	-154



Start Date	23NOV01
Finish Date	07JAN07
Data Date	15OCT03
Run Date	30OCT03 08:38

Early Bar
Progress Bar
Critical Activity

3M23

Sheet 1 of 12

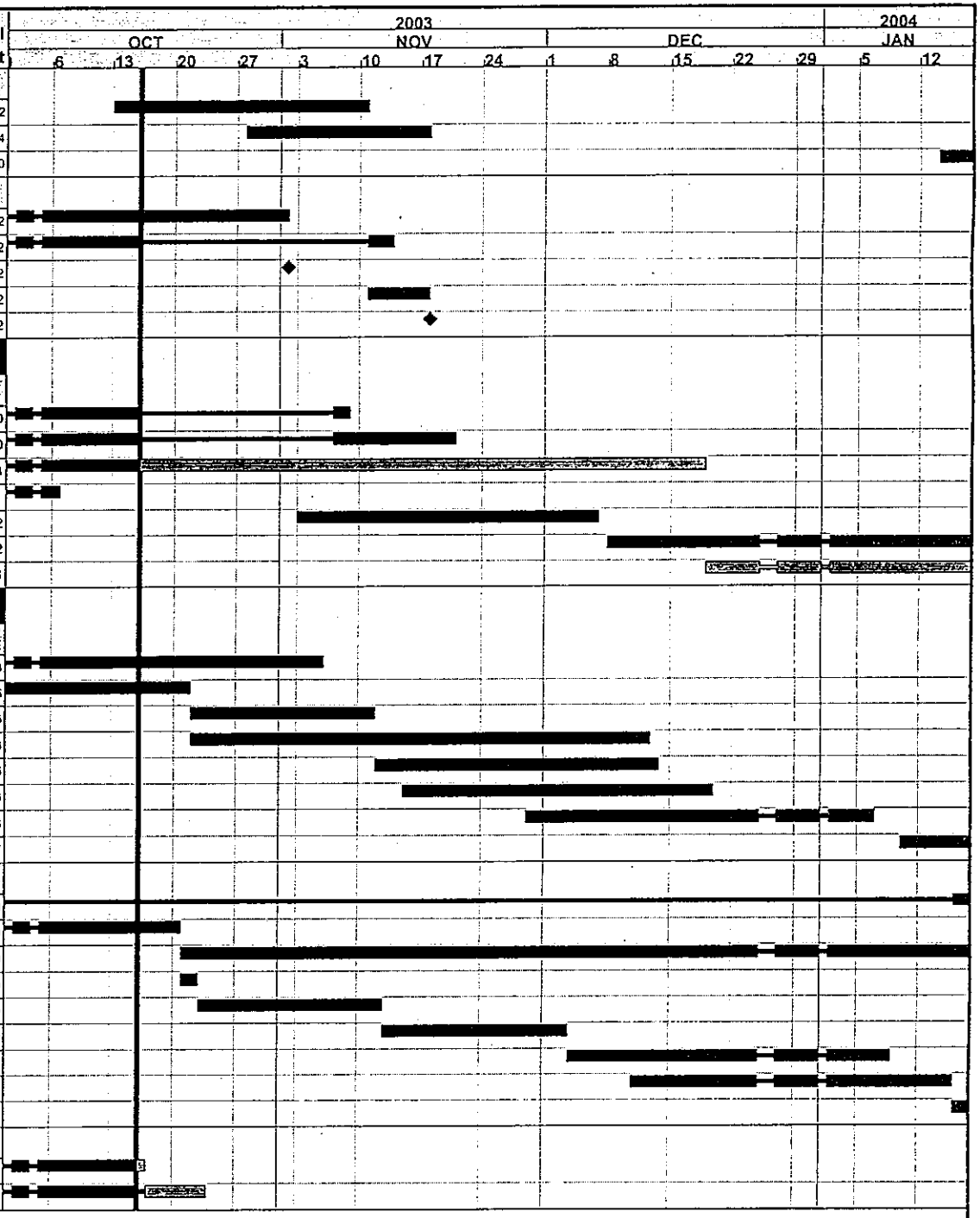
Maeda Corporation
HY/99/18 - Castle Peak
3- Month Rolling Programme

MAEDA

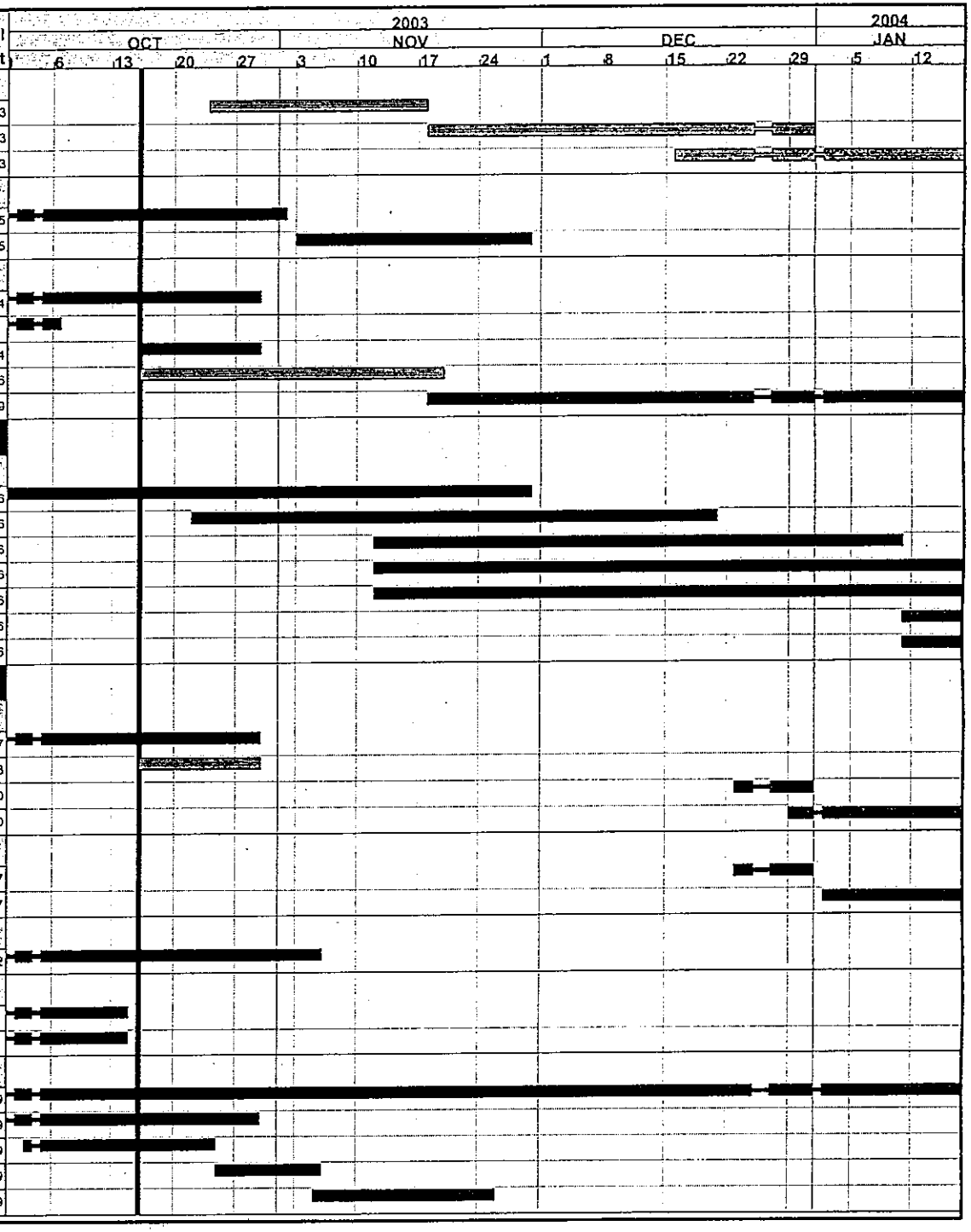
October 2003

Date	Revision	Checked	Approved
14APR03	revision c		
16JUN03	revision d		
19JUN03	revision e		
30JUL03	revision 01		
17SEP03	revision 02		

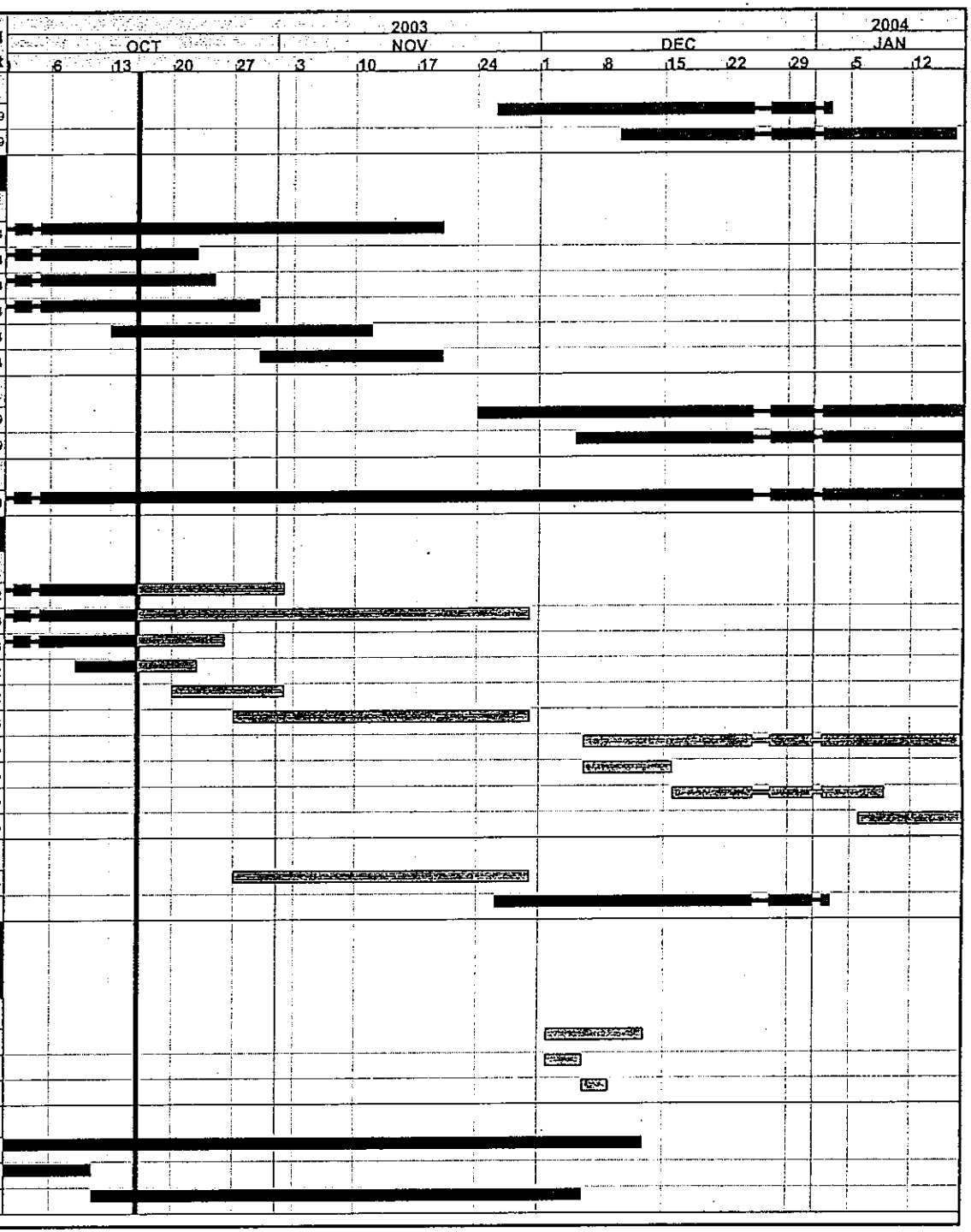
Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	% Comp	Total Float
Drainage Works						
03-31202	Add. works demoish/re-const drainage VO 231	24	13OCT03A	10NOV03	8	-172
03-3137	Construct drainage at E/B CH1100-1205	18	28OCT03	17NOV03	0	-154
03-3134	Drainage at Access Road R8	30	14JAN04	20FEB04	0	-140
Road Works						
03-3102	Temp Rdworks/Protect UUs at E/B (CH1350 -1475)	30	01SEP03A	01NOV03	50	-102
03-3110	Lay sub-base, kerbs & edgings; W/B CH0960-1075	12	16SEP03A	13NOV03	75	-172
03-3103	Divert Traffic to E/B Temp C'way (CH1350 -1464)	0		01NOV03	0	-102
03-31102	Construct rd pave & f/p; W/B CH0960-1075	6	11NOV03	17NOV03	0	-172
03-3114	Divert Traffic to W/B Perma C'Way CH0960-1075	0		17NOV03	0	-172
5. Footbridges						
Footbridge FB12						
05-5300	Form Working Platform for S.I. South (FB12)	30	04APR02A	08NOV03	90	-100
05-5310	GI Work at South Support for FB12; 14 piles	28	25APR02A	20NOV03	57	-100
05-53112	Piling Work at North Support for FB12; 18 piles	72	13SEP03A	18DEC03	24	21
05-53113	4 nos. Add. GI Work at FB12/4 & FB12/6; VO 220	36	22SEP03A	06OCT03A	100	
05-53101	Piling Platform for FB12 South	30	03NOV03	06DEC03	0	-102
05-53102	Piling Work at South Support for FB12; 14 piles	56	08DEC03	17FEB04	0	-102
05-5330	North Pile caps for FB12; 8 Nos.	40	19DEC03	10FEB04	0	21
6. Retaining Walls						
Bored Pile Wall BPRW03						
06-62231	Chipping out Anchorage Bars for BPRW03; 1 to 30	45	28AUG03A	05NOV03	60	-33
06-622244	Review/Approve Alter. Design by the Engineer	28	14SEP03A	21OCT03	79	-66
06-622246	Supply of perm. Casing for mini piles	21	22OCT03	11NOV03	0	-66
06-62232	Construct Facing Wall for BPRW03; 1 to 30	45	22OCT03	12DEC03	0	-33
06-622248	Const. 16 no.s 610 dia mini piles	32	12NOV03	13DEC03	0	-66
06-62233	Construct Caping Beam for BPRW03; 1 to 30	30	15NOV03	19DEC03	0	-33
06-62235	Fill & Trim Slope/Construct U-Channel; 1 to 30	30	29NOV03	06JAN04	0	-33
06-62255	Construct Facing Wall for BPRW03; 31 to 37	20	10JAN04	05FEB04	0	-57
Bored Pile Wall BPRW60						
06-62640	Fill & Trim Slope/Construct U-Channel on Slope	30	02MAY03A	28JAN04	73	-140
06-62650	Construct Facing Wall for BPRW60	45	19JUL03A	20OCT03	91	-140
06-62652	Rem. Works for Failed Slope at BPRW60; VO.197	80*	21OCT03	28JAN04	0	-140
06-62653	Erect access tower	2	21OCT03	22OCT03	0	-140
06-62654	Rem. temp. supp./const. soil nails upper layer	18	23OCT03	12NOV03	0	-140
06-62265	Rem. temp. supp./const. soil nails lower layer	18	13NOV03	03DEC03	0	-140
06-62266	Excavation/formation for skin wall	28	04DEC03	08JAN04	0	-140
06-62267	Const. skin wall	28	11DEC03	15JAN04	0	-140
06-62268	Reinstate work/finishing work	8	16JAN04	28JAN04	0	-140
Reinforced Earth Wall 01						
RE0109	Clear veget./Form access/Divert temp. drainage	24	04NOV02A	16OCT03	96	13
RE0112	Mass concrete/Install panel & mesh 1st stage	15	28APR03A	23OCT03	60	13



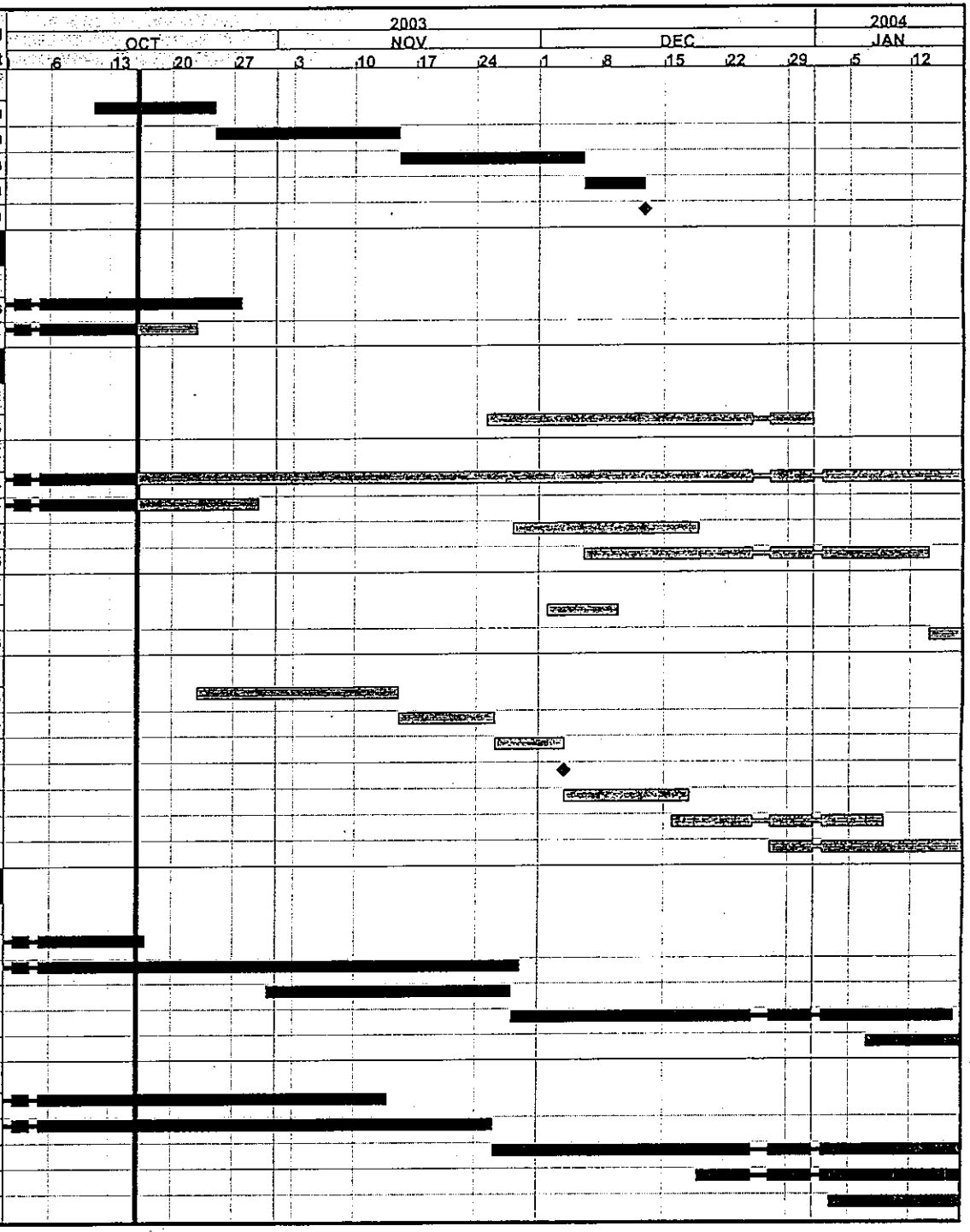
Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	% Comp	Total Float
Reinforced Earth Wall 01						
RE0114	Excavate/Temp. Slope Protection: 2nd stage	21	24OCT03	17NOV03	0	13
RE0116	Mass concrete/Install panel & mesh/Backfill	36	18NOV03	31DEC03	0	13
RE0118	Finishing Work	30	16DEC03	26JAN04	0	13
Reinforced Earth Wall 60						
RE6012	Mass concrete/Install panel	30	22SEP03A	01NOV03	50	-105
RE6014	Backfill/Finishing Work	24	03NOV03	29NOV03	0	-105
L-Shaped Walls						
06-6203	Construct Retaining Wall RW86 incl.Temp. Works	123*	02JUN03A	29OCT03	90	-124
06-62033	Const. wall stems for RW 86; 6 bays	15	07JUL03A	06OCT03A	100	
06-62034	Back fill/trim slope & const. U-ch behind RW 86	12	16OCT03	29OCT03	0	-124
06-6540	Construct Retaining Wall RW60	30	16OCT03	19NOV03	0	46
06-6201	Construct Retaining Wall RW74	60	18NOV03	02FEB04	0	-69
7. Noise Structures						
Procurement of Noise Barrier						
07-7030	ER Review Shop Drawings for Noise Barrier	60	02SEP03A	29NOV03	25	-96
07-7040	Resubmit Shop Drawings for Noise Barrier	60	22OCT03	20DEC03	0	-96
07-7050	ER Approves Shop Drawings for Noise Barrier	60	12NOV03	10JAN04	0	-96
07-7060	Fabrication of Steel Members for Noise Barrier	120	12NOV03	10MAR04	0	-96
07-7070	Fabrication of Panels for Noise Barrier	120	12NOV03	10MAR04	0	-96
07-7080	Delivery of Steel Members for Noise Barrier	90	11JAN04	09APR04	0	-96
07-7090	Delivery of Panels for Noise Barrier	90	11JAN04	09APR04	0	-96
8. Culverts and Outfalls						
Culvert-Outfall AA						
08-81501	Culvert-Outfall AA (South of exist CPR)	150*	29APR03A	29OCT03	92	-147
08-815015	Const. catchpit & 450 dia. DI Downpipe	12	16OCT03	29OCT03	0	83
08-81502	Exc. Culvert-Outfall AA (within Exist CPR)	6	23DEC03	31DEC03	0	-60
08-815022	const. Culvert-Outfall AA (within Exist CPR)	18	29DEC03	19JAN04	0	-60
Culvert-Outfall AB						
08-8102	Exc. Culvert-Outfall AB (the remaining portion)	6	23DEC03	31DEC03	0	-57
08-81022	Const. Culvert-Outfall AB (the remain. portion)	35	02JAN04	14FEB04	0	-57
Culvert-Outfall B						
08-82013	Excavate/Const. manhole & Downpipes at B. Batter	18	23SEP03A	05NOV03	0	-152
Culvert-Outfall C						
08-8401	Excavate Culvert-Outfall C (North of Exist CPR)	87*	30JUN03A	14OCT03A	100	
08-84016	Const. add. D. wall/M. stair; VO 205	18	20SEP03A	14OCT03A	100	
Culvert-Outfall D						
08-8500	Construct Outfall D (North)	140*	14AUG03A	03FEB04	36	-139
08-85011	Exc. Culvert-Outfall D (North)	12	09SEP03A	29OCT03	0	-139
08-85012	Const. western intake chamber	18	03OCT03A	24OCT03	56	-139
08-85013	Construct 1050 stepped channel	10	25OCT03	05NOV03	0	-139
08-85014	Construct eastern intake chamber	18	05NOV03	25NOV03	0	-139



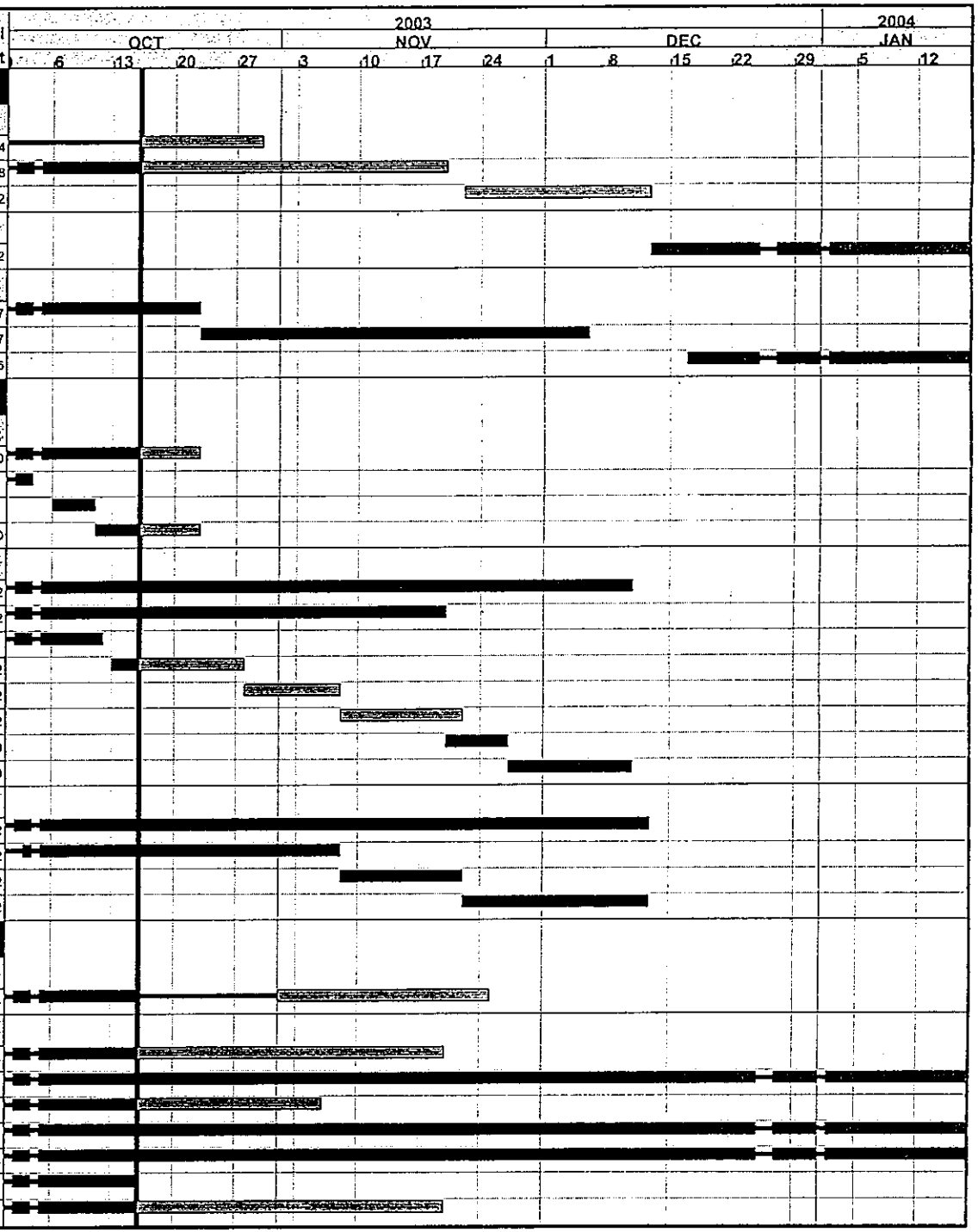
Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	% Comp	Total Float
Culvert-Outfall D						
08-85015	Construct SMHD1/cascade/ staircase	30	26NOV03	02JAN04	0	-139
08-85016	Add. mass conc. wall at toe of slope 3; VO. 225	30	10DEC03	16JAN04	0	-139
10. Geotechnical & Slope Works						
New Slope No. 1						
10-1045	Const. drainage/stabilize slope at bott. batter	74*	22AUG03A	19NOV03	60	-154
10-1046	Erect inspection scafolding (SI No. 128)	30	22AUG03A	22OCT03	80	-154
10-1047	Rock mapping at bottom batter by the ER	30	04SEP03A	24OCT03	73	-154
10-1048	Er. w. platf./Const. add. dent. wall;CH1122-1172	24	15SEP03A	29OCT03	50	-154
10-1049	Inst. r. dowels/r. drains/ w. mesh at b. batter	24	13OCT03A	11NOV03	4	-154
10-1051	Const. planter wall/drainage V.O. 104	16	30OCT03	19NOV03	0	-154
New Slope Nos. 4, 5 & 3						
10-10205	Excavation & Filling Works for Slopes 4, 5 & 3	50	24NOV03	27JAN04	0	-139
10-102052	Drainage/Stabise Slopes 4, 5 & 3	50	05DEC03	07FEB04	0	-139
Existing Slope Works						
10-10211	Remedial Works to Slope No. D/R16	568*	05DEC02A	08NOV04	44	-70
13. Reprovisioning of LCSD & FEHD Facilities						
FEHD Facilities						
13-1330	Construct RCP B	96*	09JUL03A	01NOV03	84	342
13-1340	Reprovision of Sitting Out Area at Ka Loon Tsuen	65*	13SEP03A	29NOV03	40	83
13-13406	Const. footing/floor slab of Sitting Out Area	40	13SEP03A	25OCT03	78	83
13-13304	Construct sub-structure & roofing of RCPB	18	09OCT03A	22OCT03	67	342
13-13306	Construct drainage system & misc. of RCPB	12	20OCT03	01NOV03	0	342
13-13407	Const./Install Roof & Furnit of Sitting Out Area	30	27OCT03	29NOV03	0	123
13-1320	Construct RCP A	35*	06DEC03	19JAN04	0	83
13-13202	Formation/construct foundation of RCPA	8	06DEC03	15DEC03	0	83
13-13204	Construct sub-structure & roofing of RCPA	18	16DEC03	08JAN04	0	83
13-13206	Construct drainage system & misc. of RCPA	12	06JAN04	19JAN04	0	83
Stairways						
13-1310	Construct Stairway ST01 and Add. Ramp ST01A	30	27OCT03	29NOV03	0	83
13-1313	Construct Stairway ST03	30	26NOV03	02JAN04	0	-57
CPR from Chainage 2+210 to Chainage 3+010						
1. Preliminaries						
Proposed Utility Works						
01-12102	Proposed CLP on W/B C.way CH2300-2480	10	02DEC03	12DEC03	0	22
01-12103	Proposed HKT on W/B C.way crossing(2)	4	02DEC03	05DEC03	0	22
01-12104	Proposed CATV on W/B C.way crossing(1)	2	06DEC03	08DEC03	0	22
Programme for SA No. 3						
01-0110	Programme for SA No. 3	75*	29SEP03A	12DEC03	23	-171
01-0111	Prelim. design of NM03 & ass. dra./w.m./uus	14	29SEP03A	10OCT03A	100	
01-0112	Detailed design of NM03 & ass. dra./w.m./uus	56	11OCT03A	05DEC03	9	-164



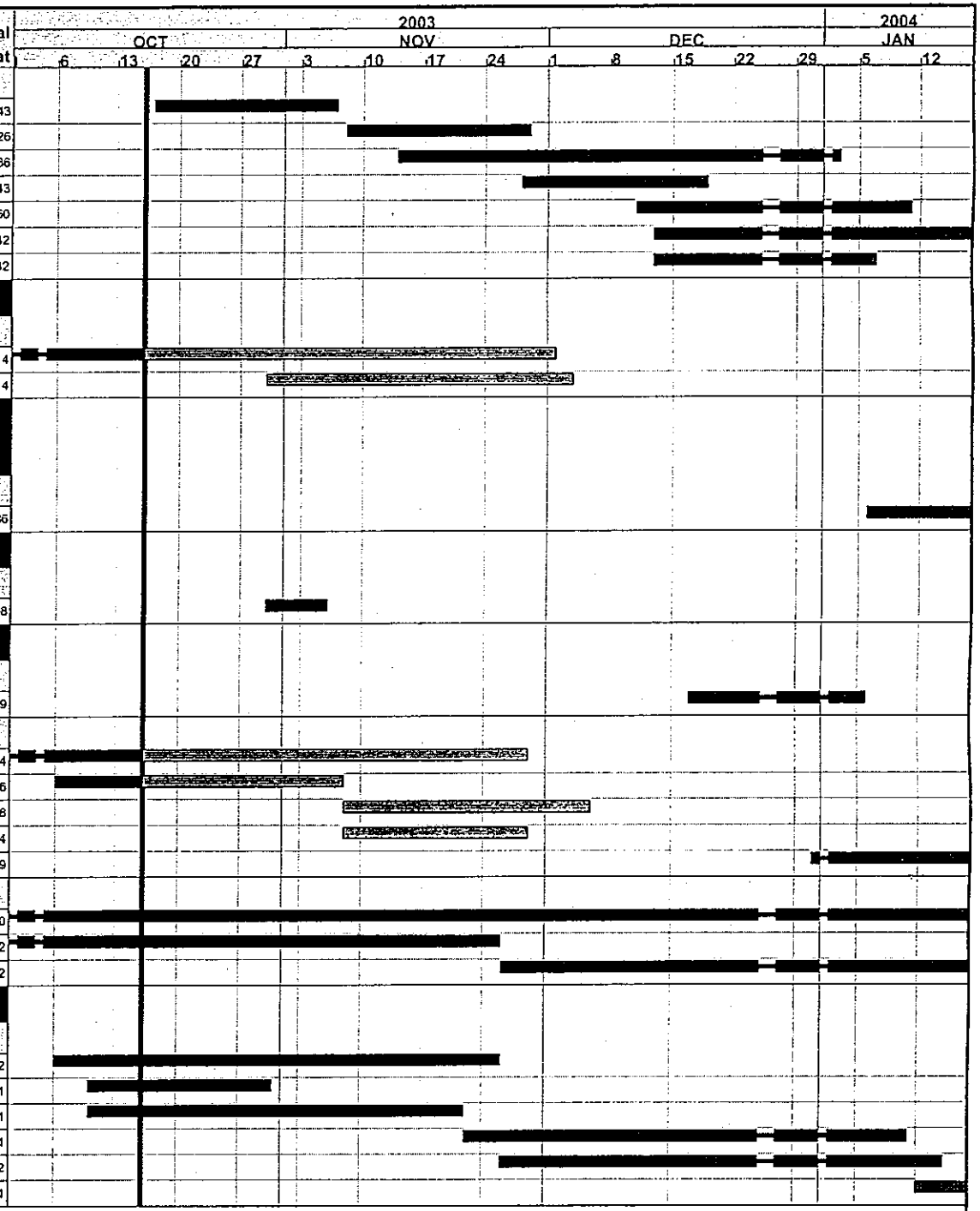
Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	% Comp	Total Float
Programme for SA No. 3						
01-0113	Prepare preliminary cost data	14	11OCT03A	24OCT03	36	-171
01-0114	Prepare draft SA	21	25OCT03	14NOV03	0	-171
01-0115	Prepare final SA	21	15NOV03	05DEC03	0	-171
01-0116	Prepare formal copies of SA for execution SA	7	06DEC03	12DEC03	0	-171
01-0117	Execute SA	0		12DEC03	0	-171
2. Site Clearance						
Demolition of Existing Buildings						
02-2130	General Site Clearance bet CH2210 and 3010	90	08JAN02A	27OCT03	95	-186
02-2131	Temp. Divert W. Way/Demol. Exist Pavil. & W.Way	24	23JUN03A	22OCT03	75	951
3. Roadworks						
Earthworks						
03-3201	Earthworks along W/B C'way bet CH2250 & 2500	30	25NOV03	31DEC03	0	4
Drainage Works						
03-3222	Drainage Works at CPR CH2800-3010	306*	02AUG03A	13AUG04	20	14
03-32226	Drainage Works at SMHGB8 - GB2.2	24	22SEP03A	29OCT03	50	87
03-32211	Drainage Works at W/B C'way bet CH2450-2500	18	28NOV03	18DEC03	0	7
03-32223	Drainage Works at HAP7/5.1-2.2-2.5	30	06DEC03	13JAN04	0	25
Pipe Works (Local Supply Watermains)						
03-3230	Pipe Works on W/B C'way at CH2420	7	02DEC03	09DEC03	0	21
03-3232	Pipe Works at CPR CH2750-3010	21	14JAN04	10FEB04	0	66
Road Works						
03-3144	Lay sub-base, kerbs & edgings; E/B CH2210-2300	20	23OCT03	14NOV03	0	30
03-31442	Construct rd pave & f/p; E/B CH2210-2300	9	15NOV03	25NOV03	0	30
03-31444	Rd finishes, marking & lighting; E/B CH2210-2300	7	26NOV03	03DEC03	0	30
03-31446	Divert Traffic to E/B Perma C'way CH2210 to 2300	0		03DEC03	0	30
03-31448	Reinstate W/B CH2210-2300 prior to Complete KDE	12	04DEC03	17DEC03	0	30
03-3142	Lay sub-base, kerbs & edgings; W/B CH2250-2500	18	16DEC03	08JAN04	0	4
03-31422	Construct rd pave & f/p; W/B CH2250-2500	18	27DEC03	17JAN04	0	4
5. Footbridges						
Footbridge FB01						
05-51102	Piling Works for pile caps 6 to 9 FB01; 10 Nos.	72	11APR03A	16OCT03	99	-130
05-51103	Piling Works for caps 10 to 12; FB01; 8 Nos.	72	17JUN03A	28NOV03	47	-130
05-5120	South Pile caps for 6 to 8; FB01; 3 Nos.	24	31OCT03	27NOV03	0	-43
05-51202	South Columns & Column head for 6-9; 7 Nos.	40	28NOV03	16JAN04	0	-5
05-51201	South Pile caps for 9 to 12; FB01; 3 Nos.	24	07JAN04	06FEB04	0	-142
Footbridge FB02						
05-52102	Piling Works at South Supports for FB02; 18 Nos.	72	25JUL03A	13NOV03	65	-186
05-52402	North Columns & column head for FB02; 9 Nos.	40	22SEP03A	25NOV03	13	-151
05-5270	Construct Ramp for FB02 (North)	60	26NOV03	10FEB04	0	-151
05-5230	South Pile caps for FB02; 8 Nos.	35	19DEC03	04FEB04	0	-186
05-52704	Construct Stairway for FB02 (North)	30	03JAN04	10FEB04	0	-151



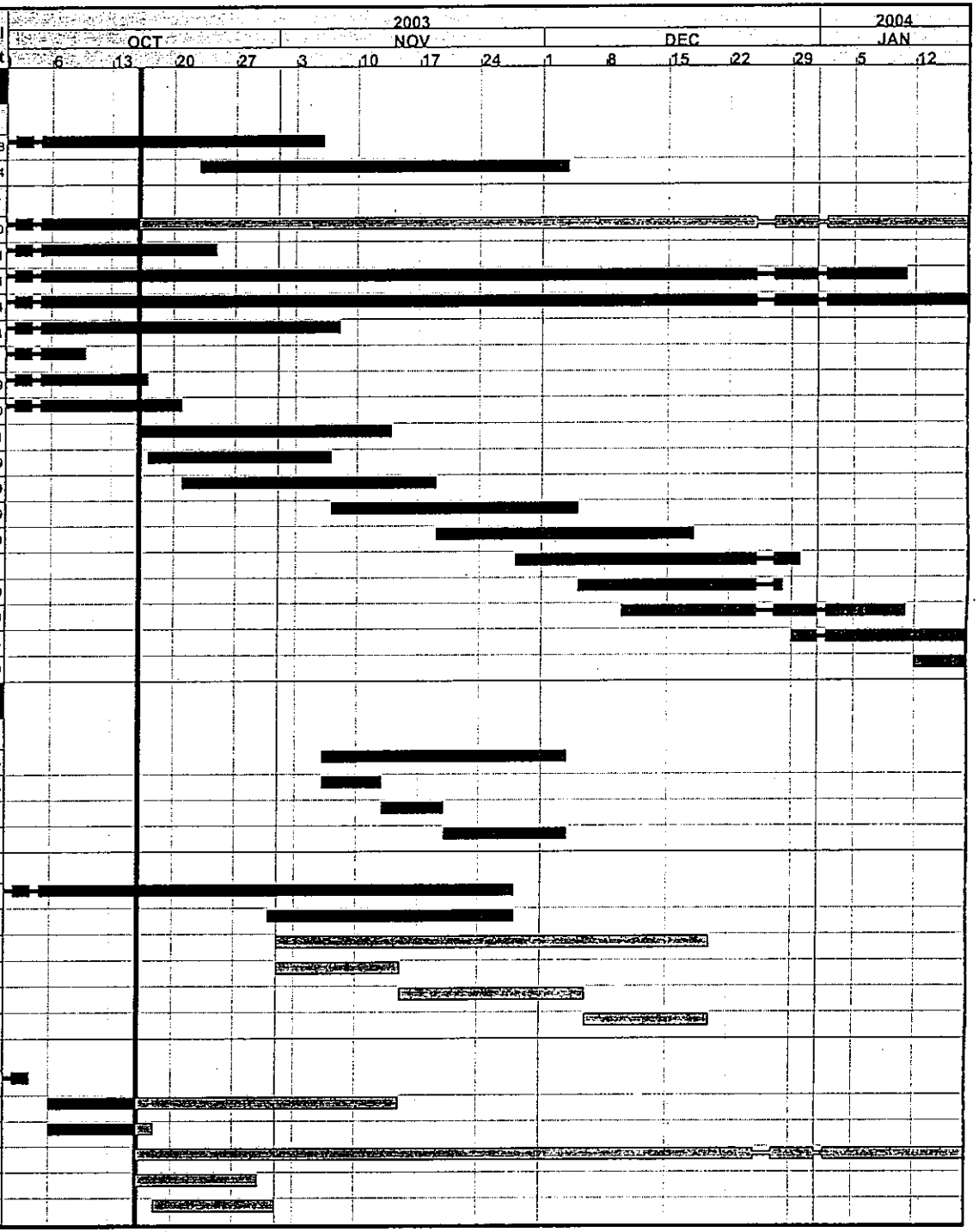
Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	% Comp	Total Float
7. Noise Structures						
Noise Mitigation No. 02						
07-7211	Excave/Formation for NM02 (South): CH2300-2450	30	09JUN03A	29OCT03	60	14
07-72212	Const. footing for NM02 (South): CH2300-2450	36	19SEP03A	19NOV03	17	8
07-7231	Const. footing for NM02 (South): CH2450-2480	18	22NOV03	12DEC03	0	12
Noise Mitigation No. 03						
07-7311	Foundation of NM03 (South)	60	13DEC03	27FEB04	0	-62
Noise Mitigation No. 04						
07-7403	Excavate/formation of NM04 (Within Portion W10)	12	13SEP03A	22OCT03	50	-67
07-74032	Const. footing of NM04 (Within Portion W10)	38	23OCT03	05DEC03	0	-67
07-7407	Erect Frame/Panels for NM04(Within portion W10)	50	17DEC03	19FEB04	0	-76
8. Culverts and Outfalls						
Culvert-Outfall ED						
08-81930	Const. Culvert-Outfall ED (within exist. CPR)	43*	30AUG03A	22OCT03	86	30
08-819303	Excavate/blinding for 1050 dia. conc. pipe	5	26SEP03A	03OCT03A	100	
08-819304	Install 1050 conc. pipes & concrete surround	6	06OCT03A	10OCT03A	100	
08-819307	Backfill/compaction	12	11OCT03A	22OCT03	50	30
Culvert-Outfall F						
08-8710	Formation Culvert-Outfall F (South of Exist CPR)	159*	02JUN03A	10DEC03	70	-62
08-87102	Excavate and Const. Outlet	43	02JUN03A	19NOV03	30	-62
08-87103	Drive sheet piles/ Excavation for SMHF3	18	06SEP03A	11OCT03A	100	
08-87104	Const. for SMHF3	12	13OCT03A	27OCT03	17	12
08-87105	Excavation/formation for 1800 dia. twin pipes	10	28OCT03	07NOV03	0	12
08-87106	Const. 1800 dia. twin pipes: SMHF2-SMHF3	12	08NOV03	21NOV03	0	12
08-87107	Excavation/formation for 1800 dia. twin pipes	6	20NOV03	26NOV03	0	-60
08-87108	Const. 1800 dia. twin pipes: SMHF3-Outlet	12	27NOV03	10DEC03	0	-60
Culvert-Outfall G						
08-8810	Culvert-Outfall G (South of Exist CPR)	154*	11JUN03A	12DEC03	68	-82
08-88104	Const. twin box-culvert for bay 1 & outfall	30	26JUL03A	07NOV03	33	-82
08-88105	Excavate/formation/blinding for bay 3	12	08NOV03	21NOV03	0	-82
08-88106	Const. twin box-culvert for bay 3	18	22NOV03	12DEC03	0	-82
9. Seawalls and Marine Works						
Sea Wall B (710 m Length)						
09-9114	Granular Fill (CH2210-2450)	50	22APR03A	24NOV03	60	4
L-Shaped Walls						
09-9113	Retaining Wall RW-B (CH2250-2450)	231*	10FEB03A	19NOV03	87	4
09-9133	Retaining Wall RW-B (CH2800-3010)	264*	11JUN03A	30APR04	39	-1
09-91331	Const. RW-B: bays 57-58 & 69-76	40	11JUN03A	05NOV03	55	91
09-9143	Reprovision of Pavillion at Sea Wall B	224*	23JUN03A	22MAR04	42	-52
09-9123	Retaining Wall RW-B (CH2450-2800)	238*	14JUL03A	30APR04	33	-98
09-91231	Const. base of RW-B: bays 33-39 & 43-56	64	14JUL03A	15OCT03A	100	
09-91136	Const. plinth: RW-B (CH2210-2450)	46	04SEP03A	19NOV03	35	4



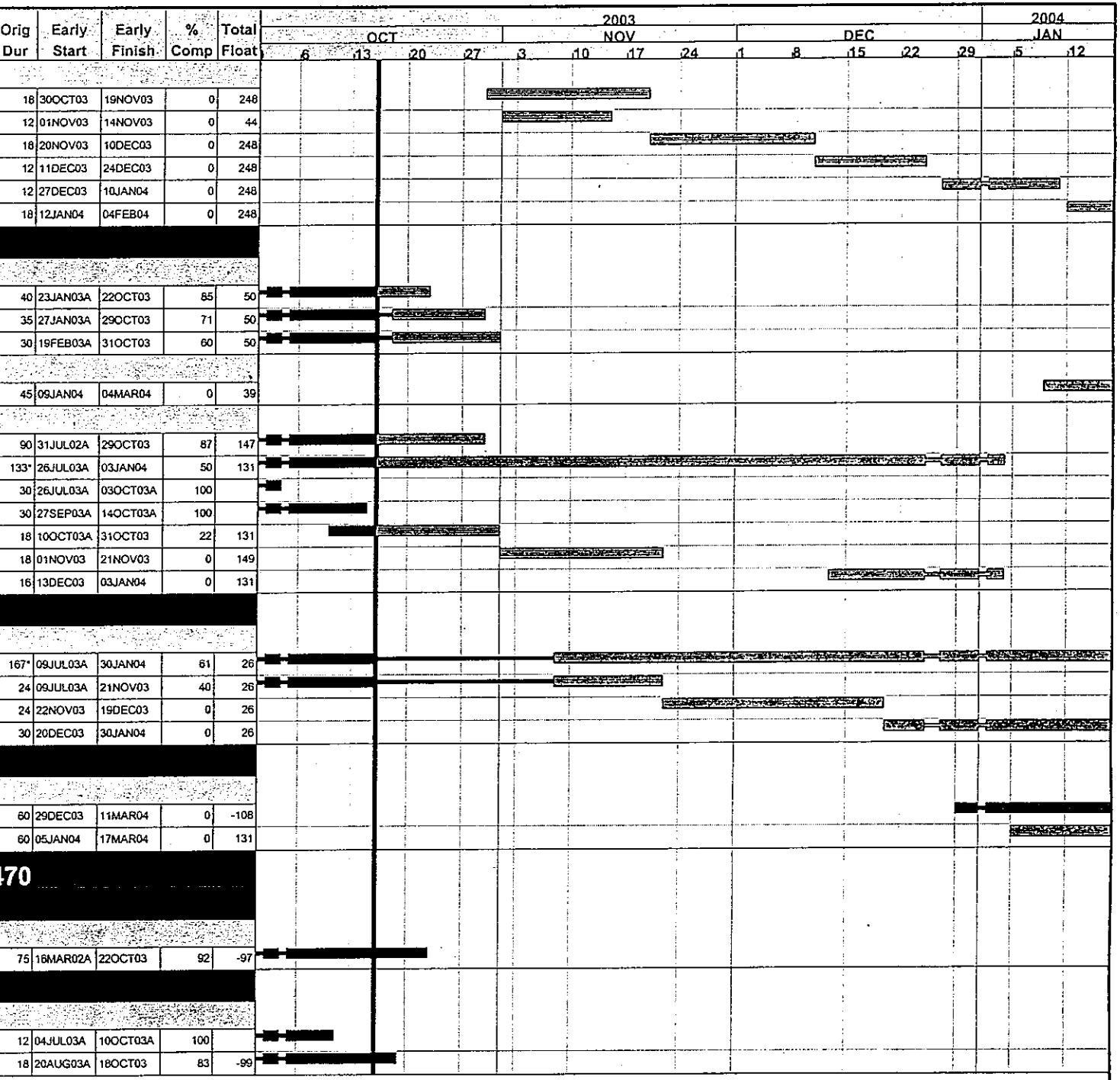
Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	% Comp	Total Float
L-Shaped Walls						
09-91234	Const. RW-B; base for bays 24-26; at FB01	18	17OCT03	06NOV03	0	-43
09-91233	Const. RW-B; bays 40-42; at outfall G	18	08NOV03	26NOV03	0	-26
09-91334	Const. RW-B; base for bays 59-68; at FB02	40	14NOV03	02JAN04	0	-186
09-912342	Const. RW-B; wall for bays 25-27; at FB01	18	28NOV03	18DEC03	0	-43
09-91232	Const. RW-B; bays 22-24; at outfall F	24	11DEC03	10JAN04	0	-60
09-912312	Const. wall of RW-B; bays 33-56	60	13DEC03	27FEB04	0	-142
09-912344	Const. RW-B; base for bays 28-32; at FB01	18	13DEC03	06JAN04	0	-142
12. Entrusted Watermains						
Entrusted Water Mains						
12-1216	DN1000FW/Associated Wks at CPR CH2800-3010	52	10SEP03A	01DEC03	23	14
12-1219	DN1000FW/Associated Wks at E/B CH2480-2550	30	30OCT03	03DEC03	0	14
CPR from Chainage 3+010 to Chainage 3+730						
1. Preliminaries						
Temporary Watermain Diversions						
001-1170	Watermain Diversion between CH3010-3100	21	06JAN04	02FEB04	0	-86
2. Site Clearance						
Demolition of Existing Buildings						
02-2162	Demolish Exist RCP at Potion No. W32	6	30OCT03	05NOV03	0	-108
3. Roadworks						
Earthworks						
03-3241	Earthworks at W/B C'way CH3010-3300	14	17DEC03	05JAN04	0	-119
Drainage Works						
03-3324	Drainage Works on E/B C'way bet CH3540-3670	189*	10APR03A	28NOV03	80	44
03-33246	Exc. & const. drainage for IB1.4-IB1.5	24	06OCT03A	07NOV03	17	26
03-33247	Exc. & const. drainage for IB1.5-IB1.6	24	08NOV03	05DEC03	0	38
03-33248	Exc. & const. drainage for H2.4-gH2.4	18	08NOV03	28NOV03	0	44
03-3320	Drainage Works on W/B C'way bet CH3010-3300	58	31DEC03	11MAR04	0	-119
Road Works						
03-3340	Dragon Garden Accommodation	584*	12APR02A	30MAR04	77	-120
03-334006	Const. Plinth & Wall Face incl. Slope Work	60	10JAN03A	25NOV03	42	-72
03-33132	Temp UUs & Roadworks at E/B CH3300-3460	50	26NOV03	29JAN04	0	-72
5. Footbridges						
Footbridge FB11						
05-5530	North Pile caps for FB11; 6 Nos.	35	06OCT03A	25NOV03	0	-72
05-55103	Pile loading Test for FB11/12; VO.108	18	10OCT03A	30OCT03	28	-1
05-5520	South Pile caps for FB11; 8 Nos.	35	10OCT03A	21NOV03	9	-1
05-55202	South Columns & column head for FB11; 9 Nos.	40	22NOV03	10JAN04	0	-1
05-55302	North Columns & column head for FB11; 7 Nos.	40	26NOV03	14JAN04	0	-72
05-5550	Construct Ramp for FB11 (South)	60	12JAN04	24MAR04	0	-1



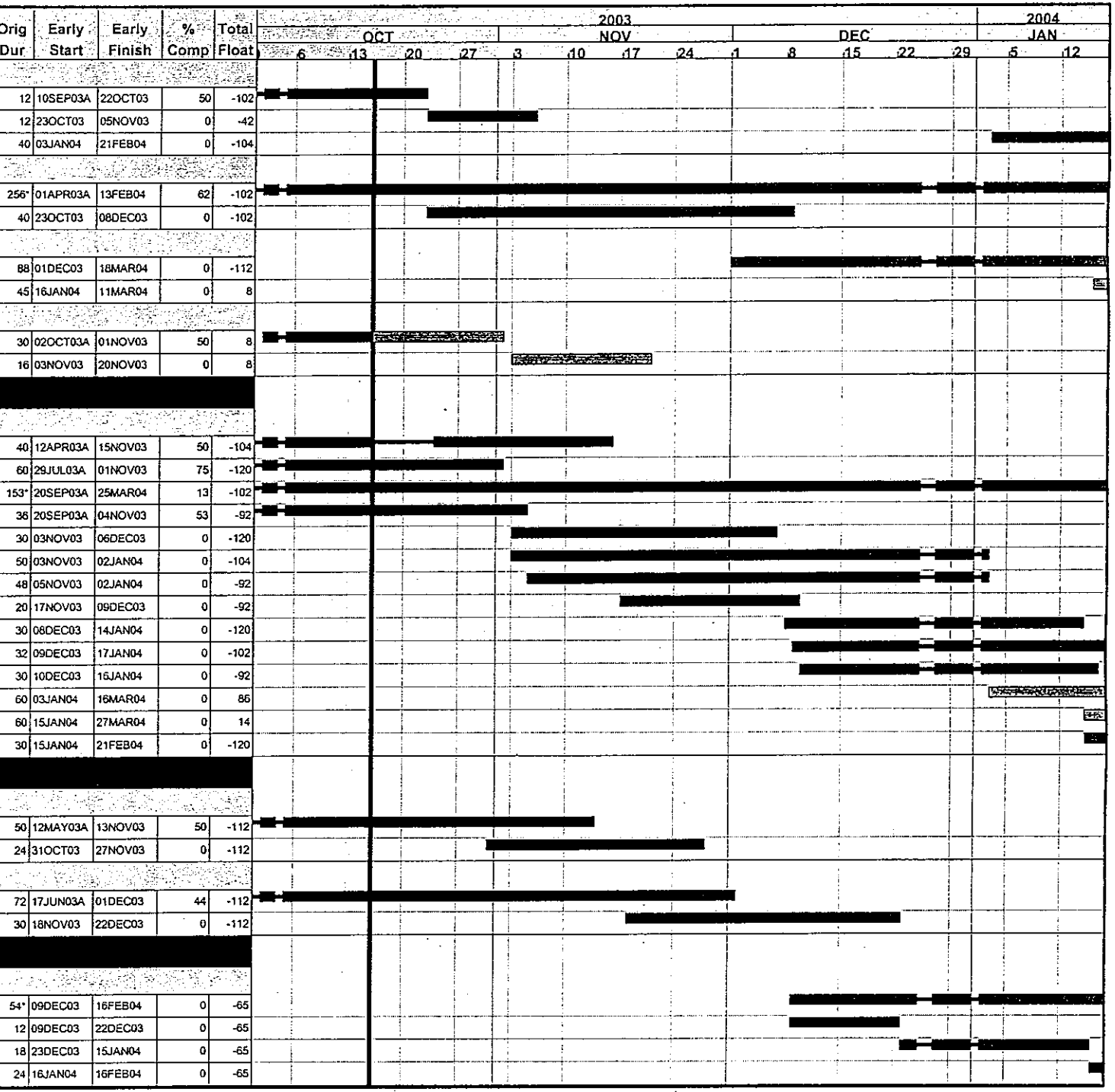
Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	% Comp	Total Float
6. Retaining Walls						
Reinforced Earth Wall 13						
RE1312	Mass concrete/Install panel & mesh/Backfill	80	21JAN03A	05NOV03	78	-108
RE1314	Finishing Work	36	23OCT03	03DEC03	0	-94
L-Shaped Walls						
06-6590	Construct Partition Wall at D. Garden	410*	28SEP02A	18FEB04	75	130
06-65902	Construct Partition Wall; Bays 2 & 7	30	12FEB03A	24OCT03	73	-61
06-6591	Construct Retaining Wall RW16 (Outside)	250*	08MAR03A	10JAN04	71	-61
06-6560	Construct Retaining Wall RW13	223*	22APR03A	19JAN04	65	-104
06-65912	Construct Wall Stem of RW16; Bay 3 to 5	40	05JUL03A	07NOV03	50	-61
06-65903	Construct Partition Wall; Bays 1 & 3	30	19JUL03A	09OCT03A	100	
06-6564	Excavation/Temp. Slope Protection/Formation:RW13	21	14AUG03A	16OCT03	95	-119
06-65905	Sheet piling/formation for P8 to P10 & RW16-bay6	18	06SEP03A	20OCT03	78	-20
06-65913	Construct Retaining Wall RW16; Bay 1	25	16OCT03	13NOV03	0	-61
06-6565	Construct Base Slab of RW13; 6 bays	18	17OCT03	06NOV03	0	-119
06-65906	Construct Partition Wall; Bays 8 & 10	25	21OCT03	18NOV03	0	-20
06-6566	Construct Wall Stem of RW13; 6 bays	24	07NOV03	04DEC03	0	-119
06-65907	Construct Partition Wall; Bays 9	25	19NOV03	17DEC03	0	-20
06-65914	Construct Retaining Wall RW16; Bay 2	25	28NOV03	29DEC03	0	-61
06-6567	Backfill behind RW13	18	05DEC03	27DEC03	0	-119
06-65915	Construct Retaining Wall RW16; Bay 6	25	10DEC03	10JAN04	0	-20
06-6568	Construct plinth of RW13; 6 bays	18	29DEC03	19JAN04	0	-104
06-65908	Extract sheet piles & temp. rd to D. Garden	12	12JAN04	28JAN04	0	-20
8. Culverts and Outfalls						
Culvert - Outfall HB						
08-81010	Culvert-Outfall H8 (South of Exist CPR)	24*	06NOV03	03DEC03	0	-108
08-810102	Excavation for DN 1200 DI Pipe & SMHHB3	6	06NOV03	12NOV03	0	-108
08-810103	Install DN 1200 DI Pipe & Backfill	6	13NOV03	19NOV03	0	-108
08-810104	Const. SMHHB3 & Catchpit	12	20NOV03	03DEC03	0	-108
Culvert-Outfall H						
08-81110	Culvert-Outfall H (North of Exist CPR)	89*	13AUG03A	27NOV03	58	-61
08-81113	Construct manhole SMHH1& install 1.65m pipe	24	31OCT03	27NOV03	0	-61
08-81120	Culvert-Outfall H (Portion South of RW15)	42*	01NOV03	19DEC03	0	131
08-811202	Excavation & formation	12	01NOV03	14NOV03	0	131
08-811203	Const. Outfall and cascade	18	15NOV03	05DEC03	0	131
08-811204	Const. catchpit SCPH2	12	06DEC03	19DEC03	0	131
Culvert-Outfall IA						
08-81200	Expose/Protect/Divert Exist. Utilities	30	23JUL03A	03OCT03A	100	
08-81220	Culvert-Outfall IA (Remaining Portion)	35*	06OCT03A	14NOV03	26	44
08-812202	Excavate/formation for intake/cascade/manhole	12	06OCT03A	17OCT03	83	44
08-81230	Additional Works under V.O. No. 195	126*	16OCT03	17MAR04	0	248
08-81231	Form Access & Remove Vegetation: VO 195	12	16OCT03*	29OCT03	0	248
08-812203	Const. intake/cascade/manhole	12	18OCT03	31OCT03	0	44



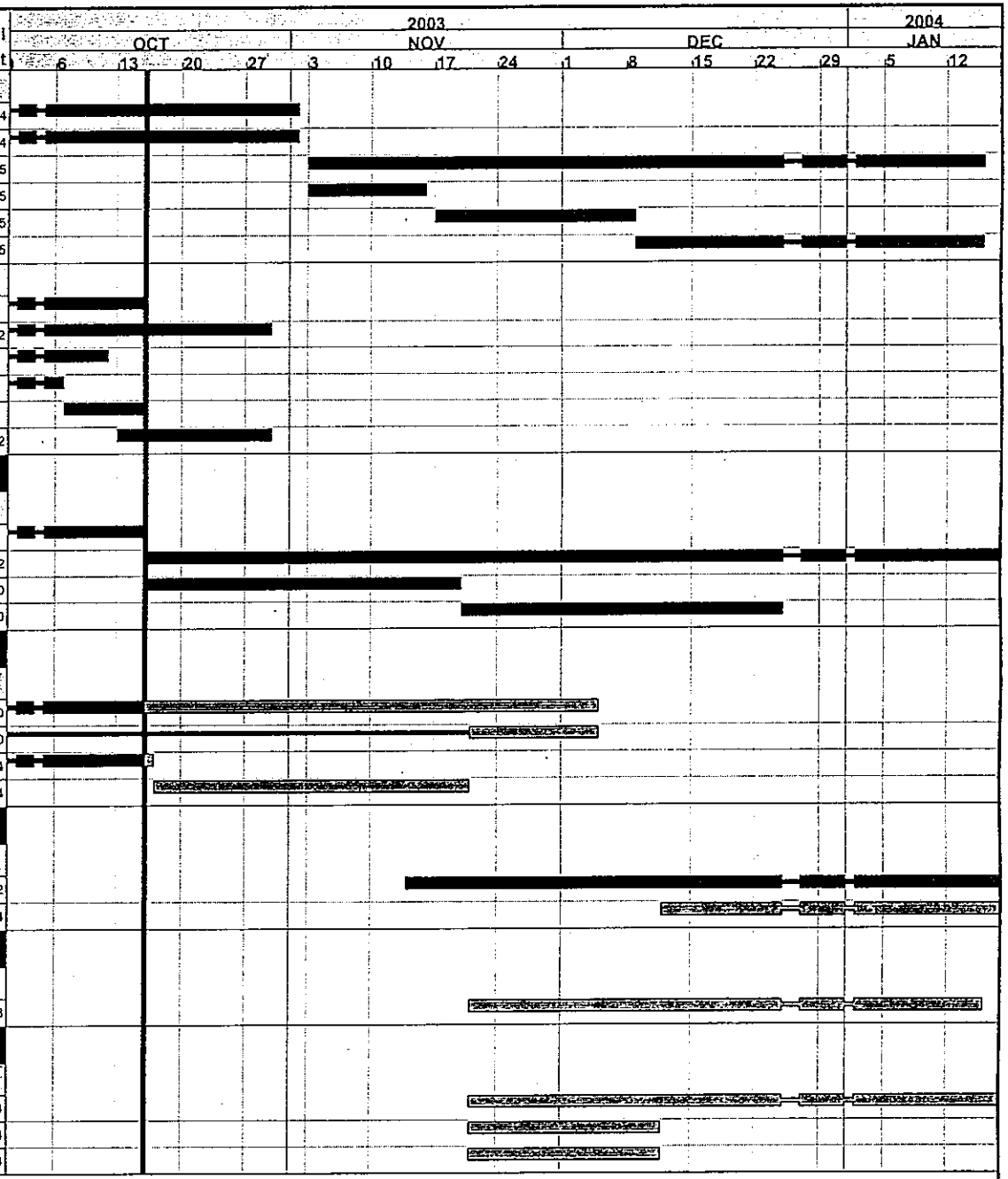
Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	% Comp	Total Float
Culvert-Outfall IA						
08-81232	Exc. incl. Sheet pile/Break Conc. Pipe; L. Part	18	30OCT03	19NOV03	0	248
08-812204	Install 1050 dia. conc. pipe with conc. surround	12	01NOV03	14NOV03	0	44
08-81233	Const. Cascade/M. Stairway/Backfill; L. Part	18	20NOV03	10DEC03	0	248
08-81234	Exc. incl. Sheet pile; U. Part of Cascade	12	11DEC03	24DEC03	0	248
08-81235	Const. Cascade/M. Stairway/Backfill; U. Part	12	27DEC03	10JAN04	0	248
08-81236	Exc. incl. Sheet pile/Break C. Pipe; SCPIA2/Pipe	18	12JAN04	04FEB04	0	248
10. Geotechnical & Slope Works						
New Slope No. 9						
10-10540	Excavation Work for Slope No.9	40	23JAN03A	22OCT03	85	50
10-10545	Drainage Work for Slope No.9	35	27JAN03A	29OCT03	71	50
10-10550	Stabilise Slope No.9	30	19FEB03A	31OCT03	60	50
New Slope No. 11						
10-10757	Reprovsion of B. Fence; V.O. No. 133	45	09JAN04	04MAR04	0	39
Existing Slope Works						
10-1090	Remedial Works to Slope No. C25	90	31JUL02A	29OCT03	87	147
10-1092	Remedial Works to Slope No. FR41	133*	26JUL03A	03JAN04	50	131
10-10922	Excavate and Temp. Slope Protection	30	26JUL03A	03OCT03A	100	
10-10923	Construct add. mass concrete benching	30	27SEP03A	14OCT03A	100	
10-10924	Construct Base Slab for RW104; 4 basys	18	10OCT03A	31OCT03	22	131
10-10926	Construct Wall Stem for RW104; 4 basys	18	01NOV03	21NOV03	0	149
10-10928	Fill behind RW104 & Finishing Work	16	13DEC03	03JAN04	0	131
11. Entrusted Sewerage Works						
Entrusted Sewers/Drains						
11-1141	Sewer Works at E/B bet CH3540-3670	167*	09JUL03A	30JAN04	61	26
11-11412	Const. sewer for TS127 to TS127A	24	09JUL03A	21NOV03	40	26
11-11413	Const. sewer for TS127A to TS128	24	22NOV03	19DEC03	0	26
11-11414	Const sewer for TS128 to TS130	30	20DEC03	30JAN04	0	26
13. Reprovisioning of LCSD & FEHD Facilities						
Stairways						
13-1331	Construct Stairway ST06	60	29DEC03	11MAR04	0	-108
13-1332	Construct Stairway ST07	60	05JAN04	17MAR04	0	131
CPR from Chainage 3+730 to Chainage 4+470						
2. Site Clearance						
Demolition of Existing Buildings						
02-2160	Site Clearance bet CH3730-4470	75	16MAR02A	22OCT03	92	-97
3. Roadworks						
Utility Diversion						
03-34102	Temp.Relocate Pillar Box at FB03; V.O. 167	12	04JUL03A	10OCT03A	100	
03-34103	Divert exist. 40mm watermain at CH3700; VO 208	18	20AUG03A	18OCT03	83	-99



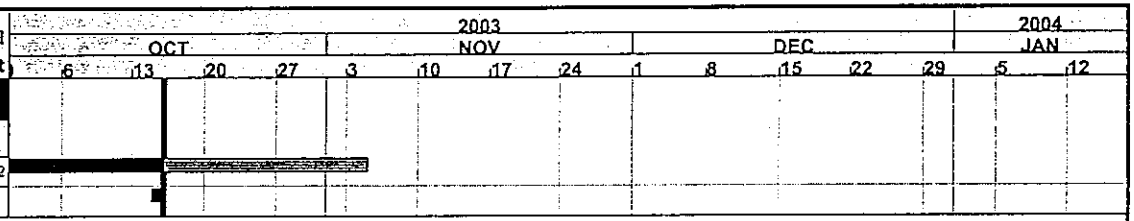
Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	% Comp	Total Float
Utility Diversion						
03-34104	Temp.Relocate exist. UUs at W/B CH3690-3720	12	10SEP03A	22OCT03	50	-102
03-34105	Relocate/protect exist. L.A. Pipes	12	23OCT03	05NOV03	0	-42
03-34506	Lay UUs/Temp. Roadwork at E/B CH 3900-3980	40	03JAN04	21FEB04	0	-104
Earthworks						
03-3400	Excavate & Temp. Slope Protection; Walkway-FB03	256*	01APR03A	13FEB04	62	-102
03-34002	Excavate & Temp. Slope Protection; bays 15-21	40	23OCT03	08DEC03	0	-102
Drainage Works						
03-3424	Drainage Works at E/B C'way CH3980-4330	88	01DEC03	18MAR04	0	-112
03-3426	Drainage Works at E/B C'way CH4330-4470	45	16JAN04	11MAR04	0	8
Road Works						
03-34521	Prepare/consent of TTA Scheme for CH4330-4470	30	02OCT03A	01NOV03	50	8
03-34523	Divert traffic to W/B exist. C'way CH4330-4470	16	03NOV03	20NOV03	0	8
5. Footbridges						
Footbridge FB03						
05-5430	North Pile caps for FB03; 6 Nos.	40	12APR03A	15NOV03	50	-104
05-54112	Piling for South Supports at FB03; 6 Nos.	60	29JUL03A	01NOV03	75	-120
05-5450	Construct Walkway for FB03 (South)	153*	20SEP03A	25MAR04	13	-102
05-54501	Const. base of walkway; FB03(South); bays 4-12	36	20SEP03A	04NOV03	53	-92
05-5420	South Pile caps for FB03; 1 Nos.	30	03NOV03	06DEC03	0	-120
05-54302	North Columns & Col head for FB03; 6 Nos.	50	03NOV03	02JAN04	0	-104
05-54502	Const. wall of walkway; FB03(South); bays 4-12	48	05NOV03	02JAN04	0	-92
05-54507	Const. base of walkway; FB03(South); bays 1-3	20	17NOV03	09DEC03	0	-92
05-54202	South Columns & Column head for FB03	30	08DEC03	14JAN04	0	-120
05-54503	Const. base of walkway; FB03(South); bays 15-21	32	09DEC03	17JAN04	0	-102
05-54509	Const. wall of walkway; FB03(South); bays 1-3	30	10DEC03	16JAN04	0	-92
05-5460	Construct Ramp for FB03 (North)	60	03JAN04	16MAR04	0	86
05-54504	Construct Ramp for FB03 (South)	60	15JAN04	27MAR04	0	14
05-54506	Construct Stairway for FB03 (South)	30	15JAN04	21FEB04	0	-120
6. Retaining Walls						
Reinforced Earth Wall 21						
RE2112	Mass concrete/Install panel & mesh/Backfill	50	12MAY03A	13NOV03	50	-112
RE2114	Finishing Work	24	31OCT03	27NOV03	0	-112
Reinforced Earth Wall 70						
RE7010	Mass concrete/Install panel & mesh/Backfill	72	17JUN03A	01DEC03	44	-112
RE7012	Finishing Work	30	18NOV03	22DEC03	0	-112
8. Culverts and Outfalls						
Culvert-Outfall IB						
08-81520	Culvert-Outfall IB (South Portion)	54*	09DEC03	16FEB04	0	-65
08-815202	Excavation and formation	12	09DEC03	22DEC03	0	-65
08-815203	Const. wing wall and cascade	18	23DEC03	15JAN04	0	-65
08-815204	Const. ret. wall/manhole & concrete pipes	24	16JAN04	16FEB04	0	-65



Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	% Comp	Total Float
Culvert-Outfall I						
08-81310	Culvert-Outfall I (North of Exist CPR)	132*	26MAY03A	01NOV03	89	-104
08-81315	Construct drainage channel for bays 10 & 11	30	05JUL03A	01NOV03	50	-104
08-81320	Culvert-Outfall I (South & Exist CPR)	61*	03NOV03	15JAN04	0	-105
08-813202	Excavation and formation; South	12	03NOV03	15NOV03	0	-105
08-813203	Const. outfall wing wall	19	17NOV03	08DEC03	0	-105
08-813204	Const. 2mx2m twin box culvert; South	30	09DEC03	15JAN04	0	-105
Culvert-Outfall IC						
08-81420	Form Site Access/Exc. for IC (S. of Exist. CPR)	51*	14AUG03A	15OCT03A	100	
08-81410	Exc. Culvert-Outfall IC (North of Exist CPR)	50*	29AUG03A	29OCT03	76	-72
08-814102	Exc. for SMHIC1 and 900 dia. conc. twin pipes	30	29AUG03A	11OCT03A	100	
08-814203	Const. Outlet IC & 900 dia. twins pipe(S)	12	19SEP03A	06OCT03A	100	
08-841204	Backfilling (South)	12	07OCT03A	15OCT03A	100	
08-814103	Const. SMHIC1 and 900 dia. conc. twin pipes	19	13OCT03A	29OCT03	37	-72
9. Seawalls and Marine Works						
L-Shaped Walls						
09-92504	Form access/temp. divertion of footway to Pier	150	14AUG03A	15OCT03A	100	
09-9250	Construct Retaining Wall RW-C	347*	16OCT03	14DEC04	0	-112
09-92506	Trial pits/Sheet piling/ Excavation; Bays 22-24	30	16OCT03	19NOV03	0	-70
09-92508	Const. RW-C, bays 22-24	30	20NOV03	24DEC03	0	-70
10. Geotechnical & Slope Works						
Existing Slope Works						
10-109203	Rem. Works to Slope 6SE-C/C431& C/C111; VO 168	130*	02JUL03A	04DEC03	67	120
10-109206	Slope works to 6SE-C/C431& C/C111; VO 168	30	21JUL03A	04DEC03	60	120
10-109207	Confirm details of VO. 219 for add. ret. wall	21	30SEP03A	16OCT03	95	114
10-109208	Add ret. walls to 6SE-C/C431& C/C111; VO 219	30	17OCT03	20NOV03	0	114
11. Entrusted Sewerage Works						
Entrusted Sewers/Drains						
11-1124	Sewer Works at E/B C'way bet CH3980-4330	87	14NOV03	01MAR04	0	-112
11-1121	Additional Sewer Works at R10; VO No. 209	30	12DEC03	19JAN04	0	114
12. Entrusted Watermains						
Entrusted Water Mains						
12-1225	DN1000FW/Associated Wks E/B bet CH4420-4470	45	21NOV03	15JAN04	0	8
13. Reprovisioning of LCSD & FEHD Facilities						
FEHD Facilities						
13-1350	Reprovision Pavilion & Pai Lau	174*	21NOV03	25JUN04	0	114
13-1351	Substructure of Pai Lau	18	21NOV03	11DEC03	0	114
13-1353	Substructure of Pavilion	18	21NOV03	11DEC03	0	114



Activity ID	Activity Description	Orig Dur	Early Start	Early Finish	% Comp	Total Float
14. Landscape Works						
Tree Felling and Transplanting						
14-21606	Transplant Trees;South of exist. CPRCH4200-4300	65	09MAY02A	04NOV03	70	172
14-21608	Transplant Trees from in front of Lido Garden	16	15OCT03A	15OCT03A	100	



APPENDIX B

Log record on environmental complaints

Log Record on Environmental Complaints

No.	Date of Complaint Received	Description	Propopsed Actions	Completion Date	Remarks
029	12-Aug-02	Complaint from Mr. Au regarding muddy water washing out from Kowloon Bound Lane from the construction site	Enlarge concrete paving at site entrance; further improvement to the existing temporary drainage system to minimise wash-off of waste water to the adjacent road; and make sure temporary water supply points are properly turned off during lunch break or other times when they are not in	16-Aug-02	
036	31-Aug-02	Complaint from Mrs. Chung regarding the generation of fugitive dust from the construction site in front of Tsing Lung Tau	Frequent watering of the related works area with the aid of water browser	31-Aug-02	
054	7-Dec-02	Complaint from Mr. Lo regarding the stagnant water ponding in front of the construction site at Sham Tseng	Explained to the complainant that the water ponding was a wheel washing bay	7-Dec-02	
067	3-Mar-03	Complaint from Hong Kong Garden Management Office regarding the noise from vehicular movement over the temporary road cover at Castle Peak Road provided by the Contractor	The Contractor has added extra welding to improve the rigidity of the temporary steel deck. The work was completed dring the off-peak hours in the period between 12-Mar-03 to 17-Mar-03.	17-Mar-03	The Contractor has taken noise readings and found that the noise level was within the baseline levels.
068	11-Mar-03	Complaint from Mr. Leung at Hong Kong Garden regarding the noise from evening road traffic, travelling over the steel decking plate on the adjacnt temporary road	The Contractor has added extra welding to improve the rigidity of the temporary steel deck. The work was completed dring the off-peak hours in the period between 12-Mar-03 to 17-Mar-03.	17-Mar-03	The Contractor has taken noise readings and found that the noise level was within the baseline levels.
070	6-Mar-03	Complaint from EPD regarding the reclamation works at Seawall B opposite to Hong Kong Garden on Sunday	The Contractor has previously informed the subcontractor of the statutory requirements as noise, dust emission, water discharge, and waste management. The Contractor agreed to keep vigilant in monitoring and survellance of the site and continue to remind the subcontractors of the statutory requirements.	10-Mar-03	The Contractor has formally closed all site area for the Chinese New Year. Entrances of all site area were barricaded before the Contractor's staff vacnated the sites on 30 January 2003.
070	6-Mar-03	Complaint from EPD regarding dust emission from the reclamation works at Seawall B opposite to Hong Kong Garden.	The Contractor has previously informed the subcontractor of the statutory requirements as noise, dust emission, water discharge, and waste management. The Contractor agreed to keep vigilant in monitoring and surveillance of the site and continue to remind the subcontractors of the statutory requirements.	10-Mar-03	The Contractor has investigated and confirmed that the marine works towards the eastern end of Seawall B was wet and the concreting works at the west end of the Seawall B were not dusty and no dust was emitted. Ground surface was also covered with crushed rock. The Contractor was also further reminded to spray water before and during unloading and moving of rock boulders and onto the haul road.

Log Record on Environmental Complaints

No.	Date of Complaint Received	Description	Propopsed Actions	Completion Date	Remarks
070	24-Mar-03	Complaint from EPD regarding daytime construction noise at Seawall B opposite to Hong Kong Garden.	The Contractor agreed to continuously monitor and review the operation in the vicinity opposite to Lung tang Court, in order to minimize the noise impact caused to the public. In addition the Contractor will respond to the complaints received on the 24- hours Contract Complaint Hotline 2496 2555 in the first instant.	31-Mar-03	No exceedance was recorded at the noise monitoring station WN6, WN7 and WN8 from January 2003 to March 2003. It was suspected that the noise was due to traffic noise together with operational noise of plant equipment at Seawall B. The Contractor was also reminded if reorganzation of working arrangement is necessary, mitigation proposal should be submitted to IC(E) for review. Additioinal noise monitoring shall also be conducted at the noise monitoring station WN8 once the
076	15-Apr-03	Complaint from Mr. Wong of TL 60 Management Limited regarding the noise nuisance generated from the vehicle movement over the temporary steel decking in front of Hong Kong Garden at Castle Peak Road provided by the	The Contractor has replaced the isolated decking plate by 17 April 2003 and agreed to frequently inspect the condition of the steel decking. Further improvement works were completed on 25 April 2003.	25-Apr-03	
078	15-Apr-03	Complaint from Mr. Chau of Hong Kong Garden regarding the noise nuisance generated from vehicle movement over the temporary steel plate in	The Contractor has explained to Mr. Chau that the improvement works were completed on 25 April 2003 and agreed to carry out daily inspection to check the condition of the steel plate.	29-Apr-03	The complainant agreed that the noise nuisance has abated.
080	5-May-03	Complaint from Mr. Tsao / Mr. Chan of Mui Yuen, opposite to Bayside Villas regarding water leakage from the rocky slope behind his house and the damage of water pipes by	The water pipe was repaired on 9 May 2003. The Contractor has explained that the rocky slope was ouside the site boundary.	9-May-03	
082	7-May-03	Complaint from Ms. Chan regarding water ponding on existing footpath along Castle Peak Road near the Contractor's site office.	The Contractor has formed holes at existing upstand wall to drain off water trapped in the adjacent footpath and to patch up local depression at the affected footway with plain concrete.	19-May-03	
084	21-May-03	Complaint from Ms. Lam of Sea Crest Villa Phase I regarding construction noise from the slope works outside Sea Crest Villa Phase I.	The Contractor has observed low-noise emission construction equipment were being used at the time of inspection and proposed to speed up the works to limit the duration of daytime construction noise impact. The Contractor has provided additional information in their letter ref. HY/99/18/M45/300/40/10229 dated 25 June 2003. Additional noise monitoring had been taken by the Contractor on 22 May 2003 at WN15 obtaining the result of 66.6dB(A), which was below the limit level of 75dB(A). After reviewing the findings and investigation details, the Contractor confirmed that no further remedial actions was required.	25-Jun-03	The Contractor was requested to submit mitigation proposal to IC(E) for review and to implement the mitigation proposal. Additioinal noise monitoring is required to be conducted at the noise monitoring station WN15 once the mitigation proposal is implemented. The IC(E) had no comment on the Contractor' s findings. Since no mitigation measures were implemented, additional noise monitoring was not conducted.

Log Record on Environmental Complaints

No.	Date of Complaint Received	Description	Propopsed Actions	Completion Date	Remarks
086	23-May-03	Complaint from Mr. So regarding stagnant water in the drainage and wheel washing bay near the entrance of Sea Crest Villa Phase IV and the damage of road surface near L1 main gate and CLP electricity supply room.	Explained to the complainant that the stagnant water inside the wheel washing bay was for cleaning of vehicle. The leakage found the temporary water pipe was repaired. The water and silt trapped in the U-channel near the main entrance of the estate was removed and the kerb on west side of the run-in to Gate L1 was reinstated.	29-May-03	The Contractor will properly maintain the wheel washing facility, regularly inspect and clean the drainage channel and the gully pots near the main entrance of the estate. The damaged paving slab and cable pit near the power supply room will be restored to original condition after completion of the adjacent substructure works around mid August 2003.
088	3-Jun-03	Complaint from EPD regarding construction dust from Seawall B.	The Contractor proposed to place the concerned area under higher priority and endeavor to water the concerned haul road more frequently during dry days.	6-Jun-03	No rock breaking activity has been observed in site audits since 5 June 2003. The haul road at Seawall B was observed wetted in the site audits. The Contractor was reminded to provide water spraying if there is rock breaking activity in this vicinity.
088	3-Jun-03	Complaint from EPD regarding construction noise from Seawall B.	The Contractor reported that there may be occasional crashing noise for the piling works when rock level is reached. The Contractor has been providing mitigation measures, such as barrier and restriction of the rate of concerned works. The Contractor will also endeavor to expedite the works to reduce the duration of perceived daytime impact. The Contractor proposed to perform additional ad hoc inspections on Mondays, Wednesday and Fridays at the concerned area to confirm continual implementation of measures and to conduct additional noise monitoring where appropriate.	6-Jun-03	No rock breaking activity has been observed in site audits since 5 June 2003. Contractor has been reminded to submit mitigation proposal to IC(E) for review and to implement the mitigation proposal if provision of additional mitigation measures is required. The Contractor was also advised to provide portable noise barrier if there is rock breaking activity. Additioinal noise monitoring is also required to be conducted at the noise monitoring station WN8 once the mitigation proposal is implemented. The IC(E) had no comment on the Contractor' s findings. Since no mitigation measures were implemented, additional noise
091	16-Jun-03	Complaint from Ms. Chan of Sea Crest Villa Phase 1 regarding noise from drilling works carried out at BPRW70 outside Sea Crest Villa Phase 1 before 07:00.	Upon investigation, the Contractor confirmed that there has been no construction work being conducted before 07:00. Nevertheless, the Contractor has scheduled the concerned work to be commenced at 08:00 as on 17 July 2003.	17-Jun-03	
092	16-Jun-03	Complaint from Mrs. Chung of Lido Garden regarding noise from drilling works carried out at BPRW70 opposite to Lido Garden before 07:00.	Upon investigation, the Contractor confirmed that there has been no construction work being conducted before 07:00. Nevertheless, the Contractor has scheduled the concerned work to be commenced at 08:00 as on 17 July 2003.	17-Jun-03	
097	27-Jun-03	Complaint from Mr Fok of Kai Shing Management Services regarding noise nuisance and the ponding of stagnant water arising from the construction activities outside Sea Crest Villa Phase III.	Upon investigation, the condition of water pumps installed separately at east end of the slope close to SCV Phase III and Pai Min Kok Stream Course has been checked. Noise generated from the ongoing construction works in these areas has been monitored. The rock breaking with jackhammer at PMK had been completed on 26 June 2003.	4-Jul-03	After further enquiry into the nature of the complaint, its appears that the complaint refers to the extended duration of construction works in the concerned area (i.e. inconvenienve caused due to lengthy works program). The Contrator's Mr Peter Ip has explained the nature of the works to the Management Office. There have been no further complaints from SCV Phase III since the briefing.

Log Record on Environmental Complaints

No.	Date of Complaint Received	Description	Propopsed Actions	Completion Date	Remarks
103	31-Jul-03	Complaint from Hong Kong Management Office regarding the noise generated by vehicles running over the steel decking plate on the Castle Peak Road close to Hong	The existing steel decking plate had been repaired during off peak hours and regular inspection on the condition of steel plate and adjacent road surface was agreed to be conducted.	5-Aug-03	There had been no further complaints after the repair.
105	13-Aug-03	Complaint from Mr Chow of Sham Tseng regarding fell of all old trees along section of Castle Peak Road near Ma Wan Pier.	After investigation on the matter, it had been confirmed that the felling and the transplanting of group of trees along the Castle Peak Road near Ma Wan Pier had been carried out in compliance with approved plans and schedules. No follow up is required.	16-Aug-03	
108	11-Sep-03	Complaint from Mr Edith Lee of Sea Creat Villa Phase I complained that it was very dusty at her house and she found that there was no water spraying at the construction site of the slope near Ma Wan Pier.	After investigation on the matter, water browser was arranged for spraying through the haul road. Rock breaking location would be sprayed directly connected from water supply point. To follow up the case, water browser would be arranged every 2 to 3 hours depends on drying up condition. A worker would be arranged for spraying water through out the rock breaking process.	11-Sep-03	
112	10-Oct-03	Complaint from Mr Cheung of FEHD that egarding the general refuse being accumulating on the pedestrian walkway between Sea Crest Villa Phase III and Phase II and the drainage channel at Pai Min Kok Village.	Investigation was conducted immediately on 11 October 2003. It was observed that the pedestrian walkway and Outfall I had been tidied up except at the corner of Sea Crest Villa Phase III where a broken umbrella and some broken traffic light was lying on the ground. Immediate action was taken to remove the broken umbrella and signal lights. The site area would be maintained regularly. It was noted that wooden formwork and construction materials might possibly been mistaken to be rubbish.	13-Oct-03	