

Highways Department

**Route 8 (previously known as Route 9) between
Cheung Sha Wan & Sha Tin**

**Contract No. HY/2003/10 - Environmental Team for
Lai Chi Kok Viaduct and Eagle's Nest Tunnel**

**Quarterly EM&A Report
Part I – Lai Chi Kok Viaduct (Version 1.0)**

June to August 2006

Approved By



(Environmental Team Leader)

REMARKS:

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

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EXECUTIVE SUMMARY

- This is the eleventh Quarterly Environmental Monitoring and Audit (EM&A) Report prepared by Cinotech Consultants Limited for the "Route 8 (previously known as Route 9) between Cheung Sha Wan & Sha Tin, Lai Chi Kok Viaduct & Eagle's Nest Tunnel". This summary report documents the findings of EM&A works performed in the period between March and May 2006 for Contract No. HY/2003/01, Route 8 – Lai Chi Kok Viaduct (the Project).
- The major site activities undertaken in the reporting period included bulk excavation works, retaining wall constructions, drainage works, segment erection by launching gantry at Abutment M, Construction of Wai Man Tsuen Pump House and Irrigation Pump House near Pier C14.

Environmental Monitoring Works

- Environmental monitoring for the Project was performed regularly as stipulated in the EM&A Manuals and the results were checked and reviewed. Environmental site audits were conducted once per week. The implementation of the environmental mitigation measures, Event Action Plans and environmental complaint handling procedures were also checked.
- Summary of the events and action taken in the reporting quarter is tabulated in **Table I**.

Table I Summary Table for Events Recorded in the Reporting Quarter

Parameter	No. of Exceedance		No. of Events due to the Project	Action Taken
	Action Level	Limit Level		
<i>June 2006</i>				
1-hr TSP	0	0	0	N/A
24-hr TSP	0	0	0	N/A
Noise	2 ^a	0	0	Complaint Investigation.
<i>July 2006</i>				
1-hr TSP	0	0	0	N/A
24-hr TSP	0	0	0	N/A
Noise	0	0	0	N/A
<i>August 2006</i>				
1-hr TSP	0	0	0	N/A
24-hr TSP	0	0	0	N/A
Noise	1 ^a	0	0	Complaint Investigation

Remarks:

- (a) Three noise action level exceedances were recorded due to a noise complaint received on 9 June, 26 June and 31 August 2006.

Environmental Licensing and Permitting

- Licenses/Permits granted to the Project include the Environmental Permit (EP) for the Project, Construction Noise Permits (CNP) and Water Discharge Licenses (WDL). The Contractor had also registered as a Chemical Waste Producer.

Key Information in the Reporting Quarter

- Summary of key information in this reporting quarter is tabulated in **Table II**.

Table II Summary Table for Key Information in the Reporting Quarter

Event	Event Details		Action Taken	Status	Remark
	Number	Nature			
Complaint received	4	2 on noise, 1 on noise, dust and water quality and 1 on dust	Complaint investigation	Closed	---
Changes to the assumptions and key construction / operation activities recorded	0	---	N/A	N/A	---
Status of submissions under EP	0	---	N/A	N/A	---
Notifications of any summons & prosecutions received	0	---	N/A	N/A	---
<p>Future Key Issues:</p> <p>Major site activities for the coming month include:</p> <ul style="list-style-type: none"> • Rock dowel installation at slope CCR-S1 & CCR-S4. • Bulk excavation works at slope CCR-S4, CCR-R3 and CCR-R6. • Retaining wall construction at CCR-R1 to CCR-R6 and LCK-R1 to LCK-R2. • Drainage works at Rest Garden area, Hoi Lai Estate and Castle Peak Road. • Offsite fabrication of parapet and noise barrier. • Cast in-situ of slip roads C and D. • Parapet installation for Main Viaduct and slip roads A to D. • Erection of noise barrier at slip roads A, C and D. • Construction of Wai Man Tsuen pump house and Irrigation Pump House near Pier C14. <p>The anticipated environmental impacts will be mainly on air impact from bulk excavation works, noise impact from construction of Wai Man Tsuen pump house, and water quality impact during rainy season.</p>					

1. INTRODUCTION

- 1.1 Route 9 (Kowloon Section) (R9K) (hereinafter call the R9K-Project) forms part of the Route 9 between Cheung Sha Wan and Sha Tin (R9-CSWST) project, which will be a new expressway connecting West Kowloon and Sha Tin. It will be the fourth external link between Sha Tin and Kowloon and will form an important link between the northeast New Territories and the west Kowloon, Lantau Island and the western New Territories. R9K is being managed and implemented by the Highways Department (HyD).
- 1.2 The engineering design of R9K is covered under Agreement No. CE 50/98 "Route 9 between Cheung Sha Wan and Sha Tin – Design Construction Assignment". The main consultant engaged under Agreement No. CE 50/98 is Maunsell Hyder Joint Venture (MHJV), who will act as the Engineer for the construction contracts. The works of R9K mainly comprise a 1.4km dual 3-lane Lai Chi Kok Viaduct from Lai Wan Interchange to Butterfly Valley; 0.5 km of dual 3-lane at-grade carriageway linking to the 2.1 km dual 3-lane twin-bore Eagle's Nest Tunnel with associated portal buildings; a toll plaza with an administration building located with the Sha Tin valley woodland; a ventilation building and an adit; associated noise barriers, noise enclosures, drainage, slope and landscape works; and electrical and mechanical works for the whole R9-CSWST. The remainder of the R9-CSWST forms the Sha Tin Section (R9S) of the project and is being managed and implemented separately by the Civil Engineering and Development Department (CEDD).
- 1.3 The R9-CSWST project is a Designated Project under the Environmental Impact Assessment Ordinance (Cap. 449) (EIAO). An environmental impact assessment (EIA) report has been prepared in 1998 for the R9-CSWST project (1998 R9 EIA) to consider the key issues of noise, air quality, water quality, ecological, construction waste, landscape and visual, land use and cultural impacts, and identify possible mitigation measures.
- 1.4 An Updated Final EIA report was subsequently completed in August 1999 for the R9-CSWST project (1999 R9 EIA), to cater for some changes in R9K portion as mentioned in paragraph 1 in the report. The 1999 R9 EIA was endorsed by Environmental Protection Department (EPD) in November 1999. The 1998 R9 EIA and the 1999 R9 EIA (R9 EIA Reports) were included in the EIA register under the EIAO as report no. EIA-135/BC and AEIAR-022/1999 respectively. An Environmental Monitoring and Audit (EM&A) Manuals for each of the R9 EIA Reports (EM&A Manuals) were also included as part of the EIA reports in the register.
- 1.5 Subsequent to the endorsement of the R9 EIA Reports by EPD in November 1999, the project programme was deferred to start in 2002/2003 for completion by 2006/07. The implementation of the project was then separated into the R9S and R9K portion. An Environmental Permit (EP) No. EP-103/2001 was issued on 17 September 2001 for R9K to the HyD as Permit Holder. A varied EP-103/2001/C was recently issued on 22 July 2005.

- 1.6 The major construction activities of two civil contracts of the R9K project, Contract No. HY/2003/01 entitled "Route 9 – Lai Chi Kok Viaduct" and Contract No. HY/2003/02 entitled "Route 9 – Eagle's Nest Tunnel and Associated Works", were commenced in 15th December 2003 for completion in April 2007.
- 1.7 "Route 9" was recently re-titled as "Route 8 (previously known as Route 9)". Cinotech Consultants Limited (Cinotech) was commissioned by HyD to undertake the Environmental Monitoring and Audit works for "Route 8 (previously known as Route 9) between Cheung Sha Wan and Sha Tin - Environmental Team (ET) for Lai Chi Kok Viaduct and Eagle's Nest Tunnel (Contract No. HY/2003/10)". Dr. Priscilla CHOY of Cinotech was appointed as the ET Leader under Condition 2.2 of the EP. Mr. David YEUNG of CH2M-HILL Hong Kong Ltd. was appointed as the IEC under Condition 2.1 of the EP. This is the eleventh quarterly EM&A report summarizing the EM&A works for the LCKV Project between June and August 2006.

2. PROJECT CHARACTERISTICS

Project Organization and Contacts of Key Management

- 2.1 An organization structure and the line of communication were set up for the Project between the Project Proponent, Engineer's Representative (ER), Independent Environmental Checker (IEC), the Contractor and Environmental Team (ET). The organization chart and contact details are shown in **Figure 2** and **Appendix A**.

Construction Programme and Synopsis of Work

- 2.2 The construction programme is presented in **Appendix B**. The site activities during the reporting period include:
- Bulk excavation works at slope CCR-S1, CCR-S4, CCR-R3, CCR-R4 and CCR-R6.
 - Retaining wall construction at CCR-R1 to CCR-R6 and LCK-R1 to LCK-R3.
 - Drainage works at Rest Garden area, Hoi Lai Estate, piers B1 and Hoi Lai Estate.
 - Offsite fabrication of pre-cast deck segment moulds, segment casting, parapet and noise barrier.
 - Segment erection by launching gantry at pier P21 and Abutment M.
 - Cast in-situ of slip road C and D
 - Erection of noise barrier at slip roads A.
 - Construction of Wai Man Tsuen Pump House and Irrigation Pump.
 - Parapet installation for slip roads A-D and main viaduct.
 - Construction of Pier P21 and cross head of column at pier.
 - Soil nail installation at slope CCR-S4.
 - Segment erection by lifting crane at Piers P1, P5, P17, P18, PA/R, P1/R, P4/R, P18/R, PA/L, D1 to D3, D7 to D9, C6, Abutment M and Abutment D.
 - Parapet installation for Main Viaduct and slip roads A to D.
 - Construction of Pier 21, cross head of column at Pier 21;
 - Raking excavation works at CCR-S1, CCR-S4, CCR-R5 and CCR-R6;

3. ENVIRONMENTAL MONITORING AND AUDIT REQUIREMENTS

Monitoring Parameters and Monitoring Locations

- 3.1 The EM&A Manuals designate locations for the ET to monitor environmental impacts in terms of noise and air quality due to the Project. The monitoring locations are depicted in **Figure 1**. **Appendix C** gives details of monitoring requirements.

Monitoring Methodology and Calibration Details

- 3.2 Monitoring works/equipments were conducted/calibrated regularly in accordance with the EM&A Manual. Copies of calibration certificates are attached in the appendices of the Monthly EM&A Reports.

Environmental Quality Performance Limits (Action and Limit Levels)

- 3.3 The environmental quality performance limits, i.e. Action and Limit Levels were derived from the baseline monitoring results. Should the measured environmental quality parameters exceed the Action/Limit Levels, the respective Event Action Plans would be implemented. The Action/Limit Levels for each environmental parameter are provided in **Appendix D**.

Environmental Mitigation Measures

- 3.4 Relevant mitigation measures as recommended in the project EIA report have been stipulated in the EM&A Manual for the Contractor to implement. A list of mitigation measures is provided in **Appendix G**.

4. MONITORING RESULTS

Weather Conditions

- 4.1 The weather during monitoring sessions was mainly fine, sunny or cloudy. The weather conditions for each individual monitoring session were presented in the field record sheets.

Air Quality

1-hr TSP Monitoring

- 4.2 All 1-hr TSP monitoring was conducted as scheduled, except for the noise monitoring at Station NM4 on 13 June 06 due to raining when ET conducted the noise monitoring at this station. The noise monitoring was rescheduled from 13 June 06 to 14 June 06. Besides, all monitoring Stations (NM4, NM8a, NM8b and NM9) on 28 June 06 were

also rescheduled on 30 June 06 because Typhoon Signal No.1 was hoisted on 28 June 06. No Action / Limit Level exceedance was recorded in the reporting quarter.

24-hr TSP Monitoring

- 4.3 All 24-hr TSP monitoring was conducted as scheduled, except for the noise monitoring at Station NM4 on 13 June 06 due to raining when ET conducted the noise monitoring at this station. The noise monitoring was rescheduled from 13 June 06 to 14 June 06. Besides, all monitoring Stations (NM4, NM8a, NM8b and NM9) on 28 June 06 were also rescheduled on 30 June 06 because Typhoon Signal No.1 was hoisted on 28 June 06. No Action / Limit Level exceedance was recorded in the reporting quarter.
- 4.4 As noted by the monitoring team, road traffic dust from Ching Cheung Road was identified as the major dust source at the monitoring station during the monitoring.
- 4.5 The monitoring data of 1-hr and 24-hr TSP Levels are attached in the appendices of the Monthly Reports for June to August 2006. The graphical presentations of the monitoring results are shown in **Appendix E**.

Construction Noise

- 4.6 All construction noise monitoring was conducted as scheduled in this reporting quarter except on 2 August 2006. The monitoring at all Stations (NM4, NM8a, NM8b and NM9) on that date was cancelled as Typhoon Signal No. 1 was hoisted.
- 4.7 Three action level exceedances were recorded due to noise complaints were received on 9 June, 26 June and 31 August 2006, triggering noise Action Level exceedances. The details can refer to **Appendix I**.
- 4.8 At Stations NM4, NM8a and NM8b, the measured noise levels during the monitoring exercises were mainly contributed from the road traffic noise. On the other hand, the major noise source for the monitoring at Station NM9 was coming from the construction activities of the Project.
- 4.9 All the Construction Noise Levels (CNLs) reported in this report were adjusted with the corresponding baseline level (i.e. Measured Leq – Baseline Leq = Measured CNL), in order to facilitate the interpretation of the noise exceedance.
- 4.10 The monitoring data of construction noise are attached in the appendices of the Monthly Reports for June to August 2006. The graphical presentations of the monitoring results are shown in **Appendix F**.

5. ENVIRONMENTAL AUDIT

Implementation Status of Environmental Mitigation Measures

- 5.1 According to the Environmental Permit and the EM&A Manuals, the mitigation measures detailed in the documents are required to be implemented. An updated summary of the Environmental Mitigation Implementation Status (EMIS) is provided in **Appendix G**.

Site Audit Summary

- 5.2 ET's weekly site audits were conducted on 5, 14, 21 and 28 June 2006, 3, 12, 19 and 26 July 2006, 2, 7, 16, 23 and 30 August 2006. IEC's monthly site audits were conducted on 5 June, 3 July and 7 August 2006 together with ET.
- 5.3 During site inspections in the reporting period, no non-conformance was identified. The observations and recommendations are summarized in **Table 5.1**.

Table 5.1 Observations and Recommendations of the Site Audits

Parameters	Date	Observations and Recommendations	Follow-up
<i>Water Quality</i>	5-Jun-06	The contractor was recommended to improve the position or the size of existing noise barrier at slope S4 for reducing the noise emitted to Mei Foo Sun Estate.	The situation was found improved / rectified during the audit on 14-Jun-06.
	5-Jun-06	The contractor was also reminded to take attention for the stagnant water after rainy to avoid mosquito breeding.	The situation was found improved / rectified during the audit on 14-Jun-06.
	14-Jun-06	Some yellow water accidentally discharged to the nullah was found at pier P17. Suitable drainage system or other measures should be provided to prevent it directly discharge nullah without treatment.	The situation was found improved / rectified during the audit on 21-Jun-06.
	28-Jun-06	The Contractor was reminded that the exposed slope surface should be entirely covered by the existing tarpaulin at Pier 17L.	The situation was found improved / rectified during the audit on 3-Jun-06.
	3-Jul-06	Accumulation of stagnant water was observed after rains inside the works area such as at the area of Lai Po Road and C14. The Contractor was reminded to spray with larvicide or pump away the stagnant water to prevent mosquito from breeding.	The situation was found improved / rectified during the audit on 12-Jul-06.
	3-Jul-06	The water pump connecting to Aquased idled at catchpit of Pier 17. The Contractor instructed a worker to switch on the water pump immediately. However, the Contractor was reminded to ensure that the water pump has been well maintained.	The situation was found improved / rectified during the audit on 12-Jul-06.

Parameters	Date	Observations and Recommendations	Follow-up
	7-Aug-06	Accumulation of stagnant water was observed after rain at the deck of Bridge Area, D13 and S1. The Contractor was reminded to remove/spray larvicide onto stagnant water preventing mosquitoes from breeding.	The situation was found improved / rectified during the audit on 16-Aug-06.
	7-Aug-06	Sand and silt were observed inside the trench at the discharge outlet of the Aquased, at R3. The Contractor was reminded to remove sand and silt. Besides, the Contractor was reminded to review the Sedimentation System to maintain its efficiency.	The situation was found improved / rectified during the audit on 16-Aug -06.
	30-Aug-06	Accumulation of stagnant water was observed at LCK-R2. The Contractor was reminded to remove/spray larvicide onto stagnant water preventing mosquitoes from breeding.	The situation was found improved / rectified during the audit on 4-Sep -06.
Chemical Management	7-Aug-06	General refuses were scattered on the ground at Abutment B. The Contractor was reminded to clear refuses regularly.	The situation was found improved / rectified during the audit on 16-Aug -06.

Status of Environmental Licensing and Permitting

5.4 Environmental licenses and permits including the Environmental Permit for the Project were in place and valid during the reporting quarter. The status of all licenses and permits obtained for the Project is summarized in **Appendix H**.

6. NON-COMPLIANCE (EXCEEDANCES) OF THE ENVIRONMENTAL QUALITY PERFORMANCE LIMITS (ACTION AND LIMIT LEVELS)

Summary of Exceedances

Air Quality

6.1 No Action / Limit Level exceedance was recorded in the reporting quarter.

Construction Noise

6.2 Three Action Level exceedances were triggered by noise complaints received on 9 June, 26 June and 31 August 2006. No Limit Level exceedances were recorded.

Review of the Reasons for and the Implications of Non-compliance

6.3 There was no non-compliance from the site audits in the reporting quarter. As mentioned previously in the Section 5.2 of this report, the observations and recommendations made in each individual site audit session were presented.

7. ENVIRONMENTAL COMPLAINTS

7.1 Four environmental complaints were received in the reporting period.

Log no. 60609 (Received on 9 June 06) and Log no. 60626 (Received on 26 June 06)

7.2 The two complaints were considered the same because the complainants made the complaints to ICC through two channels – by phone on 8 June 2006 and through facsimile on 12 June 2006. The complaints were about the noise generated from rock excavation work from 9 a.m. to 6 p.m. at the area between Ching Cheung Road and Mei Lai Road (near Phase 5 Mei Foo Sun Chuen). As advised by the RSS, silent rock breaking equipment has been used and noise barriers were erected to minimize the noise impact generated from the breaking activity. Ad-hoc inspections were conducted by the ET on 14, 16 and 30 June 2006 and all the results were well below the noise criteria of 75 dB(A). Based on the information collected, the complaint was considered not justifiable. The complaint report was issued on 22 June 2006 and 5 July 2006.

Log no. 60830 (Received on 30 August 06)

7.3 The complaint was referred by the Integrated Complaint Centre (ICC) on 30 August 2006 about dust generated by the rock drilling work at the area between Mei Foo and Lai King Hill Road. According to RSS's record, rock dowel installation for slope stabilization at CCR-S1 was commenced on 22 August 2006 and would likely last for at least 6 months. As advised by the RSS, tarpaulin sheet covering and water spraying were provided by the Contractor to mitigate the dust nuisance generated from the rock drilling works. During the monthly site inspection on 4 September 2006, the ET observed that the work area was enclosed by tarpaulin sheets at three sides. Water was sprayed continuously at the drilling hole and head of the drilling rig was enclosed with a wet thick towel. Based on the information collected and the monitoring results, the complaints are considered not justifiable. The investigation report was issued on 14 September 2006.

Log no. 60831 (Received on 31 August 06)

7.4 The complaint was referred by the Environmental Protection Department (EPD) to the Environmental Team (ET) Leader of the Project on 31 August 2006 regarding construction noise, dust and wastewater discharge between Lai Wan Road and Lai King Hill Road. According to RSS's record, rock dowel installation for slope stabilization at CCR-S1 was commenced on 22 August 2006 and would likely last for at least 6 months. With reference to RSS's site diary, all site activities including drilling works at the concerned area were conducted between 8:00 and 18:00 daily. Ad hoc site observation carried out by the RSS confirmed that no construction activity was carried out after 18:00. Based on the information collected, the complaints were considered not justifiable. The investigation report was issued on 14 September 2006.

- 7.5 There were 29 complaints received since the Project commencement. All complaints have been handled in accordance with the EM&A Manuals. The implementation status of the complaint handling procedure is summarized in **Appendix I**.

8. NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTIONS

8.1 Further to incident of mosquito larvae being identified in a plant pot drip tray on 21 July 2005 during FEHD's site inspection, the Contractor was prosecuted under the Public Health and Municipal Services Ordinance (Cap.132). After the hearing on 6 December 2005, the Contractor was fined \$5,000 by the Kowloon City magistrate's court.

There was 1 successful prosecution received since the Project commencement.

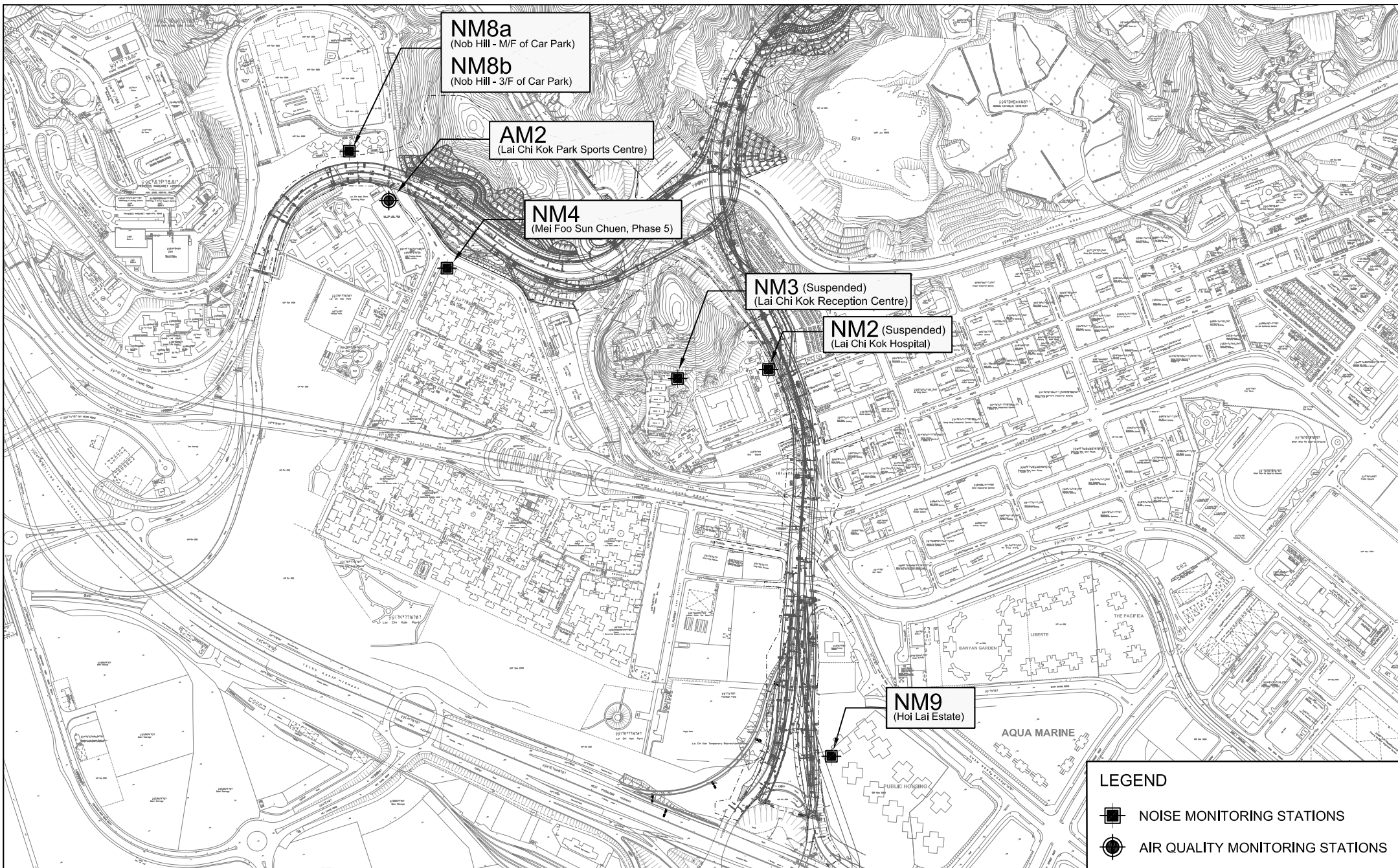
9. COMMENTS, CONCLUSIONS AND RECOMMENDATIONS

9.1 Major site activities for the coming month include:

- Rock dowel installation at slope CCR-S1 & CCR-S4.
- Bulk excavation works at slope CCR-S4, CCR-R3 and CCR-R6.
- Retaining wall construction at CCR-R1 to CCR-R6 and LCK-R1 to LCK-R2.
- Drainage works at Rest Garden area, Hoi Lai Estate and Castle Peak Road.
- Offsite fabrication of parapet and noise barrier.
- Cast in-situ of slip roads C and D.
- Parapet installation for Main Viaduct and slip roads A to D.
- Erection of noise barrier at slip roads A, C and D.
- Construction of Wai Man Tsuen pump house and Irrigation Pump House near Pier C14.

9.2 The anticipated environmental impacts will be mainly on on air impact from bulk excavation works, noise impact from construction of Wai Man Tsuen pump house, and water quality impact during rainy season

FIGURES



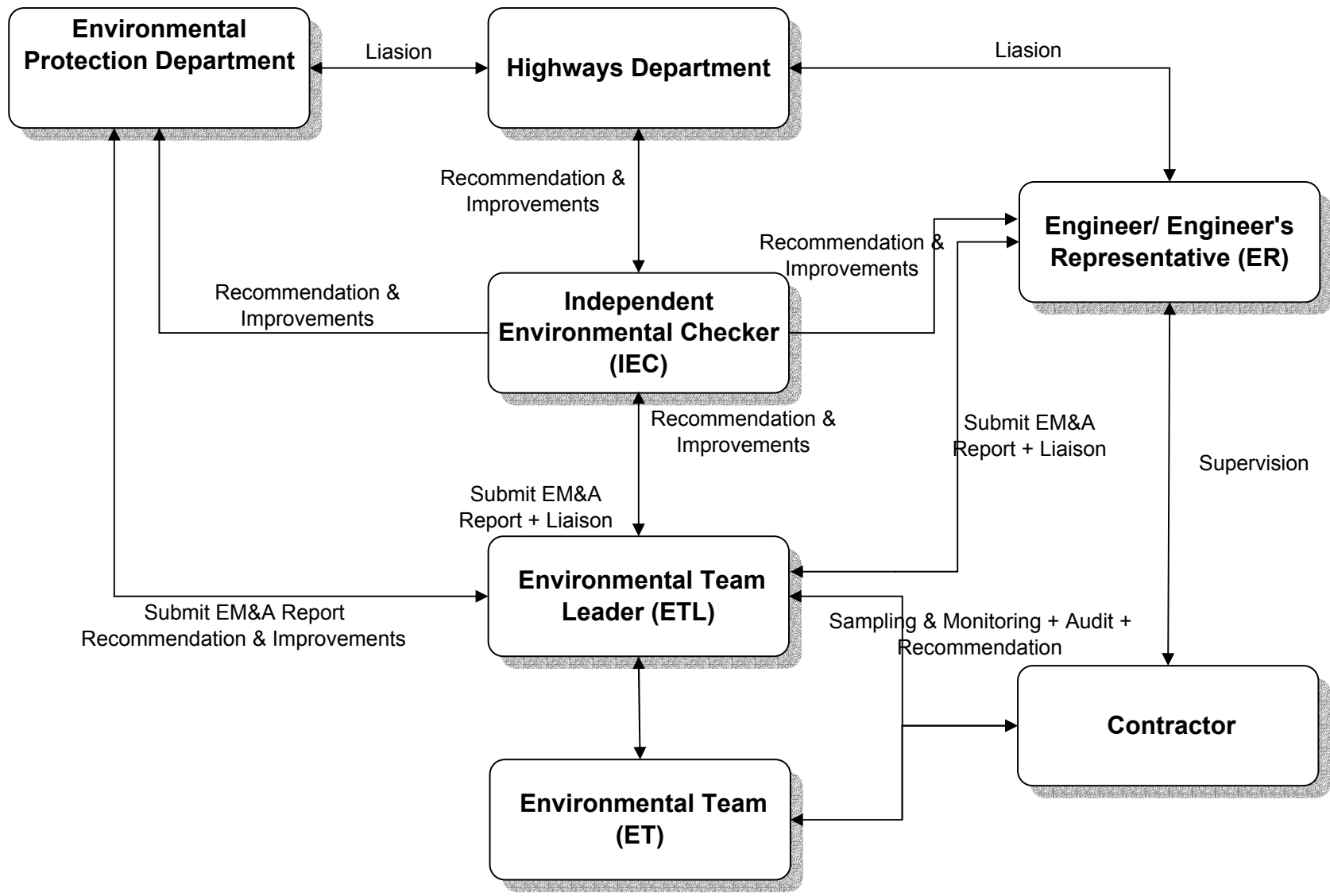
LEGEND	
	NOISE MONITORING STATIONS
	AIR QUALITY MONITORING STATIONS

Title ROUTE 8 (PREVIOUSLY KNOWN AS ROUTE 9) BETWEEN CHEUNG SHA WAN AND SHA TIN
CONTRACT HY/2003/01 - LAI CHI KOK VIADUCT

LOCATIONS OF MONITORING STATIONS

Scale	1 : 8000 (A4)	Project No.	MA3024
Date	2006	Figure No.	1





Title ROUTE 8 (PREVIOUSLY KNOWN AS ROUTE 9) BETWEEN CHEUNG SHA WAN AND SHA TIN
 CONTRACT NO. HY/2003/01 - LAI CHI KOK VIADUCT

Environmental Monitoring and Audit Organization Chart

Scale	N.T.S	Project No.	MA3024
Date	2006	Figure	2



**APPENDIX A
CONTACT DETAILS OF THE PROJECT
ORGANISATION**

Appendix A - Contact Details of the Project Organisation (LCKV)

Party	Role	Name	Position	Phone No.	Fax No.
HyD	Permit Holder	Mr. Kroc Leung	SE2/R8K	2762 3662	2714 5198
		Mr. Esther Yung	E1/R8K	2762 3677	
		Mr. L.C. Chung	E4/R9K	2762 3613	
MHJV	Engineer	Mr. Conrad Ng	Project Manager	2605 6262	2691 2649
	Engineer's Representative	Mr. D.F. Lilliman	CRE	2959 0010	2959 0290
		Mr. Henry Liu	SRE	2991 1068	
Mr. Joseph Chi	RE	2991 1034			
Cinotech	Environmental Team	Dr. Priscilla Choy	The ET Leader	2151 2089	3107 1388
		Mr. Edmond Wu	Audit Team Leader	2151 2092	
		Mr. Henry Leung	Monitoring Team Leader	2151 2087	
CH2M-HILL	Independent Environmental Checker	Mr. David Yeung	Independent Environmental Checker	2872 2934	2507 2293
		Mr. Billy Yu	Assistant Independent Environmental Checker	2872 2949	
Assiona	Contractor	Mr. William D. Payne	Project Director	2956 3300	2956 3331
		Mr. Lawrence Kwok	QA/E Manager		
24-hour Emergency Hotline				2370 9200	-

APPENDIX B
CONSTRUCTION PROGRAMME

Activity ID	Activity Description	Orig. Durn.	Early Start	Early Finish	Late Start	Late Finish	2006																	
							MAR			APR			MAY			JUN								
							13	20	27	3	10	17	24	1	8	15	22	29	5	12	19	26		
Preliminaries & General Requirements																								
Portion Access Dates																								
PD1140	Access to Portion F1	0	17APR06*		17APR06*																			
PD1150	Access to Portion F2	0	17APR06*		17APR06*																			
PD1160	Anticipated Access to Portion F3	0	20MAR06*		08DEC05*		◆																	
Design of Temporary Works																								
TW1280	Design of Temp Works for Retaining Wall CCR-R4	36	20MAR06	02MAY06	13APR06	25MAY06																		
TW1370	Design of Temp Works for Feature 11NW-A/C66	36	20MAR06	02MAY06	27APR06	08JUN06																		
TW1380	Design of Temp Works for Feature 11NW-A/FR54&55	36	20MAR06	02MAY06	06JUN05	19JUL05																		
TW1440	Design of Temporary Works for Pumping Stations	36	20MAR06	02MAY06	21FEB06	04APR06																		
TW1450	Design of T/Works for Erection of Noise Encl'res	36	20MAR06	02MAY06	28SEP05	10NOV05																		
TW1460	Design of T/Works for Erection of Noise Barriers	36	20MAR06	02MAY06	09JUN06	22JUL06																		
Monitoring & Instrumentation - New Works																								
IM3010	Install Instrumentation @ Cut Slope CCR-S1	12	20MAR06	01APR06	16MAY08	29MAY08																		
IM3015	Monitoring @ Cut Slope CCR-S1	387*	20MAR06	03JUL07	16MAY08	15MAY08																		
IM3020	Install Instrumentation @ Cut Slope CCR-S2	12	18APR06	02MAY06	16MAY08	29MAY08																		
IM3025	Monitoring @ Cut Slope CCR-S2	363*	18APR06	03JUL07	16MAY08	15MAY08																		
IM3030	Install Instrumentation @ Cut Slope CCR-S3	12	20MAR06	01APR06	16MAY08	29MAY08																		
IM3035	Monitoring @ Cut Slope CCR-S3	387*	20MAR06	03JUL07	16MAY08	15MAY08																		
IM3050	Install Instrumentation @ Cut Slope CCR-S5	12	20MAR06	01APR06	16MAY08	29MAY08																		
IM3055	Monitoring @ Cut Slope CCR-S5	387*	20MAR06	03JUL07	16MAY08	15MAY08																		
IM3060	Install Instrumentation @ Cut Slope CCR-S6	12	20MAR06	01APR06	16MAY08	29MAY08																		
IM3065	Monitoring @ Cut Slope CCR-S6	387*	20MAR06	03JUL07	16MAY08	15MAY08																		
IM3080	Install Instrumentation @ Slope 11NW-A/C26	12	20MAR06	01APR06	16MAY08	29MAY08																		
IM3085	Monitoring @ Slope 11NW-A/C26	387*	20MAR06	03JUL07	16MAY08	15MAY08																		
IM3130	Install Instrumentation @ Piers P1 to P6	12	20MAR06	01APR06	16MAY08	29MAY08																		
IM3135	Monitoring @ Piers P1 to P6	387*	20MAR06	03JUL07	16MAY08	15MAY08																		
IM3140	Install Instrumentation @ Piers P7 to P10	12	20MAR06	01APR06	16MAY08	29MAY08																		
IM3145	Monitoring @ Piers P7 to P10	387*	20MAR06	03JUL07	16MAY08	15MAY08																		
IM3150	Install Instrumentation @ Piers P11 to P15	12	20MAR06	01APR06	16MAY08	29MAY08																		
IM3155	Monitoring @ Piers P11 to P15	387*	20MAR06	03JUL07	16MAY08	15MAY08																		
IM3160	Install Instrumentation @ Piers P16 to P18	12	20MAR06	01APR06	16MAY08	29MAY08																		
IM3165	Monitoring @ Piers P16 to P18	387*	20MAR06	03JUL07	16MAY08	15MAY08																		

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Activity ID	Activity Description	Orig. Durn.	Early Start	Early Finish	Late Start	Late Finish	2006																
							MAR			APR			MAY			JUN							
							13	20	27	3	10	17	24	1	8	15	22	29	5	12	19	26	
IM3170	Install Instrumentation @ Piers P19 to Abut. M	12	20MAR06	01APR06	16MAY08	29MAY08																	
IM3175	Monitoring @ Piers P19 to Abut. M	387*	20MAR06	03JUL07	16MAY08	15MAY08																	
IM3180	Install Instrumentation @ Piers on Slip Road A	12	20MAR06	01APR06	16MAY08	29MAY08																	
IM3185	Monitoring @ Piers on Slip Road A	387*	20MAR06	03JUL07	16MAY08	15MAY08																	
IM3190	Install Instrumentation @ Piers on Slip Road B	12	20MAR06	01APR06	16MAY08	29MAY08																	
IM3195	Monitoring @ Piers on Slip Road B	387*	20MAR06	03JUL07	16MAY08	15MAY08																	
IM3200	Install Instrumentation @ Piers on Slip Road C	12	20MAR06	01APR06	16MAY08	29MAY08																	
IM3205	Monitoring @ Piers on Slip Road C	387*	20MAR06	03JUL07	16MAY08	15MAY08																	
IM3210	Install Instrumentation @ Piers on Slip Road D	12	20MAR06	01APR06	16MAY08	29MAY08																	
IM3215	Monitoring @ Piers on Slip Road D	387*	20MAR06	03JUL07	16MAY08	15MAY08																	
Temporary Traffic Management Schemes																							
TT1245	30th. TMLG Meeting	1	17APR06	17APR06	05MAR05	05MAR05																	
TT1250	31st. TMLG Meeting	1	22MAY06	22MAY06	04FEB06	04FEB06																	
TT1255	32nd. TMLG Meeting	1	19JUN06	19JUN06	11MAR06	11MAR06																	
Procurement																							
Segmental Deck Casting (Type A Units)																							
SD2720	P20/L (North)-Down - Cast 13 seg Type A	22	09MAR06A	30MAR06	09MAR06A	04FEB06																	
SD2720A	P20/L (North)-Up - Cast first 6 seg Type A	9	12MAR06A	21MAR06	12MAR06A	11JAN06																	
SD2715	P20/R (South)-Down - Cast 12 seg Type A	20	03MAR06A	23MAR06	03MAR06A	28JAN06																	
SD2710	P20/R (South)-Up - Cast 12 seg Type A	19	22MAR06	11APR06	12JAN06	04FEB06																	
SD2720B	P20/L (North)-Up - Cast last 7 seg Type A	14	24MAR06	08APR06	06FEB06	20FEB06																	
SD2740A	P21/R (South)-Up - Cast 9 seg Type A	16	31MAR06	17APR06	06FEB06	22FEB06																	
SD2740	P21/R (South)-Down - Cast 9 seg Type A	16	09APR06	26APR06	01MAR06	17MAR06																	
SD2730A	P21/L (North)-Up - Cast 8 seg Type A	15	12APR06	28APR06	23FEB06	11MAR06																	
SD2730	P21/L (North)-Down - Cast 8 seg Type A	15	18APR06	05MAY06	23FEB06	11MAR06																	
SD2750	Abutment M/L (South) - Cast 5 seg Type A	12	27APR06	10MAY06	22MAR06	04APR06																	
SD2760	Abutment M/R (North) - Cast 4 seg Type A	9	29APR06	09MAY06	25MAR06	04APR06																	
Segmental Deck Casting (Type B Units)																							
SD3490A	P20 Slip C-Down - Cast 13 Segments Type B	20	04MAR06A	28MAR06	04MAR06A	22NOV05																	
SD3480	P20 Slip D-Up - Cast 12 Segments Type B	19	03MAR06A	20MAR06	03MAR06A	19JAN06																	
SD3480A	P20 Slip D-Down - Cast 12 Segments Type B	19	06MAR06A	25MAR06	06MAR06A	11NOV05																	
SD3290	PA/L (North) - Cast 8 seg Type B	16	03MAR06A	20MAR06	03MAR06A	25OCT05																	
SD3490	P20 Slip C-Up - Cast 13 Segments Type B	20	21MAR06	11APR06	20JAN06	14FEB06																	

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							MAR			APR			MAY			JUN					
							13	20	27	3	10	17	24	1	8	15	22	29	5	12	19
SD3380	D7-Up - Cast 12 segments Type B	19	21MAR06	10APR06	26OCT05	16NOV05	SD3380														
SD3380A	D7-Down - Cast 9 segments Type B	16	27MAR06	12APR06	12NOV05	29NOV05	SD3380A														
SD3370	D8-Up - Cast 12 Segments Type B	19	29MAR06	18APR06	23NOV05	14DEC05	SD3370														
SD3370A	D8-Down - Cast 12 Segments Type B	19	11APR06	03MAY06	17NOV05	07DEC05	SD3370A														
SD3500	P21 Slip C-Down - Cast 8 Segments Type B	15	11APR06	27APR06	07MAR06	22MAR06	SD3500														
SD3510	P21 Slip D-Down - Cast 8 Segments Type B	15	13APR06	29APR06	06MAR06	21MAR06	SD3510														
Precast Parapet Panel Casting																					
PP2000	CASTING Type I & VII Parapet Units 1 - 150	55	20OCT05A	06APR06	20OCT05A	19OCT05	PP2000														
PP2010	CASTING Type I & VII Parapet Units 151 - 350	35	07APR06	18MAY06	01NOV05	10DEC05	PP2010														
PP2020	CASTING Type I & VII Parapet Units 351 - 550	35	19MAY06	29JUN06	23DEC05	07FEB06	PP2020														
PP2110	CASTING Type II Parapet Units 266 - 515	55	11FEB06A	13APR06	11FEB06A	16NOV05	PP2110														
PP2120	CASTING Type II Parapet Units 516 - 765	45	14APR06	06JUN06	17NOV05	10JAN06	PP2120														
PP2130	CASTING Type II Parapet Units 766 - 1099	60	07JUN06	18AUG06	11JAN06	24MAR06	PP2130														
PP2200	CASTING Type III Parapet Units 1 - 22	22	20MAR06	14APR06	23SEP05	20OCT05	PP2200														
PP2300	CASTING Type IV Parapet Units 1 - 227	80	20OCT05A	10JUN06	20OCT05A	15OCT05	PP2300														
PP2310	CASTING Type IV Parapet Units 228 - 455	75	12JUN06	09SEP06	17OCT05	13JAN06	PP2310														
PP2400	CASTING Type V & VI Parapet Units 1 - 260	65	21OCT05A	04MAY06	21OCT05A	13OCT05	PP2400														
PP2410	CASTING Type V & VI Parapet Units 2611 - 520	65	05MAY06	21JUL06	14OCT05	29DEC05	PP2410														
PP2420	CASTING Type V & VI Parapet Units 521 - 780	65	19MAY06	05AUG06	28OCT05	13JAN06	PP2420														
Noise Barriers & Enclosures																					
NB1020	Noise Encl' - Slip Rd A - Eng. Review & Approval	28	20MAR06	16APR06	24OCT05	20NOV05	NB1020														
NB1030	Noise Encl' - Slip Rd A - Materials Purchasing	23	28FEB06A	21MAR06	28FEB06A	28SEP05	NB1030														
NB1040	Noise Encl' - Slip Rd A - Off-site Fabrication	64	22MAR06	06JUN06	29SEP05	14DEC05	NB1040														
NB1050	Noise Encl' - Slip Rd A - Delivery to Site	45	26APR06	17JUN06	04NOV05	27DEC05	NB1050														
NB1070	Erection of Noise barrier Mock Up Sample	18	04MAY06	24MAY06	14NOV05	03DEC05	NB1070														
NB1110	Noise Encl' - Slip Rd B - Eng. Review & Approval	28	20MAR06	16APR06	26NOV05	23DEC05	NB1110														
NB1120	Noise Encl' - Slip Rd B - Materials Purchasing	26	20MAR06	21MAR06	29SEP05	30SEP05	NB1120														
NB1130	Noise Encl' - Slip Rd B - Off-site Fabrication	70	22MAR06	13JUN06	03OCT05	23DEC05	NB1130														
NB1140	Noise Encl' - Slip Rd B - Delivery to Site	65	27APR06	14JUL06	08NOV05	24JAN06	NB1140														
NB1200	Noise Encl' - P8 to P11 - Design & Shop Drawings	74	10SEP05A	19MAY06	10SEP05A	08NOV05	NB1200														
NB1210	Noise Encl' - P8 to P11 - Eng. Review & Approval	28	20MAY06	16JUN06	09NOV05	06DEC05	NB1210														
NB1220	Noise Encl' - P8 to P11 - Materials Purchasing	30	28FEB06A	20APR06	28FEB06A	27SEP05	NB1220														
NB1230	Noise Encl' - P8 to P11 - Off-site Fabrication	78	21APR06	24JUL06	28SEP05	30DEC05	NB1230														

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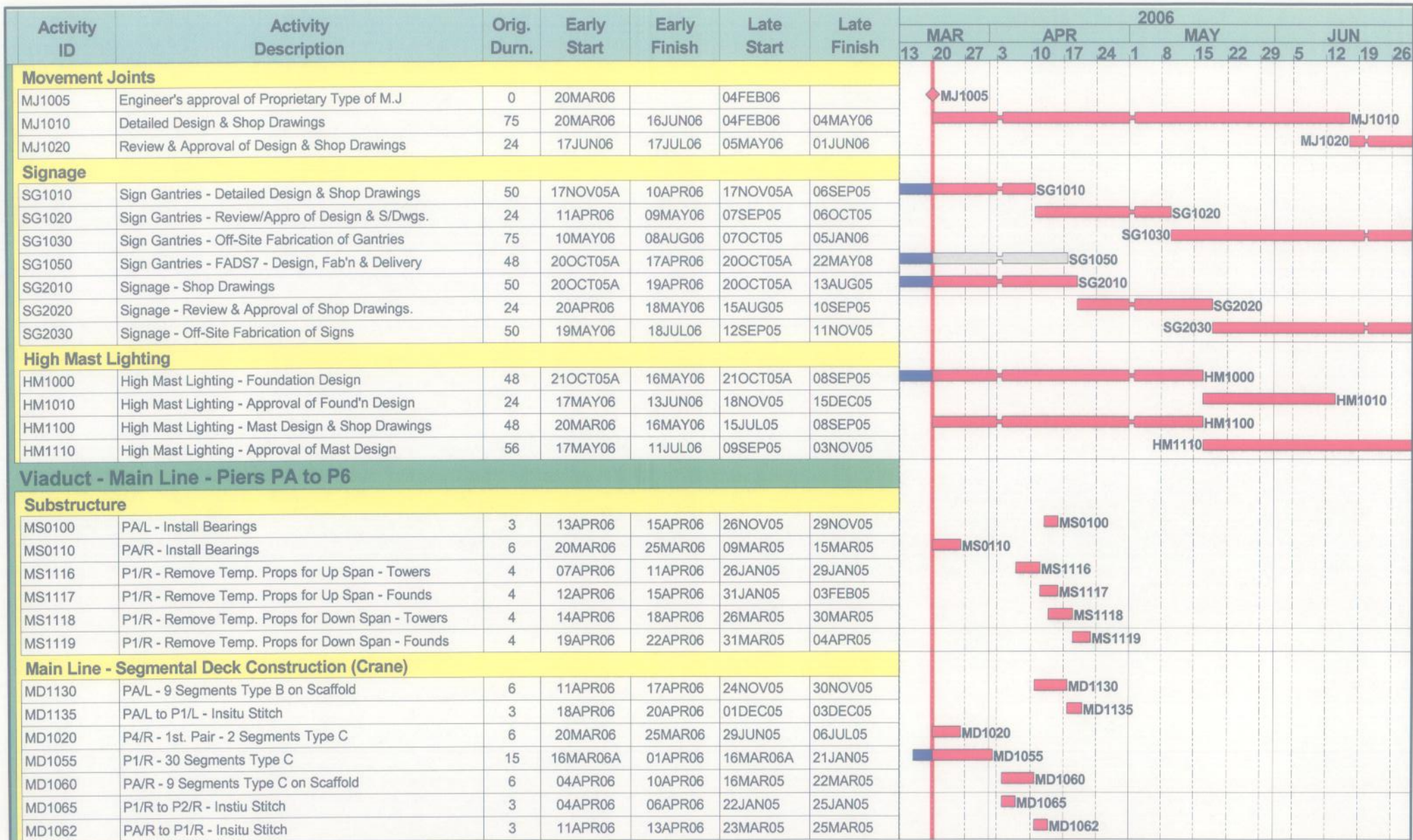
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Activity ID	Activity Description	Orig. Durn.	Early Start	Early Finish	Late Start	Late Finish	2006																		
							MAR			APR			MAY			JUN									
							13	20	27	3	10	17	24	1	8	15	22	29	5	12	19	26			
Main Line - Segmental Deck Const'n (Lift Frames)																									
MD1036	P2/R to P3/R - Insitu Stitch	3	20MAR06	22MAR06	14NOV05	16NOV05																			
MD1025	P4/R - 28 Segments Type C	13	27MAR06	11APR06	07JUL05	21JUL05																			
MD1033	P4/R to P5/R - Insitu Stitch	3	12APR06	14APR06	28NOV05	30NOV05																			
MD1034	P3/R to P4/R - Insitu Stitch	3	12APR06	14APR06	17OCT05	19OCT05																			
Superstructure Finishing Works Required for TCSS																									
MF1005	P3L to P6 - Parapets P3/L to P7/L (incl earthing)	48	05MAY06	30JUN06	21NOV05	17JAN06																			
MF1000	PA to P6 - Parapets PA/L to P3/L (incl earthing)	48	21APR06	16JUN06	05DEC05	03FEB06																			
MF1010	PA to P6 - Parapets PA/R to P3/R (incl earthing)	48	15APR06	10JUN06	20OCT05	14DEC05																			
MF1015	PA to P6 - Insitu Slab to Under Median Barrier	36	20MAR06	02MAY06	14NOV05	24DEC05																			
MF1017	PA to P6 - Median Barrier (incl earthing)	36	11APR06	23MAY06	05DEC05	17JAN06																			
Viaduct - Slip Road A																									
Substructure																									
AS1050	Abutment A - Install Bearings	2	20MAR06	21MAR06	09NOV06	10NOV06																			
Superstructure Finishing Works Required for TCSS																									
AF1010	Slip Rd.A to P7 -Parapets East Face (incl earth)	60	06JAN06A	18APR06	06JAN06A	10NOV05																			
AF1020	Slip Rd.A to P7- Parapets West Face (incl earth)	60	17JAN06A	24APR06	17JAN06A	23NOV05																			
Noise Barriers & Encl' (Sec.15 Excision)																									
AN1000	Slip Rd. A - Full Enclosure Ch.1070 - Pier A2	48	04MAY06	29JUN06	11NOV05	07JAN06																			
AN1010	Slip Rd. A - Full Enclosure Pier A2 - 1280	48	10JUN06	08AUG06	19DEC05	17FEB06																			
Viaduct - Slip Road B																									
Superstructure Finishing Works Required for TCSS																									
BF1010	Slip Rd.B to P7 - Parapets East Face (incl earth)	60	11APR06	21JUN06	08OCT05	17DEC05																			
BF1015	Slip Rd.B to P7 - Parapets West Face (incl earth)	60	24MAY06	04AUG06	24NOV05	07FEB06																			
Remaining Noise Barriers & Enclosures																									
BN1000	Slip Road B - Full Enclosure Ch.1038 - Pier B2	48	17MAY06	13JUL06	14NOV05	10JAN06																			
BN1005	Slip Road B - Full Enclosure Pier B2 - Ch. 1258	48	14JUN06	11AUG06	12DEC05	10FEB06																			
At Grade Works - Lai Po Road																									
Temporary Traffic Management Schemes																									
WT3140	Divert N/B & S/B Traffic to Divs'n No.1 (for B3)	1	20MAR06	20MAR06	29MAY08	29MAY08																			
WT3250	4th. TTMS Lai Po Rd (P4R,P5R,B4) -Implementation	61*	02FEB06A	14APR06	02FEB06A	30NOV05																			
WT3300	5th. TTMS Lai Po Rd (for N/B C/W)-Prepare Review	18	20MAR06	10APR06	12FEB05	04MAR05																			

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							MAR			APR			MAY			JUN					
							13	20	27	3	10	17	24	1	8	15	22	29	5	12	19
MF2007	P7 to P10 - Median Barrier (incl earthing)	48	18APR06	13JUN06	08OCT05	03DEC05	MF2007														
Remaining Superstructure Finishing Works																					
MF2040	P7 to P10 - Deck Drainage	48	14JUN06	11AUG06	26SEP06	23NOV06	MF2040														
At Grade Works - Lai Chi Kok Interchange																					
Temporary Traffic Management Schemes																					
MT1300	2nd. TTMS Butterfly Valley Rd-Prepare for Review	12	20MAR06	01APR06	19FEB05	04MAR05	MT1300														
MT1310	2nd. TTMS Butterfly Valley Rd - CRE Endorsement	6	18APR06	24APR06	16JUN05	22JUN05	MT1310														
MT1320	2nd. TTMS Butterfly Valley Rd - Roadworks Advice	6	25APR06	02MAY06	23JUN05	29JUN05	MT1320														
MT1330	2nd. TTMS Butterfly Valley Rd - Prepare	18	03MAY06	23MAY06	30JUN05	21JUL05	MT1330														
MT1400	3rd TTMS Butterfly Valley Rd -Prepare for Review	12	20MAR06	01APR06	12FEB05	25FEB05	MT1400														
MT1410	3rd. TTMS Butterfly Valley Rd - CRE Endorsement	6	18APR06	24APR06	10SEP05	16SEP05	MT1410														
MT1420	3rd. TTMS Butterfly Valley Rd - Roadworks Advice	6	25APR06	02MAY06	17SEP05	24SEP05	MT1420														
MT1430	3rd. TTMS Butterfly Valley Rd - Prepare	24	03MAY06	30MAY06	26SEP05	25OCT05	MT1430														
MT2070	TTMS Case No.027 (P7 Piling) - Implementation	563*	03JUN04A	17APR06	03JUN04A	18JAN06	MT2070														
MT2140	TTMS for Pier P8/L - Implementation	641*	23FEB04A	08APR06	23FEB04A	11NOV05	MT2140														
MT3100	2nd. TTMS Kom Tsun Street - Prepare for Review	12	20MAR06	01APR06	19FEB05	04MAR05	MT3100														
MT3110	2nd. TTMS Kom Tsun Street - CRE Endorsement	6	04APR06	10APR06	23MAY05	28MAY05	MT3110														
MT3120	2nd. TTMS Kom Tsun Street - Roadworks Advice	6	11APR06	17APR06	30MAY05	04JUN05	MT3120														
MT3130	2nd. TTMS Kom Tsun Street - Site Preparation	20	18APR06	11MAY06	06JUN05	29JUN05	MT3130														
MT3140	2nd. TTMS Kom Tsun Street - Implementation	117*	15MAY06	03OCT06	14SEP05	18NOV05	MT3140														
MT3200	3rd. TTMS Kom Tsun Street - Prepare for Review	12	20MAR06	01APR06	12FEB05	25FEB05	MT3200														
MT3210	3rd. TTMS Kom Tsun Street - CRE Endorsement	6	04APR06	10APR06	03OCT05	08OCT05	MT3210														
MT3220	3rd. TTMS Kom Tsun Street - Roadworks Advice	6	11APR06	17APR06	10OCT05	17OCT05	MT3220														
MT3230	3rd. TTMS Kom Tsun Street - Site Preparation	28	18APR06	20MAY06	18OCT05	18NOV05	MT3230														
Drainage Works																					
SA5000	Butterfly Valley Rd Stage1 - Stormwater Drainage	54	15JUN05A	06MAY06	15JUN05A	23MAY05	SA5000														
SA2000	Kom Tsun St. & Bus Terminal - St/water Drainage	54	14FEB05A	13MAY06	14FEB05A	29JUN05	SA2000														
Utilities & Roadworks																					
SR4000	Kwai Chung Road (Pier 7) - Reinstatement	24	20MAR06	17APR06	20DEC05	18JAN06	SR4000														
SR2000	Castle Peak Road - Roadworks Reinstatement	17	20MAR06	08APR06	24OCT05	11NOV05	SR2000														
SR5000	Butterfly V. Rd (LCKI) Stage1-Excav. & Formation	36	08APR06	20MAY06	25APR05	06JUN05	SR5000														
SR5010	Butterfly V. Rd (LCKI) Stage 1 - Sub-base	36	22APR06	03JUN06	10MAY05	21JUN05	SR5010														
SR5020	Butterfly V. Rd (LCKI) Stage 11 - Kerbs	24	22MAY06	17JUN06	07JUN05	06JUL05	SR5020														

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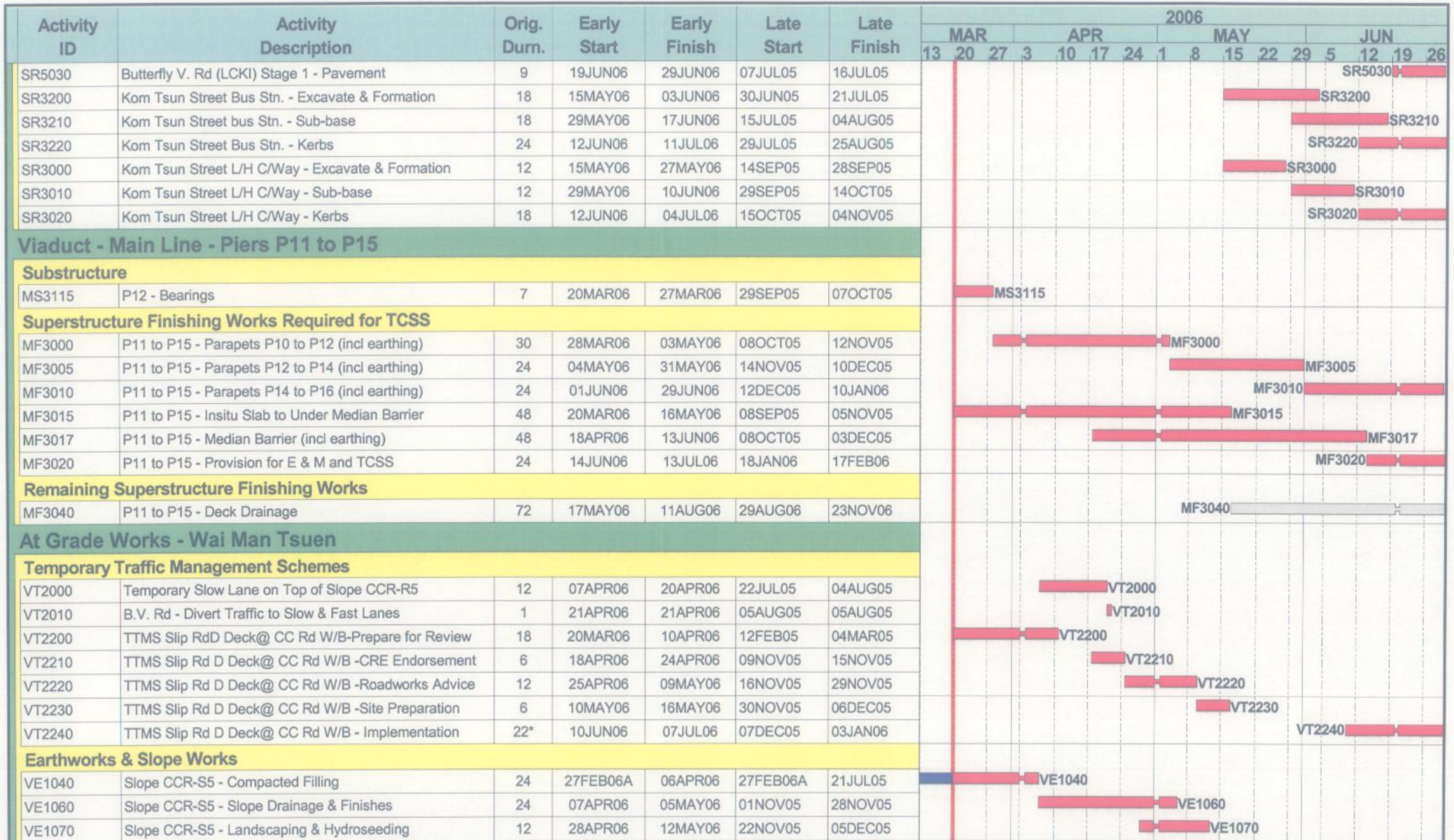
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Activity ID	Activity Description	Orig. Durn.	Early Start	Early Finish	Late Start	Late Finish	2006															
							MAR			APR			MAY			JUN						
							13	20	27	3	10	17	24	1	8	15	22	29	5	12	19	26
Earthworks & Slope Works - 11NW-A/C678 & CR679																						
VE2025	Slope 11NW-A/C678 & CR679 - Platform for S.Nails	3	20MAR06	22MAR06	25NOV05	28NOV05																
VE2027	Slope 11NW-A/C678 & CR679 - Test Soil Nail	6	23MAR06	29MAR06	29NOV05	05DEC05																
VE2030	Slope 11NW-A/C678 & CR679 - Soil Nails	18	30MAR06	20APR06	06DEC05	27DEC05																
VE2000	Slope 11NW-A/C678 & CR679 - Remove Temp Platform	6	10JUN06	16JUN06	28DEC05	04JAN06																
VE2020	Slope 11NW-A/C678 & CR679 - Trim Original Slope	6	17JUN06	24JUN06	05JAN06	11JAN06																
Drainage Works																						
VA1000	Butterfly Valley Rd Stage3 - Stormwater Drainage	48	22APR06	17JUN06	06AUG05	03OCT05																
Utilities & Roadworks																						
VR3000	Drainage Maintenance Access Rd. - Formation	24	02MAR06A	17APR06	02MAR06A	07NOV05																
VR3010	Drainage Maintenance Access Rd. - Sub-base	24	27MAR06	24APR06	18OCT05	14NOV05																
VR3020	Drainage Maintenance Access Rd. - Kerbs	24	04APR06	02MAY06	25OCT05	21NOV05																
VR3030	Drainage Maintenance Access Rd. - Pavement	48	04APR06	30MAY06	22NOV05	18JAN06																
VR3040	Drainage Maintenance Access Rd. - Street Lights	12	17MAY06	30MAY06	05JAN06	18JAN06																
VR2100	Butterfly V. Rd (WMT) Stage3- Excav. & Formation	18	05JUN06	26JUN06	17SEP05	10OCT05																
VR2110	Butterfly V. Rd (WMT) Stage 3 - Sub-base	18	12JUN06	04JUL06	26SEP05	18OCT05																
VR2120	Butterfly V. Rd (WMT) Stage 3 - Kerbs	18	19JUN06	11JUL06	04OCT05	25OCT05																
Wai Man Tsuen Fire Hydrant Pump House																						
VH1000	Wai Man Tsuen F/H Pump House - Plate Load Test	6	20MAR06	25MAR06	28MAR06	04APR06																
VH1010	Wai Man Tsuen F/H Pump House - Structure	60	03MAY06	13JUL06	05APR06	14JUN06																
VH2000	Fire Main - Pipework Along Maintenance Road	18	20MAR06	10APR06	10OCT05	31OCT05																
VH2005	Fire Main - Pipework to Piers P10/R & P14	18	11APR06	02MAY06	04JAN06	24JAN06																
VH2010	Fire Main - Valves & Connections	18	03MAY06	23MAY06	25JAN06	17FEB06																
Landscape Works																						
VX1000	Landscaping - Earthworks & Formation	24	03MAY06	30MAY06	22NOV05	19DEC05																
VX1040	Landscaping - Soiling & Planting	24	31MAY06	28JUN06	20DEC05	18JAN06																
Viaduct - Main Line - Piers P16 to P18																						
Substructure																						
MS4055	P16/L - Install Bearings	6	20MAR06	25MAR06	04JAN06	10JAN06																
MS4115	P16/R - Install Bearings	6	20MAR06	25MAR06	05DEC05	10DEC05																
MS4225	P17/L & P17/R - Cure & Strike Form/Falsework	24	21DEC05A	23MAR06	21DEC05A	20JUN05																

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Highways Department Contract No. HY/2003/01
Route 8 - Lai Chi Kok Viaduct
3 Month Rolling Programme
from 20 March 2006



Activity ID	Activity Description	Orig. Durn.	Early Start	Early Finish	Late Start	Late Finish	2006																	
							MAR			APR			MAY			JUN								
							13	20	27	3	10	17	24	1	8	15	22	29	5	12	19	26		
Main Line - Segmental Deck Construction (Crane)																								
MD4030	P17 Slip C - 1st. Pair - 2 Segments Type B	4	20MAR06	23MAR06	01DEC05	05DEC05																		
MD4035	P17 Slip C - 16 Segments Type B	7	24MAR06	31MAR06	06DEC05	13DEC05																		
MD4040	C6 Slip C - 3 Segments Type B	2	04APR06	05APR06	14DEC05	15DEC05																		
MD4042	C6 Slip C to P17 Slip C - Insitu Stitch	2	06APR06	07APR06	16DEC05	17DEC05																		
MD4095	P18 Slip D - 22 Segments Type B	11	06APR06	18APR06	07DEC05	19DEC05																		
DD1025	D10 to P18 - Insitu Stitch	2	19APR06	20APR06	31DEC05	03JAN06																		
Main Line - Segmental Deck Const'n (Lift Frames)																								
MD4112	P18 Slip C - Install Lifting Frames	8	20MAR06	28MAR06	15NOV05	23NOV05																		
MD4115A	P18 Slip C - 2nd-4th. Pairs -6 Segments Type B	9	29MAR06	08APR06	24NOV05	03DEC05																		
MD4115	P18 Slip C - 5th-14th Pairs - 20 Segments Type B	7	10APR06	17APR06	05DEC05	12DEC05																		
Main Line - Segmental Deck Construction (Gantry)																								
MD4018	Delivery of Segments at P17 Slip C	4	20MAR06	23MAR06	26MAY08	29MAY08																		
MD4020	Launch Gantry to P16/P17/P18 UNDER CLP O/H LINES	2	14MAR06A	20MAR06	14MAR06A	21NOV05																		
Superstructure Finishing Works Required for TCSS																								
MF4000	P16 to P18 - Parapets at P16 - P18 incl earthing	24	15JUN06	14JUL06	27DEC05	24JAN06																		
MF4005	P16 to P18 - Insitu Slab to Under Median Barrier	24	18APR06	16MAY06	13DEC05	11JAN06																		
MF4007	P16 to P18 - Median Barrier (incl earthing)	24	12MAY06	08JUN06	07JAN06	07FEB06																		
Viaduct - Main Line - Piers 19 to Abutment M																								
Substructure																								
MS5115	P20 - Pier Head - Cure & Strip Falsework	30	02MAR06A	22MAR06	02MAR06A	25NOV05																		
MS5165	P21 - Pier Hammer Head	30	18MAR06A	21APR06	18MAR06A	01DEC05																		
MS5170	P21 - Pier Insitu Deck Segment	60	22APR06	04JUL06	02DEC05	15FEB06																		
MS5230	Abutment M - Install Bearings	6	20MAR06	25MAR06	23MAY08	29MAY08																		
MS5240	Abutment M - Insitu Deck Segment	60	14FEB06A	21APR06	14FEB06A	07DEC05																		
MS5250	Abutment M - Cure & Strip Falsework	24	22APR06	20MAY06	08DEC05	06JAN06																		
MS5260	Abutment M - End Wall and Wing Walls	36	22MAY06	04JUL06	07JAN06	21FEB06																		
Main Line - Segmental Deck Construction (Gantry)																								
MD4025	Launch Gantry to P17/P18/P19 UNDER CLP O/H LINES	1	21MAR06	21MAR06	22NOV05	22NOV05																		
MD5000	Launch Gantry to P18/P19/P20 UNDER CLP O/H LINES	1	22MAR06	22MAR06	23NOV05	23NOV05																		
MD4107	CLP RESUME POWER - O/HEAD LINES NORTH &	0		31MAR06		29MAY08																		
MD5015	P19 Slip C - 18 Segments Type B	8	23MAR06	31MAR06	24NOV05	02DEC05																		
MD5022	P19/L - 16 Segments Type A	8	24MAR06	01APR06	25NOV05	03DEC05																		

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Activity ID	Activity Description	Orig. Durn.	Early Start	Early Finish	Late Start	Late Finish	2006																	
							MAR			APR			MAY			JUN								
							13	20	27	3	10	17	24	1	8	15	22	29	5	12	19	26		
MD5035	P19/R - 18 Segments Type A	8	24MAR06	01APR06	25NOV05	03DEC05																		
MD5045	P19 Slip D - 14 Segments Type B	8	23MAR06	31MAR06	25NOV05	03DEC05																		
MD5055	P19/L&R to P18/L&R - Insitu Stitches	2	04APR06	05APR06	05DEC05	06DEC05																		
MD5060	P20 Slip D - 1st. Pair - 2 Segments Type B	4	19APR06	22APR06	11FEB06	15FEB06																		
MD5070	P20/R - 1st. Pair - 2 Segments Type A	4	05APR06	08APR06	25JAN06	28JAN06																		
MD5080	P20/L - 1st. Pair - 2 Segments Type A	4	10APR06	13APR06	02FEB06	06FEB06																		
MD5090	P20 Slip C - 1st. Pair - 2 Segments Type A	4	14APR06	18APR06	07FEB06	10FEB06																		
MD5065	P20 Slip D - 22 Segments Type B	15	24APR06	11MAY06	16FEB06	04MAR06																		
MD5075	P20/R - 22 Segments Type A	15	24APR06	11MAY06	16FEB06	04MAR06																		
MD5085	P20/L - 24 Segments Type A	15	25APR06	12MAY06	17FEB06	06MAR06																		
MD5095	P20 Slip C - 24 Segments Type B	15	25APR06	12MAY06	17FEB06	06MAR06																		
MD5097	P20/L&R to P19/L&R - Insitu Stitches	3	12MAY06	15MAY06	21MAR06	23MAR06																		
MD5100	Launch Gantry to P20/P21/Abut M	2	22MAY06	23MAY06	07MAR06	08MAR06																		
Viaduct - Main Line - Tunnel Approaches																								
Noise Barriers & Encl' (Sec.10 Excision)																								
MN6100	Semi Enclosure S/B Ch.2005 - 2200 - Frame	60	19JUN06	30AUG06	08DEC05	21FEB06																		
At Grade Works - Butterfly Valley																								
Temporary Traffic Management Schemes																								
QT2130	TTMS Slip Rd Deck@ CC Rd E/B - Site Preparation	2	20MAR06	21MAR06	28MAY08	29MAY08																		
QT2140	TTMS Slip Rd D Deck @ CC Rd E/B - Implementation	18*	28FEB06A	20MAR06	28FEB06A	30DEC05																		
Earthworks & Slope Works - 11NW-A/FR54 & F55																								
QE2000	Slope 11NW-A/FR54 & FR55 - Remove Temp. Platform	18	24MAR06	14APR06	21JUN05	12JUL05																		
QE2002	Slope 11NW-A/FR54 & FR55 - Retaining Wall -Bases	36	15APR06	27MAY06	13JUL05	23AUG05																		
QE2004	Slope 11NW-A/FR54 & FR55 - Retaining Wall -Walls	48	15MAY06	11JUL06	10AUG05	06OCT05																		
QE2010	Slope 11NW-A/FR54 & FR55 - Install Temp Works	48	03MAY06	28JUN06	20JUL05	13SEP05																		
Utilities & Roadworks																								
QR2000	WSD Access Road - New CLP 11Kv Cable Laying	36	20MAR06	02MAY06	17APR08	29MAY08																		
Landscape Works																								
QX1020	Landscaping - Soiling & Planting on Slope CCR-S6	75	20MAR06*	16JUN06	21OCT05	18JAN06																		
QX1100	Landscape Establishment Works	301	17JUN06	18JUN07	04NOV06	03NOV07																		

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							MAR			APR			MAY			JUN					
							13	20	27	3	10	17	24	1	8	15	22	29	5	12	19
Viaduct - Slip Road C																					
Substructure																					
CS1150	Abutment C - Install Bearings	6	20MAR06	18MAR06	26OCT05	25OCT05	CS1150														
CS1447	C5/L - C5/R Portal - Install Bearings	6	20MAR06	25MAR06	06OCT05	13OCT05	CS1447														
CS1555	C6/R & C6/L - Install Bearings on Portal Frame	6	27MAR06	01APR06	14OCT05	20OCT05	CS1555														
Slip Road C - Insitu Deck Construction																					
CD1032	Slip Rd. C - Deck Span C3 to C4 - Falsework	12	27JAN06A	21MAR06	27JAN06A	26AUG05	CD1032														
CD1034	Slip Rd. C - Deck Span C3 to C4 - Soffit	6	22MAR06	28MAR06	27AUG05	02SEP05	CD1034														
CD1036	Slip Rd. C - Deck Span C3 to C4 - 1st. Pour	20	29MAR06	21APR06	03SEP05	27SEP05	CD1036														
CD1038	Slip Rd. C - Deck Span C3 to C4 - 2nd. Pour	20	22APR06	16MAY06	28SEP05	22OCT05	CD1038														
CD1039	Slip Rd. C - Deck Span C3 to C4 - Stressing	4	17MAY06	20MAY06	24OCT05	27OCT05	CD1039														
CD1041	Slip Rd. C - Deck Span C3 to C4 - Cure & Strip	6	22MAY06	27MAY06	28OCT05	03NOV05	CD1041														
CD1040	Slip Rd. C - Deck Span C4 to C5 - Ground Prep.	9	20MAR06	29MAR06	16SEP05	27SEP05	CD1040														
CD1042	Slip Rd. C - Deck Span C4 to C5 - Falsework	10	30MAR06	11APR06	30SEP05	13OCT05	CD1042														
CD1044	Slip Rd. C - Deck Span C4 to C5 - Soffit	6	12APR06	18APR06	21OCT05	27OCT05	CD1044														
CD1046	Slip Rd. C - Deck Span C4 to C5 - 1st. Pour	20	19APR06	12MAY06	28OCT05	19NOV05	CD1046														
CD1048	Slip Rd. C - Deck Span C4 to C5 - 2nd. Pour	20	13MAY06	05JUN06	21NOV05	13DEC05	CD1048														
CD1049	Slip Rd. C - Deck Span C4 to C5 - Stressing	4	06JUN06	09JUN06	14DEC05	17DEC05	CD1049														
CD1051	Slip Rd. C - Deck Span C4 to C5 - Cure & Strip	6	10JUN06	16JUN06	11JAN06	17JAN06	CD1051														
CD1050	Slip Rd. C - Deck Span C5 to C6 - Ground Prep.	12	30MAR06	13APR06	28SEP05	13OCT05	CD1050														
CD1052	Slip Rd. C - Deck Span C5 to C6 - Falsework	18	14APR06	05MAY06	14OCT05	03NOV05	CD1052														
CD1054	Slip Rd. C - Deck Span C5 to C6 - Soffit	6	29MAY06	03JUN06	04NOV05	10NOV05	CD1054														
CD1056	Slip Rd. C - Deck Span C5 to C6 - 1st. Pour	20	05JUN06	28JUN06	11NOV05	03DEC05	CD1056														
Superstructure Finishing Works Required for TCSS																					
CF1010	Slip Rd. C - Parapets C2 to C4 (incl earthing)	48	15APR06	10JUN06	24OCT05	17DEC05	CF1010														
CF1000	Slip Rd. C - Parapets - Abut. C to C2 + earthing	24	12JUN06	11JUL06	19DEC05	17JAN06	CF1000														
Viaduct - Slip Road D																					
Substructure																					
DS1045	Abutment D - Install Bearings	6	20MAR06	25MAR06	26OCT05	01NOV05	DS1045														
DS1115	D1 - Install Bearings	6	20MAR06	25MAR06	29OCT05	04NOV05	DS1115														
DS1175	D2 - Install Bearings	6	20MAR06	25MAR06	05NOV05	11NOV05	DS1175														
DS1295	D4 - Install Bearings	6	20MAR06	25MAR06	23MAY08	29MAY08	DS1295														

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							MAR			APR			MAY			JUN						
							13	20	27	3	10	17	24	1	8	15	22	29	5	12	19	26
DS1355	D5 - Install Bearings	6	20MAR06	25MAR06	23MAY08	29MAY08																
DS1530	D8 - Pier Head	24	03MAR06A	13APR06	03MAR06A	10OCT05																
DS1530A	D8 - Pier Head - Insitu Segment	36	14APR06	26MAY06	12OCT05	22NOV05																
DS1531	D8 - Pier Head - Cure & Strike Form/Falsework	12	27MAY06	09JUN06	23NOV05	06DEC05																
DS1592	D9 - Install Bearings	6	20MAR06	25MAR06	23MAY08	29MAY08																
DS1655	D10 - Install Bearings	6	20MAR06	25MAR06	23MAY08	29MAY08																
Slip Road D - Segmental Deck Const'n (Crane)																						
DD1035	D9 - 6 seg Type B	5	28FEB06A	20MAR06	28FEB06A	30DEC05																
DD1037	D9 to D10 - Insitu Stitch	2	21MAR06	22MAR06	31DEC05	03JAN06																
DD1050	D8 - 1st. Pair - 2 Segments Type B	6	10JUN06	16JUN06	07DEC05	13DEC05																
DD1055	D8 - 28 Segments Type B	14	17JUN06	05JUL06	14DEC05	30DEC05																
DD1115	D5 - 26 seg Type B	7	17MAR06A	24MAR06	17MAR06A	25NOV05																
DD1137	D4 to D5 - Insitu Stitch	3	25MAR06	28MAR06	08DEC05	10DEC05																
DD1172	Install Segment Sliding System Abut. D to D3	24	09MAR06A	10APR06	09MAR06A	01NOV05																
DD1200	Abut D - 3 Segments Type B on scuff	3	11APR06	13APR06	02NOV05	04NOV05																
DD1195	D1 - 21 Segments Type B (incl. Pierhead Seg)	6	14APR06	20APR06	05NOV05	11NOV05																
DD1205	D1 to Abut D - Insitu Stitch	3	21APR06	24APR06	21DEC05	23DEC05																
DD1175	D2 - 27 Segments Type B (incl. Pier Head Seg)	10	21APR06	03MAY06	12NOV05	23NOV05																
DD1197	D1 to D2 - Insitu Stitch	3	04MAY06	06MAY06	08DEC05	10DEC05																
DD1150	D3 - 1st. Pair - 2 Segments Type B	6	04MAY06	10MAY06	24NOV05	30NOV05																
DD1155	D3 - 18 Segments Type B	6	11MAY06	17MAY06	01DEC05	07DEC05																
DD1167	D3 to D4 - Insitu Stitch	3	18MAY06	20MAY06	08DEC05	10DEC05																
DD1177	D2 to D3 - Insitu Stitch	3	18MAY06	20MAY06	08DEC05	10DEC05																
DD1179	Dismantle Segment Sliding System (Abut. D to D3)	12	08MAY06	20MAY06	24JUN06	08JUL06																
Slip Road D - Segmental Deck Const'n (L/Frames)																						
DD1095	D6 - 16 seg Type B	7	25MAR06	01APR06	26NOV05	03DEC05																
DD1117	D5-D6 Insitu Stitch	2	04APR06	05APR06	16DEC05	17DEC05																
DD1070	D7 - 1st. pair - 2 seg Type B	6	10APR06	15APR06	28NOV05	03DEC05																
DD1075	D7 - 16 seg Type B	8	18APR06	26APR06	05DEC05	13DEC05																
DD1077	D7-D8 Insitu Stitch	2	27APR06	28APR06	16DEC05	17DEC05																
DD1097	D6-D7 Insitu Stitch	2	27APR06	28APR06	16DEC05	17DEC05																
Superstructure Finishing Works Required for TCSS																						
DF1005	Slip Rd. D -Parapets D4 to Abut D (incl earthing)	42	22MAY06	11JUL06	12DEC05	03FEB06																

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Activity ID	Activity Description	Orig. Durn.	Early Start	Early Finish	Late Start	Late Finish	2006																	
							MAR			APR			MAY			JUN								
							13	20	27	3	10	17	24	1	8	15	22	29	5	12	19	26		
West Bound - Insitu Deck																								
LD1040	Lai Wan O/pass W/B - Demolish F/p for Stage 3	24	20MAR06	17APR06	20AUG05	16SEP05																		
LD1050	Lai Wan O/pass W/B - Span St.3 - Ground Prep.	18	25APR06	16MAY06	17SEP05	10OCT05																		
LD1052	Lai Wan O/pass W/B - Span St.3 - Falsework	18	03MAY06	23MAY06	26SEP05	18OCT05																		
LD1054	Lai Wan O/pass W/B - Span St.3 - Soffit	24	10MAY06	06JUN06	04OCT05	01NOV05																		
LD1056	Lai Wan O/pass W/B - Span St.3 - 1st. Pour	24	31MAY06	28JUN06	26OCT05	22NOV05																		
At Grade Works - Ching Cheung Road at LCK Park																								
Temporary Traffic Management Schemes																								
NT2050	2nd. TTMS CC Rd (E/B C/Way) - Prepare for Review	12	18APR06	02MAY06	11JAN06	24JAN06																		
NT2060	2nd. TTMS CC Rd (E/B C/Way) - CRE Endorsement	6	23MAY06	28MAY06	29OCT06	03NOV06																		
NT2070	2nd. TTMS CC Rd (E/B C/Way) - Roadworks Advice	6	29MAY06	03JUN06	04NOV06	09NOV06																		
NT2080	2nd. TTMS CC Rd (E/B C/Way) - Site Preparation	6	05JUN06	10JUN06	10NOV06	16NOV06																		
Retaining Wall CCR-R1 West Bound																								
NW1070	W/B Ret. Wall CCR-R1A East - Parapet on Wall	24	20MAR06	17APR06	31OCT05	26NOV05																		
NW1150	W/B Ret. Wall CCR-R1B - Backfill Behind Wall	12	20MAR06	01APR06	27SEP05	12OCT05																		
NW1152	W/B Ret. Wall CCR-R1B - Parapet on Wall	18	18APR06	09MAY06	28NOV05	17DEC05																		
NW1210	W/B Ret. Wall CCR-R1A West - Bases	18	27FEB06A	01APR06	27FEB06A	10SEP05																		
NW1220	W/B Ret. Wall CCR-R1A West - Walls	24	13MAR06A	17APR06	13MAR06A	26SEP05																		
NW1230	W/B Ret. Wall CCR-R1A West - B/fill Behind Wall	12	18APR06	02MAY06	27SEP05	12OCT05																		
NW1240	W/B Ret. Wall CCR-R1A West - Parapet on Wall	18	10MAY06	30MAY06	19DEC05	10JAN06																		
Retaining Wall CCR-R1 East Bound																								
NW2070	W/B Ret. Wall CCR-R1C - Parapets on Wall	48	07JAN06A	29APR06	07JAN06A	22OCT05																		
NW2160	W/B Ret. Wall CCR-R1D -Parapets on Wall	60	02MAY06	12JUL06	24OCT05	03JAN06																		
NW2240	W/B Ret. Wall CCR-R1E - Parapets on Wall	24	20MAR06	17APR06	05DEC05	03JAN06																		
Drainage Works																								
NA2010	C.C. Rd. W/B in New C/way - S/water Drainage E3	75	20MAR06	16JUN06	13OCT05	10JAN06																		
NA2020	C.C. Rd. W/B in New C/way - S/water Drainage J2	75	03MAY06	01AUG06	13OCT05	10JAN06																		
NA3000	C.C. Rd. E/B in New C/way - Stormwater Drainage	75	20MAR06	16JUN06	05OCT05	03JAN06																		
Utilities & Roadworks																								
NR1000	C.C. Rd. W/B in Portion E3 - Formation	18	03JUN06	24JUN06	27DEC05	17JAN06																		
NR1010	C.C. Rd. W/B in Portion E3 - Sub-base	12	17JUN06	03JUL06	11JAN06	24JAN06																		
NR2000	C.C. Rd. E/B - Foundations to Sign Gantry ADS3	18	17JUN06	10JUL06	04JAN06	24JAN06																		
NR3000	C.C. Rd. E/B - Formation	24	17JUN06	17JUL06	27APR06	25MAY06																		

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Activity ID	Activity Description	Orig. Durn.	Early Start	Early Finish	Late Start	Late Finish	2006														
							MAR			APR			MAY			JUN					
							13	20	27	3	10	17	24	1	8	15	22	29	5	12	19
At Grade Work - Ching Cheung Road - Main Section																					
Temporary Traffic Management Schemes																					
RT2240	3rd. TTMS CC Rd (Slewing) - Implementation	385*	28DEC04A	10APR06	28DEC04A	23NOV06	RT2240														
Earthworks & Slope Works - CCR-S1, S2 & S3																					
RE1700	Slope CCR-S1E - Finish Seed & Planting +62.3mPD	6	20MAR06*	25MAR06	19OCT06	26OCT06	RE1700														
RE1710	Slope CCR-S1E - Finish Seed & Planting +54.8mPD	12	27MAR06	10APR06	27OCT06	09NOV06	RE1710														
RE1720	Slope CCR-S1E - Finish Seed & Planting +47.3mPD	12	11APR06	24APR06	10NOV06	23NOV06	RE1720														
RE1710A	Slope CCR-S1C- Finish Seed & Planting +54.9mPD	12	20MAR06	01APR06	27OCT06	09NOV06	RE1710A														
RE1720A	Slope CCR-S1C - Finish Seed & Planting +47.3mPD	12	04APR06	17APR06	10NOV06	23NOV06	RE1720A														
RE1840	Slope CCR-S1E&C- Rock Stabilisation to +25.4mPD	48	24OCT05A	07APR06	24OCT05A	11SEP06	RE1840														
RE1850	Slope CCR-S1E&C - Drainage to Level +25.4mPD	48	24JAN06A	06MAY06	24JAN06A	11OCT06	RE1850														
RE1860	Slope CCR-S1E&C- Finish Seed & Planting to +25.4	36	08MAY06	17JUN06	12OCT06	23NOV06	RE1860														
RE2000	Slope CCR-S2 -Excavate Rock to Formation	24	20MAR06	17APR06	20OCT05	16NOV05	RE2000														
RE2050	Slope CCR-S2 - Rock Stabilisation	48	04APR06	30MAY06	08APR06	03JUN06	RE2050														
RE2100	Slope CCR-S2 - Drainage	42	31MAY06	20JUL06	05JUN06	25JUL06	RE2100														
RE1720B	Slope CCR-S1W - Seed & Planting to +39.95mPD	36	20MAR06	02MAY06	12OCT06	23NOV06	RE1720B														
RE1550	Slope CCR-S1W - Rock Stabilisation to 24.9mPD	54	24OCT05A	04MAY06	24OCT05A	29MAY08	RE1550														
RE1250	Slope CCR-S1W - Bulk Excavate to Level +19.0mPD	18	25NOV05A	24MAR06	25NOV05A	16AUG05	RE1250														
RE1250A	Slope CCR-S1W -Detailed Excavate to Level +19.0m	18	20MAR06	28MAR06	08NOV05	16NOV05	RE1250A														
RE1560	Slope CCR-S1W - Rock Stabilisation to 19.0mPD	48	25MAR06	22MAY06	08AUG06	04OCT06	RE1560														
RE1660	Slope CCR-S1W - Drainage to Level +19.0mPD	24	09MAY06	05JUN06	19SEP06	18OCT06	RE1660														
RE1270	Slope CCR-S1W - Excavate to Lai Wan Road O/pass	18	25MAR06	15APR06	17AUG05	06SEP05	RE1270														
RE16604	Slope CCR-S1W - Drainage to Level +16.8mPD	18	06JUN06	27JUN06	19OCT06	09NOV06	RE16604														
RE1665	Slope CCR-S1W - Seed & Planting to +32.4mPD	24	20MAR06	17APR06	22AUG06	18SEP06	RE1665														
RE1670	Slope CCR-S1W - Seed & Planting to +24.9mPD	24	18APR06	16MAY06	19SEP06	18OCT06	RE1670														
RE1675	Slope CCR-S1W - Seed & Planting to +19.0mPD	18	06JUN06	27JUN06	19OCT06	09NOV06	RE1675														
RE3200	Slope CCR-S3 - Additional Soil Nails (VO166)	24	20MAR06	17APR06	27OCT06	23NOV06	RE3200														
Retaining Wall CCR-R2 (Value Engineering Design)																					
RW1200	Ch 02.13 to 41.71 -Excavate & Rock Stabilisation	36	04APR05A	30MAR06	04APR05A	29MAY08	RW1200														
RW1220	Ch 02.13 to 41.71 - Mass Concrete Facing Wall	24	24OCT05A	28MAR06	24OCT05A	29MAY08	RW1220														
RW1230	Ch 02.13 to 41.71 - Retaining Wall Base Slabs	12	06FEB06A	28MAR06	06FEB06A	27AUG05	RW1230														
RW1240	Ch 02.13 to 41.71 - Retaining Wall Stem & Coping	27	29MAR06	29APR06	29AUG05	29SEP05	RW1240														
RW1300	Ch 50.71 to 78.27 -Excavate & Rock Stabilisation	24	21OCT05A	30MAR06	21OCT05A	29MAY08	RW1300														

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Activity ID	Activity Description	Orig. Durn.	Early Start	Early Finish	Late Start	Late Finish	2006														
							MAR			APR			MAY			JUN					
							13	20	27	3	10	17	24	1	8	15	22	29	5	12	19
RW1320	Ch 50.71 to 78.27 - Mass Concrete Facing Wall	27	12NOV05A	11APR06	12NOV05A	25JAN06	RW1320														
RW1330	Ch 50.71 to 78.27 - Retaining Wall Base Slabs	12	12APR06	25APR06	26JAN06	11FEB06	RW1330														
RW1340	Ch 50.71 to 78.27 - Retaining Wall Stem & Coping	24	26APR06	24MAY06	13FEB06	11MAR06	RW1340														
RW1400	Ch 00.00 to 02.13 -Excavate & Rock Stabilisation	12	20MAR06	01APR06	06MAR06	18MAR06	RW1400														
RW1420	Ch 00.00 to 02.13 - Mass Concrete Facing Wall	6	04APR06	10APR06	20MAR06	25MAR06	RW1420														
RW1430	Ch 00.00 to 02.13 - Retaining Wall Base Slabs	6	11APR06	17APR06	27MAR06	01APR06	RW1430														
RW1440	Ch 00.00 to 02.13 - Retaining Wall Stem & Coping	16	18APR06	06MAY06	04APR06	21APR06	RW1440														
Slope Works Above Retaining Wall CCR-R2																					
RE4000	Ch 00.00 to 78.27 - Excavate in Benches	48	02MAY06	27JUN06	30SEP05	26NOV05	RE4000														
RE4010	Ch 00.00 to 78.27 - Filter Layer	48	16MAY06	12JUL06	17OCT05	10DEC05	RE4010														
RE4020	Ch 02.13 to 41.71 - General Filling & Compaction	36	06JUN06	19JUL06	07NOV05	17DEC05	RE4020														
RE4022	Ch 50.71 to 78.27 - General Filling & Compaction	36	06JUN06	19JUL06	19JAN06	04MAR06	RE4022														
RE4025	Ch 00.00 to 2.13 - General Filling & Compaction	6	08MAY06	13MAY06	22APR06	28APR06	RE4025														
RE4027	Excavate & Demolish Existing Retaining Wall	12	15MAY06	27MAY06	29APR06	13MAY06	RE4027														
RE4028	Fill & Compact to Form Toe of Berm	6	29MAY06	03JUN06	15MAY06	20MAY06	RE4028														
Retaining Wall CCR-R3 Type D, E & F																					
RW2190	Ret. Wall CCR-R3F - Break Down Top of Piles	36	03NOV05A	22MAR06	03NOV05A	27FEB06	RW2190														
RW2200	Ret. Wall CCR-R3F - Capping beam	42	12NOV05A	08APR06	12NOV05A	09MAR06	RW2200														
RW2210	Ret. Wall CCR-R3F - Stem Walls	48	30NOV05A	22APR06	30NOV05A	23MAR06	RW2210														
RW2070	Ret. Wall CCR-R3E - Break Down Top of Piles	12	07FEB06A	21MAR06	07FEB06A	09MAR06	RW2070														
RW2090	Ret. Wall CCR-R3E - Capping beam	18	27FEB06A	28MAR06	27FEB06A	16MAR06	RW2090														
RW2110	Ret. Wall CCR-R3E - Stem Walls	18	06MAR06A	05APR06	06MAR06A	23MAR06	RW2110														
RW2590	Ret. Wall CCR-R3D - Erect Noise Barriers	12	20MAR06	01APR06	16MAY08	29MAY08	RW2590														
RW2600	Ret. Wall CCR-R3D - Break Down Top of Piles	24	25FEB06A	10APR06	25FEB06A	06JUN06	RW2600														
RW2610	Ret. Wall CCR-R3D - Capping beam	12	11APR06	24APR06	07JUN06	21JUN06	RW2610														
RW2630	Ret. Wall CCR-R3D - Stem Walls	24	20APR06	18MAY06	16JUN06	15JUL06	RW2630														
Retaining Wall CCR-R3 Type A																					
RW3040	Ret. Wall CCR-R3A - Backfill & Form Platform	18	20MAR06	10APR06	15SEP05	07OCT05	RW3040														
Retaining Wall CCR-R3 Type B																					
RW4040	Ret. Wall CCR-R3B - Backfill & Form Platform	18	20MAR06	10APR06	28NOV05	17DEC05	RW4040														
Retaining Wall CCR-R3 Type C																					
RW5010	Ret. Wall CCR-R3C - Temporary Works & Excavation	24	25JAN06A	24MAR06	25JAN06A	23NOV06	RW5010														
RW5020	Ret. Wall CCR-R3C - Bases	24	22MAY06	17JUN06	10JUL06	07AUG06	RW5020														

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from 20 March 2006



Activity ID	Activity Description	Orig. Durn.	Early Start	Early Finish	Late Start	Late Finish	2006														
							MAR			APR			MAY			JUN					
							13	20	27	3	10	17	24	1	8	15	22	29	5	12	19
RW5030	Ret. Wall CCR-R3C - Walls	30	05JUN06	11JUL06	24JUL06	28AUG06	RW5030														
Slope Works Above Retaining Walls CCR-R3D, E & F																					
RE4107	Slope above CCR-R3D-Excavate Slope	12	19MAY06	01JUN06	17JUL06	31JUL06	RE4107														
RE4110	Slope above CCR-R3D- Filter - Bottom to 1st Berm	6	02JUN06	08JUN06	01AUG06	07AUG06	RE4110														
RE4111	Slope above CCR-R3D- Rockfill - Bt'm to 1st Berm	12	09JUN06	23JUN06	08AUG06	21AUG06	RE4111														
RE4205	Slope above CCR-R3E&F -Remove Piling Platform	6	24APR06	29APR06	24MAR06	30MAR06	RE4205														
RE4207	Slope above CCR-R3E&F -Excavate Slope	12	02MAY06	15MAY06	31MAR06	14APR06	RE4207														
RE4210	Slope above CCR-R3E&F- Filter - Btm. to 1st Berm	6	16MAY06	22MAY06	15APR06	21APR06	RE4210														
RE4211	Slope above CCR-R3E&F -Rockfill-Bt'm to 1st Berm	12	23MAY06	05JUN06	22APR06	06MAY06	RE4211														
RE4213	Slope above CCR-R3E&F -Filter-1st Berm to +24mPD	6	06JUN06	12JUN06	15AUG06	21AUG06	RE4213														
RE4214	Slope above CCR-R3E&F-Rockfil-1st Berm to +24mPD	12	13JUN06	27JUN06	22AUG06	04SEP06	RE4214														
Earthworks & Slope Works - CCR-S4																					
RE4268	Slope CCR-S4 - Excavate & Bench Upper Slope	48	03JAN06A	10APR06	03JAN06A	11FEB06	RE4268														
RE4280	Slope CCR-S4 - Fill and Compact	24	23MAY06	19JUN06	13FEB06	11MAR06	RE4280														
RE4285	Slope CCR-S4 - Form New Access Road at Footpath	24	23MAY06	19JUN06	13FEB06	11MAR06	RE4285														
Ching Cheung Road NTMM Retaining Wall A																					
RW5990	NNTM Wall A - Excavate to Formation	36	09JAN06A	30MAR06	09JAN06A	20MAY06	RW5990														
RW6000	NNTM Wall A - Bases	12	31MAR06	14APR06	22MAY06	03JUN06	RW6000														
RW6010	NNTM Wall A - Walls	18	15APR06	06MAY06	05JUN06	26JUN06	RW6010														
RW6020	NNTM Wall A - Drainage & Fill Behind Walls	12	08MAY06	20MAY06	27JUN06	11JUL06	RW6020														
RW6030	NNTM Wall A - Excavate to +20.5mPD	12	22MAY06	03JUN06	12JUL06	25JUL06	RW6030														
RW6040	NNTM Wall A - Debris Collection Area Drainage	12	05JUN06	17JUN06	26JUL06	09AUG06	RW6040														
RW6050	NNTM Wall A - Debris Collection Area Access Ramp	12	19JUN06	04JUL06	10AUG06	23AUG06	RW6050														
Drainage Works																					
RR3100	Ching Cheung Rd. E/B -S/Water S300-01 to S300-07	60	13JUN06	24AUG06	22MAR06	01JUN06	RR3100														
Utilities & Roadworks																					
RA2000	Lai Wan Road - Footpath below Slope CCR-S4	24	19MAY06	15JUN06	27OCT06	23NOV06	RA2000														
RA2100	CLP Cable Trough - CC Rd. Rest Garden to CCR-R3D	48	20MAR06	16MAY06	10MAR06	06MAY06	RA2100														
RA2110	CLP Cable Trough - Behind CCR-R3D	24	06JUN06	05JUL06	08MAY06	03JUN06	RA2110														
RA3000	Ching Cheung Rd. W/B New C/Way -N/B Founds Bases	60	16DEC05A	25MAR06	16DEC05A	05NOV05	RA3000														
RA3002	Ching Cheung Rd. W/B New C/Way -N/B Founds Walls	72	07FEB06A	05JUN06	07FEB06A	03DEC05	RA3002														
RA3003	Ching Cheung Rd. W/B New C/Way - Filling	60	11APR06	21JUN06	08OCT05	17DEC05	RA3003														
RA3005	Ching Cheung Rd. W/B - S/Gantry FADS4 Founds	18	31MAY06	21JUN06	22DEC05	13JAN06	RA3005														

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Activity ID	Activity Description	Orig. Durn.	Early Start	Early Finish	Late Start	Late Finish	2006														
							MAR			APR			MAY			JUN					
							13	20	27	3	10	17	24	1	8	15	22	29	5	12	19
RA4000	Ching Cheung Rd. New E/B Slip Road - E&M +TCSS	75	18APR06	17JUL06	17NOV05	17FEB06	RA4000														
RA4030	Ching Cheung Rd. New E/B - N/B Founds Base	75	20MAR06	16JUN06	08SEP05	07DEC05	RA4030														
RA4040	Ching Cheung Rd. New E/B - Fill Behind N/B Base	48	17MAY06	13JUL06	07NOV05	03JAN06	RA4040														
RA7000	Lai Wan Road - Watermains & Hydrants FH4 & FH5	24	16MAY06	12JUN06	22FEB06	21MAR06	RA7000														
At Grade Works - Butterfly Valley Interchange																					
Temporary Traffic Management Schemes																					
PT2200	TTMS CP Rd-KC S/B for Paving -Prepare for Review	18	18APR06	09MAY06	11JAN06	03FEB06	PT2200														
PT2210	TTMS CP Rd-KC S/B for Paving - CRE Endorsement	6	23MAY06	28MAY06	05FEB06	10FEB06	PT2210														
PT2220	TTMS CP Rd-KC S/B for Paving - Roadworks Advice	7	29MAY06	04JUN06	11FEB06	17FEB06	PT2220														
PT2230	TTMS CP Rd-KC S/B for Paving - Site Preparation	6	05JUN06	10JUN06	18FEB06	24FEB06	PT2230														
Earthworks & Slopeworks - 11NW-A/C26																					
PE1040	Slope 11NW-A/C26 - Finishing Works	12	20MAR06	01APR06	10NOV06	23NOV06	PE1040														
Retaining Wall CCR-R5 (Pre-bored "H" Piles)																					
PW2150	Ret. Wall CCR-R5 - R.C. Wall CCR-R5A	48	20MAR06	02MAY06	17APR08	29MAY08	PW2150														
PW2040	Ret. Wall CCR-R5 - Stage 1 - Fill Behind Wall	60	20MAR06	30MAY06	19MAR08	29MAY08	PW2040														
PW2130	Ret. Wall CCR-R5 - Stage 2 - Install "H" Piles	18	20MAR06	10APR06	12DEC05	03JAN06	PW2130														
PW2225	Ret. Wall CCR-R5 - Complete Coping & Facing	12	11APR06	24APR06	04JAN06	17JAN06	PW2225														
PW2140	Ret. Wall CCR-R5 - Complete Fill Behind Wall	12	25APR06	09MAY06	26SEP06	11OCT06	PW2140														
PW2230	Ret. Wall CCR-R5 - Slope Works Behind Wall	36	10MAY06	21JUN06	12OCT06	23NOV06	PW2230														
Retaining Wall CCR-R6 (Value Engineering Design)																					
PW3220	Ret. Wall CCR-R6 - Excavate Slope	48	06MAR06A	06MAY06	06MAR06A	29OCT05	PW3220														
PW3230	Ret. Wall CCR-R6 - Reinstate Soil Nail Heads	48	08APR06*	03JUN06	30SEP05	26NOV05	PW3230														
PW3240	Ret. Wall CCR-R6 - Install T40 Tie Back Anchors	48	08MAY06*	04JUL06	31OCT05	24DEC05	PW3240														
PW3250	Ret. Wall CCR-R6 - Bases to R.C. Walls	48	05JUN06*	02AUG06	28NOV05	24JAN06	PW3250														
Utilities & Roadworks																					
PR1110	CLP Slew 2No.132kva No.5 Behind Wall CCR-R5	36	21DEC05A	25MAR06	21DEC05A	24DEC05	PR1110														
PR1115	New CLP 11Kv Cable Laying behind CCR-R5	12	27MAR06	10APR06	28FEB06*	13MAR06	PR1115														
PR5000	C.P.Rd-K.C. S/B to C.C.Rd E/B - Excavate Road	18	17JUN06	10JUL06	18JAN06	10FEB06	PR5000														
PR5100	C.C. Rd. W/B - Sign Gantry FADS7 at P15-P16	6	18APR06	24APR06	23MAY08	29MAY08	PR5100														
Kiosk at Slip Road C																					
PK1000	Kiosk at Slip Rd. C - Structure	24	18APR06	16MAY06	21NOV05	17DEC05	PK1000														
PK1010	Kiosk at Slip Rd. C - Building Finishes	48	17MAY06	13JUL06	19DEC05	17FEB06	PK1010														
PK1020	Kiosk at Slip Rd. C - MVAC Installation	24	17MAY06	13JUN06	19DEC05	17JAN06	PK1020														

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**APPENDIX C
MONITORING REQUIREMENTS**

Appendix C - Environmental Impact Monitoring Requirements for Lai Chi Kok Viaduct

Type of Monitoring	Parameter	Frequency	Location	Measurement Conditions
Air Quality	1-hour TSP	3 times every 6 days	<ul style="list-style-type: none"> AM2 (Lai Chi Kok Park Sports Centre) 	<ul style="list-style-type: none"> Rooftop facing the site area
	24-hour TSP	Once every 6 days		
Noise	L _{eq} , L ₉₀ & L ₁₀ at 30 minute intervals during (0700 to 1900 on normal weekdays)	Once per week	<ul style="list-style-type: none"> NM2 (Lai Chi Kok Reception Centre)⁽²⁾ NM3 (Lai Chi Kok Hospital)⁽³⁾ NM4 (Mei Foo Sun Chuen, Phase 5) NM8a (M/F of Nob Hill) NM8b (3/F of Nob Hill) NM9 (Hoi Lai Estate) 	<ul style="list-style-type: none"> NM2 – Roadside (Façade measurement) NM3 – Rooftop of Block L (Façade measurement) NM4 – Rooftop of Block 9 (Façade measurement) NM8a – M/F of Nob Hill (Façade measurement) NM8b – 3/F of Nob Hill (Façade measurement) NM9 – G/F of Hoi Fai House
	L _{eq} , L ₉₀ & L ₁₀ at 5 minute intervals during (1900 to 2300) ⁽¹⁾	Once per week (include 3 consecutive 5-min measurements)		
	L _{eq} , L ₉₀ & L ₁₀ at 5 minute intervals during (2300 to 0700 of next day) ⁽¹⁾	Once per week (include 3 consecutive 5-min measurements)		
	L _{eq} , L ₉₀ & L ₁₀ at 5 minute intervals during (0700 to 1900 on holidays) ⁽¹⁾	Once per week (include 3 consecutive 5-min measurements)		

⁽¹⁾ – Conduct noise monitoring only when construction work is carried out.

⁽²⁾ – Renovation work was undertaken at the Lai Chi Kok Reception Centre (NM2) and the centre was found vacated. The noise monitoring was suspended since December 2004. Approval for the change of EM&A Programme was granted by EPD on 30 December 2004.

⁽³⁾ - The Lai Chi Kok Hospital (NM3) was also found vacated and noise monitoring could not be conducted since January 05. EPD's approval for suspension of noise monitoring at this station was received on 15th March 2005.

**APPENDIX D
ENVIRONMENTAL QUALITY
PERFORMANCE (ACTION/LIMIT)
LEVELS**

Appendix D - Action and Limit Levels (LCKV)

1-Hour TSP

Location	Action Level, $\mu\text{g}/\text{m}^3$	Limit Level, $\mu\text{g}/\text{m}^3$
AM2	301	500

24-Hour TSP

Location	Action Level, $\mu\text{g}/\text{m}^3$	Limit Level, $\mu\text{g}/\text{m}^3$
AM2	177	260

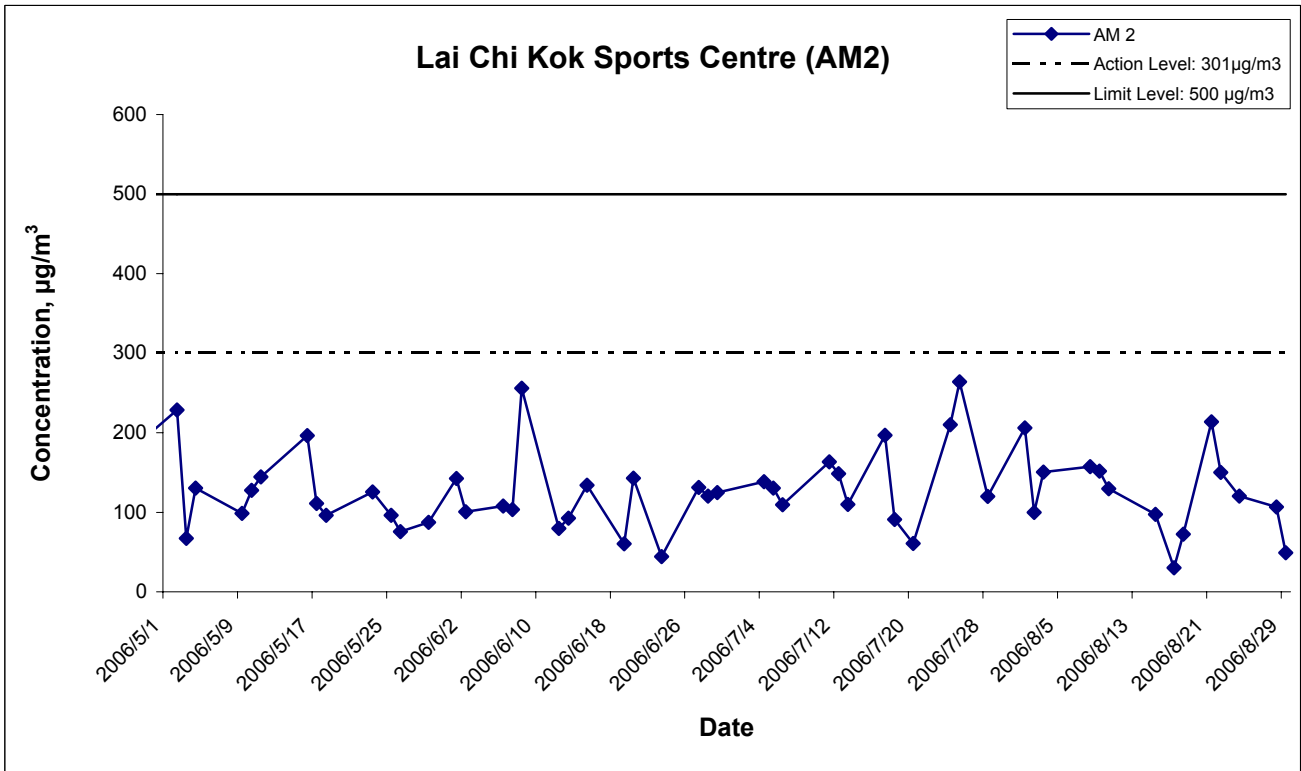
Construction Noise

Period	Action Level	Limit Level
0700-1900 hrs on normal weekdays	When one documented complaint is received	75 dB(A)
0700-2300 hrs on holidays & 1900-2300 hrs on all other days		70* dB(A)
2300-0700 hrs of next day		55* dB(A)

(*) The Area Sensitivity Rating for the noise monitoring stations (NM3, NM4, NM8a, NM8b and NM9) is taken as C, according to Table 1 of EPD's Technical Memorandum on Noise from Construction Work other than Percussive Piling.

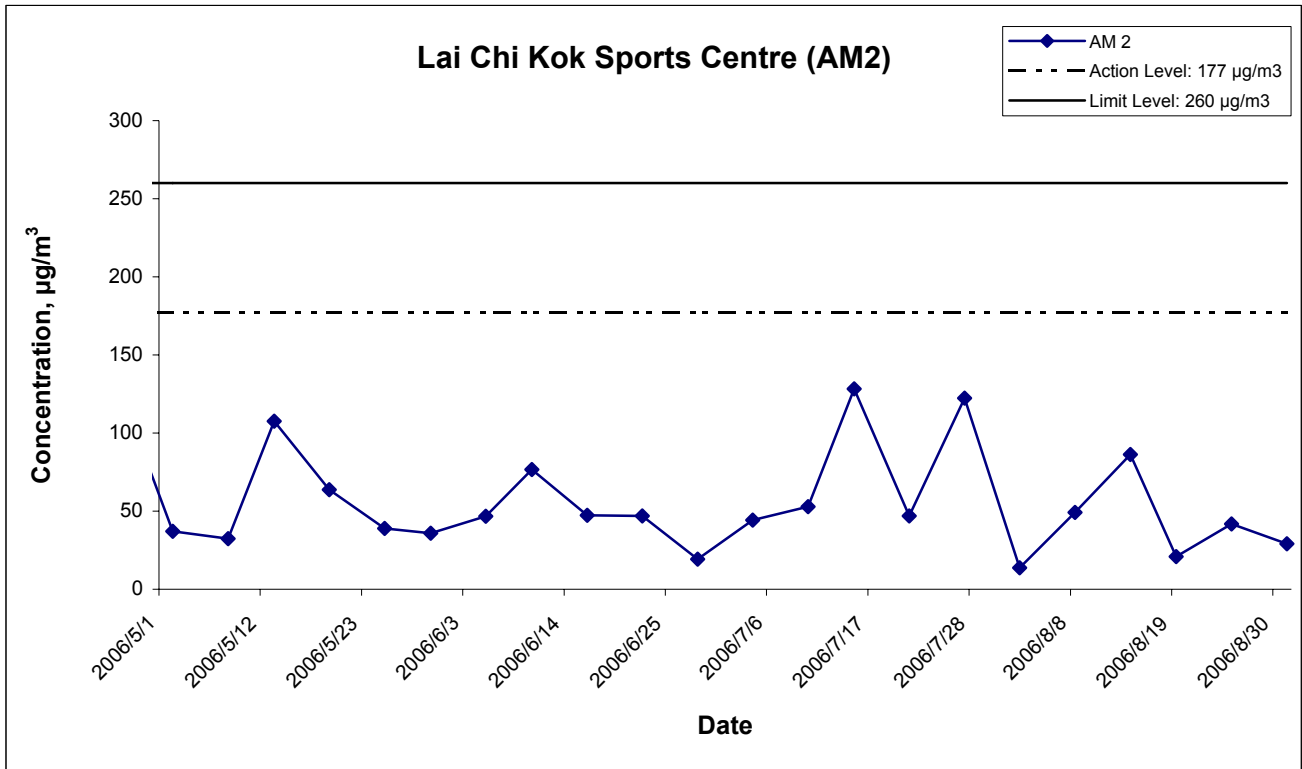
**APPENDIX E
GRAPHICAL PRESENTATION OF AIR
QUALITY MONITORING RESULTS**

1-hr TSP Levels



Title Route 8 (previously known as Route 9) between Cheung Sha Wan & Sha Tin Contract HY/2003/01 - Lai Chi Kok Viaduct Graphical Presentation of 1-hour TSP Impact Monitoring Results	Scale N.T.S	Project No. MA3024	
	Date Aug 06	Appendix E	

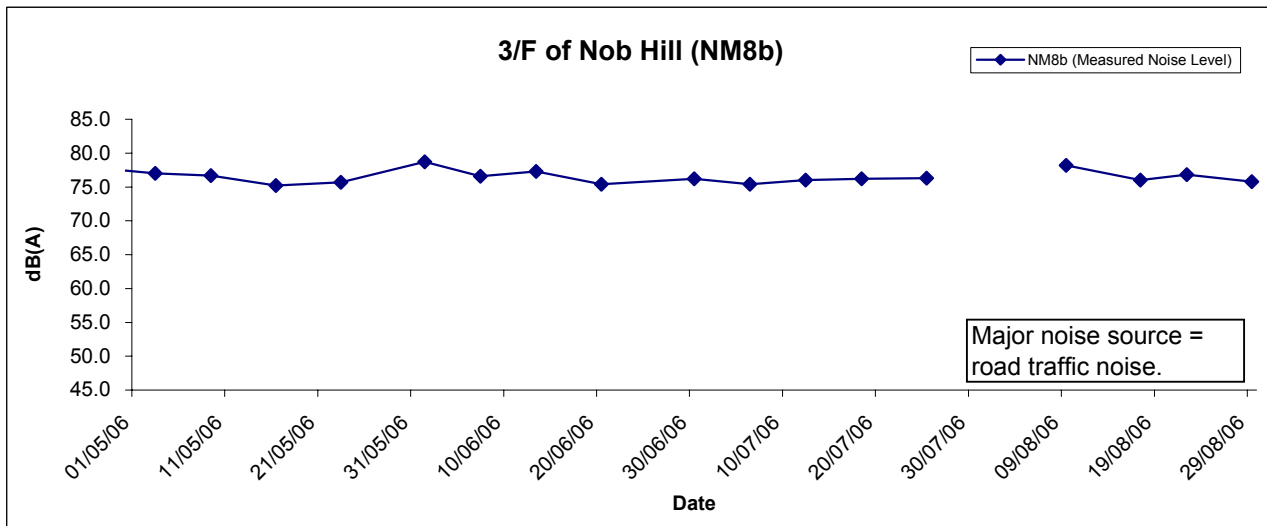
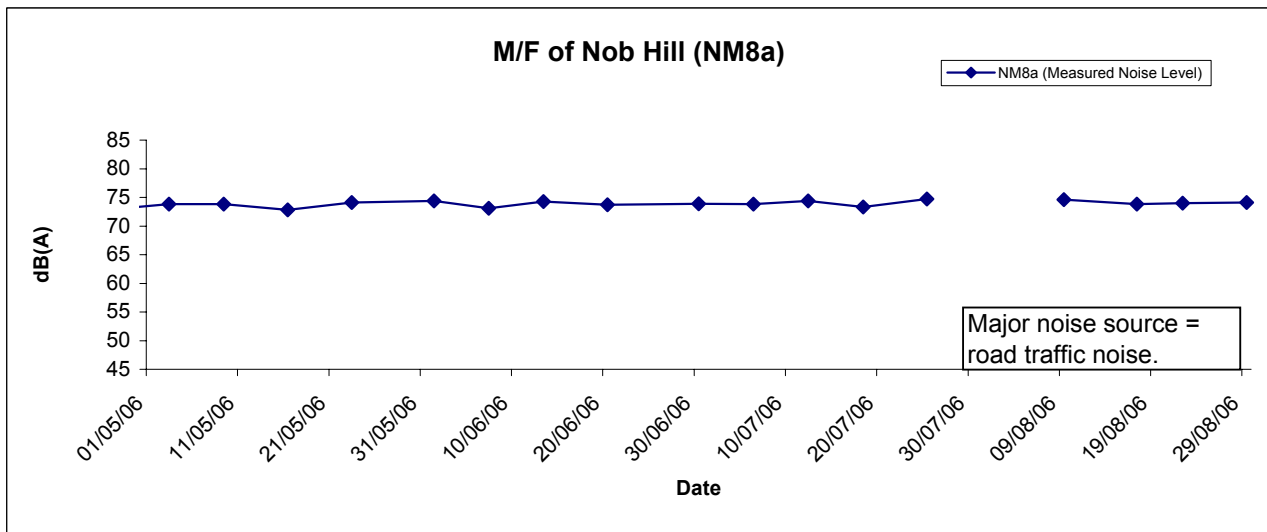
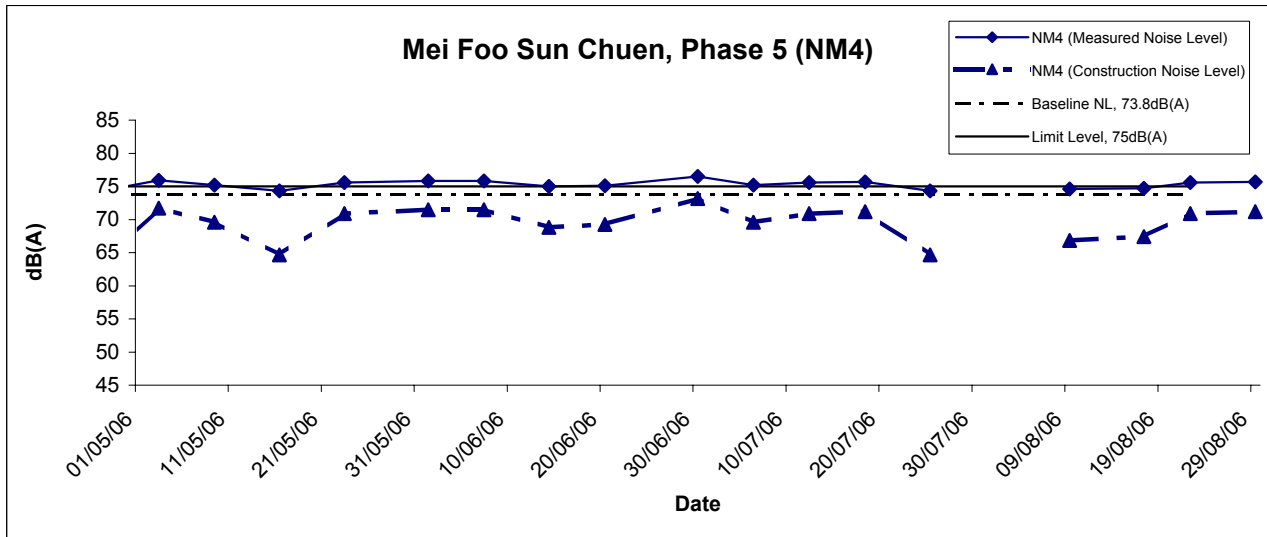
24-hr TSP Levels



Title Route 8 (previously known as Route 9) between Cheung Sha Wan & Sha Tin Contract HY/2003/01 - Lai Chi Kok Viaduct Graphical Presentation of 24-hour TSP Impact Monitoring Results	Scale N.T.S	Project No. MA3024	
	Date Aug 06	Appendix E	

**APPENDIX F
GRAPHICAL PRESENTATION OF
NOISE MONITORING RESULTS**

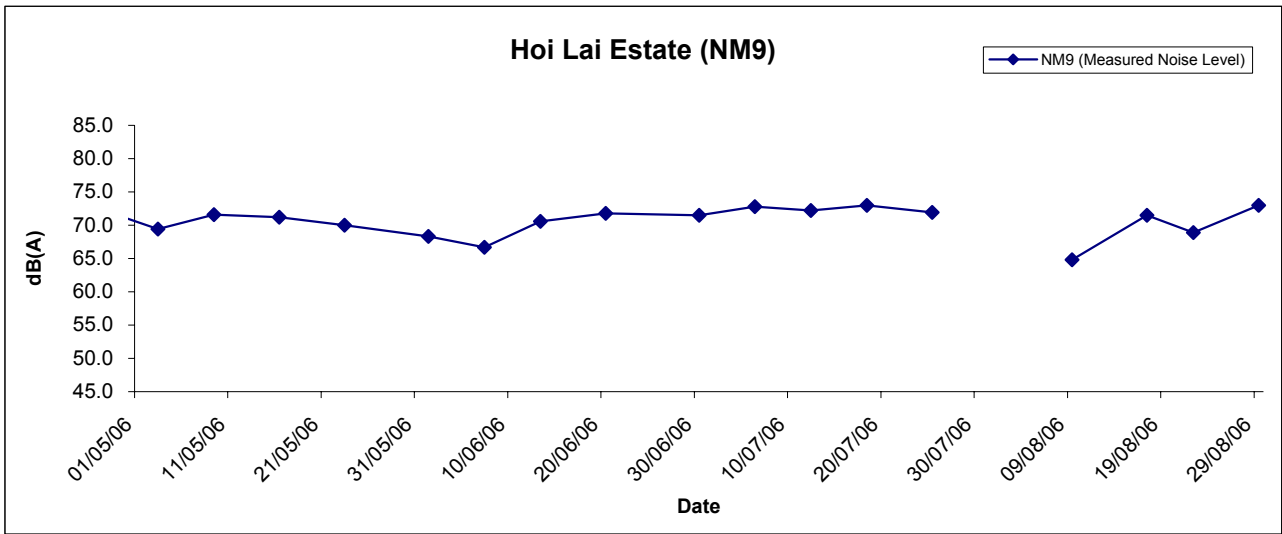
Noise Levels



* Construction Noise Level = Measured Noise Level - Baseline Level
 (If the measured noise level is lower than the baseline level, the construction noise level will be taken as the measured one)

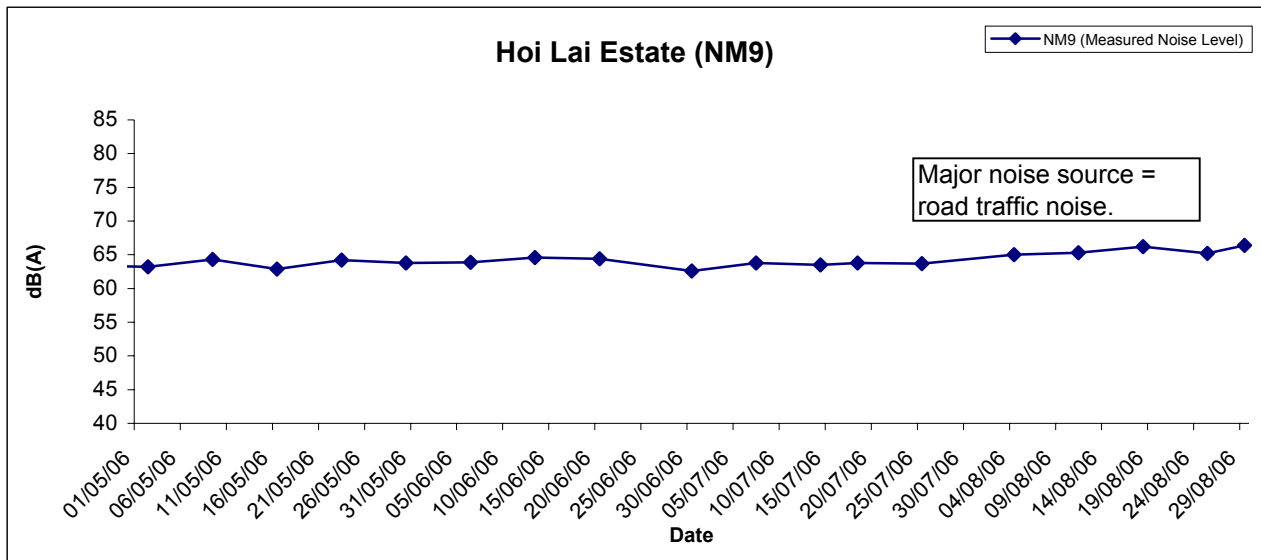
Title Route 8 (previously known as Route 9) between Cheung Sha Wan and Sha Tin Contract HY/2003/01 - Lai Chi Kok Viaduct Graphical Presentation of Construction Noise Monitoring Results	Scale	Project No.	
	Date	Appendix F	
	N.T.S	MA3024	
	Aug 06		

Noise Levels



Title Route 8 (previously known as Route 9) between Cheung Sha Wan and Sha Tin Contract HY/2003/01 - Lai Chi Kok Viaduct Graphical Presentation of Construction Noise Monitoring Results	Scale N.T.S	Project No. MA3024	
	Date Aug 06	Appendix F	

Restricted Hours (19:00 to 23:00) - Noise Levels



Title Route 8 (previously known as Route 9) between Cheung Sha Wan and Sha Tin Contract HY/2003/01 - Lai Chi Kok Viaduct Graphical Presentation of Construction Noise Monitoring Results	Scale N.T.S	Project No. MA3024	
	Date Aug 06	Appendix F	

**APPENDIX G
IMPLEMENTATION SCHEDULE OF
ENVIRONMENTAL MITIGATION
MEASURES (EMIS)**

Appendix G - Summary of Environmental Mitigation Implementation Schedule

Types of Impacts	Mitigation Measures	Status
Construction Dust	<ul style="list-style-type: none"> • Any stockpile of dusty materials or stockpile of dusty material should be covered entirely by impervious sheeting or sprayed with water so as to maintain the entire surface wet. • A stockpile of dusty materials should not extend beyond the pedestrian barriers, fencing or traffic cones. • Vehicle washing facilities should be provided at every exit point. • The area where vehicle washing takes place and the section of the road between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores. • Where a site boundary adjoins a road, street, service lane or other area accessible to the public, hoarding of not less than 2.4m high from ground level should be provided along the entire length of that portion of the site boundary except for a site entrance or exit. • Every main haul road should be sprayed with water or a dust suppression chemical so as to maintain the entire road surface wet. • The portion of any road leading only to a construction site that is within 30m of a discernible or designated vehicle entrance or exit should be kept clear of dusty materials. • Any stockpile of dusty materials should be either covered entirely by impervious sheeting, placed in an area sheltered on the top and the 3 sides or sprayed with water or a dust suppression chemical so as to maintain the entire surface wet. • All dusty materials should be sprayed with water or a dust suppression chemical immediately prior to any loading, unloading or transfer operation so as to maintain the dusty materials wet. • Every vehicle should be washed to remove any dusty materials from its body and wheels immediately before leaving a construction site. • The working area of any excavation should be sprayed with water or a dust suppression chemical immediately before, during and immediately after the operation so as to maintain the entire surface wet. 	<p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p>
Construction Noise	<ul style="list-style-type: none"> • Only well-maintained plant should be operated on –site and plant should be serviced regularly during the construction works. • Machines and plant that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum. • Plant known to emit noise strongly in one direction, should where possible, be orientated to direct noise away from the NSRS. • Mobile plant should be sited as far away from NSRs as possible. • Material stockpiles and other structures should be effectively utilised, where practicable, to screen noise from on-site construction activities. • Use quiet plant and Working Method 	<p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p> <p>^</p>

Types of Impacts	Mitigation Measures	Status
	<ul style="list-style-type: none"> • Reduce the number of plant operating in critical areas close NSRs. • Construct temporary and movable noise barriers 	<p style="text-align: center;">^</p> <p style="text-align: center;">^</p>
Water Quality	<p><i>Construction Runoff and Drainage</i></p> <ul style="list-style-type: none"> • Use of sediment traps and the adequate maintenance of drainage systems to prevent flooding and overflow. • Boundaries of critical areas of earthworks should be marked and surrounded by dykes or embankments for flood protection. Temporary ditches should be provided to facilities runoff discharge into the appropriate watercourses, via a silt retention pond. Permanent drainage channels should incorporate sediment basins or traps and baffles to enhance deposition rates. • All temporary and permanent drainage pipes and culverts provided to facilitate runoff discharge should be adequately designed for the controlled release of storm flows. All sediment traps should be regularly cleaned and maintained. The temporarily diverted drainage should be reinstated to its original condition when the construction works has finished or the temporary diversion is no longer required • Sand silt in the wash water from the wheel washing facilities, which ensure no earth, mud and debris is deposited on roads, should be settled out the removed before discharging into storm drains. A section of the road between the wheel washing bay and the public road should be paved with backfill to prevent wash water or other site runoff form entering public road drains. • Oil interceptors should be provided in the drainage system and regularly emptied to prevent the release of oils and grease into the storm water drainage system after accidental spillage. The interceptor should have a bypass to prevent flushing during periods of heavy rain. • Catchpits and perimeter channels shall be constructed in advance of site formation works and earthworks. • Silt removal facilities, channels and manholes shall be suitably maintained with the deposited silt and grit being removed at least once a week, and at the onset of and after each rainstorm to ensure that these facilities are functioning properly at all times. • Earthworks final surfaces shall be well compacted and the subsequent permanent work or surface protection shall be carried out immediately after the final surfaces are formed to prevent erosion caused by rainstorms. Appropriate intercepting channels shall be provided along the site boundary or at the locations agreed with the ET Leader. Rainwater pumped out from trenches or foundation excavations shall be discharged into silt removal facilities before discharge into storm drains. • All generators, fuel and oil storage shall be within bunded areas. Drainage from the areas shall be connected to storm drains via a petrol interceptor. 	<p style="text-align: center;">^</p> <p style="text-align: center;">^</p> <p style="text-align: center;">^</p> <p style="text-align: center;">^</p> <p style="text-align: center;">^</p> <p style="text-align: center;">^</p> <p style="text-align: center;">^</p> <p style="text-align: center;">^</p>
	<p><i>Tunnelling Work</i></p> <ul style="list-style-type: none"> • Temporary open storage of excavated materials should be covered with tarpaulin or similar fabric during rainstorms. Any washout of construction or excavated materials form the drill and blast tunnelling work should be diverted to the drainage system via appropriate sediment traps. • Ground water pumped out of tunnels should be discharged into the drainage channels which incorporated sediment traps to enhance deposition rates and to remove silt. 	<p style="text-align: center;">N/A</p> <p style="text-align: center;">N/A</p>

Types of Impacts	Mitigation Measures	Status
	<ul style="list-style-type: none"> • Spent grouts used in diaphragm wall construction should be collected in a separate slurry collection system, reconditioned and reused wherever practicable. The disposal of used grouting materials will only be permitted if it is treated to the TM standards before discharge to the storm drains or disposal to landfill. 	N/A
	<i>General Construction Activities</i>	
	<ul style="list-style-type: none"> • Debris and rubbish on site should be collected, handled and disposed of properly to avoid entering the water column and cause water quality impacts. • All fuel tanks and storage areas will be provided with locks and be located on sealed areas (within bunds of a capacity equal to 110% of the storage capacity of the largest tank or 20% by volume of the fuel stored in that areas, whichever in the greatest). 	^
	<i>Sewage Effluent</i>	
	<ul style="list-style-type: none"> • Construction work force sewage discharges from fixed toilet facilities on-site should be connected to the nearby existing trunk sewer wherever feasible. However, for areas where existing trunk sewer is not available, it is recommended that appropriate and adequate on site portable chemical toilets should be provided by a licensed contractor who will be responsible for appropriate disposal and maintenance of these facilities. • It is considered that sewage discharges could also be treated by on-site septic tanks and soakaway. Minimum clearance away from streams and catchments and other requirements for the proposed septic tank and soakaway should be referred to EPD's Practice Note for Professional Persons, Drainage Plans. 	^
		N/A
Waste	<i>General</i>	
	<ul style="list-style-type: none"> • Training and instruction shall be given at a site to construction staff to increase awareness and draw attention to waste management issues and the need to minimise waste generation. The training requirement shall be included in the site waste management plan. 	^
	<i>Storage, Collection and Transportation of Waste</i>	
	<ul style="list-style-type: none"> • Wastes shall be handled and stored in a manner to ensure that they are held securely without loss or leakage. • Authorised or licensed waste hauliers shall be used and they shall only collect wastes prescribed by their permits. • Waste shall be removed on a daily basis. • Waste storage area shall be maintained and cleaned on a daily basis. • Windblown litter and dust during transportation shall be minimised by either covering trucks or transporting wastes in enclosed containers. • Obtain necessary waste disposal permits from the appropriate authorities if they are required. • Wastes shall be disposed of at licensed waste disposal facilities. • Develop procedure such as ticketing system to facilitate tracking of loads, particularly for chemical waste, and to ensure that illegal disposal of wastes does not occur. 	^ ^ ^ ^ ^ ^ ^
	<ul style="list-style-type: none"> • Maintain records of the quantities of wastes generated, recycled and disposed. 	^

Types of Impacts	Mitigation Measures	Status
	<i>Surplus Excavated Materials</i>	
	<ul style="list-style-type: none"> Due to the high risk of loose material being washed into the existing nullah, stockpile materials should be properly compacted and covered from water erosion and located at least 10m away from the nullah wall. 	^
	<i>Construction and Demolition (C&D) Waste</i>	
	<ul style="list-style-type: none"> Careful design, planning and good site management shall be adopted to minimise over-ordering and generation of waste materials such as concrete grouts. The handling and disposal of bentonite slurries shall be undertaken in accordance with Practice Note for Professional Persons – Construction Site Drainage (ProPECC PN 1/94) on construction site drainage. Construction and demolition (C&D) material shall be segregated to inert and non-inert parts. The inert portion shall re-used at areas of reclamation or land formation, or to public filling area such allocation is deemed necessary. The non-inert portion shall be disposed of to landfill. 	^ N/A ^
	<i>Chemical Waste</i>	
<ul style="list-style-type: none"> Chemical waste that is produce during construction shall be handled in accordance with the Cod of Practice on the Packaging, Handling and Storage of Chemical Wastes. Containers used for the storage of chemical wastes should: <ul style="list-style-type: none"> a. Be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed; b. Have a capacity of less than 450 litres unless the specifications have been approved by the EPD; c. Display a label in English and Chinese in accordance with instructions prescribed in Schedule 2 of the Chemical Waste Regulations. The storage area for chemical wastes should: <ul style="list-style-type: none"> a. Be clearly labelled and used solely for the storage of chemical waste; b. Be enclosed on at least 3 sides; c. Have an impermeable floor and bunding of capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical waste stored in the area, whichever is largest; d. Have adequate ventilation; e. Be covered to prevent rainfall entering (water collected within the bund must be tested and disposed as chemical waste if necessary); f. Be arranged so that incompatible materials are adequately separated. Disposal of chemical waste shall be via a licensed waste collector; and to a facility licensed to receive chemical waste; or a reuser of the waste (under approval from EPD). 	^ ^ ^	
	<i>General Refuse</i>	

Types of Impacts	Mitigation Measures	Status
	<ul style="list-style-type: none"> • General refuse generated on-site shall be stored in enclosed bins or compaction unit separate from C&D and chemical wastes. A reputable waste collector shall be employed by the contractor to remove general refuse from the site, separately from C&D and chemical wastes, on a daily for every second day basis to minimise odour, pest and litter impacts. The burning of refuse on construction sites is prohibited by law. • Reusable rather than disposable dishware shall be used if feasible. 	<p style="text-align: center;">^</p> <p style="text-align: center;">N/A</p>
Ecology	<ul style="list-style-type: none"> • A sediment barrier shall be erected to minimize stream sedimentation at downstream of the project boundary of the Toll Plaza. • Conduct a tree survey before commencement of the construction work. • All measures recommended in the approved landscape proposals under Condition 2.4 in EP above shall be fully implemented in accordance with the details and time schedule set out in the submission. • Loss of the adjacent woodland due to temporary land take shall be returned to the original status immediately. • Wild and uncontrolled fire shall be strictly prohibited • Fences shall be erected along the boundary of the construction sites at the Toll Plaza before commencement of works, to prevent tipping, vehicle movements, and encroachment of personnel onto adjacent wooded areas. 	<p style="text-align: center;">N/A</p> <p style="text-align: center;">^</p> <p style="text-align: center;">N/A</p> <p style="text-align: center;">N/A</p> <p style="text-align: center;">^</p> <p style="text-align: center;">N/A</p>
Landscape and Visual Impact	<ul style="list-style-type: none"> • Landscape mitigation measure 1 (LMM1) – Construction programming and management. The periphery of the works areas at street level shall be managed so that they do not appear cluttered, untidy and unattractive and inconvenient to pedestrians. For example, all hoarding shall be colorfully designed with interesting motifs demonstrating the work of Highways Department. Hoardings with bland colours shall be avoided. • Landscape mitigation measure 2 (LMM2) – Advanced planting and erosion control works. Where possible, the transplantation of existing valuable trees, the stockpiling of topsoil, new planting and erosion control works shall be carried out as early as possible in the construction period instead of at the end. This will assist in maximizing the time for carrying out transplantation and new planting, resulting in a higher success rate for the survival of transplantation and new planting, resulting in a higher success rate for the survival of transplanted trees and the establishment of new screen trees. The stockpiling of topsoil will provide an abundant use of on-site material for growing media. During detailed design, the issue of stockpiling of topsoil in a manner that would avoid washing into the drainage scheme should be examined comprehensively. • Measurement of vibration would also be carried out on a need basis during the piling work 	<p style="text-align: center;">N/A</p> <p style="text-align: center;">N/A</p> <p style="text-align: center;">^</p>

Remarks:

^
N/A

Compliance of mitigation measure;
Not Applicable;

X
•

Non-compliance of mitigation measure;
Non-compliance but rectified by the contractor

**APPENDIX H
SUMMARY OF ENVIRONMENTAL
LICENCES AND PERMITS**

Appendix H - Summary of Environmental Licensing and Permit Status (LCKV)

Permit No.	Valid Period		Details	Status
	From	To		
Environmental Permit (EP)				
EP-103/2001/C	22/7/05	N/A	<p><u>Construction and operation of</u></p> <p>(a) All civil works (including highways, traffic, geotechnical, drainage, structural, architectural and landscaping works) for the Lai Chi Kok Viaduct, the interchange with Ching Cheung Road, the main road within Butterfly Valley and the Eagle's Nest Tunnel;</p> <p>(b) All E&M works (including ventilation, Traffic Control & Surveillance System (TCSS), toll collection system and lighting) for the whole Route 9 between Cheung Sha Wan and Sha Tin;</p> <p>(c) The permanent slope works above the northern portal of the Eagle's Nest Tunnel;</p> <p>(d) The architectural works (including fitting out and furnishings) of the portal buildings of the Sha Tin Heights Tunnel.</p>	Valid
Registration of Chemical Waste Producer				
WPN 5213-261-N2413-0 4	17/11/03	N/A	N/A	Valid
Water Discharge Licence				
EP482/260/251/1	05/12/03	31/12/08	Discharge of industrial trade effluent arising from the construction site at Route 9 – Lai Po Road Section of Lai Chi Kok Viaduct (Contract HY/2003/01).	Valid
EP482/260/251/2	15/12/03	31/12/08	Discharge of industrial trade effluent arising from the construction site at Route 9 – Lai Chi Kok Viaduct excluding Lai Po Road Section.	Valid
Construction Noise Permit (CNP)				
GW-RW0121-06	11/3/06	6/9/06	<p><i>Location:</i> Ching Cheung Road near Castle Peak Road</p> <p><i>Time Period:</i> Whole day of general holidays (including Sundays) and any other days between 1900-0700 hrs on next day</p>	Valid
GW-RW0135-06	16/3/06	15/9/06	<p><i>Location:</i> Butterfly Valley</p> <p><u>20/03/06 to 31/03/06</u> <i>Time Period:</i> Whole day of general holidays (including Sundays) and any other days between 1900-0700 hrs on next day</p> <p><u>1/4/06 to 15/9/06</u> <i>Time Period:</i> General holidays (including Sundays) between 0900-2300 hrs and any other days between 1900-0700 hrs on next day</p>	Valid
GW-RW0142-06	22/3/06	15/9/06	<p><i>Location:</i> Lai Wan Road</p> <p><i>Time Period:</i> Any day not being a general holiday between 2100-0700 hrs on next day</p>	Valid
GW-RW0145-06	31/3/06	30/9/06	<p><i>Location:</i> Lai Po Road and Yuet Lun Street</p> <p><i>Time Period:</i> Any day not being a general holiday between 2100-0700 hrs on next day</p>	Valid
GW-RW0146-06	22/3/06	19/9/06	<p><i>Location:</i> Lai Wan Road</p> <p><i>Time Period:</i> Whole day of general holidays (including Sundays) and any other days between 1900-0700 hrs on next day</p>	Valid

Permit No.	Valid Period		Details	Status
	From	To		
GW-RW0173-06	31/3/06	30/9/06	<i>Location:</i> Butterfly Valley Road, Lai Chi Kok <i>Time period:</i> General holiday including Sundays between 0000-2300 hrs and any day not being a general holiday between 1900-2300	Valid
GW-RW0192-06	7/4/06	6/10/06	<i>Location:</i> Junction of Ching Cheung Road and Castle Peak Road <i>Time Period:</i> General holidays (including Sundays) between 0700-2300 hours and any other days between 1900-2300 hours	Valid
GW-RW0244-06	27/4/06	26/9/06	<i>Location:</i> Ching Cheung Road near Mei Foo Sun Chuen <i>Time Period:</i> General holiday (included Sundays) between 0700-2300 hours and any day not being a general holiday between 1900-2300 hours.	Valid
GW-RW0257-06	4/5/06	3/10/06	<i>Location:</i> Castle Peak Road near Ching Cheung Road <i>Time Period:</i> General holiday (includes Sundays) between 0700-2300 hours and any day not being a general holiday between 1900-2300 hours.	Valid
GW-RW0258-06	5/5/06	4/10/06	<i>Location:</i> Butterfly Valley <i>Time Period:</i> General holiday (includes Sundays) between 0000-2400 hours and any day not being a general holiday between 1900-0700 hours.	Valid
GW-RW0269-06	15/5/06	14/11/06	<i>Location:</i> Lai Po Road near Yuet Lun Street <i>Time Period:</i> General holiday (includes Sundays) between 0000-2400 hours and any day not being a general holiday between 1900-0700 hours.	Valid
GW-RW0270-06	15/5/06	14/11/06	<i>Location:</i> Lai Po Road near Hoi Lai Estate <i>Time Period:</i> General holiday (includes Sundays) between 0000-2400 hours and any day not being a general holiday between 1900-0700 hours.	Valid
GW-RW0271-06	15/5/06	10/11/06	<i>Location:</i> Ching Cheung Road near Butterfly Valley Road <i>Time Period:</i> Any day not being a general holiday between 2100-2400 hours (immediately following a general holiday) and between 2100-0700 hours (not immediately following a general holiday).	Valid
GW-RW0276-06	15/5/06	11/11/06	<i>Location:</i> Butterfly Valley Road near Lai Chi Kok Interchange <i>Time Period:</i> Any day not being a general holiday between 2100-2400 hours (immediately following a general holiday) and between 2100-0700 hours (not immediately following a general holiday).	Valid
GW-RW0319-06	30/5/06	26/11/06	<i>Location:</i> Ching Cheung Road near Butterfly Valley Road <i>Time Period:</i> General holiday (includes Sundays) between 0000-2400 hours and any day not being a general holiday between 1900-0700 hours.	Valid
GW-RW0311-06	6/6/06	5/12/06	<i>Location:</i> Butterfly Valley near O Pui Shan Boys' Home <i>Time Period:</i> General holiday (including Sundays) between 0700-2300 hours and any day not being a general holiday between 1900-2300 hours.	Valid (new)
GW-RW0381-06	17/7/06	16/12/06	<i>Location:</i> Kwai Chung Road near Lai Chi Kok Interchange <i>Time Period:</i> Any day not being a general holiday between 2100-2400 (immediately following a general holiday) and 2100-0700 (not immediately following a general holiday)	Valid (new)
GW-RW0393-06	27/7/06	25/1/07	<i>Location:</i> Lai Wan Road <i>Time Period:</i> Any day not being a general holiday between 2100-2400 (immediately following a general holiday) and 2100-0700 (not immediately following a general holiday)	Valid (new)
GW-RW0408-06	02/8/06	30/12/06	<i>Location:</i> Lai Po Road near Hoi Lai Estate <i>Time Period:</i> Any day not being a general holiday between 2100-2400 (immediately following a general holiday) and 2100-0700 (not immediately following a general holiday)	Valid (new)

Permit No.	Valid Period		Details	Status
	From	To		
GW-RW0421-06	3/8/06	2/1/07	<i>Location:</i> Lai Po Road near Sham Mong Road <i>Time Period:</i> Any day not being a general holiday between 19:00 - 07:00 and 00:00 - 24:00 (general holiday including Sundays)	Valid (new)

**APPENDIX I
COMPLAINT LOGS**

Appendix I - Complaint Log

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
40318	Nob Hill	18 March 2004	<p>Kwai Tsing District Officer (KTDO) recently received a public noise complaint about construction noise generated from the Route 8 – Lai Chi Kok Viaduct (R8-LCKV) Project, near Nob Hill, Lai Chi Kok. KTDO referred the complaint to the Highways Department (HyD) on the same day. HyD subsequently referred the complaint to the Environmental Team (ET) Leader of the Project on 18 March 2004.</p> <p>The complaint was raised by the Citybase Property Management Ltd. (the management company of Nob Hill) and the Secretary of Nob Hill Owners Committee (Mr. Kevin Tse) about construction noise generated from the R8-LCKV Project at the work areas near Nob Hill. Mr. Kevin Tse mentioned that residents living in Nob Hill have greatly been affected by the noise impacts generating from the R8-LCKV construction works. He also requested relevant government departments to consider installing noise barrier along Ching Cheung Road and to work out possible measures to minimize the noise nuisances to the residents living in the vicinity.</p>	<p>Based on the information provided by the ER, the construction activities conducted in the vicinity of Nob Hill in the period between 2 and 18 March 2004 were:</p> <ul style="list-style-type: none"> ▪ Item 1 – Breaking off existing planter and excavate trial trench to expose underground utilities (using one to two backhoes) ▪ Item 2 – Erect rock fall fence & forming platform for pre-drilling (using one backhoe and occasionally one crane lorry) ▪ Item 4 – Excavate further to expose all underground utilities (using hand tools) ▪ Item 5 – Pre-drilling works (using one drilling rig) <p>Considering the scale of work and the PMEs adopted, the ET believed that the construction noise impact at Nob Hill from the above construction activities of R8-LCKV was not significant.</p> <p>The bored piling work (Item 3) using one crawler crane and one oscillator was started on 19 March 2004, which was two days after the issue date of this complaint, so this activity was not considered in this report.</p> <p>According to the EM&A Manuals, Nob Hill was not selected as Noise Monitoring Location (NML) for the Project. Therefore, no direct noise monitoring data could be provided for the complaint investigation. However, there was no noise level exceedance recorded at the nearby NML (NM4 – Mei Foo Sun Chuen, Phase 5) since the commencement of the project according to ET's inventory.</p> <p>During ET's weekly environmental site inspections on 3, 10, 17 March 2004, no serious noise nuisance induced by the Project works was observed at the sites near Nob Hill.</p> <p>Based on the joint site visit with the representative of HyD, IEC, RSS and ET to the Nob Hill on 30 March 2004, the major noise</p>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
				<p>source at Nob Hill was identified as traffic noise on Ching Cheung Road, which is located very close to this building, especially at or above the Podium Floor (i.e. 5/F).</p> <p>Based on the information obtained, this noise complaint is not considered due to the construction activities of the Project. Nevertheless, the Contractor was recommended to adopt good site practice to minimize the construction noise, such as:</p> <ul style="list-style-type: none"> • To space out noisy equipment and position it as far away as possible from the sensitive receivers; • To avoid concurrent uses of noisy equipment near the sensitive area; • To ensure the equipment are maintaining in good operation condition; and • To turned off any idle equipment on site. <p>Adding to that, ET is proposed to install one to two noise monitoring stations at Nob Hill in order to monitor the noise impact generated from the R8-LCKV Project to the resident of Nob Hill or the nearby buildings.</p>	

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
40330	Site Areas near Nob Hill	30 March 2004	<p>Highways Department (HyD) recently received a public noise complaint about construction noise generated from the Route 8 – Lai Chi Kok Viaduct (R8-LCKV) Project, near Nob Hill, Lai Chi Kok. HyD referred the complaint to the RSS and subsequently referred to the ET Leader of the Project on 30 March 2004.</p> <p>The complaint was raised by Mr. Yau, the Office of DCV Member Mr. Cheung Wing Shum, regarding the high pitch construction noise generated at the R8-LCKV site which cause serious nuisance to the residents at Mei Foo.</p>	<p>Based on the information provided by the RSS, the Contractor was not aware of any high pitched construction noise arising from plant employed for their works. The noise complaint referred to may be originated from the damage of a gas main valve on the afternoon of 29 March 2004 in the vicinity of the junction of Mai Lai Road with Lai King Hill Road. The high pitched whistle apparently resulted from the damage which was repaired by TownGas in that afternoon.</p> <p>Based on the information obtained, this noise complaint is considered not due to the construction activities of the Project. Nevertheless, the Contractor was recommended to adopt good site practice to minimize the construction noise, such as:</p> <ul style="list-style-type: none"> • To space out noisy equipment and position it as far away as possible from the sensitive receivers; • To avoid concurrent uses of noisy equipment near the sensitive area; • To ensure the equipment are maintaining in good operation condition; and • To turned off any idle equipment on site. 	Closed
40402	Nob Hill	06 April 2004	<p>A public noise complaint was received by the Contractor (NECSO) on 02 April 2004 regarding the noise generated from the Ching Cheung Road Widening Works of the Route 8 – Lai Chi Kok Viaduct (R8-LCKV) Project, near Nob Hill, Lai Chi Kok.</p> <p>NECSO referred the complaint to the RSS and subsequently referred to the ET Leader of the Project on 6 April 2004</p>	<p>The complaint was raised by Ms Wong, regarding the noise generated from the Ching Cheung Road Widening Works of the R8-LCKV Project, which cause serious nuisance to her.</p> <p>Based on the information provided by the RSS, the plants employed by the Contractor for carrying out bored piling works in front of Nob Hill should not generate excessive noise. The RSS had also checked against the site records that no piling works was in progress in front of Nob Hill on 1-3 April 2004.</p> <p>According to telephone communication between the complainant (Ms Wong) and the RSS on 8 April 2004, the RSS reported that Ms Wong was not complaining about the construction noise generated by the R8-LCKV Project. She was actually complaining about the traffic noise she anticipated to be generated after completion of widening work at Ching Cheung</p>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
				<p>Road in front of Nob Hill.</p> <p>During ET's weekly environmental site inspections on 17, 24 & 31 March 2004 and 7 April 2004, no serious noise nuisance induced by the Project works was observed at the construction sites near Nob Hill.</p> <p>Based on the joint site visit with the representative of HyD, IEC, RSS and ET to the Nob Hill on 30 March 2004, the major noise source at Nob Hill was identified as traffic noise on Ching Cheung Road, which is located very close to this building, especially at or above the Podium Floor (i.e. 5/F).</p> <p>Based on the information obtained, this noise complaint is considered not due to the construction activities of the Project.</p> <p>Nevertheless, the Contractor was recommended to adopt good site practice to minimize the construction noise, such as</p> <ul style="list-style-type: none"> • To space out noisy equipment and position it as far away as possible from the sensitive receivers; • To avoid concurrent uses of noisy equipment near the sensitive area; • To ensure the equipment are maintaining in good operation condition; and • To turned off any idle equipment on site. 	
40710	Pier P7 in Portion E1	10 July 2004	<p>A public complaint was raised on 30th June 2004 regarding the washout of muddy water from the site area of the Route 8 – Lai Chi Kok Viaduct (R8-LCKV) Project, at Pier P7 onto Lai Chi Kok Road.</p> <p>The complaint was referred to the RSS on 3rd July 2004 and subsequently referred to the ET Leader of the Project on 10th July 2004.</p>	<p>Based on the information provided by the RSS, the spillage of muddy water was in fact due to a burst in a temporary water pipe being utilized in the piling operations at Pier P7 in Portion E1.</p> <p>Emergency remedial works were undertaken preventing further spillage of muddy water. The remaining ponding water within the works area arising from the burst was all removed from the area on 5th July 2004.</p> <p>During ET's weekly environmental site inspection on 14th July 2004, no serious water quality nuisance induced by the Project works was observed at the construction sites near Pier P7. It was</p>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
			<p>The complaint was raised by Mr. Chan, regarding the washout of muddy water from the works area of the R8-LCKV Project onto Lai Chi Kok Road. The washout caused nuisance to the drivers utilizing the road, and may also cause danger to the motorbikes.</p>	<p>also noted that the back of profile barriers along the site boundary had been sealed up by cement as preventive measures.</p> <p>During ET's weekly environmental site inspections on 17, 24 & 31 March 2004 and 7 April 2004, no serious noise nuisance induced by the Project works was observed at the construction sites near Nob Hill.</p> <p>Based on the information obtained, the complaint is considered due to the construction activities of the Project. Emergency remedial works had been taken by the Contractor to rectify the situation and preventive measures had also been implemented.</p> <p>Nevertheless, the Contractor was recommended to adopt the following measures to avoid re-occurrence of similar incidents:</p> <ul style="list-style-type: none"> • to enhance surface runoff control measures along the site boundary; • to provide adequate training to the frontline workers; and • to regularly inspect temporary water supply equipment, such as hose pipe to make sure the equipment is in good condition. 	
40809	Ching Cheung Road area near Nob Hill	<p>22-Jul-04 (by EPD)</p> <p>09-Aug-04 (by ET Leader)</p>	<p>EPD received a public noise complaint on 22 July 2004 about construction noise and dust generated from Route 8 – Lai Chi Kok Viaduct (R8-LCKV) Project, at the Ching Cheung Road Area near Nob Hill. EPD subsequently referred the complaint to the ET Leader of the Project on 9 August 2004.</p> <p>The complaint was about the construction noise and dust observed at the Ching Cheung Road area near Nob Hill. The locations of the works areas being concerned by the complainant include:</p> <p>1. Area A: Works area between Nob</p>	<p>Information Provided by RSS Information (construction activities and equipment adopted) in a 2-week period before the date of complaint, i.e. 7 to 21 July 2004, was obtained from the Resident Site Staff.</p> <p>Area A:</p> <ul style="list-style-type: none"> ▪ Item 1 – Drainage works by using 1 x backhoe; ▪ Item 2 – Bored piling works by using 1 x crawler crane, 1 x air compressor, 1 x reverse circulation drill and 1 x power pack; ▪ Item 3 – Trial trench excavation by man power; ▪ Item 4 – Gas main diversion by 1 x backhoe (performed by TGC's Contractor) <p>Area B: No construction activity was undertaken in the concerned period.</p> <p>Review of Environmental Monitoring Results</p>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
			<p>Hill and Lai Chi Kok Park Swimming Pool</p> <p>2. Area B: Works area between Ching Cheung Road and Mei Lai Road / Lai Wan Road opposite to Mei Foo Sun Cheung (Phase 5) and Lai Chi Kok Public Library.</p>	<p>The routine monitoring stations, which are in the vicinity of the concerned works areas, include:</p> <p><u>Noise Monitoring</u> NM4: R/F of Mei Foo Sun Chuen (Phase 5) NM8a: M/F of Nob Hill NM8b: 3/F of Nob Hill</p> <p><u>Air Quality (1-hr TSP / 24-hr TSP) Monitoring</u> AM2: R/F of Lai Chi Kok Sports Centre</p> <p>No Action / Limit level exceedance was identified in July 2004.</p> <p>Environmental Site Inspection During the ET site inspections on 8th, 14th and 20th July 04, no major environmental deficiency with regard to noise and air quality was identified by the auditors.</p> <p>Conclusions Based on the RSS's information, environmental monitoring results as well as the observations made during site inspections, this complaint is considered to be invalid and not due to the construction activities of the Project. Nevertheless, the Contractor was recommended to adopt good site practice to minimize the construction noise and dust impacts, such as:</p> <ul style="list-style-type: none"> • To space out noisy equipment and position it as far away as possible from the sensitive receivers; • To avoid concurrent uses of noisy equipment near the sensitive area; • To ensure the equipment are maintaining in good operation condition; • To turn off any idle equipment on site. • To cover excavated dusty materials by impervious sheeting; • To provide water spray for haul roads, loading/unloading and concrete breaking operations; • To perform wheel wash for every vehicle immediately before leaving the site. 	

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
50215	Mei Foo Sun Chuen, Phase 5 (Retaining Wall CC-R3)	15-Feb-05 (by ET Leader)	<p>A public complaint was raised on 8th Feb 2005 regarding construction noise from the site area of the Route 8 – Lai Chi Kok Viaduct (R8-LCKV) Project near Mei Foo Sun Chuen. The complaint was referred to the Resident Site Staff on 14th Feb 2005 and subsequently referred to the ET Leader of the Project on 15th Feb 2005.</p> <p>The complaint was raised by a resident in Mei Foo Sun Chuen, regarding the noise generation from the piling work at Retaining Wall CC-R3, adjacent to Po Leung Kuk Tong Nai Kan College.</p>	<p>Construction Activities</p> <p>During the weekly site inspection on 17 Feb 05, piling work was being conducted at the concerned. The major powered mechanical equipment (PME) in operation included a mobile crane, an air compressor, a reverse circulation drill and a generator.</p> <p>In view of the separation of the site area and the residential building (around 40 m) and also the high traffic noise from Ching Cheung Road as well as Mei Lai Road, the noise generated from the operation of the PME was believed to be insignificant.</p> <p>Environmental Monitoring</p> <p>The noise monitoring results at Station NM4 (Mei Foo Sun Chuen, Phase 5) for the last 3 months were reviewed in order to evaluate the noise impact from the Project on the noise sensitive receiver. The measured noise levels in last three threes were ranged from 70.8 to 75.8 dB(A). It was observed that the measured noise levels were well within the range of baseline noise levels (69.2 to 75.8 dB(A)).</p> <p>The corrected construction noise levels were found to be ranged from 63.5 to 71.5 dB(A), which were well below the noise criterion of 75 dB(A).</p> <p>Conclusions</p> <p>Based on the information obtained and the noise monitoring results, this complaint is considered to be invalid and not due to the construction activities of the Project.</p> <p>Nevertheless, the Contractor was recommended to adopt good site practice to minimize the construction noise impacts.</p>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
50322	Seung Lai House, Wah Lai Estate (Slope S1)	11-Mar-05 (by EPD) 22-Mar-05 (by ET Leader)	<p>Environmental Protection Department (EPD) received a public noise complaint on 11 Mar 05 about daytime construction noise generation from R8-LCKV. EPD subsequently referred the complaint to the Environmental Team (ET) Leader of the Project on 22 Mar 05.</p> <p>The complaint was raised by a resident of Seung Lai House of Wah Lai Estate, regarding the daytime (0800-1800 hrs) construction noise generated from the slope work and road work of R8-LCKV Project. As advised by EPD, the complainant is living on 20/F or above in Seung Lai House.</p>	<p>Construction Activities</p> <p>As advised by the RSS, the major construction work during 25 Feb 05 to 11 Mar 05 (2 weeks before the date of complaint) in the vicinity of Wah Lai Estate included excavation work, soil nail work and installation of u-channel and manholes. The major powered mechanical equipment included excavators, drilling machine and air compressor.</p> <p>In view of the separation of the site area (Slope S1) and the Seung Lai House (around 140 m) and also the traffic noise from Ching Cheung Road, the noise generated from the construction activities at Slope S1 was believed to be insignificant.</p> <p>Environmental Monitoring</p> <p>Ad-hoc noise measurement was conducted at Seung Lai House on 30th Mar 05 and the measured noise level (Leq-30min) was 66.9 dB(A), which was well below the criterion for daytime construction noise of 75 dB(A). The construction noise level (with reduction of background noise level) is expected to be even lower.</p> <p>Conclusion</p> <p>Based on the information obtained and the noise measurement results, this complaint is considered not justifiable. Nevertheless, the Contractor was recommended to adopt good site practice to minimize the construction noise impact.</p>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
50330, 50331, 50404 & 50407	Wah Lai Estate	30-Mar-05, 31-Mar-05, 4-Apr-05 & 7-Apr-05 (by ET Leader via RSS)	<p>Four public complaints were lodged by the residents of Wah Lai Estate regarding the construction noise from the site area of the Route 8 – Lai Chi Kok Viaduct (R8-LCKV) Project near Wah Lai Estate. The complaints were referred by the Resident Site Staff to the Environmental Team (ET) Leader on 30th, 31st March, 4th and 7th April 2005, respectively.</p>	<p>Construction Activities</p> <p>The site of concern was likely to be Slope S1, which is around 140 m away from Wah Lai Estate. The major construction work at Slope S1 included trimming of slope, soil nail work and erection of u-channels and step channels.</p> <p>Environmental Monitoring</p> <p>Ad-hoc noise measurement was conducted at Seung Lai House on 30th Mar 05 and 7th Apr 05 and the measured noise levels (Leq-30min) were ranged from 66.9 to 69.1 dB(A), which were well below the criterion for daytime construction noise of 75 dB(A). The construction noise level (with reduction of background noise level) is expected to be even lower.</p> <p>Conclusion</p> <p>Based on the results of the ad-hoc noise measurements at Wah Lai Estate, no exceedance of daytime noise criterion of 75 dB(A) was recorded. The complaints lodged are therefore considered not justifiable.</p> <p>Mitigation</p> <p>The Contractor agreed to arrange the noisy activities to commence after 8:00 am. This arrangement could effectively reduce the disturbance to the residents within the more sensitive time period (7:00 am to 8:00 am).</p>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
50404-v2	Mei Foo Sun Chuen	4-Apr-05 (by ET Leader via RSS)	A public complaint was raised on 1 st April 2005 regarding construction noise from the site area of the Route 8 – Lai Chi Kok Viaduct (R8-LCKV) Project near Mei Foo Sun Chuen. The complaint was referred to the Resident Site Staff and the ET Leader on 4 th April 2005.	<p>Construction Activities</p> <p>The site of concern was likely to Retaining Wall CC-R3, adjacent to Po Leung Kuk Tong Nai Kan College. The major construction works at this area included bored piling works and excavation works.</p> <p>Environmental Monitoring</p> <p>According to the EM&A Manual, Mei Foo Sun Chuen, Phase 5 (NM4) is designated as one of the noise monitoring stations.</p> <p>Since the commencement of the impact monitoring programme, the construction noise levels recorded at this station were all below the noise criterion.</p> <p>Conclusion</p> <p>Based on the noise monitoring results at Station NM4 (Mei Foo Sun Chuen), no exceedance of daytime noise criterion of 75 dB(A) was recorded since the commencement of the impact monitoring programme. The complaint lodged is therefore considered not justifiable.</p> <p>Mitigation</p> <p>The Contractor has agreed to arrange the noisy activities to commence after 8:00 am. This arrangement could effectively reduce the disturbance to the residents within the more sensitive time period (7:00 am to 8:00 am). The Contractor also agreed to provide some temporary noise barriers for the noisy machinery if found necessary.</p>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
50613	Mei Foo Sun Chuen	7-Jun-05 (by EPD) 13-Jun-05 (by ET Leader)	<p>According to EPD, the complaint was raised by a resident of Mei Foo Sun Chuen (Block 7, Phase 5) on 7 June 2005. It was about construction dust emitted intermittently from the slope works undertaken on the other side of Mei Lai Road.</p> <p>The complainant was particularly concerned about the fugitive dust emission during rock / concrete breaking activities.</p>	<p><i>Site Activities</i></p> <p>The site of concern was likely to be CCR-R3. Bored piling works and demolition of existing retaining walls were undertaken at this area in the period between 1 and 7 June 2005. It was believed that the demolition of existing retaining wall, which involved concrete breaking, was the activity of concern.</p> <p><i>Observations</i></p> <p>On 1 Jun 05, one of the environmental deficiencies noted by the ET was about fugitive dust emission from breaking activities at CCR-R3. The Contractor was reminded to provide sufficient dust mitigation measures for the breaking works. Immediate action was taken by the Contractor to apply water spray for the works as observed during the audit session.</p> <p>On 9 Jun 05, the breaking works were still being taken at CCR-R3. Water spray as a dust mitigation measure was being adopted by the Contractor during the audit. No observable dust emission was noted from the breaking works or other site activities.</p> <p>On 15 Jun 05, the same area was re-inspected due to the receipt of the complaint from EPD. The demolition works had been finished and no other dust emissive activity was being taken. No other dust source from the construction site was observed during the inspection.</p> <p><i>Conclusion</i></p> <p>Based on the observations noted during our site inspections, this complaint is considered to be valid and related to the construction activities of the Project.</p> <p>However, corrective action had been taken by the Contractor and the situation was found improved during the follow-up inspections.</p>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
50721	Hei Lai House, Wah Lai Estate	21-Jul-05 (by ET Leader)	<p>The complaint was lodged by a resident of Hei Lai House of Wah Lai Estate through a Legislative Council member. The complaint was about construction noise nuisance caused by rock breaking work, which claimed to be started from 8:30am daily, carried out at Ching Cheung Road near Wah Lai Estate.</p> <p>The complainant hoped that the rock breaking work could start later i.e. be carried out from noon to afternoon and the site could be fully enclosed.</p> <p>The Environmental Team (ET) of the Project received the complaint on 21 July 2005 and forwarded it to the Resident Site Staff (RSS) to obtain necessary information.</p>	<p><i>Site Activities</i></p> <p>The slope work at Slope S1 was likely to be the activity of concern. The work at Slope S1 recently included the operation of excavator mounted breakers, excavators and dump trucks.</p> <p>The time period of concern was within normal working hours (7am to 7pm) on a weekday not being a public holiday. The noise criterion is 75 dB(A) for domestic premises.</p> <p><i>Noise Measurement</i></p> <p>Ad-hoc measurements were carried out on the roof of Hei Lai House on 25 July 2005.</p> <p>The results show that the measured noise level is well below the noise criterion of 75 dB(A). The construction noise level (with reduction of background noise) is expected to be even lower.</p> <p><i>Conclusion</i></p> <p>Since the noise measurement results at Wah Lai Estate were below 75 dB(A), the complaint was considered not justifiable.</p> <p>Nevertheless, noise mitigation measures have been implemented by the Contractor to minimize the noise impact arising from the breaking activities:</p> <ol style="list-style-type: none"> 1. Employment of silenced-type breakers; 2. Temporary noise barriers, attached with sound adsorption materials, were erected to screen the site of breaking from sensitive receivers 3. While the permitted hours for construction works are 7am to 7pm on non-holidays, the Contractor has commenced the rock breaking activity after 8:30am. 	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
51107	Ching Cheung Road near Mei Foo Sun Chuen	7-Nov-05 (by the ET Leader)	<p>Environmental Protection Department (EPD) received a public complaint about environmental nuisance generated from Route 8 – Lai Chi Kok Viaduct (R8-LCKV) Project. EPD subsequently referred the complaint to the Environmental Team (ET) Leader of the Project on 7 November 2005.</p> <p>According to EPD, the complaint was raised by a resident of Mei Foo Sun Chuen. The complaint was about dark smoke, dust and noise nuisance caused by the construction work of R8-LCKV near Mei Foo Sun Chuen.</p>	<p>The site of concern was likely to be CCR-S4 and CCR-R3. According to RSS's records, bored piling works and soil nail drilling at CCR-R3, excavation works at CCR-S4 in the concerned period.</p> <p>Site Inspection</p> <p>After receipt of the complaint, an ad-hoc site inspection was carried by ET on 9 November 2005 and the following observations were made:</p> <ol style="list-style-type: none"> 1. Breaking activities were undertaken at CCR-R2 and R3. Continuous water spray was applied by the workers for dust suppression. Movable noise barriers were erected to alleviate the noise impact. 2. The haul roads and exposed works areas were observed wet. A water sprinkler was installed at the CCR-S4 for water spraying. 3. Most of the slope was shot-creted to avoid wind erosion. 4. Bored piling work was carried out near the site exit of CCR-R3. Since bored piling mainly involves handling of wet materials, dust nuisance causing by this type of work is not anticipated. Gas exhaust from the machines was visually clear and no dark smoke was identified. <p>Environmental Monitoring</p> <p>Air quality monitoring was conducted at Lai Chi Kok Sports Centre and noise monitoring is conducted at Mei Foo Sun Chuen. No exceedance was recorded for both monitoring.</p> <p>Conclusion</p> <p>Based on the ad-hoc site inspection and the environmental monitoring results, this complaint was considered not justifiable.</p>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
60118	Lai Po Road near Hoi Lai Estate	18-Jan-06 (by the ET Leader)	<p>Environmental Protection Department (EPD) received a public complaint about environmental nuisance generated from Route 8 – Lai Chi Kok Viaduct (R8-LCKV) Project. EPD subsequently referred the complaint to the Environmental Team (ET) Leader of the Project on 18 January 2006.</p> <p>According to EPD, the complaint was lodged by a resident of Hoi Ming House of Hoi Lai Estate. The complaint was about construction noise nuisance caused by construction work of R8-LCKV carried out at Lai Po Road near Hoi Lai Estate. The noise nuisance was noted since 14 January 2006 during the periods from 2330 hrs to 0600 hrs.</p>	<p>Site Activities</p> <p>According to the RSS's records, night works were carried out by the Contractor between 2000 hrs on 14 January 2006 and 0530 hrs on 15 January 2006:</p> <ul style="list-style-type: none"> • Delivery of segment from storage yard near Pier P5/L to Pier 15 for erection; • Stressing to temporary PT bars of segments at Pier B3. <p>The above night works, which involved operation of tractor, mobile crane, lifting frame and generator, were undertaken under the two construction noise permits CNP no. GW-RW0739-05 and GW-RW0740-05.</p> <p>Environmental Monitoring</p> <p>In order to evaluate the noise impact onto the residents of Hoi Lai Estate, nighttime noise monitoring was carried out on 18 January 2006 at 23:00. The above monitoring results revealed that the measured noise levels were close to the reference background levels. After correction of the mean background level, all corrected noise levels were below the noise criterion of 55 dB(A).</p> <p>Conclusion</p> <p>Based on the information collected and the monitoring results, the complaint is considered not justifiable.</p> <p>Nevertheless, the Contractor was reminded to take sufficient noise mitigation measures to minimize the environmental impact on the nearby community.</p>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
60119	Mei Foo Sun Chuen (Phase 5)	18-Jan-06 (by the ET Leader)	<p>Environmental Protection Department (EPD) received a public complaint about environmental nuisance generated from Route 8 – Lai Chi Kok Viaduct (R8-LCKV) Project. EPD subsequently referred the complaint to the Environmental Team (ET) Leader of the Project on 19 January 2006.</p> <p>According to EPD, the complaint was raised by a resident of Mei Foo Sun Chuen via a Sham Shui Po District Council Member’s Office. The complaint mentioned that residents of Mei Foo Sun Chuen Stage 5 were adversely affected by construction dust caused by the Route 8 work carried out at the slopes adjacent to Ching Cheung Road.</p>	<p>Site Activities</p> <p>The site of concern was likely to be CCR-S4, CCR-R2 and CCR-R3. According to RSS’s records, site activities included:</p> <ul style="list-style-type: none"> • Trimming of existing rock slope at CCR-S4; • Excavation and rock dowel installation at CCR-R2; and • Construction of cable trough at CCR-R3 by CLP’s contractor. <p>Site Inspection</p> <p>After receipt of the complaint, an ad-hoc site inspection was carried by ET on 19 January 2006. No environmental deficiency regarding construction dust was identified during the inspection.</p> <p>Environmental Monitoring</p> <p>All monitoring results in Jan 06 revealed that no exceedance was recorded for the air quality (1-hr and 24-hr TSP) criteria.</p> <p>Contractor’s Action</p> <p>The Contractor of R8-LCKV had implemented several dust mitigation measures:</p> <ul style="list-style-type: none"> • Haul roads, exposed slope surface and soil stockpiles were watered regularly by hose pipes and sprinklers; • Idled exposed slope were shot-creted; and • Watering was applied for the dust emissive activities, such as loading and unloading of dusty materials, excavation and breaking works. <p>Conclusion</p> <p>Based on the ad-hoc site inspection and the environmental monitoring results, this complaint was considered not justifiable. Nevertheless, the Contractor was reminded to keep on the dust mitigation measures being implemented and step up the measures if necessary.</p>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
60213 60216 60220 60222	Hoi Lai Estate (Lai Po Road)	13-Feb-06 16-Feb-06 20-Feb-06 22-Feb-06 (by the ET Leader)	<p>Four environmental complaints were received in this reporting month. Three of them were referred by EPD on 13th, 20th and 22nd Feb 06 and the other one was referred by HyD via MHJV on 16th Feb 06.</p> <p>All about construction noise due to night works at Lai Po Road near Hoi Lai Estate.</p>	<p>Site Activities</p> <p>Since around mid-January 2006, segments were transported to Piers P15 and B4, under the permission of construction noise permit (CNP).</p> <p>It was suspected that the sound of concern was generated from tractors for precast segment transportation. In view of the safety of workers, an alert sound and flashing are maintained during backing action of the tractors.</p> <p>Site Inspection</p> <p>An ad-hoc inspection was carried out by the ET on 16 Feb 06 from 00:30 to 02:30 am. Noise measurement was carried out during the inspection to evaluate the noise impact onto the residents of Hoi Lai Estate. During the monitoring, the major noise source identified was the road traffic noise from Sham Mong Road and Lai Po Road. No alarm sound or alike from the construction equipment was noted. The above monitoring results revealed that the measured noise levels were close to the reference baseline level. After correction of the mean background level, most of data were below the noise criterion of 55 dB(A).</p> <p>Conclusion</p> <p>Based on the information collected and the monitoring results, the complaints are considered not justifiable.</p> <p>It was suspected that the nuisance was caused by the alert sound of tractors during backward movement which serves as a safety measure. However, the RSS and the Contractor are considering the possibility of lowering the alert sound level or replacing by a less disturbing pitch in order to minimize the noise nuisance to residents of Hoi Lai Estate.</p>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
60420	Near both Hoi Lai Estate and West Kowloon Highway	20-Apr-06 (by the ET Leader)	<p>Environmental Protection Department (EPD) received a public complaint about environmental nuisance generated from Route 8 – Lai Chi Kok Viaduct (R8-LCKV) Project. EPD subsequently referred the complaint to the ET Leader on 20 April 2006.</p> <p>The complaint is about construction noise nuisance caused by construction work of night works at location near both Hoi Lai Estate and West Kowloon Highway between 14 and 17 April 2006.</p>	<p>Site Activities</p> <p>According to the Resident Site Staff (RSS)'s records, the construction works were carried out by the Contractor from daytime to 2230 hours on 14 April and from 2000 hours to 0600 hours 16 April 2006.</p> <p>The construction activities near Hoi Lai estate included: -</p> <ul style="list-style-type: none"> • Erecting segments at column PA/R; • Stressing of top tendon wires of segments and erecting segments at column P1/R; and • Transporting segments to storage yard. <p>The above construction activities were undertaken under a construction noise permit CNP no. GW-RW0172-06.</p> <p>Base on the RSS's preliminary investigation, it was suspected that the noise nuisance of concern was caused by loading and unloading of materials, hammering and/or dropping of materials on ground during the stressing works and transportation of precast segment by tractors.</p> <p>Contractor's Action</p> <p>The Contractor had implemented a short term mitigation measures:-</p> <ul style="list-style-type: none"> • Turned off the alert sound of tractors during backward movement in order to reduce the potential for noise impact; • Strengthened their management on worker's working manner such as avoid dropping of material on ground, wrapping up of hammering equipment and etc.; and • Conducted training of worker in order to reducing noise nuisance during the night works. 	Close

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
				<p>Conclusion</p> <p>Based on the information collected and the monitoring results, the complaints are considered not justified.</p> <p>It was suspected that the nuisance was caused by loading and unloading of materials, hammering and/or dropping of materials on ground during the stressing works and transportation of precast segment by tractors.</p> <p>The Contractor has strictly complied with PME allowed in the CNP No. GW-RW0172-06. Besides, night work at the concerned location was completed. No further construction work at night at this location is anticipated.</p>	
60428	Between Ching Cheung Road and Mei Lai Road (near Phase 5 of Mei Foo Sun Chuen)	28-Apr-06 (by the ET Leader)	<p>Environmental Protection Department (EPD) received a public complaint about tree cutting in the area between Ching Cheung Road and Mei Lai Road (near Phase 5 of Mei Foo Sun Chuen). EPD subsequently referred the complaint to the ET Leader on 28 April 2006.</p> <p>The complaint was about the Contractor cut trees in the area between Ching Cheung Road and Mei Lai Road (near Phase 5 of Mei Foo Sun Chuen). This had removed the traffic noise barrier effect of the trees and hence made the residents of Mei Foo Sun Chuen becoming being seriously affected by the traffic noise nuisance.</p>	<p>Site Activities</p> <p>According to the Resident Site Staff (RSS)'s records, current construction activities included segment erection works for Slip Road D, excavation works for cut slope CCR-S4 and retaining wall construction at CCR-R2 and CCR-R3.</p> <p>Since excavation for cut slopes and construction of slip road D are required at this area, tree cutting is unavoidable. Tree felling application was approved by DLO/KW.</p> <p>Contractor Action</p> <p>Under the EP condition and EIA, there is no need for this project to mitigate the traffic noise barrier effect due to the removal of trees.</p> <p>No follow up action was required for this complaint.</p> <p>Conclusion</p> <p>Under the EP conditions and EIAO, there is no need for this</p>	Close

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
				<p>project to mitigate the traffic noise barrier effect due to the removal of trees.</p> <p>Based on the information collected, the complaint is considered not justifiable.</p> <p>Since excavation for cut slopes and construction of slip road D are required at this area, tree cutting is unavoidable. Tree felling application was approved by DLO/KW.</p> <p>Compensatory planting will be provided at the concerned area after completion of the construction works in order to improve the landscape and visual impacts.</p> <p>No follow up action will be required for this complaint.</p>	
60522	Hoi Lai Estate (Hoi Fai House)	22-May-06 (by ET Leader)	<p>Environmental Protection Department (EPD) received a public complaints about noise nuisance generated from Route 8 – Lai Chi Kok Viaduct Project. EPD subsequently referred the complaint to ET Leader on 22 May 2006.</p> <p>The complaint was concerned about the noise produced from construction work during the period between 2300 hours and 0100 hours every night since 3 weeks ago. The complaint described the noise being like sound of poring concrete.</p>	<p>Site Activities</p> <p>According to the RSS's records, only precast segment transportation works at the concerned area which was used as the segment storage yard near Pier P5L to Piers near Mui Kong Tsuen.</p> <p>No concreting activities were carried out at the abovementioned area between 2300 hours and 0100 hours every night in concerned period. In addition, the transportation works were usually carried out from 2000 hours to 0300 hours (or before 0300 hours).</p> <p>Contractor Action</p> <p>The idle and backup equipments such as tractors has turned off or throttled down in order to reduce the noise impact since the last complaint on this issue near Hoi Lai Estaet. Besides, the above night works were undertaken with three construction noise permits.</p>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
				<p>Site Inspection</p> <p>An ad-hoc inspection was carried out by the ET at 2300 on 26 May 2006. During the inspection, no construction activities were carried out at the concerned area, where the tractor and mobile crane were throttled down.</p> <p>Conclusion</p> <p>According to RSS's information, no concreting activities were carried out at the concerned area. Therefore, the major noise nuisance (pouring concrete) might not be generated from the abovementioned area. Besides, the Contractor strictly complied with PME allowed in the CNP No. GW-RW0172-06. In addition, the Contractor had turned off the alert sound of tractors during backward movement.</p> <p>Based on the information collected, the complaint is considered not justifiable.</p> <p>However, the Contractor was reminded to continuously implement their practice to prevent noise nuisance generation due to the construction works. The site situation will be continuously reviewed by ET and RSS also.</p>	
60609	Near Phase 5 of Mei Foo Sun Chuen	9-Jun-06 (by ET Leader)	<p>The Integrated Complaint Centre (ICC) of HKSAR received a public complaint about environment nuisance generated from Route 8 – Lai Chi Kok Viaduct (R8-LVKC). Resident Site Staff (RSS) subsequently referred the complaint to the ET Leader on 9 June 2006.</p> <p>The complaint was about the noise generated from rock excavation work from 9 a.m. to 6 p.m. at the area between Ching Cheung Road and Mei Lai Road (near Phase 5 of Mei Foo Sun</p>	<p>Site Activities</p> <p>As advised by the RSS, the site of concerned area was likely to be CCR-S4.</p> <p>According to the RSS's records, 1 number of excavator mounted breaker was used to carry out rock breaking work at CCR-S4 during the period between 9 a.m. and 6 p.m.</p> <p>The excavation and rock breaking activities at the concerned area will likely be completed by end of September 2006.</p>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
			Cheun).	<p>Contractor Action</p> <p>The silent rock breaking equipment has been used and noise barriers were erected to minimize the noise impact generated from the breaking activity.</p> <p>Site Inspection and Environmental Monitoring</p> <p>An ad-hoc inspection was carried out by ET on 14 June 2006 from 1:30 p.m. to 4:30 p.m. and 16 June 2006 from 4:00 p.m. to 4:45 p.m.</p> <p>During the inspections, the construction activities at CCR-S4 included handheld breaking, excavation and rock breaking activities were carried out at CCR-S4. However, the temporary noise barriers were erected at the abovementioned location as same as RSS's mentioned.</p> <p>Noise measurement was carried out during the inspection to evaluate the noise impact onto the residents of Mei Foo Sun Chuen. The monitoring location was original monitoring location NM4 (Mei Foo Sun Chuen Phase 5).</p> <p>The measured monitoring results were close to the reference baseline level. After correction of the mean background level, the monitoring data were below the noise criterion of 75 dB(A).</p> <p>Conclusion</p> <p>Base on the information collection and the monitoring result, the complaint was considered not justifiable.</p> <p>The Contractor had implemented noise mitigation measures to minimize the noise impact. Besides, the monitoring result were below the noise criteria of 75dB(A). However, the Contractor was still reminded to continuously implement their practice to prevent noise nuisance generation from the construction works.</p>	

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
				The environmental conditions of the site will be continuously reviewed by the RSS and the ET.	
60626	Near Phase 5 of Mei Foo Sun Chuen	26-Jun-06 (by ET Leader)	<p>The Integrated Complaint Centre (ICC) of HKSAR received a public complaint through a facsimile on 12 June 2006 about an environmental nuisance generated from Route 8 – Lai Chi Kok Viaduct 9R8-LCKV) Project. Resident Site Staff (RSS) subsequently referred the complaint to the ET Leader on 26 June 2006.</p> <p>According to the explanation from the RSS, this complaint was indeed the same as that received by the ET on 9 June 2006. The complaint initiated the complaint verbally to the ICC on 8 June 2006 and then also issued a facsimile to the ICC. The facsimile was transferred to the RSS on 12 June 06 and eventually reached the ET on 26 June 2006.</p> <p>The complaint was about the noise generated from rock excavation work from 9 a.m. to 6 p.m. at the area between Ching Cheung Road and Mei Lai Road (near Phase 5 of Mei Foo Sun Cheun).</p> <p>This complaint was made by the same complainant to the ICC through two different channels (by phone and by facsimile) and the ET of the Project was firstly notified on 9 June 2006. A complaint investigation report was issued on 22 June 06.</p>	<p><i>Site Activities</i></p> <p>As advised by the RSS, the site of concerned area was likely to be CCR-S4.</p> <p>According to the RSS's records, 1 number of excavator mounted breaker was used to carry out rock breaking work at CCR-S4 during the period between 9 a.m. and 6 p.m.</p> <p>The excavation and rock breaking activities at the concerned area will likely be completed by end of September 2006.</p> <p><i>Contractor Action</i></p> <p>The silent rock breaking equipment has been used and noise barriers were erected to minimize the noise impact generated from the breaking activity.</p> <p><i>Site Inspection and Environmental Monitoring</i></p> <p>As the complaint was identical to the one received on 9 June 06 by the ET, the ad-hoc inspections carried out on 14 June 2006 from 1:30 p.m. to 4:30 p.m. and 16 June 2006 from 4:00 p.m. to 4:45 p.m. were still applicable to this report. In addition, further ad-hoc inspections were carried out on 28 June 2006 from 1:30 p.m. to 4 :00 p.m. and 3 July 2006 from 9:30 a.m. to 11:30 a.m.</p> <p>During the aforesaid inspections, the construction activities at CCR-S4 included handheld breaking, excavation and rock breaking activities were carried out at CCR-S4. However, the temporary noise barriers were erected at the abovementioned location.</p> <p>In addition to the noise measurement conducted on 14 and 16 June 2006, further noise measurement was carried out on 30</p>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
			<p>As the ET received this separate complaint after the issue of the complaint investigation report and considered the nature of the complained event (general construction during daytime but not single event at a particular moment), the complaint investigation procedures were initiated.</p>	<p>June 2006 to evaluate the noise impact onto the residents of Mei Foo Sun Chuen. The monitoring location was original monitoring location NM4 (Mei Foo Sun Chuen Phase 5).</p> <p>Noise measurement carried out on 30 June 06, after correction of the mean background level, the monitoring data were below the noise criterion of 75 dB(A)</p> <p>Conclusion</p> <p>This complaint was identical to the one received by the ET on 9 June 06 because the complainant addressed the complaint to the ICC through two different channels (by phone and by facsimile). The facsimile was transferred to the RSS on 12 June 06 and eventually reached the ET on 26 June 06.</p> <p>Base on the information collection and the monitoring result, the complaint was considered not justifiable.</p> <p>The Contractor had implemented noise mitigation measures to minimize the noise impact. Besides, the monitoring result were below the noise criteria of 75dB(A). However, the Contractor was still reminded to continuously implement their practice to prevent noise nuisance generation from the construction works.</p> <p>The environmental conditions of the site will be continuously reviewed by the RSS and the ET.</p>	
60830	Near Mei Foo and Lai King Hill Road	30-Aug-06 (by ET Leader)	<p>The Integrated Complaint Centre (ICC) of HKSAR received a public complaint on 25 August 2006 about an environmental nuisance generated from Route 8 – Lai Chi Kok Viaduct 9R8-LCKV) Project. Resident Site Staff (RSS) subsequently referred the complaint to the ET Leader on 30 August 2006.</p> <p>The complaint was concerned about</p>	<p>Site Activities</p> <p>According to RSS's record, rock dowel installation for slope stabilization at CCR-S1 was commenced on 22 August 2006 and would likely last for at least 6 months.</p> <p>Contractor Action</p> <p>After receiving the complaint, the Contractor has further enhanced the dust mitigation measures as follows:-</p>	Closed

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			<p>dust generated from the rock drilling works affected the nearby ASRs. The complaint described that spraying of water during rock drilling works was not implemented.</p>	<ul style="list-style-type: none"> • Enclosing the rock dowel drilling work on three sides, i.e. top, back and the left hand side, with tarpaulin sheets; • Spraying of water at the hole during drilling; • Wrapping the head of the drilling rig with a wet thick towel. <p>Site Inspection and Environmental Monitoring</p> <p>During the monthly site inspection on 4th September 2006, rock drilling at the slope CCR-S1 was carrying out. The ET observed that the work area was enclosed by tarpaulin sheets at three sides. Water was sprayed continuously at the drilling hole and head of the drilling rig was enclosed with a wet thick towel. All the mitigation measures mentioned by the RSS were implemented.</p> <p>Conclusion</p> <p>Base on the information collected and the monitoring results, the complaints are considered not justifiable.</p> <p>It was because there was no exceedance of the air quality monitoring results and dust mitigation measures were implemented by the Contractor during the rock drilling works.</p> <p>However, the Contractor was still reminded to take sufficient dust mitigation measures to minimize the environmental impact on the nearby community:</p> <ul style="list-style-type: none"> • Enclose dusty activity such as rock drilling with tarpaulin sheet; • Apply water spraying for any dust emissive activities, such as breaking, excavation, loading and unloading of dusty materials; • Cover long-term idle exposed slope surfaces and stockpiles with tarpaulin sheets. <p>The environmental conditions of the site will be continuously</p>	

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
				reviewed by the RSS and the Environmental Team through site inspections and monitoring exercises.	
60831	Between Lai Wan Road and Lai King Hill Road	31-Aug-06 (by ET Leader)	<p>Environmental Protection Department (EPD) received a public complaint about environment nuisance generated from Route 8 – Lai Chi Kok Viaduct Project. EPD subsequently referred the complaint to ET Leader on 31 August 2006.</p> <p>The complaint was concerned about construction noise, dust and waste water generated from the construction work affect the nearby NSRs after 19.00 hrs, the nearby ASRs and discharged to exiting road respectively</p>	<p>Site Activities</p> <p>According to RSS's record, rock dowel installation for slope stabilization at CCR-S1 was commenced on 22 August 2006 and would likely last for at least 6 months.</p> <p>Contractor Action</p> <p>With reference to RSS's site diary, all site activities including drilling works at the concerned area were conducted between 8:00 and 18:00 daily. Ad hoc site observation carried out by the RSS confirmed that no construction activity was carried out after 18:00.</p> <p>As advised by the RSS, tarpaulin sheet covering and water spraying were provided by the Contractor to mitigate the dust nuisance generated from the rock drilling works. On 31 August 2006, the Contractor was further enhanced the dust mitigation measures as follows:-</p> <ul style="list-style-type: none"> • Enclosing the rock dowel drilling work on three sides, i.e. top, back and the left hand side (LHS) with tarpaulin sheets; • Spraying water at the hole during drilling; • Wrapping the head of the drilling rig with a wet thick towel. <p>Site Inspection and Environmental Monitoring</p> <p>During the monthly site inspection on 4th September 2006, rock drilling at the slope CCR-S1 was carrying out. The ET observed that the work area was enclosed by tarpaulin sheets at three sides. Water was sprayed continuously at the drilling hole and head of the drilling rig was enclosed with a wet thick towel. All the mitigation measures mentioned by the RSS were implemented.</p>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
				<p><i>Conclusion</i></p> <p>Base on the information collected and the monitoring results, the complaint was considered not justifiable.</p> <p>It was because there was no exceedance of the air quality monitoring results and dust mitigation measures were implemented by the Contractor during the rock drilling works. No construction activities were carried after 18:00 in the period mentioned by the complainant. In addition, no wastewater discharge was observed.</p> <p>However, the Contractor was still recommended to take the following mitigation measures to minimize the environmental impact on the nearby community:</p> <p><u>Dust Nuisance</u></p> <ul style="list-style-type: none"> • Enclose dusty activity such as rock drilling by tarpaulin sheet; • Apply water spraying for any dust emissive activities, such as breaking, excavation, loading and unloading of dusty materials; • Cover long-term idle exposed slope surfaces and stockpiles with tarpaulin sheets. <p><u>Construction Noise</u></p> <p>The Contractor was reminded that construction activities during restricted hours could only be carried out with a valid Construction Noise Permit (CNP). In addition, appropriate noise mitigation measures described in the CNP should be implemented in order to minimize the noise impact on the nearby noise sensitive receivers.</p> <p><u>Wastewater Discharge</u></p> <ul style="list-style-type: none"> • Fill up the gaps under the footings of hoarding fence along Lai King Hill Road so as to prevent spillage of muddy water during heavy rain onto the existing road. 	

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				The environmental conditions of the site will be continuously reviewed by the Resident Site Staff and the Environmental Team through site inspections and monitoring exercises.	

APPENDIX J
SUMMARY OF EXCEEDANCES

Summary of Exceedances Recorded in the Reporting Quarter

a) Exceedance Report for 1-hr TSP (NIL)

b) Exceedance Report for 24-hr TSP (NIL)

c) Exceedance Report for Construction Noise

- Three noise action level exceedances were recorded due to a noise complaint received on 9 June, 26 June and 31 August 2006. The details of the complaint can refer to Appendix I.
- No Limit Level exceedances were recorded in the reporting period.