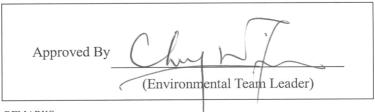
Highways Department

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

> Monthly EM&A Report Part I – Lai Chi Kok Viaduct (Version 1.1)

> > February 2007



REMARKS:

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

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

CINOTECH CONSULTANTS LTD

Room 1602-1610, Delta House, 3 On Yiu Street, Shatin, NT, Hong Kong Tel: (852) 2151 2083 Fax: (852) 3107 1388 Email: <u>info@cinotech.com.hk</u>

TABLE OF CONTENTS

EX	ECUTIVE SUMMARY	.1
	Introduction Environmental Monitoring and Audit Works Environmental Licenses and Permits Key Information in the Reporting Month	1 2
1.	INTRODUCTION	3
	Background Project Organizations Construction Programme Summary of EM&A Requirements	4 4
2.	AIR QUALITY	7
	Monitoring Requirements Monitoring Locations Monitoring Equipment Monitoring Parameters, Frequency and Duration Monitoring Methodology and QA/QC Procedure Results and Observations	7 7 7 8
3.	NOISE	10
	Monitoring Requirements Monitoring Locations Monitoring Equipment Monitoring Parameters, Frequency and Duration Monitoring Methodology and QA/QC Procedures Maintenance and Calibration Results and Observations	10 11 11 11 12
4.	ENVIRONMENTAL AUDIT	13
	Site Audits Review of Environmental Monitoring Procedures Status of Environmental Licensing and Permitting Implementation Status of Environmental Mitigation Measures Summary of Exceedances Implementation Status of Event Action Plans Summary of Complaint and Prosecution	13 13 13 17 17
5.	FUTURE KEY ISSUES	18
	Key Issues for the Coming Month Monitoring Schedule for the Next Month Construction Program for the Next Month	18 18
6.	CONCLUSIONS AND RECOMMENDATIONS	19
	Conclusions	

LIST OF TABLES

- Table I
 Summary Table for Events Recorded in the Reporting Month
- Table II
 Summary Table for Key Information in the Reporting Month
- Table 1.1Key Project Contacts
- Table 2.1Locations for Air Quality Monitoring
- Table 2.2Air Quality Monitoring Equipment
- Table 2.3Impact Dust Monitoring Parameters, Frequency and Duration
- Table 3.1Noise Monitoring Stations
- Table 3.2Noise Monitoring Equipment
- Table 3.3Noise Monitoring Parameters, Frequency and Duration
- Table 4.1
 Summary of Environmental Licensing and Permit Status
- Table 4.2Observations and Recommendations of Site Audit for Civil Works
- Table 4.3Observations and Recommendations of Site Audits Followed up for Pervious Month
for Civil Works

LIST OF FIGURES

Figure 1 Locations of Monitoring Stations

LIST OF APPENDICES

А	Action and Limit Levels for Air Quality and Noise
В	Copies of Calibration Certificates
С	Environmental Monitoring Schedules
D	Wind Data
E	1-hour TSP Monitoring Results and Graphical Presentations
F	24-hour TSP Monitoring Results and Graphical Presentations
G	Noise Monitoring Results and Graphical Presentations
Н	Summary of Exceedance
Ι	Site Audit Summary
J	Event Action Plans
Κ	Environmental Mitigation Implementation Schedule (EMIS)
L	Construction Programme
М	Complaint Log

ABBREVIATION AND ACRONYM

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

EXECUTIVE SUMMARY

Introduction

This is the 39th monthly 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 report documents the findings of EM&A Works conducted in February 2007 for Contract No. HY/2003/01, Lai Chi Kok Viaduct (the Project).

The major site activities for civil works undertaken in the reporting month included:

- Bulk excavation works at slope CCR-S4 and LCK-R3;
- Retaining wall construction at CCR-R1 to CCR-R3 & CCR-R6 and LCK-R2 to LCK-R3;
- Drainage works at slip road D and Lai Po 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, B C, D and Main Viaduct;
- Construction of Wai Man Tsuen pump house & Irrigation Pump House near pier C14 and kiosk at CCR-S1;
- Shotcreting for slope CCR-S1; and
- Roadworks at Slip Road C & D, Lai Po Road and Butterfly Valley Road.

The major site activities for Traffic Control and Surveillance System (TCSS) works undertaken in the reporting month included:

- Cable-laying at Sections A, B, C and El;
- Control Cabinet Installation at Sections A, B, C and E;
- Highmast Installation at Section A, B and E; and
- Field Equipment Installation at Section A, B, C and E.

Environmental Monitoring and Audit Works

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

• Summary of the events and action taken in the reporting month is tabulated in Table I.

Table I Summary Table for Events Recorded in the Reporting Month

Parameter	No. of Events		No. of Events	Action Taken
1 al ameter	Action Level	Limit Level	Due to the Project	Action Taken
1-hr TSP	0	0	0	N/A
24-hr TSP	0	0	0	N/A
Noise	0	0	0	N/A

Environmental Licenses and Permits

Licenses/Permits granted to the Project include the Environmental Permit (EP) for the Project, the Water Discharge Licenses (WDLs) and the Construction Noise Permits (CNPs). Total of 2 new CNPs were issued to the Project by EPD in the reporting month.

Key Information in the Reporting Month

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

Table II Summary Table for Key Information in the Reporting Month

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

Future Key Issues:

Major site activities for civil works in the coming month include:

- Rock dowel installation at slope CCR-S4;
- Bulk excavation works at slope CCR-S4 and LCK-R3.
- Retaining wall construction at CCR-R1 to CCR-R3 & CCR-R6 and LCK-R2 to LCK-R3;
- Slope upgrading works for Features No.11NW-A/FR54 & FR55;
- Drainage works at slip roads D and Lai Po 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 B;
- Erection of noise barrier at slip roads A, B C, D and Main Viaduct;
- Construction of Wai Man Tsuen pump house & Irrigation Pump House near pier C14 and kiosk at CCR-S1;
- Hydroseeding for slope CCR-S1 & S3; and
- Roadworks at Slip Road C & D, Lai Po Road and Butterfly Valley Road.

Major site activities for TCSS works in the coming month include:

- Cable-laying at Sections A, B, C and E;
- Control Cabinet Installation at Sections A, B, C and E;
- Highmast Installation at Section A, B and E; and
- Field Equipment Installation at Section A, B, C and E.

The anticipated environmental issues will be mainly on dust impact from bulk excavation works and noise nuisance from construction of Wai Man Tsuen Pump House and Irrigation Pump House near Pier C14 and kiosk at CCR-S1.

1. INTRODUCTION

Background

- 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. 499) (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. 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 and a varied EP No. EP-103/2001/A was subsequently issued on 20 May 2003 for R9K (R9K EP) to 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 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 Consultants Ltd. 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 39th monthly EM&A report summarizing the EM&A works for the Project in February 2007.

Project Organizations

- 1.8 Different parties with different levels of involvement in the project organization include:
 - Project Proponent Major Works Project Management Office (MWPMO) of Highways Department (HyD)
 - Engineer (E) / Engineer's Representative (ER) Maunsell-Hyder Joint Venture
 - Environmental Team (ET) Cinotech Consultants Limited
 - Independent Environmental Checker (IEC) CH2M HILL Hong Kong Limited
 - Contractor Acciona Infraestructuras S.A.
 - Engineer's Representative for TCSS works Ove Arup & Partners Hong Hong Limited
 - Contractor for TCSS works Delcan-Imtech-Gtech Joint Venture
- 1.9 The responsibilities of respective parties are detailed in Section 1.8.3 of the EM&A Manual (1999) of the Project.
- 1.10 The key contacts of the Project are shown in **Table 1.1**.

Construction Programme

- 1.11 The site activities for civil works undertaken in the reporting month included:
 - Bulk excavation works at slope CCR-S4 and LCK-R3;
 - Retaining wall construction at CCR-R1 to CCR-R3 & CCR-R6 and LCK-R2 to LCK-R3;
 - Drainage works at slip road D and Lai Po 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, B C, D and Main Viaduct;
 - Construction of Wai Man Tsuen pump house & Irrigation Pump House near pier C14 and kiosk at CCR-S1;
 - Shotcreting for slope CCR-S1; and
 - Roadworks at Slip Road C & D, Lai Po Road and Butterfly Valley Road.

- 1.12 The site activities for TCSS works undertaken in the reporting month included:
 - Cable-laying at Sections A, B, C and E;
 - Control Cabinet Installation at Sections A, B, C and E;
 - Highmast Installation at Section A, B and E; and
 - Field Equipment Installation at Section A, B, C and E.

 Table 1.1
 Key Project Contacts

Party	Role	Name	Position	Phone No.	Fax No.	
		Mr. Kroc Leung	SE2/R8K	2762 3662		
HyD	Permit Holder	Mr. Esther Yung	E1/R8K	2762 3677	2714 5198	
		Mr. LC Chung	E2/R8K	2762 3613		
	Engineer	Mr. Conrad Ng	Project Manager	2605 6262	2691 2649	
MHJV		Mr. Peter Poon	CRE	2959 0010		
IVITIJ V	Engineer's Representative	Mr. Henry Liu	SRE	2991 1068	2959 0290	
	representative	Mr. Joseph Chi	RE	2991 1034		
		Dr. Priscilla Choy	ET Leader	2151 2089		
	Environmental Team	Mr. Jesse Yuen	Project Manager	2151 2091	3107 1388	
Cinotech		Mr. Edmond Wu	Audit Team Leader	2151 2092		
		Mr. Henry Leung	Monitoring Team Leader	2151 2087		
CH2M	Independent M Environmental	Mr. David Yeung	Independent Environmental Checker	2872 2934	2507 2293	
СП2М	Checker	Mr. Billy Yu	Assistant Independent Environmental Checker	2872 2949	2307 2293	
Acciona	Contractor	Mr. William D. Payne	Project Director	2956 3300	2956 3331	
Acciolia	Contractor	Mr. Lawrence Kwok	QA/E Manager	2930 3300	2930 3331	
ARUP	Engineer's	Mr. Donald Leung	RE	2436 7489	2436 1803	
AKUP	Representative (TCSS)	Mr. Joseph Chow	ARE	2436 7435	2430 1803	
DIGJV Contractor (TCSS) Ms. Joyce Char		Ms. Joyce Chan	Quality Manager	2123 0845	2123 0889	
24-hour Er	nergency Hotline			2370 9200	-	

Summary of EM&A Requirements

- 1.13 The EM&A programme requires construction phase monitoring for air quality and construction noise, and environmental site audit. The EM&A requirements for each parameter are described in the following sections, including:
 - All monitoring parameters;
 - Action and Limit levels for all environmental parameters;
 - Event Action Plans;
 - Environmental mitigation measures, as recommended in the project EIA study final report; and
 - Environmental requirements in contract documents.
- 1.14 The advice on the implementation status of environmental protection and pollution control/mitigation measures is summarized in Section 4 of this report.
- 1.15 This report presents the environmental monitoring results, observations, locations, equipment, period, methodology and QA/QC procedures of the required monitoring parameters, namely dust and noise levels and audit works for the Project in the reporting month.

2. AIR QUALITY

Monitoring Requirements

2.1 Monitoring of 1-hour and 24-hour TSP was conducted to monitor the air quality. **Appendix** A shows the established Action/Limit Levels for the environmental monitoring works.

Monitoring Locations

2.2 One designated monitoring station, AM2 was selected for impact dust monitoring for the Project. **Table 2.1** describes the air quality monitoring location, which is also depicted in **Figures 1**.

Table 2.1 Locations for Air Quality Monitoring

Monitoring Station	Description	Location
AM2	Lai Chi Kok Park Sports Centre	Rooftop

Monitoring Equipment

2.3 **Table 2.2** summarizes the equipment used for the air quality monitoring. Copies of calibration certificates are attached in **Appendix B**.

Table 2.2Air Quality Monitoring Equipment

Equipment	Model and Make	Quantity
Calibrator GMW25; S/N: 1536		1
HVS Sampler	Graseby GMW Model GS2310 High Volume TSP Sampler and associated equipment and shelter	1

Monitoring Parameters, Frequency and Duration

2.4 **Table 2.3** summarizes the monitoring parameters and frequencies of impact dust monitoring for the whole construction period. The air quality monitoring schedule for the reporting period is shown in **Appendix C**.

Table 2.3 Impact Dust Monitoring Parameters, Frequency and Duration

Parameters	Frequency	
1-hr TSP	Three times / 6 days	
24-hr TSP	Once / 6 days	

Monitoring Methodology and QA/QC Procedure

Instrumentation

2.5 Graseby GMW Model GS2310 TSP High Volume Sampler (HVS) was employed for 1-hour & 24-hour TSP monitoring. The sampler was composed of a motor, a filter holder, a flow controller and a sampling inlet and its performance specification complied with that required by USEPA Standard Title 40, Code of Federation Regulations Chapter 1 (Part 50). Moreover, the HVS also met all the requirements in Sections 2.2 to 2.4 of the EM&A Manual (1999).

Operating/Analytical Procedures

- 2.6 Operating/analytical procedures for the operation of HVS were as follows:
 - A horizontal platform was provided with appropriate support to secure the samplers against gusty wind.
 - No two samplers were placed less than 2 meters apart.
 - The distance between the sampler and an obstacle, such as buildings, was at least twice the height that the obstacle protrudes above the sampler.
 - A minimum of 2 meters of separation from walls, parapets and penthouses was required for rooftop samples.
 - A minimum of 2 meters separation from any supporting structure, measured horizontally was required.
 - No furnaces or incineration flues were nearby.
 - Airflow around the sampler was unrestricted.
 - The sampler was more than 20 meters from the drip line.
 - Any wire fence and gate, to protect the sampler, should not cause any obstruction during monitoring.
- 2.7 Prior to the commencement of the dust sampling, the flow rate of the high volume sampler was properly set (between $1.1 \text{ m}^3/\text{min.}$ and $1.4 \text{ m}^3/\text{min.}$) in accordance with the manufacturer's instruction to within the range recommended in USEPA Standard Title 40, CFR Part 50.
- 2.8 For TSP sampling, fiberglass filters (G810) were used.
- 2.9 The power supply was checked to ensure the sampler worked properly.
- 2.10 On sampling, the sampler was operated for 5 minutes to establish thermal equilibrium before placing any filter media at the designated air monitoring station.
- 2.11 The filter holding frame was then removed by loosening the four nuts and a weighted and conditioned filter was carefully centered with the stamped number upwards, on a supporting screen.
- 2.12 The filter was aligned on the screen so that the gasket formed an airtight seal on the outer edges of the filter. Then the filter holding frame was tightened to the filter holder with swing bolts. The applied pressure should be sufficient to avoid air leakage at the edges.

- 2.13 The shelter lid was closed and secured with the aluminum strip.
- 2.14 The timer was then programmed. Information was recorded on the record sheet, which included the starting time, the weather condition and the filter number (the initial weight of the filter paper can be found out by using the filter number).
- 2.15 After sampling, the filter was removed and sent to the laboratory for weighing. The elapsed time was also recorded.
- 2.16 Before weighing, all filters were equilibrated in a conditioning environment for 24 hours. The conditioning environment temperature should be between 25°C and 30°C and not vary by more than ± 3 °C; the relative humidity (RH) should be < 50% and not vary by more than $\pm 5\%$. A convenient working RH is 40%.

Maintenance/Calibration

- 2.17 The following maintenance/calibration was required for the HVS:
 - The high volume motors and their accessories were properly maintained. Appropriate maintenance such as routine motor brushes replacement and electrical wiring checking were made to ensure that the equipment and necessary power supply are in good working condition.
 - High volume samplers were calibrated at bi-monthly intervals using GMW-25 Calibration Kit throughout all stages of the air quality monitoring.

Results and Observations

- 2.18 All TSP monitoring was conducted as scheduled in this reporting month. No Action/Limit Level exceedance for both 1-hr and 24-hr TSP was recorded in the reporting month.
- 2.19 Wind data monitoring equipment has been installed in Shatin Heights for logging wind speed and wind direction. These wind data for the reporting month is summarized in **Appendix D**.
- 2.20 The monitoring data and graphical presentations of 1-hour and 24-hour TSP monitoring results are shown in **Appendices E** and **F**, respectively.

3. NOISE

Monitoring Requirements

- 3.1 Monitoring and audit of construction noise levels is required to be conducted, in accordance with the EM&A Manual, to ensure that any unacceptable noise impacts could be readily detected and timely and appropriate action be undertaken to rectify the situation.
- 3.2 The construction noise levels shall be measured in terms of the A-weighted equivalent continuous sound pressure level (Leq). Leq (30min) shall be used as the monitoring parameter for the time period between 0700-1900 hours on normal weekdays. For all other time periods, Leq (5min) shall be employed for comparison with the Noise Control Ordinance (NCO) criteria. As supplementary information for data auditing, statistical results such as L_{10} and L_{90} shall also be obtained for reference.
- 3.3 Five designated noise monitoring stations, namely NM2, NM4, NM8a, NM8b and NM9 were selected for impact monitoring. **Appendix A** shows the established Action and Limit Levels for the environmental monitoring works.

Monitoring Locations

3.4 Noise monitoring was conducted at five designated monitoring stations as summarized in **Table 3.1**. Figures 1 show the locations of these stations.

Stations ⁽¹⁾	Description	Location
NM2	Lai Chi Kok Correctional Institution Rooftop	
NM4	Mei Foo Sun Chuen, Phase 5	Rooftop of Block 9
NM8a	Nob Hill	M/F of Car Park
NM8b	NM8b Nob Hill 3/F of Car Par	
NM9	Hoi Lai Estate	G/F of Hoi Fai House

Table 3.1Noise Monitoring Stations

(1) The Lai Chi Kok Hospital (NM3) was also found vacated and noise monitoring has been suspended since January 2005, as approved by EPD on 15th March 2005.

3.5 Stations NM8a and NM8b were installed at Nob Hill in May 2004. Station NM8b is located at 3/F of the car park of Nob Hill, which is strongly influenced by traffic noise from Ching Cheung Road. The measurement at this station is for reference purpose, but not for compliance check of construction noise. The measured noise level at Station NM8a, which is located at M/F of car park and closer to the construction site, acts as an indicator of the construction noise. Since the domestic premises are located above 5/F, noise assessment would be performed to assess the level of nuisance resulting from the construction noise at the domestic premises whenever the measured noise level at NM8a exceeds the noise limit level.

- The noise monitoring at Lai Chi Kok Correctional Institution (NM2), which was formerly 3.6 known as Lai Chi Kok Reception Centre, has been resumed since 8th September 2006 after the completion of the renovation works.
- 3.7 A new housing estate, Hoi Lai Estate, became one of the noise sensitive receivers close to the Project site. As recommended by the Regional (West) Office of EPD, noise monitoring at this location (Station NM9) was newly included in the EM&A programme. Approval for the change of EM&A programme was granted by EPD on 30th December 2004.

Monitoring Equipment

3.8 Table 3.2 summarizes the noise monitoring equipment model being used. Copies of calibration certificates are attached in Appendix B.

Table 3.2 **Noise Monitoring Equipment**

Equipment	Model and Make	Qty.
Integrating Sound Level Meter	B&K Model 2238	5
Calibrator	B&K 4231	2
Wind Speed Anemometer	RS232 Integral Vane Digital Anemometer	1

Monitoring Parameters, Frequency and Duration

3.9 Table 3.3 summarizes the monitoring parameters, frequency and total duration of monitoring. The noise monitoring schedule is shown in **Appendix C**.

Table 3.3 Noise Monitoring Parameters, Frequency and Duration

Stations	Parameter	Period	Frequency	Measurement
NM2	L ₁₀ (30 min.)dB(A) L ₉₀ (30 min.)dB(A) L _{eq} (30 min.)dB(A)			Façade
NM4				Façade
NM8a		0700-1900 hrs. on weekdays	Once per week	Façade
NM8b		on weekdays	week	Façade
NM9				Façade

Monitoring Methodology and QA/QC Procedures

- The Sound Level Meter was generally set on a tripod at a height of 1.2 m above the • ground, depending to the actual monitoring condition.
- The battery condition was checked to ensure the correct functioning of the meter. •
- Parameters such as frequency weighting, the time weighting and the measurement time were set as follows:
 - frequency weighting : A ____ : Fast
 - time weighting
 - time measurement : 30 minutes / 5 minutes
- Prior to and after each noise measurement, the meter was calibrated using a Calibrator

for 94.0 dB at 1000 Hz. If the difference in the calibration level before and after measurement was more than 1.0 dB, the measurement would be considered invalid and repeat of noise measurement would be required after re-calibration or repair of the equipment.

- The wind speed was frequently checked with the portable wind meter.
- At the end of the monitoring period, the L_{eq} , L_{90} and L_{10} were recorded. In addition, site conditions and noise sources were recorded on a standard record sheet.
- Noise measurement was paused during periods of high intrusive noise if possible and observation was recorded when intrusive noise was not avoided.
- Noise monitoring was cancelled in the presence of fog, rain, and wind with a steady speed exceeding 5 m/s, or wind with gusts exceeding 10 m/s.

Maintenance and Calibration

- 3.10 The microphone head of the sound level meter and calibrator was cleaned with soft cloth regularly.
- 3.11 The meters were sent to the supplier to check and calibrate on a yearly interval.

Results and Observations

- 3.12 Noise monitoring was performed at the five designated locations (NM2, NM4, NM8a, NM8b and NM9) as scheduled in the reporting month.
- 3.13 All the Construction Noise Levels (CNLs) reported in this report, except those collected at Stations NM8a, NM8b and NM9, 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.
- 3.14 Noise monitoring results and graphical presentations are shown in Appendix G.
- 3.15 No Action/Limit Level exceedance was recorded in the reporting month.
- 3.16 At Stations NM8a and NM8b, the major noise source identified during the monitoring exercises was mainly the road traffic noise.
- 3.17 At Stations NM2, NM4 and NM9, construction noise from the Project and occasionally the traffic noise were identified as the major noise source during monitoring.

4. ENVIRONMENTAL AUDIT

Site Audits

- 4.1 Site audits were carried out by ET on weekly basis to monitor the timely implementation of proper environmental management practices and mitigation measures in the Project site. The summaries of site audits are attached in **Appendix I**.
- 4.2 Site audits for Civil contract were conducted on 7th and 14th February 2007 by ET. The site audit for Civil contract on week 3 of February 2007 was cancelled since major works in LCKV was not commenced after Lunar New Year during that week.

Review of Environmental Monitoring Procedures

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

Air Quality Monitoring

- The monitoring team recorded all observations around the monitoring stations within and outside the construction site.
- The monitoring team recorded the temperature and weather conditions on the monitoring days.

Noise Monitoring

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

Status of Environmental Licensing and Permitting

4.4 All valid permits/licenses obtained for the Project are summarized in **Table 4.1**. Total of 2 new CNPs were issued to the Project in the reporting month.

Implementation Status of Environmental Mitigation Measures

4.5 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 EMIS is provided in **Appendix K**.

Table 4.1	Summary of Environmental Licensing and Permit Status
-----------	--

Permit No.	Valid PeriodFromTo		= Details	Status
1 CI IIII 110.				Status
Environmental Per	rmit (EP)		_	
EP-103/2001/C	22/7/05	N/A	 <u>Construction and operation of</u> (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; (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; (c) The permanent slope works above the northern portal of the Eagle's Nest Tunnel; (d) The architectural works (including fitting out and furnishings) of the portal buildings of the Sha Tin Heights Tunnel. 	Valid
Registration of Ch	emical Wast	e Producer		
WPN 5213-261- N2413-04	17/11/03	N/A	N/A	Valid
Water Discharge L		21/12/00		** 1' 1
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	e Permit (CN	(P)		
GW-RW0468-06	7/9/06	5/2/07	<i>Location:</i> Ching Cheung Road near Castle Peak Road <i>Time Period:</i> 0700-2300 (general holiday including Sundays) and 1900-2300 (any day not being a general holiday).	Expired
GW-RW0498-06	16/9/06	15/3/07	<i>Location:</i> Butterfly Valley <i>Time Period:</i> 0700-2300 (general holiday including Sundays) and 1900-2300 (any day not being a general holiday).	Valid
GW-RW0508-06	13/9/06	12/3/07	<i>Location</i> : Butterfly Valley 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-RW0513-06	17/9/06	11/3/07	<i>Location:</i> Junction of Castle Peak Road and Ching Cheung Road <i>Time Period:</i> 0900-1900 (general holiday including Sundays).	Valid
GW-RW0558-06	1/10/06	31/3/07	<i>Location:</i> Butterfly Valley Road <i>Time Period:</i> 0700-2300 (general holiday including Sundays) and 1900-2300 (any day not being a general holiday).	Valid

Permit No.	Valid Period		= Details	Status	
rerinit No.	From To		Details	Status	
GW-RW0563-06	2/10/06	1/4/07	Location: Ching Cheung Road – Lai Wan Road Overpass near Nob Hill <i>Time Period:</i> 0900-2300 (general holiday including Sundays) and 1900-2300 (any day not being a general holiday).	Valid	
GW-RW0565-06	4/10/06	3/4/07	<i>Location:</i> Castle Peak Road near Ching Cheung Road <i>Time Period:</i> 0700-2300 (general holiday including Sundays) and 1900-2300 (any day not being a general holiday).	Valid	
GW-RW0580-06	9/10/06	9/3/07	<i>Location:</i> Castle Peak Road and Butterfly Road <i>Time Period:</i> Any day not being a general holiday for 2100-2400 (immediately following a general holiday) and 2100-0700 hours (not immediately following a general holiday).	Valid	
GW-RW0581-06	7/10/06	6/4/07	<i>Location:</i> Junction of Ching Cheung Road and Castle Peak Road <i>Time Period:</i> 0700-2300 (general holiday including Sundays) and 1900-2300 (any day not being a general holiday).	Valid	
GW-RW0582-06	9/10/06	8/3/07	<i>Location:</i> Butterfly Valley Interchange <i>Time Period:</i> Any day not being a general holiday for 2100-2400 (immediately following a general holiday) and 2100-0700 hours (not immediately following a general holiday).	Valid	
GW-RW0624-06	27/10/06	26/4/07	<i>Location:</i> Kwai Chung Road near Lai Chi Kok Interchange <i>Time Period:</i> Any day not being a general holiday for 2100-2400 (immediately following a general holiday) and 2100-0700 hours (not immediately following a general holiday).	Valid	
GW-RW0625-06	31/10/06	28/4/07	<i>Location:</i> Butterfly Valley Road near Lai Chi Kok Reception Centre <i>Time Period:</i> Any day not being a general holiday for 2100-2400 (immediately following a general holiday) and 2100-0700 hours (not immediately following a general holiday).	Valid	
GW-RW0642-06	13/11/06	11/4/07	<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 0000-0700 hours & 2100-2400 hours (not immediately following a general holiday).	Valid	
GW-RW0643-06	8/11/06	7/5/07	<i>Location:</i> Ching Cheung Road near Butterfly Valley <i>Time Period:</i> 0000-2400 (general holiday including Sundays) and 0000-0700 & 1900-2400 (any day not being a general holiday).	Valid	

Down:t No	Valid Period		Data®a	Status	
Permit No.	From	То	- Details	Status	
GW-RN0662-06	24/11/06	19/5/07	<i>Location:</i> Ching Cheung Road near Butterfly Valley <i>Time Period:</i> Any day not being a general holiday for 2100-2400 (immediately following a general holiday) and 2100-0700 hours (not immediately following a general holiday).	Valid	
GW-RW0745-06	3/1/07	2/6/07	<i>Location:</i> Lai Po Road near Sham Mong Road <i>Time Period:</i> 0000-2400 (general holiday including Sundays) and 0000-0700 & 1900-2400 (any day not being a general holiday).	Valid	
GW-RW0755-06	14/1/07	10/6/07	<i>Location:</i> Lai Po Road near Hoi Lai Estate <i>Time Period:</i> 0000-2400 (general holiday including Sundays) and 0000-0700 & 1900-2400 (any day not being a general holiday).	Valid	
GW-RW0004-07	21/1/07	19/6/07	<i>Location:</i> Ching Cheung Road near Mei Foo Sun Chuen <i>Time Period:</i> 0000-2400 (general holiday including Sundays) and 0000-0700 & 1900-2400 (any day not being a general holiday).	Valid	
GW-RW0027-07	31/1/07	30/6/07	<i>Location:</i> Lai Wan Road <i>Time Period:</i> 0000-2400 (general holiday including Sundays) and 0000-0700 & 1900-2400 (any day not being a general holiday).	Valid	
GW-RW0028-07	28/1/07	25/3/07	<i>Location:</i> Ching Cheung Road <i>Time Period:</i> 0000-2400 (general holiday including Sundays) and 0000-0700 & 1900-2400 (any day not being a general holiday).	Valid	
GW-RW0057-07	21/2/07	21/7/07	<i>Location:</i> Kwai Chung Road near Lai Chi Kok Interchange <i>Time Period:</i> 0000-2400 (general holiday including Sundays) and 0000-0700 & 1900-2400 (any day not being a general holiday).	Valid	
GW-RW0058-07	25/2/07	19/8/07	<i>Location:</i> Ching Cheung Road section between Nob Hill to Castle Peak Road <i>Time Period:</i> 0000-2400 (general holiday including Sundays) and 0000-0700 & 1900-2400 (any day not being a general holiday).	Valid	

4.6 During site inspections in the reporting month, no non-conformance was identified. The observations and recommendations are summarized in **Table 4.2**.

Table 4.2 Observations and Recommendations of Site Audits for Civil Works

Parameters	Date	Observations and Recommendations	Follow-up
-	-	-	_

4.7 The observations and recommendations arising from pervious month and followed up in the reporting month are summarized in **Table 4.3**.

Table 4.3Observations and Recommendations of Site Audits Followed up for Pervious
Month for Civil Works

Parameters	Date	Observations and Recommendations	Follow-up
Water Quality	31-Jan-07	<i>Reminder</i> - The Contractor was reminded to improve the temporary drainage diversion system to prevent accumulation of road washing water at Lai Po Road.	improved / rectified during the

Summary of Exceedances

1-hr and 24-hr TSP Monitoring

4.8 No Action/Limit Level exceedance was recorded in the reporting month.

Construction Noise Monitoring

4.9 No Action/Limit Level exceedance was recorded in the reporting month.

Implementation Status of Event Action Plans

4.10 The Event Action Plans for air quality and construction noise are presented in Appendix J.

Summary of Complaint and Prosecution

- 4.11 No environmental complaint was received in the reporting month.
- 4.12 No prosecution was received in the reporting month.
- 4.13 There were 37 environmental complaints referred to the ET and 1 prosecution received since the commencement of the Project. The Complaint Log is attached in **Appendix M**.

5. FUTURE KEY ISSUES

Key Issues for the Coming Month

- 5.1 Key issues to be considered in the coming month include:
 - Construction noise from excavation works, construction of pump station, rock dowel installation and retaining wall at CCR-R1 to CCR-R3 & CC-R6 and LCK-R2 to LCK-R3;
 - Surface runoff generated at the areas CCR-S1, CCR-S4 and LCK-R3; and
 - Dust generation from stockpiles of dusty materials, exposed retaining wall and bulk excavation works and haul road.

Monitoring Schedule for the Next Month

5.2 The tentative monitoring schedule for the next month is shown in **Appendix C**.

Construction Program for the Next Month

- 5.3 The major construction activities for civil works in the coming month include:
 - Rock dowel installation at slope CCR-S4.
 - Bulk excavation works at slope CCR-S4 and LCK-R3.
 - Retaining wall construction at CCR-R1 to CCR-R3 & CCR-R6 and LCK-R2 to LCK-R3
 - Slope upgrading works for Features No.11NW-A/FR54 & FR55.
 - Drainage works at slip roads D and Lai Po 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 B.
 - Erection of noise barrier at slip roads A, B C, D and Main Viaduct.
 - Construction of Wai Man Tsuen pump house & Irrigation Pump House near pier C14 and kiosk at CCR-S1.
 - Hydroseeding for slope CCR-S1 & S3.
 - Roadworks at Slip Road C & D, Lai Po Road and Butterfly Valley Road.
- 5.4 The tentative construction program for civil works is provided in **Appendix L**.
- 5.5 The major activities for TCSS works in the coming month include:
 - Cable-laying at Sections A, B, C and E.
 - Control Cabinet Installation at Sections A, B, C and E.
 - Highmast Installation at Section A, B and E.
 - Field Equipment Installation at Section A, B, C and E

6. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

- 6.1 Environmental monitoring works were conducted in the reporting month and all monitoring results were checked and reviewed.
- 6.2 No Action/Limit Level exceedance for both 1-hour TSP and 24-hours TSP was recorded in the reporting month.
- 6.3 No Action/Limit Level exceedance for noise was recorded in the reporting month.
- 6.4 No environmental complaint was received in the reporting month.
- 6.5 No prosecution was received in the reporting month.

Recommendations

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

Water Impact

- To ensure properly maintenance for de-silting facilities
- To review and implement temporary drainage system for the upcoming wet season.
- To review the capacity of de-silting facilities for discharge.
- To avoid stagnant water accumulation on site.

Noise Impact

- To provide temporary noise barriers for noisy activities, such as rock dowel installation.
- To review the works sequence of site activities so as to reduce the number of noisy equipment in concurrent operation.
- To employ quiet powered mechanical equipment if possible.
- To ensure compliance of CNP conditions during restricted-hour works.

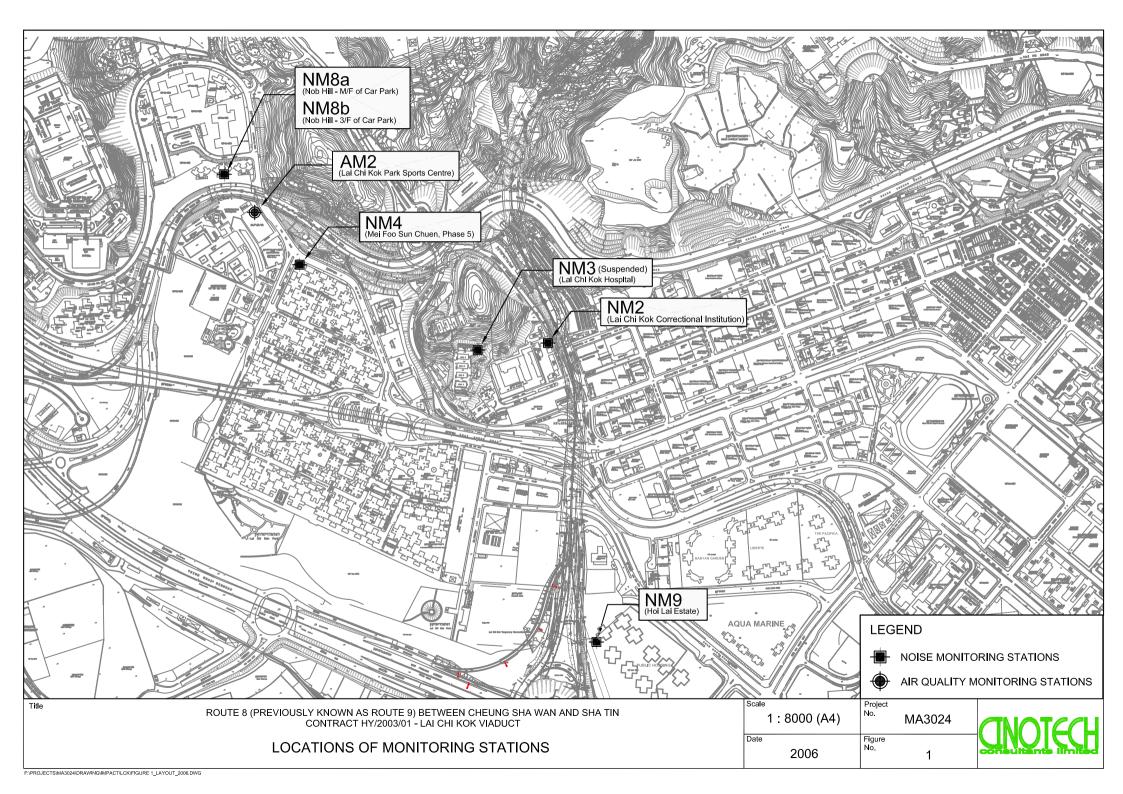
Dust Impact

- To ensure water spray is applied for the dust emissive works, such as soil nail installation, loading and unloading of soil materials, excavation works and rock dowel installation.
- To cover soil stockpiles and exposed slope surface by impervious sheets or other means.
- To ensure that all vehicles carrying dusty material are properly covered before leaving the site.

Waste / Chemical Management

- To ensure the performance of sorting of C&D materials at source (during generation);
- To carry out inspection of dump truck at site exit to ensure inert and non-inert C&D materials are properly segregated before removing off site.
- To ensure proper collection and disposal of rubbish generated on site.
- To avoid any discharge or accidental spillage of chemical waste directly from the site.

FIGURES



APPENDIX A ACTION AND LIMIT LEVELS

Appendix A - Action and Limit Levels (LCKV)

1-Hour TSP

Location	Action Level, μg/m ³	Limit Level, µg/m ³
AM2	301	500

24-Hour TSP

Location	Action Level, μg/m ³	Limit Level, µg/m ³
AM2	177	260

Construction Noise

Period	Action Level	Limit Level
0700-1900 hrs on normal weekdays		75 dB(A)
0700-2300 hrs on holidays & 1900-2300 hrs on all other days	When one documented complaint is received	70* dB(A)
2300-0700 hrs of next day	1	55* dB(A)

(*) The Area Sensitivity Rating for the noise monitoring stations (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 B COPIES OF CALIBRATION CERTIFCATES

High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET

CINOTECH

						File No.	MA3024/20/0021
Station	Lai Chi Kok Sport C	Centre (AM2)		Operator:	WK		
Date:	17-Jan-07		. 1	Next Due Date:	16-Mar	-07	
Equipment No .:	A-01-20		~~ *_	Serial No.	0818		
			Ambient	Condition			
Temperatu	ire, Ta (K)	289.3	Pressure, Pa			767.4	
	, , , , , , , , , , , , , , , , , , , ,						
		Or	ifice Transfer St	andard Inform	ation		
Equipm	ent No.:	A-04-04	Slope, mc	0.0575	Intercept		0.0395
Last Calibr	ation Date:	13-Mar-06			$bc = [\Delta H x (Pa/76)]$		
Next Calibi	ration Date:	12-Mar-07		Qstd = $\{ \Delta H $	x (Pa/760) x (298	/Ta)] ^{1/2} -bc} /	mc
		3					
			Calibration of	f TSP Sampler			
Calibration		Or	fice			HVS	
Point	ΔH (orifice), in. of water	[ΔH x (Pa/76	0) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	ΔW (HVS), in. of oil		60) x (298/Ta)] ^{1/2} Y- axis
1	11.9	3	3.52	60.50	9.5		3.14
2	10.7	3	3.34	57.33	8.3		2.94
3	7.2	2	2.74	46.91	5,6		2.41
4	5.3	2	2.35	40.15	3.2		1.82
5	3.2	1	.82	31.04	2.1		1.48
Slope , mw =	ression of Y on 2 0.0581 coefficient* =		940	Intercept, bw	-0.381	0	
*If Correlation	Coefficient < 0.9	90, check and rec	alibrate.				
			Set Point C	Calculation			
From the TSP F	ield Calibration (Curve, take Qstd =	= 43 CFM				
From the Regre	ssion Equation, th	ne "Y" value acco	rding to				
					· · · · · · · · · · · · · · · · · · ·		
		mw x C	$Qstd + bw = [\Delta W]$	x (Pa/760) x (2	(98/Ta)]		
Therefore, S	Set Point; W = (n	nw x Qstd + bw $)^{2}$	² x (760 / Pa) x (Ta / 298) =	4.31		
			. , , ,				
Remarks:						41-12-12-12-12-12-12-12-12-12-12-12-12-12	
	-						
	War		1				. 7 (
Conducted by:	The	Signature:	pina	-		Date:	(////0/
Checked by	- H-	Signature:				Date:	D'January o
			/				/
	ibration\HVS\A-01-20\2	0070117	v				

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

TEST REPORT

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

Test Report No .:	C/06/60502	
Date of Issue:	2006-05-02	
Date Received:	2006-05-01	
Date Tested:	2006-05-01	
Date Completed:	2006-05-02	
Page:	1 of 1	

ATTN:

Mr. Henry Leung

Certificate of Calibration

Item for calibration:

	Description	: RS232 Integral Vane Digital Anemometer
	Manufacturer	: AZ Instrument
	Model No.	: 451104
	Serial No.	: 9020746
	Equipment No.	: A-03-01
con	ditions:	

Test c

Room Temperature Relative Humidity Pressure

: 21 degree Celsius : 66% : 1018.4 kPa

Methodology:

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

Results:

	Reference Set Point	Instrument Readings
Measuring Air Velocity, m/s	2.00	2.00
Temperature, °C	21.0	21.0

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

Patrick

PATRICK TSE Laboratory Manager

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

AIR POLLUTION MONITORING EQUIPMENT

ORIFICE TRANSFER STANDARD CERTIFICATION WORKSHEET TE-5025A

Date - Ma Operator		5 Rootsmeter Orifice I.I		9833620 0993	Ta (K) - Pa (mm) -	294 746.76
PLATE OR Run #	VOLUME START (m3)	VOLUME STOP (m3)	DIFF VOLUME (m3)	DIFF TIME (min)	METER DIFF Hg (mm)	ORFICE DIFF H2O (in.)
1 2 3 4 5	NA NA NA NA NA	NA NA NA NA	1.00 1.00 1.00 1.00 1.00 1.00	1.3890 0.9850 0.8810 0.8410 0.6950	3.2 6.3 7.8 8.6 12.5	2.00 4.00 5.00 5.50 8.00

DATA TABULATION

Vstd	(x axis) Qstd	(y axis)	5	Va	(x axis) Qa	(y axis)
0.9917 0.9876 0.9854 0.9844 0.9792	0.7139 1.0026 1.1185 1.1706 1.4090	1.4113 1.9959 2.2315 2.3405 2.8227		0.9957 0.9916 0.9894 0.9884 0.9832	0.7168 1.0067 1.1231 1.1753 1.4147	0.8874 1.2549 1.4030 1.4715 1.7747
Qstd slop intercept coefficie	(b) =	2.03154 -0.03970 0.99999		Qa slope intercept coefficie	t (b) = ent (r) =	1.27212 -0.02496 0.99999
y axis =	SQRT [H2O(I	Pa/760) (298/5	[a)]	y axis =	SQRT [H2O (I	la/Pa)]

CALCULATIONS

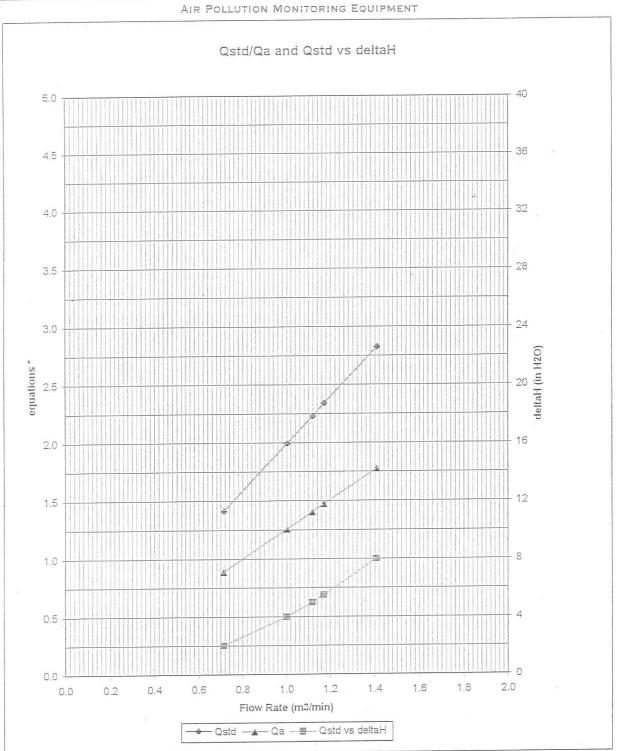
Vstd = Diff. Vol[(Pa-Diff. Hg)/760](298/Ta) Qstd = Vstd/Time

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

For subsequent flow rate calculations:

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

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



* y-axis equations: Qstd series:

P a P s t d Tstd ΔH T a $\sqrt{(\Delta H (Ta / Pa))}$

#0993

Qa series:

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

TEST REPORT

APPLICANT:	Cinotech Consultants Limited 1602-1610 Delta House,	Test Report No.: Date of Issue:	C/N/61215/1 2006-12-15
	3 On Yiu Street,	Date Received:	2006-12-14
	Shatin, N.T.	Date Tested:	2006-12-15
		Date Completed:	2006-12-15
		Next Due Date:	2007-12-14

Page:

1 of 1

ATTN:

Mr. Henry Leung

Certificate of Calibration

Item for calibration:

Description	: Integrating Sound Level Meter
Manufacturer	: Brüel & Kjær
Model No.	: B&K 2238
Serial No.	: 2337665
Microphone No.	: 2289749
Equipment No.	: N-01-01
Test conditions:	
Room Temperatre	: 20 degree Celsius
Relative Humidity	: 60%

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

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

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

PATRICK TSE Operation Manager

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

TEST REPORT

APPLICANT:	Cinotech Consultants Limited	Test Report No.:	C/N/61116/1
	1602-1610 Delta House,	Date of Issue:	2006-11-16
	3 On Yiu Street,	Date Received:	2006-11-15
	Shatin, N.T.	Date Tested:	2006-11-15
		Date Completed:	2006-11-16
		Next Due Date:	2007-11-15

ATTN:

Mr. Henry Leung

Certificate of Calibration

Item for calibration:

Description ·	: Integrating Sound Level Meter
Manufacturer	: Brüel & Kjær
Model No.	: B&K 2238
Serial No.	: 2337666
Microphone No.	: 2289750
Equipment No.	: N-01-02
tions:	

Test conditions:

Room Temperatre Relative Humidity : 20 degree Celsius : 59%

Page:

1 of 1

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

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

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

Patriels

PATRICK TSE Operation Manager

This test document cannot be reproduced in any way, except in full context, without the prior approval in writing of the laboratory.

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

TEST REPORT

APPLICANT:	Cinotech Consultants Limited	Test Report No.:	C/N/60904-1
	1601-1610 Delta House,	Date of Issue:	2006-09-04
	3 On Yiu Street,	Date Received:	2006-09-02
	Shatin, N.T.	Date Tested:	2006-09-02
		Date Completed:	2006-09-04

ATTN:

Mr. Henry Leung

Certificate of Calibration

Item for calibration:

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

Next Due Date:

Page:

2007-09-03

1 of 1

Test conditions:

Room Temperatre Relative Humidity : 23 degree Celsius : 64%

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

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

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

atrick

PATRICK TSE Laborary Manager

This test document cannot be reproduced in any way, except in full context, without the prior approval in writing of the laboratory.

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

TEST REPORT

APPLICANT:	Cinotech Consultants Limited	Test Report No.:	C/N/60904-2
	1602-1610 Delta House,	Date of Issue:	2006-09-04
	3 On Yiu Street,	Date Received:	2006-09-02
	Shatin, N.T.	Date Tested:	2006-09-02
		Date Completed:	2006-09-04

ATTN:

Mr. Henry Leung

Certificate of Calibration

Item for calibration:

Description Manufacturer Model No. Serial No. Equipment No.

Test conditions:

Room Temperatre Relative Humidity Pressure : Integrating Sound Level Meter : Brüel & Kjær : B&K 2238 : 2359303 : N-01-04

Next Due Date:

Page:

2007-09-03

1 of 1

: 23 degree Celsius : 63% : 1006.5hPa

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

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

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

Patrick

PATRICK TSE Operation Manager

This test document cannot be reproduced in any way, except in full context, without the prior approval in writing of the laboratory.

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

TEST REPORT

APPLICANT:	Cinotech Consultants Limited	Test Report No .:	C/N/61014/1
	1602-1610 Delta House,	Date of Issue:	2006-10-14
	3 On Yiu Street,	Date Received:	2006-10-13
	Shatin, N.T.	Date Tested:	2006-10-14
		Date Completed:	2006-10-14
		Next Due Date:	2007-10-13

ATTN:

Mr. Henry Leung

Certificate of Calibration

Item for calibration:

Description Manufacturer Model No. Serial No. Microphone No. Equipment No. : Integrating Sound Level Meter : Brüel & Kjær : B&K 2238 : 2394976 : 2407349 : N-01-05

Page:

1 of 1

Test conditions:

Room Temperatre Relative Humidity : 21 degree Celsius : 60%

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

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

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

Patrick

PATRICK TSE Operation Manager

This test document cannot be reproduced in any way, except in full context, without the prior approval in writing of the laboratory.

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

TEST REPORT

APPLICANT:	Cinotech Consultants Limited	Test Report No.:	C/N/61116/2
	1602-1610 Delta House,	Date of Issue:	2006-11-16
	3 On Yiu Street,	Date Received:	2006-11-15
	Shatin, N.T.	Date Tested:	2006-11-15
		Date Completed:	2006-11-16
		Next Due Date:	2007-11-15
ATTN:	Mr. Henry Leung	Page:	1 of 1

Item for calibration:

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

Test conditions:

Room Temperatre: 20 degree CelsiusRelative Humidity: 59%Pressure: 1015.2 hPa

Methodology:

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

Results:

Sound Pressure Level	Measured SPL	Tolerance
At 94 dB SPL	94.0	$94.0\pm~0.1~\mathrm{dB}$

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

Patrick

PATRICK TSE Operation Manager

This test document cannot be reproduced in any way, except in full context, without the prior approval in writing of the laboratory.

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

TEST REPORT

APPLICANT:	Cinotech Consultants L 1602-1610 Delta House, 3 On Yiu Street, Shatin, N.T.		Test Report No.: Date of Issue: Date Received: Date Tested: Date Completed:	C/06/60304 2006-03-04 2006-03-03 2006-03-03 2006-03-04
			Next Due Date:	2007-03-04
ATTN:	Mr. Henry Leung		Page:	1 of 1
Item for calibration:				
	Description	: Acoustica	al Calibrator	
]	Manufacturer	: Brüel & H	Kjær	
1	Model No.	: 4231		
	Serial No.	: 2343007		
]	Project No.	: C13		

: N-02-02

Test conditions:

: 20 degree Celsius Room Temperatre **Relative Humidity** : 71% Pressure :1020.1hPa

Equipment No.

Methodology:

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

Results:

Sound Pressure Level	Measured SPL	Tolerance
At 94 dB SPL	94.0	$94.0\pm~0.2~\mathrm{dB}$

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

Patrick

PATRICK TSE Operation Manager

606 - 608 Cornell Centre, 50 Wing Tai Road, Chai Wan, Hong Kong. Tel: (852) 2898 7388 Fax: (852) 2898 7076

TEST REPORT

APPLICANT:	Cinotech Consultants Limited	Test Report No.:	C/N/60904-3
	1601-1610 Delta House,	Date of Issue:	2006-09-04
	3 On Yiu Street,	Date Received:	2006-09-02
	Shatin, N.T.	Date Tested:	2006-09-02
		Date Completed:	2006-09-04
		Next Due Date:	2007-09-03
ATTN:	Mr. Henry Leung	Page:	1 of 1

Item for calibration:

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

Test conditions:

Room Temperatre	: 23 degree Celsius
Relative Humidity	: 63%
Pressure	: 1020.1hPa

Methodology:

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

Results:

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

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

Patrick

PATRICK TSE Operation Manager

APPENDIX C ENVIRONMENTAL MONITORING AND AUDIT SCHEDULE

Environmental Monitoring for Lai Chi Kok Viaduct Tentative Air Quality and Noise Monitoring Schedule for February 2007

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
28-Jan	29-Jan	30-Jan	31-Jan	1-Feb	2-Feb	3-Feb
	1 hr TSP	1 hr TSP Noise	24 hr TSP	1 hr TSP		
4-Feb	5-Feb	6-Feb	7-Feb	8-Feb	9-Feb	10-Feb
		1 hr TSP Noise 24 hr TSP	1 hr TSP	1 hr TSP		
11-Feb	12-Feb	13-Feb	14-Feb	15-Feb	16-Feb	17-Feb
	1 hr TSP 24 hr TSP	1 hr TSP		1 hr TSP Noise	24 hr TSP	
18-Feb	19-Feb	20-Feb	21-Feb	22-Feb	23-Feb	24-Feb
			1 hr TSP	1 hr TSP 24 hr TSP	1 hr TSP Noise	
25-Feb	26-Feb	27-Feb	28-Feb	1-Mar	2-Mar	3-Mar
		1 hr TSP Noise	24 hr TSP	1 hr TSP	1 hr TSP	

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

- AM2 Lai Chi Kok Sports Centre
- NM2 Lai Chi Kok Correctional Institution
- NM4 Mei Foo Sun Chuen, Phase 5
- NM8a M/F of Nob Hill
- NM8b 3/F of Nob Hill
- NM9 G/F, Hoi Fai House, Hoi Lai Estate

Environmental Monitoring for Lai Chi Kok Viaduct Tentative Air Quality and Noise Monitoring Schedule for March 2007

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

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

- AM2 Lai Chi Kok Sports Centre
- NM2 Lai Chi Kok Correctional Institution
- NM4 Mei Foo Sun Chuen, Phase 5
- NM8a M/F of Nob Hill
- NM8b 3/F of Nob Hill
- NM9 G/F, Hoi Fai House, Hoi Lai Estate

APPENDIX D WIND DATA

Date	Time	Wind Speed m/s	Direction
1-Feb-2007	00:00	2.7	WSW
1-Feb-2007	01:00	2.7	W
1-Feb-2007	02:00	2.2	WSW
1-Feb-2007	03:00	3.1	WSW
1-Feb-2007	04:00	3.6	WSW
1-Feb-2007	05:00	2.7	WSW
1-Feb-2007	06:00	4.0	WSW
1-Feb-2007	07:00	1.8	W
1-Feb-2007	08:00	0.4	WSW
1-Feb-2007	09:00	1.3	WNW
1-Feb-2007	10:00	0.4	WSW
1-Feb-2007	11:00	0.4	W
1-Feb-2007	12:00	0.0	WNW
1-Feb-2007	13:00	0.9	WNW
1-Feb-2007	14:00	0.9	WNW
1-Feb-2007	15:00	0.4	W
1-Feb-2007	16:00	0.0	
1-Feb-2007	17:00	0.0	
1-Feb-2007	18:00	1.8	W
1-Feb-2007	19:00	0.9	WNW
1-Feb-2007	20:00	2.2	WNW
1-Feb-2007	21:00	0.9	WNW
1-Feb-2007	22:00	0.9	W
1-Feb-2007	23:00	2.2	SW
2-Feb-2007	00:00	1.3	
	01:00	1.8	WSW
2-Feb-2007 2-Feb-2007	01:00	2.2	SW
2-Feb-2007 2-Feb-2007	02:00	2.2	WSW
		0.9	WSW
2-Feb-2007	04:00 05:00	0.9	WNW
2-Feb-2007			
2-Feb-2007	06:00 07:00	0.9	WNW WSW
2-Feb-2007		0.0	
2-Feb-2007	08:00	0.9	SW
2-Feb-2007	09:00	1.8	WNW WNW
2-Feb-2007	10:00		
2-Feb-2007	11:00 12:00	4.0	WNW
2-Feb-2007			WNW
2-Feb-2007	13:00	3.1	WSW
2-Feb-2007	14:00	1.3	WNW
2-Feb-2007	15:00	2.2	WSW
2-Feb-2007	16:00	1.8	W
2-Feb-2007	17:00	2.2	WNW
2-Feb-2007	18:00	2.2	W
2-Feb-2007	19:00	1.3	WNW
2-Feb-2007	20:00	2.7	WNW
2-Feb-2007	21:00	2.7	WNW
2-Feb-2007	22:00	1.8	WNW
2-Feb-2007	23:00	4.5	WNW
3-Feb-2007	00:00	1.3	WNW
3-Feb-2007	01:00	0.9	WSW
3-Feb-2007	02:00	1.3	WSW
3-Feb-2007	03:00	0.4	S
3-Feb-2007	04:00	0.0	SSW
3-Feb-2007	05:00	0.0	

Time	Wind Speed m/s	Direction
06:00	0.0	
07:00	0.0	
08:00	0.0	SW
09:00	2.2	SSW
10:00	2.7	WNW
11:00	1.8	WSW
12:00	0.9	WSW
13:00	0.0	
14:00	0.0	
15:00	0.0	
		WNW
	1.3	WNW
23:00	1.8	WNW
		NW
		NNE
		WSW
		S
		SSW
		SSW
		SSE
		S
		W
		WSW
		WSW
		WSW
	-	NNE
		WNW
		WNW
		WNW
		NW
	-	WNW
		WNW
		W
		W
		W
		WSW
		WOW
		WSW
		WSW
		WSW
		W
		SW
		<u>Sw</u>
		WNW
10:00	0.9	VVINVV
	06:00 07:00 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00 17:00 18:00 19:00 20:00 21:00 22:00	06:00 0.0 07:00 0.0 08:00 0.0 09:00 2.2 10:00 2.7 11:00 1.8 12:00 0.9 13:00 0.0 14:00 0.0 15:00 0.0 16:00 0.0 17:00 0.9 18:00 0.9 20:00 1.8 21:00 1.3 22:00 1.3 22:00 1.3 23:00 1.8 00:00 1.3 01:00 0.9 02:00 1.3 03:00 1.3 04:00 0.0 05:00 0.0 08:00 0.0 09:00 0.4 10:00 3.6 11:00 1.8 12:00 0.9 13:00 0.4 14:00 0.0 15:00 0.0 16:00 </td

Date	Time	Wind Speed m/s	Direction
5-Feb-2007	12:00	1.8	WNW
5-Feb-2007	13:00	0.4	WSW
5-Feb-2007	14:00	1.8	WNW
5-Feb-2007	15:00	0.4	W
5-Feb-2007	16:00	0.0	
5-Feb-2007	17:00	0.0	W
5-Feb-2007	18:00	2.7	W
5-Feb-2007	19:00	0.0	NW
5-Feb-2007	20:00	1.8	WNW
5-Feb-2007	21:00	2.2	W
5-Feb-2007	22:00	0.9	WNW
5-Feb-2007	23:00	1.8	WSW
6-Feb-2007	00:00	2.2	SW
6-Feb-2007	01:00	0.9	W
6-Feb-2007	02:00	2.2	SW
6-Feb-2007	03:00	2.2	SW
6-Feb-2007	04:00	2.2	SW
6-Feb-2007	05:00	0.4	WNW
6-Feb-2007	06:00	0.9	WNW
6-Feb-2007	07:00	0.0	W
6-Feb-2007	08:00	0.0	SW
6-Feb-2007	09:00	1.3	WNW
6-Feb-2007	10:00	1.3	WNW
6-Feb-2007	11:00	3.1	WNW
6-Feb-2007	12:00	0.9	W
6-Feb-2007	13:00	3.1	WNW
6-Feb-2007	14:00	2.2	W
6-Feb-2007	15:00	1.3	SW
6-Feb-2007	16:00	0.9	WNW
6-Feb-2007	17:00	1.3	WNW
6-Feb-2007	18:00	0.9	W
6-Feb-2007	19:00	2.7	WNW
6-Feb-2007	20:00	2.2	WNW
6-Feb-2007	21:00	3.6	WNW
6-Feb-2007	22:00	3.6	WNW
6-Feb-2007	23:00	2.7	W
7-Feb-2007	00:00	4.0	WNW
7-Feb-2007	01:00	2.2	WSW
7-Feb-2007	02:00	1.8	WSW
7-Feb-2007	03:00	2.7	WSW
7-Feb-2007	04:00	2.7	SW
7-Feb-2007	05:00	1.8	WNW
7-Feb-2007	06:00	1.3	W
7-Feb-2007	07:00	1.3	WNW
7-Feb-2007	08:00	1.8	WNW
7-Feb-2007	09:00	1.8	WNW
7-Feb-2007	10:00	1.3	WNW
7-Feb-2007	11:00	1.3	WNW
7-Feb-2007	12:00	2.2	WNW
7-Feb-2007	13:00	2.7	WNW
7-Feb-2007	14:00	0.9	WSW
7-Feb-2007	15:00	0.4	WNW
7-Feb-2007	16:00	2.2	W
7-Feb-2007	17:00	3.6	WNW

Date	Time	Wind Speed m/s	Direction
7-Feb-2007	18:00	3.1	WNW
7-Feb-2007	19:00	3.6	WNW
7-Feb-2007	20:00	4.0	WNW
7-Feb-2007	21:00	4.0	WNW
7-Feb-2007	22:00	3.1	WNW
7-Feb-2007	23:00	4.5	WNW
8-Feb-2007	00:00	1.8	WNW
8-Feb-2007	01:00	1.8	WSW
8-Feb-2007	02:00	0.4	WSW
8-Feb-2007	03:00	0.9	SW
8-Feb-2007	04:00	1.3	SSW
8-Feb-2007	05:00	1.8	SSW
8-Feb-2007	06:00	3.1	WSW
8-Feb-2007	07:00	3.1	WSW
8-Feb-2007	08:00	1.3	WSW
8-Feb-2007	09:00	2.7	WSW
8-Feb-2007	10:00	2.7	WSW
8-Feb-2007	11:00	1.3	WNW
8-Feb-2007	12:00	2.2	W
8-Feb-2007 8-Feb-2007	12:00	2.2	WSW
			WSW
8-Feb-2007	14:00 15:00	4.0	WSW
8-Feb-2007		4.0	
8-Feb-2007	16:00	4.9	WSW
8-Feb-2007	17:00	3.6	WSW
8-Feb-2007	18:00	3.6	WNW
8-Feb-2007	19:00	4.0	WSW
8-Feb-2007	20:00	4.5	WSW
8-Feb-2007	21:00	4.9	WSW
8-Feb-2007	22:00	3.6	WSW
8-Feb-2007	23:00	2.7	WNW
9-Feb-2007	00:00	3.6	WSW
9-Feb-2007	01:00	3.1	WSW
9-Feb-2007	02:00	3.6	WSW
9-Feb-2007	03:00	3.6	WSW
9-Feb-2007	04:00	3.1	WSW
9-Feb-2007	05:00	2.2	WSW
9-Feb-2007	06:00	1.8	WSW
9-Feb-2007	07:00	1.8	WSW
9-Feb-2007	08:00	1.3	W
9-Feb-2007	09:00	2.2	WSW
9-Feb-2007	10:00	2.2	WSW
9-Feb-2007	11:00	1.8	WSW
9-Feb-2007	12:00	3.1	WSW
9-Feb-2007	13:00	3.1	WSW
9-Feb-2007	14:00	2.7	WSW
9-Feb-2007	15:00	3.1	SW
9-Feb-2007	16:00	3.6	WSW
9-Feb-2007	17:00	5.4	WNW
9-Feb-2007	18:00	4.0	WNW
9-Feb-2007	19:00	3.6	WSW
9-Feb-2007	20:00	4.0	WSW
9-Feb-2007	21:00	3.6	WSW
9-Feb-2007	22:00	2.7	WSW
9-Feb-2007	23:00	1.8	SW

Date	Time	Wind Speed m/s	Direction
10-Feb-2007	00:00	2.2	SW
10-Feb-2007	01:00	0.9	SSW
10-Feb-2007	02:00	1.3	S
10-Feb-2007	03:00	0.0	SW
10-Feb-2007	04:00	0.0	
10-Feb-2007	05:00	0.0	
10-Feb-2007	06:00	0.0	
10-Feb-2007	07:00	0.0	
10-Feb-2007	08:00	0.0	
10-Feb-2007	09:00	0.0	W
10-Feb-2007	10:00	0.9	WSW
10-Feb-2007	11:00	1.8	W
10-Feb-2007	12:00	2.2	WSW
10-Feb-2007	13:00	3.1	WSW
10-Feb-2007	14:00	2.7	SW
10-Feb-2007	15:00	2.2	WSW
10-Feb-2007 10-Feb-2007	16:00	3.1	WSW
10-Feb-2007	17:00	5.4	WNW
			WNW
10-Feb-2007	18:00	5.8	
10-Feb-2007	19:00	4.9	WNW
10-Feb-2007	20:00	3.6	WNW
10-Feb-2007	21:00	3.6	WNW
10-Feb-2007	22:00	2.7	WNW
10-Feb-2007	23:00	2.2	WNW
11-Feb-2007	00:00	1.3	WNW
11-Feb-2007	01:00	0.0	SW
11-Feb-2007	02:00	0.0	
11-Feb-2007	03:00	0.0	
11-Feb-2007	04:00	0.0	
11-Feb-2007	05:00	0.0	
11-Feb-2007	06:00	0.0	SW
11-Feb-2007	07:00	0.0	
11-Feb-2007	08:00	0.0	
11-Feb-2007	09:00	0.0	
11-Feb-2007	10:00	0.0	
11-Feb-2007	11:00	0.0	
11-Feb-2007	12:00	0.0	
11-Feb-2007	13:00	0.0	
11-Feb-2007	14:00	0.0	SSW
11-Feb-2007	15:00	0.0	
11-Feb-2007	16:00	0.0	
11-Feb-2007	17:00	1.3	WNW
11-Feb-2007	18:00	3.6	WNW
11-Feb-2007	19:00	4.0	WNW
11-Feb-2007	20:00	3.6	WNW
11-Feb-2007	21:00	2.7	WNW
11-Feb-2007	22:00	2.2	WNW
11-Feb-2007	23:00	1.3	WNW
12-Feb-2007	00:00	1.3	WNW
12-Feb-2007	01:00	0.4	NE
12-Feb-2007	02:00	0.0	
12-Feb-2007	03:00	0.0	
12-Feb-2007	04:00	0.0	
12-Feb-2007	05:00	0.0	

Date	Time	Wind Speed m/s	Direction
12-Feb-2007	06:00	0.0	
12-Feb-2007	07:00	0.0	
12-Feb-2007	08:00	0.0	
12-Feb-2007	09:00	0.0	
12-Feb-2007	10:00	0.0	
12-Feb-2007	11:00	0.0	
12-Feb-2007	12:00	0.0	SW
12-Feb-2007	13:00	1.3	WNW
12-Feb-2007	14:00	0.4	WNW
12-Feb-2007	15:00	2.2	WNW
12-Feb-2007	16:00	1.3	WSW
12-Feb-2007	17:00	2.2	WNW
12-Feb-2007	18:00	1.8	WNW
12-Feb-2007		1.3	WNW
	19:00		
12-Feb-2007	20:00	0.4	SSW
12-Feb-2007	21:00	2.2	WNW
12-Feb-2007	22:00	1.8	WNW
12-Feb-2007	23:00	0.4	WSW
13-Feb-2007	00:00	0.0	WNW
13-Feb-2007	01:00	0.9	W
13-Feb-2007	02:00	0.9	W
13-Feb-2007	03:00	0.9	W
13-Feb-2007	04:00	1.3	W
13-Feb-2007	05:00	2.7	WNW
13-Feb-2007	06:00	2.2	WNW
13-Feb-2007	07:00	3.6	WNW
13-Feb-2007	08:00	2.2	WNW
13-Feb-2007	09:00	3.1	WNW
13-Feb-2007	10:00	4.0	WSW
13-Feb-2007	11:00	2.7	WNW
13-Feb-2007	12:00	2.7	W
13-Feb-2007	13:00	1.3	W
13-Feb-2007	14:00	0.4	WNW
13-Feb-2007	15:00	3.6	WNW
13-Feb-2007	16:00	3.1	WNW
13-Feb-2007	17:00	2.2	WNW
13-Feb-2007	18:00	4.5	W
13-Feb-2007	19:00	4.0	WNW
13-Feb-2007	20:00	2.7	W
13-Feb-2007	21:00	1.3	WNW
13-Feb-2007	22:00	1.3	WNW
13-Feb-2007	23:00	0.9	SW
14-Feb-2007	00:00	1.3	W
14-Feb-2007	01:00	0.4	SW
14-Feb-2007	02:00	0.0	
14-Feb-2007	03:00	0.9	W
14-Feb-2007	04:00	1.8	WNW
14-Feb-2007	05:00	1.3	WNW
14-Feb-2007	06:00	1.8	W
14-Feb-2007	07:00	2.7	W
			W
14-Feb-2007	08:00	2.2	
14-Feb-2007	09:00	2.2	WNW
14-Feb-2007	10:00	1.3	W
14-Feb-2007	11:00	1.3	SW

Date	Time	Wind Speed m/s	Direction
14-Feb-2007	12:00	0.9	SW
14-Feb-2007	13:00	2.2	WNW
14-Feb-2007	14:00	0.0	WSW
14-Feb-2007	15:00	1.8	WNW
14-Feb-2007	16:00	1.3	WSW
14-Feb-2007	17:00	2.2	W
14-Feb-2007	18:00	2.2	WNW
14-Feb-2007	19:00	0.4	WNW
14-Feb-2007	20:00	0.9	NW
14-Feb-2007	21:00	0.4	W
14-Feb-2007	22:00	0.9	WNW
14-Feb-2007	23:00	2.2	WNW
15-Feb-2007	00:00	2.2	WNW
15-Feb-2007	01:00	1.3	W
15-Feb-2007	02:00	0.9	SSW
15-Feb-2007	03:00	0.4	SW
15-Feb-2007	03:00	0.4	SW
15-Feb-2007	05:00	0.9	SW
15-Feb-2007	06:00	0.9	WNW
15-Feb-2007	07:00	1.8	SW
15-Feb-2007	07:00	1.8	
			WNW
15-Feb-2007	09:00	1.8	
15-Feb-2007	10:00	1.8	WNW
15-Feb-2007	11:00	4.0	WNW
15-Feb-2007	12:00	3.6	WNW
15-Feb-2007	13:00	1.8	W
15-Feb-2007	14:00	0.9	SW
15-Feb-2007	15:00	0.9	WSW
15-Feb-2007	16:00	1.8	WNW
15-Feb-2007	17:00	3.1	WNW
15-Feb-2007	18:00	3.1	WNW
15-Feb-2007	19:00	2.2	WNW
15-Feb-2007	20:00	2.7	WNW
15-Feb-2007	21:00	2.2	WNW
15-Feb-2007	22:00	1.8	WNW
15-Feb-2007	23:00	1.8	WNW
16-Feb-2007	00:00	0.9	WNW
16-Feb-2007	01:00	0.0	W
16-Feb-2007	02:00	0.0	
16-Feb-2007	03:00	0.0	
16-Feb-2007	04:00	0.0	
16-Feb-2007	05:00	0.0	W
16-Feb-2007	06:00	1.8	WNW
16-Feb-2007	07:00	3.1	WNW
16-Feb-2007	08:00	2.2	WNW
16-Feb-2007	09:00	1.3	WNW
16-Feb-2007	10:00	2.2	WSW
16-Feb-2007	11:00	2.7	WSW
16-Feb-2007	12:00	3.1	WSW
16-Feb-2007	13:00	2.2	WSW
16-Feb-2007	14:00	1.8	WSW
16-Feb-2007	15:00	1.8	WSW
16-Feb-2007	16:00	1.8	WSW
16-Feb-2007	17:00	2.7	W

Date	Time	Wind Speed m/s	Direction
16-Feb-2007	18:00	3.1	WNW
16-Feb-2007	19:00	3.1	WNW
16-Feb-2007	20:00	2.2	WNW
16-Feb-2007	21:00	2.2	WNW
16-Feb-2007	22:00	2.2	WNW
16-Feb-2007	23:00	1.8	WNW
17-Feb-2007	00:00	2.2	WNW
17-Feb-2007	01:00	0.9	W
17-Feb-2007	02:00	0.4	W
17-Feb-2007	03:00	0.9	W
17-Feb-2007	04:00	0.0	
17-Feb-2007	05:00	0.4	SSW
17-Feb-2007	06:00	0.0	WSW
17-Feb-2007	07:00	0.9	SW
17-Feb-2007	08:00	1.8	SW
17-Feb-2007	09:00	2.7	SW
17-Feb-2007	10:00	3.1	SW
17-Feb-2007	11:00	2.7	
	12:00	1.8	SW
17-Feb-2007		2.2	Sw WNW
17-Feb-2007	13:00		
17-Feb-2007	14:00	1.3	WNW
17-Feb-2007	15:00	0.9	W
17-Feb-2007	16:00	1.3	W
17-Feb-2007	17:00	1.8	WNW
17-Feb-2007	18:00	2.2	WNW
17-Feb-2007	19:00	1.8	WNW
17-Feb-2007	20:00	2.2	WNW
17-Feb-2007	21:00	1.8	WNW
17-Feb-2007	22:00	2.7	W
17-Feb-2007	23:00	1.8	WNW
18-Feb-2007	00:00	1.3	WNW
18-Feb-2007	01:00	1.3	W
18-Feb-2007	02:00	0.0	W
18-Feb-2007	03:00	0.0	
18-Feb-2007	04:00	0.0	
18-Feb-2007	05:00	0.0	SSW
18-Feb-2007	06:00	0.9	SSW
18-Feb-2007	07:00	1.3	SSW
18-Feb-2007	08:00	3.6	WNW
18-Feb-2007	09:00	2.7	WNW
18-Feb-2007	10:00	0.9	WNW
18-Feb-2007	11:00	0.4	WNW
18-Feb-2007	12:00	0.0	
18-Feb-2007	13:00	0.0	
18-Feb-2007	14:00	0.0	S
18-Feb-2007	15:00	0.0	
18-Feb-2007	16:00	0.4	SSE
18-Feb-2007	17:00	1.3	WNW
18-Feb-2007	18:00	0.9	WNW
18-Feb-2007	19:00	1.8	WNW
18-Feb-2007	20:00	0.9	WNW
18-Feb-2007	21:00	0.9	W
18-Feb-2007	22:00	1.8	W
18-Feb-2007	23:00	2.7	WNW

Date	Time	Wind Speed m/s	Direction
19-Feb-2007	00:00	1.3	W
19-Feb-2007	01:00	1.8	WNW
19-Feb-2007	02:00	0.4	WNW
19-Feb-2007	03:00	2.7	WNW
19-Feb-2007	04:00	2.7	WSW
19-Feb-2007	05:00	2.7	WNW
19-Feb-2007	06:00	1.3	WSW
19-Feb-2007	07:00	0.4	WSW
19-Feb-2007	08:00	0.0	
19-Feb-2007	09:00	0.4	WNW
19-Feb-2007	10:00	0.0	
19-Feb-2007	11:00	0.0	WNW
19-Feb-2007	12:00	0.0	WNW
19-Feb-2007	13:00	2.7	WNW
19-Feb-2007	14:00	3.1	WNW
19-Feb-2007	15:00	3.6	WNW
19-Feb-2007	16:00	2.7	W
19-Feb-2007	17:00	0.4	W
19-Feb-2007	18:00	1.3	W
19-Feb-2007	19:00	1.8	W
19-Feb-2007	20:00	0.9	W
19-Feb-2007	21:00	2.2	W
19-Feb-2007	22:00	1.8	W
19-Feb-2007	23:00	2.2	W
20-Feb-2007	00:00	2.2	WNW
20-Feb-2007	01:00	4.0	WNW
20-Feb-2007	02:00	1.8	WNW
20-Feb-2007	03:00	2.7	WNW
20-Feb-2007	03:00	4.0	WNW
20-Feb-2007	05:00	4.9	WNW
20-Feb-2007	06:00	3.6	W
20-Feb-2007	07:00	0.4	WSW
20-Feb-2007	08:00	1.3	W
20-Feb-2007	09:00	1.8	W
20-Feb-2007	10:00	2.7	WNW
20-Feb-2007	11:00	4.0	WNW
20-Feb-2007	12:00	1.8	WNW
20-Feb-2007	13:00	1.3	WNW
20-Feb-2007	14:00	1.3	WNW
	15:00	0.9	WNW
20-Feb-2007	16:00	3.1	WNW
20-Feb-2007	17:00	2.7	W
20-Feb-2007			
20-Feb-2007	18:00	2.7	WNW W
20-Feb-2007	19:00	3.1	 WNW
20-Feb-2007	20:00	3.6	
20-Feb-2007	21:00	3.6	WNW
20-Feb-2007	22:00	3.6	WNW
20-Feb-2007	23:00	2.7	WNW
21-Feb-2007	00:00	1.8	W
21-Feb-2007	01:00	1.3	WSW
21-Feb-2007	02:00	0.9	WSW
21-Feb-2007	03:00	0.4	SW
21-Feb-2007	04:00	0.9	SSW
21-Feb-2007	05:00	1.3	WSW

Date	Time	Wind Speed m/s	Direction
21-Feb-2007	06:00	1.3	WNW
21-Feb-2007	07:00	0.9	WNW
21-Feb-2007	08:00	0.9	WNW
21-Feb-2007	09:00	0.4	WNW
21-Feb-2007	10:00	0.0	
21-Feb-2007	11:00	0.0	WNW
21-Feb-2007	12:00	0.4	W
21-Feb-2007	13:00	1.8	WNW
21-Feb-2007	14:00	1.8	WNW
21-Feb-2007	15:00	2.2	WNW
21-Feb-2007	16:00	1.3	WNW
21-Feb-2007	17:00	2.2	W
21-Feb-2007	18:00	3.6	WNW
21-Feb-2007	19:00	4.5	WNW
21-Feb-2007	20:00	4.0	WNW
21-Feb-2007	21:00	1.8	WNW
21-Feb-2007 21-Feb-2007	22:00	1.8	WNW
21-Feb-2007 21-Feb-2007			WNW
	23:00	0.4	
22-Feb-2007	00:00	0.9	ESE
22-Feb-2007	01:00	0.4	ESE
22-Feb-2007	02:00	0.0	
22-Feb-2007	03:00	0.0	ESE
22-Feb-2007	04:00	0.0	
22-Feb-2007	05:00	0.0	SW
22-Feb-2007	06:00	0.0	WSW
22-Feb-2007	07:00	0.0	SW
22-Feb-2007	08:00	0.4	WNW
22-Feb-2007	09:00	0.9	WNW
22-Feb-2007	10:00	0.9	W
22-Feb-2007	11:00	0.9	WNW
22-Feb-2007	12:00	0.4	WNW
22-Feb-2007	13:00	0.0	SSE
22-Feb-2007	14:00	0.0	
22-Feb-2007	15:00	0.9	SW
22-Feb-2007	16:00	0.9	WNW
22-Feb-2007	17:00	2.2	WNW
22-Feb-2007	18:00	2.7	W
22-Feb-2007	19:00	2.2	W
22-Feb-2007	20:00	3.1	WNW
22-Feb-2007	21:00	2.2	WNW
22-Feb-2007	22:00	2.2	WNW
22-Feb-2007	23:00	1.3	SW
23-Feb-2007	00:00	2.7	WNW
23-Feb-2007	01:00	1.8	WNW
23-Feb-2007	02:00	2.2	WNW
23-Feb-2007	03:00	0.9	WSW
23-Feb-2007	04:00	2.2	WNW
23-Feb-2007	05:00	2.7	WNW
23-Feb-2007	06:00	2.2	WNW
23-Feb-2007	07:00	2.2	W
23-Feb-2007	08:00	0.9	WNW
23-Feb-2007	09:00	0.4	W
23-Feb-2007	10:00	0.4	W
23-Feb-2007	11:00	0.0	

Date	Time	Wind Speed m/s	Direction
23-Feb-2007	12:00	0.9	W
23-Feb-2007	13:00	0.0	NW
23-Feb-2007	14:00	0.0	
23-Feb-2007	15:00	0.0	WNW
23-Feb-2007	16:00	2.7	WNW
23-Feb-2007	17:00	0.9	WNW
23-Feb-2007	18:00	1.3	WNW
23-Feb-2007	19:00	0.4	WNW
23-Feb-2007	20:00	0.4	WNW
	20:00	0.9	WNW
23-Feb-2007	21:00		W
23-Feb-2007		0.9	
23-Feb-2007	23:00	1.8	WNW
24-Feb-2007	00:00	1.8	WNW
24-Feb-2007	01:00	2.7	WNW
24-Feb-2007	02:00	3.1	WNW
24-Feb-2007	03:00	2.7	WNW
24-Feb-2007	04:00	2.2	WNW
24-Feb-2007	05:00	2.7	WNW
24-Feb-2007	06:00	2.2	WNW
24-Feb-2007	07:00	0.9	WNW
24-Feb-2007	08:00	0.9	WNW
24-Feb-2007	09:00	0.0	NW
24-Feb-2007	10:00	0.0	NW
24-Feb-2007	11:00	0.0	WSW
24-Feb-2007	12:00	0.9	WNW
24-Feb-2007	13:00	0.4	WSW
24-Feb-2007	14:00	1.3	SW
24-Feb-2007	15:00	0.9	SW
24-Feb-2007	16:00	1.3	WSW
24-Feb-2007	17:00	2.7	WNW
		1.3	W
24-Feb-2007	18:00		
24-Feb-2007	19:00	2.7	WSW
24-Feb-2007	20:00	1.8	WSW
24-Feb-2007	21:00	2.7	WNW
24-Feb-2007	22:00	2.7	W
24-Feb-2007	23:00	2.2	WNW
25-Feb-2007	00:00	2.2	WNW
25-Feb-2007	01:00	1.3	WNW
25-Feb-2007	02:00	2.2	WNW
25-Feb-2007	03:00	0.4	WNW
25-Feb-2007	04:00	0.9	WSW
25-Feb-2007	05:00	0.4	WSW
25-Feb-2007	06:00	1.8	WNW
25-Feb-2007	07:00	1.8	WNW
25-Feb-2007	08:00	1.3	SW
25-Feb-2007	09:00	0.9	WSW
25-Feb-2007	10:00	0.4	W
25-Feb-2007	11:00	1.8	WNW
25-Feb-2007	12:00	2.2	WNW
25-Feb-2007	13:00	2.7	WNW
25-Feb-2007	14:00	2.7	W
25-Feb-2007	15:00	1.8	WNW
25-Feb-2007	16:00	1.8	WNW
25-Feb-2007	17:00	3.6	WNW

Date	Time	Wind Speed m/s	Direction
25-Feb-2007	18:00	4.0	WNW
25-Feb-2007	19:00	2.2	WNW
25-Feb-2007	20:00	2.2	WNW
25-Feb-2007	21:00	1.8	W
25-Feb-2007	22:00	2.2	Ŵ
25-Feb-2007	23:00	2.7	SW
26-Feb-2007	00:00	1.3	W
26-Feb-2007	01:00	1.3	W
26-Feb-2007	02:00	0.4	WSW
26-Feb-2007	03:00	0.4	SSW
26-Feb-2007	04:00	0.9	SW
26-Feb-2007	05:00	0.9	W
26-Feb-2007	06:00	1.8	SW
26-Feb-2007	07:00	2.7	WSW
26-Feb-2007	08:00	2.7	SW
26-Feb-2007	09:00	2.7	WSW
26-Feb-2007	10:00	2.2	WSW
26-Feb-2007	11:00	2.2	WSW
26-Feb-2007	12:00	2.2	WSW
26-Feb-2007	13:00	2.2	WSW
26-Feb-2007	14:00	2.7	WNW
26-Feb-2007	15:00	4.0	WNW
26-Feb-2007	16:00	4.9	WNW
26-Feb-2007	17:00	4.0	WNW
26-Feb-2007	18:00	4.5	WNW
26-Feb-2007	19:00	3.6	WNW
26-Feb-2007	20:00	2.2	WNW
26-Feb-2007	21:00	3.6	WNW
26-Feb-2007	22:00	3.6	WNW
26-Feb-2007	23:00	3.1	WNW
27-Feb-2007	00:00	3.1	WNW
27-Feb-2007	01:00	2.2	WNW
27-Feb-2007	02:00	1.3	SSW
27-Feb-2007	03:00	0.9	S
27-Feb-2007	03:00	0.0	S
27-Feb-2007	05:00	0.0	
27-Feb-2007	06:00	0.0	
27-Feb-2007	07:00	0.0	SW
27-Feb-2007	07:00	0.0	SW
27-Feb-2007	09:00	0.9	NW
27-Feb-2007	10:00	1.3	SW
27-Feb-2007 27-Feb-2007	11:00	0.4	WNW
27-Feb-2007	12:00	0.4	NW
27-Feb-2007 27-Feb-2007	13:00	0.9	WNW
27-Feb-2007 27-Feb-2007	14:00	1.3	WNW
	14.00	2.2	WNW
27-Feb-2007 27-Feb-2007	16:00	3.6	WNW
		2.7	
27-Feb-2007 27-Feb-2007	17:00	2.7	WNW WNW
	18:00		
27-Feb-2007	19:00	1.8	WNW
27-Feb-2007	20:00	2.2	WNW
27-Feb-2007	21:00	2.2	WNW
27-Feb-2007	22:00	1.3	WNW
27-Feb-2007	23:00	0.9	WNW

Date	Time	Wind Speed m/s	Direction
28-Feb-2007	00:00	2.7	WNW
28-Feb-2007	01:00	0.4	SW
28-Feb-2007	02:00	0.0	
28-Feb-2007	03:00	0.0	
28-Feb-2007	04:00	0.0	
28-Feb-2007	05:00	0.0	
28-Feb-2007	06:00	0.0	SSE
28-Feb-2007	07:00	0.0	
28-Feb-2007	08:00	0.0	
28-Feb-2007	09:00	0.0	
28-Feb-2007	10:00	0.0	
28-Feb-2007	11:00	0.0	
28-Feb-2007	12:00	0.0	
28-Feb-2007	13:00	0.0	
28-Feb-2007	14:00	0.0	
28-Feb-2007	15:00	0.0	
28-Feb-2007	16:00	0.0	W
28-Feb-2007	17:00	0.9	NW
28-Feb-2007	18:00	2.2	WNW
28-Feb-2007	19:00	2.7	WNW
28-Feb-2007	20:00	3.1	WNW
28-Feb-2007	21:00	2.7	WNW
28-Feb-2007	22:00	2.2	NW
28-Feb-2007	23:00	2.7	WSW

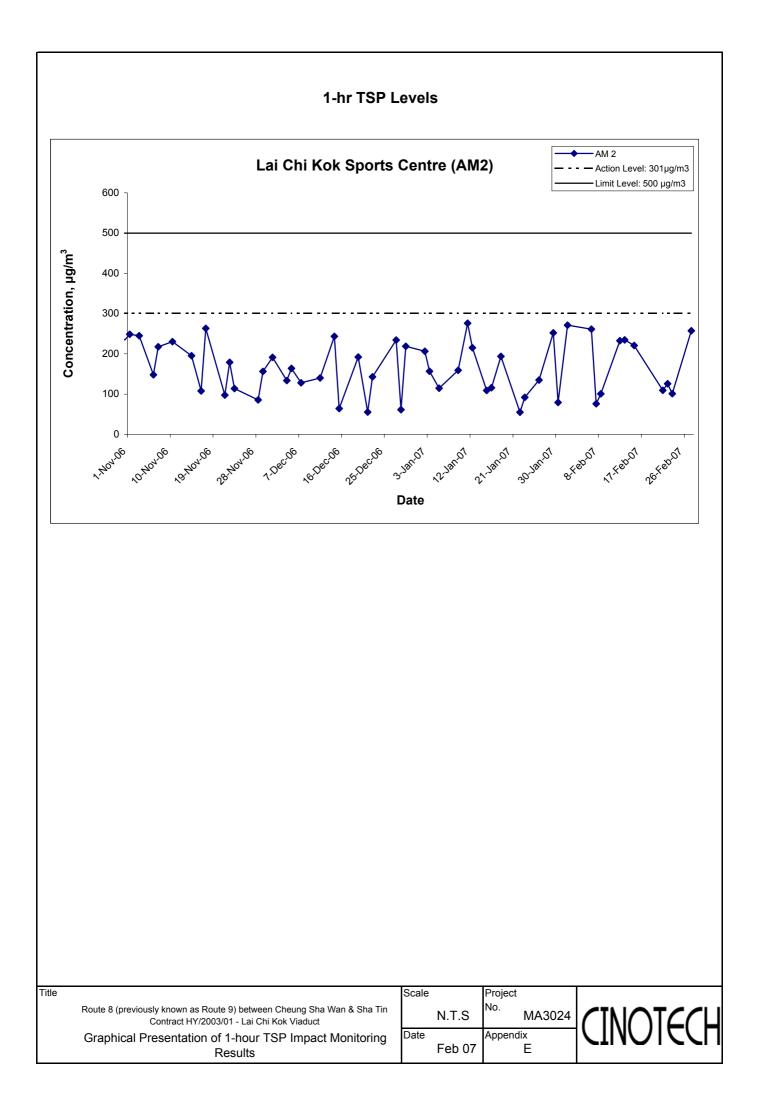
APPENDIX E 1-HOUR TSP MONITORING RESULTS AND GRAPHICAL PRESENTATION

Appendix E - 1-hour TSP Monitoring Results

Location AM 2 - Lai Chi Kok Sports Centre

Date	Weather	Filter W	eight (g)	Flow Rate	e (m ³ /min.)	Elaps	se Time	Air	Atmospheric	Particulate	Av. flow	Total vol.	Sampling	Conc.
	Condition	Initial	Final	Initial	Final	Initial	Final	Temp. (K)	Pressure(Pa)	weight(g)	(m ³ /min)	(m ³)	Time(hrs.)	(µg/m ³)
1-Feb-07	Sunshine	2.8853	2.9053	1.22	1.22	5452.1	5453.1	290.5	771.5	0.0200	1.22	73.7	1.0	271.3
6-Feb-07	Sunshine	2.8821	2.9011	1.21	1.21	5453.1	5454.1	290.9	767.3	0.0190	1.21	72.8	1.0	261.1
7-Feb-07	Sunshine	2.8772	2.8827	1.21	1.21	5478.1	5479.1	292.9	767.7	0.0055	1.21	72.6	1.0	75.8
8-Feb-07	Sunshine	2.8947	2.9020	1.21	1.21	5479.1	5480.1	293.3	767.5	0.0073	1.21	72.5	1.0	100.7
12-Feb-07	Sunshine	2.8766	2.8935	1.21	1.21	5480.1	5481.1	291.9	766.3	0.0169	1.21	72.6	1.0	232.7
13-Feb-07	Sunshine	2.8503	2.8672	1.20	1.20	5505.1	5506.1	295.9	763.3	0.0169	1.20	72.1	1.0	234.4
15-Feb-07	Sunshine	2.8677	2.8837	1.21	1.21	5506.1	5507.1	293.0	765.4	0.0160	1.21	72.5	1.0	220.8
21-Feb-07	Cloudy	2.8672	2.8751	1.21	1.21	5531.1	5532.1	293.5	764.1	0.0079	1.21	72.4	1.0	109.2
22-Feb-07	Cloudy	2.9017	2.9108	1.21	1.21	5532.1	5533.1	292.9	762.2	0.0091	1.21	72.4	1.0	125.8
23-Feb-07	Cloudy	2.9118	2.9191	1.21	1.11	5557.1	5558.1	292.8	762.9	0.0073	1.16	72.4	1.0	100.8
27-Feb-07	Sunny	2.9389	2.9576	1.21	1.21	5558.1	5559.1	291.2	764.9	0.0187	1.21	72.6	1.0	257.4
													Min	75.8
													Max	074.0

Max 271.3 Average 180.9

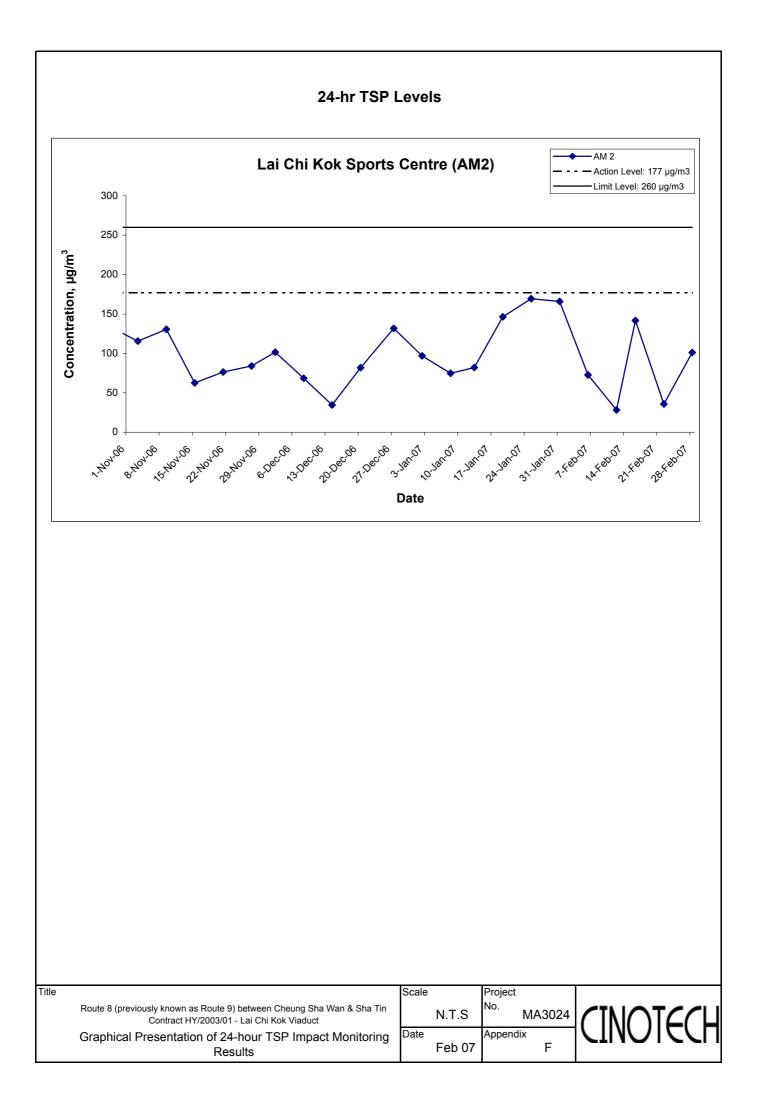


APPENDIX F 24-HOUR TSP MONITORING RESULTS AND GRAPHICAL PRESENTATION

Appendix F - 24-hour TSP Monitoring Results

Location AM 2 - Lai Chi Kok Sports Centre

Date	Weather	Filter Weight (g)		Flow Rate	Flow Rate (m ³ /min.)		Elapse Time		Atmospheric	Particulate	Av. flow	Total vol.	Sampling	Conc.
	Condition	Initial	Final	Initial	Final	Initial	Final	Temp. (K)	Pressure(Pa)	weight(g)	(m ³ /min)	(m ³)	Time(hrs.)	(µg/m³)
6-Feb-07	Sunshine	2.8562	2.9831	1.21	1.21	5454.1	5478.1	291.1	766.9	0.1269	1.21	1745.5	24.0	72.7
12-Feb-07	Sunshine	2.8699	2.9190	1.21	1.21	5481.1	5505.1	441.9	766.3	0.0491	1.21	1742.9	24.0	28.2
16-Feb-07	Cloudy	2.8898	3.1357	1.21	1.21	5507.1	5531.1	293.3	761.9	0.2459	1.21	1735.2	24.0	141.7
22-Feb-07	Cloudy	2.8878	2.9499	1.21	1.21	5533.1	5557.1	293.1	762.1	0.0621	1.21	1735.8	24.0	35.8
28-Feb-07	Sunshine	2.8867	3.0628	1.21	1.21	5559.1	5583.1	292.6	764.5	0.1761	1.21	1739.4	24.0	101.2
													Min	28.2
													Max	141.7
													Average	75.9



APPENDIX G NOISE MONITORING RESULTS AND GRAPHICAL PRESENTATION

Appendix G - Noise Monitoring Results

Location N	Location NM2 - Lai Chi Kok Reception Centre											
						Unit: dB (A) (30)-min)					
Date	Time	Weather	Measu	red Nois	e Level	Baseline Level	Construction Noise Level	Remarks				
	L _{eq} L ₁₀ L ₉₀		L _{eq}	L _{eq}								
6-Feb-07	16:14	Sunny	60.4	62.7	55.7		60.4, Measured \leq Baseline					
15-Feb-07	17:19	Cloudy	62.3	64.2	57.7	68.4	62.3, Measured \leq Baseline	Resumed since September 2006				
23-Feb-07	11:25	Fine	64.9	67.2	60.2	00.4	64.9, Measured \leq Baseline	Resulted since September 2000				
27-Feb-07	14:20	Sunny	65.5	67.7	61.2		65.5, Measured \leq Baseline					

Location N	Location NM4 - Mei Foo Sun Chuen, Phase 5												
						Unit: dB (A) (30							
Date	Date Time Weather		Measured Noise Level			Baseline Level	Construction Noise Level	Remarks					
		L _{ec}		L ₁₀	L ₉₀	L _{eq}	L _{eq}						
6-Feb-07	09:09	Sunny	74.1	77.0	69.5		62.3	Road traffic noise from Ching					
15-Feb-07	14:50	Cloudy	74.2	76.0	68.5	73.8	63.6	Cheung Road was identified as the					
23-Feb-07	09:25	Fine	72.2	73.5	70.0	75.0	72.2	major noise source.					
27-Feb-07	11:23	Sunny	74.6	77.0	71.0		66.9	major noise source.					

Location N	M8a - M	/F of Nob I	lill			
Date	Time	Weather	Unit: d	IB (A) (3	0-min)	Remarks
			L _{eq}	L ₁₀	L ₉₀	
6-Feb-07	09:49	Sunny	73.2	76.5	68.0	
15-Feb-07	15:42	Sunny	73.9	76.0	68.5	Road traffic noise from Ching Cheung Road
23-Feb-07	10:10	Fine	69.4	71.0	66.5	was identified as the major noise source.
27-Feb-07	10:05	Sunny	70.2	72.5	67.5	

Location N	M8b - 3/	F of Nob H	lill			
Date	Time	Weather	Unit: d	IB (A) (3	0-min)	Remarks
			L _{eq}	L ₁₀	L 90	
8-Feb-07	10:36	Sunny	77.7	79.5	70.0	This Station (NM8b) which is strongly
15-Feb-07	16:30	Cloudy	76.8	78.5	70.0	influenced by road traffic noise from Ching Cheung Road. The measurement at this station
23-Feb-07	10:43	Fine	78.0	79.5	73.5	is for reference purpose, but not for compliance
27-Feb-07	10:40	Sunny	77.5	79.5	73.5	check for construction noise.

Location N	Location NM9 - Hoi Lai Estate											
Date	ate Time Weather		Unit: c	IB (A) (3	0-min)	Remarks						
			L _{eq}	L ₁₀	L ₉₀							
8-Feb-07	11:24	Sunny	64.7	66.5	60.0							
15-Feb-07	13:42	Cloudy	67.4	69.5	61.5	_						
23-Feb-07	13:40	Fine	70.4	73.5	65.5	_						
27-Feb-07	13:25	Sunny	71.8	75.5	65.5							

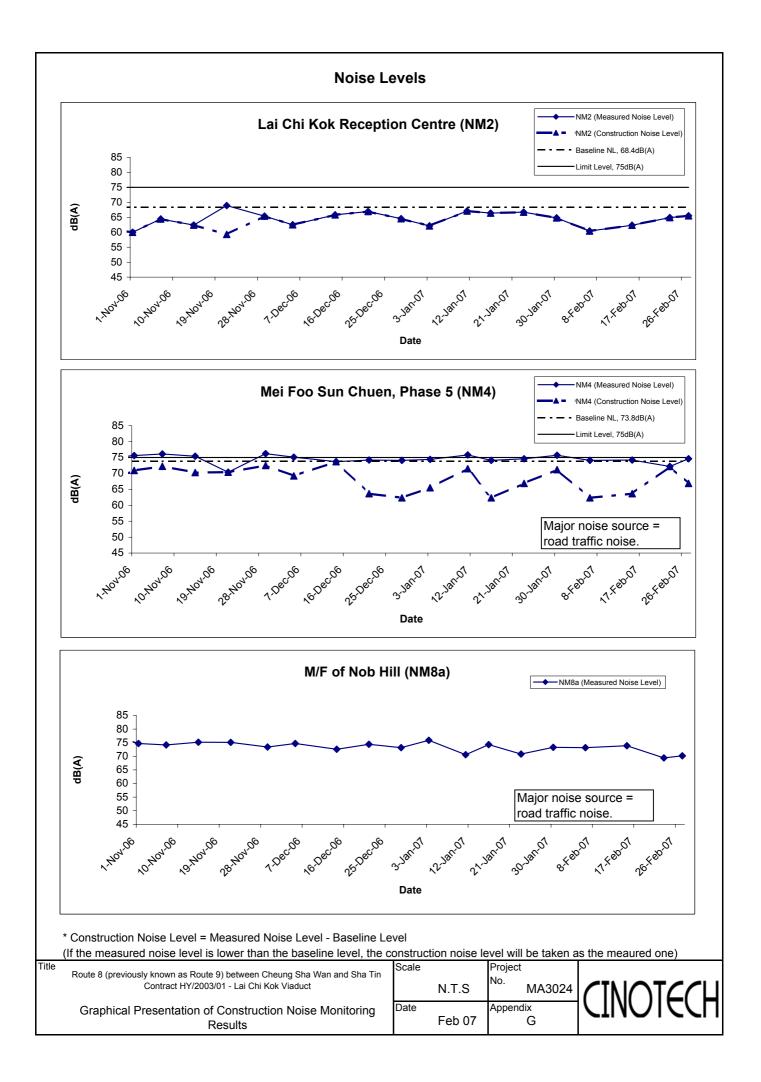
Construction Noise Level (Leq) = Measured Noise Level (Leq) - Baseline Noise Level (Leq)

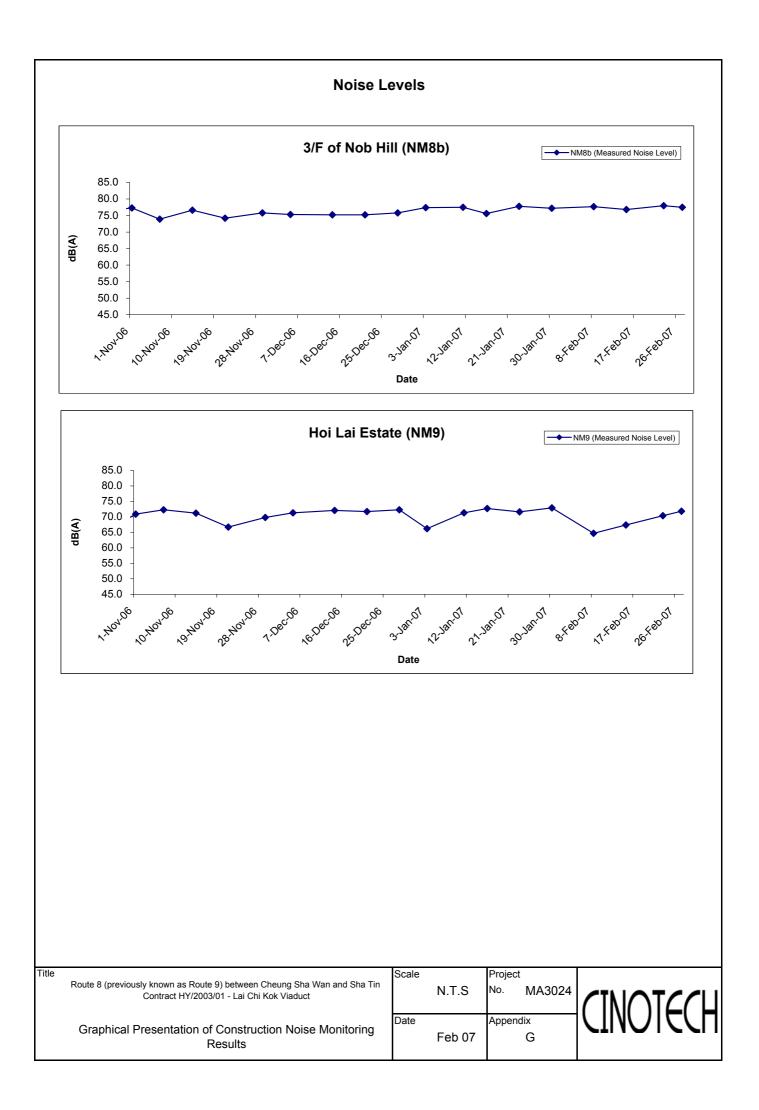
Appendix G - Noise Monitoring Results

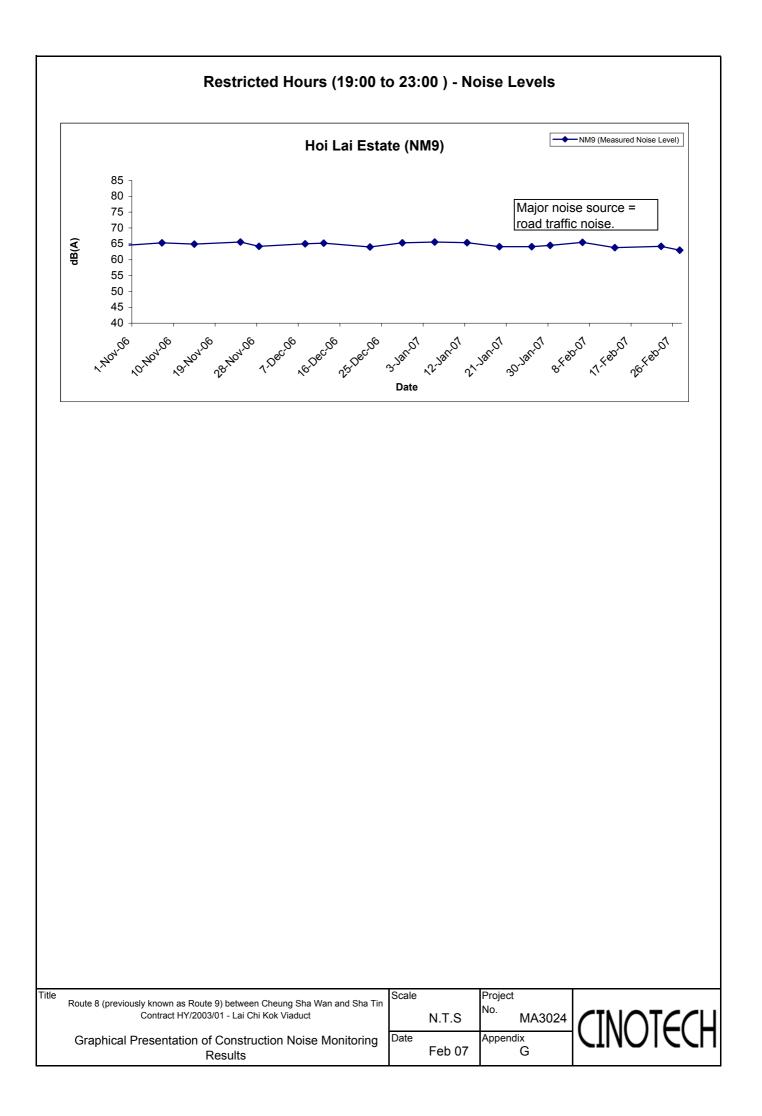
Restricted Hours - 19:00 to 23:00 on normal weekdays

Location N	M9 - Ho	oi Lai Estat	e						
Dete	Time		dB (A) (5-min)						
Date	Time	Weather	L _{eq}	L ₁₀	L ₉₀	Average L_{eq}			
	19:05		65.8	68.0	61.0				
6-Feb-07	19:10	Cloudy	65.8	68.0	61.0	65.5			
	19:15		64.9	68.0	61.0				
	19:00		63.7	67.0	60.5				
13-Feb-07	19:05	Cloudy	63.8	67.0	60.5	63.8			
	19:10		63.8	67.0	60.5				
	19:00		64.1	68.0	61.5				
23-Feb-07	19:05	Cloudy	64.4	68.0	61.5	64.2			
	19:10		64.2	68.0	61.5				
	20:00		62.8	67.0	60.0				
27-Feb-07	20:05	Cloudy	62.9	67.0	60.0	63.0			
	20:10		63.2	67.0	60.0				

Construction Noise Level (Leq) = Measured Noise Level (Leq) - Baseline Noise Level (Leq)







APPENDIX H SUMMARY OF EXCEEDANCE

Summary of Exceedances Recorded in the Reporting Month

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

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

c) Exceedance Report for Construction Noise (NIL)

APPENDIX I SITE AUDIT SUMMARY

Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	70207-LCKV
Date	7 February 2007 (Wed)
Time	13:30 - 15:05

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

Ref. No.	Remarks/Observations	Related Item No.
	A. Water Quality	
	• No environmental deficiency was identified during the site inspection.	
1	B. Air Quality	
	• No environmental deficiency was identified during the site inspection.	
	C. Noise	
	• No environmental deficiency was identified during the site inspection.	
	D. Waste / Chemical Management	
	• No environmental deficiency was identified during the site inspection.	
	E. Permit / Licenses	
	• No environmental deficiency was identified during the site inspection.	
	F. Others	
	• Follow-up on previous audit (Ref. No.: 70131-LCKV), all environmenta	
	deficiencies were rectified by the Contractor.	
	Spot checking for dump truck (loaded) was carried out during site inspection	
	No dump truck leaving the construction site was observed.	

	Name	Signature	Date
Recorded by	Ray Yan	Kan.	7 February 2007
Checked by	Edmond Wu	The SI	7 February 2007

Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	70214-LCKV
Date	14 February 2007 (Wed)
Time	13:30 - 15:00

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

Ref. No.	Remarks/Observations	Related Item No.
	 A. Water Quality No environmental deficiency was identified during the site inspection. 	
	B. Air QualityNo environmental deficiency was identified during the site inspection.	
	C. NoiseNo environmental deficiency was identified during the site inspection.	
	 D. Waste / Chemical Management No environmental deficiency was identified during the site inspection. 	
	E. Permit / LicensesNo environmental deficiency was identified during the site inspection.	
	 F. Others Follow-up on previous audit (Ref. No.: 70207-LCKV), no environmental deficiency was observed during site inspection. Spot checking for dump truck (loaded) was carried out during site inspection. No dump truck leaving the construction site was observed. 	

	Name	Signature	Date
Recorded by	Ray Yan	fan.	14 February 2007
Checked by	Edmond Wu	211	14 February 2007

٦

APPENDIX J EVENT ACTION PLANS

Appendix J - Event Action Plans

Event/Action Plan for Air Quality

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

EVENT	ACTION			
EVENI	ET	IEC	ER	Contractor
	remedial actions and keep EPD and ER &	4. Advise the ER & ET on the effectiveness	proposed remedial actions	3. Implement the agreed proposals
	IEC informed of the results	of the proposed remedial measures	5. Ensure remedial actions properly	4. Amend proposal if appropriate
		5. Supervise the implementation of the	implemented	
		remedial measures		
2. Exceedance for two or	1. Identify source	1. Checking monitoring data submitted by	1. Confirm receipt of notification of failure	1. Take immediate action to avoid
more consecutive samples	2. Inform ER, IEC, Contractor and EPD	ET	in writing	further exceedance
	the cause & actions taken for the	2. Discuss amongst ER, ET and Contractor	2. Notify Contractor	2. Submit proposals for remedial
	exceedances	on possible remedial measures	3. Carry out analysis of Contractor's	actions to IEC, ER within 3 working
	3. Repeat measurement to confirm findings	3. Review Contractor's remedial measures	working procedures to determine possible	days of notification
	4. Increase monitoring frequency to daily	whenever necessary to ensure their	mitigation to be implemented	3. Implement the agreed proposals
	5. Investigate the causes of exceedance	effectiveness and advise the ER	4. Discuss amongst ET, IEC and the	4. Resubmit proposals if problem
	6. Carry out analysis of contractor's	accordingly	Contractor on proposed remedial actions	still not under control
	working procedures to determine possible	4. Supervise the implementation of the	5. In consultation with IEC, agree with the	5. Stop the relevant portion of works
	mitigation to be implemented.	remedial measures	contractor remedial measures to be	as determined by the ER until the
	7. Arrange meeting with EPD, IEC and ER		implemented	exceedance is abated
	to discuss the remedial actions to be taken		6. Ensure remedial measure are properly	
	8. Assess effectiveness of Contractor's		implemented	
	remedial actions and keep EPD and ER &		7. If exceedance continues, consider what	
	IEC informed of the results		portion of the work is responsible and	
	9. If exceedance stops, cease additional		instruct the Contractor to stop that portion	
	monitoring		of work until the exceedance is abated	

Event/Action Plan for Construction Noise

Exceedance	ACTION			
Exceedance	ET	.IEC	ER	Contractor
Action Level	1. Discuss with the IEC and ER and seek to	1. Review the analyzed results submitted	1. Confirm receipt of notification of	1. Submit proposals for remedial
	identify potential noise source	by the ET	complaint and notify Contractor	actions to ER within three working
			immediately	days of notification
	2. Undertake noise measurement to	2. Review the proposed remedial measures	2. Check monitoring data trends and	2. Amend proposals if required by
	confirm the validity of complaint	by the Contractor and advise the ER & ET	Contractor's working methods	the Engineer
		accordingly		
	3. Inform ER&IEC in writing	3. Supervise the implementation of	3. Remind the Contractor of his contractual	3. Implement the remedial actions
	Discuss remedial actions required with	remedial measures	obligations and discuss with ET, IEC and	immediately upon instruction
	ER&IEC if an exceedance is recorded		Contractor on proposed remedial actions	
	4. Increase monitoring frequency to		4. Assess the efficacy of remedial actions	4. Liaise with the ER to optimize the
	demonstrate efficacy of remedial measures		and keep the Contractor informed	effectiveness of the agreed
				mitigation
	5. If exceedance continues, meet with		5. Inform complainant of actions taken	5. Amend proposal if appropriate
	ER&IEC to review implementation of			
	appropriate mitigation measures.			
	6. If exceedance stops, cease additional			
	monitoring			

Exceedance	ACTION			
Executation	ET	IEC	ER	Contractor
Limit Level	1. Repeat measurement to confirm findings	1. Check monitoring data submitted by ET	1. Confirm receipt of notification of	1. Take immediate action to avoid
			exceedance and notify Contractor	further exceedance
	2. Investigate the cause of the exceedance	2. Review Contractor's remedial actions to	2. Check monitoring data trends and	2. Submit proposals for remedial
	and identify the main source(s) of impact	assure their effectiveness and advise the	Contractor's working methods	actions to ER immediately not more
		ER &ET accordingly		than 3 working days of notification
	3. Inform ER&IEC and EPD in writing	3. Supervise the implementation of the	3. Discuss with ET, IEC and Contractor on	3. Amend proposals if required by
		remedial measures	proposed remedial actions to be	the ER
			implemented	
	4. Discuss remedial actions required with		4. Assess the efficacy of remedial actions	4. Implement remedial actions
	ER&IEC		and keep the Contractor informed	immediately upon instruction
	5. Increase monitoring frequency to		5. If exceedance continuous, consider what	5. Liaise with the ER to optimize the
	demonstrate efficacy of remedial measures		portion of the work is responsible and	effectiveness of the agreed
			instruct the Contractor to stop that portion	mitigation
			of work until the exceedance is aborted	
	6. Assess efficacy of remedial actions and			6. Resubmit proposals if problem
	keep ER & IEC informed of the results			still not under control
	7. If exceedance continues, meet with			7. Stop the relevant portion of works
	ER&IEC to identify appropriate mitigation			as determined by the ER until the
	measures			exceedance is aborted
	8. If exceedance stops, cease additional			
	monitoring			

APPENDIX K ENVIRONMENTAL MITIGATION IMPLEMENTATION SCHEDULE (EMIS)

Appendix K - Summary of Environmental Mitigation Implementation Schedule
--

Types of Impacts	Mitigation Measures	Status
	• 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.	^
Construction Dust	• Every main haul road should be sprayed with water or a dust suppression chemical so as to maintain the entire road surface wet.	^
Dust	• 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 be 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.	^
	• 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 know to emit noise strongly in one direction, should where possible, be orientated to direct noise away from the NSRS.	^
Construction	• Mobile plant should be sited as far away from NSRs as possible.	^
Noise	• Material stockpiles and other structures should be effectively utilised, where practicable, to screen noise from on-site construction activities.	^
	• Use quite plant and Working Method	^
	Reduce the number of plant operating in critical areas close NSRs.	^
	Construct temporary and movable noise barriers	^

Types of Impacts	Mitigation Measures	Status
Water Quality	Construction Runoff and Drainage	
	 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.	N/A
	• 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.	^
	Tunnelling Work	T
	• 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.	N/A
	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.	N/A
	• Spend 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

Types of Impacts	Mitigation Measures	Status
	General Construction Activities	
	• 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).	^
	Sewage Effluent	
	 Construction work force sewage discharges form 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 form 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	General	
	• 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.	^
	Storage, Collection and Transportation of Waste	
	• 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.	^
	Maintain records of the quantities of wastes generated, recycled and disposed.	^
	Surplus Excavated Materials	
	• 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.	^
	Construction and Demolition (C&D) Waste	

Types of Impacts	Mitigation Measures	Status
F	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.	N/A
	• 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 shall such allocation is deemed necessary. The non-inert portion shall be disposed of to landfill.	^
	Chemical Waste	
	• 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: Be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed; Have a capacity of less than 450 litres unless the specifications have been approved by the EPD; 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: 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. 	٨
	• 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).	^
	General Refuse	
	• 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.	^

Types of Impacts	Mitigation Measures	Status
•	 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. 	N/A
Ecology	• 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.	^
Ecology	 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 	N/A
	• 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.	N/A
	• 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 and Visual Impact	• 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 transplantation and new planting, resulting 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	^

Remarks:

N/A

Compliance of mitigation measure; Not Applicable;

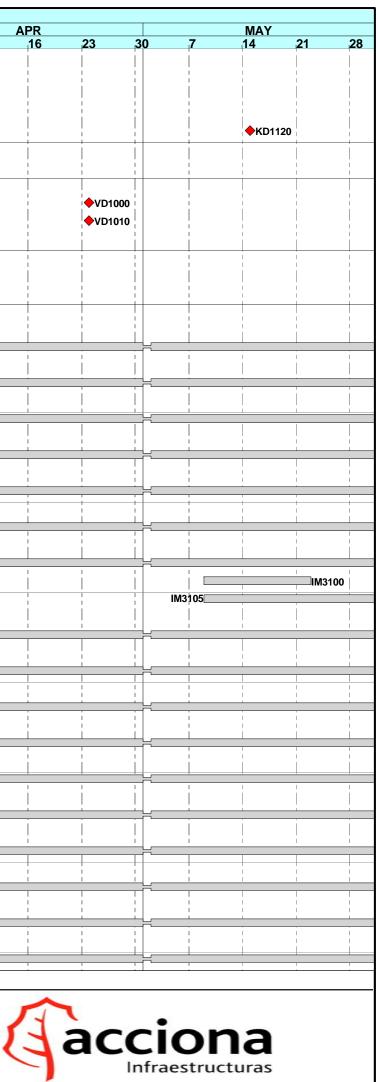
Non-compliance but rectified by the contractor •

APPENDIX L CONSTRUCTION PROGRAMME

Activity	Activity	Orig.	Early	Early	%	Rem						1445		20	07	
ID	Description	Durn.	Start	Finish		Durn.	5	FEB 12	19	26	5	MAR _12		26	2	9
Prelimina	ries & General Requirments				-			16							-	
Key Dates								I I I				 			1	
KD1070	KD-7: Completion of Section 5 of the Works	0		26MAR07*	0	0								♦ KD1070		
KD1080	KD-8: Completion of Section 6 of the Works	0		26MAR07*	0	0						1	1	+ KD1080	1	
KD1120	KD-12: Completion of Section 10 of the Works	0		14MAY07*	0	0		l						1		l
Portion Acc	cess Dates															
PD1140	Access to Portion F1 (NOT USED)	0	20FEB07*		0	0			PD1140			 			1	
Portion Vac	cate Dates				1	1			Ţ							1
VD1000	Vacate Portion A	0		23APR07*	0	0		l			1	1	1		1	
VD1010	Vacate Portion B	0		23APR07*	0	0				i i			1	1	1	l T
VD1110	Vacate Portion F1	0		19FEB07*	0	0			VD111		1	l Í	l I	I I	1	1
Design of T	Femporary Works				1	1					1	1		1	1	1
TW1370	Design of Temp Works for Feature 11NW-A/C66	24	22FEB07	21MAR07	0	24						1	TW137	70	Ì	Ì
TW1380	Design of Temp Works for Feature 11NW-A/FR54&55	24	22FEB07	21MAR07	0	24							TW138	80	1	
Monitoring	& Instrumentation - New Works															+
IM3010	Install Instrumentation @ Cut Slope CCR-S1	12	22FEB07	07MAR07	0	12					IM301	0	1			i I
IM3015	Monitoring @ Cut Slope CCR-S1	238*	22FEB07	04DEC07	0	238*		1	M3 <mark>0</mark> 15					i	 	<u> </u>
IM3020	Install Instrumentation @ Cut Slope CCR-S2	12	22MAR07	05APR07	0	12			i					· · · · · · · · · · · · · · · · · · ·	ПМЗ	020
IM3025	Monitoring @ Cut Slope CCR-S2	214*	22MAR07	04DEC07	0	214*		l I		1	1	¦ I	M3025		<u>г</u>	-
IM3030	Install Instrumentation @ Cut Slope CCR-S3	12	22FEB07	07MAR07	0	12					IM303	0				
IM3035	Monitoring @ Cut Slope CCR-S3	238*	22FEB07	04DEC07	0	238*		1	M3 <mark>0</mark> 35			1		· · · · · · · · · · · · · · · · · · ·		—
IM3040	Install Instrumentation @ Cut Slope CCR-S4	12	22FEB07	07MAR07	0	12				-	IM304	0			l L	l
IM3045	Monitoring @ Cut Slope CCR-S4	238*	22FEB07	04DEC07	0	238*		1	M3 <mark>0</mark> 45							4
IM3050	Install Instrumentation @ Cut Slope CCR-S5	12	22FEB07	07MAR07	0	12		l		1	IM305	0			1	I I
IM3055	Monitoring @ Cut Slope CCR-S5	238*	22FEB07	04DEC07	0	238*		I	M3 <mark>0</mark> 55			1	1		<u> </u>	-
IM3060	Install Instrumentation @ Cut Slope CCR-S6	12	22FEB07	07MAR07	0	12					IM306	0		1	1	
IM3065	Monitoring @ Cut Slope CCR-S6	238*	22FEB07	04DEC07	0	238*		1	M3 <mark>0</mark> 65	1				1		
IM3080	Install Instrumentation @ Slope 11NW-A/C26	12	22FEB07	07MAR07	0	12		l			IM308	0	1		1	I I
IM3085	Monitoring @ Slope 11NW-A/C26	238*	22FEB07	04DEC07	0	238*		I	M3 <mark>0</mark> 85							<u>+</u>
IM3100	Install Instrumentation @ Slope11NW-A/C687 & 679	12	09MAY07	22MAY07	0	12			i 🛛	İ		Ì		İ I		i.
IM3105	Monitoring @ Slope 11NW-A/C687 & 679	175*	09MAY07	04DEC07	0	175*		1				1		1	1	1
IM3120	Install Instrumentation @ Slip Road B Embankment	12	26FEB07	10MAR07	0	12						M3120				
IM3125	Monitoring @ Slip Road B Embankment	235*	26FEB07	04DEC07	0	235*			IM312	25						<u> </u>
IM3130	Install Instrumentation @ Piers P1 to P6	12	22FEB07	07MAR07	0	12					IM313	0			1	
IM3135	Monitoring @ Piers P1 to P6	238*	22FEB07	04DEC07	0	238*		<u> </u>	M3135							
IM3140	Install Instrumentation @ Piers P7 to P10	12	22FEB07	07MAR07	0	12					IM314	o				
IM3145	Monitoring @ Piers P7 to P10	238*	22FEB07	04DEC07	0	238*		I	M3145							<u> </u>
IM3150	Install Instrumentation @ Piers P11 to P15	12	22FEB07	07MAR07	0	12		i I			IM315	0	i I			i I
IM3155	Monitoring @ Piers P11 to P15	238*	22FEB07	04DEC07	0	238*		1	M3155			1				
IM3160	Install Instrumentation @ Piers P16 to P18	12	22FEB07	07MAR07	0	12					IM316	¢				
IM3165	Monitoring @ Piers P16 to P18	238*	22FEB07	04DEC07	0	238*		1	M3165	1		1	1	1		
IM3170	Install Instrumentation @ Piers P19 to Abut. M	12	22FEB07	07MAR07	0	12					IM317	0				
IM3175	Monitoring @ Piers P19 to Abut. M	238*	22FEB07	04DEC07	0	238*		1	M3175	i	· ·			i I		
IM3180	Install Instrumentation @ Piers on Slip Road A	12	22FEB07	07MAR07	0	12					IM318	O				
IM3185	Monitoring @ Piers on Slip Road A	238*	22FEB07	04DEC07	0	238*		1	M3185							
IM3190	Install Instrumentation @ Piers on Slip Road B	12	22FEB07	07MAR07	0	12		I I		il	IM319	Ó	i I I		- 	-
IM3195	Monitoring @ Piers on Slip Road B	238*	22FEB07	04DEC07	0	238*		1	M3195			1				-
IM3200	Install Instrumentation @ Piers on Slip Road C	12	22FEB07	07MAR07	0	12					IM320	0			1	
IM3205	Monitoring @ Piers on Slip Road C	238*	22FEB07	04DEC07	0	238*		I	M3205			i		;		
IM3210	Install Instrumentation @ Piers on Slip Road D	12	22FEB07	07MAR07	0	12					IM321	0				
IM3215	Monitoring @ Piers on Slip Road D	238*	22FEB07	04DEC07	0	238*			M3 <mark>2</mark> 15			1	1	· T		_

Start Date Finish Date Data Date 23SEP03 01NOV08 20FEB07

Highways Department Contract No. HY/2003/01 Route 8 - Lai Chi Kok Viaduct 3 Month Rolling Programme from 21 February 2007 Sheet 1 of 13



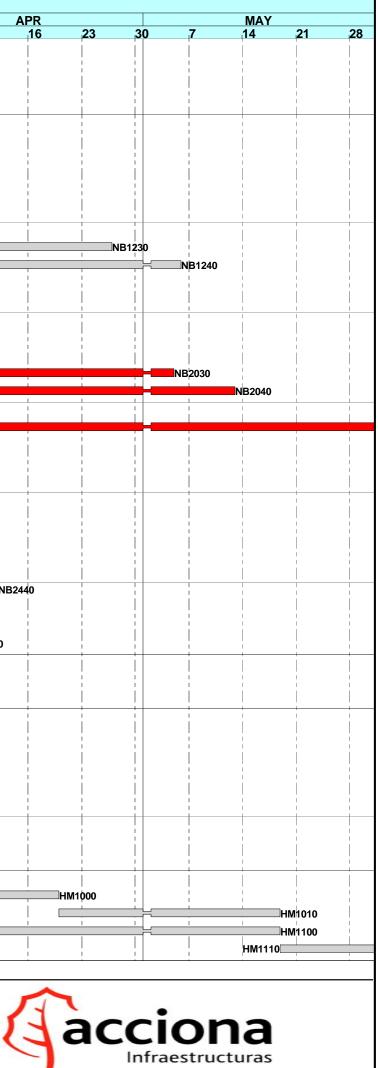
Activity	Activity	Orig.	Early	Early	%	Rem		FEB		NA .	AR	20	07	
ID	Description	Durn.	Start	Finish	Compl.	.Durn.			19 26	5 12	19	26	2	9
Procurem	ient								İ İ İ					1
Precast Pa	rapet Panel Casting												1	
PP2310	Casting Type IV Parapet Units 228 - 455	75	06AUG06A	24FEB07	99	3			PP2310					
PP2420	Casting Type V & VI Parapet Units 521 - 780	30	06AUG06A	24FEB07	99	3			PP2420				i I	i
Noise Barr	iers & Enclosures	1			1	1						1	1	-
NB1040	Noise Encl' - Slip Rd A - Off-site Fabrication	64	20MAR06A	22FEB07	97	1			NB1040				1	
NB1050	Noise Encl' - Slip Rd A - Delivery to Site	18	26JUL06A	01MAR07	97	1				1050			1 1 1	I I
NB1110	Noise Encl' - Slip Rd B - Eng. Review & Approval	28	16MAR06A	20FEB07	95	1			NB1110				Ì	
NB1130	Noise Encl' - Slip Rd B - Off-site Fabrication	70	20MAR06A	23FEB07	90	2			NB1130				1	
NB1140	Noise Encl' - Slip Rd B - Delivery to Site	24	06SEP06A	02MAR07	75	3				B1140				
VB1210	Noise Encl' - P8 to P11 - Eng. Review & Approval	28	16MAR06A	21FEB07	95	2			NB1210				1	1
VB1230	Noise Encl' - P8 to P11 - Off-site Fabrication	78	18NOV06A	26APR07	7	54							<u></u>	
NB1240	Noise Encl' - P8 to P11 - Delivery to Site	41	12DEC06A	05MAY07	7	38	_					· · · · ·		
NB1310	Noise Encl' - ENT Approach - Eng. Review & Appro	28	03APR06A	23FEB07	95	4			NB1310				- 	i
NB1320	Noise Encl' - ENT Approach - Material Purchasing	27	28FEB06A	24FEB07	90	3			NB1320					
NB1330	Noise Encl' - ENT Approach - Off-site Fabricat'n	57	09SEP06A	19MAR07	60	22					NB1330		 	
NB1340	Noise Encl' - ENT Approach - Delivery to Site	41	08JAN07A	24MAR07	60	16						NB1340		
NB2010	Noise Barriers - PA to P4 - Eng. Review & Appro'	4	23MAR06A	19FEB07	95	0			NB2010				1	I I
NB2030	Noise Barriers - PA to P4 - Off-site Fabrication	120	29NOV06A	04MAY07	20	60								
NB2040	Noise Barriers - PA to P4 - Delivery to Site	62	28FEB07	12MAY07	0	62	-							
NB2110	Noise Barriers - P5 to P8 - Eng. Review & Appro'	47	23MAR06A	21FEB07	95	2			NB2110					
IB2110	Noise Barriers - P5 to P8 - Delivery to Site	56	03APR07	07JUN07	0	56						NB21	40	
NB2140	Noise Barriers - P11 to P13 - Off-site Fabric'n	35	06DEC06A	28MAR07	10	30						NB22	1	1
		7		2000AR07		30 7	_					NDZZ		B2240
IB2240	Noise Barriers - P11 to P13 - Delivery to Site		29MAR07	24FEB07	0				NB2300		1			52240
IB2300	Noise Barriers - ENT Approach -Des'n & Shop Dwgs	82	24AUG05A		95	3				NB2310			 	
NB2310	Noise Barriers - ENT Approach -Eng Rev & Approv	28	03APR06A	03MAR07	75	7				NB2310		NDOO		
NB2330	Noise Barriers - ENT Approach -Off-site Fabric'n	48	06OCT06A	28MAR07	40	30						NB23		
B2340	Noise Barriers - ENT Approach - Delivery to Site	25	06DEC06A	05APR07	20	20	_							2340
NB2410	Noise Barriers - Slip Rd. C - Eng Rev & Approv	28	23MAR06A	22FEB07	95	3	_	I I	NB2410			1		
NB2430	Noise Barriers - Slip Rd.C - Off-site Fabricat'n	38	02JAN07A	03APR07	10	34							- NB243	0
NB2440	Noise Barriers - Slip Rd. C - Delivery to Site	17	22MAR07	11APR07	0	17								1
NB2510	Noise Barriers - Slip Rd. D - Eng Rev & Approv	125	16MAR06A	21FEB07	98	2		I I	NB2510					
NB2530	Noise Barriers - Slip Rd. D -Off-site Fabricat'n	38	02JAN07A	03APR07	10	34							NB253	
NB2540	Noise Barriers - Slip Rd. D - Delivery to Site	13	23MAR07	07APR07	0	13		 					+	NB254
Movement					1									
MJ1040	Off-Site Manuf' of M.Js Main Line & LWRd O/P	35	21AUG06A	05MAR07	30	10				MJ1040			i T	i
VJ1050	Off-Site Manufacturing of M.Js Slip Roads	35	21NOV06A	10MAR07	50	15		, , , ,	+	MJ1050		-	 	
Signage														Ì
SG1010	Sign Gantries - Detailed Design & Shop Drawings	50	17NOV05A	28FEB07	80	6			SG10				- - -	i I
SG1020	Sign Gantries - Review/Appro of Design & S/Dwgs.	24	20MAR06A	02MAR07	75	6			S S	G1020				
SG1030	Sign Gantries - Off-Site Fabrication of Gantries	60	02OCT06A	30MAR07	45	20	_				1	ISC	51030	
SG1040	Sign Gantries - Delivery of Gantries to Site	40	07NOV06A	05APR07	10	36	_						SG	1040
SG2010	Signage - Shop Drawings	50	20OCT05A	27FEB07	70	5			SG201	0			 	i
SG2020	Signage - Review & Approval of Shop Drawings.	24	28FEB07	27MAR07	0	24				I I	1	SG2020		l I
G2030	Signage - Off-Site Fabrication of Signs	50	02OCT06A	28MAR07	25	30						SG20		
	Signage - Delivery of Signs to Site	25	03MAR07	31MAR07	0	25							G2040	-
G2040									i ¯	1 i _				
	Lighting (NOT USED)	-				40	1			· · ·	· · · · · · · · · · · · · · · · · · ·			_
ligh Mast	Lighting (NOT USED) High Mast Lighting -Foundation Design (NOT USED)	48	22FEB07	19APR07	0	48						1	1	i.
High Mast IM1000		48 24	22FEB07 20APR07	19APR07 18MAY07	0	48 24	-							
SG2040 High Mast HM1000 HM1010 HM1100	High Mast Lighting -Foundation Design (NOT USED)	-			-		_							

Start Date Finish Date

Data Date

23SEP03 01NOV08 20FEB07

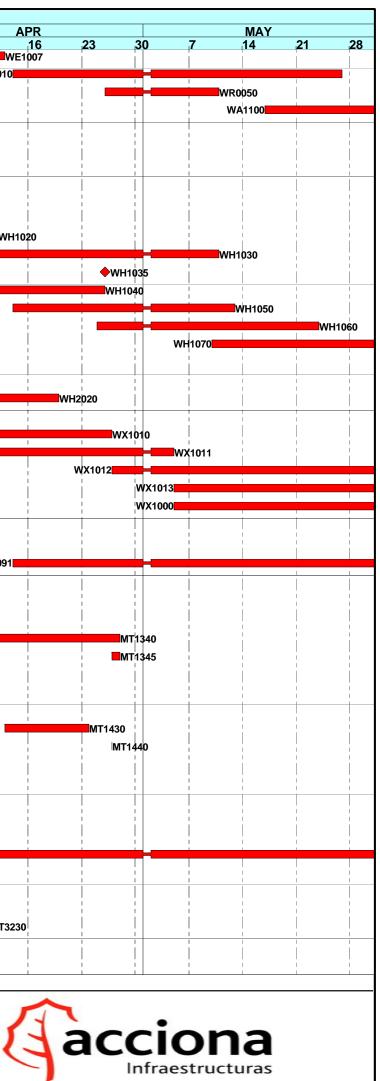
Highways Department Contract No. HY/2003/01 Route 8 - Lai Chi Kok Viaduct 3 Month Rolling Programme from 21 February 2007 Sheet 2 of 13



Activity	Activity	Oria	Forby	Forbe	%	Rem								2(007							
ID	Description	Orig. Durn.	Early Start	Early Finish	% Compl.			FEB	0 6		E	MAR				APR	00	20	7	MAY	24	20
Kiosk at S	-	Dam	Otart	1 mion	compi			5 12 1	9 2	26	5	12	19	26	29	16	23	30	/	14	21	28
EM1010	Procurement & Delivery of Electrical Switchboard	48	14JUN06A	14MAR07	75	18						EM10	010									1
EM1030	Procurement & Delivery of Fire AFA System	48	31JUL06A	14MAR07	75	18						EM1	030					i l				Ì
EM1040	Submission & Approval for Air Conditioner Unit	24	22FEB07	14MAR07	0	18						EM1	040	1			I I		i I	l I	l I	i I
EM1050	Procurement & Delivery of Air Conditioner Unit	12	05MAR07	14MAR07	0	9	-					EM1	050									
EM1060	Submission & Approval for Sanitary Wear	24	22FEB07	14MAR07	0	18	- 1					EM10	060									
EM1070	Procurement & Delivery of Sanitary Wear	12	15MAR07	24MAR07	0	9					1			EM1070				1			1	-
1	ad Fire Hydrant Pump House													<u> </u>								1
EM2010	Procurement & Delivery of Pumps Valves	48	31JUL06A	07MAR07	80	12					EM201	0		1								1
EM2030	Procurement & Delivery of Pump Control Panel	48	150CT06A	08MAR07	80	13					EM2	030										
EM2050	Procurement & Delivery of Electrical Switchboard	48	14JUN06A	06MAR07	80	11					EM2050											
EM2070	Procurement & Delivery of Fire AFA System	48	31JUL06A	07MAR07	80	12					EM207	0										
EM2110	Submission & Approval for Air Conditioner Unit	24	22FEB07	07MAR07	0	12	- i				EM211	0	i I						i	i I	i I	i I
EM2120	Procurement & Delivery of Air Conditioner Unit	12	08MAR07	21MAR07	0	12			1				EM21	20		I				<u> </u>		1
	suen Fire Hydrant Pump House			2	Ū																	1
EM3010	Procurement & Delivery of Pumps Valves	48	31JUL06A	16MAR07	80	20						E	M3010	I I			i I		i I	i I	i I	i i
EM3030	Procurement & Delivery of Pump Control Panel	48	150CT06A	17MAR07	80	20							EM3030									
EM3050	Procurement & Delivery of Electrical Switchboard	40	14JUN06A	14MAR07	80	18						EM3										
EM3050	Procurement & Delivery of Fire AFA System	48	31JUL06A	14MAR07	80	18						EM3										
EM3070	Sumission & Approval for Air Conditioner Unit	24	22FEB07	14MAR07	0	18	- i				I											
EM3110 EM3120			15MAR07	28MAR07			- !						- 1-	EM3	120							+
	Procurement & Delivery of Air Conditioner Unit	12	TOWARU/	ZOIVIARUI	0	12												-il	-			+
	Verpass Irrigation Pump House	40	24 11 11 00 4	1014007	00	20	i	i i i	i		<u>i</u>	F	M4010	l I		I	i I		i I	i I	i I	i I
EM4010	Procurement & Delivery of Pumps Valves	48	31JUL06A	16MAR07	80	20							EM4030									
EM4030	Procurement & Delivery of Pump Control Panel	48	150CT06A	17MAR07	80	21	i	i i l			i	EM40		1								1
EM4050	Procurement & Delivery of Electrical Switchboard	48	14JUN06A	14MAR07	80	18	!						EM407									
EM4070	Procurement & Delivery of Fire AFA System	48	31JUL06A	20MAR07	80	23	_				1		EM4090			1	1			1		
EM4090	Procurement & Delivery of FGRP Water Tank	48	15DEC06A	17MAR07	50	21	_	· · · · ·	· · · ·					 		 	 			 	 	
EM4110	Sumission & Approval for Air Conditioner Unit	24	22FEB07	14MAR07	0	18	-l i					EM4 ²		EM4				i I	İ	Ì		
EM4120	Procurement & Delivery of Air Conditioner Unit	12	15MAR07	28MAR07	0	12			1				1	EIVI4	120			1	1	1		+
Viaduct -	Main Line - Piers PA to P6																					
Remaining	Superstructure Finishing Works	1	1		1	T					· ·			1								1
MF1090	P6 - Landscaping - Planting 0n Viaduct	25	08MAR07*	06APR07	0	25							İ	Í	MF1090					l I		
MF1100	P6 - Landscape Establishment Works on Viaduct	301	07APR07	04APR08	0	301					1				MF1100				_			
Viaduct -	Slip Road A										1			1								1
Superstrue	cture Finishing Works Required for TCSS						i	i i i	Í		Í		ĺ	Ì				i l	Ì	Ì	Í	Ì
AF1010	Slip Rd.A to P7 -Parapet Panels East Face	60	06JAN06A	22FEB07	99	1				10	1			1						1		1
AF1010A	Slip Rd.A to P7 -Parapet Insitu Concrete E. Face	60	20JAN06A	26FEB07	95	2				AF1010	4											
AF1020	Slip Rd.A to P7- Parapet Panels West Face	60	17JAN06A	22FEB07	99	1			AF102	20	i I		i I			i		i l	i I	i I	 	
AF1020A	Slip Rd.A to P7-Parapet Insitu Concrete W. Face	60	20FEB06A	26FEB07	98	2				AF1020	A.											
AF1025	Slip Rd. A - Sign Gantry DS6 at Abutment	12	11MAY07	24MAY07	0	12	-											il –			AF1	025
AF1030	Slip Rd. A - Provision for E & M and TCSS	24	26JUL06A	23FEB07	95	2			AF1	030						 	 				 	
AF1035	Slip Rd. B - Sign Gantry DS13 at Roundabout	12	22FEB07	07MAR07	0	12	- i	ļ I İ			AF103	5										
	Superstructure Finishing Works				1	1			1							1	1					+
AF1050	Slip Rd. A - Top Rail to Parapets	12	26MAR07	09APR07	0	12									AF10	50						1
AF1055	Slip Rd. A - Install Movement Joint at Abut. A	6	12MAR07	17MAR07	0	6	- i		i I		1		AF1055									1
1	iers & Encl' (Sec.15 Excision)		I			1							1	1								+
AN1000	Slip Rd. A - Full Enclosure Ch.1070 - Pier A2	48	26JUL06A	09MAR07	70	14					AN	1000						il	i			
AN1010	Slip Rd. A - Full Enclosure Pier A2 - 1280	48	30SEP06A	17APR07	70	15							 	-		AN10	010	i l	i I	i I I	i I I	1
	Slip Road B						1				1		1	+						+	-	+
													I I I									1
	Cture Finishing Works Required for TCSS	60		2255007	00	4			BF101	10												
BF1010	Slip Rd.B to P7 - Parapets Panels East Face	60	04MAY06A	22FEB07	99	1	1	I I I	- 6F IV		1		1	I	I I	I	I	1	I	I	1	
Start Date			23SEP03	P3 File : LU4	1								Sh	eet 3 of 13								
Finish Date Data Date			01NOV08 20FEB07				Hiah	ways Department	Contrac	t No. ⊦	IY/2003/01		-									
			ZUI EDU/				3.1	Route 8 - Lai C	Chi Kok	Viaduo	t					J.	20	~i	~ ~	1		
								3 Month Rolli			;					1	ac			d		
								from 21 Fe	bruary 2	2007									struct			
	© Primavera Systems, Inc.																					

Activity	Activity	Orig.	Early	Early	%	Rem							2007					
ID	Description	Durn.	Start	-	Compl.		FEB				MAR			APR			MAY	4 00
BF1010A	Slip Rd.B to P7 -Parapet Insitu Concrete E. Face	60	17MAY06A	26FEB07	98	2	5 12 19		ס 1010A	12	19	26	∠	9 16	23 30	/	14 2	1 28
BF1015	Slip Rd.B to P7 - Parapets Panels West Face	60	04MAY06A	22FEB07	99	1		BF1015			ļ							
BF1015A	Slip Rd.B to P7 -Parapet Insitu Concrete W. Face	60	12MAY06A	26FEB07	99	1		BF	1015A									
BF1040	Slip Rd. B - Provision for E & M and TCSS	12	18SEP06A	08MAR07	95	3		1		BF1040	Ì	i i	i					
	Superstructure Finishing Works					-												
BF1050	Slip Rd. B - Deck Drainage	60	21SEP06A	12APR07	80	12								BF1050				
BF1060	Slip Rd. B - Top Rail to Parapets	12	26MAR07	09APR07	0	12		l			l			BF1060				
BF1065	Slip Rd. B - Install Movement Joint at Abut. B	6	06APR07	12APR07	0	6					1			BF1065				
	Noise Barriers & Enclosures				-													
BN1000	Slip Road B - Full Enclosure Ch.1038 - Pier B2	48	250CT06A	10MAR07	60	15				BN10	00		ĺ		i i		i i	
BN1005	Slip Road B - Full Enclosure Pier B2 - Ch. 1258	48	07NOV06A	09APR07	60	20		1	1					BN1005				
BN1010	Slip Road B - Semi Enclosures Ch.1258 - 1318	48	07NOV06A	16APR07	40	28								BN1010				
		10	ontoroon		10	20												
	Works - Lai Po Road							l										
	7 Traffic Management Schemes	47*	00 14 10 74	00144 D07	0	0.01			l I	1	l Í	M	T3550					
WT3550	7th. TTMS Lai Po Rd (forS/B C/W) -Implementation	47*	30JAN07A	28MAR07	0	30*		1	I	1	WT3600		13330					
WT3600	8th. TTMS Lai Po Rd (for S/B C/W)-Prepare Review	18	22FEB07	17FEB07	0	0	i i i		WT3610		JUDC I VV				i il		ļ İ	Ì
WT3610	8th. TTMS Lai Po Rd (for S/B C/W) - CRE Endors't	6	22FEB07	28FEB07	0	6			U) OC I W	WT2620								
WT3620	8th. TTMS Lai Po Rd (for S/B C/W) -Roadwk Advice	6	01MAR07	07MAR07	0	6				WT3620	MITACAS							
WT3630	8th. TTMS Lai Po Rd (for S/B C/W) - Site Prepare	6	08MAR07	14MAR07	0	6			i 		WT3630					 		
WT3640	Divert S/B Traffic to Divs'n No.6 (for N/B C/W)	1	28MAR07	28MAR07	0	1						1	T3640					
WT3650	8th. TTMS Lai Po Rd (forS/B C/W) -Implementation	128*	28MAR07	28AUG07	0	128*						WT3650						
WT5100	Transfer Viaduct Access to Slip Rd B	1	29MAR07	29MAR07	0	1			i I	i I	i I	-	WT5100					
WT6010	Open New Lai Po Rd. South Bound	1	24APR07	24APR07	0	1									W T6010			
	Wall LCK-R1					1												
WW1010	Ret. Wall LCK-R1 - Bases	18	12AUG06A	20APR07	45	5			İ	İ				W	/₩1010			
WW1020	Ret. Wall LCK-R1 - Walls	24	24AUG06A	12MAY07	45	13											WW1020	
Retaining	Wall LCK-R2					1					_							
WW2030	Ret. Wall LCK-R2 - Insitu Concrete Parapets	24	05FEB07A	14MAR07	25	18					WW2030							
	Wall LCK-R3		1 1		1	T			i 	i I	i I	l I	1			l l		
WW3000	Ret. Wall LCK-R3 - Bases	18	27SEP06A	05MAR07	20	10			W	W3000								
WW3010	Ret. Wall LCK-R3 - Walls	24	140CT06A	19MAR07	20	18					WW	/3010	1					
Lai Po Roa	d (D3) Roadworks - Stage 1		1 1		1	T		1			l							
WR1250	Lai Po Rd N/B Ch.1+250 - 1+360- Utilities	12	22FEB07	07MAR07	0	12				WR1250						 		
Lai Po Roa	d (D3) Roadworks - Stage 3				-1	1												
WE1040	Lai Po Rd S/B - Temp. Ramp at Slip Rd B NOT USED	0	22FEB07	17FEB07	0	0	i i i	WE1040	ĺ	ĺ	Ì				i i	ĺ	i i	
WR2420	Lai Po Rd S/B Ch.1+140 - 1+300- Kerbs	12	22DEC06A	23FEB07	90	2		WR2420		1								
WE2000	Lai Po Rd S/B Ch.1+000 - 1+140 Fill Embankment	18	16OCT06A	24FEB07	85	3		WE200	0									
WA2200	Lai Po Road S/B Ch.1+000 - 1+140 - Drainage	24	15DEC06A	17MAR07	10	21					WA220	0	i i				i i	
WR2100	Lai Po Rd S/B Ch.1+000 - 1+140 - Formation	24	02JAN07A	24MAR07	20	20		1	_	1	1	WR2100						
WR2110	Lai Po Rd S/B Ch.1+000 - 1+140 - Sub-base	24	08JAN07A	31MAR07	15	21							WR21					
WR2120	Lai Po Rd S/B Ch.1+000 - 1+140- Kerbs	24	10JAN07A	09APR07	5	23		i	I	· · ·	I	<u> </u>		WR2120		 		-
WR2130	Lai Po Rd S/B Ch.1+000 - 1+140 - Pavement	24	15MAR07	12APR07	0	24								WR2130				
Lai Po Roa	d (D3) Roadworks - Stage 4								1									
WA3200	Lai Po Rd S/B Ch.1+300 - 1+360 - Drainage	12	03FEB07A	28FEB07	50	6			WA3200									
WR2300	Lai Po Rd S/B Ch.1+300 - 1+360 - Formation	6	01MAR07	07MAR07	0	6				WR2300								1
WR2310	Lai Po Rd S/B Ch.1+300 - 1+360 - Sub-base	6	08MAR07	14MAR07	0	6					WR2310							
WR2320	Lai Po Rd S/B Ch.1+300 - 1+360 - Kerbs	6	15MAR07	21MAR07	0	6	i i i		İ	İ		WR2320		i i	1 il	i		Ì
WR2330	Lai Po Rd S/B Ch.1+300 - 1+360 - Pavement	6	15MAR07	21MAR07	0	6			I	 		WR2330	1			1		
WR2140	Lai Po Rd S/B Ch.1+000 - 1+360- Crash Barriers	18	26MAR07	16APR07	0	18								WR2140				
WR2145	Lai Po Rd S/B Ch.1+000 - 1+360 -Street Lighting	12	10APR07	23APR07	0	12			 			i I			WR2145			
WR2150	Lai Po Rd S/B Ch.1+000 - 1+360 -Marking & Signs	6	17APR07	23APR07	0	6									WR2150			
WE1005	Lai Po Rd N/B - Remove Temp Ramp to Slip Rd. A	6	30MAR07	06APR07	0	6			1 			l I		WE1005				
Start Date				P3 File : LU4	11				I	I	I	Sheet 4 of	13	I		I		I
Finish Date Data Date			01NOV08 20FEB07				Highways Department C	Contract N	o. HY/20	003/01								
							Route 8 - Lai C											
							3 Month Rollin											
							from 21 Feb	pruary 200	1									
	© Primavera Systems, Inc.																	

Activity	Activity	Orig.	Early	Early	%	Rem		FEB		MAR	200	51
ID	Description	Durn.	Start	Finish	Compl		5	12	19 26		19 26	29
WE1007	Lai Po Rd N/B -Remove Temp Road Over Slip Rd A	12	29MAR07	12APR07	0	12						WE1010
WE1010	Lai Po Rd N/B Ch.0+946 - 1+250 - Fill Embankment	36	14APR07	26MAY07	0	36						WEIDIO
WR0050	Lai Po Rd N/B - Sign Gantry DS6 Founds	12	26APR07	10MAY07	0	12						
WA1100	Lai Po Rd N/B Ch.0+946 - 1+250 - Drainage	30	17MAY07	09JUN07	0	21						
	Lighting (NOT USED)											
WR3000	H/M Lighting (3 No. Mast) - Found's (NOT USED)	24	22FEB07	21MAR07	0	24					WR3000	
WR3010	H/MLighting (3 No. Mast) -Erect Masts (NOT USED)	12	22MAR07	05APR07	0	12		 				WR3010
	ad Fire Hydrant Pump House					1						
WH1000	Lai Po Rd. F/H Pump House - Plate Load Test	6	31JAN07A	27FEB07	5	5			WH100			
WH1010	Lai Po Rd. F/H Pump House - Structure	24	28FEB07	27MAR07	0	24					WH1010	I
WH1020	Lai Po Rd. F/H Pump House - Waterproofing	12	28MAR07	11APR07	0	12						WH
WH1030	Lai Po Rd. F/H Pump House - Building Finishes	24	12APR07	10MAY07	0	24	- I	l l		I I I I	I I I I I I	
WH1035	Lai Po Rd. F/H P/H - Provision for E & M Contr'r	0		25APR07	0	0						
WH1040	Lai Po Rd. F/H Pump House - Mechanical Works	24	28MAR07	25APR07	0	24						
WH1050	Lai Po Rd. F/H Pump House - Electrical Works	24	14APR07	12MAY07	0	24						
WH1060	Lai Po Rd. F/H Pump House - FS Installation	24	25APR07	23MAY07	0	24						
WH1070	Lai Po Rd. F/H Pump House - Plumbing & Drainage	24	10MAY07	06JUN07	0	24						
WH2000	Fire Main at Lai Po Road - at Grade Pipework	18	24JUN06A	06MAR07	40	11				WH2000		
WH2010	Fire Main at Lai Po Road - Pipework up Pier P5/R	12	08MAR07	21MAR07	0	12					WH2010	
WH2020	Fire Main at Lai Po Road - Valves & Connections	24	22MAR07	19APR07	0	24						
Landscape						1	-	1				
WX1010	Landscaping - Dwarf Walls FW8, FW10 & FW13	54	22FEB07	26APR07	0	54					I I I	
WX1011	Landscaping - Dwarf Walls FW4 & FW6	41	16MAR07	04MAY07	0	41						
WX1012	Landscaping - Dwarf Walls FW12 & FW14	34	27APR07	06JUN07	0	34	- 1	I I		I I I I		
WX1013	Landscaping - Dwarf Walls FW8, FW10 & FW13	34	05MAY07	13JUN07	0	34						
WX1000	Landscaping - Earthworks & Formation	140	05MAY07	20OCT07	0	140		 				
Viaduct -	Main Line - Piers P7 to P10											
Remaining	Superstructure Finishing Works		1	1	_	1						
MF2091	P7 to P10 - Landscape Establish Works on Viaduct	301	14APR07	12APR08	0	301						MF2091
At Grade	Works - Lai Chi Kok Interchange											
Temporary	/ Traffic Management Schemes											
MT1330	2nd. TTMS Butterfly Valley Rd - Prepare	9	22FEB07	03MAR07	0	9				MT1330	 	
MT1340	2nd. TTMS Butterfly Valley Rd - Implementation	72*	30JAN07A	27APR07	0	55*						
MT1345	B.V. Rd - Divert Traffic to Slow & Middle Lanes	1	27APR07	27APR07	0	1						
MT1400	3rd TTMS Butterfly Valley Rd -Prepare for Review	12	22FEB07	07MAR07	0	12				MT1400		
MT1410	3rd. TTMS Butterfly Valley Rd - CRE Endorsement	6	22FEB07	28FEB07	0	6			MT14	10		
MT1420	3rd. TTMS Butterfly Valley Rd - Roadworks Advice	6	01MAR07	07MAR07	0	6				MT1420		
MT1430	3rd. TTMS Butterfly Valley Rd - Prepare	9	13APR07	23APR07	0	9		1				
MT1440	3rd. TTMS Butterfly Valley Rd - Implementation	0*	27APR07	26APR07	0	0*						
MT2140	TTMS for Pier P8/L - Implementation	919*	23FEB04A	13MAR07	29	17*				MT2140		
MT3100	2nd. TTMS Kom Tsun Street - Prepare for Review	12	22FEB07	07MAR07	0	12		l l		MT3100	I I I I I I	I I I I
MT3110	2nd. TTMS Kom Tsun Street - CRE Endorsement	6	22FEB07	28FEB07	0	6			MT31	10		
MT3120	2nd. TTMS Kom Tsun Street - Roadworks Advice	6	01MAR07	07MAR07	0	6		i I		MT3120		
MT3130	2nd. TTMS Kom Tsun Street - Site Preparation	6	08MAR07	14MAR07	0	6				MT31:	30	
MT3140	2nd. TTMS Kom Tsun Street - Implementation	93*	15MAR07	05JUL07	0	93*				MT3140		
MT3200	3rd. TTMS Kom Tsun Street - Prepare for Review	12	22FEB07	07MAR07	0	12				MT3200		
MT3210	3rd. TTMS Kom Tsun Street - CRE Endorsement	6	22FEB07	28FEB07	0	6			MT32	10		
MT3220	3rd. TTMS Kom Tsun Street - Roadworks Advice	6	01MAR07	07MAR07	0	6				MT3220		
MT3230	3rd. TTMS Kom Tsun Street - Site Preparation	28	08MAR07	10APR07	0	28						MT32
Drainage V	Vorks											
SA5100	Butterfly Valley Rd Stage2 - Stormwater Drainage	36	21SEP06A	23FEB07	95	2			SA5100			
•			•	·			· · ·	· · · · · · · · · · · · · · · · · · ·	····	· · · · · · · · · · · · · · · · · · ·	· · · · · ·	
Start Date			23SEP03 01NOV08	P3 File : LU4	41						Sheet 5 of 13	
Data Date			20FEB07						nt Contract No. H			
									i Chi Kok Viaduc			
							3		olling Programme February 2007			
	© Primavera Systems, Inc.								1 Joi dai y 2007			

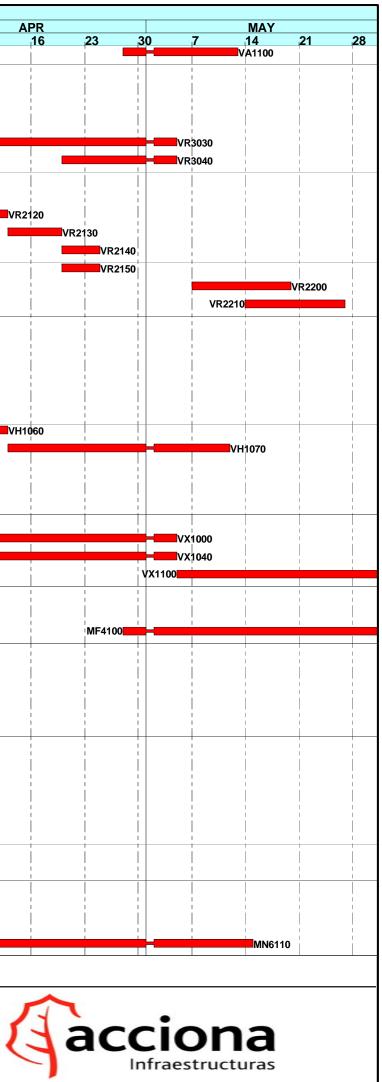


Activity	Activity	Orig.	Early	Early	%	Rem	FEB			MAR		007	APR				MAY
ID	Description	Durn.	Start		Compl.		5 12 19	26	5	12 19	26	29	16	23	30	7	14 21
	Butterfly Valley Rd Stage4 - Stormwater Drainage	12	21SEP06A	26FEB07	75	4		SASS			Ĭ					1	
Jtilities & R						17				SR2000			i I	i			
	Castle Peak Road - Roadworks Reinstatement	17	22FEB07	13MAR07	0	17					l						
	Butterfly V. Rd (LCKI) Stage1-Excav. & Formation	36	19SEP06A	14MAR07	50	18											
SR5010	Butterfly V. Rd (LCKI) Stage 1 - Sub-base	24	12DEC06A	28MAR07	5	22					SR50	10					
SR5020	Butterfly V. Rd (LCKI) Stage 1 - Kerbs	24	19DEC06A	12APR07	5	22							SR5020	j	il –	İ	i i
SR5030	Butterfly V. Rd (LCKI) Stage 1 - Pavement	9	29JAN07A	02MAR07	5	8		1	SR5030		1		1	1	1	1	
SR5040	Butterfly V. Rd (LCKI) Stage 1 - Street Lighting	4	03MAR07	07MAR07	0	4			SR50	40							
SR5060	Butterfly V. Rd (LCKI) Stage 1 - Road Marking	4	03MAR07	07MAR07	0	4			SR50	60							
SR5200	Butterfly V. Rd (LCKI) Stage2-Excav. & Formation	18	08MAR07	28MAR07	0	18					SR52	00					
SR5210	Butterfly V. Rd (LCKI) Stage 2 - Sub-base	18	15MAR07	05APR07	0	18			i I			SR5210	i l	i I		i I	
SR5220	Butterfly V. Rd (LCKI) Stage 2 - Kerbs	18	22MAR07	12APR07	0	18							SR5220				
SR5230	Butterfly V. Rd (LCKI) Stage 2 - Pavement	8	13APR07	21APR07	0	8								SR5230	1		
SR5240	Butterfly V. Rd (LCKI) Stage 2 - Street Lighting	4	23APR07	26APR07	0	4								SR5	240		
SR5250	Butterfly V. Rd (LCKI) Stage 2 - Road Marking	4	23APR07	26APR07	0	4	i i i							SR5	250		
SR5300	Butterfly V. Rd (LCKI) Stage4-Excav. & Formation	18	22FEB07	14MAR07	0	18				SR5300	i I		i I	i I		i I	
	Butterfly V. Rd (LCKI) Stage 4 - Sub-base	18	02MAR07	22MAR07	0	18					5310				1		
SR5320			02MAR07 09MAR07	22MAR07 29MAR07	-					ISP	SR	5320		1		1	
	Butterfly V. Rd (LCKI) Stage 4 - Kerbs	18			0	18						SR5330					
SR5330	Butterfly V. Rd (LCKI) Stage 4 - Pavement	6	30MAR07	06APR07	0	6						1	SR5340	i	i l		
	Butterfly V. Rd (LCKI) Stage 4 - Street Lighting	4	07APR07	11APR07	0	4						1				1	
	Butterfly V. Rd (LCKI) Stage 4 - Road Marking	4	07APR07	11APR07	0	4			1			i i	SR5350			1	
SR3200	Kom Tsun Street Bus Stn Excavate & Formation	18	15MAR07	05APR07	0	18					1	SR3200			1	1	
SR3210	Kom Tsun Street bus Stn Sub-base	18	22MAR07	12APR07	0	18	i i i						SR3210		i l		
SR3220	Kom Tsun Street Bus Stn Kerbs	24	29MAR07	26APR07	0	24			i I				i	SR3	220	 	
SR3230	Kom Tsun Street Bus Stn Concrete Pavement	75	06APR07	05JUL07	0	75						SR3230				1	
SR3000	Kom Tsun Street L/H C/Way - Excavate & Formation	12	15MAR07	28MAR07	0	12					SR30	00			1		
SR3010	Kom Tsun Street L/H C/Way - Sub-base	12	29MAR07	12APR07	0	12							SR3010				
SR3020	Kom Tsun Street L/H C/Way - Kerbs	18	13APR07	04MAY07	0	18			i I		1				SF	R3020	
SR3030	Kom Tsun Street L/H C/Way - Pavement	8	05MAY07	14MAY07	0	8					l				! 💻		SR3030
SR3035	Kom Tsun Street L/H C/Way - Street Lighting	4	15MAY07	18MAY07	0	4											SR3035
SR3040	Kom Tsun Street L/H C/Way - Road Marking	4	15MAY07	18MAY07	0	4											SR3040
	Main Line - Piers P11 to P15		1		1	1									i l		
								1	1	I I I I	l L	 	1	1	1	1	1 I I I
	Superstructure Finishing Works P11 to P16 - Landscape Establish W'ks on Viaduct	301	21APR07	19APR08	0	301							MF3100				
		301	ZTAPRUT	IJAPRUO	0	301											
	Vorks - Wai Man Tsuen																
	Traffic Management Schemes				1	1			1							1	1 I
/T2050	B.V. Rd - Divert Traffic to Slow & Middle Lanes	1	27APR07	27APR07	0	1									2050		
	Channel at Wai Man Tsuen																
/C3000	Channel - Modifications to Channel Floor -VO 299	12	30NOV05A	26FEB07	95	4		VC30	00								
Earthworks	& Slope Works							i T		i i							
/E1060	Slope CCR-S5 - Slope Drainage & Finishes	24	22FEB07	21MAR07	0	24				VE1	060		l l		1	1	
VE1070	Slope CCR-S5 - Landscaping & Hydroseeding	12	15MAR07	28MAR07	0	12					VE10	70					
	& Slope Works - 11NW-A/C678 & CR679													 		1	
/E2025	Slope 11NW-A/C678 & CR679 - Platform for S.Nails	3	22MAR07	24MAR07	0	3					VE2025						
/E2027	Slope 11NW-A/C678 & CR679 - Test Soil Nail	6	26MAR07	31MAR07	0	6			1			VE2027			:	1	
VE2020	Slope 11NW-A/C678 & CR679 - Soil Nails	18	03APR07	23APR07	0	18								VE2030			
VE2000	Slope 11NW-A/C678 & CR679 - Remove Temp Platform	6	24APR07	30APR07	0	6									VE2000	1	
/E2000	Slope 11NW-A/C678 & CR679 - Trim Original Slope	6	02MAY07	08MAY07	0	6										VE2020	
																	VE2050
	Slope 11NW-A/C678 & CR679 -Landscape & Hydroseed	6	09MAY07	15MAY07	0	6		<u> </u>	1	<u>I I</u>	1	1 I 1 I			1	1	
Drainage W	1		007777	0.000	-		_ ! _ I			VA1					[]		
/A1000	Butterfly Valley Rd Stage3 - Stormwater Draiange	24	22FEB07	21MAR07	0	24				VA1	000						
			2205000	P3 File : LU4	4						haat 0 - 1 10						
art Data			235EP03		1					S	heet 6 of 13	1					
art Date hish Date			01NOV08	1 5 1 110 . 204	•		abuveve Dementer and C	tract NI:	111/1000010								
			01NOV08 20FEB07	1 0 1 HC . LO4			ghways Department Cont Bouto 8 - Lai Chi k										
sh Date			01NOV08	5 T IIC . 204			ghways Department Con Route 8 - Lai Chi k 3 Month Rolling P	ok Viad	uct								

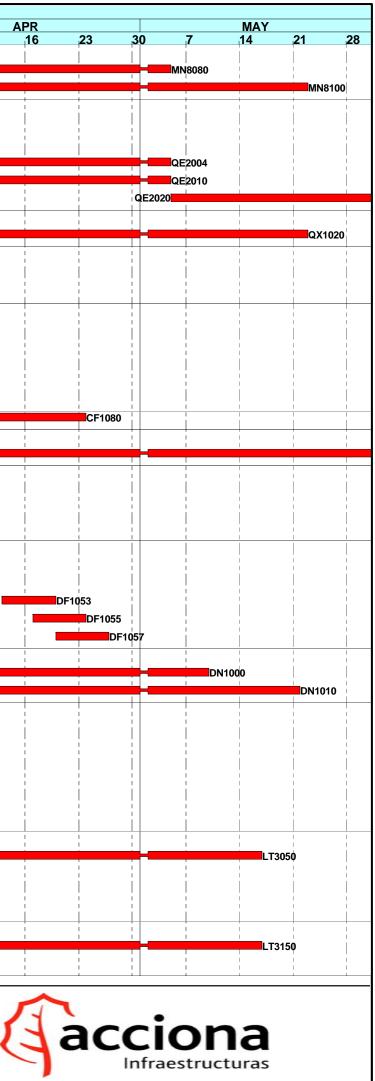
ര	Primavera	Systems	Inc

Activity	Activity	Orig.	Early	Early	%	Rem		FEB					MAR		200	1
ID	Description	Durn.	Start	Finish	Compl	Durn.	5	<u>12</u>	19	26	6 5	12	<u>19</u>	26	2	2 9
VA1100	Butterfly Valley Rd Stage4 - Stormwater Draiange	12	28APR07	12MAY07	0	12										
Utilities & I	Roadworks							1		1			 		1	1
VR3000	Drainage Maintenance Access Rd Formation	24	22FEB07	21MAR07	0	24							V	R3000	1	
VR3010	Drainage Maintenance Access Rd Sub-base	24	01MAR07	28MAR07	0	24									VR3010) 1
VR3020	Drainage Maintenance Access Rd Kerbs	24	08MAR07	05APR07	0	24		1							-	VR302
VR3030	Drainage Maintenance Access Rd Pavement	48	08MAR07	04MAY07	0	48	1	1		1					-	-
VR3040	Drainage Maintenance Access Rd Street Lights	12	20APR07	04MAY07	0	12										
VR2100	Butterfly V. Rd (WMT) Stage3- Excav. & Formation	12	15MAR07	28MAR07	0	12									VR2100)
VR2110	Butterfly V. Rd (WMT) Stage 3 - Sub-base	12	22MAR07	05APR07	0	12		i I	i i	i I			i 📕			VR211
VR2120	Butterfly V. Rd (WMT) Stage 3 - Kerbs	12	29MAR07	12APR07	0	12									-	-
VR2130	Butterfly V. Rd (WMT) Stage 3 - Pavement	6	13APR07	19APR07	0	6		l l								1
VR2140	Butterfly V. Rd (WMT) Stage 3 - Street Lighting	4	20APR07	24APR07	0	4		l						l		ļ
VR2150	Butterfly V. Rd (WMT) Stage 3 - Road Marking	4	20APR07	24APR07	0	4				 						
VR2200	Butterfly V. Rd (WMT) Stage4- Excav. & Formation	12	07MAY07	19MAY07	0	12										
VR2210	Butterfly V. Rd (WMT) Stage 4 - Sub-base	12	14MAY07	26MAY07	0	12		ĺ	- i -				ĺ		- li	
	suen Fire Hydrant Pump House	1			Ĭ		 									
VH1020	Wai Man Tsuen F/H Pump House - Waterproofing	12	11DEC06A	28FEB07	50	6			━╇	-	VH1020					
VH1020 VH1030	Wai Man Tsuen F/H Pump House - Building Works	24	09JAN07A	16MAR07	20	20							VH1030			
VH1035	Wai Man Tsuen F/H P/H - Provide for E & M Contr'	0	033411074	17FEB07	0	0			♦ VH1	035						
VH1040	Wai Man Tsuen F/H Pump House - Mechanical Works	24	01MAR07	28MAR07	0	24		1			1	I	1	T	VH1040)
VH1040 VH1050	Wai Man Tsuen F/H Pump House - Electrical Works	-	01MAR07	28MAR07	0	24								1	VH1050	
	•	24			-										VIII030	
VH1060	Wai Man Tsuen F/H Pump House - FS Installation	24	15MAR07	12APR07	0	24		i I	- i	i i			1	I I		1
VH1070	Wai Man Tsuen F/H Pump House - Plumb & Drains	24	13APR07	11MAY07	0	24			- T				VH2000		1	
VH2000	Fire Main - Pipework Along Maintenance Road	18	22FEB07	14MAR07	0	18					i	i	1			
VH2005	Fire Main - Pipework to Piers P10/R & P14	18	22FEB07	14MAR07	0	18							VH2005			
VH2010	Fire Main - Valves & Connections	18	15MAR07	05APR07	0	18		- i		i						- VH201
Landscape					1		l	l		l		l	I I	I		
VX1000	Landscaping - Earthworks & Formation	24	06APR07	04MAY07	0	24										
VX1040	Landscaping - Soiling & Planting	24	06APR07	04MAY07	0	24										
VX1100	Landscape Establishment Works	300	05MAY07	02MAY08	0	300										
Viaduct -	Main Line - Piers P16 to P18									1						1
Remaining	Superstructure Finishing Works															
MF4100	P16 to P17 - Landscape Establish W'ks on Viaduct	301	28APR07	26APR08	0	301		i i	i i	i	i i		i i	i I	li.	1
Viaduct -	Main Line - Piers 19 to Abutment M							1		1		1				
	cture Finishing Works Required for TCSS															
MF5005	P19 to Abut M - Insitu Slab Under Median Barrier	20	07NOV06A	01MAR07	30	7					MF5005					1
MF5007	P19 to Abut M - Median Barrier (incl earthing)	18	16JAN07A	10MAR07	15	15		i				MF500	7		- [j.	ĺ
MF5010	P19 to Abut M - Sign Gantry FADS1at Abutment M	50	29NOV06A	22MAR07	40	25	Η	I		-	1	1	I.	MF5010	1	1
		50	23110 1004	ZZWIAROT		20										
MF5040	Superstructure Finishing Works P19 to Abut M - Deck Drainage	18	26FEB07	17MAR07	0	10							MF5040			1
	ő	-				18		l				MF5050				
MF5050	P19 to Abut M - Top Rail to Parapets	12	22FEB07	07MAR07	0	12		1					F5055			1
MF5055	P19 to Abut M - Install Movement Joint at Abut M	4	09MAR07	13MAR07	0	4							MF5058			
MF5058	P19 to Abut M - Waterproofing of Deck	4	13MAR07	16MAR07	0	4		İ	i I					F5060		
MF5060	P19 to Abut M - Flexible Pavement	4	17MAR07	21MAR07	0	4								MF5070		
MF5070	P19 to Abut M - Viaduct Road Lighting	18	03MAR07	23MAR07	0	18									5000	
MF5080	P19 to Abut M - Road Marking & Traffic Signage	4	22MAR07	26MAR07	0	4		 		 		 			5080	
Viaduct -	Main Line - Tunnel Approaches															I
Noise Barr	iers & Encl' (Sec.10 Excision)									I I			1			1
	Semi Enclosure S/B Ch.2005 - 2200 - Frame	60	30NOV06A	28MAR07	25	30				-		1			MN6100)
MN6100							1	1					1		1.1	

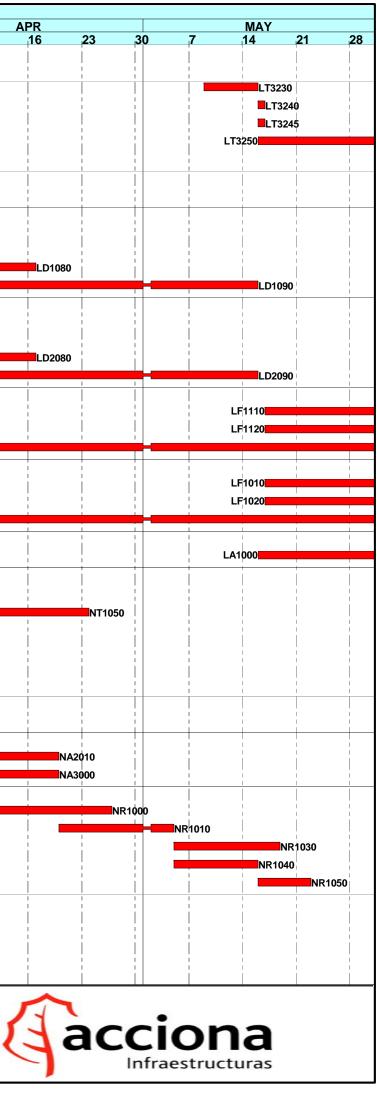
Start Date	^{23SEP03} P3 File : LU41		Sheet 7 of 13
Finish Date	01NOV08	Listevene Department Contract No. 11V/2002/04	
Data Date	20FEB07	Highways Department Contract No. HY/2003/01	
		Route 8 - Lai Chi Kok Viaduct	
		3 Month Rolling Programme	
		from 21 February 2007	
	terre les	-	



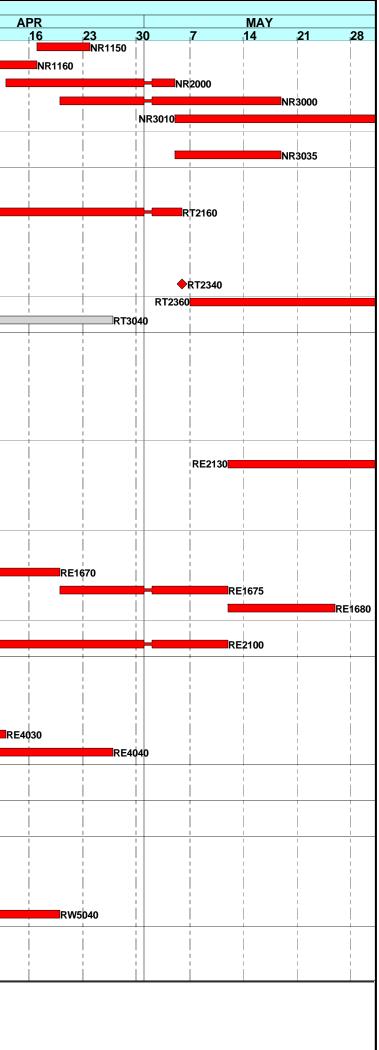
Activity	Activity	Orig.	Early	Early	%	Rem			FEB				MAR	2	007	
ID	Description	Durn.	Start	Finish	Compl.	Durn.		5		19	26	5	12 19	26	2	9
Remaining	Noise Barriers & Enclosures					1				1						
MN8080	At Grade - 7m Reflective Barrier S/B Ch1789-1989	75	11DEC06A	04MAY07	35	48		 	! !		İ			!	L.	1
MN8100	At Grade - 5.5m Reflective Barrier Ch1799-1997	75	22FEB07	22MAY07	0	75		-	1		-			1		-
At Grade	Works - Butterfly Valley										1					
Earthwork	s & Slope Works - 11NW-A/FR54 & F55	-	1	1	1	1			1 	· ·	1					l l
QE2002	Slope 11NW-A/FR54 & FR55 - Retaining Wall -Bases	36	22FEB07	05APR07	0	36									QE	2002
QE2004	Slope 11NW-A/FR54 & FR55 - Retaining Wall -Walls	48	08MAR07	04MAY07	0	48			1					1		
QE2010	Slope 11NW-A/FR54 & FR55 - Install Temp Works	36	22MAR07	04MAY07	0	36			1					1		
QE2020	Slope 11NW-A/FR54 & FR55 - Excavate & Rockfill	36	05MAY07	15JUN07	0	36					i I			 		
Landscape	Works	_	1	1	-1	1				 						
QX1020	Landscaping - Soiling & Planting on Slope CCR-S6	75	22FEB07*	22MAY07	0	75										
Viaduct -	Slip Road C								1		i I		i i I I I I	i I		i I
Superstruc	cture Finishing Works Required for TCSS															
CF1020	Slip Rd. C - Provision for E & M and TCSS	12	15NOV06A	23FEB07	85	2				CF	1020			1		I I I
Remaining	Superstructure Finishing Works							1	1	i I	1			1	i i	
CF1040	Slip Rd. C - Deck Drainage	50	230CT06A	27FEB07	90	5						F1040		1		l I
CF1050	Slip Rd. C - Top Rail to Parapets	18	22FEB07	14MAR07	0	18			l l				CF1050			
CF1058	Slip Rd. C - Waterproofing of Deck	6	22FEB07	28FEB07	0	6						CF1058				
CF1060	Slip Rd. C - Flexible Pavement	4	01MAR07	05MAR07	0	4	1	1	l l		l l	CF1060	I I I I	l l	1	1
CF1070	Slip Rd. C - Viaduct Road Lighting	24	06MAR07	03APR07	0	24	1								CF107	0
CF1080	Slip Rd. C - Road Marking & Traffic Signage	18	03APR07	23APR07	0	18					 					
Remaining	Noise Barriers & Enclosures	-			-	-		1	1	1	1		 	1	1	1
CN1000	Slip Rd. C - 3m Absorptive Barriers Ch.665 - 730	52	04APR07	04JUN07	0	52			1		1			CN	1000	1
	Slip Road D	02	0 // 1 / 10/	0.001.01					1							
	-										İ		i i	Ì		ĺ
	cture Finishing Works Required for TCSS	10	0055007	0714007		10	-	1	1		1	DF100		1	1	1
DF1009	Slip Rd. D - Sign Gantry ADS4 at D6	12	22FEB07	07MAR07	0	12	-					DF101	-			
DF1010	Slip Rd. D - Provision for E & M and TCSS	12	22FEB07	07MAR07	0	12		 	 		1			 		1
	Superstructure Finishing Works										- 1040					I
DF1040	Slip Rd. D - Deck Drainage	24	01SEP06A	23FEB07	90	2	_				- ₁ 040			1		1050
DF1050	Slip Rd. D - Top Rail to Parapets	18	15MAR07	05APR07	0	18	-		1					1		1050
DF1053	Slip Rd. D - Movement Joint at Abut D.	6	13APR07	19APR07	0	6	-		1	i 🛛	İ		i i	Ì		
DF1055	Slip Rd. D - Movement Joint at D6	6	17APR07	23APR07	0	6		1	1		1	I I	I I I I	1	1	1
DF1057	Slip Rd. D - Movement Joint at D9	6	20APR07	26APR07	0	6										
	Noise Barriers & Enclosures		1	1	1	1			1		i I				L	
DN1000	Slip Rd. D - 3.5m Reflective Barrier Ch.805-881	36	27MAR07	09MAY07	0	36			1		l					
DN1010	Slip Rd. D - 3m Reflective Barriers Ch.680 - 805	36	09APR07	21MAY07	0	36			1							_
Lai Wan F	Road Overpass								1		 			1		
Temporary	/ Traffic Management Schemes															
LT2140	TTMS LW Rd (for W/B Deck) - Implementation	213*	03JUL06A	17MAR07	0	21*		1	1		1		LT2140			
LT2240	TTMS LW Rd (for E/B Deck) - Implementation	393*	24NOV05A	17MAR07	0	21*		i	I		i		LT2240			
LT3000	TTMS CC Rd (on W/B Deck) - Prepare for Review	12	08DEC06A	26FEB07	50	4	-				LT	3000		i I		i I
LT3010	TTMS CC Rd (on W/B Deck) - CRE Endorsement	6	20FEB07	25FEB07	0	6	1		1		LT3	010				
LT3020	TTMS CC Rd (on W/B Deck) - Roadworks Advice	6	26FEB07	03MAR07	0	6	1			i I		LT3020				
LT3030	TTMS CC Rd (on W/B Deck) - Site Preparation	6	05MAR07	10MAR07	0	6		 	 		1		T3030	 		
LT3050	TTMS CC Rd (on W/B Deck) - Implementation	84*	02FEB07A	16MAY07	0	70*	1 🗖		T	┝╉╌╍╍╍						
LT3120	TTMS CC Rd (on E/B Deck) - Roadworks Advice	6	20FEB07	25FEB07	0	6	1		1		LT3 ²	120				
LT3130	TTMS CC Rd (on E/B Deck) - Site Preparation	6	10MAR07	16MAR07	0	6	1						LT3130			
LT3140	Divert 1No. Lane to New East Bound Bridge	1	17MAR07	17MAR07	0	1	1		 		- 		LT3140			
LT3145	Divert 1No. Lane to New West Bound Bridge	1	17MAR07	17MAR07	0	1	-		1				LT3145			
LT3150	TTMS CC Rd (on E/B Deck) - Implementation	50*	17MAR07	16MAY07	0	50*	1		1		1			1		1
LT3200	TTMS CC Rd (on Both Decks) - Prepare for Review	12	22FEB07	07MAR07	0	12	1		1 		-	LT320	o			
								· · · · · · · · · · · · · · · · · · ·			<u>. </u>		· · ·	· · · · · · · · · · · · · · · · · · ·	<u> </u>	
Start Date Finish Date Data Date			23SEP03 01NOV08 20FEB07	P3 File : LU4	1		Hig					lo. HY/2003/0 ⁻		eet 8 of 13	3	
									te 8 - Lai							1
									onth Rol							- (
								1	from 21 F	ebruary	200)/				
	© Primavera Systems, Inc.															



Activity	Activity	Orig.	Early	Early	%	Rem	FEB				MAR			2007	
ID	Description	Durn.	Start	Finish	Compl	Durn.		19 26		5 í	12	19	26	2	9
LT3210	TTMS CC Rd (on Both Decks) - CRE Endorsement	6	20FEB07	25FEB07	0	6		LT3					Ì	l i	Ì
LT3220	TTMS CC Rd (on Both Decks) - Roadworks Advice	6	26FEB07	03MAR07	0	6				Г3220		 	 	1	
_T3230	TTMS CC Rd (on Both Decks) - Site Preparation	6	09MAY07	15MAY07	0	6									
LT3240	Divert 2 Lanes to Each New East Bound Bridge	1	16MAY07	16MAY07	0	1		i i	i i	i I		i I		i i	i i
_T3245	Divert 2 Lanes to Each New West Bound Bridge	1	16MAY07	16MAY07	0	1									
LT3250	TTMS CC Rd (on Both Decks) - Implementation	20*	16MAY07	07JUN07	0	20*									I
T3300	TTMS CC Rd (on Both Decks) - Prepare for Review	12	22FEB07	07MAR07	0	12				LT3300)				
LT3310	TTMS CC Rd (on Both Decks) - CRE Endorsement	6	20FEB07	25FEB07	0	6		LT3	310						
LT3320	TTMS CC Rd (on Both Decks) - Roadworks Advice	6	26FEB07	03MAR07	0	6				Г3320		i I			i I
West Bound	d - Insitu Deck	1		1		1			1			1	1		
	Lai Wan Overpass W/B - Movement Joints at DA1&2	6	06MAR07	12MAR07	0	6					LD1065				
_D1067	Lai Wan Overpass W/B - Flexible Pavement	4	13MAR07	16MAR07	0	4						01067			
	Lai Wan Overpass WB - Demolish Existing Flanges	24	19MAR07	16APR07	0	24		i i	i i	Ì					
	Lai Wan Overpass W/B - Construct New Flanges	36	03APR07	15MAY07	0	36									
		30	03AFK07	15IVIATO7	0	- 30			1	1					
	I - Insitu Deck		00140007	40144.007							LD2065				
LD2065	Lai Wan O/Pass E/B - Movement Joints at CA1&2	6	06MAR07	12MAR07	0	6						2067			
_D2067	Lai Wan O/Pass E/B - Flexible Pavement	4	13MAR07	16MAR07		4				 		02067	i		i
LD2080	Lai Wan O/Pass E/B - Demolish Existing Flanges	24	19MAR07	16APR07	0	24									
LD2090	Lai Wan O/Pass E/B - Construct New Flanges	36	03APR07	15MAY07	0	36				-		1	 		
Nest Bound	d - Superstructure Finishing Works														
_F1110	Lai Wan O/Pass W/B - Resurface Existing Deck	18	17MAY07	06JUN07	0	18						1	1		
LF1120	Lai Wan O/Pass W/B - Reconstruct Deck Drainage	18	17MAY07	06JUN07	0	18									
LF1130	Lai Wan O/Pass W/B - 6 Months Wait for Stitches	179	12APR07	13NOV07	0	179				i I			1		LF1130
East Bound	- Superstructure Finishing Works	·		'									1		
	Lai Wan O/Pass E/B - Resurface Existing Deck	18	17MAY07	06JUN07	0	18		i i							ĺ
F1020	Lai Wan O/Pass E/B - Reconstruct Deck Drainage	18	17MAY07	06JUN07	0	18		i i	i i						i I
_F1040	Lai Wan O/Pass E/B - 6 Months Wait for Stitches	176	12APR07	09NOV07	0	176		I I							LF1040
Drainage W			-			-						1			
	Area Under Overpass - Stormwater Drainage	48	16MAY07	12JUL07	0	48		ļ ļ							
		-				10									
	Norks - Ching Cheung Road at LCK Pa	ar K											l		
•	Traffic Management Schemes	a a a t				= 1 +									
	TTMS CC Rd (W/B C/Way) - Implementation	968*	05FEB04A	23APR07	33	51*		NTO	070	1		1	1		1
	2nd. TTMS CC Rd (E/B C/Way) - Roadworks Advice	6	20FEB07	25FEB07	0	6		NT2							
NT2080	2nd. TTMS CC Rd (E/B C/Way) - Site Preparation	6	26FEB07	03MAR07	0	6				T2080		i I			i I
	3rd. TTMS CC Rd (E/B C/Way) - Prepare for Review	12	22FEB07	07MAR07	0	12				NT210)				
NT2110	3rd. TTMS CC Rd (E/B C/Way) - CRE Endorsement	6	20FEB07	25FEB07	0	6		NT2				1	1	1	
NT2120	3rd. TTMS CC Rd (E/B C/Way) - Roadworks Advice	6	26FEB07	03MAR07	0	6			N	T2120					
NT2130	3rd. TTMS CC Rd (E/B C/Way) - Site Preparation	6	05MAR07	10MAR07	0	6				N	T2130		i 	1	i
Drainage W	orks														
NA2010	C.C. Rd. W/B in New C/way - S/water Drainage E3	48	22FEB07	19APR07	0	48									
NA3000	C.C. Rd. E/B in New C/way - Stormwater Drainage	60	170CT06A	19APR07	10	48				I		1		**- ****	
Utilities & R	loadworks									I			<u> </u>	1	
	C.C. Rd. W/B in Portion E3 - Formation	18	06APR07	26APR07	0	18						1	l l		
	C.C. Rd. W/B in Portion E3 - Sub-base	12	20APR07	04MAY07	0	12									
	C.C. Rd. W/B in Portion E3 -E&M + TCSS Provision	12	05MAY07	18MAY07	0	12									
	C.C. Rd. W/B in Portion E3 - Pavement	9	05MAY07	15MAY07	0	9									
	C.C. Rd. W/B in Portion E3 - Rd Marking & Signs	6	16MAY07	22MAY07	0	6						1			
												NR10	190		I
	C.C. Rd. W/B - Foundations & Sign Gantry ADS3	24	22FEB07	21MAR07	0	24					NR11		- ₁ -		1
NR1100	C.C. Rd. W/B Portion J2 - Formation	18	22FEB07	14MAR07	-	18			į		INRTI	i.	110		
NR1110	C.C. Rd. W/B in Portion J2 - Sub-base	12	08MAR07	21MAR07	0	12						NR11		1120	
NR1130	C.C. Rd. W/B in Portion J2 -E&M + TCSS Provision	12	15MAR07	28MAR07		12								1130	i I
	C.C. Rd. W/B in Portion J2 - Pavement	9	22MAR07	31MAR07		9								NR1140	
art Date ish Date			23SEP03 01NOV08	P3 File : LU	41							Sh	neet 9 of 1	3	
ta Date			20FEB07				Highways Departmen			/2003/01					
							Route 8 - Lai								
							3 Month Rol								
							trom 21 F	Eebruary 200) (
	© Primavera Systems, Inc.													1	



Activity	Activity	0	Forb	Fork	0/	Rem								2	2007	
Activity ID	Activity Description	Orig. Durn.	Early Start	Early Finish	% Compl.		5	FEB 12	19 2	6	5	MAR 12	19		2	<u> </u>
NR1150	C.C. Rd. W/B in Portion J2 - Rd Marking & Signs	6	17APR07	23APR07	0	6		12			5			20		
NR1160	C.C. Rd. W/B in Portion J2 - Street Lighting	12	03APR07	16APR07	0	12						 		l I		
NR2000	C.C. Rd. E/B - Foundations for Sign Gantry FADS3	18	13APR07	04MAY07	0	18			ļ ļ							
NR3000	C.C. Rd. E/B - Formation	24	20APR07	18MAY07	0	24						1		1		
NR3010	C.C. Rd. E/B - Sub-base	24	05MAY07	01JUN07	0	24										
NR3030	C.C. Rd. E/B - E & M and TCSS Provision	36	22FEB07	05APR07	0	36										IR3030
NR3035	C.C. Rd. E/B - Sign Gantry FADS3	12	05MAY07	18MAY07	0	12						 				
At Grade	Work - Ching Cheung Road - Main Sect	ion														
Temporary	Traffic Management Schemes											1				
RT2160	2nd. TTMS CC Rd E/B (CCR-S1) - Implementation	895*	14MAY04A	05MAY07	16	61*						1	1			
RT2240	3rd. TTMS CC Rd (Slewing) - Implementation	663*	28DEC04A	14MAR07	0	18*						RT22	40			
RT2320	4th. TTMS CC Rd E/B C/Way - Roadworks Advice	6	20FEB07	25FEB07	0	6		I I		T232	20	I I	1	1	1	l I
RT2330	4th. TTMS CC Rd E/B C/Way - Site Preparation	6	26FEB07	03MAR07	0	6					RT2330					
RT2340	C.C. Rd - Divert 1No. E/B Lane to New C/way	0		05MAY07	0	0					1	 	 	1		
RT2360	4th. TTMS CC Rd E/B C/Way - Implementation	36*	07MAY07	16JUN07	0	36*					l I	 	l	l T		l
RT3040	TTA Case No.011 - (CCR-R4) - Implementation	931*	23MAR04A	26APR07	24	54*										
	s & Slope Works - CCR-S1, S2 & S3		1	1	1	1		I I				 		i I		
RE1700	Slope CCR-S1E - Finish Seed & Planting +62.3mPD	6	22FEB07*	28FEB07	0	6			!	R	E1700					
RE1710	Slope CCR-S1E - Finish Seed & Planting +54.8mPD	12	01MAR07	14MAR07	0	12						RE17	10			
RE1720	Slope CCR-S1E - Finish Seed & Planting +47.3mPD	12	15MAR07	28MAR07	0	12							i	RE1	720	
RE1710A	Slope CCR-S1C- Finish Seed & Planting +54.9mPD	12	22FEB07	07MAR07	0	12					RE17	10A				
RE1720A	Slope CCR-S1C - Finish Seed & Planting +47.3mPD	12	08MAR07	21MAR07	0	12		 				1	RE17	-		
RE1860	Slope CCR-S1E&C- Finish Seed & Planting to +25.4	24	22FEB07	21MAR07	0	24							RE18	60		
RE2130	Slope CCR-S2 - Finish Seeding & Planting	18	12MAY07	01JUN07	0	18						1				
RE1720B	Slope CCR-S1W - Seed & Planting to +39.95mPD	24	22FEB07	21MAR07	0	24					l	1	RE17	208		
RE1560	Slope CCR-S1W - Rock Stabilisation to 19.0mPD	48	10MAY06A	23FEB07	90	2	-	i	RE1	560		-				
RE1660	Slope CCR-S1W - Drainage to Level +19.0mPD	24	12DEC06A	09MAR07	50	12				DEA	1	1660		1		
RE16604	Slope CCR-S1W - Drainage to Level +16.8mPD	18	04DEC06A	26FEB07	75	4	-			REI	6604		RE16	CE.	Į.	
RE1665	Slope CCR-S1W - Seed & Planting to +32.4mPD	24	22FEB07	21MAR07	0	24					i i	1	KEIO	00		
RE1670	Slope CCR-S1W - Seed & Planting to +24.9mPD	24	22MAR07	19APR07	0	24						1		1		
RE1675	Slope CCR-S1W - Seed & Planting to +19.0mPD	18	20APR07	11MAY07	0	18										
RE1680	Slope CCR-S1W - Seed & Planting to +16.8mPD	12	12MAY07	25MAY07 21MAR07	0	12		 				1	RE20	nn		I
RE2000 RE2100	Slope CCR-S2 -Excavate Rock to Formation Slope CCR-S2 - Drainage	24	22FEB07 22MAR07	21MAR07 11MAY07	0	24 42	-									
	ks Above Retaining Wall CCR-R2	42	ZZIVIARUI	TIVIATO	0	42	<u> </u>	 			 	 			<u></u>	
RE4023	Remove Access Road	6	22FEB07	28FEB07	0	6	4			R	E4023	1		1		
RE4023	Excavate & Demolish Existing Retaining Wall	12	22FEB07	07MAR07	0	12					RE402	27				
RE4028	Fill & Compact to Form Toe of Berm	6	08MAR07	14MAR07	0	6	- 1					RE40	28			
RE4030	Slope Drainage above R/W CCR-R2	24	15MAR07	12APR07	0	24	-		1		ļ					R
RE4040	Slope Finishes above R/W CCR-R2	24	29MAR07	26APR07	0	24						1 				
	Wall CCR-R3 Type A						<u>├</u>				1	1	1	1	++	
RW3040	Ret. Wall CCR-R3A - Backfill & Form Platform	18	22FEB07	14MAR07	0	18						RW3	040			
Retaining V	Wall CCR-R3 Type B				1	I					 	1 	1	1		
RW4040	Ret. Wall CCR-R3B - Backfill & Form Platform	18	22FEB07	14MAR07	0	18						RW4	040			
Retaining V	Wall CCR-R3 Type C				1	I						 		 		
RW5010	Ret. Wall CCR-R3C - Temporay Works & Excavation	24	25JAN06A	23FEB07	95	2			RW5	010		1	l I	l T		l I
RW5020	Ret. Wall CCR-R3C - Bases	18	22FEB07	14MAR07	0	18						RW5	020			
RW5030	Ret. Wall CCR-R3C - Walls	24	08MAR07	05APR07	0	24									P-	RW5030
RW5040	Ret. Wall CCR-R3C - Backfill & Remove Temp Works	12	06APR07	19APR07	0	12			i i		Ì	1				
1	ks Above Retaining Walls CCR-R3D, E & F				1							+ 	1	1		
RE4107	Slope above CCR-R3D-Excavate Slope	12	25SEP06A	22FEB07	90	1				07	1	1		1		
RE4113	Slope above CCR-R3D- Filter - 1st Berm to F/Path	6	13DEC06A	24FEB07	50	3			RE	4113		1		I 		
Start Date	•		23SEP03	P3 File : LU4	1	•	<u> </u>			I		1	She	et 10 of 1	3	
Finish Date Data Date	© Primavera Systems, Inc.		01NOV08 20FEB07				R	oute 8 - La Month Ro	i Chi Kok ˈ	Viac ram	me	1				
															_ <u></u>	



Activity	Activity	Orig.	Early	Early	%	Rem								2	2007	
ID	Description	Durn.	Start	Finish	Compl.		_	FEB	40	26	F	MAR		26	<u> </u>	0
RE4114	Slope above CCR-R3D - Filling-1st Berm to F/Path	12	13DEC06A	28FEB07	50	6	-	<u>5 12</u>	19	26 RE41	5 1 <mark>4</mark>	12	19	26		3
RE4115	Slope above CCR-R3D- Filter - F/Path to 3rd Berm	6	03JAN07A	24FEB07	0	3			╧	RE4115						
RE4116	Slope above CCR-R3D - Filling-F/Path to3rd Berm	12	08JAN07A	28FEB07	0	6			╧	RE41	16					
RE4119	Slope above CCR-R3D- Filter - 3rd Berm to Top	6	01MAR07	07MAR07	0	6					RE4	119		1		
RE4120	Slope above CCR-R3D - Filling - 3rd Berm to Top	12	08MAR07	21MAR07	0	12	-						RE41	20		
RE4130	Slope above CCR-R3D- Slope Drainage	24	15MAR07	12APR07	0	24	-									R
RE4140	Slope above CCR-R3D - Slope Finishes	18	29MAR07	19APR07	0	18	-									
RE4205	Slope above CCR-R3E&F -Remove Piling Platform	6	22FEB07	28FEB07	0	6	-			RE42	:05			1		I I
RE4207	Slope above CCR-R3E&F -Excavate Slope	12	28DEC06A	28FEB07	50	6				RE42	:07					
RE4211	Slope above CCR-R3E&F - Filling-Bt'm to 1st Berm	12	27NOV06A	28FEB07	50	6				RE42	11	Í	Ì	j.		
RE4213	Slope above CCR-R3E&F -Filter-1st Berm to +24mPD	6	08DEC06A	24FEB07	50	3				RE4213						
RE4214	Slope above CCR-R3E&F-Filling-1st Berm to +24mPD	12	26DEC06A	24FEB07	50	3			╇	RE4214						
RE4214A	Slope above CCR-R3E&F- Form Crane Platform	6	26FEB07	03MAR07	0	6	-				RE4214A	i I	i I	i I		i I
RE4215	Slope above CCR-R3E&F-Filter- +24mPD to 3rd Berm	6	20APR07	26APR07	0	6					1	<u> </u> 		1		
RE4216	Slope above CCR-R3E&F -Filling-+24mPD to3rd Berm	12	27APR07	11MAY07	0	12	-			i l						
RE4219	Slope above CCR-R3E&F- Filter - 3rd Berm to Top	6	12MAY07	18MAY07	0	6	-				i I	i I	i I I	i T		I I
RE4220	Slope above CCR-R3E&F -Filling -3rd Berm to Top	12	19MAY07	01JUN07	0	12	-									
RE4410	Slope Above CC Rest Garden - Excavate Slope	12	14JUL06A	22FEB07	95	1				4410				1		
RE4420	Slope Above CC Rest Garden - Benching	12	30SEP06A	23FEB07	80	2				RE4420		 I		1		-
RE4430	Slope Above CC Rest Garden - Bending	12	24FEB07	09MAR07	0	12	-				I F	E4430		1		1
RE4440	Slope Above CC Rest Garden - Kock Hinnig	12	10MAR07	30MAR07	0	18	-					·- · ····		F	RE4440	
RE4450	Slope Above CC Rest Garden - Slope Finishes	12	24MAR07	07APR07	0	12	-			İ I						RE4450
		12	24101/11/07	07 AP 107	0	12	-	<u>I I I</u> I I I	-	1 1	1	1	1	1	1	
RE4268	s & Slope Works - CCR-S4 Slope CCR-S4 - Excavate & Bench Upper Slope	48	03JAN06A	26FEB07	90	4	_			RE4268						
RE4200	Slope CCR-S4 - Excavate & Bench Opper Slope	24	23FEB06A	05MAR07	60	10				11200	RE4280			1		
RE4285	Slope CCR-S4 - Form New Access Road at Footpath	12	06MAR07	19MAR07	0	12	-				1 1200		RE4285			
RE4200	Slope CCR-S4 - Point New Access Road at Polipain	12	20MAR07	10APR07	0	12	-							1		RE42
			11APR07	02MAY07	0	18	-				1	1		1		
RE4300 RE4310	Slope CCR-S4 - Upper Slope Finishes Slope CCR-S4 - Excavate Lower Slope	18 24	01MAR06A	24FEB07	90	3				RE4310	-					
RE4310	Slope CCR-S4 - Excavate Lower Slope	18	26FEB07	17MAR07	0	-	_						RE4320			
RE4320		_	19MAR07		-	18	-						1124520			
	Slope CCR-S4 - Lower Slope Finishes	24	T9MAR07	16APR07	0	24			-	1	1	1		1		
	ung Road NTMM Retaining Wall A NNTM Wall A - Drainage & Fill Behind Walls	12	21JUN06A	28FEB07	50	6				RW6	120					
RW6020 RW6030	NNTM Wall A - Excavate to +20.5mPD	12	21JUN06A	28FEB07	50 50	6	_			RW6	1	ĺ				
RW6040	NNTM Wall A - Debris Collection Area Drainage	12 12	01MAR07	14MAR07	0	12	-					RW6	n40	1	1	1
RW6040	NNTM Wall A - Debris Collection Area Dramage		15MAR07	28MAR07	0	12	-							RW	6050	
RW6060	NNTM Wall A - Debris Collection Area Access Ramp	12	29MAR07	2600AR07	0	24	-				i I					İ
		24	29MAR07	2045807	0	24			-							
Drainage V RR2000	Ching Cheung Rd. W/B - Stormwater in New C/way	20	22FEB07	05APR07	0	20										2000
RR3100	Ching Cheung Rd. E/B -S/Water S300-01 to S300-07	36 60	04DEC06A	07MAR07	80	36 12	_			1	RR3	100	1	1		2000
RR4000	Ching Cheung Rd. E/B - Stormwater in Exist C/way	24	07MAY07	02JUN07	0	24	_									
	5 5 7	24	071014107	02301107		24	-		-		 	 	 			
RA2000	Roadworks Lai Wan Road - Footpath below Slope CCR-S4	24	22FEB07	21MAR07	0	24	-						RA20	00		
	Ching Cheung Rd. W/B New C/Way - Filling			21MAR07 28FEB07	90	6	_			RA30	03	1				l
RA3003 RA3005	Ching Cheung Rd. W/B - S/Gantry FADS4 Founds	36 18	15JAN07A 25AUG06A	05MAR07	45	10					RA3005			1		
				12APR07			_					ĺ				R
RA3010 RA3020	Ching Cheung Rd. W/B New C/Way - Formation Ching Cheung Rd. W/B New C/Way - Sub-base	18	22MAR07 29MAR07	12APR07 19APR07	0	18 18	-									
	Ching Cheung Rd. W/B New C/Way - Sub-base Ching Cheung Rd. W/B New C/Way - Pavement	18 6	29MAR07 20APR07	19APR07 26APR07	0	6			-							
RA3040					-	6	-				i I	i I	 	i I		
RA3045 RA3047	Ching Cheung Rd W/B New C/Way -Sign Gantry FADS4 Ching Cheung Rd. W/B -Sign Gantry ADS4	6	27APR07 27APR07	04MAY07 04MAY07	0	6	-							1		
RA3047 RA3050	Ching Cheung Rd. W/B E & M and TCCS Provision	18	27APR07 13APR07	04MAY07 04MAY07	0	6 18	-									
	Ching Cheung Rd. W/B - Street Lighting				0	18	-			1	1	1	1	1	1	
RA3060		12	05MAY07	18MAY07		12									-1	
Start Date Finish Date			23SEP03 01NOV08	P3 File : LU	41		11:		0		V/2002	14	She	et 11 of 1	3	
Data Date			20FEB07				nig	hways Department Route 8 - Lai				71				
								3 Month Roll)
								from 21 F								
	© Primavera Systems, Inc.															
						-										



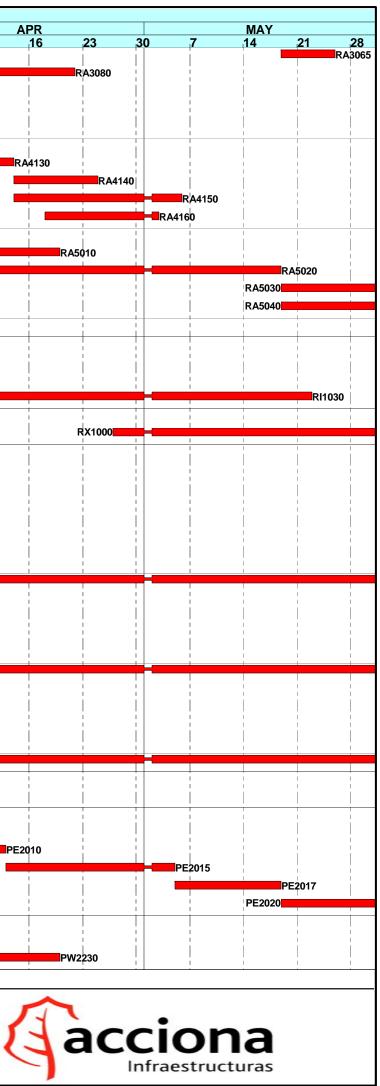
Activity	Activity	Orig.	Early	Early	%	Rem								20	07
ID	Description	Durn.	Start	-	Compl.	-		<u>FEB</u>	19	26	5	MAR 12	19	26	2 9
RA3065	Ching Cheung Rd. Road Marking & Signs	6	19MAY07	25MAY07	0	6				20	U		15		-
RA3080	Ching Cheung Rd. New E/B - Sign Gantry DS3	18	31MAR07	21APR07	0	18	1					1	1		
RA4000	Ching Cheung Rd. New E/B Slip Road - E&M +TCSS	36	22FEB07	05APR07	0	36	1	i i	i 🗖			1			RA4000
RA4040	Ching Cheung Rd. New E/B - Fill Behind N/B Base	48	08AUG06A	05MAR07	80	10			╺┊┨╌╺╸		RA4040	1	1		
RA4110	Ching Cheung Rd. New E/B Slip Road - Formation	36	22JAN07A	22MAR07	30	25			╺┊┨╴╺╸				RA4	110	
RA4120	Ching Cheung Rd. New E/B Slip Road - Sub-base	18	24JAN07A	29MAR07	25	14								RA4	120
RA4130	Ching Cheung Rd. New E/B Slip Road - Kerbs	18	26JAN07A	13APR07	20	15						 	 	-	
RA4140	Ching Cheung Rd. New E/B Slip Road - Pavement	9	14APR07	24APR07	0	9			i	İ			1		
RA4150	Ching Cheung Rd. New E/B Slip Road - C/Barriers	18	14APR07	05MAY07	0	18	1	1 I I I		1	1	1	l l	1	I I I I
RA4160	Ching Cheung Rd. New E/B Slip Road - St. Lights	12	18APR07	02MAY07	0	12									
RA5000	Ching Cheung Rd. W/B Exist C/Way - Formation	36	22FEB07	05APR07	0	36		<u> </u>							RA5000
RA5010	Ching Cheung Rd. W/B Exist C/Way - Sub-base	24	22MAR07	19APR07	0	24	1			1		1			
RA5020	Ching Cheung Rd. W/B Exist C/Way - Kerbs	36	06APR07	18MAY07	0	36	1					1			
RA5030	Ching Cheung Rd. Resurface Existing W/B C/way	12	19MAY07	01JUN07	0	12	1					1	1		
RA5040	Ching Cheung Rd. W/B Exist C/Way - C/Barriers	24	19MAY07	15JUN07	0	24		i i	i i	ĺ	ĺ	Ì	Ì	Ì	i i
RA7000	Lai Wan Road - Watermains & Hydrants FH4 & FH5	24	22FEB07	21MAR07	0	24						1	RA70)0	
Lai Wan Ov	erpass Irrigation Pump House				1	I							1		
RI1010	Lai Wan O/pass Irig Pump House - Structure	36	18SEP06A	23FEB07	95	2			╺┽╂╌┉	RI1010		i I	i I		
RI1020	Lai Wan O/pass Irig Pump House - Waterproofing	12	24FEB07	09MAR07	0	12					RI	1020	1		
RI1030	Lai Wan O/pass Irig Pump House - Building Works	75	22FEB07	22MAY07	0	75			i 🗖 🗖				1		
Landscape	Works				1	1		1 I		1		1	1	1	
RX1000	Landscaping - Formation	72	27APR07	23JUL07	0	72	1								
At Grade V	Norks - Butterfly Valley Interchange	1	I	I	1	1				l		1	1		
	Traffic Management Schemes												1		
PT2250	TTMS CP Rd-KC N/B for CCR-R4 -Prepare (NOT USED)	16	22FEB07	12MAR07	0	16			i 🗖	!		PT2250			
PT2260	TTMS CP Rd-KC N/B for CCR-R4 - CRE End(NOT USED)	6	20FEB07	25FEB07	0	6	1			РТ22	60	i I I	i I	I I	
PT2270	TTMS CP Rd-KC N/B for CCR-R4 - R/A (NOT USED)	7	26FEB07	04MAR07	0	7	1				PT2270				
PT2280	TTMS CP Rd-KC S/B - Re-open Slip Road (NOT USED)	0		03MAR07	0	0	1	, , , , , , , , , , , , , , , , , , , ,			♦РТ2280	- 	1		
PT2288	TTMS CP Rd-KC N/B-Close Loop to CC Rd(NOT USED)	0		03MAR07	0	0	1				◇PT2288		1		
PT2290	TTMS CP Rd-KC N/B for CCR-R4 - Implem(NOT USED)	512*	22FEB07	01NOV08	0	512*			PT2 <mark>2</mark> 90						
PT2200	TTMS CP Rd-KC S/B for Paving -Prepare for Review	18	22FEB07	14MAR07	0	18	1		i 🗖	!		PT220	0	1	
PT2210	TTMS CP Rd-KC S/B for Paving - CRE Endorsement	6	20FEB07	25FEB07	0	6	1			PT22	10				
PT2220	TTMS CP Rd-KC S/B for Paving - Roadworks Advice	7	26FEB07	04MAR07	0	7	1				PT2220	1	1	1	
PT2230	TTMS CP Rd-KC S/B for Paving - Site Preparation	6	05MAR07	10MAR07	0	6	1	 1 I			P	T2230	1	1	 1
PT2240	TTMS CP Rd-KC S/B for Paving - Implementation	75*	24MAR07	22JUN07	0	75*		· · · · · · · · · · · · · · · · · · ·			I	+	PT2240		
PT2300	TTMS CP Rd-KC N/B for 11NW-A/C66-Prep for Review	16	22FEB07	12MAR07	0	16	1					PT2300	1		
PT2310	TTMS CP Rd-KC N/B for 11NW-A/C66 - CRE Endorse	6	20FEB07	25FEB07	0	6		i i		PT23	10	Ì	Ì		i i
PT2320	TTMS CP Rd-KC N/B for 11NW-AC66 - Roadwks Advice	7	26FEB07	04MAR07	0	7					PT2320	1	1		
PT2330	TTMS CP Rd-KC N/B for 11NW-A/C66 - Site Prepare	6	05MAR07	10MAR07	0	6					P	т2330			
PT2340	TTMS CP Rd-KC N/B for 11NW-A/C66 - Implement	147*	12MAR07	03SEP07	0	147*					PT2340				
Earthworks	& Slopeworks - 11NW-A/C26				1	1			1	1		1	1	1	
PE1040	Slope 11NW-A/C26 - Finishing Works	12	12OCT04A	22FEB07	90	1			<mark>──┼</mark> ╋──₽₽	PE1040			Ì		
Earthworks	& Slopeworks - 11NW-A/C66				1	1				1		T 	 	1	
PE2000	Slope 11NW-A/C66 - Hoardings / Fencing	6	12MAR07	17MAR07	0	6						F	E2000		
PE2010	Slope 11NW-A/C66 - Trim Slope	18	22MAR07	12APR07	0	18						1 1 1			
PE2015	Slope 11NW-A/C66 - Platform for Soil Nailing	18	13APR07	04MAY07	0	18	1					 	1		
PE2017	Slope 11NW-A/C66 - Soil Nails - Test Nail	12	05MAY07	18MAY07	0	12	1		i I			1			
PE2020	Slope 11NW-A/C66 - Soil Nails (incl. Testing)	60	19MAY07	30JUL07	0	60	1	, I I I I I	i I			1 	1		
	Vall CCR-R5 (Pre-bored "H" Piles)		I	I											
PW2140	Ret. Wall CCR-R5 - Complete Fill Behind Wall	12	22FEB07	07MAR07	0	12				I	PW21	40	1		
	•				1 -	-	1					1		1	
PW2230	Ret. Wall CCR-R5 - Slope Works Behind Wall	36	08MAR07	19APR07	0	36		i i	1 	I		1	T	T T	1

Start Date	
Finish Date	
Data Date	

23SEP03 01NOV08 20FEB07

Highways Department Contract No. HY/2003/01 Route 8 - Lai Chi Kok Viaduct 3 Month Rolling Programme from 21 February 2007 Sheet 12 of 13

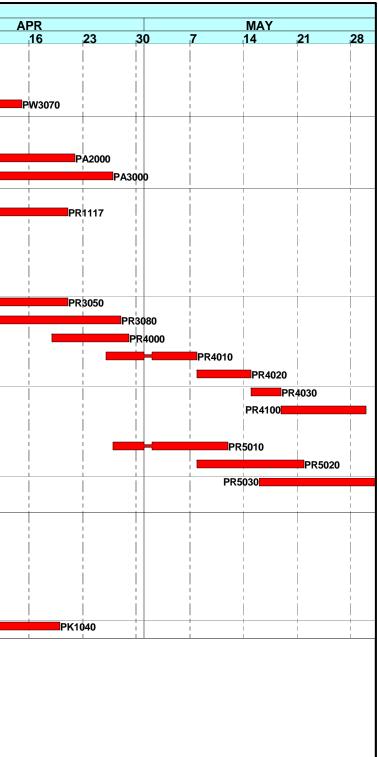




Activity	Activity	Orig.	Early	Early	%	Rem		FEB				MAR		2007	
ID	Description	Durn.	Start	Finish	Compl	Durn.		5 <u>12</u>	19	26	5	12 19	26	2	9
Retaining V	Wall CCR-R6 (Value Engineering Design)								i l					l i	
PW3250	Ret. Wall CCR-R6 - Bases to R.C. Walls	48	22AUG06A	23FEB07	95	2		· ·		PW3250	i I I		l I		i I
PW3260	Ret. Wall CCR-R6 - R.C. Walls	48	280CT06A	23MAR07	54	20							PW3260		
PW3070	Ret. Wall CCR-R6 - Fill Behind Ret Wall	36	03MAR07	14APR07	0	36									
Drainage W	Vorks										1				
PA1200	C.P.Rd Loop to Slip Road C - Stormwater Drainage	18	03OCT06A	24FEB07	70	3			┉	PA1200			l		
PA2000	C.P.Rd-K.C. S/B - Stormwater Drainage	24	24MAR07	21APR07	0	24									
PA3000	C.P.RdK.C S/B to C.C. Rd E/B - Storm Drainage	36	15MAR07	26APR07	0	36	1 i		i 🗌	i l	İ				
Utilities & I	Roadworks					1					1				
PR1117	New CLP 11Kv Cable Laying in front of CCR-R5	18	30MAR07	20APR07	0	18									
PR3000	C.P.Rd. Loop to Slip Road C - Formation	13	22FEB07	08MAR07	0	13					PR3	000	I		
PR3010	C.P.Rd. Loop to Slip Road C - Sub-base	12	02MAR07	15MAR07	0	12						PR3010			
PR3020	C.P.Rd. Loop to Slip Road C - Kerbs	18	09MAR07	29MAR07	0	18			i l					PR3020	
PR3040	C.P.Rd. Loop to Slip Road C - Pavement	6	30MAR07	06APR07	0	6				i l			i i		PR3040
PR3050	C.P.Rd. Loop to Slip Road C - Street Lighting	12	07APR07	20APR07	0	12									
PR3080	C.P.Rd. Loop to Slip Road C - Crash Barriers	18	07APR07	27APR07	0	18									
PR4000	C.P.RdK.C. S/B L/H C/Way - Excavate & Format'n	9	19APR07	28APR07	0	9					1				
PR4010	C.P.RdK.C. S/B L/H C/Way - Sub-base	9	26APR07	07MAY07	0	9		1					l		
PR4020	C.P.RdK.C. S/B L/H C/Way - Kerbs	6	08MAY07	14MAY07	0	6									
PR4030	C.P.RdK.C. S/B L/H C/Way - Pavement	4	15MAY07	18MAY07	0	4	Í		İ	İ		İ			
PR4100	C.P.RdK.C. S/B R/H C/Way - Excavate & Format'n	9	19MAY07	29MAY07	0	9		l		l I	I I		l		
PR5000	C.P.Rd-K.C. S/B to C.C.Rd E/B - Excavate Road	18	22FEB07	14MAR07	0	18						PR5000			
PR5010	C.P.Rd-K.C. S/B to C.C.Rd E/B - Formation	12	27APR07	11MAY07	0	12							i I		
PR5020	C.P.Rd-K.C. S/B to C.C.Rd E/B - Sub-base	12	08MAY07	21MAY07	0	12									
PR5030	C.P.Rd-K.C. S/B to C.C.Rd E/B - Kerbs	18	16MAY07	05JUN07	0	18									
PR5100	C.C. Rd. W/B - Sign Gantry FADS7 at P15-P16	18	15MAR07	05APR07	0	18				i l	1				PR5100
Kiosk at SI	lip Road C					1			1						
PK1010	Kiosk at Slip Rd. C - Building Finishes	24	02JAN07A	12MAR07	30	16						PK1010			
PK1015	Kiosk at Slip Rd. C - Provision for E & M Contr'	0		12MAR07	0	0	-					•PK1015			
PK1020	Kiosk at Slip Rd. C - MVAC Installations	24	22FEB07	21MAR07	0	24							PK1020		
PK1030	Kiosk at Slip Rd. C - Electrical Works	24	08MAR07	05APR07	0	24	1 ¦							addi-ana	PK1030
PK1035	Kiosk at Slip Rd. C - FS Installation	24	08MAR07	05APR07	0	24	1 i	· 	i 🛛	İ				addi-ana	PK1035
PK1040	Kiosk at Slip Rd. C - Drainage Works	24	22MAR07	19APR07	0	24			1		1	 			

Start Date
Finish Date
Data Date

23SEP03 01NOV08 20FEB07



Delcan-Imtech-GTECH Joint Venture Contract No. HY/2003/05 Route 8 - Traffic Control and Surveillance System

5-week Rolling Programme of Site Works

Rev:	0								I																					
Item	Civil Area	Portion	Work Area	Activity	[8]Type of major equipmen	t	Fenb 07		+									Ma	ar-07								-			
No.					/ plant to be used	S S	M T	W	TF	S S	М	ΤW	/ T	F S	S	ΜT	W	Т	FS	S	M	ΓW	Т	FS	S <mark>S</mark>	M	ΤW	/ Т	F	S
						24 2	5 26 27	28	1 2	3 4	5	6 7	8	9 10	11	12 13	3 14	15 1	16 17	′ <mark>18</mark>	19 2	0 21	22	23 2	4 25	26 2	27 28	3 29	30	31
1	Works Area	A	DIGJV Site Office	Pesticide spraying	N.A.		N		R																					
2	Works Area	A	Subcontractor warehouse	Material preparation for cable containment / Cable laying	N.A.																									
3	Works Area	A	DIGJV Site Office	Assemble of control cabinet	N.A.	N	N	Ν	N																				-	
																												-		
4	Road T3	G	Road T3	Routine Checkings	Van																									
5	Road T3	G	Road T3 / Road Gantry	[3]Installation of Field equipment (Gantry refer: ADS1-	Special design lorry															_								-		
0	Rodd To	0	rioda ro / rioda Ganay	T3,FADS1-T3 & DS7-SHT)	opecial design long	R	RR	R	RR																				1	1
																									_		—		\vdash	
6	SHT	H1A, H1B, H1C	SHT (SB,NB, NPB, SPB)	Routine Checkings	Van																							+		
7	SHT	H1B & H1C	SHT(N/B, then S/B)	TCSS Traffic field equipment installation	Scissor lift														_	_								—	\square	
8	SHT	H1A, H1B, H1C	SHT (S/B & N/B)	Cable laying	Special design lorry	╉╌╋	N	N											_	_							_	—	\square	<u> </u>
o 9	SHT	H1A, H1B, H1C	SHT (5/B & N/B) SHT NPB, G/F - 1/F	[1] & [3]Installation of cable containment	Metal scaffolding			IN												_		-			_	╉─┼╴	+	+	\vdash	<u> </u>
9 10	SHT	H1A H1A	SHT NPB, G/F - 1/F SHT SPB, G/F - 1/F	[1] & [3]Installation of cable containment	Metal scaffolding				D	_			_		-					_		_			_	┢─┼╴	—	_	\vdash	
11	SHT	HIA	SHT SFB, G/F - 1/F SHT - CP, LV switch room	Wiring of control cabinet	Van				R	_			_							_		_			_	┢─┼╴	—	_	\vdash	
	SHT	H1A		Antenna mounting bracket	Van								_									_			_	<u> </u>	—	<u> </u>	\vdash	—
12			SHT - SPB & NPB				RR								_		_		_							↓ →	+	—	'	<u> </u>
13	SHT	H1A	SHT - SPB & NPB (L/P & U/P)	Dismantle of cable conduit	Van		RR	R	RR										_	_		_			_			+		
14	SHT	H1B & H1C	SHT - N/B & S/B	Cable termination	Scissor lift	╉╋					╉┼┼	+	+													F	4	-	\square	
15	SHT	H1A	SHT - NPB (G/F - U/P)	FRP joint site inpsection	Van	╉╋		IN			╉┼┼	+	+				-	\vdash	_		\vdash	+	+			┢┼┼	+	+	+_'	
10	0117	110		Deutine Obserbinger																		_				┢┙┝	╧╋	_	┢──'	_
16	SHT	H2	SHT - Open road Section	Routine Checkings	Van																							4		
17	SHT	H2	SHT Open road section	Cable laying	special design lorry																						4	4		
18	SHT	H2	SHT Open road section	[3]Remedial work of cable containment	special design lorry																				_	4	_	_	–'	
19	SHT	H2	SHT Open road section	Fibre cable splicing and termination	Van	R																				↓ →	\perp	_	\vdash	<u> </u>
																			_											_
20	SHT	H3	SHT - RCFE	Routine Checkings	Van																									
21	SHT	H3	SHT - RCFE (S/B first, then N/B)	 & [3]Installation of cable containment 	Special design lorry																									
22	SHT	H3	SHT - RCFE	Cable laying	Special design lorry		R R	R	R R																	7				
23	ENT	11, 12 & 13	ENT Tunnel (SB, NB, NPB, SPB, ADB, VB,	Routine checkings	Van																					1				
			Toll Plaza & Butterfly Valley)																											
24	ENT	12	ENT Tunnel (S/B & N/B)	[3] Cable laying	Special design lorry		R		R																					
25	ENT	12	ENT Tunnel (S/B & N/B)	[3]TCSS Traffic field equipment	Scissor lift		RR	R	R R																					
26	ENT	12	ENT - CP, LV switch room	[2][3] Cable containment	Van		R R	R	R R																	1				
27	ENT	I1 & I3	ENT - NPB / SPB (1/F & R/F)	Cable Containment	Metal scaffolding																									
28	ENT	11 & 13	ENT - NPB/SPB (G/F, 2/F & R/F)	Outdoor's cable containment	Metal scaffolding																									
29	ENT	11 & 13	ENT - SPB/SPB	Antenna mounting bracket	Van																					7				
30	ENT	I1 & I3	ENT -SPB/NPB (L/P & U/P)	Dismantle of cable conduit	Van		R R	R	R R																					
31	ENT	13	ENT - ADB (Control Rm, Computer Rm,	Cable containment	Van																									
			Telecom Rm. & Dark Rm, 2/F and R/F)			R		IN	N N																				1	1
32	ENT	13	ENT - Workshop Block	Cable Containment	Van		RR																							
33	ENT	12	ENT - Vent. Building (ELV Equip. Rm)	Cable Containment	Van		R																							
34	ENT	12	ENT - S/B & N/B	Cable Containment	Scissor lift		N N	Ν																						
35	ENT	12	ENT - S/B & N/B	Cable testing	Scissor lift																									
36	ENT	11	ENT -Butterfly Valley (Gantry GT104 & ADS		Special design lorry																									
			1)		1 0 9	N	N																						1	1
37	ENT	13	ENT - Toll plaza, Subway	[3] Cable laying	Special design lorry																									
38	ENT	13	ENT - ADB, G/F - 2/F	[3] Cable wiring	Metal scaffolding		N N	Ν	NN																			-		
					<u> </u>																							-		
39	LCKV	J1	LCKV	Routine checkings	Van																									
40	NWT	B & C	NWT (E/B, W/B & WEB)	Routine checkings	Van																									
41	NWT	B	NWT - E/B	[3]Cable containment installation	Scissor lift		RR	R																			-			
42	NWT	B	NWT - W/B	[3]Cable containment installation	Scissor lift		RR										+	\vdash				+	+				+	+-	<u> </u>	,
43	NWT	B	NWT. E/B & W/B	[3] cable laying	Special design lorry		RR										+	\vdash				+	+				+	+-	<u> </u>	,
43	NWT	B	NWT, E/B & W/B	[3]TCSS Traffic field equipment installation	Scissor lift	╡╴┣╴			RR																					
44	NWT	B	NWT, E/B & W/B NWT - CP, TCSS Room	Cable containment installation	Van	╡╴┣╴	RR		R																	F	-	-	P	_
45	NWT	C	NWT, WEB (control room)	Video wall & console installation	Van				RR													+	+				+	+-	<u> </u>	,
40	NWT	В	NWT, E/B & W/B	[2]Cable termination & testing	Scissor lift	╡╴┣╴					╉┼┼	+	+																	
47	NWT	B	NWT, E/B & W/B	[2] & [8]Cable bracket for leaky coaxial cable	Scissor lift																					H	4	-		
40	INVVI	D	INVVI, E/D & VV/D		SUSSUI IIIL	┨──┨──																+	+			┢┼┼	+	+	+—′	. <u></u>
					1	1	1 1	1																					4	_

Legend :

1 of 1

= Work Done = Public Holiday R - Re-scheduled N - New activity A - Awaiting of site access

Distribution: Arup-Johnny Mac, Hara,Alex C, Franco L, Hamlyn K, Joseph C, KT Chan, Patrick L, Philip C, PF Li, Sharon H, Tony C, Wilson W, Winnie M, Donald L, Johnny L, Kenny C

= Planned activity

Remark: The schedule only shows the anticipated works planned and shall be subject to changes which will be reported by daily labour forecast on ad-hoc bases.

[2] Works Subject to Traffic Tube arrangement [3] Works subject to condition of site access & civil provision.

[4] Works subject to SCURVY to relocate their containers in N/B

[5] Works subject to coordination with other services

[6] Works depend on ENT's contractor to complete their raised floor installation

[7] Works depend on Civil Contractor to rectify their provision [8] Works subject to the site access of the major equipment.



道易通聯營公司 DELCAN-IMTECH-GTECH JOINT VENTURE

Record Date: 02-03-2007

[1] Works depends on spatial co-ordination among related Main Contractor and TCSS.

APPENDIX M COMPLAINT LOG

Appendix M - Complaint Log

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
40318			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.	 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: 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 predrilling (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) 	
	Nob Hill	18 March 2004	The complaint was raised by the Citybase Property Management Ltd. (the management company of Nob Hill) and the Secretarty 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	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. 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.	Closed
			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	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.	
			residents living in the vicinity.	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. 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	

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
				Cheung Road, which is located very close to this building, especially at or above the Podium Floor (i.e. 5/F).	
				 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: 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. 	
				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.	

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
40330	Site Areas near Nob Hill	30 March 2004	 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. 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. 	 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. 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: To space out noisy equipment and position it as far away as possible from the sensitive receivers; 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	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. NECSO referred the complaint to the RSS and subsequently referred to the ET Leader of the Project on 6 April 2004	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. 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. 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 Road in front of Nob Hill.	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
Log Ku				 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. 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). 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 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 	Status
				 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	A public complaint was raised on 30 th 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. The complaint was referred to the RSS on 3 rd July 2004 and subsequently	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. 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 5 th July 2004.	Closed
			referred to the ET Leader of the Project on 10 th July 2004. The complaint was raised by Mr. Chan,	During ET's weekly environmental site inspection on 14 th July 2004, no serious water quality nuisance induced by the Project works was observed at the construction sites near Pier P7. It was also noted that the back of profile barriers along the site boundary had been sealed up by cement as preventive measures.	

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
			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.	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.	
				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.	
				 Nevertheless, the Contractor was recommended to adopt the following measures to avoid re-occurrence of similar incidents: 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	22-Jul-04 (by EPD) 09-Aug-04 (by ET Leader)	 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. 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: 	 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. Area A: 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) Area B: No construction activity was undertaken in the concerned period. 	Closed
			 Area A: Works area between Nob Hill and Lai Chi Kok Park Swimming Pool Area B: Works area between Ching 	<i>Review of Environmental Monitoring Results</i> The routine monitoring stations, which are in the vicinity of the concerned works areas, include: <u>Noise Monitoring</u>	

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
Log Ref.	Location	Received Date	Details of Complaint Cheung Road and Mei Lai Road / Lai Wan Road opposite to Mei Foo Sun Cheung (Phase 5) and Lai Chi Kok Public Library.	 NM4: R/F of Mei Foo Sun Chuen (Phase 5) NM8a: M/F of Nob Hill Air Quality (1-hr TSP / 24-hr TSP) Monitoring AM2: R/F of Lai Chi Kok Sports Centre No Action / Limit level exceedance was identified in July 2004. <i>Environmental Site Inspection</i> 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. <i>Conclusions</i> 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: 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; 	Status
				 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. 	
50215	Mei Foo Sun Chuen, Phase 5 (Retaining Wall CC-R3)	15-Feb-05 (by ET Leader)	A public complaint was raised on 8 th Feb 2005 regarding construction noise from the site area of the Route 8 – Lai Chi Kok Viaduct (R8-LCKV) Project	<i>Construction Activities</i> During the weekly site inspection on 17 Feb 05, piling work was being conducted at the concerned. The major powered	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
Lug Kei.		Acceived Date	near Mei Foo Sun Chuen. The complaint was referred to the Resident Site Staff on 14 th Feb 2005 and subsequently referred to the ET Leader of the Project on 15 th Feb 2005. 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.	 mechanical equipment (PME) in operation included a mobile crane, an air compressor, a reverse circulation drill and a generator. 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. <i>Environmental Monitoring</i> The noise monitoring results at Station NM4 (Mei Foo Sun 	Status
				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)). 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).	
				Conclusions	
				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.	
				Nevertheless, the Contractor was recommended to adopt good site practice to minimize the construction noise impacts.	
50322	Seung Lai House, Wah Lai Estate	11-Mar-05 (by EPD)	Environmental Protection Department (EPD) received a public noise complaint on 11 Mar 05 about daytime	Construction Activities As advised by the RSS, the major construction work during 25	Closed
	(Slope S1)	22-Mar-05 (by ET Leader)	construction noise generation from R8- LCKV. EPD subsequently referred the	Feb 05 to 11 Mar 05 (2 weeks before the date of complaint) in the vicinity of Wah Lai Estate included excavation work, soil	

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
			complaint to the Environmental Team (ET) Leader of the Project on 22 Mar 05. 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.	 nail work and installation of u-channel and manholes. The major powered mechanical equipment included excavators, drilling machine and air compressor. 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. <i>Environmental Monitoring</i> 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. <i>Conclusion</i> 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. 	
50330, 50331, 50404 & 50407	Wah Lai Estate	30-Mar-05, 31- Mar-05, 4-Apr- 05 & 7-Apr-05 (by ET Leader via RSS)	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	<i>Construction Activities</i> 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.	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
			referred by the Resident Site Staff to the Environmental Team (ET) Leader on 30 th , 31 st March, 4 th and 7 th April 2005, respectively.	Investigation/Milgation Action Environmental Monitoring Ad-hoc noise measurement was conducted at Seung Lai House on 30 th Mar 05 and 7 th 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. Conclusion 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. Mitigation 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).	
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	<i>Construction Activities</i> 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.	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
			April 2005.	Environmental Monitoring	
				According to the EM&A Manual, Mei Foo Sun Chuen, Phase 5 (NM4) is designated as one of the noise monitoring stations.	
				Since the commencement of the impact monitoring programme, the construction noise levels recorded at this station were all below the noise criterion.	
				Conclusion	
				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.	
				Mitigation	
				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.	
50613	Mei Foo Sun Chuen	7-Jun-05 (by EPD) 13-Jun-05 (by ET Leader)	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.	Site Activities 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.	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
Log Ref.	Location	Received Date	Details of Complaint The complainant was particularly concerned about the fugitive dust emission during rock / concrete breaking activities.	Investigation/Mitigation ActionObservationsOn 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.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.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.ConclusionBased on the observations noted during our site inspections, this 	Status
				However, corrective action had been taken by the Contractor and the situation was found improved during the follow-up inspections.	
50721	Hei Lai House, Wah Lai Estate	21-Jul-05 (by ET Leader)	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.	Site Activities 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. 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.	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
			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. 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.		
51107	Ching Cheung Road near Mei Foo Sun Chuen	7-Nov-05 (by the ET Leader)	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. According to EPD, the complaint was	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. <i>Site Inspection</i> After receipt of the complaint, an ad-hoc site inspection was carried by ET on 9 November 2005 and the following	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
			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.	 observations were made: 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. <i>Environmental Monitoring</i> 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. <i>Conclusion</i> Based on the ad-hoc site inspection and the environmental monitoring results, this complaint was considered not justifiable. 	
60118	Lai Po Road near Hoi Lai Estate	18-Jan-06 (by the ET Leader)	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. According to EPD, the complaint was lodged by a resident of Hoi Ming	 Site Activities 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: 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. The above night works, which involved operation of tractor, 	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
Log Iul.			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.	mobile crane, lifting frame and generator, were undertaken under the two construction noise permits CNP no. GW-RW0739-05 and GW-RW0740-05. <i>Environmental Monitoring</i> 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). <i>Conclusion</i> Based on the information collected and the monitoring results, the complaint is considered not justifiable. Nevertheless, the Contractor was reminded to take sufficient noise mitigation measures to minimize the environmental impact on the nearby community.	Status
60119	Mei Foo Sun Chuen (Phase 5)	18-Jan-06 (by the ET Leader)	 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. According to EPD, the complaint was raised by a resident of Mei Foo Sun Chuen via a Sham Shui Po District 	 Site Activities The site of concern was likely to be CCR-S4, CCR-R2 and CCR-R3. According to RSS's records, site activities included: 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. Site Inspection After receipt of the complaint, an ad-hoc site inspection was carried by ET on 19 January 2006. No environmental deficiency 	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
			Council Member's Office. The complaint mentioned that residents of	regarding construction dust was identified during the inspection.	
			Mei Foo Sun Chuen Stage 5 were adversely affected by construction dust	Environmental Monitoring	
			caused by the Route 8 work carried out at the slopes adjacent to Ching Cheung Road.	All monitoring results in Jan 06 revealed that no exceedance was recorded for the air quality (1-hr and 24-hr TSP) criteria.	
				Contractor's Action	
				 The Contractor of R8-LCKV had implemented several dust mitigation measures: 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. 	
				Conclusion	
				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.	
60213	H. H. Frank	13-Feb-06 16-Feb-06 20-Feb-06	Four environmental complaints were received in this reporting month. Three of them were referred by EPD on 13 th , 20 th and 22 nd Feb 06 and the other one was referred by HyD via MHJV on 16 th Feb 06.	<i>Site Activities</i> Since around mid-January 2006, segments were transported to Piers P15 and B4, under the permission of construction noise permit (CNP).	
60216 60220 60222	Hoi Lai Estate (Lai Po Road)	22-Feb-06 (by the ET Leader)	All about construction noise due to night works at Lai Po Road near Hoi Lai Estate.	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.	Closed
				Site Inspection	

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
				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).	
				Conclusion	
				Based on the information collected and the monitoring results, the complaints are considered not justifiable.	
				It was suspected that the nuisance was caused by the alert sound of tractors during backward movement which servers 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.	
			Environmental Protection Department	Site Activities	
			(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.	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 hours16 April 2006.	
			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.	 The construction activities near Hoi Lai estate included: - 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. 	

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)		 The above construction activities were undertaken under a construction noise permit CNP no. GW-RW0172-06. 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. <i>Contractor's Action</i> The Contractor had implemented a short term mitigation measures:- 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, 	Close
				 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. 	
				Based on the information collected and the monitoring results, the complaints are considered not justified.	
				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.	
				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.	

Log Ref. Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
60428 Between Ching Cheung Road and Mei Lai Road (near Phase 5 of Mei Foo Sun Chuen)	28-Apr-06 (by the ET Leader)	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. The complaint was about the Contractor cu 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.	 Site Activities 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. 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. Contractor Action 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 tress. No follow up action was required for this complaint. Conclusion Under the EP conditions and EIAO, there is no need for this project to mitigate the traffic noise barrier effect due to the removal of tress. No follow up action was required for this complaint. Conclusion Under the EP conditions and EIAO, there is no need for this project to mitigate the traffic noise barrier effect due to the removal of trees. Based on the information collected, the complaint is considered not justifiable. 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. Compensatory planting will be provided at the concerned area after completion of the construction works in order to improve the landscape and visual impacts. No follow up action will be required for this complaint. 	Close

Environmental Protection Department (EPD) received a public complaints about noise nuisance generated from Route 8 – Lai Chi Kok Viaduct Project. Site Activities Site Activities According to the RSS's records, only precast segment transportation works at the concerned area which was used as the	
60522Hoi Lai Estate (Hoi Fai House)22-May-06 (by ET Leader)22-May-06 (by ET Leader)22-May-06 (by ET Leader)22-May-06 (by ET Leader)22-May-06 (by ET Leader)22-May-06 (by ET Leader)22-May-06 (by ET Leader)22-May-06 (by ET Leader)22-May-06 (by ET Leader)22-May-06 (by ET Leader)22-May-06 (by ET Leader)22-May-06 	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
			The Integrated Complaint Centre (ICC) of HKSAR received a public complaint	not justifiable. 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. Site Activities	
			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. 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	As advised by the RSS, the site of concerned area was likely to be CCR-S4. According to the RSS's records, 1 number of excavator mounted breaker was unsed to carry out rock breaking work at CCR-S4 during the period between 9 a.m. and 6 p.m. The excavation and rock breaking activities at the concerned area will likely be completed by end of September 2006.	
			Cheun).	Contractor Action	
60609	Near Phase 5 of Mei Foo Sun Chuen	9-Jun-06 (by ET Leader)		The silent rock breaking equipment has been used and noise barriers were erected to minimize the noise impact generated from the breaking activity.	Closed
				Site Inspection and Environmental Monitoring 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.	
				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.	
				Noise measurement was carried out during the inspection to	

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
				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).	
				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).	
				Conclusion	
				Base on the information collection and the monitoring result, the complaint was considered not justifiable.	
				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.	
				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)	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. 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	 Site Activities As advised by the RSS, the site of concerned area was likely to be CCR-S4. According to the RSS's records, 1 number of excavator mounted breaker was unsed to carry out rock breaking work at CCR-S4 during the period between 9 a.m. and 6 p.m. The excavation and rock breaking activities at the concerned area will likely be completed by end of September 2006. Contractor Action 	Closed
			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	The silent rock breaking equipment has been used and noise barriers were erected to minimize the noise impact generated from the breaking activity.	

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
			and eventually reached the ET on 26 June 2006.	Site Inspection and Environmental Monitoring	
			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).	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.	
			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	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.	
			complaint investigation report was issued on 22 June 06. 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.	In addition to the noise measurement conducted on 14 and 16 June 2006, further noise measurement was carried out on 30 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). 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)	
			investigation procedures were initiated.	Conclusion	
				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.	
				Base on the information collection and the monitoring result, the complaint was considered not justifiable.	
				The Contractor had implemented noise mitigation measures to minimize the noise impact. Besides, the monitoring result were	

Log Ref. Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
Log Ker. Location		The Integrated Complaint Centre (ICC) of HKSAR received a public complaint on 25 August 2006 about an environmental nuisance generated from	 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. The environmental conditions of the site will be continuously reviewed by the RSS and the ET. Site Activities According to RSS's record, rock dowel installation for slope stabilization at CCR-S1 was commenced on 22 August 2006 and 	Status
Near Mei Foo and Lai King Hill Road	30-Aug-06 (by ET Leader)	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. The complaint was concerned about 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.	 would likely last for at least 6 months. <i>Contractor Action</i> After receiving the complaint, the Contractor has further enhanced the dust mitigation measures as follows:- 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. <i>Site Inspection and Environmental Monitoring</i> 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. <i>Conclusion</i> Base on the information collected and the monitoring results, the complaints are considered not justifiable. It was because there was no exceedance of the air quality 	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
				monitoring results and dust mitigation measures were implemented by the Contractor during the rock drilling works. However, the Contractor was still reminded to take sufficient dust mitigation measures to minimize the environmental impact	
				 on the nearby community: 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.	
				The environmental conditions of the site will be continuously reviewed by the RSS and the Environmental Team through site inspections and monitoring exercises.	
			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.	<i>Site Activities</i> 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. <i>Contractor Action</i>	
60831	Between Lai Wan Road and Lai King Hill Road	Load and ing Hill31-Aug-06 (by ET Leader)	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	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.	Closed
			abonargou to exiting roud respectively	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:-	
				• Enclosing the rock dowel drilling work on three sides, i.e.	

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
				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.	
				Site Inspection and Environmental Monitoring	
				During the monthly site inspection on 4 th 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.	
				Conclusion	
				Base on the information collected and the monitoring results, the complaint was considered not justifiable.	
				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.	
				However, the Contractor was still recommended to take the following mitigation measures to minimize the environmental impact on the nearby community:	
				Dust Nuisance	
				• 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.	

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
Log Kei.	Location			Construction Noise 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. Wastewater Discharge • 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. 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.	Status
60925	Near Ching Cheung Road, Nob Hill and Mei Lai Road	25-Sep-06 (by ET Leader)	The Integrated Complaint Centre (ICC) of HKSAR received a public complaint on 25 September 2006 about the 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 25 September 2006. The complaint was concerned about the noise generated from the construction works after 19:00 at the area near Ching Cheung Road, Nob Hill and Mei Lai Road	 Site Activities According to RSS's record, rock dowel installation for slope stabilization at the Slope CCR-S1 was commenced on 22 August 2006 and would last for at least 6 months and the first batch of rock drilling works at the Slope CCR-S4 was commenced on 19 September 2006 and completed on 23 September 2006. <i>Contractor Action</i> After receiving the complaint, the Contractor has further enhanced the noise mitigation measures as follows:- Placing of a wooden box to cover the head of drilling; Spraying of water at the hole during drilling and erecting of nylon sheets; Providing silent type drilling rigs for the drilling works at both Slopes CCR-S1 and CCR-S4 Site Inspection and Environmental Monitoring 	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
				During the weekly site inspection on 27 September 2006, rock drilling at the Slope CCR-S1 was not carrying out. The ET observed that the work area was enclosed by tarpaulin sheets at three sides. Temporary noise barrier was erected at the working platform of the Slope CCR-S1.	
				The ET also undertook an ad hoc site inspection at the concerned areas after 19:00 on 27 September 2006. No construction activities were observed and noise monitoring was not conducted.	
				Conclusion	
				Base on the information collected and the monitoring results, there was no exceedance of the noise monitoring results and noise mitigation measures were implemented by the Contractor during the rock drilling works.	
				However, the Contractor was still reminded to carry out construction activities only within the permitted working hours (i.e. $07:00 - 19:00$ on weekday) and to take sufficient noise mitigation measures to minimize the environmental impact on the nearby community:	
				• Provide silent type drilling rigs for the drilling works;	
				Placing of wooden box to cover the head of drilling;Apply water spraying for at the hole during drilling;	
				The environmental conditions of the site will be continuously reviewed by the RSS and the Environmental Team through site inspections and monitoring exercises.	
61025	Lai Chi Kok Road Flyover near PCCW building	25-Oct-06 (by ET Leader)	The Integrated Complaint Centre (ICC) of HKSAR received a public complaint on 25 th October 2006 regarding noise nuisance generated from Route 8 – Lai Chi Kok Viaduct R8-LCKV) Project. Resident Site Staff (RSS) subsequently	<i>Site Activities:</i> According to RSS's record, installation of catchfan at Pier P5/L to P6 near PCCW was carried out at around 0115 to 0500 at both nights of 19 th and 20 th October 2006. The construction equipment used in both nights included one mobile crane, one crane lorry and one generator.	Closed

referred the complaint to the ET Leader on 25 th October 2006. The complaint was concerned about the noise nuisance generated from workers and construction vehicles during the mid-night between 0100 and 0200 on	og Ref. Location	Log Ref.	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
 bioth 19th and 20th October 2006 at Lai bioth 19th and 20th October 2006 at Lai Chi Kok Road Flyover near PCCW building. <i>Environmental Monitoring</i> An ad-hoc site observation and noise monitoring at Hoi Fai An ad-hoc site observation and noise monitoring at Hoi Fai October 2006 between 0100 and 0130. The ET also carried out at Pier P5 to P6, which involved the operation of mobile crane and movement of lorry and trucks. During the monitoring results revealed that the measured noise levels were close to the reference background levelse. After correction of the mean background level, all corrected noise levels were below the noise criterion of 55 dB (A) which consists with the noise monitoring results from the Conclusion Based on the information collected, the complaint is considered justifiable although the monitoring results complied with the noise criteria. Nevertheless, the Contractor was reminded to take sufficient noise mitigation measures to minimize the environmental impact on the nearly community: To strengthen management on worker's working manner, such as avoiding dropping materials on ground; No hammering is allowed during restricted hours; and To provide adequate training to workers working, esp. for night works. 	g Ref. Location	Log Ref.	Received Date	referred the complaint to the ET Leader on 25 th October 2006. The complaint was concerned about the noise nuisance generated from workers and construction vehicles during the mid-night between 0100 and 0200 on both 19 th and 20 th October 2006 at Lai Chi Kok Road Flyover near PCCW	 Contractor Action According to RSS' record, acoustic material wrapping the head of chain blocks and hessian bags placing on ground around catchfans to suppress noise generation when hand tools were dropped onto ground. Environmental Monitoring An ad-hoc site observation and noise monitoring at Hoi Fai House of Hoi Lai Estate were conducted by the Contractor on 26th October 2006 between 0100 and 0130. The ET also carried out an ad-hoc inspection on 28th October 2006 from 0100 to 0200. During the inspection, segment erection work was carried out at Pier P5 to P6, which involved the operation of mobile crane and movement of lorry and trucks. During the monitoring, the major noise source identified was the road traffic noise. The 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) which consists with the noise monitoring results from the Contractor. Conclusion Based on the information collected, the complaint is considered justifiable although the monitoring results complied with the noise criteria. Nevertheless, the Contractor was reminded to take sufficient noise mitigation measures to minimize the environmental impact on the nearby community: To strengthen management on worker's working manner, such as avoiding dropping materials on ground; No hammering is allowed during restricted hours; and To provide adequate training to workers working, esp. for 	Status

Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
			reviewed by the Resident Site Staff and the Environmental Team.	
Pier C13 and C14 at Lai Wan Road Overpass	3-Nov-06 (by ET Leader)	The Integrated Complaint Centre (ICC) of HKSAR received a public complaint on 28 th October 2006 regarding noise nuisance generated from Route 8 – Lai Chi Kok Viaduct R8-LCKV) Project. Resident Site Staff (RSS) subsequently referred the complaint to the ET Leader on 3 rd November 2006. The complaint was concerned about noise generated from the general cleaning work of deck surface using water jet between Pier C13 and C14 at Lai Wan Road Overpass, at the evening of 28 th October 2006.	 Site Activities According to the RSS's record, there is a CNP (CNP no. GW-RW0563-06) at the concerned location. Construction activities were allowed to be carried out between 19:00hr and 23:00hr (any day not being a general holiday) under the CNP. Environmental Monitoring During the weekly site inspections in October 2006, no non-compliance or observation on noise was recorded. Accordance to the EM&A program, two noise monitoring stations at Nob Hill, namely (NM8a and NM8b), have been set up in order to monitor the noise level generated from the construction activities. The Station (NM8b) is strongly influenced by road traffic noise from Ching Cheung Road. The measurement at this station is for reference purpose, but not for compliance check for construction noise. All measured value were lower than the noise criterion of 75 dB(A). No exceedance of noise level has been recorded in October 2006. Moreover, based on our site observation record during monitoring, road traffic noise from Ching Cheung Road was the major noise source. Conclusion Based on the information collected, the complaint is considered not justifiable. Nevertheless, the Contractor was reminded to take sufficient noise mitigation measures to minimize the environmental impact on the nearby community: As the general cleaning work could be carried out during normal working hours (i.e. 07:00 to 19:00hr) instead as the work was not critical. RSS would remind the Contractor to programme their works better in order to minimize nuisance to nearby residents. 	Closed
	Pier C13 and C14 at Lai Wan	Pier C13 and C14 at Lai Wan 3-Nov-06 (by ET L ander)	Pier C13 and C14 at Lai Wan 3-Nov-06 Pier C13 and C14 at Lai Wan 3-Nov-06 Pier C13 and C14 at Lai Wan 3-Nov-06	Pier C13 and C14 at Lai Wan Road Overpass Pier C14 at Lai Wan Road Overpass Pier C14 at Lai Wan Road Overpass Pier C14 Pier

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
Log Ref.	Location Area near Lai Chi Kok Swimming Pool	21-Nov-06 (by ET Leader)	Details of Complaint The Integrated Complaint Centre (ICC) of HKSAR received a public complaint through telephone on 18 th November 2006 regarding noise nuisance generated from Route 8 – Lai Chi Kok Viaduct R8-LCKV) Project. Resident Site Staff (RSS) subsequently referred the complaint to the ET Leader on 21 st November 2006. The complaint was concerned about noise generated from the construction works between 09:00 and 18:30 at the area near Lai Chi Kok Swimming Pool.	Investigation/Mitigation ActionTeam.Site ActivitiesAccording to RSS's record, rebar fixing, formwork erection, placing concrete and preparation work for construction joint were carried out at the concerned site during the period of 13th to 18th November 2006 and the construction works within the mentioned period were occasionally finished at 18:30.As advised by the RSS, the RSS has recommended the Contractor to finish the construction works at the concerned areas before 18:00 in order to minimize the noise nuisance to the public.Environmental MonitoringDuring the weekly site inspections in November 2006, no non- compliance or observation on noise was recorded.Accordance to the EM&A programme, one noise monitoring station at Mei Foo Sun Chuen, Phase 5 (NM4) and two noise monitoring stations at Nob Hill, namely (NM8a and NM8b), were set up in order to monitor the noise level generated from the construction activities. The Station (NM8b) is strongly 	Status

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
				construction works at the concerned areas before $18:00$ and to carry out construction activities only within the permitted working hours (i.e. $07:00 - 19:00$ on weekday).	
				The environmental conditions of the site will be continuously reviewed by the RSS and the Environmental Team through site inspections and monitoring exercises.	
	Construction works opposite Tong Nai Kan College	21-Nov-06 (by ET Leader)	The Integrated Complaint Centre (ICC) of HKSAR received a public complaint through telephone on 17 th November 2006 regarding dust and noise nuisance generated from Route 8 – Lai Chi Kok Viaduct R8-LCKV) Project. Resident Site Staff (RSS) subsequently referred the complaint to the ET Leader on 21 st November 2006. The complaint was concerned about dust and noise generated from the construction works opposite Tong Nai Kan College in the past years.	<i>Site Activities</i> According to RSS's record, construction works adjacent to Tong Nai Kan College in the past years included the construction of Retaining Wall CCR-R3 and Slip Road D.	
				As advised by the RSS, noise and dust mitigation measures such as provision of noise barriers and acoustic materials at drill pit, dust suppression system and water browser were provided in order to minimize the noise and dust nuisance generated from the above mentioned construction activities.	Closed
				Environmental Monitoring	
61121-2				During the weekly site inspections in November 2006, no non- compliance or observation on noise and air at the concerned site was recorded.	
				Accordance to the EM&A programme, one noise monitoring station at Mei Foo Sun Chuen, Phase 5 (NM4) and one air monitoring station at Lai Chi Kok Sports Centre (AM2), were set up in order to monitor the noise and dust level generated from the construction activities.	
				The monitoring results revealed that no exceedance was recorded for the noise and air quality (1-hr and 24-hr TSP).	
				<i>Conclusion</i> Base on the information collected and the monitoring results, the complaint was considered not justifiable.	
				However, the Contractor was still reminded to continuously implement their practice, such as providing noise barrier with	

Log Ref. Locatio	on Received Date	Details of Complaint	Investigation/Mitigation Action	Status
		Environmental Protection Department	acoustic materials at drill pit and applying water spraying for any dust emissive activities to minimize the noise and dust nuisance generated from these construction activities. The environmental conditions of the site will be continuously reviewed by the RSS and the Environmental Team through site inspections and monitoring exercises. Site Activities	
61205 Banyan Ga	arden 5 th December 2006 (by ET Leader)	 (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 5th December 2006. The complaint was concerned construction noise near Banyan Garden within the period of 01:00 – 02:00hr on 29th November 2006. 	 According to RSS's record, a catchfan was moved from bay (AL-62) to (AL-58) from 22:00 to 02:00hr. Installation of catchfan at parapet bay (MS-R-74) was carried out from 00.00 to 04:00hr on 29th November 2006. As advised by the RSS, the Contractor has been requested to: Wrapping of tools with acoustic material Erection of noise barrier (mill barrier with acoustic material) adjacent to isolated noise source Placing of hessin bags on ground to mitigate noise generated as a result of the dropping of tools on ground. According to the RSS, there is no evidence of hammering of metals on site. <i>Conclusion</i> Based on the information collected, the complaint is considered unjustifiable. Nevertheless, the Contractor was reminded to take sufficient noise mitigation measures to minimize the environmental impact on the nearby community: To strengthen management on worker's working manner, such as avoiding dropping materials on ground; No hammering is allowed during restricted hours; and To provide adequate training to workers working, esp. for night works. 	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
70117-1	P6 – P8 near Lai Chi Kok Road Interchange	17 th January 2007 (by ET Leader)	The Integrated Complaint Centre (ICC) of HKSAR received a public complaint through telephone on 16 th January 2007 regarding noise nuisance generated from Route 8 – Lai Chi Kok Viaduct R8-LCKV) Project. Resident Site Staff (RSS) subsequently referred the complaint to the ET Leader on 17 th January 2007. The complaint was concerned about noise generated from the P6 – P8 near Lai Chi Kok Road Interchange in the past months.	 Site Activities According to RSS's record, the construction activities at the concerned area was mainly central stitch construction and parapet erection and similar works will be carried out in the concerted site in coming one month. The equipment used on site during the complaint period was covered under the construction noise permit (CNP) no. GW-RW0624-06. Based on the RSS's record of PME used in the concerned area from 15 November 2006 to 30 December 2006, the construction works complied with the CNP no. GW-RW0624-06. <i>Conclusion</i> Based on the information collected, the complaint is considered unjustifiable as the equipment used complied with the CNP conditions. Nevertheless, the Contractor was recommended to take further noise mitigation measures to minimize the environmental impact on the nearby community: To strengthen management on worker's working manner, such as avoiding dropping materials on ground; No hammering is allowed during restricted hours; and 	Closed
70117-2	P3 – P6 near Banyan Garden	17 th January 2007 (by ET Leader)	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 17 th January 2007. The complaint was concerned construction noise near Banyan Garden within the period of 01:00 – 02:00hr on 11 th January 2007.	Site Activities According to RSS's record, the construction activities at the concerned area was mainly central stitch construction and parapet erection and similar works will be carried out in the concerned site in coming one month. The equipment used on site during the complaint period was covered under the construction noise permit (CNP) no. GW- RW0624-06. Based on the RSS's record of PME used in the concerned area from 1 st December 2006 to 13 th January 2007, the construction	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
				works complied with the CNP no. GW-RW0624-06.	
				<i>Conclusion</i> Based on the information collected, the complaint is considered	
				unjustifiable as the equipment used complied with the CNP conditions.	
				Nevertheless, the Contractor was recommended to take further noise mitigation measures to minimize the environmental impact on the nearby community:	
				- To strengthen management on worker's working manner, such as avoiding dropping materials on ground;	
				 No hammering is allowed during restricted hours; and To provide adequate training to workers working, esp. for 	
				night works.	