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)

April 2006

Approved By	Chuph
	(Environmental Team Leader)

REMARKS:

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

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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 twenty-ninth 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 April 2006 for Contract No. HY/2003/01, Lai Chi Kok Viaduct (the Project).
- The major site activities undertaken in the reporting month included construction of abutments and columns, excavation works and segment erection works.

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 alletel	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	2	0	2	Complaint reports were issued to all relevant parties

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). Three 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	ixemat k	
Complaint received	2	Noise	Complaint Investigation	Closed		
Changes to the assumptions and key construction / operation activities recorded	0		N/A	N/A		
Status of submissions under EP	0		N/A	N/A		
Notifications of any summons & prosecutions received	0		N/A	N/A		

Future Key Issues:

Major site activities for the coming month include:

- Construction of Abutment M and cross head of column at Pier;
- Bulk excavation works and rock dowels installation at slope CCR-S1;
- Soil nail installation at slope CCR-S4;
- Bulk excavation works at slope CCR-S4, CCR-S5, CCR-R3, CCR-R4 & CCR-R6;
- Retaining wall construction at CCR-R1 to CCR-R6;
- Drainage works at Rest Garden area, Hoi Lai Estate Y piers B1;
- Offsite fabrication of pre-cast deck segment mould and segment casting;
- Segment erection by launching gantry at night at per P20;
- Cast in-situ of slip road C;
- Cast in-situ and precast segment erection at slip road D; and
- Segment erection by lifting crane at pier D1, D3, D7, PA/L & Abutment D.

The anticipated environmental impacts will be mainly on noise impact from excavation works and water quality impact during rainy days.

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. An Environmental Monitoring and Audit (EM&A) Manuals for each of the R9 EIA Reports (EM&A Manuals) were also included as part of the EIA reports in the register.
- 1.5 Subsequent to the endorsement of the R9 EIA Reports by EPD in November 1999, the project programme was deferred to start in 2002/2003 for completion by 2006/07. The implementation of the project was then separated into the R9S and R9K portion. An Environmental Permit (EP) No. EP-103/2001 was issued on 17 September 2001 for R9K to the HyD as Permit Holder 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 twenty-ninth monthly EM&A report summarizing the EM&A works for the Project in April 2006.

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.
- 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 undertaken in the reporting month were:
 - Construction of abutment at slip roads C & D and column at P21 and slip roads D;
 - Rock dowel installation and soil nail installation at slopes CCR-S1;
 - Bulk excavation works at CCR-S4;
 - Bulk excavation works and retaining wall construction at CCR-R1, CCR-R3, CCR-R4, CCR-R5 and CCR-R6;
 - Drainage works at Hoi Lai Estate, Piers B1, P9 and P10;
 - Offsite fabrication of pre-cast deck segment moulds and segment casting;
 - Segment erection by lifting frame at pier D6;
 - Segment erection by launching gantry works at night at Pier P18/R, P19 and P20;
 - Segment erection by lifting crane at Pier PA/R, P1/R, P4/R, P18/R, D1, D3 and Abutment D;
 - Cast in-situ of slip roads C and D; and
 - Backfilling slope at CCR-S5.

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. D.F. Lilliman	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	The ET Leader	2151 2089		
Cinotech Environmental Team		Miss Attle Hui	Audit Team Leader	2151 2093	3107 1388	
	Mr. Henry Leung	Monitoring Team Leader	2151 2087			
Independent		Mr. David Yeung	Independent Environmental Checker	2872 2934	2507 2202	
	Environmental Checker	Mr. Billy Yu	Assistant Independent Environmental Checker	2872 2949	2507 2293	
Acciona	Contractor	Mr. Rafael Rubio	Project Director	2956 3300	2956 3331	
	Contractor	Mr. Lawrence Kwok	QA/E Manager	2930 3300	2930 3331	
24-hour Er	nergency Hotline			2370 9200	-	

Table 1.1Key Project Contacts

Summary of EM&A Requirements

- 1.12 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.
- 1.13 The advice on the implementation status of environmental protection and pollution control/mitigation measures is summarized in Section 4 of this report.
- 1.14 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.
- 2.19 No Action/Limit Level exceedance was recorded for both 1-hr and 24-hr TSP monitoring.
- 2.20 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**.
- 2.21 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 Four designated noise monitoring stations, namely 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*	Description	Location
NM4	Mei Foo Sun Chuen, Phase 5	Rooftop of Block 9
NM8a	Nob Hill	M/F of Car Park
NM8b	Nob Hill	3/F of Car Park
NM9	Hoi Lai Estate	G/F of Hoi Fai House

Table 3.1Noise Monitoring Stations

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

(2) 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.

3.6 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

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

Table 3.2Noise 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

3.8 **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
1 4010 0.0	rouse monitoring runanceers, rrequency and Duration

Stations	Parameter	Period	Frequency	Measurement
NM4				Façade
NM8a	$L_{10}(30 \text{ min.})dB(A)$	0700-1900 hrs.	Once per	Façade
NM8b	$L_{90}(30 \text{ min.})dB(A)$ $L_{eq}(30 \text{ min.})dB(A)$	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
 - time weighting : Fast
 - time measurement : 30 minutes / 5 minutes
- Prior to and after each noise measurement, the meter was calibrated using a Calibrator for 94.0 dB at 1000 Hz. If the difference in the calibration level before and after measurement was more than 1.0 dB, the measurement would be considered invalid and repeat of noise measurement would be required after re-calibration or repair of the equipment.
- The wind speed was frequently checked with the portable wind meter.

- At the end of the monitoring period, the L_{eq} , L_{90} and L_{10} were recorded. In addition, site conditions and noise sources were recorded on a standard record sheet.
- Noise measurement was paused 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

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

Results and Observations

- 3.11 Noise monitoring was performed at the four designated locations as scheduled in this reporting month.
- 3.12 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.
- 3.13 Noise monitoring results and graphical presentations are shown in Appendix G.
- 3.14 Two Action Level (noise complaint) exceedances were recorded on 20th and 28th April 2006. No Limit Level exceedance was recorded in the reporting month.
- 3.15 On 20th April 2006, EPD referred a public complaint about construction noise due to night works at both Hoi Lai Estate and West Kowloon Highway between 14th and 17th April 2006. According to the RSS's records, the construction works were carried out by the contractor from day time to 2230 hours on 14th April 2006 and from 2000 hours to 0600 hours 16th April 2006 at the area near Hoi Lai Estate. Construction night works were undertaken by the Contractor under valid CNP No. GW-RW0172-06. In addition, the Contractor had implemented mitigation measures such as turned off the alert sound of tractors during backward movement and have strengthened their management on worker's working manner. Finally, night works at the concerned location were completed and no further construction work at night will be carried out. The complaint report was issued to EPD on 28th April 2006.

- 3.16 On 28th April 2006, EPD referred 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). The complaint was related to the existing traffic noise impact generated from Ching Cheung Road due to the temporary removal of existing trees by this report. 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 was considered not justifiable. Since excavation for cut slopes and construction of slip road D are required at this area, tree cutting is unavoidable. Besides, the tree felling was approved by DLO/KW. No follow up action was required for this complaint. The complaint report is provided in **Appendix M**.
- 3.17 At Stations NM8a and NM8b, the major noise source identified during the monitoring exercises was mainly the road traffic noise.
- 3.18 At Station 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 were conducted on 3rd, 12th, 20th and 26th April 2006 by ET. The audit session on 3rd April 2006 was conducted with the representatives of HyD, IEC, ER, the Contractor and ET.

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 permits/licenses obtained for the Project are summarized in **Table 4.1**. Three 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
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Permit No.	Valid Period		Details		
I el mit 100.	From	То	Details	Status	
Environmental Per	rmit (EP)				
EP-103/2001/C	22/7/05	N/A	Construction and operation of(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		1	
WPN 5213-261- N2413-04	17/11/03	N/A	N/A	Valid	
Water Discharge I					
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-RW0699-05	7/11/05	5/5/06	<i>Location:</i> Lai Po Road near West Kowloon Highway <i>Time Period:</i> Any day not being a general holiday between 2100- 0700 hrs	Valid	
GW-RW0738-05	15/11/05	14/05/06	<i>Location:</i> Lai Po Road near Hoi Lai Estate <i>Time Period:</i> General holidays (including Sundays) between 0700-2300 hrs and any other days between 1900-2300 hrs	Valid	
GW-RW0740-05	16/11/05	14/05/06	<i>Location:</i> Lai Po Road near Yuet Lun Street <i>Time Period:</i> Whole day of general holidays (including Sundays) and any other days between 1900-0700 hrs on next day	Valid	
GW-RW0745-05	18/11/05	17/05/06	<i>Location:</i> Ching Cheung Road near LCK Swimming Pool <i>Time Period:</i> Whole day of general holidays (including Sundays) and any other days between 1900-0700 hrs on next day	Valid	
GW-RW0780-05	5/12/05	4/5/06	<i>Location:</i> Butterfly Valley, Lai Chi Kok <i>Time period:</i> general holiday including Sundays between 0900- 2300 hrs and any day not being a general holiday between 0000- 0700 hrs and 1900-2400	Valid	
GW-RW0844-05	15/1/06	14/06/06	<i>Location:</i> Butterfly Valley <i>Time Period:</i> Whole day of general holidays (including Sundays) and any other days between 1900-0700 hrs on next day	Valid	

Permit No.	Valid	Period	Dataila	Statur
Permit No.	From	То	- Details	Status
GW-RW0867-05	3/2/06	2/8/06	<i>Location:</i> Hing Wah Street West (Jetty Area) <i>Time Period:</i> Whole day of general holidays (including Sundays) and any other days between 1900-0700 hrs on next day	Valid
GW-RW0083-06	18/2/06	17/8/06	<i>Location:</i> Ching Cheung Road near Mei Foo Sun Chuen <i>Time Period:</i> General holidays (including Sundays) between 0700-2300 hrs and any other days between 1900-2300 hrs	Valid
GW-RW0091-06	19/2/06	13/8/06	<i>Location:</i> Ching Cheung Road near CLP Substation <i>Time Period:</i> General holidays (including Sundays) between 0900-2100 hrs	Valid
GW-RW0093-06	26/2/06	21/5/06	Location: Ching Cheung Road near Lai Wan Road Time Period: General holidays (including Sundays) between 0700-1900 hrs	Valid
GW-RW0121-06	11/3/06	6/9/06	<i>Location:</i> Ching Cheung Road near Castle Peak Road <i>Time Period:</i> Whole day of general holidays (including Sundays) and any other days between 1900-0700 hrs on next day	Valid
GW-RW0135-06	16/3/06	15/9/06	<i>Location:</i> Butterfly Valley <u>20/03/06 to 31/03/06</u> <i>Time Period:</i> Whole day of general holidays (including Sundays) and any other days between 1900- 0700 hrs on next day <u>1/4/06 to 15/9/06</u> <i>Time Period:</i> General holidays (including Sundays) between 0900-2300 hrs and any other days between 1900-0700 hrs on next day	Valid
GW-RW0142-06	22/3/06	15/9/06	<i>Location:</i> Lai Wan Road <i>Time Period:</i> Any day not being a general holiday between 2100- 0700 hrs on next day	
GW-RW0145-06	31/3/06	30/9/06	Location: Lai Po Road and Yuet Lun Street Time Period: Any day not being a general holiday between 2100- 0700 hrs on next day	
GW-RW0146-06	22/3/06	19/9/06	<i>Location:</i> Lai Wan Road <i>Time Period:</i> Whole day of general holidays (including Sundays) and any other days between 1900-0700 hrs on next day	
GW-RW0172-06	5/4/06	17/4/06	<i>Location:</i> Lai Po Road near Hoi Lai Estate <i>Time period:</i> General holiday including Sundays between 0000- 2400 hrs	
GW-RW0173-06	31/3/06	30/9/06	<i>Location:</i> Butterfly Valley Road, Lai Chi Kok <i>Time period:</i> General holiday including Sundays between 0000- 2300 hrs and any day not being a general holiday between 1900- 2300	
GW-RW0192-06	7/4/06	6/10/06	<i>Location:</i> Junction of Ching Cheung Road and Castle Peak Road <i>Time Period:</i> General holidays (including Sundays) between 0700-2300 hours and any other days between 1900-2300 hours	Valid

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

Summary of Exceedances

1-hr and 24-hr TSP Monitoring

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

Construction Noise Monitoring

- 4.8 Two Action Level (noise complaint) exceedances were recorded on 20th and 28th April 2006. No Limit Level exceedance was recorded in the reporting month.
- 4.9 On 20th April 2006, EPD referred a public complaint about construction noise due to night works at both Hoi Lai Estate and West Kowloon Highway between 14th and 17th April 2006. According to the RSS's information, construction night works were undertaken by the Contractor under valid CNP No. GW-RW0172-06. In addition, the Contractor had implemented mitigation measures such as turned off the alert sound of tractors during backward movement and have strengthened their management on worker's working manner. Finally, night works at the concerned location were completed and no further construction work at night will be carried out. The complaint was considered not justifiable.

4.10 On 28th April 2006, EPD referred 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). The traffic noise barrier had been removed and hence made the residents of Mei Foo Sun Chuen becoming being seriously affected by the traffic noise nuisance. Since excavation for cut slopes and construction of slip road D are required at this area, tree cutting is unavoidable. The tree felling was approved by DLO/KW. Besides, compensatory planting will be provided at the concerned area after completion of construction works. In addition, temporary noise barrier may provided by the Contractor along the concerned area. Based on the information collected, the complaint was considered not justifiable. The complaint report is provided in **Appendix M**.

Implementation Status of Event Action Plans

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

Parameters	Date	Observations and Recommendations	Follow-up
		The Contractor was reminded to provide proper protection along the open channel especially for P11 to P12 to prevent untreated surface runoff discharging into the channel.	The situation was found improved / rectified during the audit on 12-Apr-06.
	3-Apr-06	Clearance works were undertaken by the Contractor to remove the sediments/mud from the open channel in Wai Man Tsuen. The Contractor was reminded to take precautionary measures during the works to minimize contamination to the channel water.	The situation was found improved / rectified during the audit on 12-Apr-06.
Air Quality	12-Apr-06	An air compressor at R3 was found operated with doors open. The Contractor was reminded to keep the compressor's doors closed during operation to minimize noise impact.	The situation was found improved / rectified during the audit on 20-Apr-06.
Chemical Management	26-Apr-06	A bucket of chemical solvent without cover was observed on bare ground at S4 site area. Cover should be provided and placed at suitable area with drip tray.	The situation will be followed in May 06.

Table 4.2 Observations and Recommendations of Site Audits

Summary of Complaint and Prosecution

- 4.12 Two public complaints were received on 20th and 28th April 20006 about construction noise nuisance and cutting of trees.
- 4.13 No prosecution was received in the reporting month.
- 4.14 There were 24 environmental complaints 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, construction of Abutment and rock dowels installation at Pier, slope CCR-S1, CCR-S4, CCR-S5, CCR-R3, CCR-R4 & CCR-R6;
 - Surface runoff generated at the areas CCR-S and CCR-R1 to CCR-R6;
 - Dust generation from stockpiles of dusty materials, exposed slope surfaces, excavation works and soil nail installations at CCR-S1,CCR- S4, CCR-R1 to CCR-R3;
 - Standing water accumulated within the site after rains; and
 - Nighttime construction noise from segment transportation and segment erection at Pier P20.

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 in coming months include:
 - Construction of Abutment M and cross head of column at Pier;
 - Bulk excavation works and rock dowels installation at slope CCR-S1;
 - Soil nail installation at slope CCR-S4;
 - Bulk excavation works at slope CCR-S4, CCR-S5, CCR-R3, CCR-R4 & CCR-R6;
 - Retaining wall construction at CCR-R1 to CCR-R6;
 - Drainage works at Rest Garden area, Hoi Lai Estate Y piers B1;
 - Offsite fabrication of pre-cast deck segment mould and segment casting;
 - Segment erection by launching gantry at night at per P20;
 - Cast in-situ of slip road C;
 - Cast in-situ and precast segment erection at slip road D; and
 - Segment erection by lifting crane at pier D1, D3, D7, PA/L & Abutment D.

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

6. CONCLUSIONS AND RECOMMENDATIONS

Conclusions

- 6.1 Environmental monitoring works were performed in the reporting month and all monitoring results were checked and reviewed.
- 4.15 Two public complaints were received on 20th and 28th April 20006 about construction noise nuisance and cutting of trees.
- 6.2 No prosecution was received in the reporting month.

Recommendations

6.3 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.

Noise Impact

- To provide temporary noise barriers for noisy activities, such as breaking works and drilling works.
- 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.

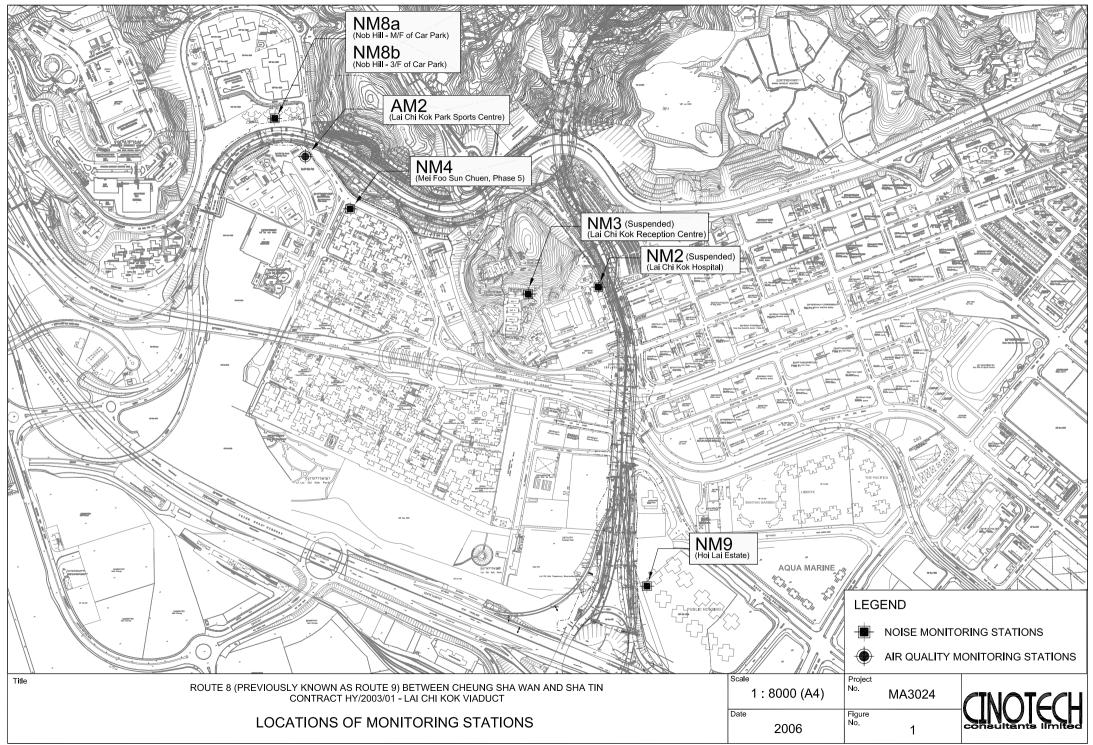
Dust Impact

- To ensure water spray is applied for the dust emissive works, such as soil nail installation, loading and unloading of soil materials, rock breaking works.
- To cover soil stockpiles and exposed slope surface by impervious sheets or other means.

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



F:\PROJECTS\MA3024\DRAWING\IMPACT\LCK\FIGURE 1_LAYOUT_2006.DWG

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



		5-POIN	IT CALIBRA	TION DATA	A SHEET		
						File No.	MA3024/20/0016
Station	Lai Chi Kok Sport C	Centre (AM2)		Operator:	KH		
Date:	25-Mar-06				24-May-06		
Equipment No.	A-01-20				0818		
			Ambiont	Condition			
Temperati	ıre, Ta (K)	296	Pressure, Pa		T	763.6	
Temperate				a (mminig)	1	0.00	
		Or	ifice Transfer Sta	andard Inform	nation		
Equipm	ent No.:	A-04-03	Slope, mc	0.0572	Intercep	t, bc	0.0261
Last Calibr	ation Date:	23-Apr-05		mc x Qstd + h	$bc = [\Delta H \times (Pa/76)]$	0) x (298/Ta	()] ^{1/2}
Next Calibi	ation Date:	22-Apr-06			x (Pa/760) x (298		
		•		-			
			Calibration of	TSP Sampler			
Calibration		Orf	ice			HVS	
Point	ΔH (orifice), in. of water	[ΔH x (Pa/760)) x (298/Ta)] ^{1/2}	Qstd (CFM) X - axis	∆W (HVS), in. of oil	-	760) x (298/Ta)] ^{1/2} Y- axis
1	12.8	3	.60	62.45	8.4		2.91
2	10.6	3	.27	56.79	6.9		2.64
3	8.2	2	.88	49.89	5.5		2.36
4	5.4	2.	34	40.40	3.7		1.93
5	3.3	1.	83	31.48	2.2		1.49
Slope , mw = Correlation c		0.99	95	Intercept, bw - -	0.078	8	
	ield Calibration C			Calculation			<u>4. 68. 28. 68. 68. 69. 69.</u> 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
Tom the Regres	sion Equation, in		ung to				
		mw x Q	$std + bw = [\Delta W]$	x (Pa/760) x (2	$98/Ta)]^{1/2}$		
	et Deint: W - (m	$w \propto Ostd + hw)^2$	$v(760/P_{P_{2}})v(7$	[a/298] =	4.08		
Therefore, S	et Point; $w = (m)$	n'n gold i on j i	x(/00/1a)x(1				
Therefore, S	et Point, w – (my		x (700 / 1 a) x (1				
Therefore, S	et Point, w – (my						
	et Point, w – (my		x (700 / 14) x (1				

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TEST REPORT

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

Test Report No.:	C/05/50503
Date of Issue:	2005-05-03
Date Received:	2005-05-03
Date Tested:	2005-05-03
Date Completed:	2005-05-03
Page:	1 of 1

ATTN:

Mr. Henry Leung

Certificate of Calibration

Item for calibration:

Description
Manufacturer
Model No.
Serial No.
Project No.
Equipment No.

: RS232 Integral Vane Digital Anemometer : AZ Instrument : 451104 : 9020746 : C13 : A-03-01

Test conditions:

Room Temperature Relative Humidity Pressure : 21 degree Celsius : 70% : 100.8 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	20.0	20.1

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

Patrick

PATRICK TSE Operation Manager

Date:	04/23/2005		Rootsmete Calibrator	Contraction of the second s	9736553 1888A		Ta: Pa:	22.00 C 761.0 mm Ha
Operator: RA Calibrator Model #: G25A			Calibrator	5/IV.	e (0e oe oe oe or o e o	Placed in		701.0 mm rig
	Run	Vol. Init. (m3)	Vol. Final (m3)	∆ Vol. (m3)	∆ Time (min)	ΔP (mm Hg)	∆H (in H2O)	
	1	1.00	2.00	1.00	1.404	3.08	2.00	
	2	3.00	4.00	1.00	0.997	6.17	4.00	
	3	5.00	6.00	1.00	0.889	7.85	5.00	
	4	7.00	8.00	1.00	0.848	8.59	5.50	
	5	9.00	10.00	1.00	0.700	12.42	8.00	

Andersen Instruments, Inc. Drifice Transfer Standard Certification Worksheet

Data Tabulation

Vstd (m3)	Qstd (x-axis)	$\frac{\sqrt{\Delta H} \left(\frac{Pa}{Pstd}\right) \left(\frac{Tstd}{Ta}\right)}{(y-axis)}$	Va	Qa (x-axis)	√⊿H(Ta / Pa) (y-axis)
1.007	0.717	1.422	0.996	0.709	0.881
1.003	1.006	2.011	0.992	0.995	1.246
1.000	1.125	2.248	0.990	1.113	1.393
0.999	1.179	2.358	0.989	1.166	1.461
0.994	1.420	2.844	0.984	1.405	1.762
	m =	2.0208		m =	1.2658
	b =	-0.024947		b =	-0.015460
	r =	0.999989		r =	0.999989

Calculations

Vstd ==ZVol((Pa -=ZP) / Pstd)(Tstd / Ta) Qstd ==Vstd / ZTime $Va = \Delta Vol((Pa - \Delta P) / Pa)$ Qa = Va / $\Delta Time$ page 1

For subsequent flow rate calculations:

$$Qstd = 1 / m \left(\left(\sqrt{\Delta H \left(\frac{Pa}{Pstd} \right) \left(\frac{Tstd}{Ta} \right)} \right) - b$$

Standard Conditions: Tstd: 298.18 ° K Pstd: 760 mm Hg

For additional information consult:

1. The Federal Register, Vol. 47, No.234, pp. 54896-54921, Dec. 6, 1982

2. Quality Assurance Handbook, Vol II (EPA 60074-77-277a), Section 2.11

3. Andersen Instruments, Inc. Instruction Manual

Notes:

1. Copies of this calibration are not kept on file.

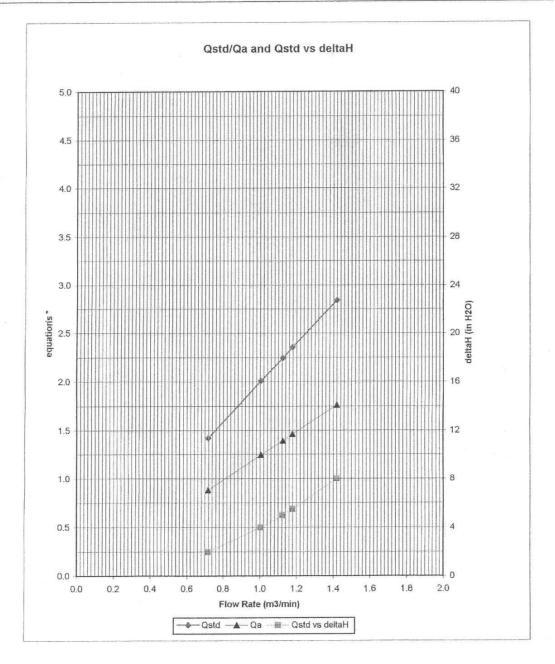
2. EPA recommends calibrators should be recalibrated after one year of use.

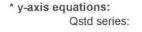
 $Qa = 1 / m((\sqrt{\Delta H(Ta / Pa)}) - b)$

where: ∆H: calibrator manometer reading (in H2O) ∆P: rootsmeter manometer reading (mm Hg) Ta: actual absolute temperature (° K) Pa: actual barometric pressure (mm Hg) b: intercept m: slope

Andersen Instruments, Inc.

Orifice Transfer Standard Certification





n.



Qa series:

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TEST REPORT

APPLICANT:		Test Report No .:	C/N/51216/1
	1602-1610 Delta House,	Date of Issue:	2005-12-16
		Date Received:	2005-12-15
	Shatin, N.T.	Date Tested: Date Completed: Next Due Date:	2005-12-15
		Date Completed:	2005-12-16
		Next Due Date:	2006-12-15

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 : 2337665 : 2289749 : N-01-01

Page:

1 of 1

Test conditions:

Room Temperatre Relative Humidity : 20 degree Celsius : 63%

Test Specifications:

Performance checking at 94 and 114 dB

Methodology:

In-house method, according to manufacturer instruction manual

Results:

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

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

PATRICK TSE

Operation Manager

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TEST REPORT

APPLICANT:	Cinotech Consultants Limited	Test Report No .:	C/N/51116/1
	1602-1610 Delta House,	Date of Issue:	2005-11-16
	3 On Yiu Street,	Date Received:	2005-11-15
	Shatin, N.T.	Date Tested:	2005-11-15
		Date Completed:	2005-11-16
		Next Due Date:	2006-11-15

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
s:	

Test conditions:

Room Temperatre Relative Humidity : 20 degree Celsius : 60%

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.**

Patrick

PATRICK TSE Operation Manager

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TEST REPORT

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

Test Report No .:	C/N/50905-1
Date of Issue:	2005-09-06
Date Received:	2005-09-05
Date Tested:	2005-09-06
Date Completed:	2005-09-06
Next Due Date:	2006-09-05
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.	: 2359311
Microphone No.	: 2346382
Equipment No.	: N-01-03
ons:	
Room Tomporatro	· 22 degree Celsius

Test conditions:

Room Temperatre Relative Humidity : 22 degree Celsius : 65%

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

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Patrick

PATRICK TSE Laborary Manager

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TEST REPORT

APPLICANT:	Cinotech Consultants Limited	Test Report No.:	C/N/50905-2
	1602-1610 Delta House,	Date of Issue:	2005-09-06
	3 On Yiu Street,	Date Received:	2005-09-05
	Shatin, N.T.	Date Tested:	2005-09-05
		Date Completed:	2005-09-06
		Next Due Date:	2006-09-05

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

Page:

1 of 1

: 21 degree Celsius : 62% : 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

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Patrick

PATRICK TSE Operation Manager

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TEST REPORT

APPLICANT:	Cinotech Consultants Limited	Test Report No.:	C/N/51015/1
	1602-1610 Delta House,	Date of Issue:	2005-10-15
	3 On Yiu Street,	Date Received:	2005-10-13
	Shatin, N.T.	Date Tested:	2005-10-14
		Date Completed:	2005-10-15

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.	: 2394976
Microphone No.	: 2407349
Equipment No.	: N-01-05

Test conditions:

Room Temperatre Relative Humidity : 22 degree Celsius : 65%

Next Due Date:

Page:

2006-10-14

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.

Patrick

PATRICK TSE Operation Manager

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TEST REPORT

APPLICANT:	Cinotech Consultants Limited	Test Report No .:	C/05/1115-1
	1602-1610 Delta House,	Date of Issue:	2005-11-15
	3 On Yiu Street,	Date Received:	2005-11-14
	Shatin, N.T.	Date Tested:	2005-11-15
		Date Completed:	2005-11-15
		Next Due Date:	2006-11-14

ATTN: Mr. Henry Leung

Item for calibration:

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

Page:

1 of 1

Test conditions:

Room Temperatre Relative Humidity Pressure : 20 degree Celsius : 65% : 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.**

atriels

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/06/60304
	1602-1610 Delta House,	Date of Issue:	2006-03-04
	3 On Yiu Street,	Date Received:	2006-03-03
	Shatin, N.T.	Date Tested:	2006-03-03
		Date Completed: Next Due Date:	2006-03-04
		Next Due Date:	2007-03-04
ATTN:	Mr. Henry Leung	Page:	1 of 1

Item for calibration:

Description	: Acoustical Calibrator
Manufacturer	: Brüel & Kjær
Model No.	: 4231
Serial No.	: 2343007
Project No.	: C13
Equipment No.	: N-02-02

Test conditions:

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

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	$94.0\pm~0.2~\mathrm{dB}$

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Patrick

PATRICK TSE Operation Manager

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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/50905-1A
	1602-1610 Delta House,	Date of Issue:	2005-09-06
	3 On Yiu Street,	Date Received:	2005-09-05
	Shatin, N.T.	Date Tested:	2005-09-05
		Date Completed:	2005-09-06
		Mart Day Date	2006 00 05

ATTN:

Mr. Henry Leung

Next Due Date: 2006-09-05 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 **Relative Humidity** Pressure

: 21 degree Celsius : 62% : 1006.5hPa

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	$94.0 \pm 0.1 \text{ dB}$
At 114 dB SPL	114.0	$114.0 \pm 0.1 \text{ dB}$

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Patrick.

PATRICK TSE **Operation Manager**

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APPENDIX C ENVIRONMENTAL MONITORING AND AUDIT SCHEDULE

Environmental Monitoring for Lai Chi Kok Viaduct Tentative Air Quality and Noise Monitoring Schedule for April 2006

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

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

AM2 Lai Chi Kok Sports Centre

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 May 2006

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

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

AM2 Lai Chi Kok Sports Centre

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-Apr-2006	0:00	0.4	ENE
1-Apr-2006	1:00	0.4	E
1-Apr-2006	2:00	0	ENE
1-Apr-2006	3:00	0	E
1-Apr-2006	4:00	0	NNW
1-Apr-2006	5:00	0	NNE
1-Apr-2006	6:00	0	SSW
1-Apr-2006	7:00	0	SSW
1-Apr-2006	8:00	0	WNW
1-Apr-2006	9:00	0	
1-Apr-2006	10:00	0.4	ENE
1-Apr-2006	11:00	0.9	NE
1-Apr-2006	12:00	0.4	WNW
1-Apr-2006	13:00	0.4	SW
1-Apr-2006	14:00	0.4	SW
1-Apr-2006	15:00	0.4	SW
1-Apr-2006	16:00	0.9	WSW
1-Apr-2006	17:00	0.4	SW
1-Apr-2006	18:00	0.4	SW
1-Apr-2006	19:00	0	SW
1-Apr-2006	20:00	0	SW
1-Apr-2006	21:00	0	
1-Apr-2006	22:00	0	
1-Apr-2006	23:00	0	
2-Apr-2006	0:00	0	
2-Apr-2006	1:00	0	SW
2-Apr-2006	2:00	0	SW
2-Apr-2006	3:00	0	SW
2-Apr-2006	4:00	0	SW
2-Apr-2006	5:00	0	
2-Apr-2006	6:00	0	
2-Apr-2006	7:00	0	SSW
2-Apr-2006	8:00	0	SSW
2-Apr-2006	9:00	0	SSW
2-Apr-2006	10:00	0	SW
2-Apr-2006	11:00	0	SW
2-Apr-2006	12:00	0	SW
2-Apr-2006	13:00	0	SW
2-Apr-2006	14:00	0	SW
2-Apr-2006	15:00	0.4	WSW
2-Apr-2006	16:00	0.4	NW
2-Apr-2006	17:00	0	NW
2-Apr-2006	18:00	0	
2-Apr-2006	19:00	0	
2-Apr-2006	20:00	0	
2-Apr-2006	21:00	0	
2-Apr-2006	22:00	0	
2-Apr-2006	23:00	0	
3-Apr-2006	0:00	0	
3-Apr-2006	1:00	0	
3-Apr-2006	2:00	0	
3-Apr-2006	3:00	0	NW
3-Apr-2006	4:00	0	NW
3-Apr-2006	5:00	0	

Date	Time	Wind Speed m/s	Direction
3-Apr-2006	6:00	0	
3-Apr-2006	7:00	0	
3-Apr-2006	8:00	0	
3-Apr-2006	9:00	0	NW
3-Apr-2006	10:00	0	NW
3-Apr-2006	11:00	0.4	NW
3-Apr-2006	12:00	0.9	SW
3-Apr-2006	13:00	0.9	SW
3-Apr-2006	14:00	1.3	SW
3-Apr-2006	15:00	0.9	SW
3-Apr-2006	16:00	0.4	SW
3-Apr-2006	17:00	0.4	SW
3-Apr-2006	18:00	0	SSW
3-Apr-2006	19:00	0	SSE
3-Apr-2006	20:00	0.4	SE
3-Apr-2006	21:00	0	SE
3-Apr-2006	21:00	0	ESE
3-Apr-2006	23:00	0	SE
4-Apr-2006	0:00	0	SE
4-Apr-2006	1:00	0.4	SSE
4-Apr-2006	2:00	0.4	ESE
	3:00	0	<u> </u>
4-Apr-2006			
4-Apr-2006	4:00	0	SSE
4-Apr-2006	5:00	0	
4-Apr-2006	6:00	0	SSE
4-Apr-2006	7:00	0	
4-Apr-2006	8:00	0	SSE
4-Apr-2006	9:00	0	SW
4-Apr-2006	10:00	0	E
4-Apr-2006	11:00	0	WNW
4-Apr-2006	12:00	0	SSE
4-Apr-2006	13:00	0.4	SW
4-Apr-2006	14:00	0.4	SW
4-Apr-2006	15:00	0.4	SW
4-Apr-2006	16:00	0.4	SSW
4-Apr-2006	17:00	0.4	SSW
4-Apr-2006	18:00	0	E
4-Apr-2006	19:00	0	E
4-Apr-2006	20:00	0	
4-Apr-2006	21:00	0	E
4-Apr-2006	22:00	0	
4-Apr-2006	23:00	0	E
5-Apr-2006	0:00	0	ESE
5-Apr-2006	1:00	0	ESE
5-Apr-2006	2:00	0	ESE
5-Apr-2006	3:00	0	ESE
5-Apr-2006	4:00	0	ESE
5-Apr-2006	5:00	0	
5-Apr-2006	6:00	0	
5-Apr-2006	7:00	0	ESE
5-Apr-2006	8:00	0	
5-Apr-2006	9:00	0	NNE
5-Apr-2006	10:00	0.4	WSW
5-Apr-2006	11:00	0.9	WSW

Date	Time	Wind Speed m/s	Direction
5-Apr-2006	12:00	1.3	SW
5-Apr-2006	13:00	0.9	SW
5-Apr-2006	14:00	0.4	SW
5-Apr-2006	15:00	0.4	SSW
5-Apr-2006	16:00	0	ESE
5-Apr-2006	17:00	0	SW
5-Apr-2006	18:00	0.4	SSW
5-Apr-2006	19:00	0	WSW
5-Apr-2006	20:00	0	SW
5-Apr-2006	21:00	0	N
5-Apr-2006	22:00	0	SW
5-Apr-2006	23:00	0	SW
6-Apr-2006	0:00	0	SSW
6-Apr-2006	1:00	0	ESE
6-Apr-2006	2:00	0	SW
6-Apr-2006	3:00	0	SW
6-Apr-2006	4:00	0	SW
6-Apr-2006	5:00	0	
6-Apr-2006	6:00	0	
6-Apr-2006	7:00	0	
6-Apr-2006	8:00	0	
6-Apr-2006	9:00	0	SW
6-Apr-2006	10:00	0.4	SW
6-Apr-2006	11:00	0.9	SW
6-Apr-2006	12:00	1.3	W
6-Apr-2006	13:00	0.4	SW
6-Apr-2006	14:00	0.9	SW
6-Apr-2006	15:00	0.9	SW
6-Apr-2006	16:00	0.4	E
6-Apr-2006	17:00	0.9	ENE
6-Apr-2006	18:00	0.4	ENE
6-Apr-2006	19:00	0	SE
6-Apr-2006	20:00	0	ESE
6-Apr-2006	21:00	0	NE
6-Apr-2006	22:00	0	E
6-Apr-2006	23:00	0	E
7-Apr-2006	0:00	0	E
7-Apr-2006	1:00	0	E
7-Apr-2006	2:00	0	E
7-Apr-2006	3:00	0	E
7-Apr-2006	4:00	0	E
7-Apr-2006	5:00	0	ENE
7-Apr-2006	6:00	0.4	N
7-Apr-2006	7:00	1.3	N N
7-Apr-2006	8:00	0.4	N N
7-Apr-2006	9:00	0.4	WNW
7-Apr-2006	10:00	0	N
7-Apr-2006	11:00	0.4	N N
7-Apr-2006	12:00	0.4	NE NE
			NE N
7-Apr-2006	13:00	0.4	
7-Apr-2006	14:00	0.9	ENE
7-Apr-2006	15:00	0.4	NE
7-Apr-2006	16:00	1.3	N
7-Apr-2006	17:00	1.8	N

Date	Time	Wind Speed m/s	Direction
7-Apr-2006	18:00	0.9	ENE
7-Apr-2006	19:00	0.4	SSW
7-Apr-2006	20:00	0	SSW
7-Apr-2006	21:00	0	SSW
7-Apr-2006	22:00	0.4	WNW
7-Apr-2006	23:00	0.4	NW
8-Apr-2006	0:00	0.4	NE
8-Apr-2006	1:00	0	
8-Apr-2006	2:00	0	
8-Apr-2006	3:00	0	
8-Apr-2006	4:00	0	
8-Apr-2006	5:00	0	NNE
8-Apr-2006	6:00	0	NNE
8-Apr-2006	7:00	0	NNE
8-Apr-2006	8:00	0	NNE
8-Apr-2006	9:00	0	ENE
8-Apr-2006	10:00	1.3	NE
8-Apr-2006	11:00	0.4	ENE
8-Apr-2006	12:00	0.9	NE
8-Apr-2006	13:00	0.9	ENE
8-Apr-2006	14:00	0.9	ENE
8-Apr-2006	15:00	0.4	E
8-Apr-2006	16:00	0	ENE
8-Apr-2006	17:00	0	E
8-Apr-2006	18:00	0	ENE
8-Apr-2006	19:00	0	ENE
8-Apr-2006	20:00	0	ENE
8-Apr-2006	21:00	0	ESE
8-Apr-2006	22:00	0	<u> </u>
8-Apr-2006	23:00	0	
9-Apr-2006	0:00	0	
9-Apr-2006	1:00	0	
9-Apr-2006	2:00	0	W
9-Apr-2006	3:00	0	NW
9-Apr-2006	4:00	0	E
9-Apr-2006	5:00	0.4	SE
9-Apr-2006	6:00	0	SSE
9-Apr-2006	7:00	0	SSE
9-Apr-2006	8:00	0.4	ENE
9-Apr-2006	9:00	0.4	ENE
9-Apr-2006	10:00	0.4	ENE
9-Apr-2006	11:00	0.4	NE
9-Apr-2006	12:00	0.4	ESE
9-Apr-2006	13:00	0.4	ENE
9-Apr-2006	14:00	0.4	SW
9-Apr-2006	15:00	0.4	SSW
9-Apr-2006	16:00	0.4	WNW
9-Apr-2006	17:00	0.4	WSW
9-Apr-2006	18:00	0.4	SSW
9-Apr-2006	19:00	0	W
9-Apr-2006	20:00	0	E
9-Apr-2006	21:00	0.4	WNW
9-Apr-2006	22:00	0.4	N
9-Apr-2006	23:00	0.4	WSW

Date	Time	Wind Speed m/s	Direction
10-Apr-2006	0:00	0	SW
10-Apr-2006	1:00	0	SW
10-Apr-2006	2:00	0	WSW
10-Apr-2006	3:00	0	WSW
10-Apr-2006	4:00	0	
10-Apr-2006	5:00	0	
10-Apr-2006	6:00	0	WSW
10-Apr-2006	7:00	0	WSW
10-Apr-2006	8:00	0.4	SW
10-Apr-2006	9:00	0.4	S
10-Apr-2006	10:00	1.8	SW
10-Apr-2006	11:00	3.1	SW
	12:00	2.7	SW
10-Apr-2006		2.7	SW
10-Apr-2006	13:00	3.1	SW
10-Apr-2006	14:00		
10-Apr-2006	15:00	3.1	SW
10-Apr-2006	16:00	2.7	SW
10-Apr-2006	17:00	1.8	SW
10-Apr-2006	18:00	2.2	SW
10-Apr-2006	19:00	0.9	SSW
10-Apr-2006	20:00	0.4	SW
10-Apr-2006	21:00	0	ESE
10-Apr-2006	22:00	0	ESE
10-Apr-2006	23:00	0	ESE
11-Apr-2006	0:00	0	NE
11-Apr-2006	1:00	0	NNE
11-Apr-2006	2:00	0	NNE
11-Apr-2006	3:00	0	NNE
11-Apr-2006	4:00	0	E
11-Apr-2006	5:00	0	E
11-Apr-2006	6:00	0	NW
11-Apr-2006	7:00	0	E
11-Apr-2006	8:00	0	WSW
11-Apr-2006	9:00	0	W
11-Apr-2006	10:00	0.4	SW
11-Apr-2006	11:00	0.9	SW
11-Apr-2006	12:00	0.4	SE
11-Apr-2006	13:00	0.9	W
11-Apr-2006	14:00	0.4	SSW
11-Apr-2006	15:00	0.4	WNW
11-Apr-2006	16:00	0.4	WNW
11-Apr-2006	17:00	0.4	NW
11-Apr-2006	18:00	0.4	WNW
11-Apr-2006	19:00	0.4	NW
11-Apr-2006	20:00	0	NNW
11-Apr-2006	21:00	0.4	N
11-Apr-2006	22:00	0.4	N
11-Apr-2006	23:00	0.4	NE
12-Apr-2006	0:00	0.4	NNE
12-Apr-2006	1:00	0	NNW
12-Apr-2006	2:00	0	NNE
	3:00	0	ESE
12-Apr-2006			ESE E
12-Apr-2006	4:00	0	
12-Apr-2006	5:00	0	ENE

Date	Time	Wind Speed m/s	Direction
12-Apr-2006	6:00	0	ENE
12-Apr-2006	7:00	0	S
12-Apr-2006	8:00	0.4	N
12-Apr-2006	9:00	0.9	Ν
12-Apr-2006	10:00	0.9	N
12-Apr-2006	11:00	0.9	WNW
12-Apr-2006	12:00	0.9	NNE
12-Apr-2006	13:00	1.3	SW
12-Apr-2006	14:00	1.3	SSW
12-Apr-2006	15:00	1.3	SSW
12-Apr-2006	16:00	0.9	SW
12-Apr-2006	17:00	0.9	SSW
12-Apr-2006	18:00	0.4	SSW
12-Apr-2006	19:00	0	ENE
12-Apr-2006	20:00	0	ENE
12-Apr-2006	21:00	0	E
12-Apr-2006	22:00	0	ESE
12-Apr-2006	23:00	0	E
13-Apr-2006	0:00	0	WNW
13-Apr-2006	1:00	0	WSW
13-Apr-2006	2:00	0	SW
13-Apr-2006	3:00	0	SSE
13-Apr-2006	4:00	0	SSE
·			
13-Apr-2006	5:00	0	SSE
13-Apr-2006	6:00	1.8	WSW
13-Apr-2006	7:00	0.4	SW
13-Apr-2006	8:00	0.4	W
13-Apr-2006	9:00	0.4	W
13-Apr-2006	10:00	0.9	N
13-Apr-2006	11:00	0.9	N
13-Apr-2006	12:00	1.8	N
13-Apr-2006	13:00	1.8	N
13-Apr-2006	14:00	1.3	N
13-Apr-2006	15:00	1.3	<u>N</u>
13-Apr-2006	16:00	0.9	N
13-Apr-2006	17:00	0.9	NE
13-Apr-2006	18:00	0.4	NE
13-Apr-2006	19:00	0.9	NE
13-Apr-2006	20:00	0.9	N
13-Apr-2006	21:00	0.9	N
13-Apr-2006	22:00	1.3	N
13-Apr-2006	23:00	0.9	N
14-Apr-2006	0:00	0.4	N
14-Apr-2006	1:00	1.3	N
14-Apr-2006	2:00	0.9	N
14-Apr-2006	3:00	0.4	N
14-Apr-2006	4:00	0.4	NNE
14-Apr-2006	5:00	0.9	N
14-Apr-2006	6:00	0.9	N
14-Apr-2006	7:00	0.9	N
14-Apr-2006	8:00	0.9	N
14-Apr-2006	9:00	0.4	N
14-Apr-2006	10:00	0.9	N
14-Apr-2006	11:00	0.4	Ν

Date	Time	Wind Speed m/s	Direction
14-Apr-2006	12:00	0.9	Ν
14-Apr-2006	13:00	1.3	Ν
14-Apr-2006	14:00	1.3	N
14-Apr-2006	15:00	0.9	N
14-Apr-2006	16:00	0.9	N
14-Apr-2006	17:00	0.4	NE
14-Apr-2006	18:00	0.4	NE
14-Apr-2006	19:00	0.4	N
14-Apr-2006	20:00	0.4	WNW
14-Apr-2006	21:00	0.4	N
14-Apr-2006	22:00	0.4	N
14-Apr-2006	23:00	0.9	N
15-Apr-2006	0:00	0.9	N
15-Apr-2006	1:00	0.9	N
	2:00	0.9	NNE
15-Apr-2006			
15-Apr-2006	3:00 4:00	0.9	<u>N</u>
15-Apr-2006 15-Apr-2006	5:00	0.9	N N
15-Apr-2006	6:00	1.3	<u>N</u>
15-Apr-2006	7:00	0.9	
15-Apr-2006	8:00	1.3	N
15-Apr-2006	9:00	1.3	N
15-Apr-2006	10:00	0.9	N
15-Apr-2006	11:00	0.9	N
15-Apr-2006	12:00	0.9	N
15-Apr-2006	13:00	0.9	NNW
15-Apr-2006	14:00	0.9	N
15-Apr-2006	15:00	1.3	N
15-Apr-2006	16:00	1.3	N
15-Apr-2006	17:00	0.9	N
15-Apr-2006	18:00	1.3	N
15-Apr-2006	19:00	0.9	N
15-Apr-2006	20:00	0.9	N
15-Apr-2006	21:00	0.9	N
15-Apr-2006	22:00	0.9	N
15-Apr-2006	23:00	1.3	N
16-Apr-2006	0:00	1.8	N
16-Apr-2006	1:00	2.7	N
16-Apr-2006	2:00	2.2	N
16-Apr-2006	3:00	2.2	N
16-Apr-2006	4:00	1.8	N
16-Apr-2006	5:00	1.8	N
16-Apr-2006	6:00	1.3	N
16-Apr-2006	7:00	1.3	N
16-Apr-2006	8:00	0.9	N
16-Apr-2006	9:00	1.3	N
16-Apr-2006	10:00	0.9	N
16-Apr-2006	11:00	1.3	N
16-Apr-2006	12:00	1.3	N
16-Apr-2006	13:00	0.4	N
16-Apr-2006	14:00	1.3	N
16-Apr-2006	15:00	1.3	N
16-Apr-2006	16:00	0.9	N
16-Apr-2006	17:00	1.3	NE

Date	Time	Wind Speed m/s	Direction
16-Apr-2006	18:00	0.4	NE
16-Apr-2006	19:00	0.4	Ν
16-Apr-2006	20:00	0.4	ENE
16-Apr-2006	21:00	0	ENE
16-Apr-2006	22:00	0	NE
16-Apr-2006	23:00	0.4	NE
17-Apr-2006	0:00	0.4	NE
17-Apr-2006	1:00	0.4	NE
17-Apr-2006	2:00	0	NE
17-Apr-2006	3:00	0	
17-Apr-2006	4:00	0	
17-Apr-2006	5:00	0	
17-Apr-2006	6:00	0	
17-Apr-2006	7:00	0	NE
17-Apr-2006	8:00	0	
17-Apr-2006	9:00	0	SSW
17-Apr-2006	10:00	0.4	NW
17-Apr-2006	11:00	0.9	Ν
17-Apr-2006	12:00	0.9	Ν
17-Apr-2006	13:00	0.9	Ν
17-Apr-2006	14:00	0.9	Ν
17-Apr-2006	15:00	0.4	SW
17-Apr-2006	16:00	0.4	SSW
17-Apr-2006	17:00	0	SSW
17-Apr-2006	18:00	0.4	ENE
17-Apr-2006	19:00	0.4	ESE
17-Apr-2006	20:00	0.4	ESE
17-Apr-2006	21:00	0	E
17-Apr-2006	22:00	0.4	ENE
17-Apr-2006	23:00	0	NE
18-Apr-2006	0:00	0	NE
18-Apr-2006	1:00	0	NE
18-Apr-2006	2:00	0	WNW
18-Apr-2006	3:00	0	
18-Apr-2006	4:00	0	
18-Apr-2006	5:00	0	Ν
18-Apr-2006	6:00	0.9	ENE
18-Apr-2006	7:00	0	NE
18-Apr-2006	8:00	0	NNE
18-Apr-2006	9:00	0	Ν
18-Apr-2006	10:00	0	NNE
18-Apr-2006	11:00	0	NNW
18-Apr-2006	12:00	0.9	NE
18-Apr-2006	13:00	0.9	ENE
18-Apr-2006	14:00	0.9	SW
18-Apr-2006	15:00	0.9	N
18-Apr-2006	16:00	0.9	WNW
18-Apr-2006	17:00	0.4	WSW
18-Apr-2006	18:00	0	SSW
18-Apr-2006	19:00	0	SW
18-Apr-2006	20:00	0	
18-Apr-2006	21:00	0	SW
18-Apr-2006	22:00	0	
18-Apr-2006	23:00	0	

Date	Time	Wind Speed m/s	Direction
19-Apr-2006	0:00	0	
19-Apr-2006	1:00	0	
19-Apr-2006	2:00	0	
19-Apr-2006	3:00	0	
19-Apr-2006	4:00	0	
19-Apr-2006	5:00	0	
19-Apr-2006	6:00	0	
19-Apr-2006	7:00	0	
19-Apr-2006	8:00	0	
19-Apr-2006	9:00	0	
19-Apr-2006	10:00	0.4	SW
19-Apr-2006	11:00	1.3	N
19-Apr-2006	12:00	1.8	W
19-Apr-2006	13:00	1.8	NNW
19-Apr-2006	14:00	1.3	NNW
· · · · · · · · · · · · · · · · · · ·	15:00	1.3	N
19-Apr-2006 19-Apr-2006	16:00	0.9	NNW
19-Apr-2006	17:00	0.9	WNW
	18:00	0.4	W
19-Apr-2006		0.4	V W
19-Apr-2006	19:00		
19-Apr-2006	20:00	0	
19-Apr-2006	21:00	0	
19-Apr-2006	22:00	0	
19-Apr-2006	23:00	0	
20-Apr-2006	0:00	0	
20-Apr-2006	1:00	0	
20-Apr-2006	2:00	0	
20-Apr-2006	3:00	0	
20-Apr-2006	4:00	0	W
20-Apr-2006	5:00	0	
20-Apr-2006	6:00	0	
20-Apr-2006	7:00	0	
20-Apr-2006	8:00	0	
20-Apr-2006	9:00	0	W
20-Apr-2006	10:00	0.4	W
20-Apr-2006	11:00	0.4	NNW
20-Apr-2006	12:00	0.4	NNW
20-Apr-2006	13:00	0.4	N
20-Apr-2006	14:00	0.4	NE
20-Apr-2006	15:00	0.9	NE
20-Apr-2006	16:00	1.8	ENE
20-Apr-2006	17:00	1.8	ENE
20-Apr-2006	18:00	1.8	NE
20-Apr-2006	19:00	1.8	NE
20-Apr-2006	20:00	1.3	NE
20-Apr-2006	21:00	1.3	NE
20-Apr-2006	22:00	1.8	NE
20-Apr-2006	23:00	1.3	ENE
21-Apr-2006	0:00	2.2	ENE
21-Apr-2006	1:00	1.8	NE
21-Apr-2006	2:00	1.8	NE
21-Apr-2006	3:00	1.3	NE
21-Apr-2006	4:00	0.4	NE
21-Apr-2006	5:00	0	ENE

Date	Time	Wind Speed m/s	Direction
21-Apr-2006	6:00	0	ENE
21-Apr-2006	7:00	0	NW
21-Apr-2006	8:00	0.4	NE
21-Apr-2006	9:00	0.4	ENE
21-Apr-2006	10:00	0.4	SW
21-Apr-2006	11:00	0.9	ENE
21-Apr-2006	12:00	0.9	N
21-Apr-2006	13:00	0.9	E
21-Apr-2006	14:00	0.9	SSW
21-Apr-2006	15:00	0.4	SSW
21-Apr-2006	16:00	0.4	SW
21-Apr-2006	17:00	0.4	NNE
21-Apr-2006	18:00	0.4	SW
21-Apr-2006	19:00	0	SW
21-Apr-2006	20:00	0.4	S
			<u> </u>
21-Apr-2006	21:00 22:00	0	S SSW
21-Apr-2006	22:00	0	SW
21-Apr-2006		N	
22-Apr-2006	0:00	0	SSE
22-Apr-2006	1:00		
22-Apr-2006	2:00	0	SSE
22-Apr-2006	3:00	0	
22-Apr-2006	4:00	0	
22-Apr-2006	5:00	0	SSE
22-Apr-2006	6:00	0	SSE
22-Apr-2006	7:00	0	SE
22-Apr-2006	8:00	0	NNE
22-Apr-2006	9:00	0	N
22-Apr-2006	10:00	0.4	SW
22-Apr-2006	11:00	0.9	SW
22-Apr-2006	12:00	0.9	SW
22-Apr-2006	13:00	0.4	SSW
22-Apr-2006	14:00	0.9	SW
22-Apr-2006	15:00	0.4	SW
22-Apr-2006	16:00	0.4	WNW
22-Apr-2006	17:00	0.4	SW
22-Apr-2006	18:00	0.4	SW
22-Apr-2006	19:00	0.4	ESE
22-Apr-2006	20:00	0	W
22-Apr-2006	21:00	0	WNW
22-Apr-2006	22:00	0	SE
22-Apr-2006	23:00	0	SE
23-Apr-2006	0:00	0	SE
23-Apr-2006	1:00	0	SW
23-Apr-2006	2:00	0	WSW
23-Apr-2006	3:00	0	
23-Apr-2006	4:00	0	
23-Apr-2006	5:00	0	
23-Apr-2006	6:00	0	
23-Apr-2006	7:00	0	
23-Apr-2006	8:00	0	WSW
23-Apr-2006	9:00	0.4	ESE
23-Apr-2006	10:00	0.4	ESE
23-Apr-2006	11:00	0.4	SW

Date	Time	Wind Speed m/s	Direction
23-Apr-2006	12:00	0.9	SW
23-Apr-2006	13:00	0.9	SW
23-Apr-2006	14:00	0.4	SW
23-Apr-2006	15:00	0.4	SW
23-Apr-2006	16:00	0.4	WNW
23-Apr-2006	17:00	0	WSW
23-Apr-2006	18:00	0	W
23-Apr-2006	19:00	0	SSW
23-Apr-2006	20:00	0	SW
23-Apr-2006	21:00	0	SSW
23-Apr-2006	22:00	0	S
23-Apr-2006	23:00	0	SSW
24-Apr-2006	0:00	0	SSW
24-Apr-2006	1:00	0.4	NW
24-Apr-2006	2:00	0	NW
24-Apr-2006	3:00	0	WNW
24-Apr-2006	4:00	0	
24-Apr-2006	5:00	0	
24-Apr-2006	6:00	0	
24-Apr-2006	7:00	0	WNW
24-Apr-2006	8:00	0	WNW
24-Apr-2006	9:00	0	WNW
24-Apr-2006	10:00	0	WNW
24-Apr-2006	11:00	0	WNW
24-Apr-2006	12:00	0.4	W
24-Apr-2006	13:00	0	E
24-Apr-2006	14:00	0.4	E
24-Apr-2006	15:00	1.3	ENE
24-Apr-2006	16:00	0.4	ENE
24-Apr-2006	17:00	0.9	ENE
24-Apr-2006	18:00	0.4	ENE
24-Apr-2006	19:00	0.4	ENE
24-Apr-2006	20:00	0	ESE
24-Apr-2006	21:00	0	ESE
24-Apr-2006	22:00	0.4	ENE
24-Apr-2006	23:00	0.4	E
25-Apr-2006	0:00	0.4	ENE
25-Apr-2006	1:00	0.4	ENE
25-Apr-2006	2:00	0.4	ENE
25-Apr-2006	3:00	0.4	ENE
25-Apr-2006	4:00	0	ENE
25-Apr-2006	5:00	0	NNW
25-Apr-2006	6:00	0	N
25-Apr-2006	7:00	0	ESE
· · · ·	8:00	0.9	ESE
25-Apr-2006	9:00	0.9	E
25-Apr-2006 25-Apr-2006	10:00	0.9	NE
25-Apr-2006	11:00	<u> </u>	ENE ENE
25-Apr-2006	12:00		
25-Apr-2006	13:00	1.3	ENE
25-Apr-2006	14:00	2.2	
25-Apr-2006	15:00	1.3	ENE
25-Apr-2006	16:00	0.9	ENE
25-Apr-2006	17:00	0.9	ENE

Date	Time	Wind Speed m/s	Direction
25-Apr-2006	18:00	0.9	ENE
25-Apr-2006	19:00	0.9	E
25-Apr-2006	20:00	0.4	ENE
25-Apr-2006	21:00	0	ENE
25-Apr-2006	22:00	0	ENE
25-Apr-2006	23:00	0	ESE
26-Apr-2006	0:00	0	 E
26-Apr-2006	1:00	0	SSW
26-Apr-2006	2:00	0	
26-Apr-2006	3:00	0	S
26-Apr-2006	4:00	0	S
26-Apr-2006	5:00	0	<u> </u>
26-Apr-2006	6:00	0	<u> </u>
26-Apr-2006	7:00	0	S
26-Apr-2006	8:00	0	S
26-Apr-2006	9:00	0	SSE
26-Apr-2006	10:00	0.4	ESE
26-Apr-2006	11:00	0.4	ESE
26-Apr-2006	12:00	0.4	E
26-Apr-2006	12:00	0.4	SW
		0.4	WSW
26-Apr-2006	14:00		SW
26-Apr-2006	15:00	1.8	
26-Apr-2006	16:00	1.8	SW
26-Apr-2006	17:00	0.9	SW
26-Apr-2006	18:00	0.4	SW
26-Apr-2006	19:00	0	SE
26-Apr-2006	20:00	0	E
26-Apr-2006	21:00	0	
26-Apr-2006	22:00	0	E
26-Apr-2006	23:00	0	
27-Apr-2006	0:00	0	
27-Apr-2006	1:00	0	<u> </u>
27-Apr-2006	2:00	0	E
27-Apr-2006	3:00	0	SSW
27-Apr-2006	4:00	0	SSE
27-Apr-2006	5:00	0	SSE
27-Apr-2006	6:00	0	SSE
27-Apr-2006	7:00	0	
27-Apr-2006	8:00	0	SSE
27-Apr-2006	9:00	0	SSE
27-Apr-2006	10:00	0	SW
27-Apr-2006	11:00	0.4	SW
27-Apr-2006	12:00	0.4	SW
27-Apr-2006	13:00	0.4	SSW
27-Apr-2006	14:00	0.4	E
27-Apr-2006	15:00	0.4	SSE
27-Apr-2006	16:00	3.1	NE
27-Apr-2006	17:00	2.2	NE
27-Apr-2006	18:00	2.2	NNE
27-Apr-2006	19:00	1.3	NE
27-Apr-2006	20:00	0	NE
27-Apr-2006	21:00	0	E
27-Apr-2006	22:00	0	
27-Apr-2006	23:00	0	

Date	Time	Wind Speed m/s	Direction
28-Apr-2006	0:00	0	
28-Apr-2006	1:00	0	
28-Apr-2006	2:00	0	E
28-Apr-2006	3:00	0	WSW
28-Apr-2006	4:00	0	W
28-Apr-2006	5:00	0	
28-Apr-2006	6:00	0	
28-Apr-2006	7:00	0	W
28-Apr-2006	8:00	0	W
28-Apr-2006	9:00	0	SE
28-Apr-2006	10:00	0.4	WNW
28-Apr-2006	11:00	0.4	SW
28-Apr-2006	12:00	0	WNW
28-Apr-2006	13:00	0	ENE
28-Apr-2006	14:00	0	ENE
28-Apr-2006	15:00	0.4	ENE
28-Apr-2006	16:00	0.4	NNE
·	17:00	0.4	W
28-Apr-2006		0.9	 NNE
28-Apr-2006	18:00	0	ENE
28-Apr-2006 28-Apr-2006	19:00	0.4	<u>ENE</u>
	20:00		
28-Apr-2006	21:00	0.4	E NE
28-Apr-2006	22:00	0	
28-Apr-2006	23:00	0	E
29-Apr-2006	0:00		
29-Apr-2006	1:00	0	
29-Apr-2006	2:00	0	
29-Apr-2006	3:00	0	
29-Apr-2006	4:00	0	
29-Apr-2006	5:00	0	E
29-Apr-2006	6:00	0	
29-Apr-2006	7:00	0	
29-Apr-2006	8:00	0	SE
29-Apr-2006	9:00	0	WNW
29-Apr-2006	10:00	0.9	NNW
29-Apr-2006	11:00	2.2	NW
29-Apr-2006	12:00	2.2	N
29-Apr-2006	13:00	1.8	NW
29-Apr-2006	14:00	1.3	N
29-Apr-2006	15:00	2.2	N
29-Apr-2006	16:00	2.7	N
29-Apr-2006	17:00	3.1	N
29-Apr-2006	18:00	1.3	NNE
29-Apr-2006	19:00	1.3	WNW
29-Apr-2006	20:00	0.9	W
29-Apr-2006	21:00	0.4	W
29-Apr-2006	22:00	0.4	S
29-Apr-2006	23:00	0	S
30-Apr-2006	0:00	0	S
30-Apr-2006	1:00	0	N
30-Apr-2006	2:00	1.3	NNE
30-Apr-2006	3:00	1.3	NNE
30-Apr-2006	4:00	0.9	NNE
30-Apr-2006	5:00	0.9	ENE

Date	Time	Wind Speed m/s	Direction
30-Apr-2006	6:00	0.4	E
30-Apr-2006	7:00	0.4	NE
30-Apr-2006	8:00	0.4	NE
30-Apr-2006	9:00	0.9	NE
30-Apr-2006	10:00	0.9	NE
30-Apr-2006	11:00	1.3	NE
30-Apr-2006	12:00	2.7	NNE
30-Apr-2006	13:00	3.1	Ν
30-Apr-2006	14:00	3.1	NE
30-Apr-2006	15:00	3.6	NE
30-Apr-2006	16:00	3.6	NE
30-Apr-2006	17:00	3.6	NE
30-Apr-2006	18:00	3.1	NE
30-Apr-2006	19:00	2.2	NE
30-Apr-2006	20:00	2.2	NE
30-Apr-2006	21:00	1.8	ENE
30-Apr-2006	22:00	2.7	NE
30-Apr-2006	23:00	2.7	NE

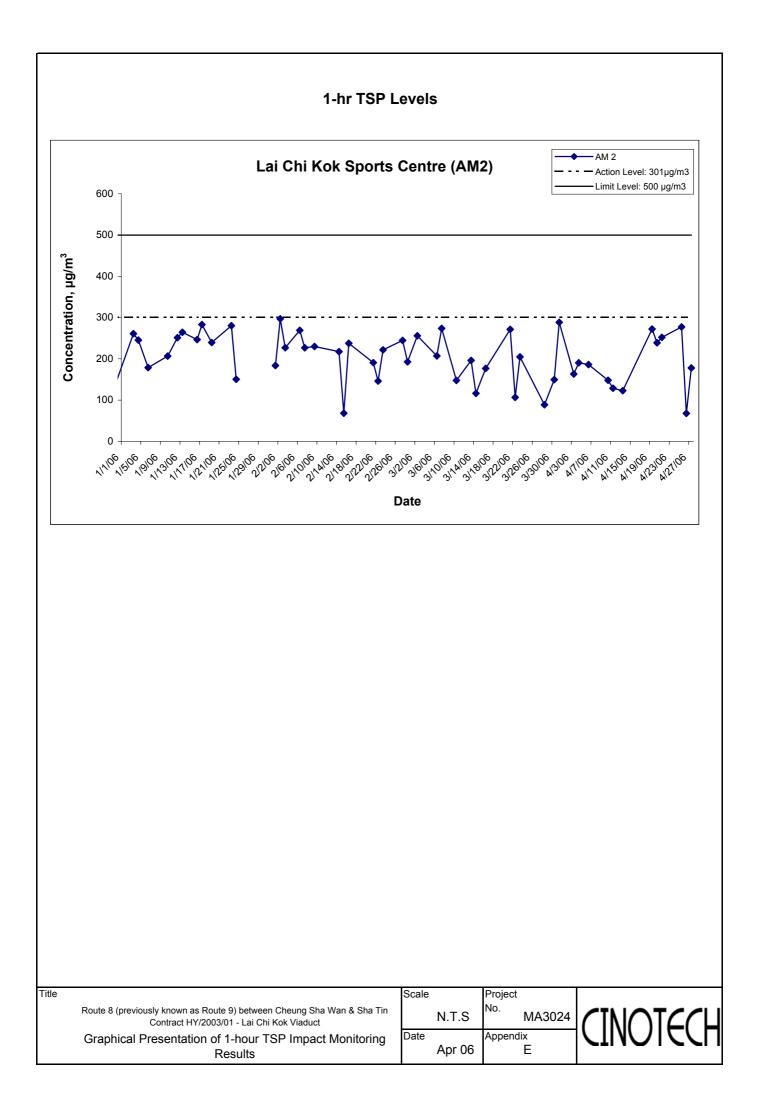
APPENDIX E 1-HOUR TSP MONITORING RESULTS AND GRAPHICAL PRESENTATION

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/m³)
3-Apr-06	Sunny	2.8912	2.9031	1.22	1.22	4071.1	4072.1	297.6	761.3	0.0119	1.22	72.9	1.0	163.2
4-Apr-06	Cloudy	2.8565	2.8705	1.21	1.21	4072.0	4073.1	298.3	761.1	0.0140	1.21	73.5	1.0	190.4
6-Apr-06	Sunny	2.8644	2.8779	1.21	1.21	4073.1	4074.1	300.0	760.7	0.0135	1.21	72.6	1.0	186.0
10-Apr-06	Sunny	2.8676	2.8783	1.20	1.20	4098.1	4099.1	301.4	757.6	0.0107	1.20	72.2	1.0	148.1
11-Apr-06	Sunny	2.8602	2.8695	1.21	1.21	4099.1	4100.1	301.2	758.7	0.0093	1.21	72.3	1.0	128.6
13-Apr-06	Cloudy	2.8494	2.8584	1.22	1.22	4124.1	4125.1	294.8	760.7	0.0090	1.22	73.2	1.0	122.9
19-Apr-06	Sunny	2.8865	2.9064	1.22	1.22	4125.1	4126.1	296.7	763.9	0.0199	1.22	73.1	1.0	272.1
20-Apr-06	Sunny	2.8885	2.9059	1.21	1.21	4150.1	4151.1	298.6	762.8	0.0174	1.21	72.9	1.0	238.8
21-Apr-06	Sunny	2.8973	2.9157	1.22	1.22	4151.1	4152.1	296.7	761.5	0.0184	1.22	73.0	1.0	252.0
25-Apr-06	Cloudy	2.8682	2.8884	1.21	1.21	4152.1	4153.1	298.0	760.4	0.0202	1.21	72.8	1.0	277.4
26-Apr-06	Sunny	2.8648	2.8697	1.20	1.20	4177.1	4178.1	301.9	758.4	0.0049	1.20	72.2	1.0	67.9
27-Apr-06	Cloudy	2.8755	2.8885	1.21	1.21	4178.1	4179.1	301.1	759.1	0.0130	1.21	73.1	1.0	177.9
													Min	67.9

Max 277.4 Average 185.4



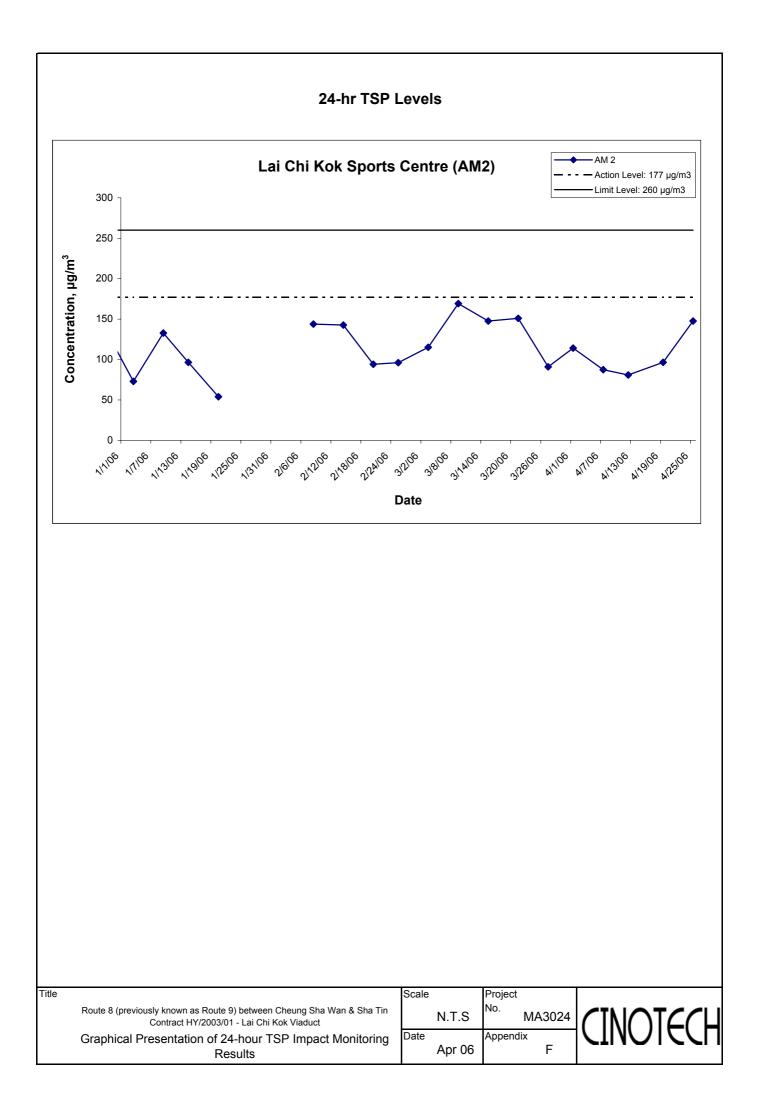
APPENDIX F 24-HOUR TSP MONITORING RESULTS AND GRAPHICAL PRESENTATION

Appendix F - 24-hour TSP Monitoring Results

Location AM 2 - Lai Chi Kok Sports Centre

Date	Weather	Filter Weight (g)		Flow Rate (m ³ /min.)		Elapse 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/m³)
1-Apr-06	Sunny	2.8489	3.0489	1.22	1.22	4047.1	4071.1	296.3	762.1	0.2000	1.22	1754.5	24.0	114.0
7-Apr-06	Sunny	2.8501	3.0032	1.22	1.22	4074.1	4098.1	296.7	762.4	0.1531	1.22	1753.6	24.0	87.3
12-Apr-06	Cloudy	2.8582	2.9983	1.20	1.20	4100.1	4124.1	301.7	757.3	0.1401	1.20	1732.4	24.0	80.9
19-Apr-06	Sunny	2.8522	3.0215	1.22	1.22	4126.1	4150.1	297.0	763.7	0.1693	1.22	1754.5	24.0	96.5
25-Apr-06	Sunny	2.8650	3.1224	1.21	1.21	4153.1	4177.1	298.9	760.1	0.2574	1.21	1744.3	24.0	147.6
													Min	80.9
													Max	147.6

Average 105.2



APPENDIX G NOISE MONITORING RESULTS AND GRAPHICAL PRESENTATION

Appendix G - Noise Monitoring Results

Location N	Location NM4 - Mei Foo Sun Chuen, Phase 5											
						Unit: dB (A) (30	-min)					
Date	Date Time Weather		Measured Noise Level			Baseline Level	Construction Noise Level	Remarks				
			L _{eq}	L ₁₀	L ₉₀	L _{eq}	L _{eq}					
4-Apr-06	11:10	Cloudy	74.8	76.0	73.0		67.9	Road traffic noise from Ching				
11-Apr-06	11:30	Cloudy	74.8	78.5	71.0	73.8	67.9	Cheung Road was identified as the				
20-Apr-06	13:05	Sunny	76.2	77.5	74.0	75.0	72.5	major noise source.				
26-Apr-06	13:45	Fine	74.1	78.0	72.5		62.3	major noise source.				

Location N	Location NM8a - M/F of Nob Hill											
Date	Time	Weather	Unit: d	IB (A) (3	0-min)	Remarks						
			L _{eq}	L ₁₀	L ₉₀							
4-Apr-06	9:50	Cloudy	73.1	74.5	68.0							
11-Apr-06	13:10	Cloudy	74.9	78.5	72.5	Road traffic noise from Ching Cheung Road						
20-Apr-06	10:35	Sunny	72.5	75.0	69.5	was identified as the major noise source.						
26-Apr-06	14:25	Fine	72.8	75.5	69.0							

Location N	Location NM8b - 3/F of Nob Hill											
Date	Time	Weather	Unit: d	IB (A) (3	0-min)	Remarks						
			L _{eq}	L ₁₀	L ₉₀							
4-Apr-06	10:30	Cloudy	75.3	77.0	73.0							
11-Apr-06	13:50	Cloudy	76.1	79.0	71.5	Road traffic noise from Ching Cheung Road						
20-Apr-06	11:20	Sunny	77.8	79.0	73.5	was identified as the major noise source.						
26-Apr-06	15:10	Fine	77.9	80.5	74.0							

Location N	Location NM9 - Hoi Lai Estate											
Date	Time	Weather	Unit: c	IB (A) (3	0-min)	Remarks						
			L _{eq}	L ₁₀	L ₉₀							
4-Apr-06	13:00	Sunny	67.1	70.0	62.5							
11-Apr-06	15:10	Cloudy	70.3	73.5	68.5	_						
20-Apr-06	13:55	Sunny	73.1	77.5	66.0	-						
26-Apr-06	16:00	Fine	72.8	77.5	65.0							

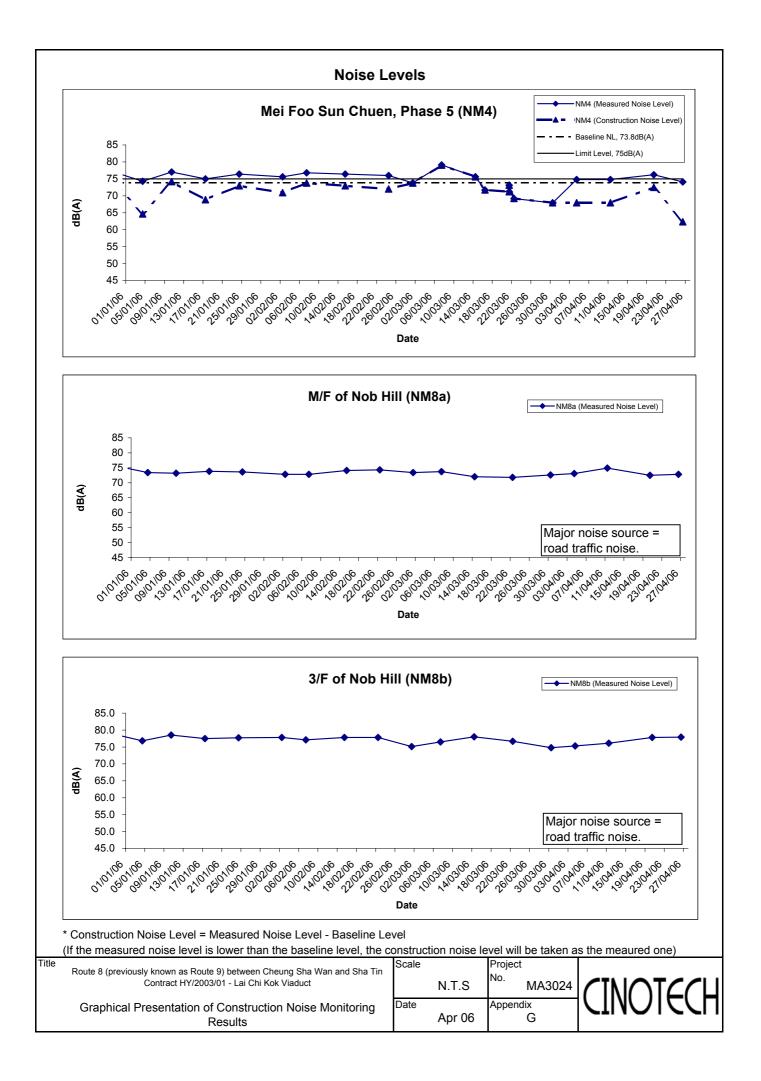
Construction Noise Level (Leq) = Measured Noise Level (Leq) - Baseline Noise Level (Leq)

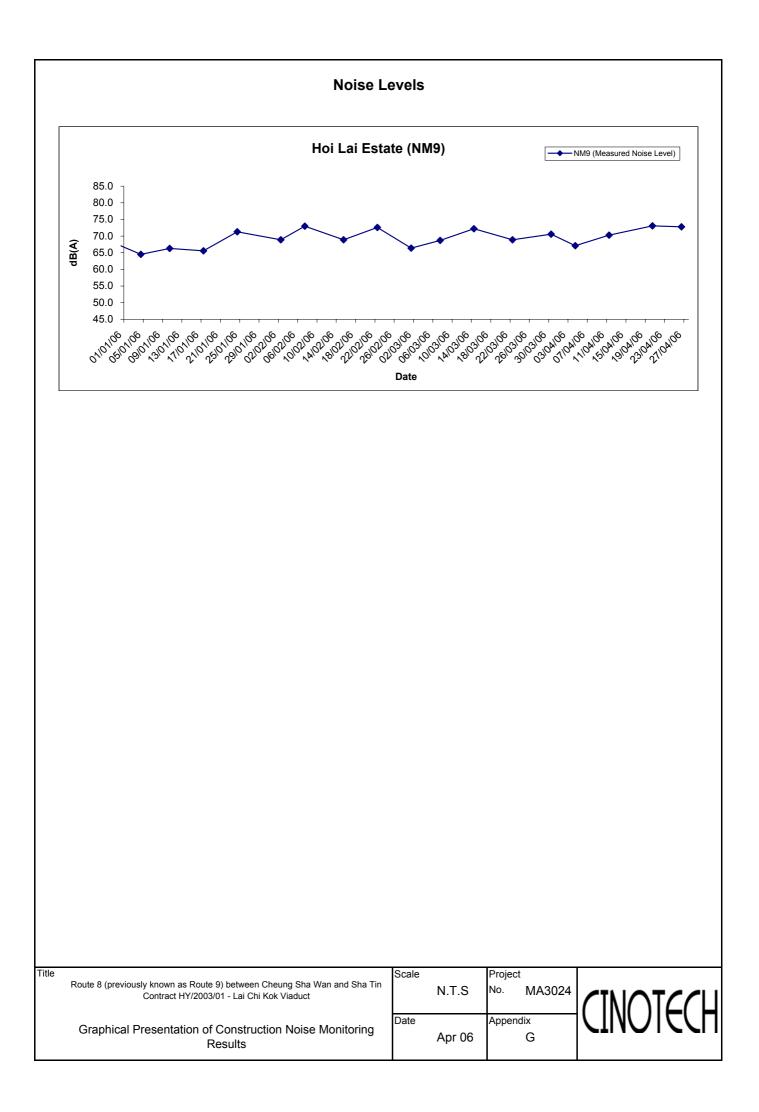
Appendix G - Noise Monitoring Results

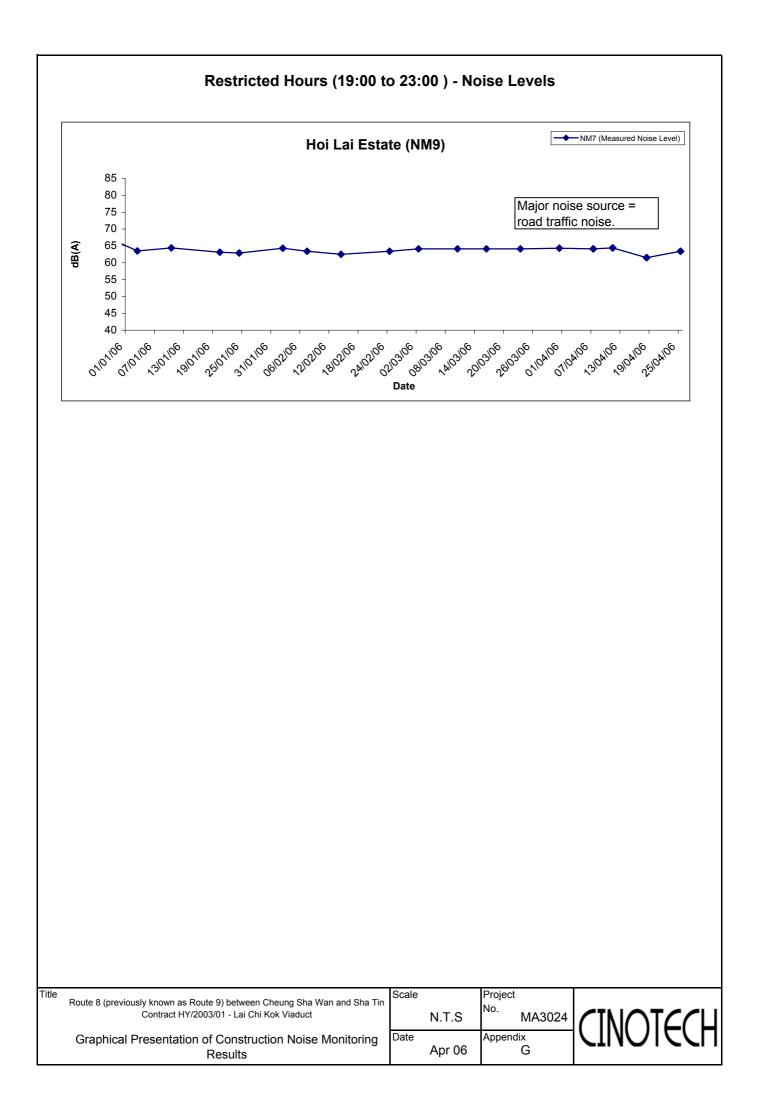
Restricted Hours - 19:00 to 23:00 on normal weekdays

Location N	M9 - Ho	oi Lai Estat	e					
Dete	Time	Maathar	dB (A) (5-min)					
Date	Time	Weather	L _{eq}	L ₁₀	L ₉₀	Average L_{eq}		
7-Apr-06	19:05		63.8	68.0	60.0			
	19:10	Cloudy	64.2	68.0	60.0	64.1		
	19:15		64.2	68.0	60.0			
	19:00		64.2	68.5	61.0			
11-Apr-06	19:05	Cloudy	64.5	69.0	61.0	64.4		
	19:10		64.6	69.0	61.5			
	19:25		65.0	67.5	62.0			
18-Apr-06	19:30	Cloudy	64.7	67.5	61.5	61.5		
	19:35		64.0	67.5	61.0			
	19:00		63.1	67.5	59.5			
25-Apr-06	19:05	Cloudy	63.2	67.5	59.5	63.4		
	19:10		63.9	68.0	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

- Two Action Level exceedances were recorded due to noise complaints received on 20 and 28 April 2006.
- No noise Limit Level exceedance was recorded in the reporting monthly.

APPENDIX I SITE AUDIT SUMMARY

Inspection Information

Checklist Reference Number	60403-LCKV	
Date	3 April 2006 (Mon)	
Time	14:30 - 17:00	

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

 Ref. No.	Remarks/Observations	Related Item No.
60403L-1	 A. Water Quality The Contractor was reminded to provide proper protection along the open channel especially for P11 to P12 to prevent untreated surface runoff discharging into the channel. 	В3
60403L-2	• Clearance works were undertaken by the Contractor to remove the sediments / mud from the open channel in Wai Man Tsuen. The Contractor was reminded to take precautionary measures during the works to minimize contamination to the channel water.	В9
	<i>B. Air Quality</i>No environmental deficiency was identified during the site inspection.	
	<i>C. Noise</i>No environmental deficiency was identified during the site inspection.	
	<i>D. Waste / Chemical Management</i>No environmental deficiency was identified during the site inspection.	
	<i>E. Permit / Licenses</i>No environmental deficiency was identified during the site inspection.	
	<i>F. Others</i>No environmental deficiency was identified during the site inspection.	

	Name	Signature	Date
Recorded by	KK Chan		4 April 2006
Checked by	Alex Ngai	MAN	4 April 2006

lat

Inspection Information

Checklist Reference Number	60412-LCKV	
Date	12 April 2006 (Wed)	
Time	1330 - 1530	

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 Quality	
	• No environmental deficiency was identified during the site inspection.	
	C. Noise	
60412L-1	• An air compressor at R3 was found operated with doors open. The Contractor	D10
	was reminded to keep the compressor's doors closed during its operation to	
	minimize noise impact.	
	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	
	• No environmental deficiency was identified during the site inspection.	

	Name	Signature	Date
Recorded by	KK Chan	in	12 April 2006
Checked by	Kenneth Lam	Lamthe	12 April 2006

Inspection Information

Checklist Reference Number	60420-LCKV	
Date	20 April 2006 (Thu)	
Time	1345 - 1600	

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.	
-u			
d		B. Air Quality	
		• No environmental deficiency was identified during the site inspection.	
		• No environmental deficiency was identified during the site inspection.	
			d.
		C. Noise	
		• No environmental deficiency was identified during the site inspection.	
		D. Wests (Chamberl Management)	
		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. 	
		• No environmental deficiency was identified during the site inspection.	
		F. Others	
		The environmental deficiency identified during last audit (ref. 60412-LCKV)	
<u></u>		12 April 2006, was rectified / improved by the Contractor.	
		12 April 2000, was recurred / improved by the Contractor.	

	Name	Signature	Date
Recorded by	Tommy Ho	Lon	20 April 2006
Checked by	Alex Ngai		20 April 2006

Inspection Information

Checklist Reference Number	60426-LCKV	
Date	26 April 2006 (Wed)	
Time	1340 - 1555	

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 Quality	
	• No environmental deficiency was identified during the site inspection.	
	• No environmental deficiency was identified during the site inspection.	
	C. Noise	10 C
	• No environmental deficiency was identified during the site inspection.	
	D. Waste / Chemical Management	
60426L-01	A bucket of chemical solvent without cover was observed on bare ground at S4	E10
	site area. Cover should be provided and placed at suitable area with drip tray.	
	E. Permit / Licenses	
	• No environmental deficiency was identified during the site inspection.	
	F. Others	
	• The environmental deficiency identified during last audit (ref. 60412-LCKV)	
	12 April 2006, was rectified / improved by the Contractor.	

	Name	Signature	Date
Recorded by	Tommy Ho	Toman	26 April 2006
Checked by	Alex Ngai	MM	26 April 2006

APPENDIX J EVENT ACTION PLANS

Appendix J - Event Action Plans

Event/Action Plan for Air Quality

EVENT	ACTION				
EVENI	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	proposed remedial actions		
	6. If exceedance continues, arrange	effectiveness of the proposed remedial	5. Ensure remedial actions properly		
	meeting with ER & IEC	measures	implemented		
	7. If exceedance stops, cease additional	5. Supervise the implementation of the			
	monitoring	remedial measures			
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	proposed remedial actions	3. Implement the agreed proposals	
	IEC informed of the results	effectiveness of the proposed remedial	5. Ensure remedial actions properly	4. Amend proposal if appropriate	
		measures	implemented		
		5. Supervise the implementation of the			
		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				

Encoderac		ACTION				
Exceedance	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)

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.	Λ
	• 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.	Λ
	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
•	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. 	۸
	 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. 	۸
	• 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	ı
	• 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 stablishment 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 •

K-5

APPENDIX L CONSTRUCTION PROGRAMME

A	Activity	Orig	Farly	Farly	Late	Late					2006	-		
		Activity Orig. Early Late MAR APR Description Dum. Start Finish Start Finish 13 20 27 3 10 17 24 1 Seneral Requirments Seneral Requirments	MAY	00 00	5	JUN 12 19 2								
		Dum.	otart	1 mion	Oture	TIMOT	13	20 21	3 10	11 24	1 8 15	Julia had	3	2 19
A REAL PROPERTY AND A REAL			A CONTRACTOR OF	ALL MARY BY		And the second second								
Portion Acc	ess Dates													
PD1140	Access to Portion F1	0	17APR06*	4	TATA AND DESCRIPTION					and the second				
PD1150	Access to Portion F2	0					_			PD1150				
PD1160	Anticipated Access to Portion F3	0	20MAR06*		08DEC05*			PD1160						
Design of T	emporary Works												1 1	
TW1280	Design of Temp Works for Retaining Wall CCR-R4	36	20MAR06	02MAY06	13APR06			1	ř i	1				
TW1370	Design of Temp Works for Feature 11NW-A/C66	36	20MAR06	02MAY06	27APR06	08JUN06			<u> </u>		HTW1370			
TW1380	Design of Temp Works for Feature 11NW-A/FR54&55	36	20MAR06	02MAY06	06JUN05	19JUL05			1		HTW1380		1 1	
TW1440	Design of Temporary Works for Pumping Stations	36	20MAR06	02MAY06	21FEB06	04APR06				1 1	HTW1440			
TW1450	Design of T/Works for Erection of Noise Encl'res	36	20MAR06	02MAY06	28SEP05	10NOV05			H		HTW1450			
TW1460	Design of T/Works for Erection of Noise Barriers	36	20MAR06	02MAY06	09JUN06	22JUL06			<u>г</u>		HITW1460			
Monitoring	Activity Activity Activity Durn. Start Finish Start MAR APR MAY 10 Description Durn. Start Finish Start<													
IM3010		12	20MAR06	01APR06	16MAY08	29MAY08			M3010					
IM3015		387*	20MAR06	03JUL07	16MAY08	15MAY08			4		ř.	I I I		N
IM3020	Install Instrumentation @ Cut Slope CCR-S2	12	18APR06	02MAY06	16MAY08	29MAY08					HIM3020			
IM3025		363*	18APR06	03JUL07	16MAY08	15MAY08			IM3	025	<u> </u>	1 1	1	H
IM3030		12	20MAR06	01APR06	16MAY08	29MAY08			IM3030					
IM3035		387*	20MAR06	03JUL07	16MAY08	15MAY08			ř.	1 1		1 1	1	, H
IM3050		12	20MAR06	01APR06	16MAY08	29MAY08		-	IM3050					
IM3055		387*	20MAR06	03JUL07	16MAY08	15MAY08			ř.	1 1	C	1 1	1	
IM3060		12	20MAR06	01APR06	16MAY08	29MAY08			IM3060					
IM3065		387*	20MAR06	03JUL07	16MAY08	15MAY08			H	1 1	r	: :		<u>, , , , , , , , , , , , , , , , , , , </u>
IM3080		12	20MAR06	01APR06	16MAY08	29MAY08			IM3080					
1		387*	20MAR06	03JUL07	16MAY08	15MAY08					ř.			
and a second s		12	20MAR06	01APR06	16MAY08	29MAY08			FM3130					
the second second		387*	20MAR06	03JUL07	16MAY08	15MAY08			ř –		<u> </u>	1 1		n
		12	20MAR06	01APR06	16MAY08	29MAY08			IM3140					
IM3145		387*	20MAR06	03JUL07	16MAY08	15MAY08			K -		K		1	H
IM3150		12	20MAR06	01APR06	16MAY08	29MAY08			IM3150					
		387*	20MAR06	03JUL07	16MAY08	15MAY08			X		K	1 1 1	1 1	ž
		12	20MAR06	01APR06	16MAY08	29MAY08			IM3160					
IM3165		387*	20MAR06	03JUL07	16MAY08	15MAY08			<u> </u>		<u></u>			n
Start Date Inish Date Data Date	29MAY08 20MAR06		Rout 3 Mo	e 8 - Lai C onth Rollin	hi Kok Via Ig Progran	duct		et 1 of 21	2	Î		io	nucti	a

Antipultur	Activity	Orig.	Early	Early	Late	Late					DD		2006	MAY		-		JUN	
Activity ID	Description	Durn.	Start	Finish	Start	Finish	13	MAR 20 2	7 3		PR 17	24	1 8	15	22	29			19 2
	Install Instrumentation @ Piers P19 to Abut. M	12	20MAR06	01APR06	16MAY08	29MAY08	19		IM3										
M3170	Monitoring @ Piers P19 to Abut. M	387*	20MAR06	03JUL07	16MAY08	15MAY08			- Y			-	X		1		1		K
M3175	Install Instrumentation @ Piers on Slip Road A	12	20MAR06	01APR06	16MAY08	29MAY08			IM3	180									
M3180		387*	20MAR06	03JUL07	16MAY08	15MAY08			- K	-	-		× ;		1 1				K
M3185	Monitoring @ Piers on Slip Road A	12	20MAR06	01APR06	16MAY08	29MAY08		-	IM3	190								1	
M3190	Install Instrumentation @ Piers on Slip Road B	387*	20MAR06	03JUL07	16MAY08	15MAY08			- y			-	H.	a de com			1 1	1	×
M3195	Monitoring @ Piers on Slip Road B	12	20MAR06	01APR06	16MAY08	29MAY08		-	IM3	200							1		
M3200	Install Instrumentation @ Piers on Slip Road C		20MAR06	03JUL07	16MAY08	15MAY08	-	-		d.	1	i	1	1	1 1		1 1		ž
M3205	Monitoring @ Piers on Slip Road C	387*		01APR06	16MAY08	29MAY08	-	-	IM3	210	1								
IM3210	Install Instrumentation @ Piers on Slip Road D	12	20MAR06			15MAY08	-				1		Li_	i	<u>i</u> i			-	X
M3215	Monitoring @ Piers on Slip Road D	387*	20MAR06	03JUL07	16MAY08	TOMATUO	-												
Temporary	Traffic Management Schemes						_				111	945							
TT1245	30th. TMLG Meeting	1	17APR06	17APR06	05MAR05	05MAR05	_					245			TT12	50			
TT1250	31st. TMLG Meeting	1	22MAY06	22MAY06	04FEB06	04FEB06	_												TT12
TT1255	32nd. TMLG Meeting	1	19JUN06	19JUN06	11MAR06	11MAR06						-		-	-		-	-	
Procurem	nent																	1	
	Deck Casting (Type A Units)									1							1-3	1	- 1
SD2720	P20/L (North)-Down - Cast 13 seg Type A	22	09MAR06A	30MAR06	09MAR06A	04FEB06		and the second	SD2	720									
SD2720A	P20/L (North)-Up - Cast first 6 seg Type A	9	12MAR06A	21MAR06	12MAR06A	11JAN06		SD2	720A	1					1				
SD2720A SD2715	P20/R (South)-Down - Cast 12 seg Type A	20	03MAR06A	23MAR06	03MAR06A	28JAN06		SD	2715										
SD2715	P20/R (South)-Up - Cast 12 seg Type A	19	22MAR06	11APR06	12JAN06	04FEB06				S	D2710				1 - 1				
	P20/L (North)-Up - Cast last 7 seg Type A	14	24MAR06	08APR06	06FEB06	20FEB06				SD	2720B	1							
SD2720B	P21/R (South)-Up - Cast 9 seg Type A	16	31MAR06	17APR06	06FEB06	22FEB06			-		SD2	2740A							
SD2740A	P21/R (South)-Down - Cast 9 seg Type A	16	09APR06	26APR06	01MAR06	17MAR06				1	-	S	02740				1		
SD2740		15	12APR06	28APR06	23FEB06	11MAR06							SD2730A	1					
SD2730A	P21/L (North)-Up - Cast 8 seg Type A	15	18APR06	05MAY06	23FEB06	11MAR06						-	SD	2730					
SD2730	P21/L (North)-Down - Cast 8 seg Type A	12	27APR06	10MAY06	22MAR06	04APR06							-	SD275	0				
SD2750	Abutment M/L (South) - Cast 5 seg Type A	9	29APR06	09MAY06	25MAR06	04APR06						1		SD2760)		-		
SD2760	Abutment M/R (North) - Cast 4 seg Type A	0	2041100	0014/1100	20111 1 100	0.000											1		
Segmenta	I Deck Casting (Type B Units)	00	048400000	28MAR06	04MAR06A	22NOV05		-	SD34	AOR			-				1		
SD3490A	P20 Slip C-Down - Cast 13 Segments Type B	20	04MAR06A	in the second in the second second	03MAR06A	19JAN06	_	SD3									1		
SD3480	P20 Slip D-Up - Cast 12 Segments Type B	19	03MAR06A	20MAR06	06MAR06A	11NOV05			D3480	4	i	1							- 1
SD3480A	P20 Slip D-Down - Cast 12 Segments Type B	19	06MAR06A	25MAR06			_	SD3				1							
SD3290	PA/L (North) - Cast 8 seg Type B	16	03MAR06A	20MAR06	03MAR06A	25OCT05	-	1000	200	-	SD3490						1		
SD3490	P20 Slip C-Up - Cast 13 Segments Type B	20	21MAR06	11APR06	20JAN06	14FEB06		-			503450	-	1	1	-		1		_
Start Date Finish Date Data Date	23SEP03 29MAY08 20MAR06 © Primavera Systems, Inc.	File : LU30 Hig	3 Mo	e 8 - Lai C onth Rollin	Contract No hi Kok Via ng Program arch 2006	duct		eet 2 of	21	1	E	10	ac	C	ic	D	Tuct		3

Activity	Activity	Orig.	Early	Early	Late	Late				2006		-		
ID	Description	Durn.	Start	Finish	Start	Finish	MAR 13 20		APR 10 17 24 1	MA 8 15	y 5 22 2	0 5	JUN 12 1	0 1
SD3380	D7-Up - Cast 12 segments Type B	19	21MAR06	10APR06	26OCT05	16NOV05	13 20		SD3380	0 15		3 5	16 1	3
SD3380A	D7-Down - Cast 9 segments Type B	16	27MAR06	12APR06	12NOV05	29NOV05		1.1	SD3380A					
SD3370	D8-Up - Cast 12 Segments Type B	19	29MAR06	18APR06	23NOV05	14DEC05			SD3370					
SD3370A	D8-Down - Cast 12 Segments Type B	19	11APR06	03MAY06	17NOV05	07DEC05				SD3370A				
SD3500	P21 Slip C-Down - Cast 8 Segments Type B	15	11APR06	27APR06	07MAR06	22MAR06				3500				
SD3500	P21 Slip D-Down - Cast 8 Segments Type B	15	13APR06	29APR06	06MAR06	21MAR06				D3510		1		
		10	10/11/00	20/11/100	001111 1 100	211101100		1						-
	rapet Panel Casting	55	200CT05A	06APR06	200CT05A	19OCT05		-Li-	PP2000					
PP2000	Casting Type I & VII Parapet Units 1 - 150	35	07APR06	18MAY06	01NOV05	10DEC05			112000		PP2010			
PP2010	Casting Type I & VII Parapet Units 151 - 350	35	CTO AND INCOME.	29JUN06	23DEC05	07FEB06				PP2020		Li	i i	
PP2020	Casting Type I & VII Parapet Units 351 - 550		19MAY06			16NOV05			PP2110	1112020			1	
PP2110	Casting Type II Parapet Units 266 - 515	55	11FEB06A	13APR06	11FEB06A				PP2110			00	2120	
PP2120	Casting Type II Parapet Units 516 - 765	45	14APR06	06JUN06	17NOV05	10JAN06					DI	2130	2120	1
PP2130	Casting Type II Parapet Units 766 - 1099	60	07JUN06	18AUG06	11JAN06	24MAR06			PP2200			2130	1	
PP2200	Casting Type IIII Parapet Units 1 - 22	22	20MAR06	14APR06	23SEP05	20OCT05			PP2200				-	
PP2300	Casting Type IV Parapet Units 1 - 227	80	200CT05A	10JUN06	200CT05A	15OCT05							PP2300	
PP2310	Casting Type IV Parapet Units 228 - 455	75	12JUN06	09SEP06	17OCT05	13JAN06				_		PP2310		-
PP2400	Casting Type V & VI Parapet Units 1 - 260	65	210CT05A	04MAY06	210CT05A	13OCT05		- A		PP2400				
PP2410	Casting Type V & VI Parapet Units 2611 - 520	65	05MAY06	21JUL06	14OCT05	29DEC05			PP24		1 1			
PP2420	Casting Type V & VI Parapet Units 521 - 780	65	19MAY06	05AUG06	280CT05	13JAN06		1		PP2420		1		
Noise Barr	iers & Enclosures													1
NB1020	Noise Encl' - Slip Rd A - Eng. Review & Approval	28	20MAR06	16APR06	24OCT05	20NOV05			NB1020					
NB1030	Noise Encl' - Slip Rd A - Materials Purchasing	23	28FEB06A	21MAR06	28FEB06A	28SEP05	NB	1030						
NB1040	Noise Encl' - Slip Rd A - Off-site Fabrication	64	22MAR06	06JUN06	29SEP05	14DEC05				1 1	T F	NB	1040	
NB1050	Noise Encl' - Slip Rd A - Delivery to Site	45	26APR06	17JUN06	04NOV05	27DEC05				San di sua di sua		Parties of	NE	B105
NB1070	Erection of Noise barrier Mock Up Sample	18	04MAY06	24MAY06	14NOV05	03DEC05					NB1	070		
NB1110	Noise Encl' - Slip Rd B - Eng. Review & Approval	28	20MAR06	16APR06	26NOV05	23DEC05			NB1110					
NB1120	Noise Encl' - Slip Rd B - Materials Purchasing	26	20MAR06	21MAR06	29SEP05	30SEP05	INB	120						
NB1130	Noise Encl' - Slip Rd B - Off-site Fabrication	70	22MAR06	13JUN06	03OCT05	23DEC05		X					NB11	30
NB1140	Noise Encl' - Slip Rd B - Delivery to Site	65	27APR06	14JUL06	08NOV05	24JAN06			NB1140				X	
NB1200	Noise Encl' - P8 to P11 - Design & Shop Drawings	74	10SEP05A	19MAY06	10SEP05A	08NOV05		H			NB1200			
NB1210	Noise Encl' - P8 to P11 - Eng. Review & Approval	28	20MAY06	16JUN06	09NOV05	06DEC05							NB	1210
NB1220	Noise Encl' - P8 to P11 - Materials Purchasing	30	28FEB06A	20APR06	28FEB06A	27SEP05		H	NB1220				1 1	
NB1230	Noise Encl' - P8 to P11 - Off-site Fabrication	78	21APR06	24JUL06	28SEP05	30DEC05			NB1230				H	
		114 - 1 1100					Sheet 3 of	24						
art Date nish Date ata Date	23SEP03 29MAY08 20MAR06		Route 3 Mo	8 - Lai Cl	hi Kok Viad g Program	o. HY/2003/0 duct		21	Ja	CC	ic	D n	B	1
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Antistitut	Activity	Orig.	Early	Early	Late	Late	-			20	06			
Activity		Durn.	Start	Finish	Start	Finish	10	MAR	APR	24 4	MAY	22 29	JUI	
ID	Description			CONTRACTOR OF CARLON	C. C. C. C. C. C.		13	20 27 3	10 17	24 1	8 15		5 12 B1240	19
B1240	Noise Encl' - P8 to P11 - Delivery to Site	41	13JUN06	02AUG06	21NOV05	09JAN06	_	NB1300						T
B1300	Noise Encl' - ENT Approach - Design & Shop Dwgs.	23	07JUL05A	24MAR06	07JUL05A	15NOV05		NB1300		NB1310				
B1310	Noise Encl' - ENT Approach - Eng. Review & Appro	28	25MAR06	21APR06	16NOV05	13DEC05	_			NB1310	NEADO			
B1320	Noise Encl' - ENT Approach - Material Purchasing	27	28FEB06A	10MAY06	28FEB06A	29OCT05	-			NIDA	NB1320	1		1
B1330	Noise Encl' - ENT Approach - Off-site Fabricat'n	57	11MAY06	18JUL06	310CT05	06JAN06				NB1	330	1	ND4040	T
B1340	Noise Encl' - ENT Approach - Delivery to Site	41	15JUN06	04AUG06	05DEC05	23JAN06	-						NB1340	1
B2000	Noise Barriers - PA to P4 - Design & Shop Dwgs.	147	19AUG05A	29MAR06	19AUG05A	24JUN06	-	NB200	00					-
B2010	Noise Barriers - PA to P4 - Eng. Review & Appro'	28	30MAR06	26APR06	25JUN06	22JUL06			1	NB201	0			
B2020	Noise Barriers - PA to P4 - Materials Purchasing	39	28FEB06A	20APR06	28FEB06A	22MAR06				NB2020				1
B2030	Noise Barriers - PA to P4 - Off-site Fabrication	120	21APR06	12SEP06	23MAR06	15AUG06			NB2030	N. N.			1	- H
B2100	Noise Barriers - P5 to P8 - Design & Shop Dwgs.	147	05SEP05A	22MAR06	05SEP05A	11JUL06		NB2100						
B2110	Noise Barriers - P5 to P8 - Eng. Review & Appro'	47	23MAR06	08MAY06	12JUL06	27AUG06			1		NB2110			
B2120	Noise Barriers - P5 to P8 - Materials Purchasing	40	28FEB06A	20APR06	28FEB06A	11MAY06			1 martine	NB2120				
B2130	Noise Barriers - P5 to P8 - Off-site Fabrication	110	21APR06	31AUG06	12MAY06	20SEP06			NB2130		1 1	1 1 1	1 :	~~~
B2200	Noise Barriers - P11 to P13 - Design & Shop Dwgs	82	20JUL05A	29APR06	20JUL05A	12JUN06		K AND		NB2	200			
B2210	Noise Barriers - P11 to P13 -Eng Review & Approv	28	30APR06	27MAY06	13JUN06	10JUL06					1	NB22	10	
B2220	Noise Barriers - P11 to P13 - Materials Purchase	28	28FEB06A	10MAY06	28FEB06A	21JUN06					NB2220	D		
B2230	Noise Barriers - P11 to P13 - Off-site Fabric'n	35	11MAY06	21JUN06	22JUN06	03AUG06				NB2	230			22
B2300	Noise Barriers - ENT Approach -Des'n & Shop Dwgs	82	24AUG05A	12APR06	24AUG05A	03JUL06			NB230	00				
B2310	Noise Barriers - ENT Approach -Eng Rev & Approv	28	13APR06	10MAY06	04JUL06	31JUL06					NB2310	D		
IB2320	Noise Barriers - ENT Approach -Material Purchase	65	28FEB06A	30MAY06	28FEB06A	27JUN06				ř		NB	2320	
IB2330	Noise Barriers - ENT Approach -Off-site Fabric'n	48	31MAY06	27JUL06	28JUN06	24AUG06					1	NB2330	1 1	ž
IB2400	Noise Barriers - Slip Rd. C - Design & Shop Dwgs	10	20MAR06	30MAR06	20MAY06	31MAY06		NB24	00					
IB2410	Noise Barriers - Slip Rd. C - Eng Rev & Approv	28	31MAR06	27APR06	01JUN06	28JUN06				NB24	10			
IB2420	Noise Barriers - Slip Rd. C - Material Purchase	29	28FEB06A	20APR06	28FEB06A	06JUN06				NB2420				
IB2420	Noise Barriers - Slip Rd.C - Off-site Fabricat'n	38	21APR06	05JUN06	07JUN06	22JUL06			1 11				NB2430	
IB2430	Noise Barriers - Slip Rd. C - Delivery to Site	17	25MAY06	13JUN06	20JUL06	09AUG06							NE	B244
B2500	Noise Barriers - Slip Rd. D - Design & Shop Dwgs	82	11JUL05A	22MAR06	11JUL05A	10MAY06		NB2500						
B2510	Noise Barriers - Slip Rd. D - Eng Rev & Approv	125	23MAR06	25JUL06	11MAY06	12SEP06			1 1					
B2510	Noise Barriers - Slip Rd. D - Material Purchase	90	28FEB06A	20MAY06	28FEB06A	21AUG06						NB2520		
	Noise particis - Silp Par D Indiana Paranase													1
Bearings	Chipping of Pogrings to Site	72	12JAN05A	12APR06	12JAN05A	31MAR05			BE104	0				
3E1040	Shipping of Bearings to Site	16	120/1100/1	1270 1100	12.07 0 10 07 1	01110 0100	-				-			-
rt Date		File : LU30					She	et 4 of 21	-					
ish Date ta Date	29MAY08 20MAR06	Hig	hways Dep				/01		11	•		•		
a Date					hi Kok Via				11	2	CC	10	n	
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Activity	Activity	Orig.	Early	Early	Late	Late						200					
ID	Description	Durn.	Start	Finish	Start	Finish		MAR 20 27 3	2	APR	24	4	MAY		0 5	JU	
Movement							13	20 21	3	10 17	24		8 15	22 2	3 3	12	19
MJ1005	Engineer's approval of Proprietary Type of M.J	0	20MAR06		04FEB06			MJ1005									
MJ1000	Detailed Design & Shop Drawings	75	20MAR06	16JUN06	04FEB06	04MAY06			-			-		1			MJ1010
	Review & Approval of Design & Shop Drawings	24	17JUN06	17JUL06	05MAY06	01JUN06	-								N	NJ1020	and the second
MJ1020	Review & Approval of Design & Shop Drawings	24	11001100	1130200	00141100	01001100											
Signage	Sign Gantries - Detailed Design & Shop Drawings	50	17NOV05A	10APR06	17NOV05A	06SEP05			-	SG1010				1 1			
SG1010		24	11APR06	09MAY06	07SEP05	060CT05	-						SG1020				
SG1020	Sign Gantries - Review/Appro of Design & S/Dwgs.	7700		08AUG06	070CT05	05JAN06	-				5	G103					i, i
SG1030	Sign Gantries - Off-Site Fabrication of Gantries	75	10MAY06	a conversion			-	L i li			1050	01001		1			TI
SG1050	Sign Gantries - FADS7 - Design, Fab'n & Delivery	48	200CT05A	17APR06	200CT05A	22MAY08	-					1		1 1		1	
SG2010	Signage - Shop Drawings	50	200CT05A	19APR06	200CT05A	13AUG05	-				G2010			00000			
SG2020	Signage - Review & Approval of Shop Drawings.	24	20APR06	18MAY06	15AUG05	10SEP05	-							G2020		_	
SG2030	Signage - Off-Site Fabrication of Signs	50	19MAY06	18JUL06	12SEP05	11NOV05			_		1		SG2030	1			
High Mast	Lighting												_				
HM1000	High Mast Lighting - Foundation Design	48	210CT05A	16MAY06	210CT05A	08SEP05			-		1	-	HI	/1000			
HM1010	High Mast Lighting - Approval of Found'n Design	24	17MAY06	13JUN06	18NOV05	15DEC05							-	1	1	H	M1010
HM1100	High Mast Lighting - Mast Design & Shop Drawings	48	20MAR06	16MAY06	15JUL05	08SEP05			(11) III		1			/1100			
HM1110	High Mast Lighting - Approval of Mast Design	56	17MAY06	11JUL06	09SEP05	03NOV05						HI	V1110				-
Viaduct -	Main Line - Piers PA to P6													1			
Substruct	ure												Ì			1	
MS0100	PA/L - Install Bearings	3	13APR06	15APR06	26NOV05	29NOV05				MSO	100		İ				
MS0110	PA/R - Install Bearings	6	20MAR06	25MAR06	09MAR05	15MAR05		MS011	10								
MS1116	P1/R - Remove Temp. Props for Up Span - Towers	4	07APR06	11APR06	26JAN05	29JAN05			-	MS111	6						
MS1117	P1/R - Remove Temp. Props for Up Span - Founds	4	12APR06	15APR06	31JAN05	03FEB05				MS1	117						
MS1118	P1/R - Remove Temp. Props for Down Span - Towers	4	14APR06	18APR06	26MAR05	30MAR05				M	S1118						
MS1119	P1/R - Remove Temp. Props for Down Span - Founds	4	19APR06	22APR06	31MAR05	04APR05					MS11	19					
Main Line																	
MD1130	PA/L - 9 Segments Type B on Scaffold	6	11APR06	17APR06	24NOV05	30NOV05				M	01130						
MD1135	PA/L to P1/L - Insitu Stitch	3	18APR06	20APR06	01DEC05	03DEC05					MD113	5	i	1 1			
MD1020	P4/R - 1st. Pair - 2 Segments Type C	6	20MAR06	25MAR06	29JUN05	06JUL05		MD102	20								
MD1020	P1/R - 30 Segments Type C	15	16MAR06A	01APR06	16MAR06A	21JAN05		M	AD105	5							
MD1055	PA/R - 9 Segments Type C on Scaffold	6	04APR06	10APR06	16MAR05	22MAR05			-	MD1060							
	P1/R to P2/R - Instiu Stitch	3	04APR06	06APR06	22JAN05	25JAN05	-		_	1065	1				1	1	1 1
MD1065		3	11APR06	1990 Contraction Contraction	23MAR05	25MAR05	-		1000	MD10	62						
MD1062	PA/R to P1/R - Insitu Stitch		11/1/11/00	10/11/00	20111 1 100	2010-1100	Shr	et 5 of 21						1		-	I
Start Date Finish Date Data Date	23SEP03 29MAY08 20MAR06		3 Mo	e 8 - Lai Cl	ni Kok Viad g Program	duct		51 3 01 21	1	E	a		C	iC		1	as

ID1036 ID1025 ID1033 ID1034	Activity Description Segmental Deck Const'n (Lift Frames) P2/R to P3/R - Insitu Stitch P4/R - 28 Segments Type C	Orig. Durn.	Early Start	Early Finish	Late	Late Finish		MAR	APR		MAY	22 29		JUN	
lain Line - \$ D1036 D1025 D1033 D1034	Segmental Deck Const'n (Lift Frames) P2/R to P3/R - Insitu Stitch		orunt	* ********		FILISO			40 47 04						0
ID1036 ID1025 ID1033 ID1034	P2/R to P3/R - Insitu Stitch	3			Ground a	· · · · · · ·	13	20 27 3	10 17 24	1 8	15	the fi	1 0	12	9
ID1025 ID1033 ID1034			20MAR06	22MAR06	14NOV05	16NOV05	-	MD1036							
ID1033 ID1034	P4/R = 20 Segments Type C	13	27MAR06	11APR06	07JUL05	21JUL05			MD1025						
ID1034	DAID to DEID Jacity Stitch	3	12APR06	14APR06	28NOV05	30NOV05	-		MD1033						
a second a s	P4/R to P5/R - Insitu Stitch	3	12APR06	14APR06	170CT05	190CT05	-		MD1034						
	P3/R to P4/R - Insitu Stitch	3	12APR00	14APR00	1700105	1900105	-							-	_
	ture Finishing Works Required for TCSS	40	OCMAN/00	20 11 15 100	041001/05	4714100	-		BAE	1005			-		_
and the second	P3L to P6 - Parapets P3/L to P7/L (incl earthing	48	05MAY06	30JUN06	21NOV05	17JAN06	_		IVIT	1005	1	1	1		-40
	PA to P6 - Parapets PA/L to P3/L (incl earthing)	48	21APR06	16JUN06	05DEC05	03FEB06									F100
	PA to P6 - Parapets PA/R to P3/R (incl earthing)	48	15APR06	10JUN06	20OCT05	14DEC05	_		I T I					MF101	0
IF1015	PA to P6 - Insitu Slab to Under Median Barrier	36	20MAR06	02MAY06	14NOV05	24DEC05			1	MF101	5			1-1	
IF1017	PA to P6 - Median Barrier (incl earthing)	36	11APR06	23MAY06	05DEC05	17JAN06		11		- F		MF101	17	1	
iaduct - S	Slip Road A														
Substructur	re														
S1050	Abutment A - Install Bearings	2	20MAR06	21MAR06	09NOV06	10NOV06		AS1050							
uperstruct	ture Finishing Works Required for TCSS														
	Slip Rd.A to P7 -Parapets East Face (incl earth)	60	06JAN06A	18APR06	06JAN06A	10NOV05			AF101	0					
F1020	Slip Rd.A to P7- Parapets West Face (incl earth)	60	17JAN06A	24APR06	17JAN06A	23NOV05			A	-1020	1			1 1	
loise Barrie	ers & Encl' (Sec.15 Excision)														
N1000	Slip Rd. A - Full Enclosure Ch.1070 - Pier A2	48	04MAY06	29JUN06	11NOV05	07JAN06			AN	1000					
N1010	Slip Rd. A - Full Enclosure Pier A2 - 1280	48	10JUN06	08AUG06	19DEC05	17FEB06						A	N1010		
laduct - S	Slip Road B		a segent of		6. m. 2										
and the second	ture Finishing Works Required for TCSS														
F1010	Slip Rd.B to P7 - Parapets East Face (incl earth	60	11APR06	21JUN06	08OCT05	17DEC05		BF10	10	H	-				4
F1015	Slip Rd.B to P7 - Parapets West Face (incl earth	60	24MAY06	04AUG06	24NOV05	07FEB06					BF101	5			
	Noise Barriers & Enclosures					011									
	Slip Road B - Full Enclosure Ch.1038 - Pier B2	48	17MAY06	13JUL06	14NOV05	10JAN06	-			BN1	000			-	
BN1000		48	14JUN06	11AUG06	12DEC05	10FEB06						1	BN10	5	
N1005	Slip Road B - Full Enclosure Pier B2 - Ch. 1258	40	14301000	TIAOGOO	TZDEC03	TOPEDOO									_
	Norks - Lai Po Road														
	Traffic Management Schemes		00111000	00144500	001441400	001411/00	-	Durrada							
VT3140	Divert N/B & S/B Traffic to Divs'n No.1 (for B3)	1	20MAR06	20MAR06	29MAY08	29MAY08	_	DWT3140							
VT3250	4th. TTMS Lai Po Rd (P4R,P5R,B4) -Implementation	61*	02FEB06A	14APR06	02FEB06A	30NOV05	-		WT3250				1		
VT3300	5th. TTMS Lai Po Rd (for N/B C/W)-Prepare Review	18	20MAR06	10APR06	12FEB05	04MAR05			WT3300						
rt Date ish Date a Date	23SEP03 29MAY08 20MAR06 © Primavera Systems, Inc.		Route 3 Mo	e 8 - Lai Cl	hi Kok Via g Program			et 6 of 21	A	ac	C	iO	ruct	B	s

Activity	Activity	Orig.	Early	Early	Late	Late				31 4 5	20				-		
ID	Description	Durn.	Start	Finish	Start	Finish	13 20	AR 27 3	APR		1	MA 8 .1		22 2	0 5	JL 12	19
VT3310	5th. TTMS Lai Po Rd (for N/B C/W) -CRE Endorsm't	6	18APR06	24APR06	07MAR05	12MAR05	15 25	1 21 3		and the second se	3310	0 11	-	a fin	0 0	16	13
VT3320	5th. TTMS Lai Po Rd (for N/B C/W) -Roadwk Advice	6	25APR06	02MAY06	14MAR05	19MAR05					HWT	3320					
VT3330	5th. TTMS Lai Po Rd (for N/B C/W) - Site Prepare	24	27MAY06	24JUN06	21MAR05	18APR05				1		V	WT33	30			X
VT3400	6th. TTMS Lai Po Rd (for S/B C/W)-Prepare Review	18	20MAR06	10APR06	12FEB05	04MAR05			WT340	0							
VT3410	6th. TTMS Lai Po Rd (for S/B C/W) - CRE Endors't	6	18APR06	24APR06	28JUL05	03AUG05				WT	3410						
VT3420	6th. TTMS Lai Po Rd (for S/B C/W) -Roadwk Advice	6	25APR06	02MAY06	04AUG05	10AUG05		1		1	HWT	3420					
	Wall LCK-R2			1										1			
VW2020	Ret, Wall LCK-R2 - Walls	60	17APR06	27JUN06	04FEB05	19APR05		1	WW2020		H				C.C.	ale -	-ix-
	d (D3) Roadworks - Stage 1																
	Lai Po Rd N/B Ch.1+250 - 1+360 - Formation	18	20MAR06	10APR06	03FEB05	26FEB05			WR12	10							
VR1210	Lai Po Rd N/B Ch.1+250 - 1+360 - Polinaton Lai Po Rd N/B Ch.1+250 - 1+360 - Sub-base	12	04APR06	17APR06	21FEB05	05MAR05				R1230							
VR1230	Lai Po Rd N/B Ch.1+250 - 1+360 - Kerbs	12	11APR06	24APR06	28FEB05	12MAR05					1240						
VR1240 VR1250	Lai Po Rd N/B Ch.1+250 - 1+360- Utilities	24	25APR06	23MAY06	17SEP05	180CT05					4	1 A		WR1	250		
North Albuna (201	Lai Po Rd N/B Ch.1+250 - 1+360 - Road Pavement	6	25APR06	02MAY06	14MAR05	19MAR05					HWE	1260					
VR1260 VE1040	Lai Po Rd N/B Ch. 1-250 - 1-300 - Road Pavement	18	03JUN06	24JUN06	26MAR05	16APR05		+ +	1					WE10	40		-
		10	00001100	24001400	20141/41 (00	TOPATIOO							1				-
	d (D3) Roadworks - Stage 2 Reduce Segment Storage Area for Temp Road Divs'n	6	27MAY06	02JUN06	12APR05	18APR05								_	WE	1035	
VE1035		0	2/10//100	02301400	12/11/00	TOALINGS				-	-						
	d (D3) Roadworks - Stage 3	10	20144.000	0140000	07144 205	10140.005		NA/	A3200				1				
VA3200	Lai Po Rd S/B Ch.1+300 - 1+360 - Drainage	12	20MAR06	01APR06	07MAR05	19MAR05			WR230	0			1				
VR2300	Lai Po Rd S/B Ch.1+300 - 1+360 - Formation	6	04APR06	10APR06	21MAR05	26MAR05					1						1
VR2310	Lai Po Rd S/B Ch.1+300 - 1+360 - Sub-base	6	11APR06	17APR06	28MAR05	02APR05				/R2310	2200				4		
VR2320	Lai Po Rd S/B Ch.1+300 - 1+360 - Kerbs	6	18APR06	24APR06	04APR05	11APR05			-	VVR	2320	0000					
VR2330	Lai Po Rd S/B Ch.1+300 - 1+360 - Pavement	6	25APR06	02MAY06	12APR05	18APR05				_	VVF	2330	-		Å		
Lai Po Roa	d (D3) Roadworks - Stage 5		1							_							
NE1030	Lai Po Rd S/B - Remove Segment Storage Area	6	12APR06	18APR06	22JUL05	28JUL05				NE1030			-	1		-	
/iaduct -	Main Line - Piers P7 to P10									1					1		
Substructu	Ire																
MS2052	P7 Install Bearings	2	20MAR06	21MAR06	28SEP05	29SEP05		MS2052		1							1
Superstruc	cture Finishing Works Required for TCSS																
MF2000	P7 to P10 - Parapets P7 to P8 (incl earthing)	36	22MAR06	04MAY06	30SEP05	12NOV05			and the second second	-	M	F2000	1				
MF2002	P7 to P10 - Parapets P8 to P10 (incl earthing)	36	18APR06	30MAY06	24OCT05	03DEC05				-	-		-		MF20	02	
MF2005	P7 to P10 - Insitu Slab to Under Median Barrier	48	20MAR06	16MAY06	08SEP05	05NOV05		K			-		MF2	005			
11 2000					/						-						
rt Date ish Date ta Date	23SEP03 P3 F 29MAY08 20MAR06		3 Mo	oartment C e 8 - Lai C onth Rollin from 20 M	hi Kok Via Ig Progran	duct	Sheet 7 /01	' of 21	E	10				C		1	a
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Activity	Activity	Orig.	Early	Early	Late	Late			4.000	2	006		1	
ID	Description	Durn.	Start	Finish	Start	Finish		AR 0 27 3	APR	24 1	MAY 8 15	22 2	0 5	JUN 12 19
/F2007	P7 to P10 - Median Barrier (incl earthing)	48	18APR06	13JUN06	08OCT05	03DEC05	10	V AT V		64 1	0 15	the first first	5 5	MF2007
Remaining	Superstructure Finishing Works													
/F2040	P7 to P10 - Deck Drainage	48	14JUN06	11AUG06	26SEP06	23NOV06							MF204	0
t Grade	Works - Lai Chi Kok Interchange			-		A STATLES						1		
	Traffic Management Schemes							11						
1T1300	2nd. TTMS Butterfly Valley Rd-Prepare for Review	12	20MAR06	01APR06	19FEB05	04MAR05		MT1	300					
AT1300	2nd. TTMS Butterfly Valley Rd - CRE Endorsement	6	18APR06	24APR06	16JUN05	22JUN05				MT1310				
AT1320	2nd. TTMS Butterfly Valley Rd - Roadworks Advice	6	25APR06	02MAY06	23JUN05	29JUN05					T1320			
AT1320	2nd. TTMS Butterfly Valley Rd - Prepare	18	03MAY06	23MAY06	30JUN05	21JUL05						MT13	30	
1T1400	3rd TTMS Butterfly Valley Rd -Prepare for Review	12	20MAR06	01APR06	12FEB05	25FEB05		MT1	400					
AT1400	3rd. TTMS Butterfly Valley Rd - CRE Endorsement	6	18APR06	24APR06	10SEP05	16SEP05				MT1410				
AT1410 AT1420	3rd. TTMS Butterfly Valley Rd - Roadworks Advice	6	25APR06	02MAY06	17SEP05	24SEP05				and the second s	T1420			
лт1420 ЛТ1430	3rd. TTMS Butterfly Valley Rd - Prepare	24	03MAY06	30MAY06	26SEP05	250CT05						1 1	MT1430	
/T2070	TTMS Case No.027 (P7 Piling) - Implementation	563*	03JUN04A	17APR06	03JUN04A	18JAN06			M	T2070				
/T2140	TTMS for Pier P8/L - Implementation	641*	23FEB04A	08APR06	23FEB04A	11NOV05			MT2140					1
1T3100	2nd. TTMS Kom Tsun Street - Prepare for Review	12	20MAR06	01APR06	19FEB05	04MAR05		MT3	and the second second second					
1T3110	2nd. TTMS Kom Tsun Street - CRE Endorsement	6	04APR06	10APR06	23MAY05	28MAY05			MT3110	0				
113120	2nd. TTMS Kom Tsun Street - Roadworks Advice	6	11APR06	17APR06	30MAY05	04JUN05				T3120				
1T3130	2nd, TTMS Kom Tsun Street - Site Preparation	20	18APR06	11MAY06	06JUN05	29JUN05					MT313	0		
1T3140	2nd. TTMS Kom Tsun Street - Implementation	117*	15MAY06	03OCT06	14SEP05	18NOV05				1	VT3140			- in
1T3200	3rd. TTMS Kom Tsun Street - Prepare for Review	12	20MAR06	01APR06	12FEB05	25FEB05		MT32	200					
1T3210	3rd. TTMS Kom Tsun Street - CRE Endorsement	6	04APR06	10APR06	03OCT05	08OCT05			MT3210					
AT3220	3rd. TTMS Kom Tsun Street - Roadworks Advice	6	11APR06	17APR06	10OCT05	17OCT05			M	T3220				
AT3230	3rd. TTMS Kom Tsun Street - Site Preparation	28	18APR06	20MAY06	18OCT05	18NOV05				1		MT3230		
Drainage V					Transar									
SA5000	Butterfly Valley Rd Stage1 - Stormwater Drainage	54	15JUN05A	06MAY06	15JUN05A	23MAY05			1	-	SA5000			
SA2000	Kom Tsun St. & Bus Terminal - St/water Drainage	54	14FEB05A	13MAY06	14FEB05A	29JUN05		-			SA20	00		
	Roadworks											-		
SR4000	Kwai Chung Road (Pier 7) - Reinstatement	24	20MAR06	17APR06	20DEC05	18JAN06			SF	24000				
SR2000	Castle Peak Road - Roadworks Reinstatement	17	20MAR06	08APR06	24OCT05	11NOV05			SR2000			1 1		
SR5000	Butterfly V. Rd (LCKI) Stage1-Excav. & Formation	36	08APR06	20MAY06	25APR05	06JUN05			1 Contra de la			SR5000		
SR5010	Butterfly V. Rd (LCKI) Stage 1 - Sub-base	36	22APR06	03JUN06	10MAY05	21JUN05					1		SR5010	
SR5020	Butterfly V. Rd (LCKI) Stage 11 - Kerbs	24	22MAY06	17JUN06	07JUN05	06JUL05								SR5
t Date sh Date a Date	23SEP03 29MAY08 20MAR06	ile : LU30	hways Dep Route 3 Mo	artment C e 8 - Lai Cl	ontract No hi Kok Viao g Program	o. HY/2003/ duct	Sheet 8 01	of 21	B	a	CC	io	n	
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Activity	Activity	Orig.	Early	Early	Late	Late				20	06		
ID	Description	Durn.	Start	Finish	Start	Finish		AR	APR	04 4	MAY	0 00 -	JUN
R5030	Butterfly V. Rd (LCKI) Stage 1 - Pavement	9	19JUN06	29JUN06	07JUL05	16JUL05	13 2	0 27 3	10 17	24 1	8 15 2	2 29 5	12 19 SR5030
	Kom Tsun Street Bus Stn Excavate & Formation	18	15MAY06	03JUN06	30JUN05	21JUL05							3200
SR3200	Kom Tsun Street bus Stn Excavate & Formation	18	29MAY06	17JUN06	15JUL05	04AUG05							SR32
SR3210		24	12JUN06	11JUL06	29JUL05	25AUG05						SP3	220
SR3220	Kom Tsun Street Bus Stn Kerbs						-						
SR3000	Kom Tsun Street L/H C/Way - Excavate & Formation	12	15MAY06	27MAY06	14SEP05	28SEP05						SR3000	
SR3010	Kom Tsun Street L/H C/Way - Sub-base	12	29MAY06	10JUN06	29SEP05	14OCT05						0.000	SR3010
SR3020	Kom Tsun Street L/H C/Way - Kerbs	18	12JUN06	04JUL06	15OCT05	04NOV05						SR3	020
/iaduct -	Main Line - Piers P11 to P15			the Reg Provent									
Substructu	Ire												
MS3115	P12 - Bearings	7	20MAR06	27MAR06	29SEP05	07OCT05		MS3115		1999	1 1 1		
Superstruc	ture Finishing Works Required for TCSS												
MF3000	P11 to P15 - Parapets P10 to P12 (incl earthing)	30	28MAR06	03MAY06	08OCT05	12NOV05				MD	F3000	111	
MF3005	P11 to P15 - Parapets P12 to P14 (incl earthing)	24	04MAY06	31MAY06	14NOV05	10DEC05						MF3	005
MF3010	P11 to P15 - Parapets P14 to P16 (incl earthing)	24	01JUN06	29JUN06	12DEC05	10JAN06					M	F3010	X
MF3015	P11 to P15 - Insitu Slab to Under Median Barrier	48	20MAR06	16MAY06	08SEP05	05NOV05				H H	MF30	15	
MF3017	P11 to P15 - Median Barrier (incl earthing)	48	18APR06	13JUN06	08OCT05	03DEC05				-			MF3017
MF3020	P11 to P15 - Provision for E & M and TCSS	24	14JUN06	13JUL06	18JAN06	17FEB06						MF	3020
Parallel and services	Superstructure Finishing Works												
MF3040	P11 to P15 - Deck Drainage	72	17MAY06	11AUG06	29AUG06	23NOV06					MF3040		
		12	11100	11110000	20/10/000	20110100							
	Works - Wai Man Tsuen				No. Contraction								
	Traffic Management Schemes												
VT2000	Temporary Slow Lane on Top of Slope CCR-R5	12	07APR06	20APR06	22JUL05	04AUG05				T2000			
VT2010	B.V. Rd - Divert Traffic to Slow & Fast Lanes	1	21APR06	21APR06	05AUG05	05AUG05				/T2010			
VT2200	TTMS Slip RdD Deck@ CC Rd W/B-Prepare for Review	18	20MAR06	10APR06	12FEB05	04MAR05			VT2200	1			
VT2210	TTMS Slip Rd D Deck@ CC Rd W/B -CRE Endorsement	6	18APR06	24APR06	09NOV05	15NOV05				VT2210			
VT2220	TTMS Slip Rd D Deck@ CC Rd W/B -Roadworks Advice	12	25APR06	09MAY06	16NOV05	29NOV05					VT2220		- 1 1 1
VT2230	TTMS Slip Rd D Deck@ CC Rd W/B -Site Preparation	6	10MAY06	16MAY06	30NOV05	06DEC05					VT223	30	
VT2240	TTMS Slip Rd D Deck@ CC Rd W/B - Implementation	22*	10JUN06	07JUL06	07DEC05	03JAN06						VT224	K IO
Earthwork	s & Slope Works												
VE1040	Slope CCR-S5 - Compacted Filling	24	27FEB06A	06APR06	27FEB06A	21JUL05		HIN	/E1040				
VE1060	Slope CCR-S5 - Slope Drainage & Finishes	24	07APR06	05MAY06	01NOV05	28NOV05					/E1060		
VE1070	Slope CCR-S5 - Landscaping & Hydroseeding	12	28APR06	12MAY06	22NOV05	05DEC05					VE1070		
TLIGIO							-						
art Date	23SEP03 P3 File 29MAY08						Sheet 9	of 21	-				
nish Date ata Date	29MAT08 20MAR06	Hig				b. HY/2003/	/01		11				
					hi Kok Via				11	21	CI	Or	12
					g Program	ime			5	a	CCI		
			1	from 20 M	arch 2006				-		Infra	estru	cturas
	© Primavera Systems, Inc.												

Activity	Activity	Orig.	Early	Early	Late	Late	-		1	-			20	006				21/2		
ID	Description	Durn.	Start	Finish	Start	Finish		MAR 20 2	7	2	APR		1 1		15	22	20		UN	0
Earthworks	& Slope Works - 11NW-A/C678 & CR679						15	20 4			10 1	1 20	-	0	15	Jak .	23	2	4 13	9
/E2025	Slope 11NW-A/C678 & CR679 - Platform for S.Nails	3	20MAR06	22MAR06	25NOV05	28NOV05		VE2	025											
/E2027	Slope 11NW-A/C678 & CR679 - Test Soil Nail	6	23MAR06	29MAR06	29NOV05	05DEC05			VE	2027		3								
'E2030	Slope 11NW-A/C678 & CR679 - Soil Nails	18	30MAR06	20APR06	06DEC05	27DEC05						VE2	030							
E2000	Slope 11NW-A/C678 & CR679 - Remove Temp Platform	6	10JUN06	16JUN06	28DEC05	04JAN06									1				VE	20
/E2020	Slope 11NW-A/C678 & CR679 - Trim Original Slope	6	17JUN06	24JUN06	05JAN06	11JAN06												VE20	20	
Drainage W	Vorks														1					-
/A1000	Butterfly Valley Rd Stage3 - Stormwater Draiange	48	22APR06	17JUN06	06AUG05	03OCT05							H		-	i i		1	VA	41
Itilities & F	Roadworks																			a du
/R3000	Drainage Maintenance Access Rd Formation	24	02MAR06A	17APR06	02MAR06A	07NOV05					V	R3000	0							
'R3010	Drainage Maintenance Access Rd Sub-base	24	27MAR06	24APR06	18OCT05	14NOV05				-		V	R3010							
/R3020	Drainage Maintenance Access Rd Kerbs	24	04APR06	02MAY06	25OCT05	21NOV05			1	(11.1.)	and the second se			23020						
'R3030	Drainage Maintenance Access Rd Pavement	48	04APR06	30MAY06	22NOV05	18JAN06	1		1		1						VR	3030		
/R3040	Drainage Maintenance Access Rd Street Lights	12	17MAY06	30MAY06	05JAN06	18JAN06			1					1			VR	3040		
/R2100	Butterfly V. Rd (WMT) Stage3- Excav. & Formation	18	05JUN06	26JUN06	17SEP05	10OCT05			Ì							VR	2100		X	
/R2110	Butterfly V. Rd (WMT) Stage 3 - Sub-base	18	12JUN06	04JUL06	26SEP05	18OCT05											VR	2110	×	
/R2120	Butterfly V. Rd (WMT) Stage 3 - Kerbs	18	19JUN06	11JUL06	04OCT05	25OCT05												VR2	120 H	
Nai Man Ts	suen Fire Hydrant Pump House																			
/H1000	Wai Man Tsuen F/H Pump House - Plate Load Test	6	20MAR06	25MAR06	28MAR06	04APR06		VI	1100	0										
/H1010	Wai Man Tsuen F/H Pump House - Structure	60	03MAY06	13JUL06	05APR06	14JUN06	1					VH1	010				2		X	
/H2000	Fire Main - Pipework Along Maintenance Road	18	20MAR06	10APR06	10OCT05	31OCT05		S	H		VH200	0								
/H2005	Fire Main - Pipework to Piers P10/R & P14	18	11APR06	02MAY06	04JAN06	24JAN06		1	1			-	-IVH	12005						
/H2010	Fire Main - Valves & Connections	18	03MAY06	23MAY06	25JAN06	17FEB06								-		VH2	010			
andscape	Works																			-
/X1000	Landscaping - Earthworks & Formation	24	03MAY06	30MAY06	22NOV05	19DEC05								-			VX1	000		
/X1040	Landscaping - Soiling & Planting	24	31MAY06	28JUN06	20DEC05	18JAN06									V	X1040			H	
iaduct -	Main Line - Piers P16 to P18																			1
Substructu									li		1	i				1				
/IS4055	P16/L - Install Bearings	6	20MAR06	25MAR06	04JAN06	10JAN06		MS	\$405	5	Î	1 -								
MS4115	P16/R - Install Bearings	6	20MAR06	25MAR06	05DEC05	10DEC05		MS	5411	5										
MS4225	P17/L & P17/R - Cure & Strike Form/Falsework	24	21DEC05A	23MAR06	21DEC05A	20JUN05	-	MS4	1225								1	1	1	

3 Month Rolling Programme from 20 March 2006

Start Date Finish Date Data Date 23SEP03 P3 File : LU30 29MAY08 20MAR06 Hig

U30 Sheet 10 of 21 Highways Department Contract No. HY/2003/01 Route 8 - Lai Chi Kok Viaduct

Gacciona Infraestructuras

Activity	Activity	Orig.	Early	Early	Late	Late	2006
ID	Description	Durn.	Start	Finish	Start		MAR APR MAY JUN 13 20 27 3 10 17 24 1 8 15 22 29 5 12 1
	- Segmental Deck Construction (Crane)						
Main Line	P17 Slip C - 1st. Pair - 2 Segments Type B	4	20MAR06	23MAR06	01DEC05	05DEC05	MD4030
MD4035	P17 Slip C - 16 Segments Type B	7	24MAR06	31MAR06	06DEC05	13DEC05	MD4035
VID4035	C6 Slip C - 3 Segments Type B	2	04APR06	05APR06	14DEC05	15DEC05	MD4040
VD4040	C6 Slip C to P17 Slip C - Insitu Stitch	2	06APR06	07APR06	16DEC05	17DEC05	EMD4042
/D4042 //D4095	P18 Slip D - 22 Segments Type B	11	06APR06	18APR06	07DEC05	19DEC05	MD4095
Company and a second second	D10 to P18 - Insitu Stitch	2	19APR06	20APR06	31DEC05	03JAN06	DD1025
DD1025		-	10/ 5/100				
Main Line	- Segmental Deck Const'n (Lift Frames)	8	20MAR06	28MAR06	15NOV05	23NOV05	MD4112
/D4112	P18 Slip C - Install Lifting Frames	9	29MAR06	08APR06	24NOV05	03DEC05	MD4115A
MD4115A	P18 Slip C - 2nd-4th. Pairs -6 Segments Type B	7	10APR06	17APR06	05DEC05	12DEC05	MD4115
MD4115	P18 Slip C - 5th-14th Pairs - 20 Segments Type B	1	TUAFRUO	TIAFILOO	UJDECUJ	1202000	
Main Line		1 4	001447000	001447000	001443/00	29MAY08	MD4018
MD4018	Delivery of Segments at P17 Slip C	4	20MAR06	23MAR06	26MAY08		MD4020
MD4020	Launch Gantry to P16/P17/P18 UNDER CLP O/H LINES	2	14MAR06A	20MAR06	14MAR06A	21NOV05	
Superstru	cture Finishing Works Required for TCSS					-	MF4000
VF4000	P16 to P18 - Parapets at P16 - P18 incl earthing	24	15JUN06	14JUL06	27DEC05	24JAN06	
MF4005	P16 to P18 - Insitu Slab to Under Median Barrier	24	18APR06	16MAY06	13DEC05	11JAN06	MF4005
MF4007	P16 to P18 - Median Barrier (incl earthing)	24	12MAY06	08JUN06	07JAN06	07FEB06	MF4007
/iaduct ·	- Main Line - Piers 19 to Abutment M						
Substruct		1				0.51101.405	MS5115
MS5115	P20 - Pier Head - Cure & Strip Falsework	30	02MAR06A	22MAR06	02MAR06A	25NOV05	MS5165
MS5165	P21 - Pier Hammer Head	30	18MAR06A	21APR06	18MAR06A	01DEC05	MS5170
MS5170	P21 - Pier Insitu Deck Segment	60	22APR06	04JUL06	02DEC05	15FEB06	
MS5230	Abutment M - Install Bearings	6	20MAR06	25MAR06	23MAY08	29MAY08	MS5230
MS5240	Abutment M - Insitu Deck Segment	60	14FEB06A	21APR06	14FEB06A	07DEC05	MS5240
MS5250	Abutment M - Cure & Strip Falsework	24	22APR06	20MAY06	08DEC05	06JAN06	MS5250
MS5260	Abutment M - End Wall and Wing Walls	36	22MAY06	04JUL06	07JAN06	21FEB06	M\$5260
Main Line	- Segmental Deck Construction (Gantry)						
MD4025	Launch Gantry to P17/P18/P19 UNDER CLP O/H LINES	1	21MAR06	21MAR06	22NOV05	22NOV05	IMD4025
MD5000	Launch Gantry to P18/P19/P20 UNDER CLP O/H LINES	1	22MAR06	22MAR06	23NOV05	23NOV05	IMD5000
MD4107	CLP RESUME POWER - O/HEAD LINES NORTH &	0		31MAR06		29MAY08	♦MD4107
MD5015	P19 Slip C - 18 Segments Type B	8	23MAR06	31MAR06	24NOV05	02DEC05	MD5015
17 M 12 200 200 200 200	P19/L - 16 Segments Type A	8	24MAR06	01APR06	25NOV05	03DEC05	MD5022
MD5022	23SEP03 P3 File	: LU30			-	S	Sheet 11 of 21
				automath C	Contract No	HV/2003/0	01
MD5022 tart Date nish Date ata Date	29MAY08 20MAR06	Hig	3 Mo	e 8 - Lai C onth Rollin	hi Kok Via g Program arch 2006	duct	acciona

Activity ID	Activity	Orig.	Early	Early	Late	Late	-			2006	
	Description	Durn.	Start	Finish	Start	Finish	M/	AR 0 27 3	APR 10 17 24 1	MAY 8 15 22 29	JUN 5 12 19
	P19/R - 18 Segments Type A	8	24MAR06	01APR06	25NOV05	03DEC05	15 20		5035	0 13 22 23	5 12 19
	P19 Slip D - 14 Segments Type B	8	23MAR06	31MAR06	25NOV05	03DEC05		MD5			
	P19/L&R to P18/L&R - Insitu Stitches	2	04APR06	05APR06	05DEC05	06DEC05			MD5055		
10000		4	19APR06	22APR06	11FEB06	15FEB06			MD5060)	
	P20 Slip D - 1st. Pair - 2 Segments Type B	4	05APR06	08APR06	25JAN06	28JAN06			MD5070		
	P20/R - 1st. Pair - 2 Segments Type A	4	10APR06	13APR06	02FEB06	06FEB06			MD5080		
and a second second second	P20/L - 1st. Pair - 2 Segments Type A	4	14APR06	18APR06	07FEB06	10FEB06			MD5090		
	P20 Slip C - 1st. Pair - 2 Segments Type A				16FEB06	04MAR06			mosooo	MD5065	
	P20 Slip D - 22 Segments Type B	15	24APR06	11MAY06	and a free loss less					MD5075	
Charles and the state	P20/R - 22 Segments Type A	15	24APR06	11MAY06	16FEB06	04MAR06				MD5085	
ND5085	P20/L - 24 Segments Type A	15	25APR06	12MAY06	17FEB06	06MAR06					
/ID5095	P20 Slip C - 24 Segments Type B	15	25APR06	12MAY06	17FEB06	06MAR06				MD5095	
MD5097	P20/L&R to P19/L&R - Insitu Stitches	3	12MAY06	15MAY06	21MAR06	23MAR06				MD5097	
/ID5100	Launch Gantry to P20/P21/Abut M	2	22MAY06	23MAY06	07MAR06	08MAR06				MD510	0
liaduct - N	Main Line - Tunnel Approaches										
	ers & Encl' (Sec.10 Excision)										
	Semi Enclosure S/B Ch.2005 - 2200 - Frame	60	19JUN06	30AUG06	08DEC05	21FEB06					MN6100
				and the local of the							
	Norks - Butterfly Valley										
	Traffic Management Schemes	0	00144 000	04144.000	28MAY08	29MAY08		QT2130			
	TTMS Slip RdD Deck@ CC Rd E/B - Site Preparation	2	20MAR06	21MAR06				QT2140			
	TTMS Slip Rd D Deck @ CC Rd E/B - Implementation	18*	28FEB06A	20MAR06	28FEB06A	30DEC05		212:140			1 1
Earthworks	& Slope Works - 11NW-A/FR54 & F55	-									
QE2000	Slope 11NW-A/FR54 & FR55 - Remove Temp. Platform	18	24MAR06	14APR06	21JUN05	12JUL05			QE2000		
QE2002	Slope 11NW-A/FR54 & FR55 - Retaining Wall -Bases	36	15APR06	27MAY06	13JUL05	23AUG05				QE2	002
QE2004	Slope 11NW-A/FR54 & FR55 - Retaining Wall -Walls	48	15MAY06	11JUL06	10AUG05	06OCT05				QE2004	
	Slope 11NW-A/FR54 & FR55 - Install Temp Works	48	03MAY06	28JUN06	20JUL05	13SEP05			QE2010		1 1 1
QE2010	Roadworks										
	toudino luo	-	20MAR06	02MAY06	17APR08	29MAY08		H		QR2000	
Utilities & R	WSD Access Road - New CLP 11Kv Cable Laying	36									
Utilities & R QR2000	WSD Access Road - New CLP 11Kv Cable Laying	36									
QE2010 Utilities & R QR2000 Landscape	WSD Access Road - New CLP 11Kv Cable Laying	36 75	20MAR06*	16JUN06	210CT05	18JAN06		- H			

Activity	Activity	Orig.	Early	Early	Late	Late	-			2006
ID	Description	Durn.	Start	Finish	Start	Finish	40	MAR 20 27 3	APR	MAY JUN 8 15 22 29 5 12 19
			oture				13	20 21 3	10 17 24 1	8 15 22 29 5 12 19
COLUMN TABLE 122	Slip Road C						-			
Substructu							-	-		
CS1150	Abutment C - Install Bearings	6	20MAR06	18MAR06	26OCT05	25OCT05	-	CS1150		
CS1447	C5/L - C5/R Portal - Install Bearings	6	20MAR06	25MAR06	06OCT05	13OCT05	-	CS1447		
CS1555	C6/R & C6/L - Install Bearings on Portal Frame	6	27MAR06	01APR06	14OCT05	20OCT05	-	CS15	55	
Slip Road (C - Insitu Deck Construction									
CD1032	Slip Rd. C - Deck Span C3 to C4 - Falsework	12	27JAN06A	21MAR06	27JAN06A	26AUG05		CD1032		
CD1034	Slip Rd. C - Deck Span C3 to C4 - Soffit	6	22MAR06	28MAR06	27AUG05	02SEP05		CD1034		
CD1036	Slip Rd. C - Deck Span C3 to C4 - 1st. Pour	20	29MAR06	21APR06	03SEP05	27SEP05			CD1036	
CD1038	Slip Rd. C - Deck Span C3 to C4 - 2nd. Pour	20	22APR06	16MAY06	28SEP05	22OCT05				CD1038
CD1039	Slip Rd. C - Deck Span C3 to C4 - Stressing	4	17MAY06	20MAY06	24OCT05	27OCT05				CD1039
CD1041	Slip Rd. C - Deck Span C3 to C4 - Cure & Strip	6	22MAY06	27MAY06	28OCT05	03NOV05		17.1		CD1041
CD1040	Slip Rd. C - Deck Span C4 to C5 - Ground Prep.	9	20MAR06	29MAR06	16SEP05	27SEP05		CD1040		
CD1042	Slip Rd. C - Deck Span C4 to C5 - Falsework	10	30MAR06	11APR06	30SEP05	13OCT05			CD1042	
CD1044	Slip Rd. C - Deck Span C4 to C5 - Soffit	6	12APR06	18APR06	21OCT05	27OCT05			CD1044	
CD1046	Slip Rd. C - Deck Span C4 to C5 - 1st. Pour	20	19APR06	12MAY06	280CT05	19NOV05				CD1046
CD1048	Slip Rd. C - Deck Span C4 to C5 - 2nd. Pour	20	13MAY06	05JUN06	21NOV05	13DEC05				CD1048
CD1049	Slip Rd. C - Deck Span C4 to C5 - Stressing	4	06JUN06	09JUN06	14DEC05	17DEC05				CD1049
CD1051	Slip Rd. C - Deck Span C4 to C5 - Cure & Strip	6	10JUN06	16JUN06	11JAN06	17JAN06				CD10
CD1050	Slip Rd. C - Deck Span C5 to C6 - Ground Prep.	12	30MAR06	13APR06	28SEP05	13OCT05			CD1050	
CD1052	Slip Rd. C - Deck Span C5 to C6 - Falsework	18	14APR06	05MAY06	14OCT05	03NOV05				CD1052
CD1054	Slip Rd. C - Deck Span C5 to C6 - Soffit	6	29MAY06	03JUN06	04NOV05	10NOV05				CD1054
CD1056	Slip Rd. C - Deck Span C5 to C6 - 1st. Pour	20	05JUN06	28JUN06	11NOV05	03DEC05				CD1056
	ture Finishing Works Required for TCSS									
CF1010	Slip Rd. C - Parapets C2 to C4 (incl earthing)	48	15APR06	10JUN06	24OCT05	17DEC05				CF1010
CF1000	Slip Rd. C - Parapets - Abut. C to C2 + earthing	24	12JUN06	11JUL06	19DEC05	17JAN06				CF1000
	Slip Road D									
	•									
Substructu		6	20MAR06	25MAR06	26OCT05	01NOV05	-	DS1045		
DS1045	Abutment D - Install Bearings	6	20MAR06	25MAR06	290CT05	04NOV05	-	DS1045		
DS1115	D1 - Install Bearings	6		25MAR06	05NOV05	11NOV05	-	DS1175		
DS1175	D2 - Install Bearings		20MAR06		23MAY08	29MAY08	-	DS1295		
DS1295	D4 - Install Bearings	6	20MAR06	ZOIVIARUO	23IVIA100	291VIA100	_	031233		
and Data	23SEP03 P3	File : 1120					Sheet	13 of 21	A	
art Date nish Date ata Date	29MAY08 20MAR06		Rout	e 8 - Lai C	Contract No hi Kok Via g Program	o. HY/2003/ duct			Sa	cciona
					arch 2006					Infraestructuras
	© Primavera Systems Inc									mmacstractards

DS1530 D8 DS1530A D8 DS1531 D8 DS1592 D9 DS1655 D1 Slip Road D - S DD1035 D9 DD1035 D9 DD1050 D8 DD11050 D8 DD1115 D5 DD1137 D4 DD1195 D1 DD1195 D1 DD11200 Ab DD1195 D1 DD1200 D1	Activity Description 5 - Install Bearings 5 - Pier Head 9 - Pier Head - Insitu Segment 9 - Pier Head - Cure & Strike Form/Falsework 9 - Install Bearings 10 - Install Bearings 5 - 6 seg Type B 9 - 6 seg Type B 9 - 6 seg Type B 9 - 1st. Pair - 2 Segments Type B 8 - 28 Segments Type B	Orig. Durn. 6 24 36 12 6 6 6 6 2 7 5 2	Early Start 20MAR06 03MAR06A 14APR06 27MAY06 20MAR06 20MAR06	Early Finish 25MAR06 13APR06 26MAY06 09JUN06 25MAR06 25MAR06	Late Start 23MAY08 03MAR06A 12OCT05 23NOV05 23MAY08	Late Finish 29MAY08 10OCT05 22NOV05 06DEC05	MAR 13 20 27 3 DS1355	200 APR 10 17 24 1 D\$1530	MAY 8 15 22 29 DS15	
DS1355 D5 DS1530 D8 DS1530A D8 DS1531 D8 DS1592 D9 DS1655 D1 Slip Road D - S DD1035 D9 DD1055 D8 DD1115 D5 DD1137 D4 DD11200 Ab DD12055 D1	 5 - Install Bearings 6 - Pier Head 8 - Pier Head - Insitu Segment 9 - Pier Head - Cure & Strike Form/Falsework 9 - Install Bearings 10 - Install Bearings 5 Segmental Deck Const'n (Crane) 9 - 6 seg Type B 9 to D10 - Insitu Stitch 8 - 1st. Pair - 2 Segments Type B 	6 24 36 12 6 6 6 5	20MAR06 03MAR06A 14APR06 27MAY06 20MAR06 20MAR06	25MAR06 13APR06 26MAY06 09JUN06 25MAR06	23MAY08 03MAR06A 12OCT05 23NOV05	29MAY08 10OCT05 22NOV05 06DEC05				30A
DS1530 D8 DS1530A D8 DS1531 D8 DS1592 D9 DS1655 D1 Slip Road D - S DD1035 D9 DD1050 D8 DD11055 D8 DD1115 D5 DD1137 D4 DD11200 Ab DD1195 D1	 B - Pier Head B - Pier Head - Insitu Segment B - Pier Head - Cure & Strike Form/Falsework B - Install Bearings B - Install Bearings Segmental Deck Const'n (Crane) B - 6 seg Type B B to D10 - Insitu Stitch B - 1st. Pair - 2 Segments Type B 	24 36 12 6 6 6 5	03MAR06A 14APR06 27MAY06 20MAR06 20MAR06	13APR06 26MAY06 09JUN06 25MAR06	03MAR06A 12OCT05 23NOV05	100CT05 22NOV05 06DEC05		DS1530	DS15	
DS1530A D8 DS1531 D8 DS1592 D9 DS1655 D10 Slip Road D - S DD1035 D9 DD1037 D9 DD1050 D8 DD1115 D5 DD1137 D4 DD1200 Ab DD1200 Ab DD1195 D1 DD1200 Ab	 B - Pier Head - Insitu Segment B - Pier Head - Cure & Strike Form/Falsework D - Install Bearings C - Install Bearings Segmental Deck Const'n (Crane) D - 6 seg Type B D to D10 - Insitu Stitch B - 1st. Pair - 2 Segments Type B 	36 12 6 6 5	14APR06 27MAY06 20MAR06 20MAR06	26MAY06 09JUN06 25MAR06	12OCT05 23NOV05	22NOV05 06DEC05			DS15	
DS1531 D8 DS1592 D9 DS1655 D1 Slip Road D - S DD1035 D9 DD1037 D9 DD1050 D8 DD1055 D8 DD1115 D5 DD1137 D4 DD1200 Ab DD1200 Ab DD1195 D1	 B - Pier Head - Cure & Strike Form/Falsework Install Bearings Install Bearings Install Bearings Segmental Deck Const'n (Crane) - 6 seg Type B - 0 - 10 - Insitu Stitch - 1st. Pair - 2 Segments Type B 	12 6 6 5	27MAY06 20MAR06 20MAR06	09JUN06 25MAR06	23NOV05	06DEC05			0013	
DS1592 D9 DS1655 D1 Slip Road D - S DD1035 D9 DD1037 D9 DD1050 D8 DD1055 D8 DD1115 D5 DD1137 D4 DD1200 Ab DD1195 D1 DD1200 Ab DD1195 D1	 9 - Install Bearings 10 - Install Bearings Segmental Deck Const'n (Crane) 9 - 6 seg Type B 9 to D10 - Insitu Stitch 8 - 1st. Pair - 2 Segments Type B 	6 6 5	20MAR06 20MAR06	25MAR06						
DS1655 D11 Slip Road D - S DD1035 D9 DD1037 D9 DD1050 D8 DD1155 D8 DD1115 D5 DD1137 D4 DD11200 Ab DD1195 D1 DD1200 Ab	0 - Install Bearings Segmental Deck Const'n (Crane) 9 - 6 seg Type B 9 to D10 - Insitu Stitch 8 - 1st. Pair - 2 Segments Type B	6 5	20MAR06		23MAY08		004500			001001
Slip Road D - S DD1035 D9 DD1037 D9 DD1050 D8 DD1055 D8 DD1115 D5 DD1137 D4 DD1200 Ab DD1200 Ab DD1195 D1 DD1200 Ab	Segmental Deck Const'n (Crane) 9 - 6 seg Type B 9 to D10 - Insitu Stitch 8 - 1st. Pair - 2 Segments Type B	5		25MAR06	001441/00	29MAY08	DS1592			
DD1035 D9 DD1037 D9 DD1050 D8 DD1055 D8 DD1115 D5 DD1137 D4 DD1172 Ins DD1200 Ab DD1195 D1 DD1200 Ab	9 - 6 seg Type B 9 to D10 - Insitu Stitch 3 - 1st. Pair - 2 Segments Type B				23MAY08	29MAY08	DS1655			
DD1037 D9 DD1050 D8 DD1055 D8 DD1115 D5 DD1137 D4 DD1172 Ins DD1200 Ab DD1195 D1 DD1205 D1	9 to D10 - Insitu Stitch 9 - 1st. Pair - 2 Segments Type B		The second se							
DD1050 D8 DD1055 D8 DD1115 D5 DD1137 D4 DD1172 Ins DD1200 Abi DD1195 D1 DD1205 D1	3 - 1st. Pair - 2 Segments Type B	2	28FEB06A	20MAR06	28FEB06A	30DEC05	DD1035			
DD1055 D8 DD1115 D5 DD1137 D4 DD1172 Ins DD1200 Ab DD1195 D1 DD1205 D1			21MAR06	22MAR06	31DEC05	03JAN06	DD1037			
DD1115 D5 DD1137 D4 DD1172 Ins DD1200 Ab DD1195 D1 DD1205 D1	R - 28 Segments Type B	6	10JUN06	16JUN06	07DEC05	13DEC05				DD1050
DD1137 D4 DD1172 Ins DD1200 Abi DD1195 D1 DD1205 D1	- to coalitation type o	14	17JUN06	05JUL06	14DEC05	30DEC05				DD1055
DD1172 Ins DD1200 Abi DD1195 D1 DD1205 D1	5 - 26 seg Type B	7	17MAR06A	24MAR06	17MAR06A	25NOV05	DD1115			
DD1200 Ab DD1195 D1 DD1205 D1	to D5 - Insitu Stitch	3	25MAR06	28MAR06	08DEC05	10DEC05	DD1137			
DD1195 D1 DD1205 D1	stall Segment Sliding System Abut. D to D3	24	09MAR06A	10APR06	09MAR06A	01NOV05		DD1172		
DD1205 D1	out D - 3 Segments Type B on scaff	3	11APR06	13APR06	02NOV05	04NOV05		D D1200		
and the second second second	I - 21 Segments Type B (incl. Pierhead Seg)	6	14APR06	20APR06	05NOV05	11NOV05		DD1195		
	1 to Abut D - Insitu Stitch	3	21APR06	24APR06	21DEC05	23DEC05		DD1205		
DD1175 D2	2 - 27 Segments Type B (incl. Pier Head Seg)	10	21APR06	03MAY06	12NOV05	23NOV05			1175	
DD1197 D1	to D2 - Insitu Stitch	3	04MAY06	06MAY06	08DEC05	10DEC05			DD1197	
DD1150 D3	3 - 1st. Pair - 2 Segments Type B	6	04MAY06	10MAY06	24NOV05	30NOV05			DD1150	
DD1155 D3	3 - 18 Segments Type B	6	11MAY06	17MAY06	01DEC05	07DEC05			DD1155	
	3 to D4 - Instiu Stitch	3	18MAY06	20MAY06	08DEC05	10DEC05			DD1167	
	2 to D3 - Insitu Stitch	3	18MAY06	20MAY06	08DEC05	10DEC05			DD1177	
The second se	smantle Segment Sliding System (Abut. D to D3)	12	08MAY06	20MAY06	24JUN06	08JUL06			DD1179	
	Segmrntal Deck Const'n (L/Frames)									
	6 - 16 seg Type B	7	25MAR06	01APR06	26NOV05	03DEC05	DD10	95		
	5-D6 Insitu Stitch	2	04APR06	05APR06	16DEC05	17DEC05		D1117		
	7 - 1st. pair - 2 seg Type B	6	10APR06	15APR06	28NOV05	03DEC05		DD1070		
	7 - 16 seg Type B	8	18APR06	26APR06	05DEC05	13DEC05		DD1075		
	7-D8 Insitu Stitch	2	27APR06	28APR06	16DEC05	17DEC05		DD107	7	
	6-D7 Insitu Stitch	2	27APR06	28APR06	16DEC05	17DEC05		DD109		
		-								
	e Finishing Works Required for TCSS	42	22MAY06	11JUL06	12DEC05	03FEB06			DF1005	
DF1005 Sli	ip Rd. D -Parapets D4 to Abut D (incl earthing	42	221VIA100	HJULUO	12DEC03	USPEBUO				1
Start Date Finish Date Data Date	23SEP03 P3 F 29MAY08 20MAR06		hways Dep	artment C	ontract No		heet 14 of 21	~		

Activity	Activity	Orig.	Early	Early	Late	Late						00		200						_
ID	Description	Durn.	Start	Finish	Start	Finish		MAR 20		2		PR	24	1 8	MA)		20	5	JUN 12	
OF1007	Slip Rd. D -Parapets D4 to D8 (incl earthing)	36	15JUN06	28JUL06	19DEC05	03FEB06	10	20	6.1	0	10	11	24		15	-	100		007	H
ai Wan F	Road Overpass	I STATE		11.5						1	1					1				-
and the second se	Traffic Management Schemes									1		215								
_T2120	TTMS LW Rd (for W/B Deck) - Roadworks Advice	6	20MAR06	25MAR06	17MAY08	22MAY08			LT2	120										
_T2130	TTMS LW Rd (for W/B Deck) - Site Preparation	6	27MAR06	01APR06	23MAY08	29MAY08				LT2	130		-			-				
LT2140	TTMS LW Rd (for W/B Deck) - Implementation	121*	25APR06	16SEP06	17SEP05	11FEB06						LT214	10	H.		1			1	X
_T2210	TTMS LW Rd (for E/B Deck) - CRE Endorsement	6	20MAR06	25MAR06	11MAY08	16MAY08			T2	210										
_T2220	TTMS LW Rd (for E/B Deck) - Roadworks Advice	6	26MAR06	31MAR06	17MAY08	22MAY08		1		LT22	20									
LT2230	TTMS LW Rd (for E/B Deck) - Site Preparation	6	01APR06	08APR06	23MAY08	29MAY08				K.	LT2	230				-				1
LT3010	TTMS CC Rd (on W/B Deck) - CRE Endorsement	6	20MAR06	25MAR06	11NOV05	16NOV05			LT3	010			1						1	
LT3020	TTMS CC Rd (on W/B Deck) - Roadworks Advice	6	26MAR06	31MAR06	17NOV05	22NOV05				LT30	20				1				1	8-
LT3030	TTMS CC Rd (on W/B Deck) - Site Preparation	6	01APR06	08APR06	23NOV05	29NOV05				H	LT3	030					1			
LT3100	TTMS CC Rd (on E/B Deck) - Prepare for Review	12	23MAY06	05JUN06	18FEB06	03MAR06						1			1			LT	3100	
_T3110	TTMS CC Rd (on E/B Deck) - CRE Endorsement	6	20JUN06	25JUN06	28JUL06	02AUG06				1	1								LT311	0
West Boun	d - Substructure																			2
LS1235	D13 - Install Bearings	3	20MAR06	22MAR06	29SEP05	03OCT05		LS	123	5										
LS1285	D14 - Install Bearings	6	20MAR06	25MAR06	26SEP05	03OCT05			LS1	285										
LS1310	Abutment DA2 - Excavation in Rock for Footing	12	20MAR06	01APR06	13AUG05	26AUG05				LS1	310									
LS1320	Abutment DA2 - Mass Concrete Fill Under Footing	6	04APR06	10APR06	27AUG05	02SEP05					LS	1320		1	1			1		
LS1330	Abutment DA2 - Footing	12	11APR06	24APR06	03SEP05	16SEP05				1		-	LS1	330						
LS1340	Abutment DA2 - Bearing Shelf & Walls	18	25APR06	16MAY06	17SEP05	10OCT05						1	Market		LS	5134	0	1		
LS1350	Abutment DA2 - Install Bearings	3	17MAY06	19MAY06	22OCT05	25OCT05										LS1:	350			
East Bound	d - Substructure																			
LS2220	C14 - Excavate for Footing	12	17APR06	29APR06	10SEP05	24SEP05							1 - 1	LS2220)					
LS2230	C14 - Footing & Pier Kicker	12	02MAY06	15MAY06	26SEP05	10OCT05									LS	2230				
LS2240	C14 - Backfill & Remove Temporary Works	4	16MAY06	19MAY06	12OCT05	15OCT05										LS2	240	_		
LS2250	C14 - Pier (incl. Pier Head)	18	20MAY06	09JUN06	17OCT05	05NOV05													S225	0
LS2255	C14 - Install Bearings	2	10JUN06	12JUN06	07NOV05	08NOV05				1		1				1	1	1	LS2	255
LS2260	Abutment CA2 - Excavation in Rock for Footing	12	17APR06	29APR06	07SEP05	21SEP05					1	-		S2260)		1			
LS2270	Abutment CA2 - Footing	12	02MAY06	15MAY06	22SEP05	06OCT05							1		LS	2270				
LS2280	Abutment CA2 - Bearing Shelf & Walls	24	16MAY06	12JUN06	07OCT05	04NOV05				1		1				-		-	LS2	280
LS2290	Abutment CA2 - Install Bearings	3	13JUN06	15JUN06	05NOV05	08NOV05					1		1			1				5229

Start Date Finish Date Data Date 23SEP03 29MAY08 20MAR06 Hig

Sheet 15 of 21

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



Activity	Activity	Orig.	Early	Early	Late	Late	2006	
ID	Description	Durn.	Start	Finish	Start	Finish		AY JUN 15 22 29 5 12 19 2
West Boun	d - Insitu Deck							
LD1040	Lai Wan O/pass W/B - Demolish F/p for Stage 3	24	20MAR06	17APR06	20AUG05	16SEP05	LD1040	
LD1050	Lai Wan O/pass W/B - Span St.3 - Ground Prep.	18	25APR06	16MAY06	17SEP05	10OCT05		LD1050
LD1052	Lai Wan O/pass W/B - Span St.3 - Falsework	18	03MAY06	23MAY06	26SEP05	18OCT05		LD1052
LD1054	Lai Wan O/pass W/B - Span St.3 - Soffit	24	10MAY06	06JUN06	04OCT05	01NOV05		LD1054
LD1056	Lai Wan O/pass W/B - Span St.3 - 1st. Pour	24	31MAY06	28JUN06	26OCT05	22NOV05		LD1056
At Grade	Works - Ching Cheung Road at LCK P	ark						
	Traffic Management Schemes							
NT2050	2nd. TTMS CC Rd (E/B C/Way) - Prepare for Review	12	18APR06	02MAY06	11JAN06	24JAN06	INT2050	
NT2060	2nd. TTMS CC Rd (E/B C/Way) - CRE Endorsement	6	23MAY06	28MAY06	29OCT06	03NOV06		NT2060
NT2070	2nd, TTMS CC Rd (E/B C/Way) - Roadworks Advice	6	29MAY06	03JUN06	04NOV06	09NOV06		NT2070
NT2080	2nd. TTMS CC Rd (E/B C/Way) - Site Preparation	6	05JUN06	10JUN06	10NOV06	16NOV06		NT2080
	Wall CCR-R1 West Bound							
NW1070	W/B Ret. Wall CCR-R1A East - Parapet on Wall	24	20MAR06	17APR06	31OCT05	26NOV05	NW1070	
NW1150	W/B Ret. Wall CCR-R1B - Backfill Behind Wall	12	20MAR06	01APR06	27SEP05	12OCT05	NW1150	
NW1152	W/B Ret. Wall CCR-R1B - Parapet on Wall	18	18APR06	09MAY06	28NOV05	17DEC05	NW1	152
NW1210	W/B Ret. Wall CCR-R1A West - Bases	18	27FEB06A	01APR06	27FEB06A	10SEP05	NW1210	
NW1220	W/B Ret. Wall CCR-R1A West - Walls	24	13MAR06A	17APR06	13MAR06A	26SEP05	NW1220	
NW1230	W/B Ret. Wall CCR-R1A West - B/fill Behind Wall	12	18APR06	02MAY06	27SEP05	12OCT05	INW1230	
NW1240	W/B Ret. Wall CCR-R1A West - Parapet on Wall	18	10MAY06	30MAY06	19DEC05	10JAN06		NW1240
Retaining V	Wall CCR-R1 East Bound							
NW2070	W/B Ret. Wall CCR-R1C - Parapets on Wall	48	07JAN06A	29APR06	07JAN06A	22OCT05	NW2070	
NW2160	W/B Ret. Wall CCR-R1D -Parapets on Wall	60	02MAY06	12JUL06	24OCT05	03JAN06	NW2160	
NW2240	W/B Ret. Wall CCR-R1E - Parapets on Wall	24	20MAR06	17APR06	05DEC05	03JAN06	NW2240	
Drainage V	Vorks							
NA2010	C.C. Rd. W/B in New C/way - S/water Drainage E3	75	20MAR06	16JUN06	13OCT05	10JAN06		NA2010
NA2020	C.C. Rd. W/B in New C/way - S/water Drainage J2	75	03MAY06	01AUG06	13OCT05	10JAN06	NA2020	X X X
NA3000	C.C. Rd. E/B in New C/way - Stormwater Drainage	75	20MAR06	16JUN06	05OCT05	03JAN06		NA3000
Utilities & I	Roadworks							
NR1000	C.C. Rd. W/B in Portion E3 - Formation	18	03JUN06	24JUN06	27DEC05	17JAN06		NR1000
NR1010	C.C. Rd. W/B in Portion E3 - Sub-base	12	17JUN06	03JUL06	11JAN06	24JAN06		NR1010
NR2000	C.C. Rd. E/B - Foundations to Sign Gantry ADS3	18	17JUN06	10JUL06	04JAN06	24JAN06		NR2000
NR3000	C.C. Rd. E/B - Formation	24	17JUN06	17JUL06	27APR06	25MAY06		NR3000
Start Date Finish Date Data Date	23SEP03 29MAY08 20MAR06 © Primavera Systems, Inc.		3 Mo	e 8 - Lai C nth Rollin	Contract No hi Kok Via Ig Program arch 2006	HY/2003 duct		ciona fraestructuras

Activity	Activity	Orig.	Early	Early	Late	Late	2006 MAR APR MAY JUN
ID	Description	Durn.	Start	Finish	Start	Finish	MAR APR MAY JUN 13 20 27 3 10 17 24 1 8 15 22 29 5 12 19
t Grade	Work - Ching Cheung Road - Main Sec	tion					
	/ Traffic Management Schemes						
RT2240	3rd. TTMS CC Rd (Slewing) - Implementation	385*	28DEC04A	10APR06	28DEC04A	23NOV06	RT2240
	s & Slope Works - CCR-S1, S2 & S3				1		
RE1700	Slope CCR-S1E - Finish Seed & Planting +62.3mPD	6	20MAR06*	25MAR06	19OCT06	26OCT06	RE1700
RE1710	Slope CCR-S1E - Finish Seed & Planting +54.8mPD	12	27MAR06	10APR06	27OCT06	09NOV06	RE1710
	Slope CCR-S1E - Finish Seed & Planting +47.3mPD	12	11APR06	24APR06	10NOV06	23NOV06	RE1720
RE1720	Slope CCR-S1C - Finish Seed & Planting +7.5m D	12	20MAR06	01APR06	27OCT06	09NOV06	RE1710A
RE1710A		12	04APR06	17APR06	10NOV06	23NOV06	RE1720A
RE1720A	Slope CCR-S1C - Finish Seed & Planting +47.3mPD	48	240CT05A	07APR06	240CT05A	11SEP06	RE1840
RE1840	Slope CCR-S1E&C- Rock Stabilisation to +25.4mPD	48	240CT05A 24JAN06A	06MAY06	2400105A	110CT06	RE1850
RE1850	Slope CCR-S1E&C - Drainage to Level +25.4mPD				120CT06	23NOV06	RE
RE1860	Slope CCR-S1E&C- Finish Seed & Planting to +25.4	36	08MAY06	17JUN06		2.00000	RE2000
RE2000	Slope CCR-S2 -Excavate Rock to Formation	24	20MAR06	17APR06	20OCT05	16NOV05	
RE2050	Slope CCR-S2 - Rock Stabilisation	48	04APR06	30MAY06	08APR06	03JUN06	RE2050
RE2100	Slope CCR-S2 - Drainage	42	31MAY06	20JUL06	05JUN06	25JUL06	
RE1720B	Slope CCR-S1W - Seed & Planting to +39.95mPD	36	20MAR06	02MAY06	12OCT06	23NOV06	
RE1550	Slope CCR-S1W - Rock Stabilisation to 24.9mPD	54	240CT05A	04MAY06	240CT05A	29MAY08	RE1550
RE1250	Slope CCR-S1W - Bulk Excavate to Level +19.0mPD	18	25NOV05A	24MAR06	25NOV05A	16AUG05	RE1250
RE1250A	Slope CCR-S1W -Detailed Excavate to Level +19.0m	18	20MAR06	28MAR06	08NOV05	16NOV05	RE1250A
RE1560	Slope CCR-S1W - Rock Stabilisation to 19.0mPD	48	25MAR06	22MAY06	08AUG06	04OCT06	RE1560
RE1660	Slope CCR-S1W - Drainage to Level +19.0mPD	24	09MAY06	05JUN06	19SEP06	18OCT06	RE1660
RE1270	Slope CCR-S1W - Excavate to Lai Wan Road O/pass	18	25MAR06	15APR06	17AUG05	06SEP05	RE1270
RE16604	Slope CCR-S1W - Drainage to Level +16.8mPD	18	06JUN06	27JUN06	19OCT06	09NOV06	RE16604
RE1665	Slope CCR-S1W - Seed & Planting to +32.4mPD	24	20MAR06	17APR06	22AUG06	18SEP06	RE1665
RE1670	Slope CCR-S1W - Seed & Planting to +24.9mPD	24	18APR06	16MAY06	19SEP06	18OCT06	RE1670
RE1675	Slope CCR-S1W - Seed & Planting to +19.0mPD	18	06JUN06	27JUN06	19OCT06	09NOV06	RE1675
RE3200	Slope CCR-S3 - Additional Soil Nails (VO166)	24	20MAR06	17APR06	27OCT06	23NOV06	RE3200
Retaining	Wall CCR-R2 (Value Engineering Design)						
RW1200	Ch 02.13 to 41.71 -Excavate & Rock Stabilisation	36	04APR05A	30MAR06	04APR05A	29MAY08	RW1200
RW1220	Ch 02.13 to 41.71 - Mass Concrete Facing Wall	24	240CT05A	28MAR06	240CT05A	29MAY08	RW1220
RW1230	Ch 02.13 to 41.71 - Retaining Wall Base Slabs	12	06FEB06A	28MAR06	06FEB06A	27AUG05	RW1230
RW1240	Ch 02.13 to 41.71 - Retaining Wall Stem & Coping	27	29MAR06	29APR06	29AUG05	29SEP05	RW1240
RW1300	Ch 50.71 to 78.27 -Excavate & Rock Stabilisation	24	210CT05A	30MAR06	210CT05A	29MAY08	RW1300
lart Date nish Date ata Date	23SEP03 29MAY08 20MAR06		Route 3 Mo	8 - Lai Cl	Contract No hi Kok Via g Program arch 2006	b. HY/2003/ duct	Sheet 17 of 21 3/01

Activity	Activity	Orig.	Early	Early	Late	Late	APR MAY JUN
ID	Description	Durn.	Start	Finish	Start	Finish	MAR APR MAY JUN 13 20 27 3 10 17 24 1 8 15 22 29 5 12 19
RW1320	Ch 50.71 to 78.27 - Mass Concrete Facing Wall	27	12NOV05A	11APR06	12NOV05A	25JAN06	100 100 100 100 100 100 100 100 100 100
RW1330	Ch 50.71 to 78.27 - Retaining Wall Base Slabs	12	12APR06	25APR06	26JAN06	11FEB06	RW1330
RW1340	Ch 50.71 to 78.27 - Retaining Wall Stem & Coping	24	26APR06	24MAY06	13FEB06	11MAR06	RW1340
RW1400	Ch 00.00 to 02.13 -Excavate & Rock Stabilisation	12	20MAR06	01APR06	06MAR06	18MAR06	RW1400
RW1420	Ch 00.00 to 02.13 - Mass Concrete Facing Wall	6	04APR06	10APR06	20MAR06	25MAR06	RW1420
RW1430	Ch 00.00 to 02.13 - Retaining Wall Base Slabs	6	11APR06	17APR06	27MAR06	01APR06	RW1430
RW1440	Ch 00.00 to 02.13 - Retaining Wall Stem & Coping	16	18APR06	06MAY06	04APR06	21APR06	
NEARINE FOR EACH	s Above Retaining Wall CCR-R2						
RE4000	Ch 00.00 to 78.27 - Excavate in Benches	48	02MAY06	27JUN06	30SEP05	26NOV05	RE4000
RE4010	Ch 00.00 to 78.27 - Filter Layer	48	16MAY06	12JUL06	17OCT05	10DEC05	RE4010
RE4020	Ch 02.13 to 41.71 - General Filling & Compaction	36	06JUN06	19JUL06	07NOV05	17DEC05	RE4020
RE4022	Ch 50.71 to 78.27 - General Filling & Compaction	36	06JUN06	19JUL06	19JAN06	04MAR06	RE4022
RE4025	Ch 00.00 to 2.13 - General Filling & Compaction	6	08MAY06	13MAY06	22APR06	28APR06	RE4025
RE4027	Excavate & Demolish Existing Retaining Wall	12	15MAY06	27MAY06	29APR06	13MAY06	RE4027
RE4028	Fill & Compact to Form Toe of Berm	6	29MAY06	03JUN06	15MAY06	20MAY06	RE4028
	Vall CCR-R3 Type D, E & F						
RW2190	Ret. Wall CCR-R3F - Break Down Top of Piles	36	03NOV05A	22MAR06	03NOV05A	27FEB06	RW2190
RW2200	Ret. Wall CCR-R3F - Capping beam	42	12NOV05A	08APR06	12NOV05A	09MAR06	
RW2210	Ret, Wall CCR-R3F - Stem Walls	48	30NOV05A	22APR06	30NOV05A	23MAR06	RW2210
RW2070	Ret. Wall CCR-R3E - Break Down Top of Piles	12	07FEB06A	21MAR06	07FEB06A	09MAR06	RW2070
RW2090	Ret. Wall CCR-R3E - Capping beam	18	27FEB06A	28MAR06	27FEB06A	16MAR06	RW2090
RW2110	Ret. Wall CCR-R3E - Stem Walls	18	06MAR06A	05APR06	06MAR06A	23MAR06	
RW2590	Ret. Wall CCR-R3D - Erect Noise Barriers	12	20MAR06	01APR06	16MAY08	29MAY08	RW2590
RW2600	Ret. Wall CCR-R3D - Break Down Top of Piles	24	25FEB06A	10APR06	25FEB06A	06JUN06	RW2600
RW2610	Ret. Wall CCR-R3D - Capping beam	12	11APR06	24APR06	07JUN06	21JUN06	RW2610
RW2630	Ret, Wall CCR-R3D - Stem Walls	24	20APR06	18MAY06	16JUN06	15JUL06	RW2630
	Vall CCR-R3 Type A				1		
RW3040	Ret. Wall CCR-R3A - Backfill & Form Platform	18	20MAR06	10APR06	15SEP05	07OCT05	RW3040
		10	20111 1 100	10/11/100	1002100	0.00.00	
	Nall CCR-R3 Type B Ret. Wall CCR-R3B - Backfill & Form Platform	18	20MAR06	10APR06	28NOV05	17DEC05	RW4040
RW4040		10	2010/41 (00	10/41100	20110700	INDECCO	
	Wall CCR-R3 Type C	24	25JAN06A	24MAR06	25JAN06A	23NOV06	RW5010
RW5010	Ret. Wall CCR-R3C - Temporay Works & Excavation		25JAN00A 22MAY06	NUMBER OF TAXABLE	and the second s		RW5
RW5020	Ret. Wall CCR-R3C - Bases	24	ZZIVIATUO	17JUN06	10JUL06	07AUG06	
art Date nish Date ata Date	23SEP03 29MAY08 20MAR06 © Primavera Systems, Inc.		Route 3 Mo	8 - Lai Cl	contract No hi Kok Viao g Program arch 2006	o. HY/2003/ duct	/01 Gacciona

Activity	Activity	Orig.	Early	Early	Late	Late	2006
ID	Description	Durn.	Start	Finish	Start	Finish	MAR APR MAY JUN 13 20 27 3 10 17 24 1 8 15 22 29 5 12 19
RW5030	Ret. Wall CCR-R3C - Walls	30	05JUN06	11JUL06	24JUL06	28AUG06	RW5030
	ks Above Retaining Walls CCR-R3D, E & F						
RE4107	Slope above CCR-R3D-Excavate Slope	12	19MAY06	01JUN06	17JUL06	31JUL06	RE4107
RE4110	Slope above CCR-R3D- Filter - Bottom to 1st Berm	6	02JUN06	08JUN06	01AUG06	07AUG06	RE4110
RE4111	Slope above CCR-R3D- Rockfill - Bt'm to 1st Berm	12	09JUN06	23JUN06	08AUG06	21AUG06	RE4111
RE4205	Slope above CCR-R3E&F -Remove Piling Platform	6	24APR06	29APR06	24MAR06	30MAR06	RE4205
RE4207	Slope above CCR-R3E&F -Excavate Slope	12	02MAY06	15MAY06	31MAR06	14APR06	RE4207
RE4210	Slope above CCR-R3E&F- Filter - Btm. to 1st Berm	6	16MAY06	22MAY06	15APR06	21APR06	RE4210
RE4211	Slope above CCR-R3E&F -Rockfill-Bt'm to 1st Berm	12	23MAY06	05JUN06	22APR06	06MAY06	RE4211
RE4213	Slope above CCR-R3E&F -Filter-1st Berm to +24mPD	6	06JUN06	12JUN06	15AUG06	21AUG06	RE4213
RE4214	Slope above CCR-R3E&F-Rockfil-1st Berm to +24mPD	12	13JUN06	27JUN06	22AUG06	04SEP06	RE4214
	s & Slope Works - CCR-S4						
RE4268	Slope CCR-S4 - Excavate & Bench Upper Slope	48	03JAN06A	10APR06	03JAN06A	11FEB06	
RE4280	Slope CCR-S4 - Fill and Compact	24	23MAY06	19JUN06	13FEB06	11MAR06	RE4280
RE4285	Slope CCR-S4 - Form New Access Road at Footpath	24	23MAY06	19JUN06	13FEB06	11MAR06	RE4285
	ung Road NTMM Retaining Wall A						
RW5990	NNTM Wall A - Excavate to Formation	36	09JAN06A	30MAR06	09JAN06A	20MAY06	RW5990
RW6000	NNTM Wall A - Bases	12	31MAR06	14APR06	22MAY06	03JUN06	RW6000
RW6010	NNTM Wall A - Walls	18	15APR06	06MAY06	05JUN06	26JUN06	RW6010
RW6020	NNTM Wall A - Drainage & Fill Behind Walls	12	08MAY06	20MAY06	27JUN06	11JUL06	RW6020
RW6030	NNTM Wall A - Excavate to +20.5mPD	12	22MAY06	03JUN06	12JUL06	25JUL06	RW6030
RW6040	NNTM Wall A - Debris Callection Area Drainage	12	05JUN06	17JUN06	26JUL06	09AUG06	RW60
RW6050	NNTM Wall A - Debris Callection Area Access Ramp	12	19JUN06	04JUL06	10AUG06	23AUG06	RW6050
Drainage V							
RR3100	Ching Cheung Rd. E/B -S/Water S300-01 to S300-07	60	13JUN06	24AUG06	22MAR06	01JUN06	RR3100
	Roadworks						
RA2000	Lai Wan Road - Footpath below Slope CCR-S4	24	19MAY06	15JUN06	270СТ06	23NOV06	RA200
RA2100	CLP Cable Trough - CC Rd. Rest Garden to CCR-R3D	48	20MAR06	16MAY06	10MAR06	06MAY06	RA2100
RA2100	CLP Cable Trough - Behind CCR-R3D	24	06JUN06	05JUL06	08MAY06	03JUN06	RA2110
RA3000	Ching Cheung Rd. W/B New C/Way -N/B Founds Bases	60	16DEC05A	25MAR06	16DEC05A	05NOV05	RA3000
RA3002	Ching Cheung Rd. W/B New C/Way -N/B Founds Walls	72	07FEB06A	05JUN06	07FEB06A	03DEC05	RA3002
RA3002	Ching Cheung Rd. W/B New C/Way - Filling	60	11APR06	21JUN06	08OCT05	17DEC05	RA3003
RA3005	Ching Cheung Rd. W/B - S/Gantry FADS4 Founds	18	31MAY06	21JUN06	22DEC05	13JAN06	RA3005
RA3005			011111100	21001100			
tart Date inish Date bata Date	23SEP03 29MAY08 20MAR06		Route 3 Mo	e 8 - Lai C onth Rollin	Contract No hi Kok Via og Program arch 2006	o. HY/2003/ duct	/01 Gacciona
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Activity	Activity	Orig.	Early	Early	Late	Late	-					2006		
ID	Description	Durn.	Start	Finish	Start	Finish		MAR 20	27 3	AF	17 24	MA	Y 5 22 29	JUN 5 12 19
RA4000	Ching Cheung Rd. New E/B Slip Road - E&M +TCSS	75	18APR06	17JUL06	17NOV05	17FEB06	13	20 4	21 3	RA400		1 8 1	5 22 29	5 12 19
A4030	Ching Cheung Rd. New E/B - N/B Founds Base	75	20MAR06	16JUN06	08SEP05	07DEC05	-	1	H					RA
RA4040	Ching Cheung Rd. New E/B - Fill Behind N/B Base	48	17MAY06	13JUL06	07NOV05	03JAN06	-					RA4040		
A7000	Lai Wan Road - Watermains & Hydrants FH4 & FH5	24	16MAY06	12JUN06	22FEB06	21MAR06								RA7000
and the second s		2.1	101111100	12001100	LEI EBOO	2 110 4 100				-				
	Works - Butterfly Valley Interchange												1 1	
And the state of the state of the state of the	7 Traffic Management Schemes	18	18APR06	09MAY06	11JAN06	03FEB06	-			i		PT220	0	
T2200	TTMS CP Rd-KC S/B for Paving -Prepare for Review	6	23MAY06	28MAY06	05FEB06	10FEB06	-			1				2210
T2210	TTMS CP Rd-KC S/B for Paving - CRE Endorsement	7	and a second second		11FEB06		-							PT2220
T2220	TTMS CP Rd-KC S/B for Paving - Roadworks Advice		29MAY06	04JUN06		17FEB06	-			1				
T2230	TTMS CP Rd-KC S/B for Paving - Site Preparation	6	05JUN06	10JUN06	18FEB06	24FEB06	-							PT2230
	s & Slopeworks - 11NW-A/C26	10	00144500	04400000	400,000	001101/00			-					
E1040	Slope 11NW-A/C26 - Finishing Works	12	20MAR06	01APR06	10NOV06	23NOV06	-	-	P	E1040				
Retaining	Wall CCR-R5 (Pre-bored "H" Piles)	1												
W2150	Ret. Wall CCR-R5 - R.C. Wall CCR-R5A	48	20MAR06	02MAY06	17APR08	29MAY08	_	1	Ē	i.	1 1	HPW2150		
2040 W2040	Ret. Wall CCR-R5 - Stage 1 - Fill Behind Wall	60	20MAR06	30MAY06	19MAR08	29MAY08					T T	7	P	W2040
W2130	Ret. Wall CCR-R5 - Stage 2 - Install "H" Piles	18	20MAR06	10APR06	12DEC05	03JAN06		-	T	PW	2130			
W2225	Ret. Wall CCR-R5 - Complete Coping & Facing	12	11APR06	24APR06	04JAN06	17JAN06				1	PW	2225		
W2140	Ret. Wall CCR-R5 - Complete Fill Behind Wall	12	25APR06	09MAY06	26SEP06	11OCT06	1					PW21	40	
PW2230	Ret. Wall CCR-R5 - Slope Works Behind Wall	36	10MAY06	21JUN06	12OCT06	23NOV06			1			PW2230		N N
Retaining	Wall CCR-R6 (Value Engineering Design)													
W3220	Ret. Wall CCR-R6 - Excavate Slope	48	06MAR06A	06MAY06	06MAR06A	29OCT05			H		-	PW3220		
W3230	Ret. Wall CCR-R6 - Reinstate Soil Nail Heads	48	08APR06*	03JUN06	30SEP05	26NOV05				-		H		PW3230
W3240	Ret. Wall CCR-R6 - Install T40 Tie Back Anchors	48	08MAY06*	04JUL06	31OCT05	24DEC05					P	N3240		
W3250	Ret. Wall CCR-R6 - Bases to R.C. Walls	48	05JUN06*	02AUG06	28NOV05	24JAN06							PW32	50
Sec. 19.	Roadworks													
PR1110	CLP Slew 2No.132kva No.5 Behind Wall CCR-R5	36	21DEC05A	25MAR06	21DEC05A	24DEC05		P	R1110)				
PR1115	New CLP 11Kv Cable Laying behind CCR-R5	12	27MAR06	10APR06	28FEB06*	13MAR06			- H	PR1	115			
PR5000	C.P.Rd-K.C. S/B to C.C.Rd E/B - Excavate Road	18	17JUN06	10JUL06	18JAN06	10FEB06								PR5000
PR5100	C.C. Rd. W/B - Sign Gantry FADS7 at P15-P16	6	18APR06	24APR06	23MAY08	29MAY08			1		PR	5100		
Kiosk at S	lip Road C													
PK1000	Kiosk at Slip Rd. C - Structure	24	18APR06	16MAY06	21NOV05	17DEC05						Harris P	PK1000	
PK1010	Kiosk at Slip Rd. C - Building Finishes	48	17MAY06	13JUL06	19DEC05	17FEB06						PK1010		X
PK1020	Kiosk at Slip Rd. C - MVAC Installation	24	17MAY06	13JUN06	19DEC05	17JAN06								PK1020
rt Date ish Date ta Date	23SEP03 P3 F 29MAY08 20MAR06		3 Mo	8 - Lai Cl	hi Kok Viad g Program	b. HY/2003/ duct		20 of	21	1	12		raestr	na

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ID	Description	Durn.	Start	Finish	Start	Finish	13	20	27	3	10	17	24	1	8 1	5 22	2 29) 5	12	19	26
PK1030	Kiosk at Slip Rd. C - Electrical Works	24	31MAY06	28JUN06	04JAN06	03FEB06										PK	1030		- NY	-	
PK1040	Kiosk at Slip Rd. C - Drainage Works	24	14JUN06	13JUL06	18JAN06	17FEB06												PK10	040	-Y-	

Highways Department Contract No. HY/2003/01

Route 8 - Lai Chi Kok Viaduct 3 Month Rolling Programme from 20 March 2006

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APPENDIX M COMPLAINT LOG

Appendix M - Complaint Log

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
Ref. 40318	Nob Hill	18 March 2004	Kwai Tsing District Officer (KTDO)recently received a public noisecomplaint about construction noisegenerated from the Route 8 – Lai ChiKok Viaduct (R8-LCKV) Project, nearNob Hill, Lai Chi Kok. KTDO referredthe complaint to the HighwaysDepartment (HyD) on the same day.HyD subsequently referred thecomplaint to the Environmental Team(ET) Leader of the Project on 18 March2004.The complaint was raised by theCitybase Property Management Ltd.(the management company of NobHill) and the Secretarty of Nob HillOwners Committee (Mr. Kevin Tse)about construction noise generated	 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) 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 	Closed
			from the R8-LCKV Project at the work areas near Nob Hill. Mr. Kevin Tse mentioned that residents living in Nob Hill have greatly been affected by the noise impacts generating from the R8- LCKV construction works. He also requested relevant government departments to consider installing noise barrier along Ching Cheung Road and to work out possible measures to minimize the noise nuisances to the residents living in the vicinity.	 after the issue date of this complaint, so this activity was not considered in this report. 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. 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 	

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

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
				 Road in front of Nob Hill. 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 sensitive area; 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 referred to the ET Leader of the Project on 10 th July 2004.	 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 5th July 2004. During ET's weekly environmental site inspection on 14th July 2004, no serious water quality nuisance induced by the Project works was observed at the construction sites near Pier P7. It was 	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
			The complaint was raised by Mr. Chan, regarding the washout of muddy water	also noted that the back of profile barriers along the site boundary had been sealed up by cement as preventive measures.	
			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.	
			danger to the motorbixes.	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
			1. Area A: Works area between Nob	Review of Environmental Monitoring Results	

Log Ref. Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
		 Hill and Lai Chi Kok Park Swimming Pool Area B: Works area between Ching Cheung Road and Mei Lai Road / Lai Wan Road opposite to Mei Foo Sun Cheung (Phase 5) and Lai Chi Kok Public Library. 	concerned works areas, include: <u>Noise Monitoring</u> NM4: R/F of Mei Foo Sun Chuen (Phase 5) NM8a: M/F of Nob Hill	

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
50215	Mei Foo Sun Chuen, Phase 5 (Retaining Wall CC-R3)	15-Feb-05 (by ET Leader)	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 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.	being conducted at the concerned. The major powered mechanical equipment (PME) in operation included a mobile crane, an air compressor, a reverse circulation drill and a generator. In view of the separation of the site area and the residential building (around 40 m) and also the high traffic noise from	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
50322	Seung Lai House, Wah Lai Estate (Slope S1)	11-Mar-05 (by EPD) 22-Mar-05 (by ET Leader)	Environmental Protection Department (EPD) received a public noise complaint on 11 Mar 05 about daytime construction noise generation from R8- LCKV. EPD subsequently referred the complaint to the Environmental Team (ET) Leader of the Project on 22 Mar 05. 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.	 Construction Activities As advised by the RSS, the major construction work during 25 Feb 05 to 11 Mar 05 (2 weeks before the date of complaint) in the vicinity of Wah Lai Estate included excavation work, soil nail work and installation of u-channel and manholes. The major powered mechanical equipment included excavators, drilling machine and air compressor. 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. Environmental Monitoring 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. Conclusion 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. 	Closed

Log Ref. Loc	ition	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
50330, 50331, 50404 Wah La 50407		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 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.	 Construction Activities 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. Environmental Monitoring Ad-hoc noise measurement was conducted at Seung Lai House on 30th Mar 05 and 7th Apr 05 and the measured noise levels (Leq-30min) were ranged from 66.9 to 69.1 dB(A), which were well below the criterion for daytime construction noise of 75 dB(A). The construction noise level (with reduction of background noise level) is expected to be even lower. 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). 	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
50404- v2	Mei Foo Sun Chuen	4-Apr-05 (by ET Leader via RSS)	A public complaint was raised on 1 st April 2005 regarding construction noise from the site area of the Route 8 – Lai Chi Kok Viaduct (R8-LCKV) Project near Mei Foo Sun Chuen. The complaint was referred to the Resident Site Staff and the ET Leader on 4 th April 2005.	 Construction Activities 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. 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. 	Closed

Log Ref. I	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
50613 Ma	ei 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. The complainant was particularly concerned about the fugitive dust emission during rock / concrete breaking 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. <i>Observations</i>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
50771	łei Lai House, Vah 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. 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.	 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. <i>Noise Measurement</i> Ad-hoc measurements were carried out on the roof of Hei Lai House on 25 July 2005. The results show that the measured noise level is well below the noise criterion of 75 dB(A). The construction noise level (with reduction of background noise) is expected to be even lower. <i>Conclusion</i> Since the noise measurement results at Wah Lai Estate were below 75 dB(A), the complaint was considered not justifiable. Nevertheless, noise mitigation measures have been implemented by the Contractor to minimize the noise impact arising from the breaking activities: Employment of silenced-type breakers; Temporary noise barriers, attached with sound adsorption materials, were erected to screen the site of breaking from sensitive receivers While the permitted hours for construction works are 7am to 7pm on non-holidays, the Contractor has commenced the rock breaking activity after 8:30am. 	Closed

Log Ref. Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
51107 Ching Cheun Road near Ma Foo Sun Chua	ei (by the ET	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 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.	 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 observations were made: 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. The haul roads and exposed works areas were observed wet. A water sprinkler was installed at the CCR-S4 for water spraying. Most of the slope was shot-creted to avoid wind erosion. 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> 	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
	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 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.	 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, mobile crane, lifting frame and generator, were undertaken under the two construction noise permits CNP no. GW-RW0739-05 and GW-RW0740-05. Environmental Monitoring 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). Conclusion 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. 	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
60110	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 Council Member's Office. The complaint mentioned that residents of Mei Foo Sun Chuen Stage 5 were adversely affected by construction dust caused by the Route 8 work carried out at the slopes adjacent to Ching Cheung Road.	 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 regarding construction dust was identified during the inspection. Environmental Monitoring 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. 	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
60213 60216 60220 60222	Hoi Lai Estate (Lai Po Road)	13-Feb-06 16-Feb-06 20-Feb-06 22-Feb-06 (by the ET Leader)	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. All about construction noise due to night works at Lai Po Road near Hoi Lai Estate.	 Site Activities Since around mid-January 2006, segments were transported to Piers P15 and B4, under the permission of construction noise permit (CNP). 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. Site Inspection 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. 	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
	Near both Hoi Lai Estate and West Kowloon Highway	20-Apr-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 ET Leader on 20 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.	 Site Activities 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 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. 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. Contractor's Action 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, wrapping up of hammering equipment and etc.; and Conducted training of worker in order to reducing noise nuisance during the night works. 	Close

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
				 Conclusion 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. 	
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. 	Close

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