Territory Development Department

Contract No. ST 77/01

Sha Tin New Town, Stage II Road D15 Linking Lok Shun Path and Tai Po Road

Quarterly Environmental Monitoring & Audit Report – January to March 2004

April 2004

Sha Tin New Town, Stage II Road D15 Linking Lok Shun Path and Tai Po Road (Contract No. ST 77/01)

Quarterly Environmental Monitoring & Audit Report – January to March 2004

Checked in accordance with EML QP22 ______Environmental Team Leader

EXECUTIVE SUMMARY

This quarterly environmental monitoring report was prepared by Environmental Management Limited (EML) for Environmental Monitoring & Audit (EM&A) Services of Sha Tin New Town, Stage II Road D15 Linking Lok Shun Path and Tai Po Road. This report summarizes the EM&A carried out in the period from January to March 2004.

Environmental monitoring for this Project included both air quality and noise measurements. The parameters measured for air quality were 24-hour and 1-hour Total Suspended Particulate (TSP) while for noise monitoring, the A-weighted continuous sound pressure level (L_{eq}) as well as percentile levels (L_{10} and L_{90}) were measured.

Over the reporting period, there were seven exceedances in Action Level recorded in measured 24-hour TSP. The 24-hour TSP exceedances occurred at Station A1 on 2 January 2004, three times at Station A2 separately on 2 January, 30 January and 17 February 2004, and three times at Station A3 separately on 2 January, 30 January and 17 February. Ad-hoc site inspections were carried out separately on 7 January, 5 and 26 February 2004 by ET, MCAL and BCCL to investigate the matters. It was noted that excavation work was carried out near Station A1 on 2 January 2004, and general site works were carried out near Stations A2 and A3 on 2 January, 30 January and 17 February 2004. No particular dust issues were observed on site during the monitoring period. The high TSP levels on 2 and 30 January were likely to be caused by ambient factors. This was supported by the fact that the maximum values of API recorded at Sha Tin Station on 2 and 30 January were 109 and 92 respectively, much higher than the maximum value of around 70 on an average winter day, and that high levels were recorded at all monitoring stations. As for the exceedances on 17 February, the high TSP levels would likely to be caused by the dust generated by the haulage and delivery vehicles crossing Bridge C during the backfilling works of the abutment between B1 and B2.

The regular site inspections had been conducted in this reporting period and mitigation measures were identified and implemented. The mitigation measures implemented in this quarter covered the aspects in noise, air, water, wastewater and land contamination.

In regard to the last quarter environmental issues, it was observed that the exposed soil faces and excavation trenches near Lok Lo Ha roundabout were properly covered with tarpaulic sheeting for dust control. The Wetsep pump sump was properly maintained.

However, it was noted from site inspection in March that sand and black mud was found accumulated at Lok Shun Path Roundabout. Besides, watermains were found leaking near Retaining Wall No. 12. Furthermore, debris and rubbish were found uncovered near Bridge B, site boundary near headwall and between Piers C1 and C2. The Contractor was reminded to clear off any sand and mud found at the roundabout. The Contractor was also asked to rectify the watermains leakage as soon as possible. Besides, the Contractor was reminded to cover the construction waste and debris with tarpaulin and remove the waste once the site access is reopened.

March 2004

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1. INTRODUCTION

1.1 Background

Environmental Management Limited (EML) was appointed by Maunsell Consultants Asia Ltd. as the Environmental Specialist for the project *Sha Tin New Town, Stage II Road Linking Lok Shun Path and Tai Po road* (Agreement No. ST77/01).

The responsibilities of the Environmental Team included:

- Monitor the noise and air quality data as required in the Environmental Monitoring and Audit (EM&A) Manual;
- Analyse the monitoring data and review the success of EM&A program to cost effectively
 confirm the adequacy of mitigatory measures implemented and validity of the Environmental
 Impact Assessment Study predictions and to identify any adverse environmental impacts arising;
- Carry out site inspection to investigate and audit the Contractor's site practice, equipment and work methodologies with respect to pollution control and environmental mitigation, and anticipate environmental issues for proactive action before problems arise;
- Review the proposal for mitigation measures submitted by Contractor in accordance with Event and Action Plans.
- Propose any improvement or other alternative mitigation measures should Contractor's proposal be found to be inadequate;
- Adhere to the procedures for carrying out complaint investigation;
- Audit and prepare EM&A reports on environmental monitoring data and site environmental conditions;
- Report on EM&A results to Engineer, the ER and EPD;

This is the quarterly EM&A report for the period from January to March 2004. The report summarises the results of the impact air quality and noise monitoring in the reporting quarter as well as the environmental status and issues of the construction site for the Project. The remedial actions undertaken as a result of non-compliance with relevant environmental criteria or complaints related to the Project's construction works will also be discussed in the report.

The project area of the construction site for this Project is shown in **Figure 1.1** while the project organisation, contacts of key management for the project and EPD complaint hotline are shown in **Appendix D**.

1.2 Project Description

Road D15 Linking Lok Shun Path and Tai Po Road (hereinafter referred to as 'Road D15') is part of the development of Sha Tin New Town, Stage II by NT East Development Office/Territory Development Department. The project will provide a link between Lok Lo Ha Area (Planning Area 43 and 44) and Tai Po Road so as to relieve traffic congestion at the present access via Fo Tan Road. The construction of Road D15 includes the major components listed hereunder:

- (a) Construction of approximately 0.4km a single 2-lane carriageway forming part of Road D15 at Fo Tan. About 0.2km of road is on elevated structure.
- (b) Construction of vehicular bridge A, B and C with footpaths.

- (c) Construction of noise barriers.
- (d) Construction of associated footpaths, cycle tracks, drainage and workworks.
- (e) Construction of sewerage improvement works via Lok Lo Ha Village.
- (f) Slope works and landscaping works associated with the above roadworks.

1.3 Construction Activities During the Reporting Quarter

The major activities performed during the reporting period included:

- Construction of Bridges A, B and C, including pile caps (Bridge A), abutment walls (Bridge A), bridge decks (Bridges A, B and C), and installation of bridge bearings (Bridges A and B);
- Retaining walls 1, 2, 6,7 and 12;
- Noise barrier construction for noise barrier No. 1 and noise barrier No.4B;
- Box culvert extension of 1500 diameter pipe;
- Underground drainage and water pipes at Lok Shun Path Roundabout; and
- Construction of staircases 4, 10 and 11.

The work program for the current and next quarter is attached in **Appendix F**.

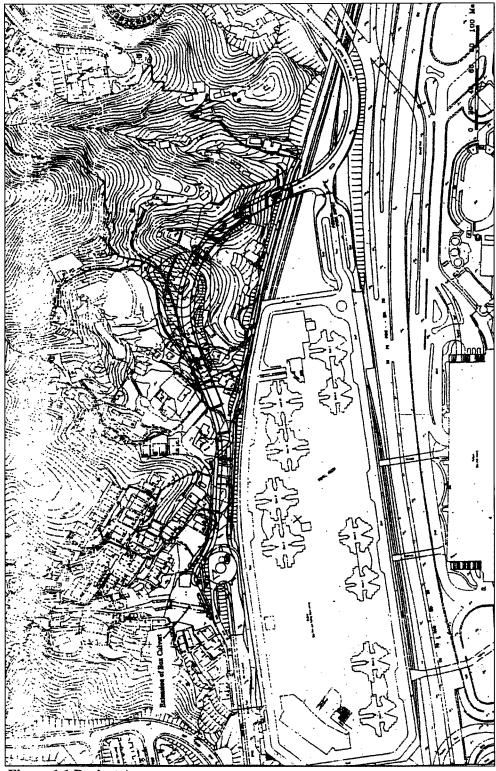


Figure 1.1 Project Area

2. ENVIRONMENTAL MONITORING & AUDIT REQUIREMENTS

2.1 Monitoring Parameters

Impact monitoring on the Road D15 Project involved both air quality and noise. For air impact monitoring, continuous 24-hour and 1-hour TSP levels were sampled. For 24-hour TSP, monitoring was performed once in every six days while for 1-hour TSP, monitoring was performed three times in every six days.

For noise monitoring, the A-weighted equivalent continuous sound pressure level (L_{eq}) was measured with duration of 30 minutes. The measured L_{eq} was used to compare with the relevant noise criteria and the monitoring was conducted once in every six days. As supplementary information for data auditing, statistical results, namely L_{10} and L_{90} , were also recorded for reference.

The monitoring parameters are summarised in Table 2.1 below.

Table 2.1 Parameter, Frequency and Duration of Monitoring

Monitoring Type	Parameter	Duration	
	24-hour TSP	24 hours	
Air Quality	1-hour TSP	1 hour within 0700-1900 on working days	
Noise	Leq, L ₁₀ , L ₉₀	30 minutes	

2.2 Environmental Quality Performance Limits (Action & Limit Levels)

The Action and Limit (AL) Levels set the air quality and noise criteria for construction works. For air quality, the AL levels for the parameters 24 and 1-hour TSP are shown in **Table 2.2** below.

Table 2.2 Action / Limit Levels for Air Quality

Parameters	Action		
24 Hour TSP Level in μg/m ³	For baseline level < $108 \mu g/m^3$, Action Level = average of baseline level plus 30% and Limit level; For baseline level > $108 \mu g/m^3$, and baseline level < $154 \mu g/m^3$, Action Level = $200 \mu g/m^3$; For baseline level > $154 \mu g/m^3$, Action Level = 130% of baseline level.	260	
1 Hour TSP Level in μg/m ³	For baseline level < 154 μ g/m³, Action Level = average of baseline level plus 30% and Limit Level; For baseline level > 154 μ g/m³, and baseline level < 269 μ g/m³, Action Level = 350 μ g/m³; For baseline level > 269 μ g/m³, Action Level = 130% of baseline level.	500	

For noise monitoring, the AL levels for the parameters L_{eq} are shown in **Table 2.3** below:

Table 2.3	Action /	[Limit]	Levels for	Construction	Noise

Time Period	Action Level	Limit Level	
0700-1900 hours on normal weekdays		75* dB(A)	
0700-2300 hours on holidays; and 1900-2300 hours on all other days	When one documented complaint is received	60/65/70** dB(A)	
2300- 0700 hours of next day		45/50/55** dB(A)	

^{**} to be selected based on Area Sensitivity Rating

Note: If works are to be carried out during restricted hours, the conditions stipulated in the construction noise permit issued by the Noise Control Authority have to be followed.

From the baseline study carried out in the period from 9 to 27 August 2001, the AL levels for air quality as specified in **Table 2.2** were determined and are shown in **Tables 2.4** and **2.5**. Details of the baseline study were provided in the 'Baseline Environmental Monitoring Report' by Maunsell Environmental Management Consultants Ltd., carried out prior to the preparation of this EM&A report.

Table 2.4 Action and Limit Levels for 24-hour TSP

Location	Action Level, μg/m3	Limit Level, μg/m³
A1	156	
A2	155	260
A3	153	

Table 2.5 Action and Limit Levels for 1-hour TSP

Location	Action Level, μg/m3	Limit Level, μg/m³	
A1	371		
A2	378	500	
A3	368		

2.3 Environmental Mitigation Measures During Construction Phase

In order to minimise adverse environmental impacts to the surrounding area, the environmental impact assessment report and environmental review had recommended a number of mitigation measures on the Road D15 Project. These mitigation measures cover the aspects in air, water and noise and some of the mitigation measures are listed below:

Air

- Effective dust suppression equipment and other measures should be installed to ensure the concentration of air borne dust at the site boundary and any nearby sensitive receiver are within the established standard
- Wheel washing facilities should be installed and used by all vehicles leaving the construction site.
- All motorised vehicles should be restricted to a maximum speed of 8 km/h. Haulage and delivery vehicles should be confined to designated roadway inside the site
- In the process of material handling, any material which has the potential to create dust should be treated with water or sprayed with wetting agent.

Noise

- Temporary purposed-built barrier must be installed around heavy noise generated equipment. The design of the temporary barrier must meet the requirements specified in the *Technical Memorandum on Noise from Construction Works*. This provides reduction of noise level to at least 10 dB(A).
- The number of equipment, procedure and sequence of construction should be arranged such that the noise levels generated from the plants are kept to the minimum.
- Quietened equipment shall be used for the construction works
- A noise mitigation proposal describing the above measures must be submitted to the EPD with prior verification from the Environmental Team (ET)

Water

- Temporary barrier shall be provided in order to protect the water quality of the stream course located in the site. The barrier shall be installed at the stream bank to prevent accidental dumping or spillage of materials into the stream course during construction.
- Proper mitigation measures as described in **Annex A** of the Environmental Permit will need to be implemented to mitigate environmental impacts due to site runoff and other potential water pollution caused by construction activities. A copy of **Annex A** is attached in **Appendix A** of this report.

3. ENVIRONMENTAL STATUS

3.1 Air Quality

3.1.1 Monitoring Requirements

In accordance with the EM&A Manual, air quality impact monitoring was conducted in terms of 1-hour and 24-hour TSP at the designated monitoring locations.

Continuous 24-hour TSP monitoring was performed once in every six days while 1-hour TSP monitoring was performed 3 times in every 6 days. The Action and Limit levels for air quality are included in **Section 2** of this report.

3.1.2 Monitoring Locations

The designated impact air quality monitoring stations are listed in **Table 3.1** and are shown in **Figure 3.1**.

Table 3.1 Air Quality Monitoring Locations

Monitoring Station	Location
A1	Village house at Lok Lo Ha Village
A2	Lok Lo Ha Village House No. 104
A3	Village House near Tsun King Road

3.1.3 Summary of Monitoring Results

The monitoring results obtained in this quarter are summarised in **Table 3.2**. The graphical plots of the trends of 24-hour and 1-hour TSP in the quarter are presented in **Figures 3.2** and **3.3** respectively. **Appendix B** shows the meteorological conditions during the monitoring days.

Table 3.2 Summary of 24 and 1-hour TSP Monitoring Results

Parameter	Monitoring	Mean TSP	Range	No. of Exceedance	
rarameter	Location Levels (µg/m³)		(μg/m ³)	Action Level	Limit Level
	Al	108.7	50 - 174	1	0
24 – hour TSP	A2	110.6	52 - 170	3	0
	A3	113.9	48 - 177	3	0
	A1	208.5	92 –326	0	0
1 – hour TSP	A2	205.9	84 – 305	0	0
	A3	206.4	87 - 300	0	0

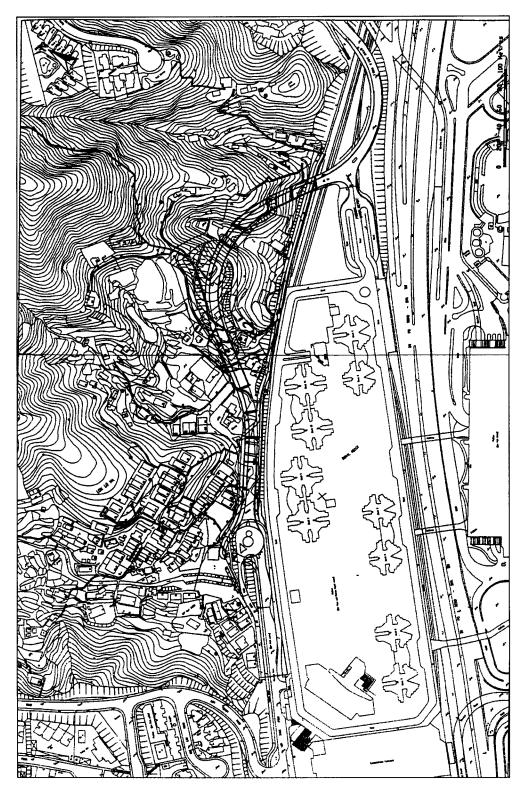
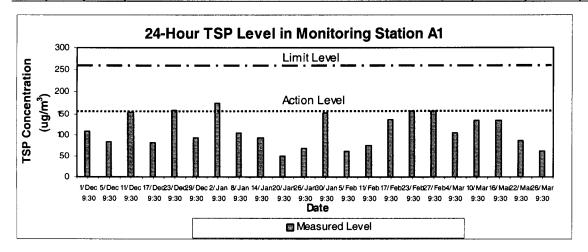
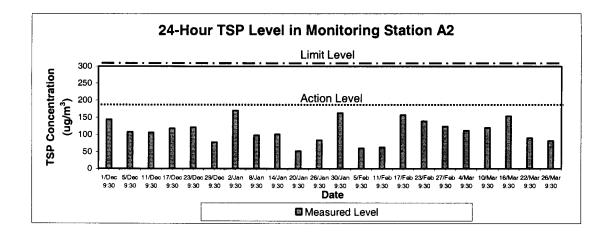


Figure 3.1 Air Quality Monitoring Locations





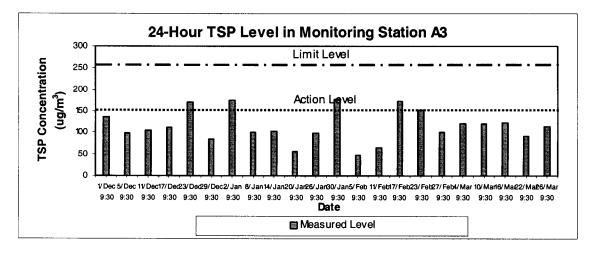
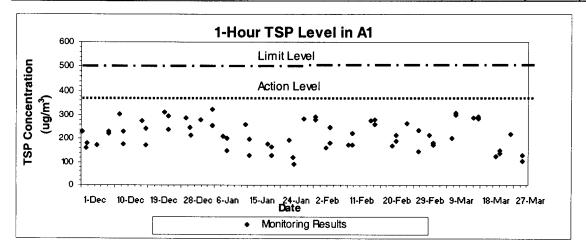
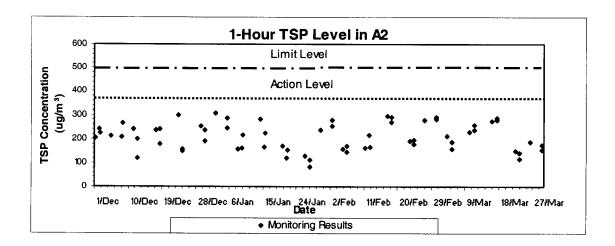


Figure 3.2 Plots of 24-hour TSP Concentration





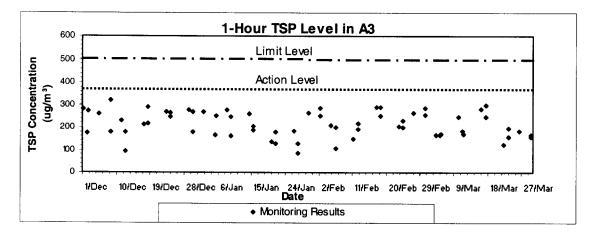


Figure 3.3 Plots of 1-hour TSP Concentrations

3.2 Noise

3.2.1 Monitoring Requirements

Impact noise monitoring was conducted once in every six days at the five designated monitoring locations in accordance with the specifications in the EM&A Manual. The duration of sampling was 30 minutes in the reporting period. The Action and Limit levels for noise are presented in **Section 2** of this report.

3.2.2 Monitoring Locations

The impact noise monitoring locations are presented in Table 3.3 and shown in Figure 3.4.

Table 3.3 Noise Monitoring Locations

Monitoring Location	Measurement	Location
N1	Façade	Lok Lo Ha Village House No. 3B
N2	Façade	Lok Lo Ha Village House No. 32A
N3	Façade	Royal Ascot Block 9, Flat C
N4	Façade	Lok Lo Ha Village House No. 97
N5	Façade	Village near Royal Ascot

3.2.3 Summary of Monitoring Results

The monitoring results obtained in this quarter are summarised in **Table 3.4**. Graphical plots of the noise level trends in the quarter are presented in **Figure 3.5**. **Appendix B** shows the meteorological conditions during the monitoring days.

Table 3.4 Summary of Noise Monitoring Results

Parameter	Monitoring Location	Range of Results	No. of Exceedance		
1 at attacted		dB(A)	Action Levels	Limit Levels	
	N1	58.0 – 73.5	0	0	
	N2	60.2 – 68.3	0	0	
30-minute Noise Measurement (L_{eq})	N3	55.1 – 62.3	0	0	
;	N4	54.9 – 70.7	0	0	
	N5	56.9 – 64.4	0	0	

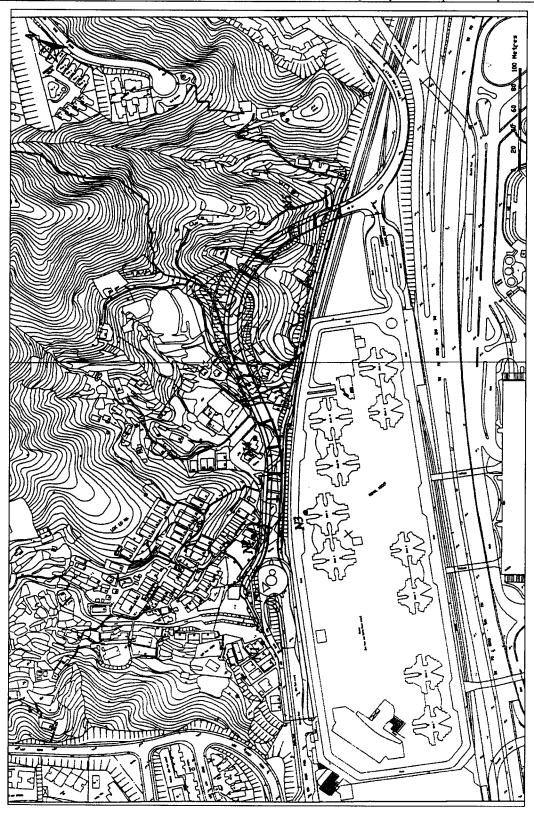
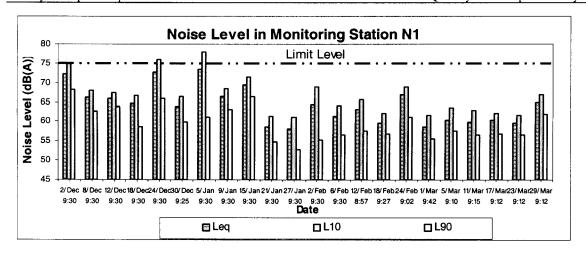
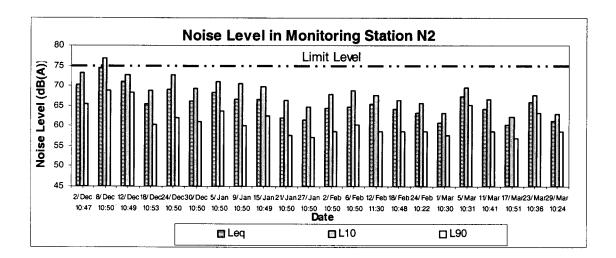


Figure 3.4 Noise Monitoring Locations





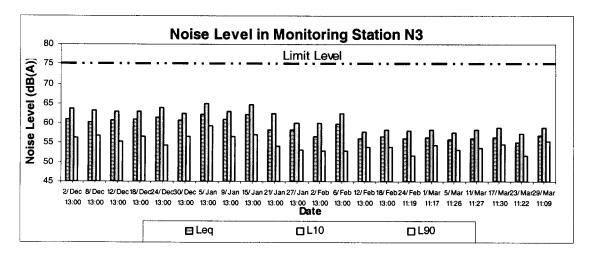
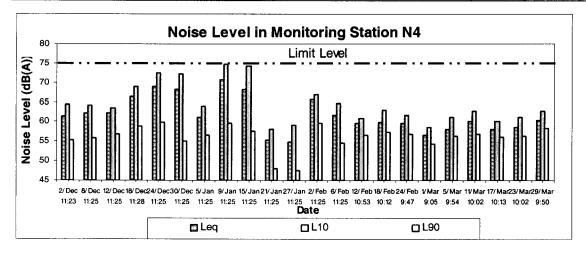


Figure 3.5 Plots of Noise Levels



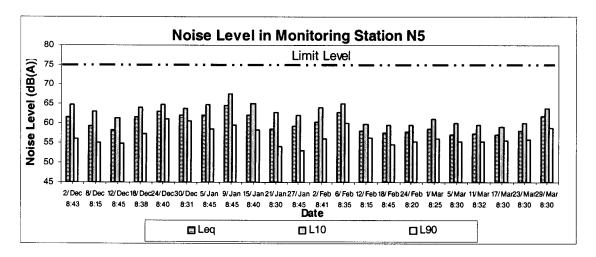


Figure 3.5 Plots of Noise Levels (con't)

4. ENVIRONMENTAL AUDIT

4.1 Summary of Environmental Monitoring Results

The monitoring work undertaken in this reporting quarter is summarised in Table 4.1.

Table 4.1 Summary of Environmental Monitoring

		Monitoring	Total No. of	No. of Exceedance	
Item	Parameter	Period	Samples Taken (on all stations)	Action Levels	Limit Levels
1	24 – hour TSP	01/01/04 to 31/03/04	48	7	0
2	1 – hour TSP	01/01/04 to 31/03/04	144	0	0
3	30-minute Noise Measurement (Leq)	01/01/04 to 31/03/04	80	0	0

In this reporting quarter, there were in total seven incidents of Action Level exceedance for 24-hour TSP while no exceedance was recorded for noise and 1-hour TSP monitoring. The exceedances recorded in this reporting period are summarized in **Table 4.2**.

Table 4.2 Summary of Non-Compliance with Relevant Criteria

Location	Parameter	Data & Time of Exceedance	Measured Level (µg/m³)	Action Level (μg/m³)	Type of Exceedance
Lok Lo Ha Village (Station A1)	24 – hour TSP Measurement (μg/m³)	2 January (09:30 to 09:30 of next day)	174.0	156.0	Action Level (by 18 μg/m³)
Lok Lo Ha Village House No. 104 (Station A2)	24 – hour TSP Measurement (µg/m³)	2 January (09:30 to 09:30 of next day)	170.0	155.0	Action Level (by 15 µg/m³)
Lok Lo Ha Village House No. 104 (Station A2)	24 – hour TSP Measurement (μg/m³)	30 January (09:30 to 09:30 of next day)	163.0	155.0	Action Level (by 8 μg/m³)
Lok Lo Ha Village House No. 104 (Station A2)	24 – hour TSP Measurement (μg/m³)	17 Februray (09:30 to 09:30 of next day)	157.0	155.0	Action Level (by 2 μg/m³)
Village House near Tsun King Road (Station A3)	24 – hour TSP Measurement (µg/m³)	2 January (09:30 to 09:30 of next day)	175.0	153.0	Action Level (by 22 μg/m³)
Village House near Tsun King Road (Station A3)	24 – hour TSP Measurement (µg/m³)	30 January (09:30 to 09:30 of next day)	177.0	153.0	Action Level (by 24 µg/m³)

Location	Parameter	Data & Time of Exceedance	Measured Level (µg/m³)	Action Level (μg/m³)	Type of Exceedance
Village House near Tsun King Road (Station A3)	24 – hour TSP Measurement (µg/m³)	17 Februray (09:30 to 09:30 of next day)	173.0	153.0	Action Level (by 20 µg/m³)

Since exceedances in Action Levels had occurred, the Event and Action Plan for Air Quality attached in **Appendix C** was triggered. Ad-hoc site inspections were carried out separately on 7 January, 5 and 26 February 2004 by ET, MCAL and BCCL to investigate the matters. It was noted that excavation work was carried out near Station A1 on 2 January 2004, and general site works were carried out near Stations A2 and A3 on 2 January, 30 January and 17 February 2004. No particular dust issues were observed on site during the monitoring period. The high TSP levels on 2 and 30 January were likely to be caused by ambient factors. This was supported by the fact that the maximum values of API recorded at Sha Tin Station on 2 and 30 January were 109 and 92 respectively, much higher than the maximum value of around 70 on an average winter day, and that high levels were recorded at all monitoring stations. As for the exceedances on 17 February, the high TSP levels would likely to be caused by the dust generated by the haulage and delivery vehicles crossing Bridge C during the backfilling works of the abutment between B1 and B2.

The Contractor was reminded that proper dust control measures should be implemented as stated in the Environment Monitoring Checklist Item nos. A8, A9 and A10, in particular where a vehicle leaving and entering the construction site is carrying a load of dusty materials, the load should be covered entirely by clean impervious sheeting to ensure the dusty materials do not leak from the vehicle, and all dusty materials (except for cement and PFA and for cases where the moisture content is a matter of concern) shall be sprayed with water or a dust suppression chemical immediately prior to loading or unloading or transfer operation so as to maintain the dusty materials wet. Besides, every vehicle immediately before leaving the construction site shall be washed to remove any dusty materials from its body and wheels.

4.2 Environmental Complaints

No environmental complaint was received against the construction site in this reporting quarter.

Table 4.3 shows the complaint summary record for this reporting quarter while **Table 4.4** summarises the complaint statistics from the commencement of the project to date.

Table 4.3 Environmental Complaints / Enquiry Received in the Reporting Quarter

Complaint	Received	Description (inc. location/ nature of complaint)	Follow-up Action	Recommended	Status/
No.	date & Time		Taken	Mitigation Measures	Remarks
N/a	N/a	N/a	N/a	N/a	N/a

Table 4.4 Summary of Total Number of Complaints Received to date

Total No. of Complaints to date	No. of Complaints in this reporting period	No. of Active Complaints	No. of Inactive/Closed Complaints
2	N/a	N/a	2

4.3 Assessment of Mitigation Measures

The mitigation measures listed in Table 4.5 below had been implemented in this reporting period.

Table 4.5 Summary of Major Mitigation Measures at the Site

Туре	Mitigation Measure	Comments		
Noise	Temporary purposed-built Noise Barrier	No longer required		
	Wheel Washing Facility	Installed and in operation.		
Water	Sand/Silt Removal Facilities	No longer required		
	Measures along stream-banks north-east of Lok Shun Path Roundabout	No longer required		
	Diversion of Stream Course via drainage pipe	Installed at the existing channel.		
Wastewater	Water Reuse at wheel washing facility and site investigation drilling works.	Implemented		
Land Contamination	Metal trays are placed underneath stationary machines where there are potential of oil leakage	Implemented		
	Provide plastic sheeting covers on exposed soils	Implemented		
Air	Regular water spraying on areas where there is likely generation of dust	Implemented		
	Impervious sheeting was placed around the working area near monitoring station A1	Implemented		

In regard to the last quarter environmental issues, it was observed that the exposed soil faces and excavation trenches near Lok Lo Ha roundabout were properly covered with tarpaulic sheeting for dust control. The Wetsep pump sump was properly maintained.

However, it was noted from site inspection in March that sand and black mud was found accumulated at Lok Shun Path Roundabout. Besides, watermains was found leaking near Retaining Wall No. 12. Furthermore, debris and rubbish were found uncovered near Bridge B, site boundary near headwall and between Piers C1 and C2. The Contractor was reminded to clear off any sand and mud found at the roundabout. The Contractor was also asked to rectify the watermains leakage as soon as possible. Besides, the Contractor was reminded to cover the construction waste and debris with tarpaulin and remove the waste once the site access is reopened.

5. **COMMENTS & CONCLUSION**

Weekly site inspection had been carried out in this quarter in order to investigate the implementation and effectiveness of the mitigation measures. The major mitigation measures were identified and were implemented as indicated in Table 4.5.

In respect to environmental monitoring for both air quality and noise, there were seven exceedances in Action Level on 24-hour TSP in this reporting period. Therefore the Event and Action Plan for Air Quality as set out in Appendix C was triggered.

No environmental complaint on the construction site was received in this reporting period.

The updated work program for the current and next quarters are attached in Appendix F.

APPENDIX A:

Water Mitigation Measures – Extract from Annex A of the Environmental Permit



Annex A (as referred to in Condition 3.3)

Measures to Mitigate Environmental Impacts due to Site Run-off and Other Potential Water Pollution During Construction

(a) Surface Runoff

- (i) Surface run-off from the construction site shall be directed into adequately designed sand/silt removal facilities such as sand traps, silt traps and sediment basins before discharge into storm drains. Channels, earth bunds or sand bag barriers shall be provided on site to properly direct stormwater to such silt removal facilities.
- (ii) Catchpits and perimeter channels shall be constructed in advance of site formation works and earthworks.
- (iii) 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.
- (iv) 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.
- (v) Open stockpiles of construction materials (e.g. aggregates and sand) on site shall be covered with tarpaulin or similar fabric during rainstorms. Measures such as providing sand bag barriers shall be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system.
- (vi) 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.

(b) General Construction Activities

At all parts of all works areas and construction sites, and throughout the full duration of the construction contract(s), debris and rubbish on site shall be handled and disposed of to avoid entering the water column and causing water quality impacts. Temporary on-site storage of excavated materials from construction works shall be covered with tarpaulin or similar fabric during rainstorms. Any washout of construction or excavated materials should be diverted to the drainage system via sediment traps. Stockpiling of the excavated material shall be minimised by scheduling the construction programme in a way that one section of the alignment can be constructed and completed before the excavation works of the next section commence.

To mitigate environmental impacts from wastewater due to construction activities, water used for water testing, boring, drilling works, concrete batching and precast concrete casting shall be

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Environmental Permit No. <u>EP-092/2001/A</u> 環境許可證編號 EP-092/2001/A

recirculated and reused; wastewater from concrete batching and precast concrete casting shall be treated for pH adjustment and silt removed prior to discharge into stormwater drains and washwater from wheel washing facilities shall have sand, silt or other materials removed before discharge into stormwater drains; the access road sections between site exits and the public roads shall be paved with backfall to prevent site run-off from entering the public roads.

APPENDIX B:

Weather Conditions During Monitoring Periods

Weather Condition During Monitoring Period (From 1 January to 31 March 2004)

02-Jan-03	weather	Mean Air Temperature	Wind Speed (m/s)	Mean Relative Humidity
05 Ion 03	Hine	19.8	0	(%)
7	rille	19.0	1.0	60
OJ-Jan-OJ	Fine	19.8	1.0	7.1
08-Jan-03	Fine	18.5	1.0	77
09-Jan-03	Fine	18.5	1.0	92
14-Jan-03	Fine	15.9	1.0 - 1.7	71
15-Jan-03	Fine	17.8	1.0 - 1.7	62
20-Jan-03	Cloudy / Rainy	10.6	1.7 - 1.8	87
	Fine - Cloudy	10.3	1.8 – 1.9	59
26-Jan-03	Fine	13.3	1.0	62
	Fine	13.4	1.0	65
30-Jan-03	Misty	17.4	1.0	83
	Fine	19.7	1.0	28
05-Feb-03	Rainy	9.5	1.0	06
06-Feb-03	Cloudy	12.1	1.0	74
	Fine	15.8	1.0	70
	Sunny	17.8	0.0 - 0.5	74
	Fine	20.0	0.0	75
	Cloudy / Fine	19.0	0.0 - 0.5	85
23-Feb-03	Fine	19.4	0.5	72
	Cloudy	18.4	0.5 - 0.9	6 <i>L</i>
27-Feb-03	Fine	19.9	0.5	75
01-Mar-04	Cloudy	24.2	0.5	83
04-Mar-04	Fine	15.5	0.5	58
05-Mar-04	Fine	17.8	0.5	70
10-Mar-04	Fine	20.1	0.5	79
11-Mar-04	Sunny	22.5	0.5	92
16-Mar-04	Cloudy	20.2	0.5	84
17-Mar-04	Cloudy	22.3	0.5	91
22-Mar-04	Fine	19.8	0.5	74
23-Mar-04	Cloudy	18.8	0.5	81
26-Mar-04	Cloudy	16.7	0.5	91
29-Mar-04	Cloudy	18.4	0.5	94

APPENDIX C:

Event and Action Plan for Air Quality and Noise

Event / Action Plan for Air Quality

		ACTION	
EVENT	ET	Engineer	CONTRACTOR
ACTION LEVEL		25	
Exceedance for one sample	Identify source; Inform the Engineer and Contractor; Repeat measurement to confirm finding; and Increase monitoring	Notify Contractor; and Check monitoring data and Contractor's working methods.	 Rectify any unacceptable practice, if any; and Amend working methods if appropriate.
2. Exceedance for two or more consecutive samples	frequency to daily. 1. Identify source; 2. Inform the Engineer and Contractor; 3. Repeat measurement to confirm findings; 4. Increase monitoring frequency to daily. 5. Discuss with Engineer for remedial actions required; 6. If exceedance continues, arrange meeting with the engineer; and 7. If exceedance stops, cease additional monitoring.	Confirm receipt of notification of failure in writing; Notify Contractor; Check monitoring data and Contractor's working methods; Discuss with ET and Contractor on potential remedial actions; and Ensure remedial measures properly implemented.	 Submit proposals for mitigation measures to the Engineer within 3 working days of notification; Implement the agreed proposals; and Amend proposal if appropriate.
1. Exceedance for one sample	Identify source; Inform the Engineer and Contractor; Repeat measurement to confirm findings; Increase monitoring frequency to daily; Assess effectiveness of Contractor's remedial actions and keep EPD and the Engineer informed of results.	Confirm receipt of notification of failure in writing; Notify Contractor; Check monitoring data and Contractor's working methods; Discuss with ET and Contractor on potential remedial actions; and Ensure remedial action properly implemented.	Take immediate action to avoid further exceedance; Submit proposals for remedial actions to the Engineer within 3 working days of notification; Implement the agreed proposals; and Amend proposal if appropriate.
Exceedance for two or more consecutive samples	1. Identify source; 2. Inform the Engineer and Contractor; 3. Repeat measurement to confirm findings; 4. Increase monitoring frequency to daily. 5. Investigate the causes of exceedance; 6. Arrange meeting with EPD and the Engineer to discuss the remedial actions to be taken; 7. Assess effectiveness of Contractor's remedial actions and keep EPD and the Engineer informed of the results; and 8. If exceedance stops, cease additional monitoring	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; 4. Discuss among ET and Contractor on potential remedial actions; 5. Review Contractor's remedial action whenever necessary to assure their effectiveness; and 6. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop portion of work until	Take immediate action to avoid further exceedance; Submit proposals for remedial actions to the Engineer within 3 working days of notification; Implement the agreed proposals; Resubmit proposals if problem still not under control; Stop the relevant portion of works as determined by the Engineer until the exceedance is abated.

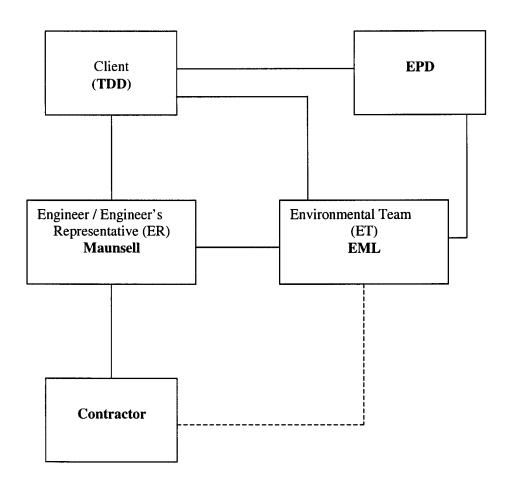
Event / Action Plan for Construction Noise

EVENT	ACT	TON
LVLIVI	ET	Contractor
Action Level	 Notify the Engineer and Contractor; Analyze investigation; Require Contractor to propose measures for the analyzed noise problem; and Increase monitoring frequency to check mitigation effectiveness. 	 Submit noise mitigation proposals to Environmental Team and the Engineer; and Implement noise mitigation proposals.
Limit Level	 Notify the Engineer and Contractor; Notify EPD; and Require Contractor to implement mitigation measures; and increase monitoring frequency to check mitigation effectiveness. 	 Implement mitigation measures; and Prove to Environmental Team and the Engineer effectiveness of measures applied.

APPENDIX D:

Project Organisation and Contacts of Key Personnel

Figure D.1: Project Management Structure



Contacts of Key Personnel:

Organisation	Nature of Duty	Contact Personnel	Contact Number		
Organisation	Mature of Duty	Contact I et sonnei	Telephone	Fax	
Territory Development Department (TDD)	Client	Mr. K.K. Law	2301-1397	2739-0076	
Maunsell Consultants Asia Ltd. (MCAL)	Engineer	Mr. Conrad Ng	2685-6107	2691-2649	
Environmental Management Ltd. (EML)	Environmental Team	Mr. W. K. Ng	2839-2800	2890-6901	
EPD Complaint Hotline	24-hour Complaint Hotline	-	1823		

APPENDIX E:

Summary Record of Complaints Received

Complaint	Received	Description	Fo	Follow-up Action Taken	Recommended Mitigation	Status/ Remarks
Ŋo.	date &	(inc. location/ nature of			Measures	
C02-N1	Morning.	Around 9:30am on 29/7/02,	•	Ad hoc site inspection was	Mitigation actions:	The complaint was
	29/7/2002			carried out on 31/7/02, jointly	Excavator-mounted breaker shall	considered as ad hoc rather
		investigate a complaint of noise		with the Engineer and Contractor	not be carried out within 125m	than continuous. It is
		pollution emitted during rock	•	The complaint log sheet, the	from any nearby noise sensitive	therefore considered not
		breaking which carried out by		investigation findings and	receivers and;	necessary to increase the
		the Contractor near the Site		recommendations on mitigation	 Temporary purposed built 	noise monitoring frequency
		Office (near the box culvert and		measures were submitted to the	barrier should be installed	
		north Lok Shun Path		Engineer and Contractor.	whenever there are high noise	File Closed.
		Roundabout). The Contractor	•	A letter, addressing to the	level construction activities.	
		immediately halted the activity		complainant, will be sent to the	-	
		in response to police's advice		police.		
C02-N2	Night-time,	Nearby residents	•	Ad hoc site inspection was	Mitigation actions:	File Closed.
	7 August,	complained to police that a		carried out on 8 August 02,	Under the Noise Control	
	2002	generator in Road D15 Site		jointly with the Engineer and	Ordinance, the carrying out of	
		was operating in night-		Contractor and ET.	general construction work using	
		time near Lok Lo Ha	•	The complaint log sheet, the	powered mechanical equipment	
		Village.		investigation findings and	(including generators) during the	
		Police came to the site to		recommendations on mitigation	restricted hours (between 7 p.m.	
		investigate the complaint		measures were submitted to the	and 7 a.m. or at any time on a	
		and inform watchmen to		Engineer and Contractor.	general holiday (including	
		turn off the operating	•	A letter in both English and	Sunday) is prohibited unless a	
		generator at around		Chinese, addressing to the	valid Construction Noise Permit	
		8:30pm.		complainant, has been sent to the	is in force;	
		The complaint was valid as		police.	A watchmen or site staff should	
		it concerned with			be employed to check daily that	
		construction noise during			=	
		the restricted hours.			switched off after the	
					permissible working hours.	

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Construction Program for Current and Next Quarter

=	The state of the s							
	lask name			Duration	Start	Finish	2004 Ion Feb Mor A	20 Oct No. Page
0	Road D15 Master Programme	ter Programme		1326 days	Wed 12/12/01	Fri 02/06/06		des for the form
-	1.0 Original Contract Period	nod		1187 days	Wed 12/12/01	Sat 12/03/05	-	
2	1.1 Works in Section I (345 days.)	ion I (345 days)		345 days	Wed 12/12/01	Thu 21/11/02		
m .	1.2 Works in Section IA (475 Days)	ion IA (475 Days)		475 days	Wed 12/12/01	Mon 31/03/03		
4	L.3 Works in Section II (822 days)	ion II (822 days)		822 days	Wed 12/12/01	Fri 12/03/04		
0 1	w ednoscobe w	1.4 Landscape work in section III (1187 Days)		1187 days	Wed 12/12/01	Sat 12/03/05		
۰	Z.U Anticipated Dates			1289 days	Fri 22/11/02	Fri 02/06/06		
_	2.1 Anticipated EOT for Section I	OT for Section (249.5 days	Fri 22/11/02	Tue 29/07/03		
80	2.2 Anticipated C	2.2 Anticipated Completion Date for Section IA		0 days	Mon 31/03/03	Mon 31/03/03	•••	
6	2.3 Anticipated (2.3 Anticipated Completion Date for Section II		141 days	Thu 13/01/05	Thu 02/06/05		2.3 Anticipated Completion Date for Section II
2	2.4 Anticipated C	2.4 Anticipated Completion Date for Section III		365 days	Fri 03/06/05	Fri 02/06/06		2.4 Anticip
=	3 Pretiminary & Site Establishment	ablishment		689 days	Wed 12/12/01	Tue 06/04/04		06 April 2004
81	4 Earthworks			473 days	Fri 10/05/02	FH 05/12/03	ember 2003	
33	5 Entrustment Works (Section I & 1A)	ection I & 1A)		455 days	Wed 12/12/01	Thu 26/06/03		
45	6 Bridge A & General			1007 days	Wed 12/12/01	Fri 06/05/05		
46	6.1 Design Submis	6.1 Design Submission of Alternative Design (I Beam)		180 days	Wed 12/12/01	Wed 24/07/02	•	
47	6.2 Procurement,r	6.2 Procurement, manufacturing and testing of bridge bearing		63.2 days	Thu 25/07/02	Tue 08/10/02		
48	6.3 Engineer's Ap	6.3 Engineer's Approval of Off Site Casting Yard		180 days	Sat 19/01/02	Wed 28/08/02	••	
49	6.4 Fabrication of precast beams	precast beams		150 days	Thu 29/08/02	Thu 27/02/03	•••	
SS	6.5 Fabrication PC	6.5 Fabrication PC panel permanent formwork		200 days	Thu 29/08/02	Fri 02/05/03	•••	
51	6.6 Ground Investigation	igation		62 days	Wed 12/12/01	Thu 28/02/02		
25	6.7 Piling Works at A1 to A5	A1 to A5		121 days	Wed 12/12/01	Mon 13/05/02	•••	
8	6.8 Pile Caps Construction A1 to A5	ruction A1 to A5		546 days	Sat 16/03/02	Tue 13/01/04	13 January 2004	
20	6.8.1 A1 Pile Cap	ap		50 days	Mon 25/03/02	Mon 27/05/02	•••	
8 :	6.8.2 A2 Pile Cap	db		24 days	Sat 16/03/02	Tue 16/04/02	••	
0 5	6.8.3 A3 Pile Cap	ap		22 days	Wed 08/05/02	Mon 03/06/02		
70	0.8.4 A4 Pile Cop	do		24 days	Fri 19/04/02	Fri 17/05/02		
3 ;	0.0.3 As File Ca	d		247 days	Mon 17/03/03	Tue 13/01/04	13 January 2004	
8 4	0.8.5.1 A5	0.8.5.1 AS Pile Cap (1st Portion)		110 days	Mon 17/03/03	Thu 31/07/03		
3 \$	6 9 Abstrant Well A1 to A5	U.S.D.Z. AD THE CUD (ZITU PORTION)		22 days	Tue 16/12/03	Tue 13/01/04	3 January 2004	
200	6.9.1 A1 Abutment Well	ent Wall		247 days	Wed 1//04/02	Sat 14/02/04	14 February 2004	
89	4012A1	6912 A) (1st portion to allow site access to C?)		30 de 10	To so oc and	Wed Z9/10/03		
\$ 8	6912A1	69 1 2 A1 (incher Portion)		30 days	10e 28/05/02	wed 03/07/02		
2	6.9.2 A2 Pier & Cross Head	Cross Head		33 ddys	W-4 -776/03	wed 24/10/03		
17	6.9.2.1 Ple	6.9.2.1 Pier only To allow access to C2		22 dovs	Wed 17/04/02	Mon 13/05/02		
72	6.9.2.2 A2	6.9.2.2 A2 Crosshead		29 days	Mon 25/08/03	Scrt 27/00/03	•••	
73	6.9.3 A3 Pier & Cross Head	k Cross Head		30 days	Tue 04/06/02	Wed 10/07/02		
74	6.9.4 A4 Pier & Cross Head	k Cross Head		12 days	Thu 11/07/02	Wed 24/07/02		
75	6.9.5 A5 Abutment Wall	ent Wall		148 days	Mon 18/08/03	Sat 14/02/04	14 February 2cos	
9/	6.9.5.1 A5	6.9.5.1 A5 Abutment wall (Portion 1 to allow site access)	(2)	50 days	Mon 18/08/03	Thu 16/10/03	• • •	
1 1	6.9.5.2 A5	6.9.5.2 A5 Abutment wall (Portion 2.)		25 days	Wed 14/01/04	Sat 14/02/04		
e	6.10 install bridge bearings A1 to A5	earings A1 to A5		474 days	Mon 29/07/02	Fri 27/02/04	27 February 2004	2004
٨ / ١	6.10.1 AI - A2	6.10.1 A1 - A2 Bridge Bearings		6 days	Wed 05/11/03	Wed 12/11/03	2003	
3 2	6.10.2 A2 - A3	o. 10.2 Az - As Bridge Bedrings A 10.3 A3. As Bridge Bearings		6 days	Wed 05/11/03	Wed 12/11/03	2003	
2 6	A 10.4 A4 - A5	A 10 4 A4 - A5 Bridge Bearings		o days	Mon 29/07/02	Mon 05/08/02		
83	6.11 Install Precest Beams A1 to A5	Beams A1 to A5		ara days	Th: 20/02/04	Hr 27/02/04	idge Bearington 27 February 2004	2004
84	6.11.1 AT to A2 PC Beams	2 PC Beams		6 days	Thu 20/11/03	Thu 27/11/03	ber 2003	
		+						-
5	700000	Tosk Progress	 Critical task Progress Milestone 		Rolled Up Task	Rolled Up Task Rolled Up Critical Task (77)	Rolled Up Progress	rogress Project Summary
		Critical Task	3 Summary		Rolled Up Milestone	Wilestone 🔷		r Sy

Apr May Jun Jun Jun Mug Sep Oct Nov Dec.				MAS I EM FRUGHAMME (ST/7/01/MF/13B) Sha Tin New Town Stage II Contract No. ST77/01, Road D15 Linking Lok Shun Path and Tai Po Road	WAS LEN FF	Vo. ST77/01, Roac	1 D15 Linking Lok	Shun Path ar	nd Tai Po Ro.	pe pe				
11 M M M M M M M M M M M M M M M M M M	₽	Task Name			Duration	Start	Finish	2004	N S	100	4			2005
11 12 12 12 12 13 13 13	82	6.11.2 A2 to A3	PC Beams		3 days	Mon 24/01/05	Wed 26/01/05	3	-17	-	unn	And	5	PC Beams
1.00 1.00	8	6.11.3 A3 to A4	PC Beams		3 days	Mon 01/03/04	Wed 03/03/04		4	ch 2004				
13.1 for the Armonic and th	ò	6.11.40 A4 to A5	S PC Beams (Storage on Span A3 to A4)		6 days	Thu 30/12/04	Thu 06/01/05		<u> </u>		8.11.	ta A4 to A5 PC Beam	s (Storage on Span A3 to	
10.25 ke to Single Reck 2009	8 8	6.12 Bridge Deck Con	istruction A1 to A5		392 days	Fri 07/01/05	Fri 14/01/05						6.11.4 A4 to A5 PC.E	
1972 AND AND ESPECTATION 1972 AND	8	6.12.1 A1 to A2	Bridge Deck		50 days	Fri 28/11/03	Thi OS/O2/04		5 Fahruary 20					
10.21 Act 10.20 Compared 10.20 Co	5	6.12.2 A2 to A3	Bridge Deck		32 days	Thu 27/01/05	Fri 11/03/05						6 12 2 A2 to A3	Bridge Deck
1.25 Air of the Entropy Section 1.25	8	6.12.3 A3 to A4	Bridge Deck		95 days	Thu 04/03/04	Wed 14/07/04	, ĕ .	Declos			4 July 2004		
13.1 A to be Delivery Plan Wilcowe & Guly 18 cm	g]	6.12.4 A4 to A5	Bridge Deck		50 days	Mon 17/01/05	Fri 25/03/05	1					6.12.4 A4 to A5 Bri	
13.1 10.0	8 8	6.13 Bridge Deck Drait	nage		355 days	Fri 20/02/04	Wed 04/05/05	_						
State Stat	3 5	0.13.1 Al 10 AZ	Drainage Pipe, M/H cover & Gully		18 days	Fri 20/02/04	Tue 16/03/04	cover &		Merch 2004				
1.00 1.00	6	6 13.3 A3 to A4	Draingge Pipe, M/H cover & Gully		18 days	Wed 23/02/05	Fri 18/03/05						3.2 A2 to A3 Drainage Pip	e, M/H cover
March Francisco Control Cont	86	6.13.4 A4 to A5.1	Drainage Pipe, M/H cover & Gully		18 days	Mon 11 /04 /05	Mon 23/08/04		6.13.3.A3 to	M Drainage Pip	P, MAH cover	Ş .	_	
10.14 k. M. b. Albronover & C.D. 20.000 Final	8	6.14 Bridge deck Para	pet & Curb		369 davs	Fri 06/02/04	wed 04/03/03						6.13.4 A4 to A!	5 Crainage Pi
1.0 km /	8	6.14.1 A1 to A2	Parapet & Curb		30 days	Fri 06/02/04	Thu 18/03/04			March 2004				 - -
14 A 7 to A 8 forces 8 Cuch 20 con 100 A 200 Mon 100	101	6.14.2 A2 to A3	Parapet & Curb		27 days	Mon 14/03/05	Tue 19/04/05	_					6.14	2 42 to 43 Pr
10 cm 10	J02	6.14.3 A3 to A4	Parapet & Curb		60 days	Thu 23/09/04	Wed 15/12/04				6.14.3 A3 tc	A4 Parapet & Curby	The state of the s	15 Decemb
2 control (red) Control (re	ည်	6.14.4 A4 to A5	Parapet & Curb		30 days	Mon 28/03/05	Fri 06/05/05			•••				
2.2 Bit Method Bit Rich Cap	2 2	7 Bridge B			749 days	Wed 12/12/01	Mon 21/06/04			-	21 Jur	ne 2004		
22 EN FIFE 22 Can Lie Model 12 Can Lie Model 23 Can Lie Model 24 Can Lie Model 25 Can Lie Model	3	7.1 Ground Investiga	ation		36 days	Fri 01/03/02	Mon 15/04/02							
2 door Mort 106/00/20 Neet 2016/00/20 Neet 20	2 5	7.2 Pre Bore H-Piles			431 days	Tue 16/04/02	Tue 23/09/03							
27 does National 12 does 12	à Ş	7.2.1 BI H Piles			29 days	Tue 16/04/02	Tue 21/05/02			•••				
15 Constitute 8 Pie Cop 25 Cops West 24/09/13 Set 2271/130 Free Cop Set 24/09/13 Set 2271/130 Set 24/09/13 Set 2271/130 Set 24/09/13 Set 2271/130 Set 2271/130 Set 24/09/13 Set 2271/130 Set 24/09/13 Set 2271/130 Set 24/09/13	3 2	7.2.3 Londing to	et on Dio		27 days	Mon 11/08/03	Wed 10/09/03			• • •				
3.5 Construct B File Cap 10 cts	2 2	7.3 Pile Con & Abirt	ment Woll B1 & B2		12 days	Tue 09/09/03	Tue 23/09/03			•••				
19 days Wed 55/11/30 Set 22/11/30 Man 15/12/30 Man 15/1	Ξ	7.3.1 Temp. worl	ks for B1 Pile Cap		35 dovs	Wed 24/09/03	SQT 22/11/03							· • -
19 days Mon 24/11/03 Mon 24/1	118	7.3.2 Construct	81 Pile Cap		16 days	Wed 05/11/03	Sct 22/11/03			•••				
19 doys Mon 24/11/203 M	127		The state of the s							•••				
10 days 1 to 10	128	7.3.3 B1 Abutment			19 days	Mon 24/11/03	Mon 15/12/03			• • •				
19 19 19 19 19 19 19 19	135	Remove temp work	and backfilling at B1 Abutment		10 days	Tue 16/12/03	Mon 29/12/03			•••				
1 1 1 1 1 1 1 1 1 1	8 5													
24 EB bidge Bearings 6 days Fit 0x02x04 Thu 12x02x04 Bearings 24 Eb bidge Bearings 6 days Fit 0x02x04 Thu 12x02x04 Bearings 24 Eb bidge Bearings 6 days Fit 0x02x04 Thu 12x02x04 Bearings 24 Eb bidge Bearings 25 days	2 2	/.3.4 lemp. works rc	or 82 Pile Cap		619 days	Wed 12/12/01	Sat 10/01/04	П						
1 1 1 2 2 2 2 2 2 2	60 1	7 4 Install Bridge Beer	400							••				
7.4.28.2 bridge Bedrings Codys Fit 00/20/204 Thu 13/02/04 Bening C-12* February 2044 Fit 06/02/204 Thu 13/02/204 Bening C-12* February 2044 Fit 06/02/204 Thu 13/02/204 Fit 06/02/204 Fit 06/	3 9	7 4 1 R1 bridge B	Partions		6 days	Fri 08/02/04	Thu 12/02/04	Bearings	12 February	7. ·				
Section 10 km 1	170	7.4.2 B2 bridge E	Beginds		o days	Fii 06/02/04	Th: 12/02/04	The state of	Z February	ž · š				
Single Deck Construction Bit to B2	171	7.5 Install Precast Be	oms B1 to B2		6 days	Wed 18/02/04	Ti io 24/02/04	ame R1 to	24 February	300				
Signature Empty	172	7.6 Bridge Deck Cor	astruction B1 to B2		50 days	Wed 25/02/04	Tue 27/04/04	uction B1			vil 2004			
Second Figure Control 1 to B2 20 days Sof 28/05/04 Mon 21/05/04 Mon 21/05/05/04 Mon 21/05/05/04 Mon 21/05/05/05 Mon 21/05/05/05 Mon 21/05/05/05 Mon 21/05/05/05 Mon 21/05/05	173	7.7 Bridge deck Dra	inage B1 to B2		25 days	Wed 28/04/04	Fri 28/05/04	7.7 Bridge		4 B 0.7	28 May 2004			
Second Find Find Find Find Find Find Find Fi	174	7.8 Bridge Deck Park	apet & Curb B1 to B2		20 days	Sat 29/05/04	Mon 21/06/04	7.8.Bridge	1	L'Cum Billo B	2 4 Jun	• 2004		
1014 days Surface Thu 10/05/04 Thu 10/05/04 Thu 10/05/04 Thu 10/05/04 Thu 10/05/04 Thu 10/05/05 Thu 25/07/02	27.	7.9 Kemove lemp P	Hafform(Underneath Bridge Deck)		30 days	Wed 28/04/04	Thu 03/06/04		lerneath Bridg		1			
Control Truestigation Control Tosk Progress Cont	2/2	R Bridge C	Valley		60 days	Sat 27/03/04	Thu 10/06/04	10 Reins	Extg Valley	 	4	204		
Re Dore H-Plies 3.21 days Fin 1.07/03 Wed 20/08/03 Red 20/08/03 8.2.1 Cit H Plies 3.5 days Fin 1.07/03 Wed 20/08/03 Red 20/08/03 8.2.2 Cz H Plies 5.2 days Thu 25/07/02 Mon 25/09/02 Thu 08/01/04 **Recapt & Abutment Wall Cl & Cz 385 days Tue 24/09/02 Thu 08/01/04 Thu 08/01/04 **Relied up Construct Cl Plie Cap 39 days Mon 29/09/03 Thu 13/11/03 Projects **Task Critical Task Milestone **Relied Up Critical Task **External Task **External Task **Critical Task Summary **Relied Up Milestone **External Task **External Task	178	8.1 Ground Investigo	Itlon		1014 days	Wed 12/12/01	Sat 14/05/05							- -
8.2.1 C.1 H Piles 8.2.2 C.2 H Piles 8.2.2 C.2 H Piles 8.2.1 Temp works and Construct C.1 Pile Cap 8.3.1 Temp works and Construct C.1 Pile Cap 1. Task	82	8.2 Pre Bore H-Piles			321 days	Thu 25/07/02	Wed 20/08/03							
8.2.2.2.2.Hiles 8.2.1.Zer Piles 8.3.1 Temp. works and Construct CI Pile Cap 8.3.1 Temp. works and Construct CI Pile Cap 8.3.1 Temp. works and Construct CI Pile Cap 1. Task 1. Ta	<u>8</u>	8.2.1 C1 H Piles			35 days	Fri 11/07/03	Wed 20/08/03							
	<u></u>	8.2.2 C2 H Piles			52 days	Thu 25/07/02	Mon 23/09/02							
8.3.1 lemp, works and Construct C Pile Cap 39 days Mon 29/09/03 Thu 13/11/03	182	8.3 Pile Cap & Abuti	ment Wall C1 & C2		385 days	Tue 24/09/02	Thu 08/01/04	108 Jan	y 2004					
Task Critical Task Progress Rolled Up Task Rolled Up Task Rolled Up Task Rolled Up Critical Task Image: Summary Image: Summary Image: Summary Rolled Up Milestone External Tasks External Tasks	-83 -83	8.3.1 Temp. worl	ks and Construct C1 Pile Cap		39 days	Mon 29/09/03	Thu 13/11/03							
Task Progress Milestone ▼ Rolled Up Critical Task External Tasks Image: Summary			Tosk	Critical Task Progress		Rolled Up	Task		■ Rolled L	lp Progress		Project Sumi	mary	
Summary Rolled Up Milestone ♦	Date:	18/10/2003	Task Progress	Milestone	>	Rolled Up	Critical Task 172		Split		-	· —		1
Page 2			Critical Task	Summary		Rolled Up			Externa	Tasks				
						Page 2								

In Insk Name	emi		Sha lin New lown Stag	ge II Contract N	Io. ST//U1, Hoad	age II Contract No. 5 (77/0), Hoad D15 Linking Lok Shun Path and Tai Po Hoad	shun Path and Tai	Fo Hoad						ä
				5	5		Jan Feb	Mar Apr	May	Jun Jul	Aug	Sep	Nov	3 5
205	8.3.2 C1 Abutment Wall	ment Wall		25 days	Fri 14/11/03	Fri 12/12/03	F				┼	1	┨	
306	a)Erect or	a)Erect outer formwork		5 days	Fri 14/11/03	Wed 19/11/03		•••						
202	b)Flx steel rebar	rebar		5 days	Thu 20/11/03	Tue 25/11/03		••			•			
208	c)Erect in	c)Erect inner formwork	The state of the s	6 days	Wed 26/11/03	Tue 02/12/03		• • •				****		
209	d)Checking	QC Coli) day	Wed 03/12/03	Wed 03/12/03		•••						
211	DC uring &	Considering Persons formwork		7 700%	Fri 05/12/03	Fr 12/12/03		•••						
212	Remove temp	Remove temp work and backfilling of Abutment C1		20 days	Sof 13/12/03	Thu 08/01/04		•••						
213	8.3.3 C2 Pile Cap & Pier	Op & Pier		50 days	Tue 24/09/02	Fri 22/11/02	1	• • •						
214	8.4 Instell Bridge Bearings	arings		356.8 days	Fri 11/10/02		December 2003	•••						
215	8.4.1 C1 Bridge Bearings	e Bearings		6 days	Sat 13/12/03	Fri 19/12/03	December 2003	• • •						
216	8.4.2 C2 Bridge Bearings	e Bearings		6 days	Wed 27/11/02	Tue 03/12/02								
217	8.4.3 C3 Bridge Bearings	e Bearings		234.8 days	Fri 11/10/02	Mon 28/07/03		•••						
218	8.5 Install Precast Beams C1 to C2	Beams C1 to C2		125 days	Tue 29/07/03	Tue 23/12/03	cember	• • •						
219	8.5.1 C1 to C2 PC Beams	PC Beams		3 days	Sat 20/12/03	Tue 23/12/03	December 2003	•••						
220	8.5.2 C2 to C3 PC Beams	PC Beams		3 days	Tue 29/07/03	E0/20/18 n41								
221	8.6 Bridge Deck Construction C1 to C3	struction C1 to C3		219 days	Frt 01/08/03	Mon 26/04/04			☐ 26 April 2004	4				
222	8.6.1 C1 to C2	8.6.1 C1 to C2 Bridge Deck (1st portion)		32 days	Wed 24/12/03			<u>.</u>	f					
229	8.6.2 C1 to C2	8.6.2 C1 to C2 Bridge Deck (2nd portion)		65 days	Fri 06/02/04		d portion C		<u>ل</u> ا					
238	8.6.3 C2 to C3	8.6.3 C2 to C3 Bridge Deck (1st portion)		66 days	Fri 01/08/03	Sat 18/10/03		••						
239	8.6.3 C2 to C3	8.6.3 C2 to C3 Bridge Deck (2nd portion)		40 days	Mon 20/10/03	Thu 04/12/03								
240	8.7 Bridge deck Drainage C1 to C3	nage C1 to C3		36 days	Fri 06/02/04		Ü	8 Marci	2004					
241	8.7.1 C1 to C2	8.7.1 C1 to C2 Drainage Pipe, M/H cover & Gully		18 days	Fri 06/02/04		er & Gutte							
242	8.7.2 C2 to C3	8.7.2 C.2 to C.3 Drainage Pipe, M/H cover & Guily		18 days	Fri 27/02/04	Thu 18/03/04	Alcover & Guille	Name .	2004					
243	8.8 Bridge Deck Pari	6.8 Bridge Deck Parapet & Curb C1 to C3		137 days	Fri 05/12/03	Tue 25/05/04				May 2004				
	8.8.1 (1.10 (2.	8.8.1 CT to CZ Paraper & Curb		24 days	10e 27/04/04	Tue 25/05/04		desa		Mey 2004				-
242	8 O Bridge A B & C	8 0 Bidge A B & C Movement loints installation (10 page)		24 Odys	rii 05/12/03	MOI U3/U1/04						0	0 0 4 006	-
1	9 Road works, Pavement & Cycle Track	& Cycle Track		110 days	Sat 08/01/05	Thu 26/05/05				_	8	Boad works Pavement & Cycle Tr	avernent & Cycle I	
	9.1 Drainage to on Grade Road	Grade Road		40 days	Sat 08/01/05	Sat 26/02/05		••				9.1 Drainage	9.1 Drainage to on Grade F	
249	9.2 Utilities at on Grade Road	rade Road		40 days	Thu 20/01/05	Thu 10/03/05						9.2 Utili	9.2 Utilities at on Grac	F Foad
250	9.3 Carriageway Flexible Pavement	dble Pavement		57 days	Fri 11/03/05	Mon 23/05/05							9.3 Carriage	way Flexibl
251	9.3.1 Sub base	9.3.1 Sub base & DBM Course		30 days	Fri 11/03/05	Tue 19/04/05							9.3.1 S	9.3.1 Sub base & D
252	9.3.2 Bitumino.	9.3.2 Bituminous Base Course		30 days	Wed 23/03/05	Sat 30/04/05	reserva in a	•••					9.3	9.3.2 Bituminou
253	9.3.3 Wearing	9.3.3 Wearing Course to On grade road		20 days	Wed 30/03/05	Tue 26/04/05		• • •					9.3.3 Weer	₽.
75.	O A Bood Marking & rood 6 posture	9.3.4 Base Course & Wedning Course to bridges A, B & C. Bood Marking & road finalities		o adys	Tue 1/05/05	Thu 24/05/05							9.3.4 Base Co	
3 32	O 5 Foot porth			30 days	10e 24/00/00	MOD 00/05/06								.
257	9.6 Cycle Track			60 days	Thu 20/03/05	Sort 02/04/05							200	Track
258	9.7 Light Poles			40 days	Fri 25/03/05	Tue 17/05/05		•••						
259	9.8 Road Work Finishings	shings		21 days	Thu 21/04/05	Tue 17/05/05								_]
260 10	10 Retaining Walls			929 days	Wed 12/12/01	Wed 26/01/05								
261	10.1 RW1			504 days	Wed 08/11/02	Mon 19/07/04					19 July 2004			
292	10.1 Temp. div	10.1 Temp. diversion of 150mm dia water main		30 days	Fri 01 /08/03	Thu 04/09/03		• • •						
263	10.1.1 RW1 Bay 1			313 days	Wed 06/11/02	Sat 22/11/03		•••						
274	10.1.2 RW1 Bay 2	2		51 days	Tue 21/10/03	Thu 18/12/03		•••						
285	10.1.3 RW1 Bay 3	0		21 days	Sat 28/12/02	Wed 22/01/03		•••						
202	10 1 5 DW1 Boy 5	2		£0 doing	VANCE 10 /05 /04	Mon 10/07/04		- 5			total and			
306	10.1.6 RW1 Bay 6	9		19 days	Fri 25/06/04	Sat 17/07/04			10.1.6 RW1 Bay	Say &	took king t			
		Task	Critical Task Progress		Rolled Up Task	Task		Rolled Up Progress	ress		Project Summary	ımmary		
Date: 18/10/2003	2003	Task Progress	Milestone		Rolled Up	Rolled Up Critical Task 17272	77777	Spilt						
		Critical Task	Summory		Rolled Up	Rolled Up Milestone		External Tasks			CT)			

Mor Apr Moy Jun Jul Aug Sep Oct Nov Dec	-		Duration	Start	Finish	Duration Start Finish 2004				2005
Column C						n Feb Mar	May	Jul Aug	Н	Dec Jan
1.0.25 Growing water 1.0.25 Communication 1.0.25 Growing water	10.2		929 days	Wed 12/12/01	ш.		╫			
10.5 (1970) 10.5 (1970)			60 days	Wed 10/09/03	Thu 20/11/03					- -
10.25 (1990 Fig. 1991) 10.25 (1990 Fig. 19			28 days	Mon 10/11/03	Thu 11/12/03	•••				
1.0.2 Filtrer 1.0.2 Filtre			1/ days	Sat 01/11/03	Thu 20/11/03					- -
13.5 Principles 13.5 Princ			20 days	10e 040 1 1/03	Sat 29/11/03					
1.0.2 No. 10.0 No.			505 days	Wed 15/01/01	7.					
13.2 Fig. 10.2 Fig. 20.2 Fig. 10.2 Fig. 20.2			374 days	Sat 25/10/03		П				-
10.50 Mode 10.	10.3		545 days	Wed 12/12/01						
115 Grows 110 Cloth (110 Clot	10.4 RW4		100 days	Wed 12/12/01	Wed 17/04/02					
10.6 ki lingui l'exponent no 1.6.5 1.0 ki lingui l'exponent no 1.6 ki	10.5 RW5		115 days	Fri 01/08/03	Mon 15/12/03	•				-
10.01 Feed Feed Control Cont	10.6 RW6		48 days	Sat 13/12/03	Fri 13/02/04	13 February				
10.6.5 (By 1.2 10.6	10.6.1 install temporar	γ work	3 days	Sat 13/12/03	Tue 16/12/03	mber 2003		_		
10.45 Sept. 1 20.40 Sept. 2 20.00 Sept.	10.6.2 Excavation to +	16.5	5 days	Wed 17/12/03	_	Ť				
10.25 Ferright Foreign 10.25 Ferright Fore	10.6.3 Bay 1		24 days	Tue 23/12/03	Mon 26/01/04	- 18				
10.06 Rickells to 2.00 Thu 15/00204 The 11/00204 Thu 15/00204 Thu 15/00	10.6.4 Bay 2		24 days	Mon 05/01/04	Wed 04/02/04					
17 17 17 17 17 17 17 17	10.6.5 Backfill to +22		6 days	Thu 05/02/04		i i				
10.71 Pre-24th blooks (2) now) 23 d only 10.00 Received 23 d only 23	10.6.6 Remove tempo	orary work	2 days	Thu 12/02/04	₽.	ary worked 13 February				-
10.21 Fearmagn working politicisms 24 chase 11.00 MoRNO 24 chase 11.00 MoRNO 25 chase	10.7 RW7		615 days	Thu 06/05/02	Tue 29/06/04			29 June		
10.22 Forming bend pile (2012) 1.52 Forming bend pile (201	10.7.1 Pre-drill holes (2	2) nos)	47 days	Thu 06/06/02	Thu 01/08/02					
10.23 Democrate Benefits 18.00 Mon. 14.00 Mon. 12.00 Mon.	10.7.2 Forming workin	g platform	24 days	Fri 02/08/02	Thu 29/08/02					
10.7.3 Betae Pies 10.7.0 Compiled Bore Pies 10.0.0 C	10.7.3 Install bored pile	(21nos)	544 days	Fri 30/08/02	Tue 29/06/04	*** 		29 June 2004		
10.7.2 Bits 10.0.2 Bits	10.7.3.0 Complete	ed Bore Piles	183 days	Fri 30/08/02	Fri 28/02/03	••				
10.7 & State Lite Lite State Lite Lite State Lite Lite State Lite State Lite Lite Lite Lite Lite Lite Lite Li	10.7.3.1 B4 Bore P.	9	6 days	Mon 14/04/03	Wed 23/04/03					
10.75 Bore Per Core Feet	10.7.3.2 B10,B11,B	13,814	61 days	Mon 31/03/03	Tue 17/06/03					
U. Z. Construct Schools Good Control Good Con	10.7.4 Bore Pile SC	onic lest	20 days	Mon 18/08/03	Tue 02/09/03					
10.7 Construct Copping Bearm 24 ctors	30 7 5 Coognitive to	onding Concrete decorptive wall	30 days	Sot 14/02/04	10e 07/10/00					
10.17 Constituct Capping Beam 21 days 11 days 11 days 11 days 12 days 12 days 12 days 13	10.7.6 Construct e	extension section above based alle	26.00%	Scrt 20/03/04	Mon 31/05/04	We borned miles	13.	7000		
Reference First Garden First G	10.7.7 Construct C	Capping Beam	24 dovs	Tue 01/06/04	Tue 29/06/04		moing Beam's	Š		
199 days Wed 12/12/01 Hon Georgia Wed 12/12/02 Hon Georgia Wed 12/12/03 Hon Georgia Hon Georgia Wed 12/12/03 Hon Georgia Hon	10.8 RW8		218 days	Tue 08/10/02	Fri 04/07/03					
100 12 RW12 Boy 2	10.9 RW11		190 days	Wed 12/12/01	Mon 05/08/02					
10.01 2 Part 20 Cardys Fri 10 J Cardys F	10.10 RW12		220 days	Mon 21/07/03	Mon 12/04/04		2			
10 io 2 NW/12 Boy 1 20 doys Wed 14/01/Q4 Mon 09/02/Q4 Mon 19/01/Q4 Mo	Temp. diversion of 150	Omm dia water main	107 days	Fri 01/08/03	Fri 05/12/03					
10.10.2 RW12 Bay 2	10.10.1 RW12 Bay 1		20 days	Wed 14/01/04		49 February				
10.10.3 Rivin/2 Bary 3	10.10.2 RW12 Bay 2		20 days	Wed 24/12/03		į				
10.10.4 Dichnage works in vicinity of pier C2 of Birdge C 25 days Tue 10,002/04 Tue 08/03/04 Tue 08/0	10.10.3 RW12 Bay 3		35 days	Mon 21/07/03	Fri 29/08/03					
10.05 World works in vicinity of RW 12 30 days Wed 24/12/03 Tue 03/02/04 Tue 09/03/04 Utilities 30 days Wed 24/12/03 Tue 09/03/04 Utilities 30 days Wed 12/12/01 The 09/03/04 Utilities The 09/03/04 Utilitie	10.10.4 Drainage wor	ks in vicinity of pier C2 of Bridge C	25 days	Tue 10/02/04	Tue 09/03/04 k	4 Bridge Q				
10.10 block laying new utilities	10.10.5 Water works in	vicinity of RW 12	30 days	Wed 24/12/03	Tue 03/02/04					
10.10.7 Dialnoge & Roadworks 28 days Wed 10/03/04 Mon 12/04/04 mays & Readworksp. 1028 days Wed 12/12/01 Thu 0206/05 Ff 13/12/02 Ff 13/1	10.10.6 Laying new u	THITIES	30 days	Wed 04/02/04	Tue 09/03/04	f				
Took Progress Circle Took Progress Circ	10.10.7 Urainage & R	OCCIWORKS	28 days	Wed 10/03/04	Mon 12/04/04		計			
11.2.1. Note Barrier No. 1 1.2.1. Note Barrier Structures 736 days Wed 12/12/01 The 05/03/04 Med 12/12/01/03 The 05/03/04 The	ad S Work Work Subs	Mission & Approvi	200 days	10/01/20/20/20	בטיסיסים דיין					 -
11.2.1 Notice Barrier No. 1 Control to Shun Poth Control to Shun Poth Control Total Short Control Total S	11.2 Noise Barrier Structures	STATE OF STA	200 days	Wed 12/12/01	Set 05/12/02					
11.2.1.3 Site investigation 30 days Wed 12/12/01 Tue 22/01/02 Inc. 22/01/02 11.2.1.3 Demoilsh Extg Retaining Wall Footing 60 days Mon 17/02/03 Fit 09/05/03 Fit 09/05/03 11.2.1.5 Benedish Extg Retaining Wall Footing 6 days Fin 22/05/03 Fit 09/05/03 Fit 09/05/03 11.2.1.5 Benedish Extg Retaining Wall Footing 6 days Fin 30/05/03 Thu 22/05/03 Fit 09/05/03 11.2.1.5 Benedish Extg Retaining Wall Footing Critical Task Progress Rolled Up Task Rolled Up Task Task Progress Milestone Rolled Up Critical Task Rolled Up Critical Task Rolled Up Milestone Rolled Up Milestone External Task	11.2.1 Noise Barrier No.	-	666 davs	Wed 12/12/01	Tue 09/03/04	Asset 100	2004			
11.2.1.2 Tradfic Diversion of Lok Shun Path 1 day 1.2.1.3 Demoilsh Extg Retaining Wall Footing 1.2.1.3 Demoilsh Extg Retaining Wall Footing 1.2.1.4 Temporary earth platform for Bare Pile Equipment 6 days 11.2.2.05.03 11.2.1.5 Bare Piles SP1 to SP4 1.2.1.5 Bare Piles SP1 to SP4 3.5 days 1.4.2.20.05.03 1.4.1.2.0.05.03 1.4.1.2.0.05.03 1.4.1.1.0.07.03 1.4.1.1.0.	11.2.1.1 Site invest	liagion	30 000	Wed 12/12/01	Tue 22/01/02)				
1.2.1.3 Demoilsh Extg Retaining Wall Footing 2.0 days Man 17/02/03 Fri 90/05/03 Fri 90/05/03 Thu 22/05/03 Thu 22	11.2.1.2 Traffic Div	version at Lok Shun Path	VCD I	Wed 21/05/03	Wed 21/05/03					
11.2.1.5 Bore Plies SP1 to SP4	11.2.1.3 Demolish	Extg Retaining Wall Footing	60 days	Mon 17/02/03	Fri 09/05/03	••				
11.2.1.5 Bace Piles SP1 to SP4		ry earth platform for Bore Pile Equipment	6 days	Thu 22/05/03	Thu 29/05/03					
Task Critical Task Progress Rolled Up Task Rolled Up Progress Rolled Up Progress Rolled Up Progress Rolled Up Progress Summary Rolled Up Milestone External Task Critical Task Rolled Up Milestone Rolled Up M	11.2.1.5 Bore Piles	SP1 to SP4	35 days	Fri 30/05/03	Thu 17/07/03					
Task Progress Milestone Rolled Up Critical Task (ZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZZ	Tas			Rolled Up 7	ask	Rolled Up F	Progress	Project	Summary	
erolleany de College d	· · ·			Rolled Up (L			
	٥			I kolled up I	Milestone	Exfernal IC	ısks			

amon action		- 11 - C							
				Sidir	CSICIL	2004 Ign Feb Mar And	Ed out	Air Can Oct Nav	2
	11.2.1.6 Bore Piles Coring Test (4nos)		10 days	Fri 22/08/03	Thu 04/09/03			I wild dae I don't	+
	11.2.1.8 RW Panel 1		80 days	Thu 27/11/03	Fri 05/03/04			-	
	112.1.9 RW Panel 2		80 days	Mon 01/12/03	Tue 09/03/04	·····································			
404	44.54.44.BW Date 1.4		34 days	Set 29/11/03	Sat 10/01/04	···			
	11.4.111 NW POINE 4		65 days	Fri 10/10/03	Wed 24/12/03	• • •			
	11.6.1.1.2 NW Penel 3		49 days	Mon 29/09/03	Tue 25/11/03	• •			
	A A A A DIMP		49 days	Tue 28/10/03	Tue 23/12/03				
	HW Panel /		46 days	Wed 27/08/03	Tue 21/10/03				
7.1.	11.2.2 Additional Bore Piles		70 days	Thu 10/07/03	Tue 30/09/03	••			
	11.2.2.1 Mobilisation of RCD		9 days	Thu 10/07/03	Sat 19/07/03	••			
	АВР1		11 days	Mon 21/07/03	Fri 01/08/03				
	ABP2		17 days	Sat 02/08/03	Thu 21/08/03				
11.2	11,2,2,3 Bore Piles Tests		12 days	Wed 17/09/03	Tue 30/09/03				
	11.2.2.3.1 Sonic Test		1 day	Wed 17/09/03	Wed 17/09/03				
	11.2.2.3.2 Core Test (2nos)		7 days	Sat 20/09/03	Sat 27/09/03				
574	11.2.2.3.3 Grouting Sonic Tubes and core holes		2 days	Mon 29/09/03	Tue 30/09/03				
11.2.3 No	11.2.3 Noise Barrier No. 4B		120 days	Thu 08/01/04	Set 05/06/04		05 Juhe 200		
	11.2.3a Concrete Footing for Noise Barrier 4C		45 days	Wed 20/03/02	Wed 15/05/02				
582 11.2.4 Noise Barrier No. 5	Barrier No. 5		69 days	Thu 16/05/02	Wed 07/08/02				
	11.2.4.1 Excavation		12 days	Thu 16/05/02	Thu 30/05/02	••			
	11.2.4.2 Construct Footing and Walls		45 days	Fri 31/05/02	Wed 24/07/02				
	11.2.4.3 Backfill to Foundation of Noise Barrier No 5		12 days	Thu 25/07/02	Wed 07/08/02	•			
586 11.3 Noise Barrier	11.3 Noise Barrier Steel Post & Panels		1029 days	Wed 12/12/01	Thu 02/06/05	•			-
	11.3.1 Procurement and Fabrication of Noise barrier		150 days	Wed 12/12/01	Tue 18/06/02				
	11.4.1 Design, Submission for approval		250 days	Wed 19/06/02	Wed 16/04/03				
	11.4.2 Fabrication and Delivery		200 days	Thu 17/04/03	Tue 16/12/03	ecember 2003			
590 11.4.3 Noise I	11.4.3 Noise Barrier Installation		363 days	Wed 10/03/04	Thu 02/06/05	Barrier Installation			
	11.4.3.1 Noise Barrier No.1		60 days	Wed 10/03/04	Mon 24/05/04	Noise Barrier No.19	24 May 2804		
	11.4.3.2 Noise Barrier No 2		40 дауз	Mon 07/03/05	Tue 26/04/05	-			11.4.3.2 NotseB
	11.4.3.3 Noise Borner No. 3		40 days	Mon 11/04/05	Thu 02/06/05				5
	11.4.3.4 Noise Borner No. 4A		18 days	Fri 29/04/05	Sat 21/05/05				
373	1.4.3.5 Noise Barner No. 4B		30 days	Mon 07/06/04	Tue 13/07/04	11.43.5 No.;se Ba	Infler No. 48 p	1-13 July 2004	
	11.4.3.6 Noise Borrier No. 4B of Bridge A., A2 to A3		10 days	Wed 20/04/05	Sat 30/04/05			11.4.3.6	11.4.3.6 Noise Barrier No. 4
	1.4.3.0 Noise Borner No. 4C		30 days	Mon 03/05/04	Mon 07/06/04	114.36 Noise Barrier No 4	C. June 2004	4	
and co	11.4.3.7 Noise Barrier No. 5		40 days	Tue 08/06/04	Mon 26/07/04	11.4.3.7 \(\)	Barrier No. 5 p	26 July 2004	
:			745 days	Wed 12/12/01	Wed 16/06/04		1	700	
	12.1 Remove existing inlet, water diversion		158 days	Wed 12/12/01	Thu 27/06/02				
2.2 Box Culver			156 days	Mon 31/12/01	Fri 12/07/02	•••			
1			29 days	Thu 30/05/02	Thu 04/07/02	•••			
2.4 Construct 14W b	12.4 Construct 1400 box curver (5 boys)		166 days	Thu 10/04/03	Wed 12/11/03				
3	add a		185 days	Tue 28/10/03	Wed 16/06/04		16 Jane	7d0	
	12.3.1 Construct 1500 pipe CH 0 to CH 30 (MHA64 to MH31)		100 days	Tue 28/10/03	Fri 27/02/04	27 February 200	-		
	12.5.2 Construct 1500 pipe CH 30 to CH 60		44 days	Sat 28/02/04	Fri 23/04/04	CH 30 to CH 80	423 April 2004		
,	12.5.3 Construct 1500 pipe CH 60 to CH 82		44 days	Sat 24/04/04	Wed 16/06/04	natruct 1500 pipe CH 60 to C'4 8E	CH 60 to C'4 824		
	.P15 (Deleted)		0 days	Sat 15/03/03	Sat 15/03/03				
609 12.7 Construct M/H31	A/H31		s do days	Mon 22/09/03	Mon 01/12/03	nber 2003			
610 12.8 Construct 1	12.8 Construct 1400 Box Culvert Extension (bay A. B & manhole)		90 days	Mon 14/04/03	Mon 04/08/03				
110	A Lieute					•••			
2	Concerground Designation of Library	7.000	655 days	Wed 15/01/03	Tue 29/03/05				
OIO Ist. Craimage a r	OBSTANCES BY LOK THE LO TOUTGBDOUT		651 days	Wed 15/01/03	Thu 24/03/05				
	Task	Critical Task Progress		Rolled Up Task	Tosk	Rolled Up Progress	ress	Project Summary	
Date: 18/10/2003	Task Progress	Milestone		Rolled Up (Rolled Up Critical Task (77777777	flos CZZZZZZ	-		
	Critical Task	Summary		Rolled Up Milestone	Wilestone	External Tasks			

Task Name					,					
			Duration	Start	Finish 2004					2
	13.1.1 Drainage & roadworks at stage 2 & 2A of TIM		263 days	Wed 15/01/03	Mon 01/12/03 mb	Jan reb n	Mar Apr May	lul lul yr	Aug Sep Oct	Nov Dec Jan
	13.1.2 Drainage and roadworks at stage 2b of TIM		95 days	Tue 02/12/03	Mon 29/03/04		29 Narch 2004			
	13.1.3 Drainage and roadworks at stage 4 of TIM(Deleted)	eted)	0 days	Mon 29/03/04	Mon 29/03/04					
	13.1.3 Drainage and roadworks at stage 5 of TIM		54 days	Tue 30/03/04	Sat 05/06/04 ada	orks at stage 5 of	of TITE	-05 June 2004		
	13.1.4 Drainage and roadworks at stage 6 of TIM		46 days	Thu 27/01/05	Thu 24/03/05		-		- 13.1.4 Drainage and roadw	orks at stage 6 of TTM
13.2	13.2 New Utilities and Dranage Near Noise Barrier NO 1		128 days	Wed 22/10/03	Fri 26/03/04					
	13.2.1 Construct M/H24 pipe 225 dia and MH10 at stage 25 TIM	зде 25 ПМ	19 days	Wed 22/10/03	Wed 12/11/03		•••			
	13.2.2 Construct M/H 12 & 2nd portion pipe 450 dia at stage 2b of TTM	nt stage 2b of TTM	19 days	Wed 22/10/03	Wed 12/11/03		•••			
	13.2.1 PCCW -At Stage 2b TTM Lay cable duct near Noise Barrier No 1 Panel 7 &6	Voise Barrier No 1 Panel 7 &6	7 days	Thu 13/11/03	Thu 20/11/03					
	13.2.2 CABLE TV -At Stage 2b TTM Lay cable duct near Noise Barrier No 6 &	or Noise Barrier No 6 & 7	7 days	Fri 21/11/03	Fn 28/11/03		•••			
}	13.2.3 CABLE TV -After Completion of Noise Barrier No 1 panel 1-5	1 panel 1-5	14 days	Wed 10/03/04	Ē	No 1 panel 1-5				
13.3	13.3 Water pipes and associated Works		482 days	Sat 16/08/03	Tue 29/03/05		-			
	13.3.1 Water Mains for Irrigation system		120 days	Fri 14/11/03	Fri 09/04/04		.)409 April 2004	8		-
	13.3.2 Fire Service Pipe & Hydrant		50 days	Thu 27/01/05	Tue 29/03/05				13.3.2 Fire	13.3.2 Fire Service Pipe & Hydrant P
	13.3.3 Water Main Diversion (1400 Box Culvert)		45 days	Tue 11/11/03	Mon 05/01/04 1 05	- 05 January 2004				
	stoir 8		25 days	Sat 16/08/03	Mon 15/09/03		••			
_	Sucts		40 days	Thu 21/08/03	Wed 08/10/03					
13.5	es Diversion		161 days	Sat 06/09/03	Sat 20/03/04		_ 20 March 2004			
	13.5.1 RW1, RW2 and 1400 Box Culvert		90 days	Mon 01/12/03	Sat 20/03/04		20 March 2004			
	13.5.2 Abutment A1 to RW11		130 days	Sat 06/09/03	Fri 13/02/04	13 Febr	rueny 2024			
	to C2		100 days	Wed 10/09/03	Fri 09/01/04	☐ 09 January 2004				
	King Street		100 days	Wed 10/09/03	,,,,	09 January 2004				
8			782 days	Wed 12/12/01	Sat 31/07/04				31 July 2004	
	6		12 days	Fri 09/04/04	Mon 26/04/04	14.1 Stair 1 (NB 4C)	Ħ	26 April 2004		- -
638 (4.2 Sfoir 2 (RWB)			50 days	Thu 13/03/03	Fri 16/05/03		• • •			
639 4.3 STOIR 3 (RW3)			sy days	Thu 24/04/03	Fri 15/08/03		• • •			· • •
	1 (2 () - F 2 () - F		11/ days	I nu 04/09/03	Tue 27/01/04	Щ	•••			
	14.4.1 stair 4 Box 7 (10 dillow decess Bridge C PC begins)	ns)	24 days	Ihu 04/09/03	Fri 03/10/03		•••			
14.5	7 (00		24 Odys	wed 24/12/03	10e 2//01/04	-				
	ment B1)		Sy days	M/24 28/04/04	Thu 27 /05 /04					-
			24 000%	Mon 05/07/04	Sort 33 /07/04		Defit on the bound			
	(+36)		2000	Tue 16/00/03	Thu 13/11/03		•	Michael Carro	31 July 2004	
-	30) (deleted)		12 days	Wed 28/01/04	Tile 10/02/04	40 Feb				
648 14.10 Stair 10 (RW12)	V12)		20 days	Tue 10/02/04			03 March 2004			
649 14.11 Stair 11 (Abutment A5)	outment A5)		20 days	Fri 20/02/04	Sort 13/03/04 (Abus		н			
650 14.12 Stair 12 (House 102)	use 102)		24 days	Tue 13/04/04	ليب	12 (1)		1000		
651 14.13 Stair 13 (Slo	14.13 Stair 13 (Slope CH350 - 400)		18 days	Wed 12/12/01	\perp			=		
15.8	Collection Point		45 days	Mon 28/02/05	Mon 25/04/05				15.9	5 Standard Betises Collecti
	(2		60 days	Tue 25/11/03	Mon 09/02/04	49 Februar	ny 2001			
17.			329 days	Tue 13/04/04	Thu 26/05/05	7 Land	Mudeba			
	6		42 days	Wed 23/03/05	Tue 17/05/05					17.
			42 days	Fri 01/04/05	Thu 26/05/05		•••			
	17.3 Iree Planting in the vicinity of RW 12		25 days	Tue 13/04/04	Ē	icinit	icinity of RW 124			
17.4 iUming in the	17.4 Juming in the vincinity of kW12		15 days	Mon 17/05/04		n B	he vincinity of RW12 b			- -
See Principle Co. 1	. abuda		50 days	Tue 13/04/04	Tue 15/06/04	17.5 Hard Lands	d LandsdapinOy			-
AA1 18 1 Section Completion	a national		1269 days	Wed 12/12/01	Thu 02/06/05					-
	inprenoi		0 days	Tue 04/02/03	Tue 04/02/03		•••			
	ompletion		o days	Thu 26/06/03	Thu 26/06/03		•••			
	Tosk	- Critical Tark Broaden	2000	w/w/w/w	CONTRACTOR IN					
	Tosk Progress	Milestone		T Kolled up lidsk	Kolled op I dek		Rolled up Progress		Project Summary	
Date: 18/10/2003	Critical Task	Summary Summary		Rolled Up Milestone	Allestone		Spiii External Tasks	-		
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			MASTER PRO	GRAMME (S	ST77/01/MP/13B		
ID Task Name		Sha Tin New Town	Sha Tin New Town Stage II Contract No. ST7701, Road D15 Linking Lok Shun Path and Tai Po Road Durdtion Stort Finish 2004	St77/01, Road (715 Linking Lok Shun Finish 2004		
664 18.4 Section III Completion	ompletion		0 days W	Wed 12/12/01	Wed 12/12/01	Jon Feb Mar Apr May Jun Jul	Aug Sep Oct Nov Dec Jan
	Task Progress	Critical Task Progress	s	Rolled Up Task	JSK Tool Tool	Rolled Up Progress	Project Summary
Date: 18/10/2003	Critical Task	Summary		Rolled Up Milestone	Rolled Up Milestone	External Tasks	
				Page 7			