

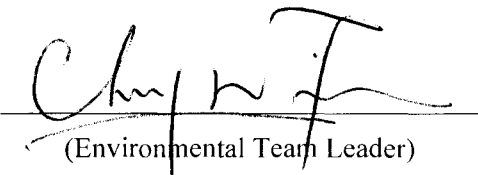
**-CCECC & CRWJ Joint Venture**

**Contract No. HY/2003/19**

**Improvement to Tung Chung Road  
between Lung Tseng Tau and Cheung Sha**

**Monthly EM&A Report  
(Version 2.0)**

January 2008

Certified By   
(Environmental Team Leader)

REMARKS:

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

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## ABBREVIATION AND ACRONYM

AL Levels	Action and Limit Levels
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 Exceedance
QA/QC	Quality Assurance / Quality Control
RE	Resident Engineer
RH	Relative Humidity
SLM	Sound Level Meter
TSP	Total Suspended Particulates
WMP	Waste Management Plan

## EXECUTIVE SUMMARY

### *Introduction*

1. This is the 39<sup>th</sup> monthly Environmental Monitoring and Audit (EM&A) Report prepared by Cinotech Consultants Limited for the project “Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha” (the Project). This report documents the findings of EM&A Works conducted in January 2008.
2. The construction activities undertaken in the reporting month included:
  - Construction of retaining wall
  - Construction of bridge
  - Construction of parapet
  - Construction of break pressure tank
  - Construction of underground utilities
  - Construction of straining and deflection structures
  - Drainage works
  - Road works
  - Slope works
  - Soil nail works
  - Backfilling

### *Environmental Monitoring Works*

3. Environmental monitoring for the Project was performed regularly as stipulated in the Updated EM&A Manual (Revision C) 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.
4. Summary of exceedance of noise, air and water quality monitoring for the reporting month is tabulated in Table I.

**Table I Summary Table for Exceedance Recorded in the Reporting Month**

Parameter	Number of Exceedances due to the Project		Action Taken	Results of Action Taken
	Action Level	Limit Level		
Air Quality	0	0	N.A.	N.A.
Noise	0	0	N.A.	N.A.
Water Quality	0	0	N.A.	N.A.

### *Air Quality*

5. 24-hr TSP monitoring at 3 monitoring stations, AM1, AM2 and AM4, were conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded for 24-hr TSP monitoring in the reporting month.

*Construction Noise*

6. Noise monitoring at 7 designated monitoring stations, namely NM1, NM2, NM3, NM4, NM5, NM6 and NM8, were conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded in the reporting month.

*Water Quality*

7. Water quality monitoring was conducted as scheduled at designated monitoring stations (Streams 15, 18, 21, 23, 26, 27, 40, Cheung Sha Stream, Tung Chung Stream and Tung Chung Bay) which are under the influence of the works in the reporting period. Streams 19, 25, 32 and 35 were observed to be dry throughout the reporting month. Therefore, no water monitoring was conducted at these streams. As the water depth of Tung Chung Bay was less than 3m, only the mid-depth level was monitored.
8. Exceedances of suspended solids (SS) were recorded in the month. No direct evidence demonstrated that the exceedances were caused by the Project.

*Environmental Licensing and Permitting*

9. License/Permits granted to the Project include Environmental Permit (License No.: EP-170/2003/C), Registration of Chemical Waste Producer (License: WPN5214-950-C1213-01), Water Discharge License (License No.: EP890/W7/XP089, EP890/W7/XP090 and EP890/W2/XG013) and Construction Noise Permit (License No.: GW-RS0526-07, GW-RS0527-07, GW-RW0463-07, GW-RS0701-07 and GW-RS0702-07).

*Key Information in the Reporting Month*

10. Summary of key information in the 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
	Number	Nature			
Complaint received	0	---	N.A.	N.A.	---
Changes to the assumptions and key construction / operation activities recorded	0	---	N.A.	N.A.	---
Notifications of any summons received	0	---	N.A.	N.A.	---
Notifications of any successful prosecution received	0	---	N.A.	N.A.	---

### ***Complaints and Prosecutions***

11. No environmental complaint was received in the reporting month.
12. No warning, summons or notifications of successful prosecution was received in the reporting month.

### ***Future Key Issues***

13. Key issues to be considered in the coming month include:
  - Dust generation from stockpiles of dusty materials, exposed retain wall, excavation works and rock breaking activities;
  - Noise from operation of the equipment, especially for rock-breaking activities and machinery on-site;
  - Regular removal of silt, mud and sand along u-channels and sedimentation tanks;
  - Wastewater and runoff discharge from site;
  - Runoff from exposed slope;
  - Storage of chemicals/fuel and chemical waste/waste oil on site;
  - Proper storage of construction materials near streams;
  - Review and implementation of temporary drainage system for the surface runoff;
  - Watering for rock breaking activity, soil nailing and on haul road; and
  - Accumulation of general and construction waste near stream and on site.

## 1. INTRODUCTION

### Background

- 1.1 The Project “Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha” involves the widening and realignment of Tung Chung Road between Lung Tseng Tau in North Lantau and Cheung Sha in South Lantau. The layout plan of the Project is shown in Figure 1.
- 1.2 The scope of the Project includes:
- a) widening and realignment of a 3.6 km section of Tung Chung Road (TCR) between Lung Tseng Tau and Pak Kung Au from a single-lane road for two-way traffic to a single two-lane road for two-way traffic with a footpath having a minimum width of 1.6 m, and construction of a 2.6 km long single two-lane road between Pak Kung Au and Cheung Sha, including elevated highway structures of a total length of 750 m, with a footpath of a minimum width of 1.6 m;
  - b) provision of 21 passing bays/bus-bays along the road and a roundabout at Cheung Sha; and
  - c) associated works including road rehabilitation, drainage, utility, environmental mitigation measures, landscaping, slope stabilization, traffic aids, road safety enhancement measures, lighting, traffic control and surveillance system, and electrical and mechanical (E&M) works.
- 1.3 The Environmental Impact Assessment (EIA) Report for the Project was approved on 4 July 2002 under the Environmental Impact Assessment Ordinance (EIAO). An Environmental Permit (EP- 170/2003) for the works was also granted on 27 June 2003. Two varied Environmental Permits (EP) (EP-170/2003/B and EP-170/2003/C) were issued in June 2006 and July 2007 respectively. Environmental Monitoring and Audit (EM&A) Manual for the Project was also included as part of the EIA reports in the register. An updated EM&A Manual (Revision C) has been issued on 28 April 2006.
- 1.4 Highways Department awarded the construction of the Project to CCECC & CRWJ Joint Venture (being a joint venture of China Civil Engineering Construction Corporation & China Railway Wujia Group Corporation) (hereinafter called “the Contractor”) in June 2004. The construction works commenced on 4 November 2004 and are scheduled to be completed by September 2007.
- 1.5 Cinotech Consultants Limited (Cinotech) was commissioned by the Contractor to undertake the Environmental Team (ET) Services for the Project since 1 September 2006. All environmental and audit works were conducted by Cinotech and the laboratory testing works were conducted by a HOKLAS laboratory, Wellab Limited. This is the 39<sup>th</sup> monthly EM&A report summarizing the EM&A works for the Project in January 2008.



## Project Organizations

- 1.6 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) – Mott Connell Limited
  - Contractor – CCECC & CRWJ Joint Venture
  - Environmental Team (ET) – Cinotech Consultants Limited
  - Independent Environmental Checker (IEC) – ENSR Asia (HK) Limited
- 1.7 The responsibilities of respective parties are detailed in Section 1.5 of the Updated EM&A Manual (Revision C, issued on 28 April 2006) of the Project. The project organization chart is presented in Figure 2.

## Construction Programme

- 1.8 The construction activities undertaken in the reporting month were:

### *Northern Section*

- Road and drainage works and soil nail works and underground utilities works at Zone A;
- Road and drainage works and underground utilities works at Zone B;
- Road and drainage works, underground utilities works and slope works at Zone C;
- Backfilling and road works at Zone D;
- Construction of RW010, RW011, RW014, RW015, RW018 and RW039 at Zone E;
- Construction of break pressure tank on CH3600 and drainage works, utilities works on CH3650 to CH3980;
- Road works on CH3200 to CH3400;
- Drainage works on CH3400 to CH3600 and CH3650 to CH3980;
- Site furniture works and footpath paving works on CH4100 to CH4300; and
- Construction of parapet on STR 06.

### *Southern Section*

- Road, drainage works and site formation at Zone 1;
- Road, drainage works and site formation at Zone 2;
- Road, drainage, construction of retaining wall and bridge at Zone 3;
- Backfilling, construction of retaining wall and bridge at Zone 4;
- Backfilling, construction of retaining wall and bridge at Zone 5; and
- Backfilling, road and drainage works at Zone 6.

### **Summary of EM&A Requirements**

- 1.9 The EM&A programme requires construction phase monitoring for air quality and construction noise, water quality 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 report; and
  - Environmental requirements in contract documents.
- 1.10 The advice on the implementation status of environmental protection and pollution control/mitigation measures is summarized in Section 5 of this report.
- 1.11 This report presents the environmental monitoring results, observations, locations, equipment, period, methodology and QA/QC procedures of the required monitoring parameters, namely air quality, noise levels, water quality 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 In accordance with the updated EM&A Manual, 24-hour TSP monitoring shall only be conducted at the monitoring location when there are Project related construction activities being undertaken within a radius of 500 m from the monitoring location.
- 2.3 Five designated monitoring stations, AM1 to AM5 were selected for impact dust monitoring for the Project. Table 2.1 describes the air quality monitoring locations and Figure 3 shows their locations.

**Table 2.1 Locations for Air Quality Monitoring**

Monitoring Station	Description	Location
AM1	YMCA of Hong Kong Christian College	Rooftop
AM2	D 68 Leyburn Villas	House
AM3 <sup>(1)</sup>	Butterfly Crest	House
AM4	No. 31 South Lantau Road	House
AM5 <sup>(2)</sup>	YWCA	To be confirmed

Remarks:

<sup>(1)</sup> Monitoring at AM3 will be conducted when the Project related construction activities are being undertaken within a radius of 500 m from the monitoring location.

<sup>(2)</sup> Monitoring at AM5, YWCA, will be resumed when YWCA re-open.

### Monitoring Equipment

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

**Table 2.2 Air 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	3

## Monitoring Parameters, Frequency and Duration

- 2.5 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 <sup>(a)</sup>	Three times / 6 days
24-hr TSP	Once / 6 days

Note:

(a) 1-hour TSP monitoring will be carried out in case that an exceedance of 24-hour TSP level is identified to be due to the Project.

## Monitoring Methodology and QA/QC Procedure

### Instrumentation

- 2.6 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 Section 3.2 of the Updated EM&A Manual.

### Operating/Analytical Procedures

- 2.7 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.
- 2.8 Prior to the commencement of the dust sampling, the flow rate of the high volume sampler was properly set (between 1.1 m<sup>3</sup>/min. and 1.4 m<sup>3</sup>/min.) in accordance with the manufacturer's instruction to within the range recommended in USEPA Standard Title 40, CFR Part 50. For TSP sampling, fiberglass filters (G810) were used.

- 2.9 The power supply was checked to ensure the sampler worked properly. On sampling, the sampler was operated for 5 minutes to establish thermal equilibrium before placing any filter media at the designated air monitoring station.
- 2.10 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.
- 2.11 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.
- 2.12 The shelter lid was closed and secured with the aluminum strip. 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). After sampling, the filter was removed and sent to the laboratory for weighing. The elapsed time was also recorded.
- 2.13 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  $\pm 3^\circ\text{C}$ ; the relative humidity (RH) should be  $< 50\%$  and not vary by more than  $\pm 5\%$ . A convenient working RH is 40%.

#### Maintenance/Calibration

- 2.14 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.

#### Wind Data

- 2.15 Wind data was required to be taken from the Hong Kong Observatory Weather Stations including HK International Airport and Cheung Chau.

#### **Results and Observations**

- 2.16 24-hr TSP monitoring at 3 monitoring stations, AM1, AM2 and AM4, were conducted as scheduled in the reporting month.
- 2.17 The monitoring data, graphical presentations and wind data for the reporting month are summarized in Appendix D. No Action/Limit Level exceedance was recorded for 24-hr TSP monitoring in the reporting month.

### 3. NOISE

#### Monitoring Requirements

- 3.1 Monitoring and audit of construction noise levels is required to be conducted, in accordance with the Updated 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<sub>10</sub> and L<sub>90</sub> shall also be obtained for reference.

#### Monitoring Locations

- 3.3 In accordance with the Updated EM&A Manual, noise monitoring shall only be conducted at the monitoring location when there are Project related construction activities being undertaken within a radius of 300m from the monitoring location.
- 3.4 Eight designated noise monitoring stations, NM1 to NM8 were selected for noise impact monitoring. Appendix A shows the established Action and Limit Levels for the environmental monitoring works. Table 3.1 describes the noise monitoring locations and Figure 3 shows their locations.

**Table 3.1 Noise Monitoring Stations**

Stations	Description	Location
NM1	No. 28 Lung Tseng Tau	Ground Floor
NM2	YMCA of Hong Kong Christian College	Rooftop
NM3	No. 37 Shek Lau Po	Ground Floor
NM4	No. 1 Shek Mun Kap	Ground Floor
NM5	Tung Chung Au Country Parks Management Centre	Ground Floor
NM6	D75 Leyburn Villa	Ground Floor
NM7 <sup>(1)</sup>	House in Butterfly Crest House 22	Rooftop
NM8	No. 31 South Lantau Road	Ground Floor

Remarks:

- <sup>(1)</sup> Monitoring at NM7 will be conducted when the Project related construction activities are being undertaken within a radius of 300 m from the monitoring location.

## Monitoring Equipment

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

**Table 3.2 Noise Monitoring Equipment**

Equipment	Model and Make	Quantity
Integrating Sound Level Meter	B&K Model 2238	5
Calibrator	B&K 4231	3
Wind Speed Anemometer	RS232 Integral Vane Digital Anemometer	1

## Monitoring Parameters, Frequency and Duration

- 3.6 Table 3.3 summarizes the monitoring parameters, frequency and total duration of monitoring. The noise monitoring schedule is attached in Appendix C.

**Table 3.3 Noise Monitoring Parameters, Frequency and Duration**

Station	Parameter	Period <sup>1</sup>	Frequency	Measurement
NM1	L <sub>10</sub> (30 min.)dB(A) L <sub>90</sub> (30 min.)dB(A) L <sub>eq</sub> (30 min.)dB(A)	(a) 0700-1900 hrs. on weekdays (b) 1900-2300 hrs. on weekdays (c) 0700-2300 hrs. on holidays (d) 2300-0700 hrs on any days	Once every 6 working days	Façade <sup>(1)</sup>
NM2				Façade <sup>(1)</sup>
NM3				Façade <sup>(1)</sup>
NM4				Façade <sup>(1)</sup>
NM5				Façade <sup>(1)</sup>
NM6				Façade <sup>(1)</sup>
NM7				Façade <sup>(1)</sup>
NM8				Façade <sup>(1)</sup>

Remarks:

<sup>(1)</sup>Noise measurements were taken at 1m from the exterior of the building facade.

(b), (c) and (d) will only be conducted if construction works are undertaken during these periods.

## 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.
- For free field measurement (if any), the meter was positioned away from any nearby reflective surfaces. All records for free field noise levels were adjusted with a correction of +3 dB(A).
- 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**

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

### **Results and Observations**

- 3.8 Noise monitoring was conducted as scheduled at the seven designated stations NM1, NM2, NM3, NM4, NM5, NM6 and NM8, in this reporting month. Noise monitoring results and graphical presentations are shown in Appendix E.
- 3.9 No Action/Limit Level exceedance was recorded in the reporting month.



## 4. WATER QUALITY

### Monitoring Requirements

- 4.1 Water quality monitoring was conducted in accordance with the Updated EM&A Manual. Appendix A shows the established Action Limit Levels for the environmental monitoring works.

### Monitoring Equipment

- 4.2 Table 4.1 summarizes the equipment used in the impact water quality monitoring program. All the monitoring equipment complied with the specifications stipulated in the EM&A Manual. Copies of the calibration certificates of the equipment are attached in Appendix B.

**Table 4.1 Water Quality Monitoring Equipment**

Equipment	Model and Make	Qty.
Multi-parameter Water Quality System	YSI 6820	2

### Monitoring Parameters, Frequency and Duration

- 4.3 Table 4.2 summarizes the monitoring parameters, monitoring period and frequencies of water quality monitoring. The water quality monitoring schedule is attached in Appendix C.
- 4.4 In-situ measurements were taken at designated monitoring stations which are under the influence of the works at least three times per week during the course of the construction period. In addition, water samples for suspended solid analysis have been collected at the designated stations and delivered to Wellab for further laboratory analysis.

**Table 4.2 Frequency and Parameters of Water Quality Monitoring**

Parameters	Frequency	No. of Depth
DO Saturation (%), DO (mg/L), Turbidity (NTU), SS (mg/L), Temperature (°C), & pH	3 times per week	Sub-surface

## Monitoring Locations

- 4.5 The water quality monitoring locations are shown in Figure 3 and their details are provided in Table 4.3.

**Table 4.3 Water Quality Monitoring Locations**

Monitoring Station (Stream No.)	Type	Easting	Northing
Tung Chung Stream	Reference	811853	813289
	Impact	811601	813716
Cheung Sha Stream	Reference	812525	811980
	Impact	812447	811165
Stream 15	Reference	811853	813289
	Impact	811781	813298
Stream 18	Reference	811889	813107
	Impact	811836	813138
Stream 19	Reference	811920	812927
	Impact	811858	812987
Stream 21	Reference	811994	812695
	Impact	811873	812723
Stream 23	Reference1	811980	812589
	Reference 2	812079	812386
	Impact	811894	812658
Stream 25	Reference	812353	812052
	Impact	812324	812017
Stream 26	Reference	812525	811980
	Impact	812456	811895
Stream 27	Reference	812658	811770
	Impact	812604	811747
Stream 32	Reference	812980	811410
	Impact	812988	811327
Stream 35	Reference	813231	811275
	Impact	813218	811218
Stream 40	Reference	813686	811311
	Impact	813690	811211
Tung Chung Bay	Reference	810679	816038
	Impact	810787	815706

## Monitoring Methodology, Calibration Details and QA/QC Procedures

### Instrumentation

- 4.6 A multi-parameter meter (Model YSI 6820 CE-C-M-Y) was used to measure DO, turbidity, salinity, pH and temperature.

### Operating/Analytical Procedures

- 4.7 At each monitoring location, two consecutive measurements were taken for water samples being collected on site. The probes were retrieved out of the water after the first measurement and then re-deployed for the second measurement. Where the difference in the value between the first and second readings of each set was more than 25% of the value of the first reading, the reading was discarded and further readings were taken.
- 4.8 For SS, measurement and grab samples of surface water were collected. Water samples of about 1,000 ml were collected and stored in polyethylene bottles. Following collection, water samples were stored in high density polythene bottles with preservative appropriately added, packed in ice and cooled to 4°C (without being frozen), delivered to the HOKLAS accredited laboratory, Wellab Limited and analyzed.

### **Maintenance and Calibration**

- 4.9 Before each round of monitoring, a zero check in distilled water was performed with the turbidity probe of YSI 6820. The probe was then calibrated with a solution of known NTU.

### **Results and Observations**

- 4.10 Water quality monitoring were conducted as scheduled at designated monitoring stations at Streams 15, 18, 21, 23, 26, 27, 40, Cheung Sha Stream, Tung Chung Stream and Tung Chung Bay), which are under the influence of the works, in the reporting month. As Streams 19, 25, 32 and 35 were observed dry, no water monitoring at these locations was conducted in the reporting month.
- 4.11 During monitoring, the weather conditions were mainly sunny and cloudy and sometimes fine. The monitoring data and graphical presentations of the monitoring results are shown in Appendix F and the Quality Control reports for the laboratory analysis are provided in Appendix G.
- 4.12 Exceedances of suspended solids (SS) were recorded in water samples in the reporting month. The exceedance reports are attached in Appendix H. The summary of exceedances for each water quality parameters are provided in Table 4.4.

**Table 4.4 Summary of Water Quality Exceedances in the reporting month**

Station No.	DO		pH	Turbidity		SS	
	Action	Limit	Limit	Action	Limit	Action	Limit
15 I	0	0	0	0	0	0	0
18 I	0	0	0	0	0	0	1
19 I*	0	0	0	0	0	0	0
21 I	0	0	0	0	0	0	0
23 I	0	0	0	0	0	1	1
25-I*	0	0	0	0	0	0	0
26 I	0	0	0	0	0	0	0
27 I	0	0	0	0	0	12	1
32 I*	0	0	0	0	0	0	0
35 I*	0	0	0	0	0	0	0
40 I	0	0	0	0	0	0	0
CSS I	0	0	0	0	0	0	0
TCB I	0	0	0	0	0	0	0
TCS I	0	0	0	0	0	0	0

Remarks: \* indicates the stream was not sampled in the reporting month.

4.13 As shown in the exceedance reports attached in Appendix H, all exceedances for water quality parameters recorded in the reporting month were not due to the Project based on the following observations:

- ✧ No construction activity was observed in the vicinity of the sampling locations.
- ✧ No pollution discharge from construction activity was observed.
- ✧ Measured value at the reference station was higher than at the impact monitoring stations.
- ✧ Natural humus materials were observed in the streams during monitoring.

4.14 According to the ET's investigation, no direct evidence demonstrated the exceedances of Action/Limit level for water monitoring parameters were caused by the Project.

## 5. ENVIRONMENTAL AUDIT

### Site Audits

- 5.1 Site audits were carried out on a weekly basis to monitor the timely implementation of proper environmental management practices and mitigation measures in the Project site.
- 5.2 ET site audits were conducted on 3<sup>rd</sup>, 9<sup>th</sup>, 17<sup>th</sup>, 23<sup>rd</sup> and 31<sup>st</sup> January 2008 in the reporting month. IEC site inspections were conducted on 9<sup>th</sup> and 23<sup>rd</sup> January 2008. The summaries of site audits are attached in Appendix I.

### Review of Environmental Monitoring Procedures

- 5.3 The monitoring works conducted by the monitoring team were inspected regularly. The following observations were recorded for the monitoring works:

#### *Air Quality Monitoring*

- The monitoring team recorded all observations around the monitoring stations within and outside of the construction site.
- The monitoring team recorded the temperature, air pressure and weather conditions on the monitoring day.

#### *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.

#### *Water Quality Monitoring*

- The monitoring team recorded all observations around the monitoring stations, which might affect the monitoring result.
- The monitoring team recorded the weather and river conditions on the monitoring day.

### Status of Environmental Licensing and Permitting

- 5.4 All permits/licenses obtained for the Project are summarized in Table 5.1.

**Table 5.1 Summary of Environmental Licensing and Permit Status**

Permit No.	Valid Period		Details	Status
	From	To		
<b>Environmental Permit (EP)</b>				
EP-170/2003/C	31/7/07	N/A	Construction of (a) Widening and realignment of an approximate 3.6 kilometre long section of Tung Chung Road between Lung Tseng Tau and Pak Kung Au from a single-lane road for two-way traffic to a single two-lane road with footpath; (b) Construction of an approximate 2.6 kilometre long single two-lane road between Pak Kung Au and Cheung Sha with footpath and elevated highway structures; and (c) Provision of passing bays/bus lay-bys along Tung Chung Road.	Valid
<b>Registration of Chemical Waste Producer</b>				
WPN5214 - 950-C1213-01	---	N/A	Chemical waste types: spent Indication oil, surplus paint, spent diesel, spent thinner, mixing residue containing pesticides, spent mineral oil	Valid
<b>Water Discharge License</b>				
EP890/W7/XP089	---	N/A	Discharge from Sewage Treatment System (Northern Section)	Valid
EP890/W7/XP090	---	N/A	Industrial discharge (Northern Section)	Valid
EP890/W2/XG013	---	N/A	Industrial discharge (Southern Section)	Valid
<b>Construction Noise Permit (CNP)</b>				
GW-RS0280-07	14/05/07	13/11/07	Construction Noise Permit for Zones B to F	Expired
GW-RS0281-07	14/05/07	13/11/07	Construction Noise Permit for Zones 2 to 6	Expired
GW-RS0526-07	22/08/07	19/02/08	Construction Noise Permit for operation of wastewater treatment facilities at Shek Mun Kap	Valid
GW-RS0527-07	23/08/07	19/02/08	Construction Noise Permit for operation of wastewater treatment facilities at San Shek Wan	Valid
GW-RW0463-07	10/09/07	9/03/08	Construction Noise Permit for Cheung Tung Road near Sunny Bay Station	Valid
GW-RS0701-07	14/11/07	13/05/08	Construction Noise Permit for Tung Chung Road between Lung Tseng Tau and Cheung Sha	Valid
GW-RS0702-07	14/11/07	13/05/08	Construction Noise Permit for Construction Site for Roadworks between Pak Kung Au and Cheung Sha Sheung Tsuen	Valid

**Status of Waste Management**

- 5.5 The waste management of the Project has to follow the requirements and procedures stated in the Waste Management Plan which was prepared by the Contractor.
- 5.6 The solid waste generated from the Project was mainly general refuse that was collected by a licensed collector on an as need basis.
- 5.7 The monthly summary of waste flow table and the timber summary for January 2008 are provided in Appendix O, except the total quantity of waste generated and quantity of reused in the contract will be updated in next Waste Flow Table.

### Implementation Status of Environmental Mitigation Measures

5.8 During site inspections in the reporting month, no non-conformance was identified. The observations and recommendations are summarized in Table 5.2.

**Table 5.2 Observations and Recommendations of Site Inspections**

Parameters	Date	Observations and Recommendations	Follow-up
<i>Water Quality</i>	03/01/07	Exposed slope was observed opposite to <b>SD 6</b> . The Contractor was reminded to cover it properly.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	03/01/07	The Contractor was reminded of the followings: - Provide temporary pond for storing the wheel washing water discharge from the road after spraying with water at <b>RW 14</b>	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	09/01/08	Exposed slope was observed opposite to <b>SD 6</b> . The Contractor was reminded to cover it with tarpaulin.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	09/01/08	The Contractor was reminded of the followings: - Provide temporary channel for discharging wheel washing water at <b>RW 14</b> .	Rectification/improvement was observed during the follow-up audit session.
	17/01/08	The Contractor was reminded of the followings: - Clear silt at <b>STR 10</b> .	Rectification/improvement was observed during the follow-up audit session.
	17/01/08	The Contractor was reminded of the followings: - Properly cover exposed slope at opposite to <b>SD 6</b> .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/01/08	Standing water with general refuse was observed at <b>STR 10</b> . The Contractor was reminded to dry it out and clear the waste.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/01/08	The Contractor was reminded of the followings: - Properly cover exposed slope at <b>STR 16</b> .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/01/08	The Contractor was reminded of the followings: - Properly cover exposed slope at <b>STR 14</b> .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.

Parameters	Date	Observations and Recommendations	Follow-up
	23/01/08	The Contractor was reminded of the followings: - Properly cover exposed slope at <b>STR 17</b> .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/01/08	The Contractor was reminded of the followings: - Properly cover exposed slope at <b>STR 18</b> .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/01/08	The Contractor was reminded of the followings: - Properly cover exposed slope at <b>SD 6</b> .	Rectification/improvement was observed during the follow-up audit session.
	31/01/08	Standing water with general refuse was observed at <b>STR 10</b> . The Contractor was reminded to dry it out and clear the waste.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	31/01/08	Standing water was observed at <b>STR 14</b> . The Contractor was reminded to dry it out.	Rectification/improvement was observed during the follow-up audit session.
	31/01/08	The Contractor was reminded of the followings: - Properly cover exposed slope at STR 14.	Rectification/improvement was observed during the follow-up audit session.
	31/01/08	The Contractor was reminded of the followings: - Properly cover exposed slope at STR 16.	Rectification/improvement was observed during the follow-up audit session.
	31/01/08	The Contractor was reminded of the followings: - Properly cover exposed slope at STR 17.	Rectification/improvement was observed during the follow-up audit session.
	31/01/08	The Contractor was reminded of the followings: - Properly cover exposed slope at STR 18.	Rectification/improvement was observed during the follow-up audit session.
<b>Air Quality</b>	03/01/08	The Contractor was reminded of the followings: - Ensure water spraying on dust-generating activities (road breaking) at <b>STR 11</b>	This item was not observed during site inspection.
	03/01/08	The Contractor was reminded of the followings: - Properly cover stockpile at <b>STR 13</b>	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	09/01/08	The Contractor was reminded of the followings: - Hydroseed the exposed slope at <b>STR 9</b> .	Rectification/improvement was observed during the follow-up audit session.



Parameters	Date	Observations and Recommendations	Follow-up
	09/01/08	The Contractor was reminded of the followings: - Cover stockpile at <b>STR13 (SA)</b> .	Rectification/improvement was observed during the follow-up audit session.
	09/01/08	The Contractor was reminded of the followings: - Ensure water-spray on dust-generation activities at <b>STR 11</b> .	This item was not observed during site inspection.
	09/01/08	The Contractor was reminded of the followings: - Clear mud at the entrance at <b>SD 6 &amp; SD 7</b> .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	17/01/08	Mud trail was observed at the entrance of <b>SD 7</b> . The Contractor was reminded to clear it and repair the concrete kerb.	Rectification/improvement was observed during the follow-up audit session.
	17/01/08	The Contractor was reminded of the followings: - Ensure water – spray on dust-generation activities at <b>STR 19</b> and <b>STR 11</b> .	This item was not observed during site inspection.
	23/01/08	The Contractor was reminded of the followings: - Ensure water – spray on dust generation activities at <b>STR 11</b> and <b>STR 19</b> .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/01/08	The Contractor was reminded of the followings: - Properly cover stockpile at <b>STR 9 -9A</b> .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/01/08	The Contractor was reminded of the followings: - Provide plant equipment maintenance at <b>SD 7</b> .	Rectification/improvement was observed during the follow-up audit session.
	23/01/08	The Contractor was reminded of the followings: - Ensure water – spray on dusty haul road.	Rectification/improvement was observed during the follow-up audit session.
	23/01/08	The Contractor was reminded of the followings: - Clear mud – trail at the entrance of San Shek Wan.	Rectification/improvement was observed during the follow-up audit session.
	31/01/08	The Contractor was reminded of the followings: - Properly cover stockpile at <b>STR 9 -9A</b> .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	31/01/08	The Contractor was reminded of the followings: - Ensure water – spray on dust generation	This item was not observed during site inspection.

Parameters	Date	Observations and Recommendations	Follow-up
		activities at <b>STR 11</b> and <b>STR 19</b> .	
	31/01/08	The Contractor was reminded of the followings: - Properly cover stockpile at <b>STR 13</b> .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
<b>Waste/Chemical Management</b>	03/01/08	C & D waste and broken temporary channel was observed at <b>Stream 28</b> . The Contractor was reminded to remove it.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	03/01/08	C & D waste and general refuse were observed at underneath <b>STR 14</b> . The Contractor was reminded to provide fencing at <b>Stream 35</b> and clear all the waste.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	03/01/08	The Contractor was reminded of the followings: - Remove C & D waste at <b>STR 7</b> .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	03/01/08	The Contractor was reminded of the followings: - Remove water pipe which is not in use at <b>STR 9A</b>	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	03/01/08	The Contractor was reminded of the followings: - Remove general refuse at <b>Stream 31</b> .	Rectification/improvement was observed during the follow-up audit session.
	09/01/08	C & D waste and broken temporary channel was observed at <b>Stream 28</b> . The Contractor was reminded to remove them.	Rectification/improvement was observed during the follow-up audit session.
	09/01/08	C & D waste was observed at <b>Stream 32</b> . The Contractor was reminded to remove them.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	09/01/08	C & D waste was observed at underneath <b>STR 14</b> . The Contractor was reminded to provide fencing at <b>Stream 35</b> and clear the waste.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	09/01/08	The Contractor was reminded of the followings: - Remove C & D waste at <b>STR 7</b> .	Rectification/improvement was observed during the follow-up audit session.
	09/01/08	The Contractor was reminded of the	This item was not rectified

Parameters	Date	Observations and Recommendations	Follow-up
		<p>followings:</p> <ul style="list-style-type: none"> <li>- Remove C &amp; D waste at <b>STR 8</b>.</li> </ul>	during the follow-up audit session. Follow-up action was needed for the outstanding item.
	09/01/08	<p>The Contractor was reminded of the followings:</p> <ul style="list-style-type: none"> <li>- Remove water pipe which is not in use at <b>STR 9A</b>.</li> </ul>	Rectification/improvement was observed during the follow-up audit session.
	09/01/08	<p>The Contractor was reminded of the followings:</p> <ul style="list-style-type: none"> <li>- Remove C &amp; D waste at <b>SD 6</b>.</li> </ul>	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	17/01/08	C & D waste was observed at <b>Stream 32</b> . The Contractor was reminded to clear them.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	17/01/08	C & D waste was observed underneath <b>STR 14</b> . The Contractor was reminded to provide fencing at <b>Stream 35</b> and clear the waste.	Rectification/improvement was observed during the follow-up audit session.
	17/01/08	False work was observed at <b>Stream 29</b> . The Contractor was reminded to remove it.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	17/01/08	<p>The Contractor was reminded of the followings:</p> <ul style="list-style-type: none"> <li>- Clear C &amp; D waste at another region of <b>STR 7</b>.</li> </ul>	Rectification/improvement was observed during the follow-up audit session.
	17/01/08	<p>The Contractor was reminded of the followings:</p> <ul style="list-style-type: none"> <li>- Clear C &amp; D waste at <b>STR 8</b>.</li> </ul>	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	17/01/08	<p>The Contractor was reminded of the followings:</p> <ul style="list-style-type: none"> <li>- Clear General refuse at underneath <b>STR 8</b>.</li> </ul>	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	17/01/08	<p>The Contractor was reminded of the followings:</p> <ul style="list-style-type: none"> <li>- Clear C &amp; D waste at <b>SD 6</b>.</li> </ul>	Rectification/improvement was observed during the follow-up audit session.
	23/01/08	False works were observed at <b>Stream 29</b> . The Contractor was reminded to remove them.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.

Parameters	Date	Observations and Recommendations	Follow-up
	23/01/08	C&D waste was observed at <b>Stream 32</b> . The Contractor was reminded to clear them.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/01/08	C&D waste was observed at <b>Stream 36</b> . The Contractor was reminded to clear them.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/01/08	The Contractor was reminded of the followings: - Clear C&D waste at <b>STR 8</b> .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/01/08	The Contractor was reminded of the followings: - Clear general refuse at underneath <b>STR 8</b> .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	23/01/08	The Contractor was reminded of the followings: - Clear C&D waste at <b>SD 6</b> and in permanent culvert.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	31/01/08	False works were observed at <b>Stream 29</b> . The Contractor was reminded to remove them.	Rectification/improvement was observed during the follow-up audit session.
	31/01/08	C&D waste and false works were observed at <b>Stream 32</b> . The Contractor was reminded to remove them.	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	31/01/08	C&D waste was observed at <b>Stream 36</b> . The Contractor was reminded to clear them.	Rectification/improvement was observed during the follow-up audit session.
	31/01/08	The Contractor was reminded of the followings: - Clear C&D waste at <b>STR 8</b> .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	31/01/08	The Contractor was reminded of the followings: - Clear general refuse at underneath <b>STR 8</b> .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.

Parameters	Date	Observations and Recommendations	Follow-up
	31/01/08	The Contractor was reminded of the followings: - Clear C&D waste at underneath <b>STR 10</b> .	This item was not rectified during the follow-up audit session. Follow-up action was needed for the outstanding item.
	31/01/08	The Contractor was reminded of the followings: - Clear C&D waste at <b>SD 6</b> and in permanent culvert.	Rectification/improvement was observed during the follow-up audit session.

### Non-compliance Recorded during Site Inspections

5.9 No non-compliance was recorded in the reporting period.

### Summary of Mitigation Measures Implemented

5.10 The Contractor has implemented the mitigation measures as recommended in the EIA and the Updated EM&A Manual. The mitigation measures implemented by the Contractor in the reporting month are summarized as follow:

#### *Water Quality*

- (1) Provided temporary channel for discharging wheel washing water at RW14.
- (2) Cleared silt at STR10.
- (3) Properly covered exposed slope at SD6.
- (4) Cleared the standing water at STR14.
- (5) Covered the exposed slope at STR14.
- (6) Covered the exposed slope at STR16.
- (7) Covered the exposed slope at STR17.
- (8) Covered the exposed slope at STR18.

#### *Air Quality*

- (9) Hydroseeded the exposed slope at STR9.
- (10) Covered stockpile at STR13 (SA).
- (11) Cleared mud trail and repaired the concrete kerb at the entrance of SD7.
- (12) Provided plant equipment maintenance at SD7.
- (13) Ensured water – spray on dusty haul road.
- (14) Cleared mud – trail at the entrance of San Shek Wan.

#### *Waste/Chemical Management*

- (15) Removed general refuse at Stream 31.
- (16) Removed C&D waste and broken temporary channel at Stream 28.
- (17) Removed C&D waste at STR7.

- (18) Removed water pipe which is not in use at STR9A.
- (19) Cleared C&D waste at underneath STR14 and provided fencing at Stream35.
- (20) Cleared C&D waste another region of STR7.
- (21) Cleared C&D waste at SD6.
- (22) Removed the false works at Stream 29.
- (23) Cleared C&D waste at Stream 36.
- (24) Cleared the C&D waste at SD6 and in permanent culvert.

5.11 According to the Updated EM&A Manual, mitigation measures are required to be implemented. An updated summary of the EMIS is provided in Appendix J.

### **Summary of Exceedances of the Environmental Quality Performance Limit**

#### *24-hr TSP Monitoring*

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

#### *Construction Noise Monitoring*

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

#### *Water Quality Monitoring*

5.14 Exceedances of suspended solids (SS) were recorded in water samples in the reporting month. The summary of exceedances is provided in Table 4.4.

5.15 All exceedances recorded for water quality parameters in the reporting month were not considered due to the Project due to the following observations:

- ✧ No construction activity was observed in the vicinity of the sampling locations.
- ✧ No pollution discharge from construction activity was observed.
- ✧ Measured value at the reference station was higher than at the impact monitoring stations.
- ✧ Natural humus materials were observed in the streams during monitoring.

5.16 No direct evidence demonstrated the exceedances of Action/Limit level for water monitoring parameters in the reporting month were caused by the Project.

### **Implementation Status of Event Action Plans**

5.17 The Event Action Plans for air quality, noise and water quality are presented in Appendix K.

5.18 No valid exceedance of Action and Limit levels for air quality, noise and water quality monitoring due to the Project was recorded. No action was required to be carried out.

**Summary of Complaint, Warning, Notification of any Summons and Successful Prosecution**

- 5.19 No environmental complaint was received in the reporting month.
- 5.20 No warning, summons and notifications of successful prosecution was received in the reporting month.
- 5.21 There were a total of 51 environmental complaints, 10 warnings, 3 summons and 2 successful prosecutions received since the commencement of the Project.
- 5.22 The Complaint Log is attached in Appendix L and the summary of warnings issued by the EPD and prosecution is attached in Appendix M.

## 6. FUTURE KEY ISSUES

### Key Issues for the Coming Month

6.1 Key issues to be considered in the coming month include:

- Dust generation from stockpiles of dusty materials, exposed retain wall, excavation works and rock breaking activities;
- Noise from operation of the equipment, especially for rock-breaking activities and machinery on-site;
- Regular removal of silt, mud and sand along u-channels and sedimentation tanks;
- Wastewater and runoff discharge from site;
- Runoff from exposed slope;
- Storage of chemicals/fuel and chemical waste/waste oil on site;
- Proper storage of construction material near streams;
- Review and implementation of temporary drainage system for the surface runoff;
- Watering for rock breaking activity, soil nailing and on haul road; and
- Accumulation of general and construction waste near stream and on site.

### Monitoring Schedule for the Next Month

6.2 The tentative monitoring schedule for the next month is given in Appendix C.

### Construction Program for the Project (Construction Program for the Next Month)

6.3 The major construction activities in the coming month include:

#### *Northern Section*

- Road and drainage works and soil nail works and underground utilities works at Zone A;
- Road and drainage works and underground utilities works at Zone B;
- Road and drainage works, underground utilities works and slope works at Zone C;
- Backfilling and road works at Zone D;
- Construction of RW010, RW011, RW014, RW015, RW018 and RW039 at Zone E;
- Construction of break pressure tank on CH3600 and drainage works, utilities works on CH3650 to CH3980;
- Road works on CH3200 to CH3400;



- Drainage works on CH3400 to CH3600 and CH3650 to CH3980;
- Site furniture works and footpath paving works on CH4100 to CH4300; and
- Construction of parapet on STR 06.

*Southern Section*

- Road, drainage works and site formation at Zone 1;
- Road, drainage works and site formation at Zone 2;
- Road, drainage, construction of retaining wall and bridge at Zone 3;
- Backfilling, construction of retaining wall and bridge at Zone 4;
- Backfilling, construction of retaining wall and bridge at Zone 5; and
- Backfilling, road and drainage works at Zone 6.

## 7. CONCLUSIONS AND RECOMMENDATIONS

### Conclusions

- 7.1 Air quality, noise and water quality monitoring works were performed in the reporting month and all monitoring results were checked and reviewed.
- 7.2 24-hour TSP monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded in the reporting month.
- 7.3 Construction noise monitoring was conducted as scheduled in the reporting month. No Action/Limit Level exceedance was recorded in the reporting month.
- 7.4 Water quality monitoring was conducted as scheduled in the reporting month. No valid Action/Limit Level exceedance for water quality was recorded in the reporting month.
- 7.5 No environmental complaint was received in the reporting month.
- 7.6 No warning, summons and notifications of successful prosecution was received in the reporting month.

### Recommendations

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

#### *Dust Impact*

- To implement dust suppression measures on all haul roads, stockpiles and dry surfaces in dry weather.
- To implement dust control measures for the dust generation work such as excavation, piling works and rock breaking.
- To ensure water spray being applied for the dust emissive works, such as soil nail installation, loading and unloading of soil materials, excavation works and rock dowel installation.
- To cover soil stockpiles and exposed slope surface by impervious tarpaulin sheets or other means.
- To ensure that all vehicles carrying dusty material are properly covered before leaving the site.
- To maintain the machinery and vehicles in a good working condition on site.

*Noise Impact*

- To implement appropriate mitigation measures, such as cover the tip of the hammer, in order to minimize the noise emitted during rock-breaking activities.
- 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.
- To follow up any exceedance caused by the construction works.
- To space out noisy equipment and position as far away as possible from sensitive receivers.

*Water Quality Impact*

- To prevent any surface runoff discharge into any stream course.
- To ensure properly maintenance for de-silting facilities.
- To review and implement temporary drainage system.
- To review the capacity of de-silting facilities for discharge.
- To avoid accumulation of stagnant and ponding water on site.
- To identify any wastewater discharges from site.
- To divert all the water generated from construction site to de-silting facilities with enough handling capacity before discharge.
- To follow up any exceedance caused by the construction works.
- To clear the silt and sediment in the sedimentation tanks.

*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 storage of oil container within the Country Park.
- To avoid any discharge or accidental spillage of chemical waste directly from the site.
- To avoid storage of construction materials at any stream.
- To check for any accumulation of waste materials or rubbish on site.
- To remove ponding water regularly in drip trays on site.

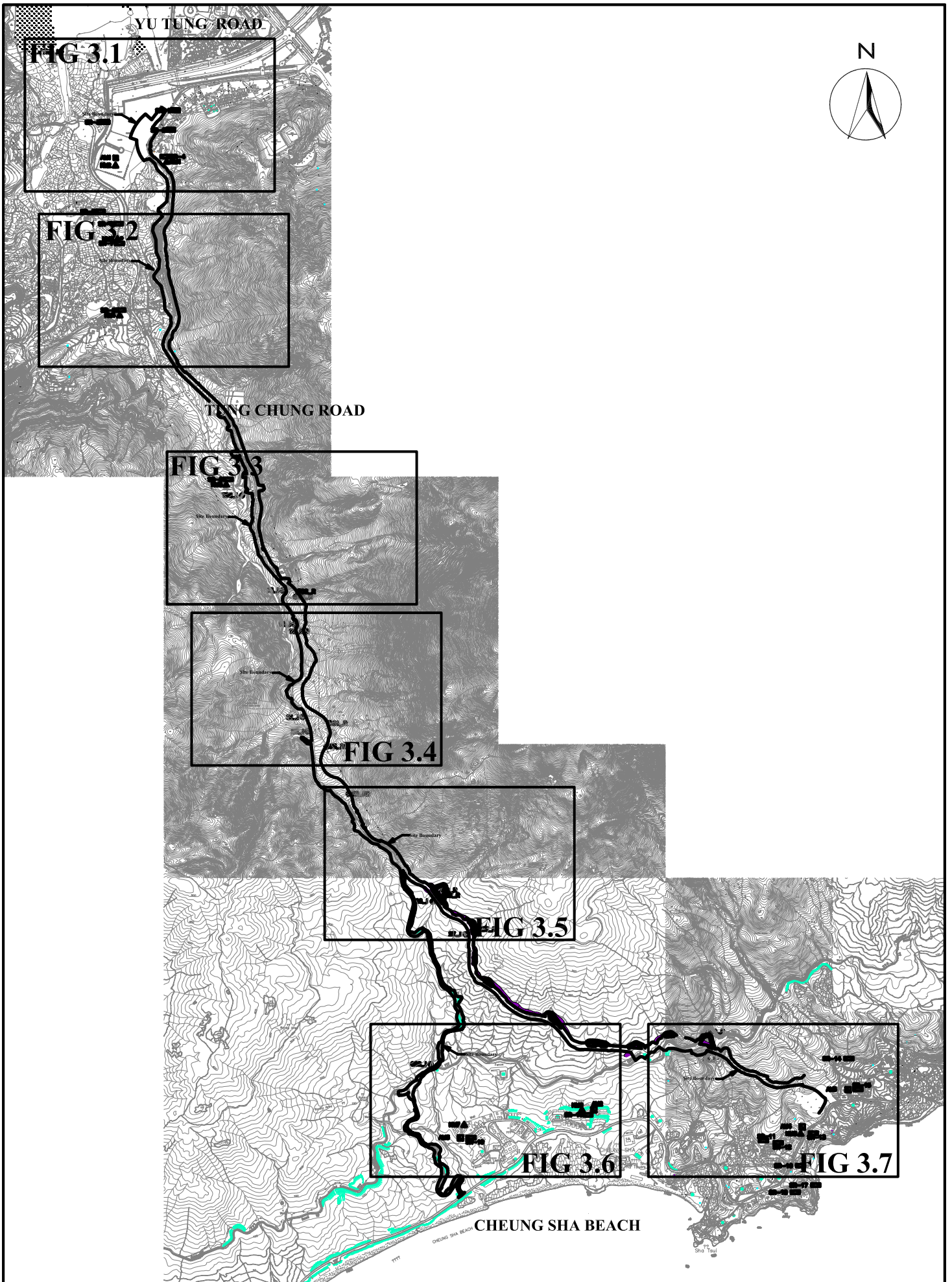
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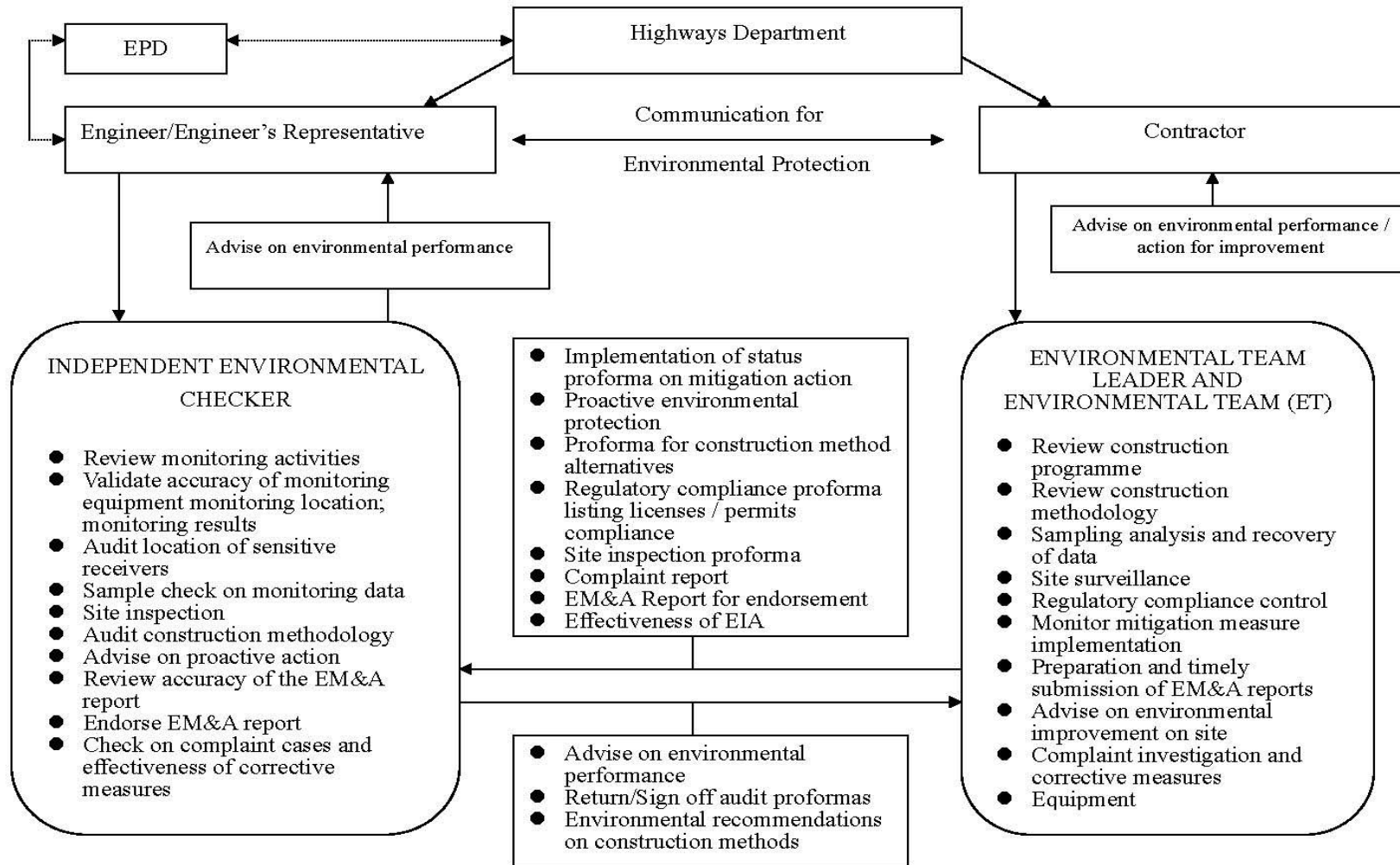
## FIGURES

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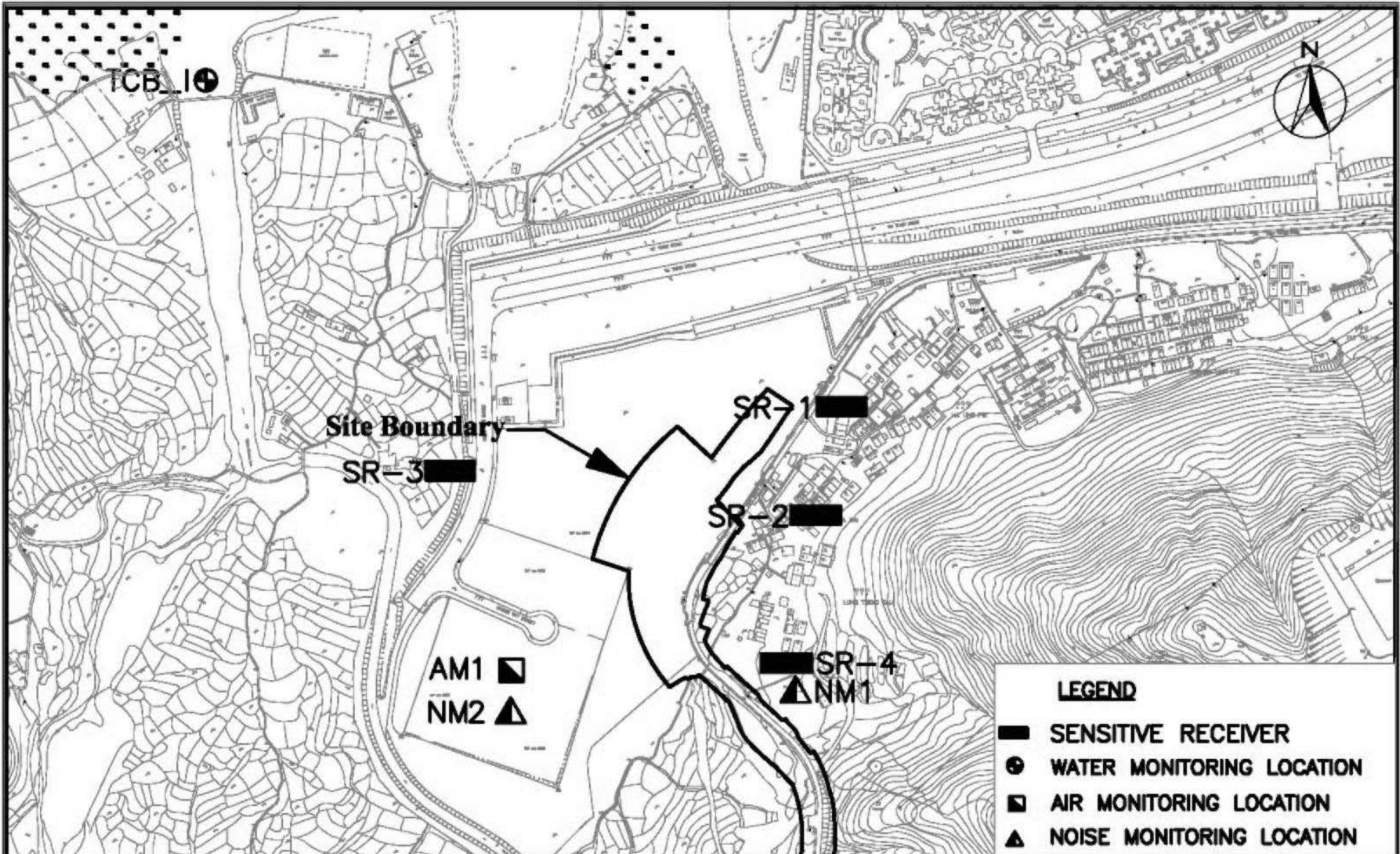
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SCALE	N.T.S.	DATE	OCT 2006
CHECK	JY	DRAWN	VL
JOB No.	MA6030	DRAWING No.	FIG 1
		REV	—



SCALE	N.T.S.	DATE	2007
CHECK	KL	DRAWN	FL
JOB NO.	MA6030	DRAWING No.	2
		Rev	1

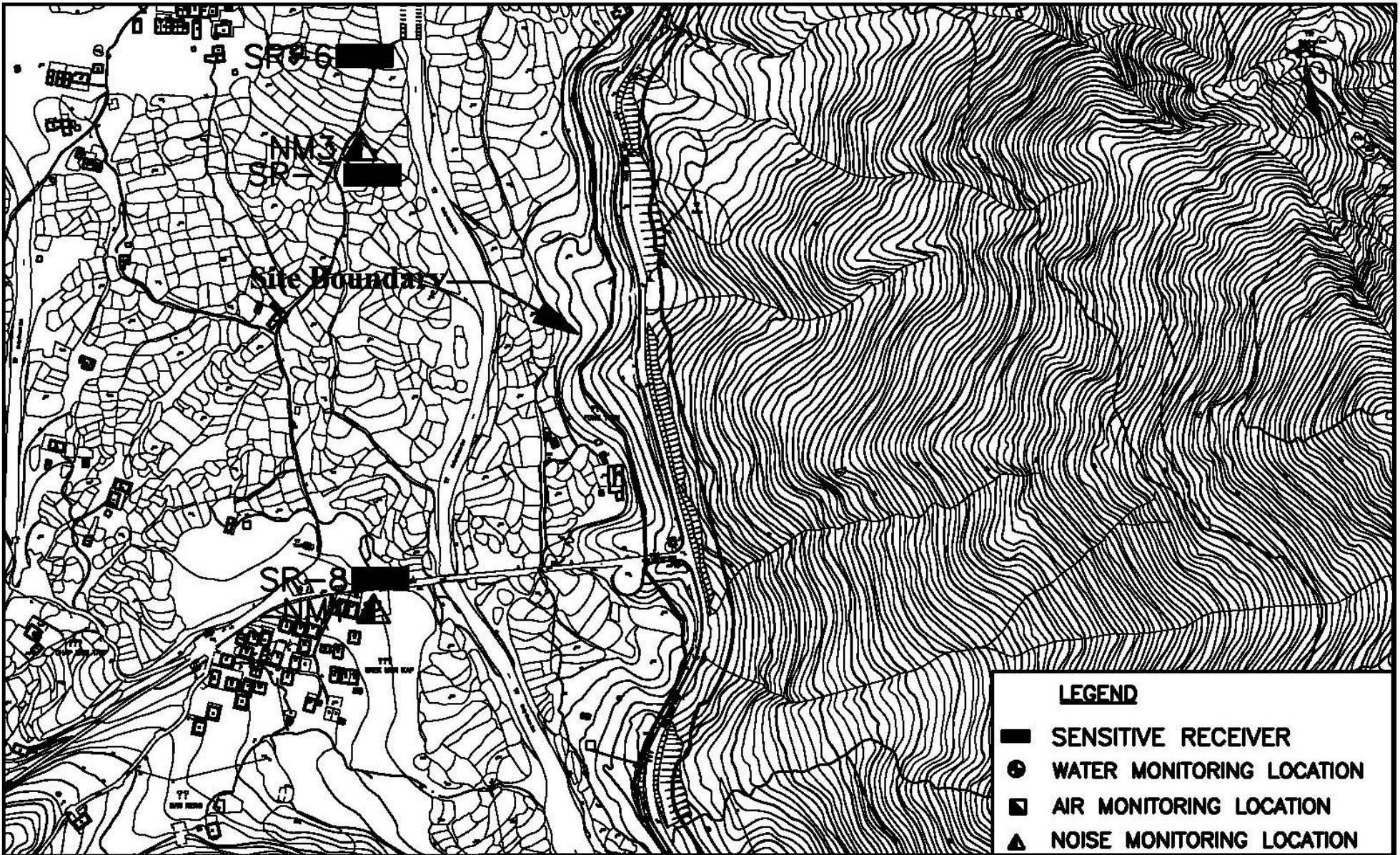






IMPROVEMENT TO TUNG CHUNG ROAD BETWEEN LUNG TSENG TAU AND CHEUNG SHA



**MONITORING LOCATIONS  
(SHEET 1 OF 7)**

SCALE	A4 1:4000	DATE	OCT 2006
CHECK	JY	DRAWN	VL
JOB No.	MA6030	DRAWING No.	FIG 3.1
		REV	1



LEGEND			
	SENSITIVE RECEIVER		
	WATER MONITORING LOCATION		
	AIR MONITORING LOCATION		
	NOISE MONITORING LOCATION		

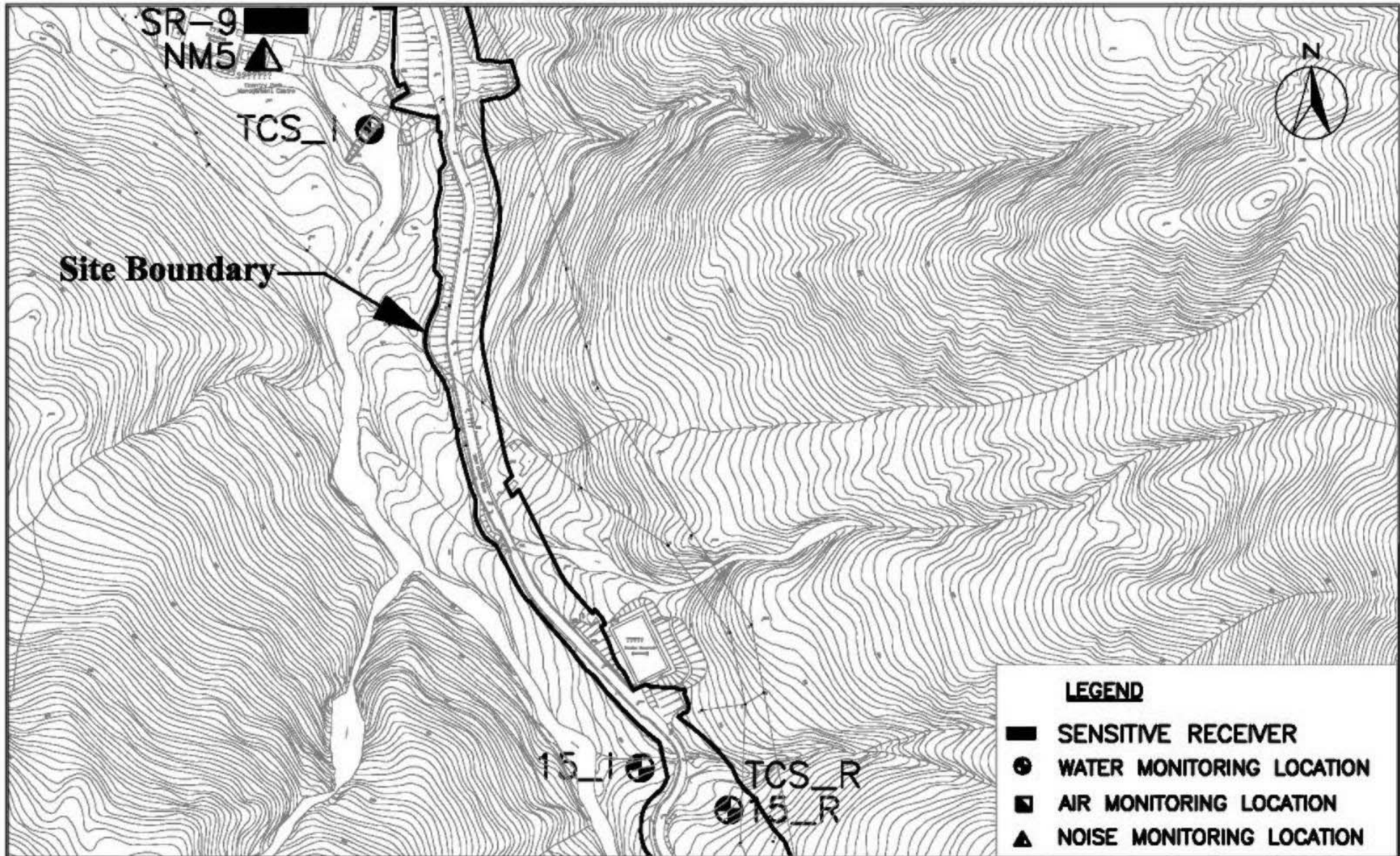
IMPROVEMENT TO TUNG CHUNG ROAD BETWEEN LUNG TSEUNG TAU AND CHEUNG SHA

**CNOTECH**  
Cinotech Consultants Limited

**MONITORING LOCATIONS  
(SHEET 2 OF 7)**

SCALE	A4 1:4000	DATE	OCT 2006
CHECK	JY	DRAWN	VL
JOB No.	MA6030	DRAWING No.	FIG 3.2
		REV	1





**LEGEND**

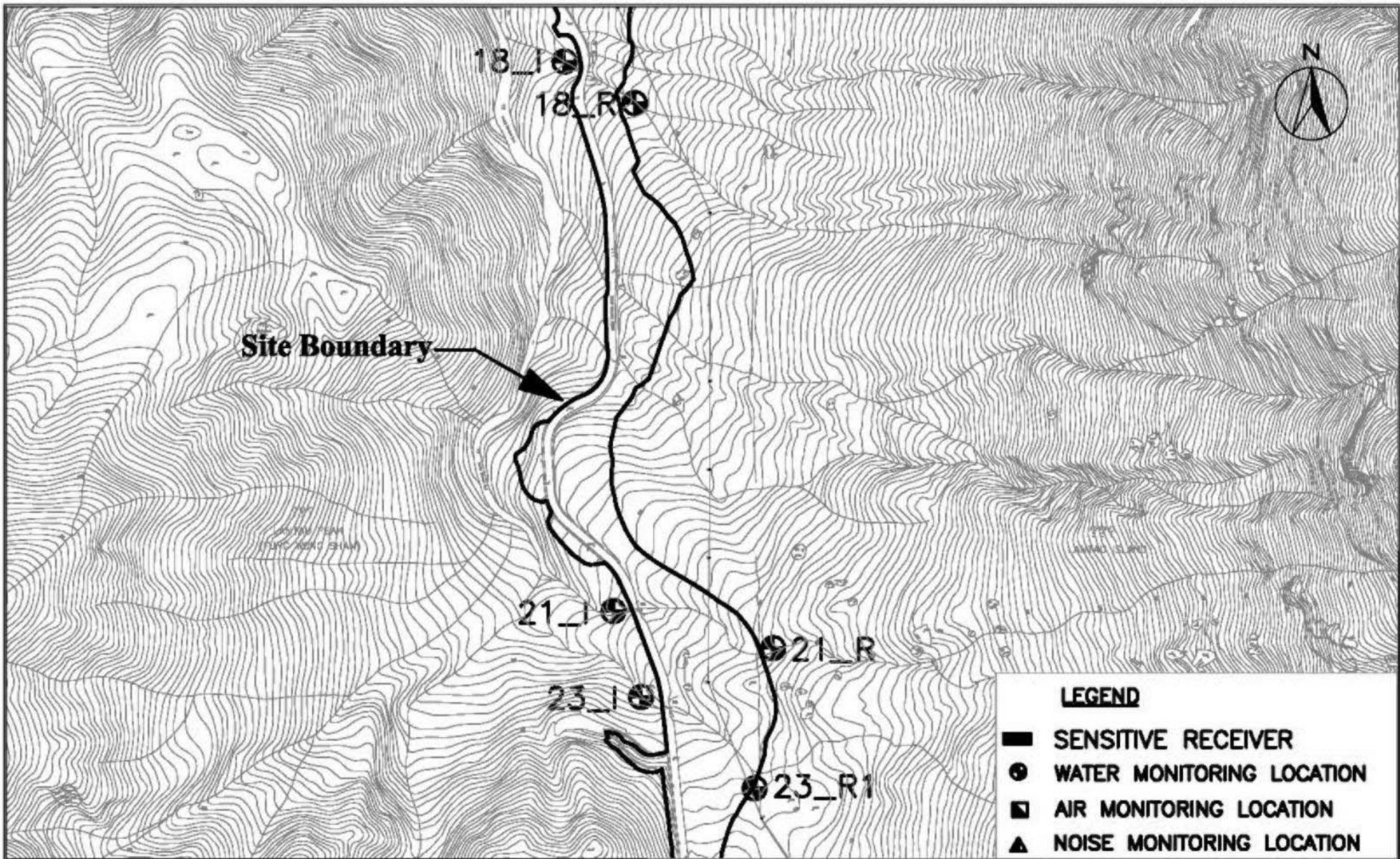
- SENSITIVE RECEIVER
- WATER MONITORING LOCATION
- AIR MONITORING LOCATION
- ▲ NOISE MONITORING LOCATION



IMPROVEMENT TO TUNG CHUNG ROAD BETWEEN LUNG TSENG TAU AND CHEUNG SHA

**MONITORING LOCATIONS  
(SHEET 3 OF 7)**

SCALE	A4 1:4000	DATE	OCT 2006
CHECK	JY	DRAWN	VL
JOB No.	MA6030	DRAWING No.	FIG 3.3
		REV	1



**LEGEND**

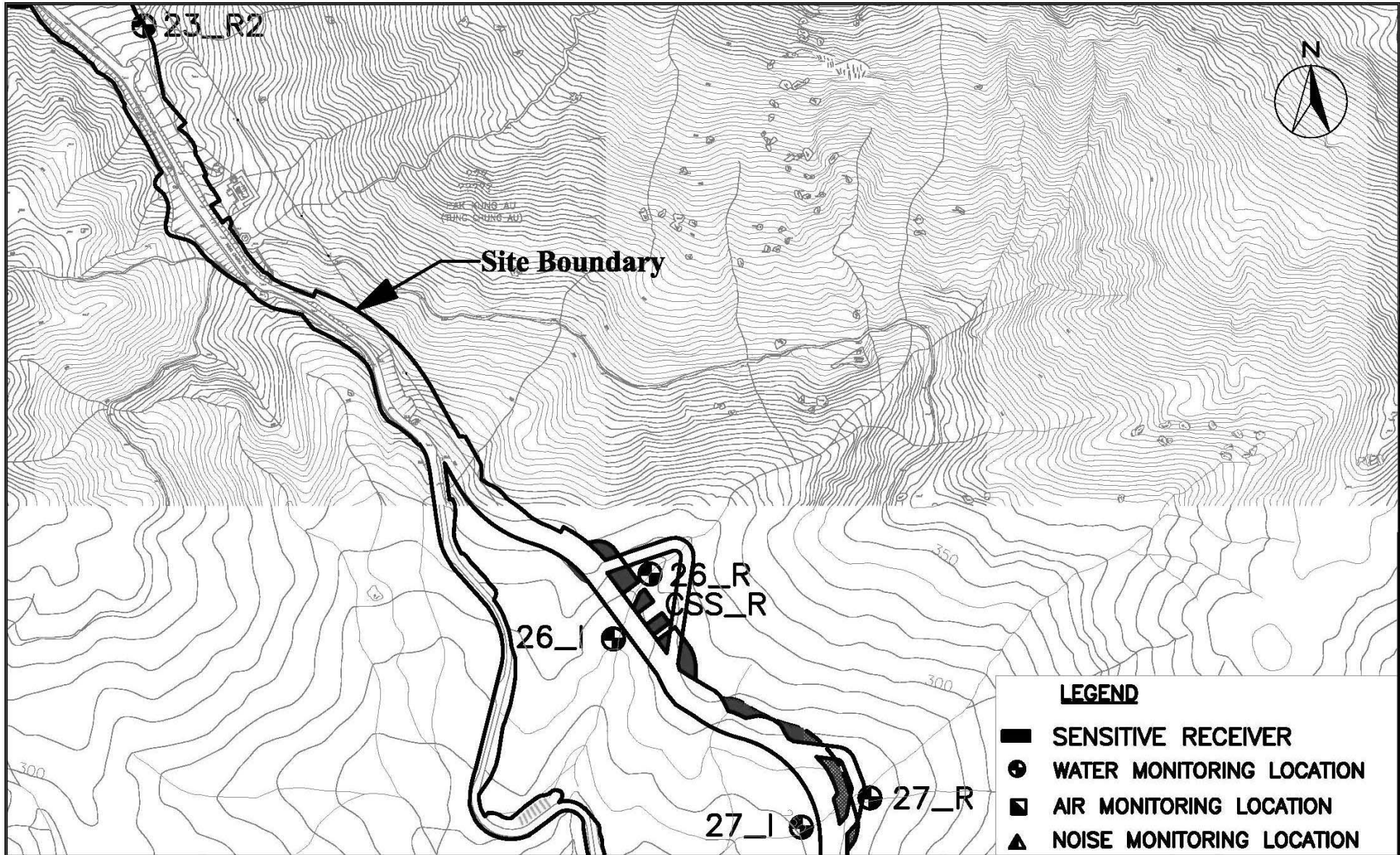
- SENSITIVE RECEIVER
- WATER MONITORING LOCATION
- AIR MONITORING LOCATION
- ▲ NOISE MONITORING LOCATION



IMPROVEMENT TO TUNG CHUNG ROAD BETWEEN LUNG TSENG TAU AND CHEUNG SHA

**MONITORING LOCATIONS  
(SHEET 4 OF 7)**

SCALE	A4 1:4000	DATE	OCT 2006
CHECK	JY	DRAWN	VL
JOB No.	MA6030	DRAWING No.	FIG 3.4
		REV	1

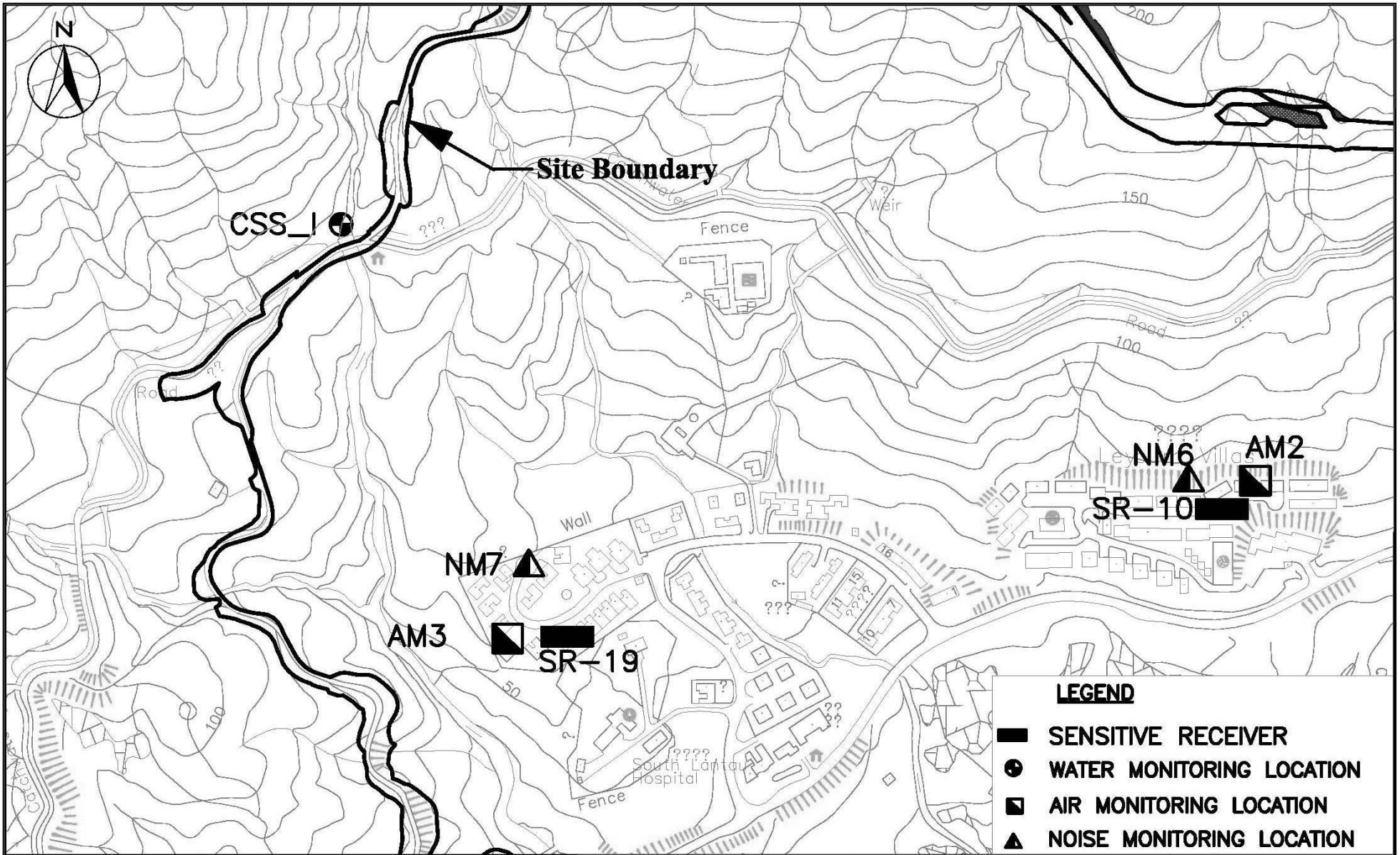


IMPROVEMENT TO TUNG CHUNG ROAD BETWEEN LUNG TSENG TAU AND CHEUNG SHA



**MONITORING LOCATIONS  
(SHEET 5 OF 7)**

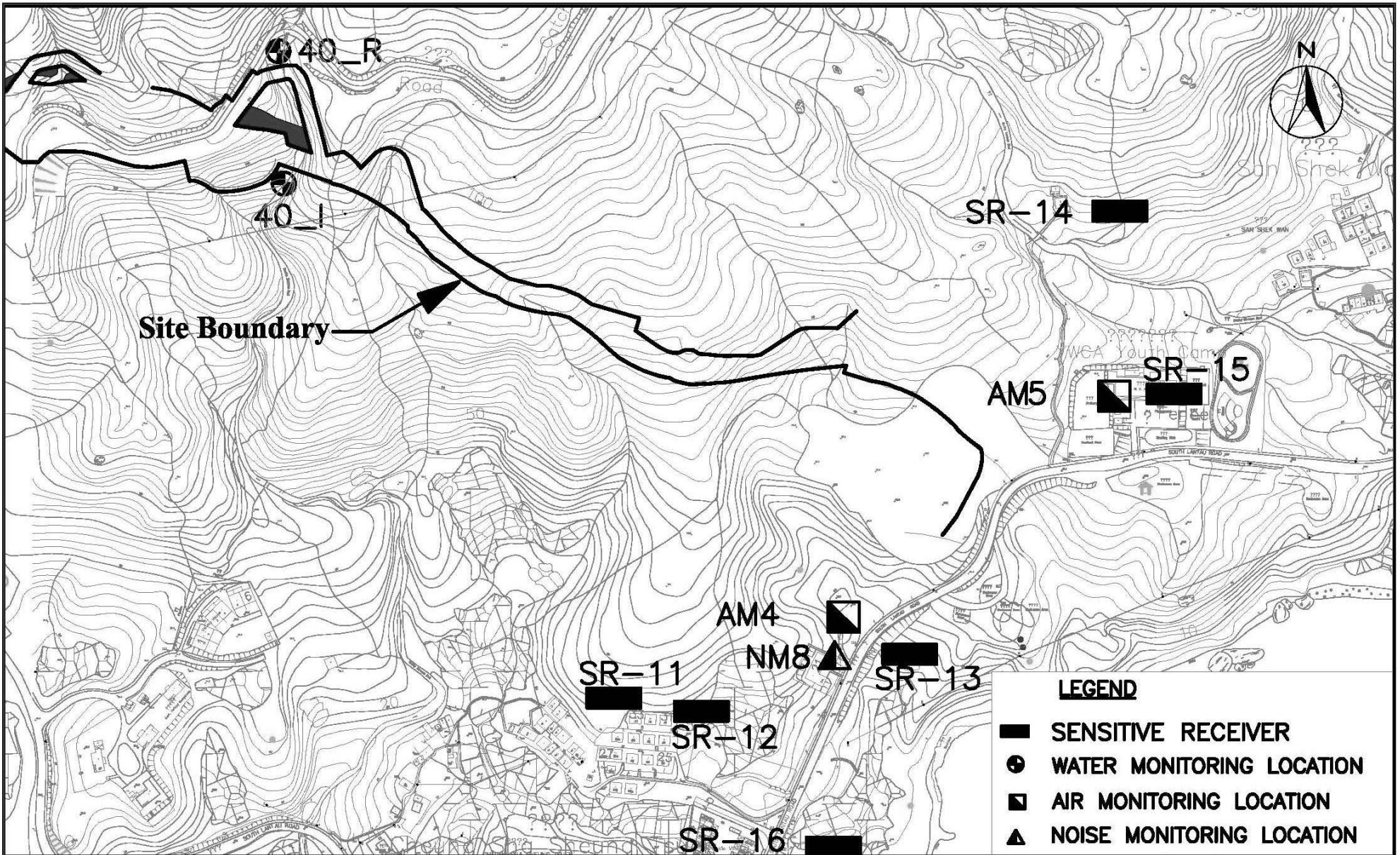
SCALE	A4 1:4000	DATE	OCT 2006
CHECK	JY	DRAWN	VL
JOB No.	MA6030	DRAWING No.	FIG 3.5
		REV	1



LEGEND	
	SENSITIVE RECEIVER
	WATER MONITORING LOCATION
	AIR MONITORING LOCATION
	NOISE MONITORING LOCATION

 Cinotech Consultants Limited	IMPROVEMENT TO TUNG CHUNG ROAD BETWEEN LUNG TSENG TAU AND CHEUNG SHA	
	<b>MONITORING LOCATIONS</b> (SHEET 6 OF 7)	

SCALE	A4 1:4000	DATE	OCT 2006
CHECK	JY	DRAWN	VL
JOB No.	MA6030	DRAWING No.	FIG 3.6
		REV	1



IMPROVEMENT TO TUNG CHUNG ROAD BETWEEN LUNG TSENG TAU AND CHEUNG SHA



**MONITORING LOCATIONS  
(SHEET 7 OF 7)**

SCALE	A4 1:4000	DATE	OCT 2006
CHECK	JY	DRAWN	VL
JOB No.	MA6030	DRAWING No.	FIG 3.7
		REV	1

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**APPENDIX A  
ACTION AND LIMIT LEVELS FOR AIR  
QUALITY, NOISE AND WATER  
QUALITY**

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## Appendix A - Action and Limit Levels

**Table A-1 Action and Limit Levels for 1-Hour TSP**

Location	Action Level, $\mu\text{g}/\text{m}^3$	Limit Level, $\mu\text{g}/\text{m}^3$
AM1	312	500
AM2	328	
AM3	302	
AM4	305	
AM5	342	

**Table A-2 Action and Limit Levels for 24-Hour TSP**

Location	Action Level, $\mu\text{g}/\text{m}^3$	Limit Level, $\mu\text{g}/\text{m}^3$
AM1	155	260
AM2	151	
AM3	141	
AM4	145	
AM5	153	

**Table A-3 Action and Limit Levels for Construction Noise**

Period	Action Level <sup>(2)</sup>	Limit Level	
		0700-1900 hrs on normal weekdays	When one documented complaint is received
1900-2300 hrs on holidays & 0700-2300 hrs on all other days	- <sup>(1)</sup>		
2300-0700 hrs of next day	- <sup>(1)</sup>		

\*Free field noise levels were adjusted with a correction of +3 dB(A)

Notes:

- (1) The noise limits shall be determined by EPD during the application of the construction noise permit (CNP).
- (2) Stated in the *“Environmental Monitoring and Audit Guidelines for Development Projects in Hong Kong”*, Appendix D2, Section 2.6, Table 2.1

**Table A-4 Compliance Level for Water Quality**

Monitoring Stations	DO, mg/L		pH		Turbidity, NTU				SS, mg/L			
	Action	Limit	Action	Limit	Action		Limit		Action		Limit	
TCS_I	6.10	4.00	-	<6.5 or >8.5	5.95	or 120% of the upstream control station's Tby (at the sme tide on the same day if appropriate)	13.30	or 130% of the upstream control station's Tby (at the sme tide on the same day if appropriate)	10.30	or 120% of the upstream control station's SS (at the sme tide on the same day if appropriate)	12.00	or 130% of the upstream control station's SS (at the sme tide on the same day if appropriate)
CSS_I	6.40	4.00	-	<6.5 or >8.5	7.91		10.50		9.90		16.00	
15_I	5.94	4.00	-	<6.5 or >8.5	11.00		16.10		6.10		8.20	
18_I	6.43	4.00	-	<6.5 or >8.5	6.84		11.10		14.00		16.00	
19_I	6.55	4.00	-	<6.5 or >8.5	7.52		9.03		14.00		18.00	
21_I	6.73	4.00	-	<6.5 or >8.5	7.70		8.30		6.60		20.00	
23_I	6.55	4.00	-	<6.5 or >8.5	6.37		6.62		8.50		17.00	
26_I	6.49	4.00	-	<6.5 or >8.5	7.53		8.10		6.70		15.00	
27_I	5.33	4.00	-	<6.5 or >8.5	6.05		6.76		2.10		3.00	
32_I	5.94	4.00	-	<6.5 or >8.5	10.30		14.20		15.00		18.00	
40_I	6.42	4.00	-	<6.5 or >8.5	9.38		10.60		14.00		15.00	
TCB_I	6.31	4.00	-	<6.5 or >8.5	17.10		41.40		19.00		20.00	



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**APPENDIX B  
COPIES OF CALIBRATION  
CERTIFICATES**

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# High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET

CINOTECH

File No. MA6030/46/0008

Station AM1 - YMCA of HK Christian College

Operator: WK

Date: 12-Dec-07

Next Due Date: 11-Feb-08

Equipment No.: A-01-46

Serial No. 1315

Ambient Condition			
Temperature, Ta (K)	292.6	Pressure, Pa (mmHg)	765.2

Orifice Transfer Standard Information					
Equipment No.:	A-04-05	Slope, mc	0.0575	Intercept, bc	0.0395
Last Calibration Date:	12-Mar-07	$mc \times Qstd + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$			
Next Calibration Date:	11-Mar-08	$Qstd = \{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc\} / mc$			

Calibration of TSP Sampler					
Calibration Point	Orifice			HVS	
	$\Delta H$ (orifice), in. of water	$[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$	Qstd (CFM) X - axis	$\Delta W$ (HVS), in. of oil	$[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Y-axis
1	12.1	3.52	60.57	8.7	2.99
2	10.0	3.20	55.00	6.7	2.62
3	7.4	2.75	47.22	5.0	2.26
4	5.0	2.26	38.69	3.3	1.84
5	3.0	1.75	29.82	1.8	1.36

By Linear Regression of Y on X

Slope, mw = 0.0518

Intercept, bw : -0.1805

Correlation coefficient\* = 0.9990

\*If Correlation Coefficient < 0.990, check and recalibrate.

### Set Point Calculation

From the TSP Field Calibration Curve, take Qstd = 43 CFM

From the Regression Equation, the "Y" value according to

$$mw \times Qstd + bw = [\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$$

Therefore, Set Point;  $W = (mw \times Qstd + bw)^2 \times (760 / Pa) \times (Ta / 298) =$  4.08

Remarks: \_\_\_\_\_

Conducted by: Wk Tang

Signature: \_\_\_\_\_

Date: 12/12/07

Checked by: [Signature]

Signature: \_\_\_\_\_

Date: 12 Dec 07



# High-Volume TSP Sampler 5-POINT CALIBRATION DATA SHEET

**CINOTECH**

File No. MA6030/AM4/0008

Station No. 31 South Lantau Road (AM4) Operator: WK  
 Date: 12-Dec-07 Next Due Date: 11-Feb-08  
 Equipment No.: A-01-06 Serial No. 10576

Ambient Condition			
Temperature, Ta (K)	292.6	Pressure, Pa (mmHg)	765.2

Orifice Transfer Standard Information					
Equipment No.:	A-04-05	Slope, mc	0.0575	Intercept, bc	0.0395
Last Calibration Date:	12-Mar-07	$mc \times Q_{std} + bc = [\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$			
Next Calibration Date:	11-Mar-08	$Q_{std} = \{[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2} - bc\} / mc$			

Calibration of TSP Sampler					
Calibration Point	Orifice			HVS	
	$\Delta H$ (orifice), in. of water	$[\Delta H \times (Pa/760) \times (298/Ta)]^{1/2}$	Qstd (CFM) X - axis	$\Delta W$ (HVS), in. of oil	$[\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$ Y-axis
1	12.3	3.55	61.08	7.9	2.85
2	10.2	3.23	55.56	6.7	2.62
3	7.6	2.79	47.86	4.6	2.17
4	5.3	2.33	39.86	3.1	1.78
5	3.2	1.81	30.82	1.9	1.40

By Linear Regression of Y on X

Slope,  $m_w =$  0.0490 Intercept,  $b_w =$  -0.1417  
 Correlation coefficient\* = 0.9985

\*If Correlation Coefficient < 0.990, check and recalibrate.

Set Point Calculation
From the TSP Field Calibration Curve, take Qstd = 43 CFM
From the Regression Equation, the "Y" value according to
$m_w \times Q_{std} + b_w = [\Delta W \times (Pa/760) \times (298/Ta)]^{1/2}$
Therefore, Set Point; $W = (m_w \times Q_{std} + b_w)^2 \times (760 / Pa) \times (Ta / 298) =$ <u>3.77</u>

Remarks: \_\_\_\_\_

Conducted by: Wk. Tang Signature: [Signature]  
 Checked by: [Signature] Signature: [Signature]

Date: 12/12/07  
 Date: 12 Dec 07

# WELLAB LTD.

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

## TEST REPORT

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

Test Report No.:	C/07/70502
Date of Issue:	2007-05-02
Date Received:	2007-05-01
Date Tested:	2007-05-01
Date Completed:	2007-05-02

**ATTN:** Mr. Henry Leung

Page: 1 of 1

### Certificate of Calibration

**Item for calibration:**

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

**Test conditions:**

Room Temperature : 21 degree Celsius  
Relative Humidity : 65%  
Pressure : 101.3 kPa

**Methodology:**

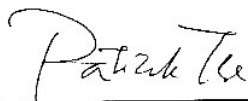
The anemometer has been calibrated in accordance with the documented procedures and using standard(s) and instrument(s) which are recommended by the manufacturer, or equivalent.

**Results:**

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

*PREPARED AND CHECKED BY:*

For and On Behalf of **WELLAB Ltd.**



**PATRICK TSE**

Senior Chemist



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

AIR POLLUTION MONITORING EQUIPMENT

ORIFICE TRANSFER STANDARD CERTIFICATION WORKSHEET TE-5025A

Date - Mar 12, 2007 Rootsmeter S/N 9833640 Ta (K) - 294  
 Operator Tisch Orifice I.D. - 0999 Pa (mm) - 746.76

PLATE OR Run #	VOLUME START (m3)	VOLUME STOP (m3)	DIFF VOLUME (m3)	DIFF TIME (min)	METER DIFF Hg (mm)	ORFICE DIFF H2O (in.)
1	NA	NA	1.00	1.3890	3.2	2.00
2	NA	NA	1.00	0.9850	6.3	4.00
3	NA	NA	1.00	0.8810	7.8	5.00
4	NA	NA	1.00	0.8410	8.6	5.50
5	NA	NA	1.00	0.6950	12.5	8.00

DATA TABULATION

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

CALCULATIONS

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

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

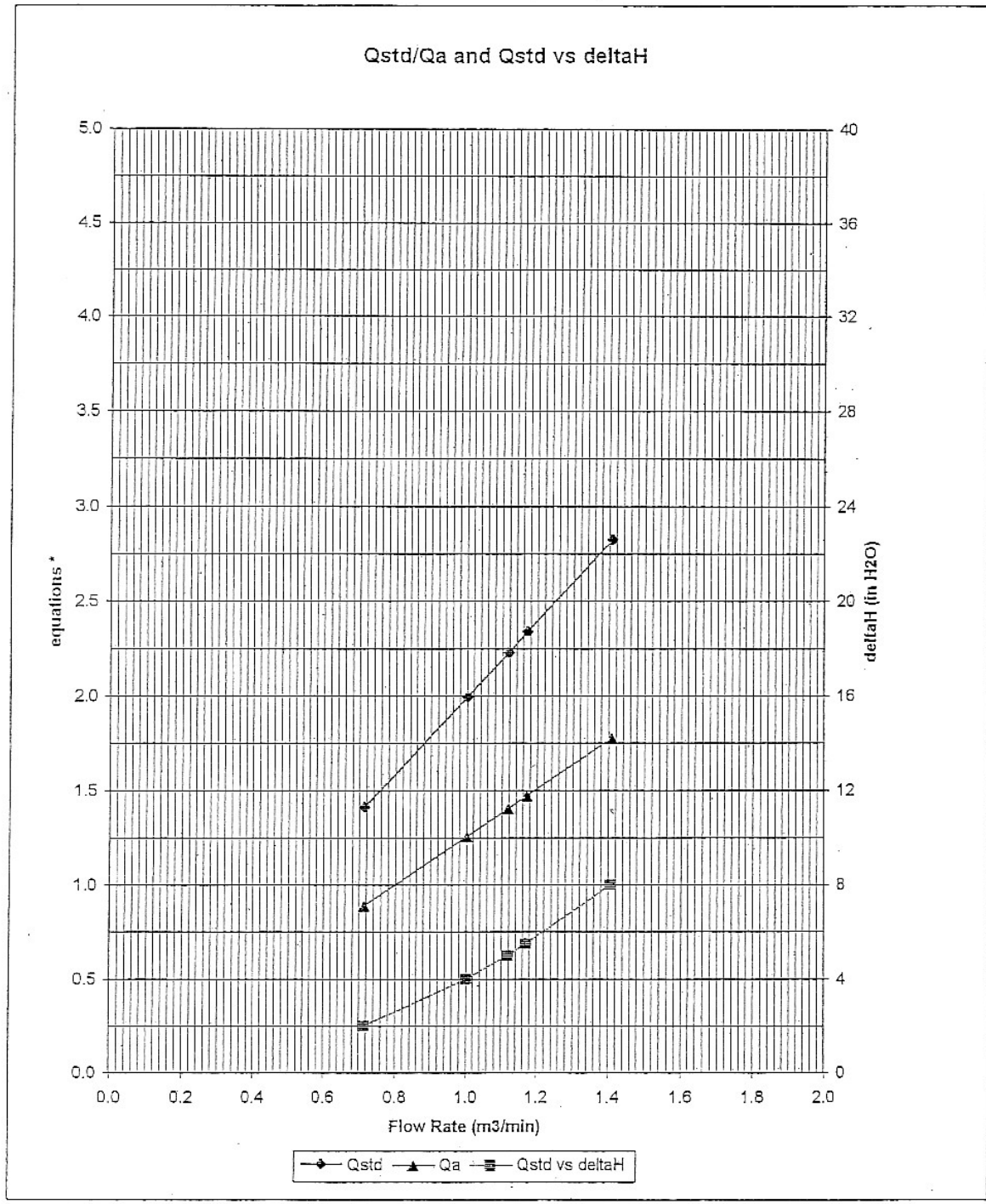
For subsequent flow rate calculations:

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



TISCH ENVIRONMENTAL, INC.  
 145 SOUTH MIAMI AVE.  
 VILLAGE OF CLEVELAND, OH 45002  
 513.467.9000  
 877.253.7610 TOLL FREE  
 513.467.9009 FAX  
 WWW.TISCH-ENV.COM

AIR POLLUTION MONITORING EQUIPMENT



\* y-axis equations:

Qstd series: 
$$\sqrt{\Delta H \left( \frac{P_a}{P_{std}} \right) \left( \frac{T_{std}}{T_a} \right)}$$

Qa series: 
$$\sqrt{(\Delta H (T_a / P_a))}$$

**TEST REPORT**

**APPLICANT:** Cinotech Consultants Limited  
Room 1710, Technology Park,  
18 On Lai Street,  
Shatin, NT, Hong Kong

Test Report No.:	C/N/71213/1
Date of Issue:	2007-12-14
Date Received:	2007-12-13
Date Tested:	2007-12-14
Date Completed:	2007-12-14
Next Due Date:	2008-12-13

**ATTN:** Mr. Henry Leung

Page: 1 of 1

**Certificate of Calibration**

**Item for calibration:**

Description	: Integrating Sound Level Meter
Manufacturer	: Brüel & Kjær
Model No.	: B&K 2238
Serial No.	: 2337665
Microphone No.	: 2289749
Equipment No.	: N-01-01

**Test conditions:**

Room Temperature	: 20 degree Celsius
Relative Humidity	: 60%

**Test Specifications:**

Performance checking at 94 and 114 dB

**Methodology:**

In-house method, according to manufacturer instruction manual

**Results:**

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

*PREPARED AND CHECKED BY:*

For and On Behalf of **WELLAB Ltd.**



**PATRICK TSE**  
Senior Chemist



## TEST REPORT

**APPLICANT:** Cinotech Consultants Limited  
Room 1710, Technology Park,  
18 On Lai Street,  
Shatin, NT, Hong Kong

Test Report No.:	C/N/71116/1
Date of Issue:	2007-11-16
Date Received:	2007-11-15
Date Tested:	2007-11-15
Date Completed:	2007-11-16
Next Due Date:	2008-11-15

**ATTN:** Mr. Henry Leung

Page: 1 of 1

### 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

**Test conditions:**

Room Temperature	: 20 degree Celsius
Relative Humidity	: 59%

**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**  
Senior Chemist

## TEST REPORT

**APPLICANT:** Cinotech Consultants Limited  
1601-1610 Delta House,  
3 On Yiu Street,  
Shatin, N.T.

Test Report No.:	C/N/70903-1
Date of Issue:	2007-09-03
Date Received:	2007-09-01
Date Tested:	2007-09-03
Date Completed:	2007-09-03
Next Due Date:	2008-09-02

**ATTN:** Mr. Henry Leung

Page: 1 of 1

### 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

**Test conditions:**

Room Temperature	: 22 degree Celsius
Relative Humidity	: 62%

**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**  
*Senior Chemist*

## TEST REPORT

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

Test Report No.:	C/N/70903-2
Date of Issue:	2007-09-03
Date Received:	2007-09-01
Date Tested:	2007-09-03
Date Completed:	2007-09-03
Next Due Date:	2008-09-02

**ATTN:** Mr. Henry Leung

Page: 1 of 1

### Certificate of Calibration

**Item for calibration:**

Description	: Integrating Sound Level Meter
Manufacturer	: Brüel & Kjær
Model No.	: B&K 2238
Serial No.	: 2359303
Equipment No.	: N-01-04

**Test conditions:**

Room Temperature	: 22 degree Celsius
Relative Humidity	: 62%

**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**  
Senior Chemist

## TEST REPORT

**APPLICANT:** Cinotech Consultants Limited  
Room 1710, Technology Park,  
18 On Lai Street,  
Shatin, NT, Hong Kong

Test Report No.:	C/N/71015/1
Date of Issue:	2007-10-15
Date Received:	2007-10-13
Date Tested:	2007-10-13
Date Completed:	2007-10-15
Next Due Date:	2008-10-14

**ATTN:** Mr. Henry Leung

Page: 1 of 1

### 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 Temperature	: 21 degree Celsius
Relative Humidity	: 60%

**Test Specifications:**

Performance checking at 94 and 114 dB

**Methodology:**


In-house method, according to manufacturer instruction manual

**Results:**

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

*PREPARED AND CHECKED BY:*

For and On Behalf of **WELLAB Ltd.**

  
**PATRICK TSE**  
Senior Chemist

## TEST REPORT

**APPLICANT:** Cinotech Consultants Limited  
Room 1710, Technology Park,  
18 On Lai Street,  
Shatin, NT, Hong Kong

Test Report No.:	C/N/71116/2
Date of Issue:	2007-11-16
Date Received:	2007-11-15
Date Tested:	2007-11-15
Date Completed:	2007-11-16
Next Due Date:	2008-11-15

**ATTN:** Mr. Henry Leung

Page: 1 of 1

### Item for calibration:

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

### Test conditions:

Room Temperature	: 20 degree Celsius
Relative Humidity	: 59%
Pressure	: 1015.2 hPa

### Methodology:

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

### Results:

Sound Pressure Level	Measured SPL	Tolerance
At 94 dB SPL	94.0	94.0 ± 0.1 dB

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**



**PATRICK TSE**  
Senior Chemist

# WELLAB LTD.

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

## TEST REPORT

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

Test Report No.:	C/06/70305
Date of Issue:	2007-03-05
Date Received:	2007-03-03
Date Tested:	2007-03-03
Date Completed:	2007-03-05
Next Due Date:	2008-03-04

**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 Temperature : 20 degree Celsius  
Relative Humidity : 65%  
Pressure : 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 ± 0.2 dB

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



**PATRICK TSE**  
*Operation Manager*

## TEST REPORT

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

Test Report No.:	C/N/70903-3
Date of Issue:	2007-09-03
Date Received:	2007-09-01
Date Tested:	2007-09-03
Date Completed:	2007-09-03
Next Due Date:	2008-09-02

**ATTN:** Mr. Henry Leung

Page: 1 of 1

### Item for calibration:

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

### Test conditions:

Room Temperature	: 22 degree Celsius
Relative Humidity	: 62%

### Methodology:

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

### Results:

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

PREPARED AND CHECKED BY:

For and On Behalf of **WELLAB Ltd.**

  
**PATRICK TSE**  
Senior Chemist

## TEST REPORT

**APPLICANT:** Cinotech Consultants Limited  
Room 1710, Technology Park,  
18 On Lai Street,  
Shatin, NT, Hong Kong

Test Report No.:	C/W/71110-1
Date of Issue:	2007-11-10
Date Received:	2007-11-09
Date Tested:	2007-11-10
Date Completed:	2007-11-10
Next Due Date:	2008-02-09

**ATTN:** Mr. Henry Leung

Page: 1 of 2

### Certificate of Calibration

**Item for calibration:**

Description	: Sonde Environmental Monitoring System
Manufacturer	: YSI
Model No.	: 6820-C-M
Serial No.	: 02D0126AA
Equipment No.	: W.03.01
Project No.	: C013

**Test conditions:**

Room Temperature	: 21 degree Celsius
Relative Humidity	: 62%

**Test Specifications:**

Conductivity & Salinity Sensor, Model: 6560, S/N: 05A1209

1. Conductivity performance check with Potassium Chloride standard solution
2. Salinity performance check with Sodium Chloride standard solution

Dissolved Oxygen Sensor, Model: 6562, S/N: 04A0145

1. Performance check against Winkler titration

Turbidity Sensor, Model: 6136, S/N: 05A1610AJ

1. Calibration check with Formazin standard solution

pH Meter, Model: 6561, S/N: 01J

1. Calibration check with standard pH buffer

Depth Meter


1. Calibration check at 1m water level depth

**Methodologies:**

1. YSI 6-Series Sonde Environmental Monitoring System Instruction Manual
2. In-house method with reference to APHA and ISO standards

*PREPARED AND CHECKED BY:*

For and On Behalf of **WELLAB Ltd.**

  
**PATRICK TSE**  
Senior Chemist



**TEST REPORT**

Test Report No.:	C/W/71110-1
Date of Issue:	2007-11-10
Date Received:	2007-11-09
Date Tested:	2007-11-10
Date Completed:	2007-11-10
Next Due Date:	2008-02-09

Page: 2 of 2

**Results:**

1. Conductivity performance check

Specific Conductivity, $\mu\text{S}/\text{cm}$		Correction, $\mu\text{S}/\text{cm}$	Acceptable range
Salinity Meter (C1)	Theoretical Value (C2)	$D = C1 - C2$	
1421	1420	2	$1420 \pm 20$

2. Salinity Performance check

Salinity, ppt		Correction, ppt	Acceptable range
Instrument Reading	Theoretical Value		
30.0	30.0	0.0	$30.0 \pm 3$

3. Dissolved Oxygen check

Oxygen level in water at 20°C	Dissolved Oxygen, mg O <sub>2</sub> /L		Correction, mg O <sub>2</sub> /L	Acceptable range
	D.O. Meter	Winkler Titration		
Saturated	9.1	9.1	0.0	$\pm 0.2$
Half-saturated	5.6	5.6	0.0	$\pm 0.2$
Zero	0.0	0.0	0.0	$\pm 0.2$

4. Turbidity check

Turbidity value in solution, NTU	Calibration Value, NTU	Correction, NTU	Acceptable range
0.00	0.00	0.00	$0.00 \pm 0.05$
100	100	0	$100 \pm 5$

5. pH Meter check

Test Parameters	Performance characteristic	Acceptable range
Liquid junction error $\Delta\text{pH}_j$ , pH unit	0.01	Less than 0.05
Shift on stirring $\Delta\text{pH}_s$ , pH unit	0.01	Less than 0.02
Noise $\Delta\text{pH}_n$ , pH unit	0.00	Less than 0.02

6. Depth Meter check

Instrument Reading, m	Calibration Value, m	Correction, m	Acceptable range
1.0	1.00	0.00	$1.00 \pm 0.05$

\*\*\*\*\*END OF REPORT\*\*\*\*\*

## TEST REPORT

**APPLICANT:** Cinotech Consultants Limited  
Room 1710, Technology Park,  
18 On Lai Street,  
Shatin, NT, Hong Kong

Test Report No.:	C/W/71110-2
Date of Issue:	2007-11-10
Date Received:	2007-11-09
Date Tested:	2007-11-10
Date Completed:	2007-11-10
Next Due Date:	2008-02-09

**ATTN:** Mr. Henry Leung

Page: 1 of 2

### Certificate of Calibration

**Item for calibration:**

Description	: Sonde Environmental Monitoring System
Manufacturer	: YSI
Model No.	: 6820-C-M
Serial No.	: 02D0293AA
Equipment No.	: W.03.02
Project No.	: C013

**Test conditions:**

Room Temperature	: 21 degree Celsius
Relative Humidity	: 62%

**Test Specifications:**

Conductivity & Salinity Sensor, Model: 6560, S/N: 02C0886

1. Conductivity performance check with Potassium Chloride standard solution
2. Salinity performance check with Sodium Chloride standard solution

Dissolved Oxygen Sensor, Model: 6562, S/N: 0261137

1. Performance check against Winkler titration

Turbidity Sensor, Model: 6136, S/N: 05F2030AQ

1. Calibration check with Formazin standard solution

pH Meter, Model: 6561, S/N: 02A

1. Calibration check with standard pH buffer

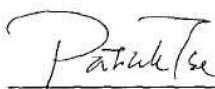
Depth Meter

1. Calibration check at 1m water level depth

**Methodologies:**

1. YSI 6-Series Sonde Environmental Monitoring System Instruction Manual
2. In-house method with reference to APHA and ISO standards

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

  
**PATRICK TSE**  
Senior Chemist

## TEST REPORT

Test Report No.:	C/W/71110-2
Date of Issue:	2007-11-10
Date Received:	2007-11-09
Date Tested:	2007-11-10
Date Completed:	2007-11-10
Next Due Date:	2008-02-09

Page: 2 of 2

**Results:**

1. Conductivity performance check

Specific Conductivity, $\mu\text{S}/\text{cm}$		Correction, $\mu\text{S}/\text{cm}$	Acceptable range
Salinity Meter (C1)	Theoretical Value (C2)	$D = C1 - C2$	
1420	1420	0	$1420 \pm 20$

2. Salinity Performance check

Salinity, ppt		Correction, ppt	Acceptable range
Instrument Reading	Theoretical Value		
30.1	30.0	0.1	$30.0 \pm 3$

3. Dissolved Oxygen check

Oxygen level in water at 20°C	Dissolved Oxygen, mg O <sub>2</sub> /L		Correction, mg O <sub>2</sub> /L	Acceptable range
	D.O. Meter	Winkler Titration		
Saturated	9.0	9.0	0.0	$\pm 0.2$
Half-saturated	5.8	5.8	0.0	$\pm 0.2$
Zero	0.0	0.0	0.0	$\pm 0.2$

4. Turbidity check

Turbidity value in solution, NTU	Calibration Value, NTU	Correction, NTU	Acceptable range
0.00	0.00	0.00	$0.00 \pm 0.05$
100	100	0	$100 \pm 5$

5. pH Meter check

Test Parameters	Performance characteristic	Acceptable range
Liquid junction error $\Delta\text{pH}_j$ , pH unit	0.01	Less than 0.05
Shift on stirring $\Delta\text{pH}_s$ , pH unit	0.01	Less than 0.02
Noise $\Delta\text{pH}_n$ , pH unit	0.01	Less than 0.02

6. Depth Meter check

Instrument Reading, m	Calibration Value, m	Correction, m	Acceptable range
1.0	1.00	0.00	$1.00 \pm 0.05$

\*\*\*\*\*END OF REPORT\*\*\*\*\*

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**APPENDIX C  
ENVIRONMENTAL MONITORING  
SCHEDULES**

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**Contract No. HY/2003/19 - Improvement to Tung chung Road between Lung Tseng Tau and Cheung Sha  
Air, Noise and Water Quality Monitoring Schedule for January 2008**

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

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

**Contract No. HY/2003/19 - Improvement to Tung chung Road between Lung Tseng Tau and Cheung Sha  
Tentative Air, Noise and Water Quality Monitoring Schedule for February 2008**

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

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

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**APPENDIX D  
24-HOUR TSP MONITORING  
RESULTS ,GRAPHICAL  
PRESENTATION AND WIND DATA**

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## Appendix D - 24-hour TSP Monitoring Results

### Location AM1 - YMCA of Hong Kong Christian College

Date	Filter Weight (g)		Flow Rate (m <sup>3</sup> /min.)		Elapse Time		Sampling Time(hrs.)	Conc. (µg/m <sup>3</sup> )	Weather Condition	Air Temp. (K)	Atmospheric Pressure(Pa)	Particulate weight(g)	Av. flow (m <sup>3</sup> /min)	Total vol. (m <sup>3</sup> )
	Initial	Final	Initial	Final	Initial	Final								
5-Jan-08	2.7972	2.9595	1.22	1.22	3077.7	3101.7	24.0	92.7	Sunshine	292.4	760.4	0.1623	1.22	1750.6
11-Jan-08	2.8319	2.8968	1.22	1.22	3101.7	3125.7	24.0	37.1	Sunshine	293.9	763.7	0.0649	1.22	1750.0
17-Jan-08	2.8747	3.0330	1.23	1.23	3125.7	3149.7	24.0	89.7	Cloudy	289.9	767.7	0.1583	1.23	1765.3
23-Jan-08	2.8307	2.9166	1.23	1.23	3149.7	3173.7	24.0	48.4	Cloudy	286.6	769.1	0.0859	1.23	1776.1
29-Jan-08	2.8366	2.9304	1.24	1.24	3173.7	3197.7	24.0	52.7	Cloudy	284.1	765.6	0.0938	1.24	1779.4
								Min	37.1					
								Max	92.7					
								Average	64.1					

### Location AM2 - House in Leyburn Villas

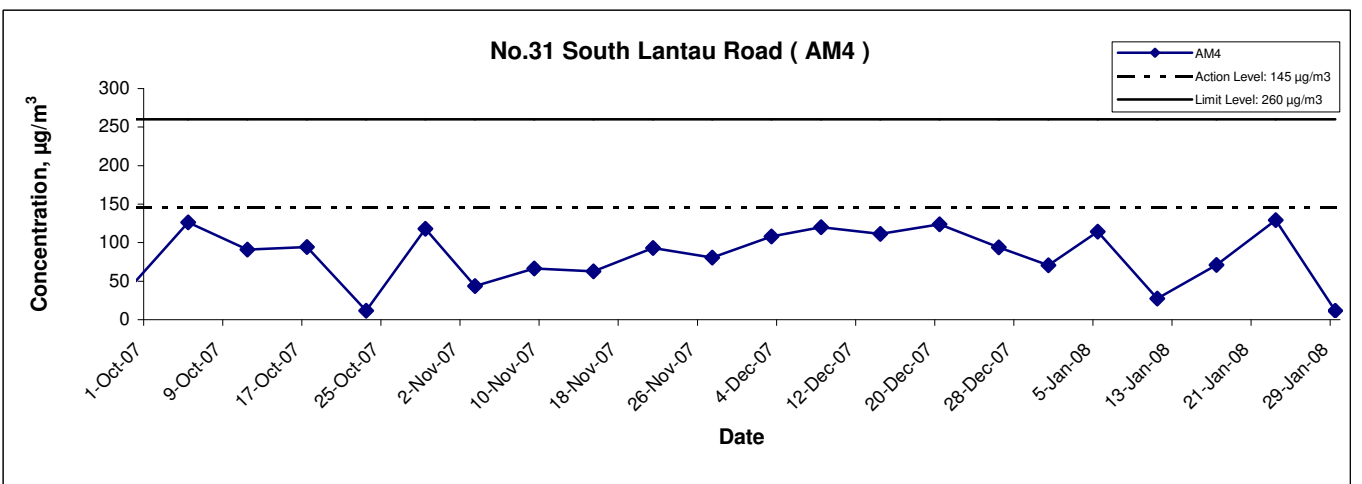
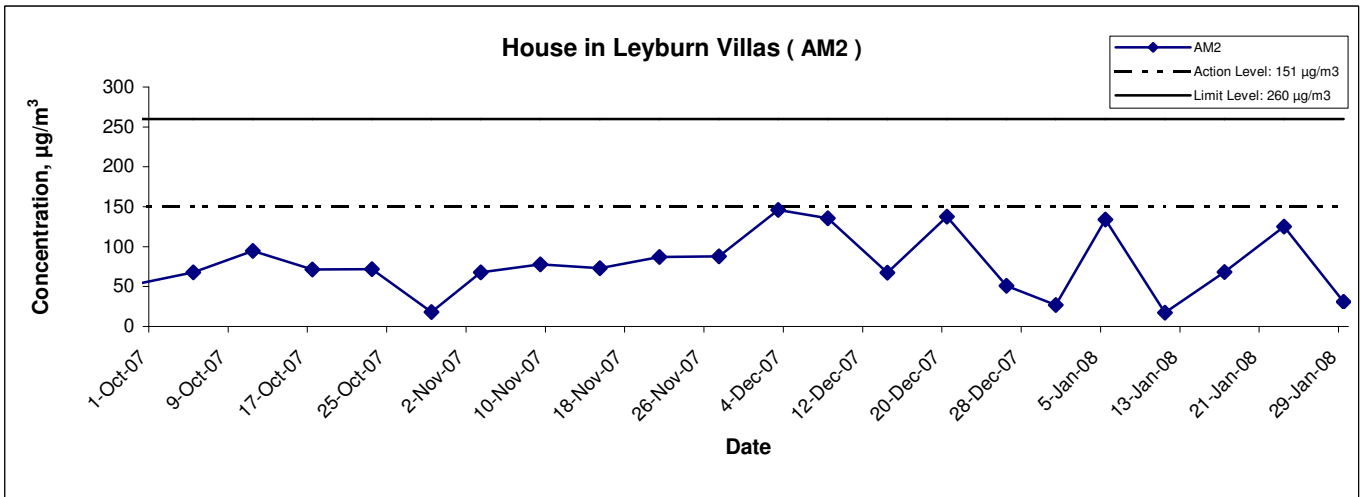
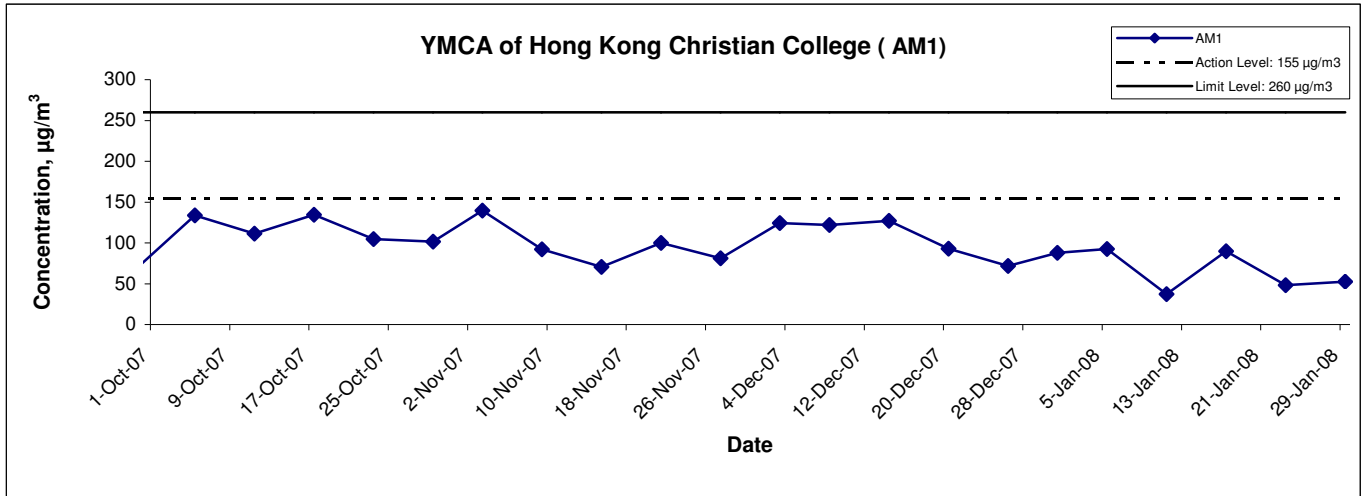
Date	Filter Weight (g)		Flow Rate (m <sup>3</sup> /min.)		Elapse Time		Sampling Time(hrs.)	Conc. (µg/m <sup>3</sup> )	Weather Condition	Air Temp. (K)	Atmospheric Pressure(Pa)	Particulate weight(g)	Av. flow (m <sup>3</sup> /min)	Total vol. (m <sup>3</sup> )
	Initial	Final	Initial	Final	Initial	Final								
5-Jan-08	2.8217	3.0558	1.21	1.21	7871.3	7895.3	24.0	133.8	Sunshine	292.4	760.4	0.2341	1.21	1749.2
11-Jan-08	2.8365	2.8667	1.21	1.21	7895.3	7919.3	24.0	17.3	Sunshine	293.9	763.7	0.0302	1.21	1748.6
17-Jan-08	2.8478	2.9679	1.22	1.22	7919.3	7943.3	24.0	68.2	Cloudy	289.9	767.7	0.1201	1.22	1762.4
23-Jan-08	2.8378	3.0599	1.23	1.23	7943.3	7967.3	24.0	125.3	Cloudy	286.6	769.1	0.2221	1.23	1772.2
29-Jan-08	2.8062	2.8609	1.23	1.23	7967.3	7991.3	24.0	30.8	Cloudy	284.1	765.6	0.0547	1.23	1775.2
								Min	17.3					
								Max	133.8					
								Average	75.1					

### Location AM4 - No.31 South Lantau Road

Date	Filter Weight (g)		Flow Rate (m <sup>3</sup> /min.)		Elapse Time		Sampling Time(hrs.)	Conc. (µg/m <sup>3</sup> )	Weather Condition	Air Temp. (K)	Atmospheric Pressure(Pa)	Particulate weight(g)	Av. flow (m <sup>3</sup> /min)	Total vol. (m <sup>3</sup> )
	Initial	Final	Initial	Final	Initial	Final								
5-Jan-08	2.8156	3.0219	1.22	1.22	7726.5	7750.5	24.0	114.1	Sunshine	292.4	760.4	0.2063	1.22	1755.0
11-Jan-08	2.8020	2.8500	1.22	1.22	7750.5	7774.5	24.0	27.4	Sunshine	293.9	763.7	0.0480	1.22	1754.3
17-Jan-08	2.8391	2.9649	1.23	1.23	7774.5	7798.5	24.0	71.1	Cloudy	289.9	767.7	0.1258	1.23	1769.9
23-Jan-08	2.8304	3.0608	1.24	1.24	7798.5	7822.5	24.0	129.4	Cloudy	286.6	769.1	0.2304	1.24	1780.9
29-Jan-08	2.8541	2.8750	1.24	1.24	7822.5	7846.5	24.0	11.7	Cloudy	284.1	765.6	0.0209	1.24	1784.3
								Min	11.7					
								Max	129.4					
								Average	70.7					



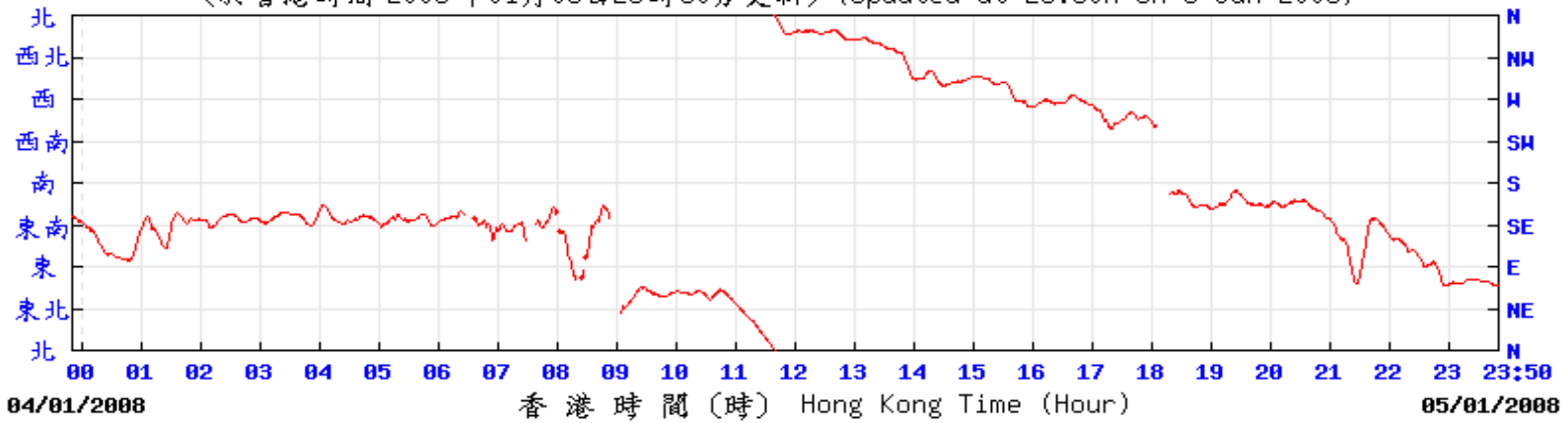
## 24-hour TSP Levels



Title Contract No. HY/2003/19 Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha  Graphical Presentation of 24-hour TSP Monitoring Results	Scale N.T.S	Project No. MA6030	CINOTECH
	Date Jan 08	Appendix D	

### Wind Data (HK International Airport)

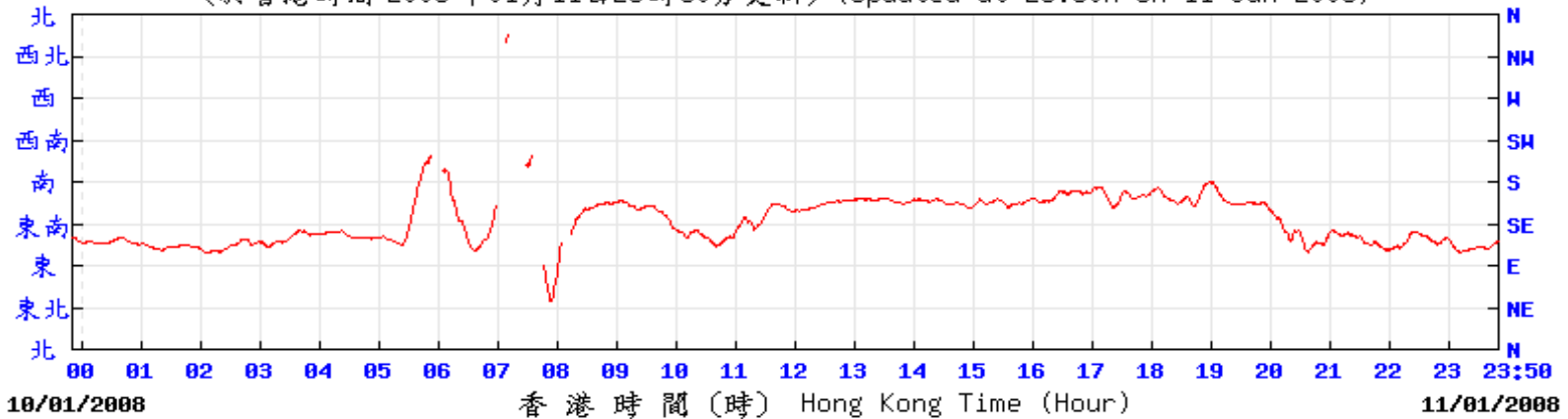
(於香港時間 2008 年01月05日23時50分更新) (Updated at 23:50H on 5 Jan 2008)



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(於香港時間 2008 年01月11日23時50分更新) (Updated at 23:50H on 11 Jan 2008)



r2c

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Title Contract No. HY/2003/19 Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha  Wind Data Extracted from the Hong Kong Observatory (HK International Airport)	Scale N.T.S	Project No. MA6030	CINOTECH
	Date Jan 08	Appendix D	

## Wind Data (HK International Airport)

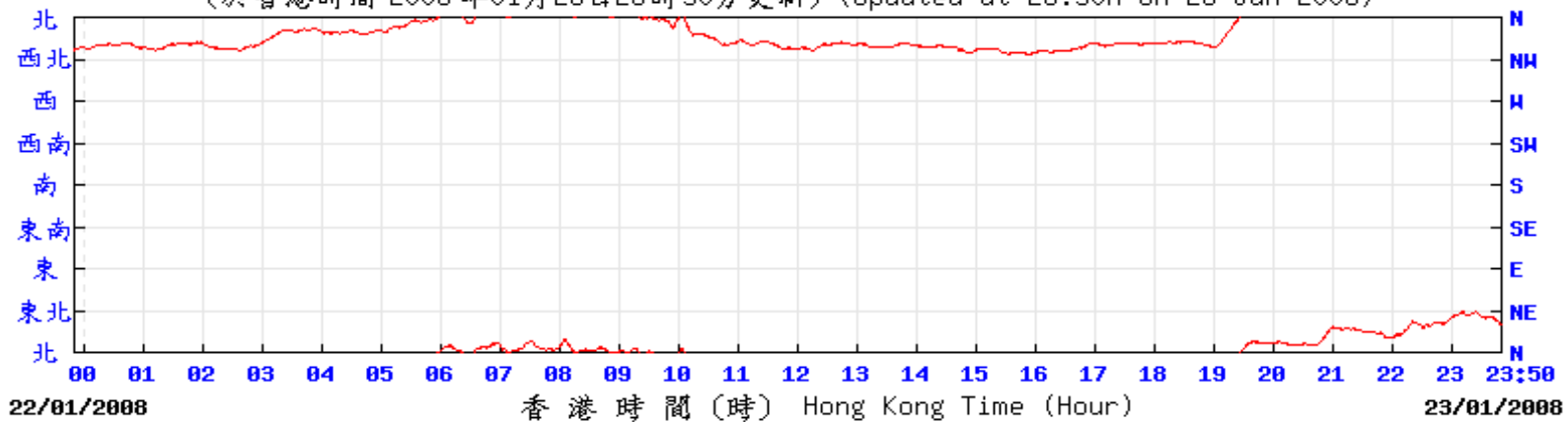
17 Jan 2008

"風向" - 現正維修  
"Wind Direction" - Under Maintenance.

cch

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(於香港時間 2008 年 01 月 23 日 23 時 50 分更新) (Updated at 23:50H on 23 Jan 2008)



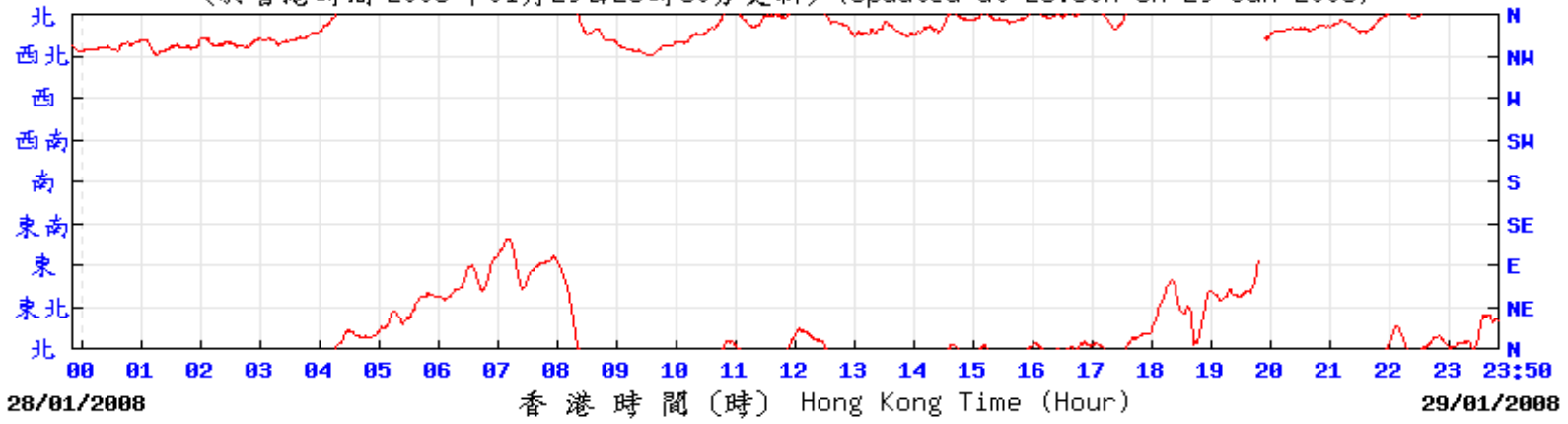
r2c

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<p style="text-align: center;">Contract No. HY/2003/19 Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha</p>	<p>Scale N.T.S</p>	<p>Project No. MA6030</p>	CINOTECH
<p style="text-align: center;">Wind Data Extracted from the Hong Kong Observatory (HK International Airport)</p>	<p>Date Jan 08</p>	<p>Appendix D</p>	

### Wind Data (HK International Airport)

(於香港時間 2008 年01月29日23時50分更新) (Updated at 23:50H on 29 Jan 2008)



28/01/2008

香港時間 (時) Hong Kong Time (Hour)

29/01/2008

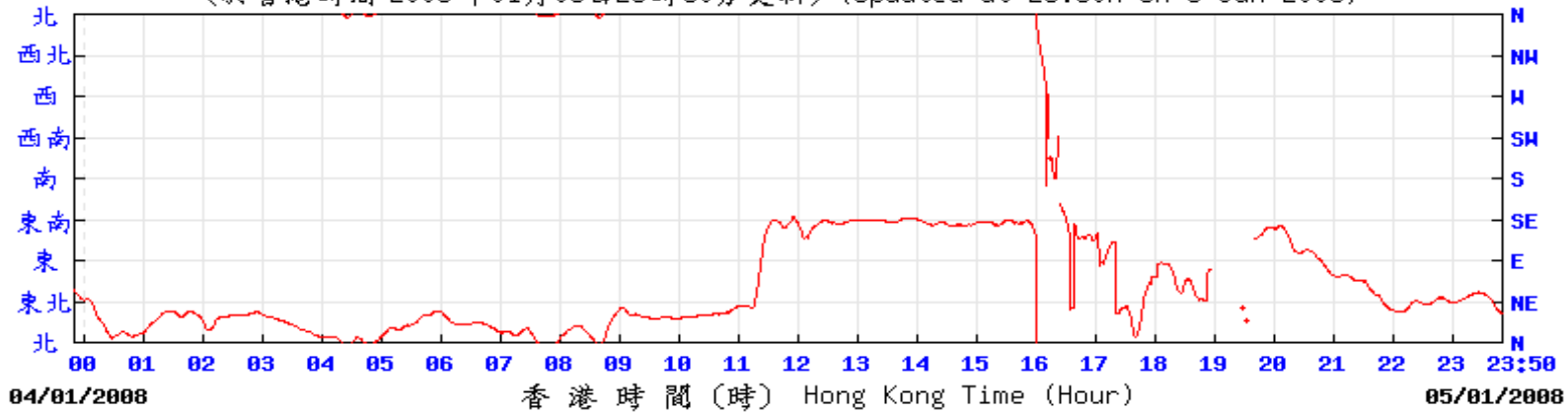
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Title Contract No. HY/2003/19 Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha  Wind Data Extracted from the Hong Kong Observatory (HK International Airport)	Scale	Project	<b>CINOTECH</b>
	N.T.S	No. MA6030	
	Date	Appendix	
	Jan 08	D	

### Wind Data (Cheung Chau)

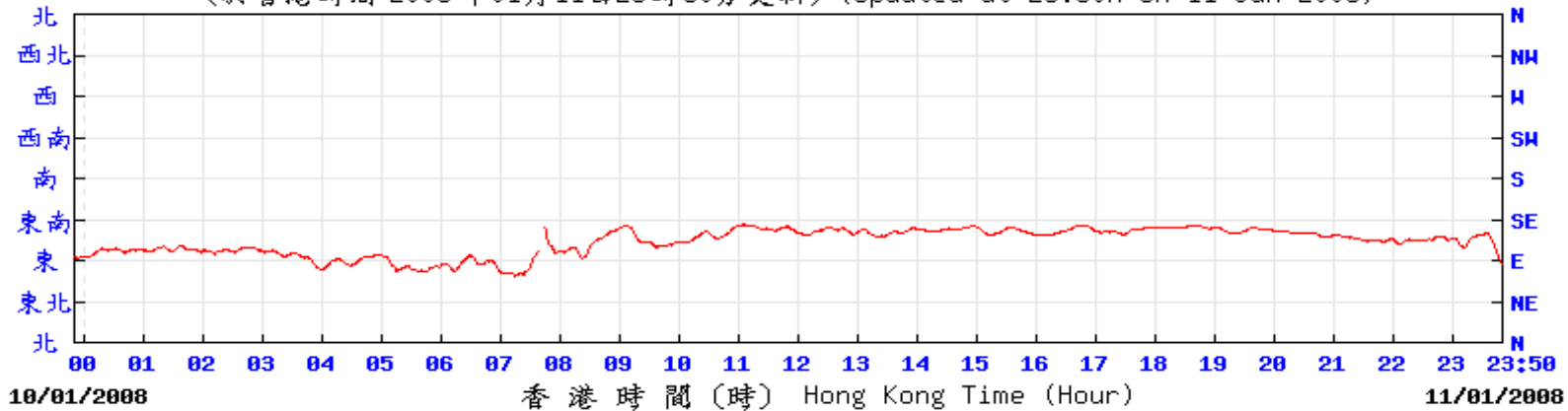
(於香港時間 2008 年01月05日23時50分更新) (Updated at 23:50H on 5 Jan 2008)



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(於香港時間 2008 年01月11日23時50分更新) (Updated at 23:50H on 11 Jan 2008)



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Title

Contract No. HY/2003/19  
Improvement to Tung Chung Road  
between Lung Tseng Tau and Cheung Sha

Wind Data Extracted from the Hong Kong Observatory (Cheung Chau)

Scale

N.T.S

Date

Jan 08

Project

No. MA6030

Appendix

D

CINOTECH

## Wind Data (Cheung Chau)

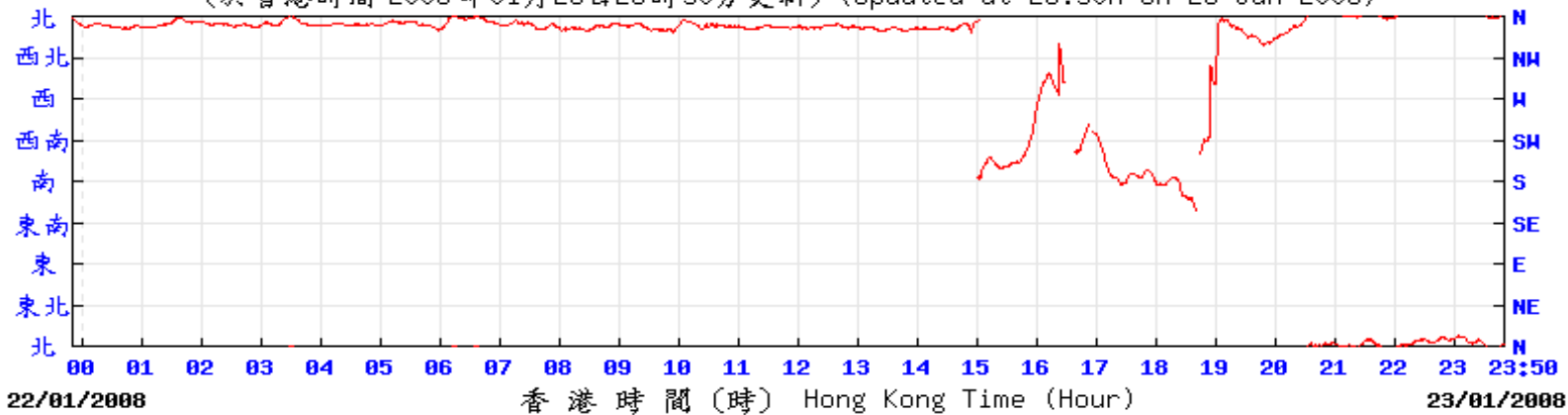
17 Jan 2008

"風向" - 現正維修  
 "Wind Direction" - Under Maintenance.

cch

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(於香港時間 2008 年 01 月 23 日 23 時 50 分更新) (Updated at 23:50H on 23 Jan 2008)



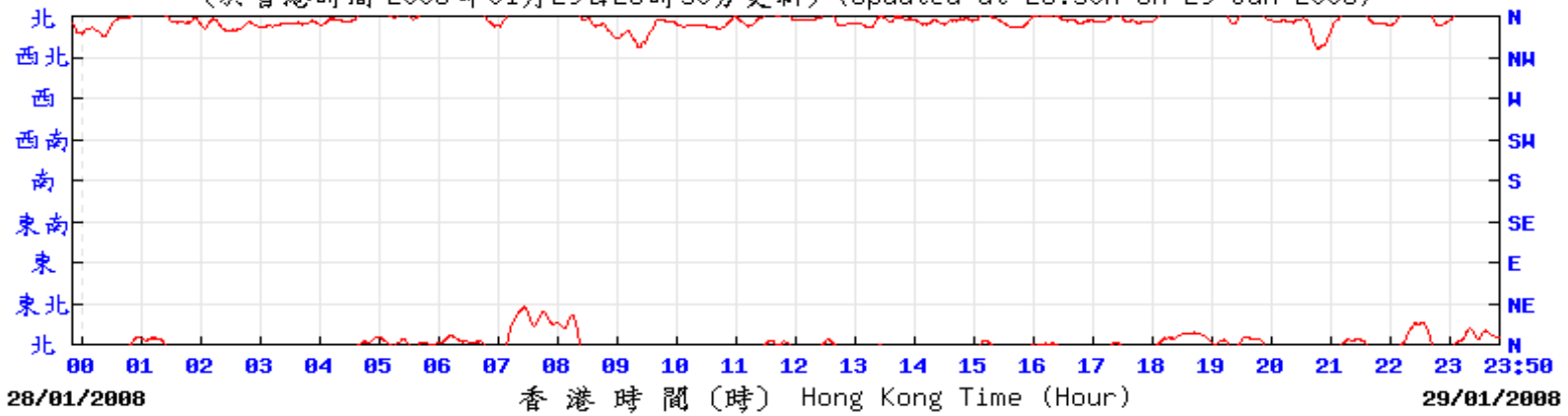
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Title	Contract No. HY/2003/19 Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha	Scale N.T.S	Project No. MA6030	CINOTECH
	Wind Data Extracted from the Hong Kong Observatory (Cheung Chau)	Date Jan 08	Appendix D	

### Wind Data (Cheung Chau)

(於香港時間 2008 年 01 月 29 日 23 時 50 分更新) (Updated at 23:50H on 29 Jan 2008)



28/01/2008

香港時間 (時) Hong Kong Time (Hour)

29/01/2008

cch

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Title	Contract No. HY/2003/19 Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha	Scale	Project	CINOTECH
		Date	No. MA6030	
	Wind Data Extracted from the Hong Kong Observatory (Cheung Chau)	Jan 08	Appendix D	

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**APPENDIX E  
NOISE MONITORING RESULTS AND  
GRAPHICAL PRESENTATION**

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## Appendix E - Noise Monitoring Results

Location NM1 - No. 28 Lung Tseng Tau					
Date	Time	Weather	dB (A) (30-min)		
			L <sub>eq</sub>	L <sub>10</sub>	L <sub>90</sub>
2-Jan-08	9:40	Sunny	61.2	64.5	58.0
9-Jan-08	9:40	Sunny	62.3	65.5	60.5
16-Jan-08	9:40	Cloudy	60.7	64.5	58.5
23-Jan-08	9:40	Fine	63.2	66.5	57.5
30-Jan-08	9:40	Cloudy	63.3	66.0	60.5
		Average	62.3	65.5	59.2
		Minimum	60.7	64.5	57.5
		Maximum	63.3	66.5	60.5

Location NM2 - YMCA of HK Christian College					
Date	Time	Weather	dB (A) (30-min)		
			L <sub>eq</sub>	L <sub>10</sub>	L <sub>90</sub>
2-Jan-08	9:00	Sunny	52.8	56.0	50.0
9-Jan-08	9:00	Sunny	52.6	55.5	50.5
16-Jan-08	9:00	Cloudy	52.6	54.5	51.0
23-Jan-08	9:00	Fine	52.8	54.5	49.5
30-Jan-08	9:00	Cloudy	54.5	57.0	51.0
		Average	53.1	55.6	50.4
		Minimum	52.6	54.5	49.5
		Maximum	54.5	57.0	51.0

Location NM3 - No. 37 Shek Lau Po					
Date	Time	Weather	dB (A) (30-min)		
			L <sub>eq</sub>	L <sub>10</sub>	L <sub>90</sub>
2-Jan-08	10:20	Sunny	40.2	41.5	38.0
9-Jan-08	10:25	Sunny	41.2	43.5	39.5
16-Jan-08	10:20	Cloudy	40.2	41.5	39.0
23-Jan-08	10:20	Fine	40.3	42.0	38.5
30-Jan-08	10:20	Cloudy	41.5	44.5	39.5
		Average	40.7	42.8	38.9
		Minimum	40.2	41.5	38.0
		Maximum	41.5	44.5	39.5

Location NM4 - No.1 Shek Mun Kap					
Date	Time	Weather	dB (A) (30-min)		
			L <sub>eq</sub>	L <sub>10</sub>	L <sub>90</sub>
2-Jan-08	11:00	Sunny	53.6	56.0	51.0
9-Jan-08	11:05	Sunny	53.6	55.5	51.0
16-Jan-08	11:00	Cloudy	52.6	55.5	50.5
23-Jan-08	10:55	Fine	53.5	55.5	51.0
30-Jan-08	11:00	Cloudy	55.3	57.5	52.5
		Average	53.8	56.1	51.3
		Minimum	52.6	55.5	50.5
		Maximum	55.3	57.5	52.5

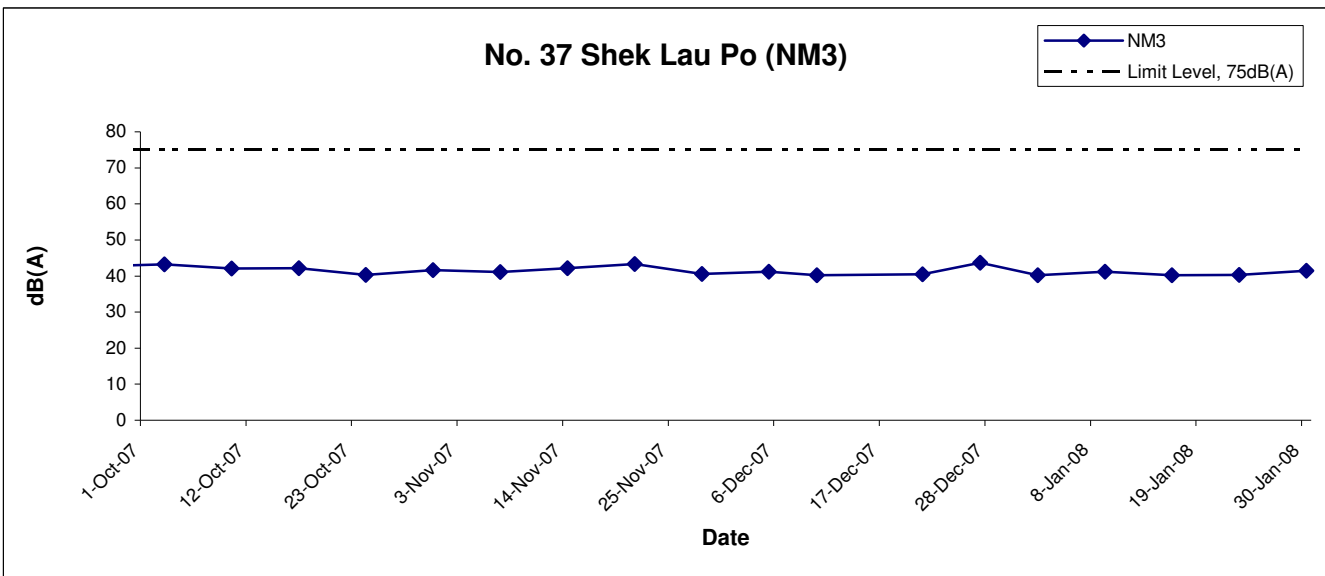
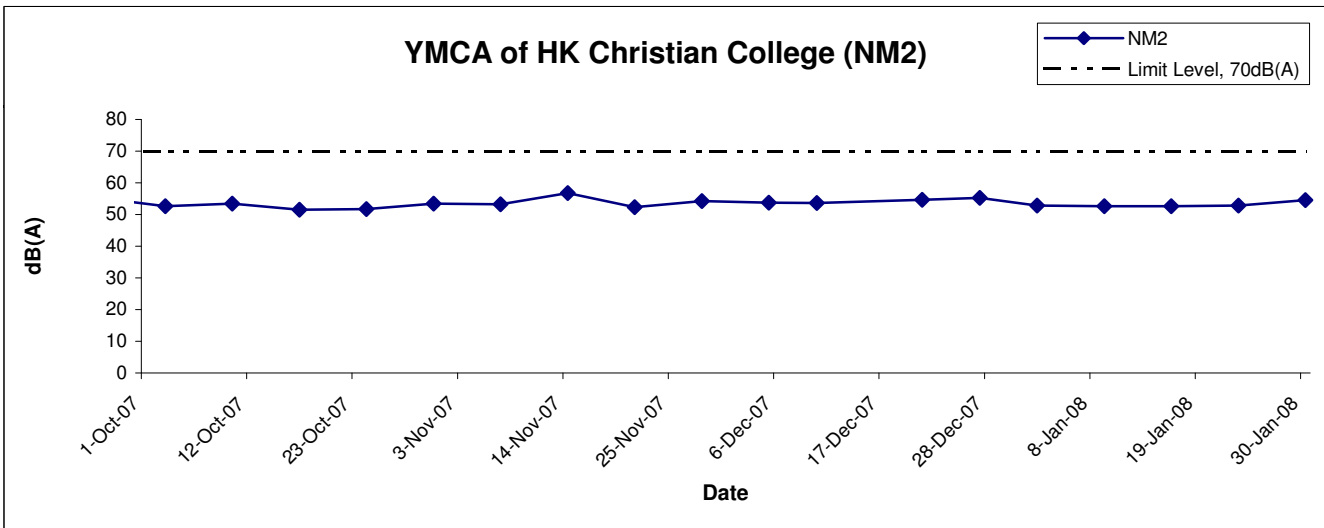
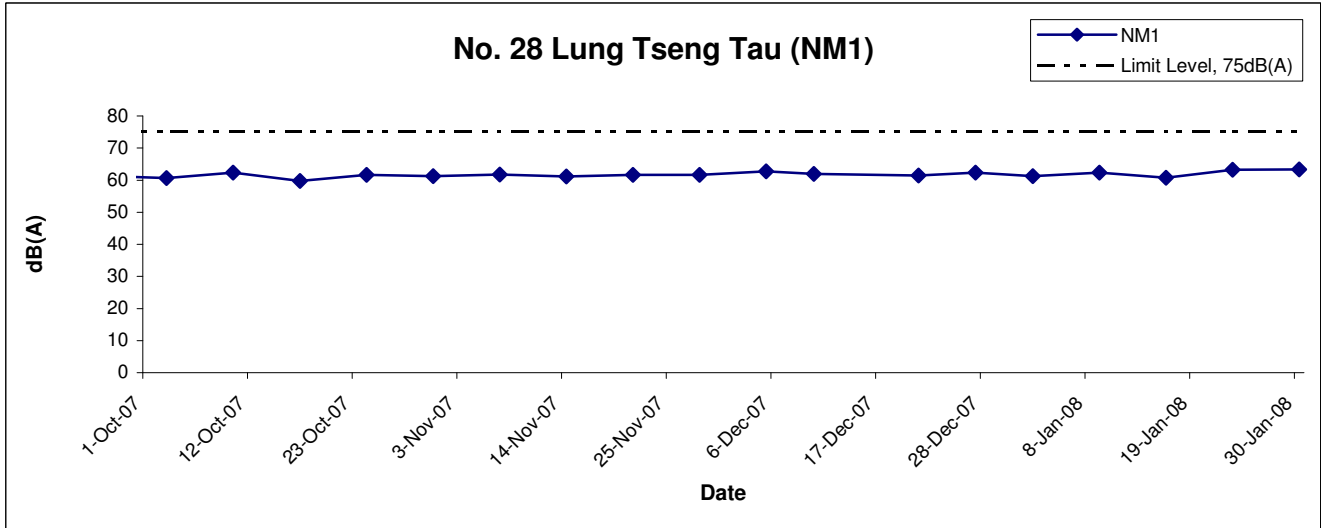
## Appendix E - Noise Monitoring Results

Location NM5 - Tung Chung Au Country Parks Management Centre					
Date	Time	Weather	dB (A) (30-min)		
			L <sub>eq</sub>	L <sub>10</sub>	L <sub>90</sub>
2-Jan-08	13:00	Sunny	50.8	53.0	47.5
9-Jan-08	13:00	Sunny	51.3	54.0	48.5
16-Jan-08	13:00	Cloudy	53.4	56.5	51.5
23-Jan-08	13:00	Fine	53.2	55.0	50.5
30-Jan-08	13:00	Cloudy	51.6	53.5	49.5
		Average	52.2	54.6	49.7
		Minimum	50.8	53.0	47.5
		Maximum	53.4	56.5	51.5

Location NM6 - D75 Leyburn Villa					
Date	Time	Weather	dB (A) (30-min)		
			L <sub>eq</sub>	L <sub>10</sub>	L <sub>90</sub>
2-Jan-08	13:45	Sunny	41.2	43.5	38.0
9-Jan-08	13:45	Sunny	40.9	42.5	39.0
16-Jan-08	13:45	Cloudy	40.6	42.5	38.5
23-Jan-08	13:45	Fine	41.2	43.0	39.0
30-Jan-08	13:45	Cloudy	40.9	42.5	39.0
		Average	41.0	42.8	38.7
		Minimum	40.6	42.5	38.0
		Maximum	41.2	43.5	39.0

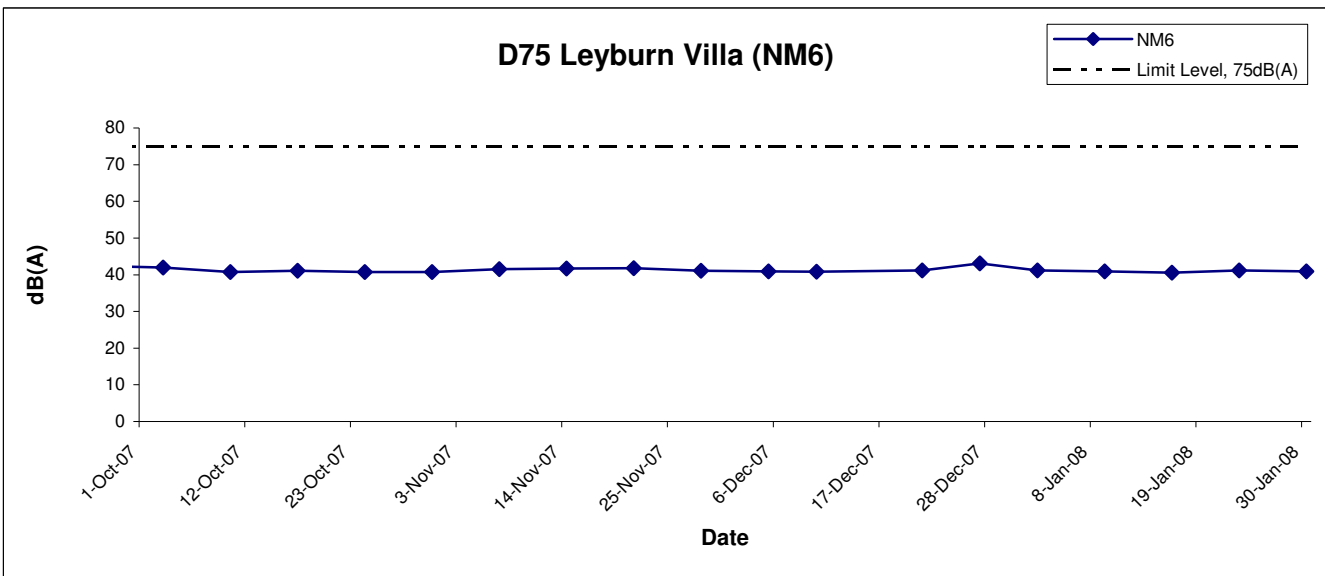
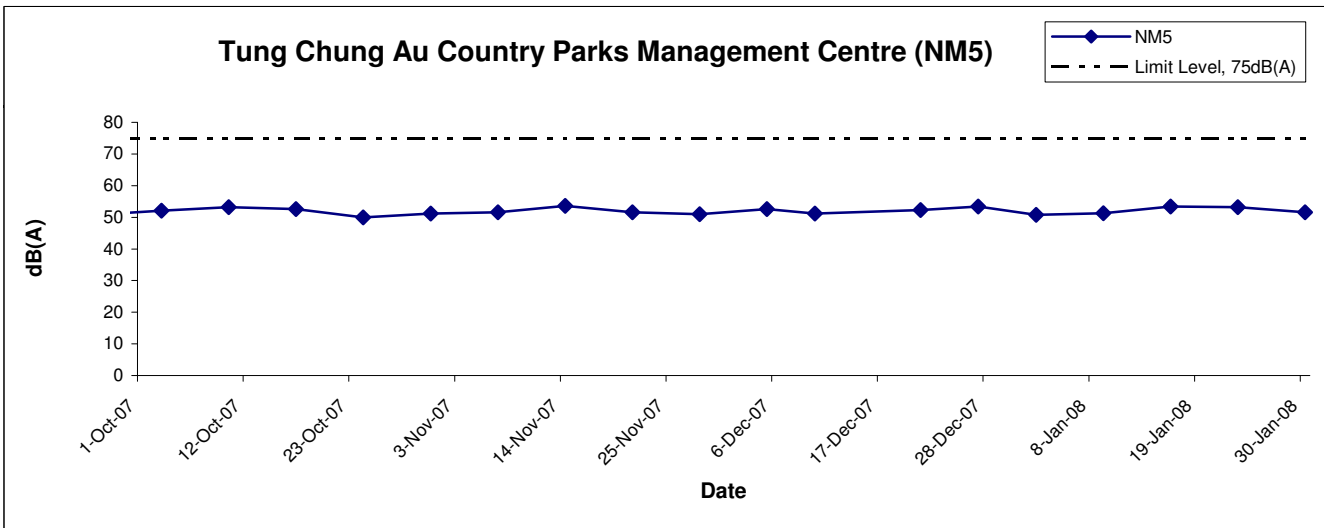
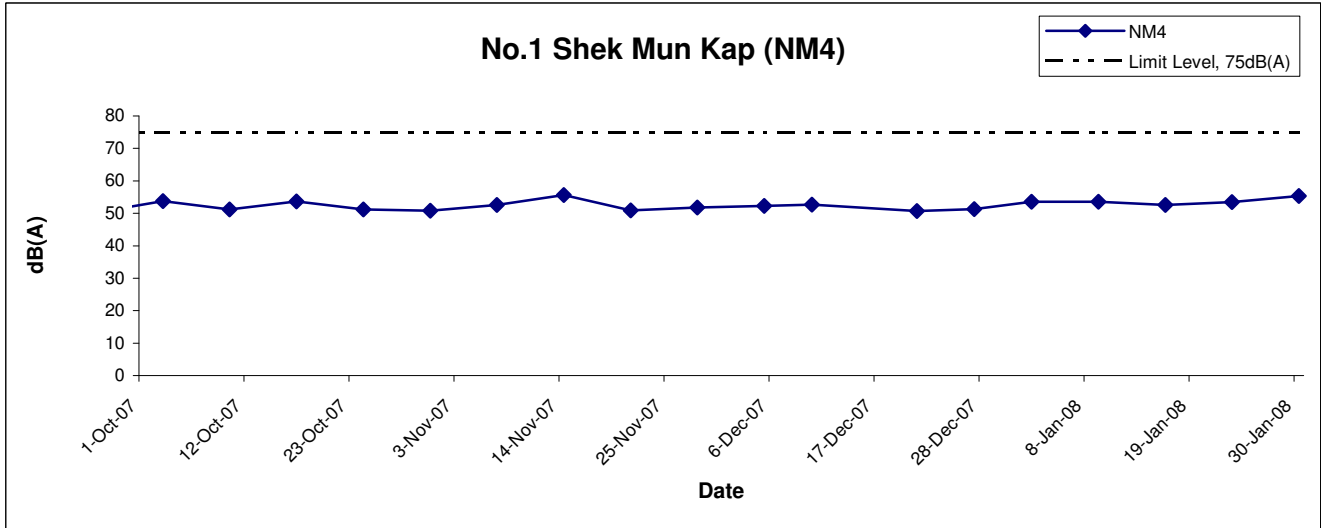
Location NM8 - No. 31 South Lantau Road					
Date	Time	Weather	dB (A) (30-min)		
			L <sub>eq</sub>	L <sub>10</sub>	L <sub>90</sub>
2-Jan-08	14:25	Sunny	56.0	59.5	53.5
9-Jan-08	14:25	Sunny	57.2	61.5	54.5
16-Jan-08	14:25	Cloudy	53.9	56.5	51.5
23-Jan-08	14:25	Fine	59.6	63.5	56.5
30-Jan-08	14:25	Cloudy	60.6	63.5	59.0
		Average	58.1	61.6	55.8
		Minimum	53.9	56.5	51.5
		Maximum	60.6	63.5	59.0

## Noise Levels



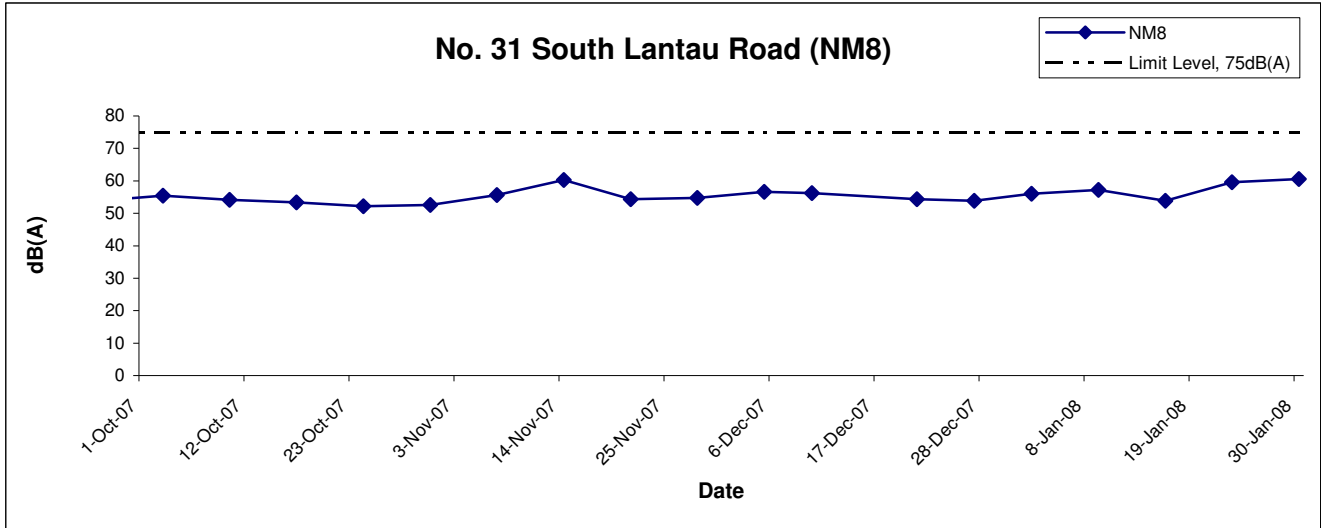
Title Contract No. HY/2003/19 Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha Graphical Presentation of Construction Noise Monitoring Results	Scale N.T.S	Project No. MA6030	
	Date Jan 08	Appendix E	

## Noise Levels



Title Contract No. HY/2003/19 Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha Graphical Presentation of Construction Noise Monitoring Results	Scale N.T.S	Project No. MA6030	
	Date Jan 08	Appendix E	

## Noise Levels



Title Contract No. HY/2003/19 Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha Graphical Presentation of Construction Noise Monitoring Results	Scale N.T.S	Project No. MA6030	<h1 style="margin: 0;">CINOTECH</h1>
	Date Jan 08	Appendix E	

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**APPENDIX F  
WATER QUALITY MONITORING  
RESULTS AND GRAPHICAL  
PRESENTATION**

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## Water Quality Monitoring Results at 15\_I

Date	Weather Condition	Sea Condition*	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Jan-08	Sunny	Calm	12:54	Middle	0.09	16.3 16.3	16.3	7.4 7.4	7.4	0.02 0.02	0.02	89.8 89.5	89.7	8.0 8.0	8	1.5 1.5	1.5	3.0 <2.5	2.8
4-Jan-08	Sunny	Calm	13:00	Middle	0.09	16.4 16.4	16.4	7.5 7.5	7.5	0.02 0.02	0.02	89.5 89.2	89.4	8.1 8.0	8.1	1.7 1.7	1.7	3.0 3.0	3
7-Jan-08	Sunny	Calm	13:30	Middle	0.09	17.3 17.3	17.3	7.6 7.6	7.6	0.02 0.02	0.02	89.9 89.6	89.8	8.0 8.0	8	1.5 1.5	1.5	<2.5 <2.5	<2.5
9-Jan-08	Sunny	Calm	13:36	Middle	0.09	18.2 18.2	18.2	7.7 7.7	7.7	0.02 0.02	0.02	89.8 89.5	89.7	8.0 8.0	8	1.7 1.7	1.7	<2.5 <2.5	<2.5
11-Jan-08	Sunny	Calm	11:00	Middle	0.09	17.6 17.6	17.6	7.7 7.7	7.7	0.02 0.02	0.02	91.1 90.9	91	7.9 7.9	7.9	1.9 1.9	1.9	<2.5 <2.5	<2.5
14-Jan-08	Cloudy	Calm	14:45	Middle	0.09	16.7 16.7	16.7	7.7 7.7	7.7	0.02 0.02	0.02	91.2 91.0	91.1	7.9 7.9	7.9	1.8 1.8	1.8	<2.5 <2.5	<2.5
16-Jan-08	Cloudy	Calm	12:40	Middle	0.09	16.6 16.6	16.6	7.7 7.7	7.7	0.02 0.02	0.02	90.5 90.3	90.4	7.9 7.9	7.9	1.9 1.9	1.9	<2.5 <2.5	<2.5
18-Jan-08	Cloudy	Calm	13:02	Middle	0.09	16.7 16.7	16.7	7.7 7.7	7.7	0.02 0.02	0.02	89.9 89.6	89.8	8.0 8.0	8	1.6 1.6	1.6	<2.5 <2.5	<2.5
21-Jan-08	Sunny	Calm	13:22	Middle	0.09	16.9 16.9	16.9	7.6 7.6	7.6	0.02 0.02	0.02	90.6 90.4	90.5	7.9 7.9	7.9	1.7 1.7	1.7	<2.5 <2.5	<2.5
23-Jan-08	Fine	Calm	13:49	Middle	0.09	17.1 17.1	17.1	7.7 7.7	7.7	0.02 0.02	0.02	90.2 90.0	90.1	8.0 7.9	8	1.4 1.5	1.5	<2.5 <2.5	<2.5
25-Jan-08	Cloudy	Calm	13:30	Middle	0.09	16.9 16.9	16.9	7.7 7.7	7.7	0.02 0.02	0.02	90.9 90.7	90.8	8.0 8.0	8	1.6 1.7	1.7	<2.5 <2.5	<2.5
28-Jan-08	Cloudy	Calm	13:03	Middle	0.09	16.8 16.8	16.8	7.6 7.6	7.6	0.02 0.02	0.02	91.1 90.9	91	7.9 7.9	7.9	1.9 1.9	1.9	<2.5 <2.5	<2.5
30-Jan-08	Rainy	Calm	14:09	Middle	0.09	16.9 16.9	16.9	7.6 7.6	7.6	0.02 0.02	0.02	90.2 89.9	90.1	8.0 8.0	8	1.7 1.7	1.7	<2.5 <2.5	<2.5

The reporting limit for laboratory analysis of suspended solids is 2.5 mg/L. For the results below the reporting limit, the SS level will be taken as 2.5 mg/L.

Remarks: \* Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher  
 \*\* Cancelled due to Thunderstorm Warning

## Water Quality Monitoring Results at 15\_R

Date	Weather Condition	Sea Condition*	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Jan-08	Sunny	Calm	12:47	Middle	0.08	16.3	16.3	7.4	7.4	0.02	0.02	90.3	90.3	8.1	8.1	1.6	1.6	7.0	7.5
						16.3		7.4		0.02		90.2		8.1		1.6		8.0	
4-Jan-08	Sunny	Calm	12:54	Middle	0.08	16.3	16.4	7.4	7.5	0.02	0.02	90.0	90	8.1	8.1	1.8	1.8	4.0	4
						16.4		7.5		0.02		89.9		8.1		1.8		4.0	
7-Jan-08	Sunny	Calm	13:23	Middle	0.08	17.2	17.2	7.5	7.5	0.02	0.02	90.4	90.4	8.0	8	1.6	1.6	<2.5	<2.5
						17.2		7.5		0.02		90.3		8.0		1.6		<2.5	
9-Jan-08	Sunny	Calm	13:29	Middle	0.08	18.1	18.1	7.6	7.6	0.02	0.02	90.3	90.3	8.0	8	1.8	1.8	<2.5	<2.5
						18.1		7.6		0.02		90.2		8.0		1.8		<2.5	
11-Jan-08	Sunny	Calm	10:53	Middle	0.08	17.5	17.6	7.6	7.6	0.02	0.02	91.6	91.6	7.9	7.9	1.9	1.9	<2.5	<2.5
						17.6		7.6		0.02		91.5		7.9		1.9		<2.5	
14-Jan-08	Cloudy	Calm	14:38	Middle	0.08	16.7	16.7	7.6	7.6	0.02	0.02	91.7	91.7	7.9	7.9	1.8	1.8	5.0	4.5
						16.7		7.6		0.02		91.6		7.9		1.7		4.0	
16-Jan-08	Cloudy	Calm	12:33	Middle	0.08	16.6	16.6	7.6	7.6	0.02	0.02	91.0	91	8.0	8	1.9	1.9	<2.5	<2.5
						16.6		7.6		0.02		90.9		8.0		1.9		<2.5	
18-Jan-08	Cloudy	Calm	12:56	Middle	0.08	16.6	16.7	7.6	7.6	0.02	0.02	90.4	90.4	8.1	8.1	1.6	1.6	5.0	5
						16.7		7.6		0.02		90.3		8.1		1.6		5.0	
21-Jan-08	Sunny	Calm	13:15	Middle	0.08	16.9	16.9	7.6	7.6	0.02	0.02	91.1	91.1	8.0	8	1.7	1.7	<2.5	<2.5
						16.9		7.6		0.02		91.0		8.0		1.7		<2.5	
23-Jan-08	Fine	Calm	13:42	Middle	0.08	17.0	17	7.6	7.6	0.02	0.02	90.7	90.7	8.0	8	1.5	1.5	<2.5	<2.5
						17.0		7.6		0.02		90.6		8.0		1.4		<2.5	
25-Jan-08	Cloudy	Calm	13:23	Middle	0.08	16.8	16.8	7.6	7.6	0.02	0.02	91.3	91.3	8.0	8	1.7	1.7	5.0	4.5
						16.8		7.6		0.02		91.2		8.0		1.6		4.0	
28-Jan-08	Cloudy	Calm	12:56	Middle	0.08	16.8	16.8	7.5	7.6	0.02	0.02	91.6	91.5	8.0	8	1.9	1.9	<2.5	<2.5
						16.8		7.6		0.02		91.4		8.0		1.9		<2.5	
30-Jan-08	Rainy	Calm	14:02	Middle	0.08	16.9	16.9	7.5	7.5	0.02	0.02	90.7	90.6	8.1	8.1	1.7	1.7	<2.5	<2.5
						16.9		7.5		0.02		90.5		8.0		1.7		<2.5	

The reporting limit for laboratory analysis of suspended solids is 2.5 mg/L. For the results below the reporting limit, the SS level will be taken as 2.5 mg/L.

Remarks: \* Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher  
 \*\* Cancelled due to Thunderstorm Warning



## Water Quality Monitoring Results at 18\_I

Date	Weather Condition	Sea Condition*	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Jan-08	Sunny	Calm	12:39	Middle	0.1	16.1	16.1	7.6	7.6	0.02	0.02	89.4	89.4	8.0	8	1.6	1.6	<2.5	<2.5
						16.1		7.6		0.02		89.3		8.0		1.6			
4-Jan-08	Sunny	Calm	12:45	Middle	0.1	16.2	16.2	7.7	7.7	0.02	0.02	89.1	89.1	8.0	8	1.8	1.8	3.0	3
						16.2		7.7		0.02		89.0		8.0		1.7		3.0	
7-Jan-08	Sunny	Calm	13:15	Middle	0.1	17.1	17.1	7.7	7.7	0.02	0.02	89.6	89.6	8.0	8	1.6	1.6	<2.5	<2.5
						17.1		7.7		0.02		89.5		8.0		1.5		<2.5	
9-Jan-08	Sunny	Calm	13:21	Middle	0.1	17.9	18	7.8	7.8	0.02	0.02	89.5	89.5	8.0	8	1.8	1.8	<2.5	<2.5
						18.0		7.8		0.02		89.4		8.0		1.7		<2.5	
11-Jan-08	Sunny	Calm	10:45	Middle	0.1	17.4	17.4	7.8	7.8	0.02	0.02	90.9	90.9	7.9	7.9	2.0	2	<2.5	<2.5
						17.4		7.8		0.02		90.8		7.9		2.0		<2.5	
14-Jan-08	Cloudy	Calm	14:30	Middle	0.1	16.5	16.5	7.8	7.8	0.02	0.02	91.1	91.1	7.9	7.9	1.6	1.6	3.0	3
						16.5		7.8		0.02		91.0		7.9		1.6		3.0	
16-Jan-08	Cloudy	Calm	12:25	Middle	0.1	16.4	16.4	7.8	7.8	0.02	0.02	90.3	90.3	7.9	7.9	1.9	1.9	<2.5	<2.5
						16.4		7.8		0.02		90.2		7.9		1.9		<2.5	
18-Jan-08	Cloudy	Calm	12:47	Middle	0.1	16.5	16.5	7.8	7.8	0.02	0.02	89.5	89.5	8.0	8	1.6	1.6	<2.5	<2.5
						16.5		7.8		0.02		89.4		8.0		1.6		<2.5	
21-Jan-08	Sunny	Calm	13:07	Middle	0.1	16.7	16.7	7.8	7.8	0.02	0.02	90.4	90.4	7.9	7.9	1.7	1.7	<2.5	<2.5
						16.7		7.8		0.02		90.3		7.9		1.7		<2.5	
23-Jan-08	Fine	Calm	13:34	Middle	0.1	16.9	16.9	7.8	7.8	0.02	0.02	90.0	90	8.0	8	1.4	1.5	<2.5	<2.5
						16.9		7.8		0.02		89.9		7.9		1.5		<2.5	
25-Jan-08	Cloudy	Calm	13:15	Middle	0.1	16.6	16.7	7.8	7.8	0.02	0.02	90.8	90.8	8.0	8	1.6	1.7	<2.5	<2.5
						16.7		7.8		0.02		90.7		8.0		1.7		<2.5	
28-Jan-08	Cloudy	Calm	12:48	Middle	0.1	16.6	16.6	7.8	7.8	0.02	0.02	91.0	91	7.9	7.9	1.9	1.9	<2.5	<2.5
						16.6		7.8		0.02		90.9		7.9		1.9		<2.5	
30-Jan-08	Rainy	Calm	13:54	Middle	0.1	16.7	16.7	7.7	7.7	0.02	0.02	89.9	89.9	8.0	8	1.7	1.7	4.0	4
						16.7		7.7		0.02		89.8		8.0		1.7		4.0	

The reporting limit for laboratory analysis of suspended solids is 2.5 mg/L. For the results below the reporting limit, the SS level will be taken as 2.5 mg/L.

Remarks: \* Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher  
 \*\* Cancelled due to Thunderstorm Warning

## Water Quality Monitoring Results at 18\_R

Date	Weather Condition	Sea Condition*	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Jan-08	Sunny	Calm	12:35	Middle	0.175	16.1	16.1	7.6	7.6	0.02	0.02	90.0	89.7	8.1	8.1	1.7	1.7	<2.5	<2.5
						16.1		7.6		0.02		89.4		8.0		1.7			
4-Jan-08	Sunny	Calm	12:42	Middle	0.175	16.2	16.2	7.7	7.7	0.02	0.02	89.7	89.4	8.1	8.1	1.7	1.7	<2.5	<2.5
						16.2		7.7		0.02		89.1		8.0		1.7			
7-Jan-08	Sunny	Calm	13:11	Middle	0.175	17.0	17.1	7.7	7.7	0.02	0.02	90.1	89.9	8.0	8	1.5	1.5	<2.5	<2.5
						17.1		7.7		0.02		89.6		8.0		1.5			
9-Jan-08	Sunny	Calm	13:17	Middle	0.175	17.9	17.9	7.8	7.8	0.02	0.02	90.0	89.8	8.0	8	1.6	1.6	<2.5	<2.5
						17.9		7.8		0.02		89.5		8.0		1.6			
11-Jan-08	Sunny	Calm	10:41	Middle	0.175	17.4	17.4	7.9	7.9	0.02	0.02	91.3	91.1	7.9	7.9	2.1	2.1	<2.5	<2.5
						17.4		7.8		0.02		90.8		7.9		2.0			
14-Jan-08	Cloudy	Calm	14:26	Middle	0.175	16.5	16.5	7.8	7.8	0.02	0.02	91.4	91.2	7.9	7.9	1.6	1.7	<2.5	<2.5
						16.5		7.8		0.02		90.9		7.9		1.7			
16-Jan-08	Cloudy	Calm	12:21	Middle	0.175	16.4	16.4	7.9	7.9	0.02	0.02	90.7	90.5	8.0	8	1.9	1.9	<2.5	<2.5
						16.4		7.9		0.02		90.2		7.9		1.9			
18-Jan-08	Cloudy	Calm	12:44	Middle	0.175	16.5	16.5	7.8	7.8	0.02	0.02	90.1	89.8	8.1	8.1	1.6	1.6	<2.5	<2.5
						16.5		7.8		0.02		89.5		8.0		1.6			
21-Jan-08	Sunny	Calm	13:03	Middle	0.175	16.7	16.7	7.8	7.8	0.02	0.02	90.8	90.6	8.0	8	1.7	1.7	<2.5	<2.5
						16.7		7.8		0.02		90.3		7.9		1.7			
23-Jan-08	Fine	Calm	13:30	Middle	0.175	16.8	16.9	7.8	7.8	0.02	0.02	90.4	90.2	8.0	8	1.3	1.4	<2.5	<2.5
						16.9		7.8		0.02		89.9		8.0		1.5			
25-Jan-08	Cloudy	Calm	13:11	Middle	0.175	16.6	16.6	7.9	7.9	0.02	0.02	91.1	90.9	8.0	8	1.5	1.6	<2.5	<2.5
						16.6		7.9		0.02		90.6		8.0		1.7			
28-Jan-08	Cloudy	Calm	12:44	Middle	0.175	16.6	16.6	7.8	7.8	0.02	0.02	91.3	91.1	8.0	8	1.9	1.9	<2.5	<2.5
						16.6		7.8		0.02		90.8		7.9		1.9			
30-Jan-08	Rainy	Calm	13:50	Middle	0.175	16.7	16.7	7.7	7.7	0.02	0.02	90.4	90.1	8.0	8	1.7	1.7	<2.5	<2.5
						16.7		7.7		0.02		89.8		8.0		1.7			

The reporting limit for laboratory analysis of suspended solids is 2.5 mg/L. For the results below the reporting limit, the SS level will be taken as 2.5 mg/L.

Remarks: \* Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher  
 \*\* Cancelled due to Thunderstorm Warning

## Water Quality Monitoring Results at 21\_I

Date	Weather Condition	Sea Condition*	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Jan-08	Sunny	Calm	12:31	Middle	0.14	16.0	16	7.6	7.6	0.02	0.02	90.1	90.3	8.1	8.1	1.7	1.7	<2.5	<2.5
						16.0		7.6		0.02		90.4		8.1		1.6			
4-Jan-08	Sunny	Calm	12:37	Middle	0.14	16.1	16.1	7.7	7.7	0.02	0.02	89.8	90	8.2	8.2	1.7	1.8	<2.5	<2.5
						16.1		7.7		0.02		90.1		8.2		1.8			
7-Jan-08	Sunny	Calm	13:07	Middle	0.14	17.0	17	7.8	7.8	0.02	0.02	90.2	90.4	8.1	8.1	1.5	1.6	3.0	3
						17.0		7.8		0.02		90.5		8.1		1.6			
9-Jan-08	Sunny	Calm	13:13	Middle	0.14	17.9	17.9	7.8	7.9	0.02	0.02	90.1	90.3	8.1	8.1	1.6	1.7	<2.5	<2.5
						17.9		7.9		0.02		90.4		8.1		1.7			
11-Jan-08	Sunny	Calm	10:37	Middle	0.14	17.3	17.3	7.9	7.9	0.02	0.02	91.3	91.4	8.0	8	2.0	1.9	<2.5	<2.5
						17.3		7.9		0.02		91.5		8.0		2			
14-Jan-08	Cloudy	Calm	14:22	Middle	0.14	16.4	16.4	7.9	7.9	0.02	0.02	91.3	91.4	8.0	8	1.6	1.6	<2.5	<2.5
						16.4		7.9		0.02		91.5		8.0		1.6			
16-Jan-08	Cloudy	Calm	12:17	Middle	0.14	16.3	16.3	7.9	7.9	0.02	0.02	90.7	90.9	8.0	8	2.0	2	<2.5	<2.5
						16.3		7.9		0.02		91.0		8.0		2.0			
18-Jan-08	Cloudy	Calm	12:40	Middle	0.14	16.4	16.4	7.9	7.9	0.02	0.02	90.1	90.3	8.1	8.1	1.8	1.8	<2.5	<2.5
						16.4		7.9		0.02		90.4		8.1		1.8			
21-Jan-08	Sunny	Calm	12:59	Middle	0.14	16.6	16.6	7.8	7.8	0.02	0.02	90.7	90.9	8.0	8	1.9	1.9	<2.5	<2.5
						16.6		7.8		0.02		91.0		8.0		1.9			
23-Jan-08	Fine	Calm	13:26	Middle	0.14	16.8	16.8	7.9	7.9	0.02	0.02	90.4	90.6	8.1	8.1	1.4	1.4	<2.5	<2.5
						16.8		7.9		0.02		90.7		8.1		1.3			
25-Jan-08	Cloudy	Calm	13:07	Middle	0.14	16.6	16.6	7.9	7.9	0.02	0.02	90.9	91.1	8.0	8.1	1.6	1.6	<2.5	<2.5
						16.6		7.9		0.02		91.2		8.1		1.5			
28-Jan-08	Cloudy	Calm	12:40	Middle	0.14	16.5	16.6	7.8	7.8	0.02	0.02	91.1	91.3	8.0	8	1.7	1.7	<2.5	<2.5
						16.6		7.8		0.02		91.4		8.0		1.7			
30-Jan-08	Rainy	Calm	13:46	Middle	0.14	16.6	16.6	7.7	7.8	0.02	0.02	90.3	90.5	8.1	8.1	1.5	1.5	<2.5	<2.5
						16.6		7.8		0.02		90.6		8.1		1.5			

The reporting limit for laboratory analysis of suspended solids is 2.5 mg/L. For the results below the reporting limit, the SS level will be taken as 2.5 mg/L.

Remarks: \* Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher  
 \*\* Cancelled due to Thunderstorm Warning

## Water Quality Monitoring Results at 21\_R

Date	Weather Condition	Sea Condition*	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Jan-08	Sunny	Calm	12:27	Middle	0.1	16.0 16.0	16	7.6 7.6	7.6	0.02 0.02	0.02	91.3 90.6	91	8.2 8.2	8.2	1.6 1.5	1.6	<2.5 <2.5	<2.5
4-Jan-08	Sunny	Calm	12:33	Middle	0.1	16.1 16.1	16.1	7.7 7.7	7.7	0.02 0.02	0.02	91.1 90.4	90.8	8.3 8.2	8.3	1.7 1.7	1.7	<2.5 <2.5	<2.5
7-Jan-08	Sunny	Calm	13:03	Middle	0.1	17.0 17.0	17	7.8 7.8	7.8	0.02 0.02	0.02	91.4 90.7	91.1	8.2 8.1	8.2	1.5 1.5	1.5	3.0 3.0	3
9-Jan-08	Sunny	Calm	13:09	Middle	0.1	17.8 17.9	17.9	7.9 7.8	7.9	0.02 0.02	0.02	91.3 90.6	91	8.2 8.1	8.2	1.6 1.6	1.6	<2.5 <2.5	<2.5
11-Jan-08	Sunny	Calm	10:33	Middle	0.1	17.3 17.3	17.3	7.9 7.9	7.9	0.02 0.02	0.02	92.3 91.7	92	8.1 8.0	8.1	2.0 2.0	2	<2.5 <2.5	<2.5
14-Jan-08	Cloudy	Calm	14:18	Middle	0.1	16.4 16.4	16.4	7.9 7.9	7.9	0.02 0.02	0.02	92.3 91.7	92	8.0 8.0	8	1.7 1.7	1.7	<2.5 <2.5	<2.5
16-Jan-08	Cloudy	Calm	12:13	Middle	0.1	16.3 16.3	16.3	7.9 7.9	7.9	0.02 0.02	0.02	91.8 91.2	91.5	8.1 8.1	8.1	2.1 2.0	2.1	<2.5 <2.5	<2.5
18-Jan-08	Cloudy	Calm	12:35	Middle	0.1	16.4 16.4	16.4	7.9 7.9	7.9	0.02 0.02	0.02	91.3 90.7	91	8.2 8.2	8.2	1.9 1.8	1.9	4.0 4.0	4
21-Jan-08	Sunny	Calm	12:55	Middle	0.1	16.6 16.6	16.6	7.8 7.8	7.8	0.02 0.02	0.02	91.8 91.2	91.5	8.1 8.1	8.1	2.0 1.9	2	<2.5 <2.5	<2.5
23-Jan-08	Fine	Calm	13:21	Middle	0.1	16.8 16.8	16.8	7.9 7.9	7.9	0.02 0.02	0.02	91.6 90.9	91.3	8.2 8.1	8.2	1.3 1.3	1.3	<2.5 <2.5	<2.5
25-Jan-08	Cloudy	Calm	13:03	Middle	0.1	16.5 16.6	16.6	7.9 7.9	7.9	0.02 0.02	0.02	92.0 91.4	91.7	8.1 8.1	8.1	1.5 1.5	1.5	<2.5 <2.5	<2.5
28-Jan-08	Cloudy	Calm	12:36	Middle	0.1	16.5 16.5	16.5	7.8 7.8	7.8	0.02 0.02	0.02	92.1 91.6	91.9	8.1 8.0	8.1	1.9 1.9	1.9	<2.5 <2.5	<2.5
30-Jan-08	Rainy	Calm	13:41	Middle	0.1	16.6 16.6	16.6	7.8 7.7	7.8	0.02 0.02	0.02	91.5 90.9	91.2	8.2 8.1	8.2	1.7 1.7	1.7	<2.5 <2.5	<2.5

The reporting limit for laboratory analysis of suspended solids is 2.5 mg/L. For the results below the reporting limit, the SS level will be taken as 2.5 mg/L.

Remarks: \* Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher  
 \*\* Cancelled due to Thunderstorm Warning

## Water Quality Monitoring Results at 23\_I

Date	Weather Condition	Sea Condition*	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Jan-08	Sunny	Calm	12:20	Middle	0.09	16.2	16.2	7.5	7.5	0.02	0.02	91.0	90.8	8.2	8.2	1.6	1.6	4.0	3.5
						16.2		7.5		0.02		90.6		8.1		1.6		3.0	
4-Jan-08	Sunny	Calm	12:27	Middle	0.09	16.2	16.2	7.6	7.6	0.02	0.02	90.7	90.5	8.2	8.2	1.8	1.8	<2.5	<2.5
						16.2		7.6		0.02		90.3		8.2		1.8		<2.5	
7-Jan-08	Sunny	Calm	12:56	Middle	0.09	17.1	17.1	7.6	7.6	0.02	0.02	91.1	90.9	8.2	8.2	1.6	1.6	9.0	8.5
						17.1		7.6		0.02		90.7		8.1		1.6		8.0	
9-Jan-08	Sunny	Calm	13:03	Middle	0.09	18.0	18	7.7	7.7	0.02	0.02	91.0	90.8	8.2	8.2	1.7	1.7	<2.5	<2.5
						18.0		7.7		0.02		90.6		8.1		1.7		<2.5	
11-Jan-08	Sunny	Calm	10:27	Middle	0.09	17.4	17.4	7.8	7.8	0.02	0.02	92.1	92	8.0	8	1.9	1.9	<2.5	<2.5
						17.4		7.8		0.02		91.8		8.0		1.9		<2.5	
14-Jan-08	Cloudy	Calm	14:12	Middle	0.09	16.6	16.6	7.7	7.7	0.02	0.02	92.2	92	8.0	8	1.8	1.8	<2.5	<2.5
						16.6		7.7		0.02		91.8		8.0		1.8		<2.5	
16-Jan-08	Cloudy	Calm	12:07	Middle	0.09	16.5	16.5	7.8	7.8	0.02	0.02	91.6	91.4	8.1	8.1	1.8	1.9	<2.5	<2.5
						16.5		7.8		0.02		91.2		8.1		1.9		<2.5	
18-Jan-08	Cloudy	Calm	12:29	Middle	0.09	16.5	16.5	7.7	7.7	0.02	0.02	91.0	90.8	8.2	8.2	1.6	1.7	<2.5	<2.5
						16.5		7.7		0.02		90.6		8.1		1.7		<2.5	
21-Jan-08	Sunny	Calm	12:49	Middle	0.09	16.8	16.8	7.7	7.7	0.02	0.02	91.6	91.4	8.1	8.1	1.7	1.8	<2.5	<2.5
						16.8		7.7		0.02		91.2		8.1		1.8		<2.5	
23-Jan-08	Fine	Calm	13:15	Middle	0.09	16.9	16.9	7.7	7.7	0.02	0.02	91.3	91.1	8.1	8.1	1.4	1.4	<2.5	<2.5
						16.9		7.7		0.02		90.9		8.1		1.3		<2.5	
25-Jan-08	Cloudy	Calm	12:57	Middle	0.09	16.7	16.7	7.8	7.8	0.02	0.02	91.7	91.5	8.1	8.1	1.6	1.6	<2.5	<2.5
						16.7		7.8		0.02		91.3		8.1		1.5		<2.5	
28-Jan-08	Cloudy	Calm	12:30	Middle	0.09	16.7	16.7	7.7	7.7	0.02	0.02	92.0	91.8	8.1	8.1	1.8	1.8	<2.5	<2.5
						16.7		7.7		0.02		91.6		8.0		1.8		<2.5	
30-Jan-08	Rainy	Calm	13:35	Middle	0.09	16.8	16.8	7.6	7.6	0.02	0.02	91.2	91	8.2	8.2	1.6	1.6	<2.5	<2.5
						16.8		7.6		0.02		90.8		8.1		1.6		<2.5	

The reporting limit for laboratory analysis of suspended solids is 2.5 mg/L. For the results below the reporting limit, the SS level will be taken as 2.5 mg/L.

Remarks: \* Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher  
 \*\* Cancelled due to Thunderstorm Warning

## Water Quality Monitoring Results at 23\_R1

Date	Weather Condition	Sea Condition*	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Jan-08	Sunny	Calm	12:07	Middle	0.09	16.1	16.1	7.5	7.5	0.02	0.02	93.2	92.7	8.4	8.4	1.5	1.5	<2.5	<2.5
						16.1		7.5		0.02		92.2		8.3		1.5			
4-Jan-08	Sunny	Calm	12:14	Middle	0.09	16.2	16.2	7.6	7.6	0.02	0.02	93.0	92.5	8.4	8.4	1.8	1.8	5.0	4.5
						16.2		7.6		0.02		92.0		8.4		1.8		4.0	
7-Jan-08	Sunny	Calm	12:43	Middle	0.09	17.1	17.1	7.6	7.6	0.02	0.02	93.2	92.8	8.4	8.4	1.7	1.7	7.0	7
						17.1		7.6		0.02		92.3		8.3		1.7		7.0	
9-Jan-08	Sunny	Calm	12:50	Middle	0.09	17.9	18	7.7	7.7	0.02	0.02	93.2	92.7	8.4	8.4	1.8	1.8	<2.5	<2.5
						18.0		7.7		0.02		92.2		8.3		1.8		<2.5	
11-Jan-08	Sunny	Calm	10:14	Middle	0.09	17.4	17.4	7.8	7.8	0.02	0.02	94.1	93.7	8.2	8.2	1.9	1.9	<2.5	<2.5
						17.4		7.8		0.02		93.2		8.1		1.9		<2.5	
14-Jan-08	Cloudy	Calm	13:59	Middle	0.09	16.5	16.5	7.7	7.7	0.02	0.02	94.1	93.7	8.2	8.2	1.8	1.8	3.0	3
						16.5		7.7		0.02		93.2		8.1		1.8		3.0	
16-Jan-08	Cloudy	Calm	11:54	Middle	0.09	16.4	16.4	7.8	7.8	0.02	0.02	93.6	93.2	8.3	8.3	1.8	1.9	<2.5	<2.5
						16.4		7.8		0.02		92.7		8.2		1.9		<2.5	
18-Jan-08	Cloudy	Calm	12:16	Middle	0.09	16.5	16.5	7.7	7.7	0.02	0.02	93.2	92.8	8.4	8.4	1.6	1.7	<2.5	<2.5
						16.5		7.7		0.02		92.3		8.3		1.7		<2.5	
21-Jan-08	Sunny	Calm	12:36	Middle	0.09	16.7	16.7	7.7	7.7	0.02	0.02	93.7	93.3	8.3	8.3	1.7	1.8	<2.5	<2.5
						16.7		7.7		0.02		92.8		8.2		1.8		<2.5	
23-Jan-08	Fine	Calm	13:02	Middle	0.09	16.9	16.9	7.7	7.7	0.02	0.02	93.4	93	8.3	8.3	1.6	1.6	<2.5	<2.5
						16.9		7.7		0.02		92.5		8.2		1.6		<2.5	
25-Jan-08	Cloudy	Calm	12:44	Middle	0.09	16.6	16.7	7.8	7.8	0.02	0.02	93.8	93.4	8.3	8.3	1.8	1.8	<2.5	<2.5
						16.7		7.8		0.02		92.9		8.2		1.8		<2.5	
28-Jan-08	Cloudy	Calm	12:17	Middle	0.09	16.6	16.6	7.7	7.7	0.02	0.02	94.0	93.6	8.3	8.3	1.8	1.8	<2.5	<2.5
						16.6		7.7		0.02		93.1		8.2		1.7		<2.5	
30-Jan-08	Rainy	Calm	13:22	Middle	0.09	16.7	16.7	7.6	7.6	0.02	0.02	93.4	93	8.4	8.4	1.6	1.6	<2.5	<2.5
						16.7		7.6		0.02		92.5		8.3		1.5		<2.5	

The reporting limit for laboratory analysis of suspended solids is 2.5 mg/L. For the results below the reporting limit, the SS level will be taken as 2.5 mg/L.

Remarks: \* Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher  
 \*\* Cancelled due to Thunderstorm Warning

## Water Quality Monitoring Results at 23\_R2

Date	Weather Condition	Sea Condition*	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Jan-08	Sunny	Calm	12:13	Middle	0.1	16.1	16.1	7.5	7.5	0.02	0.02	92.4	92.3	8.3	8.3	1.5	1.5	<2.5	<2.5
						16.1		7.5		0.02		92.1		8.3		1.5			
4-Jan-08	Sunny	Calm	12:20	Middle	0.1	16.2	16.2	7.6	7.6	0.02	0.02	92.2	92.1	8.4	8.4	1.9	1.9	<2.5	<2.5
						16.2		7.6		0.02		91.9		8.3		1.9			
7-Jan-08	Sunny	Calm	12:49	Middle	0.1	17.1	17.1	7.6	7.6	0.02	0.02	92.5	92.4	8.3	8.3	1.7	1.7	<2.5	<2.5
						17.1		7.6		0.02		92.2		8.3		1.7			
9-Jan-08	Sunny	Calm	12:56	Middle	0.1	18.0	18	7.7	7.7	0.02	0.02	92.4	92.3	8.3	8.3	1.8	1.8	<2.5	<2.5
						18.0		7.7		0.02		92.1		8.3		1.8			
11-Jan-08	Sunny	Calm	10:20	Middle	0.1	17.4	17.4	7.8	7.8	0.02	0.02	93.4	93.3	8.2	8.2	1.8	1.8	<2.5	<2.5
						17.4		7.8		0.02		93.1		8.1		1.8			
14-Jan-08	Cloudy	Calm	14:05	Middle	0.1	16.5	16.5	7.7	7.7	0.02	0.02	93.5	93.4	8.1	8.1	1.8	1.8	<2.5	<2.5
						16.5		7.7		0.02		93.2		8.1		1.8			
16-Jan-08	Cloudy	Calm	12:00	Middle	0.1	16.4	16.4	7.8	7.8	0.02	0.02	93.0	92.9	8.2	8.2	1.9	1.9	<2.5	<2.5
						16.4		7.8		0.02		92.7		8.2		1.8			
18-Jan-08	Cloudy	Calm	12:22	Middle	0.1	16.5	16.5	7.7	7.7	0.02	0.02	92.5	92.4	8.3	8.3	1.7	1.7	<2.5	<2.5
						16.5		7.7		0.02		92.2		8.3		1.6			
21-Jan-08	Sunny	Calm	12:42	Middle	0.1	16.7	16.7	7.7	7.7	0.02	0.02	93.0	92.9	8.2	8.2	1.8	1.8	<2.5	<2.5
						16.7		7.7		0.02		92.7		8.2		1.7			
23-Jan-08	Fine	Calm	13:08	Middle	0.1	16.9	16.9	7.7	7.7	0.02	0.02	92.7	92.6	8.3	8.3	1.6	1.5	<2.5	<2.5
						16.9		7.7		0.02		92.4		8.2		1.4			
25-Jan-08	Cloudy	Calm	12:50	Middle	0.1	16.7	16.7	7.8	7.8	0.02	0.02	93.0	92.9	8.2	8.2	1.8	1.7	<2.5	<2.5
						16.7		7.8		0.02		92.7		8.2		1.6			
28-Jan-08	Cloudy	Calm	12:23	Middle	0.1	16.6	16.6	7.7	7.7	0.02	0.02	93.3	93.2	8.2	8.2	1.7	1.8	<2.5	<2.5
						16.6		7.7		0.02		93.0		8.2		1.8			
30-Jan-08	Rainy	Calm	13:28	Middle	0.1	16.7	16.7	7.6	7.6	0.02	0.02	92.7	92.6	8.3	8.3	1.5	1.6	<2.5	<2.5
						16.7		7.6		0.02		92.4		8.3		1.6			

The reporting limit for laboratory analysis of suspended solids is 2.5 mg/L. For the results below the reporting limit, the SS level will be taken as 2.5 mg/L.

Remarks: \* Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher  
 \*\* Cancelled due to Thunderstorm Warning

## Water Quality Monitoring Results at 26\_I

Date	Weather Condition	Sea Condition*	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Jan-08	Sunny	Calm	11:33	Middle	0.14	16.1	16.1	7.7	7.7	0.03	0.03	92.5	92.5	8.3	8.3	1.5	1.6	<2.5	<2.5
						16.1		7.7		0.03		92.4		8.2		1.6			
4-Jan-08	Sunny	Calm	11:40	Middle	0.14	16.2	16.2	7.8	7.8	0.02	0.02	92.3	92.3	8.3	8.3	1.9	1.9	<2.5	<2.5
						16.2		7.8		0.02		92.2		8.3		1.9			
7-Jan-08	Sunny	Calm	12:09	Middle	0.14	17.1	17.1	7.9	7.9	0.03	0.03	92.6	92.6	8.3	8.3	1.7	1.7	3.0	3
						17.1		7.9		0.03		92.5		8.2		1.7			
9-Jan-08	Sunny	Calm	12:15	Middle	0.14	17.9	17.9	8.0	8	0.03	0.03	92.5	92.5	8.3	8.3	1.9	1.9	<2.5	<2.5
						17.9		8.0		0.03		92.4		8.2		1.9			
11-Jan-08	Sunny	Calm	9:39	Middle	0.14	17.4	17.4	8.0	8	0.03	0.03	93.4	93.4	8.1	8.1	1.7	1.7	<2.5	<2.5
						17.4		8.0		0.03		93.4		8.1		1.7			
14-Jan-08	Cloudy	Calm	13:24	Middle	0.14	16.5	16.5	8.0	8	0.03	0.03	93.5	93.5	8.1	8.1	2.0	2	4.0	4
						16.5		8.0		0.03		93.4		8.1		1.9			
16-Jan-08	Cloudy	Calm	11:19	Middle	0.14	16.4	16.4	8.0	8	0.03	0.03	93.0	93	8.2	8.2	1.8	1.8	<2.5	<2.5
						16.4		8.0		0.03		92.9		8.1		1.7			
18-Jan-08	Cloudy	Calm	11:42	Middle	0.14	16.5	16.5	8.0	8	0.03	0.03	92.5	92.5	8.3	8.3	1.6	1.6	3.0	3
						16.5		8.0		0.03		92.4		8.2		1.5			
21-Jan-08	Sunny	Calm	12:01	Middle	0.14	16.7	16.7	8.0	8	0.03	0.03	93.0	93	8.2	8.2	1.7	1.7	<2.5	<2.5
						16.7		8.0		0.03		92.9		8.1		1.6			
23-Jan-08	Fine	Calm	12:28	Middle	0.14	16.9	16.9	8.0	8	0.03	0.03	92.8	92.8	8.2	8.2	1.6	1.6	<2.5	<2.5
						16.9		8.0		0.03		92.7		8.2		1.6			
25-Jan-08	Cloudy	Calm	12:09	Middle	0.14	16.6	16.6	8.0	8	0.03	0.03	93.1	93.1	8.2	8.2	1.8	1.8	<2.5	<2.5
						16.6		8.0		0.03		93.0		8.1		1.8			
28-Jan-08	Cloudy	Calm	11:42	Middle	0.14	16.6	16.6	7.9	7.9	0.03	0.03	93.3	93.3	8.2	8.2	1.6	1.6	<2.5	<2.5
						16.6		7.9		0.03		93.2		8.1		1.6			
30-Jan-08	Rainy	Calm	12:48	Middle	0.14	16.7	16.7	7.9	7.9	0.03	0.03	92.7	92.7	8.3	8.3	1.4	1.4	<2.5	<2.5
						16.7		7.9		0.03		92.6		8.2		1.4			

The reporting limit for laboratory analysis of suspended solids is 2.5 mg/L. For the results below the reporting limit, the SS level will be taken as 2.5 mg/L.

Remarks: \* Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher  
 \*\* Cancelled due to Thunderstorm Warning



## Water Quality Monitoring Results at 26\_R

Date	Weather Condition	Sea Condition*	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Jan-08	Sunny	Calm	11:57	Middle	0.09	16.2	16.2	7.7	7.7	0.03	0.03	91.6	91.4	8.2	8.2	1.6	1.6	<2.5	<2.5
						16.2		7.7		0.03		91.1		8.2		1.6			
4-Jan-08	Sunny	Calm	12:04	Middle	0.09	16.3	16.3	7.8	7.8	0.02	0.02	91.4	91.2	8.3	8.3	1.7	1.7	<2.5	<2.5
						16.3		7.8		0.02		90.9		8.2		1.7			
7-Jan-08	Sunny	Calm	12:33	Middle	0.09	17.2	17.2	7.8	7.8	0.02	0.02	91.7	91.5	8.2	8.2	1.6	1.6	<2.5	<2.5
						17.2		7.8		0.02		91.2		8.2		1.6			
9-Jan-08	Sunny	Calm	12:39	Middle	0.09	18.0	18.1	7.9	7.9	0.02	0.02	91.6	91.4	8.2	8.2	1.8	1.8	<2.5	<2.5
						18.1		7.9		0.02		91.1		8.2		1.8			
11-Jan-08	Sunny	Calm	10:03	Middle	0.09	17.5	17.5	8.0	8	0.03	0.03	92.6	92.4	8.1	8.1	1.9	1.9	<2.5	<2.5
						17.5		7.9		0.03		92.1		8.0		1.8			
14-Jan-08	Cloudy	Calm	13:49	Middle	0.09	16.6	16.6	7.9	7.9	0.03	0.03	92.6	92.4	8.0	8	1.8	1.8	4.0	4
						16.6		7.9		0.03		92.1		8.0		1.8			
16-Jan-08	Cloudy	Calm	11:44	Middle	0.09	16.5	16.5	8.0	8	0.03	0.03	92.1	91.9	8.1	8.1	1.7	1.8	<2.5	<2.5
						16.5		8.0		0.03		91.6		8.1		1.9			
18-Jan-08	Cloudy	Calm	12:06	Middle	0.09	16.6	16.6	7.9	7.9	0.03	0.03	91.6	91.4	8.2	8.2	1.5	1.6	<2.5	<2.5
						16.6		7.9		0.03		91.1		8.2		1.7			
21-Jan-08	Sunny	Calm	12:26	Middle	0.09	16.8	16.8	7.9	7.9	0.03	0.03	92.1	91.9	8.1	8.1	1.6	1.7	<2.5	<2.5
						16.8		7.9		0.03		91.6		8.1		1.8			
23-Jan-08	Fine	Calm	12:52	Middle	0.09	17.0	17	7.9	7.9	0.03	0.03	91.9	91.7	8.1	8.1	1.6	1.6	<2.5	<2.5
						17.0		7.9		0.03		91.4		8.1		1.6			
25-Jan-08	Cloudy	Calm	12:34	Middle	0.09	16.7	16.8	8.0	8	0.02	0.02	92.4	92.1	8.1	8.1	1.8	1.8	<2.5	<2.5
						16.8		8.0		0.02		91.8		8.1		1.8			
28-Jan-08	Cloudy	Calm	12:07	Middle	0.09	16.7	16.7	7.9	7.9	0.02	0.02	92.5	92.3	8.1	8.1	1.7	1.8	<2.5	<2.5
						16.7		7.9		0.02		92.0		8.1		1.8			
30-Jan-08	Rainy	Calm	13:12	Middle	0.09	16.8	16.8	7.8	7.8	0.03	0.03	91.8	91.6	8.2	8.2	1.5	1.6	<2.5	<2.5
						16.8		7.8		0.03		91.3		8.2		1.6			

The reporting limit for laboratory analysis of suspended solids is 2.5 mg/L. For the results below the reporting limit, the SS level will be taken as 2.5 mg/L.

Remarks: \* Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher  
 \*\* Cancelled due to Thunderstorm Warning

## Water Quality Monitoring Results at 27\_I

Date	Weather Condition	Sea Condition*	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Jan-08	Sunny	Calm	11:51	Middle	0.08	16.1	16.1	7.7	7.7	0.03	0.03	92.9	92.9	8.4	8.4	1.6	1.6	<2.5	<2.5
						16.1		7.7		0.03		92.8		8.4		1.5			
4-Jan-08	Sunny	Calm	11:58	Middle	0.08	16.2	16.2	7.8	7.8	0.02	0.02	92.7	92.7	8.4	8.4	1.8	1.8	<2.5	<2.5
						16.2		7.8		0.02		92.6		8.4		1.8			
7-Jan-08	Sunny	Calm	12:27	Middle	0.08	17.1	17.1	7.8	7.8	0.02	0.02	93.0	93	8.4	8.4	1.6	1.6	<2.5	<2.5
						17.1		7.8		0.02		92.9		8.3		1.6			
9-Jan-08	Sunny	Calm	12:33	Middle	0.08	18.0	18	7.9	7.9	0.02	0.02	92.9	92.9	8.4	8.4	1.8	1.8	<2.5	<2.5
						18.0		7.9		0.02		92.8		8.3		1.8			
11-Jan-08	Sunny	Calm	9:57	Middle	0.08	17.4	17.4	8.0	8	0.03	0.03	93.7	93.7	8.2	8.2	1.7	1.7	<2.5	<2.5
						17.4		8.0		0.03		93.6		8.2		1.7			
14-Jan-08	Cloudy	Calm	13:43	Middle	0.08	16.5	16.5	7.9	7.9	0.03	0.03	93.7	93.7	8.2	8.2	1.8	1.8	<2.5	<2.5
						16.5		7.9		0.03		93.6		8.2		1.8			
16-Jan-08	Cloudy	Calm	11:38	Middle	0.08	16.4	16.4	8.0	8	0.03	0.03	93.3	93.3	8.3	8.3	1.8	1.8	<2.5	<2.5
						16.4		8.0		0.03		93.2		8.3		1.7			
18-Jan-08	Cloudy	Calm	12:00	Middle	0.08	16.5	16.5	7.9	7.9	0.03	0.03	92.9	92.9	8.4	8.4	1.6	1.6	4.0	3.5
						16.5		7.9		0.03		92.8		8.4		1.5			
21-Jan-08	Sunny	Calm	12:19	Middle	0.08	16.7	16.7	7.9	7.9	0.03	0.03	93.3	93.3	8.3	8.3	1.7	1.7	<2.5	<2.5
						16.7		7.9		0.03		93.2		8.3		1.6			
23-Jan-08	Fine	Calm	12:46	Middle	0.08	16.9	16.9	7.9	7.9	0.03	0.03	93.1	93.1	8.3	8.3	1.6	1.6	<2.5	<2.5
						16.9		7.9		0.03		93.0		8.3		1.6			
25-Jan-08	Cloudy	Calm	12:27	Middle	0.08	16.7	16.7	8.0	8	0.02	0.02	93.5	93.4	8.3	8.3	1.8	1.8	<2.5	<2.5
						16.7		8.0		0.02		93.3		8.3		1.8			
28-Jan-08	Cloudy	Calm	12:01	Middle	0.08	16.6	16.7	7.9	7.9	0.02	0.02	93.6	93.6	8.2	8.2	1.6	1.7	<2.5	<2.5
						16.7		7.9		0.02		93.5		8.2		1.8			
30-Jan-08	Rainy	Calm	13:06	Middle	0.08	16.7	16.7	7.8	7.8	0.03	0.03	93.1	93	8.4	8.4	1.4	1.5	<2.5	<2.5
						16.7		7.8		0.03		92.9		8.3		1.6			

The reporting limit for laboratory analysis of suspended solids is 2.5 mg/L. For the results below the reporting limit, the SS level will be taken as 2.5 mg/L.

Remarks: \* Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher  
 \*\* Cancelled due to Thunderstorm Warning

## Water Quality Monitoring Results at 27\_R

Date	Weather Condition	Sea Condition*	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Jan-08	Sunny	Calm	11:41	Middle	0.13	16.1 16.1	16.1	7.7 7.7	7.7	0.03 0.03	0.03	94.3 93.8	94.1	8.5 8.5	8.5	1.5 1.5	1.5	3.0 3.0	3
4-Jan-08	Sunny	Calm	11:48	Middle	0.13	16.2 16.2	16.2	7.8 7.8	7.8	0.02 0.02	0.02	94.2 93.7	94	8.6 8.5	8.6	1.8 1.8	1.8	<2.5 <2.5	<2.5
7-Jan-08	Sunny	Calm	12:17	Middle	0.13	17.1 17.1	17.1	7.9 7.9	7.9	0.02 0.02	0.02	94.4 93.9	94.2	8.5 8.4	8.5	1.6 1.6	1.6	<2.5 <2.5	<2.5
9-Jan-08	Sunny	Calm	12:24	Middle	0.13	17.9 17.9	17.9	7.9 7.9	7.9	0.02 0.02	0.02	94.3 93.8	94.1	8.5 8.5	8.5	1.8 1.8	1.8	<2.5 <2.5	<2.5
11-Jan-08	Sunny	Calm	9:48	Middle	0.13	17.4 17.4	17.4	8.0 8.0	8	0.03 0.03	0.03	95.0 94.6	94.8	8.4 8.3	8.4	1.7 1.8	1.8	<2.5 <2.5	<2.5
14-Jan-08	Cloudy	Calm	13:33	Middle	0.13	16.5 16.5	16.5	8.0 8.0	8	0.03 0.03	0.03	95.1 94.7	94.9	8.3 8.3	8.3	1.9 1.9	1.9	<2.5 <2.5	<2.5
16-Jan-08	Cloudy	Calm	11:28	Middle	0.13	16.4 16.4	16.4	8.0 8.0	8	0.03 0.03	0.03	94.7 94.3	94.5	8.4 8.4	8.4	1.7 1.7	1.7	<2.5 <2.5	<2.5
18-Jan-08	Cloudy	Calm	11:50	Middle	0.13	16.5 16.5	16.5	8.0 8.0	8	0.03 0.03	0.03	94.4 93.9	94.2	8.5 8.5	8.5	1.5 1.5	1.5	<2.5 <2.5	<2.5
21-Jan-08	Sunny	Calm	12:10	Middle	0.13	16.7 16.7	16.7	7.9 7.9	7.9	0.03 0.03	0.03	94.8 94.3	94.6	8.4 8.4	8.4	1.6 1.6	1.6	<2.5 <2.5	<2.5
23-Jan-08	Fine	Calm	12:36	Middle	0.13	16.9 16.9	16.9	8.0 8.0	8	0.03 0.03	0.03	94.6 94.1	94.4	8.5 8.4	8.5	1.6 1.6	1.6	<2.5 <2.5	<2.5
25-Jan-08	Cloudy	Calm	12:18	Middle	0.13	16.6 16.6	16.6	8.0 8.0	8	0.02 0.02	0.02	94.9 94.4	94.7	8.4 8.4	8.4	1.8 1.8	1.8	<2.5 <2.5	<2.5
28-Jan-08	Cloudy	Calm	11:51	Middle	0.13	16.6 16.6	16.6	7.9 7.9	7.9	0.02 0.02	0.02	95.0 94.6	94.8	8.4 8.3	8.4	1.7 1.6	1.7	<2.5 <2.5	<2.5
30-Jan-08	Rainy	Calm	12:56	Middle	0.13	16.7 16.7	16.7	7.8 7.8	7.8	0.03 0.03	0.03	94.5 94.1	94.3	8.5 8.5	8.5	1.5 1.4	1.5	<2.5 <2.5	<2.5

The reporting limit for laboratory analysis of suspended solids is 2.5 mg/L. For the results below the reporting limit, the SS level will be taken as 2.5 mg/L.

Remarks: \* Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher  
 \*\* Cancelled due to Thunderstorm Warning

## Water Quality Monitoring Results at 40\_I

Date	Weather Condition	Sea Condition*	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Jan-08	Sunny	Calm	11:13	Middle	0.09	16.3	16.3	7.7	7.7	0.05	0.05	98.6	98.5	8.7	8.7	1.6	1.6	<2.5	<2.5
						16.3		7.6		0.05		98.4		8.7		1.6			
4-Jan-08	Sunny	Calm	11:20	Middle	0.09	16.4	16.4	7.7	7.7	0.05	0.05	98.6	98.5	8.7	8.7	1.8	1.8	<2.5	<2.5
						16.4		7.7		0.05		98.4		8.7		1.7			
7-Jan-08	Sunny	Calm	11:49	Middle	0.09	17.3	17.3	7.8	7.8	0.05	0.05	98.6	98.5	8.6	8.6	1.7	1.7	<2.5	<2.5
						17.3		7.8		0.05		98.4		8.6		1.6			
9-Jan-08	Sunny	Calm	11:55	Middle	0.09	18.2	18.2	7.9	7.9	0.05	0.05	98.6	98.5	8.7	8.7	1.9	1.9	<2.5	<2.5
						18.2		7.9		0.05		98.4		8.6		1.8			
11-Jan-08	Sunny	Calm	9:19	Middle	0.09	17.6	17.6	7.9	7.9	0.05	0.05	98.7	98.6	8.5	8.5	1.9	1.9	<2.5	<2.5
						17.6		7.9		0.05		98.5		8.5		1.9			
14-Jan-08	Cloudy	Calm	13:05	Middle	0.09	16.7	16.7	7.9	7.9	0.05	0.05	98.7	98.6	8.4	8.4	1.9	1.9	<2.5	<2.5
						16.7		7.9		0.05		98.5		8.4		1.9			
16-Jan-08	Cloudy	Calm	11:00	Middle	0.09	16.6	16.6	7.9	7.9	0.05	0.05	98.6	98.5	8.5	8.5	2.0	2	<2.5	<2.5
						16.6		7.9		0.05		98.4		8.5		2.0			
18-Jan-08	Cloudy	Calm	11:22	Middle	0.09	16.7	16.7	7.9	7.9	0.05	0.05	98.6	98.5	8.7	8.7	1.8	1.8	<2.5	<2.5
						16.7		7.9		0.05		98.4		8.7		1.8			
21-Jan-08	Sunny	Calm	11:41	Middle	0.09	16.9	16.9	7.9	7.9	0.05	0.05	98.6	98.5	8.5	8.5	1.9	1.9	<2.5	<2.5
						16.9		7.9		0.05		98.4		8.5		1.9			
23-Jan-08	Fine	Calm	12:08	Middle	0.09	17.1	17.1	7.9	7.9	0.05	0.05	98.6	98.5	8.6	8.6	1.6	1.6	<2.5	<2.5
						17.1		7.9		0.05		98.4		8.6		1.6			
25-Jan-08	Cloudy	Calm	11:50	Middle	0.09	16.9	16.9	7.9	7.9	0.05	0.05	98.3	98.2	8.5	8.5	1.8	1.8	<2.5	<2.5
						16.9		7.9		0.05		98.1		8.5		1.8			
28-Jan-08	Cloudy	Calm	11:23	Middle	0.09	16.8	16.9	7.8	7.8	0.05	0.05	98.5	98.4	8.5	8.5	1.9	1.8	<2.5	<2.5
						16.9		7.8		0.05		98.3		8.5		1.7			
30-Jan-08	Rainy	Calm	12:28	Middle	0.09	16.9	16.9	7.8	7.8	0.05	0.05	98.5	98.4	8.6	8.6	1.7	1.6	<2.5	<2.5
						16.9		7.8		0.05		98.3		8.6		1.5			

The reporting limit for laboratory analysis of suspended solids is 2.5 mg/L. For the results below the reporting limit, the SS level will be taken as 2.5 mg/L.

Remarks: \* Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher  
 \*\* Cancelled due to Thunderstorm Warning

## Water Quality Monitoring Results at 40\_R

Date	Weather Condition	Sea Condition*	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Jan-08	Sunny	Calm	11:08	Middle	0.2	16.3 16.3	16.3	7.7 7.7	7.7	0.05 0.05	0.05	100.3 100.5	100.4	8.9 8.9	8.9	1.7 1.7	1.7	<2.5 <2.5	<2.5
4-Jan-08	Sunny	Calm	11:14	Middle	0.2	16.4 16.4	16.4	7.8 7.8	7.8	0.05 0.05	0.05	100.3 100.5	100.4	8.9 9.0	9	1.8 1.8	1.8	<2.5 <2.5	<2.5
7-Jan-08	Sunny	Calm	11:44	Middle	0.2	17.3 17.3	17.3	7.8 7.8	7.8	0.05 0.05	0.05	100.2 100.4	100.3	8.8 8.9	8.9	1.7 1.7	1.7	<2.5 <2.5	<2.5
9-Jan-08	Sunny	Calm	11:50	Middle	0.2	18.2 18.2	18.2	7.9 7.9	7.9	0.05 0.05	0.05	100.2 100.4	100.3	8.9 8.9	8.9	1.9 1.9	1.9	<2.5 <2.5	<2.5
11-Jan-08	Sunny	Calm	9:14	Middle	0.2	17.6 17.6	17.6	8.0 7.9	8	0.05 0.05	0.05	100.2 100.3	100.3	8.7 8.7	8.7	1.9 1.9	1.9	<2.5 <2.5	<2.5
14-Jan-08	Cloudy	Calm	12:59	Middle	0.2	16.7 16.7	16.7	7.9 7.9	7.9	0.05 0.05	0.05	100.1 100.2	100.2	8.6 8.6	8.6	1.8 1.8	1.8	<2.5 <2.5	<2.5
16-Jan-08	Cloudy	Calm	10:54	Middle	0.2	16.6 16.6	16.6	8.0 8.0	8	0.05 0.05	0.05	100.1 100.3	100.2	8.7 8.7	8.7	1.9 1.9	1.9	<2.5 <2.5	<2.5
18-Jan-08	Cloudy	Calm	11:17	Middle	0.2	16.7 16.7	16.7	7.9 7.9	7.9	0.05 0.05	0.05	100.2 100.4	100.3	8.9 8.9	8.9	1.7 1.7	1.7	<2.5 <2.5	<2.5
21-Jan-08	Sunny	Calm	11:36	Middle	0.2	16.9 16.9	16.9	7.9 7.9	7.9	0.05 0.05	0.05	100.1 100.3	100.2	8.7 8.7	8.7	1.8 1.8	1.8	<2.5 <2.5	<2.5
23-Jan-08	Fine	Calm	12:03	Middle	0.2	17.1 17.1	17.1	7.9 7.9	7.9	0.05 0.05	0.05	100.1 100.3	100.2	8.8 8.8	8.8	1.5 1.5	1.5	<2.5 <2.5	<2.5
25-Jan-08	Cloudy	Calm	11:44	Middle	0.2	16.9 16.9	16.9	8.0 8.0	8	0.05 0.05	0.05	99.8 100.0	99.9	8.7 8.7	8.7	1.7 1.7	1.7	<2.5 <2.5	<2.5
28-Jan-08	Cloudy	Calm	11:17	Middle	0.2	16.8 16.8	16.8	7.9 7.9	7.9	0.05 0.05	0.05	99.9 100.1	100	8.7 8.7	8.7	1.9 1.9	1.9	<2.5 <2.5	<2.5
30-Jan-08	Rainy	Calm	12:23	Middle	0.2	16.9 16.9	16.9	7.8 7.8	7.8	0.05 0.05	0.05	100.1 100.3	100.2	8.8 8.8	8.8	1.7 1.7	1.7	<2.5 <2.5	<2.5

The reporting limit for laboratory analysis of suspended solids is 2.5 mg/L. For the results below the reporting limit, the SS level will be taken as 2.5 mg/L.

Remarks: \* Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher  
 \*\* Cancelled due to Thunderstorm Warning

## Water Quality Monitoring Results at CSS\_I

Date	Weather Condition	Sea Condition*	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Jan-08	Sunny	Calm	11:20	Middle	0.19	16.2	16.2	7.7	7.7	0.03	0.03	97.4	97.5	8.7	8.7	1.5	1.5	<2.5	<2.5
						16.2		7.7		0.03		97.5		8.7		1.5			
4-Jan-08	Sunny	Calm	11:26	Middle	0.19	16.3	16.3	7.8	7.8	0.03	0.03	97.3	97.4	8.7	8.7	1.9	1.9	<2.5	<2.5
						16.3		7.8		0.03		97.5		8.7		1.8			
7-Jan-08	Sunny	Calm	11:56	Middle	0.19	17.1	17.1	7.8	7.9	0.03	0.03	97.4	97.5	8.6	8.7	1.8	1.8	<2.5	<2.5
						17.1		7.9		0.03		97.5		8.7		1.7			
9-Jan-08	Sunny	Calm	12:02	Middle	0.19	18.0	18	7.9	7.9	0.03	0.03	97.4	97.5	8.6	8.7	2.0	2	<2.5	<2.5
						18.0		7.9		0.03		97.5		8.7		1.9			
11-Jan-08	Sunny	Calm	9:26	Middle	0.19	17.5	17.5	8.0	8	0.03	0.03	97.7	97.8	8.5	8.5	1.8	1.8	<2.5	<2.5
						17.5		8.0		0.03		97.8		8.5		1.8			
14-Jan-08	Cloudy	Calm	13:11	Middle	0.19	16.6	16.6	7.9	8	0.03	0.03	97.7	97.8	8.4	8.5	1.9	1.9	<2.5	<2.5
						16.6		8.0		0.03		97.8		8.5		1.8			
16-Jan-08	Cloudy	Calm	11:06	Middle	0.19	16.5	16.5	8.0	8	0.03	0.03	97.5	97.6	8.5	8.6	2.0	1.9	<2.5	<2.5
						16.5		8.0		0.03		97.6		8.6		1.8			
18-Jan-08	Cloudy	Calm	11:28	Middle	0.19	16.6	16.6	7.9	8	0.03	0.03	97.4	97.5	8.7	8.7	1.8	1.7	<2.5	<2.5
						16.6		8.0		0.03		97.5		8.7		1.6			
21-Jan-08	Sunny	Calm	11:48	Middle	0.19	16.8	16.8	7.9	7.9	0.03	0.03	97.5	97.6	8.5	8.6	1.9	1.8	<2.5	<2.5
						16.8		7.9		0.03		97.6		8.6		1.7			
23-Jan-08	Fine	Calm	12:15	Middle	0.19	16.9	16.9	7.9	8	0.03	0.03	97.4	97.5	8.6	8.6	1.4	1.4	<2.5	<2.5
						16.9		8.0		0.03		97.5		8.6		1.4			
25-Jan-08	Cloudy	Calm	11:56	Middle	0.19	16.7	16.7	8.0	8	0.03	0.03	97.3	97.4	8.5	8.5	1.6	1.6	<2.5	<2.5
						16.7		8.0		0.03		97.4		8.5		1.6			
28-Jan-08	Cloudy	Calm	11:29	Middle	0.19	16.7	16.7	7.9	7.9	0.03	0.03	97.5	97.6	8.5	8.5	1.7	1.7	<2.5	<2.5
						16.7		7.9		0.03		97.6		8.5		1.6			
30-Jan-08	Rainy	Calm	12:35	Middle	0.19	16.8	16.8	7.8	7.8	0.03	0.03	97.4	97.5	8.6	8.6	1.5	1.5	<2.5	<2.5
						16.8		7.8		0.03		97.5		8.6		1.4			

The reporting limit for laboratory analysis of suspended solids is 2.5 mg/L. For the results below the reporting limit, the SS level will be taken as 2.5 mg/L.

Remarks: \* Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher  
 \*\* Cancelled due to Thunderstorm Warning

## Water Quality Monitoring Results at TCB\_I

Date	Weather Condition	Sea Condition*	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Jan-08	Sunny	Calm	13:23	Middle	0.35	16.3 16.3	16.3	7.3 7.3	7.3	11.99 12.02	12.01	96.6 96.4	96.5	8.2 8.2	8.2	3.1 3.2	3.2	<2.5 <2.5	<2.5
4-Jan-08	Sunny	Calm	13:30	Middle	0.35	16.4 16.4	16.4	7.3 7.4	7.4	11.97 12.00	11.99	96.7 96.5	96.6	8.3 8.2	8.3	3.3 3.4	3.4	<2.5 <2.5	<2.5
7-Jan-08	Sunny	Calm	13:59	Middle	0.35	17.3 17.3	17.3	7.4 7.4	7.4	12.00 12.03	12.02	96.5 96.3	96.4	8.2 8.2	8.2	3.1 3.0	3.1	<2.5 <2.5	<2.5
9-Jan-08	Sunny	Calm	14:05	Middle	0.35	18.2 18.2	18.2	7.5 7.5	7.5	11.99 12.02	12.01	96.5 96.3	96.4	8.2 8.2	8.2	3.2 3.1	3.2	<2.5 <2.5	<2.5
11-Jan-08	Sunny	Calm	11:29	Middle	0.35	17.6 17.6	17.6	7.5 7.5	7.5	12.13 12.16	12.15	97.0 96.8	96.9	8.1 8.0	8.1	3.3 3.2	3.3	<2.5 <2.5	<2.5
14-Jan-08	Cloudy	Calm	15:15	Middle	0.35	16.8 16.8	16.8	7.5 7.5	7.5	12.18 12.21	12.2	97.0 96.8	96.9	8.1 8.0	8.1	3.2 3.1	3.2	<2.5 <2.5	<2.5
16-Jan-08	Cloudy	Calm	13:09	Middle	0.35	16.6 16.6	16.6	7.5 7.5	7.5	12.09 12.12	12.11	96.7 96.5	96.6	8.1 8.1	8.1	3.3 3.2	3.3	<2.5 <2.5	<2.5
18-Jan-08	Cloudy	Calm	13:32	Middle	0.35	16.7 16.7	16.7	7.5 7.5	7.5	12.02 12.05	12.04	96.8 96.5	96.7	8.2 8.2	8.2	3.1 3.0	3.1	3.0 3.0	3
21-Jan-08	Sunny	Calm	13:51	Middle	0.35	16.9 16.9	16.9	7.5 7.5	7.5	12.13 12.16	12.15	96.9 96.7	96.8	8.1 8.1	8.1	3.2 3.1	3.2	<2.5 <2.5	<2.5
23-Jan-08	Fine	Calm	14:18	Middle	0.35	17.1 17.1	17.1	7.5 7.5	7.5	12.06 12.09	12.08	96.7 96.5	96.6	8.1 8.1	8.1	3.3 3.2	3.3	<2.5 <2.5	<2.5
25-Jan-08	Cloudy	Calm	13:59	Middle	0.35	16.9 16.9	16.9	7.5 7.5	7.5	11.81 11.84	11.83	96.7 96.5	96.6	8.1 8.1	8.1	3.7 3.6	3.7	<2.5 <2.5	<2.5
28-Jan-08	Cloudy	Calm	13:32	Middle	0.35	16.9 16.9	16.9	7.4 7.5	7.5	12.02 12.05	12.04	96.9 96.7	96.8	8.1 8.1	8.1	3.8 3.7	3.8	<2.5 <2.5	<2.5
30-Jan-08	Rainy	Calm	14:38	Middle	0.35	17.0 17.0	17	7.4 7.4	7.4	11.98 12.01	12	96.9 96.6	96.8	8.2 8.2	8.2	3.6 3.5	3.6	<2.5 <2.5	<2.5

The reporting limit for laboratory analysis of suspended solids is 2.5 mg/L. For the results below the reporting limit, the SS level will be taken as 2.5 mg/L.

Remarks: \* Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher  
 \*\* Cancelled due to Thunderstorm Warning

## Water Quality Monitoring Results at TCB\_R

Date	Weather Condition	Sea Condition*	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Jan-08	Sunny	Calm	13:18	Middle	0.2	16.4	16.4	7.3	7.3	19.12	19.14	95.1	95	8.1	8.1	4.1	4.2	<2.5	<2.5
						16.4		7.3		19.15		94.8		8.0		4.2			
4-Jan-08	Sunny	Calm	13:25	Middle	0.2	16.5	16.5	7.4	7.4	19.15	19.16	95.0	94.9	8.1	8.1	4.3	4.4	<2.5	<2.5
						16.5		7.4		19.17		94.7		8.1		4.4			
7-Jan-08	Sunny	Calm	13:54	Middle	0.2	17.4	17.4	7.4	7.5	19.11	19.12	95.1	95	8.0	8	4.6	4.6	<2.5	<2.5
						17.4		7.5		19.13		94.8		8.0		4.5			
9-Jan-08	Sunny	Calm	14:00	Middle	0.2	18.3	18.3	7.5	7.5	19.11	19.13	95.1	95	8.1	8.1	4.7	4.7	<2.5	<2.5
						18.3		7.5		19.14		94.8		8.0		4.6			
11-Jan-08	Sunny	Calm	11:24	Middle	0.2	17.7	17.7	7.6	7.6	18.83	18.85	95.9	95.8	8.0	8	4.8	4.8	<2.5	<2.5
						17.7		7.6		18.86		95.7		7.9		4.7			
14-Jan-08	Cloudy	Calm	15:09	Middle	0.2	16.8	16.8	7.5	7.6	18.72	18.73	96.1	96	8.0	8	4.7	4.7	<2.5	<2.5
						16.8		7.6		18.74		95.9		7.9		4.6			
16-Jan-08	Cloudy	Calm	13:04	Middle	0.2	16.7	16.7	7.6	7.6	18.91	18.92	95.6	95.5	8.0	8	3.8	3.8	<2.5	<2.5
						16.7		7.6		18.93		95.3		8.0		3.7			
18-Jan-08	Cloudy	Calm	13:27	Middle	0.2	16.8	16.8	7.5	7.6	19.04	19.05	95.3	95.2	8.1	8.1	3.6	3.6	3.0	3
						16.8		7.6		19.06		95.0		8.1		3.5		3.0	
21-Jan-08	Sunny	Calm	13:46	Middle	0.2	17.0	17	7.5	7.5	18.82	18.83	95.8	95.7	8.0	8	3.7	3.7	<2.5	<2.5
						17.0		7.5		18.84		95.5		8.0		3.6			
23-Jan-08	Fine	Calm	14:13	Middle	0.2	17.2	17.2	7.5	7.6	18.96	18.97	95.4	95.3	8.0	8	4.1	4.1	<2.5	<2.5
						17.2		7.6		18.98		95.1		8.0		4.1			
25-Jan-08	Cloudy	Calm	13:54	Middle	0.2	17.0	17	7.6	7.6	19.48	19.5	95.6	95.5	8.0	8	4.5	4.5	<2.5	<2.5
						17.0		7.6		19.51		95.3		8.0		4.5			
28-Jan-08	Cloudy	Calm	13:27	Middle	0.2	16.9	16.9	7.5	7.5	19.04	19.06	95.9	95.8	8.0	8	4.2	4.2	<2.5	<2.5
						16.9		7.5		19.07		95.7		8.0		4.2			
30-Jan-08	Rainy	Calm	14:33	Middle	0.2	17.0	17	7.4	7.4	19.11	19.12	95.4	95.3	8.1	8.1	4.0	4	3.0	3
						17.0		7.4		19.13		95.2		8.0		4.0		3.0	

The reporting limit for laboratory analysis of suspended solids is 2.5 mg/L. For the results below the reporting limit, the SS level will be taken as 2.5 mg/L.

Remarks: \* Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher  
 \*\* Cancelled due to Thunderstorm Warning



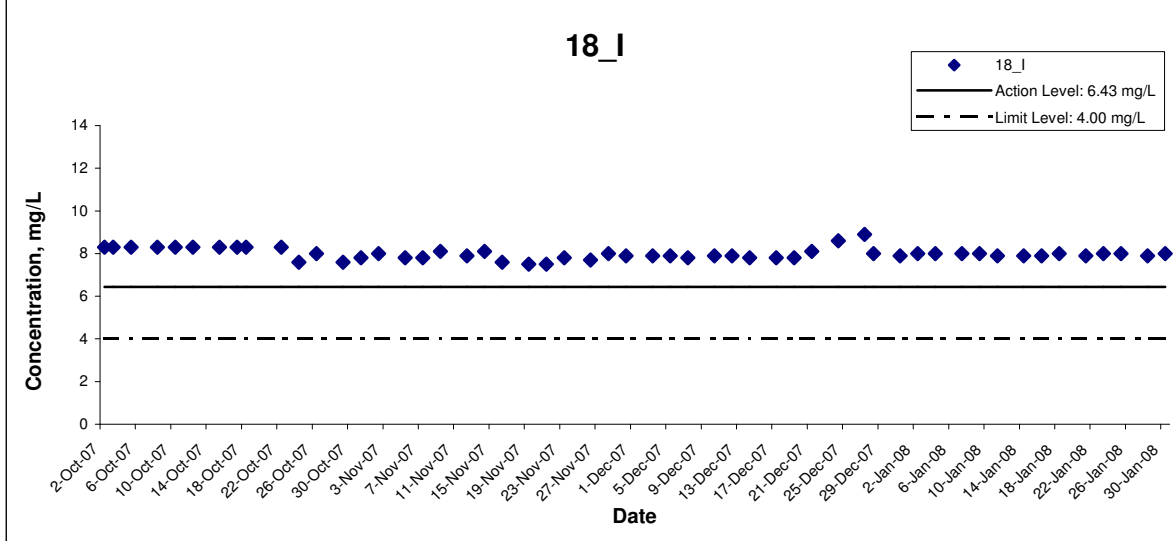
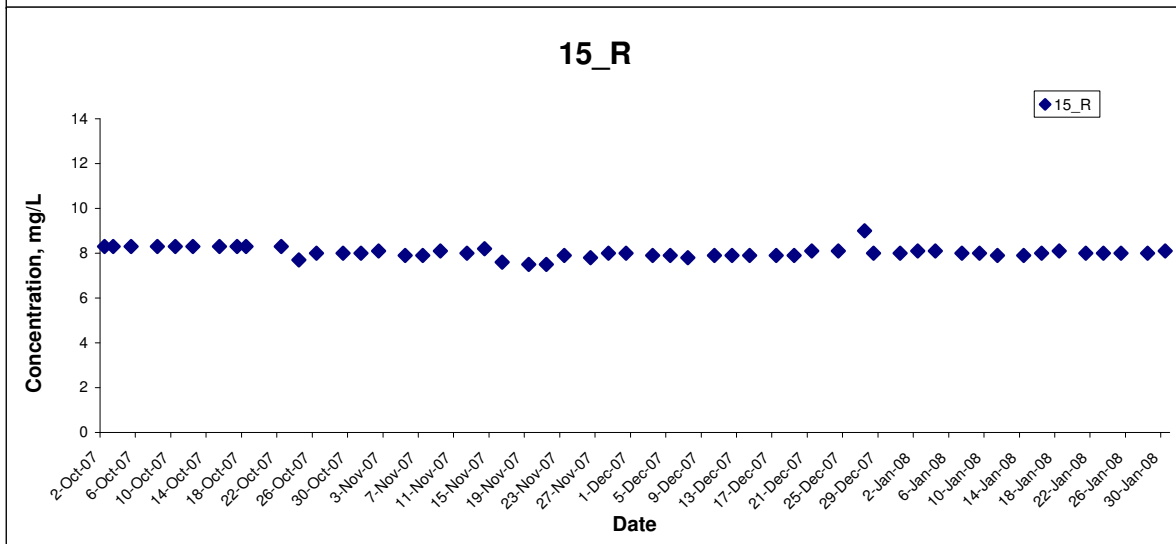
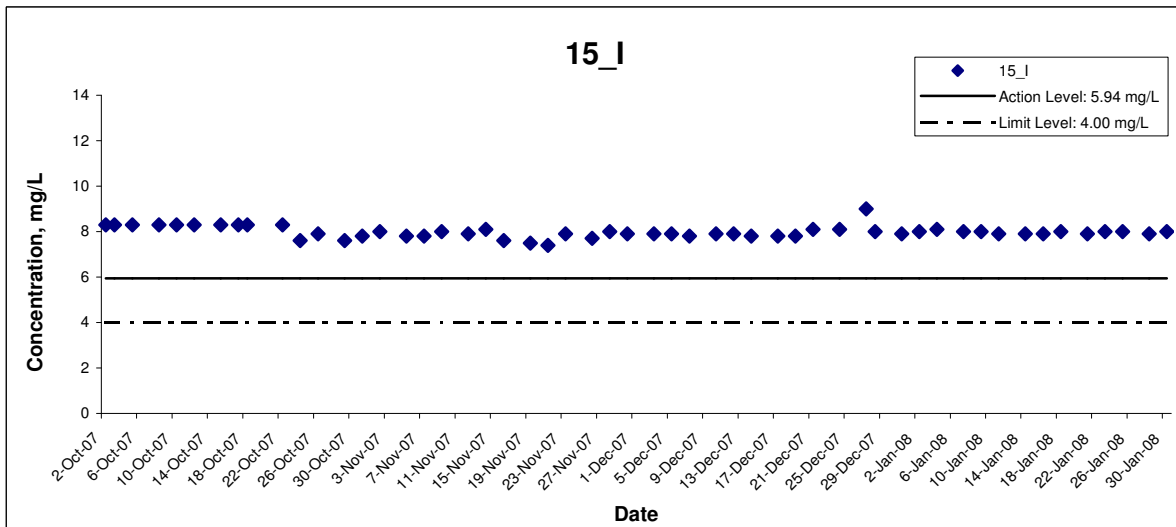
## Water Quality Monitoring Results at TCS\_I

Date	Weather Condition	Sea Condition*	Sampling Time	Depth (m)		Temperature (°C)		pH		Salinity ppt		DO Saturation (%)		Dissolved Oxygen (mg/L)		Turbidity(NTU)		Suspended Solids (mg/L)	
						Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average	Value	Average
2-Jan-08	Sunny	Calm	13:00	Middle	0.2	16.1	16.1	7.3	7.4	0.02	0.02	91.2	91	8.0	8	1.6	1.6	<2.5	<2.5
						16.1		7.4		0.02		90.8		8.0		1.6			
4-Jan-08	Sunny	Calm	13:07	Middle	0.2	16.2	16.2	7.4	7.5	0.02	0.02	91.0	90.8	8.0	8	1.7	1.7	<2.5	<2.5
						16.2		7.5		0.02		90.6		8.0		1.7			
7-Jan-08	Sunny	Calm	13:36	Middle	0.2	17.0	17.1	7.5	7.5	0.02	0.02	91.2	91.1	8.0	8	1.6	1.6	<2.5	<2.5
						17.1		7.5		0.02		90.9		7.9		1.6			
9-Jan-08	Sunny	Calm	13:42	Middle	0.2	17.9	17.9	7.6	7.6	0.02	0.02	91.2	91	8.0	8	1.8	1.8	<2.5	<2.5
						17.9		7.6		0.02		90.8		8.0		1.8			
11-Jan-08	Sunny	Calm	11:06	Middle	0.2	17.4	17.4	7.6	7.6	0.02	0.02	92.3	92.2	7.9	7.9	1.9	1.9	<2.5	<2.5
						17.4		7.6		0.02		92.0		7.9		1.9			
14-Jan-08	Cloudy	Calm	14:52	Middle	0.2	16.5	16.5	7.6	7.6	0.02	0.02	92.4	92.3	7.9	7.9	1.7	1.7	<2.5	<2.5
						16.5		7.6		0.02		92.1		7.8		1.7			
16-Jan-08	Cloudy	Calm	12:47	Middle	0.2	16.4	16.4	7.6	7.6	0.02	0.02	91.8	91.7	7.9	7.9	1.9	1.9	<2.5	<2.5
						16.4		7.6		0.02		91.5		7.9		1.9			
18-Jan-08	Cloudy	Calm	13:09	Middle	0.2	16.5	16.5	7.6	7.6	0.02	0.02	91.3	91.2	8.0	8	1.6	1.6	3.0	3
						16.5		7.6		0.02		91.0		8.0		1.6		3.0	
21-Jan-08	Sunny	Calm	13:28	Middle	0.2	16.7	16.7	7.6	7.6	0.02	0.02	91.9	91.8	7.9	7.9	1.7	1.7	<2.5	<2.5
						16.7		7.6		0.02		91.6		7.9		1.7			
23-Jan-08	Fine	Calm	13:55	Middle	0.2	16.8	16.9	7.6	7.6	0.02	0.02	91.5	91.4	7.9	7.9	1.7	1.7	<2.5	<2.5
						16.9		7.6		0.02		91.2		7.9		1.6			
25-Jan-08	Cloudy	Calm	13:37	Middle	0.2	16.6	16.6	7.6	7.6	0.02	0.02	92.2	92.1	7.9	7.9	1.9	1.9	<2.5	<2.5
						16.6		7.6		0.02		91.9		7.9		1.8			
28-Jan-08	Cloudy	Calm	13:10	Middle	0.2	16.6	16.6	7.5	7.6	0.02	0.02	92.3	92.2	7.9	7.9	2.0	2	<2.5	<2.5
						16.6		7.6		0.02		92.0		7.9		1.9			
30-Jan-08	Rainy	Calm	14:15	Middle	0.2	16.7	16.7	7.5	7.5	0.02	0.02	91.6	91.4	8.0	8	1.8	1.8	<2.5	<2.5
						16.7		7.5		0.02		91.2		8.0		1.7			

The reporting limit for laboratory analysis of suspended solids is 2.5 mg/L. For the results below the reporting limit, the SS level will be taken as 2.5 mg/L.

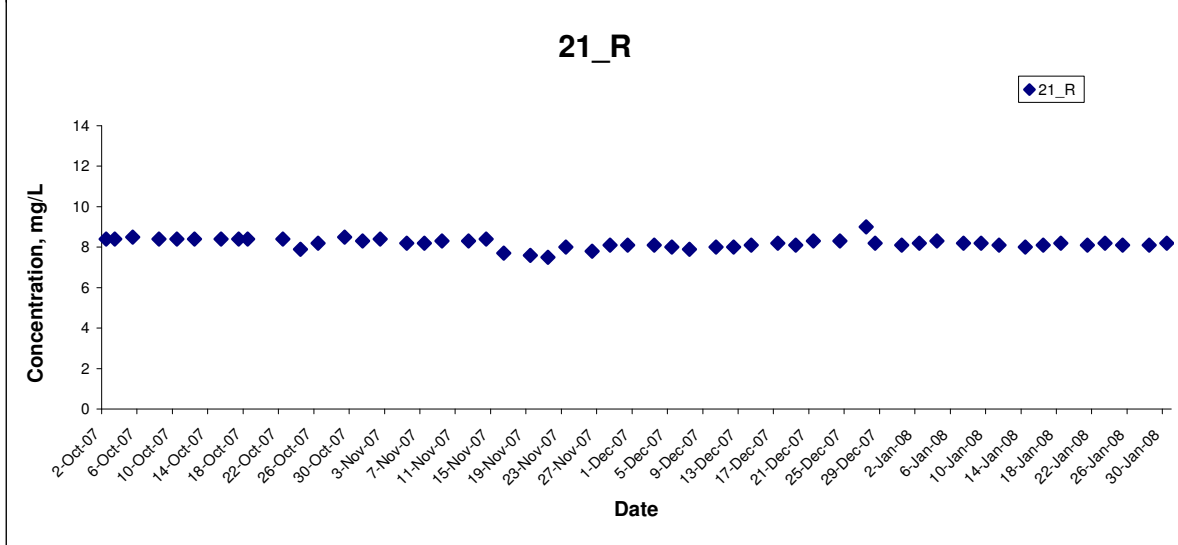
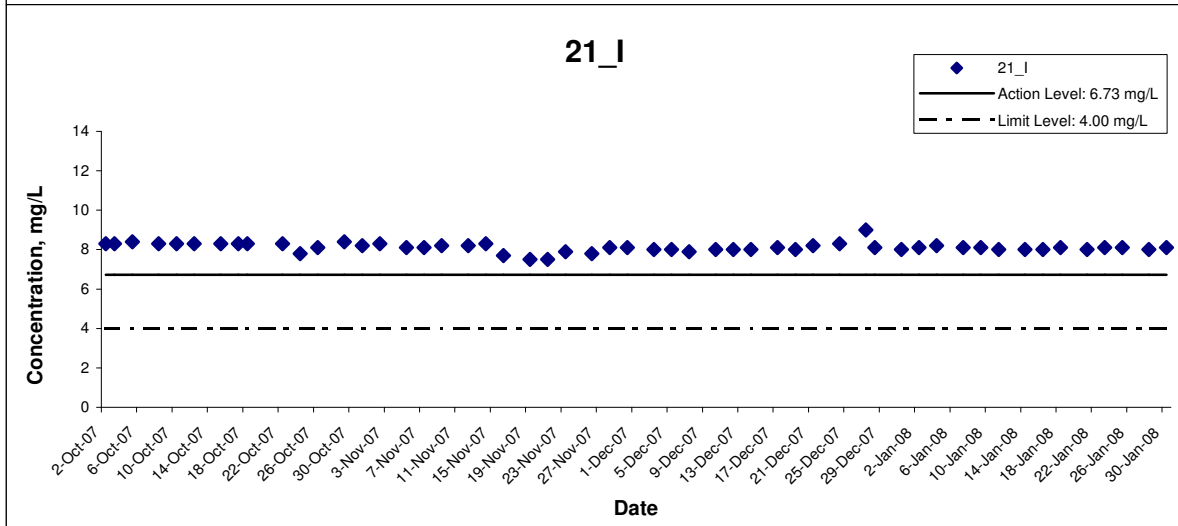
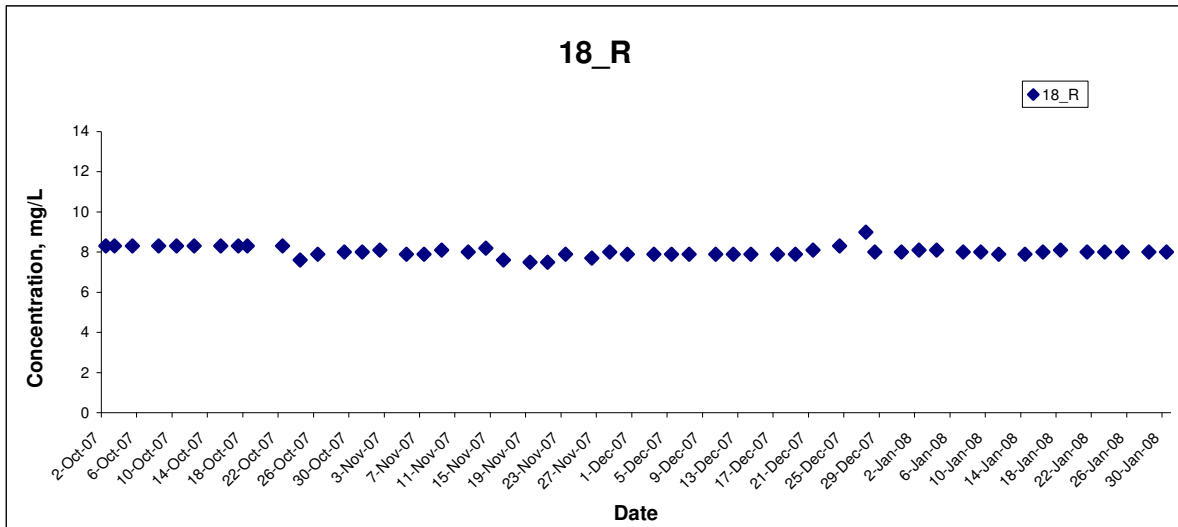
Remarks: \* Calm: Small or no wave; Moderate: Between calm and rough; Rough : White capped or rougher  
 \*\* Cancelled due to Thunderstorm Warning

## Dissolved Oxygen



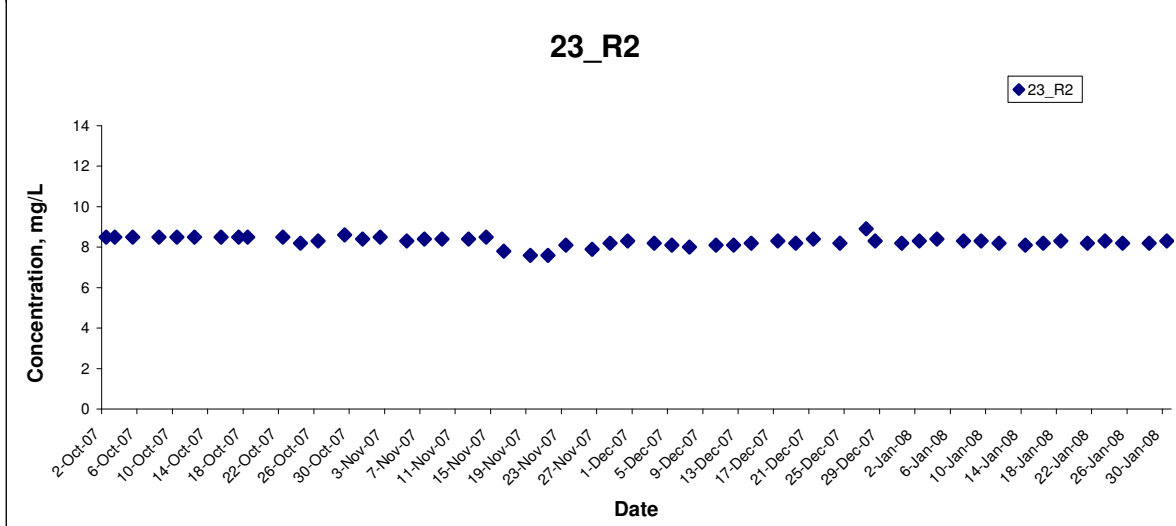
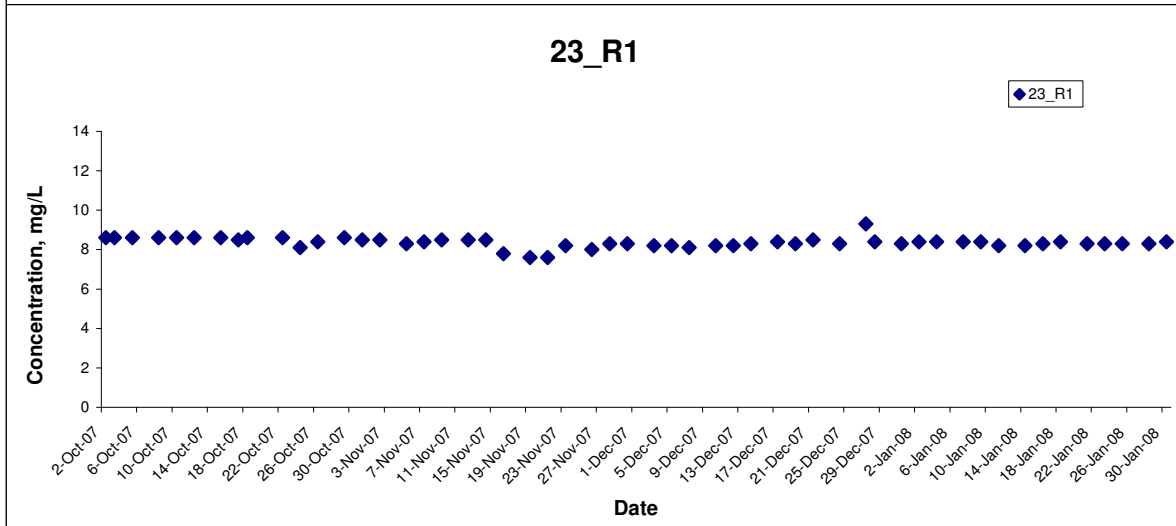
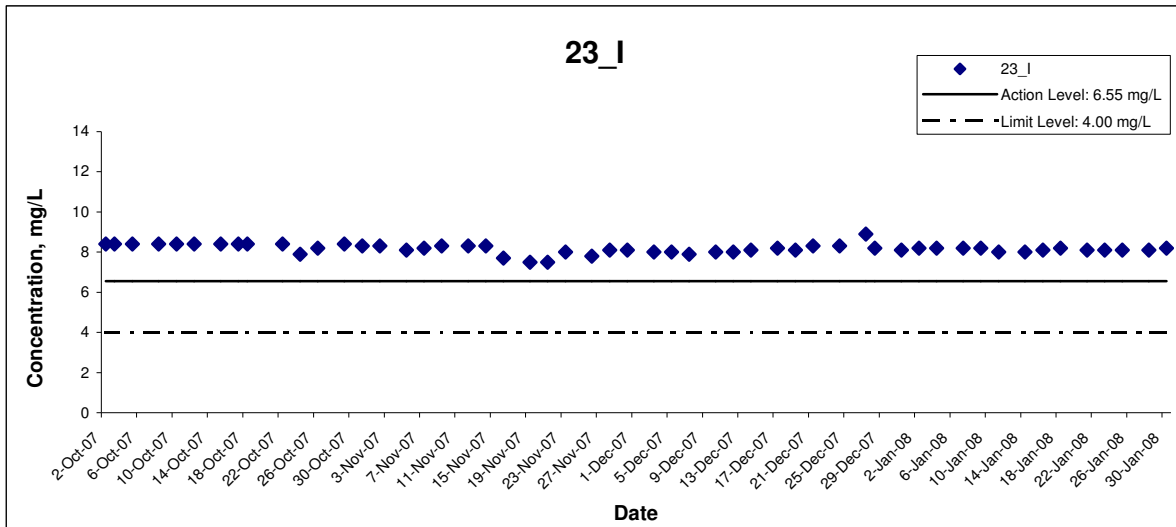
Title Contract No. HY/2003/19 Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha Graphical Presentation of Water Quality Monitoring Results	Scale	N.T.S	Project No. MA6030	CINOTECH
	Date	Jan 08	Appendix F	

## Dissolved Oxygen



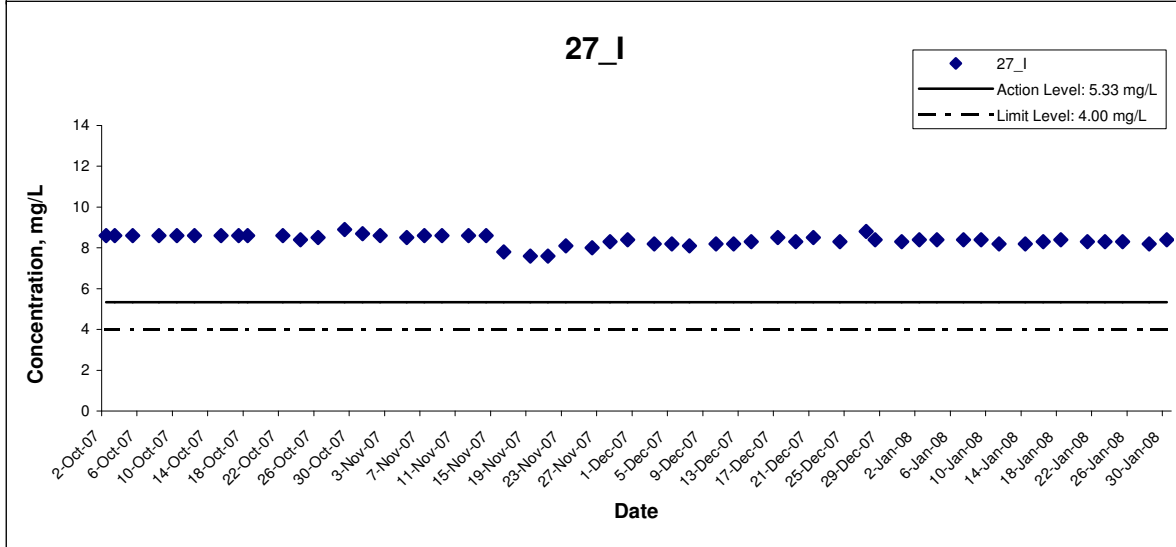
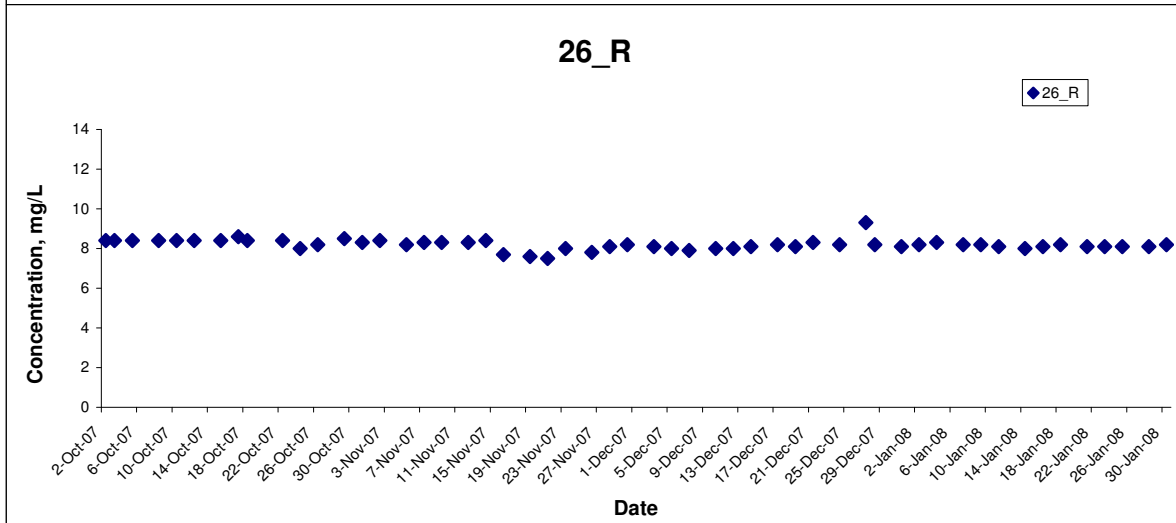
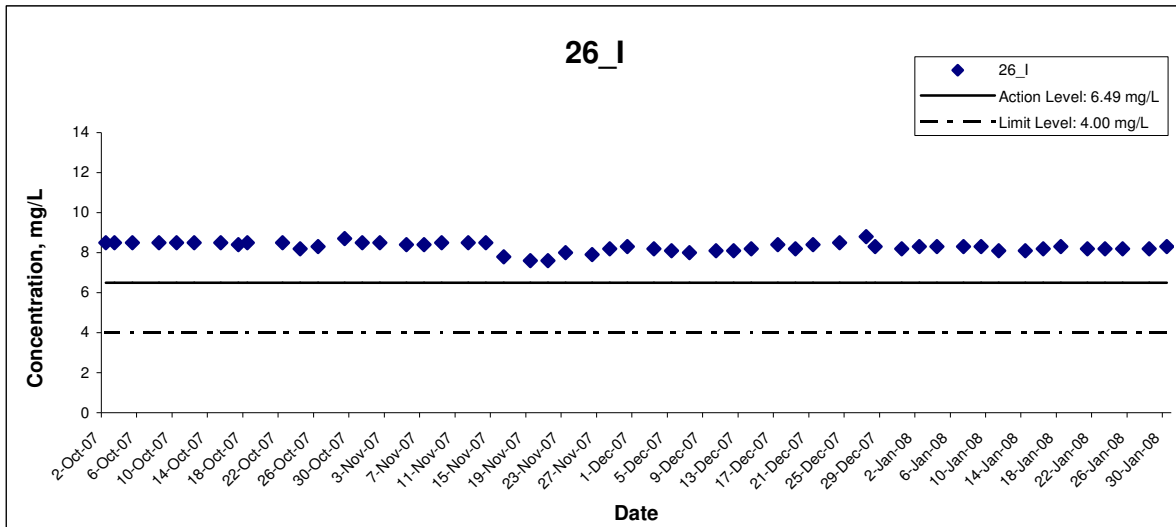
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	Date Jan 08	Appendix F	

## Dissolved Oxygen



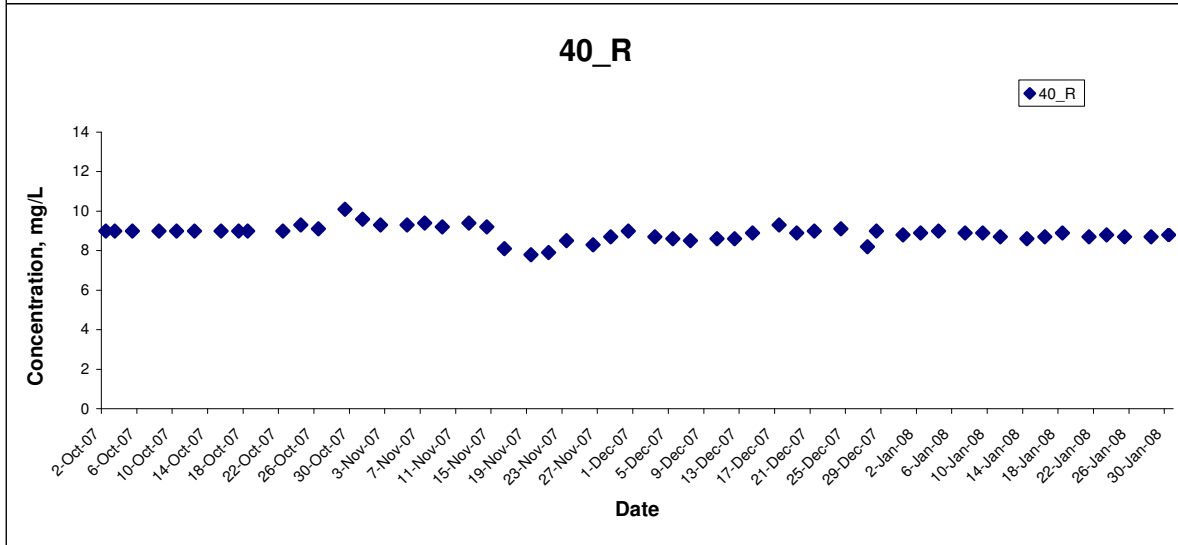
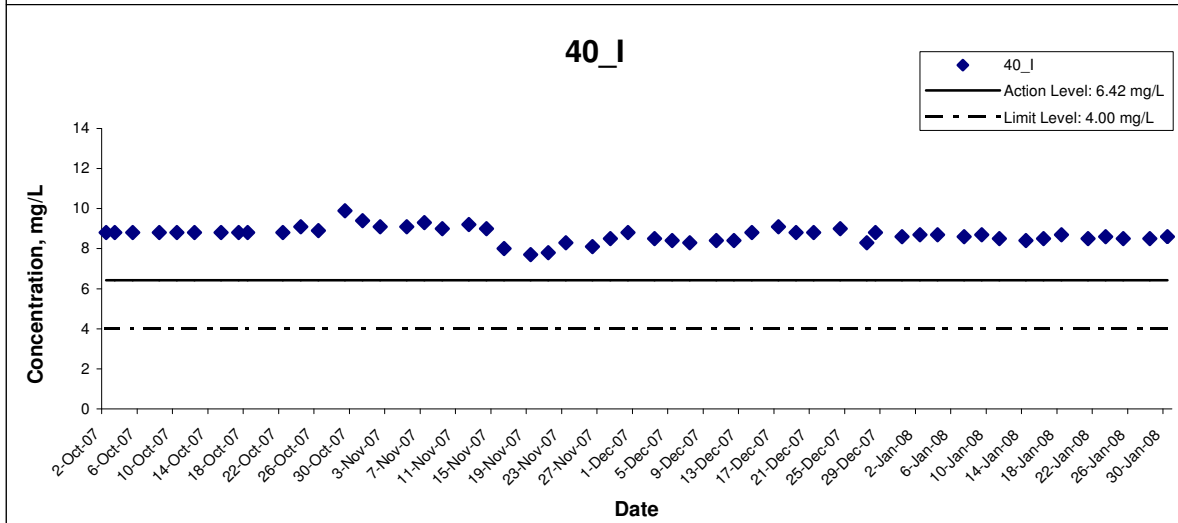
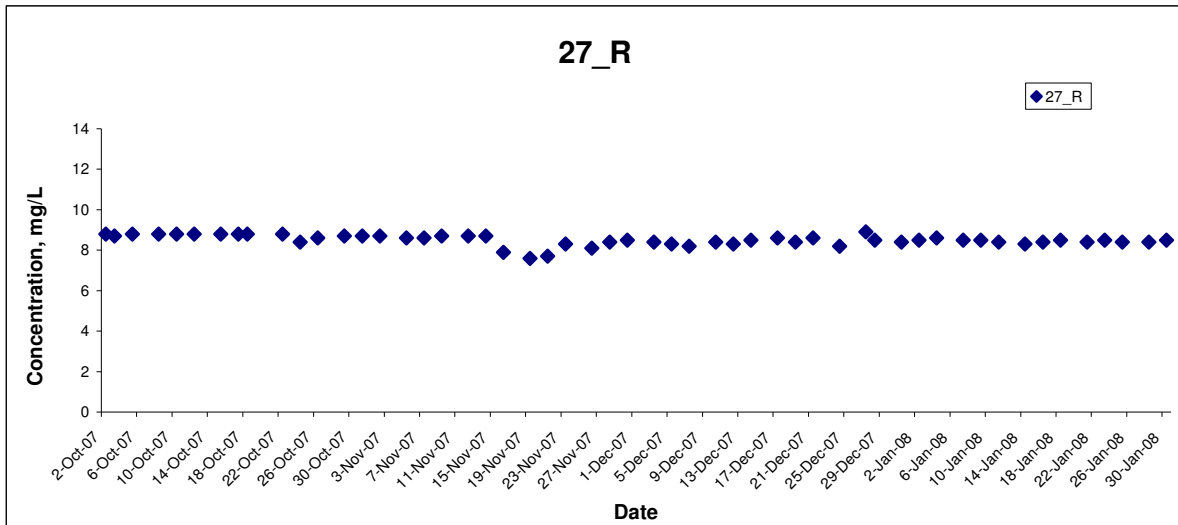
Title Contract No. HY/2003/19 Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha <b>Graphical Presentation of Water Quality Monitoring Results</b>	Scale N.T.S	Project No. MA6030	CINOTECH
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## Dissolved Oxygen



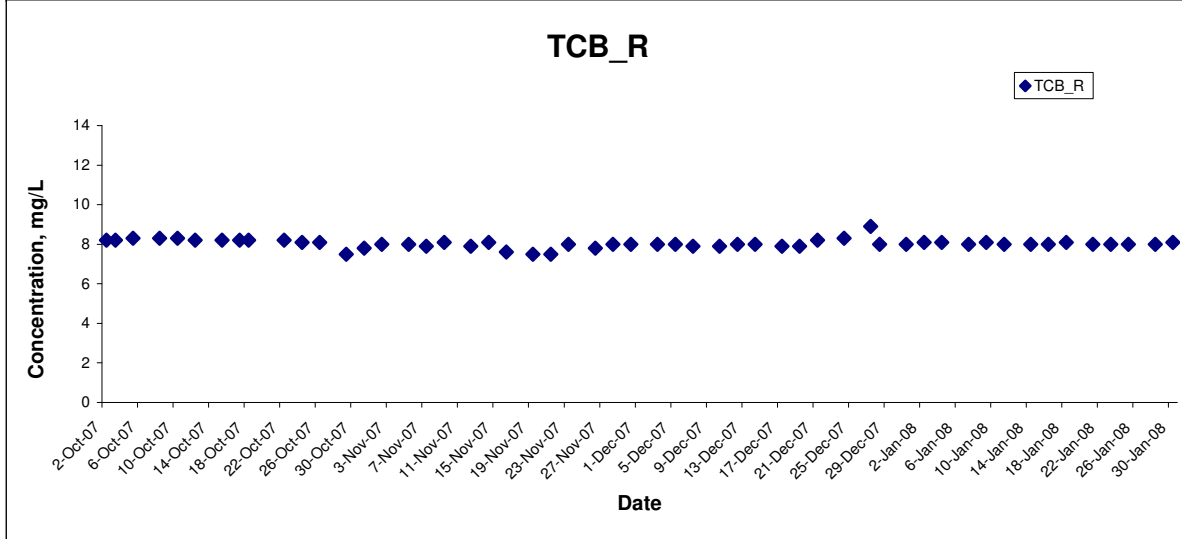
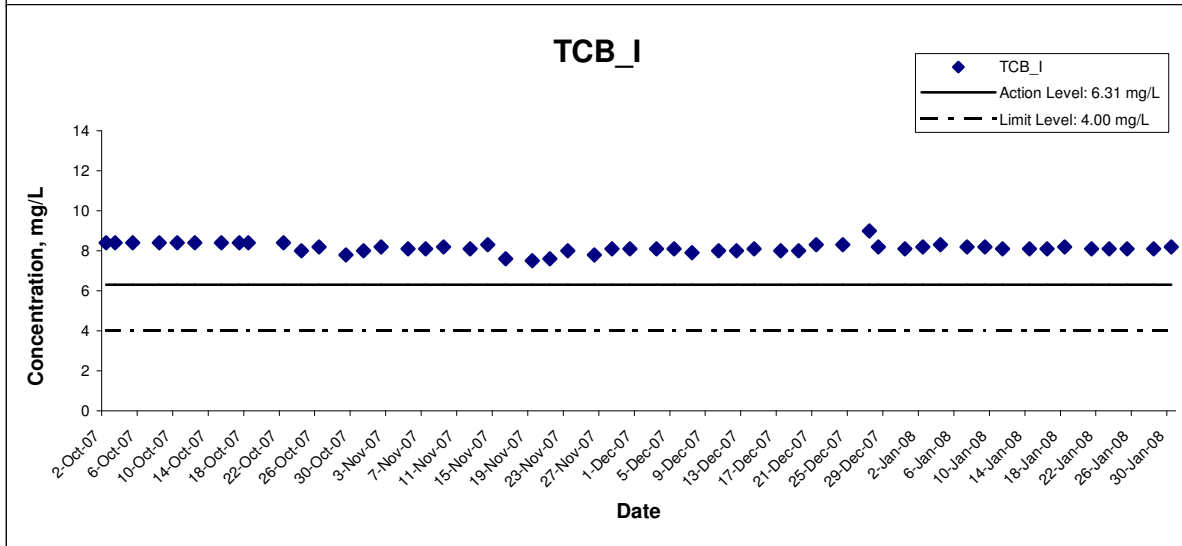
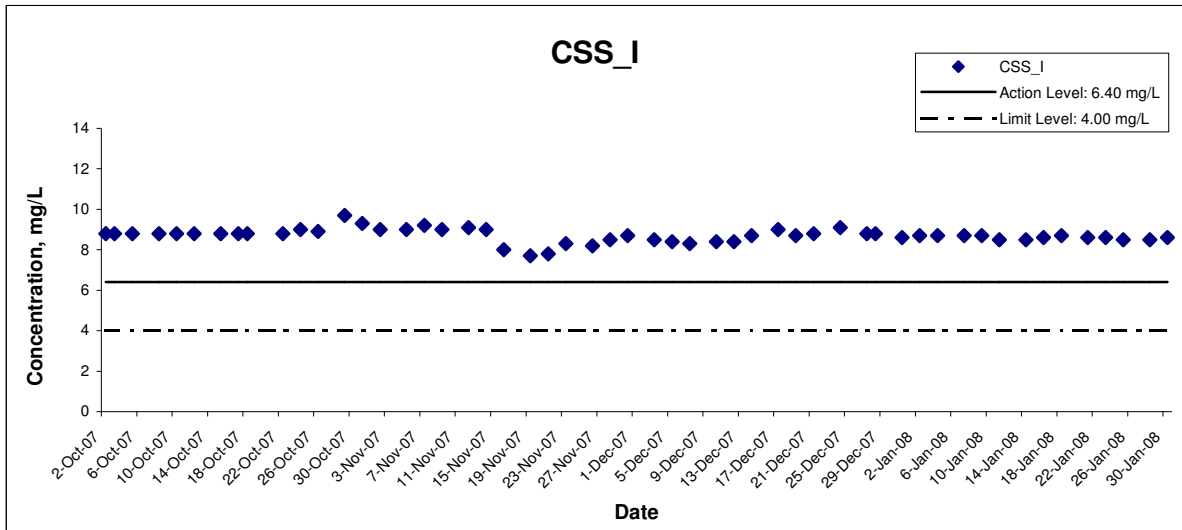
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	Date	Jan 08	Appendix	F	

## Dissolved Oxygen



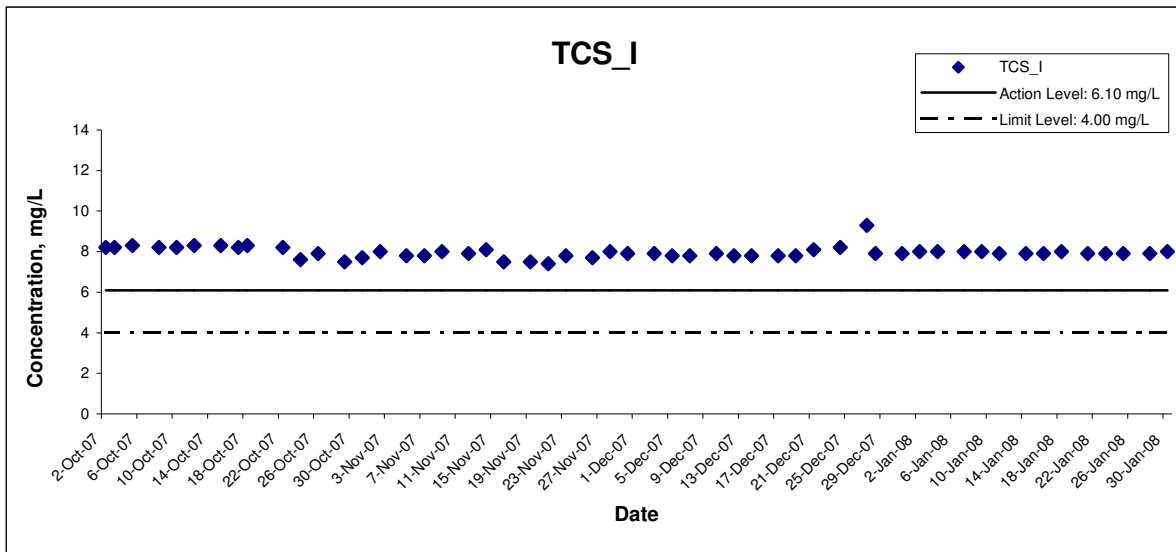
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## Dissolved Oxygen



Title Contract No. HY/2003/19 Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha Graphical Presentation of Water Quality Monitoring Results	Scale N.T.S	Project No. MA6030	<h1 style="margin: 0;">CINOTECH</h1>
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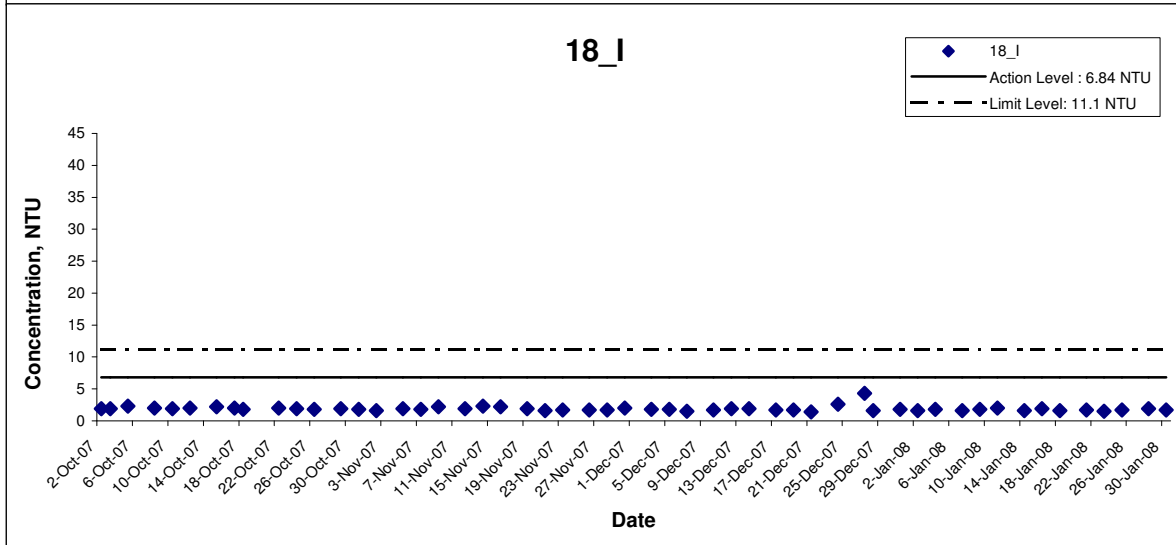
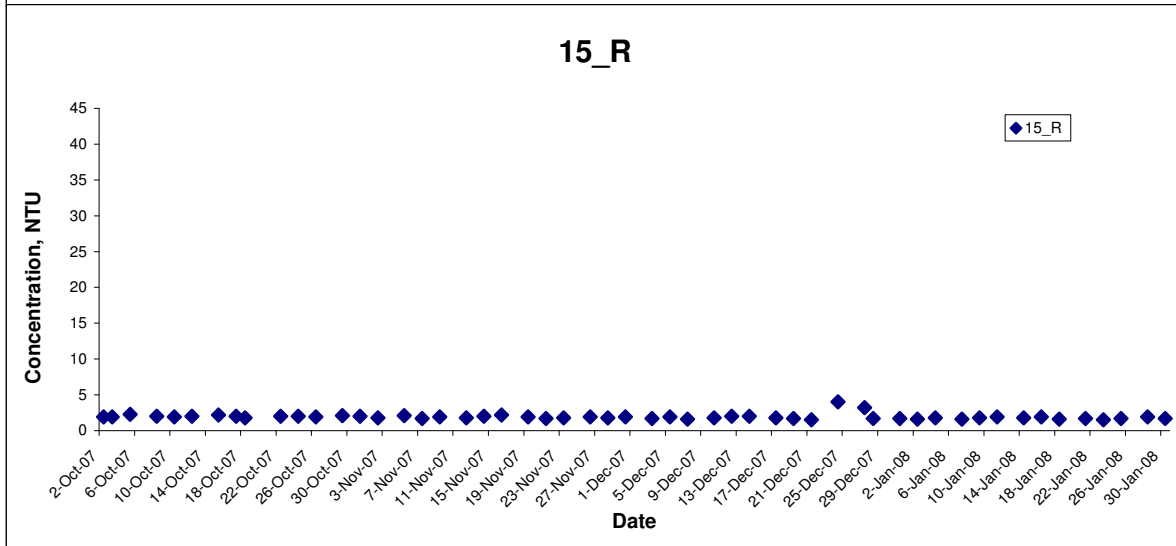
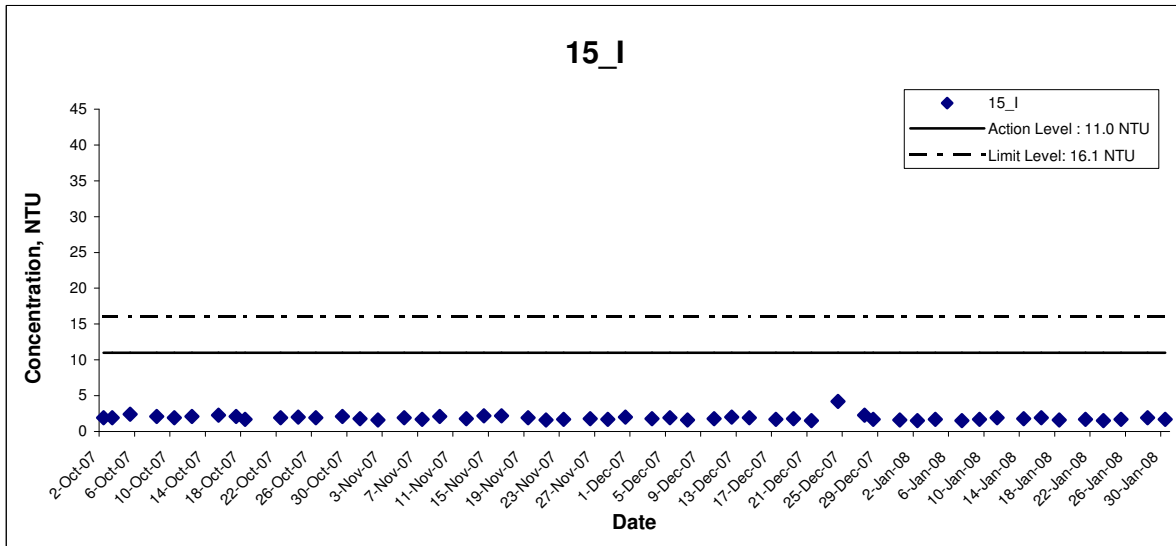
## Dissolved Oxygen



Title Contract No. HY/2003/19 Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha <b>Graphical Presentation of Water Quality Monitoring Results</b>	Scale N.T.S	Project No. MA6030	CINOTECH
	Date Jan 08	Appendix F	

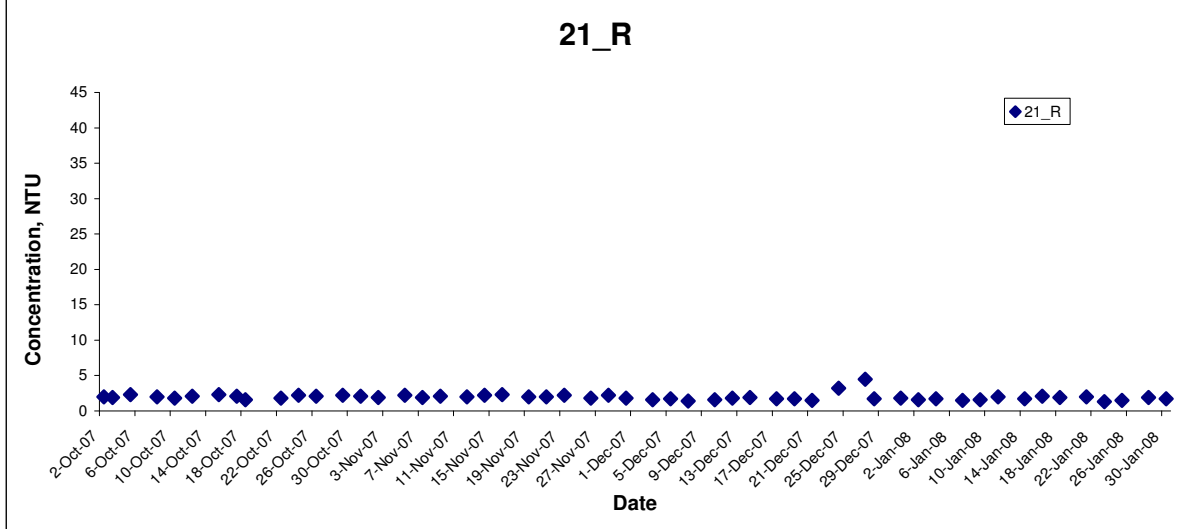
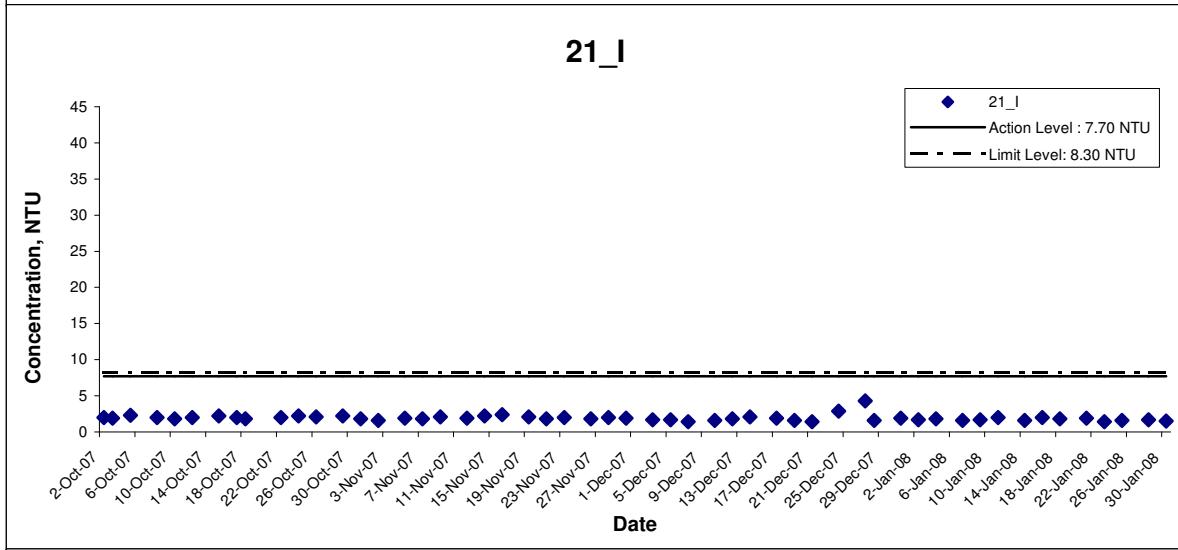
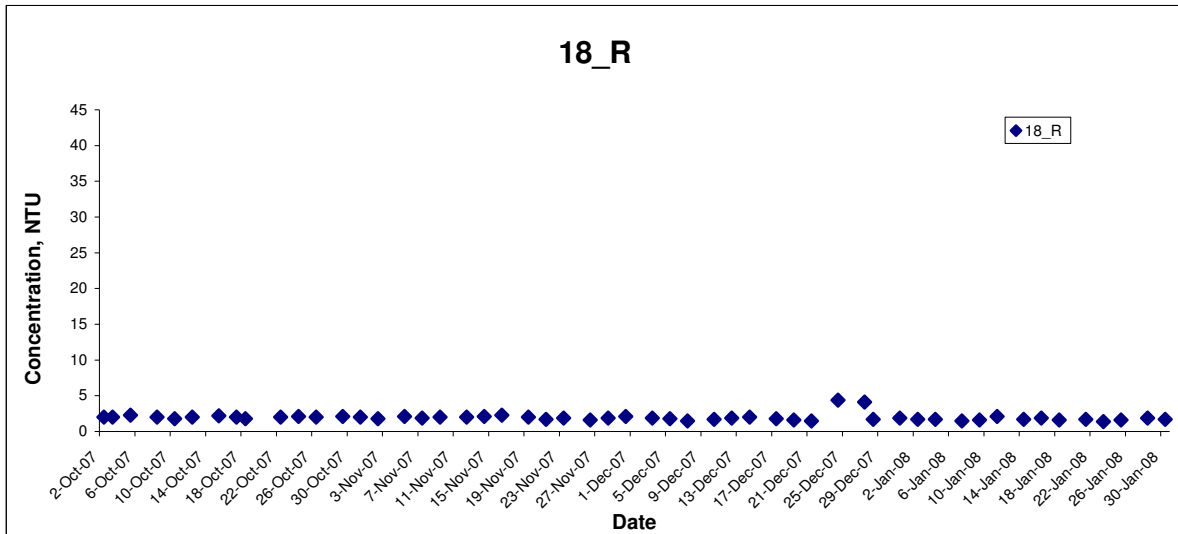


# Turbidity



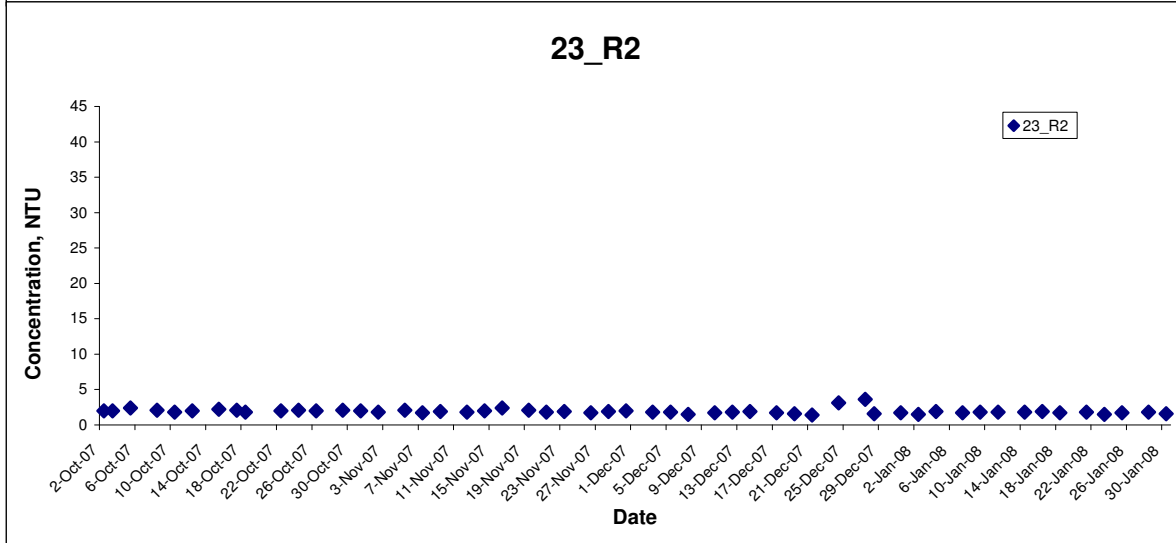
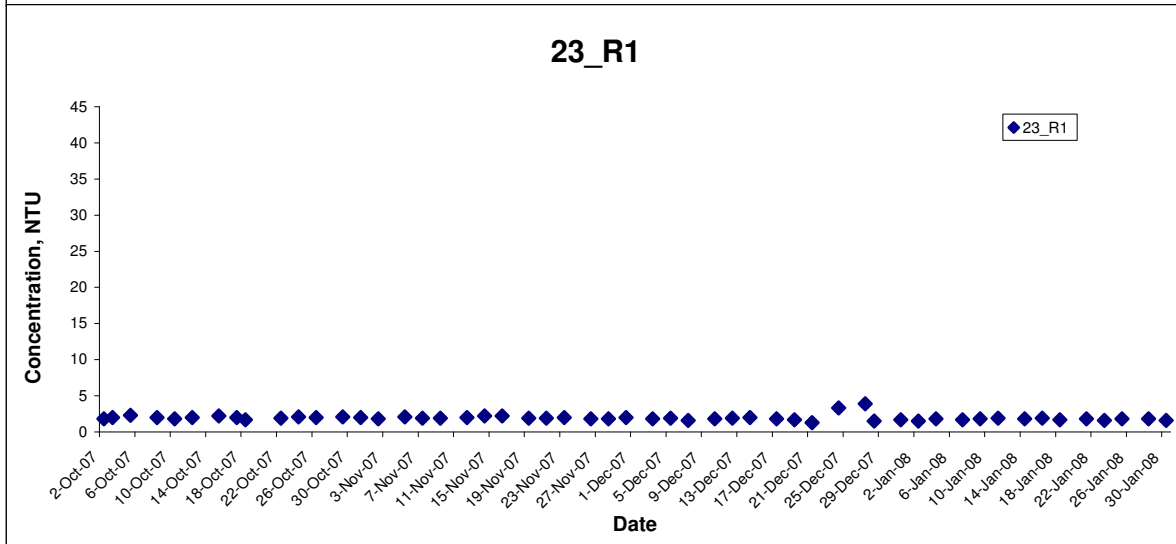
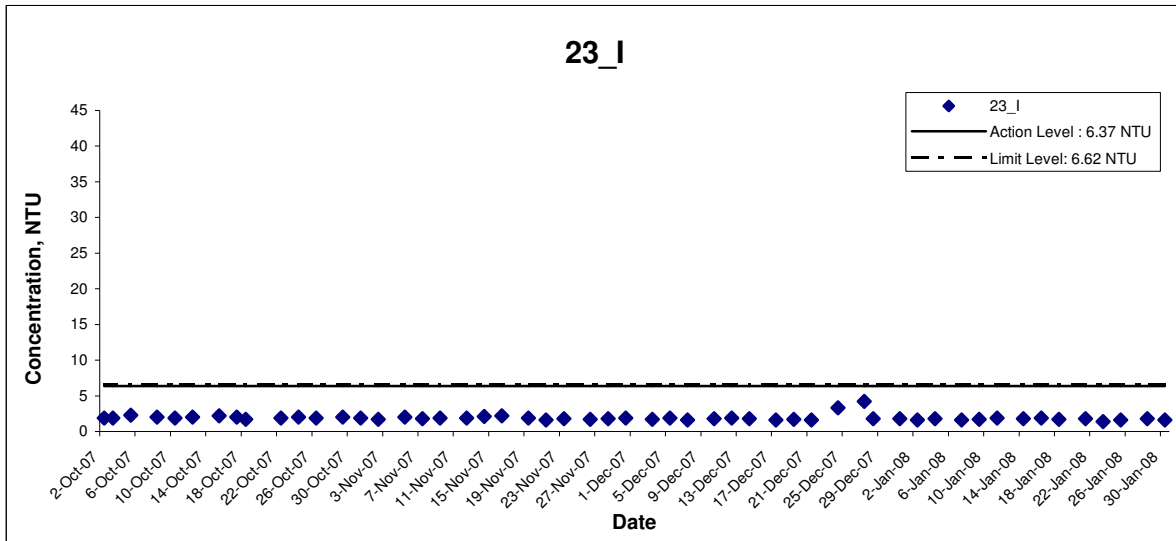
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## Turbidity



Title Contract No. HY/2003/19 Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha <b>Graphical Presentation of Water Quality Monitoring Results</b>	Scale	N.T.S	Project No.	MA6030	CINOTECH
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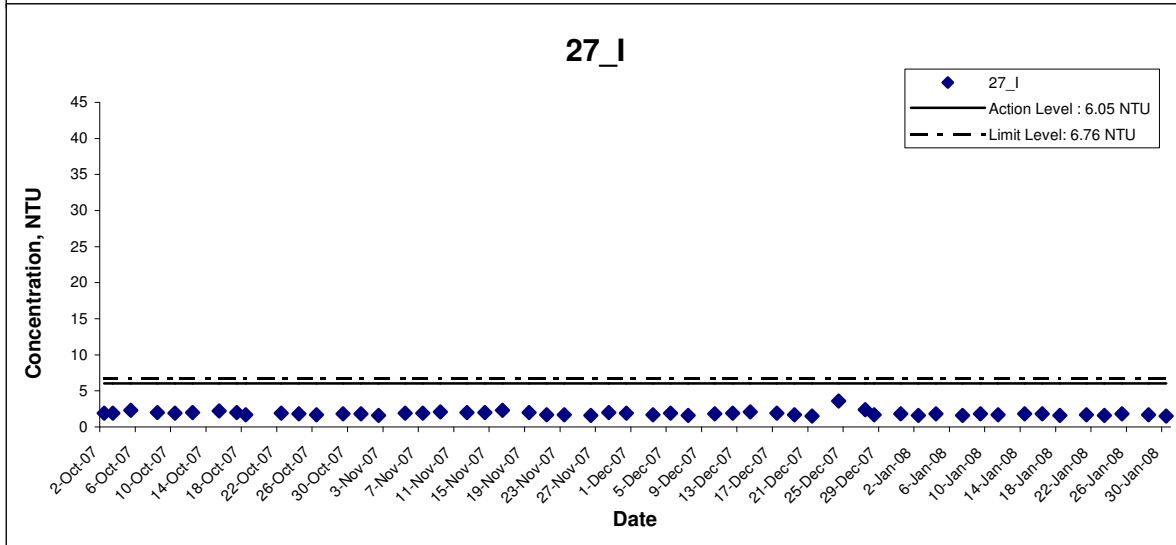
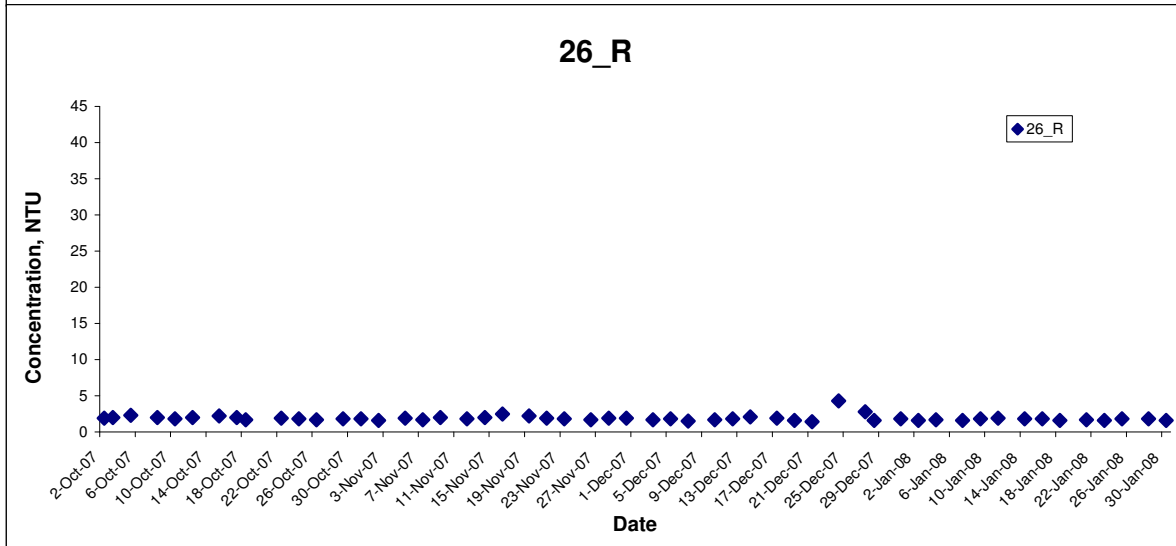
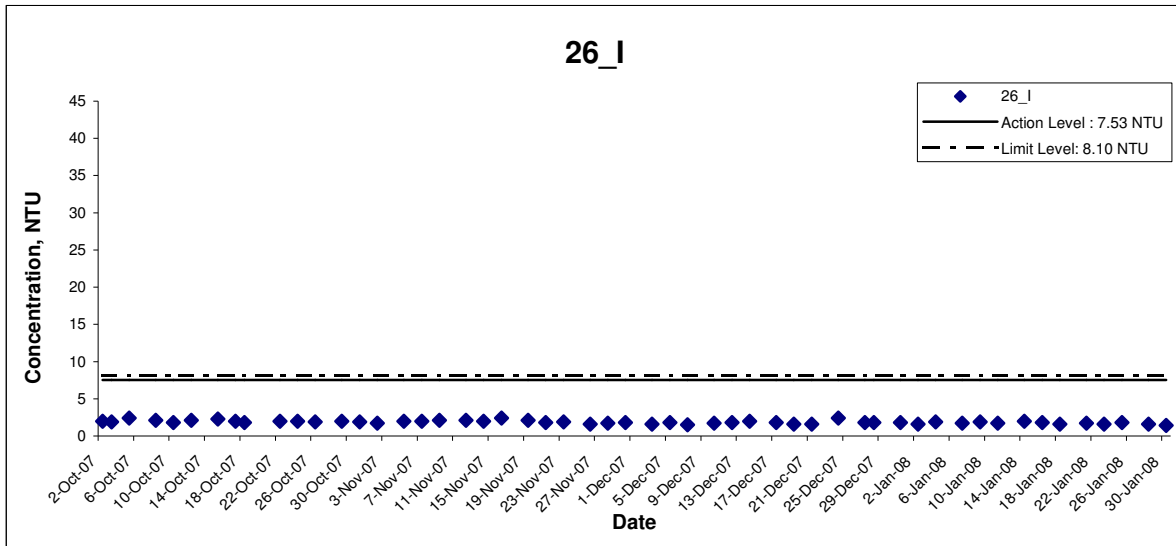
## Turbidity



Title Contract No. HY/2003/19 Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha <b>Graphical Presentation of Water Quality Monitoring Results</b>	Scale	N.T.S	Project No.	MA6030
	Date	Jan 08	Appendix	F

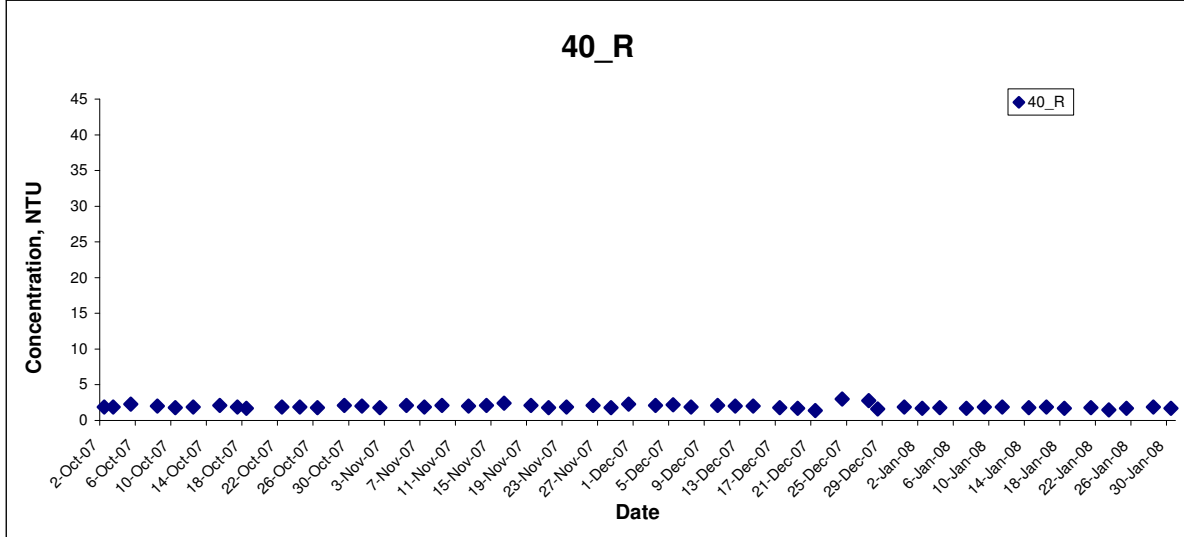
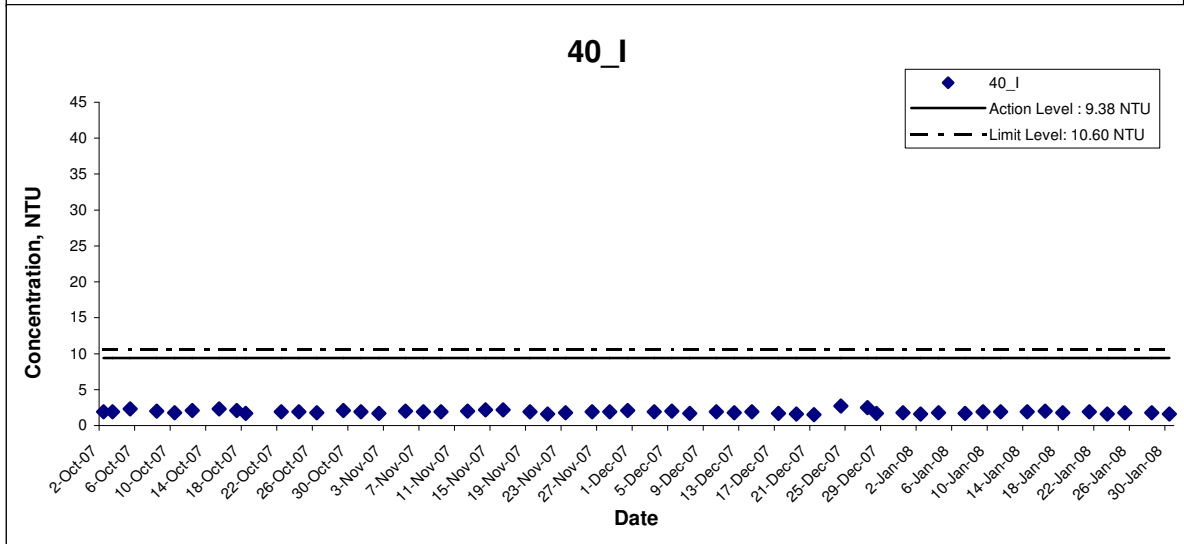
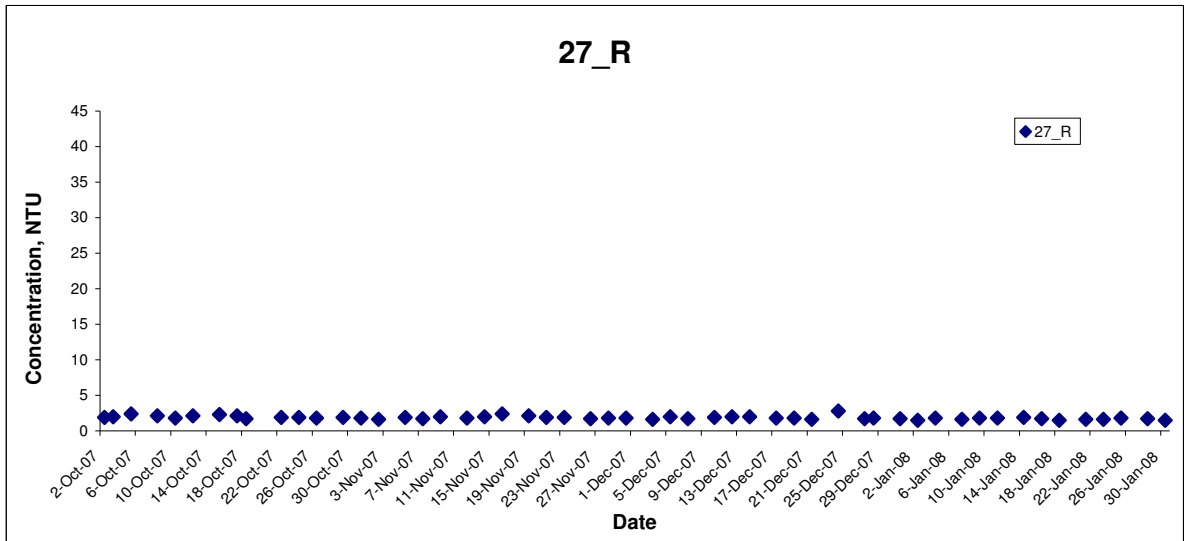
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## Turbidity



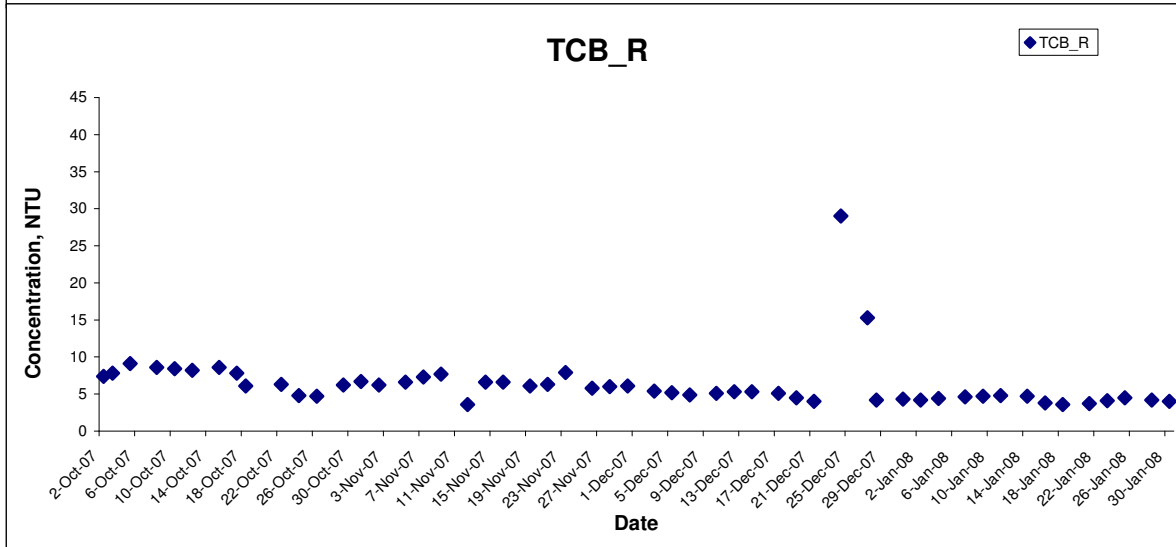
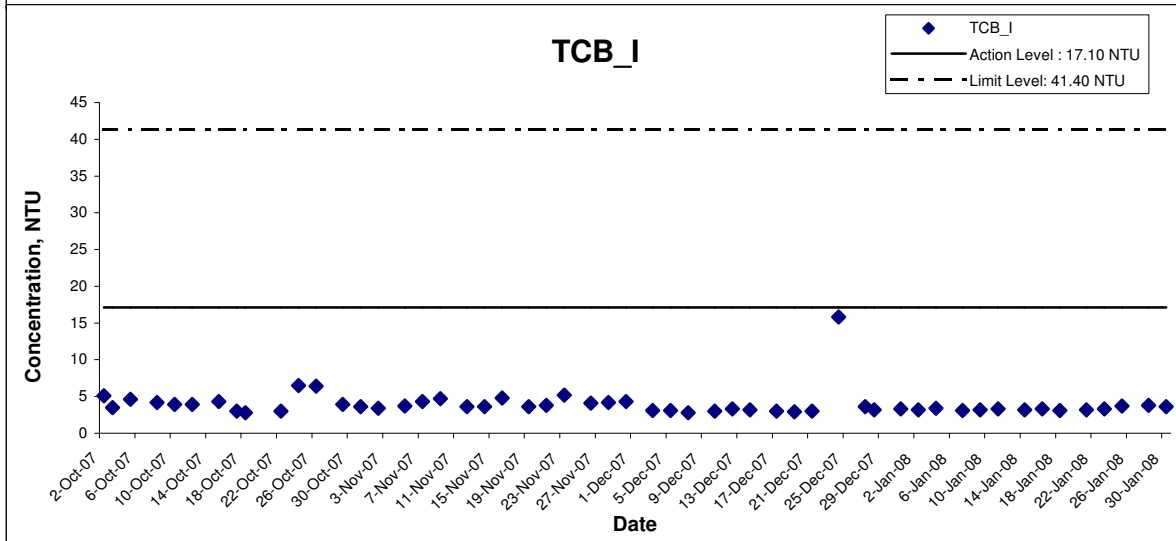
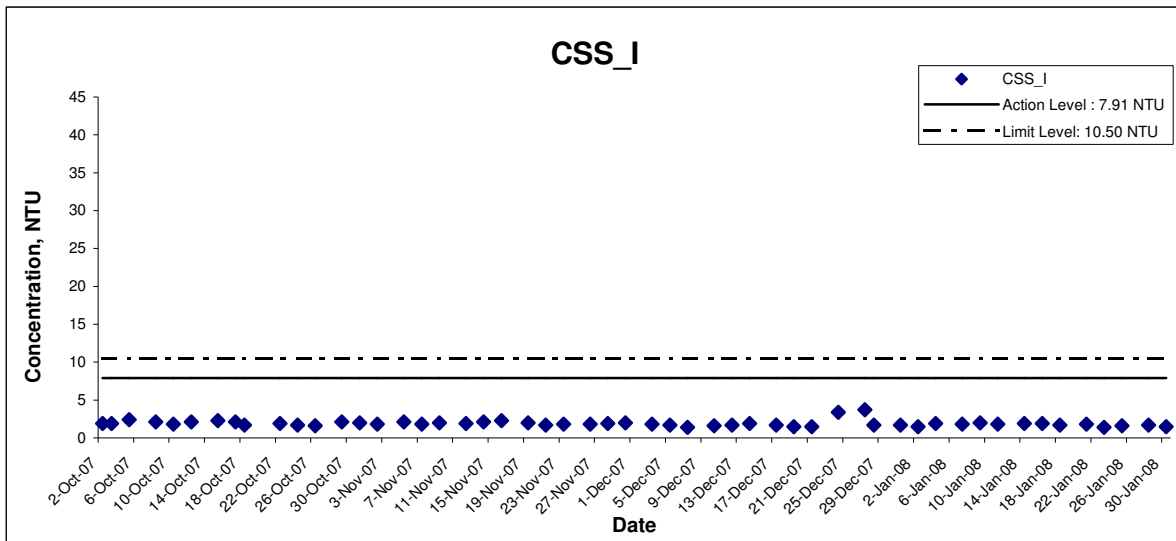
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## Turbidity



Title Contract No. HY/2003/19 Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha <b>Graphical Presentation of Water Quality Monitoring Results</b>	Scale N.T.S	Project No. MA6030	CINOTECH
	Date Jan 08	Appendix F	

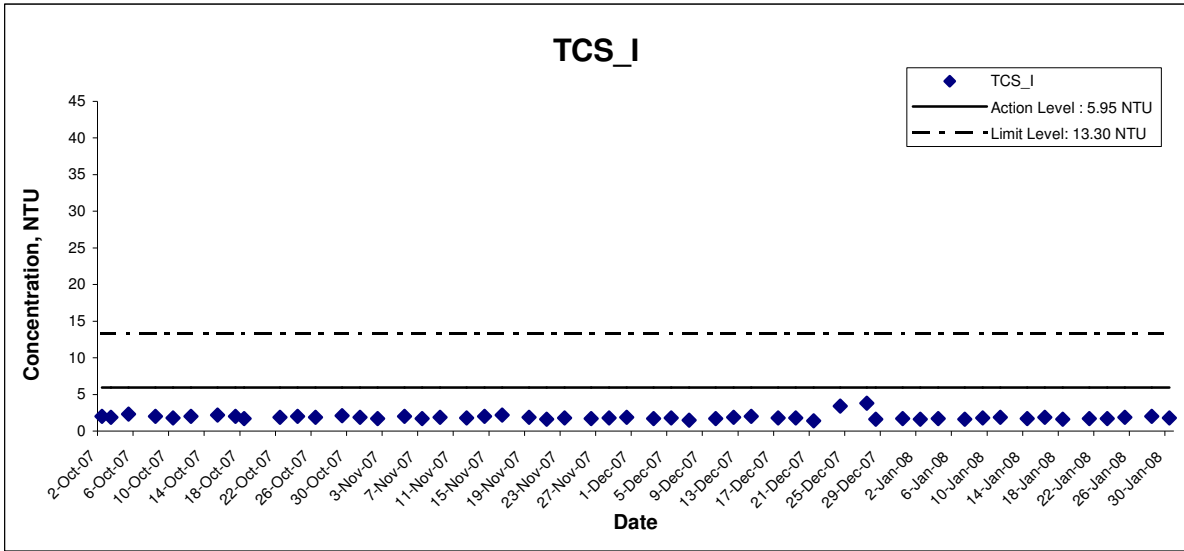
## Turbidity



Title Contract No. HY/2003/19 Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha <b>Graphical Presentation of Water Quality Monitoring Results</b>	Scale	N.T.S	Project No.	MA6030
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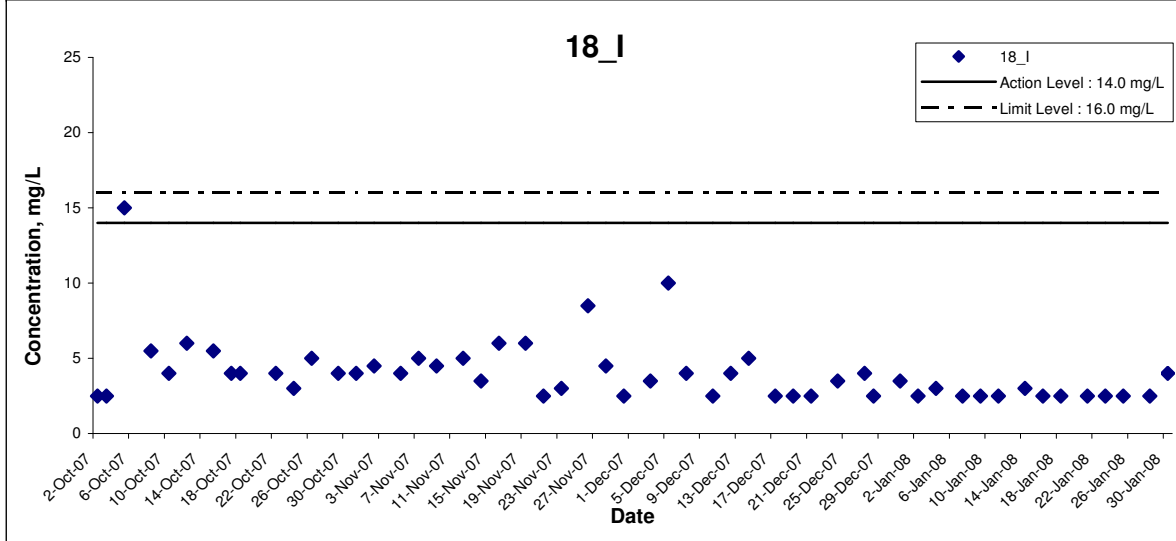
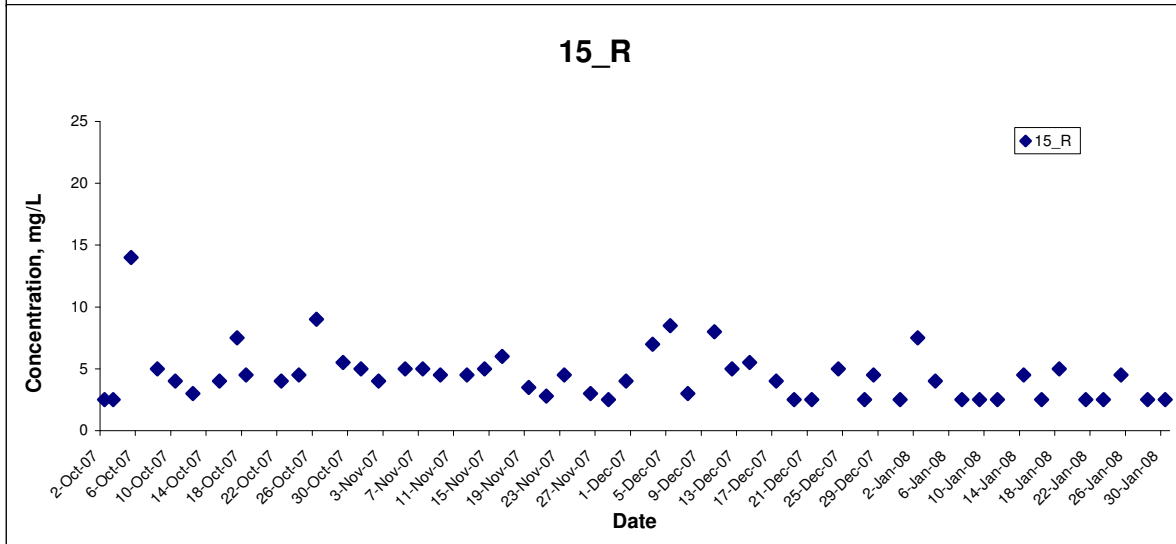
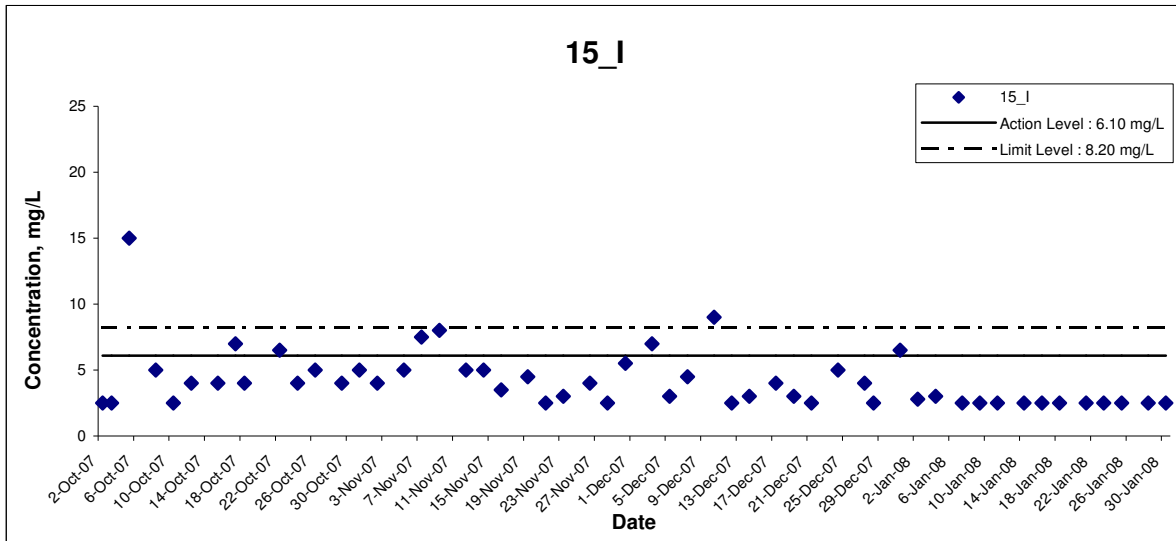


## Turbidity



Title Contract No. HY/2003/19 Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha Graphical Presentation of Water Quality Monitoring Results	Scale	N.T.S	Project No. MA6030	CINOTECH
	Date	Jan 08	Appendix F	

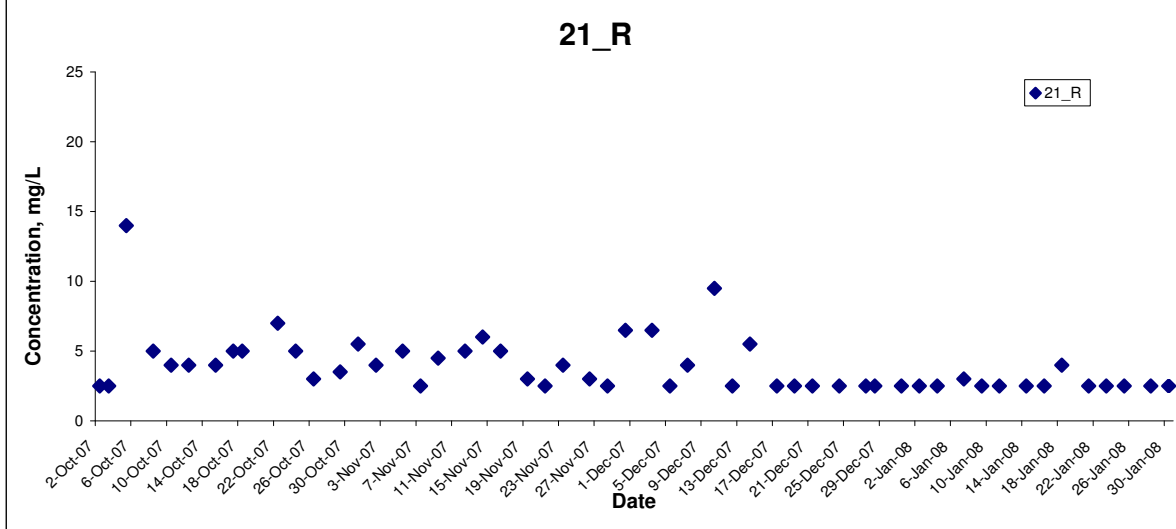
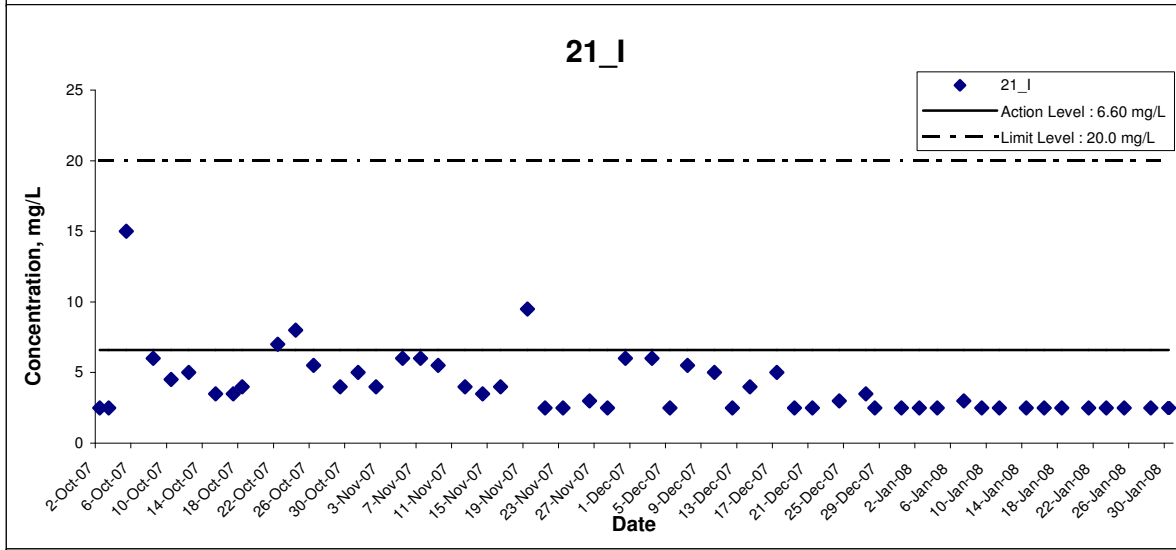
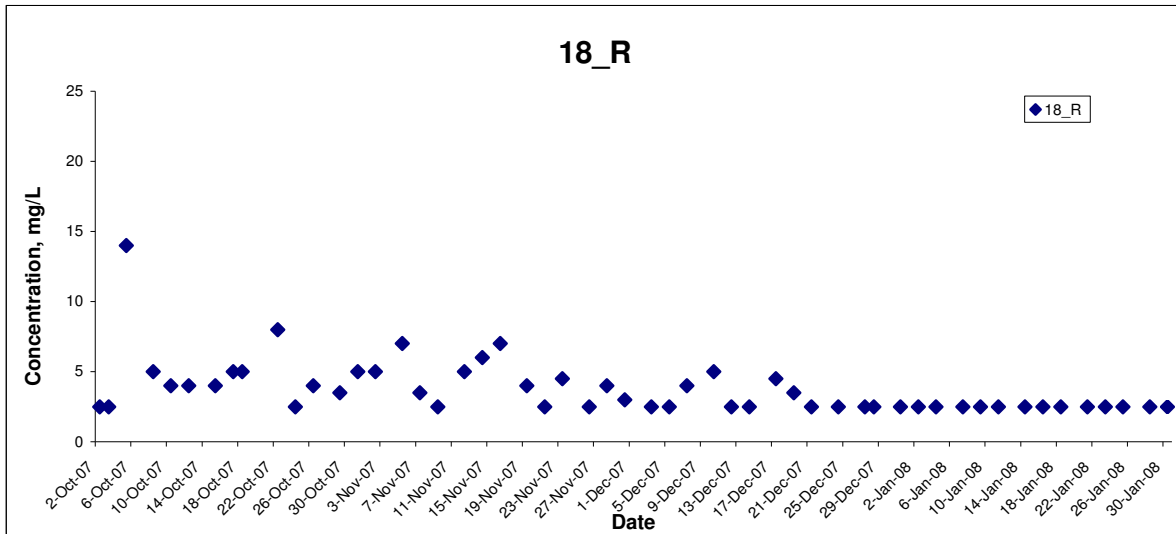
## Suspended Solids



Title Contract No. HY/2003/19 Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha <b>Graphical Presentation of Water Quality Monitoring Results</b>	Scale	N.T.S	Project No.	MA6030	CINOTECH
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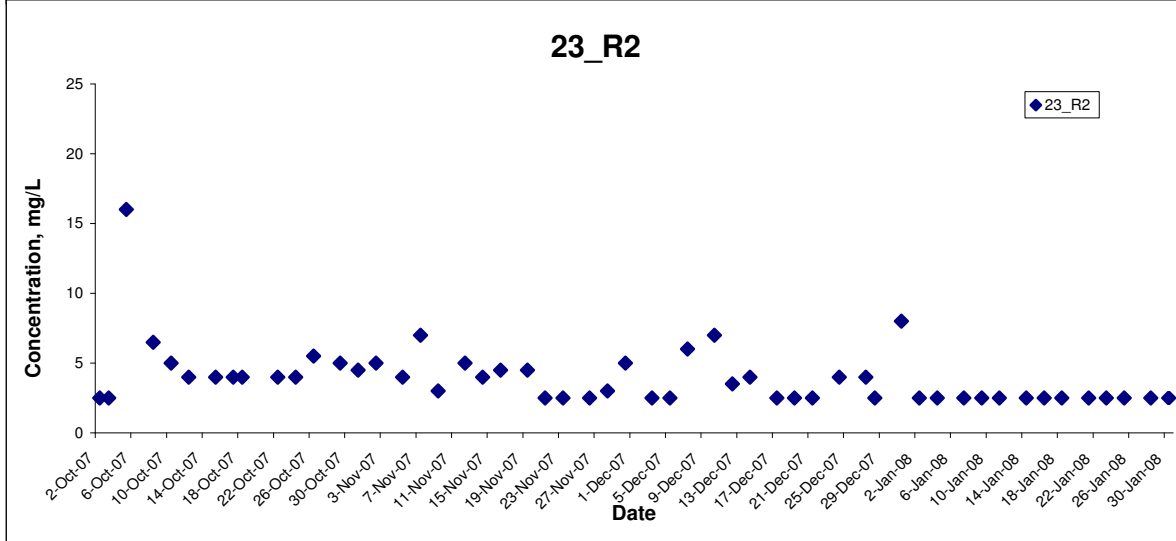
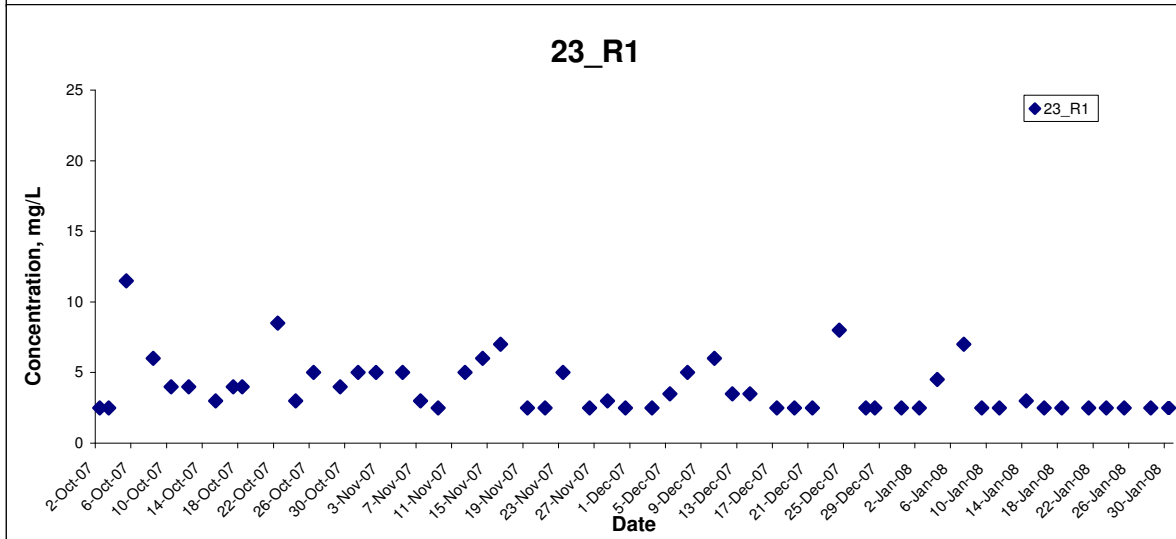
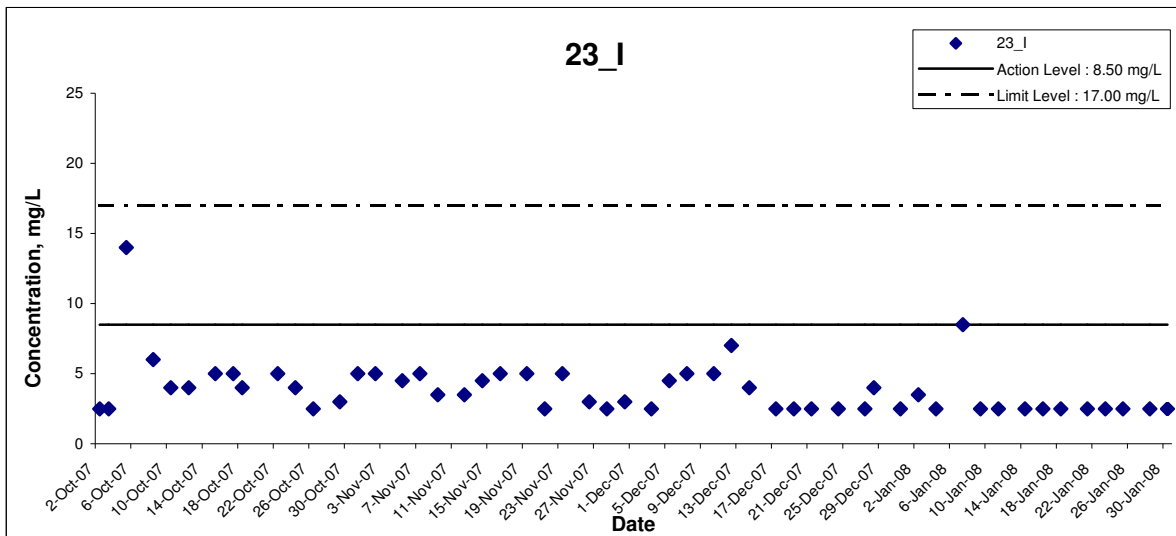


## Suspended Solids



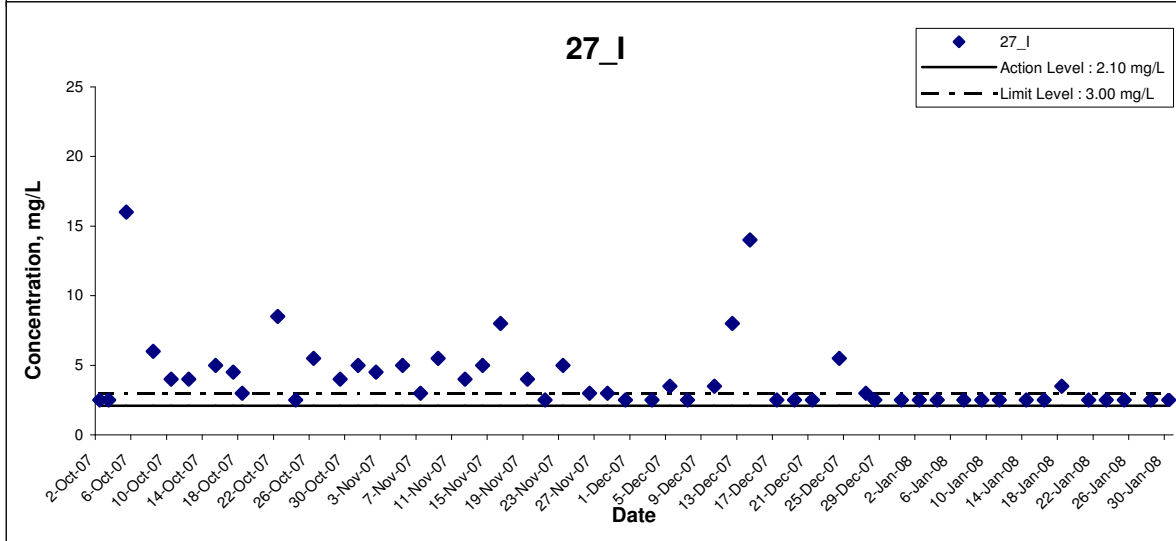
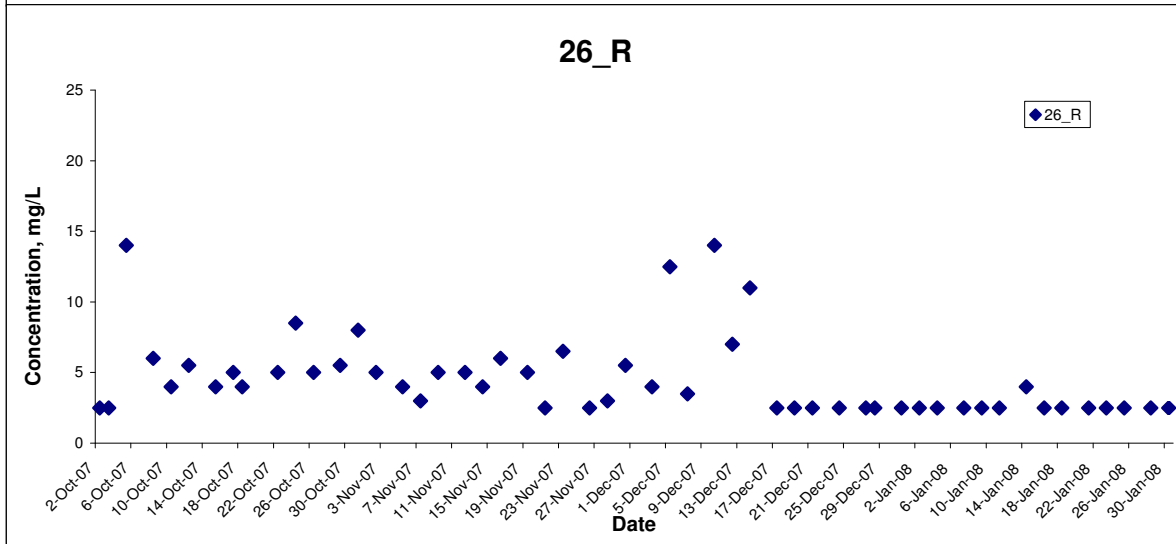
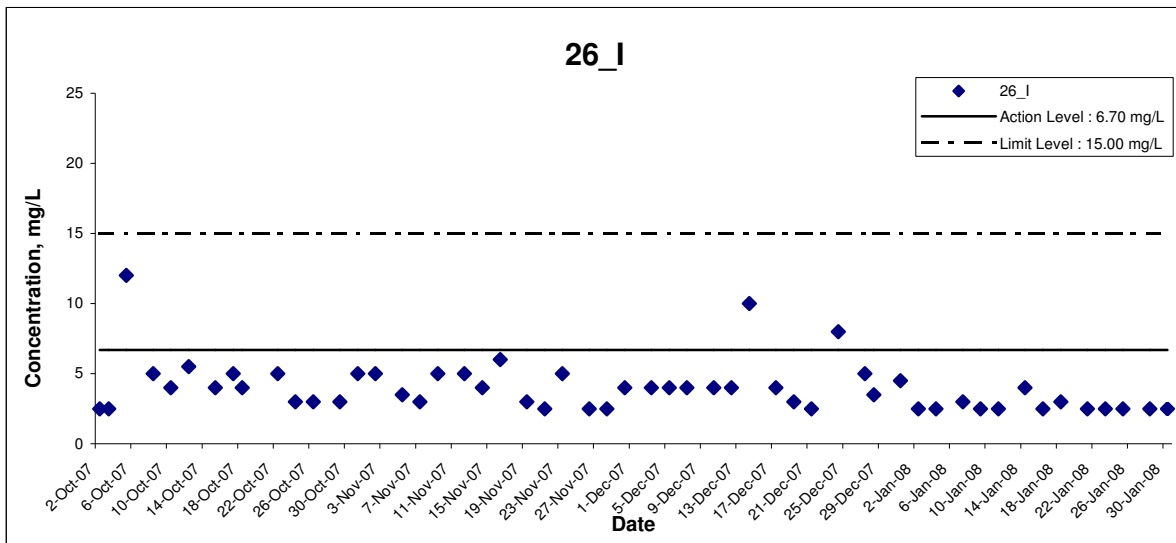
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	Date	Jan 08	Appendix	F	

## Suspended Solids



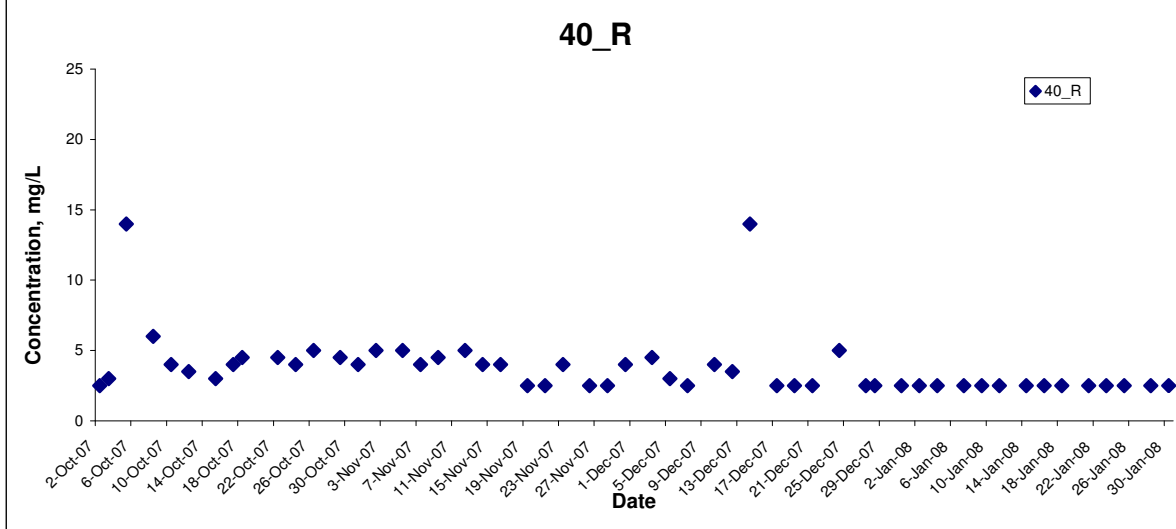
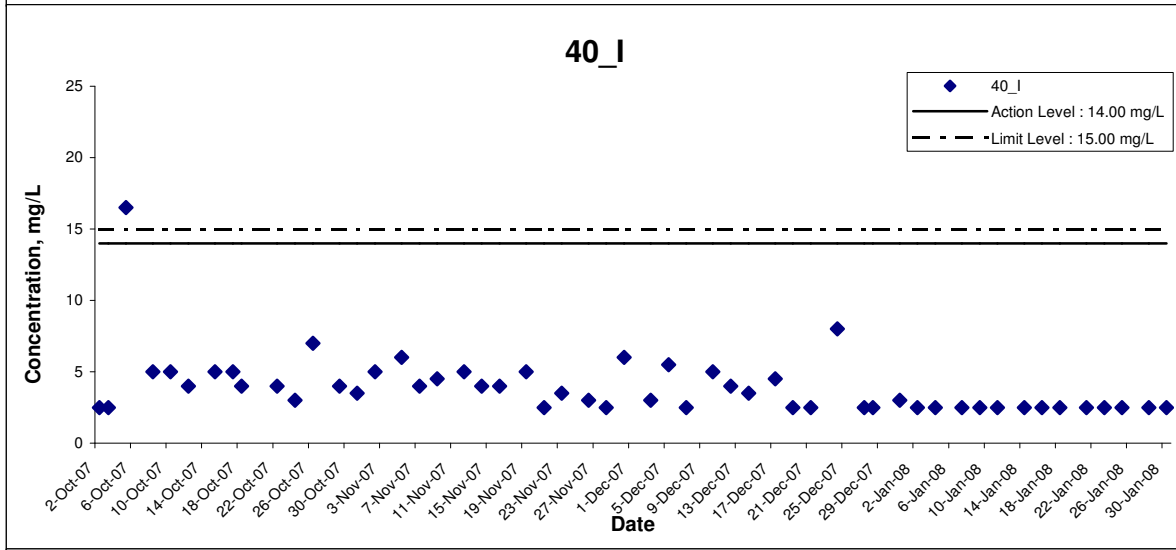
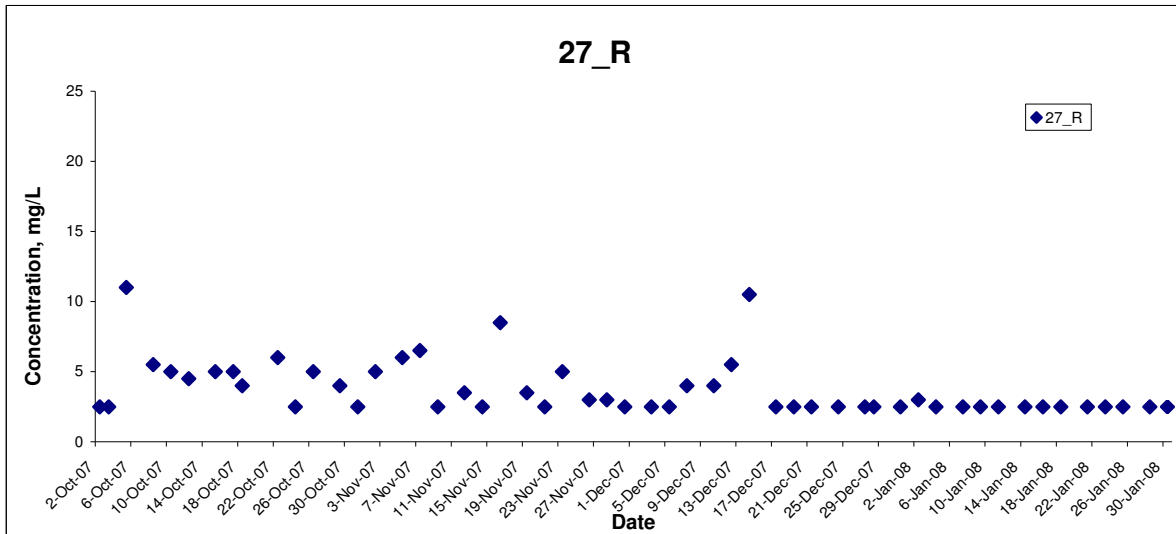
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	Date Jan 08	Appendix F	

## Suspended Solids



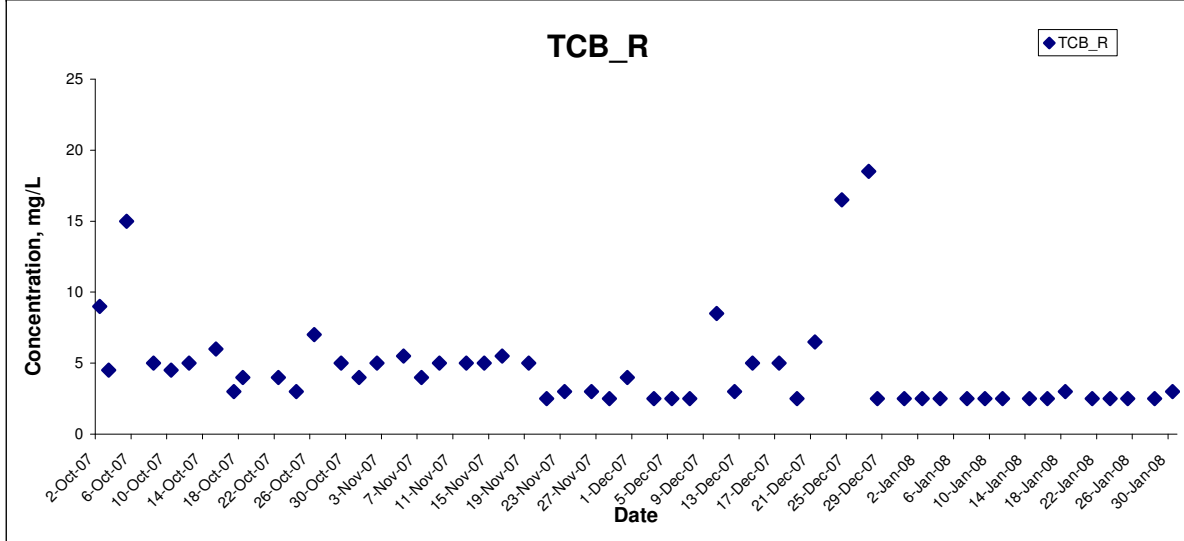
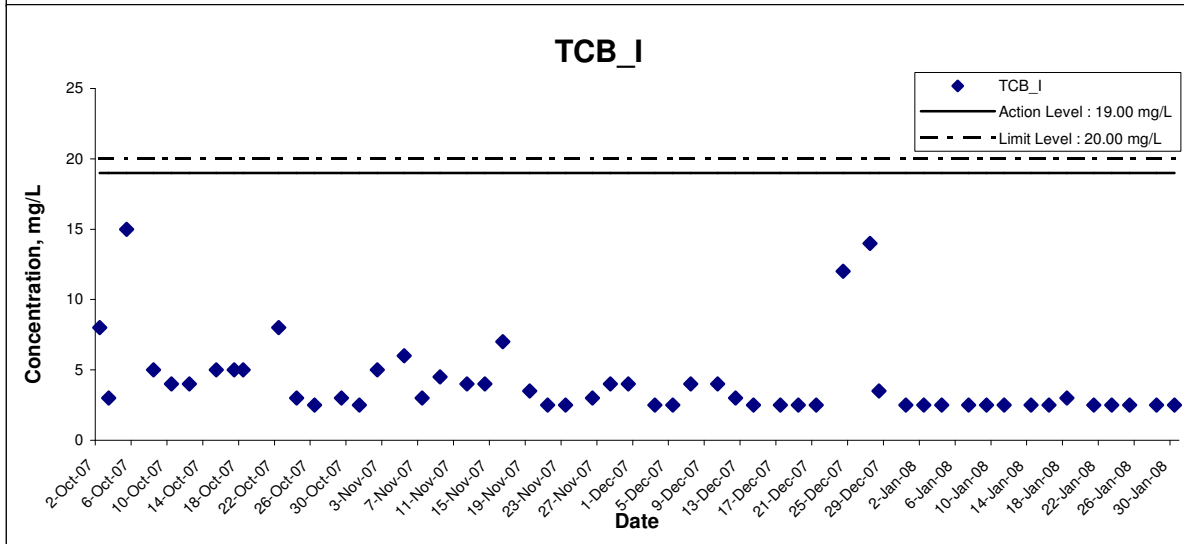
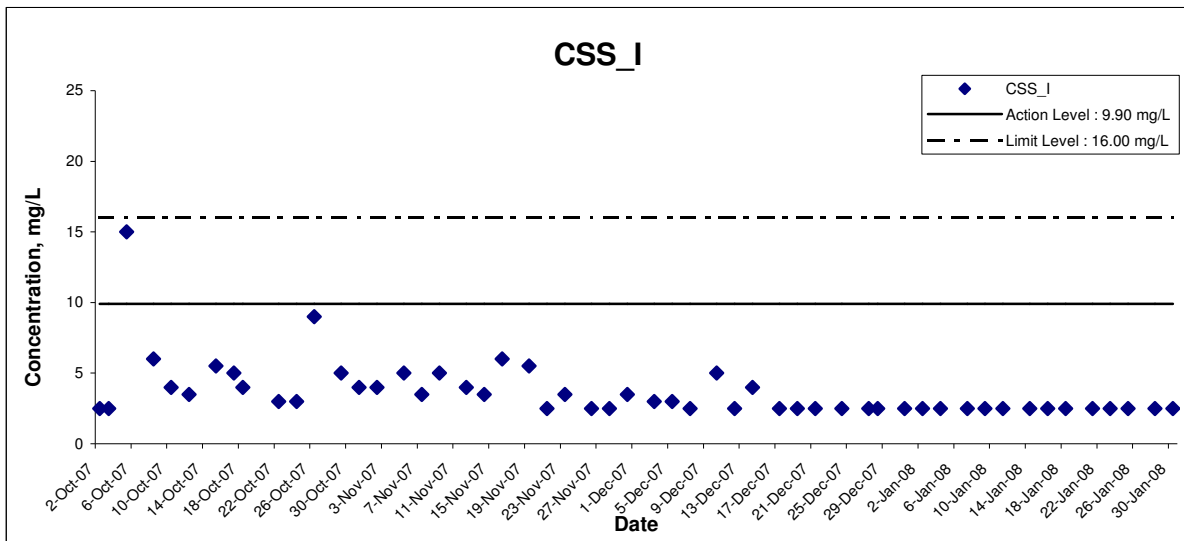
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## Suspended Solids



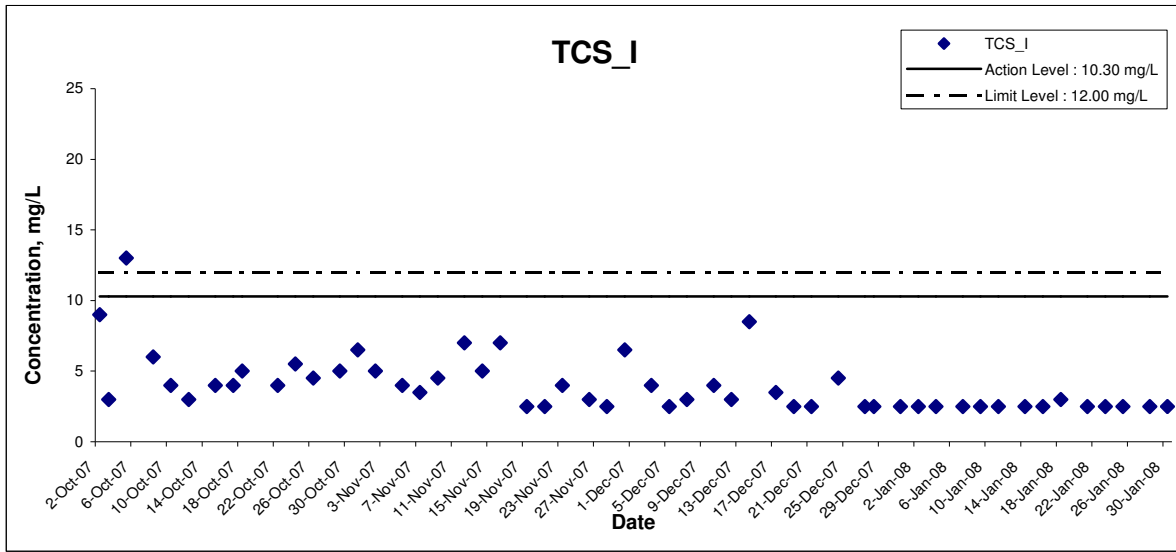
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	Date Jan 08	Appendix F	

## Suspended Solids



Title Contract No. HY/2003/19 Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha Graphical Presentation of Water Quality Monitoring Results	Scale	N.T.S	Project No. MA6030	<b>CINOTECH</b>
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## Suspended Solids



Title Contract No. HY/2003/19 Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha Graphical Presentation of Water Quality Monitoring Results	Scale	N.T.S	Project No. MA6030	CINOTECH
	Date	Jan 08	Appendix F	

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**APPENDIX G  
QUALITY CONTROL REPORTS FOR  
LABORATORY ANALYSIS**

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**TEST REPORT**

**QC REPORT**

**APPLICANT: Cinotech Consultants Limited**  
**RM 1710, Technology Park,**  
**18 On Lai Street,**  
**Shatin, N.T., Hong Kong**

Laboratory No.:	05985
Date of Issue:	2008/01/03
Date Received:	2008/01/02
Date Tested:	2008/01/02
Date Completed:	2008/01/03

Page: 1 of 1

**ATTN: Mr. Henry Leung**

Sampling Site: Tung Chung Road  
Project No.: MA6030  
Sampling Date: 2008/01/02  
Number of Sample: 38  
Custody No.: MA6030/80102

\*\*\*\*\*

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1, mg/L	Trial 2, mg/L	Difference, %	
26_I	<2.5	<2.5	N/A	93

\*\*\*\*\*End of Report\*\*\*\*\*

*PREPARED AND CHECKED BY:*

For and On Behalf of **WELLAB Ltd.**



**PATRICK TSE**

*Laboratory Manager*



**TEST REPORT**

**QC REPORT**

**APPLICANT: Cinotech Consultants Limited**  
**RM 1710, Technology Park,**  
**18 On Lai Street,**  
**Shatin, N.T., Hong Kong**

Laboratory No.:	05997
Date of Issue:	2008/01/07
Date Received:	2008/01/04
Date Tested:	2008/01/04
Date Completed:	2008/01/07

Page: 1 of 1

**ATTN: Mr. Henry Leung**

Sampling Site: Tung Chung Road  
 Project No.: MA6030  
 Sampling Date: 2008/01/04  
 Number of Sample: 38  
 Custody No.: MA6030/80104

\*\*\*\*\*

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1, mg/L	Trial 2, mg/L	Difference, %	
26_I	<2.5	<2.5	N/A	93

\*\*\*\*\*End of Report\*\*\*\*\*

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



**PATRICK TSE**  
*Laboratory Manager*

**TEST REPORT**

**QC REPORT**

**APPLICANT: Cinotech Consultants Limited**  
**RM 1710, Technology Park,**  
**18 On Lai Street,**  
**Shatin, N.T., Hong Kong**

Laboratory No.:	06007
Date of Issue:	2008/01/08
Date Received:	2008/01/07
Date Tested:	2008/01/07
Date Completed:	2008/01/08

Page: 1 of 1

**ATTN: Mr. Henry Leung**

Sampling Site: Tung Chung Road  
Project No.: MA6030  
Sampling Date: 2008/01/07  
Number of Sample: 38  
Custody No.: MA6030/80107

\*\*\*\*\*

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1, mg/L	Trial 2, mg/L	Difference, %	
26_R	<2.5	<2.5	N/A	88

\*\*\*\*\*End of Report\*\*\*\*\*

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



**PATRICK TSE**  
*Laboratory Manager*

**TEST REPORT**

**QC REPORT**

**APPLICANT: Cinotech Consultants Limited**  
**RM 1710, Technology Park,**  
**18 On Lai Street,**  
**Shatin, N.T., Hong Kong**

Laboratory No.:	06019
Date of Issue:	2008/01/10
Date Received:	2008/01/09
Date Tested:	2008/01/09
Date Completed:	2008/01/10

Page: 1 of 1

**ATTN: Mr. Henry Leung**

Sampling Site: Tung Chung Road  
Project No.: MA6030  
Sampling Date: 2008/01/09  
Number of Sample: 38  
Custody No.: MA6030/80109

\*\*\*\*\*

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1, mg/L	Trial 2, mg/L	Difference, %	
26_I	<2.5	<2.5	N/A	99

\*\*\*\*\*End of Report\*\*\*\*\*

*PREPARED AND CHECKED BY:*

For and On Behalf of **WELLAB Ltd.**



**PATRICK TSE**

*Laboratory Manager*

**TEST REPORT**

**QC REPORT**

**APPLICANT: Cinotech Consultants Limited**  
**RM 1710, Technology Park,**  
**18 On Lai Street,**  
**Shatin, N.T., Hong Kong**

Laboratory No.:	06031
Date of Issue:	2008/01/15
Date Received:	2008/01/11
Date Tested:	2008/01/11
Date Completed:	2008/01/14

Page: 1 of 1

**ATTN: Mr. Henry Leung**

Sampling Site: Tung Chung Road  
Project No.: MA6030  
Sampling Date: 2008/01/11  
Number of Sample: 38  
Custody No.: MA6030/80111

\*\*\*\*\*

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1, mg/L	Trial 2, mg/L	Difference, %	
26_I	<2.5	<2.5	N/A	99

\*\*\*\*\*End of Report\*\*\*\*\*

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



**PATRICK TSE**  
*Laboratory Manager*

**TEST REPORT**

**QC REPORT**

**APPLICANT: Cinotech Consultants Limited**  
**RM 1710, Technology Park,**  
**18 On Lai Street,**  
**Shatin, N.T., Hong Kong**

Laboratory No.:	06042
Date of Issue:	2008/01/15
Date Received:	2008/01/14
Date Tested:	2008/01/14
Date Completed:	2008/01/15

Page: 1 of 1

**ATTN: Mr. Henry Leung**

Sampling Site: Tung Chung Road  
Project No.: MA6030  
Sampling Date: 2008/01/14  
Number of Sample: 38  
Custody No.: MA6030/80114

\*\*\*\*\*

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1, mg/L	Trial 2, mg/L	Difference, %	
TCS_I	<2.5	<2.5	N/A	92

\*\*\*\*\*End of Report\*\*\*\*\*

*PREPARED AND CHECKED BY:*

For and On Behalf of **WELLAB Ltd.**



**PATRICK TSE**

*Laboratory Manager*

**TEST REPORT**

**QC REPORT**

**APPLICANT: Cinotech Consultants Limited**  
**RM 1710, Technology Park,**  
**18 On Lai Street,**  
**Shatin, N.T., Hong Kong**

Laboratory No.:	06062
Date of Issue:	2008/01/17
Date Received:	2008/01/16
Date Tested:	2008/01/16
Date Completed:	2008/01/17

Page: 1 of 1

**ATTN: Mr. Henry Leung**

Sampling Site: Tung Chung Road  
Project No.: MA6030  
Sampling Date: 2008/01/16  
Number of Sample: 38  
Custody No.: MA6030/80116

\*\*\*\*\*

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1, mg/L	Trial 2, mg/L	Difference, %	
TCS_I	<2.5	<2.5	N/A	90

\*\*\*\*\*End of Report\*\*\*\*\*

*PREPARED AND CHECKED BY:*

For and On Behalf of **WELLAB Ltd.**



**PATRICK TSE**

*Laboratory Manager*

**TEST REPORT**

**QC REPORT**

**APPLICANT: Cinotech Consultants Limited**  
**RM 1710, Technology Park,**  
**18 On Lai Street,**  
**Shatin, N.T., Hong Kong**

Laboratory No.:	06077
Date of Issue:	2008/01/21
Date Received:	2008/01/18
Date Tested:	2008/01/18
Date Completed:	2008/01/21

Page: 1 of 1

**ATTN: Mr. Henry Leung**

Sampling Site: Tung Chung Road  
Project No.: MA6030  
Sampling Date: 2008/01/18  
Number of Sample: 38  
Custody No.: MA6030/80118

\*\*\*\*\*

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1, mg/L	Trial 2, mg/L	Difference, %	
15_I	<2.5	<2.5	N/A	99

\*\*\*\*\*End of Report\*\*\*\*\*

*PREPARED AND CHECKED BY:*

For and On Behalf of **WELLAB Ltd.**



**PATRICK TSE**

*Laboratory Manager*

**TEST REPORT**

**QC REPORT**

**APPLICANT: Cinotech Consultants Limited**  
**RM 1710, Technology Park,**  
**18 On Lai Street,**  
**Shatin, N.T., Hong Kong**

Laboratory No.:	06091
Date of Issue:	2008/01/22
Date Received:	2008/01/21
Date Tested:	2008/01/21
Date Completed:	2008/01/22

Page: 1 of 1

**ATTN: Mr. Henry Leung**

Sampling Site: Tung Chung Road  
Project No.: MA6030  
Sampling Date: 2008/01/21  
Number of Sample: 38  
Custody No.: MA6030/80121

\*\*\*\*\*

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1, mg/L	Trial 2, mg/L	Difference, %	
26_I	<2.5	<2.5	N/A	98

\*\*\*\*\*End of Report\*\*\*\*\*

*PREPARED AND CHECKED BY:*

For and On Behalf of **WELLAB Ltd.**



**PATRICK TSE**

*Laboratory Manager*



**TEST REPORT**

**QC REPORT**

**APPLICANT: Cinotech Consultants Limited**  
**RM 1710, Technology Park,**  
**18 On Lai Street,**  
**Shatin, N.T., Hong Kong**

Laboratory No.:	06104
Date of Issue:	2008/01/24
Date Received:	2008/01/23
Date Tested:	2008/01/23
Date Completed:	2008/01/24

Page: 1 of 1

**ATTN: Mr. Henry Leung**

Sampling Site: Tung Chung Road  
Project No.: MA6030  
Sampling Date: 2008/01/23  
Number of Sample: 38  
Custody No.: MA6030/80123

\*\*\*\*\*

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1, mg/L	Trial 2, mg/L	Difference, %	
26_I	<2.5	<2.5	N/A	94

\*\*\*\*\*End of Report\*\*\*\*\*

*PREPARED AND CHECKED BY:*

For and On Behalf of **WELLAB Ltd.**



**PATRICK TSE**

*Laboratory Manager*

**TEST REPORT**

**QC REPORT**

**APPLICANT: Cinotech Consultants Limited**  
**RM 1710, Technology Park,**  
**18 On Lai Street,**  
**Shatin, N.T., Hong Kong**

Laboratory No.:	06121
Date of Issue:	2008/01/28
Date Received:	2008/01/25
Date Tested:	2008/01/25
Date Completed:	2008/01/28

Page: 1 of 1

**ATTN: Mr. Henry Leung**

Sampling Site: Tung Chung Road  
Project No.: MA6030  
Sampling Date: 2008/01/25  
Number of Sample: 38  
Custody No.: MA6030/80125

\*\*\*\*\*

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1, mg/L	Trial 2, mg/L	Difference, %	
26_I	<2.5	<2.5	N/A	100

\*\*\*\*\*End of Report\*\*\*\*\*

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



**PATRICK TSE**  
*Laboratory Manager*

**TEST REPORT**

**QC REPORT**

**APPLICANT: Cinotech Consultants Limited**  
**RM 1710, Technology Park,**  
**18 On Lai Street,**  
**Shatin, N.T., Hong Kong**

Laboratory No.:	06137
Date of Issue:	2008/01/29
Date Received:	2008/01/28
Date Tested:	2008/01/28
Date Completed:	2008/01/29

Page: 1 of 1

**ATTN: Mr. Henry Leung**

Sampling Site: Tung Chung Road  
Project No.: MA6030  
Sampling Date: 2008/01/28  
Number of Sample: 38  
Custody No.: MA6030/80128

\*\*\*\*\*

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1, mg/L	Trial 2, mg/L	Difference, %	
26_I	<2.5	<2.5	N/A	97

\*\*\*\*\*End of Report\*\*\*\*\*

*PREPARED AND CHECKED BY:*

For and On Behalf of **WELLAB Ltd.**



**PATRICK TSE**

*Laboratory Manager*

**TEST REPORT**

**QC REPORT**

**APPLICANT: Cinotech Consultants Limited**  
**RM 1710, Technology Park,**  
**18 On Lai Street,**  
**Shatin, N.T., Hong Kong**

Laboratory No.:	06152
Date of Issue:	2008/01/31
Date Received:	2008/01/30
Date Tested:	2008/01/30
Date Completed:	2008/01/31

Page: 1 of 1

**ATTN: Mr. Henry Leung**

Sampling Site: Tung Chung Road  
Project No.: MA6030  
Sampling Date: 2008/01/30  
Number of Sample: 38  
Custody No.: MA6030/80130

\*\*\*\*\*

Total Suspended Solids	Duplicate Analysis			QC Recovery, %
Sampling Point	Trial 1, mg/L	Trial 2, mg/L	Difference, %	
26_I	<2.5	<2.5	N/A	98

\*\*\*\*\*End of Report\*\*\*\*\*

*PREPARED AND CHECKED BY:*

For and On Behalf of **WELLAB Ltd.**



**PATRICK TSE**

*Laboratory Manager*

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**APPENDIX H  
SUMMARY OF EXCEEDANCES**

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### **Summary of Exceedances Recorded in the Reporting Month**

**a) Exceedance Report for 24-hr TSP**

(NIL)

**b) Exceedance Report for Construction Noise**

(NIL)

**c) Exceedance Report for Water Quality**

- Exceedances of suspended solids (SS) was recorded in the recording month.

**Contract No. HY/2003/19**  
**Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha - Exceedance Report**  
**Report No. 80107W-80102\_S**

**Part A – Exceedance Summary Tables**

**Table 1: Parameter – Suspended Solids (mg/L)**

Stream Location	Measured Value	Exceedances Criteria			Action / Limit Levels	Justification*	Validity (Y/N)	Action Taken (Y/N)	
		Action value	120% of Reference value*	Limit Value					130% of Reference Value*
23_I	3.5	8.5	3.0 <sup>+</sup>	17.0	Limit	(1) & (3)	N	N	
			3.0 <sup>++</sup>						3.3
27_I	2.5	2.1	3.6	3.0	3.9	Action	(2) & (4)	N	N

- \*Remarks (1) – No construction activity was observed.  
(2) – No pollution discharge from construction activity was observed.  
(3) – Natural humus or mosses was observed.  
(4) – Reference point value already exceeded either the Action or Limit Levels.  
(+) – Reference point value of 23\_R1  
(++) – Reference point value of 23\_R2

**Contract No. HY/2003/19**  
**Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha - Exceedance Report**  
**Report No. 80108W-80104\_S**

**Part A – Exceedance Summary Tables**

**Table 1: Parameter – Suspended Solids (mg/L)**

Stream Location	Measured Value	Exceedances Criteria				Action / Limit Levels	Justification*	Validity (Y/N)	Action Taken (Y/N)
		Action value	120% of Reference value*	Limit Value	130% of Reference Value*				
27_I	2.5	2.1	3.0	3.0	3.25	Action	(2) & (4)	N	N

- \*Remarks (1) – No construction activity was observed.  
(2) – No pollution discharge from construction activity was observed.  
(3) – Natural humus or mosses was observed.  
(4) – Reference point value already exceeded either the Action or Limit Levels.



**Contract No. HY/2003/19****Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha - Exceedance Report**

Report No. 80109W-80107\_S

**Part A – Exceedance Summary Tables****Table 1: Parameter – Suspended Solids (mg/L)**

Stream Location	Measured Value	Exceedances Criteria				Action / Limit Levels	Justification*	Validity (Y/N)	Action Taken (Y/N)
		Action value	120% of Reference value*	Limit Value	130% of Reference Value*				
23_I	8.5	8.50	8.4	17.00	9.1	Action	(1) & (3)	N	N
			3.0		3.25				
27_I	2.5	2.10	3.0	3.00	3.25	Action	(2) & (4)	N	N

\*Remarks (1) – No construction activity was observed.

(2) – No pollution discharge from construction activity was observed.

(3) – Natural humus or mosses was observed.

(4) – Reference point value already exceeded either the Action or Limit Levels.

(+) – Reference point value of 23\_R1

(++) – Reference point value of 23\_R2

**Contract No. HY/2003/19****Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha - Exceedance Report****Report No. 80110W-80109\_S****Part A – Exceedance Summary Tables****Table 1: Parameter – Suspended Solids (mg/L)**

Stream Location	Measured Value	Exceedances Criteria				Action / Limit Levels	Justification*	Validity (Y/N)	Action Taken (Y/N)
		Action value	120% of Reference value*	Limit Value	130% of Reference Value*				
27_I	2.5	2.1	3.0	3.0	3.25	Action	(2) & (4)	N	N

\*Remarks (1) – No construction activity was observed.

(2) – No pollution discharge from construction activity was observed.

(3) – Natural humus or mosses was observed.

(4) – Reference point value already exceeded either the Action or Limit Levels.

**Contract No. HY/2003/19****Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha - Exceedance Report**

Report No. 80115W-80111\_S

**Part A – Exceedance Summary Tables****Table 1: Parameter – Suspended Solids (mg/L)**

Stream Location	Measured Value	Exceedances Criteria				Action / Limit Levels	Justification*	Validity (Y/N)	Action Taken (Y/N)
		Action value	120% of Reference value*	Limit Value	130% of Reference Value*				
27_I	2.5	2.1	3.0	3.0	3.25	Action	(2) & (4)	N	N

\*Remarks (1) – No construction activity was observed.

(2) – No pollution discharge from construction activity was observed.

(3) – Natural humus or mosses was observed.

(4) – Reference point value already exceeded either the Action or Limit Levels.

**Contract No. HY/2003/19**  
**Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha - Exceedance Report**  
**Report No. 80115W-80114\_S**

**Part A – Exceedance Summary Tables**

**Table 1: Parameter – Suspended Solids (mg/L)**

Stream Location	Measured Value	Exceedances Criteria				Action / Limit Levels	Justification*	Validity (Y/N)	Action Taken (Y/N)
		Action value	120% of Reference value*	Limit Value	130% of Reference Value*				
27_I	2.5	2.1	3.0	3.0	3.25	Action	(2) & (4)	N	N

- \*Remarks (1) – No construction activity was observed.  
(2) – No pollution discharge from construction activity was observed.  
(3) – Natural humus or mosses was observed.  
(4) – Reference point value already exceeded either the Action or Limit Levels.

**Contract No. HY/2003/19**  
**Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha - Exceedance Report**  
**Report No. 80118W-80116\_S**

**Part A – Exceedance Summary Tables**

**Table 1: Parameter – Suspended Solids (mg/L)**

Stream Location	Measured Value	Exceedances Criteria				Action / Limit Levels	Justification*	Validity (Y/N)	Action Taken (Y/N)
		Action value	120% of Reference value*	Limit Value	130% of Reference Value*				
27_I	2.5	2.1	3.0	3.0	3.25	Action	(2) & (4)	N	N

\*Remarks (1) – No construction activity was observed.  
 (2) – No pollution discharge from construction activity was observed.  
 (3) – Natural humus or mosses was observed.  
 (4) – Reference point value already exceeded either the Action or Limit Levels.

**Contract No. HY/2003/19****Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha - Exceedance Report**

Report No. 80121W-80118\_S

**Part A – Exceedance Summary Tables****Table 1: Parameter – Suspended Solids (mg/L)**

Stream Location	Measured Value	Exceedances Criteria				Action / Limit Levels	Justification*	Validity (Y/N)	Action Taken (Y/N)
		Action value	120% of Reference value*	Limit Value	130% of Reference Value*				
27_I	3.5	2.1	3.0	3.0	3.25	Limit	(2) & (4)	N	N

\*Remarks (1) – No construction activity was observed.

(2) – No pollution discharge from construction activity was observed.

(3) – Natural humus or mosses was observed.

(4) – Reference point value already exceeded either the Action or Limit Levels.

**Contract No. HY/2003/19**  
**Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha - Exceedance Report**  
**Report No. 80123W-80121\_S**

**Part A – Exceedance Summary Tables**

**Table 1: Parameter – Suspended Solids (mg/L)**

Stream Location	Measured Value	Exceedances Criteria				Action / Limit Levels	Justification*	Validity (Y/N)	Action Taken (Y/N)
		Action value	120% of Reference value*	Limit Value	130% of Reference Value*				
27_I	2.5	2.1	3.0	3.0	3.25	Action	(2) & (4)	N	N

\*Remarks (1) – No construction activity was observed.  
 (2) – No pollution discharge from construction activity was observed.  
 (3) – Natural humus or mosses was observed.  
 (4) – Reference point value already exceeded either the Action or Limit Levels.

**Contract No. HY/2003/19**  
**Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha - Exceedance Report**  
**Report No. 80125W-80123\_S**

**Part A – Exceedance Summary Tables**

**Table 1: Parameter – Suspended Solids (mg/L)**

Stream Location	Measured Value	Exceedances Criteria				Action / Limit Levels	Justification*	Validity (Y/N)	Action Taken (Y/N)
		Action value	120% of Reference value*	Limit Value	130% of Reference Value*				
27_I	2.5	2.1	3.0	3.0	3.25	Action	(2) & (4)	N	N

- \*Remarks (1) – No construction activity was observed.  
 (2) – No pollution discharge from construction activity was observed.  
 (3) – Natural humus or mosses was observed.  
 (4) – Reference point value already exceeded either the Action or Limit Levels.



**Contract No. HY/2003/19**  
**Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha - Exceedance Report**  
**Report No. 80129W-80125\_S**

**Part A – Exceedance Summary Tables**

**Table 1: Parameter – Suspended Solids (mg/L)**

Stream Location	Measured Value	Exceedances Criteria				Action / Limit Levels	Justification*	Validity (Y/N)	Action Taken (Y/N)
		Action value	120% of Reference value*	Limit Value	130% of Reference Value*				
27_I	2.5	2.1	3.0	3.0	3.25	Action	(2) & (4)	N	N

- \*Remarks (1) – No construction activity was observed.  
 (2) – No pollution discharge from construction activity was observed.  
 (3) – Natural humus or mosses was observed.  
 (4) – Reference point value already exceeded either the Action or Limit Levels.

**Contract No. HY/2003/19**  
**Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha - Exceedance Report**  
**Report No. 80130W-80128\_S**

**Part A – Exceedance Summary Tables**

**Table 1: Parameter – Suspended Solids (mg/L)**

Stream Location	Measured Value	Exceedances Criteria				Action / Limit Levels	Justification*	Validity (Y/N)	Action Taken (Y/N)
		Action value	120% of Reference value*	Limit Value	130% of Reference Value*				
27_I	2.5	2.1	3.0	3.0	3.25	Action	(2) & (4)	N	N

\*Remarks (1) – No construction activity was observed.  
 (2) – No pollution discharge from construction activity was observed.  
 (3) – Natural humus or mosses was observed.  
 (4) – Reference point value already exceeded either the Action or Limit Levels.

**Contract No. HY/2003/19****Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha - Exceedance Report**

Report No. 80201W-80130\_S

**Part A – Exceedance Summary Tables****Table 1: Parameter – Suspended Solids (mg/L)**

Stream Location	Measured Value	Exceedances Criteria				Action / Limit Levels	Justification*	Validity (Y/N)	Action Taken (Y/N)
		Action value	120% of Reference value*	Limit Value	130% of Reference Value*				
18_I	4.0	14.0	3.0	16.0	3.25	Limit	(1) & (3)	N	N
27_I	2.5	2.1	3.0	3.0	3.25	Action	(2) & (4)	N	N

\*Remarks (1) – No construction activity was observed.

(2) – No pollution discharge from construction activity was observed.

(3) – Natural humus or mosses was observed.

(4) – Reference point value already exceeded either the Action or Limit Levels.

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**APPENDIX I  
SITE AUDIT SUMMARY**

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Weekly Site Inspection Record Summary

Inspection Information


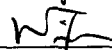
Checklist Reference Number	80103
Date	3 January 2008 (Thursday)
Time	13:30 – 16:30

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	<b>A. Water Quality</b>	
80103-O02	• Exposed slope was observed opposite to <b>SD 6</b> . The Contractor was reminded to cover it properly.	B8
	<b>B. Air Quality</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>C. Noise</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>D. Waste / Chemical Management</b>	
80103-O01	• C & D waste and broken temporary channel was observed at <b>Stream 28</b> . The Contractor was reminded to remove it.	E4ii.
80103-O03	• C & D waste and general refuse were observed at underneath <b>STR 14</b> . The Contractor was reminded to provide fencing at <b>Stream 35</b> and clear all the waste.	E1iii. E4ii.
	•	
	<b>E. Ecology</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>F. Others</b>	
	• All environmental deficiencies identified in previous audit session were improved/rectified by the Contractor except items (71227-O02, O03, O05, R06, R07, R09 and R11). Follow-up action is needed for the outstanding items.	

	Reminders	Related Item No.
	The Contractor was reminded to implement the following preventive measures:	
	<b>A. Water Quality</b>	
80103-R09	• Provide temporary pond for storing the wheel washing water discharge from the road after spraying with water at <b>RW 14</b>	B3
	<b>B. Air Quality</b>	
80103-R06	• Ensure water spraying on dust-generating activities (road breaking) at <b>STR 11</b>	C6
80103-R08	• Properly cover stockpile at <b>STR 13</b>	C7
	<b>D. Waste / Chemical Management</b>	
80103-R04	• Remove C & D waste at <b>STR 7</b> .	E4ii.
80103-R05	• Remove water pipe which is not in use at <b>STR 9A</b>	E4ii.
80103-R07	• Remove general refuse at <b>Stream 31</b> .	E1iii.

Weekly Site Inspection Record Summary

Ref. No.	Proposed Completion Date	Completion Date	Remarks
71227-O01	3 January 2008	3 January 2008	Rectified
71227-O04			
71227-R08			
71227-R10			
71227-R12			
80103-O01	9 January 2008		Follow Up Required
80103-O02			
80103-O03			
80103-R04			
80103-R05			
80103-R06			
80103-R07			
80103-R08			
80103-R09			

	Name	Signature	Date
Recorded by	Ivy Tam		3 January 2008
Checked by	Dr. Priscilla Choy		3 January 2008

Weekly Site Inspection Record Summary

Inspection Information



Checklist Reference Number	80109
Date	9 January 2008 (Wednesday)
Time	9:00 – 12:30

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	<b>A. Water Quality</b>	
80109-004	<ul style="list-style-type: none"> <li>Exposed slope was observed opposite to <b>SD 6</b>. The Contractor was reminded to cover it with tarpaulin.</li> </ul>	B8
	<b>B. Air Quality</b>	
	<ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul>	
	<b>C. Noise</b>	
	<ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul>	
	<b>D. Waste / Chemical Management</b>	
80109-001	<ul style="list-style-type: none"> <li>C &amp; D waste and broken temporary channel was observed at <b>Stream 28</b>. The Contractor was reminded to remove them.</li> </ul>	E4ii.
80109-002	<ul style="list-style-type: none"> <li>C &amp; D waste was observed at <b>Stream 32</b>. The Contractor was reminded to remove them.</li> </ul>	E4ii.
80109-003	<ul style="list-style-type: none"> <li>C &amp; D waste was observed at underneath <b>STR 14</b>. The Contractor was reminded to provide fencing at <b>Stream 35</b> and clear the waste.</li> </ul>	E4ii.
	<b>E. Ecology</b>	
	<ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul>	
	<b>F. Others</b>	
	<ul style="list-style-type: none"> <li>All environmental deficiencies identified in previous audit session were improved/rectified by the Contractor except items (80103-O01, O02, O03, R04, R05, R08 and R09). Follow-up action is needed for the outstanding items.</li> <li>Items (80103-R06) were not observed during site inspection because no construction activities was being carried out.</li> </ul>	

	Reminders	Related Item No.
	The Contractor was reminded to implement the following preventive measures:	
	<b>A. Water Quality</b>	
80109-R10	<ul style="list-style-type: none"> <li>Provide temporary channel for discharging wheel washing water at <b>RW 14</b>.</li> </ul>	B3
	<b>B. Air Quality</b>	
80109-R07	<ul style="list-style-type: none"> <li>Hydroseed the exposed slope at <b>STR 9</b>.</li> </ul>	C13
80109-R09	<ul style="list-style-type: none"> <li>Cover stockpile at <b>STR13 (SA)</b>.</li> </ul>	C7
80109-R12	<ul style="list-style-type: none"> <li>Ensure water-spray on dust-generation activities at <b>STR 11</b>.</li> </ul>	C6
80109-R13	<ul style="list-style-type: none"> <li>Clear mud at the entrance at <b>SD 6 &amp; SD 7</b>.</li> </ul>	C3
	<b>D. Waste / Chemical Management</b>	
80109-R05	<ul style="list-style-type: none"> <li>Remove C &amp; D waste at <b>STR 7</b>.</li> </ul>	E4ii.
80109-R06	<ul style="list-style-type: none"> <li>Remove C &amp; D waste at <b>STR 8</b>.</li> </ul>	E4ii.
80109-R08	<ul style="list-style-type: none"> <li>Remove water pipe which is not in use at <b>STR 9A</b>.</li> </ul>	E4ii.
80109-R11	<ul style="list-style-type: none"> <li>Remove C &amp; D waste at <b>SD 6</b>.</li> </ul>	E4ii.

Weekly Site Inspection Record Summary

Ref. No.	Proposed Completion Date	Completion Date	Remarks
80103-R07	9 January 2008	9 January 2008	Rectified
80109-O01	17 January 2008		Follow Up Required
80109-O02			
80109-O03			
80109-O04			
80109-R05			
80109-R06			
80109-R07			
80109-R08			
80109-R09			
80109-R10			
80109-R11			
80109-R12			
80109-R13			

	Name	Signature	Date
Recorded by	Ivy Tam		9 January 2008
Checked by	Dr. Priscilla Choy		9 January 2008



Weekly Site Inspection Record Summary

Inspection Information



Checklist Reference Number	80117
Date	17 January 2008 (Thursday)
Time	9:00 – 11:45

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	<b>A. Water Quality</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>B. Air Quality</b>	
80117-O04	• Mud trail was observed at the entrance of <b>SD 7</b> . The Contractor was reminded to clear it and repair the concrete kerb.	C3
	<b>C. Noise</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>D. Waste / Chemical Management</b>	
80117-O01	• C & D waste was observed at <b>Stream 32</b> . The Contractor was reminded to clear them.	E4ii.
80117-O02	• C & D waste was observed underneath <b>STR 14</b> . The Contractor was reminded to provide fencing at <b>Stream 35</b> and clear the waste.	E4ii.
80117-O03	• False work was observed at <b>Stream 29</b> . The Contractor was reminded to remove it.	E4ii.
	•	
	<b>E. Ecology</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>F. Others</b>	
	• All environmental deficiencies identified in previous audit session were improved/rectified by the Contractor except items (80109-O02, O03, O04, R06, R11 and R13). Follow-up action is needed for the outstanding items.	
	• Items (80109-R12) were not observed during site inspection because no construction activities was being carried out.	

	Reminders	Related Item No.
	The Contractor was reminded to implement the following preventive measures:	
	<b>A. Water Quality</b>	
80117-R08	• Clear silt at <b>STR 10</b> .	B18
80117-R09	• Properly cover exposed slope at opposite to <b>SD 6</b> .	B8
	<b>B. Air Quality</b>	
80117-R11	• Ensure water-spray on dust-generation activities at <b>STR 19</b> and <b>STR11</b> .	C6
	<b>D. Waste / Chemical Management</b>	
80117-R05	• Clear C & D waste at another region of <b>STR 7</b> .	E4ii.
80117-R06	• Clear C & D waste at <b>STR 8</b> .	E4ii.
80117-R07	• Clear General refuse at underneath <b>STR 8</b> .	E1iii.
80117-R10	• Clear C & D waste at <b>SD 6</b> .	E4ii.

**Weekly Site Inspection Record Summary**

Ref. No.	Proposed Completion Date	Completion Date	Remarks
80109-O01	17 January 2008	17 January 2008	Rectified
80109-R05			
80109-R07			
80109-R08			
80109-R09			
80109-R10			
80117-O01	24 January 2008		Follow Up Required
80117-O02			
80117-O03			
80117-O04			
80117-R05			
80117-R06			
80117-R07			
80117-R08			
80117-R09			
80117-R10			
80117-R11			

	Name	Signature	Date
Recorded by	Ivy Tam		17 January 2008
Checked by	Dr. Priscilla Choy		17 January 2008

Weekly Site Inspection Record Summary

Inspection Information

Checklist Reference Number	80123
Date	23 January 2008 (Wednesday)
Time	14:00 – 17:00

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	<b>A. Water Quality</b>	
80123-004	<ul style="list-style-type: none"> <li>Standing water with general refuse was observed at <b>STR 10</b>. The Contractor was reminded to dry it out and clear the waste.</li> </ul>	B11
	<b>B. Air Quality</b>	
	<ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul>	
	<b>C. Noise</b>	
	<ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul>	
	<b>D. Waste / Chemical Management</b>	
80123-001	<ul style="list-style-type: none"> <li>False works were observed at <b>Stream 29</b>. The Contractor was reminded to remove them.</li> </ul>	E4ii.
80123-002	<ul style="list-style-type: none"> <li>C&amp;D waste was observed at <b>Stream 32</b>. The Contractor was reminded to clear them.</li> </ul>	E4ii.
80123-003	<ul style="list-style-type: none"> <li>C&amp;D waste was observed at <b>Stream 36</b>. The Contractor was reminded to clear them.</li> </ul>	E4ii.
	<b>E. Ecology</b>	
	<ul style="list-style-type: none"> <li>No environmental deficiency was identified during site inspection.</li> </ul>	
	<b>F. Others</b>	
	<ul style="list-style-type: none"> <li>All environmental deficiencies identified in previous audit session were improved/rectified by the Contractor except items (80117-O01, O03, R06, R07, R09 and R11). Follow-up action is needed for the outstanding items.</li> <li>Items (80117-R11) were not observed during site inspection because no construction activities was being carried out.</li> </ul>	

	Reminders	Related Item No.
	The Contractor was reminded to implement the following preventive measures:	
	<b>A. Water Quality</b>	
80123-R09	<ul style="list-style-type: none"> <li>Properly cover exposed slope at <b>STR 16</b>.</li> </ul>	B8
80123-R10	<ul style="list-style-type: none"> <li>Properly cover exposed slope at <b>STR 14</b>.</li> </ul>	B8
80123-R11	<ul style="list-style-type: none"> <li>Properly cover exposed slope at <b>STR 17</b>.</li> </ul>	B8
80123-R12	<ul style="list-style-type: none"> <li>Properly cover exposed slope at <b>STR 18</b>.</li> </ul>	B8
80123-R13	<ul style="list-style-type: none"> <li>Properly cover exposed slope at <b>SD 6</b>.</li> </ul>	B8
	<b>B. Air Quality</b>	
80123-R07	<ul style="list-style-type: none"> <li>Ensure water – spray on dust generation activities at <b>STR 11</b> and <b>STR 19</b>.</li> </ul>	C6
80123-R08	<ul style="list-style-type: none"> <li>Properly cover stockpile at <b>STR 9 -9A</b>.</li> </ul>	C7
80123-R15	<ul style="list-style-type: none"> <li>Provide plant equipment maintenance at <b>SD 7</b>.</li> </ul>	C15
80123-R16	<ul style="list-style-type: none"> <li>Ensure water – spray on dusty haul road.</li> </ul>	C5
80123-R17	<ul style="list-style-type: none"> <li>Clear mud – trail at the entrance of San Shek Wan.</li> </ul>	C3
	<b>D. Waste / Chemical Management</b>	
80123-R05	<ul style="list-style-type: none"> <li>Clear C&amp;D waste at <b>STR 8</b>.</li> </ul>	E4ii.



**Contract No. HY/2003/19**

**Improvement to Tung Chung Road Between Lung Tseng Tau and Cheung Sha**

**Weekly Site Inspection Record Summary**

80123-R06	• Clear general refuse at underneath STR 8.	E1iii.
80123-R14	• Clear C&D waste at SD 6 and in permanent culvert.	E4ii.

Ref. No.	Proposed Completion Date	Completion Date	Remarks
80117-O02	24 January 2008	23 January 2008	Rectified
80117-O04			
80117-R05			
80117-R08			
80117-R10			
80123-O01	31 January 2008		Follow Up Required
80123-O02			
80123-O03			
80123-O04			
80123-R05			
80123-R06			
80123-R07			
80123-R08			
80123-R09			
80123-R10			
80123-R11			
80123-R12			
80123-R13			
80123-R14			
80123-R15			
80123-R16			
80123-R17			

	Name	Signature	Date
Recorded by	Ivy Tam		23 January 2008
Checked by	Dr. Priscilla Choy		23 January 2008

Weekly Site Inspection Record Summary

Inspection Information



Checklist Reference Number	80131
Date	31 January 2008 (Wednesday)
Time	9:00 – 12:00

Ref. No.	Non-Compliance	Related Item No.
-	None identified	-
Ref. No.	Remarks/Observations	Related Item No.
	<b>A. Water Quality</b>	
80131-O04	• Standing water with general refuse was observed at <b>STR 10</b> . The Contractor was reminded to dry it out and clear the waste.	B11
80131-O05	• Standing water was observed at <b>STR 14</b> . The Contractor was reminded to dry it out.	B11
	<b>B. Air Quality</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>C. Noise</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>D. Waste / Chemical Management</b>	
80131-O01	• False works were observed at <b>Stream 29</b> . The Contractor was reminded to remove them.	E4ii.
80131-O02	• C&D waste and false works were observed at <b>Stream 32</b> . The Contractor was reminded to remove them.	E4ii.
80131-O03	• C&D waste was observed at <b>Stream 36</b> . The Contractor was reminded to clear them.	E4ii.
	•	
	<b>E. Ecology</b>	
	• No environmental deficiency was identified during site inspection.	
	<b>F. Others</b>	
	• All environmental deficiencies identified in previous audit session were improved/rectified by the Contractor except items (80123-O01 to O04, R05 to R12 and R14). Follow-up action is needed for the outstanding items.	

	Reminders	Related Item No.
	The Contractor was reminded to implement the following preventive measures:	
	<b>A. Water Quality</b>	
80131-R12	• Properly cover exposed slope at <b>STR 14</b> .	B8
80131-R13	• Properly cover exposed slope at <b>STR 16</b> .	B8
80131-R14	• Properly cover exposed slope at <b>STR 17</b> .	B8
80131-R15	• Properly cover exposed slope at <b>STR 18</b> .	B8
	<b>B. Air Quality</b>	
80131-R08	• Properly cover stockpile at <b>STR 9 -9A</b> .	C7
80131-R10	• Ensure water – spray on dust generation activities at <b>STR 11</b> and <b>STR 19</b> .	C6
80131-R11	• Properly cover stockpile at <b>STR 13</b> .	C7
	<b>D. Waste / Chemical Management</b>	
80131-R06	• Clear C&D waste at <b>STR 8</b> .	E4ii.
80131-R07	• Clear general refuse at underneath <b>STR 8</b> .	E1iii.
80131-R09	• Clear C&D waste at underneath <b>STR 10</b> .	E4ii.
80131-R16	• Clear C&D waste at <b>SD 6</b> and in permanent culvert.	E4ii.

**Weekly Site Inspection Record Summary**

Ref. No.	Proposed Completion Date	Completion Date	Remarks
80123-R13	31 January 2008	31 January 2008	Rectified
80123-R15			
80123-R16			
80123-R17			
80131-O01	6 February 2008		Follow Up Required
80131-O02			
80131-O03			
80131-O04			
80131-O05			
80131-R06			
80131-R07			
80131-R08			
80131-R09			
80131-R10			
80131-R11			
80131-R12			
80131-R13			
80131-R14			
80131-R15			
80131-R16			

	Name	Signature	Date
Recorded by	Ivy Tam		31 January 2008
Checked by	Dr. Priscilla Choy		31 January 2008

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**APPENDIX J  
ENVIRONMENTAL MITIGATION  
IMPLEMENTATION SCHEDULE (EMIS)**

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## Appendix J - Summary of Environmental Mitigation Implementation Schedule

Types of Impacts	Mitigation Measures	Status
<b>Construction Dust</b>	<ul style="list-style-type: none"> <li>• A stockpile of dusty materials should not extend beyond the pedestrian barriers, fencing or traffic cones.</li> </ul>	^
	<ul style="list-style-type: none"> <li>• Vehicle washing facilities should be provided at every exit point.</li> </ul>	^
	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	^
	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	N/A
	<ul style="list-style-type: none"> <li>• Every main haul road should be sprayed with water or a dust suppression chemical so as to maintain the entire road surface wet.</li> </ul>	*
	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	*
	<ul style="list-style-type: none"> <li>• Any stockpile of dusty materials should be either covered entirely by impervious sheeting, placed in an area sheltered on the top and the 3 sides or sprayed with water or a dust suppression chemical so as to maintain the entire surface wet.</li> </ul>	*
	<ul style="list-style-type: none"> <li>• During cement debagging or concrete batching operation in an area sheltered on top and 3 sides.</li> </ul>	^
	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	^
	<ul style="list-style-type: none"> <li>• Every vehicle should be washed to remove any dusty materials from its body and wheels immediately before leaving a construction site.</li> </ul>	^
	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	^
	<ul style="list-style-type: none"> <li>• Proper enclosures and water spraying should be implemented for the main dust-generating activities, such as soil nailing or piling works.</li> </ul>	*
	<ul style="list-style-type: none"> <li>• Proper plant maintenance should be provided to avoid black smoke emission from plants/equipment.</li> </ul>	*



Types of Impacts	Mitigation Measures	Status	
<p align="center"><b>Construction Noise</b></p>	<ul style="list-style-type: none"> <li>• Only well-maintained plant should be operated on –site and plant should be serviced regularly during the construction works.</li> <li>• Machines and plant that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum.</li> <li>• Plant know to emit noise strongly in one direction, should where possible, be orientated to direct noise away from the NSRS.</li> <li>• Mobile plant should be sited as far away from NSRs as possible.</li> <li>• Material stockpiles and other structures should be effectively utilised, where practicable, to screen noise from on-site construction activities.</li> <li>• Use quiet plant and Working Method</li> <li>• Reduce the number of plant operating in critical areas close NSRs.</li> <li>• Construct temporary and movable noise barriers</li> </ul>	<p align="center">^ ^ ^ ^ ^ ^ ^ N/A</p>	
	<p><b>Water Quality</b></p>	<p><i>Construction Runoff and Drainage</i></p>	
		<ul style="list-style-type: none"> <li>• Discharges to natural water courses shall only take place when the effluent can be shown to comply with the standards specified in the Technical Memorandum, Standards for Effluents Discharged in to Drainage and Sewerage Systems, Inland and Coastal Waters. Discharges in the water gathering grounds should meet Group A standard for inland waters.</li> </ul>	<p align="center">^</p>
		<ul style="list-style-type: none"> <li>• Use of sediment traps and the adequate maintenance of drainage systems to prevent flooding and overflow.</li> <li>• 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.</li> <li>• 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</li> <li>• 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.</li> <li>• 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.</li> <li>• Catchpits and perimeter channels shall be constructed in advance of site formation works and earthworks.</li> <li>• 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.</li> </ul>	<p align="center">^ ^ ^ ^ N/A ^ ^</p>

Types of Impacts	Mitigation Measures	Status
	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<p style="text-align: center;">^</p> <p style="text-align: center;">^</p>
	<p><i>Tunnelling Work</i></p> <ul style="list-style-type: none"> <li>Temporary open storage of excavated materials should be covered with tarpaulin or similar fabric during rainstorms. Any washout of construction or excavated materials from the drill and blast tunnelling work should be diverted to the drainage system via appropriate sediment traps.</li> <li>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.</li> <li>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.</li> </ul>	<p style="text-align: center;">N/A</p> <p style="text-align: center;">N/A</p> <p style="text-align: center;">N/A</p>
	<p><i>General Construction Activities</i></p>	
	<ul style="list-style-type: none"> <li>Debris and rubbish on site should be collected, handled and disposed of properly to avoid entering the water column and cause water quality impacts.</li> <li>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).</li> </ul>	<p style="text-align: center;">*</p> <p style="text-align: center;">^</p>
	<p><i>Sewage Effluent</i></p> <ul style="list-style-type: none"> <li>Construction work force sewage discharges from fixed toilet facilities on-site should be connected to the nearby existing trunk sewer wherever feasible. However, for areas where existing trunk sewer is not available, it is recommended that appropriate and adequate on site portable chemical toilets should be provided by a licensed contractor who will be responsible for appropriate disposal and maintenance of these facilities.</li> <li>It is considered that sewage discharges could also be treated by on-site septic tanks and soakaway. Minimum clearance away from streams and catchments and other requirements for the proposed septic tank and soakaway should be referred to EPD's Practice Note for Professional Persons, Drainage Plans.</li> </ul>	<p style="text-align: center;">^</p> <p style="text-align: center;">N/A</p>

Types of Impacts	Mitigation Measures	Status
<b>Waste / Chemical</b>	<i>General</i>	
	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	^
	<i>Storage, Collection and Transportation of Waste</i>	
	<ul style="list-style-type: none"> <li>• Wastes shall be handled and stored in a manner to ensure that they are held securely without loss or leakage.</li> </ul>	^
	<ul style="list-style-type: none"> <li>• Authorised or licensed waste hauliers shall be used and they shall only collect wastes prescribed by their permits.</li> </ul>	^
	<ul style="list-style-type: none"> <li>• Waste shall be removed on a daily basis.</li> </ul>	^
	<ul style="list-style-type: none"> <li>• Waste storage area shall be maintained and cleaned on a daily basis.</li> </ul>	^
	<ul style="list-style-type: none"> <li>• Windblown litter and dust during transportation shall be minimised by either covering trucks or transporting wastes in enclosed containers.</li> </ul>	^
	<ul style="list-style-type: none"> <li>• Obtain necessary waste disposal permits from the appropriate authorities if they are required.</li> </ul>	^
	<ul style="list-style-type: none"> <li>• Wastes shall be disposed of at licensed waste disposal facilities.</li> </ul>	^
<ul style="list-style-type: none"> <li>• 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.</li> </ul>	^	
<ul style="list-style-type: none"> <li>• Maintain records of the quantities of wastes generated, recycled and disposed.</li> </ul>	^	
<i>Surplus Excavated Materials</i>		
<ul style="list-style-type: none"> <li>• 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.</li> </ul>	^	
<i>Construction and Demolition (C&amp;D) Waste</i>		
<ul style="list-style-type: none"> <li>• Careful design, planning and good site management shall be adopted to minimise over-ordering and generation of waste materials such as concrete grouts.</li> </ul>	^	
<ul style="list-style-type: none"> <li>• 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.</li> </ul>	N/A	
<ul style="list-style-type: none"> <li>• Construction and demolition (C&amp;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.</li> </ul>	^	
<i>Chemical Waste</i>		
<ul style="list-style-type: none"> <li>• Chemical waste that is produce during construction shall be handled in accordance with the Code of Practice on the Packaging, Handling and Storage of Chemical Wastes.</li> </ul>	^	

Types of Impacts	Mitigation Measures	Status
	<ul style="list-style-type: none"> <li>• Containers used for the storage of chemical wastes should:               <ol style="list-style-type: none"> <li>a. Be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed;</li> <li>b. Have a capacity of less than 450 litres unless the specifications have been approved by the EPD;</li> <li>c. Display a label in English and Chinese in accordance with instructions prescribed in Schedule 2 of the Chemical Waste Regulations.</li> </ol> </li> <li>• The storage area for chemical wastes should:               <ol style="list-style-type: none"> <li>a. Be clearly labelled and used solely for the storage of chemical waste;</li> <li>b. Be enclosed on at least 3 sides;</li> <li>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;</li> <li>d. Have adequate ventilation;</li> <li>e. Be covered to prevent rainfall entering (water collected within the bund must be tested and disposed as chemical waste if necessary);</li> <li>f. Be arranged so that incompatible materials are adequately separated.</li> </ol> </li> <li>• Disposal of chemical waste shall be via a licensed waste collector; and to a facility licensed to receive chemical waste; or a re-user of the waste (under approval from EPD).</li> </ul>	<p style="text-align: center;">^</p> <p style="text-align: center;">^</p> <p style="text-align: center;">^</p>
	<i>General Refuse</i>	
	<ul style="list-style-type: none"> <li>• General refuse generated on-site shall be stored in enclosed bins or compaction unit separate from C&amp;D and chemical wastes. A reputable waste collector shall be employed by the contractor to remove general refuse from the site, separately from C&amp;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.</li> <li>• Reusable rather than disposable dishware shall be used if feasible.</li> </ul>	<p style="text-align: center;">*</p> <p style="text-align: center;">^</p>
	<i>Oil and Fuel</i>	
	<ul style="list-style-type: none"> <li>• The storage area for chemical wastes should have an impermeable floor and bunding of capacity to accommodate 110% of the volume of the largest container;</li> <li>• No storage of oil or fuel should be stored within the Country Park or the water gathering ground.</li> </ul>	<p style="text-align: center;">^</p> <p style="text-align: center;">^</p>
<b>Landscape and Visual Impact</b>	<ul style="list-style-type: none"> <li>• Refinement of the route alignment and design of associated structures to minimise loss of woodland and other landscape resources;</li> <li>• Minimising working areas as far as possible;</li> <li>• Protection and retention of existing vegetation where possible;</li> <li>• Transplanting of trees where appropriate</li> <li>• Protection and retention of existing natural rocky outcrops, slope profiles, vegetation, landscape features;</li> <li>• Advance planting and visual screening, where possible;</li> </ul>	<p style="text-align: center;">^</p> <p style="text-align: center;">^</p> <p style="text-align: center;">^</p> <p style="text-align: center;">^</p> <p style="text-align: center;">^</p> <p style="text-align: center;">^</p>

Types of Impacts	Mitigation Measures	Status
	<ul style="list-style-type: none"> <li>• Compensatory planting;</li> <li>• Sensitively designed site hoarding, where possible (ie the sensitive design of site hoarding will be disrupted by hoarding panels showing the Highways Department logo, at regular intervals as per the approved engineering design);and</li> <li>• Grassing and woodland planting of soil slopes and disturbed areas</li> </ul>	<p style="text-align: center;">^</p> <p style="text-align: center;">^</p> <p style="text-align: center;">^</p>
<b>Ecology</b>	<ul style="list-style-type: none"> <li>• Construction activities in the stream and other disturbances to it should be avoided.</li> </ul>	<p style="text-align: center;">^</p>

Remarks:

- |   |   |  |
|---|---|--|
| <ul style="list-style-type: none"> <li>^ Compliance of mitigation measure;</li> <li>N/A Not Applicable;</li> <li>* Recommendation was made during site audit but improved/rectified by the contractor.</li> </ul> | <ul style="list-style-type: none"> <li>X Non-compliance of mitigation measure;</li> <li>• Non-compliance but rectified by the contractor;</li> <li># Non-compliance but rectified/improved by the contractor and awaiting IEC's further comment;</li> </ul> |  |
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**APPENDIX K  
EVENT ACTION PLANS**

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## Appendix K – Event Action Plans

### Event /Action Plan for Air Quality

EVENT	ACTION			
	ET	IEC	ER	Contractor
<i>Action Level</i>				
1. Exceedance for one sample	<ol style="list-style-type: none"> <li>1. Inform the IEC and the Contractor about the exceedance within 24 hours of identification of exceedance;</li> <li>2. Identify the source, investigate the causes of exceedance and propose remedial measures;</li> <li>3. Report the results of the investigation to the Contractor;</li> <li>4. Prepare Notification of Exceedance (NOE) to inform the Contractor, the IEC, the ER and the EPD within 24 hours of identification of exceedance.</li> <li>5. Repeat measurement to confirm finding.</li> <li>6. If exceedance is indicated due to the Project construction works, increase 24-hour TSP monitoring frequency to 1-hour monitoring with 3 times every six days until no exceedance is recorded.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check monitoring data submitted by the ET.</li> <li>2. Confirm the ET assessment regarding the action and/or limit level exceedance during the impact monitoring;</li> <li>3. Check Contractor's working method.</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm receipt of NOE in writing.</li> <li>2. Notify EPD and other relevant Government departments within 24 hours of identification of exceedance.</li> </ol>	<ol style="list-style-type: none"> <li>1. Inform IEC and ER within 24 hours of identification of exceedance;</li> <li>2. Submit proposals for remedial to ER within 3 working days of notification ET if exceedance is due to the Project construction works;</li> <li>3. Rectify any unacceptable practice;</li> <li>4. Amend working methods if appropriate and within reasonable time scale if exceedance is due to the Project construction works.</li> </ol>

EVENT	ACTION			
	ET	IEC	ER	Contractor
<i>Action Level</i>				
2. Exceedance for two or more consecutive samples	<ol style="list-style-type: none"> <li>1. Inform the IEC and the Contractor about the exceedance within 24 hours of identification of exceedance;</li> <li>2. Identify the source.</li> <li>3. Supervise implementation of remedial measures;</li> <li>4. Report the results of the investigation to the Contractor;</li> <li>5. Advise the ER on the effectiveness of the proposed remedial measures;</li> <li>6. Repeat measurements to confirm findings;</li> <li>7. Increase monitoring frequency to daily;</li> <li>8. Discuss with the IEC and the Contractor on remedial actions required;</li> <li>9. If exceedance continues, arrange meeting with the IEC and the ER.</li> <li>10. If exceedance stops, cease additional monitoring.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check monitoring data submitted by the ET;</li> <li>2. Check the Contractor's working method;</li> <li>3. Discuss with the ET and the Contractor on possible remedial measures;</li> <li>4. Advise the ER on the effectiveness of the proposed remedial measures;</li> <li>5. Supervise implementation of remedial measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm receipt of NOE in writing.</li> <li>2. Notify the EPD and other relevant Government departments within 24 hours of identification of exceedance;</li> <li>3. Ensure remedial measures properly implemented.</li> </ol>	<ol style="list-style-type: none"> <li>1. Inform IEC and ER within 24 hours of identification of exceedance;</li> <li>2. Submit proposals for remedial actions to IEC within 3 working days of notification;</li> <li>3. Implement the agreed proposals;</li> <li>4. Amend proposal if appropriate.</li> </ol>



EVENT	ACTION			
	ET	IEC	ER	Contractor
<i>Limit Level</i>				
1. Exceedance for one sample	<ol style="list-style-type: none"> <li>1. Notify the IEC and the Contractor within 24 hours of identification of exceedance;</li> <li>2. Identify the source, investigate the causes of exceedance and propose remedial measures;</li> <li>3. Prepare Notification of Exceedance (NOE) to inform the Contractor, the IEC, the ER and the EPD within 24 hours of identification of exceedance.</li> <li>4. Repeat measurement to confirm finding.</li> <li>5. If exceedance is indicated due to the Project construction works, increase 24-hour TSP monitoring frequency to 1-hour monitoring with 3 times every six days until no exceedance is recorded;</li> <li>6. Assess effectiveness of Contractor's remedial actions and keep the IEC, the DEP and the ER informed of the results.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check monitoring data submitted by the ET.</li> <li>2. Check Contractor's working method.</li> <li>3. Discuss with the ET, the Contractor and the ER on possible remedial measures.</li> <li>4. Advise the ER on the effectiveness of the proposed remedial measures.</li> <li>5. Supervise implementation of remedial measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm receipt of notification of exceedance in writing;</li> <li>2. Notify EPD and other relevant Government departments within 24 hours of identification of exceedance;</li> <li>3. Ensure remedial measures are properly implemented.</li> </ol>	<ol style="list-style-type: none"> <li>1. Inform ER and IEC within 24 hours of identification of exceedance;</li> <li>2. Take immediate action to avoid further exceedance;</li> <li>3. Submit proposals for remedial actions to ER and IEC within 3 working days of notification by ET;</li> <li>4. Implement the agreed proposals;</li> <li>5. Report effectiveness of remedial actions to IEC and ER;</li> <li>6. Amend proposal if appropriate.</li> </ol>

EVENT	ACTION			
	ET	IEC	ER	Contractor
2. Exceedance for two or more consecutive samples	<ol style="list-style-type: none"> <li>1. Notify the IEC and the Contractor within 24 hours of identification of exceedance;</li> <li>2. Identify the source;</li> <li>3. Repeat measurements to confirm findings if the exceedance is due to the Project construction works;</li> <li>4. Increase monitoring frequency to daily;</li> <li>5. Carry out analysis of the Contractor's working procedures to determine possible mitigation to be implemented;</li> <li>6. Arrange meeting with the IEC and the ER to discuss the remedial actions to be taken;</li> <li>7. Assess effectiveness of the Contractor's remedial actions and keep the IEC, the DEP and the ER informed of the results;</li> <li>8. If exceedance stops, cease additional monitoring.</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss amongst the ER, ET and the Contractor on the potential remedial actions;</li> <li>2. Review the Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly;</li> <li>3. Supervise the implementation of remedial measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm receipt of notification of failure in writing;</li> <li>2. Notify the EPD and other relevant Government departments within 24 hours of identification of exceedance;</li> <li>3. In consultation with the IEC, agree with the Contractor on the remedial measures to be implemented;</li> <li>4. Ensure remedial measures are properly implemented;</li> <li>5. If exceedance continues, consider what activity of the work is responsible and instruct the Contractor to stop that activity of work until the exceedance is abated.</li> </ol>	<ol style="list-style-type: none"> <li>1. Inform ER and IEC within 24 hours of identification of exceedance;</li> <li>2. Take immediate action to avoid further exceedance;</li> <li>3. Submit proposals for remedial actions to IEC within 3 working days of notification by ET;</li> <li>4. Arrange meeting with IEC and ER to discuss the remedial actions to be taken;</li> <li>5. Implement the agreed proposals;</li> <li>6. Resubmit proposals if problem still not under control;</li> <li>7. Report effectiveness of remedial actions to IEC and ER;</li> <li>8. Stop the relevant activity of works as determined by the ER until the exceedance is abated.</li> </ol>

Note: ET – Environmental Team, IEC – Independent Environmental Checker, ER – Engineer's Representative

Event Action Plan for Construction Noise

EVENT	ACTION			
	ET	IEC	ER	Contractor
Action Level	<ol style="list-style-type: none"> <li>1. Notify the IEC and the Contractor within 24 hours of identification of exceedance.</li> <li>2. Carry out investigation.</li> <li>3. Report the results of investigation to the IEC and the Contractor.</li> <li>4. Prepare Notification of Exceedance (NOE) to inform the Contractor, the IEC, the ER and the EPD within 24 hours of identification of exceedance.</li> <li>5. Discuss with the Contractor and formulate remedial measures.</li> <li>6. Increase monitoring frequency to check mitigation effectiveness.</li> </ol>	<ol style="list-style-type: none"> <li>1. Review the analysed results submitted by the ET.</li> <li>2. Review the proposed remedial measures by the Contractor and advise the ER accordingly.</li> <li>3. Supervise the implementation of remedial measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm receipt of NOE in writing.</li> <li>2. Notify the EPD and other relevant Government departments within 24 hours of identification of exceedance.</li> <li>3. Require the Contractor to propose remedial measures for the analysed noise problem.</li> <li>4. Ensure remedial measures are properly implemented.</li> </ol>	<ol style="list-style-type: none"> <li>1. Submit noise mitigation proposals to IEC</li> <li>2. Implement noise mitigation proposals</li> </ol>

EVENT	ACTION			
	ET	IEC	ER	Contractor
Limit Level	<ol style="list-style-type: none"> <li>1. Notify the IEC and the Contractor within 24 hours of identification of exceedance.</li> <li>2. Identify the source.</li> <li>3. Repeat measurement to confirm findings.</li> <li>4. Increase monitoring frequency.</li> <li>5. Prepare Notification of Exceedance (NOE) to inform the Contractor, the IEC, the ER and the EPD within 24 hours of identification of exceedance.</li> <li>6. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented.</li> <li>7. Inform the IEC, the ER and the DEP the causes &amp; actions taken for the exceedances.</li> <li>8. Assess effectiveness of the Contractor's remedial actions and keep the IEC, the DEP and the ER informed of the results.</li> <li>9. If exceedance stops, cease additional monitoring.</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss amongst the ER, the ET and the Contractor on the potential remedial actions.</li> <li>2. Review the Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly.</li> <li>3. Supervise the implementation of remedial measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm receipt of NOE in writing.</li> <li>2. Notify the EPD and other relevant Government departments within 24 hours of identification of exceedance.</li> <li>3. Require the Contractor to propose remedial measures for the analysed noise problem.</li> <li>4. Ensure remedial measures are properly implemented.</li> <li>5. If exceedance continues, consider what activity of the work is responsible and instruct the Contractor to stop that activity of work until the exceedance is abated.</li> </ol>	<ol style="list-style-type: none"> <li>1. Take immediate action to avoid further exceedance</li> <li>2. Submit proposals for remedial actions to IEC within 3 working days of notification</li> <li>3. Implement the agreed proposals</li> <li>4. Resubmit proposals if problem still not under control</li> <li>5. Stop the relevant activity of works as determined by the ER until the exceedance is abated.</li> </ol>

Note: ET – Environmental Team, IEC – Independent Environmental Checker, ER – Engineer's Representative

## Event / Action Plan for Water Quality

EVENT	ACTION			
	ET	IEC	ER	Contractor
Action Level being exceeded by one sampling day	<ol style="list-style-type: none"> <li>1. Repeat in-situ measurement to confirm findings;</li> <li>2. Identify source(s) of impact;</li> <li>3. Inform the IEC and the Contractor;</li> <li>4. Prepare Notification of Exceedance (NOE) to inform the Contractor, the IEC, the ER and the EPD with 24 hours of identification of exceedance.</li> <li>5. Check monitoring data, all plant, equipment and the Contractor's working methods;</li> <li>6. Discuss mitigation measures with the IEC and the Contractor;</li> <li>7. Repeat measurement on next day of exceedance.</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss with the ET and the Contractor on the mitigation measures;</li> <li>2. Review proposals on mitigation measures submitted by the Contractor and advise the ER accordingly;</li> <li>3. Assess the effectiveness of the implemented mitigation measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss with the IEC on the proposed mitigation measures;</li> <li>2. Make agreement on the mitigation measures to be implemented.</li> </ol>	<ol style="list-style-type: none"> <li>1. Inform the ER and confirm notification of the non-compliance in writing;</li> <li>2. Rectify unacceptable practice;</li> <li>3. Check all plant and equipment;</li> <li>4. Consider changes of working methods;</li> <li>5. Discuss with the ET and the IEC and propose mitigation measures to the IEC and the ER;</li> <li>6. Implement the agreed mitigation measures.</li> </ol>
Action Level being exceeded by more than one consecutive sampling days	<ol style="list-style-type: none"> <li>1. Repeat in-situ measurement to confirm findings;</li> <li>2. Identify source(s) of impact;</li> <li>3. Inform the IEC and the Contractor;</li> <li>4. Check monitoring data, all plant, equipment and Contractor's working methods;</li> <li>5. Discuss mitigation measures with the IEC and the Contractor;</li> <li>6. Ensure mitigation measures are implemented;</li> <li>7. Prepare to increase the monitoring frequency to daily;</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss with the ET and the Contractor on the mitigation measures;</li> <li>2. Review proposals on mitigation measures submitted by the Contractor and advise the ER accordingly;</li> <li>3. Assess the</li> </ol>	<p>Discuss with IEC on the proposed mitigation measures;</p> <p>Make agreement on the mitigation measures to be implemented;</p> <p>Access the effectiveness of the implemented mitigation measures.</p>	<ol style="list-style-type: none"> <li>1. Inform the ER and confirm notification of the non-compliance in writing;</li> <li>2. Rectify unacceptable practice;</li> <li>3. Check all plant and equipment;</li> <li>4. Consider changes of working methods;</li> <li>5. Discuss with the ET and the IEC and propose mitigation measures to the IEC and ER within 3 working days;</li> <li>6. Implement the agreed mitigation measures.</li> </ol>

EVENT	ACTION			
	ET	IEC	ER	Contractor
	8. Repeat measurement on next day of exceedance.	effectiveness of the implemented mitigation measures.		
Limit Level being exceeded by one consecutive sampling day	<ol style="list-style-type: none"> <li>1. Repeat in-situ measurement to confirm findings;</li> <li>2. Identify source(s) of impact;</li> <li>3. Inform the IEC and the Contractor;</li> <li>4. Prepare Notification of Exceedance (NOE) to inform the Contractor, the IEC, the ER and the EPD with 24 hours of identification of exceedance.</li> <li>5. Check monitoring data, all plant, equipment and the Contractor's working methods;</li> <li>6. Discuss mitigation measures with the IEC, the ER and the Contractor;</li> <li>7. Ensure mitigation measures are implemented;</li> <li>8. Increase the monitoring frequency to daily until no exceedance of Limit Level.</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss with the ET and the Contractor on the mitigation measures;</li> <li>2. Review proposals on mitigation measures submitted by the Contractor and advise the ER accordingly;</li> <li>3. Assess the effectiveness of the implemented mitigation measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss with the IEC, the ET and the Contractor on the proposed mitigation measures;</li> <li>2. Request the Contractor to critically review the working methods;</li> <li>3. Make agreement on the mitigation measures to be implemented;</li> <li>4. Assess the effectiveness of the implemented mitigation measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Inform the Engineer and confirm notification of the non-compliance in writing;</li> <li>2. Rectify unacceptable practice;</li> <li>3. Check all plant and equipment;</li> <li>4. Consider changes of working methods;</li> <li>5. Discuss with the ET, the IEC and the ER and propose mitigation measures to the IEC and the ER within 3 working days;</li> <li>6. Implement the agreed mitigation measures.</li> </ol>

EVENT	ACTION			
	ET	IEC	ER	Contractor
Limit Level being exceeded by more than one consecutive sampling days	<ol style="list-style-type: none"> <li>1. Repeat in-situ measurement to confirm findings;</li> <li>2. Identify source(s) of impact;</li> <li>3. Inform the IEC, the Contractor and DEP;</li> <li>4. Check monitoring data, all plant, equipment and Contractor's working methods;</li> <li>5. Discuss mitigation measures with the IEC, the ER and the Contractor;</li> <li>6. Ensure mitigation measures are implemented;</li> <li>7. Increase the monitoring frequency to daily until no exceedance of Limit Level for two consecutive days.</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss with ET and Contractor on the mitigation measures;</li> <li>2. Review proposals on mitigation measures submitted by the Contractor and advise the ER accordingly;</li> <li>3. Assess the effectiveness of the implemented mitigation measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss with the IEC, the ET and the Contractor on the proposed mitigation measures;</li> <li>2. Request Contractor to critically review the working methods;</li> <li>3. Make agreement on the mitigation measures to be implemented;</li> <li>4. Assess the effectiveness of the implemented mitigation measures;</li> <li>5. Consider and instruct, if necessary, the Contractor to slow down or to stop all or part of the works until no exceedance of Limit Level.</li> </ol>	<ol style="list-style-type: none"> <li>1. Inform the ER and confirm notification of the non-compliance in writing;</li> <li>2. Rectify unacceptable practice;</li> <li>3. Check all plant and equipment;</li> <li>4. Consider changes of working methods;</li> <li>5. Discuss with the ET, the IEC and the ER and propose mitigation measures to the IEC and the ER within 3 working days;</li> <li>6. Implement the agreed mitigation measures;</li> <li>7. As directed by the ER, slow down or stop all or part of the construction activities.</li> </ol>

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**APPENDIX L  
COMPLAINT LOGS**

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**Appendix L - Complaint Log**

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
S63	Tung Chung Road and Cheung Sha Stream	14 Sep 06	The complaint, which was lodged by Green Lantau Association on 13th September 2006, accused the failure of the site drainage system to check the discharge of silt-laden surface water from the site on that day.	ETL is of the view that the complaint is justifiable but the accusation is not substantiated by scientific data in that the rainstorm event was 1 in 25 years. It is therefore beyond the Contractor's terms of contract to design, operate and maintain the carrier pipe and the sedimentation tank to cater for this rainstorm. The Contractor has a defensible case under this increment weather condition.	Closed
S65-S69	Tung Chung Road Southern Section; Cheung Sha Stream;	19 Sep 06	Five complaints, which were lodged by Green Lantau Association on 15th September 2006, accused the failure of the drainage system for the Project on 13th September 2006. The subject of complaints are listed as below: (i) Failed Filtration System (ii) Contaminated Stream (iii) Polluted Cheung Sha Stream (iv) Polluted Cheung Sha Stream (v) Site Debris on Road	ETL is of the view that the complaints are justifiable but the accusation is not substantiated by scientific data in that the rainstorm event was 1 in 25 years. It is therefore beyond the Contractor's terms of contract to design, operate and maintain the carrier pipe and the sedimentation tank to cater for this rainstorm. The Contractor has a defensible case under this increment weather condition.	Closed

<b>Log Ref.</b>	<b>Location</b>	<b>Received Date</b>	<b>Details of Complaint</b>	<b>Investigation/Mitigation Action</b>	<b>Status</b>
S71	Northern Section, Tung Chung Road	3 Nov 06	The complaint, which was referred by Resident Site Staff (RSS) to ET on 3 <sup>rd</sup> November 2006, was raised by a resident living Lantau Island on 17 <sup>th</sup> October 2006 concerning the Tung Chung Road condition on 16 <sup>th</sup> October 2006.	<p>Based on the meteorological data extracted from HKO, the total rainfall between 0:45 and 6:45 hours in Lantau was 196 mm with an average intensity of 32.67 mm/hr on 16<sup>th</sup> October.</p> <p>Based on the results derived from Table 2 “the Intensity-Duration-Frequency (IDF) for various return periods” and Table 4 “Depth-Duration-Frequency (DDF) for durations of than 4 hours” of the “Stormwater Drainage Manual”, the return period should be less than 1 in 10 years.</p> <p>Therefore, the complaint was considered justifiable since the EIA report has recommended the provision of site drainage system shall be 1 in 10 years. The Contractor has implemented remedial measures and preventive measures.</p>	Closed
S72	Lung Tseng Tau Village, Tung Chung	3 Nov 06	The public complaint, which was referred by RSS to ET on 3 <sup>rd</sup> November 2006, was received by the Integrated Complaint Centre (ICC) on 26 <sup>th</sup> October 2006 regarding dust nuisance generated from the Project.	<p>Based on the information collected and the monitoring results, the complaint was considered not justifiable due to the following since no exceedance of the air quality monitoring results was recorded in October 2006.</p> <p>During site inspections in the month, dust mitigation measures have been implemented by the Contractor; and no observation was recorded during the site inspections.</p> <p>According to the information provided by the Contractor and the RSS, the Contractor has implemented additional mitigation measures, including increased water spraying on the public road to more than once a day and covered the stockpiling materials.</p>	Closed

<b>Log Ref.</b>	<b>Location</b>	<b>Received Date</b>	<b>Details of Complaint</b>	<b>Investigation/Mitigation Action</b>	<b>Status</b>
S73	Southern Section of the Project	3 Nov 06	The complaint, which was referred by RSS to ET on 3 <sup>rd</sup> November 2006, was raised by a resident living at Cheung Sha on 24 <sup>th</sup> October 2006 concerning noise generated from rock breaking in Southern Section of the Project.	<p>According to the EM&amp;A records, no exceedance of noise level and no non-compliance were recorded in the month.</p> <p>As advised by the Contractor and RSS, silent rock breaking equipment has been used and noise insulation materials have been used to minimize the noise impact generated from the rock breaking activity.</p> <p>Based on the provided information and the monitoring results, the complaints are considered not justifiable. The Contractor has implemented the mitigation measures to minimize the noise generation from construction activities and was still reminded to continuously implement their practice to prevent noise nuisance generation from the construction works.</p>	Closed
S74	Tung Chung Stream	24 Nov 06	Highways Department (HyD) of HKSAR received a complaint for Agriculture, Fisheries and Conservation (AFCD) regarding untreated site runoff discharged to Tung Chung Stream during the site visit on 21 <sup>st</sup> November 2006. The Resident Site Staff (RSS) subsequently referred the complaint to the Environmental Team (ET) Leader of the Project on 24 <sup>th</sup> November 2006.	The investigation revealed that, based on the meteorological data extracted from HKO, the highest rainfall recorded was between 13:45 and 15:45, with a total of 93mm in two hours. With the above rainfall intensities extracted from HKO, together with the Intensity-Duration-Frequency (IDF) for various return periods derived from Table 2 of the "Stormwater Drainage Manual", the return period should be less than 10 years. Therefore, the complaint was considered justifiable and the Contractor has implemented remedial measures and preventive measures.	Closed

<b>Log Ref.</b>	<b>Location</b>	<b>Received Date</b>	<b>Details of Complaint</b>	<b>Investigation/Mitigation Action</b>	<b>Status</b>
S75	West of the new Tung Chung Road Southern Section Discharge Point	21 Nov 06	Both Environmental Protection Department (EPD) and China Civil Engineering Construction Corporation and China Railway Wujia Joint Venture (the Contractor) received the same public complaint, regarding muddy water discharged to Chueng Sha on 21 <sup>st</sup> November 2006. The Contractor subsequently referred the complaint to the Environmental Team (ET) Leader of the Project on the same day.	The complainant considered that this stream was muddy and discharging muddy water into the sea. As stated in the above paragraph, the investigation revealed that the return period for the rainfall between 13:45 and 15:45 was 41 years. As the complaint was lodged at 14:58 on 21 <sup>st</sup> November 2006, it is reasonable to consider the rainfall recorded in the hour between 13:45 to 14:45 which was 57mm. According to "Stormwater Drainage Manual", the return period should be less than 10 years. Therefore, the complaint was considered justifiable and the Contractor has implemented remedial measures and preventive measures.	Closed
S76	Pui O Wan	27 Nov 06	China Civil Engineering Construction Corporation and China Railway Wujia Joint Venture (the Contractor) received the same public complaint, regarding muddy water discharged into Pui O Wan on 23 <sup>rd</sup> November 2006. According to the complainant, muddy water was discharged into Pui O Wan from the new Tung Chung Road Southern Section Discharge Point (near proposed round about on South Lantau Road) in the morning of 23 <sup>rd</sup> November 2006. The complainant suspected that the muddy water was being pumped off site through failed filtration systems into the sea as there had been no recent rainfall on that day.	The investigation revealed that the complaint was considered not justifiable since (1) no muddy water was generated due to the construction activities in the vicinity of the discharged point; and (2) no surface runoff as no rainfall was recorded on 23 <sup>rd</sup> November 2006.	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
S77	Sheung Ling Pei, Ha Ling Pei, Wong Ka Wai & Lung Tseng Tau Villages	18 Dec 06	<p>Highways Department (HyD) and the Resident Engineer received a complaint against Water Quality Supply (Muddy Water) at Sheung Ling Pei, Ha Ling Pei, Wong Ka Wai &amp; Lung Tseng Tau Villages via District Office (Islands) on 29<sup>th</sup> November 2006.</p> <p>The complainants claimed that subject villages were suffering from muddy water supplied from the water main on the past few days before 29<sup>th</sup> November 2006.</p>	<p>Upon receipt of the complaint, the Contractor inspected all streams (above AFCD entrance) in the Northern Section. Muddy water was observed at Stream 13 which was believed the source of muddy water. However, no water flow was found at the stream. The muddy water was considered probably due to the seepage of underground water mixed with excavated soil to Stream 13. Furthermore, an ad-hoc meeting between DO/WSD/AFCD/MOTT/CCJV/IEC/ET was held on 14 December 2006 to discuss this issue.</p> <p>The complaint was considered due to the construction activities of the Project. Emergency remedial works had been taken by the Contractor to rectify the situation and preventive measures had also been implemented.</p>	Closed
S80	Tung Chung Road near Lung Tseng Tau Village	3 Jan 07	<p>The complaint was lodged by a resident at Lung Tseng Tau Village regarding dust nuisance at Tung Chung Road near Lung Tseng Tau Village. According to the complainant, the dust was generated by vehicle movements (about 5 to 7 per day). The complainant noticed that there was only once per day for water spraying on the road. She suggested that the frequency of water spraying should be increased to 1 to 2 per hour. In addition, she requested to provide more water-spraying practice for the concerned area.</p>	<p>According to the Contractor and the RSS, the main dust emission in the vicinity of Lung Tseng Tau Village was due to the vehicle movements on Tung Chung Road.</p> <p>Base on the information collected and the monitoring results, the complaint was considered not justifiable since (1) no exceedance of the air quality monitoring results was recorded in December 2006; (2) dust mitigation measures have been implemented by the Contractor; and (3) no observation was recorded during the site inspections.</p> <p>In response to the complaint, the Contractor had stepped up the dust suppression control immediately. A water truck was mobilized to spray water at Tung Chung Road within particular in the vicinity of the complainant's house from once per day to at least 3 times per day.</p>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
S81	Lung Tseng Tau	20 Dec 06	<p>The Contractor, CCECC and CRWJ Joint Venture (CCJV) and Highways Department (HyD) of HKSAR received a complaint regarding dust control at Lung Tseng Tau from the Office of Islands District Councilor, Wong Fuk-kan on 6<sup>th</sup> December 2006.</p> <p>According to the complainant, he had received a number of complaints from residents in South Lantau regarding the dust nuisance when their vehicles passing through Tung Chung Road near Lung Tseng Tau. The residents said their vehicles were full of dust whenever they had passed through Tung Chung Road.</p>	<p>Base on the site inspection records and information collected from the RSS and the Contractor, the complaint was considered due to due to the vehicle movements on Tung Chung Road. In response to the complaint, the RSS has conducted site inspection in the afternoon on 18<sup>th</sup> December 2006. The Contractor had immediately mobilized labors to clear the mud trail on Tung Chung Road between ch.3700-4000 using sweepers. In order to maintain the condition of Tung Chung Road, the Contractor has mobilized more staff to clear the mud deposits on the whole Northern Section of Tung Chung Road on 23<sup>rd</sup> December 2006.</p> <p>The Contractor has provision wheel washing facilities at each site exit/entrance. In order to maintain Tung Chung Road condition, the Contractor has mobilized a water truck solely for wheel washing purpose at the site entrance near RW37 between ch.3700-4000 since 23<sup>rd</sup> December 2006. The location is the most busy site exit/entrance for soil removal as wheel washing facilities. Wheels of each vehicle shall be washed before leaving the site. The wastewater after wheel washing at each site exit/entrance shall be collected and treated before discharge at designated location. also mobilized water trucks</p>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
S82	The nullah near the Yat Tung Estate	15 Jan 07	<p>The complaint was lodged by the Legislative Councillor Hon. Albert W.Y. Chan regarding frequent discharge of muddy water from the Tung Chung Road improvement project on 15<sup>th</sup> December 2006. According to Mr. Chan's letter, the complainant was a resident living in Tung Chung.</p> <p>The DSD letter pointed out that muddy water was being frequently discharged to the nullah near the Yat Tung Estate, and confirmed that the site of Tung Chung Road improvement project was the source of such discharge.</p>	<p>After investigation, the discharge of muddy water was largely due to the deposited silts caused by previous heavy rainstorms in November.</p> <p>The contractor has responded promptly in deploying a number of actions to remedy the matter. These include de-silting operation at Wong Lung Hang nullah on 23<sup>rd</sup> December 2006 to remove the accumulated soil and silt materials washed down by the discharges, of which photographs are provided.</p> <p>In addition, several intermediate sedimentation ponds along the temporary drainage system south of Shek Mun Kap to improve de-silting capacity have been installed, and that the site condition will be closely monitored so that advice on any practical measures in improving the quality of water discharge to Wong Lung Hang nullah can be given.</p> <p>In addition, the Contractor is also undergoing continual inspections and monitoring on the conditions of the concerned discharge of the construction site, and is in close liaison with the ET to cap exceeding levels of future discharge.</p>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
S86	Slope opposite to the AFCD's Office at Tung Chung Road near mileage M2.5	8 Feb 07	The complaint was lodged by a resident in Lantau Island regarding the construction noise generated from the road works at the slope opposite to the AFCD's Office at Tung Chung Road near mileage M2.5.	<p>The site of concern is most likely at the RW6 of the Project. According to the Contractor, soil nailing works was conducted at RW6 and the first stage of soil nailing works at RW6 has been completed before 8<sup>th</sup> February 2007.</p> <p>According to the noise monitoring results at monitoring station NM5, Tung Chung Au Country Parks Management Centre, which is located near the AFCD's Office, there was no exceedance recorded from 2<sup>nd</sup> January to 14<sup>th</sup> February 2007.</p> <p>As advised by the Contractor, the following mitigation measures will be implemented as far as possible to reduce the noise nuisance to the nearby residents when soil nailing works carry out in the future:</p> <ul style="list-style-type: none"> <li>● To cover the soil nailing works area with tarpaulin;</li> <li>● To reduce the number of machines for soil nailing;</li> <li>● To orientate the machines for soil nailing works so that the major noise generating part will not directly face the Noise Sensitive Receiver; and</li> <li>● To scatter the plants so that the noise being generated will not be centralized in certain direction.</li> </ul>	Closed



Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
S90	Northern and Southern Section of Tung Chung Road	20 May 07	<p>The complaint was lodged by the Green Lantau Association at on 20 May 2007 regarding failed drainage for the Project on that day.</p>	<p>According to the Contractor, the main concern in the Northern Section is that a large amount of seepage from the permanent slope near the Stream 18 and Stream 21 was observed. The permanent hinterland u-channel was not able to collect most of the hinterland water which ultimately collected by the carrier pipe and increased the loading of the treatment facilities at Shek Mun Kap.</p> <p>As advised by the Contractor, the main problem in Southern Section was due to the fact that the silt is too fine to be settled within a short time, i.e. 3 minutes, as stated in the EIA Report. Due to the large catchments of the site, muddy water could not be completely settled or treated before discharged or overflowed. No bigger sedimentation tank can be constructed due to the site constraint to retain all surface water in heavy rainy days.</p> <p>The complaint was considered justifiable. However, it is beyond the Contractor's capability to completely avoid muddy water discharging or overflowing to sea due to the site conditions and constraints under increment weather conditions.</p>	<p>The complaint investigation report was commented</p>

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
S91	Zone 4 (STR 14)	1 June 07	<p>The complaint was lodged by a resident in Butterfly Crest, Lantau Island regarding the construction noise generated from the Project on Sunday, which is likely to be 27<sup>th</sup> May 2007.</p>	<p>According to the Contractor, construction works were undertaken near STR 14 in the morning of 27<sup>th</sup> May 2007 and the Powered Mechanical Equipment (PME) used on that day included 2 excavators and 1 dump truck at STR 14. The concerned site was covered under the construction noise permit (CNP) no. GW-RS0281-07.</p> <p>As advised by the Contractor, the 2 excavators and 1 dump truck, which categorized separately as Group A and Group E of the abovementioned CNP, were utilized alternatively during the operation in order to comply with the conditions stipulated in the CNP.</p> <p>Base on the information collected, the complaint was considered not justifiable as the equipment used comply with the CNP conditions.</p>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
S93	Western Section of Pui O Bay	22 May 07	<p>The complaint was lodged by the Green Lantau Association at on 22 May 2007 regarding muddy water was observed at 50m west of the Tung Chung Road southern section around 11am on 22 May 2007.</p>	<p>As advised by the Contractor, the main problem in Southern Section was due to the fact that the silt is too fine to be settled within a short time, i.e. 3 minutes, as stated in the EIA Report. Due to the large catchments of the site, muddy water could not be completely settled or treated before discharged or overflowed. No bigger sedimentation tank can be constructed due to the site constraint to retain all surface water in heavy rainy days.</p> <p>In the site near Pui O Wan, the Contractor has exhausted their efforts including to pump the water from sedimentation tanks back to the stockpile area. Unfortunately, one of the pumps was out of order in the early days of that rainy period. However, the pump has been rectified on 22 May 2007.</p> <p>The complaint was considered justifiable. However, it is beyond the Contractor's capability to completely avoid muddy water discharging or overflowing to sea due to the site conditions and constraints under increment weather conditions.</p>	<p>The complaint investigation report was commented</p>

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
S100	Stream water behind WSD's weir	27 July 07	<p>The complaint was lodged by a resident living at Lung Tseng Tau area during the meeting between RSS and the representatives from the villages at Lung Tseng Tau area on 17<sup>th</sup> July 2007 regarding turbid water supply from DO main to the village houses at Lung Tseng Tau area.</p>	<p>The RSS and the Contractor had a site investigation with the complainant at his household water supply, the WSD weir and a work area immediately upstream of the weir (STR02 near the Stream 12) on the same day.</p> <p>It was observed that the water directly from the household supply was found with low degree of turbidity when comparing it with portable water supply.</p> <p>According to the visual inspection of the RSS and the Contractor, the stream water behind the WSD's weir, which is the source of water supply to the villagers via a DO main, was found clear and there was no sign of contamination.</p> <p>Inspection of the work site at STR02 upstream of the weir indicated no activities affecting the upstream water quality.</p> <p>By reviewing the water quality monitoring data at Tung Chung Stream during early of July 2007, the turbidity and SS values are considered to be low and the data revealed that the Tung Chung Stream and the WSD weir were not contaminated during the above mentioned period.</p> <p>Nevertheless, In order to minimize the water quality impacts, the Contractor has implemented following mitigation measures:</p> <ul style="list-style-type: none"> <li>• To erect sand bag bund in the vicinity of STR02;</li> <li>• To shotcrete the soil surface near Stream 12.</li> </ul>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
S104	Tung Chung Road and Tung Chung Au near AFCD's Office	6 August 07	<p>The complaint was lodged by Mr. Ho on 6<sup>th</sup> August 2007 regarding a suspected case of silty runoff and muddy water generated from construction site flowing on public road. Turbid water was observed behind the weir near the AFCD's office at Tung Chung Au.</p>	<p>No non-compliance or environmental deficiency related to or in the vicinity of the concerned area was identified during these site audits.</p> <p>According to Hong Kong Observatory, Hong Kong was under the effect of the tropical storm over the central part of the South China Sea which brought heavy showers with 100.4 millimeters of total rainfall recorded on 6 August. The amber rainstorm warning was hoisted between 15:55pm to 17:30pm.</p> <p>The Contractor has confirmed there was no construction activity in the concerned area on 6<sup>th</sup> August 2007 due to heavy rainfall. According to the Contractor, muddy water was the silty runoff from nearby work sites due to the heavy rainfall on the day.</p> <p>The Contractor has implemented following mitigation measures:</p> <ul style="list-style-type: none"> <li>• To desilt temporary drainage channels and sedimentation tank.</li> <li>• To clear the silt and mud in the surface of haul road at RW06 ad RW07.</li> <li>• To cover exposed slope with tarpaulin at RW06 and RW07.</li> </ul> <p>According to the RSS and the Contractor, no further report of silt and muddy water runoff from concerned area was received after implementation of the aforesaid mitigation measures.</p>	Closed

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
S113	Upper and Lower Cheung Sha Village	12 December 2007	The complaint was lodged by Mr. Liu on 12 December 2007 regarding dust nuisance at Upper and Lower Cheung Sha Village.	<p>According to the Contractor, the main dust emission in the vicinity of Cheung Sha Village was due to the road works and associated vehicle movements on Tung Chung Road.</p> <p>The Contractor has implemented following mitigation measures:</p> <ul style="list-style-type: none"> <li>• Cleared the silts on the haul road;</li> <li>• Applied watering on the road by water hose at San Shek Wan;</li> <li>• Increased the number of water browsers; and</li> <li>• Covered the exposed slope and stockpiles with tarpaulin sheets.</li> </ul> <p>By reviewing the air quality monitoring data, there was no exceedance of air quality monitoring results on 8<sup>th</sup> and 14<sup>th</sup> December 2007 and dust mitigation measures have been implemented by the Contractor.</p> <p>According to the RSS and the Contractor, no further complaint regarding dust nuisance from concerned area was received after implementation of the aforesaid mitigation measures.</p>	Closed

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**APPENDIX M  
SUMMARY OF WARNING / DIRECTION  
ISSUED BY THE EPD AND  
PROSECUTION**

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## Appendix M - Summary of Warnings / Direction Issued by the EPD and Prosecution

### Summary of Warnings / Direction Issued by the EPD

Date of Letter	Warnings/Direction
3 February 2005	The Contractor was requested to construct catch pits and perimeter channels in advance of site formation and earth works
17 May 2005	The Contractor was requested to immediately re-provide the on-site wastewater management systems to adequately cater the rainwater runoff and to submit the detail proposal for runoff management and treatment systems.
4 October 2005	The Contractor was requested to rectify the situation in order to comply with EP Conditions 2.4 & 2.5 regarding the provision of drainage systems, EP Condition 3.16 regarding site runoff mitigation measures and EP Condition 3.6 regarding no works of the Project shall be carried out outside the “limit of works area”.
15 December 2005	The Contractor was requested to rectify the situation of Zone D where fuel oil was found spilled onto ground of the works area in contravention to Section 7.5.2.1 of the Waste Management Plan (WMP). The Section stipulates provisions against spillage of fuels to prevent contamination of the construction site.
24 March 2006	The Contractor was requested to rectify the situation in order to comply with EP Condition 3.9 regarding the stipulated span of temporary bridges used during construction to cross the stream.
13 April 2006	The Contractor was requested to rectify the situation of Zone E where fuel oil was stored within the Country Park in contravention to condition 3.14 of the EP.
29 June 2006	The Contractor was requested to rectify the situation that site runoff will not be discharged into Tung Chung Stream in order to comply with EP Condition 2.4.
26 September 2006	The Contractor was requested to rectify the situation that excessive dust emission occurred. Watering programme shall maintain to ensure that all exposed road surfaces and dust sources are wet in order to comply with EP Condition 1.7.
4 October 2006	<ul style="list-style-type: none"> <li>-The Contractor was requested to rectify the situation that site runoff will not be discharged into Tung Chung Stream in order to comply with EP Condition 2.4.</li> <li>-The Contractor was requested to rectify the situation in order to comply with EP Condition 3.9 regarding the stipulated span of temporary bridges used during construction to cross the stream 28</li> <li>-.The Contractor was requested to rectify the situation in order to comply with EP Condition 3.9 regarding the stipulated span of temporary bridges used during construction to cross the stream 32.</li> <li>- The Contractor was requested to rectify the situation in order to comply with EP Condition 3.9 regarding the stipulated span of temporary bridges used during construction to cross the stream 33.</li> </ul>
13 February 2007	The Contractor was requested to rectify the situation that site runoff will not be discharged into Tung Chung Stream in order to comply with EP Condition 2.4.



### Summary of Notification of Summons

<b>Date of Summons</b>	<b>Details of the Summons</b>	<b>Status</b>
25 January 2007	Construction works at a slope next to Stream no. 28 along Tung Chung Road, Cheung Sha, Lantau Island which contrary to EP Condition 3.9 concerning works at Stream 28 on 26 July 2006	Withdrawn by EPD
16 February 2007	Construction works near Stream no. 8 along Tung Chung Road, Cheung Sha, Lantau Island which contrary to EP Condition 2.4 by discharging runoff during construction into Tung Chung Stream on 16 August 2006	The Contractor was fined \$7500 on 4 June 2007.
17 May 2007	Construction works near Stream no. 8 along Tung Chung Road, Cheung Sha, Lantau Island which contrary to EP Condition 2.4 by discharging runoff during construction into Tung Chung Stream on 21 November 2006	The Contractor was fined \$7500 on 4 June 2007.

### Summary of Notification of Successful Prosecution

<b>Date of Successful Prosecution</b>	<b>Details of the Successful Prosecution</b>	<b>Status</b>
4 June 2007	Construction works near Stream no. 8 along Tung Chung Road, Cheung Sha, Lantau Island which contrary to EP Condition 2.4 by discharging runoff during construction into Tung Chung Stream on 16 August 2006	The Contractor was fined \$7500 on 4 June 2007
4 June 2007	Construction works near Stream no. 8 along Tung Chung Road, Cheung Sha, Lantau Island which contrary to EP Condition 2.4 by discharging runoff during construction into Tung Chung Stream on 21 November 2006	The Contractor was fined \$7500 on 4 June 2007

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**APPENDIX N**  
**CONSTRUCTION PROGRAMME**

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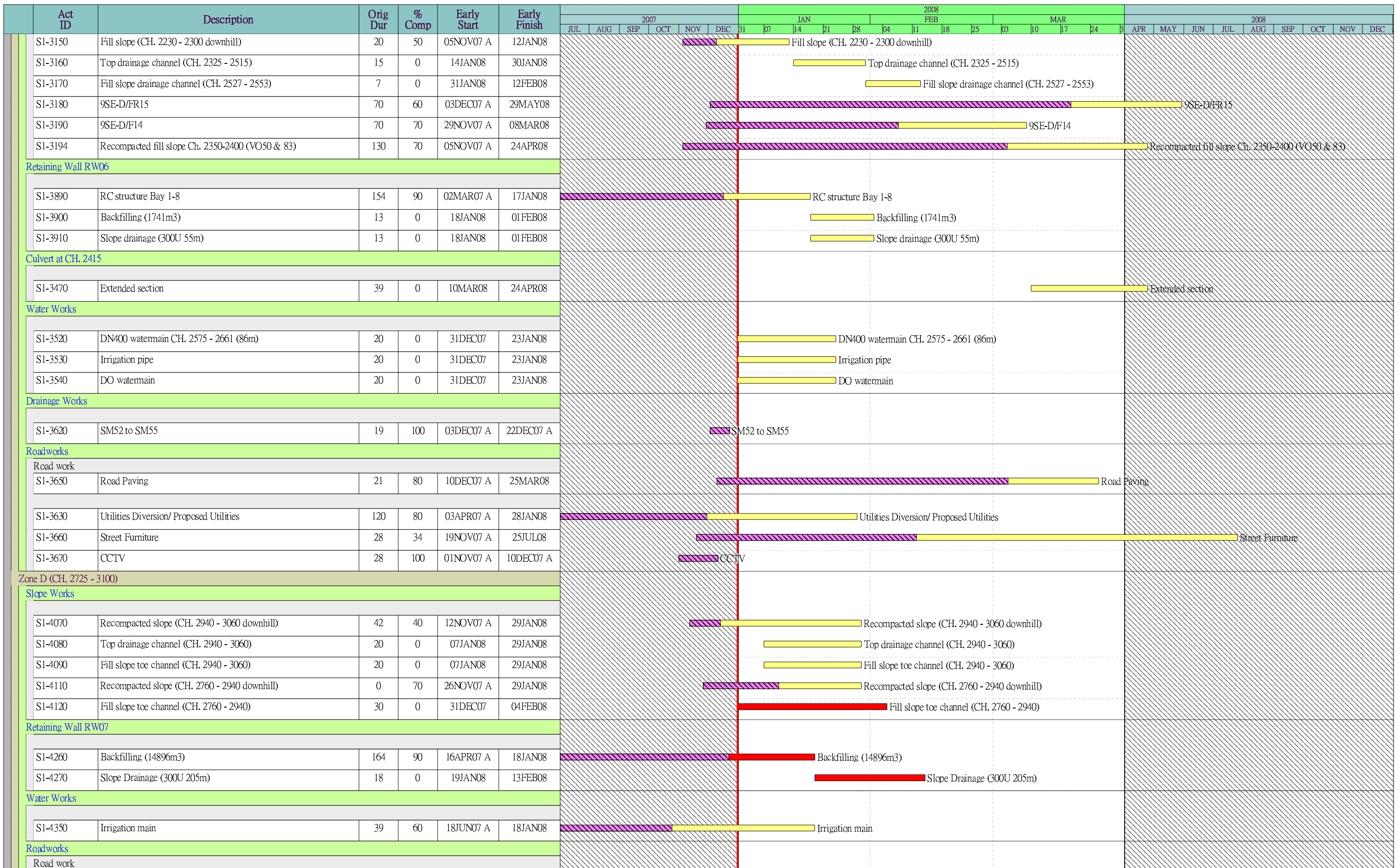
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Act ID	Description	Orig Dur	% Comp	Early Start	Early Finish	2007												2008											
						2007					JAN				FEB			MAR				2008							
						JUL	AUG	SEP	OCT	NOV	DEC	07	14	21	28	04	11	18	25	03	10	17	24	APR	MAY	JUN	JUL	AUG	SEP
General																													
Monthly Monitoring Submission																													
0470	Waste Management Plan	2364	49	04NOV04 A	25APR11	[Gantt bar: 04NOV04 A to 25APR11]																							
0480	Environment Monitoring and Audit	2364	49	04NOV04 A	25APR11	[Gantt bar: 04NOV04 A to 25APR11]																							
Section 1																													
Maintenance Access Track																													
Slope Works																													
S1-1020	Slope works & toe drainage ch. 0-260	144	100	10MAY07 A	31DEC07	[Gantt bar: 10MAY07 A to 31DEC07]																							
Roadworks																													
Road work																													
S1-1122	Road formation Ch. 0-260	79	50	02OCT07 A	20FEB08	[Gantt bar: 02OCT07 A to 20FEB08]																							
Zone A (CH. 1000 - 1565)																													
Drainage Works																													
S1-1450	S19-SM2	15	100	02AUG07 A	07DEC07 A	[Gantt bar: 02AUG07 A to 07DEC07 A]																							
S1-1500	Footpath and verge	30	50	08OCT07 A	21JAN08	[Gantt bar: 08OCT07 A to 21JAN08]																							
Roadworks																													
Road work																													
S1-1505	Road Paving CH0800-1050 (RFI 412)	63	100	15OCT07 A	22DEC07 A	[Gantt bar: 15OCT07 A to 22DEC07 A]																							
S1-1530	Street Furniture	12	60	03OCT07 A	05JAN08	[Gantt bar: 03OCT07 A to 05JAN08]																							
S1-1540	Proposed utilities	13	75	03OCT07 A	03JAN08	[Gantt bar: 03OCT07 A to 03JAN08]																							
Zone B (CH. 1565 - 2130)																													
Slope Works																													
S1-2080	Recompact and fill slope (CH. 1755 - 1945)	30	100	07MAY07 A	01DEC07 A	[Gantt bar: 07MAY07 A to 01DEC07 A]																							
S1-2090	Top drainage channel (CH. 1755 - 1850)	20	80	27AUG07 A	04JAN08	[Gantt bar: 27AUG07 A to 04JAN08]																							
S1-2100	Bottom drainage channel (CH. 1745 - 1850)	14	50	01NOV07 A	21JAN08	[Gantt bar: 01NOV07 A to 21JAN08]																							
Retaining Wall RW02																													
S1-2160	Slope drainage (300U 219m)	239	100	17MAR07 A	31DEC07	[Gantt bar: 17MAR07 A to 31DEC07]																							
Water Works																													
S1-2270	Irrigation pipe	49	100	08OCT07 A	15DEC07 A	[Gantt bar: 08OCT07 A to 15DEC07 A]																							
Roadworks																													
S1-2340	Utilities diversion	76	100	04JUL07 A	01DEC07 A	[Gantt bar: 04JUL07 A to 01DEC07 A]																							
S1-2350	Proposed Utilities	50	80	03OCT07 A	01FEB08	[Gantt bar: 03OCT07 A to 01FEB08]																							
S1-2365	Road paving (uphill)	36	100	15OCT07 A	15DEC07 A	[Gantt bar: 15OCT07 A to 15DEC07 A]																							
S1-2370	Street Furniture	60	55	05NOV07 A	31JAN08	[Gantt bar: 05NOV07 A to 31JAN08]																							
S1-2380	CCTV	36	100	01NOV07 A	15DEC07 A	[Gantt bar: 01NOV07 A to 15DEC07 A]																							
Zone C (CH. 2130 - 2725)																													
Slope Works																													
S1-3140	9SE-D/C30 Butress wall	27	100	03SEP07 A	01DEC07 A	[Gantt bar: 03SEP07 A to 01DEC07 A]																							

Start date	28JUN04	[Yellow bar]	Early bar
Finish date	23MAY15	[Pink hatched bar]	Progress bar
Data date	31DEC07	[Red bar]	Critical bar
Number/Version	Revision 13	[Grey bar]	Summary bar
Page number	1A	[Black diamond]	Summary point
Project name	R1342	[Orange diamond]	Start milestone point
		[Blue diamond]	Finish milestone point

Contract No. HY/2003/19  
Improvement to Tung Chung Road  
3M Rolling Programme 01.01.2008 to 31.03.2008

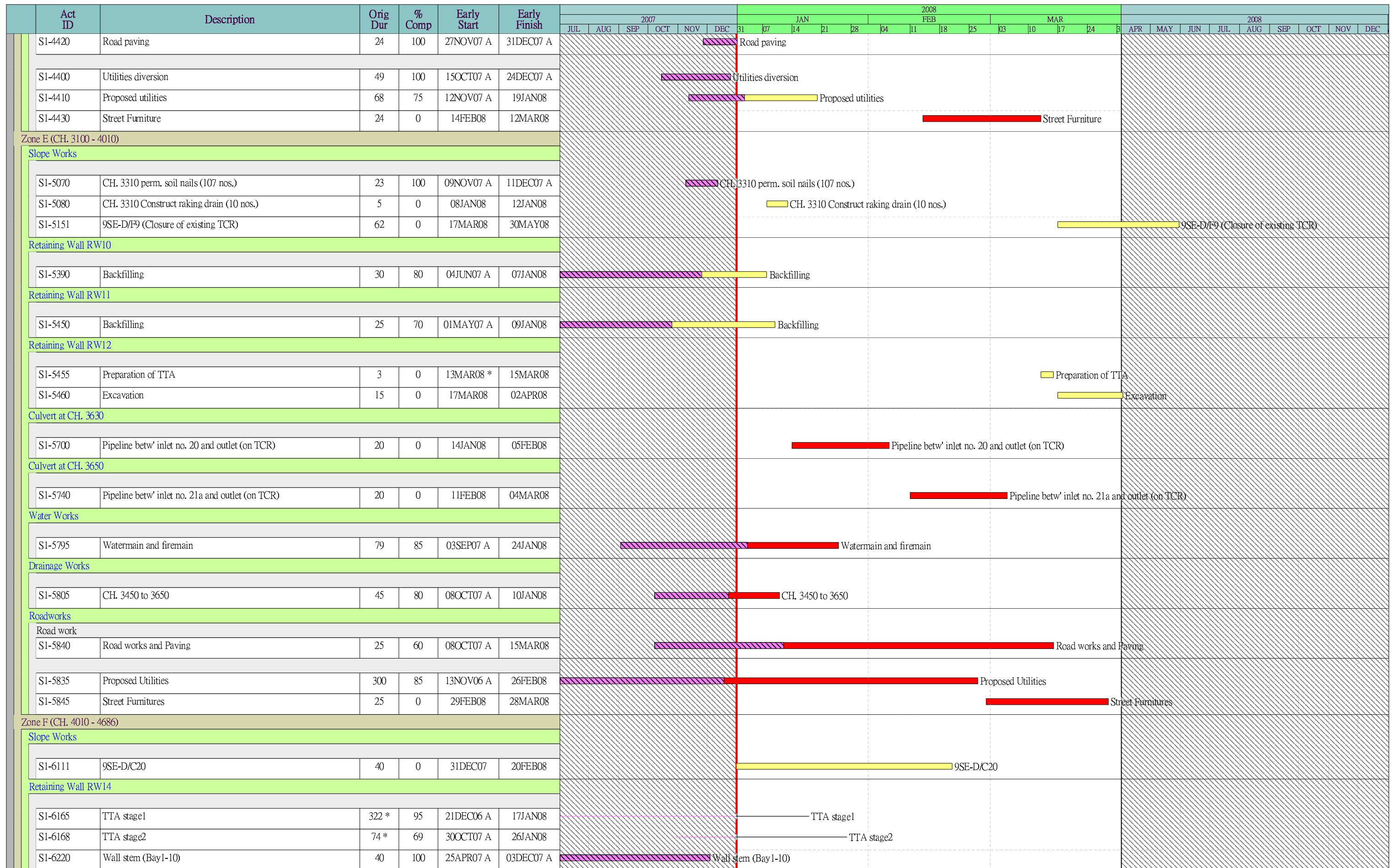
Date	Revision	Checked	Approved
28DEC07	3M rolling		



Start date	28JUN04	Early bar
Finish date	23MAY15	Progress bar
Data date	31DEC07	Critical bar
Number/Version	Revision 13	Summary bar
Page number	2A	Summary point
Project name	R1342	Start milestone point
		Finish milestone point

Contract No. HY/2003/19  
Improvement to Tung Chung Road  
3M Rolling Programme 01.01.2008 to 31.03.2008

Date	Revision	Checked	Approved
28DEC07	3M rolling		



Start date	28JUN04		Early bar
Finish date	23MAY15		Progress bar
Data date	31DEC07		Critical bar
Number/Version	Revision 13		Summary bar
Page number	3A		Summary point
Project name	R1342		Start milestone point
c Primavera Systems, Inc.			Finish milestone point

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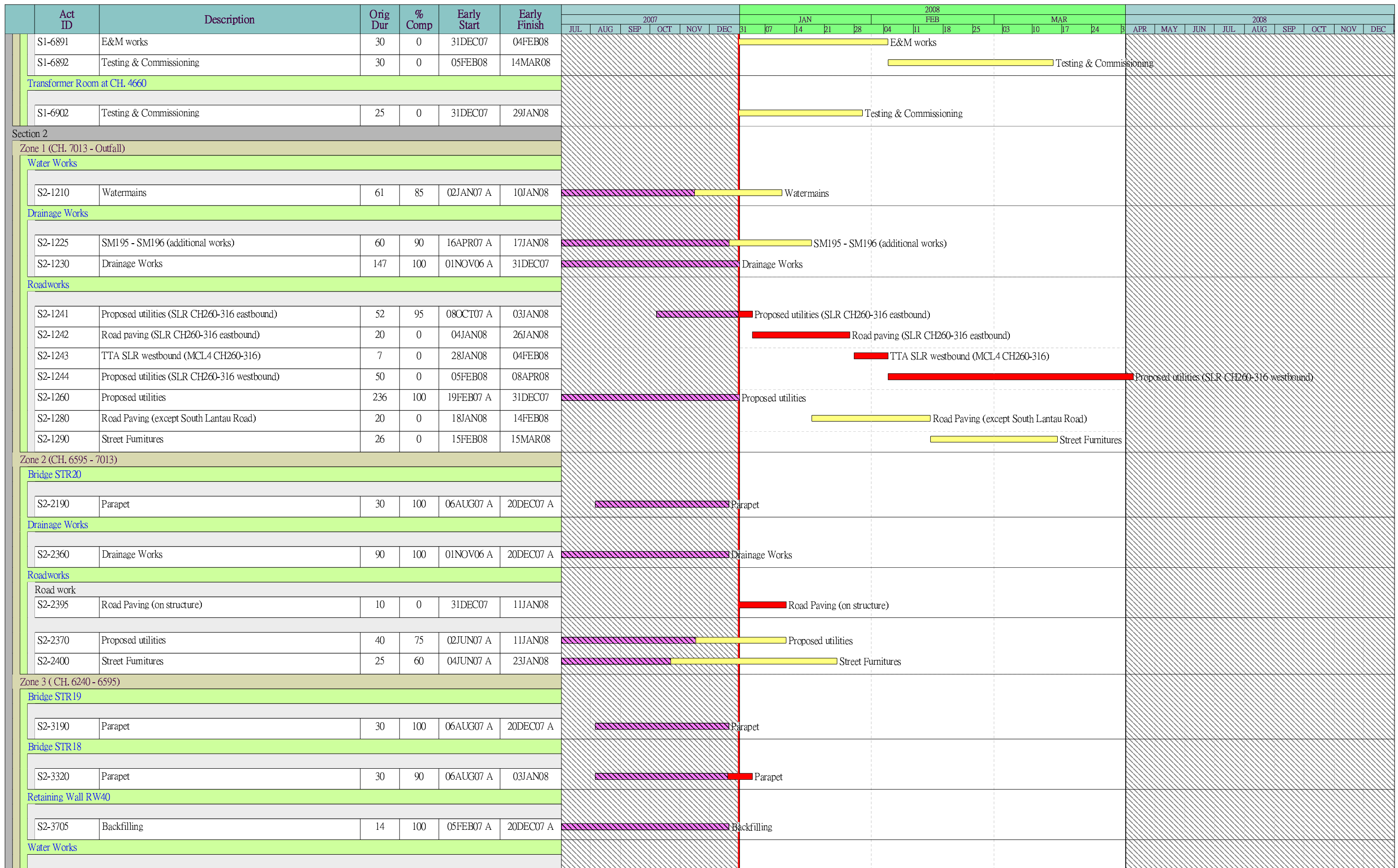
Date	Revision	Checked	Approved
28DEC07	3M rolling		

Act ID	Description	Orig Dur	% Comp	Early Start	Early Finish	2007												2008											
						2007					JAN				FEB			MAR				2008							
						JUL	AUG	SEP	OCT	NOV	DEC	31	07	14	21	28	04	11	18	25	03	10	17	24	31	APR	MAY	JUN	JUL
S1-6230	Backfilling	40	70	01AUG07 A	26JAN08	Backfilling																							
<b>Retaining Wall RW15</b>																													
S1-6260	Excavation	8	55	04JUN07 A	17JAN08	Excavation																							
S1-6270	Base slab	25	55	28JUN07 A	30JAN08	Base slab																							
S1-6280	Wall stem	25	55	05JUL07 A	31JAN08	Wall stem																							
S1-6290	Backfilling	15	0	01FEB08	22FEB08	Backfilling																							
<b>Retaining Wall RW16</b>																													
S1-6365	Proposed utilities installation	15	0	31DEC07	17JAN08	Proposed utilities installation																							
<b>Retaining Wall RW17</b>																													
S2-6430	Backfilling	25	50	13SEP07 A	15JAN08	Backfilling																							
<b>Retaining Wall RW39</b>																													
S1-6500	Excavation and temporary lateral support	12	100	28AUG07 A	08DEC07 A	Excavation and temporary lateral support																							
S1-6510	Base slab	25	95	03SEP07 A	31DEC07	Base slab																							
S1-6520	Wall stem	30	95	10SEP07 A	02JAN08	Wall stem																							
S1-6530	Backfilling	10	0	03JAN08	14JAN08	Backfilling																							
<b>Culvert at CH. 4075</b>																													
S1-6580	CH. 4075	25	0	31DEC07 *	29JAN08	CH. 4075																							
<b>Culvert at CH. 4133</b>																													
S1-6585	CH. 4133	25	0	31DEC07 *	29JAN08	CH. 4133																							
<b>Culvert at CH. 4631</b>																													
S1-6615	1050mm dia. pipeline under existing TCR	30	0	01FEB08	11MAR08	1050mm dia. pipeline under existing TCR																							
<b>Permanent Soil Nails</b>																													
S1-6650	CH. 4480 erect scaffold	6	0	31DEC07	07JAN08	CH. 4480 erect scaffold																							
S1-6660	CH. 4480 construct test nails (1 nos.)	2	0	08JAN08	09JAN08	CH. 4480 construct test nails (1 nos.)																							
S1-6670	CH. 4480 perm. soil nails (14 nos.)	8	0	10JAN08	18JAN08	CH. 4480 perm. soil nails (14 nos.)																							
<b>Water Works</b>																													
S1-6710	Water main and firemain	47	20	01DEC07 A	06MAR08	Water main and firemain																							
<b>Drainage Works</b>																													
S1-6740	CH. 4300 to 4500	25	50	03OCT07 A	17JAN08	CH. 4300 to 4500																							
S1-6750	CH. 4500 to 4700	25	0	14JAN08	15FEB08	CH. 4500 to 4700																							
<b>Roadworks</b>																													
S1-6790	Proposed utilities	40	0	16FEB08	02APR08	Proposed utilities																							
S1-6800	Road Paving	25	0	22MAR08	21APR08	Road Paving																							
S1-6810	Street Furnitures	25	0	22MAR08	21APR08	Street Furnitures																							
<b>Pump House for Fire Hydrant @ CH. 4398</b>																													

Start date	28JUN04	Early bar
Finish date	23MAY15	Progress bar
Data date	31DEC07	Critical bar
Number/Version	Revision 13	Summary bar
Page number	4A	Summary point
Project name	R1342	Start milestone point
		Finish milestone point

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Date	Revision	Checked	Approved
28DEC07	3M rolling		

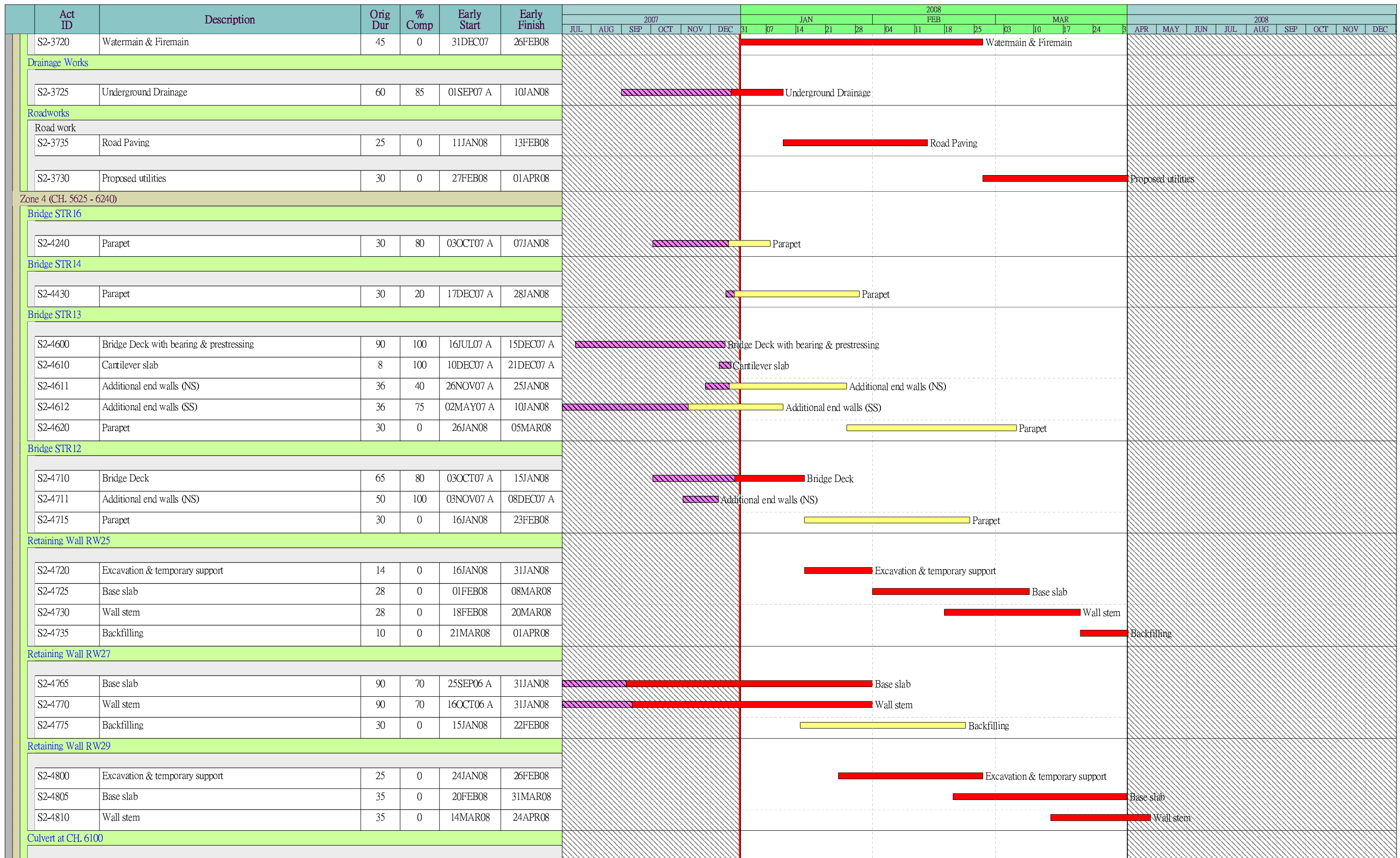


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Finish date	23MAY15	Progress bar
Data date	31DEC07	Critical bar
Number/Version	Revision 13	Summary bar
Page number	5A	Summary point
Project name	R1342	Start milestone point
		Finish milestone point

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Start date	28JUN04	Early bar
Finish date	23MAY15	Progress bar
Data date	31DEC07	Critical bar
Number/Version	Revision 13	Summary bar
Page number	6A	Summary point
Project name	R1342	Start milestone point
		Finish milestone point

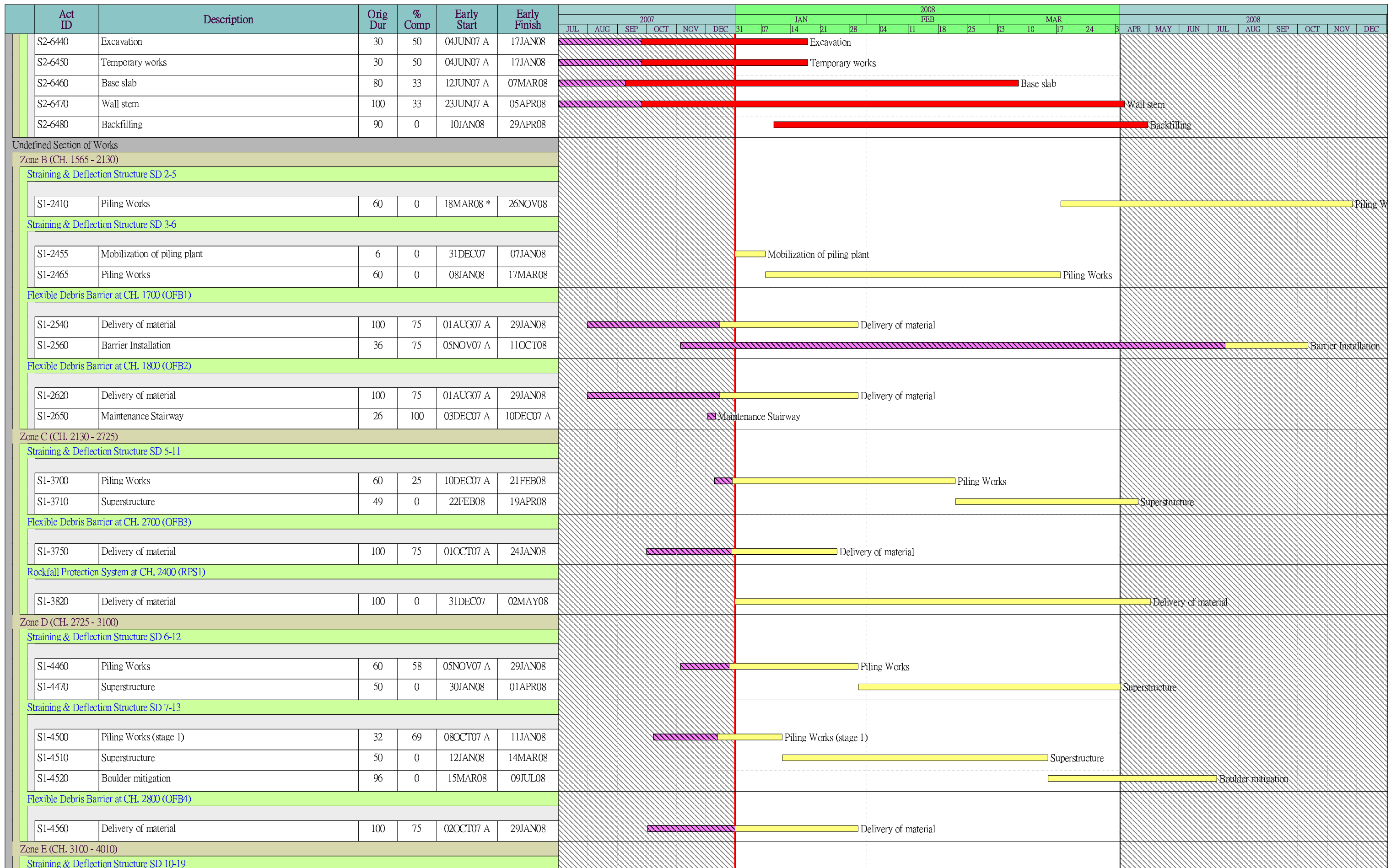
Contract No. HY/2003/19  
Improvement to Tung Chung Road  
3M Rolling Programme 01.01.2008 to 31.03.2008

Date	Revision	Checked	Approved
28DEC07	3M rolling		









Start date	28JUN04	Early bar	[Yellow bar]
Finish date	23MAY15	Progress bar	[Purple hatched bar]
Data date	31DEC07	Critical bar	[Red bar]
Number/Version	Revision 13	Summary bar	[Grey bar]
Page number	9A	Summary point	[Black diamond]
Project name	R1342	Start milestone point	[Orange diamond]
		Finish milestone point	[Red diamond]

Contract No. HY/2003/19  
Improvement to Tung Chung Road  
3M Rolling Programme 01.01.2008 to 31.03.2008

Date	Revision	Checked	Approved
28DEC07	3M rolling		



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**APPENDIX O**  
**WASTE GENERATED QUANTITY**

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## Contract No. HY/2003/19 – Improvement to Tung Chung Road between Lung Tseng Tau and Cheung Sha

**Name of Department: Highways Department**

**Project Commencement Date: June 2004**

**Construction Completion Date: June 2008**

**Approved Project Cost: \$688.5 Million**

### Monthly Summary Waste Flow Table for Year 2008

Year	Actual Quantities of inert C&D Materials (in 10 <sup>3</sup> m <sup>3</sup> )					Actual Quantities of C&D Wastes (in 10 <sup>3</sup> Kg)								
	Total Quantity Generated	Broken Concrete <sup>(1)</sup>	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Metals		Paper/cardboard packaging		Plastic <sup>(2)</sup>		Chemical Waste	Site clearance waste <sup>(3)</sup>	Others, e.g. general refuse
	(a)	(b)	(c)	(d)	(a)-(b)-(c)-(d)	Disposal	Recycle	Disposal	Recycle	Disposal	Recycle	Disposal	Disposal	Disposal
	#	0	#	0	0.102	N/A*	N/A*	N/A*	N/A*	N/A*	N/A*	0	34.71	1.3
Jan														
Feb														
Mar														
Apr														
May														
Jun														
<b>Sub-Total</b>	<b>#</b>	<b>0</b>	<b>#</b>	<b>0</b>	<b>0.102</b>	<b>N/A*</b>	<b>N/A*</b>	<b>N/A*</b>	<b>N/A*</b>	<b>N/A*</b>	<b>N/A*</b>	<b>0</b>	<b>34.71</b>	<b>1.3</b>
July														
Aug														
Sept														
Oct														
Nov														
Dec														
<b>Total</b>	<b>#</b>	<b>0</b>	<b>#</b>	<b>0</b>	<b>0.102</b>	<b>N/A*</b>	<b>N/A*</b>	<b>N/A*</b>	<b>N/A*</b>	<b>N/A*</b>	<b>N/A*</b>	<b>0</b>	<b>34.71</b>	<b>1.3</b>

Note: \* Very small quantity of aluminum can, cardboard package and plastic bottle generated from site office were collected by the local resident.

(1) Broken concrete for recycling into aggregates

(2) Plastics refer to plastic bottles/containers, plastic sheets/foam from package material.

(3) Site clearance waste refers to vegetation and construction debris.

# to be updated in the next WFT.