

**PROJECT NO.: TCS00371/07** 

DRAINAGE SERVICES DEPARTMENT (DSD) CONTRACT NO. DC/2006/02

YUEN LONG, KAM TIN, NGAU TAM MEI AND TIN SHUI WAI DRAINAGE IMPROVEMENTS, STAGE 1, PHASE 2B – CHEUNG CHUN SAN TSUEN AND KAM TSIN WAI

KT15 – Monthly EM&A Report for January 2008 (No. 7)

(Revision: 1)

PREPARED FOR Chit Cheung Construction Company Limited

#### **Quality Index**

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		36	

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## **Executive Summary**

- ES.01 Chit Cheung Construction Company Limited (CCC) has been awarded the Drainage Services Department (DSD) Contract No. DC/2006/02 Yuen Long, Kam Tin, Ngau Tam Mei and Tin Shui Wai Drainage Improvements, Stage 1, Phase 2B – Cheung Chun San Tsuen and Kam Tsin Wai (hereinafter "the Project") on 03 April 2007. According to the contract specification requirements an Environmental Monitoring & Audit program to be implemented by an Independent Environmental Team (ET) throughout the contract period.
- ES.02 Under the Project Profile for Yuen Long, Kam Tin, Ngau Tam Mei and Tin Shui Wai, Drainage Improvement Stage 1 Phase 2B – Kam Tin Secondary Drainage Channels KT14 & KT15 (Ref.: 382047/E/PP/Issue 5), KT14 & KT15 was defined as Designated Project and governed by Environmental Permit (EP-231/2005/A).
- ES.03 Action-United Environmental Services and Consulting (AUES) has been commissioned by CCC to be an Independent Environmental Team (ET) to implement the EM&A program in compliance with the requirements as stated in the Environmental Permit (EP-231/2005/A) and Environmental Monitoring &Audit Manual (EM&A Manual) for Secondary Channel KT14 & KT15 (August 2005). For this Contract (DC/2006/02) only covered KT15 and KT14 will carried out under other contract.
- ES.04 This Monthly EM&A Report for **January 2008** (No. 7) is reporting the environmental impact monitoring and audit (EM&A) results of the project EM&A program for the reporting month **January 2008** during the period from **26 December 2007 to 25 January 2008**.

# **Breach of Action and Limit (AL) Levels**

ES.05 The Limit Level exceedance was recorded in ecology (13 January 2008) during this reporting month. The wetland dependent bird individual number and species number recorded fell within the limit level (decrease > 40%). No Action/Limit Level exceedance was recorded for air, noise and stream water in this reporting period.

# **Complaints Log**

ES.06 No environmental complaint was received in this reporting period.

#### Notifications of Any Summons and Successful Prosecutions

ES.07 There was no environmental summons or successful prosecution was recorded in this reporting period.

#### **Reporting Changes**

ES.08 There are no changes to be reported in this reporting period.



# **Future Key Issues**

ES.09 Construction activities to be undertaken in **February 2008** included construction and excavation works at Ch.11-439, Ch504-575, Ch645-668 and Ch675-797; Stream Diversion; Sheet Piles Driving; Tree protection and tree transplanting works; Carrying out joined survey; Utilities companies liaison; Dumping activities of inert materials and Gabion installation. Potential environmental impacts for this project generally include air quality, noise, ecology, surface runoff and construction waste. The contractor shall properly implement the required environmental mitigation measures as per the Implementation Schedule in the EM&A manual to ensure no significant adverse environmental impact arises from the construction works. The contractor was reminded to maintain good house-keeping throughout the construction phase.

# EM&A Activities in the Reporting Period

ES.10 A summary of the monitoring activities in this reporting period is listed below:

15 Events

6 Events5 Events

16 Events

1 Event

5 Times

- 1-Hour TSP Monitoring
- 24-Hour TSP Monitoring
- Noise Monitoring
- Stream Water Quality
- Ecology (Fauna)
- Site Inspection Audit
- Air Quality
- ES.11 No Action or Limit Level of 1-Hour and 24-Hour TSP exceedance was recorded in this reporting period.

# **Construction Noise**

ES.12 No exceedance in construction noise measurements was recorded and no construction noise complaint was received in this reporting period.

# **Stream Water Quality**

ES.13 No exceedance in stream water quality was recorded in the reporting period.

# **Ecology (Fauna)**

ES.14 Non-compliance (Limit Level) with the ecological criteria was found in the individual number and species number of wetland dependent bird recorded during the reporting period (13 January 2008). No intrusions of construction activities into the wetland areas nor adverse impact was observed. Based on the findings in the pervious monthly monitoring, the non-compliance in wetland dependent bird species and individual number was not caused by the project.



# **Summary of Monitoring Exceedances**

ES.15 A summary of monitoring exceedances in this reporting period of air quality, construction noise, stream water quality and ecology (fauna) monitoring are presented below:

Env. Quality	Parameters	Work-Related Exceedance %	Investigation & Corrective Actions
Air	1-Hour TSP	0	Not Required for 0% Exceedance
Quality	24-Hour TSP	0	Not Required for 0% Exceedance
Noise	Leq (30min) Daytime	0	Not Required for 0% Exceedance
	Dissolve Oxygen (DO) in mg/L	0	Not Required for 0% Exceedance
	Suspended Solids (SS) in mg/L	0	Not Required for 0% Exceedance
Stream	Turbidity (NTU)	0	Not Required for 0% Exceedance
Water	pH	0	Not Required for 0% Exceedance
	Ammonia Nitrogen (mg/L)	0	Not Required for 0% Exceedance
	Zinc (µg/L)	0	Not Required for 0% Exceedance
Ecology	Decrease in the total number of species or individuals of wetland dependent bird from baseline	0	Not Required for 0% Exceedance
	Decrease in the total number of species or individuals of wetland faunal from baseline	NA	(monitoring not required in this reporting month)

# **Site Inspection by External Parties**

ES.16 No site inspection was undertaken by external parties in this reporting period.



# **1.0 INTRODUCTION**

- 1.01 Chit Cheung Construction Company Limited (CCC) has been awarded the Drainage Services Department (DSD) Contract No. DC/2006/02 Yuen Long, Kam Tin, Ngau Tam Mei and Tin Shui Wai Drainage Improvements, Stage 1, Phase 2B Cheung Chun San Tsuen and Kam Tsin Wai (hereinafter "the Project") on 03 April 2007. According to the contract specification requirements the Project should implemented an Environmental Monitoring & Audit (EM&A) program by an Independent Environmental Team (ET) throughout the construction period in compliance with the requirements as stated in the project particular specification, Environmental Permit (EP-231/2005/A) and EM&A Manual for KT15. The location of the project site is presented in Appendix A. The project construction program is presented in Appendix B.
- 1.02 The works to be executed at the propose drainage Channel KT15 mainly comprise the following:
  - Construction of about 0.8 km secondary drainage channels;
  - Construction of DSD maintenances access;
  - Provisioning and re-provisioning of pedestrian crossings;
  - Associated ancillary works; and
  - Construction of temporary vehicular access in Portion 5A1 of the site for vehicular access from Kam Sheung Road to Lot Nos. 398RP, 395 in DD106 which are adjacent to the site.
- 1.03 Action-United Environmental Services and Consulting (AUES) has been commissioned by CCC to be the Independent Environmental Team (ET) for implementation of the EM&A program in accordance with the requirements as set out in the contract particular specification, Environmental Permit (EP-231/2005/A), EM&A Manual for KT15 and the Environment Impact Assessment Ordinance (EIAO).
- 1.04 This report presents the results of the project EM&A program for the reporting month January 2008 during the period from 26 December 2007 to 25 January 2008.

# **REPORT STRUCTURE**

1.05 The EM&A report is structured into the following sections:

Section 1 INTRODUCTION **PROJECT ORGANIZATION AND CONSTRUCTION PROGRESS** Section 2 Section 3 **SUMMARY OF MONITORING REQUIREMENTS** Section 4 IMPACT MONITORING METHODOLOGY Section 5 **IMPACT MONITORING RESULTS** Section 6 WASTE MANAGEMENT Section 7 SITE INSPECTION Section 8 **ENVIRONMENTAL COMPLAINT AND NON-COMPLIANCE** Section 9 **IMPLEMENTATION STATUS OF MITIGATION MEASURES** Section 10 IMPACT FORECAST Section 11 CONCLUSIONS



# 2.0 PROJECT ORGANIZATION AND CONSTRUCTION PROGRESS

## PROJECT ORGANIZATION AND MANAGEMENT STRUCTURE

2.01 The organization chart and lines of communication with respect to the on-site environmental management and monitoring program are shown in **Appendix C**.

## **CONSTRUCTION PROGRESS**

- 2.02 The major construction activities undertaken in this reporting period are list below:-
  - Construction of channel wall at CH11 439 and CH645-668;
  - Provision of temporary entrance at Kam Po Road and Kam Sheung Road;
  - Dumping activities;
  - Tree protection and tree transplanting works;
  - Utilitiesd companies liasion; and
  - Carrying out joined survey.

# SUMMARY OF ENVIRONMENTAL SUBMISSIONS

2.03 A summary of the relevant permits, licences, and/or notifications on environmental protection for this Project in this reporting period is presented in **Table 2-1**.

Item	Item Description	License/Permit Status
1	Environmental Permit (EP-231/2005/A)	-
2	Air Pollution Control (Construction Dust)	Notified EPD on 09 July 2007
3	Chemical Waste Producer Registration WPN:5296-519-C3430-01 (Portion 8, Ma Fung Ling Road, Tong Yan San Tsuen, Yuen Long)	Registration on 20 April 2007
4	Chemical Waste Producer Registration WPN:5113-533-C3434-09 (Kam Tsin Wai, Kam Tin, Yuen Long)	Registration on 20 April 2007
5	Chemical Waste Producer Registration WPN:5213-424-C3431-01 (Portion 7, Birthing Area, Hoi Wan Road, Tuen Mun)	Registration on 20 April 2007
6	Water Pollution Control Ordinance (Discharge License) License No.: 1U450/1	Obtained on 20 July 2007
7	Billing Account for Disposal of Construction Waste (Account Number : 7005311)	Valid on 07 May 2007
8	Dumping at Sea Permit of Type 1 Contaminated Material (Permit No. EP/MD/08-051)	Validity period (10 Oct – 09 Apr 2008)

 Table 2-1
 Status of Environmental Licenses and Permits

# 3.0 SUMMARY OF IMPACT MONITORING REQUIREMENTS

- 3.01 Environmental monitoring and audit requirements are set out in the EM&A Manual. Air quality, construction noise, stream water quality and ecology have been identified to be the key environmental issues during the construction phase of the project.
- 3.02 A summary of the EM&A requirements for air quality, construction noise, stream water quality and ecology monitoring are shown in Table 3-1. The designated station of the air quality, construction noise, stream water quality locations and ecology monitoring area are shown in Appendix D.

Environmental Aspect	Monitoring Parameters		Monitoring Stations
Air Quality	1-Hour and 24-Hour TS	SP	A10
Construction Noise	Leq <sub>(30min)</sub> during norma	l working hours	N10a*
	Supplementary data of	$L_{10}$ and $L_{90}$ for reference.	
Stream Water Quality	In Situ Measurement	<ul> <li>Dissolved Oxygen Concentration (mg/L);</li> </ul>	W9A & W9B
		<ul> <li>Dissolved Oxygen Saturation (% Sat);</li> </ul>	
		• Turbidity (NTU);	
		• pH;	
		• Salinity (%); Water Depth (m) and	
		• Temperature (°C).	
	Laboratory Analysis	<ul> <li>Suspended Solids (mg/L);</li> </ul>	
		<ul> <li>Ammonia Nitrogen (mg/L); and</li> </ul>	
		<ul> <li>Zinc (μg/L).</li> </ul>	
Ecology	Monthly monitoring o	f construction activities adjacent to the wetland	
	areas to identify any	intrusions of construction activities into the	
	wetland areas;		
	Monthly monitoring of		
	no adverse impact on		
	water table that are attributable to the project, if any;		
	Photographic records at six-month intervals; and		
		una in the wetland areas during the wet season	
	(April to July inclusion	ive) for reptiles, amphibians, dragonflies, and	

Note: The noise ambient condition within the victim area without significant change. Due to the accessibility, noise monitoring will undertake at N10a. Once the access is available, the impact noise monitoring will undertake at N10.

3.03 Air monitoring is carried out once every six days for 24-Hour TSP and 3 times every six days for 1-Hour TSP at one designated monitoring station A10.

butterflies, and throughout the year for birds.

- 3.04 Noise monitoring is conducted once per week at one designated monitoring location (N10a). Measurements of Leq<sub>(30min)</sub> shall be taken between 0700 and 1900 with supplementary  $L_{10}$  and  $L_{90}$  data will be collected for reference.
- 3.05 Stream water quality monitoring is conducted were undertaken at two location W9A & W9B twice per week. Dissolved Oxygen (DO), pH, Turbidity (NTU) were measured in-situ, water depth, temperature and salinity will be collected for relevant data. Suspended Solids (SS), Ammonia Nitrogen and Zinc were determined in a HOKLAS accredited laboratory respectively.
- 3.06 Ecological monitoring is conducted in the seasonal wetland area as shown in Project profile of KT15 Figure ATT 4-7.2). Bird survey should be conducted in monthly through the year and other faunal groups (reptiles, amphibians, dragonflies and butterflies) are conducted monthly in wet season (April to July inclusive) only. Photographic record should be made at six month intervals.
- 3.07 A summary of the Action/Limit (A/L) Levels for air quality, construction noise, stream water quality and ecology are shown in Tables 3-2, 3-3, 3-4 and 3-5.

Monitoring Station	Action Level (µg/m <sup>3</sup> )		Limit Level (µg/m <sup>3</sup> )	
Monitoring Station	1-Hour TSP	24-Hour TSP	1-Hour TSP	24-Hour TSP
A10	> 307	> 165	> 500	> 260

Table 3-2 Action and Limit Levels for Air Quality Monitoring

AUFS



#### Table 3-3 Action and Limit Levels for Construction Noise Monitoring

Time Period	Action Level in dB(A)	Limit Level in dB(A)
0700-1900 hrs on normal weekdays	When one or more documented complaints are received	> 75* dB(A)
Note: * Reduces to $70$ dB(A) for schools and $65$ dB(A) during the school examination periods		

## Table 3-4 Action and Limit Levels for Stream Water Quality Monitoring

Dissolved Oxygen (mg/l)	W9A (Upstream) <sup>#</sup>	W9B (Downstream)
Action Level	NA	0.3
Limit Level	NA	0.2
Turbidity (NTU)	W9A (Upstream) <sup>#</sup>	W9B (Downstream)
· · · · · · · · · · · · · · · · · · ·		73.5*
Action Level	NA	
Limit Level	NA	78.2**
рН	W9A (Upstream) <sup>#</sup>	W9B (Downstream)
Action Level	NA	7.0*
Limit Level	NA	7.1**
Suspended Solids (mg/L)	W9A (Upstream) <sup>#</sup>	W9B (Downstream)
Action Level	NA	148*
Limit Level	NA	159**
Ammonia Nitrogen (mg/L)	W9A (Upstream) <sup>#</sup>	W9B (Downstream)
Animolia Nitrogen (Ing/L) Action Level	NA	30.91*
Limit Level	NA	32.20**
Zinc (µg/L)	W9A (Upstream) <sup>#</sup>	W9B (Downstream)
Action Level	NA	242*
Limit Level	NA	252**

Notes: # Act as Control Station for the Impact Water Quality Monitoring.

\* Alternative Action Level of the Turbidity, pH, Suspended Solid, Ammonia Nitrogen and Zinc are 120% of upstream control station of same day.

\*\* Alternative Limit Level of the Turbidity, pH, Suspended Solid, Ammonia Nitrogen and Zinc are 130% of upstream control station of same day.

 Table 3-5
 Action and Limit Levels for Construction Ecology Monitoring

Parameters	Action Level	Limit Level
Bird: decrease in the total number of wetland dependent bird species or individuals of the wetland dependent bird species from baseline	20 – 40% of 1.2 individuals and 3 species	

3.08 The Event/Action Plan of air quality, construction noise, stream water quality and ecology has been implemented for this project. Details of the Event/Action Plan were presented in the **Appendix E**.



# 4.0 IMPACT MONITORING METHDOLOGY

## MONITORING LOCATIONS

4.01 The 1-Hour TSP and 24-Hour TSP monitoring was carried out at one designated station A10. Impact construction noise monitoring was undertaken at the designated location N10a. Stream water quality monitoring was undertaken at two designated locations (W9A & W9B). The ecology monitoring was conducted within the wetland area in according to the EM&A Manual of KT15. The descriptions of monitoring stations are presented in Tables 4-1. The geographically location are shown in Appendix D.

# Table 4-1Location of Air Quality, Construction Noise & Stream Water Quality<br/>Monitoring Station/Locations

Air Quality Station			
A10	Village House in Tin Sam San Tsuen		
Construction Noise	Construction Noise Location		
N10*	Village House in Tin Sam San Tsuen		
N10a	Village House in Tin Sam San Tsuen		
Water Quality Locations			
W9A <sup>#</sup>	Tin Sam San Tsuen		
W9B	Tin Sam San Tsuen		
Note: * The noise ambien	nt condition within the victim area without significant change. Due to the accessibility, noise monitoring will		

\* The noise ambient condition within the victim area without significant change. Due to the accessibility, noise monitoring will undertake at N10a. Once the access is available, the impact noise monitoring will undertake at N10

# Act as control station in impact monitoring

4.02 The meteorological data during the reporting period was obtained from the Lau Fau Shan Station of the Hong Kong Observatory (HKO).

# MONITORING FREQUENCY AND PERIOD

# **<u>1-HOUR TSP MONITORING</u>**

4.03 The 1-Hour TSP monitoring was conducted in designated station A10 in according to the EM&A Manual three times every 6 days. Total of 15 monitoring events were carried out in this reporting period.

# **24-HOUR TSP MONITORING**

4.04 The 24-Hour TSP monitoring was conducted at station A10 once every six days. Total of 6 monitoring events were carried out in this reporting period.

# NOISE MONITORING

4.05 Impact noise monitoring was undertaken at one location N10a once per week. Total of 5 monitoring events were carried out in this reporting period.

# **STREAM WATER QUALITY MONITORING**

4.06 The stream water quality monitoring was undertaken at two locations W9A & W9B two times per week. Total of 16 monitoring events were carried out in this reporting period.



# ECOLOGY MONITORING

4.07 Bird survey should be conducted in monthly throughout the year and other faunal groups (reptiles, amphibians, dragonflies and butterflies) are conducted monthly in wet season (April to July inclusive) in the seasonal wetland area. Photographic record should be made at six monthly intervals.

## MONITORING EQUIPMENT

4.08 The monitoring equipment used by the ET in the EM&A program is presented in the Table 4-2.

Parameters	Equipment	Monitoring Equipment				
1-Hour TSP	Portable dust meter	Sibata LD-3 Laser Dust Meter				
24-Hour TSP	High Volume Sampler	Grasby Anderson GMWS 2310 HVS / Tisch High Volume Sampler 515N				
	Calibration Kit	TISCH Model TE-5028A				
Leq30min	Integrating Sound Level Meter (Type1)	B&K Type 2238				
_	Calibrator	B&K Type 4231				
Portable Wind Speed Indicator		Testo Anemometer				
Water Depth	Water Depth Detector	Eagle Sonar				
Temperature	Thermometer & DO Meter	YSI 85/10FT				
DO	Thermometer & DO Meter	YSI 85/10FT				
pН	pH Meter	Hanna HI 98128				
Turbidity	Turbidimeter	Hach 2100P				
Salinity	Salinometer	ATAGO refractometer				
-	Water Sampler	Teflon bailer / bucket				
-	Sample Container High density polythene bottles (provided by labora					
-	Storage Container	'Willow' 33-litter plastic cool box				

 Table 4-2
 Monitoring Equipment Used in EM&A Program

# 24-HOUR TSP MONITORING

- 4.09 24-Hour TSP monitoring was carried out by a High Volume Sampler (HVS) in compliance with the USEPA Standards Title 40, Code of Federal Regulations Chapter 1 (Part 50) specifications. The HVS employed complied with the PS specifications including.
  - Power supply of 220v/50 hz for 24-Hour continuous operation;
  - $0.6-1.7 \text{ m}^3/\text{min}$  (20-60 SCFM) adjustable flow rate;
  - A 7-day mechanical timer for 24-Hour operation;
  - An elapsed time indicator with  $\pm 2$  minutes accuracy for 24-Hour operation;
  - Minimum exposed area of  $63 \text{ in}^2$ ;
  - Flow control accuracy of  $\pm 2.5\%$  deviation over 24-Hour operation;
  - An anodized aluminum shelter to protect the filter and sampler;
  - A motor speed-voltage control to control mass flow rate with accuracy of  $\pm 2.5\%$  deviation over 24-Hour sampling period;
  - Provision of a flow recorder for continuous monitoring;
  - Provision of a peaked roof inlet;
  - Incorporation with a manometer; and
  - An 8"x10" stainless steel filter holder to hold, seal and easy to change the filter paper.
- 4.10 The filter papers used in 24-Hour TSP monitoring were of size 8"x10" and provided by a local HOKLAS-accredited laboratory, ALS Techichem Pty (HK) Limited (HOKLAS No. 66). The filters papers after measurements were returned to the laboratory for the required treatment and analysis.



# **<u>1-HOUR TSP MONITORING</u>**

4.11 Measurements of 1-Hour TSP monitoring were taken by a Sibata LD-3 Laser Dust Meter that is a portable and battery-operated laser photometer capable of performing real time 1-Hour TSP measurements. A comparison test with HVS was carried out prior to baseline monitoring in compliance with the EM&A requirements and a conversion factor for direct reading of the dust meter has been established.

# WIND DATA MONITORING

4.12 The meteorological data during the reporting period was obtained from the Lau Fau Shan Station of the Hong Kong Observatory (HKO).

# **NOISE MONITORING**

- 4.13 Noise measurements were taken in terms of the A-weighted equivalent sound pressure level (Leq) measured in decibels (dB). Supplementary statistical results such as  $L_{10}$  and  $L_{90}$  were also obtained for reference.
- 4.14 Hand-held sound level meters (B&K Model 2238) and associated acoustical calibrators in compliance with the International Electrotechnical Commission (IEC) Publication 651:1979 (Type 1) and 804:1985 (Type 1) specification were used for taking the impact noise measurements.
- 4.15 Windshield was fitted in all measurements. All noise measurements were made with the meter set to FAST response and on the A-weighted equivalent continuous sound pressure level (Leq).
- 4.16 No noise measurement was carried out in the presence of fog, rain, wind with a steady speed exceeding 5 m/s or wind with gusts exceeding 10 m/s.

# STREAM WATER QUALITY MONITORING

# <u>Water Depth</u>

- 4.17 Water quality monitoring will be conducted at the middle of the water columns (Mid-Depth) if the depths of the water columns at the sampling locations are less than 3 meters during monitoring. Or else, monitoring will be performed at two depths, at 1 meter from surface and bottom respectively when the water depth is less than 6m.
- 4.18 Water depths will be determined prior to measurement and sampling at W9A and W9B, using a portable battery operated depth detector, brand named 'Eagle Sonar', if the depths exceed 3 meter. For the depths well below 1 meter, an appropriate steel ruler or rope with appropriate weight will be used for the depth estimation.

# Water Temperature

4.19 Although the DO Meter automatically compensates ambient water temperature to a standard temperature of 20°C for ease of comparison of the data under the changing reality, the temperature readings of the DO Meter will be recorded in the field data sheets. Calibration of the equipment will be regularly performed by ALS on quarterly basis.



# Dissolved Oxygen (DO)

- 4.20 A portable YSI 85/10FT DO Meter will be used for in-situ DO measurement. The DO meter is capable of measuring DO in the range of 0 20 mg/L and 0 200 % saturation and checked against water saturated ambient air on each monitoring day prior to monitoring.
- 4.21 Although the DO Meter automatically compensates ambient water temperature to a standard temperature of 200°C for ease of comparison of the data under the changing reality, the temperature readings of the DO Meter will be recorded in the field data sheets. Calibration of the equipment will be regularly performed by ALS on quarterly basis.

<u>pH</u>

4.22 A portable Hanna pH Meter will be used for in-situ pH measurement. The pH meter is capable of measuring pH in the range of 0 - 14 and readable to 0.1. Standard buffer solutions of at least pH7 and pH10 shall be used for calibration of the instrument before and after use. Calibration of the equipment will be regularly performed by ALS on quarterly basis.

# Turbidity (NTU)

4.23 A portable Hach 2100p turbidity Meter will be used for in-situ turbidity measurement. The turbidity meter is capable of measuring turbidity in the range of 0 - 1000 NTU. Calibration of the equipment will be regularly performed by ALS on quarterly basis.

<u>Salinity</u>

4.24 A portable salinometer capable of measuring salinity in percentage (g/L) will be used for measuring salinity of the water at each monitoring location.

# Water Sampler

4.25 Water samples will be collected by the ET using a water sampler and 'PE' (Poly-Ethylene) sampling bottles provided by the laboratory. The water sampler will be rinsed before collection with the sample to be taken. Kahlsico Water Sampler will be used for sampling. One liter or 1000mL water sample will be collected from each depth for SS determination. The samples collected are stored in a cool box maintained at 40°C and delivered to ALS upon completion of the sampling by end of each sampling day. Sampling in the stream with shallow water condition, plastic bucket will be used for sample collection.

# Sample Container

4.26 Water samples will be contained in screw-cap PE (Poly-Ethylene) bottles, which will be provided and pretreated immediately prior to sampling according to HOKLAS quality requirements by ALS. The sampling bottles will be rinsed with the water to be contained. Water sample is then transferred from the sampler to the sample bottles to 95% bottle capacity to allow possible volume changes during delivery and storage.

# Sample Storage

4.27 A 'Willow' 33-litter plastic cool box packed with ice will be used to preserve the collected water samples prior to arrival at the laboratory for SS determination. The water temperature of the cool box will be maintained at a temperature as close to 4°C as possible without being frozen. Samples collected will be delivered to the laboratory upon collection.



4.28 DO, water temperature, turbidity (NTU), pH, salinity and water depth were measured in-situ whereas SS, Ammonia Nitrogen and Zinc were determined in a HOKLAS accredited laboratory (ALS).

# **ECOLOGY MONITORING**

## <u>Study Area</u>

4.29 The study area for the ecological monitoring programme for KT15 covers the seasonal wetland area as shown in Project Profile of KT15 Figures ATT 4-7.2.

# Survey Method

- 4.30 Monthly monitoring was conducted by means of walk through survey, along the boundary and within the wetland areas in KT15. Any adverse impacts to the habitat, intrusions of construction activities into the wetland areas, and adverse changes in the wetlands were checked and reported if any.
- 4.31 Photographic records on the fixed photo record points selected during the baseline survey are made every six months. The photos from the construction phase ecological monitoring will be compared with those taken during the baseline which are used as the baseline conditions.
- 4.32 Bird monitoring was conducted in the study areas monthly for KT15. Survey areas in KT15 was the seasonal wetland area covered same as the Project Profile of KT15 Figures ATT 4-7.2.
- 4.33 Fauna monitoring is conducted only during the wet season (April to July inclusive for KT15) in the same survey areas for bird monitoring. For KT15, the survey frequency is monthly, and the surveys cover reptiles, amphibians, dragonflies and butterflies.

# <u>Equipment</u>

4.34 Standard portable field survey equipment was used for ecological monitoring, including 1) Binoculars of 10 x 40 magnification; 2) Digital camera; 3) Notebook; and/or 4) Butterfly net (when it is necessary to confirm identities of butterflies and dragonflies).

# **EQUIPMENT CALIBRATION**

- 4.35 Initial calibration of the HVS was performed upon installation and thereafter at bi-monthly intervals in accordance with the manufacturer's instruction using the NIST-certified standard calibrator. The calibration data are properly documented and the records are maintained by ET for future reference.
- 4.36 The 1-Hour TSP meter was calibrated by the supplier prior to purchase. Zero response of the equipment is checked before and after each monitoring event. A comparison test was carried out with a HVS. A conversion factor (K) of 4.0 was generated in accordance with the equipment manufacturer's instruction. The meter counts in minutes multiplied by the conversion factor will generate the equivalent dust concentration by HVS.



- 4.37 The sound level meters are calibrated using an acoustic calibrator prior to and after measurements. The meters are regularly calibrated in accordance with the manufacturer's instructions. Prior to and following each noise measurement, the accuracy of the sound level meter was checked using an acoustic calibrator generating a known sound pressure level at a known frequency. Measurements are considered valid only if the calibration levels before and after the noise measurement agree to within 1.0 dB.
- 4.38 All in-situ monitoring instruments are calibrated and certified by a laboratory accredited under HOKLAS or any other international accreditation scheme at 3 monthly intervals throughout all stages of the water quality monitoring.
- 4.39 The calibration certificates of the monitoring equipment used during the impact monitoring program are attached in **Appendix F**.

# ANALYTICAL LABORATORY

4.40 Our ET has commissioned a local HOKLAS-accredited laboratory, ALS Technichem (HK) Pty Ltd (HOKLAS No. 66) to provide analytical services for this project. ALS carried out sample and analysis control in accordance with the HOKLAS QA/QC requirements. The specified testing services provided by ALS as shown in Table 4-3.

Determinant	Standard Method	Detection Limit
Suspended Solids	ALS Method EA025	2 mg/L
Ammonia Nitrogen	ALS Method EK055A	0.01 mg/L
Zinc	ALS Method EG020	10 µg/L

Table 4-3Analytical Method applied to Water Quality Samples

4.41 The analysis of suspended solids, ammonia nitrogen and zinc concentrations were follow the APHA Standard Methods for the Examination of Water and Wastewater 19ed 2540D. ALS Environmental has comprehensive quality assurance and quality control programs and has attained HOKLAS accreditation for a range of environmental testing. For QA/QC procedures, one duplicate sample for every batch of samples were analyses as required by the HOKLAS. The QA/QC results are presented in **Appendix H**.

# DATA MANAGEMENT AND DATA QA/QC CONTROL

- 4.42 The impact monitoring data are handled by the ET's systematic data recording and management, which complies with in-house certified (ISO 9001:2000) Quality Management System. Standard Field Data Sheets (FDS) are used in the impact monitoring program.
- 4.43 The monitoring data recorded in the equipment e.g. 1-Hour TSP meters and noise meters are downloaded directly from the equipment at the end of each monitoring day. The downloaded monitoring data are input into a computerized database properly maintained by the ET. The laboratory results are input directly into the computerized database and QA/QC checked by personnel other than those who input the data.
- 4.44 For monitoring activities require laboratory analysis, the local laboratory follows the QA/QC requirements as set out under the HOKLAS scheme for all laboratory testing.



#### IMPACT MONITORING RESULTS 5.0

5.01 The impact EM&A program was carried out by the ET in compliance with the project specific EM&A Manual in this reporting period. The impact monitoring schedules are presented in Appendix G and the monitoring results are detailed in the following sub-sections.

## **AIR QUALITY**

5.02 The 1-Hour and 24-Hour TSP impact air quality monitoring data are summarized in Graphical plots of the monitoring results are shown in **Tables 5-1** and **5-2**. **Appendix H** respectively.

Monitoring Date	Start Time	1 <sup>st</sup> Result (µg/m <sup>3</sup> )	2 <sup>nd</sup> Result (µg/m <sup>3</sup> )	3 <sup>rd</sup> Result (µg/m <sup>3</sup> )	Action Level (µg/m <sup>3</sup> )	Limit Level (µg/m <sup>3</sup> )
29-Dec-07	9:10	120	132	131	> 307	> 500
04-Jan-08	9:24	128	131	124	> 307	> 500
10-Jan-08	9:32	288	267	294	> 307	> 500
15-Jan-08	9:23	151	140	153	> 307	> 500
21-Jan-08	9:23	232	245	257	> 307	> 500

Table 5-1 Summary of 1-Hour TSP Monitoring Results at A10

\* Monitoring result was exceeded the Action Level Note: # Monitoring result was exceeded the Limit Level

Monitoring Date	Monitoring Results (µg/m <sup>3</sup> )	Action Level (µg/m <sup>3</sup> )	Limit Level (µg/m <sup>3</sup> )
27-Dec-07	36	> 165	> 260
02-Jan-08	100	> 165	> 260
08-Jan-08	50	> 165	> 260
14-Jan-08	60	> 165	> 260
19-Jan-08	33	> 165	> 260
25-Jan-08	48	> 165	> 260

Note: \* Monitoring result was exceeded the Action Level # Monitoring result was exceeded the Limit Level

- 5.03 No 1-Hour and 24-Hour TSP Action or Limit Level exceedance was recorded in this reporting period.
- 5.04 The meteorological data during the monitoring period are summarized in Appendix I.

# **CONSTRUCTION NOISE**

5.05 The impact construction noise monitoring results are summarized in Table 5-3. Graphical plots of the monitoring data are presented in Appendix H.

				11101501		8		
te	Start Time	1st Leq5	2nd Leq5	3rd Leq5	4th Leq5	5th Leq5	6 <sup>th</sup> Leq5	Leq

 Table 5-3
 Summary of Noise Monitoring Results at N10a

Start Time	1st Leq5	2nd Leq5	3rd Leq5	4th Leq5	5th Leq5	6 <sup>th</sup> Leq5	Leq30
10:37	48.3	48.9	48.2	50.8	49.3	53.4	50.2
11:12	57.6	62.0	55.9	55.9	56.0	53.8	57.8
10:26	49.3	48.5	48.8	48.5	48.2	47.3	48.5
10:29	46.8	62.3	57.9	47.1	45.2	45.8	56.2
14:26	50.4	51.3	50.1	51.9	50.8	48.6	50.6
evel	-					>75 dB(A)	
	10:37 11:12 10:26 10:29	TimeLeq510:3748.311:1257.610:2649.310:2946.814:2650.4	TimeLeq5Leq510:3748.348.911:1257.662.010:2649.348.510:2946.862.314:2650.451.3	Time         Leq5         Leq5         Leq5           10:37         48.3         48.9         48.2           11:12         57.6         62.0         55.9           10:26         49.3         48.5         48.8           10:29         46.8         62.3         57.9           14:26         50.4         51.3         50.1	TimeLeq5Leq5Leq5Leq510:3748.348.948.250.811:1257.662.055.955.910:2649.348.548.848.510:2946.862.357.947.114:2650.451.350.151.9	Time         Leq5         Leq5         Leq5         Leq5         Leq5         Leq5           10:37         48.3         48.9         48.2         50.8         49.3           11:12         57.6         62.0         55.9         55.9         56.0           10:26         49.3         48.5         48.8         48.5         48.2           10:29         46.8         62.3         57.9         47.1         45.2           14:26         50.4         51.3         50.1         51.9         50.8	TimeLeq5Leq5Leq5Leq5Leq510:3748.348.948.250.849.353.411:1257.662.055.955.956.053.810:2649.348.548.848.548.247.310:2946.862.357.947.145.245.814:2650.451.350.151.950.848.6

The noise ambient condition within the victim area without significant change. Due to the accessibility, baseline Note: monitoring will undertake at N10a. The impact monitoring will undertake at N10 once the access is available.



5.06 No construction noise exceedance (Action/Limit Level) was recorded in this reporting period.

# STREAM WATER QUALITY

- 5.07 The stream water quality monitoring results are summarized in **Table 5-4**. Details of the monitoring results and graphical plots for each parameter are presented in **Appendix H**.
- 5.08 No exceedance in stream water quality was recorded in the reporting period.

Monitoring	DO in	mg/L	Turbidi	ty (NTU)	р	H	SS in	mg/L	Ammon	ia (mg/L)	Zinc	(µg/L)
Date	W9A <sup>#</sup>	W9B	W9A <sup>#</sup>	W9B	W9A <sup>#</sup>	W9B	W9A <sup>#</sup>	W9B	W9A <sup>#</sup>	W9B	W9A <sup>#</sup>	W9B
29-Dec-07	3.7	2.0	172.5	57.1	8.7	8.4	130	57	125.00	20.70	612	119
31-Dec-07	4.5	2.0	146.5	118.0	8.5	8.3	228	77	129.00	25.40	593	157
04-Jan-08	4.3	1.7	112.5	63.4	8.5	8.3	159	73	101.00	19.10	590	74
07-Jan-08	3.9	1.7	129.0	53.7	8.2	8.4	207	62	68.10	30.70	711	117
10-Jan-08	2.4	1.5	412.5	108.5	8.7	8.6	286	109	32.50	30.50	1220	281
15-Jan-08	4.0	1.6	298.5	55.0	8.7	8.3	194	62	26.30	15.90	717	138
17-Jan-08	3.9	3.3	71.3	25.5	8.3	8.3	83	33	2.37	6.19	187	85
21-Jan-08	3.6	1.5	39.0	17.8	8.1	8.2	80	40	16.60	9.05	225	95
Action Level	-	< 0.3*	-	> 73.5*	-	> 7.0*	-	> 148*	-	> 30.91*	-	> 242*
Limit Level	-	< 0.2**	-	> 78.2**	-	> 7.1**	-	> 159**	-	> 32.20**	-	> 252**

 Table 5-4
 Summary of Stream Water Quality Results at W9A & W9B

Notes: # Act as Control Station for the Impact Water Quality Monitoring.

\* Alternative Action Level of the Turbidity, pH, Suspended Solid, Ammonia Nitrogen and Zinc are 120% of upstream control station of same day.

\*\* Alternative Limit Level of the Turbidity, pH, Suspended Solid, Ammonia Nitrogen and Zinc are 130% of upstream control station of same day.



#### ECOLOGY

- 5.09 43 individuals of birds from 17 species were recorded during the survey for the present monthly monitoring on 13 January 2008. Among the birds recorded, no individual of any wetland bird species with abundance from the baseline (i.e. Cattle Egret and Chinese Pond Heron) was recorded. Compared with the average abundance of 1.2 individuals from 2 species of wetland dependent birds recorded during the baseline study for the KT15 Project Profile, the individual number and the species number of wetland dependent bird recorded fell within the Limit Level for the monitoring requirements for ecology (i.e. decrease in the number of species or individuals > 40% from the baseline).
- 5.10 No intrusions of construction activities into the wetland areas nor adverse impact on the wetlands was found. Based on the findings in the pervious monthly monitoring, the non-compliance in wetland dependent bird species and individual number was not caused by the project.
- 5.11 Photographic records are scheduled in six-month intervals, while fauna survey is conducted during the wetland season (April to July), and thus both are not required in the present monthly monitoring.
- 5.12 Ecology Impact Monitoring Results are presented in the Table 5-5.

Scientific Name	Common Name	Abundance reported in the project profile	Abundance recorded in the present survey (13 Jan 08)
Birds			
Bubulcus ibis	Cattle Egret	0.4	
Ardeola bacchus	Chinese Pond Heron	0.8	
Amaurornis phoenicurus	White-breasted Waterhen	Recorded only	1
Streptopelia chinensis	Spotted Dove	Recorded only	4
Hirundo rustica	Barn Swallow	Recorded only	
Motacilla alba	White Wagtail	Recorded only	2
Pycnonotus jocosus	Red-whiskered Bulbul	Recorded only	3
Pycnonotus sinesis	Chinese Bulbul	Recorded only	5
Lanius schach	Long-tailed Shrike	Recorded only	1
Copsychus saularis	Oriental Magpie Robin	Recorded only	1
Orthotomus sutorius	Common Tailorbird	Recorded only	
Lonchura striata	White-rumped Munia	Recorded only	
Passer montanus	Eurasian Tree Sparrow	Recorded only	4
Sturnus nigricollis	Black-collared Starling	Recorded only	1
Acridotheres cristatellus	Crested Myna	Recorded only	6
Prinia flaviventris	Yellow-bellied Prinia	\	2
Eudynamis scolopacea	Common Koel	1	
Halcyon smyrnensis	White-throated Kingfisher	\	
Garrulax perspicillatus	Masked Laughingthrush	\	3
Zosterops japonica	Japanese White Eye	\	
Lonchura punctulata	Scaly-breasted Munia	\	
Egretta garzetta	Little Egret	1	1
Anthus hodgsoni	Olive-backed Pipit	1	
Phylloscopus subaffinis	Dusky Warbler	1	
Phylloscopus inornatus	Yellow-Browed Warbler	\	1
Parus major	Great Tit	l l	1
Anthus hodgsoni	Olive-backed Pipit		1
Zosterops japonica	Japanese White Eye	\	6
Species Number		15 spp. recorded, (only 2 species of wetland birds with abundance)	17 spp. (0 sp. from the wetland birds with abundance in the baseline)
Individual Number	and with abundance during t	1.2 (from the 2 species of wetland birds with abundance)	43 (0 from the wetland birds with abundance in the baseline)

 Table 5-5
 Summary of Ecology Impact Monitoring Results

\*Wetland dependent species recorded with abundance during the baseline study with the names bolded



# 6.0 WASTE MANAGEMENT

6.01 The waste management was implemented by on-site Environmental Officer or Environmental Supervisor from time to time.

## **RECORDS OF WASTE QUANTITIES**

- 6.02 All types of waste arising from the construction work are classified into the following:
  - Construction & Demolition (C&D) Material;
  - Chemical Waste;
  - General Refuse; and
  - Excavated Soil.
- 6.03 The quantities of waste for disposal in this reporting period are summarized in Tables 6-1 and 6-2. Whenever possible, materials were reused on-site as far as practicable.

 Table 6-1
 Summary of Quantities of Inert C&D Materials

Type of Waste	Quantity	<b>Disposal Location</b>
Broken Concrete (Inert) (m <sup>3</sup> )	0	Public Filling
Reused in this Contract (Inert) (m <sup>3</sup> )	0	N/A
Reused in other Projects (Inert) (m <sup>3</sup> )	0	N/A
Disposal as Public Fill (Inert) (m <sup>3</sup> )	0	Tuen Mun Area 38

# Table 6-2Summary of Quantities of C&D Wastes

Type of Waste	Quantity	<b>Disposal Location</b>
Recycled Metal (kg)	0	NA
Recycled Paper / Cardboard Packing (kg)	0	NA
Recycled Plastic (kg)	0	NENT Landfill
Chemical Wastes (kg)	0	License Collector
General Refuses (m <sup>3</sup> )	21	NENT Landfill

6.04 The quantities of excavation soil for marine disposal in this reporting period are summarized in Table 6-3.

Table 6-3	Summary of Excavated Soil for Marine Disposal
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Type of Waste	Quantity	<b>Disposal Location</b>
Type 1 Materials (m <sup>3</sup> )	0	East Sha Chau (Pitch 4a & 4b)
Type 2 Materials (m <sup>3</sup> )	0	East Sha Chau (Pitch 4c)

# 7.0 SITE INSPECTION

- 7.01 According to the EM&A Manual Section 9.1.2, the environmental site inspection should been formulation by ET Leader. ET had carried out the environmental site inspection on 27 December 2007, 03, 10, 17 and 24 January 2008 with the Representatives of the Engineer and the Contractor to evaluate the site environmental performance in this reporting period. The monthly IEC site audit conducted on 17 January 2008 by IEC's representative with the Engineer's, the Contractor's and ET's representative. No non-compliance and four observations were noted.
- 7.02 The details of observation during the site inspections and monthly audit as follows:
  - Wastewater directly discharge without diverted to the sedimentation tank was observed at CH500. The Contractor was reminded to provide sedimentation tank accordingly;



- Debris and C&D wastes accumulated on site was observed at CH160. The Contractor was reminded to clean up in regular basis;
- Debris and C&D wastes accumulated CH250 was observed, the Contract was reminded to clean up regular; and
- Wheel washing wastewater directly discharge into the stream was observed at CH459, the Contractor was reminded to divert all the wastewater to the desliting facility prior to discharge.
- 7.03 The ET site inspection checklists are shown in **Appendix J**. In general, the construction area of KT15 was kept clean and tidy.
- 7.04 No site inspection was undertaken by external parties in this reporting period.

# 8.0 ENVIRONMENTAL COMPLAINT AND NON-COMPLIANCE

## ENVIRONMENTAL COMPLAINT, SUMMONS AND PROSECUTION

8.01 No environmental complaint, summons and prosecution was received in this reporting period. The statistical summary table of environmental complaint is presented in **Table 8-1, 8-2** and **8-3**.

## Table 8-1 Statistical Summary of Environmental Complaints

Reporting Period	Enviro	onmental Complaint St	atistics
Reporting Ferrou	Frequency	Cumulative	Complaint Nature
Jul 2007 – December 2007	0	0	NA
January 2008	0	0	NA

# Table 8-2 Statistical Summary of Environmental Summons

Reporting Period	Envir	onmental Summons Sta	atistics
noporung i oriou	Frequency	Cumulative	Nature
Jul 2007 – December 2007	0	0	NA
January 2008	0	0	NA

# Table 8-3 Statistical Summary of Environmental Prosecution

Reporting Period	Enviro	nmental Prosecution S	tatistics
hepot mig i orioù	Frequency	Cumulative	Nature
Jul 2007 – December 2007	0	0	NA
January 2008	0	0	NA

# 9.0 IMPLEMENTATION STATUS OF MITIGATION MEASURES

- 9.01 CCC has been implementing the required environmental mitigation measures according to the EM&A Manual of KT15 Mitigation Measures Implementation Schedule.
- 9.02 A summary of environmental mitigation measures generally implemented by CCC in this reporting period is presented as follows;

# Water Quality

- Wastewater were appropriately treated by treatment facilities;
- Drainage channels were provided to convey run-off into the treatment facilities;
- Drainage systems were regularly and adequately maintained.



# <u>Air Quality</u>

- Vehicles were cleaned of mud and debris before leaving the site;
- Site vehicles were limited to within 8 km/hr;
- Public roads around the site entrance/exit had been kept clean and free from dust;
- Dust suppression measures were properly provided to reduce dust emission from stockpile.

# Noise

- Works and equipment were located to minimise noise nuisance from the nearest sensitive receiver;
- Idle equipments were either turned off or throttled down;
- Some of the Powered Mechanical Equipments were covered or shielded by appropriate acoustic materials if practicable.

# Waste and Chemical Management

- Wastes were properly segregated into inert and non-inert in appropriate containers/areas;
- Excavated materials were reused where practicable.
- A chemical waste storage area had been provided on site;

# General

• The site was generally kept tidy and clean.

# **10.0 IMPACT FORECAST**

# **KEY ISSUES FOR THE COMING MONTH**

- 10.01 Key issues to be considered in the coming month include:
  - Implementation of dust suppression measures at all times;
  - Potential wastewater quality impact due to surface runoff;
  - Potential fugitive dust quality impact due to dry/windy season (November to March) from the dry/loose/exposure soil surface/dusty material;
  - Disposal of empty engine oil containers within site area;
  - Ensure dust suppression measures are implemented properly;
  - Sediment catch-pits and silt removal facilities should be regularly maintained;
  - Management of chemical wastes;
  - Discharge of site effluent to the nearby wetland, stockpiling or disposal of materials, and any dredging or construction area at this area are prohibited;
  - Follow-up of improvement on general waste management issues; and
  - Implementation of construction noise preventative control measures.
- 10.02 The tentative 3-month rolling program is presented in Appendix B.

# 11.0 CONCLUSION

11.01 The EM&A program in **January 2008** was undertaken in compliance with the EM&A Manual for KT15. A summary of environmental compliance of air, noise, stream water quality and ecology in this reporting period are presented in **Table 11-1**.

Env. Quality	Parameters	Work-Related Exceedance %	Investigation & Corrective Actions
Air	1-Hour TSP	0	Not Required for 0% Exceedance
Quality	24-Hour TSP	0	Not Required for 0% Exceedance
Noise	Leq (30min) Daytime	0	Not Required for 0% Exceedance
	Dissolve Oxygen (DO) in mg/L	0	Not Required for 0% Exceedance
	Suspended Solids (SS) in mg/L	0	Not Required for 0% Exceedance
Stream	Turbidity (NTU)	0	Not Required for 0% Exceedance
Water	pH	0	Not Required for 0% Exceedance
	Ammonia Nitrogen (mg/L)	0	Not Required for 0% Exceedance
	Zinc (µg/L)	0	Not Required for 0% Exceedance
Ecology	Decrease in the total number of species or individuals of wetland dependent bird from baseline	0	Not Required for 0% Exceedance
	Decrease in the total number of species or individuals of wetland faunal from baseline	NA	(monitoring not required in this reporting month)

Table 11-1Summary of the Exceedances for Impact Monitoring

AUFS

- 11.02 No 1-Hour and 24-Hour TSP exceeded the Action/Limit Level was recorded in this reporting period.
- 11.03 All measured daytime construction noise levels were below the Limit level and no complaint was received in this reporting period.
- 11.04 No stream water quality exceeded the Action/Limit Level was recorded during the reporting period.
- 11.05 No intrusions into the wetland area/adverse impact on the wetlands were found during the reporting period. Wetland bird individual number and species number on 13 January 2008 fell within the Limit Level (decrease >40 % from baseline). Based on the findings in the pervious monthly monitoring, the non-compliance in wetland dependent bird species and individual number was not caused by the project.
- 11.06 No environmental complaint, summons or prosecution was received in this reporting period.

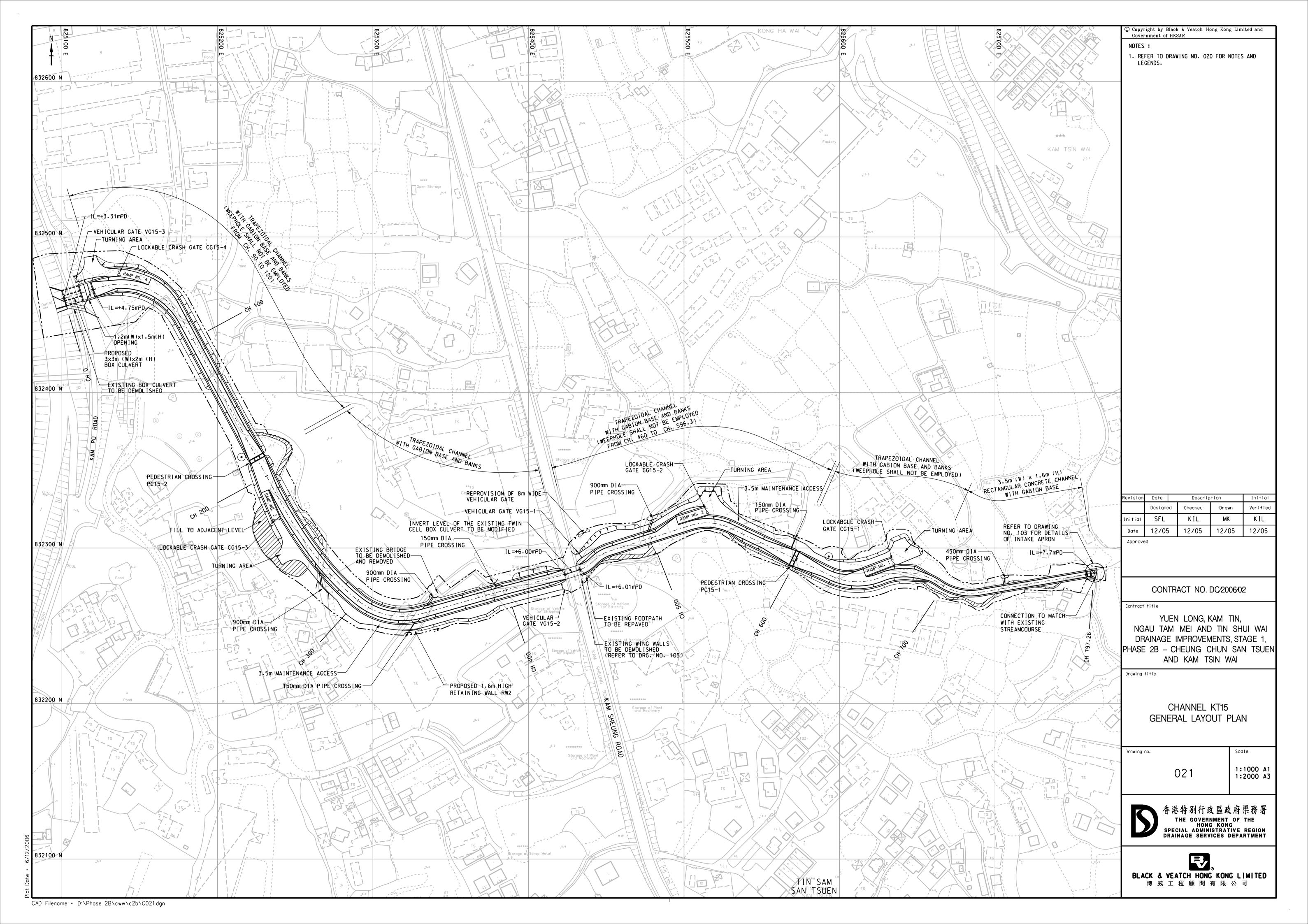
# RECOMMENDATIONS

- 11.07 Based on the ET regular and monthly IEC site audit inspection records on 27 December 2007, 03, 10, 17 and 24 January 2008, no non-compliance and four observations were recorded. Details of the observations as follows:-
  - Wastewater directly discharge without diverted to the sedimentation tank was observed at CH500. The Contractor was reminded to provide sedimentation tank accordingly;
  - Debris and C&D wastes accumulated on site was observed at CH160. The Contractor was reminded to clean up in regular basis;
  - Debris and C&D wastes accumulated CH250 was observed, the Contract was reminded to clean up regular; and
  - Wheel washing wastewater directly discharge into the stream was observed at CH459, the Contractor was reminded to divert all the wastewater to the desliting facility prior to discharge.
- 11.08 No site inspection was undertaken by external parties in this reporting period.
- 11.09 The ET will continue to implement the EM&A program and audit the implementation of the environmental mitigation measures.



Appendix A

**Project Site Layout** 





Appendix B

**Three-Month Construction Program** 

CHIT CHEUNG CONSTRUCTION CO., LTD.
DATE : AUG 2007

ID	Task Name	Duration	Start	Finish	Predecessors	Successors	0	et l	Nov	Dec	2008 Jan
1	Letter of Acceptance	1 day	Wed 21/3/07	Wed 21/3/07	·	S,193SS,199SS,196SS,202SS,212SS		JL	INOV	Dec	Jan
2	Date for commencement of Works	1 day	Fri 30/3/07	Fri 30/3/07		133SS,136SS,139SS,168SS,185SS					
3	Execution of Article of Agreement	1 day	Tue 3/4/07	Tue 3/4/07			-				
4							-				
5	Master Programme of the Works	839 days	Wed 21/3/07	Mon 6/7/09							
6											
7	Completion Dates	830 days	Fri 30/3/07	Mon 6/7/09		670FS-210 days,845FS-210 days					
8	Section I - portions 1, 2 and 3	830 days	Fri 30/3/07	Mon 6/7/09	2SS	31SS,37FF	-				
9	Section II - portions 4, 5 and 5C	830 days	Fri 30/3/07	Mon 6/7/09	2SS						
10	Section III - portions 5A1, 5A2 and 5B	740 days	Thu 28/6/07	Mon 6/7/09	20FS-1 day						
11	Section IV - temp vehicular access at portion 5A1	90 days	Thu 28/6/07	Tue 25/9/07	20FS-1 day	22,884FF-1 day	-				
12	Section V - preservation and protection of existing	trees 830 days	Fri 30/3/07	Mon 6/7/09	2SS		_				
13											
14	Possession of Site	200 days	Fri 30/3/07	Mon 15/10/07							
15	Portion 1 - channel KT2	1 day	Fri 30/3/07	Fri 30/3/07	2SS	221FS+45 days,222FS+45 days,889	- T				
16	Portion 2 - channel KT2	61 days	Fri 30/3/07	Tue 29/5/07	2SS	143,895	-				
17	Portion 3 - channel KT2	91 days	Fri 30/3/07	Thu 28/6/07	2SS	144,448,901	-				
18	Portion 4 - channel KT15	1 day	Fri 30/3/07	Fri 30/3/07	2SS	625,907	-				
19	Portion 5 - channel KT15	91 days	Fri 30/3/07	Thu 28/6/07	2SS	144,672,913,225FS-1 day	-				
20	Portion 5A1 - channel KT15	91 days	Fri 30/3/07	Thu 28/6/07		10FS-1 day,11FS-1 day,144,847,919	-				
			E : 00/0/07	TI 00/0/07	000						
21	Portion 5A2 - channel KT15	91 days	Fri 30/3/07	Thu 28/6/07		144,925					
22	Portion 5B - channel KT15 Portion 5C - channel KT15	20 days	Wed 26/9/07	Mon 15/10/07		145,931		]			
23		91 days	Fri 30/3/07	Thu 28/6/07							
24	Portion 6 - Temp Storage Area at Chi Ho Road	1 day	Fri 30/3/07	Fri 30/3/07							
25	Portion 7 - Berthing Area	1 day	Fri 30/3/07	Fri 30/3/07		2 5000 0100 0000 7000 7700 7000					
26	Portion 8 - Site Accommodation	1 day	Fri 30/3/07	Fri 30/3/07	255	\$\$,56\$\$,61\$\$,66\$\$,72\$\$,77\$\$,78\$\$	_				
27 28	A. Preliminary Works	839 days	Wed 21/3/07	Mon 6/7/09							
29	1. Setting out of Works	830 days	Fri 30/3/07	Mon 6/7/09	2SS		-				
30	2. Environmental Monitoring and Audit	830 days	Fri 30/3/07	Mon 6/7/09							
31	2.1 Establishment of Environmental Team	14 days	Fri 30/3/07	Thu 12/4/07		32					
32	2.2 approval by the Engineer	7 days	Fri 13/4/07	Thu 19/4/07		34	-				
33	2.3 Environmental baseline monitoring	77 days	Fri 20/4/07	Thu 5/7/07			-				
34	a. Technical proposal & methodology	7 days	Fri 20/4/07	Thu 26/4/07		35	-				
35	b. Approval by the Engineer	7 days	Fri 27/4/07	Thu 3/5/07		36	-				
36	c. Baseline monitoring	63 days	Fri 4/5/07	Thu 5/7/07		37,233,328,622,663	-				
37	2.4 Environmental impact monitoring and aud	,	Sun 8/7/07	Mon 6/7/09			-				
38	3. Environmental Management and Environme		Fri 30/3/07	Sun 10/6/07							
39	Management Plan 3.1 Submission of draft EMP	21 days	Fri 30/3/07	Thu 19/4/07	255	40	-				
- 39	5.1 Submission of trait EWF	2 i days	111 30/3/07	1110 19/4/07	200	40					
	I										
		Task	Mileste	one	Rolled	Up Critical Task Spl	it			Group By Summary	
Project Page:	t: PROGRAMME OF WORKS 1 of 23	Critical Task	Summ	ary	Rolled	Up Milestone 🔿 Ext	ernal Tasks			Deadline	Ŷ
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ID	Task Name	Duration	Start	Finish	Predecessors	Successors				2008
							Oct	Nov	Dec	Jan
40	3.2 Comment from the Engineer	7 days	Fri 20/4/07			41				
41	3.3 Submission of EMP	45 days	Fri 27/4/07							
42	4. Engineer's Accommodation	51 days	Fri 30/3/07							
43	4.1 Renovation	30 days	Fri 30/3/07			50FS-7 days				
44	4.2 Equipment	51 days	Fri 30/3/07							
45	a. Contract telephone	21 days	Fri 30/3/07	Thu 19/4/07	26SS					
46	b. Survey equipment	45 days	Fri 30/3/07	Sun 13/5/07	26SS					
47	c. Contract computer facilities	51 days	Fri 30/3/07	Sat 19/5/07						
48	submission	14 days	Fri 30/3/07	Thu 12/4/07	26SS	49				
49	approval	7 days	Fri 13/4/07	Thu 19/4/07	48	50				
50	installation	21 days	Sun 22/4/07	Sat 12/5/07	49,43FS-7 days	51				
51	testing & commissioning	7 days	Sun 13/5/07	Sat 19/5/07	50					
52	4.3 utilities servicing	33 days	Fri 30/3/07	Tue 1/5/07						
53	a. Water	1 day	Fri 30/3/07	Fri 30/3/07	26SS					
54	b. Electricity	1 day	Fri 30/3/07	Fri 30/3/07	26SS					
55	c. Telephone	33 days	Fri 30/3/07	Tue 1/5/07						
56	temporary service	32 days	Fri 30/3/07	Mon 30/4/07	26SS	58SS+14 days				
57	new service	19 days	Fri 13/4/07							
58	application	5 days	Fri 13/4/07		56SS+14 days	59				
59	installation	14 days	Wed 18/4/07		-					
60	d. Facsimile	33 days	Fri 30/3/07							
61	temporary service	32 days	Fri 30/3/07			63SS+14 days				
62	new service	19 days	Fri 13/4/07			0000114 days				
63	application	5 days	Fri 13/4/07		61SS+14 days	64				
64	installation	14 days	Wed 18/4/07		-					
65	e. Internet broadband		Fri 30/3/07							
		33 days				COOO + 1.1 down				
66	temporary service (56K)	32 days	Fri 30/3/07			68SS+14 days				
67	new service	19 days	Fri 13/4/07							
68	application	5 days	Fri 13/4/07		66SS+14 days	69				
69	installation	14 days	Wed 18/4/07							
70	5. Contractor's Accommodation	45 days	Fri 30/3/07							
71	5.1 Provision	45 days	Fri 30/3/07							
72	a. Premises	45 days	Fri 30/3/07			73FF,74FF,75FF,76FF				
73	b. Toilet facilities	21 days	Mon 23/4/07			939				
74	c. Telephone service	30 days	Sat 14/4/07			99FF				
75	d. Fascimile service	30 days	Sat 14/4/07							
76	e. Internet broadband service	30 days	Sat 14/4/07	Sun 13/5/07	72FF					
77	f. Water	1 day	Fri 30/3/07	Fri 30/3/07	26SS					
78	g. electricity	1 day	Fri 30/3/07	Fri 30/3/07	26SS					
79	6. Transport (land ) for the Engineer	124 days	Fri 30/3/07	Tue 31/7/07						
80	6.1 submission	7 days	Fri 30/3/07	Thu 5/4/07	2SS	81				
81	6.2 comment & approval	14 days	Fri 6/4/07	Thu 19/4/07	80	82				
		Task	Mila	stone	▲ Dollar	d Up Critical Task			Group By Summary	
Project	PROGRAMME OF WORKS				•					
Project: Page: 2	of 23	Critical Task	Sun	nmary	Rolled	d Up Milestone 🚫 Exte	ernal Tasks	E	Deadline	$\hat{\nabla}$
-		Progress	Roll	ed Up Task	Rolled	Up Progress Proj	ect Summary			

ID	Task Name	Duration	Start	Finish	Predecessors	Successors				2008
							Oct	Nov	Dec	Jan
82	6.3 delivery	103 days	Fri 20/4/07	Tue 31/7/07		83F	F			
83	6.4 temp service	124 days	Fri 30/3/07	Tue 31/7/07	2SS,82FF					
84	7. Transport (land) for Public Works Regional Laboratory	124 days	Fri 30/3/07	Tue 31/7/07						
85	7.1 submission	7 days	Fri 30/3/07	Thu 5/4/07	2SS	8				
86	7.2 comment, approval & instruction	14 days	Fri 6/4/07	Thu 19/4/07	85	8	7			
87	7.3 delivery	103 days	Fri 20/4/07	Tue 31/7/07	86					
88	8. Signboard	150 days	Fri 30/3/07	Sun 26/8/07						
89	8.1 Major	150 days	Fri 30/3/07	Sun 26/8/07						
90	submission	90 days	Fri 30/3/07	Wed 27/6/07	2SS	91SS+30 day				
91	comment & approval	90 days	Sun 29/4/07	Fri 27/7/07	90SS+30 days	92SS+30 day	s			
92	erection	90 days	Tue 29/5/07	Sun 26/8/07	91SS+30 days					
93	8.2 Minor	150 days	Fri 30/3/07	Sun 26/8/07						
94	submission	90 days	Fri 30/3/07	Wed 27/6/07	2SS	95SS+30 day	s			
95	comment & approval	90 days	Sun 29/4/07	Fri 27/7/07	94SS+30 days	96SS+30 day	s			
96	erection	90 days	Tue 29/5/07	Sun 26/8/07	95SS+30 days					
97	9. Telephone hotline	15 days	Sun 29/4/07	Sun 13/5/07						
98	9.1 Engineer's instruction	1 day	Sun 29/4/07	Mon 30/4/07	99SF					
99	9.2 installation	14 days	Mon 30/4/07	Sun 13/5/07	74FF	985	F			
100	10. Contractual general submissions	839 days	Wed 21/3/07	Mon 6/7/09						
101	10.1 programmes	28 days	Wed 21/3/07	Tue 17/4/07						
102	a. GCC Clause 16 programme	14 days	Wed 21/3/07	Tue 3/4/07	1SS	103,104	4			
103	b. Works programme & financial programme	14 days	Wed 4/4/07	Tue 17/4/07	102					
104	c. 3-month rolling programme	14 days	Wed 4/4/07	Tue 17/4/07	102					
105	10.2 contractor's superintendence	14 days	Fri 30/3/07	Thu 12/4/07						
106	a. Agent	7 days	Fri 30/3/07	Thu 5/4/07	2SS					
107	b. Surveyor	14 days	Fri 30/3/07	Thu 12/4/07	2SS					
108	c. Sub-agent	14 days	Fri 30/3/07	Thu 12/4/07	2SS					
109	d. Geotechnical Engineer	7 days	Fri 30/3/07	Thu 5/4/07	2SS					
110	e. Geotechnical Supervisor	14 days	Fri 30/3/07	Thu 12/4/07	2SS		-			
111	f. Foreman - concrete	14 days	Fri 30/3/07	Thu 12/4/07	2SS		-			
112	g. Foreman - drainage	14 days	Fri 30/3/07	Thu 12/4/07	2SS		-			
113	h. Staff Organization Plan	14 days	Fri 30/3/07	Thu 12/4/07	2SS		-			
114	10.3 Safety Organization	14 days	Fri 30/3/07	Thu 12/4/07			-			
115	a. Safety Officer	14 days	Fri 30/3/07	Thu 12/4/07	2SS					
116	b. Safety Supervisor	14 days	Fri 30/3/07	Thu 12/4/07	2SS					
117	c. Safety Representative	14 days	Fri 30/3/07	Thu 12/4/07	2SS		-			
118	10.4 TTMS design	7 days	Fri 30/3/07	Thu 5/4/07			-			
119	a. Independent Traffic Consultant	7 days	Fri 30/3/07	Thu 5/4/07	2SS		-			
120	b. Traffic Engineer	7 days	Fri 30/3/07	Thu 5/4/07	2SS					
121	10.5 Assistant to Engineer	33 days	Fri 30/3/07	Tue 1/5/07						
122	a. Chainmen (4)	33 days	Fri 30/3/07	Tue 1/5/07	2SS		-			
123	b. Watchmen (2)	33 days	Fri 30/3/07	Tue 1/5/07	2SS		-			
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	Task		Miles	tone	Rol	ed Up Critical Task	olit	 	Group By Summary	
Project Page: 3	PROGRAMME OF WORKS Critical Task		Sumr	nary	Rol	ed Up Milestone Ex	ternal Tasks		Deadline	
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ID	Task Name	Duration	Start	Finish	Predecessors	Successors					2008
							Oc	t	Nov	Dec	Jan
124	c. Field assistant (1)	33 day		Tue 1/5/07							
125	d. Technical assistant (1)	33 day		Tue 1/5/07							
126	e. Clerical assistant (1)	33 day		Tue 1/5/07							
127	f. Office assistant (1)	33 day		Tue 1/5/07	2SS						
128	10.6 Underground service detection equipment	35 day	s Fri 30/3/07	Thu 3/5/07							
129	a. Submission	7 day	s Fri 30/3/07	Thu 5/4/07	288	13	0				
130	<ul> <li>b. Comment &amp; approval</li> </ul>	14 day	s Fri 6/4/07	Thu 19/4/07	129	13	1				
131	c. Provision	14 day	s Fri 20/4/07	Thu 3/5/07	130						
132	10.7 Independent Checking of Temporary Works	28 day	s Fri 30/3/07	Thu 26/4/07							
133	<ul> <li>a. Submission of independent checking engine</li> </ul>	er 14 day	s Fri 30/3/07	Thu 12/4/07	2SS	13	4				
134	<ul> <li>b. Comment &amp; approval</li> </ul>	14 day	s Fri 13/4/07	Thu 26/4/07	133						
135	10.8 Trip ticket system for C & D material	59 day	s Fri 30/3/07	Sun 27/5/07			_				
136	a. Submission of site management plan	45 day	s Fri 30/3/07	Sun 13/5/07	2SS	13	7				
137	b. Comment & approval	14 day	s Mon 14/5/07	Sun 27/5/07	136		_				
138	10.9. Condition survey and structral monitoring	830 day	s Fri 30/3/07	Mon 6/7/09							
139	a. Submission of Independent Structural Engin	ieer 14 day	s Fri 30/3/07	Thu 12/4/07	2SS	14	0				
140	b. Comment & approval	7 day	s Fri 13/4/07	Thu 19/4/07	139	14	2				
141	c. Proposal for condition survey & structural mo	onitoring 209 day	s Fri 20/4/07	Wed 14/11/07			_				
142	Portion 1, 4, 6, 7, 8	30 day	s Fri 20/4/07	Sat 19/5/07	140	14	7		•		
143	Portion 2	30 day	wed 30/5/07	Thu 28/6/07	16	14	8				
144	Portion 3, 5, 5A1, 5A2	30 day		Sat 28/7/07	17,19,20,21	14	9				
145	Portion 5B	30 day		Wed 14/11/07		15	0 40 days	7			
146	d. Comment & approval	193 day		Wed 28/11/07							
147	Portion 1, 4, 6, 7, 8	14 day		Sat 2/6/07	142	15	2				
148	Portion 2	14 day		Thu 12/7/07		15					
149	Portion 3, 5, 5A1, 5A2	14 day		Sat 11/8/07		15					
150	Portion 5B	14 day		Wed 28/11/07		15		40	days		
151	e. Condition survey & structural monitoring	765 day		Mon 6/7/09					aye		
152	Portion 1, 4, 6, 7, 8	765 day		Mon 6/7/09	147		_				
153	Portion 2	725 day		Mon 6/7/09			_				
154	Portion 3, 5, 5A1, 5A2	695 day		Mon 6/7/09			_				
155	Portion 5B	546 day		Wed 27/5/09			_		40 days		
156	10.10 Handling & disposal of Type 1 & 2 contamina			Tue 25/9/07	100		_		40 days		
		-									
157	a. Proposed type of dump truck	44 day		Mon 27/8/07							
158	Submission	30 day			705SS-44 days	15	9				
159	Comment & approval	14 day		Mon 27/8/07	158						
160	b. Proposal of berthing area arrangement	44 day		Tue 11/9/07							
161	Submission	30 day		Tue 28/8/07		16					
162	Comment & approval	14 day		Tue 11/9/07	161	93	8				
163	c. Proposal of disposal arrangement	74 day		Tue 25/9/07							
164	Submission	60 day		Tue 11/9/07		16	5				
165	Comment & approval	14 day	Wed 12/9/07	Tue 25/9/07	164						
	Task		Miles	tone	R	colled Up Critical Task	plit		Gro	oup By Summary	
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CHIT CHEUNG CONSTRUCTION C
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ID	Task Name	Duration	Start	Finish	Predecessors	Successors				2008
					ļ		Oct	Nov	Dec	Jan
166	10.11 Handling & treatment of Type 3 contaminated material	581 days	Fri 30/3/07	Thu 30/10/08						
167	a. Decontamination specialist	134 days	Fri 30/3/07	Fri 10/8/07						
168	Submission	120 days	Fri 30/3/07	Fri 27/7/07	2SS	169	Э			
169	Comment & approval	14 days	Sat 28/7/07	Fri 10/8/07	168	17'	1			
170	b. Statement & treatment programme	42 days	Sat 11/8/07	Fri 21/9/07						
171	(1) Submission	28 days	Sat 11/8/07	Fri 7/9/07	169	173,174	4			
172	(2) Comment & approval	14 days	Sat 8/9/07	Fri 21/9/07						
173	by the Engineer	14 days	Sat 8/9/07	Fri 21/9/07	171					
174	by the EPD	14 days	Sat 8/9/07	Fri 21/9/07	171	175	5			
175	c. Setting up of Treatment Plant	60 days	Mon 1/9/08	Thu 30/10/08	174,529SS-61 days					
176	10.12 Safety Plan	35 days	Wed 21/3/07	Tue 24/4/07						
177	a. Submission of draft Safety Plan	14 days	Wed 21/3/07	Tue 3/4/07	1SS	178	3			
178	b. Comment by the Engineer	7 days	Wed 4/4/07	Tue 10/4/07	177	179	Э			
179	c. Submission of Safety Plan	14 days	Wed 11/4/07	Tue 24/4/07	178					
180	10.13 Sub-contractor Management Plan	839 days	Wed 21/3/07	Mon 6/7/09						
181	a. Submission of SMP	30 days	Wed 21/3/07	Thu 19/4/07	1SS	182	2			
182	b. For information & Comments	14 days	Fri 20/4/07	Thu 3/5/07	181	183	3			
183	c. Update SMP	795 days	Fri 4/5/07	Mon 6/7/09	182					:
184	10.14 proof of plant ownership	830 days	Fri 30/3/07	Mon 6/7/09						
185	a. Submission of draft written undertaking	14 days	Fri 30/3/07	Thu 12/4/07	2SS	186	6			
186	b. Comment by the Engineer / Employer	14 days	Fri 13/4/07	Thu 26/4/07	185	187	7			
187	c. Engineer's request	802 days	Fri 27/4/07	Mon 6/7/09	186					i
188	10.15 Contractor's Management Team	830 days	Fri 30/3/07	Mon 6/7/09						
189	a. Submission of staff member details	14 days	Fri 30/3/07	Thu 12/4/07	2SS	190	0			
190	b. Update management / site supervision team	816 days	Fri 13/4/07	Mon 6/7/09	189					
191	10.16 Water supply pipeworks material	28 days	Wed 21/3/07	Tue 17/4/07						
192	a. Supplier	28 days	Wed 21/3/07	Tue 17/4/07						
193	Submission	14 days	Wed 21/3/07	Tue 3/4/07	1SS	194	4			
194	comment & approval	14 days	Wed 4/4/07	Tue 17/4/07	193					
195	b. Manufacturer	28 days	Wed 21/3/07	Tue 17/4/07						
196	Submission	14 days	Wed 21/3/07	Tue 3/4/07	1SS	197	7			
197	comment & approval	14 days	Wed 4/4/07	Tue 17/4/07	196		7			
198	c. Independent Inspection Agent (IIA)	28 days	Wed 21/3/07	Tue 17/4/07			7			
199	Submission	14 days	Wed 21/3/07	Tue 3/4/07	1SS	200	0			
200	comment & approval	14 days	Wed 4/4/07	Tue 17/4/07	199					
201	d. Representative of the IIA	28 days	Wed 21/3/07	Tue 17/4/07						
202	Submission	14 days	Wed 21/3/07	Tue 3/4/07	1SS	203	3			
203	comment & approval	14 days	Wed 4/4/07	Tue 17/4/07	202		7			
204	10.17 Landscape softworks and establishment works	28 days	Fri 30/3/07	Thu 26/4/07						
205	a. Submission of technical information	14 days	Fri 30/3/07	Thu 12/4/07	2SS	206	6			
206	b. Comment & approval	14 days	Fri 13/4/07	Thu 26/4/07	205		]			
207	10.18 Preservation and protection of existing trees	59 days	Wed 21/3/07	Fri 18/5/07						
	Task		Milest	one	Rolled Up	Critical Task	olit		Group By Summary	
	: PROGRAMME OF WORKS Critical Task		Sumn	nary	Rolled Up	Milestone Ex	ternal Tasks		Deadline	
Page: 8	Progress		Rolled	l Up Task	Rolled Up	Progress Pr	oject Summary			
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ID	Task Name	r	Duration	Start	Finish	Predecessors	Successors	2008								
	Task Name		Duration	Start	Finish	Predecessors	Successors	00	t	N	lov	Dec	Jan			
208	a. Specialist contractor ( landscapin	ig Class I)	28 days	Fri 30/3/07	Thu 26/4/07		Î		-							
209	Submission		14 days	Fri 30/3/07	Thu 12/4/07	2SS	210									
210	Comment & approval		14 days	Fri 13/4/07	Thu 26/4/07	209										
211	b. Site supervisory staff		59 days	Wed 21/3/07	Fri 18/5/07											
212	Submission		45 days	Wed 21/3/07	Fri 4/5/07	1SS	213									
213	Comment & approval		14 days	Sat 5/5/07	Fri 18/5/07	212	891,897,903,909,915,921,927,933									
214	10.19 Concrete ( ready mix )		28 days	Fri 30/3/07	Thu 26/4/07											
215	a. Submission of supplier & design	mix	21 days	Fri 30/3/07	Thu 19/4/07	2SS	216									
216	b. Comment & approval		7 days	Fri 20/4/07	Thu 26/4/07	215										
217	10.20 Steel reinforcement		35 days	Fri 30/3/07	Thu 3/5/07											
218	a. Submission of supplier		28 days	Fri 30/3/07	Thu 26/4/07	2SS	219									
219	b. Comment & approval		7 days	Fri 27/4/07	Thu 3/5/07	218										
220	10.21 Submissions of method statement	/ materials	750 days	Tue 15/5/07	Tue 2/6/09											
221	a. Submission of materials		750 days	Tue 15/5/07	Tue 2/6/09	15FS+45 days										
222	b. Submission of method statement		750 days	Tue 15/5/07	Tue 2/6/09	15FS+45 days										
223	11. Provision of wheel washing facilities		180 days	Fri 30/3/07	Tue 25/9/07			_								
224	11.1 Channel KT2		120 days	Fri 30/3/07	Fri 27/7/07	2SS	233,328,448,471	-								
225	11.2 Channel KT15		90 days	Thu 28/6/07	Tue 25/9/07	19FS-1 day	622,663SS+75 days	-								
226	11.3 Berthing area		90 days	Fri 30/3/07	Wed 27/6/07	2SS	491			,						
227	11.4 Portion 6		45 days	Fri 30/3/07	Sun 13/5/07	2SS	897	-								
228	12. Setting up of traffic management liaiso	on group	30 days	Fri 30/3/07	Sat 28/4/07	2SS		-								
229								-								
230	B. Section I of the Works		830 days	Fri 30/3/07	Mon 6/7/09											
231	B1. Portion 1		790 days	Fri 30/3/07	Wed 27/5/09											
232	1. Site clearance		30 days	Sat 28/7/07	Sun 26/8/07			-								
233	1.1 General site clearance		30 days	Sat 28/7/07	Sun 26/8/07	36,224,893,891		-								
234	2. Temporary Traffic Management Sch	neme	59 days	Fri 30/3/07	Sun 27/5/07			-								
235	2.1 TTMS Proposal (trial pits in Chi I	Ho Road for utilities)	59 days	Fri 30/3/07	Sun 27/5/07			-								
236	a. Submission		45 days	Fri 30/3/07	Sun 13/5/07	2SS	237	-								
237	b. comments & approvals by E	ngineer & TMLG	14 days	Mon 14/5/07	Sun 27/5/07	236	242	-								
238	2.2 TTMS Proposal (for construction	of box culvet)	59 days	Fri 30/3/07	Sun 27/5/07			-								
239	a. Submission		45 days	Fri 30/3/07	Sun 13/5/07		240	-								
240	b. comments & approvals by E	ngineer & TMLG	14 days	Mon 14/5/07	Sun 27/5/07	239	243									
241	3. Excavation Permits	-	521 days	Mon 28/5/07	Wed 29/10/08											
242	3.1 application and issue of permit (t	trial pits in Chi Ho Road	180 days	Mon 28/5/07	Fri 23/11/07	237	246				Ь					
243	3.2 application and issue of permits box culvert)		180 days	Sat 3/5/08	Wed 29/10/08	240	263									
244	4. Underground utilities detection		253 days	Fri 30/3/07	Fri 7/12/07				_							
245	4.1 utilities detection		28 days	Fri 30/3/07	Thu 26/4/07	2SS	246					•				
246	4.2 trial trench excavtion & identifica	ation	14 days	Sat 24/11/07	Fri 7/12/07	245,242	254	1		577	days					
247	5. Utilities temporary diversion / prote	ection	493 days	Thu 27/9/07	Sat 31/1/09						L					
248	a. WSD watermain along village vel	hicular access	103 days	Wed 7/5/08	Sun 17/8/08	284SS	309FF	1								
249	b. Street lighting along village vehic	ular access	103 days	Wed 7/5/08	Sun 17/8/08	284SS	309FF									
		Task		Milest	one	Rolled Up	Critical Task Spl	it				Group By Summary				
	Project: PROGRAMME OF WORKS Critical Task Page: 6 of 23		KS Critical Task Summary			Rolled Up	ernal Tasks Deadline									
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21     0.4.02 orange     0.103 mo     0.103					-			00	t		Nov	Dec	Jan	
22     ••. 0 + 0 + 0 - 0 + 0 + 0 + 0 + 0 + 0 + 0 +			-											
213     0. 0.189 / 0.1981 / 0.1982 / 0.1983 / 0.		-	-											0 d
Space         9         Space space of the Nord         90 mp         Part (ref)         Space space of the Nord         90 mp			-											
Base         N. Inging ang an Chile Road         Year of the Road <thyear of="" road<="" th="" the="">         Year of the Road<!--</td--><td></td><td><b>3</b> ( )</td><td></td><td></td><td></td><td></td><td></td><td></td><td>281</td><td>days</td><td></td><td></td><td></td><td></td></thyear>		<b>3</b> ( )							281	days				
1         0         1		g. Street lighting at Chi Ho Road	92 days	Sat 1/11/08	Sat 31/1/09	264SS,246	270FF							
Part         6.1 Biometan of DMA         1 day         The 12707         The 2707	255	h. Irrigation pipe at Chi Ho Road	92 days	Sat 1/11/08	Sat 31/1/09	264SS	270FF							
100       0.6 2 Comments by the Engineer       14 days       16 1/3 307       The School (100 - 100	256	6. Drainage Management Plan (Ch810 to Ch850)	77 days	Thu 12/7/07	Wed 26/9/07			1						
203       0.3 in convention or DAP       000 -2400       0000 -2400       0000 -2400       000	257	6.1 Submission of DMPs	1 day	Thu 12/7/07	Thu 12/7/07		258	1						
200       7.8 ba Colemated Danced       590 days       Med 19807       58.3 17100       Colemated Danced       Colemated Danced <thcolemated danced<="" th=""></thcolemated>	258	6.2 Comments by the Engineer	14 days	Fri 13/7/07	Thu 26/7/07	257	259SF	1						
941         9.71 Bio Cubert BC2-1         9.69 m/s         9.81 1/10         9.71 Bio Cubert BC2-1         9.77 Fig Dia Cubert BC2-1 </td <td>259</td> <td>6.3 Implementation of DMP</td> <td>3 days</td> <td>Mon 24/9/07</td> <td>Wed 26/9/07</td> <td>258SF</td> <td>252</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	259	6.3 Implementation of DMP	3 days	Mon 24/9/07	Wed 26/9/07	258SF	252							
281       7.1 Bo Cuber BC2-1       55 days       Weet 1807       B8 31100       Image: Company Co	260	7. Box Culvert and Channel	550 days	Wed 1/8/07	Sat 31/1/09									
983         memory and support existing with Concept from the data provided in th	261	7.1 Box Culvert BC2-1	550 days	Wed 1/8/07	Sat 31/1/09									
949     Excension     9 dyn     Set 11100     Sun 01100     9 63     24483.2588.265       265     Growal mediaing     21 dyn     San 511100     F1 51200     26     265       267     Aw 11 and Deck     31 dyns     Sat 61208     Mon 51/00     266     268       267     Aw 11 and Deck     31 dyns     Sat 61208     Mon 51/00     266     268       268     Curing     31 dyns     Sat 61208     Mon 51/00     266     268       269     Ternoh Backli     3 dyns     Wed 16/007     F1 22/100     Sat 511100     2487-2387-5387-53     3068       270     Ronsbarrent Of 10 bo Rod     6 dyns     Mon 51/00     267     -     -     -       271     Ronsbarrent Of 10 bo Rod     80 dyns     Wed 16/07     F1 201007     F1 201007     -     -       272     1. Proposal     30 dyns     Wed 16/07     F1 201007     F1 201007     F1 201007     -     -       273     C. Ch15 Ch32 (Bynz 2 A)     03 dyns     Wed 16/070     F1 201007     F1 201007     F1 201007     -     -       274     C. Ch15 Ch32 (Bynz 4 A)     15 dyns     Kar 10007     Tu 201107     Sta 11007     275     273       275     Garnual Fedding     16 dyns <td>262</td> <td>a. Ch0-Ch15 (Bay 1 and Outlet)</td> <td>94 days</td> <td>Thu 30/10/08</td> <td>Sat 31/1/09</td> <td></td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	262	a. Ch0-Ch15 (Bay 1 and Outlet)	94 days	Thu 30/10/08	Sat 31/1/09			1						
204         Decavation         9 dys         Stat 11100         Sin 41100         261         26163 2553 265           265         Ground Pedding         1 dys         Sin 161100         Fri 161000         266         3 dys           267         Ground Pedding         1 dys         Sin 161100         Fri 161000         267         3 dys         3 dys         267         3 dys         267         3 dys         3 dys </td <td>263</td> <td>Remove road pavement and expose existing utiliti</td> <td>2 days</td> <td>Thu 30/10/08</td> <td>Fri 31/10/08</td> <td>243,324</td> <td>264</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	263	Remove road pavement and expose existing utiliti	2 days	Thu 30/10/08	Fri 31/10/08	243,324	264							
285         Ganuar Boding         5 dyg         Mon 101108         Fri 14/102         24         5 dyg         5 dyg <td>264</td> <td></td> <td></td> <td>Sat 1/11/08</td> <td>Sun 9/11/08</td> <td>263</td> <td>254SS,255SS,265</td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	264			Sat 1/11/08	Sun 9/11/08	263	254SS,255SS,265	-						
266       Base Sine       21 day       Sati 161108       Fri 161208       266       267       267         277       Weil and Dock       31 day       Ske 1028       Mon 191/08       267       268         288       Curing       14 day       Tue 201/08       710 201/07       268       268       269 <td>265</td> <td>Granular Bedding</td> <td>5 days</td> <td>Mon 10/11/08</td> <td>Fri 14/11/08</td> <td>264</td> <td>266</td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	265	Granular Bedding	5 days	Mon 10/11/08	Fri 14/11/08	264	266	-						
0       Will and Dock       91 dag       Star (2)20       Mon 19100       266       268         0       Charing       14 dag       Tae 20100       Tae 20100       203         0       Taench Bockill       3 dag       Tae 20100       203,300F,301F,302F,305F,3       3.838         270       Reinstatement of Ch Ho Road       6 dag       Mon 19100       2547,25F7,305       3.838         271       Interportage and in ACD Port       87 dag       Verol 1980       Fr 521007       Interportage and in ACD Port       87 dag       Verol 1980       Fr 521007       Interportage and income and PCD Port       87 dag       Verol 1980       Fr 521007       Interportage and income and PCD Port       93 dag       Star 1940       Star 1940       Star 3100       Interportage and income and PCD Port       93 dag       Star 1940       Star 1940 </td <td>266</td> <td>Base Slab</td> <td></td> <td>Sat 15/11/08</td> <td>Fri 5/12/08</td> <td>265</td> <td>267</td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	266	Base Slab		Sat 15/11/08	Fri 5/12/08	265	267	-						
268       Cuing       14 day       14 day       14 day       17 us 2010       267       0       260         269       Trench Backlit       3 day       Tue 20100       Tue 20100       28.390F 321F,392F,393F,393F,393F,393F,393F,393F,393								-						
000       Tranch BackIII → 0       3 days       The 20100       State 2000       2858 200FF, 301FF 302FF, 305FF, 3       3088         270       Reinstatement of Nedad       6 days       Mod 20100       State 3000       284FF, 285FF, 3068       3020         271       D. Temporany Bund in AFCD Pind       87 days       Wind 1800       Fri 281007       Comments by the segment and AFCD       30 days       Wind 1800       State 3000       272 <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>			-					-						
270       Reinstatement QC hi ho Road       6 day       Mon 20100       SHE 236F 5.06       320         271       b. Temporaly Burli nAFCD Pod       37 days       Wei 1807       Fi 31807       Comment Sector       31 days       SHE 12007       SHE 236F 5.06       SHE		-						-						
271       b. Temporary Bund in AFCD Pond       87 days       Wed 1/8007       Frá 26/1007       Control       272       Control       273         273       3. Comments by the Engineer and AFCD       30 days       Sta 13/807       Sta 13/807       272       274         274       3. Modified ohan link fence       11 days       Mon 1/1007       714       275								-						
272       1. Proposal       31 days       Wed 1/807       Fri 31/807       control       273       2. Comments by the Engineer and AFCD       30 days       Sat 1/807       713 80/807       272       2.272<						20411,20011,000								
273       1       0. Comments by the Engineer and AFCD       30 days       Sati 1907       Sun 30/807       272       0       274       0       11 days       Mon 11/007       Thi 11/1007       273       0       275         276       4. Construction of temporary bund       15 days       Fi 12/1007       Fi 22/1007       724       0       277       0       0       777       0       777       0       777       0       777       0       0       777       0       0       777       0       777       0       777       0       777       0       777       0       0       777       0       0       777       0       0       777       0							272	-						
274       3.Modified chain link tence       11 days       Mon 1/1007       Thu 1/1007       273       275       275       4. Construction of temporary bund       15 days       Fit 12/1007       Fit 22/1007       274.4       277         276       c. Chit-Ch22 (Bays 2.8)       103 days       Sat 27/1007       Wed 2/01       C       275       277       278		· ·	-			979								
275       4. Construction of temporary bund       15 days       Fri 12/1007       Fri 28/1007       274       0.0007       Days       Days <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								-						
276       c. Ch15-Ch32 (Bays 2 & 3)       103 days       Sat 27/1007       Wed 6/208       Image: Chance and an analysis of the chance and		1	-					<u>.                                    </u>						
27       Excavation       25 days       Sat 27/1007       Tue 20/11/07       275       Cancel 276         278       Granular Bedding       7 days       Ved 28/11/07       Tue 20/11/07       277       Cancel 276         279       Base Slab       18 days       Ved 28/11/07       Sat 15/12/07       278       Cancel 276         280       Wall and Deck       32 days       Sut 16/12/07       Wed 50/108       279       Cancel 286         281       Curing       14 days       Thu 17/1/08       Wed 20/108       280       Cancel 286         282       Curing       14 days       Thu 17/108       Wed 20/108       281       Cancel 286         283       d. Ch32-Ch88 (Bays 4 - 8)       50 days       Sat 15/108       Wed 25/108       281       Cancel 286         284       Excavation       50 days       Ved 75/08       Wed 25/08       21,321       285S+10 days. 286S5+6 days         285       Granular Bedding       60 days       Sat 175/08       Tue 15/708       284S+10 days       285S+10 days. 286S5+6 days         286       Granular Bedding       60 days       Sut 16/100       Tue 15/708       285S+10 days       286SS+10 days. 286SS+10 days       286SS+10 days         287       Wall and Deck						274	211	U days						
278       Granular Bedding       7 day       Wed 21/1107       Tue 27/1107       277       Control       Control       Control       Statistical			-			075			. 🦞					
279       Base Slab       18 days       Wed 20/11/07       Sat 15/12/07       278       280         280       Wall and Deck       32 days       Sun 16/12/07       Wed 16/1/08       279       281         281       Curing       14 days       Thu 17/1/08       Wed 20/100       280       282         282       Trench Backfill       7 days       Thu 17/1/08       Wed 20/10       281       281       281         283       d. Ch32-Ch88 (Bays 4 - 8)       137 days       Wed 7/5/08       Sat 10/208       281       285       2		1	-					C	days					
280       Wall and Deck       32 days       Sun 16/12/07       Wed 16/1/08       279       281         281       Curing       14 days       Thu 17/1/08       Wed 30/1/08       280       282         282       Trench Backfill       7 days       Thu 31/1/08       Wed 320/908       281       285         283       d. Ch32-Ch88 (Bays 4 - 8)       137 days       Wed 75/08       Stat 20/908       281.321       285SS+10 days.248SS,249SS,250SS         284       Excavation       50 days       Wed 75/08       Wed 25/608       2845       285SS+10 days.248SS,249SS,250SS       0 days         285       Granular Bedding       60 days       Sat 175/08       Tue 26/808       285SS+6 days       285SS+10 days.248SS,249SS,260SS       0 days         286       Granular Bedding       80 days       Tue 5/6/08       285SS+6 days       285SS+10 days.248SS,144 days       285SS+16 days         287       Wall and Deck       87 days       Tue 17/608       Tue 9/6/08       285SS+16 days       286SS+14 days       289SS+14 days         289       Trench Backfill       82 days       Tue 17/68       Sat 20/9/08       285S+14 days       3000         290       7.2 Channel       a. Ch840-Ch844 (Bay 56b)       91 days       Thu 31/1/08       Sat		-	· · · · ·					_			-	<b>_</b>		
281       Curing       14 day       Thu 17/1/08       Wed 30/1/08       280       282         282       Trench Backfill       7 day       Thu 31/1/08       Wed 6/2/08       281       261         283       G.Ch32-Ch88 (Bays 4 - 8)       137 days       Wed 7/5/08       Sat 20/9/08       281       265S + 10 days.248SS 249SS 250S3       0 days       0 days       0 days         284       Excavation       50 days       Wed 7/5/08       Sat 20/9/08       284SS + 10 days       285SS + 10 days.248SS 249SS 250S3       0 days       0 days       0 days         284       Excavation       60 days       Sta 17/5/08       Tue 157/68       284SS + 10 days       285SS + 10 days       285		1	-								0 days			
282       Trench Backfill       7 day       Thu 31/108       Wed 6/208       281       251         283       d. Ch32-Ch88 (Bays 4 - 8)       137 day       Wed 7/508       Sat 20/908       51,321       285SS+10 days,248SS,249SS,250SS       285       285       285SS+10 days,248SS,249SS,250SS       285SS+10 days,248SS,249SS,249SS,249SS,249SS,249SS,249SS,249SS,249SS,249SS,249SS,249SS,249SS,249SS,248SS,249SS,249SS,249SS,249SS,249SS,249S		1										0 days		
283       d. Ch32-Ch88 (Bays 4 - 8)       137 days       Wed 7/5/08       Sat 20/9/08       Image: Constraint of the		č												
284       Excavation       50 days       Wed 7/5/08       Wed 25/6/09       251.321       285SS+10 days,248SS,249SS,250SS         285       Granular Bedding       60 days       Sat 17/5/08       Tue 15/7/08       284SS+10 days       285SS+6 days       286SS+6 days         286       Base Slab       75 days       Fri 23/5/08       Tue 5/8/08       285SS+6 days       285SS+16 days       285SS+16 days         287       Wall and Deck       87 days       Sun 1/6/08       Tue 26/8/08       286SS+9 days       285SS+16 days       285SS+16 days         288       Curing       85 days       Tue 17/608       Tue 9/9/08       285SS+16 days       285SS+14 days       309         290       Trench Backfill       82 days       Tue 17/08       Sat 20/908       285SS+14 days       309         290       7.2 Channel       339 days       Thu 3/1/08       Sat 6/12/08       ence		1				281	251						0	days
285       Granular Bedding       60 days       Sat 17/5/08       Tue 15/7/08       24SS +10 days       286SS +6 days         286       Base Slab       75 days       Fri 23/5/08       Tue 15/7/08       285SS +6 days       287SS +9 days         287       Wall and Deck       87 days       Sun 1/6/08       Tue 26/8/08       285SS +6 days       288SS +16 days         288       Curing       85 days       Tue 17/6/08       Tue 9/9/08       287SS +16 days       289SS +14 days         289       Curing       82 days       Tue 17/6/08       Tue 9/9/08       288SS +14 days       309         290       7.2 Channel       339 days       Tue 1/7/08       Sat 0/9/08       288SS +14 days       309         291       a. Ch840-Ch844 (Bay 56b)       91 days       Tuu 3/1/08       Sat 6/12/08       Curing       Group By Summary         Project: PROGRAMME OF WORKS														
286       Base Slab       75 days       Fri 23/5/08       Tue 5/8/08       285S+6 days       287SS+9 days         287       Wall and Deck       87 days       Sun 1/6/08       Tue 26/8/08       286SS+9 days       288SS+16 days         288       Curing       85 days       Tue 17/6/08       Tue 9/9/08       287SS+16 days       289SS+14 days         289       Trench Backfill       82 days       Tue 17/6/08       Sat 20/9/08       288SS+14 days       309         290       7.2 Channel       339 days       Thu 3/1/08       Sat 6/12/08       ended       <			-				• • • •							
287       Wall and Deck       87 days       Sun 1/6/08       Tue 26/8/08       286SS+9 days       288SS+16 days         288       Curing       85 days       Tue 17/6/08       Tue 9/9/08       287SS+16 days       289SS+14 days         289       Trench Backfill       82 days       Tue 17/7/08       Sat 20/9/08       288SS+14 days       309         290       7.2 Channel       339 days       Thu 3/1/08       Sat 6/12/08       Enclosed Up Critical Task       Split       Group By Summary         Project: PROGRAMME OF WORKS		-												
288       Curing       85 days       Tue 17/6/08       Tue 9/9/08       287SS+16 days       289SS+14 days         289       Trench Backfill       82 days       Tue 17/08       Sat 20/9/08       288SS+14 days       309         290       7.2 Channel       339 days       Thu 3/1/08       Sat 6/12/08       Image: Control of the state of the st		1	-											
289       Trench Backfill       82 days       Tue 1/7/08       Sat 20/9/08       288S\$+14 days       309         290       7.2 Channel       339 days       Thu 3/1/08       Sat 6/12/08       and and an and and and and and and and a		1												
290     7.2 Channel     339 days     Thu 3/1/08     Sat 6/12/08       291     a. Ch840-Ch844 (Bay 56b)     91 days     Thu 3/1/08     Wed 2/4/08         Project: PROGRAMME OF WORKS     Critical Task     Milestone     Rolled Up Critical Task     Split     Group By Summary	288	Curing	85 days	Tue 17/6/08	Tue 9/9/08	287SS+16 days	289SS+14 days	1						
291       a. Ch840-Ch844 (Bay 56b)       91 days       Thu 3/1/08       Wed 2/4/08       Image: Character of the second se	289	Trench Backfill	82 days	Tue 1/7/08	Sat 20/9/08	288SS+14 days	309	1						
Project: PROGRAMME OF WORKS Critical Task Milestone Rolled Up Critical Task Split Group By Summary Project: PROGRAMME OF WORKS Critical Task Development	290	7.2 Channel	339 days	Thu 3/1/08	Sat 6/12/08			1						
Project: PROGRAMME OF WORKS Critical Tasks	291	a. Ch840-Ch844 (Bay 56b)	91 days	Thu 3/1/08	Wed 2/4/08			1						
Project: PROGRAMME OF WORKS Critical Tasks														
Project:     Proje	<b>.</b> .			Milesto	one	Rolled Up C	Critical Task Spl	it				Group By Summary		
	Project Page:	7 of 23 Critical Task		Summ	ary	Rolled Up N	/ilestone Ext	rasks Deadline						
Progress Rolled Up Task Rolled Up Progress Project Summary		Progress		Rolled	Up Task	Rolled Up F	Progress Progress Progress	ject Summar	у					

CHIT CHEUNG CONSTRUCTION CO., LTD.
DATE : AUG 2007

ID Task Name Duration Start Finish Predecessors Successors 2008 Oct Nov Dec Jan 292 293 Excavation (including contamination materials) 25 days Thu 3/1/08 Sun 27/1/08 253 281 days 293 Wed 30/1/08 292 294 Granular Bedding 3 days Mon 28/1/08 281 days 294 Base Slab 22 days Thu 31/1/08 Thu 21/2/08 293 295 281 days 295 Wall and Deck 23 days Fri 22/2/08 Sat 15/3/08 294 296 296 Sun 16/3/08 Sat 29/3/08 295 297 Curina 14 days 297 Trench Backfill 4 days Sun 30/3/08 Wed 2/4/08 296 311 298 b. Demolition of existing crossing 20 days Thu 11/9/08 Tue 30/9/08 311 300 299 c. Ch800-840 (Bay 56a) 67 days Wed 1/10/08 Sat 6/12/08 300 Excavation (including contamination materials) 12 days Wed 1/10/08 Sun 12/10/08 298 301 301 Wed 15/10/08 300 302 Granular Bedding 3 days Mon 13/10/08 302 303 Base Slab Thu 16/10/08 Mon 27/10/08 301 12 days 303 304SS+10 days Wall and Deck 22 days Tue 28/10/08 Tue 18/11/08 302 304 Curing Fri 7/11/08 Tue 2/12/08 303SS+10 days 305SS+14 days 26 days 305 Trench Backfill 16 days Fri 21/11/08 Sat 6/12/08 304SS+14 days 312 306 8. Filling in Platform Sat 6/9/08 Sun 25/1/09 142 days 307 8.1 Box Culvert 127 days Sun 21/9/08 Sun 25/1/09 308 a. Ch0-Ch15 (Bay 1 and Outlet) 3 days Fri 23/1/09 Sun 25/1/09 269 270 309 b. Ch15-Ch88 (Bay 2 to Bay 8) 10 days Sun 21/9/08 Tue 30/9/08 289,248FF,249FF,250FF 315,316,323 310 8.2 Channel 112 days Sat 6/9/08 Fri 26/12/08 311 a. Ch840-Ch844 (Bay 56b) 5 days Sat 6/9/08 Wed 10/9/08 505,297 298 312 588FF b. Ch800-840 (Bay 56a) 20 days Sun 7/12/08 Fri 26/12/08 305 313 9. Geotechnical Instrumentation for CLP Pylon 4 days Mon 24/9/07 Thu 27/9/07 341 314 10. Drainage works (except Bays 56a and 56b) 45 days Wed 1/10/08 Fri 14/11/08 315 317SS+30 days,318 a. storm drain with manhole 30 days Wed 1/10/08 Thu 30/10/08 309 316 b. surface drain Wed 1/10/08 Fri 14/11/08 309 45 days 317 60 days Fri 31/10/08 Mon 29/12/08 315SS+30 days 11. Water supply pipeworks 318 12. Roads and paving (except Bays 56a and 56b) 52 days Fri 31/10/08 Sun 21/12/08 315 319SS+30 days,341 319 13. Street furnitures / traffic sign / road marking (except Bay 52 days Sun 30/11/08 Tue 20/1/09 318SS+30 days 320 Wed 27/5/09 437SS.270 14. Landscape softworks / hardworks (except Bays 56a and 84 days Thu 5/3/09 892FF 321 15. Diversion of Village Vehicular Access to Bays 9 -11 Sat 15/3/08 Sat 15/3/08 428.429 284.441SS-10 davs 1 dav 322 16. Road Diversion in Chi Ho Road Wed 1/10/08 Wed 8/10/08 8 davs 323 a. Construction of temporary road above Box Culvert 7 days Wed 1/10/08 Tue 7/10/08 309 324 324 b. Implementation of road diversion Wed 8/10/08 Wed 8/10/08 323 263 1 day 325 326 B2. Portion 2 830 days Fri 30/3/07 Mon 6/7/09 327 1. Site clearance Tue 14/8/07 Sun 11/11/07 90 days 328 Sun 11/11/07 36,897,224,899 1.1 General clearance 90 days Tue 14/8/07 329 2. Underground utilities detection 42 days Tue 3/7/07 Mon 13/8/07 330 2.1 utilities detection 28 days Tue 3/7/07 Mon 30/7/07 331,450 331 2.2 trial trench excavtion & identification Tue 31/7/07 Mon 13/8/07 330 349 14 days 332 463 days Fri 4/7/08 3. Utilities temporary diversion / protection Fri 30/3/07 333 354FF days a. WSD water main along village vehicular access 90 days Wed 10/10/07 Mon 7/1/08 349SS Task Milestone Rolled Up Critical Task Split Group By Summary Project: PROGRAMME OF WORKS Critical Task Summary Rolled Up Milestone External Tasks Deadline Page: 8 of 23 Progress Rolled Up Task Rolled Up Progress Project Summary

ID	Task Name	Duration	Start	Finish	Predecessors	Successors							2008	
								Oct		Nov		Dec	1.	Jan
334	b. Street lighting along village vehicular access	269 days	Wed 10/10/07	Fri 4/7/08			days							
335	c. PCCW along village vehicular access	245 days	Wed 10/10/07	Tue 10/6/08	349SS		days							
336	d. CLP overhead cables / street lighting at CH 290 ~ CH 35		Fri 30/3/07	Wed 27/6/07		357								
337	4. Geotechnical Instrumentation for AFCD	6 days	Thu 27/9/07	Tue 2/10/07		341,349								
338	5. Discussion with Pond Owner	39 days	Wed 1/8/07	Sat 8/9/07		356								
339	6. Box Culvert, Channel and Crossings	533 days	Sun 9/9/07	Sun 22/2/09										
340	a. Ch88-Ch120 (Bays 9 - 11)	63 days	Mon 22/12/08	Sun 22/2/09			1							
341	Excavation	21 days	Mon 22/12/08	Sun 11/1/09	313,337,318	342SS+10 days	1							
342	Granular Bedding	15 days	Thu 1/1/09	Thu 15/1/09	341SS+10 days	343SS+6 days	1							
343	Base Slab	15 days	Wed 7/1/09	Wed 21/1/09	342SS+6 days	344SS+7 days	1							
344	Wall and Deck	22 days	Wed 14/1/09	Wed 4/2/09	343SS+7 days	345SS+11 days	1							
345	Curing	25 days	Sun 25/1/09	Wed 18/2/09	344SS+11 days	346SS+14 days								
346	Trench Backfill	15 days	Sun 8/2/09	Sun 22/2/09	345SS+14 days	405	1							
347	b. Ch120-Ch205 (Bay 12 - Bay 17)	111 days	Sun 23/9/07	Fri 11/1/08			╞━━┝							
348	Haul access	16 days	Sun 23/9/07	Mon 8/10/07	356	349							•	
349	Excavation	46 days	Wed 10/10/07	Sat 24/11/07	337,331,348	333SS,334SS,335SS,350SS+10 days	days							
350	Granular Bedding	42 douro	Sat 20/10/07	Sat 1/10/07	349SS+10 days	351SS+6 days								
350	Base Slab	43 days	Fri 26/10/07			352SS+11 days	10	0 days						
		50 days			350SS+6 days		-	100 days						
352	Wall and Deck	53 days	Tue 6/11/07		351SS+11 days	353SS+7 days		52	days					
353	Curing	53 days	Tue 13/11/07		352SS+7 days	354SS+14 days,389,395,397			100 da				<u> </u>	
354	Trench Backfill	46 days	Tue 27/11/07		353SS+14 days,333FF	407				52 day	/s			
355	c. Ch205-Ch310 (Bay 18 - Bay 24)	93 days	Sun 9/9/07	Mon 10/12/07								•		
356	Haul access	14 days	Sun 9/9/07	Sat 22/9/07		364,358,348,357	h							
357	Excavation	27 days	Sun 23/9/07	Fri 19/10/07		358SS+10 days								
358	Granular Bedding	23 days	Wed 3/10/07		357SS+10 days,356	359SS+6 days								
359	Base Slab	39 days	Tue 9/10/07		358SS+6 days	360SS+11 days	- 1							
360	Wall and Deck	42 days	Sat 20/10/07		359SS+11 days	361SS+7 days	6	9 days						
361	Curing	42 days	Sat 27/10/07		360SS+7 days	362SS+14 days,391		39 <del>days</del>			-	1		
362	Trench Backfill	31 days	Sat 10/11/07		361SS+14 days	408			<mark>39</mark> day∋			h		
363	d. Ch310-Ch375 (Bay 25 - Bay 28)	257 days	Sun 23/9/07	Thu 5/6/08										
364	Haul access	15 days	Sun 23/9/07	Sun 7/10/07		365,373								
365	Excavation	40 days	Wed 27/2/08	Sun 6/4/08		366SS+10 days								
366	Granular Bedding	26 days	Sat 8/3/08	Wed 2/4/08	365SS+10 days	367SS+6 days								
367	Base Slab	27 days	Fri 14/3/08	Wed 9/4/08	366SS+6 days	368SS+11 days								
368	Wall and Deck	30 days	Tue 25/3/08	Wed 23/4/08	367SS+11 days	369SS+7 days								
369	Curing	30 days	Tue 1/4/08	Wed 30/4/08	368SS+7 days	370SS+14 days,392,396,400	1							
370	Trench Backfill	23 days	Tue 15/4/08	Wed 7/5/08	369SS+14 days		1							
371	Demolition of Existing crossing at Ch410	7 days	Fri 30/5/08	Thu 5/6/08	444	409	1							
372	e. Ch375-Ch413 (Bay 29 - Bay 31)	314 days	Mon 8/10/07	Sat 16/8/08			1 🗨							
373	Haul access	10 days	Mon 8/10/07	Wed 17/10/07	364	374	ays							
374	Excavation	40 days	Fri 30/5/08	Tue 8/7/08	443,373	375SS+10 days,444SS-7 days	1							
375	Granular Bedding	28 days	Mon 9/6/08	Sun 6/7/08	374SS+10 days	376SS+10 days	1							
	Task	·	Miles	tone	Rolled I In	Critical Task Spl	it		11		Group	By Summary		
	PROGRAMME OF WORKS		Sumr			· · · · · · · · · · · · · · · · · · ·					Deadlin			
Page: 9	of 23 Progress	Summary     Rolled Up Milestone     External Tasks     Deadlin       Rolled Up Task     Rolled Up Progress     Project Summary							-					
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ID	Task Name		Duration	Start	Finish	Predecessors	Suc	ccessors				2008
									Oct	Nov	Dec	Jan
376	Base Slab		29 days	Thu 19/6/08		375SS+10 days		377SS+14 days				
377	Wall and Deck		27 days	Thu 3/7/08		376SS+14 days		378SS+7 days				
378	Curing		34 days	Thu 10/7/08		377SS+7 days		379SS+14 days,393				
379	Trench Backfill		24 days	Thu 24/7/08		378SS+14 days		410				
380	f. Ch413-Ch436 (Bay 32)		87 days	Sat 1/3/08	Mon 26/5/08							
381	Flow diversion		7 days	Sat 1/3/08		382SS-7 days						
382	Excavation		15 days	Sat 8/3/08	Sat 22/3/08			381SS-7 days,383				
383	Granular Bedding		4 days	Sun 23/3/08	Wed 26/3/08			384				
384	Base Slab		14 days	Thu 27/3/08	Wed 9/4/08			385				
385	Wall and Deck		22 days	Thu 10/4/08	Thu 1/5/08			386				
386	Curing		11 days	Fri 2/5/08	Mon 12/5/08			387,398				
387	Trench Backfill		14 days	Tue 13/5/08	Mon 26/5/08	386		418SS,443,462SS				
388	6. Gabion		354 days	Sat 8/12/07	Tue 25/11/08							•
389	Ch120-Ch145.5 (Bay 12 - Bay 13)		19 days	Sat 5/1/08	Wed 23/1/08			390			259 c	lays
390	Ch163 - Ch205 (Bay 15 - Bay 17)		103 days	Thu 24/1/08	Mon 5/5/08			269FF			$\downarrow$	259 days
391	Ch205 - Ch310 (Bay 18 - Bay 24)		187 days	Sat 8/12/07	Wed 11/6/08			269FF		222 da	ays 🗌	
392	Ch310 - Ch325, Ch348 - Ch375 (Bay 25, E	Bay 27 - Bay 28)	105 days	Thu 1/5/08	Wed 13/8/08			269FF				
393	Ch375 - CH413 (Bay29 - Bay31)		105 days	Wed 13/8/08	Tue 25/11/08	378		269FF				
394	7. Granite Stone Facing		134 days	Sat 5/1/08	Sat 17/5/08							
395	Ch100 -Ch120 (Bay 10 - Bay 11)		11 days	Sat 5/1/08	Tue 15/1/08	353		269FF			370 c	lays
396	Ch325 - Ch348 (Bay 26)		6 days	Thu 1/5/08	Tue 6/5/08			269FF				
397	Ch120 - Ch310 (Bay 12 - Bay 24)		16 days	Sat 5/1/08	Sun 20/1/08			269FF			533 c	lays
398	Ch413 - Ch436 (Bay 32)		5 days	Tue 13/5/08	Sat 17/5/08	386		269FF				
399	8. Ramp No. 3 (Ch356 - Ch405)		17 days	Thu 1/5/08	Sat 17/5/08							
400	General fill		5 days	Thu 1/5/08	Mon 5/5/08			401				
401	Granular fill and blinding		2 days	Tue 6/5/08	Wed 7/5/08			402				
402	Road slab		10 days	Thu 8/5/08	Sat 17/5/08	401						
403	8. Filling in Platform		450 days	Tue 11/12/07	Wed 4/3/09							
404	8.1 Box Culvert BC2-1		10 days	Mon 23/2/09	Wed 4/3/09							
405	a. Ch88-Ch120 (Bay 9 - Bay 11)		10 days	Mon 23/2/09	Wed 4/3/09	346	41	3SS+10 days,420,427				
406	8.2 Channel and Crossing		264 days	Tue 11/12/07	Sat 30/8/08							<b>—</b>
407	a. Ch120-Ch205 (Bay 12 - Bay 17)		28 days	Sat 12/1/08	Fri 8/2/08			14SS+7 days,421,428			<b></b>	52 days
408	b. Ch205-Ch310 (Bay 18 - Bay 24)		28 days	Tue 11/12/07	Mon 7/1/08	362	4	15SS+7 days,422,429		39	days	h
409	c. Ch310-Ch375 (Bay 25 - Bay 28)		31 days	Fri 6/6/08	Sun 6/7/08			416SS+7 days,423				
410	d. Ch375-Ch413 (Bay 29 - Bay 31)		14 days	Sun 17/8/08	Sat 30/8/08	379	41	7SS+10 days,424,430				
411	9. Drainage works		463 days	Tue 18/12/07	Tue 24/3/09							
412	9.1 storm drain with manhole and headwal		463 days	Tue 18/12/07	Tue 24/3/09							
413	a. Ch88-Ch 120 (Bay 9 - Bay 11)		20 days	Thu 5/3/09		405SS+10 days		425SS+30 days,427				
414	b. Ch120-Ch205 (Bay 12 - Bay 17)		20 days	Sat 19/1/08		407SS+7 days		427				481 days
415	c. Ch205-Ch310 (Bay 18 - Bay 24)		20 days	Tue 18/12/07		408SS+7 days					547 days	
416	d. Ch310-Ch375 (Bay 25 - Bay 28)		20 days	Fri 13/6/08		409SS+7 days						
417	e. Ch375-Ch413 (Bay 29 - Bay 31)		25 days	Wed 27/8/08	Sat 20/9/08	410SS+10 days						
	Tas	k		Milest	one		Rolled Up Critical Task	Split		G	roup By Summary	
Project		ical Task					•		_		eadline	
	10 of 23			Summ			Rolled Up Milestone		nal Tasks	D	Bauline	
	Pro	gress		Rollec	l Up Task		Rolled Up Progress	Projec	ct Summary			

CHIT CHEUNG CONSTRUCTION CO., LTD
DATE : AUG 2007

ID	Task Name	Duration	Start	Finish	Predecessors	Successors				2008
44.0	6 OF 442 OF 420 (Dev. 20)	4 1	Tue 13/5/08	Fri 16/5/08	00700		Oct	Nov	Dec	Jan
418	f. Ch413-Ch436 (Bay 32)	4 days								
419	9.2. surface drain	432 days								
420	a. Ch88-Ch 120 (Bay 9 - Bay 11)	10 days				437SS				
421	b. Ch120-Ch205 (Bay 12 - Bay 17)	35 days				438SS				44
422	c. Ch205-Ch310 (Bay 18 - Bay 24)	45 days				43955			484	days
423	d. Ch310-Ch375 (Bay 25 - Bay 28)	35 days				440SS				
424	e. Ch375-Ch413 (Bay 29 - Bay 31)	10 days			410	440SS				
425	10. Water supply pipeworks	60 days	Sat 4/4/09	Tue 2/6/09	413SS+30 days	427				
426	11. Roads and paving	529 days	Tue 8/1/08	B Fri 19/6/09						
427	a. Ch88-Ch 120 (Bay 9 - Bay 11)	17 days	Wed 3/6/09	Fri 19/6/09	414,425,405,413	432				
428	b. Ch120-Ch205 (Bay 12 - Bay 17)	35 days	Sat 9/2/08	B Fri 14/3/08	407	321,433SS+30 days				
429	c. Ch205-Ch310 (Bay 18 - Bay 24)	50 days	Tue 8/1/08	3 Tue 26/2/08	408	321,434SS+30 days			39	days
430	d. Ch310-Ch436 (Bay 25 - Bay 32)	58 days	Sun 31/8/08	B Mon 27/10/08	410	435SS+30 days				
431	12. Road furnitures	516 days	Thu 7/2/08	8 Mon 6/7/09			-			
431	a. Ch88-Ch 120 (Bay 9 - Bay 11)						-			
		17 days					_			
433	b. Ch120-Ch205 (Bay 12 - Bay 17)	33 days			428SS+30 days		-			
434	c. Ch205-Ch310 (Bay 18 - Bay 24)	50 days			429SS+30 days					466
435	d. Ch310-Ch436 (Bay 25 - Bay 32)	33 days			430SS+30 days					
436	13. Landscape softworks / hardworks	452 days				89855				
437	a. Ch88-Ch 120 (Bay 9 - Bay 11)	30 days				320SS				
438	b. Ch120-Ch205 (Bay 12 - Bay 17)	70 days	Sat 9/2/08	B Fri 18/4/08	421SS					44
439	c. Ch205-Ch310 (Bay 18 - Bay 24)	62 days	Tue 8/1/08	Sun 9/3/08	422SS				484	days
440	d. Ch310-Ch436 (Bay 25 - Bay 32)	72 days	Sun 31/8/08	B Mon 10/11/08	423SS,424SS					
441	14. Temporary Village Access on Bay 9 - Bay 11	10 days	Wed 5/3/08	B Fri 14/3/08	321SS-10 days					
442	15. Temporary Village Access on Bay 29 - Bay 31	10 days	Wed 27/2/08	Fri 7/3/08	572	382				
443	16. Temporary Village Access on Bay 32	3 days	Tue 27/5/08	3 Thu 29/5/08	387	374				
444	17. Diversion of Existing Traffic to Cheung Chun San	Tsuen 7 days	Fri 23/5/08	3 Thu 29/5/08	374SS-7 days	371	-			
445							-			
446	B3. Portion 3	726 days	Thu 12/7/07	Mon 6/7/09						
447	1. Site clearance	90 days	Sat 15/9/07	7 Thu 13/12/07	·					
448	1.1 General clearance	90 days	Sat 15/9/07	7 Thu 13/12/07	17,224,903,905	491SS+10 days				
449	2. Underground utilities detection	42 days	Tue 31/7/07	Mon 10/9/07						
450	2.1 utilities detection	28 days		Mon 27/8/07	330	451	-			
451	2.2 trial trench excavtion & identification	14 days		Mon 10/9/07	450	491				
452	3. Utilities temporary diversion / protection	153 days					-			
453	a. WSD water main along village access at CH 1150	-				604				
454	b. Street lighting along village access at CH 1150	93 days			-	604	-			
455	c. PCCW along village access at CH 1150	153 days				604	-			
455						604				
	4. Drainage Management Plan	706 days					-			
457	4.1 Submission of DMPs	1 day				458				
458	4.2 Comments by the Engineer	14 days				459				
459	4.3 Implementation of DMP	659 days	Tue 28/8/07	Tue 16/6/09	535FF,458					
	Task		Mile	estone	Rolled U	p Critical Task Spl	it		Group By Summary	
Project Page: 1	PROGRAMME OF WORKS 1 of 23 Critical Task		Sur	nmary	Rolled U	p Milestone Ext	ernal Tasks	[	Deadline	
Ŭ	Progress		Rol	ed Up Task	Rolled U	Progress Pro	ject Summary			

ID	Task Name	Duration	Start	Finish	Predecessors	Successors				2008
							Oct	Nov	Dec	Jan
460	5. Channel and Crossings	633 days	Sat 28/7/07	Mon 20/4/09						
461	a. Ch436-Ch535 (Bay 33 - Bay 39)	176 days	Fri 9/5/08	Fri 31/10/08						
462	Haul access	6 days	Tue 13/5/08	Sun 18/5/08	387SS	464				
463	Flow diversion	10 days	Fri 9/5/08	Sun 18/5/08	464SS-10 days					
464	Excavation (including contamination mate	erial) 56 days	Mon 19/5/08	Sun 13/7/08	462,572	465SS+30 days,463SS-10 days				
465	Granular Bedding	80 days	Wed 18/6/08	Fri 5/9/08	464SS+30 days	466SS+10 days				
466	Base Slab	82 days	Sat 28/6/08	Wed 17/9/08	465SS+10 days	467SS+14 days				
467	Wall and Deck	85 days	Sat 12/7/08	Sat 4/10/08	466SS+14 days	468SS+7 days				
468	Curing	92 days	Sat 19/7/08	Sat 18/10/08	467SS+7 days	469SS+14 days,536SS+20 days				
400	Transk Daskell	04 -	C-+ 0/0/00	E-: 01/10/00	40000 - 44 days	574 500				
469	Trench Backfill	91 days	Sat 2/8/08		468SS+14 days	574,529				
470	b. Ch535-Ch625 (Bay 40 - Bay 45)	559 days	Sat 28/7/07	Thu 5/2/09						
471	Haul access	15 days	Sat 28/7/07	Sat 11/8/07		480				
472	Flow diversion	10 days	Sun 2/11/08		473SS-10 days					
473	Excavation (including contamination mate		Sat 1/11/08	Tue 2/12/08		474SS+10 days,472SS-10 days				
474	Granular Bedding	41 days	Tue 11/11/08		473SS+10 days	475SS+6 days				
475	Base Slab	45 days	Mon 17/11/08		474SS+6 days	476SS+11 days				
476	Wall and Deck	48 days	Fri 28/11/08	Wed 14/1/09	475SS+11 days	477SS+7 days				
477	Curing	55 days	Fri 5/12/08	Wed 28/1/09	476SS+7 days	478SS+14 days,537				
478	Trench Backfill	49 days	Fri 19/12/08	Thu 5/2/09	477SS+14 days	575				
479	c. Ch625-Ch738 (Bay 46 - Bay 53)	295 days	Sun 12/8/07	Sun 1/6/08						
480	Haul access	15 days	Sun 12/8/07	Sun 26/8/07	471	482,489				
481	Flow diversion	10 days	Tue 12/2/08	Thu 21/2/08	482SS-10 days					5
482	Excavation (including contamination mate	erial) 49 days	Fri 22/2/08	Thu 10/4/08	496,480	483SS+10 days,481SS-10 days				
483	Granular Bedding	45 days	Mon 3/3/08	Wed 16/4/08	482SS+10 days	484SS+6 days				
484	Base Slab	50 days	Sun 9/3/08	Sun 27/4/08	483SS+6 days	485SS+11 days				
485	Wall and Deck	53 days	Thu 20/3/08	Sun 11/5/08	484SS+11 days	486SS+7 days				
486	Curing	60 days	Thu 27/3/08	Sun 25/5/08	485SS+7 days	487SS+14 days,538				
487	Trench Backfill	53 days	Thu 10/4/08	Sun 1/6/08	486SS+14 days	576				
488	d. Ch738-Ch800 (Bay 54 - Bay 55)	174 days	Sat 1/9/07	Thu 21/2/08						
489	Haul access	6 days	Sat 1/9/07	Thu 6/9/07	480	498,491				
490	Flow diversion	10 days	Sat 17/11/07		491SS-10 days	· · · · ·		588 days		
491	Excavation (including contamination mate	-	Thu 1/11/07		448SS+10 days,451,903,489,226	492SS+10 days,490SS-10 days	217 da			
					-					
492	Granular Bedding	34 days	Sun 11/11/07		491SS+10 days	493SS+6 days		217 days		
493	Base Slab	49 days	Sat 17/11/07		492SS+6 days	494SS+11 days		160 days		
494	Wall and Deck	62 days	Wed 28/11/07		493SS+11 days	495SS+7 days		160 da	ays)	
495	Curing	69 days	Wed 5/12/07		494SS+7 days	496SS+14 days,539,545,553		1	60 days	
496	Trench Backfill	65 days	Wed 19/12/07	Thu 21/2/08	495SS+14 days	482,577			160 days	
497	e. Ch844-Ch925 (Bay 56c - Bay 59)	365 days	Fri 7/9/07	Fri 5/9/08						
498	Haul access	10 days	Fri 7/9/07	Sun 16/9/07	489	500,507				
499	Flow diversion	10 days	Sun 6/7/08	Tue 15/7/08	500SS-10 days					
500	Excavation (including contamination mate	erial) 66 days	Tue 22/4/08	Thu 26/6/08	498,514	501SS+10 days,499SS-10 days				
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	Task		Milest	one	Rolled Up C	ritical Task Split	t		Group By Summary	
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ID	Task Name	Duration	Start	Finish	Predecessors	Successors						2008
							Oct			Nov	Dec	Jan
502	Base Slab	79 days	Thu 8/5/08		501SS+6 days	503SS+11 days						
503	Wall and Deck	82 days	Mon 19/5/08		502SS+11 days	504SS+7 days						
504	Curing	89 days	Mon 26/5/08		503SS+7 days	505SS+14 days,540	_					
505	Trench Backfill	89 days	Mon 9/6/08		504SS+14 days	311,578						
506	f. Ch925-Ch1038 (Bay 60 - Bay 66)	218 days	Mon 17/9/07	Mon 21/4/08			-					
507	Haul access	10 days	Mon 17/9/07	Wed 26/9/07		516						
508	Flow diversion	10 days	Wed 10/10/07		509SS-10 days		days					
509	Excavation and Handling of Type 3 Contaminated	Mate 116 days	Sat 20/10/07	Tue 12/2/08		508SS-10 days,510SS+10 days	510 days					
510	Granular Bedding	116 days	Tue 30/10/07		509SS+10 days	511SS+6 days	14	6 days				
511	Base Slab	127 days	Mon 5/11/07		510SS+6 days	512SS+11 days		140 da	ys			
512	Wall and Deck	130 days	Fri 16/11/07	Mon 24/3/08	511SS+11 days	513SS+7 days			148 day	s		
513	Curing	137 days	Fri 23/11/07	Mon 7/4/08	512SS+7 days	514SS+14 days,541			11	8 days		
514	Trench Backfill	137 days	Fri 7/12/07	Mon 21/4/08	513SS+14 days	500,579				118 da	iys	
515	f. Ch1038-Ch1146 (Bay 67 - Bay 71)	572 days	Thu 27/9/07	Mon 20/4/09								
516	Haul access	5 days	Thu 27/9/07	Mon 1/10/07	507	518						
517	Flow diversion	10 days	Fri 23/1/09	Sun 1/2/09	518SS-10 days							
518	Excavation and Handling of Type 3 Contaminated Material	33 days	Mon 2/2/09	Fri 6/3/09	534,516	519SS+10 days,517SS-10 days						
519	Granular Bedding	29 days	Thu 12/2/09	Thu 12/3/09	518SS+10 days	520SS+6 days						
520	Base Slab	30 days	Wed 18/2/09	Thu 19/3/09	519SS+6 days	521SS+11 days						
521	Wall and Deck	34 days	Sun 1/3/09	Fri 3/4/09	520SS+11 days	522SS+7 days,557SS+21 days						
522	Curing	41 days	Sun 8/3/09	Fri 17/4/09	521SS+7 days	523SS+14 days,542,546,557						
523	Trench Backfill	30 days	Sun 22/3/09	Mon 20/4/09	522SS+14 days	580						
524	g. Ch1146-Ch1330 (Bay 72 - Bay 84)	108 days	Fri 17/10/08	Sun 1/2/09								
525	Haul access	5 days	Fri 17/10/08	Tue 21/10/08	529SS-15 days	527						
526	Flow diversion	10 days	Wed 22/10/08	Fri 31/10/08	529SS-10 days							
527	Demolition of existing crossing (Bay 72)	3 days	Sun 16/11/08	Tue 18/11/08	550,525							
528	Demolition of existing footbridge (Bay 83)	7 days	Mon 17/11/08	Sun 23/11/08	564							
529	Excavation and Handling of Type 3 Contaminated Material	57 days	Sat 1/11/08	Sat 27/12/08	469	453SS,454SS,455SS,530SS+10 days,549SS+9 days,563SS+10 days,175SS-61 days,525SS-15						
530	Granular Bedding	53 days	Tue 11/11/08	Fri 2/1/09	529SS+10 days	531SS+6 days						
531	Base Slab	53 days	Mon 17/11/08	Thu 8/1/09	530SS+6 days	532SS+11 days						
532	Wall and Deck	49 days	Fri 28/11/08	Thu 15/1/09	531SS+11 days	533SS+7 days						
533	Curing	56 days	Fri 5/12/08	Thu 29/1/09	532SS+7 days	534SS+14 days,543,547						
534	Trench Backfill	45 days	Fri 19/12/08	Sun 1/2/09	533SS+14 days	453FF+60 days,454FF,455FF+60 days,518,551,565,581						
535	6. Gabion	491 days	Tue 12/2/08	Tue 16/6/09		459FF	1					
536	a. Bay 33- Bay39 (Ch436-Ch535)	100 days	Fri 8/8/08	Sat 15/11/08	468SS+20 days							
537	b. Bay 40 - Bay 45 (CH535-Ch625)	120 days	Thu 29/1/09	Thu 28/5/09	477							
538	c. Bay 46 - Bay 53 (Ch625-Ch738)	247 days	Mon 26/5/08	Tue 27/1/09	486							
539	d. Bay 54 - Bay 55 (Ch738-Ch800)	37 days	Tue 12/2/08	Wed 19/3/08	495		1					4
540	e. Bay 56c - Bay 59 (Ch844-Ch925)	200 days	Sat 23/8/08	Tue 10/3/09	504							
541	f. Bay 60 - Bay 66 (Ch925-Ch1038)	130 days	Tue 8/4/08	Fri 15/8/08	513							
	Task		Miles	stone	F	Rolled Up Critical Task Spl	it			G	roup By Summary	
Project Page:	:: PROGRAMME OF WORKS 13 of 23 Critical Task		Sum	mary	F	Rolled Up Milestone Ext	ernal Tasks			D	eadline	
ĩ	Progress		Rolle	ed Up Task	F	Rolled Up Progress Pro	ject Summary	- I				

ID	Task Name	Duration	Start	Finish	Predecessors	Successors				2008
- 10			0	<b>T</b> (6/6/66			Oct	Nov	Dec	Jan
542	g. Bay 67 - Bay 71 (Ch1038-Ch1146)	60 days	Sat 18/4/09	Tue 16/6/09						
543	h. Bay 72 - Bay 84 (Ch1146-Ch1330)	130 days	Fri 30/1/09	Mon 8/6/09	533					
544	7. Granite Stone Facing	454 days	Tue 12/2/08	Sun 10/5/09						
545	Bay 54 to Bay 55 (Ch738 - Ch800)	78 days	Tue 12/2/08	Tue 29/4/08						4
546	Bay 67 and Bay 69a (Ch1038 -Ch1108)	23 days	Sat 18/4/09	Sun 10/5/09						
547	Bay 83 and Bay 84 (Ch1301-Ch1330)	7 days	Fri 30/1/09	Thu 5/2/09	533					
548	8. Temp Crossing at Bay 71 (Ch1145)	86 days	Mon 10/11/08	Tue 3/2/09						
549	8.1 Construction	5 days	Mon 10/11/08		529SS+9 days	550				
550	8.2 Pesdestrian diversion	1 day	Sat 15/11/08	Sat 15/11/08		527				
551	8.3 Demolition of Temp crossing	2 days	Mon 2/2/09	Tue 3/2/09	534	580				
552	9. Ramp No. 2 (Ch752 - Ch800, Bay 55)	17 days	Tue 12/2/08	Thu 28/2/08						
553	General fill	5 days	Tue 12/2/08	Sat 16/2/08		554				4
554	Granular fill and blinding	2 days	Sun 17/2/08	Mon 18/2/08		555				
555	Road slab	10 days	Tue 19/2/08	Thu 28/2/08	554	577FF				
556	10. Ramp No. 1 (Ch1052 - Ch1103, Bay 68)	31 days	Sat 18/4/09	Mon 18/5/09						
557	base slab	12 days	Sat 18/4/09		522,521SS+21 days	558				
558	Wall	10 days	Thu 30/4/09	Sat 9/5/09		559				
559	General fill	5 days	Sun 10/5/09	Thu 14/5/09		560				
560	Granular fill and blinding	2 days	Fri 15/5/09	Sat 16/5/09		561				
561	Road slab	2 days	Sun 17/5/09	Mon 18/5/09	560	604FF				
562	11. Pedestrian Temporary Crossing at Bay 83 (Ch1306)	85 days	Tue 11/11/08	Tue 3/2/09						
563	11.1 Construction	5 days	Tue 11/11/08		529SS+10 days	564				
564	11.2 Pedestrian diversion	1 day	Sun 16/11/08	Sun 16/11/08		528				
565	11.3 Demolition of Temp crossing	2 days	Mon 2/2/09	Tue 3/2/09	534	591				
566	12. Retaining Wall RW1 (Ch430-Ch490)	109 days	Sat 10/11/07	Tue 26/2/08						
567	Excavation	26 days	Sat 10/11/07	Wed 5/12/07		568		0 days		
568	Granular bedding	7 days	Thu 6/12/07	Wed 12/12/07		569		0 d	ays	
569	Base slab	24 days	Thu 13/12/07	Sat 5/1/08		570			0 days	<b>-</b>
570	Wall	26 days	Sun 6/1/08	Thu 31/1/08		571			0 da	
571	Curing	14 days	Fri 1/2/08	Thu 14/2/08		572				0 days
572	Backfilling	12 days	Fri 15/2/08	Tue 26/2/08	5/1	365,464,442				
573	13. Filling in Platform	434 days	Fri 22/2/08	Thu 30/4/09	400	50400-40 500				
574	a. Bay 33- Bay39 (Ch436-Ch535)	25 days	Sat 1/11/08	Tue 25/11/08		584SS+10 days,593				
575 576	b. Bay 40 - Bay 45 (CH535-Ch625)	28 days	Fri 6/2/09	Thu 5/3/09		585SS+10 days,594				
576	c. Bay 46 - Bay 53 (Ch625-Ch738)	28 days	Mon 2/6/08 Fri 22/2/08	Sun 29/6/08 Tue 11/3/08		586SS+10 days,595 587SS+10 days,596				
577	d. Bay 54 - Bay 55 (Ch738-Ch800)	19 days	Sat 6/9/08	Fri 26/9/08		58755+10 days,596 588SS+10 days,597,602				
578	e. Bay 56c - Bay 59 (Ch844-Ch925) f. Bay 60 - Bay 66 (Ch925-Ch1038)	21 days 41 days	Tue 22/4/08	Sun 1/6/08		58855+10 days,597,602 589SS+10 days,598				
579	g. Bay 67 - Bay 71 (Ch1038-Ch1146)	10 days	Tue 22/4/08	Thu 30/4/09		590SS+10 days,599,604				
580	h. Bay 72 - Bay 84 (Ch1146-Ch1330)	10 days 14 days	Mon 2/2/09	Sun 15/2/09		59033+10 days,599,604 591SS+10 days,600				
582	14. Drainage works	469 days	Mon 3/3/08	Sun 15/2/09		39133+10 days,600				
583	14.1 storm drain with manhole	409 days 444 days	Mon 3/3/08	Wed 20/5/09						
- 505		444 udys	1011 3/3/06	weu 20/3/09						
	Task		Miles	tone	Rolled L	p Critical Task Split			Group By Summary	
Project	: PROGRAMME OF WORKS Critical Task		Sumr				rnal Tasks		Deadline	
Page:	14 of 23								Deauine	
	Progress		Rolle	d Up Task	Rolled L	p Progress Proje	ect Summary			

ID	Task Name	Duration	Start	Finish	Predecessors	Successors					2008
504		20 45	Tue 11/11/00	Ma - 1 40/40/00	57400 · 40 dava		Oct		 Nov	Dec	Jan
584	a. Bay 33- Bay39 (Ch436-Ch535)	30 da <u>y</u>			574SS+10 days	610					
585	b. Bay 40 - Bay 45 (CH535-Ch625)	·			575SS+10 days	611					
586	c. Bay 46 - Bay 53 (Ch625-Ch738)	20 da			576SS+10 days	612					
587	d. Bay 54 - Bay 55 (Ch738-Ch800)				577SS+10 days	613					
588	e. Bay 56c - Bay 59 (Ch844-Ch925				578SS+10 days,312FF	603					
589	f. Bay 60 - Bay 66 (Ch925-Ch1038				579SS+10 days						
590	g. Bay 67 - Bay 71 (Ch1038-Ch114				580SS+10 days						
591	h. Bay 72 - Bay 84 (Ch1146-Ch133				581SS+10 days,565						
592	14.2. surface drain	460 da <u>y</u>		Sun 14/6/09							
593	a. Bay 33- Bay39 (Ch436-Ch535)	45 da <u>y</u>		Fri 9/1/09		610SS+30 days					
594	b. Bay 40 - Bay 45 (CH535-Ch625	) 45 day	/s Fri 6/3/09	Sun 19/4/09	575	611SS+30 days					
595	c. Bay 46 - Bay 53 (Ch625-Ch738)	45 da	/s Mon 30/6/08	Wed 13/8/08	576	612					
596	d. Bay 54 - Bay 55 (Ch738-Ch800)	45 da	/s Wed 12/3/08	Fri 25/4/08	577	613					
597	e. Bay 56c - Bay 59 (Ch844-Ch925	5) 45 day	/s Sat 27/9/08	Mon 10/11/08	578						
598	f. Bay 60 - Bay 66 (Ch925-Ch1038	) 45 day	/s Mon 2/6/08	Wed 16/7/08	579						
599	g. Bay 67 - Bay 71 (Ch1038-Ch114	46) 45 day	/s Fri 1/5/09	Sun 14/6/09	580	616SS+22 days					
600	h. Bay 72 - Bay 84 (Ch1146-Ch133	30) 45 day	vs Mon 16/2/09	Wed 1/4/09	581	617SS+30 days					
601	15. Roads and paving	276 day	rs Sat 27/9/08	Mon 29/6/09							
602	a. Ch800-Ch881	60 da	/s Sat 27/9/08	Tue 25/11/08	578	603,606SS+30 days					
603	b. Ch881-CH1037	52 day	/s Sat 27/12/08	Mon 16/2/09	602,588	607SS+30 days					
604	c. CH1037-CH1165	60 da	/s Fri 1/5/09	Mon 29/6/09	580,453,454,455,561FF	608SS+30 days					
605	16. Street furnitures / traffic sign / road m	narking 253 day	s Mon 27/10/08	Mon 6/7/09			-				
606	a. Ch800-Ch881	37 da		Tue 2/12/08	602SS+30 days		-				
607	b. Ch881-CH1037	37 da	vs Mon 26/1/09	Tue 3/3/09	603SS+30 days		-				
608	c. CH1037-CH1165	37 da	/s Sun 31/5/09	Mon 6/7/09	604SS+30 days		-				
609	17. Landscape softworks / hardworks	193 day		Mon 6/7/09		904SS	-				
610	a. Bay 33- Bay39 (Ch436-Ch535)	30 da		Sat 24/1/09	593SS+30 days,584		-				
611	b. Bay 40 - Bay 45 (CH535-Ch625)	45 da		Tue 19/5/09	594SS+30 days,585		-				
612	c. Bay 46 - Bay 53 (Ch625-Ch738)	45 da			613SF,586,595						
613	d. Bay 54 - Bay 55 (Ch738-Ch800)	45 da			614SF,587,596	612SF					
614	e. Bay 56c - Bay 59 (Ch844-Ch925)	22 da		Mon 15/6/09		613SF	-				
615	f. Bay 60 - Bay 66 (Ch925-Ch1038)	23 da		Sun 24/5/09		614	-				
616	g. Bay 67 - Bay 71 (Ch1038-Ch1146)	45 day			599SS+22 days		-				
617	h. Bay 72 - Bay 84 (Ch1146-Ch1330)	45 day			600SS+30 days	615	-				
618	18. Lower down existing village access	9 da		Fri 9/11/07		567	-	0 days			
619	C. Section II of the Works	830 day		Mon 6/7/09				u aya			
620	C1. Portion 4	812 day		Thu 18/6/09							
621	1. Site clearance	14 day		Tue 9/10/07							
622	1.1 General clearance	14 day			225,36,909,911	646					
623	2. Temporary Traffic Management Schem			Mon 28/5/07	220,00,000,011						
624	2.1 TTMS Proposal (trial pits for utilities	-		Mon 28/5/07			-				
625	a. Submission	45 day	/s Sat 31/3/07	Mon 14/5/07	18	626					
		Task	Miles	one	Rolled U	Jp Critical Task Sp	it		 Gro	up By Summary	
Project Page:	PROGRAMME OF WORKS	Critical Task	Sumr	hary	Rolled L	Jp Milestone Ext	ernal Tasks		Dea	dline	
Ū		Progress	Rolle	d Up Task	Rolled U	Jp Progress Pro	ject Summary				

CHIT CHEUNG CONSTRUCTION CO., LTD.
DATE : AUG 2007

ID Task Name Duration Start Finish Predecessors Successors 2008 Oct Nov Dec Jan 626 b. comments & approvals by Engineer & TMLG 14 days Tue 15/5/07 Mon 28/5/07 625 631 627 2.2 TTMS Proposal (for construction of box culvet) Fri 30/3/07 Sun 27/5/07 59 days 628 a. Submission 45 days Fri 30/3/07 Sun 13/5/07 629 629 b. comments & approvals by Engineer & TMLG 14 days Mon 14/5/07 Sun 27/5/07 628 632 630 3. Excavation Permits Tue 29/5/07 Wed 29/10/08 520 davs 631 3.1 application and issue of permit (trial pits for utilities 60 days Tue 29/5/07 Fri 27/7/07 626 635 and site entrance in Kam Po Road) 632 3.2 application and issue of permits (for construction of 180 days Sat 3/5/08 Wed 29/10/08 629 645 box culvert) 633 4. Underground utilities detection Fri 29/6/07 Fri 10/8/07 43 days 634 4.1 utilities detection 28 days Fri 29/6/07 Fri 27/7/07 635SF-1 day 635 4.2 trial trench excavtion & identification 14 davs Sat 28/7/07 Fri 10/8/07 631 634SF-1 day.645 636 5. Utilities temporary diversion / protection Sat 1/11/08 Sat 24/1/09 85 days 637 a. WSD water main along Kam Po Road Sat 1/11/08 Sat 24/1/09 646SS 653FF 85 days 638 b. Street lighting along Kam Po Road Sat 1/11/08 Sat 24/1/09 646SS 653FF 85 davs 639 c. DSD storm Drain 85 davs Sat 1/11/08 Sat 24/1/09 646SS 653FF 640 6. Drainage Management Plan 662 days Fri 30/3/07 Mon 19/1/09 641 6.1 Submission of DMPs Fri 30/3/07 Fri 30/3/07 853SS.680SS.642 1 day 642 6.2 Comments by the Engineer Sat 31/3/07 Fri 13/4/07 641 643 14 davs 643 855FF 6.3 Implementation of DMPs Mon 19/1/09 647.642 57 days Mon 24/11/08 644 7. Box Culvert Ch0-Ch15 (Bay 1 and Outlet) Thu 30/10/08 Sat 31/1/09 94 days 645 Fri 31/10/08 635.632.833 Remove road pavement and expose existing utilities 2 days Thu 30/10/08 646 646 Sat 1/11/08 Sat 8/11/08 645.622 638SS.639SS.637SS.648 Excavation 8 days 647 Remove existing box culvert Mon 10/11/08 Sun 23/11/08 648 649SS+4 days.643.653 14 days 648 Sun 9/11/08 Sun 9/11/08 646 flow diversion 1 day 647 649 Granular Bedding 5 davs Fri 14/11/08 Tue 18/11/08 647SS+4 days 650 650 Base Slab Wed 19/11/08 Sat 6/12/08 649 651 18 davs 651 Wall and Deck 30 days Sun 7/12/08 Mon 5/1/09 650 652 652 653 Curina 14 days Tue 6/1/09 Mon 19/1/09 651 653 Trench Backfill Tue 20/1/09 Sat 24/1/09 652.637FF.638FF.639FF.647.764 654.656 5 days 654 Reinstatement of Kam Po Road 7 days Sun 25/1/09 Sat 31/1/09 653 834 655 9. Modification to invert level of box culvert at Kam Sheung Fri 9/1/09 Sun 22/2/09 716 45 davs 656 10. Fill in Platform 30 days Mon 2/2/09 Tue 3/3/09 653.834 657 657 11. Roads and paving Wed 4/3/09 Thu 2/4/09 656.798 658.659 30 davs 658 14 days Fri 3/4/09 Thu 16/4/09 657 12. Street furnitures 659 13. Landscape softworks / hardworks 77 davs Fri 3/4/09 Thu 18/6/09 657 910SS 660 661 C2. Portion 5 and 5C 830 davs Fri 30/3/07 Mon 6/7/09 662 1. Site clearance Thu 20/9/07 Tue 18/12/07 90 days 663 1.1 General clearance 90 days Thu 20/9/07 Tue 18/12/07 36,225SS+75 days,915,917 714 664 2. Temporary Traffic Management Scheme 59 days Fri 30/3/07 Sun 27/5/07 665 TTMS Proposal (trial pits for utilities and site entrance in Ka 59 days Fri 30/3/07 Sun 27/5/07 666 a. Submission 45 days Fri 30/3/07 Sun 13/5/07 2SS 667 Task Milestone Rolled Up Critical Task Split Group By Summary Project: PROGRAMME OF WORKS Critical Task Summary Rolled Up Milestone External Tasks Deadline Page: 16 of 23 Progress Rolled Up Task Rolled Up Progress Project Summary

ID	Task Name	Duration	Start	Finish	Predecessors	Successors				2008	
007		44 days	Mar 44/5/07	0	000		Oct	Nov	Dec	<u> </u>	Jan
667	b. comments & approvals by Engineer & TMLG	14 days	Mon 14/5/07	Sun 27/5/07		669					
668	3. Excavation Permits	741 days	Mon 28/5/07	Sat 6/6/09							
669	3.1 application and issue of permit (trial pits for utilities and temporary site entrance in Kam Sheung Road)	60 days	Mon 28/5/07	Thu 26/7/07		673					
670	3.2 application and issue of permits (for construction of permanent entrance)	180 days	Tue 9/12/08	Sat 6/6/09	7FS-210 days	818					
671	4. Underground utilities detection	42 days	Fri 29/6/07	Thu 9/8/07							
672	a. utilities detection	28 days	Fri 29/6/07	Thu 26/7/07	19	673					
673	b. trial trench excavtion & identification	14 days	Fri 27/7/07	Thu 9/8/07	669,672	675,676,677,712					
674	5. Utilities temporary diversion / protection	553 days	Fri 10/8/07	Thu 12/2/09							
675	a. CLP overhead cables at CH 100 ~ CH 120	90 days	Fri 10/8/07	Wed 7/11/07	673	687					
676	b. CLP overhead cables at CH 530 ~ CH 550	90 days	Fri 10/8/07	Wed 7/11/07	673	714					
677	c. CLP overhead cables at CH 670 ~ CH 690	90 days	Fri 10/8/07	Wed 7/11/07	673						
678	d. Gas main at Kam Sheung Road	84 days	Fri 21/11/08	Thu 12/2/09	714SS,719FF						
679	6. Drainage Management Plan	722 days	Fri 30/3/07	Fri 20/3/09							
680	5.1 Submission of DMPs	1 day	Fri 30/3/07	Fri 30/3/07	641SS	681					
681	5.2 Comments by the Engineer	14 days	Sat 31/3/07	Fri 13/4/07		682					
682	5.3 Implementation of DMP	581 days	Sat 18/8/07		704SS,681	767FF					
683	7. Channel and Crossings	553 days	Fri 10/8/07	Thu 12/2/09							
684	a. Ch11-Ch130 (Bay 3 - Bay 11)	229 days	Thu 23/8/07	Mon 7/4/08							
685	Haul access	5 days	Thu 23/8/07	Mon 27/8/07		687					
686	Flow diversion	10 days	Tue 1/1/08		687SS-10 days				543 days		
687	Excavation (including contamination material)	44 days	Fri 11/1/08		675,685,710	688SS+10 days,686SS-10 days				0 days	
688	Granular Bedding	40 days	Mon 21/1/08		687SS+10 days	689SS+6 days			_		0 days
689	Base Slab	44 days	Sun 27/1/08		688SS+6 days	690SS+14 days					0 days
690	Wall and Deck	37 days	Sun 10/2/08		689SS+14 days	691SS+7 days					0 days
691	Curing	44 days	Sun 17/2/08		690SS+7 days	692SS+14 days,764,796,772					
692	Trench Backfill	37 days	Sun 2/3/08		691SS+14 days	859,801,858FF,696					
693	b. Ch130-Ch233 (Bay 12 - Bay 19)	341 days	Sat 18/8/07	Wed 23/7/08							
694	Haul access	5 days	Sat 18/8/07	Wed 22/8/07	703	685,696					
695	Flow diversion	10 days	Sat 29/3/08		696SS-10 days						
696	Excavation (including contamination material)	33 days	Tue 8/4/08	Sat 10/5/08	-	697SS+10 days,695SS-10 days					
697	Granular Bedding	29 days	Fri 18/4/08		696SS+10 days	698SS+6 days					
698	Base Slab	50 days	Thu 24/4/08		697SS+6 days	699SS+14 days					
699	Wall and Deck	56 days	Thu 8/5/08		698SS+14 days	700SS+7 days					
700	Curing	63 days	Thu 15/5/08		699SS+7 days	701SS+14 days,765,790,773					
701	Trench Backfill	56 days	Thu 19/5/08		700SS+14 days	801					
702	c. Ch233-Ch340 (Bay 20 - Bay 27)	151 days	Mon 13/8/07	Thu 10/1/08	,						
702	Haul access	5 days	Mon 13/8/07		705SS-15 days	694.704					<b>r</b>
703	Flow diversion	10 days	Sat 18/8/07	Mon 27/8/07	-	682SS					
704	Excavation (including contamination material)	60 days	Tue 28/8/07	Fri 26/10/07		4 days,706SS+10 days,703SS-15 days					
705	Granular Bedding	70 days	Fri 7/9/07		705SS+10 days	707SS+6 days					
706	Base Slab	70 days 78 days	Thu 13/9/07		706SS+6 days	70755+6 days 708SS+14 days					
101	Dase Siau	i 8 days	11u 13/9/07	111u 29/11/07	10000+0 uays	/0855+14 days					
					D # 11				Carrier Die Courses		
Drojost	PROGRAMME OF WORKS		Milest	one		Jp Critical Task Spli		 	Group By Summary		
			Summ	nary	Rolled	Jp Milestone Exte	ernal Tasks		Deadline		
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ID	Task Name		Duration	Start	Finish	Predecessors	Successors						200	8
									Oct		Nov	Dec		Jan
709	Curing		92 days	Thu 4/10/07		708SS+7 days	710SS+14 days,76							
710	Trench Backfill		85 days	Thu 18/10/07		709SS+14 days	68	7 0 days	s					
711	d. Ch449-Ch504 (Bay 37 - Bay 40)		553 days	Fri 10/8/07	Thu 12/2/09			_						
712	Haul access		5 days	Fri 10/8/07	Tue 14/8/07		721,71	4						
713	Flow diversion		10 days	Fri 12/9/08	Sun 21/9/08	714SS-10 days								
714	Excavation (including contamir	nation material)	75 days	Mon 22/9/08	Fri 5/12/08	663,676,712,864	678SS,715SS+20 days,713SS-10 day	s						
715	Granular Bedding		75 days	Sun 12/10/08	Thu 25/12/08	714SS+20 days	716SS+14 day	s						
716	Base Slab		75 days	Sun 26/10/08	Thu 8/1/09	715SS+14 days	655,717SS+14 days,799S	3						
717	Wall and Deck		75 days	Sun 9/11/08	Thu 22/1/09	716SS+14 days,799	718SS+7 day	s						
718	Curing		82 days	Sun 16/11/08	Thu 5/2/09	717SS+7 days	719SS+14 days,767,774,78	4						
719	Trench Backfill		75 days	Sun 30/11/08	Thu 12/2/09	718SS+14 days	678F	F						
720	e. Ch504-Ch586 (Bay 41 - Bay 46)		147 days	Wed 15/8/07	Tue 8/1/08									<b>.</b>
721	Haul access		3 days	Wed 15/8/07	Fri 17/8/07	712	73	0						•
722	Flow diversion		5 days	Fri 7/9/07	Tue 11/9/07	723SS-10 days		_						
723	Excavation (including contamir	ation material)	45 days	Mon 17/9/07	Wed 31/10/07		724SS+10 days,722SS-10 day	s	-					
724	Granular Bedding		55 days	Thu 27/9/07	Tue 20/11/07	723SS+10 days	725SS+6 day	s						
725	Base Slab		63 days	Wed 3/10/07	Tue 4/12/07	724SS+6 days	726SS+14 day	s N	-					
726	Wall and Deck		63 days	Wed 17/10/07		725SS+14 days	727SS+7 day			-				
727	Curing		70 days	Wed 24/10/07		726SS+7 days	728SS+14 day	-	days					
728	Trench Backfill		63 days	Wed 7/11/07		727SS+14 days	750,80			days			ļ	
729	f. Ch586-Ch675 (Bay 47 - Bay 54)		163 days	Sat 18/8/07	Sun 27/1/08	1210011100/0		_	-100					
730	Haul access		5 days	Sat 18/8/07	Wed 22/8/07	721	739.73	2						
731	Flow diversion		3 days	Sat 29/9/07		732SS-10 days	100,10							
732	Excavation (including contamir	ation material)	60 days	Tue 9/10/07	Fri 7/12/07	-	733SS+10 days,731SS-10 day							
733	Granular Bedding	lation materialy	60 days	Fri 19/10/07		732SS+10 days	734SS+6 day	-						
734	Base Slab		60 days	Thu 25/10/07		733SS+6 days	7345546 day 735SS+14 day			-			a	
735	Wall and Deck					734SS+14 days			) days					.
736			60 days	Thu 8/11/07		-	736SS+7 day		44	) days			<u>.</u>	<u>,</u>
736	Curing		67 days	Thu 15/11/07		735SS+7 days	737SS+14 days,768,77			170 da			<u>.</u>	h_
-	Trench Backfill		60 days	Thu 29/11/07		736SS+14 days	741,80	2			170 days			b
738	g. Ch675-Ch741 (Bay 55 - Bay 59)		243 days	Thu 23/8/07	Mon 21/4/08			_						
739	Haul access		3 days	Thu 23/8/07	Sat 25/8/07		748,74	1						
740	Flow diversion		3 days	Fri 25/1/08		741SS-3 days								526 days
741	Excavation (including contamin	ation material)	30 days	Mon 28/1/08	Tue 26/2/08		742SS+10 days,740SS-3 day							170 days
742	Granular Bedding		27 days	Thu 7/2/08		741SS+10 days	743SS+6 day							170
743	Base Slab		31 days	Wed 13/2/08		742SS+6 days	744SS+14 day							
744	Wall and Deck		31 days	Wed 27/2/08		743SS+14 days	745SS+7 day							
745	Curing		38 days	Wed 5/3/08		744SS+7 days	746SS+14 days,76							
746	Trench Backfill		34 days	Wed 19/3/08		745SS+14 days	80	3						
747	h. Ch741-Ch797 (Bay 60 - Bay 63)		211 days	Sun 26/8/07	Sun 23/3/08					l l				
748	Haul access		3 days	Sun 26/8/07	Tue 28/8/07	739	75	0	_				$\longrightarrow$	-   ∥
749	Flow diversion		3 days	Sun 6/1/08	Tue 8/1/08	750SS-3 days						:	545 days	
750	Excavation (including contamir	nation material)	20 days	Wed 9/1/08	Mon 28/1/08	748,728	751SS+10 days,939,749SS-3 day	s					199 days	
		Task		Milest	000		Rolled Up Critical Task	olit				Group By Summa		
Project	I: PROGRAMME OF WORKS												у	
	18 of 23	Critical Task		Summ	· .		•	ternal Tasks				Deadline		
		Progress		Rolled	I Up Task		Rolled Up Progress Pr	oject Summa	ary					

ID	Task Name	Duration	Start	Finish	Predecessors	Successors				2008
							Oct	Nov	Dec	Jan
751	Granular Bedding	16 days	Sat 19/1/08		750SS+10 days	752SS+6 da	-			199 days
752	Base Slab	20 days	Fri 25/1/08		751SS+6 days	753SS+14 da				199 days
753	Wall and Deck	20 days	Fri 8/2/08		752SS+14 days	754SS+7 da	-			-199
754	Curing	28 days	Fri 15/2/08	Thu 13/3/08	753SS+7 days	755SS+14 days,7				
755	Trench Backfill	24 days	Fri 29/2/08	Sun 23/3/08	754SS+14 days	8	03			
756	8. Retaining Wall RW2 (Ch340-Ch350)	73 days	Mon 22/9/08	Wed 3/12/08						
757	Excavation	10 days	Mon 22/9/08	Wed 1/10/08	864	7	58			
758	Granular bedding	4 days	Thu 2/10/08	Sun 5/10/08	757	7	59			
759	Base slab	21 days	Mon 6/10/08	Sun 26/10/08	758	7	60			
760	Wall	14 days	Mon 27/10/08	Sun 9/11/08	759	7	61			
761	Curing	14 days	Mon 10/11/08	Sun 23/11/08	760	7	62			
762	Backfilling	10 days	Mon 24/11/08	Wed 3/12/08	761	8	70			
763	9. Gabion	466 days	Fri 4/1/08	Mon 13/4/09						
764	Bay 5- Bay 11 (Ch35-Ch130)	147 days	Tue 1/4/08	Mon 25/8/08	691	6	53			1
765	Bay 12 - Bay 19 (Ch130-Ch233)	93 days	Thu 17/7/08	Fri 17/10/08	700	6	53			
766	Bay 20 - Bay 27 (Ch233-Ch340)	159 days	Fri 4/1/08	Tue 10/6/08	709	6	53		223 da	ys
767	Bay 37 - Bay 43 (Ch449-Ch549)	67 days	Fri 6/2/09	Mon 13/4/09	718,682FF		-			
768	Bay 48 - Bay 54 (Ch609-Ch675)	79 days	Mon 21/1/08	Tue 8/4/08	736		-			454 days
769	Bay 55 - Bay 59 (Ch675-Ch741)	20 days	Sat 12/4/08	Thu 1/5/08	745		-			-
770	Bay 60 - Bay 63 (Ch741-Ch797)	17 days	Fri 14/3/08	Sun 30/3/08	754		-			
771	10. Granite Stone Facing	318 days	Tue 1/4/08	Thu 12/2/09			_			
772	Bay 4 (Ch19.5-Ch35)	5 days	Tue 1/4/08	Sat 5/4/08	691		_			
773	Bay 12 - Bay 19 (Ch130-Ch233)	12 days	Thu 17/7/08	Mon 28/7/08		3	69			
774	Bay 37 - Bay 40 (Ch449-Ch504)	7 days	Fri 6/2/09	Thu 12/2/09						
775	Bay 41 - Bay 46 (Ch504-Ch586)	6 days	Fri 1/8/08	Wed 6/8/08		7	76			
776	Bay 47 - Bay 55 (Ch586-Ch688)	9 days	Thu 7/8/08	Fri 15/8/08			53			
777	11. Ramp No. 1 (Ch645 - Ch668, Bay 52 - Bay 53)	39 days	Mon 21/1/08	Thu 28/2/08						
778	base slab	12 days	Mon 21/1/08	Fri 1/2/08	736	7	79			494 days
779	Wall	10 days	Sat 2/2/08	Mon 11/2/08			80			494 days
780	General fill	5 days	Tue 12/2/08	Sat 16/2/08			81			434 days
781	Granular fill and blinding	5 days	Sun 17/2/08	Thu 21/2/08			82			
782	Road slab	7 days	Fri 22/2/08	Thu 28/2/08						
783	12. Ramp No. 2 (Ch516 - Ch537, Bay 42)	54 days	Fri 6/2/09	Tue 31/3/09						
784	base slab	12 days	Fri 6/2/09	Tue 17/2/09	719		85			
785	Wall	12 days 10 days	Wed 18/2/09	Fri 27/2/09			86			
786	General fill	20 days	Sat 28/2/09	Thu 19/3/09			87			
786	General fill Granular fill and blinding	-	Sat 28/2/09 Fri 20/3/09	Tue 24/3/09			87			
	5	5 days				1	88			
788	Road slab	7 days	Wed 25/3/09	Tue 31/3/09			_			
789	13. Ramp No. 3 (Ch209 - Ch233, Bay 18 - Bay 19)	54 days	Thu 17/7/08	Mon 8/9/08			04			
790	base slab	12 days	Thu 17/7/08	Mon 28/7/08			91			
791	Wall	10 days	Tue 29/7/08	Thu 7/8/08			92			
792	General fill	20 days	Fri 8/8/08	Wed 27/8/08	/91	7	93			
<u> </u>	Task		Miles	ione	Rolled Un	Critical Task	Split		Group By Summary	
Project	PROGRAMME OF WORKS		Sumr		Rolled Up		External Tasks		Deadline	
Page: 1	9 of 23								Deadime	
	Progress		Rolle	d Up Task	Rolled Up	Progress	Project Summary			

ID	Task Name	Duration	Start	Finish	Predecessors	Successors				2008
793	Granular fill and blinding	5 days	Thu 28/8/08	Mon 1/9/08	792	794	Oct	Nov	Dec	Jan
794	Road slab	7 days	Tue 2/9/08	Mon 8/9/08		814				
795	14 Ramp No. 4 (Ch35 - Ch55, Bay5)	32 days	Tue 1/4/08	Fri 2/5/08		014				
796	General fill	7 days	Tue 1/4/08	Mon 7/4/08		797				
797	Granular fill and blinding	8 days	Tue 8/4/08	Tue 15/4/08		798				
798	Sloping side wall and road slab	17 days	Wed 16/4/08	Fri 2/5/08		657				
799	15. Demolition of existing wing walls Ch449	14 days	Sun 26/10/08	Sat 8/11/08		717				
800	16. Filling in Platform	212 days	Mon 28/1/08	Tue 26/8/08	11000					
801	a. Bay 3- Bay 27 (Ch11-Ch340)	34 days	Thu 24/7/08	Tue 26/8/08	692 701	806SS+10 days,810,814,832				Y
802	b. Bay 37 - Bay 55 (Ch449-Ch688)	54 days	Mon 28/1/08	Fri 21/3/08		807SS+10 days,811,817				262 days
803	c. Bay 56 - Bay 63 (Ch688-Ch797)	7 days	Tue 22/4/08	Mon 28/4/08		808,812				202 uays
804	17. Drainage works	236 days	Thu 7/2/08	Mon 29/9/08	140,133	000,012				
805	17.1 storm drain with manhole and headwall	198 days	Thu 7/2/08	Fri 22/8/08						
805					90165 i 10 dovo	914				
	a. Bay 3- Bay 27 (Ch11-Ch340)	20 days	Sun 3/8/08		801SS+10 days	814				
807	b. Bay 37 - Bay 55 (Ch449-Ch688)	90 days	Thu 7/2/08		802SS+10 days	815				339-
808	c. Bay 56 - Bay 63 (Ch688-Ch797)	14 days	Tue 29/4/08	Mon 12/5/08	803					
809	17.2 surface drain	192 days	Sat 22/3/08	Mon 29/9/08						
810	a. Bay 3- Bay 27 (Ch11-Ch340)	34 days	Wed 27/8/08	Mon 29/9/08		826				
811	b. Bay 37 - Bay 55 (Ch449-Ch688)	60 days	Sat 22/3/08	Tue 20/5/08		827				
812	c. Bay 56 - Bay 63 (Ch688-Ch797)	14 days	Tue 29/4/08	Mon 12/5/08	803	830				
813	18. Roads and paving	465 days	Sat 22/3/08	Mon 29/6/09						
814	a. Ch233 - Ch340	50 days	Mon 2/2/09		801,874SS-30 days,794,806	820				
815	b. Ch449 - Ch549	50 days	Mon 30/6/08	Mon 18/8/08		821				
816	c. Ch549 - Ch609	50 days	Sun 11/5/08	Sun 29/6/08	817	815,822				
817	d. Ch609 - Ch688	50 days	Sat 22/3/08	Sat 10/5/08	802	816,823				
818	e. Permanent Entrance at Ch449	23 days	Sun 7/6/09	Mon 29/6/09	670	824				
819	19. Street furnitures	422 days	Sun 11/5/08	Mon 6/7/09						
820	a. Ch233 - Ch340	30 days	Tue 24/3/09	Wed 22/4/09	814					
821	b. Ch449 - Ch549	30 days	Tue 19/8/08	Wed 17/9/08	815	824				
822	c. Ch549 - Ch609	30 days	Mon 30/6/08	Tue 29/7/08	816					
823	d. Ch609 - Ch688	30 days	Sun 11/5/08	Mon 9/6/08	817					
824	e. Permanent Entrance at Ch449	7 days	Tue 30/6/09	Mon 6/7/09	818,821					
825	20. Landscape softworks / hardworks	420 days	Tue 13/5/08	Mon 6/7/09		916SS				
826	a. Ch35 - Ch340	45 days	Sat 23/5/09	Mon 6/7/09	877,810					
827	b. Ch449 - Ch549	45 days	Thu 21/8/08	Sat 4/10/08	828,811	877				
828	c. Ch549 - Ch609	45 days	Mon 7/7/08	Wed 20/8/08	829	827				
829	d. Ch609 - Ch688	45 days	Fri 23/5/08	Sun 6/7/08	830	828				
830	e. Ch688 - Ch797	10 days	Tue 13/5/08	Thu 22/5/08	812	829				
831	21. Road Diversion in Kam Po Road	159 days	Wed 27/8/08	Sun 1/2/09						
832	a. Temp Decking above Bay 3 and temp road pavemen		Wed 27/8/08	Fri 5/9/08	801	833				
833	b. Implementation of road diversion	1 day	Sat 6/9/08	Sat 6/9/08	832	645				
834	c. Removal of decking	1 day	Sun 1/2/09	Sun 1/2/09		656				
						· · · · · · · · · · · · · · · · · · ·		-		
Project	: PROGRAMME OF WORKS		Miles			Critical Task Split			Froup By Summary	
Project Page: 2			Sum	mary	Rolled Up	Milestone Exte	rnal Tasks		Deadline	
	Progress		Rolle	d Up Task	Rolled Up	Progress Proje	ect Summary			

CHIT CHEUNG CONSTRUCTION CO., LTD. DATE : AUG 2007

ID T	Task Name	Duration	Start	Finish	Predecessors	Successors				2008
			-				Oct	Nov	Dec	Jan
835										
836	D. Section III of the Works - Portions 5A1, 5A2 and 5B	830 days	Fri 30/3/07	Mon 6/7/09						
837	1. Site clearance	4 days	Mon 31/12/07	Thu 3/1/08					Į į	
838	1.1 General site clearance	4 days	Mon 31/12/07	Thu 3/1/08	921,923,927,929,933,935	857FF			130 days	
839	2. Temporary Traffic Management Scheme	59 days	Fri 30/3/07	Sun 27/5/07						
840	TTMS Proposal (trial pits for utilities and site entrance in Ka	am St 59 days	Fri 30/3/07	Sun 27/5/07						
841	a. Submission	45 days	Fri 30/3/07	Sun 13/5/07	2SS	842				
842	b. comments & approvals by Engineer & TMLG	14 days	Mon 14/5/07	Sun 27/5/07	841	844				
843	3. Excavation Permits	741 days	Mon 28/5/07	Sat 6/6/09						
844	3.1 application and issue of permit (trial pits for utilities and temporary site entrance in Kam Sheung Road)	d 60 days	Mon 28/5/07	Thu 26/7/07	842	848				
845	3.2 application and issue of permits (for construction of permanent entrance)	180 days	Tue 9/12/08		7FS-210 days	875				
846	4. Underground utilities detection	42 days	Fri 29/6/07	Thu 9/8/07						
847	a. utilities detection	2 days	Fri 29/6/07	Sat 30/6/07		848				
848	b. trial trench excavtion & identification	14 days	Fri 27/7/07	Thu 9/8/07	844,847	851				
849	5. Utilities temporary diversion / protection	424 days	Thu 26/7/07	Sun 21/9/08						
850	a. Completion of WSD 450 diameter water main (By WSD	) 1 day	Thu 26/7/07	Thu 26/7/07		883				
851	b. Telephone line	87 days	Fri 27/6/08	Sun 21/9/08	859SS,864FF,848					
852	6. Drainage Management Plan	662 days	Fri 30/3/07	Mon 19/1/09						
853	a Submission of DMPs	1 day	Fri 30/3/07	Fri 30/3/07	641SS	854				
854	b Comments by the Engineer	14 days	Sat 31/3/07	Fri 13/4/07	853	855				
855	c Implementation of DMP	558 days	Thu 12/7/07	Mon 19/1/09	854,643FF	653				
856	7. Channel - Ch340-Ch439 (Bay 28 - Bay 35)	277 days	Thu 20/12/07	Sun 21/9/08						
857	Haul access	15 days	Thu 20/12/07	Thu 3/1/08	921,838FF	859			95 days	İ.
858	Flow diversion	4 days	Fri 4/4/08	Mon 7/4/08	692FF,880	859			1	
859	Excavation (including contamination material)	70 days	Tue 8/4/08	Mon 16/6/08	692,857,858	851SS,860SS+20 days				
860	Granular Bedding	70 days	Mon 28/4/08	Sun 6/7/08	859SS+20 days	861SS+14 days				
861	Base Slab	77 days	Mon 12/5/08	Sun 27/7/08	860SS+14 days	862SS+21 days,866SS				
862	Wall and Deck	77 days	Mon 2/6/08	Sun 17/8/08	861SS+21 days,866	863SS+7 days				
863	Curing	84 days	Mon 9/6/08	Sun 31/8/08	862SS+7 days	864SS+14 days,868				
864	Trench Backfill	91 days	Mon 23/6/08	Sun 21/9/08	863SS+14 days	757,851FF,867,870,714				
865	8. Demolition of existing structures	147 days	Mon 12/5/08	Sun 5/10/08						
866	a. Existing wing walls Ch439 (Bay35)	14 days	Mon 12/5/08	Sun 25/5/08	861SS	862				
867	<li>b. Existing footbridge at Ch350 (Bay 29)</li>	14 days	Mon 22/9/08	Sun 5/10/08	864	870SF+14 days				
868	9. Gabion	124 days	Mon 1/9/08	Fri 2/1/09	863	653				
869	10. Granite Stone Facing	3 days	Tue 29/7/08	Thu 31/7/08	773	775				
870	11. Fill in Platform	90 days	Thu 4/12/08	Tue 3/3/09	864,762,867SF+14 days	872SS+10 days,873,874				
871	12. Drainage works	100 days	Sun 14/12/08	Mon 23/3/09			1			
872	a. storm drain with manhole	45 days	Sun 14/12/08	Tue 27/1/09	870SS+10 days	874				
873	b. surface drain	20 days	Wed 4/3/09	Mon 23/3/09	870	877				
874	13. Roads and paving	45 days	Wed 4/3/09	Fri 17/4/09	870,872	876SS+30 days,814SS-30 days,875				
875	14. Permanent Entrance and street furnitrures at Ch439	30 days	Sun 7/6/09	Mon 6/7/09	845,874					
	Task		Milest	one	Rolled U	p Critical Task Spli	t		Group By Summary	
Project: Page: 2	PROGRAMME OF WORKS Critical Task		Summ	ary	Rolled U	p Milestone Exte	ernal Tasks		Deadline	
	1 of 23			· · ·						

ID	Task Name	Duration	Start	Finish	Predecessors	Successors						2008
		<u> </u>						Oct	Nov	Dec		Jan
876	15. Street furnitures / traffic sign / road marking	45 days	Fri 3/4/09		874SS+30 days							
877	16. Landscape softworks / hardworks	60 days	Tue 24/3/09	Fri 22/5/09	827,873	922SS,826,928SS,934SS						
878	17. Temp vehicular access in Portion 5A1	191 days	Wed 26/9/07	Thu 3/4/08								
879	a. Maintenance and operation	188 days	Wed 26/9/07	Mon 31/3/08		880						
880	b. Removal	3 days	Tue 1/4/08	Thu 3/4/08	879	858						
881												
882	E. Section IV of the Works	20 days	Thu 6/9/07	Tue 25/9/07								
883	1. Formation for temp vehicular access	2 days	Thu 6/9/07	Fri 7/9/07	921,850	884						
884	2. Construction of temp vehicular access	17 days	Sat 8/9/07	Mon 24/9/07	883,11FF-1 day	885						
885	<ol><li>Opening of temp vehicular access to the Public</li></ol>	1 day	Tue 25/9/07	Tue 25/9/07	884	879						
886												
887	F. Section V of the Works - Preservation and protection to existing trees	804 days	Sat 31/3/07	Thu 11/6/09								
888	1. Portion 1	789 days	Sat 31/3/07	Wed 27/5/09								••••••••••••••••••••••••••••••••••••••
889	1.1 Tree survey	14 days	Sat 31/3/07	Fri 13/4/07	15	891	1					
890	1.2 Tree transplant	740 days	Sat 19/5/07	Wed 27/5/09								•••••••••••
891	a. To Temp holding nursery	62 days	Sat 19/5/07	Thu 19/7/07	889,213	893SS,233						
892	b. To final location	90 days	Fri 27/2/09	Wed 27/5/09	320FF							
893	1.3 Tree protection	62 days	Sat 19/5/07	Thu 19/7/07	891SS	233						
894	2. Portion 2	454 days	Wed 30/5/07	Mon 25/8/08					ļ.			
895	2.1 Tree survey	14 days	Wed 30/5/07	Tue 12/6/07	16	897	-					
896	2.2 Tree transplant	440 days	Wed 13/6/07	Mon 25/8/08								
897	a. To Temp holding nursery	62 days	Wed 13/6/07	Mon 13/8/07	895,213,227	328,899SS	-					
898	b. To final location	231 days	Tue 8/1/08	Mon 25/8/08	436SS		-				315	lay <del>s</del>
899	2.3 Tree protection	62 days	Wed 13/6/07	Mon 13/8/07	897SS	328						
900	3. Portion 3	697 days	Fri 29/6/07	Mon 25/5/09								
901	3.1 Tree survey	14 days	Fri 29/6/07	Thu 12/7/07	17	903						
902	3.2 Tree transplant	683 days	Fri 13/7/07	Mon 25/5/09								
903	a. To Temp holding nursery	64 days	Fri 13/7/07	Fri 14/9/07	901,213	448,491,905SS						
904	b. To final location	151 days	Fri 26/12/08	Mon 25/5/09	609SS		-					
905	3.3 Tree protection	64 days	Fri 13/7/07	Fri 14/9/07	903SS	448						
906	4. Portion 4	804 days	Sat 31/3/07	Thu 11/6/09			1		ļ			(
907	4.1 Tree survey	14 days	Sat 31/3/07	Fri 13/4/07	18	909						
908	4.2 Tree transplant	755 days	Sat 19/5/07	Thu 11/6/09					ģ.			(
909	a. To Temp holding nursery	62 days	Sat 19/5/07	Thu 19/7/07	907,213	911SS,622						
910	b. To final location	70 days	Fri 3/4/09	Thu 11/6/09	659SS		1					
911	4.3 Tree protection	62 days	Sat 19/5/07	Thu 19/7/07	909SS	622						
912	5. Portion 5	559 days	Fri 29/6/07	Wed 7/1/09					ļ			(
913	5.1 Tree survey	14 days	Fri 29/6/07	Thu 12/7/07	19	915						
914	5.2 Tree transplant	545 days	Fri 13/7/07	Wed 7/1/09					ė –			(
915	a. To Temp holding nursery	69 days	Fri 13/7/07	Wed 19/9/07	913,213	663,917SS	1					
916	b. To final location	240 days	Tue 13/5/08	Wed 7/1/09	825SS		1					
917	5.3 Tree protection	69 days	Fri 13/7/07	Wed 19/9/07	915SS	663						
	Task		Milest	one	Rolled U	Jp Critical Task Spl	lit		 	Group By Sumr	mary	
	: PROGRAMME OF WORKS Critical Task		Summ	iary	Rolled L	Jp Milestone Ext	ernal T	asks		Deadline		
Page: 1	22 of 23 Progress			Up Task			oject Su					
						· · · ·		. ,				

ID	Task Name	Duration	Start	Finish	Predecessors	Successors					2008
		ļ						Oct	Nov	Dec	Jan
918	6. Portion 5A1	694 days	Fri 29/6/07	Fri 22/5/09							
919	6.1 Tree survey	7 days	Fri 29/6/07	Thu 5/7/07	20	921					
920	6.2 Tree transplant	687 days	Fri 6/7/07	Fri 22/5/09							
921	a. To Temp holding nursery	62 days	Fri 6/7/07	Wed 5/9/07	919,213	838,857,923SS,883					
922	b. To final location	60 days	Tue 24/3/09	Fri 22/5/09	877SS						
923	6.3 Tree protection	62 days	Fri 6/7/07	Wed 5/9/07	921SS	838					
924	7. Portion 5A2	694 days	Fri 29/6/07	Fri 22/5/09							
925	7.1 Tree survey	14 days	Fri 29/6/07	Thu 12/7/07	21	927					
926	7.2 Tree transplant	680 days	Fri 13/7/07	Fri 22/5/09							
927	a. To Temp holding nursery	62 days	Fri 13/7/07	Wed 12/9/07	925,213	929SS,838	1				
928	b. To final location	60 days	Tue 24/3/09	Fri 22/5/09	877SS		1				
929	7.3 Tree protection	62 days	Fri 13/7/07	Wed 12/9/07	927SS	838	1				
930	8. Portion 5B	585 days	Tue 16/10/07	Fri 22/5/09			1				
931	8.1 Tree survey	14 days	Tue 16/10/07	Mon 29/10/07	22	933	130 days	:	٦ -		
932	8.2 Tree transplant	571 days	Tue 30/10/07	Fri 22/5/09			1				
933	a. To Temp holding nursery	62 days	Tue 30/10/07	Sun 30/12/07	931,213	935SS,838		130 days		-	
934	b. To final location	60 days	Tue 24/3/09	Fri 22/5/09	877SS						
935	8.3 Tree protection	62 days	Tue 30/10/07	Sun 30/12/07	933SS	838		130 days		-	
936							1				
937	G. Berthing Area	148 days	Wed 12/9/07	Wed 6/2/08							
938	1. Construction of Loading Facilities	27 days	Wed 12/9/07	Mon 8/10/07	162	732					$\downarrow$
939	2. Removal of Loading Facilities	2 days	Tue 29/1/08	Wed 30/1/08	750,73	940					516 days 🚺
940	3. Reinstatement of Berthing Area	7 days	Thu 31/1/08	Wed 6/2/08	939		1				516 days

	Task	Milestone	Rolled Up Critical Task	Split	 Group By Summary	
Project: PROGRAMME OF WORKS Page: 23 of 23	Critical Task	Summary	Rolled Up Milestone	External Tasks	Deadline	
	Progress	Rolled Up Task	Rolled Up Progress	Project Summary		

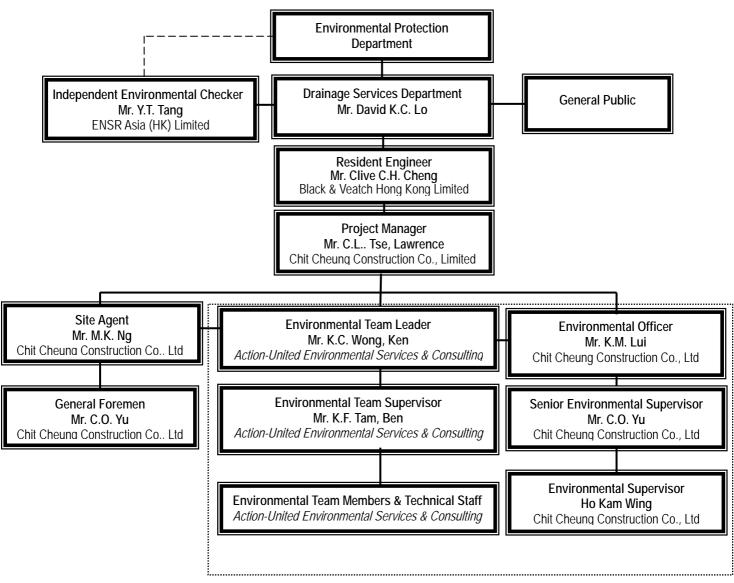


Appendix C

### **Environmental Organization Structure**



### **Environmental Organization Structure**



Contractor's Environmental Team (CET)



Organization	Project Role	Name of Key Staff	Tel No.	Fax No.
DSD	Employer	Employer Mr. David K.C. LO		2827-8526
B&V	Engineer	Mr. Kelvin N.F. LAU	2601-1000	2601-3988
B&V	Engineer's Representative	Mr. Clive C.H. CHENG	2443-1442	2443-7307
ENSR	Independent Environmental Checker	Mr. Y.T. Tang	3105-8537	2891-0305
CCC	Project Director	Mr. P.Y. CHENG	9023-4821	2403-1162
CCC	Project Manager	Mr. Lawrence TSE	9752-0748	2479-1365
CCC	Site Agent	Mr. M.K. NG	6603-9711	2479-1365
CCC	Site Engineer	Mr. Jimmy CHAN	9234-8632	2479-1365
CCC	Environmental Officer	Mr. LUI Kam Man	9257-9111	2479-1365
CCC	Senior Environmental Supervisor	Mr. YU Chor-on	9026-9501	2479-1365
CCC	Environmental Supervisor	Ho Kam Wing	9016-0592	2479-1365
CCC	Safety Officer	Mr. SHEA Yan Keung	6086-4658	2479-1365
AUES	Environmental Team Leader	Ken Wong	2959-6059	2959-6079
AUES	Environmental Team Supervisor	Ben Tam	2959-6059	2959-6079
AUES	Ecologist	Vincent Lai	9406-9784	2959-6079
AUES	Decontamination Specialist	David Yeung	2959-6059	2959-6079

### **Contact Details of Key Personnel**

Legend:

DSD (Employer) B&V (Engineer) CCC (Contractor) ENSR (IEC) AUES (ET)

Drainage Services Department

Black & Veatch Bong Kong Limited Chit Cheung Construction Company Limited. ENSR Asia (HK) Ltd. -

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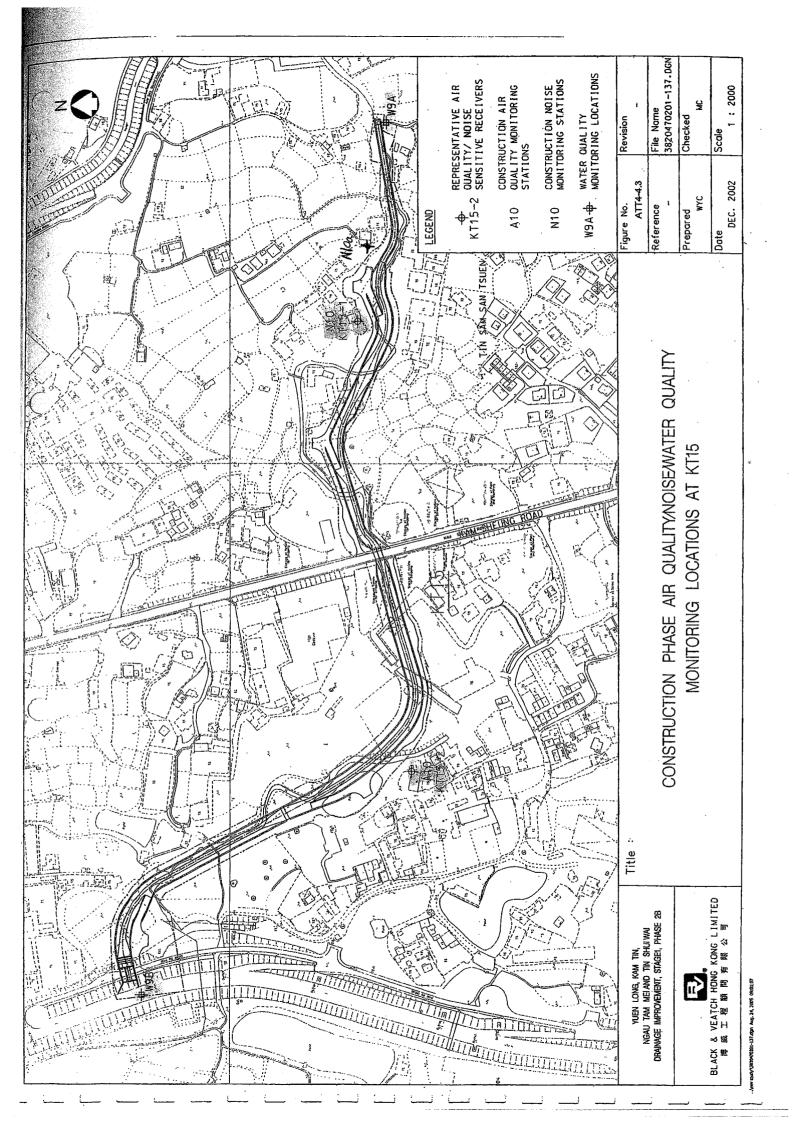
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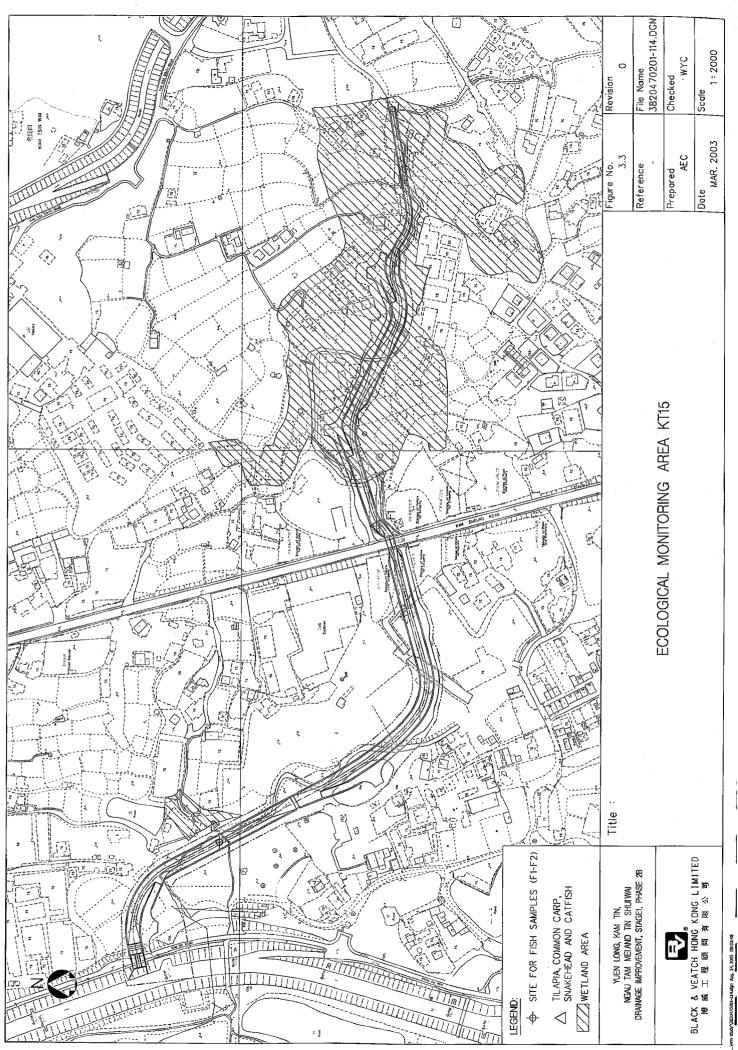
Action-United Environmental Services & Consulting



Appendix D

Locations of Designated Monitoring Station/Locations/Area







### Appendix E

### Event/Action Plan for Air Quality, Construction Noise, Stream Water Quality and Ecology



<b>Event/Action</b>	Plan for	Air	Quality
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EVENT				
EVENI	ET	IEC	Engineer	Contractor
ACTION LEVEL				
1. Exeedance for one sample	<ol> <li>Identify source</li> <li>Inform IEC and Engineer</li> <li>Repeat measurement to confirm finding</li> <li>Increase monitoring frequency to daily</li> </ol>	<ol> <li>Check monitoring data submitted by ET</li> <li>Check Contractor's working method</li> </ol>	Notify Contractor	<ol> <li>Rectify any unacceptable practice</li> <li>Amend working methods if appropriate</li> </ol>
2. Execdance for two or more consecutive samples	<ol> <li>Identify source</li> <li>Inform IEC and Engineer</li> <li>Repeat measurements to confirm findings</li> <li>Increase monitoring frequency to daily</li> <li>Discuss with IEC and Contractor on remedial actions required</li> <li>If exceedance continues, arrange meeting with IEC and Engineer</li> <li>T. If exceedance stops, cease additional monitoring</li> </ol>	<ol> <li>Check monitoring data submitted by ET</li> <li>Check Contractor's working method</li> <li>Discuss with ET and Contractor on possible remedial measures</li> <li>Advice Engineer on the effectiveness of the proposed remedial measures</li> <li>Supervise implementation of remedial measures</li> </ol>	<ol> <li>Confirm receipt of notification of failure in writing</li> <li>Notify Contractor</li> <li>Ensure remedial measures properly implemented</li> </ol>	<ol> <li>Submit proposals for remedial actions to IEC within 3 working days of notification</li> <li>Implement the agreed proposals</li> <li>Amend proposal if appropriate</li> </ol>
LIMIT LEVEL				
1. Exeedance for one sample	<ol> <li>Identify source</li> <li>Inform Engineer and EPD</li> <li>Repeat measurement to confirm finding</li> <li>Increase monitoring frequency to daily</li> <li>Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and Engineer informed of the results</li> </ol>	<ol> <li>Check monitoring data submitted by ET</li> <li>Check Contractor's working method</li> <li>Discuss with ET and Contractor on possible remedial measures</li> <li>Advice Engineer on the effectiveness of the proposed remedial measures</li> <li>Supervise implementation of remedial measures</li> </ol>	<ol> <li>Confirm receipt of notification of failure in writing</li> <li>Notify Contractor</li> <li>Ensure remedial measures properly implemented</li> </ol>	<ol> <li>Take immediate action to avoid further exceedance</li> <li>Submit proposals for remedial actions to IEC within 3 working days of notification</li> <li>Implement the agreed proposals</li> <li>Amend proposal if appropriate</li> </ol>
2. Exceedance for two or more consecutive samples	<ol> <li>Notify IEC, Engineer and EPD</li> <li>Identify source</li> <li>Repeat measurement to confirm findings</li> <li>Increase monitoring frequency to daily</li> <li>Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented.</li> <li>Arrange meeting with IEC and Engineer to discuss the remedial actions to be taken</li> <li>Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and Engineer informed of the results</li> <li>If exceedance stops, cease additional monitoring</li> </ol>	<ol> <li>Discuss amongst Engineer, ET and Contractor on potential remedial actions</li> <li>Review Contractor's remedial actions whether necessary to assure their effectiveness and advice the Engineer accordingly</li> <li>Supervise implementation of remedial measures</li> </ol>	<ol> <li>Confirm receipt of notification of failure in writing</li> <li>Notify Contractor</li> <li>In consultation with the IEC, agree with the Contractor on the remedial measures to be implemented</li> <li>Discuss amongst Environmental Team Leader and the Contractor potential remedial actions</li> <li>Ensure remedial measures properly implemented</li> <li>If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated</li> </ol>	<ol> <li>Take immediate action to avoid further exceedance</li> <li>Submit proposals for remedial actions to IEC within 3 working days of notification</li> <li>Implement the agreed proposals</li> <li>Resubmit proposals</li> <li>Resubmit proposals</li> <li>Stop the relevant portion of works as determined by the Engineer until the exceedance is abated</li> </ol>



EVENT		ACTION		
EVENI	ET Leader	IEC	Engineer	Contractor
ACTION LEVEL	<ol> <li>Notify Contractor and Engineer</li> <li>Carry out investigation</li> <li>Report the results of investigation to the IEC and Contractor</li> <li>Discuss with the Contractor and formulate remedial measures</li> <li>Increase monitoring frequency to check mitigation effectiveness</li> </ol>	<ol> <li>Review the analysed results submitted by ET</li> <li>Review the proposed remedial measures by the Contractor and advice the Engineer accordingly</li> <li>Supervise implementation of remedial measures</li> </ol>	<ol> <li>Confirm receipt of notification of failure in writing</li> <li>Notify Contractor</li> <li>Require Contractor to propose remedial measures for the analysed noise problem</li> <li>Ensure remedial measures properly implemented</li> </ol>	<ol> <li>Submit noise mitigation proposals for remedial actions to IEC</li> <li>Implement the agreed proposals</li> </ol>
LIMIT LEVEL	<ol> <li>Notify IEC, Engineer, EPD and Contractor</li> <li>Identify source</li> <li>Repeat measurement to confirm findings</li> <li>Increase monitoring frequency</li> <li>Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented</li> <li>Inform IEC, Engineer and EPD the causes &amp; actions taken for the exceedances</li> <li>Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and Engineer informed of the results</li> <li>If exceedance stops, cease additional monitoring</li> </ol>	<ol> <li>Discuss amongst Engineer, ET and Contractor on potential remedial actions</li> <li>Review Contractor's remedial actions whether necessary to assure their effectiveness and advice the Engineer accordingly</li> <li>Supervise implementation of remedial measures</li> </ol>	<ol> <li>Confirm receipt of notification of failure in writing</li> <li>Notify Contractor</li> <li>Require Contractor to propose remedial measures for the analysed noise problem</li> <li>Ensure remedial measures properly implemented</li> <li>If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated</li> </ol>	<ol> <li>Take immediate action to avoid further exceedance</li> <li>Submit proposals for remedial actions to IEC within 3 working days of notification</li> <li>Implement the agreed proposals</li> <li>Resubmit proposals if problem still not under control</li> <li>Stop the relevant portion of works as determined by the Engineer until the exceedance is abated</li> </ol>

### **Event/Action Plan for Construction Noise**



Event	ET Leader	IEC	Engineer	Contractor
ACTION LEVEL (being exceeded by one sampling day)	<ol> <li>Repeat in-situ measurement to confirm findings</li> <li>Identify source(s) of impact</li> <li>Inform IEC and Contractor</li> <li>Check monitoring data, all plant, equipment and Contractor's working methods</li> <li>Discuss mitigation measures IEC and Contractor</li> <li>Repeat measurement on next day of exceedance</li> </ol>	<ol> <li>Discuss with ET and Contractor on the mitigation measures</li> <li>Review proposals on mitigation measures submitted by Contractor and advice Engineer accordingly</li> <li>Assess the effectiveness of the implemented mitigation measures</li> </ol>	<ol> <li>Discuss with IEC on the proposed mitigation measures</li> <li>Make agreement on the mitigation measures to be implemented</li> </ol>	<ol> <li>Inform Engineer and confirm notification of the non-compliance in writing</li> <li>Rectify unacceptable practice</li> <li>Check all plant and equipment</li> <li>Consider changes of working methods</li> <li>Discuss with ET and Contractor and propose mitigation measures to IEC and Engineer</li> <li>Implement the agreed mitigation measures</li> </ol>
ACTION LEVEL (being exceeded by more than one sampling day)	<ol> <li>Repeat in-situ measurement to confirm findings</li> <li>Identify source(s) of impact</li> <li>Inform IEC, Contractor and EPD</li> <li>Check monitoring data, all plant, equipment and Contractor's working methods</li> <li>Discuss mitigation measures IEC, Engineer and Contractor</li> <li>Repeat measurement on next day of exceedance</li> <li>Ensure mitigation measures are implemented</li> <li>Prepare to increase the monitoring frequency to daily</li> <li>Repeat measurement on next day of exceedance</li> </ol>	<ol> <li>Discuss with ET and Contractor on the mitigation measures</li> <li>Review proposals on mitigation measures submitted by Contractor and advice Engineer accordingly</li> <li>Assess the effectiveness of the implemented mitigation measures</li> </ol>	<ol> <li>Discuss with IEC on the proposed mitigation measures</li> <li>Make agreement on the mitigation measures to be implemented</li> <li>Assees the effectiveness of the implemented mitigation measures</li> </ol>	<ol> <li>Inform Engineer and confirm notification of the non-compliance in writing</li> <li>Rectify unacceptable practice</li> <li>Check all plant and equipment</li> <li>Consider changes of working methods</li> <li>Discuss with ET and IEC and propose mitigation measures to IEC and Engineer within 3 working days</li> <li>Implement the agreed mitigation measures</li> </ol>
LIMIT LEVEL (being exceeded by one sampling days)	<ol> <li>Repeat in-situ measurement to confirm findings</li> <li>Identify source(s) of impact</li> <li>Inform IEC, Contractor and EPD</li> <li>Check monitoring data, all plant, equipment and Contractor's working methods</li> <li>Discuss mitigation measures IEC, Engineer and Contractor</li> <li>Ensure mitigation measures are implemented</li> <li>Increase the monitoring frequency to daily until no exceedance of Limit level</li> </ol>	<ol> <li>Discuss with ET and Contractor on the mitigation measures</li> <li>Review proposals on mitigation measures submitted by Contractor and advice Engineer accordingly</li> <li>Assess the effectiveness of the implemented mitigation measures</li> </ol>	<ol> <li>Discuss with IEC, ET and Contractor on the proposed mitigation measures</li> <li>Request Contractor to critically review the working methods</li> <li>Make agreement on the mitigation measures to be implemented</li> <li>Assess the effectiveness of the implemented mitigation measures</li> </ol>	<ol> <li>Inform Engineer and confirm notification of the non-compliance in writing</li> <li>Rectify unacceptable practice</li> <li>Check all plant and equipment</li> <li>Consider changes of working methods</li> <li>Discuss with ET, IEC and Engineer and propose mitigation measures to IEC and Engineer within 3 working days</li> <li>Implement the agreed mitigation measures</li> </ol>
LIMIT LEVEL (being exceeded by more than one sampling days)	<ol> <li>Repeat in-situ measurement to confirm findings;</li> <li>Identify source(s) of impact;</li> <li>Inform Contractor, Engineer, IEC and EPD;</li> <li>Check monitoring data, all plant, equipment and Contractor's working methods;</li> <li>Discuss mitigation measures with IEC, Engineer and Contractor;</li> <li>Ensure mitigation measures are implemented;</li> <li>Increase the monitoring frequency to daily until no exceedance of Limit level</li> </ol>	<ol> <li>Discuss with ET and Contractor on the mitigation measures</li> <li>Review proposals on mitigation measures submitted by Contractor and advice Engineer accordingly</li> <li>Assess the effectiveness of the implemented mitigation measures</li> </ol>	<ol> <li>Discuss with IEC, ET and Contractor on the proposed mitigation measures</li> <li>Request Contractor to critically review the working methods</li> <li>Make agreement on the mitigation measures to be implemented</li> <li>Assess the effectiveness of the implemented mitigation measures</li> <li>Consider and instruct, if necessary, the Contractor to slow down or to stop all or part of the construction activities until daily until no exceedance of Limit level</li> </ol>	<ol> <li>Inform Engineer and confirm notification of the non-compliance in writing</li> <li>Rectify unacceptable practice</li> <li>Check all plant and equipment</li> <li>Consider changes of working methods</li> <li>Discuss with ET, IEC and Engineer and propose mitigation measures to IEC and Engineer within 3 working days Propose mitigation measures to Engineer within 3 working days</li> <li>Implement the agreed mitigation measures;</li> <li>As directed by Engineer, to slow down or to stop all or part of the construction activities</li> </ol>

### **Event and Action Plan for Stream Water Quality**

 $\label{eq:loosl2007} \end{tabular} \end{tabular} $$Z:Jobs/2007/TCS00371 (DC-2006-02)/600/Monthly Rpt/KT15/2008/Jan 08/R0483r1.doc Action-United Environmental Services and Consulting $$$$ 



Event	ET Leader	IEC	Engineer	Contractor
Fauna The total number of species or individuals of the surveyed wetland dependent faunal groups is reduced by 20-40% from baseline	<ul> <li>Notify IEC and Contractor;</li> <li>Check the position and state of the current works to identify the causes;</li> <li>Discuss mitigation measures with IEC and Contractor</li> </ul>	<ul> <li>Discuss with ET and Contractor on the mitigation measures</li> <li>Review proposals on mitigation measures submitted by Contractor and advice Engineer accordingly</li> <li>Assess the effectiveness of the implemented mitigation measures</li> </ul>	Discuss with IEC on the proposed mitigation measures;     Reach agreement on the mitigation measures to be implemented	<ul> <li>Inform Engineer and confirm notification of the non-compliance in writing</li> <li>Take immediate action to avoid further exceedances;</li> <li>Check all plant and equipment and working methods, especially noise emanating ones</li> <li>Discuss with ET and IEC and propose mitigation measures to IEC and Engineer</li> <li>Implement the agreed mitigation measures</li> </ul>



Appendix F

### **Equipment Calibration Certificates**



Equipment Calibration List for Construction of Yuen Long, Kam Tin, Ngau Tam Mei and Tin Shui Wai Drainage Improvements, Stage 1, Phase 2B – Cheung Chun San Tsuen and Kam Tsin Wai Project

Item	Aspect	Description of Equipment	Date of Calibration	Date of Next Calibration
1*	Air	Greasby Anderson GMWS2310 High Volume Sampler	07 Jan 08	07 Mar 08
2		EQ094 - Sibata LD-3 Laser Dust Meter	22 Jun 07	21 Jun 08
3		EQ096 - Sibata LD-3 Laser Dust Meter	22 Jun 07	21 Jun 08
4	Noise	Bruel & Kjaer 4231 Acoustical Calibrator	17 Apr 07	17 Apr 08
5		Bruel & Kjaer 2238 Integrating Sound Level Meter	17 Apr 07	17 Apr 08
6*	Water	YSI 550A or YSI 85/10FT DO Meter	12 Jan 08	12 Apr 08
7*		Hanna HI 98128	15 Jan 08	15 Apr 08
8*		Hach 2100p	11 Jan 08	11 Apr 08
9*		ATAGO Refractometer	11 Jan 08	11 Apr 08

Note: \*Calibration certificates will only be provided if monitoring equipment is re-calibrated or new.

### TSP SAMPLER CALIBRATION CALCULATION SPREADSHEET

Location: Tin Sam San Tsuen Location ID:   A10							Calibration: 7-Jan-08 ration Date: 7-Mar-08
							Technician: Mr. Ben Tam
					CONDIT	IONS	
	:	Sea Level			1018.4		Corrected Pressure (mm Hg) 763.8
		Tem	perature	(°C)	20.2		Temperature (K) 293
				C	ALIBRATIO	N ORIFICE	
				Mala	TIOOLI		
				Make-> Model->			Qstd Slope -> 1.94872 Qstd Intercept -> 0.00202
				Serial # ->			
					CALIBR	ATION	
Plate	H20 (L)	H2O (R)	H20	Qstd	I	IC	LINEAR
No.	(in)	(in)	(in)	(m3/min)	(chart)	corrected	REGRESSION
18	4.4	4.4	8.8	1.537	43	43.81	Slope = 34.3383
13 3.2 3.2 6.4 1.311			36	36.68	Intercept = $-9.0446$		
10 7	2.4 1.5	2.4 1.5	4.8 3	1.135 0.897	28 22	28.53 22.42	Corr. coeff. = 0.9968
5	1.5	1.5	2.2	0.768	17	17.32	
<b>Calculations :</b> Qstd = 1/m[Sqrt(H20(Pa/Pstd)(Tstd/Ta))-b]				L1			FLOW RATE CHART
QSIG = 1/m IC = I[Sqrt(			1 Std/ 1 a))-	·o]	50.00		
Qstd = star					40.00		y = 34.338x - 9.0446
IC = correc							
I = actual chart response					se (I		
m = calibrator Qstd slope b = calibrator Qstd intercept					<b>ö</b> 30.00		
Ta = actual temperature during calibration ( deg K )				n (dea K)	res		
Pstd = actual pressure during calibration ( mm Hg )					00.05 Vectual chart response (IC)		<b>•</b>
For subsequent calculation of sampler flow:				* flow			•
1/m(( I )[Sqrt(298/Tav)(Pav/760)]-b)				r now:	Act		
					10.00	-	
m = sampler slope							
b = sampler intercept					0.00	-	
I = chart rea Tav = daily		omnorativ				.000	0.500 1.000 1.500 2.000
Tav = daily Pav = daily	•	•	e				Standard Flow Rate (m3/min)
. uv – ually	average	probbuie					

### **Equipment Calibrated:**

Туре:	Laser Dust monitor
Manufacturer:	Sibata
Serial No.	362337
Equipment Ref:	EQ094
Sensitivity	722 CPM

### Standard Equipment:

Standard Equipment:	Higher Volume Sampler
Location & Location ID:	Au Tau abutment next to Yoho Town Phase 2
Equipment Ref:	AM 7
Last Calibration Date:	20 May 2007

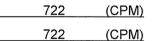
### **Equipment Calibration Results:**

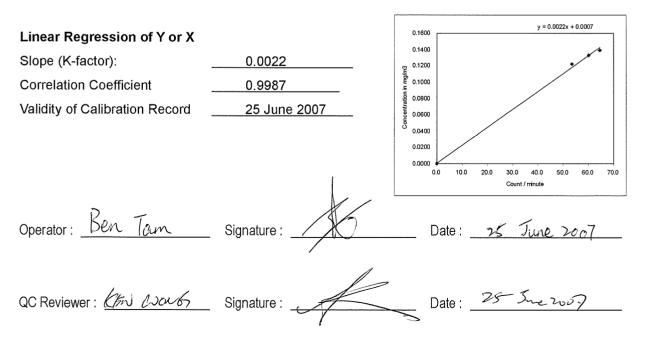
Calibration Date:

22 June 2007

Hour	Time	Temp °C	RH %	Concentration in mg/m <sup>3</sup> (Standard Equipment)	Total Count (Calibrated Equipment)	Count/Minute (Total Count/60min)
1	13:12 ~ 14:12	32.3	74	0.133	3613	60.2
1	14:15 ~ 15:15	31.7	77	0.139	3872	64.5
1	15:20 ~ 16:20	31.3	79	0.122	3204	53.4

Sensitivity Adjustment Scale Setting (Before Calibration) Sensitivity Adjustment Scale Setting (After Calibration)







### **Equipment Calibrated:**

Туре:	Laser Dust monitor
Manufacturer:	Sibata
Serial No.	362359
Equipment Ref:	EQ096
Sensitivity	769 CPM

### Standard Equipment:

Standard Equipment:	Higher Volume Sampler
Location & Location ID:	Au Tau abutment next to Yoho Town Phase 2
Equipment Ref:	AM 7
Last Calibration Date:	20 May 2007

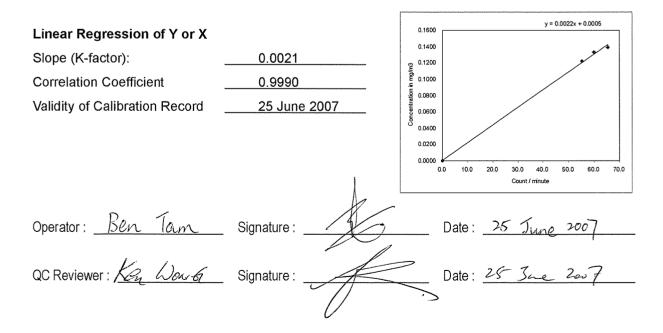
### **Equipment Calibration Results:**

Calibration Date:

22 June 2007

Hour	Time	Temp °C	RH %	Concentration in mg/m <sup>3</sup> (Standard Equipment)	Total Count (Calibrated Equipment)	Count/Minute (Total Count/60min)
1	13:12 ~ 14:12	32.3	74	0.133	3603	60.1
1	14:15 ~ 15:15	31.7	77	0.139	3930	65.5
1	15:20 ~ 16:20	31.3	79	0.122	3311	55.2

Sensitivity Adjustment Scale Setting (Before Calibration) Sensitivity Adjustment Scale Setting (After Calibration) 709 (CPM) 709 (CPM)





Certificate No. : C071764

### Certificate of Calibration

This is to certify that the equipment

Description : Acoustical Calibrator (EQ017) Manufacturer : Bruel & Kjaer Model No. : 4231 Serial No. : 2292168

### has been calibrated for the specific items and ranges. The results are shown in the Calibration Report No. C071764.

### The equipment is supplied by

Co. Name : Action-United Environmental Services and Consulting

Address : Unit A, 20/F., Gold King Industrial Building, 35-41 Tai Lin Pai Road, Kwai Chung, N.T.

Date of Issue : 17 April 2007

Certified by : K Q Lee

The test equipment used for testing are traceable to the National Standards as specified in this report. This report shall not be reproduced except in full and with prior written approval from this laboratory.

Calibration and Testing Laboratory of Sun Creation Engineering Limited

c/o 4/F, Tsing Shan Wan Exchange Building, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong Tel: 2927 2606 Fax: 2744 8986 E-mail: callab@suncreation.com Website: www.suncreation.com



Certificate No. : C071765

Certificate of Calibration

This is to certify that the equipment

Description : Integrating Sound Level Meter (EQ010) Manufacturer : Bruel & Kjaer Model No. : 2238 Serial No. : 2285721

### has been calibrated for the specific items and ranges. The results are shown in the Calibration Report No. C071765.

### The equipment is supplied by

Co. Name : Action-United Environmental Services and Consulting

Address : Unit A, 20/F., Gold King Industrial Building, 35-41 Tai Lin Pai Road, Kwai Chung, N.T.

Date of Issue : 17 April 2007

Certified by : K C Lee

The test equipment used for testing are traceable to the National Standards as specified in this report. This report shall not be reproduced except in full and with prior written approval from this laboratory.

Calibration and Testing Laboratory of Sun Creation Engineering Limited

c/o 4/F. Tsing Shan Wan Exchange Building, I Hing On Lane, Tuen Mun. New Territories, Hong Kong Tel: 2927 2606 Fax: 2744 8986 E-mail: callab@suncreation.com Website: www.suncreation.com



# **CERTIFICATE OF ANALYSIS**

Batch: Date of Issue: Client: Client Reference:

HK0800538 14/01/2008 ACTION UNITED ENVIRO SERVICES

### Calibration of DO System

Item :	YSI Multimeter
Model No. :	YSI 550A
Serial No. :	05F2063AZ
Equipment No. :	
Calibration Method :	This meter was calibrated in accordance with standard method APHA (18th Ed.) 4500-0C & G
Date of Calibration :	12 January, 2008

Testing Results :

Recording Reading	0.00 mg/L 3.25 mg/L 5.38 mg/L 8.64 mg/L	±0.2 mg/L
Expected Reading	0.00 mg/L 3.22 mg/L 5.45 mg/L 8.83 mg/L	Allowing Deviation

Ms Wong Wai/Man, Alice Laboratory Manager - Hong Kong



 Batch:
 HK0800542

 Date of Issue:
 15/01/2008

 Client:
 ACTION UNITED ENVIRO SERVICES

 Client Reference:
 ACTION UNITED ENVIRO SERVICES

### Calibration of pH System

Item :	HANNA pH Meter	
Model No. :	HI98128	
Serial No. :	S229924	
Equipment No. :	EQ110	
Calibration Method :	This meter was calibrated in accordance with standard method APHA (19th Ed.) 4500-H	I.) 4500-H
Date of Calibration :	15 January, 2008	

Testing Results :

Recording Reading	4.1	10.2	± 0.2
Expected Reading	4.00	10.0	Allowing Deviation

ALS Technichem (HK) Pty Ltd





ALS



HK0800539 14/01/2008 ACTION UNITED ENVIRO SERVICES

### **Calibration of Tubidimeter**

ltem :	HACH Turbidimeter
Model No. :	HACH 2100P
Serial No. :	95090008735
Equipment No. :	EQ091
Calibration Method :	This meter was calibrated in accordance with standard method APHA (19th Ed.) 2130B
Date of Calibration :	11 January, 2008

Recording Reading	0.1 NTU 3.8 NTU	17.1 NTU	38.8 NTU	83.8 NTU	±10%
Expected Reading	0.0 NTU 4.0 NTU	16.0 NTU	40.0 NTU	80.0 NTU	Allowing Deviation

Testing Results :

Ms Wong Wai Man, Alice Laboratory Manager - Hong Kong

ALS Environmental

ALS Technichem (HK) Pty Ltd



ALS)



HK0800541 14/01/2008 ACTION UNITED ENVIRO SERVICES

## **Calibration of Salinity System**

Item :	HAND REFRACTOMETER
Model No. :	ATAGO
Serial No. :	289468
Equipment No. :	EQ114
Calibration Method :	This meter was calibrated in accordance with standard method APHA (19th Ed.) 2520 A and B
Date of Calibration :	11 January, 2008
Tootion Doortto	

Testing Results :

Recording Reading	10 g/L 20 g/L 30 g/L	±10%
Expected Reading	10 g/L 20 g/L 30 g/L	Allowing Deviation

Ms Wong Wai Man, Alice Laboratory Manager - Hong Kong

**ALS Environmental** 

ALS Technichem (HK) Pty Ltd



Appendix G

# **Impact Monitoring Schedules**



Date		Air	Quality	Noise Leq 30min	Stream Water	Ecology Surveys
Date		1-Hour TSP	24-Hour TSP	Noise Leq Johnn	Quality	Leology Surveys
26-Dec-07	Wed					
27-Dec-07	Thu					
28-Dec-07	Fri					
29-Dec-07	Sat					
30-Dec-07	Sun					
31-Dec-07	Mon					
1-Jan-08	Tue					
2-Jan-08	Wed					
3-Jan-08	Thu					
4-Jan-08	Fri					
5-Jan-08	Sat					
6-Jan-08	Sun					
7-Jan-08	Mon					
8-Jan-08	Tue					
9-Jan-08	Wed					
10-Jan-08	Thu					
11-Jan-08	Fri					
12-Jan-08	Sat					
13-Jan-08	Sun					
14-Jan-08	Mon					
15-Jan-08	Tue					
16-Jan-08	Wed					
17-Jan-08	Thu					
18-Jan-08	Fri					
19-Jan-08	Sat					
20-Jan-08	Sun					
21-Jan-08	Mon					
22-Jan-08	Tue					
23-Jan-08	Wed					
24-Jan-08	Thu					
25-Jan-08	Fri					

# Impact Monitoring Schedules in this Reporting Period

Monitoring Day Sunday or Public Holiday



Date		Air	Quality	Noise Leq 30min	Stream Water	Ecology Surveys
Date	:	1-Hour TSP	24-Hour TSP	Noise Leq Solim	Quality	Ecology Surveys
26-Jan-08	Sat					
27-Jan-08	Sun					
28-Jan-08	Mon					
29-Jan-08	Tue					
30-Jan-08	Wed					
31-Jan-08	Thu					
1-Feb-08	Fri					
2-Feb-08	Sat					
3-Feb-08	Sun					
4-Feb-08	Mon					
5-Feb-08	Tue					
6-Feb-08	Wed					
7-Feb-08	Thu					
8-Feb-08	Fri					
9-Feb-08	Sat					
10-Feb-08	Sun					
11-Feb-08	Mon					
12-Feb-08	Tue					
13-Feb-08	Wed					
14-Feb-08	Thu					
15-Feb-08	Fri					
16-Feb-08	Sat					
17-Feb-08	Sun					
18-Feb-08	Mon					
19-Feb-08	Tue					
20-Feb-08	Wed					
21-Feb-08	Thu					
22-Feb-08	Fri					
23-Feb-08	Sat					
24-Feb-08	Sun					
25-Feb-08	Mon					

#### Impact Monitoring Schedules in the Next Reporting Period

Monitoring Day Sunday or Public Holiday



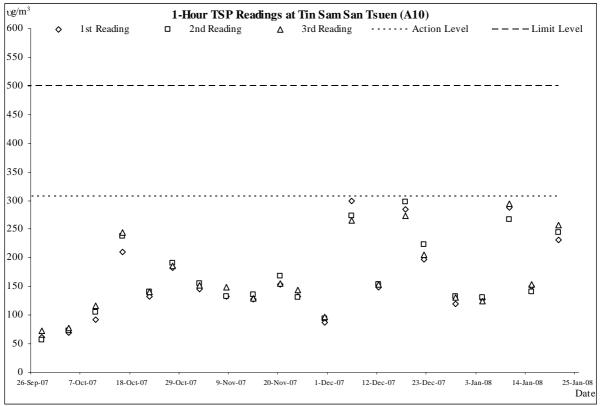
# Appendix H

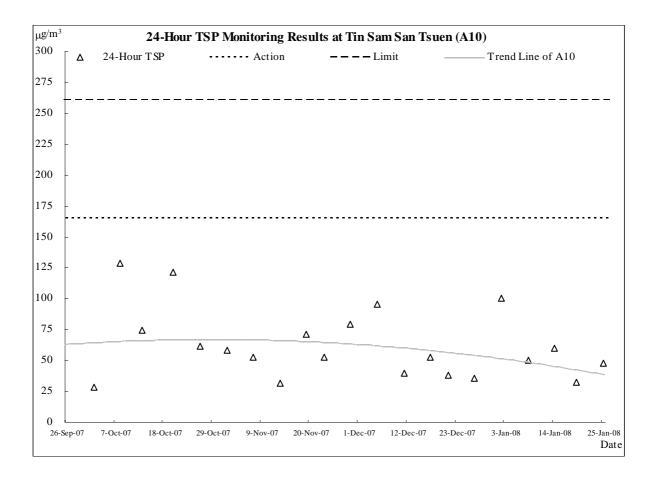
Graphical Plots of Air Quality, Construction Noise and Stream Water Quality Monitoring Results

#### DSD Contract No. DC/2006/02 Yuen Long, Kam Tin, Ngau Tam Mei and Tin Shui Wai Drainage Improvements, Stage 1, Phase 2B – Cheung Chun San Tsuen and Kam Tsin Wai KT15 – Monthly EM&A Report for January 2008 (No. 7)



#### **Air Quality**

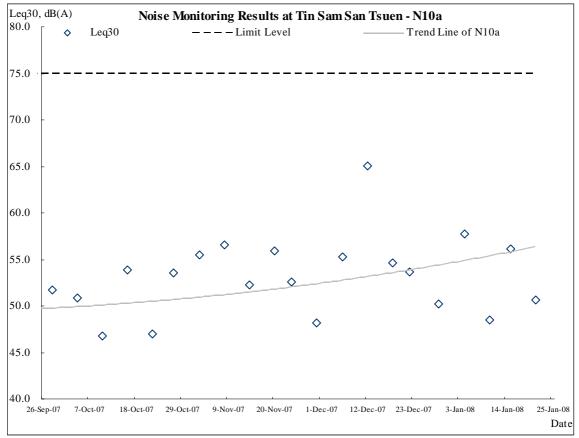




#### DSD Contract No. DC/2006/02 Yuen Long, Kam Tin, Ngau Tam Mei and Tin Shui Wai Drainage Improvements, Stage 1, Phase 2B – Cheung Chun San Tsuen and Kam Tsin Wai KT15 – Monthly EM&A Report for January 2008 (No. 7)



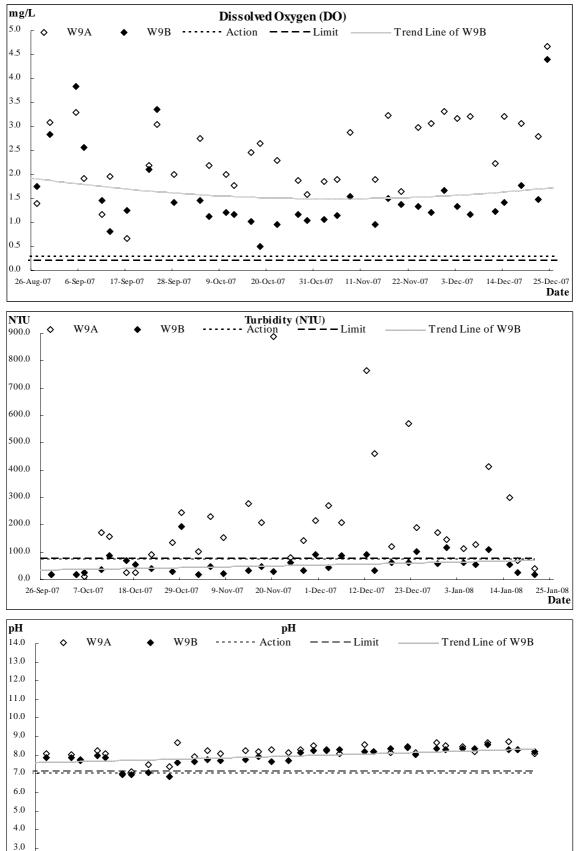
#### **Construction Noise**



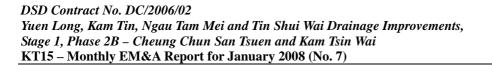


25-Jan-08 Date

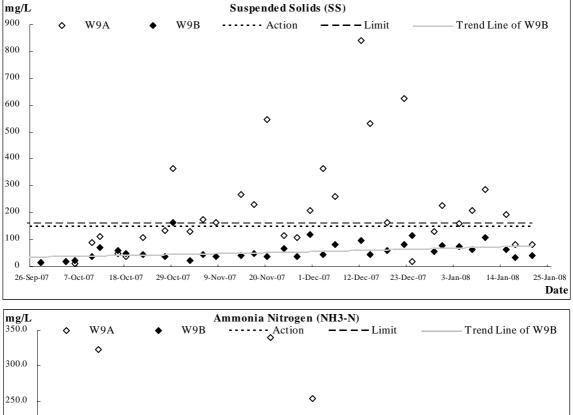
#### **Stream Water Quality**

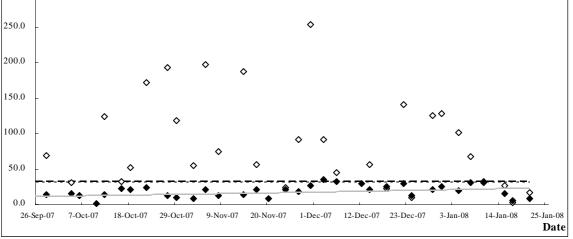


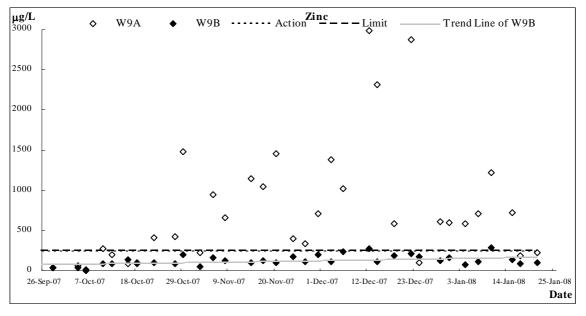
2.0











Z:\Jobs\2007\TCS00371 (DC-2006-02)\600\Monthly Rpt\KT15\2008\Jan 08\R0483r1.doc Action-United Environmental Services and Consulting

Date	29	)-Dec-07															
Location	Time	Depth (m)	Tem	o (oC)	DO	(mg/L)	DO	S (%)	Turbidi	ty (NTU)	S	Salinity	]	рH	SS	NH3-N	Zinc
W9A	11:20	0.11	19.1	19.1	3.68	3.67	40.1	39.9	175.0	172.5	0	0.0	8.65	8.66	130.0	125.0	612.0
W )/I	11.20	0.11	19.0	17.1	3.66	5.07	39.7	57.7	170.0	172.5	0	0.0	8.66	0.00	150.0	125.0	012.0
W9B	11:14	0.32	21.2	21.2	2.03	2.02	23.2	23.0	56.9	57.1	0	0.0	8.38	8.38	57.0	20.7	119.0
W)D	11.14	0.52	21.2	21.2	2	2:02	22.7	23.0	57.3	57.1	0	0.0	8.38	0.50	57.0	20.7	117.0
Date	31	l-Dec-07															
Location	Time	Depth (m)	Tem	o (oC)	DO	(mg/L)	DO	S (%)	Turbidi	ty (NTU)	S	Salinity		pH	SS	NH3-N	Zinc
	10.01	- · ·	15.6		4.49		45.8		149.0		0		8.51	0.71		100.0	
W9A	10:24	0.15	15.6	15.6	4.47	4.48	45.5	45.7	144.0	146.5	0	0.0	8.50	8.51	228.0	129.0	593.0
HIOD	10.25	0.01	18.0	10.1	2.04	2.04	21.7		119.0	110.0	0	0.0	8.32	0.00		25.4	1.55.0
W9B	10:35	0.31	18.1	18.1	2.03	2.04	21.6	21.7	117.0	118.0	0	0.0	8.32	8.32	77.0	25.4	157.0
		<b>T</b> 00															
Date		-Jan-08	T		DO		DO	G (0()			6				gg		7.
Location	Time	Depth (m)		o (oC)	-	(mg/L)		S (%)		ty (NTU)	-	Salinity	1	pH	SS	NH3-N	Zinc
W9A	13:00	0.19	16.7 16.7	16.7	4.28 4.26	4.27	44.7 44.2	44.5	112.0 113.0	112.5	0	0.0	8.46 8.46	8.46	159.0	101.0	590.0
HIOD	10.05	0.07	20.7	20 7	1.76	1.77	20.2	10.0	61.9	(2.4	0	0.0	8.34		72.0	10.1	= 1 0
W9B	13:25	0.27	20.7	20.7	1.73	1.75	19.6	19.9	64.8	63.4	0	0.0	8.34	8.34	73.0	19.1	74.0
Date		-Jan-08						~					1		~~		
Location	Time	Depth (m)	-	o (oC)	-	(mg/L)		S (%)		ty (NTU)	- 1	Salinity		рH	SS	NH3-N	Zinc
W9A	11:26	0.09	17.7	17.7	3.96	3.95	41.8	41.6	131.0	129.0	0	0.0	8.21	8.22	207.0	68.1	711.0
			17.7		3.93		41.3		127.0		0		8.22				
W9B	11:38	0.22	20.6	20.6	1.68	1.68	18.8	18.8	52.9	53.7	0	0.0	8.38	8.38	62.0	30.7	117.0
			20.6		1.67		18.7		54.4		0		8.38				
Date	10	)-Jan-08															
Location	Time	Depth (m)	Tem	o (oC)	DO	(mg/L)	DO	S (%)	Turbidi	ty (NTU)	S	alinity	]	рH	SS	NH3-N	Zinc
W9A	10:58	0.12	20.9	20.9	2.38	2.37	26.9	26.7	419.0	412.5	0	0.0	8.67	8.67	286.0	32.5	1220.
W 9A	10:38	0.12	20.9	20.9	2.35	2.37	26.4	20.7	406.0	412.3	0	0.0	8.66	0.07	200.0	32.3	1220.
W9B	11:12	0.23	22.7	22.7	1.46	1.46	17.2	17.0	110.0	108.5	0	0.0	8.57	8.57	109.0	30.5	281.0
WYD	11:12	0.23	22.7	22.1	1.45	1.40	16.8	1/.0	107.0	106.1	0	0.0	8.57	0)/	109.0	30.3	

#### DSD Contract No. DC/2006/02 Yuen Long, Kam Tin, Ngau Tam Mei and Tin Shui Wai Drainage Improvements, Stage 1, Phase 2B – Cheung Chun San Tsuen and Kam Tsin Wai KT15 – Monthly EM&A Report for January 2008 (No. 7)



Date	1:	5-Jan-08															
Location	Time	Depth (m)	Tem	p (oC)	DO	(mg/L)	DO	S (%)	Turbidi	ity (NTU)	S	alinity	]	pН	SS	NH3-N	Zinc
W9A	11:12	0.20	16.4 16.4	16.4	4.03 4.02	4.03	41.7 41.6	41.7	298.0 299.0	298.5	0	0.0	8.72 8.72	8.72	194.0	26.3	717.0
W9B	11:26	0.24	17.8	17.8	1.65	1.64	18.0	17.6	54.1	55.0	0	0.0	8.30	8.30	62.0	15.9	138.0
			17.8		1.62		17.2	_	55.9		0		8.30				
Date	1'	7-Jan-08															
Location	Time	Depth (m)	Tem	p (oC)	DO	(mg/L)	DO	S (%)	Turbidi	ity (NTU)	S	alinity		pН	SS	NH3-N	Zinc
W9A	11:20	0.09	14.5	14.5	3.92	3.91	39.1	38.8	71.0	71.3	0	0.0	8.29	8.29	83.0	2.4	187.0
W 311	11.20	0.07	14.5	14.5	3.89	5.71	38.4	50.0	71.5	/1.5	0	0.0	8.29	0.27	05.0	2.7	107.0
W9B	11:29	0.34	16.1	16.1	3.36	3.34	34.5	34.2	24.1	25.5	0	0.0	8.30	8.31	33.0	6.2	85.0
II JB	11.27	0.54	16.0	10.1	3.32	5.54	33.8	54.2	26.9	23.5	0	0.0	8.31	0.51	55.0	0.2	05.0
Date		1 Tom 00															
Location	Time	1-Jan-08 Depth (m)	Tom	p (oC)	DO	(mg/L)	DO	S (%)	Turbidi	ty (NTU)	S	alinity		рH	SS	NH3-N	Zinc
Location	Time	Deptii (iii)		p (oc)	1	(IIIg/L)		3(70)		(NIU)		amity		hII	66	1113-11	ZIIIC
W9A	14:22	0.08	19.7 19.7	19.7	3.56 3.54	3.55	39.1 38.8	39.0	39.1 38.8	39.0	0	0.0	8.10 8.11	8.11	80.0	16.6	225.0
WOD	15.14	0.24	22.5	22.5	1.54	1.52	1.5	1.5	17.9	17.0	0	0.0	8.22	0.00	40.0	0.1	05.0
W9B	15:14	0.24	22.5	22.5	1.52	1.53	1.5	1.5	17.6	17.8	0	0.0	8.21	8.22	40.0	9.1	95.0

#### DSD Contract No. DC/2006/02 Yuen Long, Kam Tin, Ngau Tam Mei and Tin Shui Wai Drainage Improvements, Stage 1, Phase 2B – Cheung Chun San Tsuen and Kam Tsin Wai KT15 – Monthly EM&A Report for January 2008 (No. 7)





Matrix Type: WATER						Duplicate (DUP)	Results	
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Ag	gregate Properties (QC Lot: 565	656)						
HK0719106-001	Anonymous	EA025: Suspended Solids (SS)		2	mg/L	<2	<2	0.0
HK0719123-002	Anonymous	EA025: Suspended Solids (SS)		3	mg/L	48	50	3.2
ED/EK: Inorganic Nonme	etallic Parameters (QC Lot: 5663	94)		•				
HK0719145-006	W9B - 1 & 2 MIX	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	20.7	20.4	1.8
HK0719042-009	Anonymous	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.90	0.88	2.2
ED/EK: Inorganic Nonme	etallic Parameters (QC Lot: 5663	95)		•	•	•		
HK0719042-026	Anonymous	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.55	0.56	1.8
HK0719146-006	Anonymous	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	25.4	27.3	7.2
EG: Metals and Major Ca	ations (QC Lot: 565660)							
HK0719145-002	W1B - 1 & 2 MIX	EG020: Zinc	7440-66-6	10	µg/L	45	46	0.0

## Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

Matrix Type: WATER			Method Blank (MB	3) Results		Single Co	ntrol Spike (SCS) and	Duplicate Con	trol Spike (DC	S) Results	
					Spike	Spike Re	covery (%)	Recovery	Limits (%)	RP	Ds (%)
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	SCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Proper	rties (QCLot: 565656)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	98.0		85	115		
ED/EK: Inorganic Nonmetallic Paramet	ers (QCLot: 566394)										
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	5.0 mg/L	98.8		85	115		
ED/EK: Inorganic Nonmetallic Paramet	ers (QCLot: 566395)										
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	5.0 mg/L	98.6		85	115		
EG: Metals and Major Cations (QCLot:	565660)		·								
EG020: Zinc	7440-66-6	10	µg/L	<10	100 µg/L	93.6		85	115		

Matrix Type: WATER					Matrix	Spike (MS) and Matrix S	Spike Duplic	ate (MSD) Res	sults	
				Spike	Spike Red	covery (%)	Recovery	Limits (%)	RPDs	(%)
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	Concentration	MS	MSD	Low	High	Value	Control Limit
ED/EK: Inorganic Nonm	etallic Parameters (QCLot:	566394)								
HK0719042-001	Anonymous	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	92.0		75	125		
ED/EK: Inorganic Nonm	etallic Parameters (QCLot:	566395)								
HK0719042-019	Anonymous	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	112		75	125		
EG: Metals and Major C	ations (QCLot: 565660)					- -				
HK0719145-001	W1A - 1 & 2 MIX	EG020: Zinc	7440-66-6	100 µg/L	89.2		75	125		



Matrix Type: WATER						Duplicate (DUP)	Results	
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Ag	gregate Properties (QC Lot: 5665	32)						
HK0719031-001	Anonymous	EA025: Suspended Solids (SS)		2	mg/L	27	25	8.4
HK0719146-004	FISH POND PUMP - 1 & 2	EA025: Suspended Solids (SS)		2	mg/L	242	240	0.7
	MIX							
ED/EK: Inorganic Nonm	etallic Parameters (QC Lot: 56639	5)						
HK0719042-026	Anonymous	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	0.55	0.56	1.8
HK0719146-006	W9B - 1 & 2 MIX	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	25.4	27.3	7.2
EG: Metals and Major Ca	ations (QC Lot: 566346)							
HK0719034-001	Anonymous	EG020: Zinc	7440-66-6	10	µg/L	30	29	0.0

## Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

Matrix Type: WATER			Method Blank (MB	) Results		Single Cor	ntrol Spike (SCS) and Du	uplicate Con	trol Spike (D	CS) Results	
					Spike	Spike Rec	overy (%)	Recovery	Limits (%)	RPI	Ds (%)
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	scs	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Propert	ies (QCLot: 566532)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	98.5		85	115		
ED/EK: Inorganic Nonmetallic Paramete	rs (QCLot: 566395)										
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	5.0 mg/L	98.6		85	115		
EG: Metals and Major Cations (QCLot:	566346)										
EG020: Zinc	7440-66-6	10	µg/L	<10	100 µg/L	86.7		85	115		

Matrix Type: WATER					Matrix S	Spike (MS) and Matrix S	pike Duplica	nte (MSD) Re	sults	
				Spike	Spike Rec	overy (%)	Recovery	Limits (%)	RPDs (%	6)
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	Concentration	MS	MSD	Low	High	Value	Control Limit
ED/EK: Inorganic Nonme	tallic Parameters (QCLot: 5	66395)								
HK0719042-019	Anonymous	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	112		75	125		
EG: Metals and Major Cat	ions (QCLot: 566346)									
HK0719034-001	Anonymous	EG020: Zinc	7440-66-6	1000 µg/L	88.2		75	125		



Matrix Type: WATER						Duplicate (DUP)	Results	
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and A	ggregate Properties (QC Lot:	567663)						
HK0800237-001	Anonymous	EA025: Suspended Solids (SS)		2	mg/L	70	67	4.4
HK0800255-002	Anonymous	EA025: Suspended Solids (SS)		0.5	mg/L	18.3	17.7	3.3
ED/EK: Inorganic Nonr	metallic Parameters (QC Lot:	568233)						
HK0800263-005	W9A - 1 & 2 MIX	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	101	100	0.2
HK0800247-003	Anonymous	EK055A: Ammonia as N	7664-41-7	0.1	mg/L	<0.1	<0.1	0.0
EG: Metals and Major (	Cations (QC Lot: 567994)							
HK0800263-002	W1B - 1 & 2 MIX	EG020: Zinc	7440-66-6	10	µg/L	60	57	4.8

### Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

Matrix Type: WATER			Method Blank (MB	) Results		Single Co	ntrol Spike (SCS) and Du	uplicate Cont	rol Spike (D	CS) Results	
					Spike	Spike Red	covery (%)	Recovery	Limits (%)	RPL	Ds (%)
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	SCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properti	es (QCLot: 567663)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	96.0		85	115		
ED/EK: Inorganic Nonmetallic Parameter	s (QCLot: 568233)			•							
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	5.0 mg/L	98.0		85	115		
EG: Metals and Major Cations (QCLot: 5	67994)			•							
EG020: Zinc	7440-66-6	10	µg/L	<10	100 µg/L	89.7		85	115		

Matrix Type: WATER					Matrix S	Spike (MS) and Matrix S	Spike Duplica	ate (MSD) Re	sults	
				Spike	Spike Rec	overy (%)	Recovery	Limits (%)	RPDs (%	6)
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	Concentration	MS	MSD	Low	High	Value	Control Limit
ED/EK: Inorganic Nonmet	allic Parameters (QCLot: 5	i68233)								
HK0800247-003	Anonymous	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	100		75	125		
EG: Metals and Major Cat	ions (QCLot: 567994)									
HK0800263-001	W1A - 1 & 2 MIX	EG020: Zinc	7440-66-6	100 µg/L	84.3		75	125		



Matrix Type: WATER						Duplicate (DUP)	Results	
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and A	ggregate Properties (QC Lot	t: 568988)						
HK0800277-001	Anonymous	EA025: Suspended Solids (SS)		3	mg/L	154	154	0.0
HK0800290-003	Anonymous	EA025: Suspended Solids (SS)		3	mg/L	5	4	0.0
EA/ED: Physical and A	ggregate Properties (QC Lo	t: 568989)						
HK0800317-005	W9A - 1 & MIX	EA025: Suspended Solids (SS)		2	mg/L	207	208	0.0
HK0800323-002	Anonymous	EA025: Suspended Solids (SS)		3	mg/L	70	65	6.8
ED/EK: Inorganic Non	metallic Parameters (QC Lot:	: 570743)					·	
HK0800321-002	Anonymous	EK055A: Ammonia as N	7664-41-7	0.1	mg/L	1.4	1.2	15.4
HK0800317-006	W9B - 1 & MIX	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	30.7	30.4	1.0
EG: Metals and Major	Cations (QC Lot: 568638)							
HK0800317-002	W1B - 1 & MIX	EG020: Zinc	7440-66-6	10	µg/L	118	118	0.0

## Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

Matrix Type: WATER			Method Blank (M	B) Results		Single Co	ntrol Spike (SCS) and D	uplicate Con	trol Spike (DC	S) Results	
					Spike	Spike Re	covery (%)	Recovery	Limits (%)	RPL	Ds (%)
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	SCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Properti	es (QCLot: 568988)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	98.5		85	115		
EA/ED: Physical and Aggregate Properti	es (QCLot: 568989)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	95.5		85	115		
ED/EK: Inorganic Nonmetallic Parameter	s (QCLot: 570743)										
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	5.0 mg/L	97.9		85	115		
EG: Metals and Major Cations (QCLot: 5	68638)										
EG020: Zinc	7440-66-6	10	µg/L	<10	100 µg/L	88.6		85	115		

Matrix Type: WATER					Matrix S	Spike (MS) and Matrix S	pike Duplic	ate (MSD) Re	sults	
				Spike	Spike Rec	overy (%)	Recovery	Limits (%)	RPDs (	%)
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	Concentration	MS	MSD	Low	High	Value	Control Limit
ED/EK: Inorganic Nonme	etallic Parameters (QCLot:	570743)								
HK0800317-001	W1A - 1 & MIX	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	Not Determined		75	125		
EG: Metals and Major Ca	tions (QCLot: 568638)									
HK0800317-001	W1A - 1 & MIX	EG020: Zinc	7440-66-6	100 µg/L	90.8		75	125		



Matrix Type: WATER						Duplicate (DUP)	Results	
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and A	Aggregate Properties (QC Lot	: 570872)						
HK0800504-001	Anonymous	EA025: Suspended Solids (SS)		3	mg/L	180	177	1.4
HK0800547-001	Anonymous	EA025: Suspended Solids (SS)		2	mg/L	117	117	0.0
EA/ED: Physical and A	Aggregate Properties (QC Lot	: 570873)			·	·	·	
HK0800638-014	Anonymous	EA025: Suspended Solids (SS)		1	mg/L	138	126	9.2
HK0800638-012	Anonymous	EA025: Suspended Solids (SS)		1	mg/L	7630	7710	1.0
ED/EK: Inorganic Nonr	metallic Parameters (QC Lot:	578609)						
HK0718874-008	Anonymous	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	2.24	2.28	1.8
HK0800824-004	Anonymous	EK055A: Ammonia as N	7664-41-7	0.1	mg/L	5.4	5.0	6.6
ED/EK: Inorganic Nonr	metallic Parameters (QC Lot:	578610)						
HK0800622-001	Anonymous	EK055A: Ammonia as N	7664-41-7	0.1	mg/L	13.9	12.9	7.7
HK0800617-001	Anonymous	EK055A: Ammonia as N	7664-41-7	0.1	mg/L	11.6	11.7	0.0
EG: Metals and Major (	Cations (QC Lot: 570971)			•				
HK0800535-002	Anonymous	EG020: Zinc	7440-66-6	10	µg/L	890	874	1.9

### Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

				_						
		Method Blank (M	B) Results		Single Co	ntrol Spike (SCS) and D	uplicate Con	trol Spike (DC	S) Results	
				Spike	Spike Rec	covery (%)	Recovery	Limits (%)	RPL	Ds (%)
CAS number	LOR	Units	Result	Concentration	SCS	DCS	Low	High	Value	Control Limit
es (QCLot: 570872)										
	2	mg/L	<2	20 mg/L	96.0		85	115		
es (QCLot: 570873)										
	2	mg/L	<2	20 mg/L	102		85	115		
rs (QCLot: 578609)										
7664-41-7	0.01	mg/L	<0.01	5.0 mg/L	109		85	115		
s (QCLot: 578610)										
7664-41-7	0.01	mg/L	<0.01	5.0 mg/L	108		85	115		
70971)										
7440-66-6	10	µg/L	<10	100 µg/L	92.8		85	115		
	es (QCLot: 570872)  es (QCLot: 570873)  s (QCLot: 578609) 7664-41-7 s (QCLot: 578610) 7664-41-7 70971)	es (QCLot: 570872)         2            2           es (QCLot: 570873)             2           s (QCLot: 578609)         7664-41-7           7664-41-7         0.01           s (QCLot: 578610)         7664-41-7           7664-41-7         0.01	CAS number         LOR         Units           es (QCLot: 570872)          2         mg/L           es (QCLot: 570873)          2         mg/L           es (QCLot: 578609)          2         mg/L           s (QCLot: 578609)          7664-41-7         0.01         mg/L           s (QCLot: 578610)          7664-41-7         0.01         mg/L           70971)           0.01         mg/L	es (QCLot: 570872)       2       mg/L       <2	CAS number         LOR         Units         Result         Concentration           es (QCLot: 570872)          2         mg/L         <2	Spike         Spike         Spike Red           CAS number         LOR         Units         Result         Concentration         SCS           es         (QCLot: 570872)          2         mg/L         <2         20 mg/L         96.0           es         (QCLot: 570873)          2         mg/L         <2         20 mg/L         102           es         (QCLot: 570873)          2         mg/L         <2         20 mg/L         102           es         (QCLot: 578609)          2         mg/L         <0.01         5.0 mg/L         109           s         (QCLot: 578610)          2         0.01         mg/L         <0.01         5.0 mg/L         108           70971)          0.01         mg/L         <0.01         5.0 mg/L         108	Spike         Spike Recovery (%)           CAS number         LOR         Units         Result         Concentration         SCS         DCS           es         (QCLot: 570872)          2         mg/L         <2         20 mg/L         96.0            es         (QCLot: 570873)          2         mg/L         <2         20 mg/L         102            es         (QCLot: 578609)          5.0 mg/L         109            s         (QCLot: 578609)          5.0 mg/L         109            s         (QCLot: 578610)          5.0 mg/L         108            70971)	Spike         Spike Recovery (%)         Recovery           CAS number         LOR         Units         Result         Concentration         SCS         DCS         Low           es (QCLot: 570872)          2         mg/L         <2	Spike         Spike Recovery (%)         Recovery Limits (%)           CAS number         LOR         Units         Result         Concentration         SCS         DCS         Low         High           es (QCLot: 570872)          2         mg/L         <2         20 mg/L         96.0          85         115           es (QCLot: 570873)          2         mg/L         <2         20 mg/L         102          85         115           es (QCLot: 570873)          2         mg/L         <2         20 mg/L         102          85         115           s (QCLot: 578609)          5.0 mg/L         109          85         115           s (QCLot: 578610)          85         115         5.0 mg/L         108          85         115           70971)          5.0 mg/L         108          85         115	Spike         Spike Recovery (%)         Recovery Limits (%)         RPL           CAS number         LOR         Units         Result         Concentration         SCS         DCS         Low         High         Value           es (QCLot: 570872)          2         mg/L         <2

Matrix Type: WATER					Matrix	Spike (MS) and Matrix S	pike Duplica	ate (MSD) Re	sults	
				Spike	Spike Rec	overy (%)	Recovery	Limits (%)	RPDs (%	<i>s</i> )
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	Concentration	MS	MSD	Low	High	Value	Control Limit
ED/EK: Inorganic Nonme	tallic Parameters (QCLot: 5	578609)								
HK0718874-001	Anonymous	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	79.7		75	125		

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Matrix Type: WATER					Matrix	Spike (MS) and Matrix S	Spike Duplic	ate (MSD) Re	sults	
				Spike Spike Recovery (%) Red				Recovery Limits (%) RPDs		%)
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	Concentration	MS	MSD	Low	High	Value	Control Limit
ED/EK: Inorganic Nonme	etallic Parameters (QCLot	: 578610)								
HK0800510-001	Anonymous	EK055A: Ammonia as N	7664-41-7	0.5 mg/L	93.3		75	125		
EG: Metals and Major Ca	ations (QCLot: 570971)									
HK0800452-001	Anonymous	EG020: Zinc	7440-66-6	100 µg/L	84.9		75	125		



Matrix Type: WATER				Duplicate (DUP) Results							
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)			
EA/ED: Physical and Ag	ggregate Properties (QC Lot	:: 574296)									
HK0800773-001	Anonymous	EA025: Suspended Solids (SS)		3	mg/L	<3	<3	0.0			
HK0800782-003	Anonymous	EA025: Suspended Solids (SS)		2	mg/L	111	121	8.9			
ED/EK: Inorganic Nonm	netallic Parameters (QC Lot:	578611)									
HK0800778-003	Anonymous	EK055A: Ammonia as N	7664-41-7	0.1	mg/L	0.2	0.2	0.0			
EG: Metals and Major C	ations (QC Lot: 574230)										
HK0800798-002	Anonymous	EG020: Zinc	7440-66-6	10	µg/L	34	30	9.9			

## Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

Matrix Type: WATER			Method Blank (MB	8) Results		Single Cor	ntrol Spike (SCS) and D	uplicate Con	trol Spike (DC	S) Results	
					Spike	Spike Rec	overy (%)	Recovery	Limits (%)	RPL	)s (%)
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	SCS	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Proper	ties (QCLot: 574296)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	97.5		85	115		
ED/EK: Inorganic Nonmetallic Paramete	ers (QCLot: 578611)										
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	5.0 mg/L	96.4		85	115		
EG: Metals and Major Cations (QCLot:	574230)			·							
EG020: Zinc	7440-66-6	10	µg/L	<10	100 µg/L	85.2		85	115		

Matrix Type: WATER					Matrix S	pike (MS) and Matrix S	Spike Duplica	ate (MSD) Re	sults	]
				Spike	Spike Rec	overy (%)	Recovery	Limits (%)	RPDs (%	6)
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	Concentration	MS	MSD	Low	High	Value	Control Limit
ED/EK: Inorganic Nonme	tallic Parameters (QCLot: 5	578611)								
HK0800494-001	Anonymous	EK055A: Ammonia as N	7664-41-7	500 mg/L	Not Determined		75	125		
EG: Metals and Major Ca	tions (QCLot: 574230)									
HK0800798-001	Anonymous	EG020: Zinc	7440-66-6	100 µg/L	89.8		75	125		



Matrix Type: WATER						Duplicate (DUP)	Results	
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR	Units	Original Result	Duplicate Result	RPD (%)
EA/ED: Physical and Ag	ggregate Properties (QC Lot:	: 577552)						
HK0800934-001	Anonymous	EA025: Suspended Solids (SS)		2	mg/L	77	76	0.0
HK0800960-006	W9B - 1 & 2 MIX	EA025: Suspended Solids (SS)		2	mg/L	33	34	0.0
ED/EK: Inorganic Nonm	netallic Parameters (QC Lot:	578649)						
HK0801017-001	Anonymous	EK055A: Ammonia as N	7664-41-7	0.1	mg/L	30.5	32.8	7.2
HK0801018-001	Anonymous	EK055A: Ammonia as N	7664-41-7	0.1	mg/L	23.0	22.9	0.5
EG: Metals and Major C	ations (QC Lot: 577520)					·		
HK0800960-002	W1B - 1 & 2 MIX	EG020: Zinc	7440-66-6	10	µg/L	43	43	0.0

## Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

Matrix Type: WATER			Method Blank (MB) Results Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results						S) Results		
					Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	scs	DCS	Low	High	Value	Control Limit
EA/ED: Physical and Aggregate Propert	ies (QCLot: 577552)										
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	98.5		85	115		
ED/EK: Inorganic Nonmetallic Paramete	ers (QCLot: 578649)			•							
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	5.0 mg/L	96.3		85	115		
EG: Metals and Major Cations (QCLot: 577520)											
EG020: Zinc	7440-66-6	10	µg/L	<10	100 µg/L	95.0		85	115		

Matrix Type: WATER				Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Results							
				Spike	Spike Rec	overy (%)	Recovery	Limits (%)	RPDs (%	6)	
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	Concentration	MS	MSD	Low	High	Value	Control Limit	
ED/EK: Inorganic Nonmet	allic Parameters (QCLot: 5	578649)									
HK0801014-001	Anonymous	EK055A: Ammonia as N	7664-41-7	5.0 mg/L	106		75	125			
EG: Metals and Major Cat	EG: Metals and Major Cations (QCLot: 577520)										
HK0800960-001	W1A - 1 & 2 MIX	EG020: Zinc	7440-66-6	100 µg/L	89.6		75	125			

#### PRELIMINARY RESULTS FOR REFERENCE ONLY

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Client : ACTION UNITED ENVIRO SERVICES Work Order HK0801096



#### **Quality Control - Laboratory Duplicate (DUP) Results**

Matrix Type: WATER						Duplicate (DUP) Results							
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	LOR Units Original Result Duplicate Result RPL									
EA/ED: Physical and Agg	regate Properties (QC Lot: 5803	94)											
HK0801061-001	Anonymous	EA025: Suspended Solids (SS)		2	mg/L	7	7	0.0					
HK0801096-004	FISH POND - 1 & 2 MIX	EA025: Suspended Solids (SS)		2	mg/L	13	13	0.0					
ED/EK: Inorganic Nonme	tallic Parameters (QC Lot: 57976	4)											
HK0801109-001	Anonymous	EK055A: Ammonia as N	7664-41-7	0.1	mg/L	28.2	24.8	12.8					
HK0801096-006	W9B - 1 & 2 MIX	EK055A: Ammonia as N	7664-41-7	0.01	mg/L	9.05	8.96	1.0					
EG: Metals and Major Ca	tions (QC Lot: 579295)			•	•								
HK0801096-002	W1B - 1 & 2 MIX	EG020: Zinc	7440-66-6	10	µg/L	17	15	13.0					

## Quality Control - Method Blank (MB), Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results

Matrix Type: WATER		Method Blank (MB) Results			Single Control Spike (SCS) and Duplicate Control Spike (DCS) Results							
					Spike	Spike Rec	overy (%)	Recovery	Limits (%)	RPL	s (%)	
Method: Analysis Description	CAS number	LOR	Units	Result	Concentration	SCS	DCS	Low	High	Value	Control Limit	
EA/ED: Physical and Aggregate Properties (QCLot: 580394)												
EA025: Suspended Solids (SS)		2	mg/L	<2	20 mg/L	102		85	115			
ED/EK: Inorganic Nonmetallic Parameter	s (QCLot: 579764)											
EK055A: Ammonia as N	7664-41-7	0.01	mg/L	<0.01	5.0 mg/L	108		85	115			
EG: Metals and Major Cations (QCLot: 579295)												
EG020: Zinc	7440-66-6	10	µg/L	<10	100 µg/L	85.8		85	115			

Matrix Type: WATER	Matrix Type: WATER				Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Results							
				Spike	Spike Rec	overy (%)	Recovery	Limits (%)	RPDs (%	6)		
Laboratory Sample ID	Client Sample ID	Method: Analysis Description	CAS number	Concentration	MS	MSD	Low	High	Value	Control Limit		
ED/EK: Inorganic Nonmet	allic Parameters (QCLot: 5											
HK0801109-001	Anonymous	EK055A: Ammonia as N	7664-41-7		Not Authorised		75	125				
EG: Metals and Major Cat	EG: Metals and Major Cations (QCLot: 579295)											
HK0801096-001	W1A - 1 & 2 MIX	EG020: Zinc	7440-66-6	100 µg/L	96.2		75	125				



Appendix I

# Meteorological Data in the Reporting Period



### Meteorological Data Extracted from HKO in the Reporting Period

	Lau Fau Shan Weath						r Station			
Date		Weather	Total Rainfall (mm)	Mean Air Temperature (°C)	Wind Speed (km/h)	Mean Relative Humidity (%)	Wind Direction			
26-Dec-07	Wed				HOL	IDAY				
27-Dec-07	Thu	fine/haze/moderate	0	18.7	10	72	Е			
28-Dec-07	Fri	fine/moderate/cloudy/cool	0	18.3	12.5	74.5	E/SE			
29-Dec-07	Sat	cloudy/dry/sunny intervals/moderate/fresh	0	16.3	10	72.5	N/NE			
30-Dec-07	Sun	fine/very dry/cold/fresh	0	15.3	16.2	36	E/NE			
31-Dec-07	Mon	fine/very dry/cold/fresh	0	13.6	19.7	34	NE			
1-Jan-08	Tue			HOLIDAY						
2-Jan-08	Wed	cool/very dry/moderate	0	11.7	6	39	E/SE			
3-Jan-08	Thu	fine/very dry/moderate	0	13.4	10.5	41	E/NE			
4-Jan-08	Fri	fine/dry/haze/moderate/fresh	0	14.9	8	53.3	Е			
5-Jan-08	Sat	fine/dry/haze/moderate	0	10	11.5	59.5	E/SE			
6-Jan-08	Sun	fine/cool/very dry/moderate	0	17.5	6	39	E/SE			
7-Jan-08	Mon	fine/cool/very dry/moderate	0	19	10.5	40.7	E/NE			
8-Jan-08	Tue	cloudy/haze/sunny intervals/rain/moderate	Trace	20.2	9	63.2	E/SE			
9-Jan-08	Wed	sunny periods/haze/cloudy/moderate	0	20.8	6.7	74	E/SE			
10-Jan-08	Thu	cloudy/rain/moderate/fresh	Trace	22.5	10.5	75.5	Е			
11-Jan-08	Fri	fog/sunny intervals/moderate	Trace	24.2	13.5	76	SE			
12-Jan-08	Sat	fine/cloudy/foggy/moderate	0	23.4	13.5	72.5	S/SE			
13-Jan-08	Sun	cloudy/rain/cool/dry/moderate/fresh	Trace	18.3	19.7	57	E/NE			
14-Jan-08	Mon	cloudy/rain/cool/dry/moderate/fresh	Trace	14.4	19.5	65	E/NE			
15-Jan-08	Tue	cloudy/rain/moderate/cold/fresh	0.7	13.7	13.5	61	E/NE			
16-Jan-08	Wed	cloudy/rain/moderate/cold/fresh	Trace	12.8	17	60	N/NE			
17-Jan-08	Thu	cloudy/cold/rain/moderate/fresh	Trace	10	17.2	59	NE			
18-Jan-08	Fri	cloudy/sunny intervals/cool/moderate/fresh	Trace	12.8	13.5	77.2	E/NE			
19-Jan-08	Sat	cloudy/fresh	Trace	18.7	16.5	72.5	E/NE			
20-Jan-08	Sun	fine/hazy/cloudy/moderate	Trace	17.8	13.5	81.5	W/SW			
21-Jan-08	Mon	fine/hazy/cloudy/moderate	Trace	24.2	13.5	72	N/NW			
22-Jan-08	Tue	cloudy/haze/moderate	Trace	16.5	13	65	W/NW			
23-Jan-08	Wed	cloudy/dry/haze/moderate	Trace	15.7	14.2	58	N/NE			
24-Jan-08	Thu	cloudy/overcast/rain/cool/moderate	0.5	13.5	17	58.5	NE			
25-Jan-08	Fri	cloudy/rain/cold/moderate	19.2	0.9	8.5	93.5	Е			



Appendix J

# **Environmental Team Site Inspection Checklists**



Proje	ct: (	Contract No.: DC/2006/02	Inspected by									
-	`	Yuen Long, Kam Tin, Ngau Tam Mei and Tin Shui Wai Drainage Improvements, Stage 1, Phase 2B –										
		Cheung Chun San Tsuen and Kam Tsin Wai	RE/	RE's re	presentati	ve:	A.F. Ng					
Inspe	ction		IEC	/IEC's r	epresenta	tive:						
Date:	2	27 December 2007	ETL	/ ET's r	epresenta	tive:	Ken Wor	ng				
Time:	·	14:00	Con	tractor	's represe	ntative:	M.K. Ng					
			Che	cklist N	lo.		KT15-271207					
PART	- A:	GENERAL INFORMATION Environmenta	al Perr	nit No.	EP-231/20	05/A						
Weath	ner:	Sunny 🖌 Fine Cloudy		Rainy								
Temp	erature:	19 °C										
Humio	dity:	High Moderate 🗸 Low										
Wind:		Strong Breeze 🗸 Light		Calm								
PART	в:	SITE AUDIT										
				Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks			
Secti	on 1: Wate	er Quality										
1.01	Is an effl	uent discharge license obtained for the Project?			$\checkmark$							
1.02	Is the e licence?	effluent discharged in accordance with the discharg	ge		$\checkmark$							
1.03	Is the dis	charge of turbid water avoided?			$\checkmark$							
1.04		e proper desilting facilities in the drainage systems S levels in effluent?	to		$\checkmark$							
1.05		e channels, sandbags or bunds to direct surface run-off tation tanks?	to	$\checkmark$								
1.06		e any perimeter channels provided at site boundaries storm runoff from crossing the site?	to	$\checkmark$								
1.07	Is draina	ge system well maintained?		$\checkmark$								
1.08		vation proceeds, are temporary access roads protected b stone or gravel?	by		$\checkmark$							
1.09	Are temp	porary exposed slopes properly covered?			$\checkmark$							
1.10	Are earth	works final surfaces well compacted or protected?						$\checkmark$				
1.11	Are man	holes adequately covered or temporarily sealed?			$\checkmark$							
1.12	Are there	e any procedures and equipment for rainstorm protection?	?		$\checkmark$							
1.13	Are whee	el washing facilities well maintained?			$\checkmark$							
1.14	Is runoff	from wheel washing facilities avoided?			$\checkmark$							
1.15	Are there	e toilets provided on site?			$\checkmark$							
1.16		s properly maintained?			$\checkmark$							
1.17	Are the v roofed ar	vehicle and plant servicing areas paved and located with reas?	nin					$\checkmark$				
1.18	Is the oil	leakage or spillage avoided?			$\checkmark$							
1.19	Are there drainage	e any measures to prevent leaked oil from entering th system?	he		$\checkmark$							
1.20		e any measures to collect spilt cement and concre s during concreting works?	ete					$\checkmark$				
1.21	Are there for vehic	e any oil interceptors/grease traps in the drainage system le and plant servicing areas, canteen kitchen, etc?	ns					$\checkmark$				

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
1.22	Are the oil interceptors/grease traps maintained properly?					$\checkmark$	
1.23	Is used bentonite recycled where appropriate?	$\checkmark$				$\checkmark$	
1.24	Designated settlement area for runoff/wheel wash waste is provide and located at the streambed with 1-2m deep, 12m long and around 50m3 capacities for sedimentation.	$\checkmark$					
1.25	No excavation is undertaken in the settlement area.		$\checkmark$				
1.26	Concreting wastes water should be neutralized below the pH Action Levels before discharge.					$\checkmark$	
1.27	Mobile toilets should provide on site and located away the KT15 stream course.		$\checkmark$				
1.28	License collector should be employed for handling the sewage of mobile toilet.		$\checkmark$				
1.29	Prevent stagnant water accumulated within the excavation trench or site working area.		$\checkmark$				
Sectio	on 2: Air Quality						
2.01	Are there wheel washing facilities with high pressure jets provided at every vehicle exit point?		$\checkmark$				
2.02	Are vehicles washed to remove any dusty materials from their bodies and wheels before leaving construction sites?		$\checkmark$				
2.03	Are the excavated materials sprayed with water during handling?	$\checkmark$					
2.04	Are stockpiles of dusty materials sprayed with water, covered or placed in sheltered areas?		$\checkmark$				
2.05	Is the exposed earth properly treated within six months after the last construction activities?					$\checkmark$	
2.06	Are the access roads sprayed with water to maintain the entire road surface wet or paved?		$\checkmark$				
2.07	Is the surface where any drilling, cutting, polishing or breaking operation continuously sprayed with water?	$\checkmark$					
2.08	Is the load on vehicles covered entirely by clean impervious sheeting?		$\checkmark$				
2.09	Is the loading of materials to a level higher than the side and tail boards during transportation by vehicles avoided?		$\checkmark$				
2.10	Is the road leading to the construction site within 30m of the vehicle entrance kept clear of dusty materials?		$\checkmark$				
2.11	Is dark smoke emission from plant/equipment avoided?		$\checkmark$				
2.12	Are de-bagging, batching and mixing processes carried out in sheltered areas during the use of bagged cement?					$\checkmark$	
2.13	Are site vehicles travelling within the speed limit not more than 15km/hour?		$\checkmark$				
2.14	Are hoardings of not less than 2.4m high provided along the site boundary, which adjoins areas accessible to the public?		$\checkmark$				
2.15	Is open burning avoided?		$\checkmark$				
2.16	Excavated materials from the stream must remove form site on the same day. The materials shall be stored in covered impermeable skips awaiting removal from site.		$\checkmark$				
Sectio	on 3: Noise						
3.01	Are noisy equipment and activities positioned as far as practicable from the sensitive receivers?		$\checkmark$				
3.02	Is silenced equipment adopted?	$\checkmark$					
3.03	Is idle equipment turned off or throttled down?		$\checkmark$				
3.04	Are all plant and equipment well maintained and in good condition?		$\checkmark$				
3.05	Are noise barriers or enclosures provided at areas where construction activities cause noise impact on sensitive receivers?		$\checkmark$				
3.06	Are hand held breakers fitted with valid noise emission labels during operation?					$\checkmark$	

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
3.07	Are air compressors fitted with valid noise emission labels during operation?					$\checkmark$	
3.08	Are flaps and panels of mechanical equipment closed during operation?		$\checkmark$				
3.09	Are Construction Noise Permit(s) applied for percussive piling works?					$\checkmark$	
3.10	Are Construction Noise Permit(s) applied for general construction works during restricted hours?					$\checkmark$	
3.11	Are valid Construction Noise Permit(s) posted at site entrances?					$\checkmark$	
3.12	Use of quiet plant had been used on site to minimise the construction noise impact to the surrounding residences/dwellings (Level 1 mitigation measures).	$\checkmark$					
3.13	Temporary/Moveable noise barrier or site hoarding are provide or erect at the site boundary to minimise the noise impact of the closest NSRs or stationary equipments shield by the noise barrier which cannot visible from NSRs (Level 2 mitigation measure)		$\checkmark$				
3.14	Temporary/Moveable noise barrier equal to or more than 3m height with 10kg/m2 are provide for noise mitigation measures (Level 2 mitigation measures).		$\checkmark$				
Sectio	n 4: Waste/Chemical Management						
4.01	Waste Management Plan had been submit to Engineer for approval.		$\checkmark$				
4.02	Are receptacles available for general refuse collection?		$\checkmark$				
4.03	Is general refuse sorting or recycling implemented?	$\checkmark$					
4.04	Is general refuse disposed of properly and regularly?		$\checkmark$				
4.05	Is the Contractor registered as a chemical waste producer?		$\checkmark$				
4.06	Are the chemical waste containers properly labelled?		$\checkmark$				
4.07	Are the chemical wastes stored in proper storage areas?		$\checkmark$				
4.08	Is the chemical waste storage area properly labelled?		$\checkmark$				
4.09	Is the chemical waste storage area used for storage of chemical waste only?		$\checkmark$				
4.10	Are incompatible chemical wastes stored in different areas?		$\checkmark$				
4.11	Are the chemical wastes disposed of by licensed collectors?					$\checkmark$	
4.12	Are trip tickets for chemical wastes disposal available for inspection?					$\checkmark$	
4.13	Are chemical/fuel storage areas bunded?		$\checkmark$				
4.14	Are designated areas identified for storage and sorting of construction wastes?		$\checkmark$				
4.15	Are construction wastes sorted (inert and non-inert) on site?		$\checkmark$				
4.16	Are construction wastes reused?	$\checkmark$					
4.17	Are construction wastes disposed of properly?		$\checkmark$				
4.18	Are site hoardings and signboards made of durable materials instead of timber?		$\checkmark$				
4.19	Is trip ticket system implemented for the disposal of construction wastes and records available for inspection?		$\checkmark$				
4.20	Are appropriate procedures followed if contaminated material exists?		$\checkmark$				
4.21	Is relevant license/ permit for disposal of construction waste or excavated materials available for inspection?		$\checkmark$				
4.22	Site cleanliness and appropriate waste management training had provided for the site workers.		$\checkmark$				

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
4.23	Contaminated sediments will managed according to WBTC No.12/2000 and EWTB TC(W) No. 34/2002.		$\checkmark$				
Sectio	on 5: Landscape & Visual						
5.01	Are retained and transplanted trees in health condition?		$\checkmark$				
5.02	Are retained and transplanted trees properly protected?		$\checkmark$				
5.03	Are surgery works carried out for the damaged trees?	$\checkmark$					
5.04	Is damage to trees outside site boundary due to construction activities avoided?		$\checkmark$				
5.05	Is the night-time lighting controlled to minimize glare to sensitive receivers?	$\checkmark$					
Sectio	on 6: Ecology						
6.01	Gabion banks and base had been provide for channel linings and banks for typical sections of KT15?					$\checkmark$	
6.02	Prevent site effluent/runoff discharge to the seasonal wetlands at KT15?		$\checkmark$				
6.03	Stockpiling or disposal of materials, and any dredging or construction activities at the seasonal wetlands at KT15 are prohibited?		$\checkmark$				
Sectio	on 7: Others						
7.01	Are relevant Environmental Permits posted at all vehicle site entrances/exits?		$\checkmark$				

#### Remarks

#### Last Site Inspection:

No environmental observation was recorded during the inspection on 20 December 2007.

#### Findings of Site Inspection on 27 December 2007:

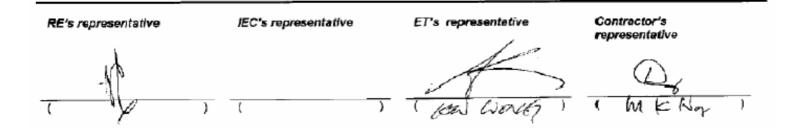
Site Inspection was covered the site area from CH000-800 and Portion 8 (Site office).



Wastewater directly discharge without diverted to the sedimentation tank was observed at CH500. The Contractor was reminded to provide sedimentation tank accordingly.



Debris and C&D wastes accumulated on site was observed at CH160. The Contractor was reminded to clean up in regular basis.





Proje	ct: Contract No.: DC/2	2006/02	I	Inspected by								
	Yuen Long, Kam T Wai Drainage Impr											
	Cheung Chun San			RE/RE's re	presentati	ve:	A.F. Ng					
Inspe	ction		I	EC/IEC's r	epresenta	tive:	. <u> </u>					
Date:	03 January 2008			ETL/ ET's r	•		Ben Tarr	1				
Time:	14:00			Contractor	-	ntative:	M.K. Ng					
				Checklist N	lo.		KT15-03	KT15-030108				
PART	A: GENERAL INFO		Environmental P	Permit No.	EP-231/20	05/A						
Weath	,	Fine	Cloudy	Rainy								
	erature: 15	°C										
Humic		Moderate	Low									
Wind:	Strong	Breeze	✓ Light	Calm								
PART	B: SITE AUDIT											
				Not	Yes	No	Follow	N/A	Photo/			
				Obs.	res	NO	up	N/A	Remarks			
Section	on 1: Water Quality						_	·				
1.01	Is an effluent discharge lice				$\checkmark$							
1.02	Is the effluent discharged licence?	d in accordance	with the discharge		$\checkmark$							
1.03	Is the discharge of turbid wa	ater avoided?			$\checkmark$							
1.04	Are there proper desilting facilities in the drainage systems reduce SS levels in effluent?				$\checkmark$							
1.05	Are there channels, sandba sedimentation tanks?	ags or bunds to dire	ect surface run-off to	$\checkmark$								
1.06	Are there any perimeter ch intercept storm runoff from c		at site boundaries to	$\checkmark$								
1.07	Is drainage system well mai	intained?		$\checkmark$								
1.08	As excavation proceeds, ar crushed stone or gravel?	e temporary acces	s roads protected by		$\checkmark$							
1.09	Are temporary exposed slop	pes properly covere	ed?		$\checkmark$							
1.10	Are earthworks final surface	es well compacted of	or protected?					$\checkmark$				
1.11	Are manholes adequately co	overed or temporar	ily sealed?		$\checkmark$							
1.12	Are there any procedures a	nd equipment for ra	ainstorm protection?		$\checkmark$							
1.13	Are wheel washing facilities	well maintained?			$\checkmark$							
1.14	Is runoff from wheel washin	g facilities avoided	?		$\checkmark$							
1.15	Are there toilets provided or	n site?			$\checkmark$							
1.16	Are toilets properly maintain				$\checkmark$							
1.17	Are the vehicle and plant se roofed areas?	ervicing areas pave	ed and located within					$\checkmark$				
1.18	Is the oil leakage or spillage											
1.19	Are there any measures to drainage system?		-		$\checkmark$							
1.20	Are there any measures to collect spilt cement and concr washings during concreting works?							$\checkmark$				
1.21	Are there any oil interceptor for vehicle and plant servicin	he drainage systems kitchen, etc?					$\checkmark$					

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
1.22	Are the oil interceptors/grease traps maintained properly?					$\checkmark$	
1.23	Is used bentonite recycled where appropriate?	$\checkmark$				$\checkmark$	
1.24	Designated settlement area for runoff/wheel wash waste is provide and located at the streambed with 1-2m deep, 12m long and around 50m3 capacities for sedimentation.	$\checkmark$					
1.25	No excavation is undertaken in the settlement area.		$\checkmark$				
1.26	Concreting wastes water should be neutralized below the pH Action Levels before discharge.					$\checkmark$	
1.27	Mobile toilets should provide on site and located away the KT15 stream course.		$\checkmark$				
1.28	License collector should be employed for handling the sewage of mobile toilet.		$\checkmark$				
1.29	Prevent stagnant water accumulated within the excavation trench or site working area.		$\checkmark$				
Sectio	on 2: Air Quality						
2.01	Are there wheel washing facilities with high pressure jets provided at every vehicle exit point?		$\checkmark$				
2.02	Are vehicles washed to remove any dusty materials from their bodies and wheels before leaving construction sites?		$\checkmark$				
2.03	Are the excavated materials sprayed with water during handling?	$\checkmark$					
2.04	Are stockpiles of dusty materials sprayed with water, covered or placed in sheltered areas?		$\checkmark$				
2.05	Is the exposed earth properly treated within six months after the last construction activities?					$\checkmark$	
2.06	Are the access roads sprayed with water to maintain the entire road surface wet or paved?		$\checkmark$				
2.07	Is the surface where any drilling, cutting, polishing or breaking operation continuously sprayed with water?	$\checkmark$					
2.08	Is the load on vehicles covered entirely by clean impervious sheeting?		$\checkmark$				
2.09	Is the loading of materials to a level higher than the side and tail boards during transportation by vehicles avoided?		$\checkmark$				
2.10	Is the road leading to the construction site within 30m of the vehicle entrance kept clear of dusty materials?		$\checkmark$				
2.11	Is dark smoke emission from plant/equipment avoided?		$\checkmark$				
2.12	Are de-bagging, batching and mixing processes carried out in sheltered areas during the use of bagged cement?					$\checkmark$	
2.13	Are site vehicles travelling within the speed limit not more than 15km/hour?		$\checkmark$				
2.14	Are hoardings of not less than 2.4m high provided along the site boundary, which adjoins areas accessible to the public?		$\checkmark$				
2.15	Is open burning avoided?		$\checkmark$				
2.16	Excavated materials from the stream must remove form site on the same day. The materials shall be stored in covered impermeable skips awaiting removal from site.		$\checkmark$				
Sectio	on 3: Noise						
3.01	Are noisy equipment and activities positioned as far as practicable from the sensitive receivers?		$\checkmark$				
3.02	Is silenced equipment adopted?	$\checkmark$					
3.03	Is idle equipment turned off or throttled down?						
3.04	Are all plant and equipment well maintained and in good condition?		$\checkmark$				
3.05	Are noise barriers or enclosures provided at areas where construction activities cause noise impact on sensitive receivers?		$\checkmark$				
3.06	Are hand held breakers fitted with valid noise emission labels during operation?					$\checkmark$	

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
3.07	Are air compressors fitted with valid noise emission labels during operation?					$\checkmark$	
3.08	Are flaps and panels of mechanical equipment closed during operation?		$\checkmark$				
3.09	Are Construction Noise Permit(s) applied for percussive piling works?					$\checkmark$	
3.10	Are Construction Noise Permit(s) applied for general construction works during restricted hours?					$\checkmark$	
3.11	Are valid Construction Noise Permit(s) posted at site entrances?					$\checkmark$	
3.12	Use of quiet plant had been used on site to minimise the construction noise impact to the surrounding residences/dwellings (Level 1 mitigation measures).	$\checkmark$					
3.13	Temporary/Moveable noise barrier or site hoarding are provide or erect at the site boundary to minimise the noise impact of the closest NSRs or stationary equipments shield by the noise barrier which cannot visible from NSRs (Level 2 mitigation measure)		$\checkmark$				
3.14	Temporary/Moveable noise barrier equal to or more than 3m height with 10kg/m2 are provide for noise mitigation measures (Level 2 mitigation measures).		$\checkmark$				
Sectio	n 4: Waste/Chemical Management						
4.01	Waste Management Plan had been submit to Engineer for approval.		$\checkmark$				
4.02	Are receptacles available for general refuse collection?		$\checkmark$				
4.03	Is general refuse sorting or recycling implemented?	$\checkmark$					
4.04	Is general refuse disposed of properly and regularly?		$\checkmark$				
4.05	Is the Contractor registered as a chemical waste producer?		$\checkmark$				
4.06	Are the chemical waste containers properly labelled?		$\checkmark$				
4.07	Are the chemical wastes stored in proper storage areas?		$\checkmark$				
4.08	Is the chemical waste storage area properly labelled?		$\checkmark$				
4.09	Is the chemical waste storage area used for storage of chemical waste only?		$\checkmark$				
4.10	Are incompatible chemical wastes stored in different areas?		$\checkmark$				
4.11	Are the chemical wastes disposed of by licensed collectors?					$\checkmark$	
4.12	Are trip tickets for chemical wastes disposal available for inspection?					$\checkmark$	
4.13	Are chemical/fuel storage areas bunded?		$\checkmark$				
4.14	Are designated areas identified for storage and sorting of construction wastes?		$\checkmark$				
4.15	Are construction wastes sorted (inert and non-inert) on site?		$\checkmark$				
4.16	Are construction wastes reused?	$\checkmark$					
4.17	Are construction wastes disposed of properly?		$\checkmark$				
4.18	Are site hoardings and signboards made of durable materials instead of timber?		$\checkmark$				
4.19	Is trip ticket system implemented for the disposal of construction wastes and records available for inspection?		$\checkmark$				
4.20	Are appropriate procedures followed if contaminated material exists?		$\checkmark$				
4.21	Is relevant license/ permit for disposal of construction waste or excavated materials available for inspection?		$\checkmark$				
4.22	Site cleanliness and appropriate waste management training had provided for the site workers.		$\checkmark$				

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
4.23	Contaminated sediments will managed according to WBTC No.12/2000 and EWTB TC(W) No. 34/2002.		$\checkmark$				
Sectio	on 5: Landscape & Visual						
5.01	Are retained and transplanted trees in health condition?		$\checkmark$				
5.02	Are retained and transplanted trees properly protected?		$\checkmark$				
5.03	Are surgery works carried out for the damaged trees?	$\checkmark$					
5.04	Is damage to trees outside site boundary due to construction activities avoided?		$\checkmark$				
5.05	Is the night-time lighting controlled to minimize glare to sensitive receivers?	$\checkmark$					
Sectio	on 6: Ecology						
6.01	Gabion banks and base had been provide for channel linings and banks for typical sections of KT15?					$\checkmark$	
6.02	Prevent site effluent/runoff discharge to the seasonal wetlands at KT15?		$\checkmark$				
6.03	Stockpiling or disposal of materials, and any dredging or construction activities at the seasonal wetlands at KT15 are prohibited?		$\checkmark$				
Sectio	on 7: Others						
7.01	Are relevant Environmental Permits posted at all vehicle site entrances/exits?		$\checkmark$				

#### Remarks

Last Site Inspection:



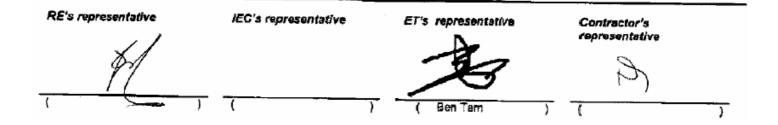
1. Debris and C&D wastes accumulated on site was observed at CH160. The Contractor was reminded to clean up in regular basis. (On-going)

2. No waste water was observed directly discharge at CH500

#### Findings of Site Inspection on 03 January 2008:

Site Inspection was covered the site area from CH000-800 and Portion 8 (Site office).

No new environmental issue was observed during the site inspection.





Project:		Contract No.: DC/2006/02 Inspected by										
	_	Yuen Long, Kam Tin, Ngau Tam Mei and Tin Shui Wai Drainage Improvements, Stage 1, Phase 2B –										
	-	Cheung Chun San Tsuen and Kam Tsin Wai	RE/RE's representative:			A.F. Ng						
Inspe	ection		IEC/IEC's r	tive:								
Date:		10 January 2008	ETL/ ET's representative:			Ken Wong						
Time:	: -	10:15	Contractor's representative:			M.K. Ng / Man						
			Checklist N	No.		KT15-10	0108					
PART	A:	GENERAL INFORMATION Environmental	Permit No.:	EP-231/20	005/A							
Weath	her:	Sunny Fine Cloudy	Rainy									
Temp	erature:	<sup>0</sup> C										
Humic	dity:	High V Moderate Low										
Wind:		Strong Breeze 🗸 Light	Calm									
PART	ГВ:	SITE AUDIT										
			Not			Follow		Photo/				
			Obs.	Yes	No	up	N/A	Remarks				
Section	on 1: Wa	ter Quality										
1.01	ls an e	ffluent discharge license obtained for the Project?		$\checkmark$								
1.02	Is the licence	effluent discharged in accordance with the discharge ?	, 🗌	$\checkmark$								
1.03	Is the c	lischarge of turbid water avoided?		$\checkmark$								
1.04		ere proper desilting facilities in the drainage systems to SS levels in effluent?	° 🗌	$\checkmark$								
1.05		ere channels, sandbags or bunds to direct surface run-off to intation tanks?	$\sim$									
1.06		ere any perimeter channels provided at site boundaries to pt storm runoff from crossing the site?	y <b>√</b>									
1.07	Is drair	age system well maintained?	$\checkmark$									
1.08		avation proceeds, are temporary access roads protected by d stone or gravel?	′	$\checkmark$								
1.09	Are ten	nporary exposed slopes properly covered?		$\checkmark$								
1.10	Are ea	rthworks final surfaces well compacted or protected?					$\checkmark$					
1.11	Are ma	nholes adequately covered or temporarily sealed?		$\checkmark$								
1.12	Are the	re any procedures and equipment for rainstorm protection?		$\checkmark$								
1.13	Are wh	eel washing facilities well maintained?		$\checkmark$								
1.14	ls runo	ff from wheel washing facilities avoided?		$\checkmark$								
1.15	Are the	re toilets provided on site?		$\checkmark$								
1.16		ets properly maintained?		$\checkmark$								
1.17	Are the roofed	e vehicle and plant servicing areas paved and located within areas?					$\checkmark$					
1.18		il leakage or spillage avoided?		$\checkmark$								
1.19	drainag	ere any measures to prevent leaked oil from entering the ge system?		$\checkmark$								
1.20	washin	ere any measures to collect spilt cement and concrete gs during concreting works?					$\checkmark$					
1.21	Are the for veh	ere any oil interceptors/grease traps in the drainage systems icle and plant servicing areas, canteen kitchen, etc?	° 🗌				$\checkmark$					

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
1.22	Are the oil interceptors/grease traps maintained properly?					$\checkmark$	
1.23	Is used bentonite recycled where appropriate?	$\checkmark$				$\checkmark$	
1.24	Designated settlement area for runoff/wheel wash waste is provide and located at the streambed with 1-2m deep, 12m long and around 50m3 capacities for sedimentation.	$\checkmark$					
1.25	No excavation is undertaken in the settlement area.		$\checkmark$				
1.26	Concreting wastes water should be neutralized below the pH Action Levels before discharge.					$\checkmark$	
1.27	Mobile toilets should provide on site and located away the KT15 stream course.		$\checkmark$				
1.28	License collector should be employed for handling the sewage of mobile toilet.		$\checkmark$				
1.29	Prevent stagnant water accumulated within the excavation trench or site working area.		$\checkmark$				
Sectio	n 2: Air Quality						
2.01	Are there wheel washing facilities with high pressure jets provided at every vehicle exit point?		$\checkmark$				
2.02	Are vehicles washed to remove any dusty materials from their bodies and wheels before leaving construction sites?		$\checkmark$				
2.03	Are the excavated materials sprayed with water during handling?	$\checkmark$					
2.04	Are stockpiles of dusty materials sprayed with water, covered or placed in sheltered areas?		$\checkmark$				
2.05	Is the exposed earth properly treated within six months after the last construction activities?					$\checkmark$	
2.06	Are the access roads sprayed with water to maintain the entire road surface wet or paved?		$\checkmark$				
2.07	Is the surface where any drilling, cutting, polishing or breaking operation continuously sprayed with water?	$\checkmark$					
2.08	Is the load on vehicles covered entirely by clean impervious sheeting?		$\checkmark$				
2.09	Is the loading of materials to a level higher than the side and tail boards during transportation by vehicles avoided?		$\checkmark$				
2.10	Is the road leading to the construction site within 30m of the vehicle entrance kept clear of dusty materials?		$\checkmark$				
2.11	Is dark smoke emission from plant/equipment avoided?		$\checkmark$				
2.12	Are de-bagging, batching and mixing processes carried out in sheltered areas during the use of bagged cement?					$\checkmark$	
2.13	Are site vehicles travelling within the speed limit not more than 15km/hour?		$\checkmark$				
2.14	Are hoardings of not less than 2.4m high provided along the site boundary, which adjoins areas accessible to the public?		$\checkmark$				
2.15	Is open burning avoided?		$\checkmark$				
2.16	Excavated materials from the stream must remove form site on the same day. The materials shall be stored in covered impermeable skips awaiting removal from site.		$\checkmark$				
Sectio	n 3: Noise						
3.01	Are noisy equipment and activities positioned as far as practicable from the sensitive receivers?		$\checkmark$				
3.02	Is silenced equipment adopted?	$\checkmark$					
3.03	Is idle equipment turned off or throttled down?		$\checkmark$				
3.04	Are all plant and equipment well maintained and in good condition?		$\checkmark$				
3.05	Are noise barriers or enclosures provided at areas where construction activities cause noise impact on sensitive receivers?		$\checkmark$				
3.06	Are hand held breakers fitted with valid noise emission labels during operation?					$\checkmark$	

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
3.07	Are air compressors fitted with valid noise emission labels during operation?					$\checkmark$	
3.08	Are flaps and panels of mechanical equipment closed during operation?		$\checkmark$				
3.09	Are Construction Noise Permit(s) applied for percussive piling works?					$\checkmark$	
3.10	Are Construction Noise Permit(s) applied for general construction works during restricted hours?					$\checkmark$	
3.11	Are valid Construction Noise Permit(s) posted at site entrances?					$\checkmark$	
3.12	Use of quiet plant had been used on site to minimise the construction noise impact to the surrounding residences/dwellings (Level 1 mitigation measures).	$\checkmark$					
3.13	Temporary/Moveable noise barrier or site hoarding are provide or erect at the site boundary to minimise the noise impact of the closest NSRs or stationary equipments shield by the noise barrier which cannot visible from NSRs (Level 2 mitigation measure)		$\checkmark$				
3.14	Temporary/Moveable noise barrier equal to or more than 3m height with 10kg/m2 are provide for noise mitigation measures (Level 2 mitigation measures).		$\checkmark$				
Sectio	n 4: Waste/Chemical Management						
4.01	Waste Management Plan had been submit to Engineer for approval.		$\checkmark$				
4.02	Are receptacles available for general refuse collection?		$\checkmark$				
4.03	Is general refuse sorting or recycling implemented?	$\checkmark$					
4.04	Is general refuse disposed of properly and regularly?			$\checkmark$			
4.05	Is the Contractor registered as a chemical waste producer?		$\checkmark$				
4.06	Are the chemical waste containers properly labelled?		$\checkmark$				
4.07	Are the chemical wastes stored in proper storage areas?		$\checkmark$				
4.08	Is the chemical waste storage area properly labelled?		$\checkmark$				
4.09	Is the chemical waste storage area used for storage of chemical waste only?		$\checkmark$				
4.10	Are incompatible chemical wastes stored in different areas?		$\checkmark$				
4.11	Are the chemical wastes disposed of by licensed collectors?					$\checkmark$	
4.12	Are trip tickets for chemical wastes disposal available for inspection?					$\checkmark$	
4.13	Are chemical/fuel storage areas bunded?		$\checkmark$				
4.14	Are designated areas identified for storage and sorting of construction wastes?		$\checkmark$				
4.15	Are construction wastes sorted (inert and non-inert) on site?		$\checkmark$				
4.16	Are construction wastes reused?	$\checkmark$					
4.17	Are construction wastes disposed of properly?			$\checkmark$			
4.18	Are site hoardings and signboards made of durable materials instead of timber?		$\checkmark$				
4.19	Is trip ticket system implemented for the disposal of construction wastes and records available for inspection?		$\checkmark$				
4.20	Are appropriate procedures followed if contaminated material exists?		$\checkmark$				
4.21	Is relevant license/ permit for disposal of construction waste or excavated materials available for inspection?		$\checkmark$				
4.22	Site cleanliness and appropriate waste management training had provided for the site workers.		$\checkmark$				

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
4.23	Contaminated sediments will managed according to WBTC No.12/2000 and EWTB TC(W) No. 34/2002.		$\checkmark$				
Sectio	on 5: Landscape & Visual						
5.01	Are retained and transplanted trees in health condition?		$\checkmark$				
5.02	Are retained and transplanted trees properly protected?		$\checkmark$				
5.03	Are surgery works carried out for the damaged trees?	$\checkmark$					
5.04	Is damage to trees outside site boundary due to construction activities avoided?		$\checkmark$				
5.05	Is the night-time lighting controlled to minimize glare to sensitive receivers?	$\checkmark$					
Sectio	on 6: Ecology						
6.01	Gabion banks and base had been provide for channel linings and banks for typical sections of KT15?					$\checkmark$	
6.02	Prevent site effluent/runoff discharge to the seasonal wetlands at KT15?		$\checkmark$				
6.03	Stockpiling or disposal of materials, and any dredging or construction activities at the seasonal wetlands at KT15 are prohibited?		$\checkmark$				
Sectio	on 7: Others						
7.01	Are relevant Environmental Permits posted at all vehicle site entrances/exits?		$\checkmark$				

### Remarks

#### Last Site Inspection:

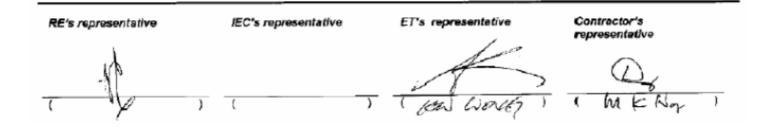
No debris and C&D waste accumulated on site was observed at CH160 (Recorded on 27 December 2007).

No new environmental issue was observed during the site inspection.

## Findings of Site Inspection on 10 January 2008:

Site Inspection was covered the site area from CH000-800 and Portion 8 (Site office).

Debris and C&D wastes accumulated CH250 was observed, the Contract was reminded to clean up regular.





Humic Wind:	Yuen Long, Kam Tin, Ngau Tam Mei and Tin Shui Wai Drainage Improvements, Stage 1, Phase 2B – Cheung Chun San Tsuen and Kam Tsin Wai         ction         17 January 2008         14:30         A:       GENERAL INFORMATION         Environmental         er:       Sunny         Fine       ✓         Cloudy         erature:       15         °C         ity:       High         Strong       Breeze         Strong       Breeze	Inspected b RE/RE's rej IEC/IEC's re ETL/ ET's re Contractor' Checklist N Permit No.: Rainy	presentativ epresentati epresentati 's represen lo.	ve: ve: tative:	Mr. W.L. Benny Li Ben Tam M.K. Ng KT15-17	u I / Man	
PART	B: SITE AUDIT	Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
Sectio	on 1: Water Quality						
1.01	Is an effluent discharge license obtained for the Project?		$\checkmark$				
1.02	Is the effluent discharged in accordance with the discharge licence?		$\checkmark$				
1.03	Is the discharge of turbid water avoided?			$\checkmark$			
1.04	Are there proper desilting facilities in the drainage systems to reduce SS levels in effluent?			$\checkmark$			
1.05	Are there channels, sandbags or bunds to direct surface run-off to sedimentation tanks?	$\checkmark$					
1.06	Are there any perimeter channels provided at site boundaries to intercept storm runoff from crossing the site?	$\checkmark$					
1.07	Is drainage system well maintained?	$\checkmark$					
1.08	As excavation proceeds, are temporary access roads protected by crushed stone or gravel?		$\checkmark$				
1.09	Are temporary exposed slopes properly covered?		$\checkmark$				
1.10	Are earthworks final surfaces well compacted or protected?					$\checkmark$	
1.11	Are manholes adequately covered or temporarily sealed?		$\checkmark$				
1.12	Are there any procedures and equipment for rainstorm protection?		$\checkmark$				
1.13	Are wheel washing facilities well maintained?		$\checkmark$				
1.14	Is runoff from wheel washing facilities avoided?		$\checkmark$				
1.15	Are there toilets provided on site?		$\checkmark$				
1.16	Are toilets properly maintained?		$\checkmark$				
1.17	Are the vehicle and plant servicing areas paved and located within roofed areas?					$\checkmark$	
1.18	Is the oil leakage or spillage avoided?		$\checkmark$				
1.19	Are there any measures to prevent leaked oil from entering the drainage system?		$\checkmark$				
1.20	Are there any measures to collect spilt cement and concrete washings during concreting works?					$\checkmark$	
1.21	Are there any oil interceptors/grease traps in the drainage systems for vehicle and plant servicing areas, canteen kitchen, etc?					$\checkmark$	

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
1.22	Are the oil interceptors/grease traps maintained properly?					$\checkmark$	
1.23	Is used bentonite recycled where appropriate?	$\checkmark$				$\checkmark$	
1.24	Designated settlement area for runoff/wheel wash waste is provide and located at the streambed with 1-2m deep, 12m long and around 50m3 capacities for sedimentation.	$\checkmark$					
1.25	No excavation is undertaken in the settlement area.		$\checkmark$				
1.26	Concreting wastes water should be neutralized below the pH Action Levels before discharge.					$\checkmark$	
1.27	Mobile toilets should provide on site and located away the KT15 stream course.		$\checkmark$				
1.28	License collector should be employed for handling the sewage of mobile toilet.		$\checkmark$				
1.29	Prevent stagnant water accumulated within the excavation trench or site working area.		$\checkmark$				
Sectio	n 2: Air Quality						
2.01	Are there wheel washing facilities with high pressure jets provided at every vehicle exit point?		$\checkmark$				
2.02	Are vehicles washed to remove any dusty materials from their bodies and wheels before leaving construction sites?		$\checkmark$				
2.03	Are the excavated materials sprayed with water during handling?	$\checkmark$					
2.04	Are stockpiles of dusty materials sprayed with water, covered or placed in sheltered areas?		$\checkmark$				
2.05	Is the exposed earth properly treated within six months after the last construction activities?					$\checkmark$	
2.06	Are the access roads sprayed with water to maintain the entire road surface wet or paved?		$\checkmark$				
2.07	Is the surface where any drilling, cutting, polishing or breaking operation continuously sprayed with water?	$\checkmark$					
2.08	Is the load on vehicles covered entirely by clean impervious sheeting?		$\checkmark$				
2.09	Is the loading of materials to a level higher than the side and tail boards during transportation by vehicles avoided?		$\checkmark$				
2.10	Is the road leading to the construction site within 30m of the vehicle entrance kept clear of dusty materials?		$\checkmark$				
2.11	Is dark smoke emission from plant/equipment avoided?		$\checkmark$				
2.12	Are de-bagging, batching and mixing processes carried out in sheltered areas during the use of bagged cement?					$\checkmark$	
2.13	Are site vehicles travelling within the speed limit not more than 15km/hour?		$\checkmark$				
2.14	Are hoardings of not less than 2.4m high provided along the site boundary, which adjoins areas accessible to the public?		$\checkmark$				
2.15	Is open burning avoided?		$\checkmark$				
2.16	Excavated materials from the stream must remove form site on the same day. The materials shall be stored in covered impermeable skips awaiting removal from site.		$\checkmark$				
Sectio	n 3: Noise						
3.01	Are noisy equipment and activities positioned as far as practicable from the sensitive receivers?		$\checkmark$				
3.02	Is silenced equipment adopted?	$\checkmark$					
3.03	Is idle equipment turned off or throttled down?		$\checkmark$				
3.04	Are all plant and equipment well maintained and in good condition?		$\checkmark$				
3.05	Are noise barriers or enclosures provided at areas where construction activities cause noise impact on sensitive receivers?		$\checkmark$				
3.06	Are hand held breakers fitted with valid noise emission labels during operation?					$\checkmark$	

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
3.07	Are air compressors fitted with valid noise emission labels during operation?					$\checkmark$	
3.08	Are flaps and panels of mechanical equipment closed during operation?		$\checkmark$				
3.09	Are Construction Noise Permit(s) applied for percussive piling works?					$\checkmark$	
3.10	Are Construction Noise Permit(s) applied for general construction works during restricted hours?					$\checkmark$	
3.11	Are valid Construction Noise Permit(s) posted at site entrances?					$\checkmark$	
3.12	Use of quiet plant had been used on site to minimise the construction noise impact to the surrounding residences/dwellings (Level 1 mitigation measures).	$\checkmark$					
3.13	Temporary/Moveable noise barrier or site hoarding are provide or erect at the site boundary to minimise the noise impact of the closest NSRs or stationary equipments shield by the noise barrier which cannot visible from NSRs (Level 2 mitigation measure)		$\checkmark$				
3.14	Temporary/Moveable noise barrier equal to or more than 3m height with 10kg/m2 are provide for noise mitigation measures (Level 2 mitigation measures).		$\checkmark$				
Sectio	n 4: Waste/Chemical Management						
4.01	Waste Management Plan had been submit to Engineer for approval.		$\checkmark$				
4.02	Are receptacles available for general refuse collection?		$\checkmark$				
4.03	Is general refuse sorting or recycling implemented?	$\checkmark$					
4.04	Is general refuse disposed of properly and regularly?		$\checkmark$				
4.05	Is the Contractor registered as a chemical waste producer?		$\checkmark$				
4.06	Are the chemical waste containers properly labelled?		$\checkmark$				
4.07	Are the chemical wastes stored in proper storage areas?		$\checkmark$				
4.08	Is the chemical waste storage area properly labelled?		$\checkmark$				
4.09	Is the chemical waste storage area used for storage of chemical waste only?		$\checkmark$				
4.10	Are incompatible chemical wastes stored in different areas?		$\checkmark$				
4.11	Are the chemical wastes disposed of by licensed collectors?					$\checkmark$	
4.12	Are trip tickets for chemical wastes disposal available for inspection?					$\checkmark$	
4.13	Are chemical/fuel storage areas bunded?		$\checkmark$				
4.14	Are designated areas identified for storage and sorting of construction wastes?		$\checkmark$				
4.15	Are construction wastes sorted (inert and non-inert) on site?		$\checkmark$				
4.16	Are construction wastes reused?	$\checkmark$					
4.17	Are construction wastes disposed of properly?		$\checkmark$				
4.18	Are site hoardings and signboards made of durable materials instead of timber?		$\checkmark$				
4.19	Is trip ticket system implemented for the disposal of construction wastes and records available for inspection?		$\checkmark$				
4.20	Are appropriate procedures followed if contaminated material exists?		$\checkmark$				
4.21	Is relevant license/ permit for disposal of construction waste or excavated materials available for inspection?		$\checkmark$				
4.22	Site cleanliness and appropriate waste management training had provided for the site workers.		$\checkmark$				

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
4.23	Contaminated sediments will managed according to WBTC No.12/2000 and EWTB TC(W) No. 34/2002.		$\checkmark$				
Sectio	on 5: Landscape & Visual						
5.01	Are retained and transplanted trees in health condition?		$\checkmark$				
5.02	Are retained and transplanted trees properly protected?		$\checkmark$				
5.03	Are surgery works carried out for the damaged trees?	$\checkmark$					
5.04	Is damage to trees outside site boundary due to construction activities avoided?		$\checkmark$				
5.05	Is the night-time lighting controlled to minimize glare to sensitive receivers?	$\checkmark$					
Sectio	on 6: Ecology						
6.01	Gabion banks and base had been provide for channel linings and banks for typical sections of KT15?					$\checkmark$	
6.02	Prevent site effluent/runoff discharge to the seasonal wetlands at KT15?		$\checkmark$				
6.03	Stockpiling or disposal of materials, and any dredging or construction activities at the seasonal wetlands at KT15 are prohibited?		$\checkmark$				
Sectio	on 7: Others						
7.01	Are relevant Environmental Permits posted at all vehicle site entrances/exits?		$\checkmark$				

## Remarks

### Last Site Inspection (10 January 2008):

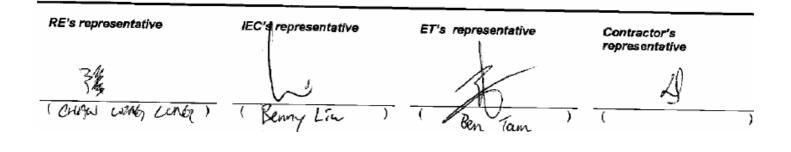
Debris and C&D waste accumulated at CH250 had been clean up.

## Findings of Site Inspection on 17 January 2008:

Site inspection was covered the site area from CH000-800 and Portion 8 (Site office).



Wheel washing wastewater directly discharge into the stream was observed at CH459, the Contractor was reminded to divert all the wastewater to the desliting facility prior to discharge.





Proje			Inspected by								
	Yuen Long, Kam Tin, Ngau Tam Mei and Tin Shu Wai Drainaga Improvementa, Stage 4, Bhase 3B					Mr. W.L. Chan					
	Wai Drainage Improvements, Stage 1, Phase 28 Cheung Chun San Tsuen and Kam Tsin Wai		RE/RE's rej	presentat	ive:						
Inspe	ction	I	EC/IEC's re	epresenta	tive:						
Date:	24 January 2008	E	ETL/ ET's r	epresenta	ative:	Ken Wor					
Time:	09:30	(	Contractor	's represe	ntative:	M.K. Ng	/ Man / Si	L L L L L L L L L L L L L L L L L L L			
		C	Checklist N	lo.		KT15-24	0108				
PART	A: GENERAL INFORMATION Environ	mental P	ermit No.:	EP-231/2	005/A						
Weath	her: Sunny Fine 🗸 Clou	dy	Rainy								
Temp	erature: 15 °C										
Humic	dity: High 🖌 Moderate Low										
Wind:	Strong Breeze 🗸 Light	t [	Calm								
PART	PART B: SITE AUDIT										
			Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks			
Section	on 1: Water Quality										
1.01	Is an effluent discharge license obtained for the Project?			$\checkmark$							
1.02	Is the effluent discharged in accordance with the di- licence?	scharge		$\checkmark$							
1.03	Is the discharge of turbid water avoided?			$\checkmark$							
1.04	Are there proper desilting facilities in the drainage syst reduce SS levels in effluent?	tems to		$\checkmark$							
1.05	Are there channels, sandbags or bunds to direct surface rused imentation tanks?	un-off to	$\checkmark$								
1.06	Are there any perimeter channels provided at site bound intercept storm runoff from crossing the site?	aries to	$\checkmark$								
1.07	Is drainage system well maintained?		$\checkmark$								
1.08	As excavation proceeds, are temporary access roads prote crushed stone or gravel?	ected by		$\checkmark$							
1.09	Are temporary exposed slopes properly covered?			$\checkmark$							
1.10	Are earthworks final surfaces well compacted or protected?						$\checkmark$				
1.11	Are manholes adequately covered or temporarily sealed?			$\checkmark$							
1.12	Are there any procedures and equipment for rainstorm prote	ection?									
1.13	Are wheel washing facilities well maintained?										
1.14	Is runoff from wheel washing facilities avoided?										
1.15	Are there toilets provided on site?										
1.16	Are toilets properly maintained?			$\checkmark$							
1.17	Are the vehicle and plant servicing areas paved and locate roofed areas?	d within					$\checkmark$				
1.18	Is the oil leakage or spillage avoided?			$\checkmark$							
1.19	Are there any measures to prevent leaked oil from ente drainage system?	-		$\checkmark$							
1.20	Are there any measures to collect spilt cement and c washings during concreting works?						$\checkmark$				
1.21	Are there any oil interceptors/grease traps in the drainages for vehicle and plant servicing areas, canteen kitchen, etc?	systems					$\checkmark$				

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
1.22	Are the oil interceptors/grease traps maintained properly?					$\checkmark$	
1.23	Is used bentonite recycled where appropriate?	$\checkmark$				$\checkmark$	
1.24	Designated settlement area for runoff/wheel wash waste is provide and located at the streambed with 1-2m deep, 12m long and around 50m3 capacities for sedimentation.	$\checkmark$					
1.25	No excavation is undertaken in the settlement area.		$\checkmark$				
1.26	Concreting wastes water should be neutralized below the pH Action Levels before discharge.					$\checkmark$	
1.27	Mobile toilets should provide on site and located away the KT15 stream course.		$\checkmark$				
1.28	License collector should be employed for handling the sewage of mobile toilet.		$\checkmark$				
1.29	Prevent stagnant water accumulated within the excavation trench or site working area.		$\checkmark$				
Sectio	on 2: Air Quality						
2.01	Are there wheel washing facilities with high pressure jets provided at every vehicle exit point?		$\checkmark$				
2.02	Are vehicles washed to remove any dusty materials from their bodies and wheels before leaving construction sites?		$\checkmark$				
2.03	Are the excavated materials sprayed with water during handling?	$\checkmark$					
2.04	Are stockpiles of dusty materials sprayed with water, covered or placed in sheltered areas?		$\checkmark$				
2.05	Is the exposed earth properly treated within six months after the last construction activities?					$\checkmark$	
2.06	Are the access roads sprayed with water to maintain the entire road surface wet or paved?		$\checkmark$				
2.07	Is the surface where any drilling, cutting, polishing or breaking operation continuously sprayed with water?	$\checkmark$					
2.08	Is the load on vehicles covered entirely by clean impervious sheeting?		$\checkmark$				
2.09	Is the loading of materials to a level higher than the side and tail boards during transportation by vehicles avoided?		$\checkmark$				
2.10	Is the road leading to the construction site within 30m of the vehicle entrance kept clear of dusty materials?		$\checkmark$				
2.11	Is dark smoke emission from plant/equipment avoided?		$\checkmark$				
2.12	Are de-bagging, batching and mixing processes carried out in sheltered areas during the use of bagged cement?					$\checkmark$	
2.13	Are site vehicles travelling within the speed limit not more than 15km/hour?		$\checkmark$				
2.14	Are hoardings of not less than 2.4m high provided along the site boundary, which adjoins areas accessible to the public?		$\checkmark$				
2.15	Is open burning avoided?		$\checkmark$				
2.16	Excavated materials from the stream must remove form site on the same day. The materials shall be stored in covered impermeable skips awaiting removal from site.		$\checkmark$				
Sectio	on 3: Noise						
3.01	Are noisy equipment and activities positioned as far as practicable from the sensitive receivers?		$\checkmark$				
3.02	Is silenced equipment adopted?	$\checkmark$					
3.03	Is idle equipment turned off or throttled down?		$\checkmark$				
3.04	Are all plant and equipment well maintained and in good condition?		$\checkmark$				
3.05	Are noise barriers or enclosures provided at areas where construction activities cause noise impact on sensitive receivers?		$\checkmark$				
3.06	Are hand held breakers fitted with valid noise emission labels during operation?					$\checkmark$	

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
3.07	Are air compressors fitted with valid noise emission labels during operation?					$\checkmark$	
3.08	Are flaps and panels of mechanical equipment closed during operation?		$\checkmark$				
3.09	Are Construction Noise Permit(s) applied for percussive piling works?					$\checkmark$	
3.10	Are Construction Noise Permit(s) applied for general construction works during restricted hours?					$\checkmark$	
3.11	Are valid Construction Noise Permit(s) posted at site entrances?					$\checkmark$	
3.12	Use of quiet plant had been used on site to minimise the construction noise impact to the surrounding residences/dwellings (Level 1 mitigation measures).	$\checkmark$					
3.13	Temporary/Moveable noise barrier or site hoarding are provide or erect at the site boundary to minimise the noise impact of the closest NSRs or stationary equipments shield by the noise barrier which cannot visible from NSRs (Level 2 mitigation measure)		$\checkmark$				
3.14	Temporary/Moveable noise barrier equal to or more than 3m height with 10kg/m2 are provide for noise mitigation measures (Level 2 mitigation measures).		$\checkmark$				
Sectio	n 4: Waste/Chemical Management						
4.01	Waste Management Plan had been submit to Engineer for approval.		$\checkmark$				
4.02	Are receptacles available for general refuse collection?		$\checkmark$				
4.03	Is general refuse sorting or recycling implemented?	$\checkmark$					
4.04	Is general refuse disposed of properly and regularly?		$\checkmark$				
4.05	Is the Contractor registered as a chemical waste producer?		$\checkmark$				
4.06	Are the chemical waste containers properly labelled?		$\checkmark$				
4.07	Are the chemical wastes stored in proper storage areas?		$\checkmark$				
4.08	Is the chemical waste storage area properly labelled?		$\checkmark$				
4.09	Is the chemical waste storage area used for storage of chemical waste only?		$\checkmark$				
4.10	Are incompatible chemical wastes stored in different areas?		$\checkmark$				
4.11	Are the chemical wastes disposed of by licensed collectors?					$\checkmark$	
4.12	Are trip tickets for chemical wastes disposal available for inspection?					$\checkmark$	
4.13	Are chemical/fuel storage areas bunded?		$\checkmark$				
4.14	Are designated areas identified for storage and sorting of construction wastes?		$\checkmark$				
4.15	Are construction wastes sorted (inert and non-inert) on site?		$\checkmark$				
4.16	Are construction wastes reused?	$\checkmark$					
4.17	Are construction wastes disposed of properly?		$\checkmark$				
4.18	Are site hoardings and signboards made of durable materials instead of timber?		$\checkmark$				
4.19	Is trip ticket system implemented for the disposal of construction wastes and records available for inspection?		$\checkmark$				
4.20	Are appropriate procedures followed if contaminated material exists?		$\checkmark$				
4.21	Is relevant license/ permit for disposal of construction waste or excavated materials available for inspection?		$\checkmark$				
4.22	Site cleanliness and appropriate waste management training had provided for the site workers.		$\checkmark$				

		Not Obs.	Yes	No	Follow up	N/A	Photo/ Remarks
4.23	Contaminated sediments will managed according to WBTC No.12/2000 and EWTB TC(W) No. 34/2002.		$\checkmark$				
Sectio	on 5: Landscape & Visual						
5.01	Are retained and transplanted trees in health condition?		$\checkmark$				
5.02	Are retained and transplanted trees properly protected?		$\checkmark$				
5.03	Are surgery works carried out for the damaged trees?	$\checkmark$					
5.04	Is damage to trees outside site boundary due to construction activities avoided?		$\checkmark$				
5.05	Is the night-time lighting controlled to minimize glare to sensitive receivers?	$\checkmark$					
Sectio	on 6: Ecology						
6.01	Gabion banks and base had been provide for channel linings and banks for typical sections of KT15?					$\checkmark$	
6.02	Prevent site effluent/runoff discharge to the seasonal wetlands at KT15?		$\checkmark$				
6.03	Stockpiling or disposal of materials, and any dredging or construction activities at the seasonal wetlands at KT15 are prohibited?		$\checkmark$				
Sectio	on 7: Others						
7.01	Are relevant Environmental Permits posted at all vehicle site entrances/exits?		$\checkmark$				

### Remarks

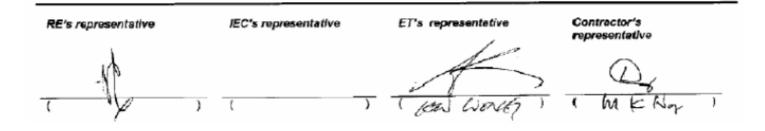
### Last Site Inspection (17 January 2008):

No wastewater discharge into the stream was observed during the site inspection.

### Findings of Site Inspection on 25 January 2008:

Site inspection was covered the site area from CH000-800 and Portion 8 (Site office).

No environmental issue was observed during the site inspection. In general, the site was kept clean and tidy.





Appendix K

**Response to Comments** 



## Contract No. DC/2006/02

Yuen Long, Kam Tin, Ngau Tam Mei and Tin Shui Wai Drainage Improvements, Stage 1, Phase 2B – Cheung Chun San Tsuen and Kam Tsin Wai Response to IEC's comments on <u>KT15 Monthly EM&A Report for January 2008 (Revision 0) [Received from e-mail on 05 Feb 2008]</u>

No.	Section / Paragraph	Comments	Ref.	Response to Comments
1	Table 5-2	The 24-Hour TSP monitoring result at A10 on 25-Jan-08 is missing. Please check.	-	Table 5-2 had been updated.
2	Various	There is a discrepancy between the date of Ecology Surveys mentioned in the report and that	-	Noted
		scheduled in Appendix G. Please revise accordingly.		
3	Appendix G	Please check there should be one air quality monitoring between 31 Jan 2007 - 15 Feb 2008	-	Appendix G had been updated.