

JOB No.: TCS00371/07

REVISION No.: 3

**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 OCTOBER
2008 (NO. 16)**

PREPARED FOR

CHIT CHEUNG CONSTRUCTION COMPANY LIMITED

Quality Index

Date	Reference No.	Prepared By	Certified By
14 November 2008	TCS00371/07/600/R1004r3	-	Ken Wong



- Environmental Team Leader

Rev. No.	Date	Remarks
1	28 Oct 2008	First Submission
2	06 Nov 2008	Response to IEC's comments received on 05 Nov 2008 (18:10)
3	14 Nov 2008	Response to IEC's comments received on 11 Nov 2008 (14:42)

This report has been prepared by Action-United Environmental Services & Consulting with all reasonable skill, care and diligence within the terms of the Agreement with the client, incorporating our General Terms and Conditions of Business and taking account of the resources devoted to it by agreement with the client. We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above. This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies upon the report at their own risk.

EXECUTIVE SUMMARY

- ES01. 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.
- ES02. 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).
- ES03. 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.
- ES04. This Monthly EM&A Report for **October 2008 (No. 16)** is present the environmental impact monitoring and audit (EM&A) results of the project EM&A program for the reporting month **October 2008** during the period from **26 September 2008 to 25 October 2008**.

BREACH OF ACTION AND LIMIT (AL) LEVELS

- ES05. Dated and parameters exceedance recorded in this reporting period are summaries in following table.

Monitoring	Parameters	Action Level	Limit Level
Air Quality	1-Hour TSP	-	-
	24-Hour TSP	-	-
Noise	Leq (30min) Daytime	-	-
Stream Water	Dissolve Oxygen (DO)	-	-
	Turbidity (NTU)	-	-
	pH	-	-
	Suspended Solids (SS)	-	02 and 15 Oct 08
	Ammonia Nitrogen	-	-
Ecology	Zinc	-	-
	Number of species of wetland birds	-	21 Oct 08
	Total number of wetland birds	-	-

Note: According to the EM&A Manual S7.5.1(b), fauna monitoring only undertaken during wet seasons (April to July)

COMPLAINTS LOG

- ES06. No environmental complaint was received in this reporting period.

NOTIFICATIONS OF ANY SUMMONS AND SUCCESSFUL PROSECUTIONS

- ES07. There was no environmental summons or successful prosecution was recorded in this reporting period.

REPORTING CHANGES

ES08. There are no changes to be reported in this reporting period.

FUTURE KEY ISSUES

ES09. Construction activities to be undertaken in **November 2008** included Construction and Excavation works, Stream Diversion, Tree protection and tree transplanting works, Carrying out joined survey, Utilities companies liaison, Dumping activities 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

ES10. A summary of the monitoring activities in this reporting period is listed below: -

• 1-Hour TSP Monitoring	15 Events
• 24-Hour TSP Monitoring	5 Events
• Noise Monitoring	5 Events
• Stream Water Quality	18 Events
• Ecology (Fauna)	1 Event
• Site Inspection Audit	4 Times

AIR QUALITY

ES11. No 1-Hour and 24-Hour TSP monitoring results trigger the Action or Limit Level was recorded in this reporting period.

CONSTRUCTION NOISE

ES12. No construction noise compliant (Action Level) was received and no construction noise monitoring exceeded the Limit Level was recorded in this reporting period.

STREAM WATER QUALITY

ES13. SS exceedance (Limit Level) at W9B was recorded on 02 and 15 October 2008. From the monitoring team on-site observations and the Contractor provide information, only steel fixing, formworks erection and gabion installation were undertaken. No excavation or major discharge on-site was observed on-site. Desilting facilities and proper mitigation measures were implemented on-site. Silty water from Kam Tin Nullah upstream was observed during the sampling. Therefore exceedances of SS were not project related.

ECOLOGY (FAUNA)

ES14. Non-compliance with the ecological criteria was found during the monitoring month on 21 October 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 or fauna was not caused by the project.

SUMMARY OF MONITORING EXCEEDANCES

ES15. A summary of monitoring exceedances during the reporting period for air quality, construction noise, stream water quality and ecology (fauna) monitoring are presented below:-

Monitoring	Parameters	Work-Related Exceedance %	Investigation & Corrective Actions
Air Quality	1-Hour TSP	0	Not Required for 0% Project Related Exceedance
	24-Hour TSP	0	Not Required for 0% Project Related Exceedance
Noise	Leq (30min) Daytime	0	Not Required for 0% Project Related Exceedance
Stream Water	Dissolve Oxygen (DO)	0	Not Required for 0% Project Related Exceedance
	Turbidity (NTU)	0	Not Required for 0% Project Related Exceedance
	pH	0	Not Required for 0% Project Related Exceedance
	Suspended Solids (SS)	0	Not Required for 0% Project Related Exceedance
	Ammonia Nitrogen	0	Not Required for 0% Project Related Exceedance
	Zinc	0	Not Required for 0% Project Related Exceedance
Ecology	Decrease in number of species of wetland birds of conservation importance from baseline.	0	Not Required for 0% Project Related Exceedance
	Decrease in the total number of wetland birds of conservation importance from baseline.	0	Not Required for 0% Project Related Exceedance

Note: According to the Project Profile Secondary Channels KT14 & KT15 Attachment 4 EM&A Manual Section 7.5.1 (b), fauna monitoring only undertaken in wet seasons (April to July) in monthly basis.

SITE INSPECTION BY EXTERNAL PARTIES

ES16. No site inspection was undertaken by external parties in this reporting period.

TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	PROJECT ORGANIZATION AND CONSTRUCTION PROGRESS	2
3.0	SUMMARY OF IMPACT MONITORING REQUIREMENTS	3
4.0	IMPACT MONITORING METHDOLOGY	5
5.0	IMPACT MONITORING RESULTS	12
6.0	WASTE MANAGEMENT	16
7.0	SITE INSPECTION	17
8.0	ENVIRONMENTAL COMPLAINT AND NON-COMPLIANCE	18
9.0	IMPLEMENTATION STATUS OF MITIGATION MEASURES	19
10.0	IMPACT FORECAST	20
11.0	CONCLUSION	21

LIST OF TABLES

TABLE 2-1	STATUS OF ENVIRONMENTAL LICENSE AND PERMITS
TABLE 3-1	SUMMARY OF EM&A REQUIREMENTS
TABLE 3-2	ACTION AND LIMIT LEVELS FOR AIR QUALITY MONITORING
TABLE 3-3	ACTION AND LIMIT LEVELS FOR CONSTRUCTION NOISE MONITORING
TABLE 3-4	ACTION AND LIMIT LEVELS FOR STREAM WATER QUALITY MONITORING
TABLE 3-5	ACTION AND LIMIT LEVELS FOR CONSTRUCTION ECOLOGY MONITORING
TABLE 4-1	LOCATIONS OF AIR QUALITY, CONSTRUCTION NOISE AND STREAM WATER QUALITY MONITORING STATION/LOCATIONS
TABLE 4-2	MONITORING EQUIPMENT USED IN EM&A PROGRAM
TABLE 4-3	ANALYTICAL METHOD APPLIED TO WATER QUALITY SAMPLES
TABLE 5-1	SUMMARY OF 1-HOUR TSP MONITORING RESULTS AT A10
TABLE 5-2	SUMMARY OF 24-HOUR TSP MONITORING RESULTS AT A10
TABLE 5-3	SUMMARY OF NOISE MONITORING RESULTS AT N10A
TABLE 5-4	SUMMARY OF STREAM WATER QUALITY RESULTS AT W9A & W9B
TABLE 5-5	SUMMARY OF KT15 ECOLOGY IMPACT MONITORING SURVEYS BIRD SURVEY
TABLE 6-1	SUMMARY OF QUANTITIES OF INERT C&D MATERIALS
TABLE 6-2	SUMMARY OF QUANTITIES OF C&D WASTES
TABLE 6-3	SUMMARY OF EXCAVATED SOIL FOR MARINE DISPOSAL
TABLE 8-1	STATISTICAL SUMMARY OF ENVIRONMENTAL COMPLAINTS
TABLE 8-2	STATISTICAL SUMMARY OF ENVIRONMENTAL SUMMONS
TABLE 8-3	STATISTICAL SUMMARY OF ENVIRONMENTAL PROSECUTION
TABLE 11-1	SUMMARY OF THE EXCEEDANCES FOR IMPACT MONITORING

LIST OF APPENDICES

- APPENDIX A PROJECT SITE LAYOUT**
- APPENDIX B THREE-MONTH CONSTRUCTION PROGRAM**
- APPENDIX C ENVIRONMENTAL ORGANISATION STRUCTURE**
- APPENDIX D LOCATIONS OF DESIGNATED MONITORING STATION/LOCATIONS/AREA**
- APPENDIX E EVENT/ACTION PLAN FOR AIR QUALITY, CONSTRUCTION NOISE, STREAM WATER QUALITY AND ECOLOGY**
- APPENDIX F EQUIPMENT CALIBRATION CERTIFICATES**
- APPENDIX G IMPACT MONITORING SCHEDULE**
- APPENDIX H GRAPHICAL PLOTS OF AIR QUALITY, CONSTRUCTION NOISE AND STREAM WATER QUALITY MONITORING RESULTS**
- APPENDIX I METEOROLOGICAL DATA IN THE REPORTING PERIOD**
- APPENDIX J ENVIRONMENTAL TEAM SITE INSPECTION CHECKLISTS**
- APPENDIX K RESPONSE TO COMMENT**

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. Location plan of the project site is presented in [Appendix A](#) and the 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 **October 2008** during the period from **26 September 2008 to 25 October 2008**.

REPORT STRUCTURE

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

- Section 1 INTRODUCTION**
- Section 2 PROJECT ORGANIZATION AND CONSTRUCTION PROGRESS**
- 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 and excavation works;
- Dumping activities;
- Sheet pile driving;
- Tree protection and tree transplanting works;
- Utilities companies liaison;
- Carrying out joined survey;
- Gabion Installation; and
- Marine dumping of Type 1 material.

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](#).

Table 2-1 Status of Environmental Licenses and Permits

Items	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	Type 1 (Open Sea Disposal) Marine Dumping Permit (EP/MD/09-027)	13 Oct 2008 – 12 Apr 2009

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**.

Table 3-1 Summary of EM&A Requirements

Environmental Aspect	Monitoring Parameters	Monitoring Stations	
Air Quality	1-Hour and 24-Hour TSP	A10	
Construction Noise	Leq _(30min) during normal working hours	N10a*	
	Supplementary data of L ₁₀ and L ₉₀ for reference		
Stream Water Quality	In Situ Measurement	W9A & W9B	
			• Dissolved Oxygen Concentration (mg/L);
			• Dissolved Oxygen Saturation (% Sat);
			• Turbidity (NTU);
			• pH;
	• Salinity (%); Water Depth (m) and		
Laboratory Analysis	• Temperature (°C);		
	• Suspended Solids (mg/L);		
	• Ammonia Nitrogen (mg/L); and		
	• Zinc (µg/L).		
Ecology	Monthly monitoring of construction activities adjacent to the wetland areas to identify any intrusions of construction activities into the wetland areas; Monthly monitoring of wetland areas themselves to check that there is no adverse impact on the wetlands as a consequence of changes to the water table that are attributable to the project, if any; Photographic records at six-month intervals; and Monthly surveys of fauna in the wetland areas during the wet season (April to July inclusive) for reptiles, amphibians, dragonflies, and butterflies, and throughout the year for birds.		

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.
- 3.04 Noise monitoring is conducted once per week at one designated monitoring location (N10a). Measurements of Leq_(30min) shall be taken between 0700 and 1900 with supplementary L₁₀ and L₉₀ data will be collected for reference.
- 3.05 Stream water quality monitoring is conducted were undertaken at two locations (W9A and W9B) twice per week. Dissolved Oxygen (DO), pH and 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 monitoring are shown in [Tables 3-2, 3-3, 3-4 & 3-5](#).

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

Monitoring Station	Action Level ($\mu\text{g}/\text{m}^3$)		Limit Level ($\mu\text{g}/\text{m}^3$)	
	1-Hour TSP	24-Hour TSP	1-Hour TSP	24-Hour TSP
A10	> 307	> 165	> 500	> 260

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 70dB(A) for schools and 65dB(A) during the school examination periods.

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

Dissolved Oxygen (mg/L)	W9A (Upstream) [#]	W9B (Downstream)
Action Level	NA	< 0.3
Limit Level	NA	< 0.2
Turbidity (NTU)		
Action Level	NA	> 73.5*
Limit Level	NA	> 78.2**
pH		
Action Level	NA	> 7.0*
Limit Level	NA	> 7.1**
Suspended Solids (mg/L)		
Action Level	NA	> 148*
Limit Level	NA	> 159**
Ammonia Nitrogen (mg/L)		
Action Level	NA	> 30.91*
Limit Level	NA	> 32.20**
Zinc ($\mu\text{g}/\text{L}$)		
Action Level	NA	> 242*
Limit Level	NA	> 252**

Note: # Act as Control Station for Impact Stream Water Quality Monitoring.
 * Alternative Action Level is 120% of upstream control station of same day.
 ** Alternative Limit Level is 130% of upstream control station of same day.

Table 3-5 Action and Limit Levels for Ecology Monitoring

Parameters	Action Level	Limit Level
Fauna: decrease in the total number of wetland dependant species or individuals of the surveyed faunal groups from baseline	20 – 40% of individuals and species	> 40% of individuals and species

- 3.08 The Event/Action Plan of air quality, construction noise, stream water quality and ecology monitoring 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 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 4-1 Location of Air Quality, Construction Noise & Stream Water Quality Monitoring Station/Locations

Air Quality Station	
A10	Village House in Tin Sam San Tsuen
Construction Noise Location	
N10*	Village House in Tin Sam San Tsuen
N10a	Village House in Tin Sam San Tsuen
Water Quality Locations	
W9A [#]	Tin Sam San Tsuen
W9B	Tin Sam San Tsuen

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

Act as control station in impact monitoring

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

MONITORING FREQUENCY AND PERIOD

1-HOUR TSP MONITORING

- 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 **5** monitoring events were carried out in this reporting period.

NOISE MONITORING

- 4.05 Impact noise monitoring was undertaken at 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 twice per week. Total of **18** 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 Monitoring equipment used by the ET in EM&A program is presented in [Table 4-2](#).

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

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 550A or YSI 85/10FT
DO	Thermometer & DO Meter	YSI 550A or YSI 85/10FT
pH	pH Meter	Hanna HI 98128 or 98107
Turbidity	Turbidimeter	Hach 2100P
Salinity	Salinometer	ATAGO refractometer
-	Water Sampler	Teflon bailer / bucket
-	Sample Container	High density polythene bottles (provided by laboratory)
-	Storage Container	'Willow' 33-litter plastic cool box

24-HOUR TSP MONITORING

4.09 The 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 m³/min (20-60 SCFM) adjustable flow rate;
- A 7-day mechanical timer for 24-Hour operation;
- An elapsed time indicator with ±2 minutes accuracy for 24-Hour operation;
- Minimum exposed area of 63 in²;
- Flow control accuracy of ±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 ±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.

1-HOUR TSP MONITORING

- 4.11 Measurement of 1-Hour TSP monitoring was taken by 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 extracted 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 (L_{eq}) 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 and associated acoustical calibrators in compliance with the International Electrotechnical Commission (IEC) Publication 651:1979 (Type 1) and 804:1985 (Type 1) specifications 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 (L_{eq}).
- 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

Water Depth

- 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.

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 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.

pH

- 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.

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.

Salinity

- 4.24 A portable salinometer capable of measuring salinity in percentage (g/L) will be used for in-situ measure the salinity of stream 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 4°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

Study Area

- 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 is 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.

Equipment

- 4.34 Standard portable field survey equipment was used for ecological monitoring, including 1) Binoculars of 10 x 40 magnifications; 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 acoustical 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 acoustical 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 stream water quality monitoring instruments are calibrated and certified by a laboratory accredited under HOKLAS or any other international accreditation scheme at 3 monthly intervals throughout all monitoring stages.
- 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](#).

Table 4-3 Analytical Method applied to Water Quality Samples

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

- 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 was 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 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.

5.0 IMPACT MONITORING RESULTS

5.01 The impact monitoring was carried out by the ET in compliance with the project specific EM&A Manual. The impact monitoring schedules are shown in [Appendix G](#) and the monitoring results are present in the following sub-sections.

AIR QUALITY

5.02 The 1-Hour and 24-Hour TSP impact monitoring data are summarized in [Tables 5-1](#) and [5-2](#). Graphical plots of the past four month monitoring results are shown in [Appendix H](#).

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

Monitoring Date	Start Time	1 st Result ($\mu\text{g}/\text{m}^3$)	2 nd Result ($\mu\text{g}/\text{m}^3$)	3 rd Result ($\mu\text{g}/\text{m}^3$)	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
29-Sep-08	09:23	172	173	175	> 307	> 500
6-Oct-08	09:23	84	86	83	> 307	> 500
13-Oct-08	09:22	192	190	187	> 307	> 500
18-Oct-08	09:19	108	110	113	> 307	> 500
24-Oct-08	09:21	189	193	196	> 307	> 500

Note: Bold and italic is exceed the Action Level.
 Bold and underline is exceed the Limit Level

Table 5-2 Summary of 24-Hour TSP Monitoring Results at A10

Monitoring Date	Monitoring Results ($\mu\text{g}/\text{m}^3$)	Action Level ($\mu\text{g}/\text{m}^3$)	Limit Level ($\mu\text{g}/\text{m}^3$)
30-Sep-08	35	> 165	> 260
8-Oct-08	48	> 165	> 260
14-Oct-08	71	> 165	> 260
20-Oct-08	41	> 165	> 260
25-Oct-08	63	> 165	> 260

Note: Bold and italic is exceed the Action Level.
 Bold and underline is exceed the Limit Level

5.03 No 1-Hour and 24-Hour TSP monitoring results trigger the Action or Limit Level 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 past four month monitoring results are shown in [Appendix H](#).

Table 5-3 Summary of Noise Monitoring Results at N10a

Date	Start Time	1st Leq5	2nd Leq5	3 rd Leq5	4th Leq5	5th Leq5	6 th Leq5	Leq30
29-Sep-08	10:03	45.8	47.0	46.6	47.0	44.1	48.7	46.7
6-Oct-08	09:40	47.0	46.5	46.1	47.2	47.3	46.3	46.8
13-Oct-08	09:37	45.5	43.9	46.3	45.2	44.9	43.2	45.0
18-Oct-08	09:45	44.8	47.0	46.8	45.9	45.8	44.0	45.8
24-Oct-08	09:36	46.9	48.6	44.5	48.2	46.5	45.7	47.0
Limit Level		-						> 75 dB(A)

5.06 No construction noise complaint (Action Level) was received and all noise level below the Limit Level in this reporting period.

STREAM WATER QUALITY

5.07 Two SS exceed the Limit Level at W9B on 02 and 15 October 2008 was recorded. From the monitoring team on-site observations and the Contractor provide information, only steel fixing, formworks erection and gabion installation were undertaken. No excavation or major discharge on-site was observed on-site (02 and 15 October 2008). Desilting facilities and proper mitigation measures were implemented on-site. Silty water from Kam Tin Nullah upstream was observed during the sampling (02 and 15 October 2008). Therefore exceedances of SS were not project related and impact monitoring schedules are shown in [Appendix G](#).

5.08 No further stream water quality monitoring results exceeded the Action or Limit Level was recorded in this reporting period. The stream water quality monitoring results are summarized in [Table 5-4](#) and graphical plots are presented in [Appendix H](#).

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

Monitoring Date	DO in mg/L		Turbidity (NTU)		pH		SS in mg/L		Ammonia (mg/L)		Zinc (µg/L)	
	W9A [#]	W9B	W9A [#]	W9B	W9A [#]	W9B	W9A [#]	W9B	W9A [#]	W9B	W9A [#]	W9B
26-Sep-08	3.9	4.4	27.1	15.0	6.8	6.9	12	17	17.60	1.31	55	24
30-Sep-08	3.8	4.3	25.1	14.0	6.7	6.8	15	22	55.90	3.68	71	32
2-Oct-08	3.5	4.1	21.5	72.8	6.8	6.8	39	<i>164</i>	103.00	4.53	159	121
6-Oct-08	4.2	4.5	10.9	13.1	6.7	6.8	19	17	27.40	1.12	<10	<10
9-Oct-08	3.7	4.0	32.5	13.0	6.8	6.8	63	22	20.20	2.97	143	37
13-Oct-08	3.6	4.0	16.8	8.5	6.9	6.9	29	15	66.10	2.38	88	23
15-Oct-08	3.5	4.1	86.2	99.6	6.7	6.8	110	<i>203</i>	109.00	4.37	334	111
20-Oct-08	3.6	4.0	12.9	71.8	6.9	6.9	28	80	33.10	4.57	84	42
22-Oct-08	3.3	3.8	68.8	19.0	6.8	6.8	39	15	21.90	2.02	100	20
Action Level	-	< 0.3*	-	> 73.5*	-	> 7.0*	-	> 148*	-	> 30.91*	-	> 242*
Limit Level	-	< 0.2**	-	> 78.2**	-	> 7.1**	-	> 159**	-	> 32.20**	-	> 252**

Notes: # Act as Control Station for the Impact Water Quality Monitoring.
 Bold and italic is exceed the Action Level.
 Bold and underline is exceed the Limit Level
 * Alternative Action Level is 120% of upstream control station of same day.
 ** Alternative Limit Level is 130% of upstream control station of same day.

ECOLOGY

- 5.09 36 individuals of birds from 12 species were recorded during the survey for the present monthly monitoring on 21 October 2008. Among the birds recorded, one individual from one 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 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 From the EM&A Manual Section 7.5.1(b), fauna survey is required during wet season (i.e. April to July) and thus no fauna undertaken in this reporting period. Photographic records are scheduled in six-month intervals and last photographic records were conducted at June 2008. The next photographic records will schedule at December 2008.

5.12 The ecology impact monitoring results are presented in **Table 5-5**.

Table 5-5 Summary of Ecology Impact Monitoring Surveys Bird Survey

Scientific Name	Common Name	Abundance reported in the project profile	Abundance recorded in the present survey (21 October 08)
Birds			
<i>Bubulcus ibis</i>	Cattle Egret	0.4	
<i>Ardeola bacchus</i>	Chinese Pond Heron	0.8	1
<i>Amaurornis phoenicurus</i>	White-breasted Waterhen	Recorded only	
<i>Streptopelia chinensis</i>	Spotted Dove	Recorded only	4
<i>Hirundo rustica</i>	Barn Swallow	Recorded only	
<i>Motacilla alba</i>	White Wagtail	Recorded only	3
<i>Pycnonotus jocosus</i>	Red-whiskered Bulbul	Recorded only	7
<i>Pycnonotus sinensis</i>	Chinese Bulbul	Recorded only	3
<i>Lanius schach</i>	Long-tailed Shrike	Recorded only	
<i>Copsychus saularis</i>	Oriental Magpie Robin	Recorded only	2
<i>Orthotomus sutorius</i>	Common Tailorbird	Recorded only	
<i>Lonchura striata</i>	White-rumped Munia	Recorded only	
<i>Passer montanus</i>	Eurasian Tree Sparrow	Recorded only	5
<i>Sturnus nigricollis</i>	Black-collared Starling	Recorded only	2
<i>Acridotheres cristatellus</i>	Crested Myna	Recorded only	4
<i>Prinia flaviventris</i>	Yellow-bellied Prinia	\	
<i>Eudynamis scolopacea</i>	Common Koel	\	
<i>Halcyon smyrnenis</i>	White-throated Kingfisher	\	
<i>Garrulax perspicillatus</i>	Masked Laughingthrush	\	
<i>Zosterops japonica</i>	Japanese White Eye	\	3
<i>Lonchura punctulata</i>	Scaly-breasted Munia	\	
<i>Egretta garzetta</i>	Little Egret	\	
<i>Anthus hodgsoni</i>	Olive-backed Pipit	\	1
<i>Phylloscopus subaffinis</i>	Dusky Warbler	\	
<i>Phylloscopus inornatus</i>	Yellow-Browed Warbler	\	
<i>Parus major</i>	Great Tit	\	1
<i>Prinia inornata</i>	Plain Prinia	\	
<i>Sturnus sericeus</i>	Red-bellied Starling		
<i>Centropus bengalensis</i>	Lesser Coucal	\	
<i>Centropus sinensis</i>	Greater Coucal	\	
Species Number		15 spp. recorded, (only 2 species of wetland birds with abundance)	12 spp. (1 sp. from the wetland birds with abundance in the baseline)
Individual Number		1.2 (from the 2 species of wetland birds with abundance)	36 (1 from the wetland birds with abundance in the baseline)

Note: * 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	Disposal Location
Broken Concrete (Inert) (m ³)	0	Public Filling
Reused in this Contract (Inert) (m ³)	0	N/A
Reused in other Projects (Inert) (m ³)	0	N/A
Disposal as Public Fill (Inert) (m ³)	0	Tuen Mun Area 38

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

Type of Waste	Quantity	Disposal Location
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 ³)	14	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

Type of Waste	Quantity	Disposal Location
Type 1 Materials (m ³)	23	East Sha Chau (Pitch 4a & 4b)
Type 2 Materials (m ³)	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 be formulation by ET Leader. ET had carried out the environmental site inspection on 02, 10, 15 and 23 October 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 15 October 2008 by IEC's representative with the Engineer's, the Contractor's and ET's representative. No non-compliance and two observations were noted.
- 7.02 The details of observation during the site inspections and monthly audit as follows:-
- Haul roads within the site were observed dusty and dry, posing potential construction dust impacts on the surrounding environment; and
 - Rain water stagnated in an idle water treatment tank, rendering mosquito breeding in the area.
- 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. Statistical summaries environmental complaint, summon and prosecution are presented in [Tables 8-1, 8-2](#) and [8-3](#).

Table 8-1 Statistical Summary of Environmental Complaints

Reporting Period	Environmental Complaint Statistics		
	Frequency	Cumulative	Complaint Nature
July – December 2007	0	0	NA
January – September 2008	0	0	NA
October 2008	0	0	NA

Table 8-2 Statistical Summary of Environmental Summons

Reporting Period	Environmental Summons Statistics		
	Frequency	Cumulative	Nature
July – December 2007	0	0	NA
January – September 2008	0	0	NA
October 2008	0	0	NA

Table 8-3 Statistical Summary of Environmental Prosecution

Reporting Period	Environmental Prosecution Statistics		
	Frequency	Cumulative	Nature
July – December 2007	0	0	NA
January – September 2008	0	0	NA
October 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.

Air Quality

- 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 minimize 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 **October 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**.

Table 11-1 Summary of the Exceedances for Impact Monitoring

Monitoring	Parameters	Work-Related Exceedance %	Investigation & Corrective Actions
Air Quality	1-Hour TSP	0	Not Required for 0% Project Related Exceedance
	24-Hour TSP	0	Not Required for 0% Project Related Exceedance
Noise	Leq (30min) Daytime	0	Not Required for 0% Project Related Exceedance
Stream Water	Dissolve Oxygen (DO)	0	Not Required for 0% Project Related Exceedance
	Turbidity (NTU)	0	Not Required for 0% Project Related Exceedance
	pH	0	Not Required for 0% Project Related Exceedance
	Suspended Solids (SS)	0	Not Required for 0% Project Related Exceedance
	Ammonia Nitrogen	0	Not Required for 0% Project Related Exceedance
	Zinc	0	Not Required for 0% Project Related Exceedance
Ecology	Decrease in number of species of wetland birds of conservation importance from baseline.	0	Not Required for 0% Project Related Exceedance
	Decrease in the total number of wetland birds of conservation importance from baseline.	0	Not Required for 0% Project Related Exceedance

Note: According to the EM&A Manual S7.5.1(b), fauna monitoring only undertaken during wet seasons (April to July)

11.02 No 1-Hour and 24-Hour TSP monitoring results trigger the Action or Limit Level was recorded in this reporting period.

11.03 No construction noise complaint (Action Level) was received and no monitoring noise level above the Limit Level was recorded in this reporting period.

11.04 Two SS exceed the Limit Level at W9B on 02 and 15 October 2008 was recorded. From the monitoring team on-site observations and the Contractor provide information, only steel fixing, formworks erection and gabion installation were undertaken. No excavation or major discharge on-site was observed on-site (02 and 15 October 2008). Desilting facilities and proper mitigation measures were implemented on-site. Silty water from Kam Tin Nullah upstream was observed during the sampling (02 and 15 October 2008). Therefore exceedances of SS were not project related.

11.05 Non-compliance with the ecological criteria was found during the monitoring on 21 October 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 or fauna was not caused by the project.

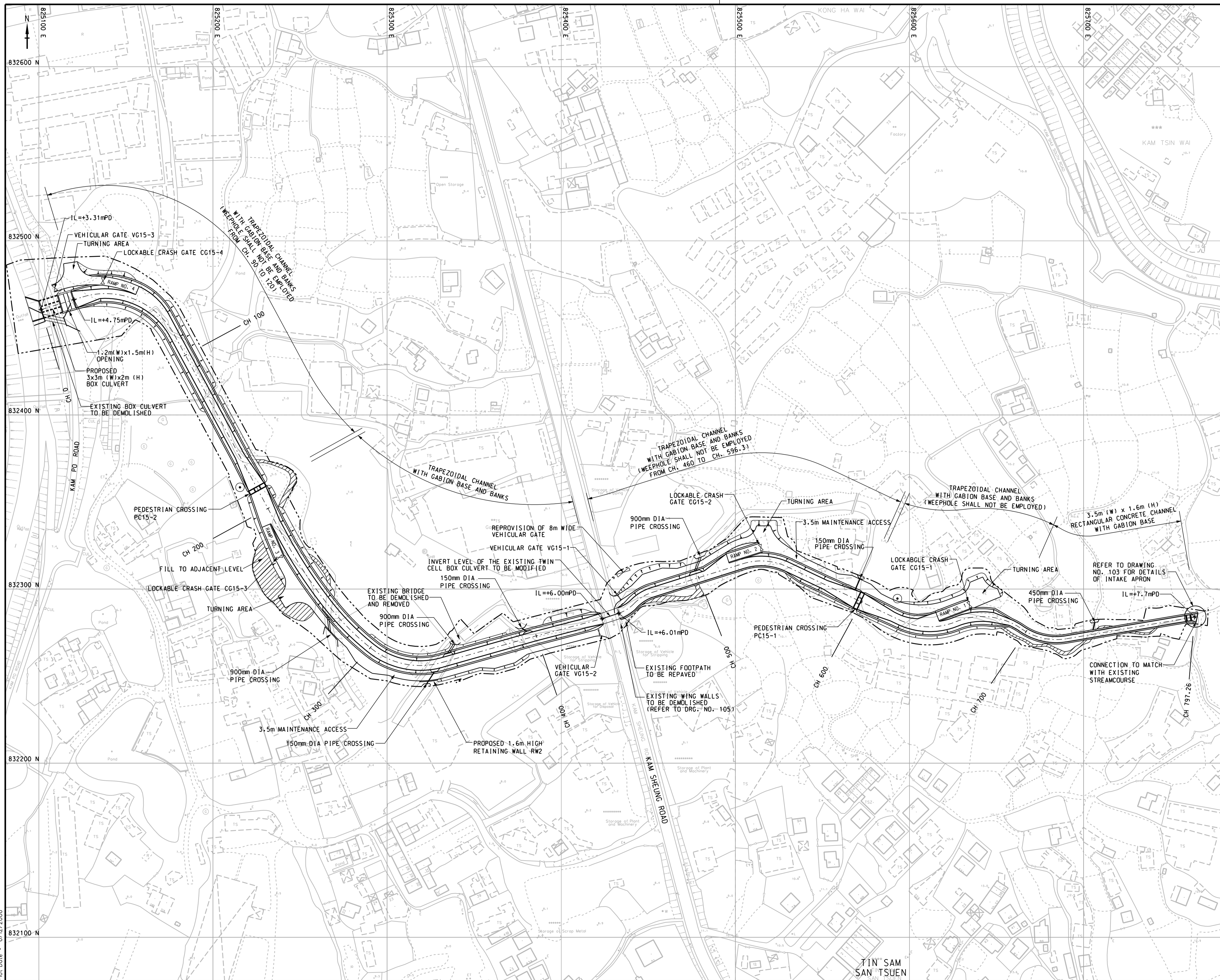
11.06 No environmental complaint, summons or prosecution was received in this reporting period.

RECOMMENDATIONS

- 11.07 Based on the ET regular and monthly IEC site audit inspection records on 02, 10, 15 and 23 October 2008, no non-compliance and two observations were recorded. Details of the observations as follows:-
- Haul roads within the site were observed dusty and dry, posing potential construction dust impacts on the surrounding environment; and
 - Rain water stagnated in an idle water treatment tank, rendering mosquito breeding in the area.
- 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



© Copyright by Black & Veatch Hong Kong Limited and Government of HKSAR

NOTES :
1. REFER TO DRAWING NO. 020 FOR NOTES AND LEGENDS.

Revision	Date	Description			Initial
		Designed	Checked	Drawn	
Initial		SFL	KIL	MK	KIL
Date	12/05	12/05	12/05	12/05	12/05

Approved

CONTRACT NO. DG200602

Contract title
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

Drawing title
CHANNEL KT15 GENERAL LAYOUT PLAN

Drawing no. 021
Scale 1:1000 A1
1:2000 A3

香港特別行政區政府渠務署
THE GOVERNMENT OF THE HONG KONG SPECIAL ADMINISTRATIVE REGION
DRAINAGE SERVICES DEPARTMENT

BLACK & VEATCH HONG KONG LIMITED
博威工程顧問有限公司

Plot Date : 6/12/2005

APPENDIX B

THREE-MONTH CONSTRUCTION PROGRAM

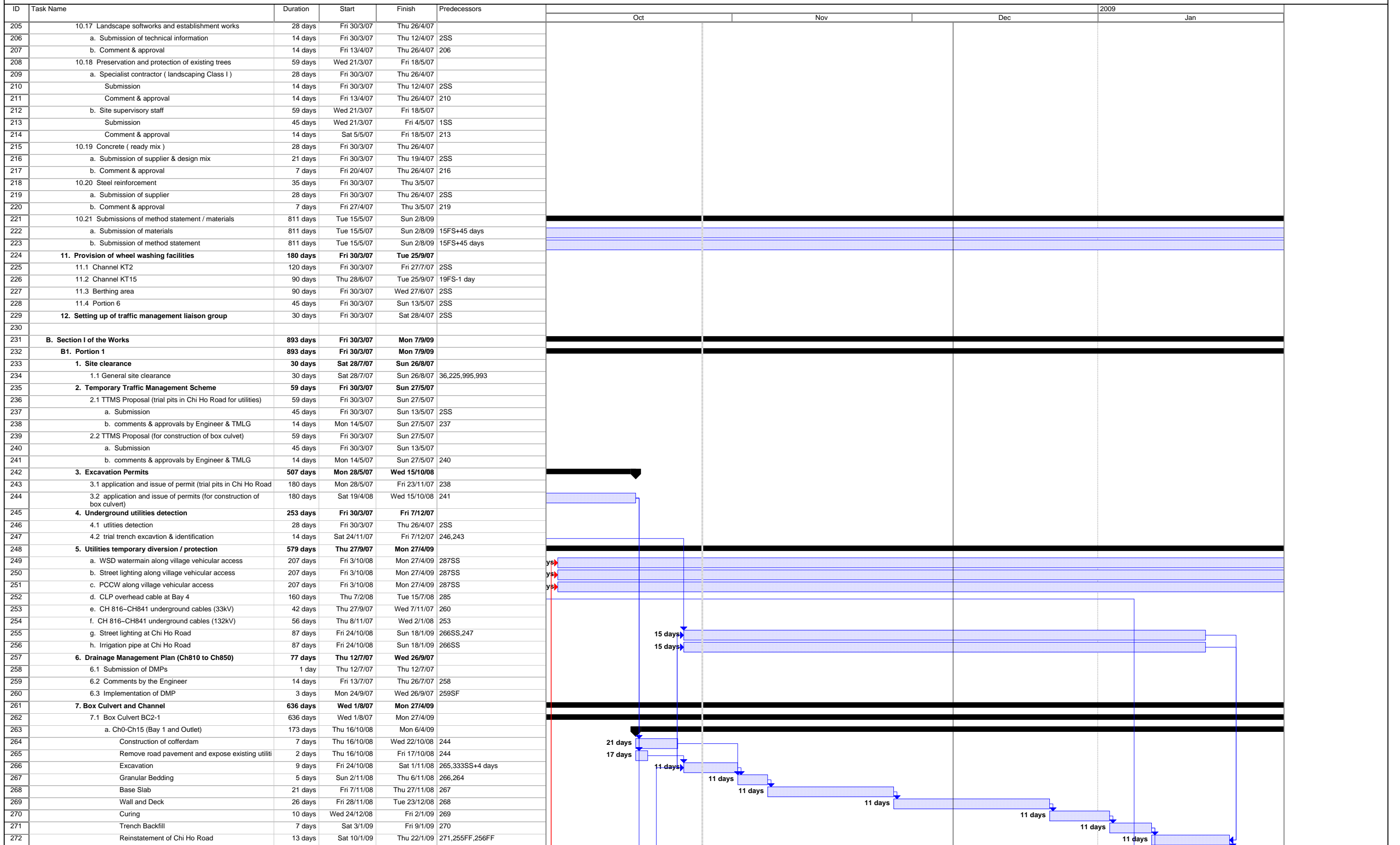
ID	Task Name	Duration	Start	Finish	Predecessors	2009			
						Oct	Nov	Dec	Jan
1	Letter of Acceptance	1 day	Wed 21/3/07	Wed 21/3/07					
2	Date for commencement of Works	1 day	Fri 30/3/07	Fri 30/3/07					
3	Execution of Article of Agreement	1 day	Tue 3/4/07	Tue 3/4/07					
4									
5	Master Programme of the Works	902 days	Wed 21/3/07	Mon 7/9/09					
6									
7	Completion Dates	893 days	Fri 30/3/07	Mon 7/9/09					
8	Section I - portions 1, 2 and 3	893 days	Fri 30/3/07	Mon 7/9/09	2SS				
9	Section II - portions 4, 5 and 5C	893 days	Fri 30/3/07	Mon 7/9/09	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				
12	Section V - preservation and protection of existing trees	893 days	Fri 30/3/07	Mon 7/9/09	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				
16	Portion 2 - channel KT2	61 days	Fri 30/3/07	Tue 29/5/07	2SS				
17	Portion 3 - channel KT2	91 days	Fri 30/3/07	Thu 28/6/07	2SS				
18	Portion 4 - channel KT15	1 day	Fri 30/3/07	Fri 30/3/07	2SS				
19	Portion 5 - channel KT15	91 days	Fri 30/3/07	Thu 28/6/07	2SS				
20	Portion 5A1 - channel KT15	91 days	Fri 30/3/07	Thu 28/6/07	2SS				
21	Portion 5A2 - channel KT15	91 days	Fri 30/3/07	Thu 28/6/07	2SS				
22	Portion 5B - channel KT15	20 days	Wed 26/9/07	Mon 15/10/07	11				
23	Portion 5C - channel KT15	91 days	Fri 30/3/07	Thu 28/6/07	2SS				
24	Portion 6 - Temp Storage Area at Chi Ho Road	1 day	Fri 30/3/07	Fri 30/3/07	2SS				
25	Portion 7 - Berthing Area	1 day	Fri 30/3/07	Fri 30/3/07	2SS				
26	Portion 8 - Site Accommodation	1 day	Fri 30/3/07	Fri 30/3/07	2SS				
27									
28	A. Preliminary Works	902 days	Wed 21/3/07	Mon 7/9/09					
29	1. Setting out of Works	893 days	Fri 30/3/07	Mon 7/9/09	2SS				
30	2. Environmental Monitoring and Audit	893 days	Fri 30/3/07	Mon 7/9/09					
31	2.1 Establishment of Environmental Team	14 days	Fri 30/3/07	Thu 12/4/07	8SS				
32	2.2 approval by the Engineer	7 days	Fri 13/4/07	Thu 19/4/07	31				
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	32				
35	b. Approval by the Engineer	7 days	Fri 27/4/07	Thu 3/5/07	34				
36	c. Baseline monitoring	63 days	Fri 4/5/07	Thu 5/7/07	35				
37	2.4 Environmental impact monitoring and audit	777 days	Tue 24/7/07	Mon 7/9/09	36,8FF				
38	3. Environmental Management and Environmental Management Plan	73 days	Fri 30/3/07	Sun 10/6/07					
39	3.1 Submission of draft EMP	21 days	Fri 30/3/07	Thu 19/4/07	2SS				
40	3.2 Comment from the Engineer	7 days	Fri 20/4/07	Thu 26/4/07	39				
41	3.3 Submission of EMP	45 days	Fri 27/4/07	Sun 10/6/07	40				
42	4. Engineer's Accommodation	51 days	Fri 30/3/07	Sat 19/5/07					
43	4.1 Renovation	30 days	Fri 30/3/07	Sat 28/4/07	26SS				
44	4.2 Equipment	51 days	Fri 30/3/07	Sat 19/5/07					
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	approval	7 days	Fri 13/4/07	Thu 19/4/07	48				
50	installation	21 days	Sun 22/4/07	Sat 12/5/07	49,43FS-7 days				
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				
57	new service	19 days	Fri 13/4/07	Tue 1/5/07					
58	application	5 days	Fri 13/4/07	Tue 17/4/07	56SS+14 days				
59	installation	14 days	Wed 18/4/07	Tue 1/5/07	58				
60	d. Facsimile	33 days	Fri 30/3/07	Tue 1/5/07					
61	temporary service	32 days	Fri 30/3/07	Mon 30/4/07	26SS				
62	new service	19 days	Fri 13/4/07	Tue 1/5/07					
63	application	5 days	Fri 13/4/07	Tue 17/4/07	61SS+14 days				
64	installation	14 days	Wed 18/4/07	Tue 1/5/07	63				
65	e. Internet broadband	33 days	Fri 30/3/07	Tue 1/5/07					
66	temporary service (56K)	32 days	Fri 30/3/07	Mon 30/4/07	26SS				

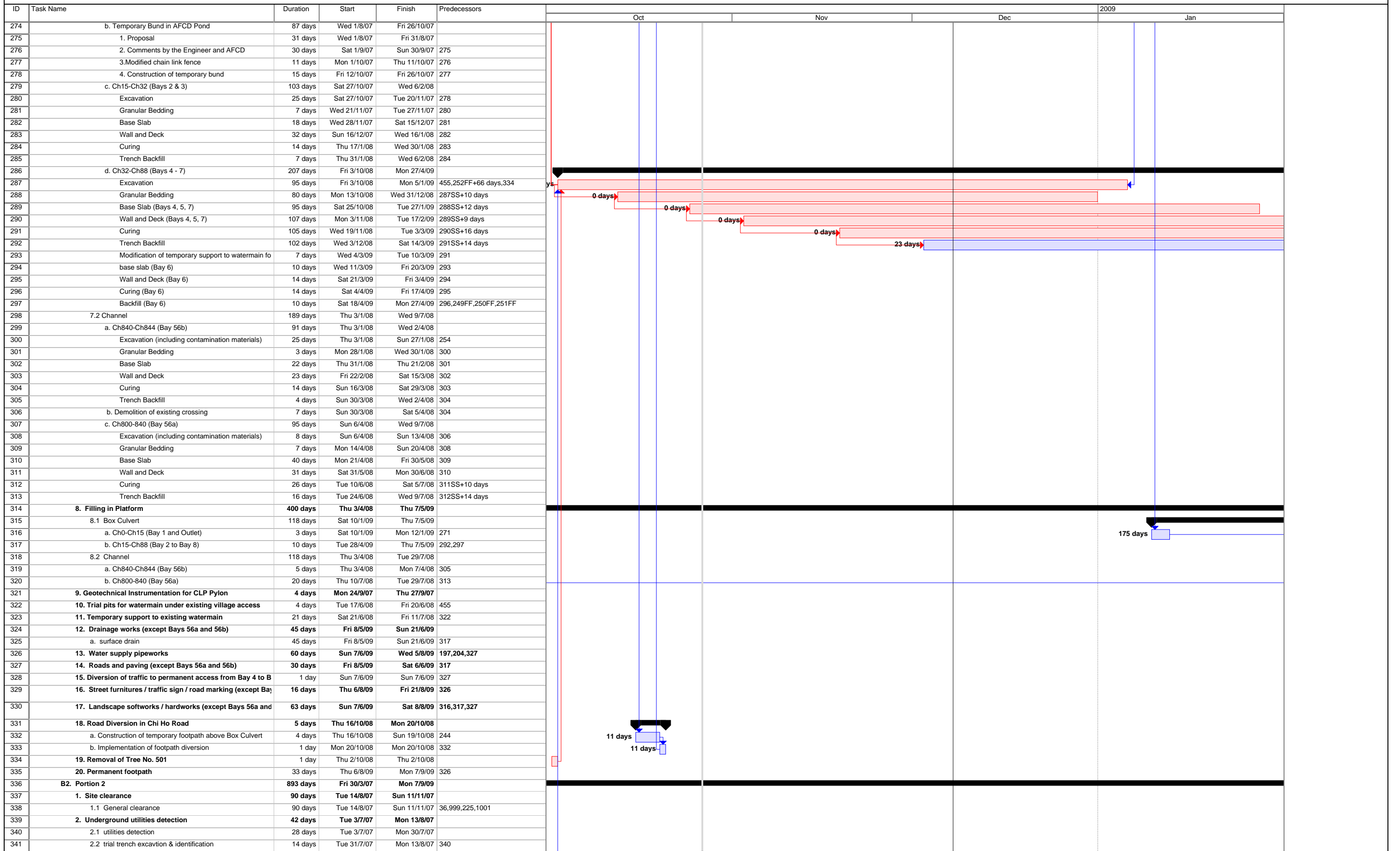
Task		Progress		Summary		Rolled Up Critical Task		Rolled Up Progress		External Tasks		Group By Summary	
Critical Task		Milestone		Rolled Up Task		Rolled Up Milestone		Split		Project Summary		Deadline	

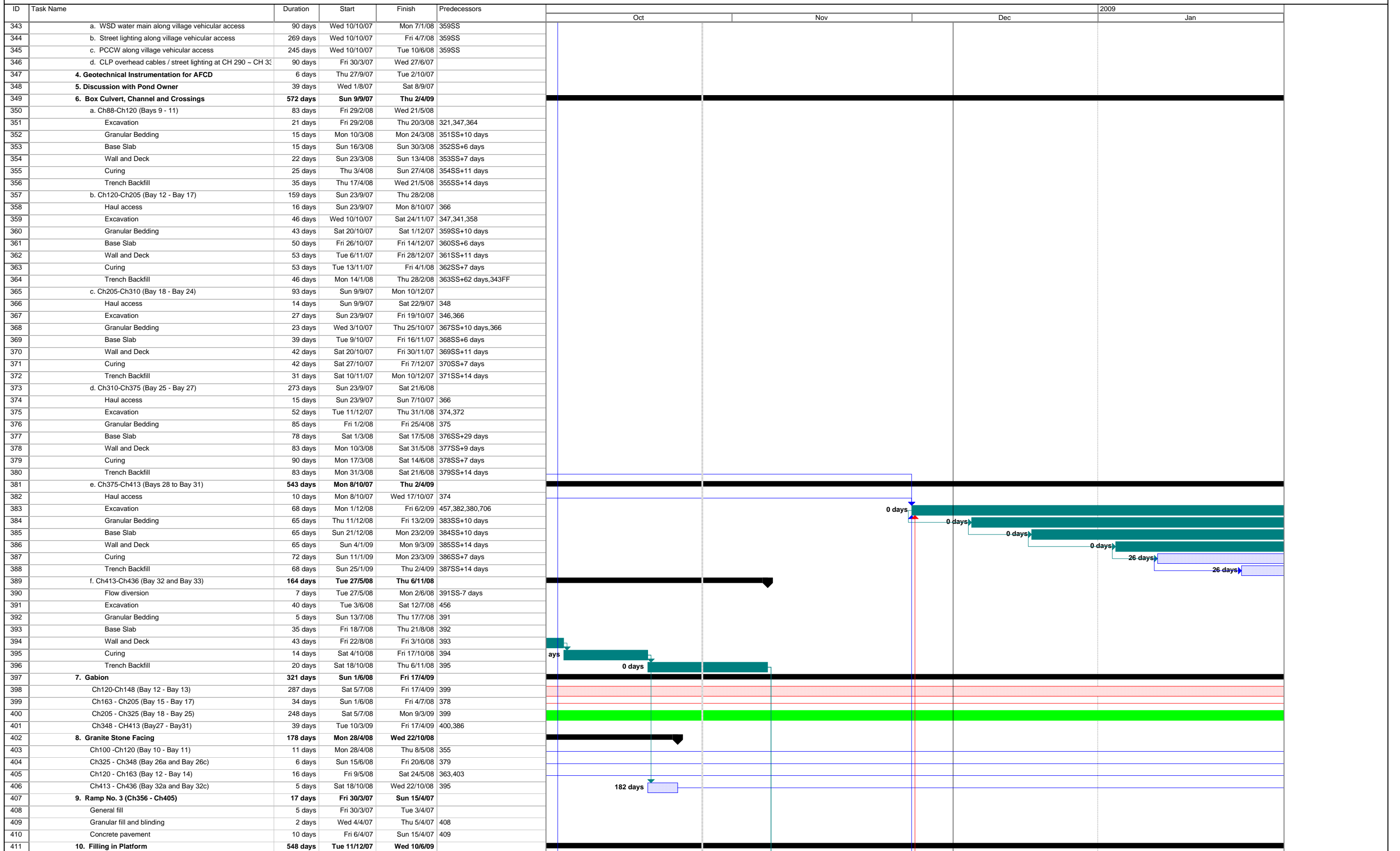
ID	Task Name	Duration	Start	Finish	Predecessors	2009			
						Oct	Nov	Dec	Jan
67	new service	19 days	Fri 13/4/07	Tue 1/5/07					
68	application	5 days	Fri 13/4/07	Tue 17/4/07	66SS+14 days				
69	installation	14 days	Wed 18/4/07	Tue 1/5/07	68				
70	5. Contractor's Accommodation	45 days	Fri 30/3/07	Sun 13/5/07					
71	5.1 Provision	45 days	Fri 30/3/07	Sun 13/5/07					
72	a. Premises	45 days	Fri 30/3/07	Sun 13/5/07	26SS				
73	b. Toilet facilities	21 days	Mon 23/4/07	Sun 13/5/07	72FF				
74	c. Telephone service	30 days	Sat 14/4/07	Sun 13/5/07	72FF				
75	d. Facsimile service	30 days	Sat 14/4/07	Sun 13/5/07	72FF				
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	6.2 comment & approval	14 days	Fri 6/4/07	Thu 19/4/07	80				
82	6.3 delivery	103 days	Fri 20/4/07	Tue 31/7/07	81				
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				
86	7.2 comment, approval & instruction	14 days	Fri 6/4/07	Thu 19/4/07	85				
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				
91	comment & approval	90 days	Sun 29/4/07	Fri 27/7/07	90SS+30 days				
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				
95	comment & approval	90 days	Sun 29/4/07	Fri 27/7/07	94SS+30 days				
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				
100	10. Contractual general submissions	902 days	Wed 21/3/07	Mon 7/9/09					
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	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				
124	c. Field assistant (1)	33 days	Fri 30/3/07	Tue 1/5/07	2SS				
125	d. Technical assistant (1)	33 days	Fri 30/3/07	Tue 1/5/07	2SS				
126	e. Clerical assistant (1)	33 days	Fri 30/3/07	Tue 1/5/07	2SS				
127	f. Office assistant (1)	33 days	Fri 30/3/07	Tue 1/5/07	2SS				
128	10.6 Underground service detection equipment	35 days	Fri 30/3/07	Thu 3/5/07					
129	a. Submission	7 days	Fri 30/3/07	Thu 5/4/07	2SS				
130	b. Comment & approval	14 days	Fri 6/4/07	Thu 19/4/07	129				
131	c. Provision	14 days	Fri 20/4/07	Thu 3/5/07	130				
132	10.7 Independent Checking of Temporary Works	28 days	Fri 30/3/07	Thu 26/4/07					
133	a. Submission of independent checking engineer	14 days	Fri 30/3/07	Thu 12/4/07	2SS				
134	b. Comment & approval	14 days	Fri 13/4/07	Thu 26/4/07	133				
135	10.8 Trip ticket system for C & D material	59 days	Fri 30/3/07	Sun 27/5/07					

Task		Progress		Summary		Rolled Up Critical Task		Rolled Up Progress		External Tasks		Group By Summary	
Critical Task		Milestone		Rolled Up Task		Rolled Up Milestone		Split		Project Summary		Deadline	

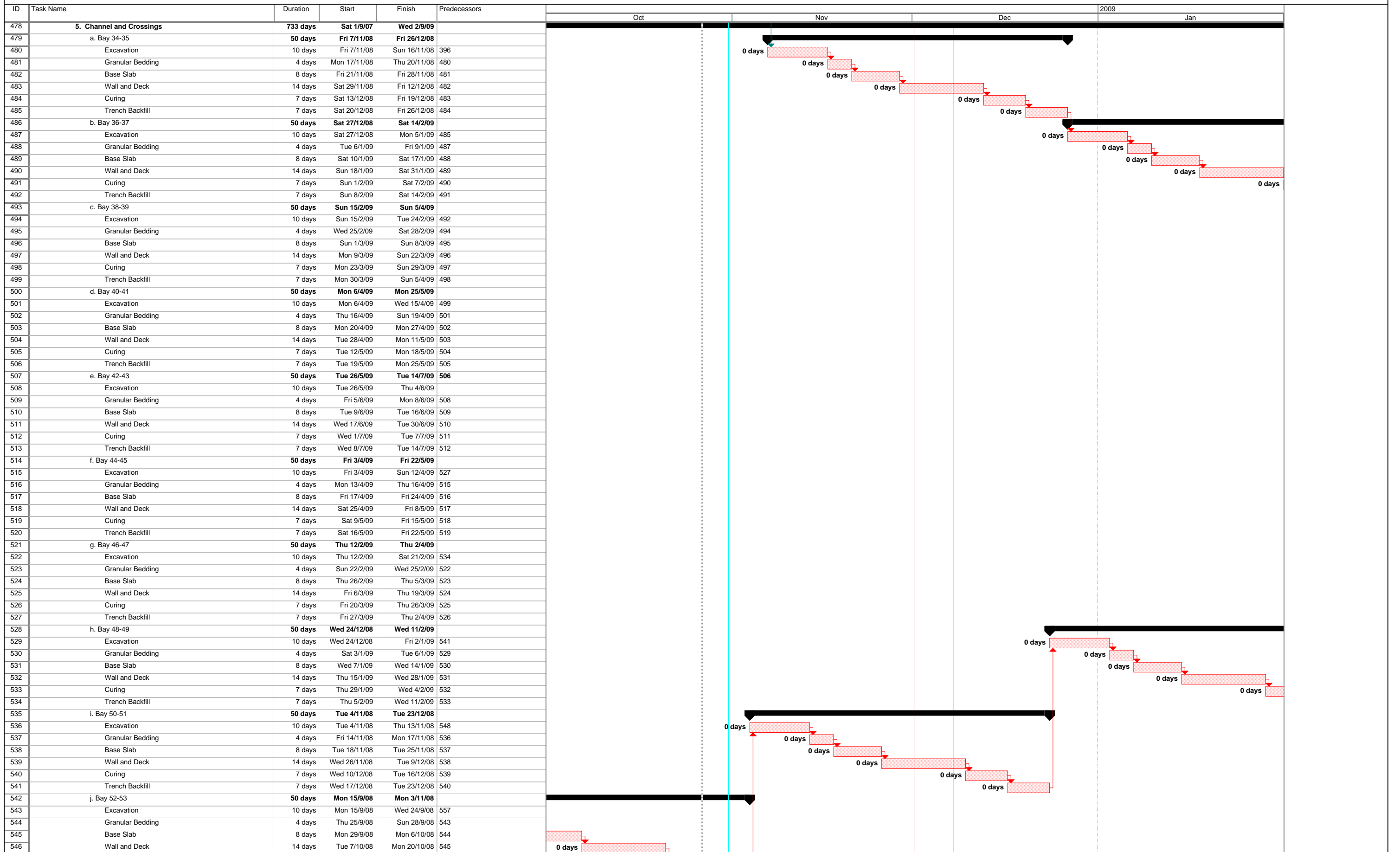
ID	Task Name	Duration	Start	Finish	Predecessors	2009			
						Oct	Nov	Dec	Jan
136	a. Submission of site management plan	45 days	Fri 30/3/07	Sun 13/5/07	2SS				
137	b. Comment & approval	14 days	Mon 14/5/07	Sun 27/5/07	136				
138	10.9. Condition survey and structural monitoring	893 days	Fri 30/3/07	Mon 7/9/09					
139	a. Submission of Independent Structural Engineer	14 days	Fri 30/3/07	Thu 12/4/07	2SS				
140	b. Comment & approval	7 days	Fri 13/4/07	Thu 19/4/07	139				
141	c. Proposal for condition survey & structural monitoring	209 days	Fri 20/4/07	Wed 14/11/07					
142	Portion 1, 4, 6, 7, 8	30 days	Fri 20/4/07	Sat 19/5/07	140				
143	Portion 2	30 days	Wed 30/5/07	Thu 28/6/07	16				
144	Portion 3, 5	30 days	Fri 29/6/07	Sat 28/7/07	17,19,20,21				
145	Portion 5A1, 5A2 and 5B	30 days	Tue 16/10/07	Wed 14/11/07	22				
146	d. Comment & approval	193 days	Sun 20/5/07	Wed 28/11/07					
147	Portion 1, 4, 6, 7, 8	14 days	Sun 20/5/07	Sat 2/6/07	142				
148	Portion 2	14 days	Fri 29/6/07	Thu 12/7/07	143				
149	Portion 3, 5	14 days	Sun 29/7/07	Sat 11/8/07	144				
150	Portion 5A1, 5A2 and 5B	14 days	Thu 15/11/07	Wed 28/11/07	145				
151	e. Condition survey & structural monitoring	828 days	Sun 3/6/07	Mon 7/9/09					
152	Portion 1, 4, 6, 7, 8	828 days	Sun 3/6/07	Mon 7/9/09	147				
153	Portion 2	788 days	Fri 13/7/07	Mon 7/9/09	148				
154	Portion 3, 5	758 days	Sun 12/8/07	Mon 7/9/09	149				
155	Portion 5A1, 5A2 and 5B	586 days	Thu 29/11/07	Mon 6/7/09	150				
156	10.10 Handling & disposal of Type 1 & 2 contaminated material:	74 days	Sat 14/7/07	Tue 25/9/07					
157	a. Proposed type of dump truck	44 days	Sun 15/7/07	Mon 27/8/07					
158	Submission	30 days	Sun 15/7/07	Mon 13/8/07	804SS-44 days				
159	Comment & approval	14 days	Tue 14/8/07	Mon 27/8/07	158				
160	b. Proposal of berthing area arrangement	44 days	Mon 30/7/07	Tue 11/9/07					
161	Submission	30 days	Mon 30/7/07	Tue 28/8/07					
162	Comment & approval	14 days	Wed 29/8/07	Tue 11/9/07	161				
163	c. Proposal of disposal arrangement	74 days	Sat 14/7/07	Tue 25/9/07					
164	Submission	60 days	Sat 14/7/07	Tue 11/9/07					
165	Comment & approval	14 days	Wed 12/9/07	Tue 25/9/07	164				
166	10.11 Type 3 contaminated material	290 days	Fri 30/3/07	Sun 13/1/08					
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	Comment & approval	14 days	Sat 28/7/07	Fri 10/8/07	168				
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				
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	c. Setting up of Treatment Plant	60 days	Thu 15/11/07	Sun 13/1/08	174				
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	b. Comment by the Engineer	7 days	Wed 4/4/07	Tue 10/4/07	177				
179	c. Submission of Safety Plan	14 days	Wed 11/4/07	Tue 24/4/07	178				
180	10.13 Sub-contractor Management Plan	902 days	Wed 21/3/07	Mon 7/9/09					
181	a. Submission of SMP	30 days	Wed 21/3/07	Thu 19/4/07	1SS				
182	b. For information & Comments	14 days	Fri 20/4/07	Thu 3/5/07	181				
183	c. Update SMP	858 days	Fri 4/5/07	Mon 7/9/09	182				
184	10.14 proof of plant ownership	893 days	Fri 30/3/07	Mon 7/9/09					
185	a. Submission of draft written undertaking	14 days	Fri 30/3/07	Thu 12/4/07	2SS				
186	b. Comment by the Engineer / Employer	14 days	Fri 13/4/07	Thu 26/4/07	185				
187	c. Engineer's request	865 days	Fri 27/4/07	Mon 7/9/09	186				
188	10.15 Contractor's Management Team	893 days	Fri 30/3/07	Mon 7/9/09					
189	a. Submission of staff member details	14 days	Fri 30/3/07	Thu 12/4/07	2SS				
190	b. Update management / site supervision team	879 days	Fri 13/4/07	Mon 7/9/09	189				
191	10.16 Water supply pipeworks material	651 days	Wed 21/3/07	Tue 30/12/08					
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	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	comment & approval	14 days	Wed 4/4/07	Tue 17/4/07	196				
198	c. Independent Inspection Agent (IIA)	28 days	Wed 21/3/07	Tue 17/4/07					
199	Submission	14 days	Wed 21/3/07	Tue 3/4/07	1SS				
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	comment & approval	14 days	Wed 4/4/07	Tue 17/4/07	202				

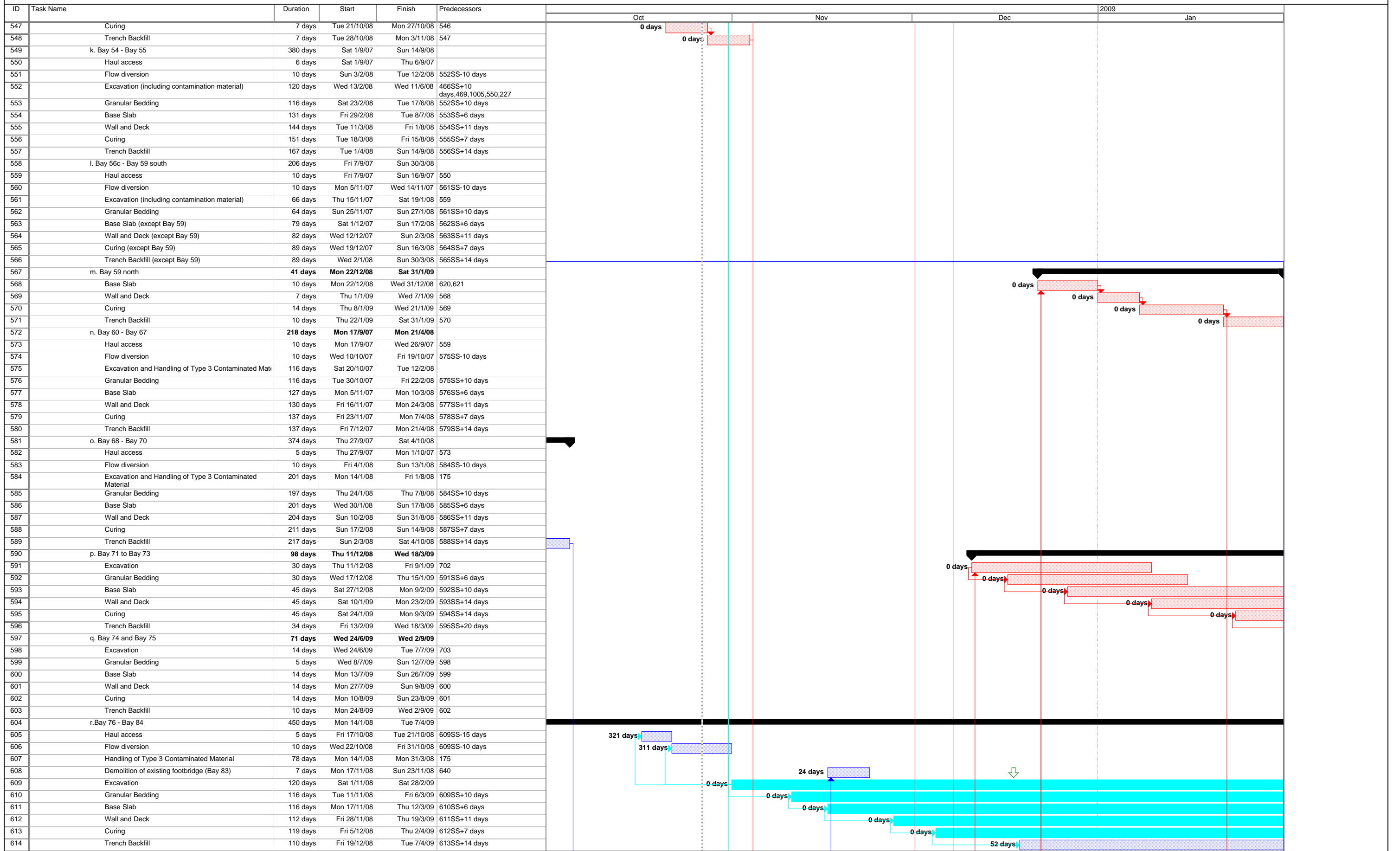


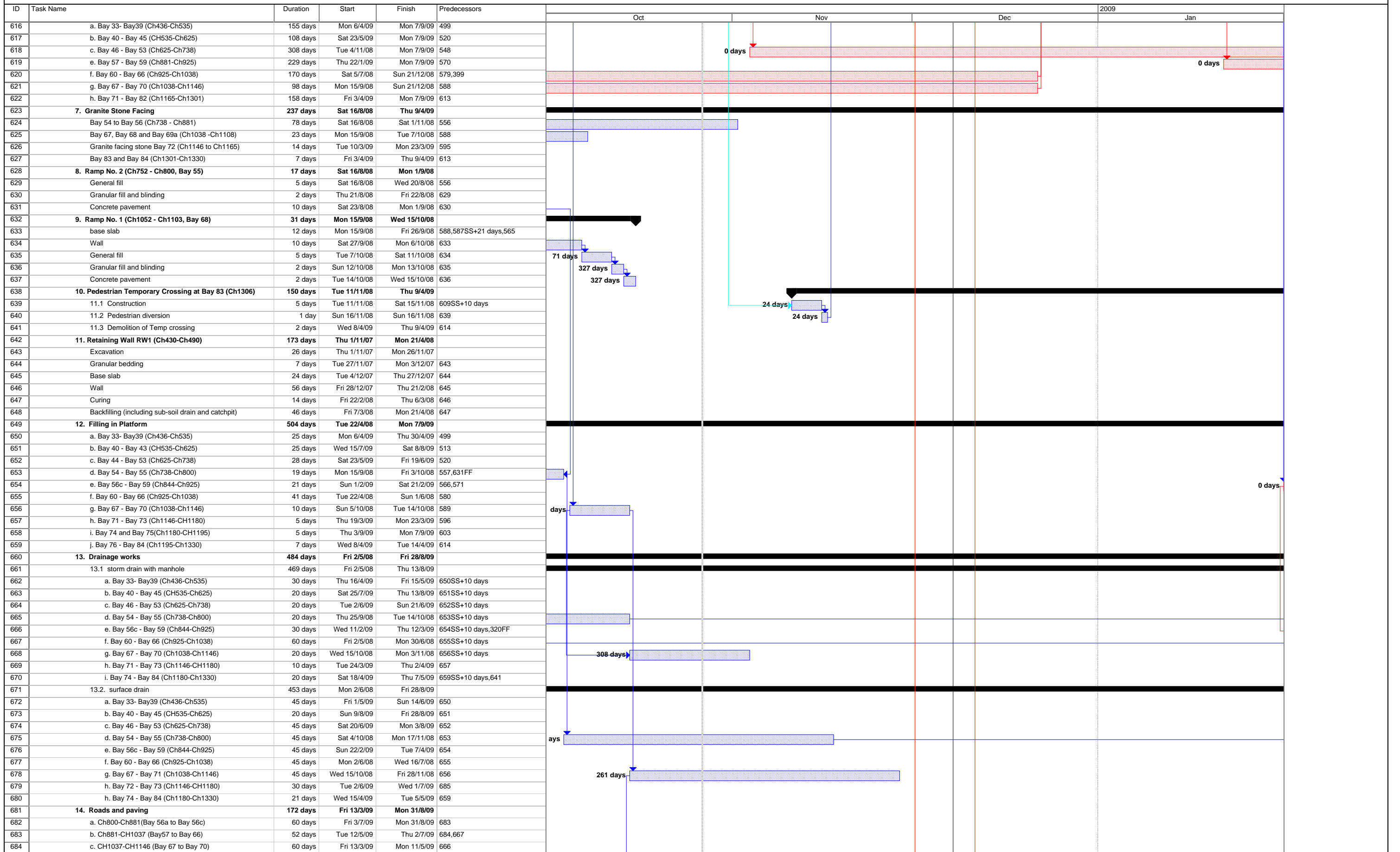


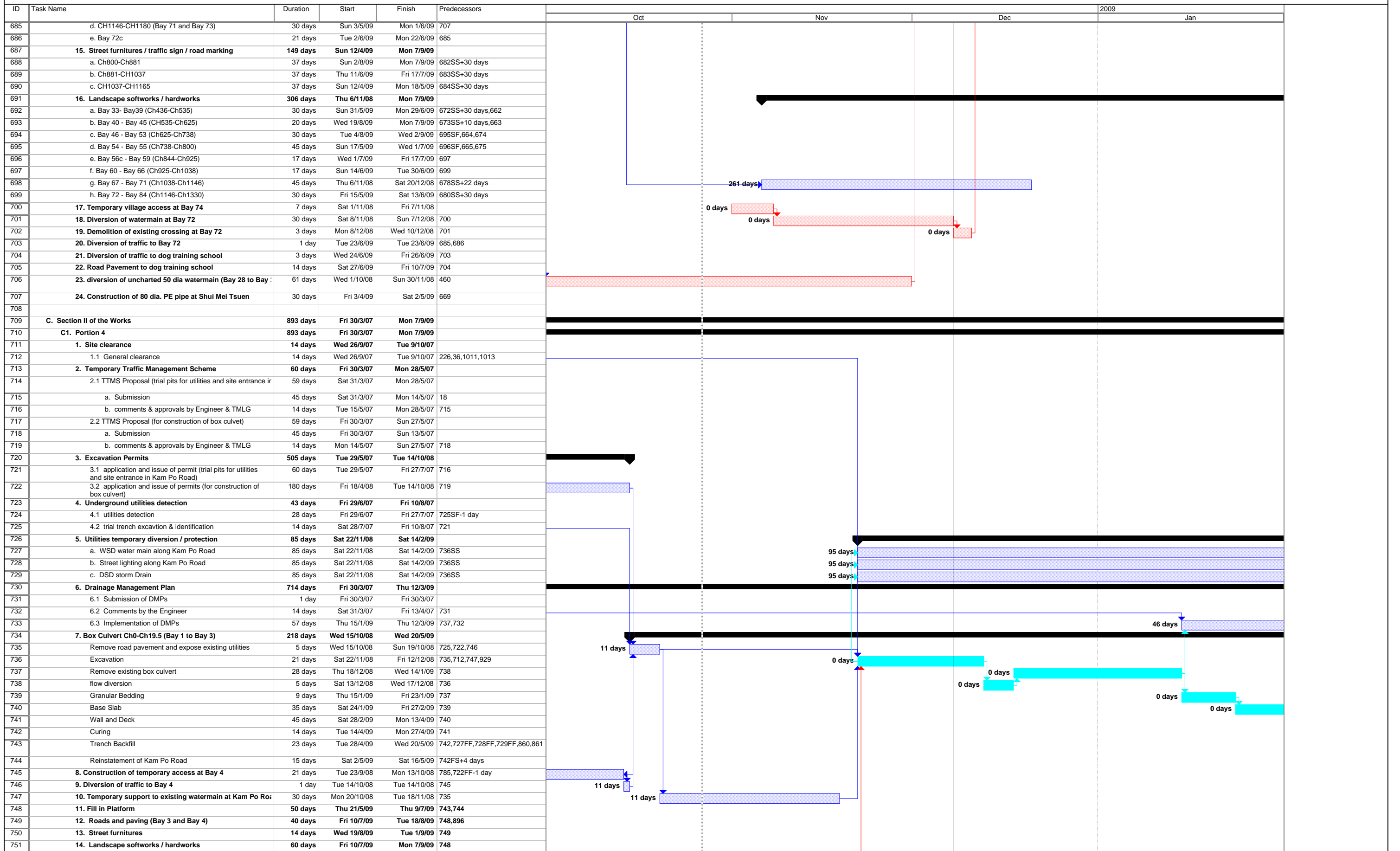


ID	Task Name	Duration	Start	Finish	Predecessors	2009			
						Oct	Nov	Dec	Jan
412	10.1 Box Culvert BC2-1	10 days	Thu 22/5/08	Sat 31/5/08					
413	a. Ch88-Ch120 (South of Bay 9 - Bay 11)	10 days	Thu 22/5/08	Sat 31/5/08	356				
414	10.2 Channel and Crossing	548 days	Tue 11/12/07	Wed 10/6/09					
415	a. Ch120-Ch205 (Bay 12 - Bay 17)	90 days	Fri 29/2/08	Wed 28/5/08	364				
416	b. Ch205-Ch310 (Bay 18 - Bay 24)	118 days	Tue 11/12/07	Sun 6/4/08	372				
417	c. Ch310-Ch361 (Bay 25 - Bay 27)	31 days	Sun 22/6/08	Tue 22/7/08	380				
418	d. Ch361-Ch413 (Bay 28 - Bay 31)	48 days	Fri 24/4/09	Wed 10/6/09	388,462				
419	11. Drainage works	451 days	Mon 7/4/08	Wed 1/7/09					
420	11.1 storm drain with manhole and headwall	451 days	Mon 7/4/08	Wed 1/7/09					
421	a. Ch88-Ch 120 (Bay 9 - Bay 11)	20 days	Sun 1/6/08	Fri 20/6/08	413				
422	b. Ch120-Ch205 (Bay 12 - Bay 17)	20 days	Thu 29/5/08	Tue 17/6/08	415				
423	c. Ch205-Ch310 (Bay 18 - Bay 24)	20 days	Mon 7/4/08	Sat 26/4/08	416				
424	d. Ch310-Ch361 (Bay 25 - Bay 27)	20 days	Wed 23/7/08	Mon 11/8/08	417				
425	e. Ch361-Ch436 (Bay 28 - Bay 32)	21 days	Thu 11/6/09	Wed 1/7/09	418				
426	11.2. surface drain	397 days	Tue 27/5/08	Sat 27/6/09					
427	a. Ch88-Ch 120 (Bay 9 - Bay 11)	10 days	Mon 25/5/09	Wed 3/6/09	413,435				
428	b. Ch120-Ch190 (Bay 12 - Bay 16)	10 days	Thu 18/6/09	Sat 27/6/09	415,436				
429	c. Ch190-Ch348 (Bay 17 - Bay 26)	15 days	Tue 27/5/08	Tue 10/6/08	416,437				
430	d. Ch348-Ch390 (Bay 27 - Bay 29)	10 days	Thu 11/6/09	Sat 20/6/09	418				
431	e. Ch390-Ch436 (Bay 30 - Bay 32)	10 days	Thu 11/6/09	Sat 20/6/09	418				
432	12.1. Water supply pipeworks (Bay 9 to Bay 26)	60 days	Thu 18/6/09	Sun 16/8/09	435,436,437,204				
433	12.2. Water supply pipeworks (Bay 27 to Bay 32)	14 days	Thu 2/7/09	Wed 15/7/09	424,425,204				
434	13. Roads and paving	496 days	Mon 7/4/08	Sat 15/8/09					
435	a. Ch88-Ch 148 (Bay 9 - Bay 13)	17 days	Fri 8/5/09	Sun 24/5/09	422,413,421,317				
436	b. Ch148-Ch190 (Bay 14 - Bay 16)	10 days	Mon 8/6/09	Wed 17/6/09	415,328				
437	c. Ch190-Ch348 (Bay 17 - Bay 26)	50 days	Mon 7/4/08	Mon 26/5/08	416				
438	d. Ch348-Ch390 (Bay 27 - Bay 29)	10 days	Thu 2/7/09	Sat 11/7/09	458,425				
439	e. Ch390-Ch436 (Bay 30 to Bay 32)	45 days	Thu 2/7/09	Sat 15/8/09	425				
440	14. Road furnitures	461 days	Tue 27/5/08	Sun 30/8/09					
441	a. Ch88-Ch 120 (Bay 9 - Bay 11)	17 days	Mon 25/5/09	Wed 10/6/09	435				
442	b. Ch120-Ch205 (Bay 12 - Bay 17)	33 days	Thu 18/6/09	Mon 20/7/09	436				
443	c. Ch205-Ch348 (Bay 18 - Bay 26)	50 days	Tue 27/5/08	Tue 15/7/08	437				
444	d. Ch348-Ch390 (Bay 27 - Bay 29)	33 days	Sun 12/7/09	Thu 13/8/09	438				
445	e. Ch390-Ch436 (Bay 30 - Bay 32)	15 days	Sun 16/8/09	Sun 30/8/09	439				
446	15. Landscape softworks / hardworks	106 days	Mon 25/5/09	Mon 7/9/09					
447	a. Ch88-Ch 120 (Bay 9 - Bay 11)	30 days	Mon 25/5/09	Tue 23/6/09	427SS				
448	b. Ch120-Ch205 (Bay 12 - Bay 17)	70 days	Thu 18/6/09	Wed 26/8/09	428SS				
449	c. Ch205-Ch310 (Bay 18 - Bay 24)	62 days	Thu 18/6/09	Tue 18/8/09	448SS				
450	d. Ch310-Ch436 (Bay 25 - Bay 32) south	38 days	Thu 11/6/09	Sat 18/7/09	430SS,431SS				
451	e. Ch310-Ch436 (Bay 25 - Bay 32) north	8 days	Mon 31/8/09	Mon 7/9/09	452				
452	16. Final trimming of north platform from Bay 26 to Bay 32	15 days	Sun 16/8/09	Sun 30/8/09	439				
453	17. Construct temporary access (Bay 5 to Bay 14)	25 days	Thu 22/5/08	Sun 15/6/08	356,364				
454	18. Removal of existing public light controller near Bay 14	1 day	Sun 15/6/08	Sun 15/6/08					
455	19. Traffic diversion at north of Bay 5 to Bay 14	1 day	Mon 16/6/08	Mon 16/6/08	454,453				
456	20. Temporary Village Access on Bay 28 - Bay 30	2 days	Sun 1/6/08	Mon 2/6/08	378				
457	21. Temporary Village Access on Bay 32	3 days	Fri 7/11/08	Sun 9/11/08	396				
458	22. Diversion of traffic to permanent access between Bay 1	1 day	Fri 3/4/09	Fri 3/4/09	388,437				
459	23. Temporary pipe crossing at south of Bay 30	4 days	Thu 28/8/08	Sun 31/8/08	460SS-4 days				
460	24. Diversion of traffic from Cheung Chun San Chuen to the	1 day	Mon 1/9/08	Mon 1/9/08					
461	25. Diversion of existing stream to constructed channel	3 days	Sat 18/4/09	Mon 20/4/09	401,273,398,399,400,403,404,405				
462	26. Demolition of existing vehicular bridge	3 days	Tue 21/4/09	Thu 23/4/09	461				
463									
464	B3. Portion 3	789 days	Thu 12/7/07	Mon 7/9/09					
465	1. Site clearance	90 days	Sat 15/9/07	Thu 13/12/07					
466	1.1 General clearance	90 days	Sat 15/9/07	Thu 13/12/07	17,225,1005,1007				
467	2. Underground utilities detection	42 days	Tue 31/7/07	Mon 10/9/07					
468	2.1 utilities detection	28 days	Tue 31/7/07	Mon 27/8/07	340				
469	2.2 trial trench excavation & identification	14 days	Tue 28/8/07	Mon 10/9/07	468				
470	3. Utilities temporary diversion / protection	153 days	Mon 5/1/09	Sat 6/6/09					
471	a. WSD water main along village access at CH 1150	153 days	Mon 5/1/09	Sat 6/6/09	609SS,614FF+60 days				93 days
472	b. Street lighting along village access at CH 1150	93 days	Mon 5/1/09	Tue 7/4/09	609SS,614FF				153 days
473	c. PCCW along village access at CH 1150	153 days	Mon 5/1/09	Sat 6/6/09	609SS,614FF+60 days				93 days
474	4. Drainage Management Plan	789 days	Thu 12/7/07	Mon 7/9/09					
475	4.1 Submission of DMPs	1 day	Thu 12/7/07	Thu 12/7/07					
476	4.2 Comments by the Engineer	14 days	Fri 13/7/07	Thu 26/7/07	475				
477	4.3 Implementation of DMP	659 days	Mon 19/11/07	Mon 7/9/09	615FF,476				



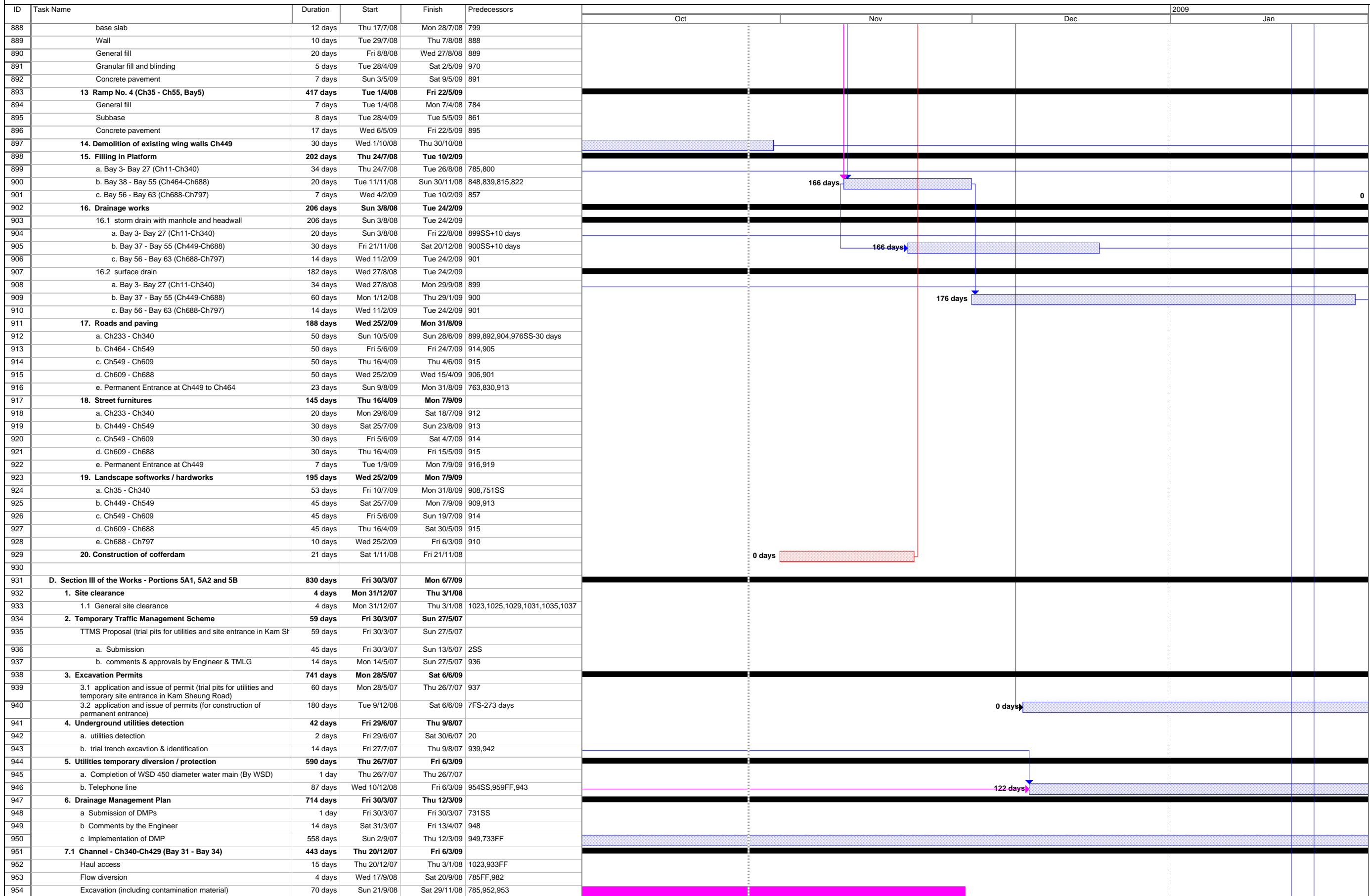






ID	Task Name	Duration	Start	Finish	Predecessors	2009			
						Oct	Nov	Dec	Jan
752	15. Modification to invert level of box culvert at Kam Sheun	45 days	Fri 19/6/09	Sun 2/8/09	826,963				
753									
754	C2. Portion 5 and 5C	893 days	Fri 30/3/07	Mon 7/9/09					
755	1. Site clearance	90 days	Thu 20/9/07	Tue 18/12/07					
756	1.1 General clearance	90 days	Thu 20/9/07	Tue 18/12/07	36,226SS+75 days,1017,1019				
757	2. Temporary Traffic Management Scheme	59 days	Fri 30/3/07	Sun 27/5/07					
758	TTMS Proposal (trial pits for utilities and site entrance in Ka	59 days	Fri 30/3/07	Sun 27/5/07					
759	a. Submission	45 days	Fri 30/3/07	Sun 13/5/07	2SS				
760	b. comments & approvals by Engineer & TMLG	14 days	Mon 14/5/07	Sun 27/5/07	759				
761	3. Excavation Permits	804 days	Mon 28/5/07	Sat 8/8/09					
762	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	760				
763	3.2 application and issue of permits (for construction of permanent entrance)	180 days	Tue 10/2/09	Sat 8/8/09	7FS-210 days				
764	4. Underground utilities detection	42 days	Fri 29/6/07	Thu 9/8/07					
765	a. utilities detection	28 days	Fri 29/6/07	Thu 26/7/07	19				
766	b. trial trench excavation & identification	14 days	Fri 27/7/07	Thu 9/8/07	762,765				
767	5. Utilities temporary diversion / protection	223 days	Fri 30/3/07	Wed 7/11/07					
768	a. CLP overhead cables at CH 100 - CH 120	90 days	Fri 10/8/07	Wed 7/11/07	766				
769	b. CLP overhead cables at CH 530 - CH 550	90 days	Fri 10/8/07	Wed 7/11/07	766				
770	c. CLP overhead cables at CH 670 - CH 690	90 days	Fri 10/8/07	Wed 7/11/07	766				
771	d. Gas main at Kam Sheung Road	84 days	Fri 30/3/07	Thu 21/6/07					
772	6. Drainage Management Plan	692 days	Fri 30/3/07	Wed 18/2/09					
773	5.1 Submission of DMPs	1 day	Fri 30/3/07	Fri 30/3/07	731SS				
774	5.2 Comments by the Engineer	14 days	Sat 31/3/07	Fri 13/4/07	773				
775	5.3 Implementation of DMP	551 days	Sat 18/8/07	Wed 18/2/09	803SS,774				
776	7. Channel and Crossings	863 days	Fri 30/3/07	Sat 8/8/09					
777	a. Ch11-Ch130 (Bay 4 - Bay 11)	229 days	Thu 23/8/07	Mon 7/4/08					
778	Haul access	5 days	Thu 23/8/07	Mon 27/8/07	793				
779	Flow diversion	10 days	Tue 1/1/08	Thu 10/1/08	780SS-10 days				
780	Excavation (including contamination material)	44 days	Fri 11/1/08	Sat 23/2/08	768,778,809				
781	Granular Bedding	40 days	Mon 21/1/08	Fri 29/2/08	780SS+10 days				
782	Base Slab (except south of Bay 6 and north of Bay 7)	44 days	Sun 27/1/08	Mon 10/3/08	781SS+6 days				
783	Wall and Deck (except south of Bay 6 and north of Bay	37 days	Sun 10/2/08	Mon 17/3/08	782SS+14 days				
784	Curing	44 days	Sun 17/2/08	Mon 31/3/08	783SS+7 days				
785	Trench Backfill	37 days	Sun 2/3/08	Mon 7/4/08	784SS+14 days				
786	b. South of Bay 6 and north of Bay 7	53 days	Thu 21/5/09	Sun 12/7/09					
787	Excavation	4 days	Thu 21/5/09	Sun 24/5/09	743,970				
788	Granular Bedding	5 days	Mon 25/5/09	Fri 29/5/09	787				
789	Base Slab and Wall	10 days	Sat 30/5/09	Mon 8/6/09	788				
790	Curing	14 days	Tue 9/6/09	Mon 22/6/09	789				
791	Trench Backfill	20 days	Tue 23/6/09	Sun 12/7/09	790				
792	c. Ch130-Ch233 (Bay 12 - Bay 19)	341 days	Sat 18/8/07	Wed 23/7/08					
793	Haul access	5 days	Sat 18/8/07	Wed 22/8/07	802				
794	Flow diversion	10 days	Sat 29/3/08	Mon 7/4/08	795SS-10 days				
795	Excavation (including contamination material)	33 days	Tue 8/4/08	Sat 10/5/08	793,785				
796	Granular Bedding	29 days	Fri 18/4/08	Fri 16/5/08	795SS+10 days				
797	Base Slab	50 days	Thu 24/4/08	Thu 12/6/08	796SS+6 days				
798	Wall and Deck	56 days	Thu 8/5/08	Wed 2/7/08	797SS+14 days				
799	Curing	63 days	Thu 15/5/08	Wed 16/7/08	798SS+7 days				
800	Trench Backfill	56 days	Thu 29/5/08	Wed 23/7/08	799SS+14 days				
801	d. Ch233-Ch340 (Bay 20 - Bay 30)	151 days	Mon 13/8/07	Thu 10/1/08					
802	Haul access	5 days	Mon 13/8/07	Fri 17/8/07	804SS-15 days				
803	Flow diversion	10 days	Sat 18/8/07	Mon 27/8/07	802				
804	Excavation (including contamination material)	60 days	Tue 28/8/07	Fri 26/10/07					
805	Granular Bedding	70 days	Fri 7/9/07	Thu 15/11/07	804SS+10 days				
806	Base Slab	78 days	Thu 13/9/07	Thu 29/11/07	805SS+6 days				
807	Wall and Deck	85 days	Thu 27/9/07	Thu 20/12/07	806SS+14 days				
808	Curing	92 days	Thu 4/10/07	Thu 3/1/08	807SS+7 days				
809	Trench Backfill	85 days	Thu 18/10/07	Thu 10/1/08	808SS+14 days				
810	e. North of Bay 38 and Bay 39	95 days	Thu 5/6/08	Sun 7/9/08					
811	Excavation	28 days	Thu 5/6/08	Wed 2/7/08	848SS+97 days				
812	Granular Bedding	10 days	Thu 3/7/08	Sat 12/7/08	811				
813	Base Slab and Wall	24 days	Sun 13/7/08	Tue 5/8/08	812				
814	Curing	14 days	Wed 6/8/08	Tue 19/8/08	813				
815	Trench Backfill	17 days	Wed 20/8/08	Fri 5/9/08	814				
816	Forming site access at north of Bay 38 and Bay 39	2 days	Sat 6/9/08	Sun 7/9/08	815				
817	f. South of Bay 38 and Bay 39, and Bay 40	64 days	Mon 8/9/08	Mon 10/11/08					





Task: Progress (blue box), Summary (black box), Rolled Up Critical Task (red box), External Tasks (grey box), Group By Summary (black box), Critical Task (red box), Milestone (blue box), Rolled Up Task (black box), Rolled Up Milestone (blue box), Split (dotted line), Project Summary (grey box), Deadline (black box)

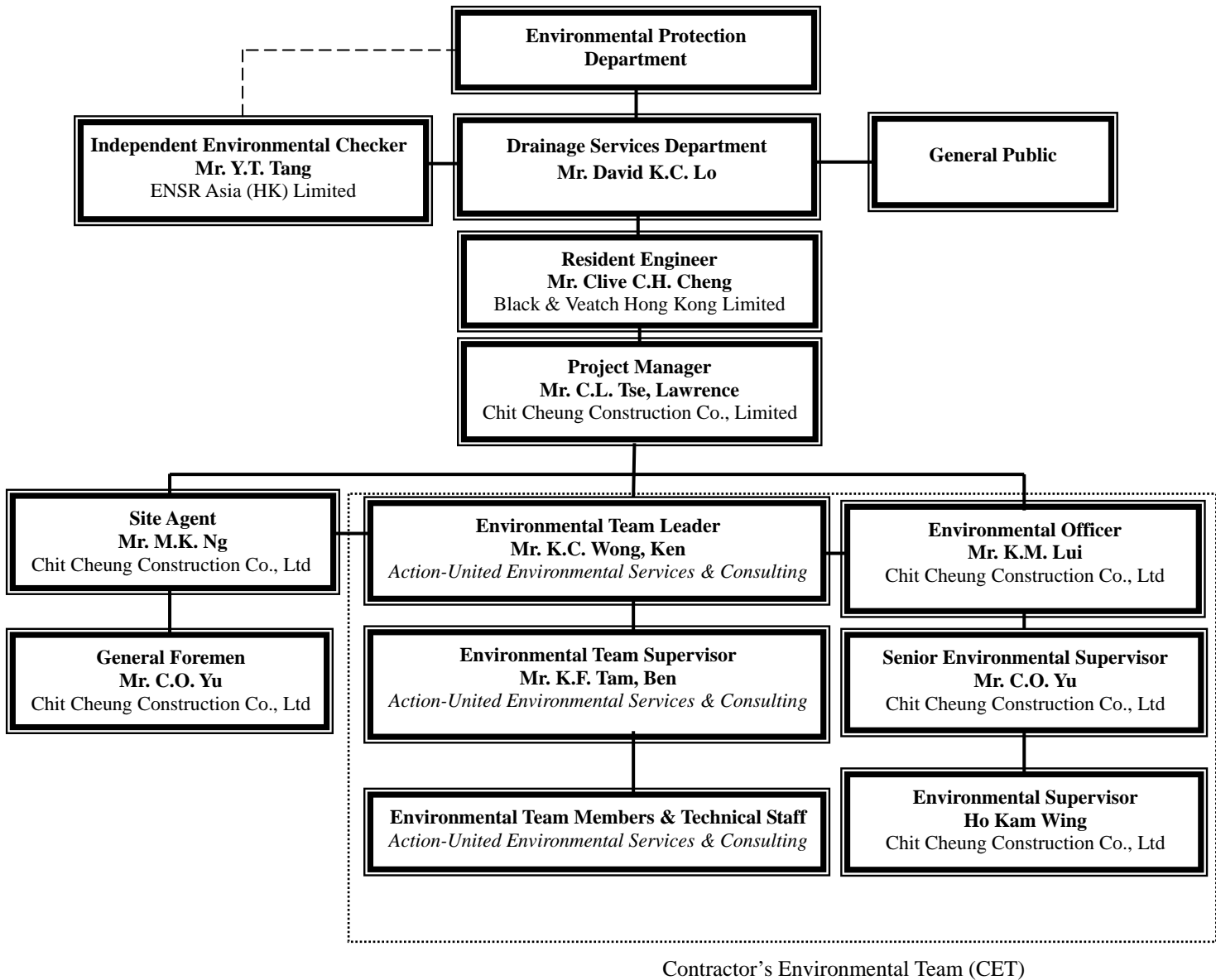


ID	Task Name	Duration	Start	Finish	Predecessors	2009			
						Oct	Nov	Dec	Jan
1022	6.2 Tree transplant	732 days	Fri 6/7/07	Mon 6/7/09					
1023	a. To Temp holding nursery	62 days	Fri 6/7/07	Wed 5/9/07	1021,214				
1024	b. To final location	61 days	Thu 7/5/09	Mon 6/7/09	979FF				
1025	6.3 Tree protection	62 days	Fri 6/7/07	Wed 5/9/07	1023SS				
1026	7. Portion 5A2	739 days	Fri 29/6/07	Mon 6/7/09					
1027	7.1 Tree survey	14 days	Fri 29/6/07	Thu 12/7/07	21				
1028	7.2 Tree transplant	725 days	Fri 13/7/07	Mon 6/7/09					
1029	a. To Temp holding nursery	62 days	Fri 13/7/07	Wed 12/9/07	1027,214				
1030	b. To final location	61 days	Thu 7/5/09	Mon 6/7/09	979FF				
1031	7.3 Tree protection	62 days	Fri 13/7/07	Wed 12/9/07	1029SS				
1032	8. Portion 5B	630 days	Tue 16/10/07	Mon 6/7/09					
1033	8.1 Tree survey	14 days	Tue 16/10/07	Mon 29/10/07	22				
1034	8.2 Tree transplant	616 days	Tue 30/10/07	Mon 6/7/09					
1035	a. To Temp holding nursery	62 days	Tue 30/10/07	Sun 30/12/07	1033,214				
1036	b. To final location	61 days	Thu 7/5/09	Mon 6/7/09	979FF				
1037	8.3 Tree protection	62 days	Tue 30/10/07	Sun 30/12/07	1035SS				
1038									
1039	G. Berthing Area	545 days	Wed 12/9/07	Mon 9/3/09					
1040	1. Construction of Loading Facilities	27 days	Wed 12/9/07	Mon 8/10/07	162				
1041	2. Removal of Loading Facilities	2 days	Sun 1/3/09	Mon 2/3/09	609				
1042	3. Reinstatement of Berthing Area	7 days	Tue 3/3/09	Mon 9/3/09	1041				

APPENDIX C

ENVIRONMENTAL ORGANIZATION STRUCTURE

Environmental Organization Structure



Contact Details of Key Personnel

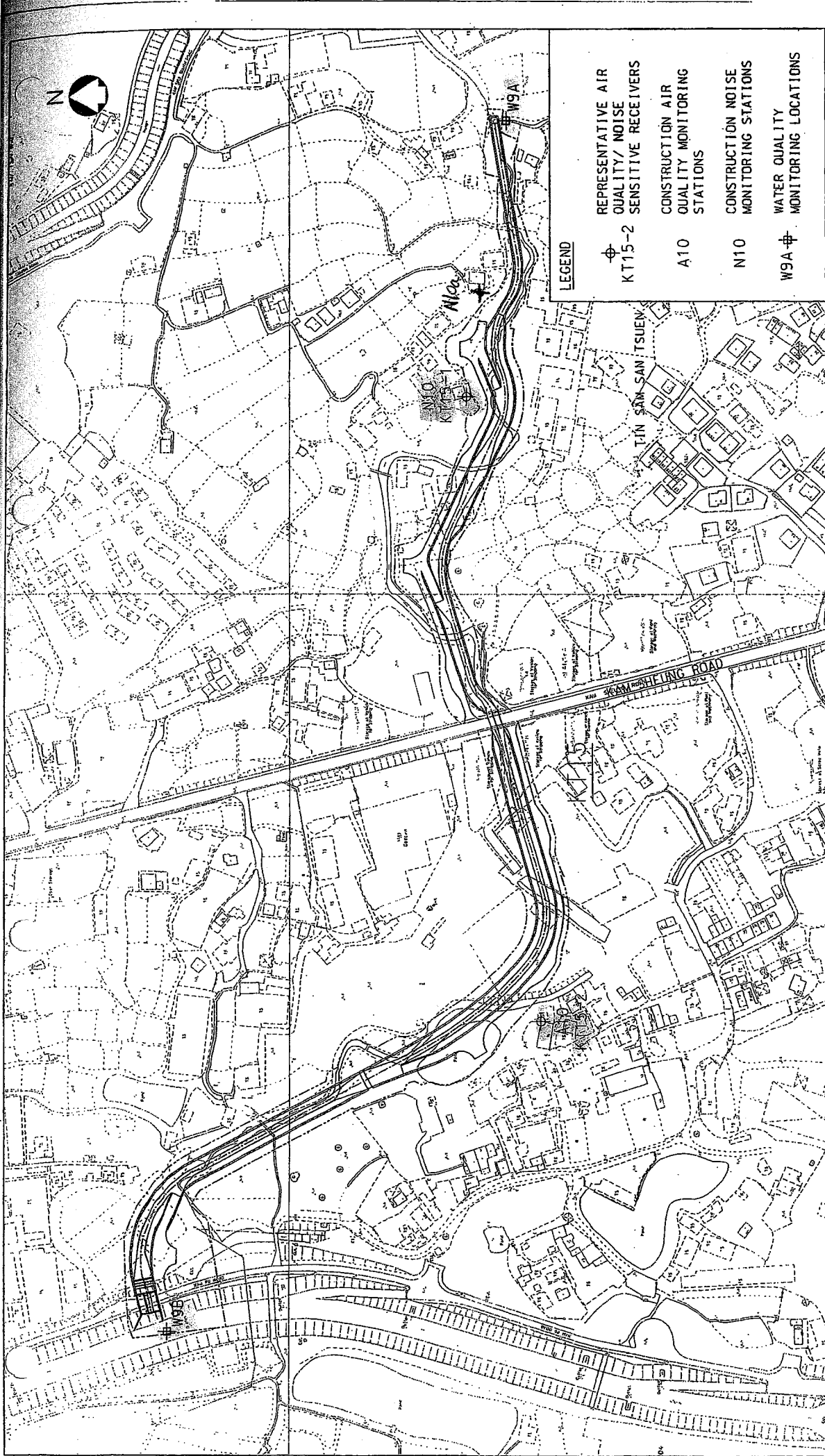
Organization	Project Role	Name of Key Staff	Tel No.	Fax No.
DSD	Employer	Mr. David K.C. LO	2594-7254	2827-8526
B&V	Engineer	Mr. Kelvin N.F. LAU	2601-1000	2601-3988
B&V	Engineer's Representative	Mr. Clive C.H. CHENG	2478-9161	2478-9396
ENSR	Independent Environmental Checker	Mr. Y.T. Tang	3105-8537	2891-0305
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	FN Wong	2959-6059	2959-6079

Legend:

- DSD (Employer) - Drainage Services Department
- B&V (Engineer) - Black & Veatch Hong Kong Limited
- CCC (Contractor) - Chit Cheung Construction Company Limited.
- ENSR (IEC) - ENSR Asia (HK) Ltd.
- AUES (ET) - Action-United Environmental Services & Consulting

APPENDIX D

LOCATIONS OF DESIGNATED MONITORING STATION/LOCATIONS/AREA




LEGEND

- ⊕ REPRESENTATIVE AIR QUALITY/ NOISE SENSITIVE RECEIVERS
KT15-2
- CONSTRUCTION AIR QUALITY MONITORING STATIONS
A10
- ⊥ CONSTRUCTION NOISE MONITORING STATIONS
N10
- ⊕ WATER QUALITY MONITORING LOCATIONS
W9A

Figure No.	ATT4-4.3	Revision	-
Reference	-	File Name	3820470201-137.DGN
Prepared	WYC	Checked	MC
Date	DEC. 2002	Scale	1 : 2000

**CONSTRUCTION PHASE AIR QUALITY/NOISE/WATER QUALITY
MONITORING LOCATIONS AT KT15**

YUEN LONG, KAM TIN,
 NGAU TAM MEI AND TIN SHUI WAI
 DRAINAGE IMPROVEMENT, STAGE I, PHASE 2B


BLACK & VEATCH HONG KONG LIMITED
 博風工程顧問有限公司

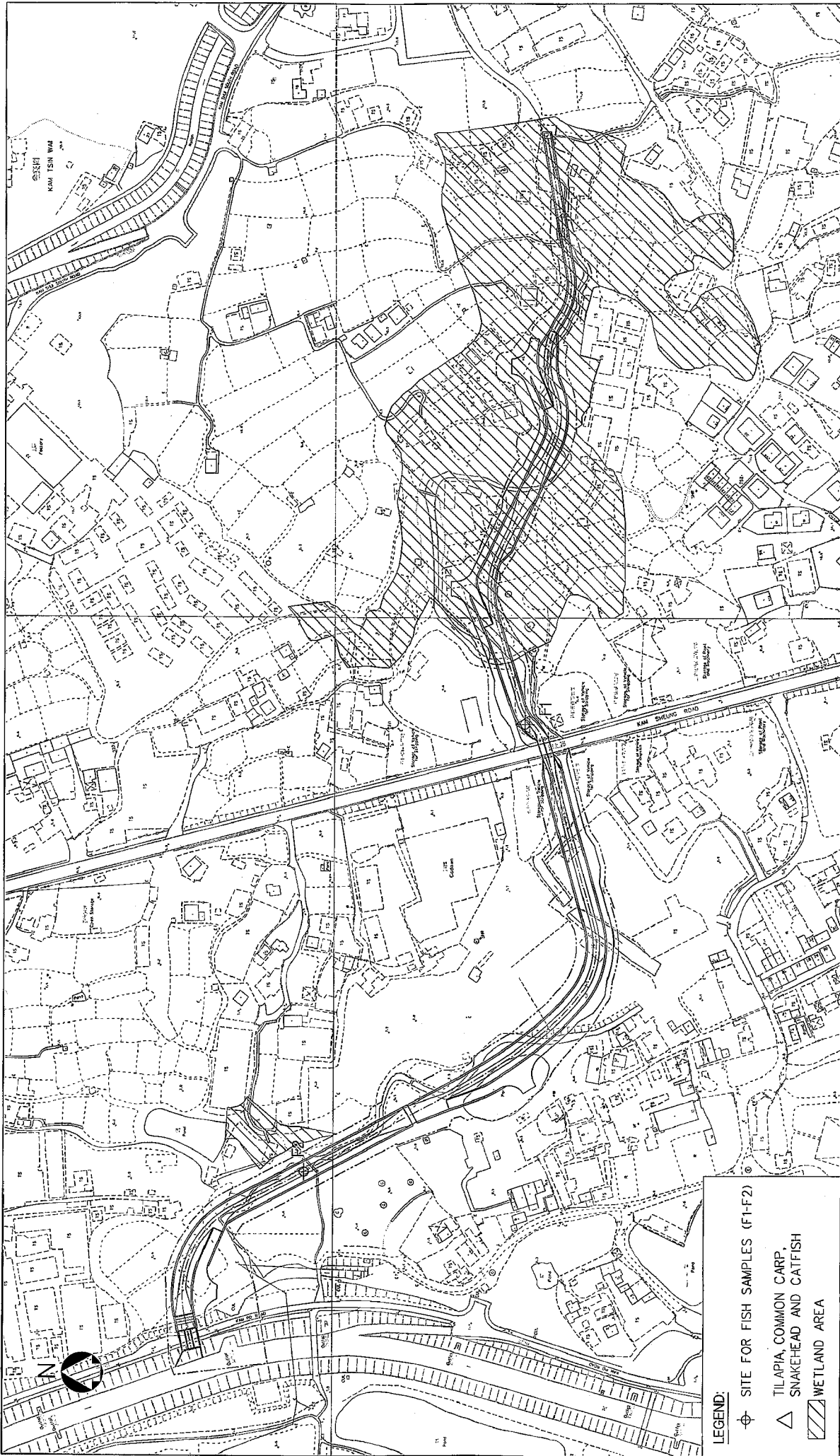


Figure No.	3.3	Revision	0
Reference		File Name	3820470201-114.DGN
Prepared	AEC	Checked	WYC
Date	MAR. 2003	Scale	1 : 2000


Title :

ECOLOGICAL MONITORING AREA KT15

LEGEND:

- ⊕ SITE FOR FISH SAMPLES (F1-F2)
- △ TILAPIA, COMMON CARP, SNAKEHEAD AND CATFISH
- ▨ WETLAND AREA

YUEN LONG, KAM TIN,
NGAU TAM MEI AND TIN SHUIWAI
DRAINAGE IMPROVEMENT, STAGE1, PHASE 2B

 **BLACK & VEATCH HONG KONG LIMITED**
博威工程顧問有限公司

APPENDIX E

EVENT/ACTION PLAN FOR AIR QUALITY, CONSTRUCTION NOISE, STREAM WATER QUALITY AND ECOLOGY

Event/Action Plan for Air Quality

EVENT	ACTION			
	ET	IEC	Engineer	Contractor
ACTION LEVEL				
1. Exceedance for one sample	<ol style="list-style-type: none"> Identify source Inform IEC and Engineer Repeat measurement to confirm finding Increase monitoring frequency to daily 	<ol style="list-style-type: none"> Check monitoring data submitted by ET Check Contractor's working method 	Notify Contractor	<ol style="list-style-type: none"> Rectify any unacceptable practice Amend working methods if appropriate
2. Exceedance for two or more consecutive samples	<ol style="list-style-type: none"> Identify source Inform IEC and Engineer Repeat measurements to confirm findings Increase monitoring frequency to daily Discuss with IEC and Contractor on remedial actions required If exceedance continues, arrange meeting with IEC and Engineer If exceedance stops, cease additional monitoring 	<ol style="list-style-type: none"> Check monitoring data submitted by ET Check Contractor's working method Discuss with ET and Contractor on possible remedial measures Advice Engineer on the effectiveness of the proposed remedial measures Supervise implementation of remedial measures 	<ol style="list-style-type: none"> Confirm receipt of notification of failure in writing Notify Contractor Ensure remedial measures properly implemented 	<ol style="list-style-type: none"> Submit proposals for remedial actions to IEC within 3 working days of notification Implement the agreed proposals Amend proposal if appropriate
LIMIT LEVEL				
1. Exceedance for one sample	<ol style="list-style-type: none"> Identify source Inform Engineer and EPD Repeat measurement to confirm finding Increase monitoring frequency to daily Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and Engineer informed of the results 	<ol style="list-style-type: none"> Check monitoring data submitted by ET Check Contractor's working method Discuss with ET and Contractor on possible remedial measures Advice Engineer on the effectiveness of the proposed remedial measures Supervise implementation of remedial measures 	<ol style="list-style-type: none"> Confirm receipt of notification of failure in writing Notify Contractor Ensure remedial measures properly implemented 	<ol style="list-style-type: none"> Take immediate action to avoid further exceedance Submit proposals for remedial actions to IEC within 3 working days of notification Implement the agreed proposals Amend proposal if appropriate
2. Exceedance for two or more consecutive samples	<ol style="list-style-type: none"> Notify IEC, Engineer and EPD Identify source Repeat measurement to confirm findings Increase monitoring frequency to daily Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented. Arrange meeting with IEC and Engineer to discuss the remedial actions to be taken Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and Engineer informed of the results If exceedance stops, cease additional monitoring 	<ol style="list-style-type: none"> Discuss amongst Engineer, ET and Contractor on potential remedial actions Review Contractor's remedial actions whether necessary to assure their effectiveness and advice the Engineer accordingly Supervise implementation of remedial measures 	<ol style="list-style-type: none"> Confirm receipt of notification of failure in writing Notify Contractor In consultation with the IEC, agree with the Contractor on the remedial measures to be implemented Discuss amongst Environmental Team Leader and the Contractor potential remedial actions Ensure remedial measures properly implemented 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 	<ol style="list-style-type: none"> Take immediate action to avoid further exceedance Submit proposals for remedial actions to IEC within 3 working days of notification Implement the agreed proposals Resubmit proposals if problem still not under control Stop the relevant portion of works as determined by the Engineer until the exceedance is abated

Event/Action Plan for Construction Noise

EVENT	ACTION			
	ET Leader	IEC	Engineer	Contractor
ACTION LEVEL	<ol style="list-style-type: none"> 1. Notify Contractor and Engineer 2. Carry out investigation 3. Report the results of investigation to the IEC and Contractor 4. Discuss with the Contractor and formulate remedial measures 5. Increase monitoring frequency to check mitigation effectiveness 	<ol style="list-style-type: none"> 1. Review the analysed results submitted by ET 2. Review the proposed remedial measures by the Contractor and advice the Engineer accordingly 3. Supervise implementation of remedial measures 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing 2. Notify Contractor 3. Require Contractor to propose remedial measures for the analysed noise problem 4. Ensure remedial measures properly implemented 	<ol style="list-style-type: none"> 1. Submit noise mitigation proposals for remedial actions to IEC 2. Implement the agreed proposals
LIMIT LEVEL	<ol style="list-style-type: none"> 1. Notify IEC, Engineer, EPD and Contractor 2. Identify source 3. Repeat measurement to confirm findings 4. Increase monitoring frequency 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented 6. Inform IEC, Engineer and EPD the causes & actions taken for the exceedances 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and Engineer informed of the results 8. If exceedance stops, cease additional monitoring 	<ol style="list-style-type: none"> 1. Discuss amongst Engineer, ET and Contractor on potential remedial actions 2. Review Contractor's remedial actions whether necessary to assure their effectiveness and advice the Engineer accordingly 3. Supervise implementation of remedial measures 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing 2. Notify Contractor 3. Require Contractor to propose remedial measures for the analysed noise problem 4. Ensure remedial measures properly implemented 5. 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 	<ol style="list-style-type: none"> 1. Take immediate action to avoid further exceedance 2. Submit proposals for remedial actions to IEC within 3 working days of notification 3. Implement the agreed proposals 4. Resubmit proposals if problem still not under control 5. Stop the relevant portion of works as determined by the Engineer until the exceedance is abated

Event and Action Plan for Stream Water Quality

Event	ET Leader	IEC	Engineer	Contractor
ACTION LEVEL (being exceeded by one sampling day)	<ol style="list-style-type: none"> Repeat in-situ measurement to confirm findings Identify source(s) of impact Inform IEC and Contractor Check monitoring data, all plant, equipment and Contractor's working methods Discuss mitigation measures IEC and Contractor Repeat measurement on next day of exceedance 	<ol style="list-style-type: none"> Discuss with ET and Contractor on the mitigation measures Review proposals on mitigation measures submitted by Contractor and advice Engineer accordingly Assess the effectiveness of the implemented mitigation measures 	<ol style="list-style-type: none"> Discuss with IEC on the proposed mitigation measures Make agreement on the mitigation measures to be implemented 	<ol style="list-style-type: none"> Inform Engineer and confirm notification of the non-compliance in writing Rectify unacceptable practice Check all plant and equipment Consider changes of working methods Discuss with ET and Contractor and propose mitigation measures to IEC and Engineer Implement the agreed mitigation measures
ACTION LEVEL (being exceeded by more than one sampling day)	<ol style="list-style-type: none"> Repeat in-situ measurement to confirm findings Identify source(s) of impact Inform IEC, Contractor and EPD Check monitoring data, all plant, equipment and Contractor's working methods Discuss mitigation measures IEC, Engineer and Contractor Repeat measurement on next day of exceedance Ensure mitigation measures are implemented Prepare to increase the monitoring frequency to daily Repeat measurement on next day of exceedance 	<ol style="list-style-type: none"> Discuss with ET and Contractor on the mitigation measures Review proposals on mitigation measures submitted by Contractor and advice Engineer accordingly Assess the effectiveness of the implemented mitigation measures 	<ol style="list-style-type: none"> Discuss with IEC on the proposed mitigation measures Make agreement on the mitigation measures to be implemented Assess the effectiveness of the implemented mitigation measures 	<ol style="list-style-type: none"> Inform Engineer and confirm notification of the non-compliance in writing Rectify unacceptable practice Check all plant and equipment Consider changes of working methods Discuss with ET and IEC and propose mitigation measures to IEC and Engineer within 3 working days Implement the agreed mitigation measures
LIMIT LEVEL (being exceeded by one sampling days)	<ol style="list-style-type: none"> Repeat in-situ measurement to confirm findings Identify source(s) of impact Inform IEC, Contractor and EPD Check monitoring data, all plant, equipment and Contractor's working methods Discuss mitigation measures IEC, Engineer and Contractor Ensure mitigation measures are implemented Increase the monitoring frequency to daily until no exceedance of Limit level 	<ol style="list-style-type: none"> Discuss with ET and Contractor on the mitigation measures Review proposals on mitigation measures submitted by Contractor and advice Engineer accordingly Assess the effectiveness of the implemented mitigation measures 	<ol style="list-style-type: none"> Discuss with IEC, ET and Contractor on the proposed mitigation measures Request Contractor to critically review the working methods Make agreement on the mitigation measures to be implemented Assess the effectiveness of the implemented mitigation measures 	<ol style="list-style-type: none"> Inform Engineer and confirm notification of the non-compliance in writing Rectify unacceptable practice Check all plant and equipment Consider changes of working methods Discuss with ET, IEC and Engineer and propose mitigation measures to IEC and Engineer within 3 working days Implement the agreed mitigation measures
LIMIT LEVEL (being exceeded by more than one sampling days)	<ol style="list-style-type: none"> Repeat in-situ measurement to confirm findings; Identify source(s) of impact; Inform Contractor, Engineer, IEC and EPD; Check monitoring data, all plant, equipment and Contractor's working methods; Discuss mitigation measures with IEC, Engineer and Contractor; Ensure mitigation measures are implemented; Increase the monitoring frequency to daily until no exceedance of Limit level 	<ol style="list-style-type: none"> Discuss with ET and Contractor on the mitigation measures Review proposals on mitigation measures submitted by Contractor and advice Engineer accordingly Assess the effectiveness of the implemented mitigation measures 	<ol style="list-style-type: none"> Discuss with IEC, ET and Contractor on the proposed mitigation measures Request Contractor to critically review the working methods Make agreement on the mitigation measures to be implemented Assess the effectiveness of the implemented mitigation measures 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 	<ol style="list-style-type: none"> Inform Engineer and confirm notification of the non-compliance in writing Rectify unacceptable practice Check all plant and equipment Consider changes of working methods 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 Implement the agreed mitigation measures; As directed by Engineer, to slow down or to stop all or part of the construction activities

Event/Action Plan for Ecology

Event	ET Leader	IEC	Engineer	Contractor
<p>Fauna</p> <p>The total number of species or individuals of the surveyed wetland dependent faunal groups is reduced by 20-40% from baseline</p>	<ul style="list-style-type: none"> Notify IEC and Contractor; Check the position and state of the current works to identify the causes; Discuss mitigation measures with IEC and Contractor 	<ul style="list-style-type: none"> Discuss with ET and Contractor on the mitigation measures Review proposals on mitigation measures submitted by Contractor and advice Engineer accordingly Assess the effectiveness of the implemented mitigation measures 	<ul style="list-style-type: none"> Discuss with IEC on the proposed mitigation measures; Reach agreement on the mitigation measures to be implemented 	<ul style="list-style-type: none"> Inform Engineer and confirm notification of the non-compliance in writing Take immediate action to avoid further exceedances; Check all plant and equipment and working methods, especially noise emanating ones Discuss with ET and IEC and propose mitigation measures to IEC and Engineer Implement the agreed mitigation measures

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

Items	Aspect	Description of Equipment	Date of Calibration	Date of Next Calibration
1	Air	Greasby Anderson GMWS2310 High Volume Sampler	08 Sep 08	08 Nov 08
2		EQ094 - Sibata LD-3 Laser Dust Meter	20 Jun 08	19 Jun 09
3		EQ096 - Sibata LD-3 Laser Dust Meter	20 Jun 08	19 Jun 09
4	Noise	Brueel & Kjaer 4231 Acoustical Calibrator	22 Apr 08	22 Apr 09
5		Brueel & Kjaer 2238 Integrating Sound Level Meter	22 Apr 08	22 Apr 09
6*	Water	YSI Multimeter YSI 550A (Serial No. 05F2063AZ)	17 Oct 08	17 Dec 08
7*		Hanna pH Meter HI98107 (Serial No. S388220)	26 Sep 08	26 Nov 08
8		Turbidimeter HACH 2100p (Serial No. 950900008735)	01 Sep 08	01 Dec 08
9*		Hand refractometer ATAGO (Serial No. 289468)	17 Oct 08	17 Dec 08

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



CERTIFICATE OF ANALYSIS

Batch: HK0817539
 Date of Issue: 17/10/2008
 Client: ACTION UNITED ENVIRO SERVICES
 Client Reference:

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-OC & G
 Date of Calibration : 17 October, 2008

Testing Results :

Expected Reading	Recording Reading
4.88 mg/L	4.76 mg/L
6.52 mg/L	6.38 mg/L
7.89 mg/L	7.86 mg/L
Allowing Deviation	±0.2 mg/L


 Ms Wong Wai Man, Alice
 Laboratory Manager - Hong Kong



CERTIFICATE OF ANALYSIS

Batch: HK0815700
Date of Issue: 26/09/2008
Client: ACTION UNITED ENVIRO SERVICES
Client Reference:

Calibration of pH System

Item : HANNA pH Meter
Model No. : HI98107
Serial No. : S388220
Equipment No. : 0800542
Calibration Method : This meter was calibrated in accordance with standard method APHA (19th Ed.) 4500-H⁺B
Date of Calibration : 26 September, 2008

Testing Results :

Expected Reading	Recording Reading
4.01	4.0
7.01	7.1
10.0	9.9
Allowing Deviation	± 0.2


 Ms Wong Wai Man, Alice
 Laboratory Manager - Hong Kong



CERTIFICATE OF ANALYSIS

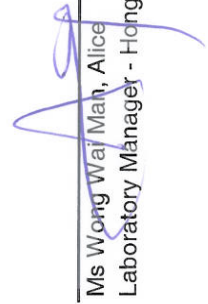
Batch: HK0817540
Date of Issue: 17/10/2008
Client: ACTION UNITED ENVIRO SERVICES
Client Reference:

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 : 17 October, 2008

Testing Results :

Expected Reading	Recording Reading
10 g/L	10 g/L
20 g/L	19 g/L
30 g/L	28 g/L
40 g/L	38 g/L
Allowing Deviation	±10%


 Ms Wong Wai Man, Alice
 Laboratory Manager - Hong Kong

APPENDIX G

IMPACT MONITORING SCHEDULES

Impact Monitoring Schedules in this Reporting Period

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

✓	Monitoring Day
	Sunday or Public Holiday

Impact Monitoring Schedules in the Next Reporting Period

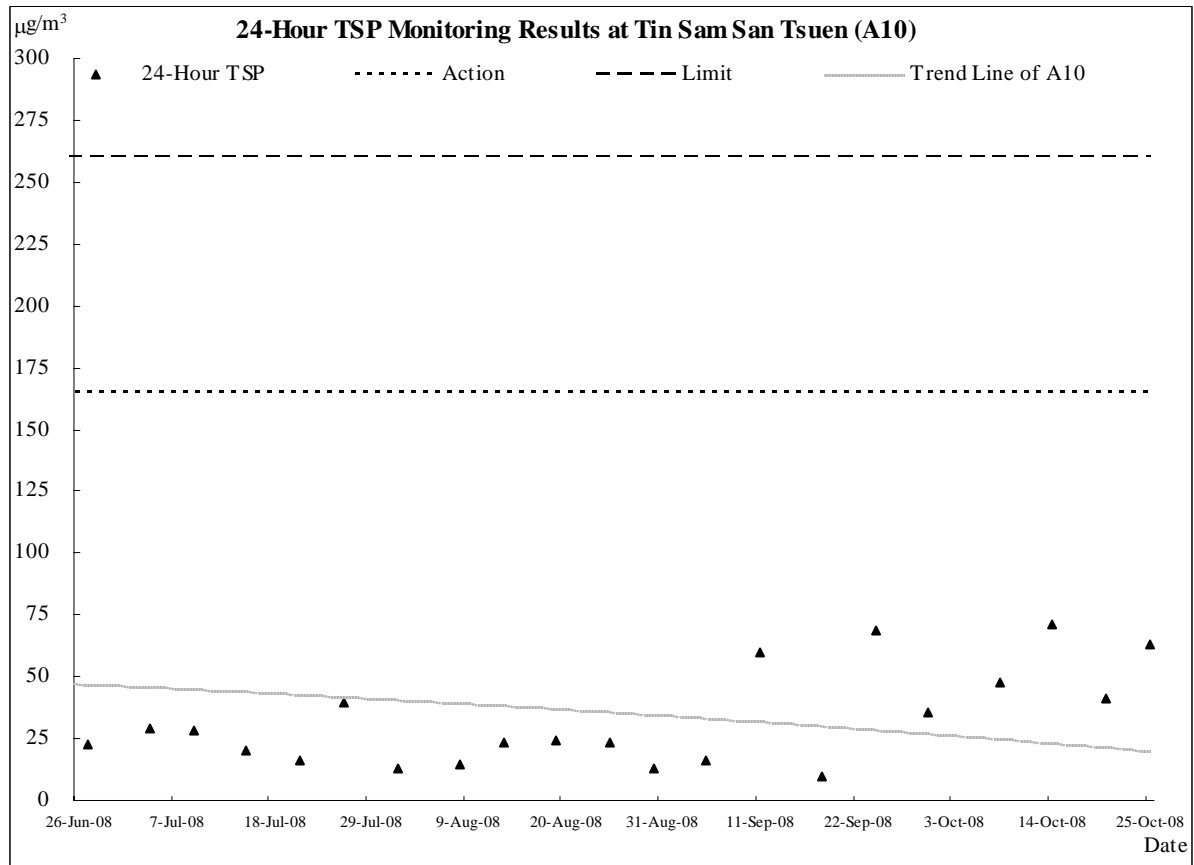
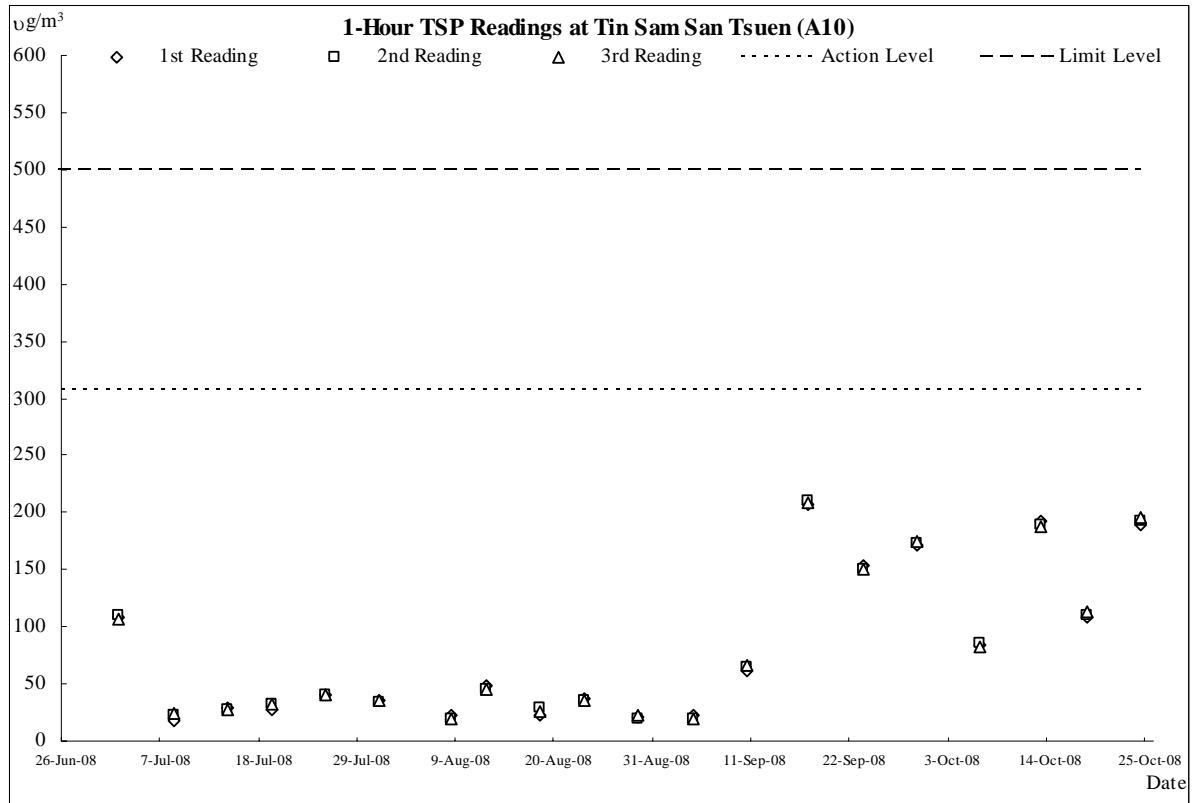
Date		Air Quality		Noise Leq 30min	Stream Water Quality	Ecology Surveys
		1-Hour TSP	24-Hour TSP			
26-Oct-08	Sun					
27-Oct-08	Mon				✓	
28-Oct-08	Tue					
29-Oct-08	Wed				✓	
30-Oct-08	Thu	✓		✓		
31-Oct-08	Fri		✓			
1-Nov-08	Sat					
2-Nov-08	Sun					
3-Nov-08	Mon				✓	
4-Nov-08	Tue		✓			
5-Nov-08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

✓	Monitoring Day
	Sunday or Public Holiday

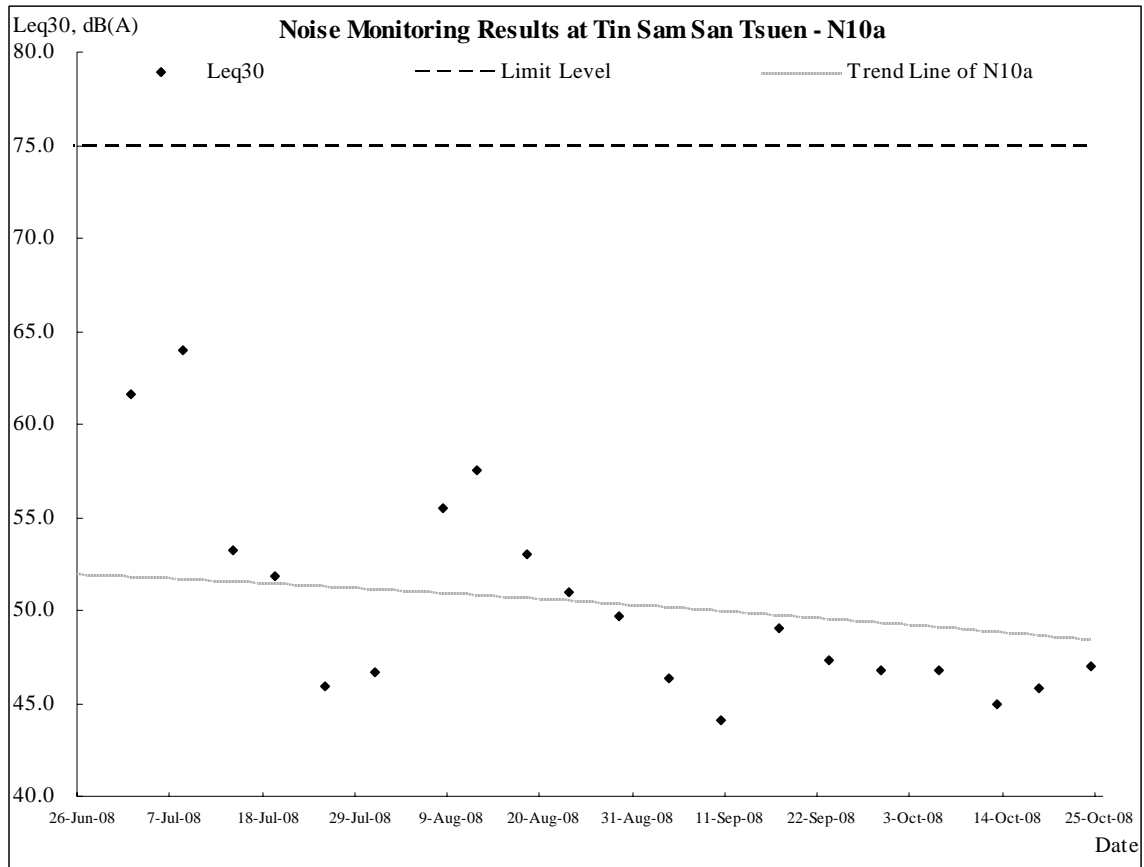
APPENDIX H

GRAPHICAL PLOTS OF AIR QUALITY, CONSTRUCTION NOISE AND STREAM WATER QUALITY MONITORING RESULTS

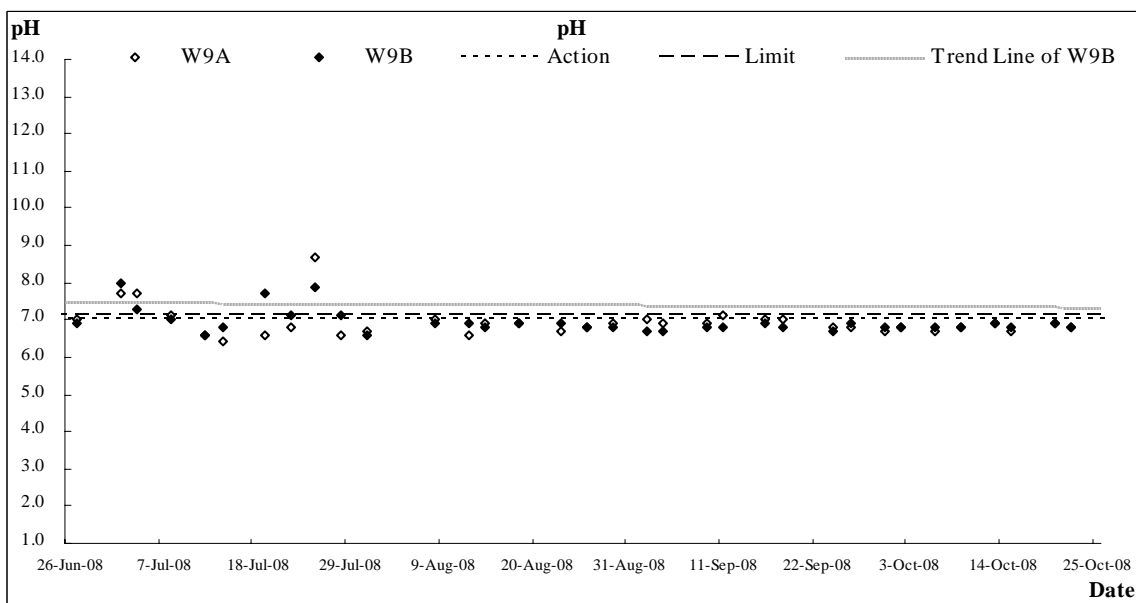
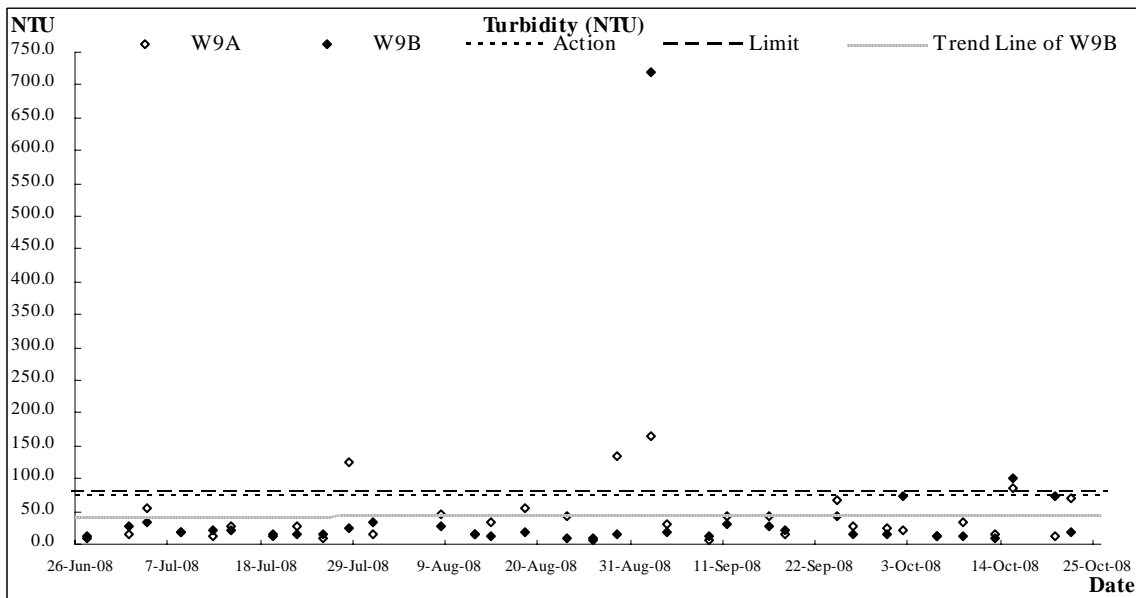
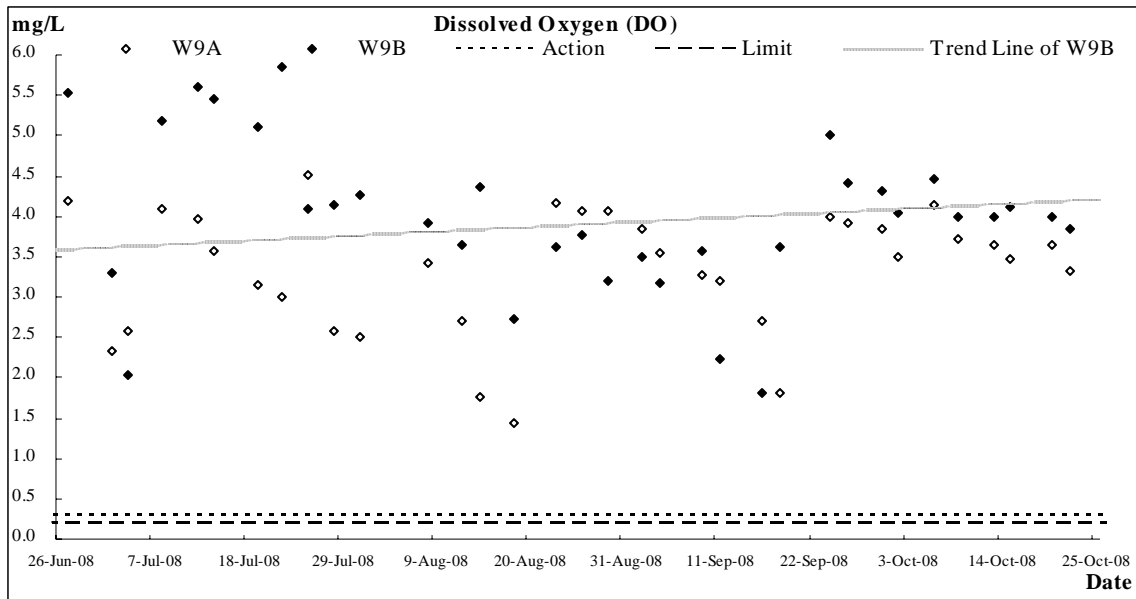
AIR QUALITY

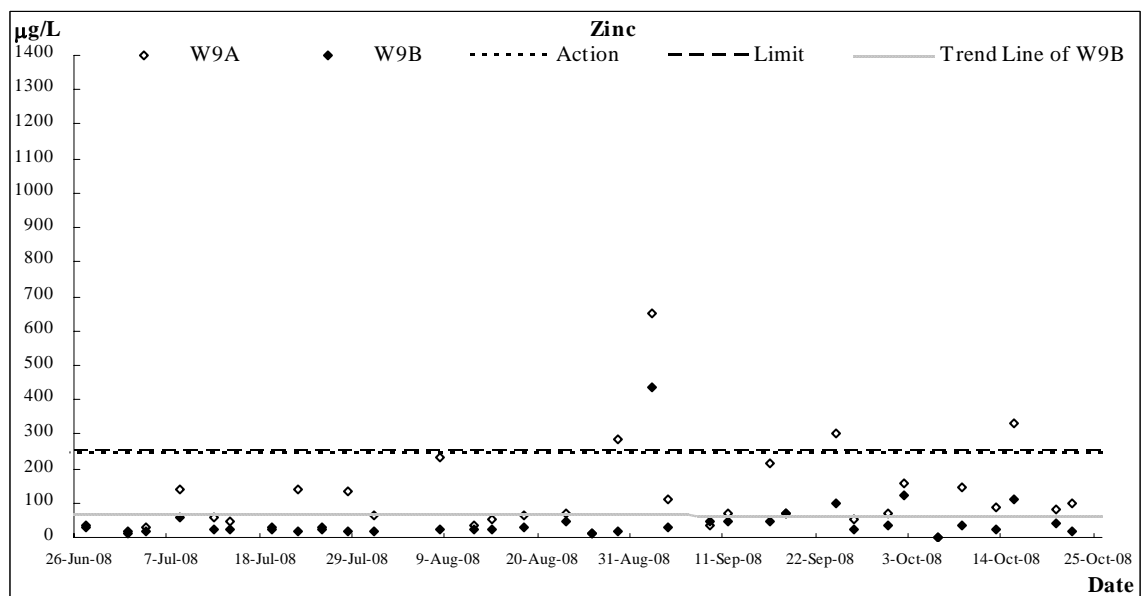
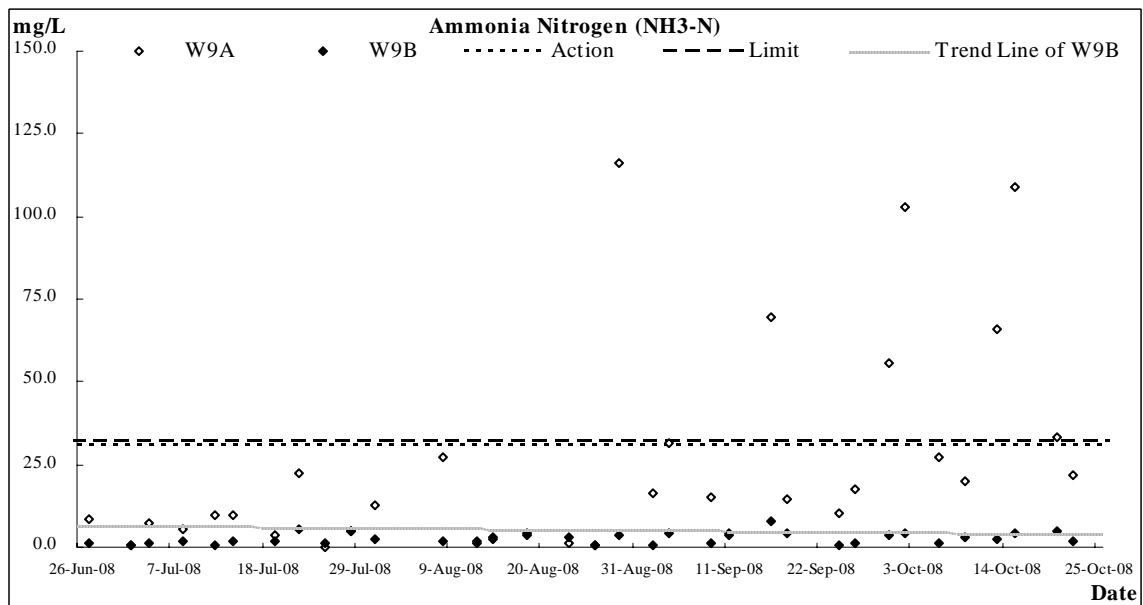
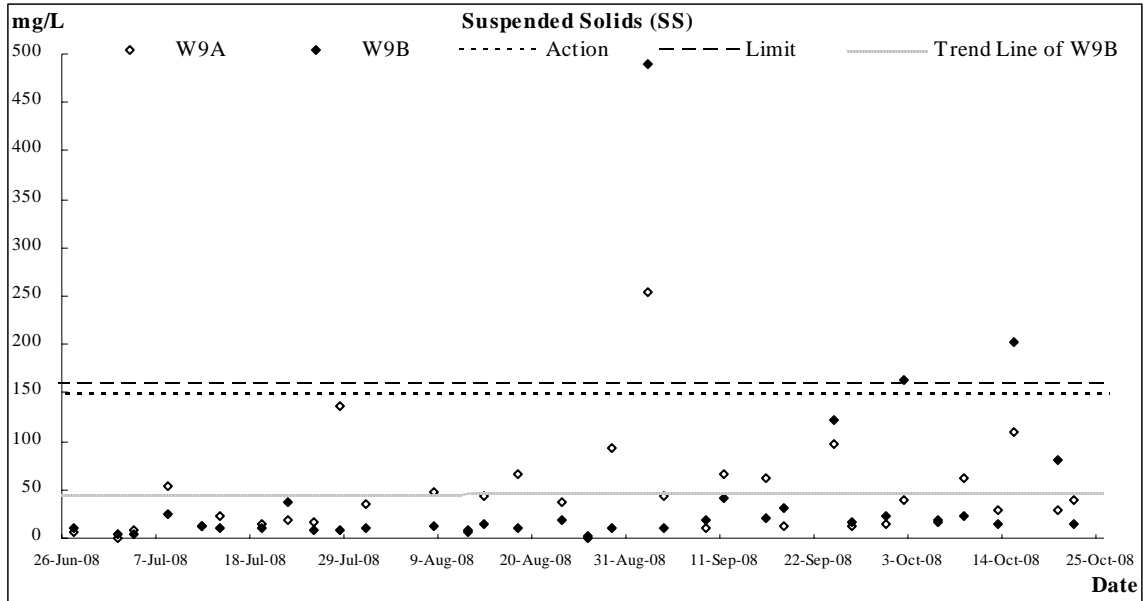


CONSTRUCTION NOISE



STREAM WATER QUALITY





Note: Monitoring on 06 August 2008 was cancelled due to Tropical Cyclone Signal No. 8
 Monitoring on 23 September 2008 was cancelled due to Tropical Cyclone, Heavy Rainfall and Thunderstorm Signal Warning.

Date 26-Sep-08																	
Location	Time	Depth (m)	Temp (oC)		DO (mg/L)		DOS (%)		Turbidity (NTU)		Salinity		pH		SS	NH3-N	Zinc
W9A	13:40	0.18	27.3	27.3	3.91	3.93	48.9	49.1	27.7	27.1	0	0.0	6.80	6.80	12.0	17.6	55.0
			27.3		3.94		49.3		26.4		0		6.80				
W9B	13:50	0.26	27.8	27.8	4.44	4.43	55.7	55.5	14.8	15.0	0	0.0	6.90	6.90	17.0	1.3	24.0
			27.8		4.41		55.2		15.2		0		6.90				

Date 30-Sep-08																	
Location	Time	Depth (m)	Temp (oC)		DO (mg/L)		DOS (%)		Turbidity (NTU)		Salinity		pH		SS	NH3-N	Zinc
W9A	13:30	0.14	27.2	27.2	3.82	3.84	47.6	47.9	24.3	25.1	0	0.0	6.70	6.70	15.0	55.9	71.0
			27.2		3.86		48.1		25.9		0		6.70				
W9B	13:45	0.21	27.9	27.9	4.29	4.31	52.9	53.2	13.7	14.0	0	0.0	6.80	6.80	22.0	3.7	32.0
			27.9		4.32		53.4		14.2		0		6.80				

Date 2-Oct-08																	
Location	Time	Depth (m)	Temp (oC)		DO (mg/L)		DOS (%)		Turbidity (NTU)		Salinity		pH		SS	NH3-N	Zinc
W9A	12:35	0.13	27.6	27.6	3.48	3.51	43.7	44.3	21.6	21.5	0	0.0	6.80	6.80	39.0	103.0	159.0
			27.6		3.53		44.8		21.4		0		6.80				
W9B	12:50	0.28	28.1	28.1	4.06	4.05	49.1	48.9	72.6	72.8	0	0.0	6.80	6.80	164.0	4.5	121.0
			28.1		4.04		48.7		72.9		0		6.80				

Location	Time	Depth (m)	Temp (oC)		DO (mg/L)		DOS (%)		Turbidity (NTU)		Salinity		pH		SS	NH3-N	Zinc
W9A	12:45	0.17	27.6	27.6	4.17	4.15	52.0	51.7	10.3	10.9	0	0.0	6.70	6.70	19.0	27.4	<10
			27.6		4.13		51.3		11.4		0		6.70				
W9B	13:00	0.31	28.2	28.2	4.48	4.46	56.9	56.5	12.8	13.1	0	0.0	6.80	6.80	17.0	1.1	<10
			28.2		4.44		56.0		13.3		0		6.80				

Date 9-Oct-08																	
Location	Time	Depth (m)	Temp (oC)		DO (mg/L)		DOS (%)		Turbidity (NTU)		Salinity		pH		SS	NH3-N	Zinc
W9A	09:45	0.14	27.3	27.3	3.71	3.72	46.1	46.3	32.9	32.5	0	0.0	6.80	6.80	63.0	20.2	143.0
			27.3		3.73		46.5		32.1		0		6.80				
W9B	09:55	0.28	27.1	27.1	3.97	3.99	49.8	50.1	12.8	13.0	0	0.0	6.80	6.80	22.0	3.0	37.0
			27.1		4.01		50.4		13.2		0		6.80				

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 October 2008 (No. 16)



Date 13-Oct-08																	
Location	Time	Depth (m)	Temp (oC)		DO (mg/L)		DOS (%)		Turbidity (NTU)		Salinity		pH		SS	NH3-N	Zinc
W9A	12:00	0.16	27.9	27.9	3.63	3.65	45.2	45.5	17.1	16.8	0	0.0	6.90	6.90	29.0	66.1	88.0
			27.9		3.66		45.7		16.4		0		6.90				
W9B	12:15	0.27	28.2	28.2	3.97	3.99	50.1	50.8	8.2	8.5	0	0.0	6.90	6.90	15.0	2.4	23.0
			28.2		4.01		50.8		8.7		0		6.90				

Date 15-Oct-08																	
Location	Time	Depth (m)	Temp (oC)		DO (mg/L)		DOS (%)		Turbidity (NTU)		Salinity		pH		SS	NH3-N	Zinc
W9A	11:50	0.13	27.8	27.8	3.44	3.46	43.7	44.0	86.9	86.2	0	0.0	6.70	6.70	110.0	109.0	334.0
			27.8		3.48		44.2		85.4		0		6.70				
W9B	12:05	0.30	28.2	28.2	4.13	4.12	53.1	52.9	97.2	99.6	0	0.0	6.80	6.80	203.0	4.4	111.0
			28.2		4.1		52.7		102.0		0		6.80				

Date 20-Oct-08																	
Location	Time	Depth (m)	Temp (oC)		DO (mg/L)		DOS (%)		Turbidity (NTU)		Salinity		pH		SS	NH3-N	Zinc
W9A	13:10	0.14	27.4	27.4	3.67	3.65	46.8	46.5	12.6	12.9	0	0.0	6.90	6.90	28.0	33.1	84.0
			27.4		3.62		46.2		13.1		0		6.90				
W9B	13:25	0.22	27.8	27.8	3.98	4.00	49.8	50.1	72.1	71.8	0	0.0	6.90	6.90	80.0	4.6	42.0
			27.8		4.02		50.3		71.4		0		6.90				

Date 22-Oct-08																	
Location	Time	Depth (m)	Temp (oC)		DO (mg/L)		DOS (%)		Turbidity (NTU)		Salinity		pH		SS	NH3-N	Zinc
W9A	12:20	0.14	27.9	27.9	3.29	3.31	38.4	38.8	69.4	68.8	0	0.0	6.80	6.80	39.0	21.9	100.0
			27.9		3.33		39.1		68.2		0		6.80				
W9B	12:35	0.28	28.1	28.1	3.86	3.84	47.1	46.8	18.4	19.0	0	0.0	6.80	6.80	15.0	2.0	20.0
			28.1		3.82		46.4		19.6		0		6.80				

APPENDIX I

METEOROLOGICAL DATA IN THE REPORTING PERIOD

Meteorological Data Extracted from HKO in the Reporting Period

Date	Weather	Lau Fau Shan Weather Station					
		Total Rainfall (mm)	Mean Air Temperature (°C)	Wind Speed (km/h)	Mean Relative Humidity (%)	Wind Direction	
26-Sep-08	Fri	sunny periods/moderate	0.1	29.4	12.5	77.5	E
27-Sep-08	Sat	sunny periods/cloudy/a few showers/moderate/fresh	Trace	27.5	12	73.5	E/NE
28-Sep-08	Sun	sunny periods/cloudy/a few showers/moderate/fresh	2.3	27.2	19.5	63	N/NE
29-Sep-08	Mon	fine/dry/moderate/fresh	2	26.9	17	62.5	N/NE
30-Sep-08	Tue	fine/dry/moderate	0	27.3	16	60	E/NE
1-Oct-08	Wed	Holiday					
2-Oct-08	Thu	sunny periods/moderate	3	27.9	9	68	E/NE
3-Oct-08	Fri	cloudy/overcast/rain/moderate/fresh/strong	2.4	27.6	17	70	E
4-Oct-08	Sat	cloudy/scattered showers/squally thunderstorm/moderate/fresh	14	28.1	17	78	E
5-Oct-08	Sun	cloudy/moderate/fresh	122.6	25	29.5	88.5	S/SE
6-Oct-08	Mon	cloudy/moderate/fresh	Trace	24	27.5	80.5	N/NW
7-Oct-08	Tue	Holiday					
8-Oct-08	Wed	cloudy/sunny periods/moderate/fresh	0.5	25	12	77	E/NE
9-Oct-08	Thu	sunny periods/cloudy/moderate/fresh	Trace	27.7	14	72	E
10-Oct-08	Fri	fine/dry/moderate	0	28.3	10	70	E/SE
11-Oct-08	Sat	fine/dry/moderate/fresh	0	28.2	13.5	68.5	E/NE
12-Oct-08	Sun	cloudy/rain/fresh/strong	Trace	26.6	12	73	E/NE
13-Oct-08	Mon	cloudy/rain/fresh/strong	0.3	24.5	11	83	E/NE
14-Oct-08	Tue	cloudy/haze/sunny periods/moderate/fresh	Trace	25.6	13.5	75.5	E/NE
15-Oct-08	Wed	fine/dry/moderate/fresh	Trace	26.9	9	71	E
16-Oct-08	Thu	fine/hazy/cloudy/moderate	0	27.4	12	71	E/SE
17-Oct-08	Fri	cloudy/rain/moderate/fresh	0.1	26.8	11.7	69.5	E/SE
18-Oct-08	Sat	sunny periods/cloudy/moderate/fresh	0	28.5	10.7	71.5	E/SE
19-Oct-08	Sun	fine/dry/moderate/fresh	1.6	28.6	9.5	66.2	E/SE
20-Oct-08	Mon	fine/dry/moderate/fresh	Trace	28.3	14.5	66.5	E/SE
21-Oct-08	Tue	fine/moderate	0	27.4	13.5	66.5	E
22-Oct-08	Wed	fine/moderate	0	27	9	74	E/SE
23-Oct-08	Thu	fine/hot/haze/light winds	0	26.7	10.5	76.2	S/SE
24-Oct-08	Fri	cloudy/sunny intervals/moderate/fresh	0	28	11.5	68	E/NE
25-Oct-08	Sat	cloudy/sunny intervals/moderate/fresh	Trace	27.6	15.5	68	E

APPENDIX J

ENVIRONMENTAL TEAM SITE INSPECTION CHECKLISTS

Environmental Site Inspection Checklist for KT15

Project:	<u>Contract No.: DC/2006/02</u> <u>Yuen Long, Kam Tin, Ngau Tam Mei and Tin Shui Wai Drainage Improvements, Stage 1, Phase 2B – Cheung Chun San Tsuen and Kam Tsui Wai</u>	Inspected by	
Inspection		RE/RE's representative:	<u>Mr. A.F.Ng</u>
Date:	<u>2 October 2008</u>	IEC/IEC's representative:	<u></u>
Time:	<u>2:30 p.m.</u>	ETL/ ET's representative:	<u>F.N.Wong</u>
		Contractor's representative:	<u>M.K.Ng/Man</u>
		Checklist No.	<u>KT15-021008</u>

PART A: GENERAL INFORMATION Environmental Permit No. EP-231/2005/A

Weather: Sunny Fine Cloudy Rainy

Temperature: °C

Humidity: High Moderate Low

Wind: Strong Breeze Light Calm

PART B: SITE AUDIT

		Not Obs.	Yes	No	Follow up	N/A	Photo/Remarks
Section 1: Water Quality							
1.01	Is an effluent discharge license obtained for the Project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.02	Is the effluent discharged in accordance with the discharge licence?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.03	Is the discharge of turbid water avoided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.04	Are there proper desilting facilities in the drainage systems to reduce SS levels in effluent?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.05	Are there channels, sandbags or bunds to direct surface run-off to sedimentation tanks?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.06	Are there any perimeter channels provided at site boundaries to intercept storm runoff from crossing the site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.07	Is drainage system well maintained?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.08	As excavation proceeds, are temporary access roads protected by crushed stone or gravel?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.09	Are temporary exposed slopes properly covered?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.10	Are earthworks final surfaces well compacted or protected?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1.11	Are manholes adequately covered or temporarily sealed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.12	Are there any procedures and equipment for rainstorm protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.13	Are wheel washing facilities well maintained?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.14	Is runoff from wheel washing facilities avoided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.15	Are there toilets provided on site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.16	Are toilets properly maintained?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.17	Are the vehicle and plant servicing areas paved and located within roofed areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1.18	Is the oil leakage or spillage avoided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.19	Are there any measures to prevent leaked oil from entering the drainage system?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.20	Are there any measures to collect spilt cement and concrete washings during concreting works?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1.21	Are there any oil interceptors/grease traps in the drainage systems for vehicle and plant servicing areas, canteen kitchen, etc?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Environmental Site Inspection Checklist for KT15

	Not Obs.	Yes	No	Follow up	N/A	Photo/Remarks
1.22	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1.23	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1.24	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1.25	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1.26	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1.27	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.28	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.29	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Section 2: Air Quality						
2.01	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.02	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2.03	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.04	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.05	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.06	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.07	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.08	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.09	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.10	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.11	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.12	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2.13	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.14	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.15	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.16	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Section 3: Noise						
3.01	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.02	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.03	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.04	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.05	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.06	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Environmental Site Inspection Checklist for KT15

	Not Obs.	Yes	No	Follow up	N/A	Photo/Remarks
3.07	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3.08	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.09	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3.10	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3.11	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3.12	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.13	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.14	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Section 4: Waste/Chemical Management						
4.01	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.02	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.03	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.04	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.05	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.06	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.07	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.08	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.09	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.10	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.11	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.12	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.13	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.14	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.15	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.16	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.17	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.18	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.19	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.20	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.21	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.22	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Environmental Site Inspection Checklist for KT15

	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.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Section 5: Landscape & Visual						
5.01 Are retained and transplanted trees in health condition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5.02 Are retained and transplanted trees properly protected?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5.03 Are surgery works carried out for the damaged trees?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5.04 Is damage to trees outside site boundary due to construction activities avoided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5.05 Is the night-time lighting controlled to minimize glare to sensitive receivers?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Section 6: Ecology						
6.01 Gabion banks and base had been provide for channel linings and banks for typical sections of KT15?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6.02 Prevent site effluent/runoff discharge to the seasonal wetlands at KT15?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6.03 Stockpiling or disposal of materials, and any dredging or construction activities at the seasonal wetlands at KT15 are prohibited?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Section 7: Others						
7.01 Are relevant Environmental Permits posted at all vehicle site entrances/exits?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Remarks

Last Site Inspection (24 September 2008):

Site conditions messed up by the rain storm signalled No. 8 were observed improved. Case closed.

Finding of Site Inspection on 02 October 2008:

No adverse environmental impacts were observed during the site inspection. However, haul roads within the site were observed dusty and dry, posing potential construction dust impacts on the surrounding environment. Construction dust suppression measures including watering of the dusty and dry surfaces of the site are reminded during dusty works in dry and windy days.

RE's representative



(_____)

IEC's representative

(_____)

ET's representative



(F.N.Wong)

Contractor's representative



(_____)

Project: 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 Tsui Wai

Inspected by _____
RE/RE's representative: Mr. A.F.Ng
IEC/IEC's representative: _____
ETL/ ET's representative: F.N.Wong
Contractor's representative: M.K.Ng/Man
Checklist No. KT15-101008

Inspection
Date: 10 October 2008
Time: 09:30 a.m.

PART A: GENERAL INFORMATION Environmental Permit No. EP-231/2005/A

Weather: Sunny Fine Cloudy Rainy
 Temperature: °C
 Humidity: High Moderate Low
 Wind: Strong Breeze Light Calm

PART B: SITE AUDIT

Section 1: Water Quality

		Not Obs.	Yes	No	Follow up	N/A	Photo/Remarks
1.01	Is an effluent discharge license obtained for the Project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.02	Is the effluent discharged in accordance with the discharge licence?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.03	Is the discharge of turbid water avoided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.04	Are there proper desilting facilities in the drainage systems to reduce SS levels in effluent?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.05	Are there channels, sandbags or bunds to direct surface run-off to sedimentation tanks?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.06	Are there any perimeter channels provided at site boundaries to intercept storm runoff from crossing the site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.07	Is drainage system well maintained?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.08	As excavation proceeds, are temporary access roads protected by crushed stone or gravel?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.09	Are temporary exposed slopes properly covered?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.10	Are earthworks final surfaces well compacted or protected?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1.11	Are manholes adequately covered or temporarily sealed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.12	Are there any procedures and equipment for rainstorm protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.13	Are wheel washing facilities well maintained?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.14	Is runoff from wheel washing facilities avoided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.15	Are there toilets provided on site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.16	Are toilets properly maintained?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.17	Are the vehicle and plant servicing areas paved and located within roofed areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1.18	Is the oil leakage or spillage avoided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.19	Are there any measures to prevent leaked oil from entering the drainage system?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.20	Are there any measures to collect spilt cement and concrete washings during concreting works?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1.21	Are there any oil interceptors/grease traps in the drainage systems for vehicle and plant servicing areas, canteen kitchen, etc?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Environmental Site Inspection Checklist for KT15

	Not Obs.	Yes	No	Follow up	N/A	Photo/Remarks
1.22	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1.23	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1.24	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1.25	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1.26	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1.27	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.28	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.29	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Section 2: Air Quality						
2.01	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.02	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2.03	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.04	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2.05	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.06	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.07	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.08	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.09	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.10	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.11	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.12	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2.13	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.14	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.15	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.16	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Section 3: Noise						
3.01	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.02	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.03	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.04	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.05	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.06	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Environmental Site Inspection Checklist for KT15

	Not Obs.	Yes	No	Follow up	N/A	Photo/Remarks
3.07	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3.08	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.09	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3.10	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3.11	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3.12	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.13	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.14	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Section 4: Waste/Chemical Management		<input type="checkbox"/>				
4.01	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.02	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.03	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.04	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.05	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.06	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.07	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.08	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.09	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.10	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.11	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.12	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.13	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.14	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.15	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.16	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.17	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.18	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.19	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.20	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.21	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.22	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Environmental Site Inspection Checklist for KT15

	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.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Section 5: Landscape & Visual						
5.01 Are retained and transplanted trees in health condition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5.02 Are retained and transplanted trees properly protected?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5.03 Are surgery works carried out for the damaged trees?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5.04 Is damage to trees outside site boundary due to construction activities avoided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5.05 Is the night-time lighting controlled to minimize glare to sensitive receivers?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Section 6: Ecology						
6.01 Gabion banks and base had been provide for channel linings and banks for typical sections of KT15?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6.02 Prevent site effluent/runoff discharge to the seasonal wetlands at KT15?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6.03 Stockpiling or disposal of materials, and any dredging or construction activities at the seasonal wetlands at KT15 are prohibited?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Section 7: Others						
7.01 Are relevant Environmental Permits posted at all vehicle site entrances/exits?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Remarks

Follow-Up of Last Site Inspection (02 October 2008):

No adverse construction dust impacts were observed within the site. Case closed

Finding of Site Inspection on 10 October 2008:

No adverse environmental impacts were observed at KT15, except rain water stagnated in an idle water treatment tank, rendering mosquito breeding in the area. Mosquito control measures are reminded, preferably drying off the stagnant water.

RE's representative



()

IEC's representative

()

ET's representative



(F.N.Wong)

Contractor's representative



()

Environmental Site Inspection Checklist for KT15

Project:	<u>Contract No.: DC/2006/02</u> <u>Yuen Long, Kam Tin, Ngau Tam Mei and Tin Shui Wai Drainage Improvements, Stage 1, Phase 2B – Cheung Chun San Tsuen and Kam Tsui Wai</u>	Inspected by	
Inspection		RE/RE's representative:	<u>Mr. A.F.Ng</u>
Date:	<u>15 October 2008</u>	IEC/IEC's representative:	<u>Cyrus Lau</u>
Time:	<u>14:30 p.m.</u>	ETL/ ET's representative:	<u>F.N.Wong</u>
		Contractor's representative:	<u>Lui Kam Man</u>
		Checklist No.	<u>KT15-151008</u>

PART A: GENERAL INFORMATION Environmental Permit No. EP-231/2005/A

Weather: Sunny Fine Cloudy Rainy

Temperature: °C

Humidity: High Moderate Low

Wind: Strong Breeze Light Calm

PART B: SITE AUDIT

		Not Obs.	Yes	No	Follow up	N/A	Photo/Remarks
Section 1: Water Quality							
1.01	Is an effluent discharge license obtained for the Project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.02	Is the effluent discharged in accordance with the discharge licence?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.03	Is the discharge of turbid water avoided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.04	Are there proper desilting facilities in the drainage systems to reduce SS levels in effluent?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.05	Are there channels, sandbags or bunds to direct surface run-off to sedimentation tanks?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.06	Are there any perimeter channels provided at site boundaries to intercept storm runoff from crossing the site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.07	Is drainage system well maintained?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.08	As excavation proceeds, are temporary access roads protected by crushed stone or gravel?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.09	Are temporary exposed slopes properly covered?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.10	Are earthworks final surfaces well compacted or protected?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1.11	Are manholes adequately covered or temporarily sealed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.12	Are there any procedures and equipment for rainstorm protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.13	Are wheel washing facilities well maintained?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.14	Is runoff from wheel washing facilities avoided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.15	Are there toilets provided on site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.16	Are toilets properly maintained?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.17	Are the vehicle and plant servicing areas paved and located within roofed areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1.18	Is the oil leakage or spillage avoided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.19	Are there any measures to prevent leaked oil from entering the drainage system?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.20	Are there any measures to collect spilt cement and concrete washings during concreting works?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1.21	Are there any oil interceptors/grease traps in the drainage systems for vehicle and plant servicing areas, canteen kitchen, etc?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Environmental Site Inspection Checklist for KT15

	Not Obs.	Yes	No	Follow up	N/A	Photo/Remarks
1.22	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1.23	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1.24	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1.25	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1.26	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1.27	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.28	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.29	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Section 2: Air Quality						
2.01	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.02	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2.03	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.04	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2.05	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.06	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.07	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.08	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.09	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.10	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.11	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.12	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2.13	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.14	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.15	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.16	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Section 3: Noise						
3.01	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.02	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.03	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.04	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.05	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.06	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Environmental Site Inspection Checklist for KT15

	Not Obs.	Yes	No	Follow up	N/A	Photo/Remarks
3.07	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3.08	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.09	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3.10	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3.11	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3.12	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.13	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.14	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Section 4: Waste/Chemical Management		<input type="checkbox"/>				
4.01	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.02	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.03	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.04	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.05	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.06	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.07	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.08	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.09	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.10	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.11	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.12	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.13	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.14	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.15	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.16	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.17	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.18	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.19	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.20	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.21	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.22	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Environmental Site Inspection Checklist for KT15

		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.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Section 5: Landscape & Visual							
5.01	Are retained and transplanted trees in health condition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5.02	Are retained and transplanted trees properly protected?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5.03	Are surgery works carried out for the damaged trees?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5.04	Is damage to trees outside site boundary due to construction activities avoided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5.05	Is the night-time lighting controlled to minimize glare to sensitive receivers?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Section 6: Ecology							
6.01	Gabion banks and base had been provide for channel linings and banks for typical sections of KT15?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6.02	Prevent site effluent/runoff discharge to the seasonal wetlands at KT15?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6.03	Stockpiling or disposal of materials, and any dredging or construction activities at the seasonal wetlands at KT15 are prohibited?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Section 7: Others							
7.01	Are relevant Environmental Permits posted at all vehicle site entrances/exits?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Remarks

Follow-Up of Last Site Inspection (10 October 2008):

Rain water stagnated in an idle water treatment tank was dried off. Case closed.

Finding of Site Inspection on 15 October 2008:

No adverse environmental impacts were observed. It is reminded that the implemented environmental mitigation measures are properly maintained or improved as necessary to minimize environmental impacts generated from the Project.

RE's representative

IEC's representative

ET's representative

Contractor's representative

(*Chun Wai Lee*)

(*Yung L Au*)

(*F.N. Wong*)

(*F.M. Lau*)

Environmental Site Inspection Checklist for KT15

Project:	<u>Contract No.: DC/2006/02</u> <u>Yuen Long, Kam Tin, Ngau Tam Mei and Tin Shui Wai Drainage Improvements, Stage 1, Phase 2B – Cheung Chun San Tsuen and Kam Tsui Wai</u>	Inspected by	
Inspection		RE/RE's representative:	<u>Mr. A.F.Ng</u>
Date:	<u>23 October 2008</u>	IEC/IEC's representative:	<u></u>
Time:	<u>09:30 a.m.</u>	ETL/ ET's representative:	<u>Ben Tam</u>
		Contractor's representative:	<u>M.K.Ng/Man</u>
		Checklist No.	<u>KT15-231008</u>

PART A: GENERAL INFORMATION Environmental Permit No. EP-231/2005/A

Weather: Sunny Fine Cloudy Rainy

Temperature: °C

Humidity: High Moderate Low

Wind: Strong Breeze Light Calm

PART B: SITE AUDIT

		Not Obs.	Yes	No	Follow up	N/A	Photo/Remarks
Section 1: Water Quality							
1.01	Is an effluent discharge license obtained for the Project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.02	Is the effluent discharged in accordance with the discharge licence?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.03	Is the discharge of turbid water avoided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.04	Are there proper desilting facilities in the drainage systems to reduce SS levels in effluent?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.05	Are there channels, sandbags or bunds to direct surface run-off to sedimentation tanks?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.06	Are there any perimeter channels provided at site boundaries to intercept storm runoff from crossing the site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.07	Is drainage system well maintained?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.08	As excavation proceeds, are temporary access roads protected by crushed stone or gravel?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.09	Are temporary exposed slopes properly covered?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.10	Are earthworks final surfaces well compacted or protected?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1.11	Are manholes adequately covered or temporarily sealed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.12	Are there any procedures and equipment for rainstorm protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.13	Are wheel washing facilities well maintained?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.14	Is runoff from wheel washing facilities avoided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.15	Are there toilets provided on site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.16	Are toilets properly maintained?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.17	Are the vehicle and plant servicing areas paved and located within roofed areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1.18	Is the oil leakage or spillage avoided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.19	Are there any measures to prevent leaked oil from entering the drainage system?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.20	Are there any measures to collect spilt cement and concrete washings during concreting works?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1.21	Are there any oil interceptors/grease traps in the drainage systems for vehicle and plant servicing areas, canteen kitchen, etc?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Environmental Site Inspection Checklist for KT15

	Not Obs.	Yes	No	Follow up	N/A	Photo/Remarks
1.22	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1.23	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1.24	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1.25	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1.26	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
1.27	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.28	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
1.29	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Section 2: Air Quality						
2.01	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.02	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2.03	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.04	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.05	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.06	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.07	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.08	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.09	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.10	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.11	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.12	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
2.13	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.14	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.15	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2.16	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Section 3: Noise						
3.01	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.02	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.03	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.04	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.05	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.06	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Environmental Site Inspection Checklist for KT15

	Not Obs.	Yes	No	Follow up	N/A	Photo/Remarks
3.07	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3.08	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.09	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3.10	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3.11	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
3.12	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.13	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3.14	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Section 4: Waste/Chemical Management						
4.01	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.02	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.03	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.04	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.05	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.06	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.07	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.08	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.09	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.10	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.11	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.12	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.13	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.14	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.15	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.16	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.17	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.18	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.19	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.20	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.21	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4.22	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Environmental Site Inspection Checklist for KT15

		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.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Section 5: Landscape & Visual							
5.01	Are retained and transplanted trees in health condition?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5.02	Are retained and transplanted trees properly protected?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5.03	Are surgery works carried out for the damaged trees?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
5.04	Is damage to trees outside site boundary due to construction activities avoided?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5.05	Is the night-time lighting controlled to minimize glare to sensitive receivers?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Section 6: Ecology							
6.01	Gabion banks and base had been provide for channel linings and banks for typical sections of KT15?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
6.02	Prevent site effluent/runoff discharge to the seasonal wetlands at KT15?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6.03	Stockpiling or disposal of materials, and any dredging or construction activities at the seasonal wetlands at KT15 are prohibited?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Section 7: Others							
7.01	Are relevant Environmental Permits posted at all vehicle site entrances/exits?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Remarks

Last Site Inspection (15 October 2008):

No adverse environmental impacts were observed during the site inspection.

Finding of Site Inspection on 23 October 2008:

No adverse environmental impacts were observed during the site inspection. However, stagnant water was observed within the site. Mosquito control measures are reminded to prevent mosquito breeding.

RE's representative

IEC's representative

()

ET's representative

FNWong (p.p)

(Ben Tam)

Contractor's representative

()

APPENDIX K

RESPONSE TO COMMENT

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 Summary Report for October 2008 (R1004 Revision 1) submit on 28 October 08 (12:17)

Response to IEC's comments [Received from e-mail on 05 November 2008 18:10]

No.	Section / Paragraph	Comments	Ref.	Response to Comments
1	ES05	Investigation reports for the exceedance of Suspended Solid of stream water quality monitoring on 2 & 15 October 2008 and exceedance of number of species of wetland birds of ecological monitoring on 21 October 2008 are still outstanding.	-	Investigation report for SS exceedance on 02 & 15 October 2008 had issued to relevant parties by facsimiles. From the Contractor information, Chit Cheung and BV also received the investigation report for 02 and 15 October 2008. Please double check your incoming records. The Contractor response for ecological monitoring exceedance on 21 October 2008 was received on 06 November 2008 and the investigation report had issued on 06 November 2008. (Our Ref.: TCS00371/07/300/F1032).
2	ES10	Only 4 site inspection audits had been carried out during the reporting period. Please check and revise accordingly.	-	Noted.
3	4.08, Appendix F	Please keep consistent with the equipment models used for pH, DO and temperature monitoring.	-	Noted.
4	5.07, 11.04, Appendix D	Please show us the exact location of the Kam Tin Nullah upstream (with marking of monitoring stations W9A and W9B) mentioned in section 5.07. (Can be provided in a separated figure)	-	Please use the figure in Appendix D to locate the Kam Tin Nullah upstream.
5	5.07, 6.04	Please inform us where the excavated Type 1 contaminated material was come from in the reporting period.	-	Please clarify the comment for S5.07 since the excavated Type 1 contaminated material only present in S6.04 Table 6-3. In according to the Contractor provide information, the Type 1 contaminated material in this reporting period was excavated from Bay 58 on 16 October 2008. Please refer to the attached Contractor information.
6	7.01, 11.07	Environmental site inspection date on 30 October 2008 is out of the reporting period, please edit the text accordingly.	-	Noted.
7	Appendix G	The date of ecological survey in the text is not consistent with the impact monitoring schedule listed in Appendix G. Please check and revise accordingly.	-	Noted.
8	Appendix H	In the suspended solid monitoring results graph, an unrelated data point at W9A was found on around 31-Aug-08. Please check and revise accordingly.	-	In according to the Monthly EM&A Report for September 2008 (R0925 Revision 3) which was certified by ETL and verified by IEC on 16 October 2008 (Your Ref.: 60023871/c/rwhw810603), the suspended solid at W9A around 31-Aug-08 (exactly monitoring date is 02 September 2008) was relative high (laboratory of SS at W9A on 02 September 2008 is 255mg/L). The graphical plot of SS in Appendix H is correct and consistency.

No.	Section / Paragraph	Comments	Ref.	Response to Comments
9	Appendix J	<p>1) In site inspection checklist on 15 October 2008, please update the date of last site inspection date and site inspection date.</p> <p>2) For the site inspection checklist on 23 October 2008,</p> <p>(a) the date of site inspection should be 23 October 2008 instead of 2 October 2008 as listed.</p> <p>(b) According to the site inspection checklist on 15 October 2008, there should be no item need to be followed up in the site inspection on 23 October 200. Please check and revise the section of “last site inspection (15 October 2008)”.</p> <p>(c) Item 1.26 should be marked as “Follow up/No” as it corresponds to the observation listed in the checklist.</p>	-	<p>Noted.</p> <p>Noted.</p> <p>Noted.</p> <p>Noted.</p>
10	Appendix K	<p>The report was submitted on 04 November 2008 (13:59) instead of the date listed.</p>	-	<p>As mention in our e-mail on 28 October 2008 (12:17), some outstanding issues will update accordingly. Therefore, the submission date is no need to amend.</p>

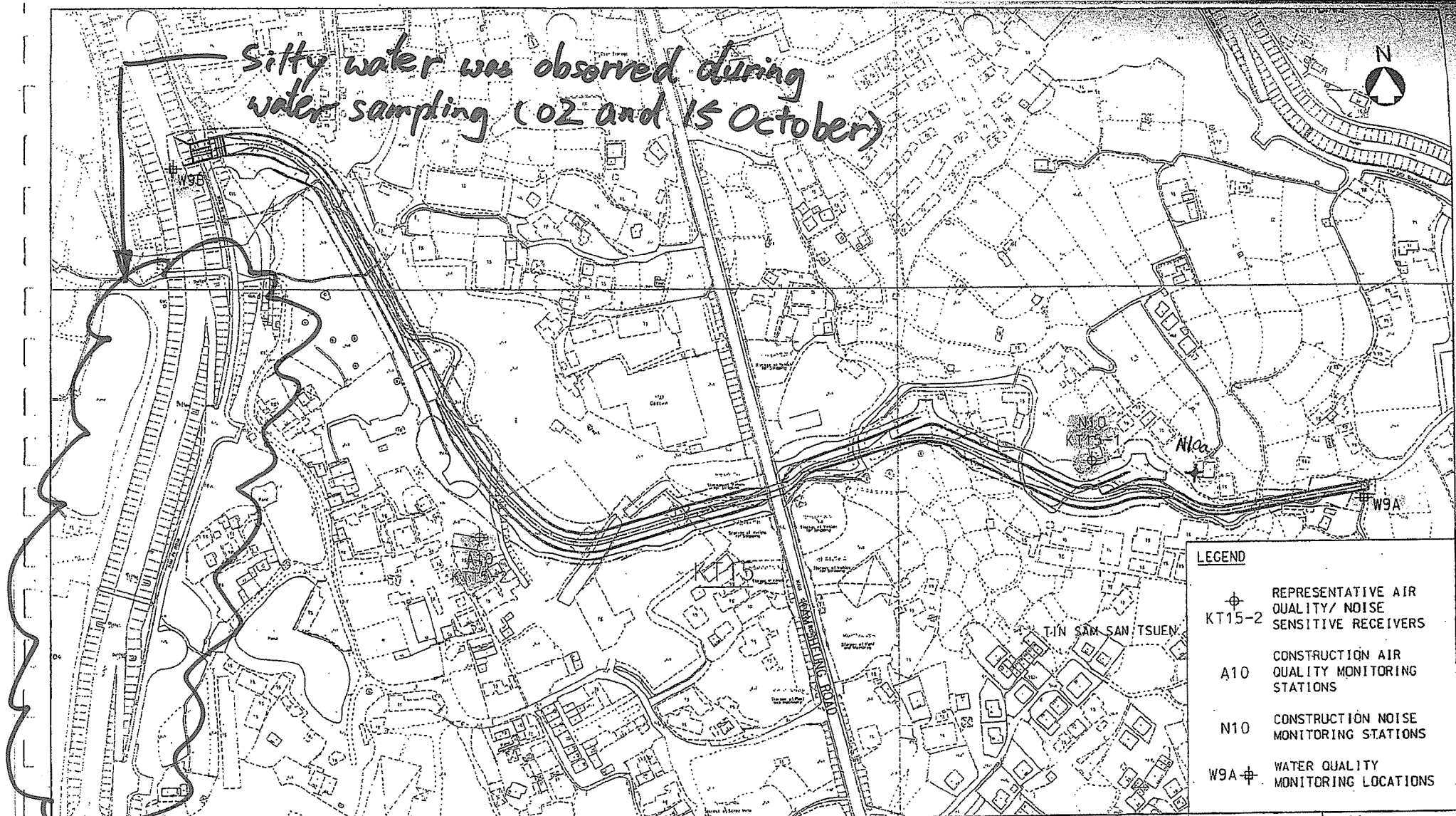
DSD Contract No. DC/2006/02

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 Summary Report for October 2008 (R1004 Revision 2) submit on 06 November 08 (14:34)

Response to IEC's comments [Received from e-mail on 11 November 2008 14:42]

No.	Section / Paragraph	Comments	Ref.	Response to Comments
1	5.07, 11.04	As we refer the location map in Appendix D, we cannot clearly locate the exact position of the Kam Tin Nullah (or Kam Tin River as stated in the investigation report) upstream mentioned in text. Please mark on a separate location map showing us the exact location of the Kam Tin Nullah (or KamTin River as stated in the investigation report) upstream (with marking of monitoring stations) mentioned in section 5.07 and 11.04 for our easy reference and investigation of potential sources of silty effluent.	-	Please refer to the attached figure.
2	5.07, 11.04	Please clarify when the on-site observations stated in section 5.07 were taken place. It is advised to add the date for the on-site observations, especially after the wordings “No excavation or major discharge on-site was observed” and “...Kam Tin Nullah upstream was observed during the sampling”, for our easy reference.	-	Noted.
3	7.01, 11.07	Environmental site inspection date on 30 October 2008 is out of the reporting period, please edit the text accordingly.	-	Noted.
4	Appendix G	The date of ecological survey in the text is not consistent with the impact monitoring schedule listed in Appendix G. Please check and revise accordingly.	-	Noted.
5	Appendix J	Item numbering of section 1 of the site inspection checklist on 2, 10, 15 October 2008 was incorrect. Please check and revise accordingly.	-	Noted.

Sitty water was observed during water sampling (02 and 15 October)



LEGEND	
⊕ KT15-2	REPRESENTATIVE AIR QUALITY/ NOISE SENSITIVE RECEIVERS
□	CONSTRUCTION AIR QUALITY MONITORING STATIONS
⊕	CONSTRUCTION NOISE MONITORING STATIONS
⊕ W9A	WATER QUALITY MONITORING LOCATIONS

YUEN LONG, KAM TIN,
NGAU TAM MEI AND TIN SHUI WAN
DRAINAGE IMPROVEMENT, STAGE1, PHASE 2B

Title :
**CONSTRUCTION PHASE AIR QUALITY/NOISE/WATER QUALITY
MONITORING LOCATIONS AT KT15**


BLACK & VEATCH HONG KONG LIMITED
博威工程顧問有限公司

Figure No. ATT4-4.3	Revision -
Reference -	File Name 3820470201-137.DGN
Prepared WYC	Checked MC
Date DEC. 2002	Scale 1 : 2000