

Contract No. : DC/2007/06
**River Improvement Works in Upper Lam Tsuen, She
Shan River and Upper Tai Po River**

ENVIRONMENTAL MONITORING AND AUDIT

MONTHLY EM&A REPORT of

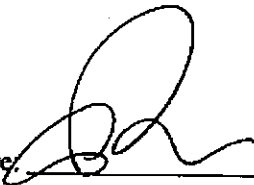

UPPER TAI PO RIVER


for October 2009

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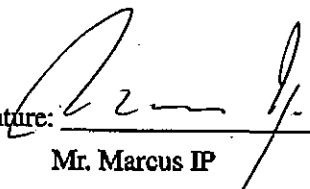
The Contents of this report have been

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Executive summary

This is the fourteenth monthly Environmental Monitoring and Audit (EM&A) Report for the river improvement works at Upper Tai Po River under Drainage Services Department Contract No. DC/2007/06 entitled “River Improvement Works in Upper Lam Tsuen River, She Shan River and Tai Po River”. This report concludes the impact monitoring for the activities undertaken during the period from 1st October 2009 to 31st October 2009. The major site activities in this reporting month were mainly site clearance, site access formation and noise barriers installation works.

The Environmental Team (ET) is responsible for the EM&A works required in the EM&A manual. Site inspections were carried out on weekly basis to investigate and audit the equipment and work methodologies with respect to pollution control and environmental mitigation. The weekly inspections records and photos taken were kept.

Capture survey was conducted by the Ecologist Dr. Mark Shea on 27th and 28th October 2009. The capture survey report is under preparation and will be shown in the upcoming month EM&A report. The summary of ecological site inspection findings and implementation status of environmental protection and mitigation for ecology, prepared by the Ecologist, are provided in table 6.2 and Appendix G respectively.

Environmental Team had carried out construction noise monitoring on weekly basis and no exceedance was found. Noise monitoring records for the reporting month and the data is presented in section 4. The location plan and the graphical plots presenting the data are provided in Appendix D.

Piling works were not scheduled for this month. Therefore, no vibration monitoring was conducted during the reporting month.

There was no non-compliance recorded for this reporting month.

There was no breach of action and limit levels for this month.

There was no reporting change for this month.

In accordance with the contractual requirements, no excavation works in river is allowed to be carried out during the present wet season. Site works proposed to be carried out in the upcoming month will be mainly construction of haul access, installation of noise barriers and river reinstatement works.

ET has reminded the contractor to provide environmental pollution control measures wherever necessary and to keep a good environmental management at site practice.

1.0 Introduction

This is the fourteenth monthly Environmental Monitoring and Audit (EM&A) Report for the river improvement works at Upper Tai Po River under Drainage Services Department Contract No. DC/2007/06 entitled “River Improvement Works in Upper Lam Tsuen River, She Shan River and Upper Tai Po River”. The site layout plan is shown in Figure 2.1. The Environmental Team, Environmental Pioneers & Solutions Limited appointed by Chiu Hing Construction and Transportation Company Limited, prepares the report. The report is to be submitted to the Contractor, the Engineer and the IEC.

This report presents the results of the environmental monitoring of the project activities for Upper Tai Po River conducted during the month of October 2009. This included regular site inspections once per week for verification of implementation of the mitigation measures as recommended in the Environmental Permit (EP-223/2005/A) (EP), EM&A Manual and the Contractor’s Environmental Management Plan (EMP).

2.0 Environmental status

2.1 Project area

The location of the project site – Upper Tai Po River starting from Ta Tit Yan of Yai Mo Shan, the Upper Tai Po River flows from southeast to northeast alongside Wilson Trail, turning northward before joining the Lam Tsuen River and then runs towards Tai Po Market. To the east of the river, there are active and abandoned cultivated lands. While the village settlements are mainly located on the west and northeast side of the river bank, where the San Uk Ka and Lai Chi Shan establishment also lie. The Project site is indicated in **Figure 2.1**.

2.2 Construction programme

Approximately 0.6km of Upper Tai Po River will be improved to enhance the hydraulic performance of the river. The improvement works comprise the following:

- (1) Re-profiling and realignment of the Channel;
- (2) Inclusion of gabions and retaining wall for bank protection whilst providing a natural channel bed; and
- (3) Re-provisioning of footbridges and footpaths along the channel

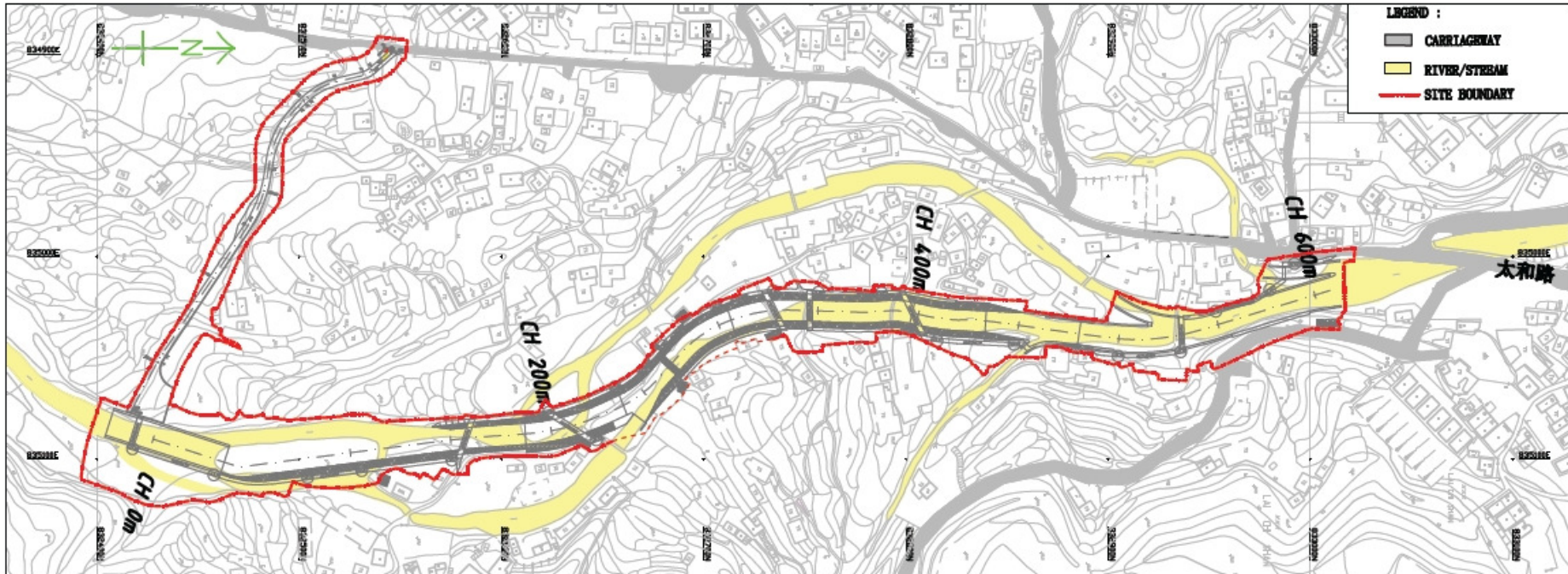
The construction of the proposed improvement works for Upper Tai Po River has been commenced on September 15th 2008 and anticipated to complete in April 2011.

2.3 Proposed construction sequences

The proposed construction sequence is shown in the following sequences:

- (1) Site clearance and preparation works
- (2) Construction of the maintenance access which involves the construction of retaining walls
- (3) River channel construction and excavation, involving the excavation works, construction of retaining walls and gabion walls
- (4) Re-provisioning of footbridges
- (5) Construction of footpaths
- (6) Landscaping works

Fig 2.1 Layout of construction area



Upper Tai Po River

2.4 Construction activities for the reporting period

Site preparation works including site clearance and site access formation and installation of noise barriers were being carried out within the reporting period.

2.5 Construction activities for the next reporting period

Major construction activities carried out by the contractor anticipated for the coming month include:

- (1) Formation of footbridge TB-01;
- (2) Construction of gabion wall;
- (3) Site clearance and site formation works; and
- (4) Installation of noise barriers for construction phase II

2.6 Non-compliance with the environmental performance limits

There was no non-compliance with the environmental performance limits for this reporting month. The event and action plan for Ecology is shown in Appendix A. The action and limit level for Noise is shown in Appendix B. The reference standards for vibration are shown in Appendix C.

2.7 Summary of complaints

There was no formal complaint received in the reporting month. Totally, four complaints had been received since the commencement of the contract. The cumulative complaint log is shown in Appendix F.

3.0 Ecological monitoring results

The Capture survey was conducted by the Ecologist Dr. Mark Shea on 27th and 28th October 2009. As the capture survey report is still under preparation those will be shown in the upcoming monthly EM&A report for reference.

4.0 Noise monitoring results

In accordance with the EM&A Manual, monitoring locations were established at 11 N.S.R. locations. The description of all 11 N.S.R. are shown in Table 4.1.

TABLE 4.1 Description of Noise Sensitive Receivers

Sensitive Receiver No.	Location and Description
UTP1	54B, Sheung Wun Yiu
UTP2	Village House in Lai Chi Shan
UTP3	Village House near Upper Tai Po River
UTP4	Village House near Upper Tai Po River
UTP5	Village House near Upper Tai Po River
UTP6	Village House near Upper Tai Po River
UTP7	Village House near Upper Tai Po River
UTP8	Village House near Upper Tai Po River
UTP9	49A, Pun Shan Chau
UTP10	Village House near the proposed access road
UTP11	49G, San Uk Ka

Noise monitoring was carried out by the Environmental Team on weekly basis for this reporting month on 9th, 16th, 22nd and 30th October 2009. $L_{eq(30min)}$ results ranged from 48.3dB(A) to 73.8dB(A), and therefore, no exceedance of action or limit level was recorded in this reporting month. For further details of the monitoring results, graphical plots and the location plan, please refer to Appendix D.

5.0 Vibration monitoring results

There was no vibration monitoring results for this reporting month. Vibration monitoring will be started once the piling works starts in Upper Tai Po River.

6.0 Environmental issues and actions

6.1 Site inspections and key environmental issues

As mentioned in Section 8.1 of the EM&A manual, site inspections were undertaken routinely to inspect the construction activities in Upper Tai Po River to ensure that appropriate environmental protection and pollution control mitigation measures are properly implemented. Implementation status of environmental protection and mitigation measures is shown in Appendix G.

Within this reporting month, site inspections were conducted on 7th, 14th, 21st and 28th October 2009. A detailed checklist of each site inspection together with comments and relevant photos have been filed and kept. The findings from inspection were summarized in Table 6.1.

Ecological inspections by the Ecologist Dr. Mark Shea were carried out on 7th, 14th, 21st and 28th October 2009. Details of findings were summarized in Table 6.2.

Table 6.1 Summary results of site inspections findings

Date	Findings	Identification	Advice from ET	Action taken	Closing date	Remarks
7 & 28 Oct 09	Site surface was observed to be dry and dusty	Observation	Sufficient water spraying should be provided to dusty static area for dust suppression	Ongoing site practice was required	Ongoing	--
7 Oct 09	Oil stains were left on the haul access and site entrance at approximately ch.500	Observation	Contractor was advised to collect the contaminated soil, proper maintenance to the site equipments should be provided to prevent further chemical spillage	Contractor took the advice and collect the contaminated soil prior to the inspection on 14 Oct	14 Oct 09	--
14, 21 & 28 Oct 09	There was no protective measures implemented to prevent surface run-off into the stream course at the haul access ch.450 & 500	Observation	Contractor was recommended to implement protective measures such as bunds and barriers to the haul access and sites which next to the river channel	Still outstanding. To be follow up during next reporting period	Ongoing	--
14 Oct 09	An idling power generator without drip tray was placed at approximately ch.400	Observation	Contractor was advised to provide a proper size of drip pan as containment measures to prevent oil spillage	The concerned power generator has been removed from site prior to the inspection on 28 Oct	28 Oct 09	--
14 Oct 09	Sheet piles crossings at approximately ch.500 was found drifted	Observation	Contractor was advised to rectify such discrepancy and provide proper barriers to prevent grit and soil dropping into the river from gaps of the crossing	Contractor took the advice by filling up the gaps with concrete	21 Oct 09	--
21 Oct 09	Oil leakage was observed from the idling backhoe at approximately ch.400	Observation	Contractor was advised to collect the contaminated soil, proper maintenance to the backhoe should be provided to prevent further oil spillage to the site ground and stream course	Contractor took the follow up actions as advised prior to the inspection on 28 Oct	28 Oct 09	--
28 Oct 09	Generation of muddy water due to site formation was observed at approximately ch.400	Observation	Contractor was advised to implement proper mitigation measures such as barriers and silt traps, to prevent site water seepage to the river channel	To be follow up in next reporting period	Ongoing	--

The summary of ecological inspection prepared by the Ecologist, Dr. Mark Shea is shown in Table 6.2.

Table 6.2 Summary results of ecological site inspection findings				
Date	Observations	Advice from Ecologist	Action Taken	Closing Date
07 Oct 2009	No Major findings for this inspection	No Advice is required	No Action is required to be taken	N/A
14 Oct 2009	No Major findings for this inspection	No Advice is required	No Action is required to be taken	N/A
21 Oct 2009	No Major findings for this inspection	No Advice is required	No Action is required to be taken	N/A
28 Oct 2009	No Major findings for this inspection	No Advice is required	No Action is required to be taken	N/A

6.2 Non-compliance

There was no non-compliance recorded for the month of October 2009.

6.3 Recommendations

Contractor was advised to be cautious on chemical spillage from site equipment and chemicals on site. Proper size of drip pans should be provided to all chemicals and stationary equipment using on site. Maintenance should be provided as to ensure site equipment are in good condition and minimize oil spillage from the site equipment.

Contractor was also recommended to implement mitigation measures such as bunds, barriers and silt trap to the newly formed site access and site area next to the stream course, as to minimize water quality impact due to surface run-off and deposition of any grit and soil to the river channel.

Site area was found dry and dusty, sufficient water spraying to the dusty static area was required to minimize dust generation due to site activities.

6.4 Implementation status and effectiveness of the mitigation measures

Refer the previous table 6.1, contractor has implemented mitigation measures to address those problems as advised by ER, IEC and ET. Some of the measures taken by the contractor were considered as effective to minimize negative impact to the environment. Ongoing investigation will be carried out to observe performance and effectiveness of those measures. Outstanding environmental items will be inspected in the follow month.

As there were some ongoing follow up practices, contractor was reminded to regularly review and rectify the discrepancy once found and maintain good site condition.

7.0 Waste management status

It is the contractor's responsibility to ensure that all wastes produced during construction phase for the drainage improvement works are handled, stored and disposed of in accordance with good waste management practices and EPD's regulation and requirement. Waste materials generated during construction activities such as construction and demolition(C&D) material, chemical wastes and general refuse, are recommended to be audited at regular intervals to ensure that proper storage, transportation and general reuse are recommended to be audited to ensure that proper storage, transportation and disposal practices are being implemented.

Table 7.1 is the Waste Disposal recorded by the Contractor in this month.

Table 7.1 Summary of Waste Disposal for the reporting month

Type of waste	Inert Waste	Non-Inert Waste	Chemical Waste
October 2009	0.9m ³	0	0

The cumulative waste flow table is shown in Appendix H.

8.0 Status of environmental licensing and permit

This project requires different permits and licenses to be run legally. **Table 8.1** is the summary of permits/ licenses for this project.

Table 8.1 Summary of Environmental Licensing and Permit Status

Description	License / Permit No.	Date of Issue	Date of Expiry	Remarks
Environmental Permit	EP-223/2005	31 st Aug, 2005	N/A	Superseded
Amended Environmental Permit	EP-223/2005/A	18 th Nov, 2008	N/A	Issued
Construction Noise Permit	N/A	N/A	N/A	N/A
Effluent Discharge License	3678	14 th Mar, 2008	31 st Mar, 2013	Issued
Registration as a Chemical Waste Producer	5213-724-C3251-03	19 th Dec, 2007	Not applicable	Issued
Billing Account for Disposal of Construction Waste	7006101	N/A	N/A	N/A

9.0 Future key issues

As informed by contractor, major construction activities in the upcoming month will include construction of footbridge, gabion wall, site formation and installation of noise barriers. The construction activities for these items will generate several environmental impacts. These include air, noise, water and waste management.

Construction activities such as backfilling, earth movement may generate dust impact to the vicinity of sensitive receivers. Contractor is advised to provide sufficient water spraying for the dusty static area. Stockpiling may be found on site and those should be covered by tarpaulin to prevent erosion.

Formation of haul access in the stream course may generate water quality impact. Contractor was recommended to provide proper bunds and barriers as forming well enclosed area for construction activities carried out in the river course. Site water treatment facilities should be used whenever necessary.

For the proposed construction activities, heavy plants and vehicles may be deployed and those would generate certain noise impacts to the sensitive receivers. Noisy activities should be well planned and scheduled to avoid parallel operation of multiple plants, so as to minimize noise impacts to the nearby sensitive receivers.

Construction activities may generate wastes on site. Contractor is advised to assign a site area for waste storage and segregation. Wastes accumulation should be prevented on site; licensed waste collection and disposal should be implemented regularly for hygiene issues.

10.0 Conclusion

Site preparation works including site clearance, site access formation and installation of noise barriers were carried out during the reporting period.

Regular site meetings and inspection audits led by the seniors for discussing environmental issues were held among project proponent, Contractor and the ET on weekly basis.

Environmental Team had carried out construction noise monitoring on weekly basis. All results obtained were within limit and therefore no exceedance was recorded in this reporting month.

Piling works were not scheduled for this month. Therefore, no vibration monitoring was conducted during the reporting month.

From the summary of ecological site inspection findings and implementation status of environmental protection and mitigation for ecology, prepared by the Ecologist Dr. Mark Shea, there is no abnormal finding observed in the reporting month. The ecologist has no further advice and no action suggested to the contractor. Capture survey was conducted on 27th and 28th October 2009. The capture survey report is still under preparation and would be provided in the upcoming monthly EM&A report.

There was no non-compliance recorded for the reporting month.

There was no complaint recorded in this reporting month.

ET has reminded the contractor to provide environmental pollution control measures wherever necessary; and to keep a good environmental management at site practice.

The ET will continue to implement the environmental monitoring & audit programme in accordance with the EM&A Manual and Environmental Permit requirement.

Appendix A: Event and action plan for ecology

Event and action plan for ecology

In the event of non-compliance, the Event / Action plan prepared by the ecologist shall be followed. Detailed Event/ Action plan was shown in **Appendix Table 1** for reference.

It is not proposed to set population size of the three species (i.e. Three-lined Chinese Stream Catfish, Predaceous and the Hong Kong Newt) or other faunal species for the Action Level and Limit Level in the revised EM&A manual in considering the following reasons:

- I. The schedule capture surveys would let to decrease in the populations of the target species; and
- II. The planned drainage works would also temporally de-fauna the stream habitat.

It is considered logical and appropriate to audit non-compliance events in relation with ecological mitigation measures, which were specified in the EP and the PS of the project.

APPENDIX TABLE 1 Event / Action plan table for Ecology

Event	Action			
	ET	ER	IEC	Contractor
Non-conformity on one occasion	1. Identify Source 2. Inform the IEC and the ER 3. Discuss remedial actions with the IEC, the ER and the Contractor 4. Monitor remedial actions until rectification has been completed	1. Check report 2. Check the Contractor's working method 3. Discuss with the ET and the Contractor on possible remedial measures, 4. Advise the Contractor on effectiveness of proposed remedial measures 5. Check implementation of remedial measures	1. Ensure Remedial measures are properly implemented	1. Amend working methods 2. Rectify damage and undertake any necessary replacement
Repeated Non conformity	1. Identify Source 2. Inform the IEC and the ER 3. Increase monitoring frequency 4. Discuss remedial actions with the IEC, the ER and the Contractor 5. Monitor remedial actions until rectification has been completed 6. If exceedance stops, cease additional monitoring	1. Check monitoring report 2. Check the Contractor's working method 3. Discuss with the ET and the Contractor on possible remedial measures 4. Advise the Contractor on effectiveness of proposed remedial measures 5. Check implementation of remedial measures	1. Ensure Remedial measures are properly implemented	1. Amend working methods 2. Rectify damage and undertake any necessary replacement

Appendix B: Action and limit level for construction noise

The Action and Limit levels for construction noise are defined in **Appendix Table 2**

Appendix Table 2: Action and Limit Levels for Construction Noise

Time Period	Action	Limit
0700 – 1900 hrs on normal weekdays	When one documented complaint is received	75 dB(A)*
0700 – 2300hrs on holidays; and 1900 – 2300 hrs on all other days		Subject to the control of Noise Control Ordinance
2300 – 0700 hrs of next day		Subject to the control of Noise Control Ordinance

*Limit level set in accordance with Particular Specification Section 26

Appendix C: Reference standards for vibration

Guidance regarding vibration limits is provided by the following British Standards (or their equivalent ISO standards):

BS 7385 - Measurement and evaluation of vibration in buildings. Part 2: Guide to damage levels from ground borne vibration.

BS 7385 suggests vibration levels, below which damage is unlikely to occur in 95% of buildings. For cosmetic damage, the level is 15 mm/s at 4 Hz, increasing to 20 mm/s at 15 Hz, increasing to 50 mm/s at 40 Hz and above. Minor structural damage is possible at vibration levels twice those given above, major damage at four times the levels given.

Appendix Table 3: Transient vibration guide values for cosmetic building damage (BS7385:Part 2 1993)

	Type of Building	Peak component particle velocity (mm/s) in frequency range of predominant pulse
1	Reinforced or framed structures	50 at 4 Hz and above
2	Un-reinforced or light framed structures	15 at 4 Hz, increasing to 20 at 15 Hz, increasing to 50 at 40 Hz and above.

The vibration magnitudes and frequencies refer to Peak Particle Velocities (PPV) occurring in any single direction, measured on the ground level of the building concerned.

Appendix D: Noise monitoring results, graphical plots and location plan

Location	L ₉₀ 30min	L ₁₀ 30min	Leq 30min	Date	Time Duration	Major Construction Noise	Other Noise source	Weather	Location description
UTP 1	57.6	65.9	66.5	9-Oct-09	13:34-14:04	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	Background noise from traffic	Sunny	Façade
UTP 2	50.6	58.6	56.6	9-Oct-09	13:00-13:30	Excavator noise (haul access formation)	Background noise from traffic	Sunny	Façade
UTP 3	52.3	70.1	66.9	9-Oct-09	14:42-15:12	Excavator noise (haul access formation)	N/A	Sunny	Façade
UTP 4	59.1	62.8	63.5	9-Oct-09	14:08-14:38	Excavator noise (haul access formation)	N/A	Sunny	Façade
UTP 5	56.4	59.6	58.4	9-Oct-09	15:15-15:45	Excavator noise (haul access formation)	N/A	Sunny	Façade
UTP 6	49.4	54.3	52.8	9-Oct-09	15:47-16:17	Excavator noise (haul access formation)	N/A	Sunny	Façade
UTP 7	47.0	51.6	49.6	9-Oct-09	11:33-12:03	Excavator noise (haul access formation)	N/A	Sunny	Façade
UTP 8	52.2	56.2	55.4	9-Oct-09	11:00-11:30	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	Innovation works of village house	Sunny	Façade
UTP 9	54.7	56.1	50.3	9-Oct-09	09:58-10:28	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Sunny	Façade
UTP 10	53.4	54.4	48.3	9-Oct-09	09:20-09:50	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Sunny	Façade
UTP 11	57.6	58.8	52.7	9-Oct-09	08:47-09:17	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	Background noise from public	Sunny	*Free field

Note* An Additional of 3dB(A) had been added to the measurement result due to Free Field Correction

Location	L ₉₀ 30min	L ₁₀ 30min	Leq 30min	Date	Time Duration	Major Construction Noise	Other Noise source	Weather	Location description
UTP 1	56.9	68.5	66.9	16-Oct-09	13:35-14:05	Excavator noise (haul access formation)	Innovation activities from the village house & background noise from traffic	Cloudy	Façade
UTP 2	53.5	66.0	64.0	16-Oct-09	13:00-13:30	Excavator noise (haul access formation)	Background noise from traffic	Cloudy	Façade
UTP 3	51.3	63.8	61.1	16-Oct-09	14:40-15:10	Excavator noise (haul access formation)	N/A	Cloudy	Façade
UTP 4	58.1	61.8	61.0	16-Oct-09	14:08-14:38	Excavator noise (haul access formation)	Background noise from traffic	Cloudy	Façade
UTP 5	54.5	63.8	60.9	16-Oct-09	15:13-15:43	Excavator noise (haul access formation)	N/A	Cloudy	Façade
UTP 6	51.8	54.4	53.7	16-Oct-09	10:58-11:28	Excavator noise (haul access formation)	N/A	Cloudy	Façade
UTP 7	47.0	53.5	52.2	16-Oct-09	15:47-16:17	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Cloudy	Façade
UTP 8	51.1	53.0	52.5	16-Oct-09	16:20-16:50	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Cloudy	Façade
UTP 9	51.6	54.6	53.8	16-Oct-09	10:20-10:50	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Cloudy	Façade
UTP 10	47.2	50.2	49.3	16-Oct-09	09:43-10:13	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Cloudy	Façade
UTP 11	51.4	54.9	53.6	16-Oct-09	09:11-09:41	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Cloudy	*Free field

Note* An Additional of 3dB(A) had been added to the measurement result due to Free Field Correction

Location	L ₉₀ 30min	L ₁₀ 30min	Leq 30min	Date	Time Duration	Major Construction Noise	Other Noise source	Weather	Location description
UTP 1	49.2	58.9	57.6	22-Oct-09	13:00-13:30	Excavator noise (haul access formation)	Background noise from traffic	Sunny	Façade
UTP 2	56.2	67.6	66.7	22-Oct-09	13:34-14:04	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	Background noise from traffic	Sunny	Façade
UTP 3	55.9	76.2	73.3	22-Oct-09	14:42-15:12	Excavator noise (haul access formation)	N/A	Sunny	Façade
UTP 4	59.0	62.5	61.4	22-Oct-09	14:09-14:39	Excavator noise (haul access formation)	N/A	Sunny	Façade
UTP 5	46.0	53.6	52.7	22-Oct-09	15:48-16:18	Excavator noise (haul access formation)	N/A	Sunny	Façade
UTP 6	45.7	52.8	53.1	22-Oct-09	15:15-15:45	Excavator noise (haul access formation)	N/A	Sunny	Façade
UTP 7	51.4	57.3	55.8	22-Oct-09	10:58-11:38	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Cloudy	Façade
UTP 8	50.2	58.0	56.4	22-Oct-09	10:25-10:55	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Sunny	Façade
UTP 9	48.8	56.3	54.2	22-Oct-09	09:53-10:23	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Sunny	Façade
UTP 10	46.4	55.3	52.8	22-Oct-09	09:17-09:47	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Sunny	Façade
UTP 11	54.2	61.8	59.3	22-Oct-09	08:45-09:15	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Sunny	*Free field

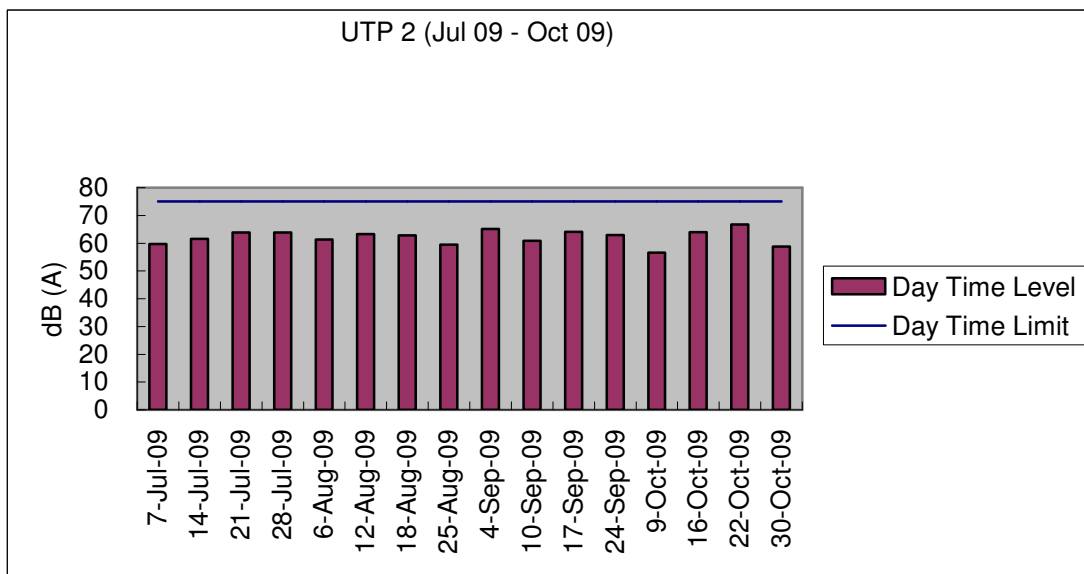
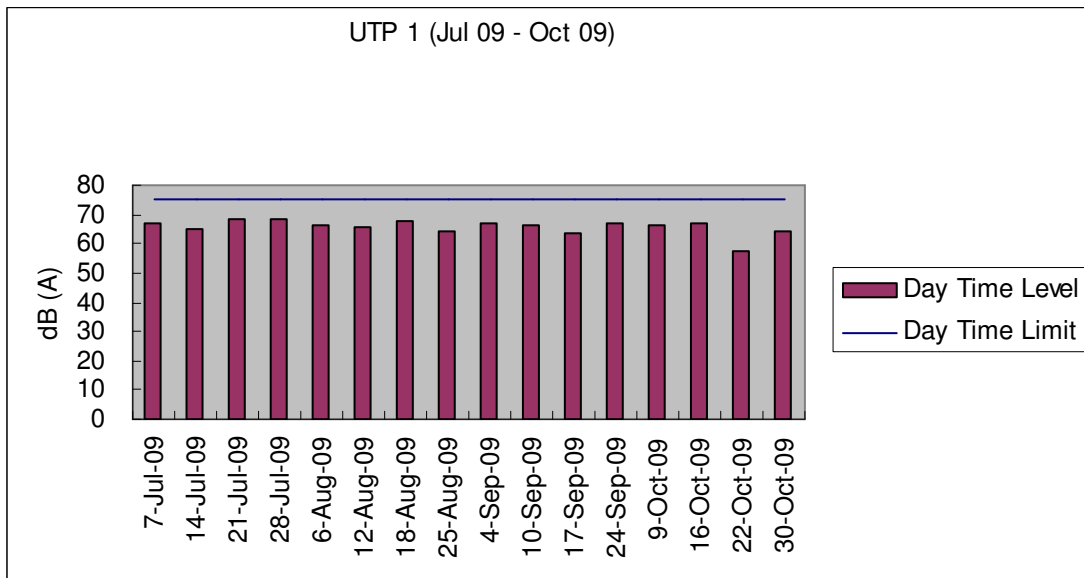
Note* An Additional of 3dB(A) had been added to the measurement result due to Free Field Correction

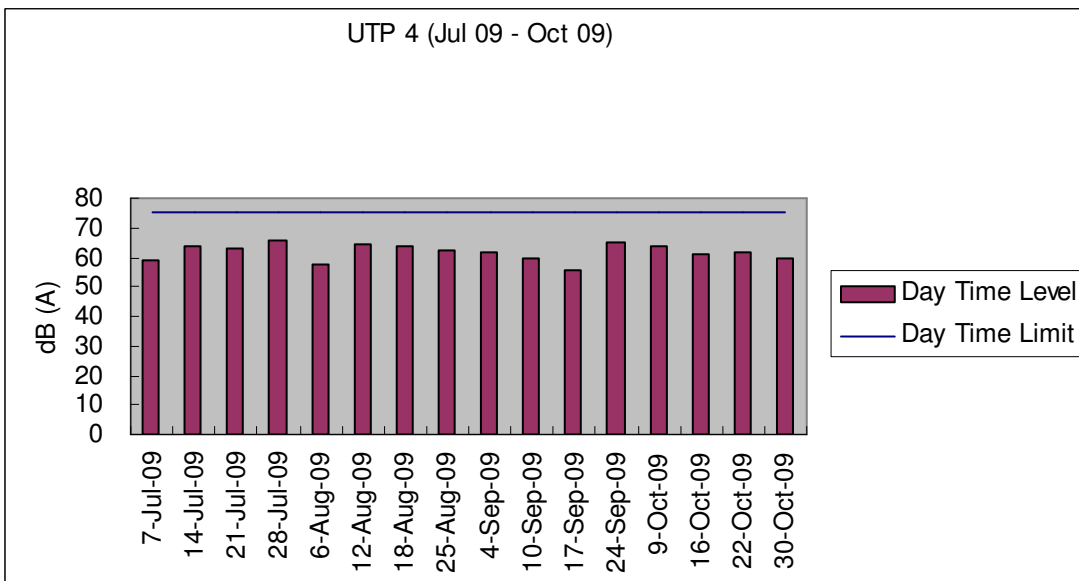
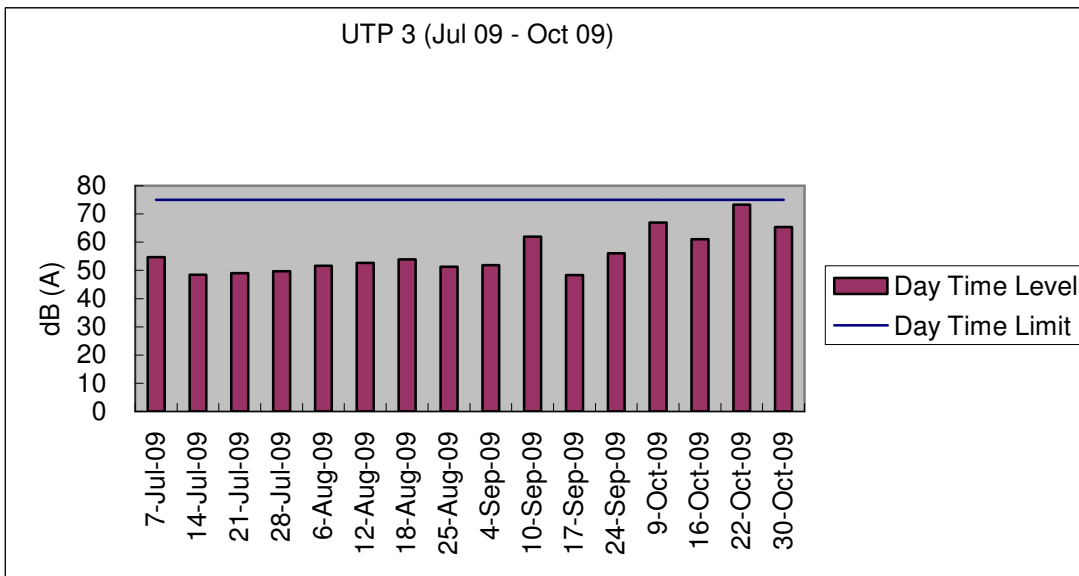
Location	L ₉₀ 30min	L ₁₀ 30min	Leq 30min	Date	Time Duration	Major Construction Noise	Other Noise source	Weather	Location description
UTP 1	55.2	66.7	64.4	30-Oct-09	13:33-14:03	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	Background noise from traffic	Sunny	Façade
UTP 2	56.9	59.3	58.8	30-Oct-09	13:00-13:30	Excavator noise (haul access formation)	Background noise from traffic	Sunny	Façade
UTP 3	45.4	69.8	65.4	30-Oct-09	14:40-15:10	Excavator noise (haul access formation)	N/A	Sunny	Façade
UTP 4	57.2	60.7	60.0	30-Oct-09	14:08-14:38	Excavator noise (haul access formation)	Background noise from traffic	Sunny	Façade
UTP 5	50.4	61.7	59.6	30-Oct-09	15:12-15:42	Excavator noise (haul access formation)	N/A	Sunny	Façade
UTP 6	61.2	76.7	73.8	30-Oct-09	15:44-16:14	Excavator noise (haul access formation)	N/A	Sunny	Façade
UTP 7	45.0	48.9	48.3	30-Oct-09	11:08-11:38	Excavator noise (haul access formation)	N/A	Sunny	Façade
UTP 8	49.5	51.2	50.7	30-Oct-09	10:33-11:03	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Sunny	Façade
UTP 9	48.7	53.4	51.6	30-Oct-09	09:59-10:29	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Sunny	Façade
UTP 10	46.4	49.7	49.0	30-Oct-09	09:23-09:53	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Sunny	Façade
UTP 11	49.8	51.8	51.2	30-Oct-09	08:51-09:21	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	N/A	Sunny	*Free field

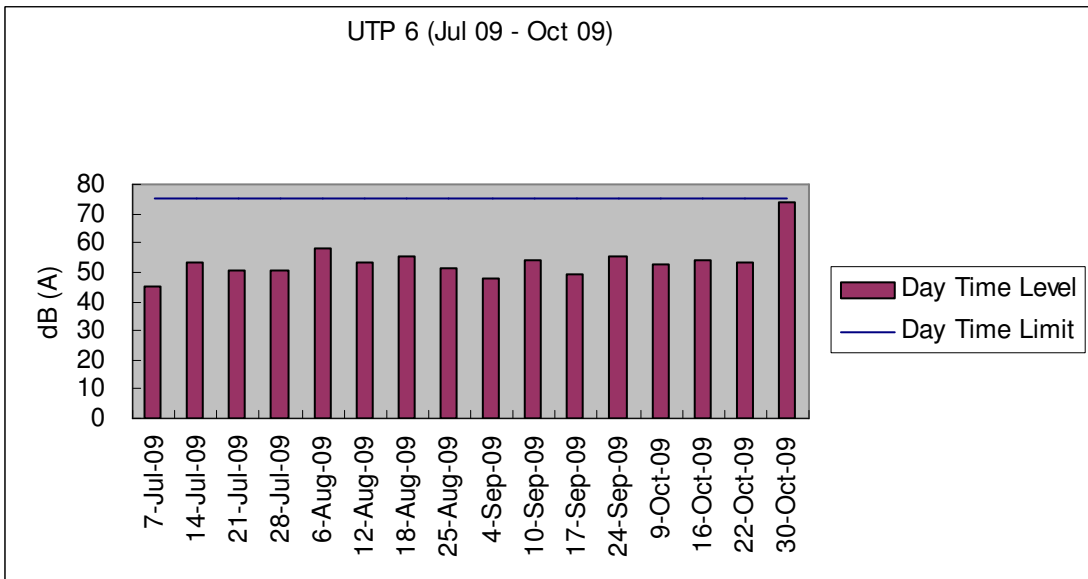
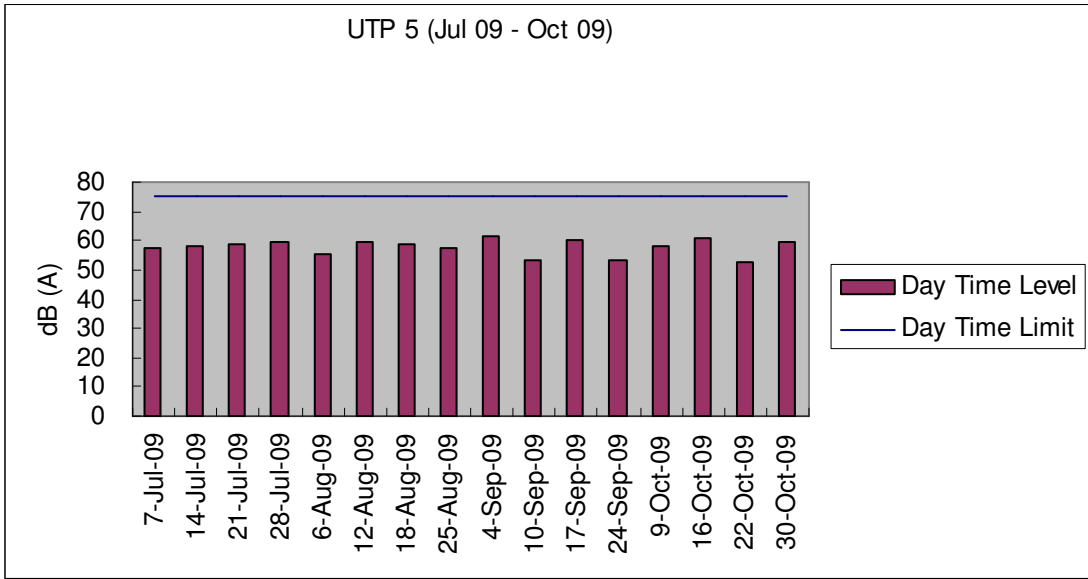
Note* An Additional of 3dB(A) had been added to the measurement result due to Free Field Correction

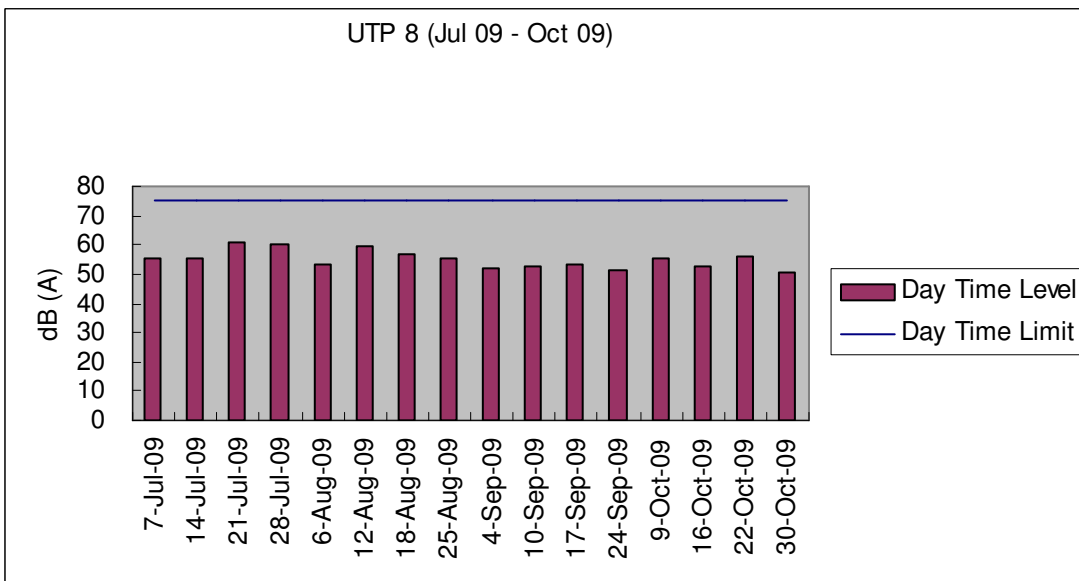
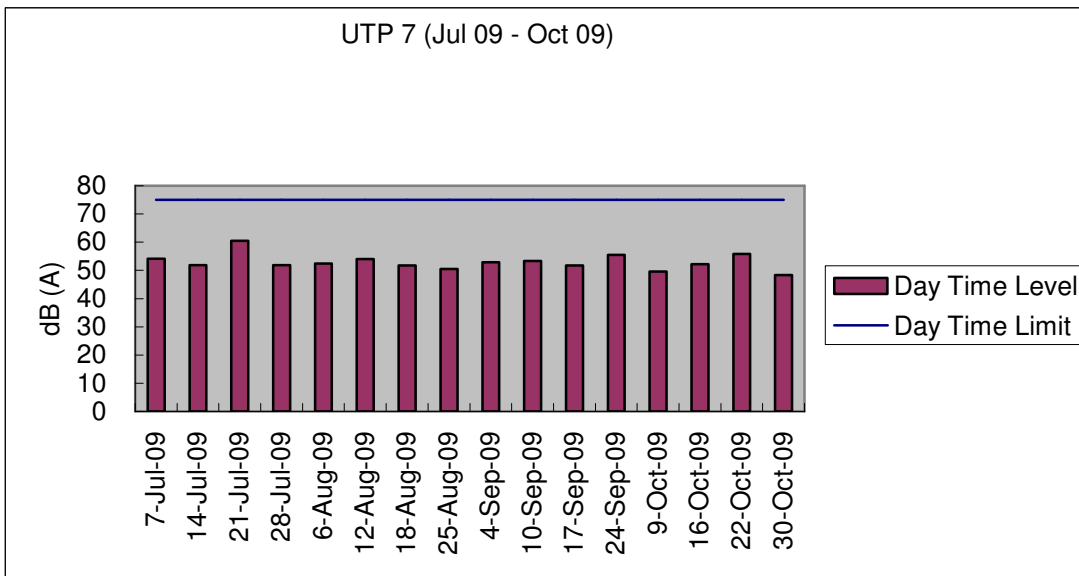
Graphical plot for noise measurements

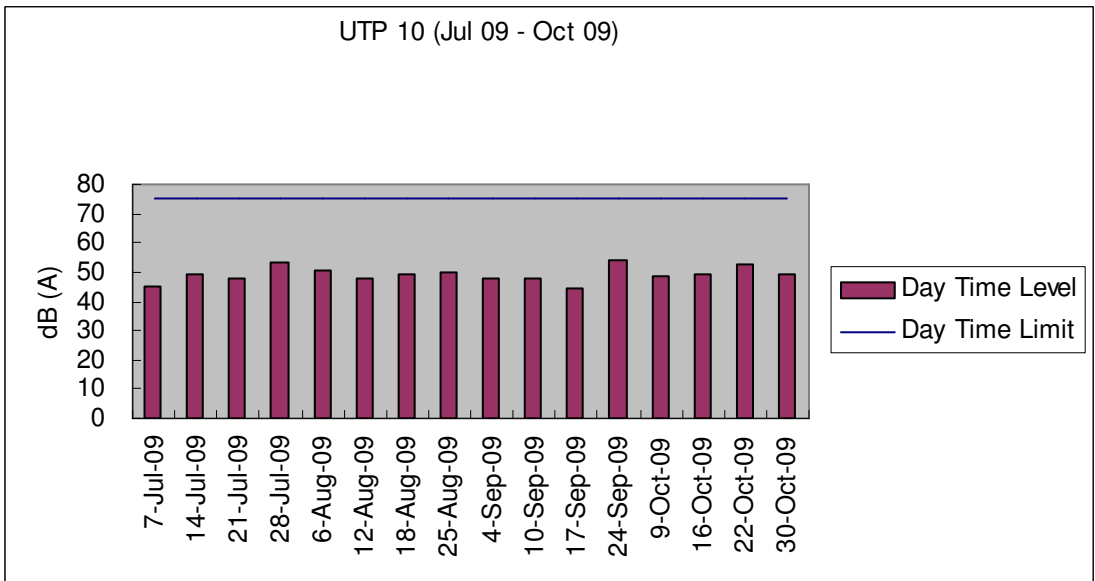
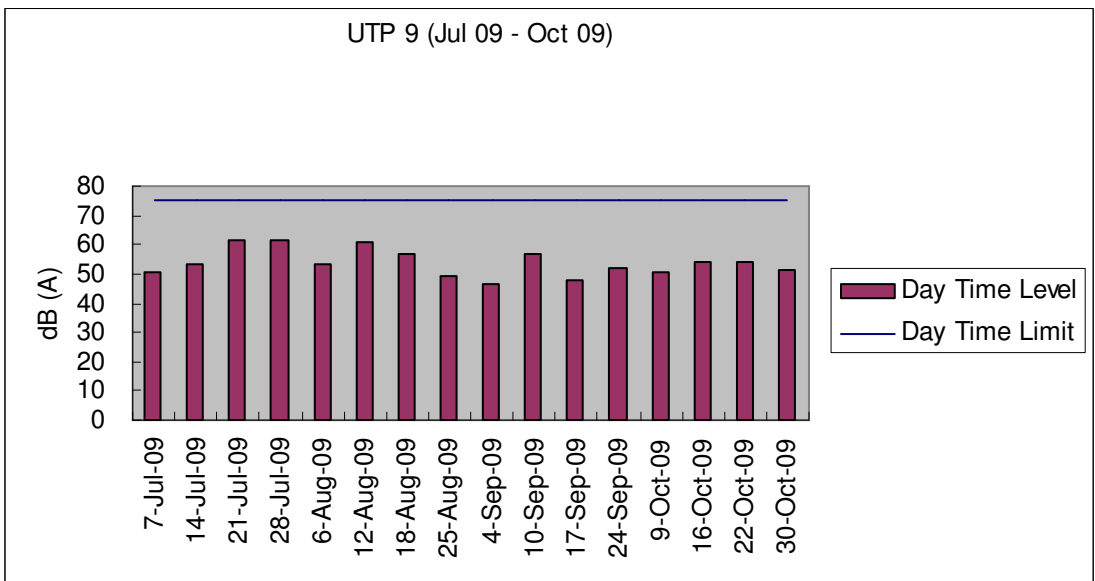
The following plots were the graphical plots for the 11 monitoring locations. Each plot showed the day time limit 75 dB(A), daytime level, date and the measured dB(A) results as in Leq 30min for each location. The graph contains the data recorded from July 2009 to October 2009.

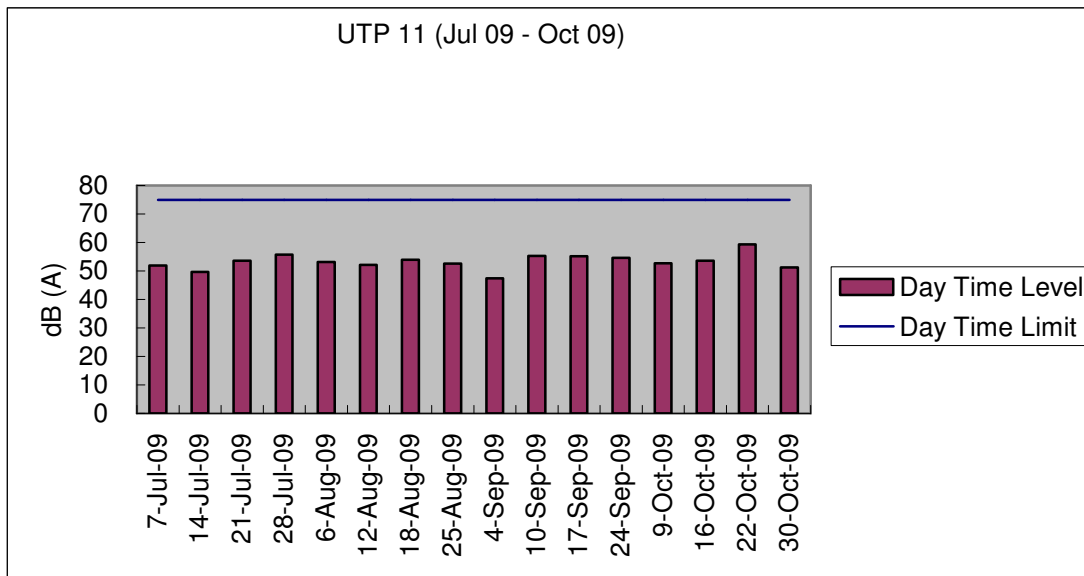


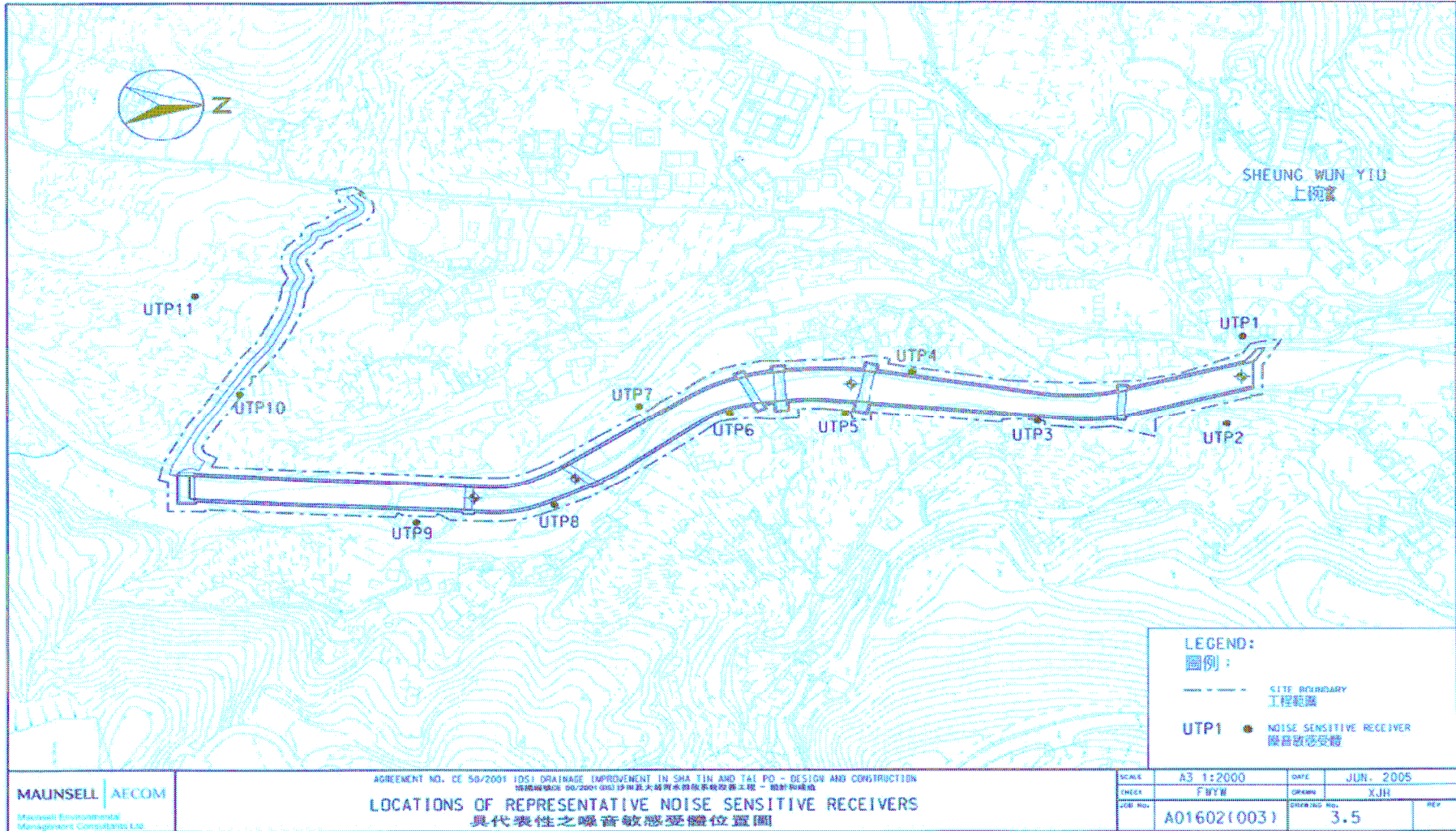












Appendix E: Monitoring schedule for the present and next reporting period

Master Schedule of EM&A works in October 2009

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1/10	2/10	3/10
4/10	5/10	6/10	7/10	8/10	9/10	10/10
			Site inspection at afternoon		Noise monitoring	
11/10	12/10	13/10	14/10	15/10	16/10	17/10
			Site inspection at afternoon		Noise monitoring	
18/10	19/10	20/10	21/10	22/10	23/10	24/10
			Site inspection and SSEMC at morning	Noise monitoring		
25/10	26/10	27/10	28/10	29/10	30/10	31/10
			Site inspection at afternoon		Noise monitoring	

Master Schedule of EM&A works in November 2009

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1/11	2/11	3/11	4/11	5/11	6/11	7/11
			Site inspection at afternoon		Noise monitoring	
8/11	9/11	10/11	11/11	12/11	13/11	14/11
			Site inspection at afternoon		Noise monitoring	
15/11	16/11	17/11	18/11	19/11	20/11	21/11
			Site inspection at afternoon		Noise monitoring	
22/11	23/11	24/11	25/11	26/11	27/11	28/11
			Site inspection and SSEMC at morning		Noise monitoring	
29/11	30/11					

Appendix F: Cumulative complaint log

Environmental Parameters	Cumulative no. Brought forward	No. of complaint October 2009	Overall Total
Air/Dust	1	0	1
Noise	1	0	1
Water	2	0	2
House Keeping Hygiene	0	0	0
Chemical waste	0	0	0
Total	4	0	4

* ET received a public enquiry referred by EPD, regarding river water quality and loss of vegetation within construction site, on 3rd July 2009.

Appendix G: Implementation status of environmental protection and mitigation measures

Implementation status of environmental protection and mitigation

Environmental Aspect	Protection / Mitigation Measures	Implementation status	Follow-up action
Construction Noise	No percussive piling shall be carried out	Not applicable	Not required
	-Use well maintained construction plant	Not applicable at this stage	Not required
	-Shut down plants between work periods	Not applicable at this stage	Not required
	-Install silencers on construction equipment	Not applicable at this stage	Not required
	-Locate mobile plant far away from NSRs	Not applicable at this stage	Not required
	-Quiet plants should be used	Not applicable at this stage	Not required
	-2m high temporary noise barriers, as stipulated in EP condition 2.9, shall be installed	Under preparation for phase II	Not required
Fugitive Dust Emission	-Implement regular watering and vehicle washing facilities	Deficiency identified	Ongoing
	-Cover excavated or stockpile of dusty material by impervious sheeting or sprayed with water	Implemented	Not required
	-Use tarpaulin to cover dusty materials on vehicles	Implemented	Not required
Water Quality	Excavation works within the Tai Po River within the Project shall be carried out in stages and excavation area for each stage shall be limited to section of half width of the channel and less than 100m long at any one time in order to maintain water flow within the river during construction stage	Not applicable at this stage	Not required
	Land-based plant shall be employed and site run-off shall be directed towards regularly cleaned and maintained silt traps and oil / grease separators to minimize leakage and loss of sediments during excavation	Implemented	Not required
	Large boulders removed from the Tai Po River within the Project during excavation shall be re-instated upon completion of works A section of 150m long natural riverbank on the western side of the river channel (Ch0 –Ch150) shall be retained	Implemented	Not required

	The excavation area shall be enclosed with bunds or barriers and dewatered prior to excavation to minimize the impacts upon the downstream of the Tai Po River	Deficiency identified	Ongoing
	Provide silt trap and oil interceptor to remove the oil, lubricants, grease, silt, grit and debris from the wastewater before pumped to the public storm water drainage system	Implemented	Not required
	Provide site toilet facilities	Implemented	Not required
Waste Management	Reuse excavated material as far as possible	Implemented	Not required
	Recycle scrap metals or abandoned equipment	Implemented	Not required
	Adopt a trip ticket system for the disposal of C&D materials	Implemented	Not required
	All general refuse should be segregated and stored in enclosed bins or compaction units	Implemented	Not required
Vibration	Percussive piling is to be replaced by bore-hole piling to minimize vibration impacts to the two identified Declared monuments	Not applicable at this stage	Not required
	Carrying out of vibration monitoring to ensure that vibration associated with the construction phase do not exceed the threshold limit otherwise contractor have to review the work method and construction activities have to be slow down or rescheduled to reduce the impacts	Not applicable at this stage	Not required
	Close monitoring and measurement on the cracks of the external wall of Fan Sin Temple during construction works will be carried out. Any changes on the cracks will be recorded for the contractor to slow down the construction activities accordingly; and to review the work methods and equipments immediately	Not Applicable at this stage	Not required

Implementation status of environmental protection and mitigation for ecology,
 prepared by the Ecologist, Dr. Mark Shea.

Environmental Aspect	Protection / Mitigation Measures	Implementation status	Follow-up action
Ecology	Large boulders will be returned to the riverbed following the excavation works.	Not applicable	Not required
	Construction works from Ch. 0.0m – Ch. 150m would be along one side of the river only	Not applicable	Not required
	Approximately 150m of the existing natural riverbank on the western side of the river would be retained.	Implemented	Not required
	Excavation works within the river channel should be restricted to an enclosed dewater section of the river, and would be limited to sections 50-100m long at any one time.	Implemented	Not required
	Flows to the area downstream shall be maintained at all times during the construction phase	Implemented	Not required
	Capture survey shall be conducted within the Tai Po River before commencement of works. The captured target species shall be relocated to areas of the watercourse upstream of the watercourse upstream of the Tai Po River	Capture surveys had been conducted at the beginning of the Contract, during the wet season July/August 2008, 4 th November 2008 and 27 th , 28 th October 2009	Not required
	Temporary noise barriers should be constructed to control noise impacts to habitats and associated wildlife within and adjacent to the proposed works area	Implemented	Not required
	Excavation works shall be carried out by land based plant within enclosed dry section of river channel.	Implemented	Not required
	Compensatory planting of trees and other vegetation along the banks of the newly improved drainage channel should be provided to compensate for the loss of riparian vegetation.	Not applicable	Not required
	Operation phase activities in the improved drainage channel would be limited to periodic channel maintenance such as de-silting.	Not applicable	Not required

Appendix H: Cumulative waste flow tableCumulative waste flow table since September 15th 2008

Type of waste	Inert Waste	Non-Inert Waste	Chemical Waste
September 2008	0	0	0
October 2008	0	2 tonnes	0
November 2008	36m ³	0	0
December 2008	0	0	0
January 2009	0	0	0
February 2009	0	0	0
March 2009	0	0	0
April 2009	0	0	0
May 2009	0	0	20kg*
June 2009	0	0	0
July 2009	0	0	0
August 2009	0	0	0
September 2009	0	0	0
October 2009	0.9m ³	0	0
Total	36.9m ³	2 tonnes	20kg

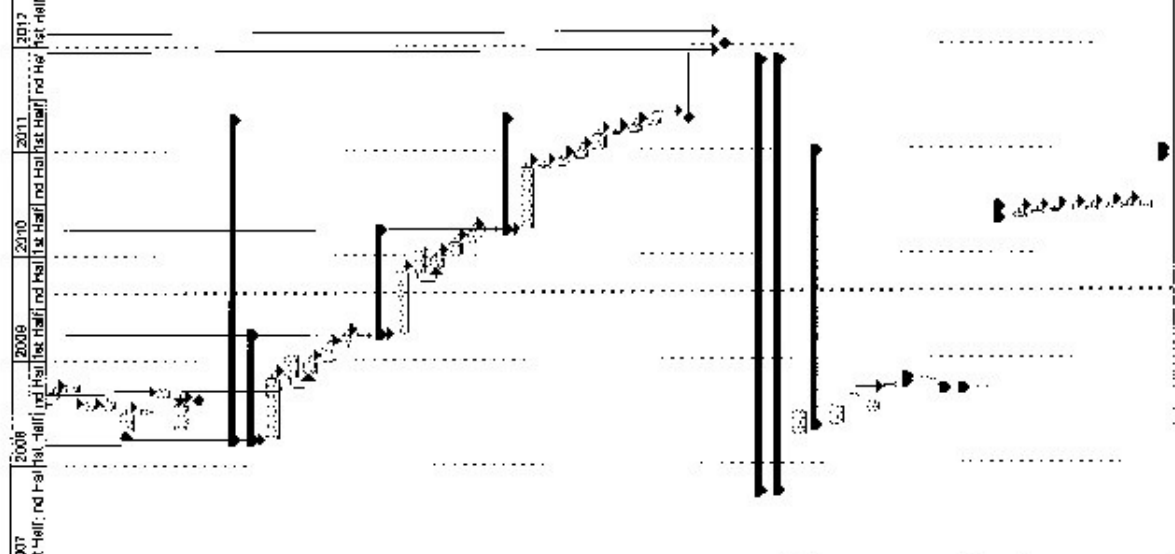
Remark*: Chemical wastes generated from the project sites including Upper Tai Po River, Lam Tsuen River and She Shan River were centralized for disposal.

Appendix I: Construction programme

Drainage Services Department

Contract No. DC/2007/06 River Improvement Works in Upper Lam Tsuen River, She Shan River and Upper Tai Po River Revised Master Programme (Rev. 08)

ID	Task Name	Duration	Early Start	Early Finish	Start	Finish	2007	2008	2009	2010	2011	2012	2013
							1st Half	nd Half	1st Half	nd Half	1st Half	nd Half	1st Half
806	Site Clearance	20 d	24/03/2008	12/04/2008	24/03/2008	12/04/2008							
807	Cherishing Working Wks	30 d	13/03/2008	12/10/2008	13/03/2008	12/10/2008							
808	Initial Survey	30 d	15/03/2008	13/03/2008	15/03/2008	13/03/2008							
809	Condition Surveys / Set up markers	30 d	15/03/2008	13/03/2008	15/03/2008	13/03/2008							
810	Preparation of Temporary Works Design	60 d	25/03/2008	30/09/2008	25/03/2008	30/09/2008							
811	Approval of Temporary Works Des gn	14 d	17/03/2008	14/07/2008	17/03/2008	14/07/2008							
812	SI Works	38 d	24/03/2008	27/09/2008	24/03/2008	27/09/2008							
813	Submission of Archaeological Monitoring	96 d	05/03/2008	30/03/2008	05/03/2008	30/03/2008							
814	Approval of Archaeological Monitoring	D.d.	18/03/2008	18/03/2008	18/03/2008	18/03/2008							
815	Cherishing from CHL 1850 to CHL 1550	114 d	14/02/2008	19/07/2011	14/02/2008	19/07/2011							
816	From CHL 1850 to CHL 1700	354 d	14/02/2008	30/03/2009	14/02/2008	30/03/2009							
817	Wkr Season (April to Oct 2008)	2-4 d	14/02/2008	14/02/2008	14/02/2008	14/02/2008							
818	Excavation	80 d	11/12/2008	19/11/2009	11/12/2008	19/11/2009							
819	Rockfill & Blinding	40 d	16/11/2008	25/11/2008	16/11/2008	25/11/2008							
820	Reaming Well	50 d	28/11/2008	13/02/2009	28/11/2008	13/02/2009							
821	Cabin Wall	40 d	14/07/2008	25/09/2008	14/07/2008	25/09/2008							
822	Install Doors/Fencing/Rainings/Drainage	5 d	29/09/2008	30/09/2008	29/09/2008	30/09/2008							
823	From CHL 1700 to CHL 1550	214 d	14/02/2008	14/02/2008	14/02/2008	14/02/2008							
824	Wkr Season (April to Oct 2008)	40 d	16/11/2008	25/11/2008	16/11/2008	25/11/2008							
825	Excavation	50 d	28/11/2008	13/02/2009	28/11/2008	13/02/2009							
826	Rockfill & Blinding	40 d	14/02/2008	25/02/2009	14/02/2008	25/02/2009							
827	Reaming Well	40 d	14/02/2008	25/02/2009	14/02/2008	25/02/2009							
828	Dipion Wall	5 d	29/02/2009	30/02/2009	29/02/2009	30/02/2009							
829	Install Doors/Fencing/Rainings/Coverage	214 d	14/02/2008	14/02/2008	14/02/2008	14/02/2008							
830	Feedslope, Platform and Fill Slope	214 d	14/02/2008	14/02/2008	14/02/2008	14/02/2008							
831	Wkr Season (April to Oct 2010)	5 d	11/12/2009	11/12/2009	11/12/2009	11/12/2009							
832	Excavation	40 d	16/11/2009	25/11/2009	16/11/2009	25/11/2009							
833	Rockfill & Blinding	50 d	28/11/2009	13/02/2010	28/11/2009	13/02/2010							
834	Feedslope for footbridge	25 d	01/12/2010	30/11/2010	01/12/2010	30/11/2010							
835	Footfall for footbridge	30 d	01/12/2010	30/11/2010	01/12/2010	30/11/2010							
836	Down Wall	56 d	31/11/2010	23/02/2011	31/11/2010	23/02/2011							
837	Footbridge	5 d	24/02/2011	24/02/2011	24/02/2011	24/02/2011							
838	Distribution of existing footbridge	25 d	1/03/2011	25/03/2011	1/03/2011	25/03/2011							
839	Box Culvert	25 d	26/03/2011	19/04/2011	26/03/2011	19/04/2011							
840	Footpaths Maintenance (Railway	0 d	19/04/2011	19/04/2011	19/04/2011	19/04/2011							
841	Completion of Area K	0 d	4/11/2012	4/11/2012	4/11/2012	4/11/2012							
842	Completion of Work at Section 2	0 d	4/11/2012	4/11/2012	4/11/2012	4/11/2012							
843													
844													
845	Section 3 - Upper Tai Po River (Area L, M, P)												
846	Area L	1503 d	29/02/2007	01/11/2011	29/02/2007	01/11/2011							
847	Handover	31 d	04/02/2008	28/02/2008	04/02/2008	28/02/2008							
848	Access Road D	958 d	14/02/2008	25/11/2010	14/02/2008	25/11/2010							
849	Site Clearance for Inve survey	3 d	17/02/2008	20/02/2008	17/02/2008	20/02/2008							
850	Site Clearance	34 d	23/02/2008	26/02/2008	23/02/2008	26/02/2008							
851	Project Site Board	4 d	27/02/2008	29/02/2008	27/02/2008	29/02/2008							
852	Final 0&B formation	15 d	11/10/2008	25/10/2008	11/10/2008	25/10/2008							
853	Noise Barriers	15 d	11/10/2008	25/10/2008	11/10/2008	25/10/2008							
854	Access D CH 2+25-3+10	15 d	11/10/2008	25/10/2008	11/10/2008	25/10/2008							
855	Utilities	14 d	17/02/2008	17/02/2008	17/02/2008	17/02/2008							
856	PCPW	14 d	17/02/2008	17/02/2008	17/02/2008	17/02/2008							
857	Test pits	40 d	19/02/2008	17/03/2008	19/02/2008	17/03/2008							
858	Retaining Wall (ch 3+00)	15 d	19/02/2008	03/03/2008	19/02/2008	03/03/2008							
859	Bulk excavation	5 d	19/02/2008	23/02/2008	19/02/2008	23/02/2008							
860	Formation	5 d	19/02/2008	23/02/2008	19/02/2008	23/02/2008							
861	Formwork and rebar fairing (base slab)	5 d	21/02/2008	25/02/2008	21/02/2008	25/02/2008							
862	Concreting (base slab)	2 d	26/02/2008	27/02/2008	26/02/2008	27/02/2008							
863	Stripping of formwork (base slab)	3 d	29/02/2008	01/03/2008	29/02/2008	01/03/2008							
864	Formwork and rebar fairing (wall stem)	2 d	31/02/2008	01/03/2008	31/02/2008	01/03/2008							
865	Concreting (wall stem)	2 d	01/03/2008	02/03/2008	01/03/2008	02/03/2008							
866	Stripping of formwork (wall stem)	3 d	03/03/2008	05/03/2008	03/03/2008	05/03/2008							
867	Canalway	25 d	01/12/2010	26/12/2010	01/12/2010	26/12/2010							



Project: Revised M. Prog (Rev.08)
 Date: 08 Aug 2009
 Consultant: AECOM

Task Progress:
 Critical Task Progress:
 Milestone:
 Summary:

Rotted Up Task:
 Rotted Up Critical Task:
 Rotted Up Milestone:

Rotted Up Progress:
 Split:
 External Tasks:

Chiu Hing Construction & Transportation Co., Ltd

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Drainage Services Department

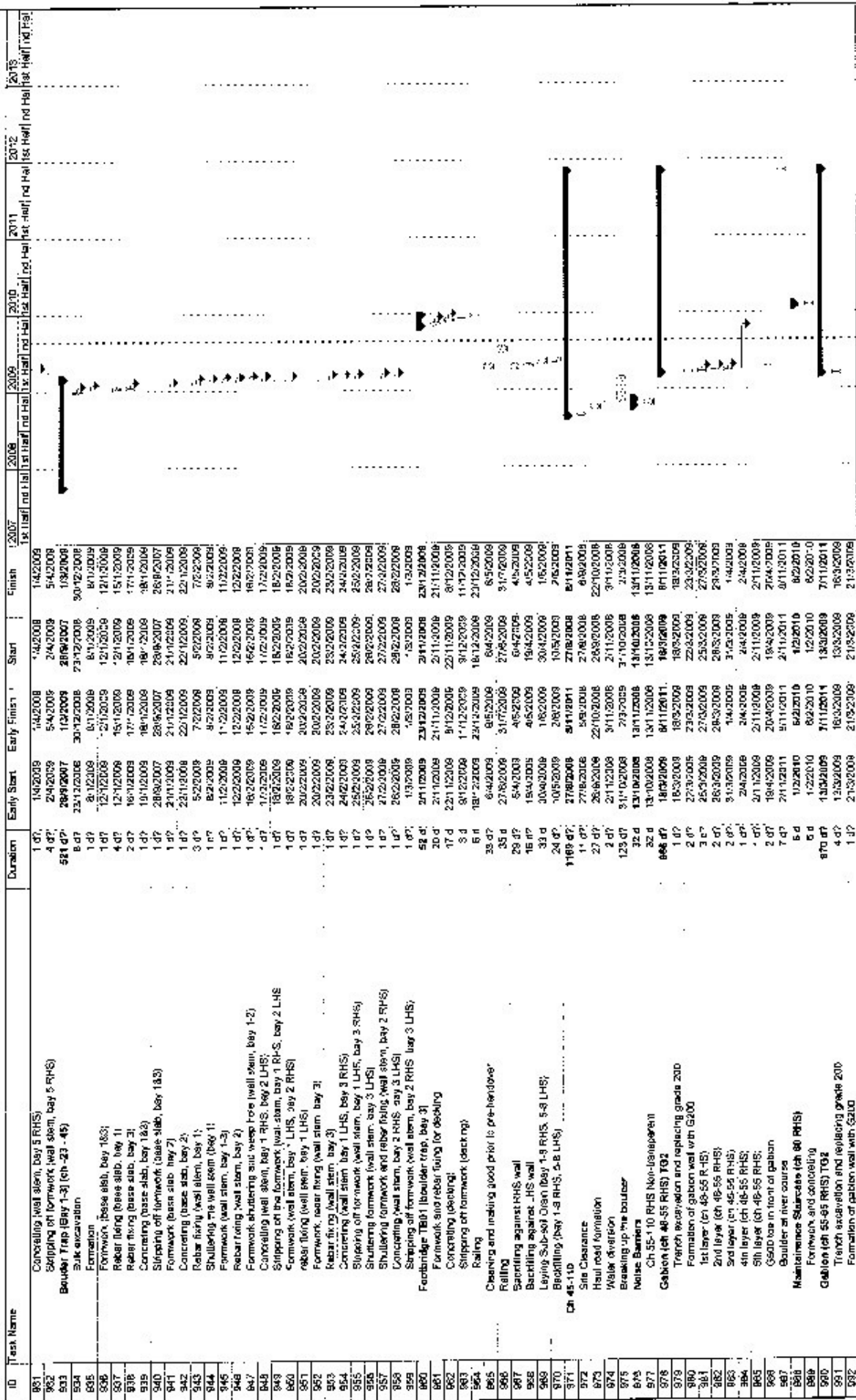
Contract No. DC/2007/06 River Improvement Works in Upper Lam Tsuen River, She Shan River and Upper Tai Po River Revised Master Programme (Rev. 08)

ID	Task Name	Duration	Early Start	Early Finish	Finish	2007	2008	2009	2010	2011	2012	2013
865	Formation	20 d	1/12/2010	20/12/2010	20/12/2010							
866	Concreting	5 d	2/12/2010	25/12/2010	25/12/2010							
870	Ch-23 - 45	818 d	28/02/2007	23/12/2009	23/12/2009							
871	She Discharge	9 d	27/02/2008	4/3/2008	4/3/2008							
872	Highroad formation	29 d	28/02/2008	4/3/2008	4/3/2008							
873	Water diversion	5 d	30/10/2008	3/11/2008	3/11/2008							
874	Boiler Trap (Bay 7-8) (ch-23 - 45)	134 d	27/11/2006	9/4/2008	9/4/2008							
875	Bulk excavation	15 d	27/11/2006	1/12/2006	1/12/2006							
876	Formation (bay 7)	5 d	13/12/2006	17/12/2006	17/12/2006							
877	Formwork (base slab, bay 7)	3 d	13/12/2006	16/12/2006	16/12/2006							
878	Rebar fixing (base slab, bay 7)	1 d	3/1/2007	3/1/2007	3/1/2007							
881	Formwork (wall stem, bay 7 RHS)	4 d	6/1/2007	9/1/2007	9/1/2007							
882	Rebar fixing (wall stem, bay 7 RHS)	2 d	10/1/2007	11/1/2007	11/1/2007							
883	Formwork (wall stem, bay 7 LHS)	1 d	12/1/2007	12/1/2007	12/1/2007							
884	Rebar fixing (wall stem, bay 7 LHS)	1 d	13/1/2007	13/1/2007	13/1/2007							
885	Stripping off formwork (wall stem, bay 7 RHS)	1 d	23/1/2007	24/1/2007	24/1/2007							
886	Formation (bay 8)	3 d	23/1/2007	26/1/2007	26/1/2007							
887	Formwork (base slab, bay 8)	1 d	30/1/2007	30/1/2007	30/1/2007							
888	Rebar fixing (base slab, bay 8)	1 d	31/1/2007	31/1/2007	31/1/2007							
889	Formwork (wall stem, bay 8)	4 d	1/2/2007	4/2/2007	4/2/2007							
890	Rebar fixing (wall stem, bay 8)	2 d	5/2/2007	7/2/2007	7/2/2007							
891	Formwork (wall stem, bay 8 LHS)	1 d	15/2/2007	15/2/2007	15/2/2007							
892	Rebar fixing (wall stem, bay 8 LHS)	1 d	16/2/2007	16/2/2007	16/2/2007							
893	Formwork (wall stem, bay 8 RHS)	1 d	17/2/2007	17/2/2007	17/2/2007							
894	Rebar fixing (wall stem, bay 8 RHS)	1 d	18/2/2007	18/2/2007	18/2/2007							
895	Formwork (wall stem, bay 8 LHS RH-S)	1 d	19/2/2007	19/2/2007	19/2/2007							
896	Rebar fixing (wall stem, bay 8 LHS RH-S)	1 d	20/2/2007	20/2/2007	20/2/2007							
897	Formwork (wall stem, bay 8 RHS RH-S)	1 d	21/2/2007	21/2/2007	21/2/2007							
898	Rebar fixing (wall stem, bay 8 RHS RH-S)	1 d	22/2/2007	22/2/2007	22/2/2007							
899	Stripping off formwork (wall stem, bay 8 LHS RH-S)	1 d	23/2/2007	23/2/2007	23/2/2007							
900	Bulk excavation	558 d	28/02/2007	8/4/2009	8/4/2009							
901	Formation (bay 5/6)	17 d	3/1/2008	19/1/2008	19/1/2008							
902	Formwork (base slab, bay 5/6)	1 d	20/1/2008	20/1/2008	20/1/2008							
903	Rebar fixing (base slab, bay 5)	1 d	22/1/2008	22/1/2008	22/1/2008							
904	Concreting (base slab, bay 5)	3 d	23/1/2008	25/1/2008	25/1/2008							
905	Formwork (wall stem, bay 5)	1 d	27/1/2008	27/1/2008	27/1/2008							
906	Rebar fixing (wall stem, bay 5)	1 d	28/1/2008	28/1/2008	28/1/2008							
907	Formwork (wall stem, bay 5)	1 d	29/1/2008	29/1/2008	29/1/2008							
908	Rebar fixing (wall stem, bay 5)	1 d	30/1/2008	30/1/2008	30/1/2008							
909	Formwork (wall stem, bay 5)	1 d	31/1/2008	31/1/2008	31/1/2008							
910	Rebar fixing (wall stem, bay 5)	1 d	1/2/2009	1/2/2009	1/2/2009							
911	Formwork (wall stem, bay 4)	1 d	2/2/2009	2/2/2009	2/2/2009							
912	Rebar fixing (wall stem, bay 4)	1 d	3/2/2009	3/2/2009	3/2/2009							
913	Formwork (wall stem, bay 4)	1 d	4/2/2009	4/2/2009	4/2/2009							
914	Rebar fixing (wall stem, bay 4)	1 d	5/2/2009	5/2/2009	5/2/2009							
915	Formwork (wall stem, bay 4)	1 d	6/2/2009	6/2/2009	6/2/2009							
916	Rebar fixing (wall stem, bay 4)	1 d	7/2/2009	7/2/2009	7/2/2009							
917	Formwork (wall stem, bay 4)	1 d	8/2/2009	8/2/2009	8/2/2009							
918	Rebar fixing (wall stem, bay 4)	1 d	9/2/2009	9/2/2009	9/2/2009							
919	Formwork (wall stem, bay 4)	1 d	10/2/2009	10/2/2009	10/2/2009							
920	Rebar fixing (wall stem, bay 4)	1 d	11/2/2009	11/2/2009	11/2/2009							
921	Formwork (wall stem, bay 4)	1 d	12/2/2009	12/2/2009	12/2/2009							
922	Rebar fixing (wall stem, bay 4)	1 d	13/2/2009	13/2/2009	13/2/2009							
923	Formwork (wall stem, bay 4)	1 d	14/2/2009	14/2/2009	14/2/2009							
924	Rebar fixing (wall stem, bay 4)	1 d	15/2/2009	15/2/2009	15/2/2009							
925	Formwork (wall stem, bay 4)	1 d	16/2/2009	16/2/2009	16/2/2009							
926	Rebar fixing (wall stem, bay 4)	1 d	17/2/2009	17/2/2009	17/2/2009							
927	Formwork (wall stem, bay 4)	1 d	18/2/2009	18/2/2009	18/2/2009							
928	Rebar fixing (wall stem, bay 4)	1 d	19/2/2009	19/2/2009	19/2/2009							
929	Formwork (wall stem, bay 4)	1 d	20/2/2009	20/2/2009	20/2/2009							
930	Rebar fixing (wall stem, bay 4)	1 d	21/2/2009	21/2/2009	21/2/2009							

Drainage Services Department

River Improvement Works in Upper Lam Teuen River, She Shan River and Upper Tai Po River Revised Master Programme (Rev. 08)

Contract No. DC/2007/06



Project: Revised M. Prog (Rev.08) Railed Up Progress
 Date: Aug 2009 Railed Up Critical Task
 Consultant: AECOM Railed Up Milestone

Drainage Services Department

River Improvement Works in Upper Lam Tsuen River, She Shan River and Upper Tai Po River Contract No. DC/2007/06 Revised Master Programme (Rev. 08)

ID	Task Name	Duration	Early Start	Early Finish	Start	Finish	2007	2008	2010	2011	2012	2013
963	1st layer (ch 55-65 RHS)	3 d	25/02/09	27/02/09	25/02/09	27/02/09						
964	2nd layer (ch 55-65 RHS)	2 d	26/02/09	28/02/09	26/02/09	28/02/09						
965	3rd layer (ch 55-65 RHS)	2 d	27/02/09	29/02/09	27/02/09	29/02/09						
966	4th layer (ch 55-65 RHS)	1 d	28/02/09	29/02/09	28/02/09	29/02/09						
967	5th layer (ch 55-65 RHS)	1 d	29/02/09	30/02/09	29/02/09	30/02/09						
968	5500 toe in front of gabion	2 d	18/02/09	20/02/09	18/02/09	20/02/09						
969	Boulder at river course	7 d	11/12/01	18/12/01	11/12/01	18/12/01						
970	Gabion (ch 65-75 RHS) TG2	81 d	23/02/09	11/05/09	23/02/09	11/05/09						
1001	Trench excavation and replacing grade 200	4 d	5/03/09	9/03/09	5/03/09	9/03/09						
1002	Formation of gabion wall with G200	8 d	13/03/09	21/03/09	13/03/09	21/03/09						
1003	1st layer (ch 65-75 RHS)	2 d	15/03/09	17/03/09	15/03/09	17/03/09						
1004	2nd layer (ch 65-75 RHS)	2 d	16/03/09	18/03/09	16/03/09	18/03/09						
1005	3rd layer (ch 65-75 RHS)	2 d	17/03/09	19/03/09	17/03/09	19/03/09						
1006	4th layer (ch 65-75 RHS)	2 d	18/03/09	20/03/09	18/03/09	20/03/09						
1007	5th layer (ch 65-75 RHS)	1 d	19/03/09	20/03/09	19/03/09	20/03/09						
1008	G500 toe in front of gabion	2 d	19/03/09	21/03/09	19/03/09	21/03/09						
1009	Boulder at river course	7 d	11/12/01	18/12/01	11/12/01	18/12/01						
1010	Gabion (ch 75-80 RHS) TG2	100 d	11/02/09	11/05/09	11/02/09	11/05/09						
-011	Trench excavation and replacing grade 200	4 d	11/02/09	15/02/09	11/02/09	15/02/09						
1012	Formation of gabion wall with G270	2 d	17/02/09	19/02/09	17/02/09	19/02/09						
1013	1st layer (ch 75-80 RHS)	1 d	18/02/09	19/02/09	18/02/09	19/02/09						
1014	2nd layer (ch 75-80 RHS)	2 d	19/02/09	21/02/09	19/02/09	21/02/09						
1015	3rd layer (ch 75-80 RHS)	1 d	20/02/09	21/02/09	20/02/09	21/02/09						
1016	4th layer (ch 75-80 RHS)	1 d	21/02/09	22/02/09	21/02/09	22/02/09						
1017	5th layer (ch 75-80 RHS)	1 d	22/02/09	23/02/09	22/02/09	23/02/09						
1018	G500 toe in front of gabion	2 d	23/02/09	25/02/09	23/02/09	25/02/09						
1019	Boulder at river course	7 d	11/12/01	18/12/01	11/12/01	18/12/01						
1020	Gabion (ch 80-90 RHS) TG2	100 d	11/02/09	11/05/09	11/02/09	11/05/09						
1021	Trench excavation and replacing grade 200	3 d	17/02/09	20/02/09	17/02/09	20/02/09						
1022	Formation of gabion wall with G200	1 d	18/02/09	19/02/09	18/02/09	19/02/09						
1023	1st layer (ch 80-90 RHS)	2 d	19/02/09	21/02/09	19/02/09	21/02/09						
1024	2nd layer (ch 80-90 RHS)	1 d	20/02/09	21/02/09	20/02/09	21/02/09						
1025	3rd layer (ch 80-90 RHS)	1 d	21/02/09	22/02/09	21/02/09	22/02/09						
1026	4th layer (ch 80-90 RHS)	1 d	22/02/09	23/02/09	22/02/09	23/02/09						
1027	5th layer (ch 80-90 RHS)	1 d	23/02/09	24/02/09	23/02/09	24/02/09						
1028	G500 toe in front of gabion	2 d	24/02/09	26/02/09	24/02/09	26/02/09						
1029	Boulder at river course	7 d	11/12/01	18/12/01	11/12/01	18/12/01						
1030	Gabion (ch 90-100 RHS) TG2	100 d	29/02/09	28/05/09	29/02/09	28/05/09						
1031	Trench excavation	1 d	29/02/09	30/02/09	29/02/09	30/02/09						
1032	Formwork for gabion units	2 d	01/03/09	03/03/09	01/03/09	03/03/09						
1033	1st layer (ch 90-100 RHS)	3 d	02/03/09	05/03/09	02/03/09	05/03/09						
1034	2nd layer (ch 90-100 RHS)	3 d	03/03/09	06/03/09	03/03/09	06/03/09						
1035	3rd layer (ch 90-100 RHS)	1 d	04/03/09	05/03/09	04/03/09	05/03/09						
1036	4th layer (ch 90-100 RHS)	1 d	05/03/09	06/03/09	05/03/09	06/03/09						
1037	5th layer (ch 90-100 RHS)	1 d	06/03/09	07/03/09	06/03/09	07/03/09						
1038	G500 toe in front of gabion	2 d	07/03/09	09/03/09	07/03/09	09/03/09						
1039	Boulder at river course	7 d	11/12/01	18/12/01	11/12/01	18/12/01						
1040	Maintenance Staircase (ch 100 RHS)	8 d	12/02/09	20/02/09	12/02/09	20/02/09						
1041	Formwork and concrete	6 d	13/02/09	19/02/09	13/02/09	19/02/09						
1042	Gabion (ch 100-110 RHS) TG3	98 d	24/02/09	20/05/09	24/02/09	20/05/09						
1043	Trench excavation and replacing grade 200	2 d	24/02/09	26/02/09	24/02/09	26/02/09						
1044	Formation of gabion wall with G200	3 d	26/02/09	29/02/09	26/02/09	29/02/09						
1045	1st layer (ch 100-110 RHS)	2 d	27/02/09	29/02/09	27/02/09	29/02/09						
1046	2nd layer (ch 100-110 RHS)	1 d	28/02/09	29/02/09	28/02/09	29/02/09						
1047	3rd layer (ch 100-110 RHS)	3 d	01/03/09	04/03/09	01/03/09	04/03/09						
1048	4th layer (ch 100-110 RHS)	1 d	02/03/09	03/03/09	02/03/09	03/03/09						
1049	5th layer (ch 100-110 RHS)	1 d	03/03/09	04/03/09	03/03/09	04/03/09						
1050	G500 toe in front of gabion	2 d	04/03/09	06/03/09	04/03/09	06/03/09						
1051	Boulder at river course	7 d	11/12/01	18/12/01	11/12/01	18/12/01						
1052	Area P	1 d	20/02/09	21/02/09	20/02/09	21/02/09						
1053	Hand over	1 d	21/02/09	22/02/09	21/02/09	22/02/09						
1054	Ch 110 - 150	866 d	4/09/08	17/11/11	4/09/08	17/11/11						

Project: Revised M. Prog (Rev.08)
 Date: Aug 2008
 Consultant: AECOM

Task Progress: Task Critical Task
 Milestone: Milestone Summary
 Rolled Up Task: Rolled Up Critical Task
 Rolled Up Progress: Rolled Up Milestone
 Split: Split
 External Tasks: External Tasks

Drainage Services Department

Contract No. DC/2007/06 River Improvement Works in Upper Lam Tsuen River, She Shan River and Upper Tai Po River Revised Master Programme (Rev. 08)

ID	Task Name	Duration	Early Start	Entry Finish	Start	Finish	2007	2008	2009	2010	2011	2012	2013
1055	Site Clearance	5 d	4/5/2008	8/5/2008	4/5/2008	8/5/2008							
1056	Hand laid formation	31 d	2/7/2008	27/8/2008	2/7/2008	27/8/2008							
1057	Water diversion	3 d	2/11/2008	4/11/2008	2/11/2008	4/11/2008							
1058	Smoking up the boulder	132 d	3/11/2008	14/3/2009	3/11/2008	14/3/2009							
1059	Demolish the house near ABC	21 d	24/10/2008	13/11/2008	24/10/2008	13/11/2008							
1060	Gabion (ch 110-150 RHS) T02	83 d	20/12/08	5/3/2009	20/12/08	5/3/2009							
1061	Trench excavation and replacing grade 200	12 d	2/11/2008	13/11/2008	2/11/2008	13/11/2008							
1062	Formation of gabion wall with G300	3 d	2/12/2008	4/12/2008	2/12/2008	4/12/2008							
1063	1st layer - 4th layer (ch 110-150 LHS)	20 d	2/12/2008	22/12/2008	2/12/2008	22/12/2008							
1064	G500 toe in front of gabion	6 d	2/12/2008	8/12/2008	2/12/2008	8/12/2008							
1065	Maintenance staircase (ch 130 RHS)	6 d	1/12/2008	7/12/2008	1/12/2008	7/12/2008							
1066	Formwork and rebar forming	5 d	1/12/2008	6/12/2008	1/12/2008	6/12/2008							
1067	Gabion (ch 140-150 LHS) T04	41 d	20/12/2008	10/1/2009	20/12/2008	10/1/2009							
1068	Trench excavation and replacing grade 200	12 d	2/12/2008	13/12/2008	2/12/2008	13/12/2008							
1069	Formation of gabion wall with G300	3 d	14/12/2008	16/12/2008	14/12/2008	16/12/2008							
1070	1st layer 4th layer (ch 140-150 LHS)	20 d	17/12/2008	6/1/2009	17/12/2008	6/1/2009							
1071	G500 toe in front of gabion	6 d	17/12/2008	23/12/2008	17/12/2008	23/12/2008							
1072	Featherbed TB02 (Ch 150)	435 d	8/11/2009	17/11/2011	8/11/2009	17/11/2011							
1073	Bulk excavation for footing (Abutment A)	10 d	9/11/2009	19/11/2009	9/11/2009	19/11/2009							
1074	Formation - Abutment A	1 d	9/11/2009	9/11/2009	9/11/2009	9/11/2009							
1075	Formwork and rebar fixing (Abutment A, footing)	5 d	22/11/2009	26/11/2009	22/11/2009	26/11/2009							
1076	Concrete (Abutment A, footing)	1 d	25/11/2009	25/11/2009	25/11/2009	25/11/2009							
1077	Stripping off formwork (Abutment A, footing)	3 d	28/11/2009	30/11/2009	28/11/2009	30/11/2009							
1078	Rebar fixing and shuttering formwork (Abutment A, column)	5 d	29/11/2009	3/12/2009	29/11/2009	3/12/2009							
1079	Concrete (Abutment A, column)	1 d	4/12/2009	4/12/2009	4/12/2009	4/12/2009							
1080	Stripping off formwork (Abutment A, column)	3 d	6/12/2009	7/12/2009	6/12/2009	7/12/2009							
1081	Bulk excavation for footing (Abutment B)	10 d	2/12/2010	11/12/2010	2/12/2010	11/12/2010							
1082	Formation - Abutment B	1 d	12/12/2010	12/12/2010	12/12/2010	12/12/2010							
1083	Formwork and rebar fixing (Abutment B, footing)	5 d	13/12/2010	17/12/2010	13/12/2010	17/12/2010							
1084	Concrete (Abutment B, footing)	1 d	18/12/2010	18/12/2010	18/12/2010	18/12/2010							
1085	Stripping off formwork (Abutment B, footing)	3 d	19/12/2010	21/12/2010	19/12/2010	21/12/2010							
1086	Rebar fixing and shuttering formwork (Abutment B, column)	5 d	22/12/2010	26/12/2010	22/12/2010	26/12/2010							
1087	Concrete (Abutment B, column)	1 d	27/12/2010	27/12/2010	27/12/2010	27/12/2010							
1088	Stripping off formwork (Abutment B, column)	3 d	29/12/2010	31/12/2010	29/12/2010	31/12/2010							
1089	Formwork and rebar fixing for decking	20 d	1/12/2010	20/12/2010	1/12/2010	20/12/2010							
1090	Concrete (decking)	2 d	21/12/2010	23/12/2010	21/12/2010	23/12/2010							
1091	Stripping off formwork (decking)	3 d	10/1/2011	13/1/2011	10/1/2011	13/1/2011							
1092	Railing installation (decking)	5 d	13/1/2011	17/1/2011	13/1/2011	17/1/2011							
1093	Site Clearance	932 d	4/8/2006	14/3/2011	4/8/2006	14/3/2011							
1094	Water diversion	2 d	8/12/2008	9/12/2008	8/12/2008	9/12/2008							
1095	Water diversion	2 d	8/12/2008	9/12/2008	8/12/2008	9/12/2008							
1096	Water diversion	134 d	3/11/2009	14/3/2010	3/11/2009	14/3/2010							
1097	Water diversion	19 d	4/11/2008	18/11/2008	4/11/2008	18/11/2008							
1098	Water diversion	15 d	4/11/2008	18/11/2008	4/11/2008	18/11/2008							
1099	Water diversion	60 d	2/11/2009	3/1/2010	2/11/2009	3/1/2010							
1100	Water diversion	15 d	2/11/2009	16/11/2009	2/11/2009	16/11/2009							
1101	Water diversion	15 d	2/11/2009	16/11/2009	2/11/2009	16/11/2009							
1102	Water diversion	3 d	17/11/2009	19/11/2009	17/11/2009	19/11/2009							
1103	Water diversion	3 d	17/11/2009	19/11/2009	17/11/2009	19/11/2009							
1104	Water diversion	10 d	22/11/2009	2/12/2009	22/11/2009	2/12/2009							
1105	Water diversion	6 d	1/12/2009	6/12/2009	1/12/2009	6/12/2009							
1106	Water diversion	6 d	1/12/2009	6/12/2009	1/12/2009	6/12/2009							
1107	Water diversion	49 d	4/12/2010	1/1/2011	4/12/2010	1/1/2011							
1108	Water diversion	12 d	10/1/2011	21/1/2011	10/1/2011	21/1/2011							
1109	Water diversion	13 d	13/1/2011	26/1/2011	13/1/2011	26/1/2011							
1110	Water diversion	5 d	13/1/2011	17/1/2011	13/1/2011	17/1/2011							
1111	Water diversion	12 d	16/1/2011	28/1/2011	16/1/2011	28/1/2011							
1112	Water diversion	3 d	30/1/2011	2/2/2011	30/1/2011	2/2/2011							
1113	Water diversion	2 d	31/1/2011	1/2/2011	31/1/2011	1/2/2011							
1114	Water diversion	10 d	5/1/2011	14/1/2011	5/1/2011	14/1/2011							
1115	Water diversion	2 d	15/1/2011	16/1/2011	15/1/2011	16/1/2011							
1116	Water diversion	3 d	17/1/2011	19/1/2011	17/1/2011	19/1/2011							
1118	Gabion (ch 200-210 LHS) T02	21 d	14/3/2006	5/4/2006	14/3/2006	5/4/2006							

Project: Revised M. Prog (Rev.08)
 Date: Aug 2009
 Consultant: AECOM

Task: Task Progress: Critical Task Progress:
 Milestone: Summary:
 Rolled Up Progress: Rolled Up Critical Task:
 Split: External Task:

Drainage Services Department

River Improvement Works in Upper Lam Tuen River, She Shan River and Upper Tai Po River Revised Master Programme (Rev. 08)

Contract No. DC/2007/08

ID	Task Name	Duration	Early Start	Early Finish	Start	Finish	2007	2008	2009	2010	2011	2012	2013
1117	Trench excavation and replacing grade 200	1d	14/3/2009	14/3/2009	14/3/2009	14/3/2009							
1118	Formation of gabion wall	2d	15/3/2009	17/3/2009	15/3/2009	17/3/2009							
1119	1st layer (ch 200-210 LHS)	1d	17/3/2009	18/3/2009	17/3/2009	18/3/2009							
1120	2nd layer (ch 200-210 LHS)	3d	21/3/2009	24/3/2009	21/3/2009	24/3/2009							
1121	3rd layer (ch 200-210 LHS)	1d	25/3/2009	26/3/2009	25/3/2009	26/3/2009							
1122	4th layer (ch 200-210 LHS)	1d	27/3/2009	28/3/2009	27/3/2009	28/3/2009							
1123	Gabion (ch 190-199 RHS) TG2	2d	19/3/2010	21/3/2010	19/3/2010	21/3/2010							
1124	Trench excavation and replacing grade 200	5d	13/3/2010	18/3/2010	13/3/2010	18/3/2010							
1125	Formation of gabion wall with G300	2d	15/3/2010	17/3/2010	15/3/2010	17/3/2010							
1126	1st layer - 4th layer (ch 180-185 LHS)	10d	16/3/2010	26/3/2010	16/3/2010	26/3/2010							
1127	G300 toe in front of gabion	2d	18/3/2010	20/3/2010	18/3/2010	20/3/2010							
1128	Trench excavation and replacing grade 200	2d	14/3/2010	16/3/2010	14/3/2010	16/3/2010							
1129	Formation of gabion wall with G300	3d	16/3/2010	19/3/2010	16/3/2010	19/3/2010							
1130	G300 toe in front of gabion	3d	19/3/2010	22/3/2010	19/3/2010	22/3/2010							
1131	Formwork	3d	14/3/2011	17/3/2011	14/3/2011	17/3/2011							
1132	Formwork and rebar fixing	5d	18/3/2011	23/3/2011	18/3/2011	23/3/2011							
1133	Concreting	2d	16/3/2011	18/3/2011	16/3/2011	18/3/2011							
1134	Stripping off formwork	3d	19/3/2011	22/3/2011	19/3/2011	22/3/2011							
1135	Trench excavation and replacing grade 200	4d	12/3/2010	16/3/2010	12/3/2010	16/3/2010							
1136	Formation of gabion wall with G300	15d	16/3/2010	31/3/2010	16/3/2010	31/3/2010							
1137	G300 toe in front of gabion	3d	19/3/2010	22/3/2010	19/3/2010	22/3/2010							
1138	Formwork	3d	15/3/2011	18/3/2011	15/3/2011	18/3/2011							
1139	Formwork and rebar fixing	5d	19/3/2011	24/3/2011	19/3/2011	24/3/2011							
1140	Concreting	2d	17/3/2011	19/3/2011	17/3/2011	19/3/2011							
1141	Stripping off formwork	3d	20/3/2011	23/3/2011	20/3/2011	23/3/2011							
1142	Trench excavation and replacing grade 200	15d	16/3/2010	31/3/2010	16/3/2010	31/3/2010							
1143	Formation of gabion wall with G300	3d	19/3/2010	22/3/2010	19/3/2010	22/3/2010							
1144	G300 toe in front of gabion	4d	13/3/2010	17/3/2010	13/3/2010	17/3/2010							
1145	Formwork	2d	11/3/2010	13/3/2010	11/3/2010	13/3/2010							
1146	Formwork and rebar fixing	6d	15/3/2010	21/3/2010	15/3/2010	21/3/2010							
1147	Concreting	1d	14/3/2010	15/3/2010	14/3/2010	15/3/2010							
1148	Stripping off formwork	1d	15/3/2010	16/3/2010	15/3/2010	16/3/2010							
1149	Trench excavation and replacing grade 200	15d	16/3/2010	31/3/2010	16/3/2010	31/3/2010							
1150	Formation of gabion wall with G300	3d	19/3/2010	22/3/2010	19/3/2010	22/3/2010							
1151	G300 toe in front of gabion	4d	13/3/2010	17/3/2010	13/3/2010	17/3/2010							
1152	Formwork	2d	11/3/2010	13/3/2010	11/3/2010	13/3/2010							
1153	Formwork and rebar fixing	6d	15/3/2010	21/3/2010	15/3/2010	21/3/2010							
1154	Concreting	1d	14/3/2010	15/3/2010	14/3/2010	15/3/2010							
1155	Stripping off formwork	1d	15/3/2010	16/3/2010	15/3/2010	16/3/2010							
1156	Trench excavation and replacing grade 200	15d	16/3/2010	31/3/2010	16/3/2010	31/3/2010							
1157	Formation of gabion wall with G300	3d	19/3/2010	22/3/2010	19/3/2010	22/3/2010							
1158	G300 toe in front of gabion	4d	13/3/2010	17/3/2010	13/3/2010	17/3/2010							
1159	Formwork	2d	11/3/2010	13/3/2010	11/3/2010	13/3/2010							
1160	Formwork and rebar fixing	6d	15/3/2010	21/3/2010	15/3/2010	21/3/2010							
1161	Concreting	1d	14/3/2010	15/3/2010	14/3/2010	15/3/2010							
1162	Stripping off formwork	1d	15/3/2010	16/3/2010	15/3/2010	16/3/2010							
1163	Trench excavation and replacing grade 200	15d	16/3/2010	31/3/2010	16/3/2010	31/3/2010							
1164	Formation of gabion wall with G300	3d	19/3/2010	22/3/2010	19/3/2010	22/3/2010							
1165	G300 toe in front of gabion	4d	13/3/2010	17/3/2010	13/3/2010	17/3/2010							
1166	Formwork	2d	11/3/2010	13/3/2010	11/3/2010	13/3/2010							
1167	Formwork and rebar fixing	6d	15/3/2010	21/3/2010	15/3/2010	21/3/2010							
1168	Concreting	1d	14/3/2010	15/3/2010	14/3/2010	15/3/2010							
1169	Stripping off formwork	1d	15/3/2010	16/3/2010	15/3/2010	16/3/2010							
1170	Trench excavation and replacing grade 200	15d	16/3/2010	31/3/2010	16/3/2010	31/3/2010							
1171	Formation of gabion wall with G300	3d	19/3/2010	22/3/2010	19/3/2010	22/3/2010							
1172	G300 toe in front of gabion	4d	13/3/2010	17/3/2010	13/3/2010	17/3/2010							
1173	Formwork	2d	11/3/2010	13/3/2010	11/3/2010	13/3/2010							
1174	Formwork and rebar fixing	6d	15/3/2010	21/3/2010	15/3/2010	21/3/2010							
1175	Concreting	1d	14/3/2010	15/3/2010	14/3/2010	15/3/2010							
1176	Stripping off formwork	1d	15/3/2010	16/3/2010	15/3/2010	16/3/2010							
1177	Trench excavation and replacing grade 200	15d	16/3/2010	31/3/2010	16/3/2010	31/3/2010							
1178	Formation of gabion wall with G300	3d	19/3/2010	22/3/2010	19/3/2010	22/3/2010							
1179	G300 toe in front of gabion	4d	13/3/2010	17/3/2010	13/3/2010	17/3/2010							
1180	Formwork	2d	11/3/2010	13/3/2010	11/3/2010	13/3/2010							
1181	Formwork and rebar fixing	6d	15/3/2010	21/3/2010	15/3/2010	21/3/2010							
1182	Concreting	1d	14/3/2010	15/3/2010	14/3/2010	15/3/2010							
1183	Stripping off formwork	1d	15/3/2010	16/3/2010	15/3/2010	16/3/2010							
1184	Trench excavation and replacing grade 200	15d	16/3/2010	31/3/2010	16/3/2010	31/3/2010							
1185	Formation of gabion wall with G300	3d	19/3/2010	22/3/2010	19/3/2010	22/3/2010							
1186	G300 toe in front of gabion	4d	13/3/2010	17/3/2010	13/3/2010	17/3/2010							
1187	Formwork	2d	11/3/2010	13/3/2010	11/3/2010	13/3/2010							
1188	Formwork and rebar fixing	6d	15/3/2010	21/3/2010	15/3/2010	21/3/2010							
1189	Concreting	1d	14/3/2010	15/3/2010	14/3/2010	15/3/2010							
1190	Stripping off formwork	1d	15/3/2010	16/3/2010	15/3/2010	16/3/2010							
1191	Trench excavation and replacing grade 200	15d	16/3/2010	31/3/2010	16/3/2010	31/3/2010							
1192	Formation of gabion wall with G300	3d	19/3/2010	22/3/2010	19/3/2010	22/3/2010							
1193	G300 toe in front of gabion	4d	13/3/2010	17/3/2010	13/3/2010	17/3/2010							
1194	Formwork	2d	11/3/2010	13/3/2010	11/3/2010	13/3/2010							
1195	Formwork and rebar fixing	6d	15/3/2010	21/3/2010	15/3/2010	21/3/2010							
1196	Concreting	1d	14/3/2010	15/3/2010	14/3/2010	15/3/2010							
1197	Stripping off formwork	1d	15/3/2010	16/3/2010	15/3/2010	16/3/2010							
1198	Trench excavation and replacing grade 200	15d	16/3/2010	31/3/2010	16/3/2010	31/3/2010							
1199	Formation of gabion wall with G300	3d	19/3/2010	22/3/2010	19/3/2010	22/3/2010							
1200	G300 toe in front of gabion	4d	13/3/2010	17/3/2010	13/3/2010	17/3/2010							

Rollled Up Progress Rollled Up Task Rollled Up Milestone Rollled Up Summary Rollled Up Critical Task Rollled Up External Task Rollled Up Split Rollled Up PTask

Project: Revised M. Prog (Rev.08)
 Date: Aug 2008
 Consultant: AECOM

Drainage Services Department

River Improvement Works in Upper Lam Tsuen River, She Shan River and Upper Tai Po River Revised Master Programme (Rev. 08)

Contract No. DC/2007/06

ID	Task Name	Duration	Early Start	Early Finish	Start	Finish	2007	2008	2009	2010	2011	2012	2013
1178	Handover	1 d	28/5/2008	28/5/2008	28/5/2008	28/5/2008							
1181	Site Clearance for initial Survey	1 d	9/6/2008	9/6/2008	9/6/2008	9/6/2008							
1182	Ch 550-600	1 d	9/6/2008	9/6/2008	9/6/2008	9/6/2008							
1183	Site Clearance	18 d	21/6/2008	4/7/2008	21/6/2008	4/7/2008							
1184	Ch 550-600	7 d	21/6/2008	27/6/2008	21/6/2008	27/6/2008							
1185	Biological Mapping for TR5	1 d	4/8/2008	4/8/2008	4/8/2008	4/8/2008							
1186	Ch 230-260	9 d	5/8/2008	14/8/2008	5/8/2008	14/8/2008							
1187	Site Clearance	1 d	5/8/2008	5/8/2008	5/8/2008	5/8/2008							
1188	Haul road formation	12 d	5/8/2008	17/8/2008	5/8/2008	17/8/2008							
1189	Noise barrier	18 d	6/8/2008	24/8/2008	6/8/2008	24/8/2008							
1190	Ch 230-260 RHS Non-transparent Gabion (ch 230-260 LHS) TG2	47 d	9/11/2008	26/1/2009	9/11/2008	26/1/2009							
1191	Trench excavation and replacing grade 200	20 d	8/11/2008	28/11/2008	8/11/2008	28/11/2008							
1192	Formation of gabion wall with G200	3 d	29/11/2008	1/12/2008	29/11/2008	1/12/2008							
1193	1st layer - 5th layer (ch 260-270 LHS)	30 d	29/11/2008	29/1/2009	29/11/2008	29/1/2009							
1194	G500 toe in front of gabion	4 d	22/12/2008	26/12/2008	22/12/2008	26/12/2008							
1195	Maintenance Structures (ch 240 LHS)	8 d	1/2/2009	9/2/2009	1/2/2009	9/2/2009							
1196	Formwork and concreting	8 d	1/2/2009	9/2/2009	1/2/2009	9/2/2009							
1197	Slope 2 (ch 240) (1.1m)	14 d	1/2/2009	15/2/2009	1/2/2009	15/2/2009							
1198	Formwork and rebar fixing	8 d	4/2/2009	12/2/2009	4/2/2009	12/2/2009							
1200	Concreting	2 d	13/2/2009	15/2/2009	13/2/2009	15/2/2009							
1201	Stripping off formwork	3 d	15/2/2009	18/2/2009	15/2/2009	18/2/2009							
1202	Gabion (ch 240-260 RHS) TG1	30 d	9/1/2009	6/2/2009	9/1/2009	6/2/2009							
1203	Trench excavation and replacing grade 200	15 d	9/1/2009	24/1/2009	9/1/2009	24/1/2009							
1204	Formation of gabion wall with G200	2 d	24/1/2009	26/1/2009	24/1/2009	26/1/2009							
1205	1st layer - 5th layer (ch 260-270 LHS)	10 d	26/1/2009	5/2/2009	26/1/2009	5/2/2009							
1206	G500 toe in front of gabion	3 d	6/2/2009	9/2/2009	6/2/2009	9/2/2009							
1207	Ch 260-330	59 d	2/10/2009	14/3/2011	2/10/2009	14/3/2011							
1208	Site Clearance	9 d	2/10/2009	10/10/2009	2/10/2009	10/10/2009							
1209	Haul road foundation	25 d	2/10/2009	26/10/2009	2/10/2009	26/10/2009							
1210	Water diversion	8 d	14/10/2009	22/10/2009	14/10/2009	22/10/2009							
1211	Gabion (ch 260-270 LHS) TG2	30 d	14/10/2009	13/1/2010	14/10/2009	13/1/2010							
1212	Trench excavation and replacing grade 200	15 d	14/10/2009	29/10/2009	14/10/2009	29/10/2009							
1213	Formation of gabion wall with G200	2 d	29/10/2009	31/10/2009	29/10/2009	31/10/2009							
1214	1st layer - 5th layer (ch 260-270 LHS)	2 d	1/11/2009	3/11/2009	1/11/2009	3/11/2009							
1215	G500 toe in front of gabion	10 d	1/11/2009	11/11/2009	1/11/2009	11/11/2009							
1216	G500 toe in front of gabion	3 d	28/12/2009	31/12/2009	28/12/2009	31/12/2009							
1217	Gabion (ch 260-270 RHS) TG1	30 d	16/1/2010	15/2/2010	16/1/2010	15/2/2010							
1218	Trench excavation and replacing grade 200	15 d	16/1/2010	30/1/2010	16/1/2010	30/1/2010							
1219	Formation of gabion wall with G200	2 d	1/2/2010	2/2/2010	1/2/2010	2/2/2010							
1220	1st layer - 5th layer (ch 260-270 LHS)	10 d	2/2/2010	12/2/2010	2/2/2010	12/2/2010							
1221	G500 toe in front of gabion	3 d	13/2/2010	16/2/2010	13/2/2010	16/2/2010							
1222	Cast-in-place (ch 270)	289 d	1/2/2010	18/1/2012	1/2/2010	18/1/2012							
1223	Trench excavation and replacing grade 200	15 d	2/1/2010	16/1/2010	2/1/2010	16/1/2010							
1224	Formation of gabion wall with G200	2 d	16/1/2010	18/1/2010	16/1/2010	18/1/2010							
1225	Formwork and rebar fixing	10 d	18/1/2010	28/1/2010	18/1/2010	28/1/2010							
1226	Concreting	1 d	18/2/2010	19/2/2010	18/2/2010	19/2/2010							
1227	Stripping off formwork	3 d	14/2/2010	17/2/2010	14/2/2010	17/2/2010							
1228	Retaining Wall (ch 270-310 LHS) TR1 (replaced by AD1)	20 d	1/1/2010	20/1/2010	1/1/2010	20/1/2010							
1229	Bulk excavation	5 d	2/1/2010	6/1/2010	2/1/2010	6/1/2010							
1230	Formation	2 d	6/1/2010	8/1/2010	6/1/2010	8/1/2010							
1231	Formwork and rebar fixing (base slab)	2 d	8/1/2010	10/1/2010	8/1/2010	10/1/2010							
1232	Concreting (base slab)	1 d	10/1/2010	11/1/2010	10/1/2010	11/1/2010							
1233	Stripping off formwork (wall stem)	3 d	11/1/2010	14/1/2010	11/1/2010	14/1/2010							
1234	Formwork and rebar fixing (wall stem)	15 d	13/1/2010	28/1/2010	13/1/2010	28/1/2010							
1235	Concreting (wall stem)	3 d	29/1/2010	31/1/2010	29/1/2010	31/1/2010							
1236	Stripping off formwork (wall stem)	3 d	2/2/2010	5/2/2010	2/2/2010	5/2/2010							
1237	Formwork and rebar fixing (base slab)	5 d	25/1/2010	29/1/2010	25/1/2010	29/1/2010							
1238	Bulk excavation	20 d	1/1/2010	20/1/2010	1/1/2010	20/1/2010							
1239	Formation	5 d	1/1/2010	6/1/2010	1/1/2010	6/1/2010							
1240	Formwork and rebar fixing (base slab)	5 d	2/1/2010	7/1/2010	2/1/2010	7/1/2010							
1241	Concreting (base slab)	3 d	8/1/2010	11/1/2010	8/1/2010	11/1/2010							

Project: Revised M. Prog (Rev. 08)
 Date: Aug. 2009
 Consultant: AECOM

Task Progress:

Critical Task Progress:

Milestones:

Summary:

Rolled Up Progress:

Rolled Up Critical Task:

Rolled Up Milestone:

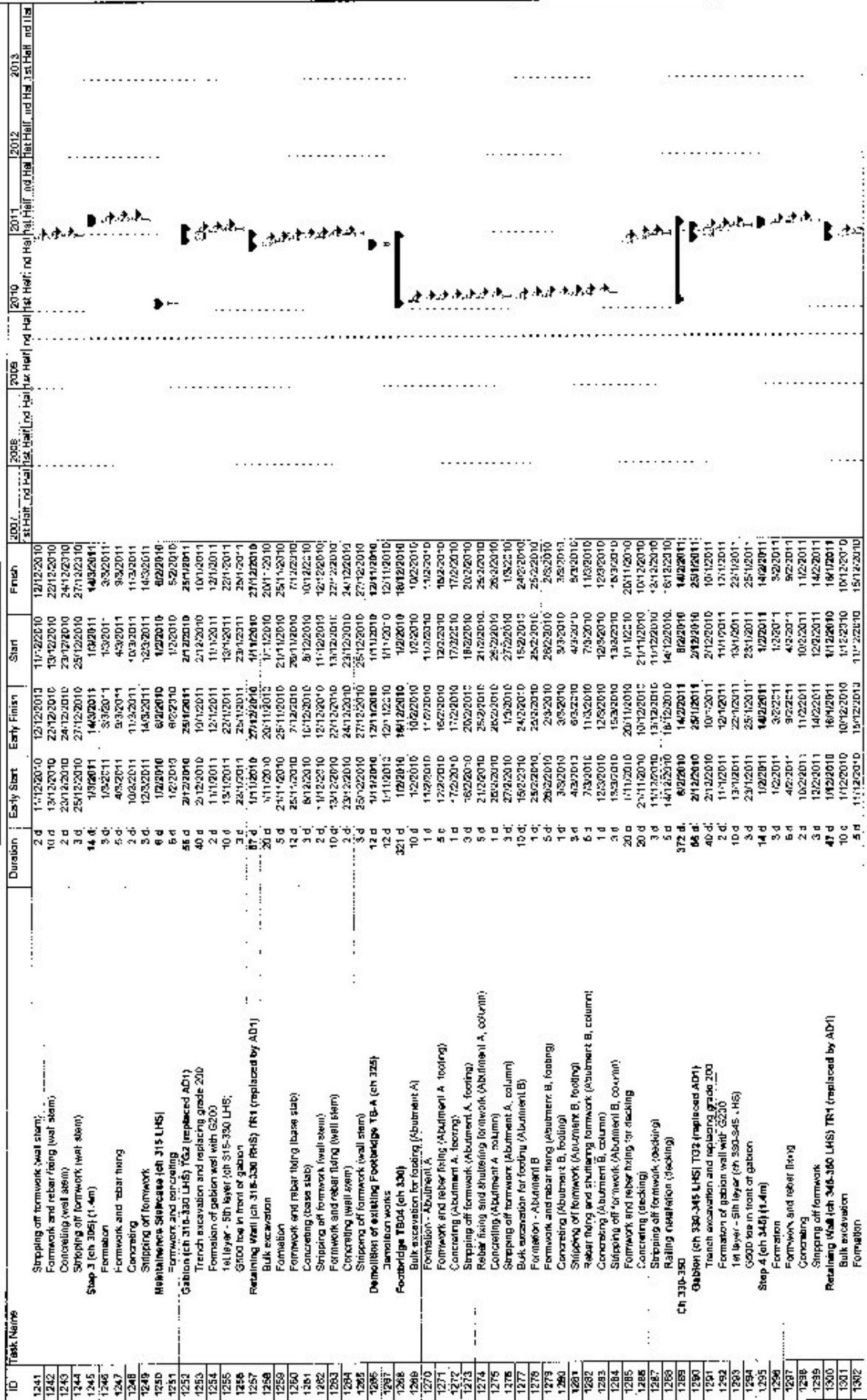
Split:

External Tasks:

PTask:

Drainage Services Department

Contract No. DC/2007/06 River Improvement Works in Upper Lam Teuen River, She Shan River and Upper Tai Po River Revised Master Programme (Rev. 08)



ID	Task Name	Duration	Early Start	Early Finish	Start	Finish
1241	Stripping off formwork (wall stem)	2 d	11/12/2010	12/12/2010	11/12/2010	12/12/2010
1242	Formwork and rebar tying (wall stem)	10 d	13/12/2010	23/12/2010	13/12/2010	23/12/2010
1243	Concreting (wall stem)	2 d	23/12/2010	25/12/2010	23/12/2010	24/12/2010
1244	Stripping off formwork (wall stem)	3 d	25/12/2010	27/12/2010	25/12/2010	27/12/2010
1245	Step 3 (ch 305) (1.4m)	14 d	1/1/2011	14/1/2011	1/1/2011	14/1/2011
1246	Formation	5 d	1/1/2011	6/1/2011	1/1/2011	6/1/2011
1247	Formwork and rebar tying	5 d	6/1/2011	11/1/2011	6/1/2011	11/1/2011
1248	Concreting	2 d	11/1/2011	13/1/2011	11/1/2011	13/1/2011
1249	Stripping off formwork	3 d	13/1/2011	16/1/2011	13/1/2011	16/1/2011
1250	Maintenance Sitecase (ch 315 LHS)	6 d	1/2/2011	7/2/2011	1/2/2011	7/2/2011
1251	Formwork and concreting	5 d	1/2/2011	6/2/2011	1/2/2011	6/2/2011
1252	Gabion (ch 316-330 LHS) T02 (replaced AD1)	5 d	2/2/2011	7/2/2011	2/2/2011	7/2/2011
1253	Trench excavation and replacing grade 200	40 d	2/2/2011	10/1/2011	2/2/2011	10/1/2011
1254	Formation of gabion wall with G200	2 d	11/1/2011	12/1/2011	11/1/2011	12/1/2011
1255	1st layer - 5th layer (ch 315-330 LHS)	10 d	13/1/2011	23/1/2011	13/1/2011	23/1/2011
1256	G200 tie in front of gabion	3 d	23/1/2011	26/1/2011	23/1/2011	26/1/2011
1257	Retaining Wall (ch 316-330 RHS) TR1 (replaced by AD1)	87 d	1/1/2011	27/3/2011	1/1/2011	27/3/2011
1258	Bulk excavation	20 d	1/1/2011	21/1/2011	1/1/2011	21/1/2011
1259	Formation	5 d	21/1/2011	26/1/2011	21/1/2011	26/1/2011
1260	Formwork and rebar tying (base slab)	12 d	25/1/2011	6/2/2011	25/1/2011	6/2/2011
1261	Concreting (base slab)	3 d	6/2/2011	9/2/2011	6/2/2011	9/2/2011
1262	Stripping off formwork (wall stem)	2 d	1/2/2011	3/2/2011	1/2/2011	3/2/2011
1263	Formwork and rebar tying (wall stem)	10 d	3/2/2011	13/2/2011	3/2/2011	13/2/2011
1264	Concreting (wall stem)	10 d	3/2/2011	13/2/2011	3/2/2011	13/2/2011
1265	Stripping off formwork (wall stem)	3 d	13/2/2011	16/2/2011	13/2/2011	16/2/2011
1266	Stripping of formwork (wall stem)	2 d	16/2/2011	18/2/2011	16/2/2011	18/2/2011
1267	Demolition of existing Footbridge TB-A (ch 325)	12 d	1/1/2011	13/1/2011	1/1/2011	13/1/2011
1268	Demolition works	321 d	1/2/2011	19/1/2012	1/2/2011	19/1/2012
1269	Footbridge TB04 (ch 336)	10 d	1/2/2011	11/2/2011	1/2/2011	11/2/2011
1270	Bulk excavation for footing (Abutment A)	1 d	1/2/2011	2/2/2011	1/2/2011	2/2/2011
1271	Formation - Abutment A	1 d	2/2/2011	3/2/2011	2/2/2011	3/2/2011
1272	Formwork and rebar tying (Abutment A, footing)	5 d	3/2/2011	8/2/2011	3/2/2011	8/2/2011
1273	Concreting (Abutment A, footing)	1 d	8/2/2011	9/2/2011	8/2/2011	9/2/2011
1274	Stripping off formwork (Abutment A, footing)	3 d	9/2/2011	12/2/2011	9/2/2011	12/2/2011
1275	Rebar tying and shuttering formwork (Abutment A, column)	1 d	12/2/2011	13/2/2011	12/2/2011	13/2/2011
1276	Stripping off formwork (Abutment A, column)	3 d	13/2/2011	16/2/2011	13/2/2011	16/2/2011
1277	Bulk excavation for footing (Abutment B)	10 d	16/2/2011	26/2/2011	16/2/2011	26/2/2011
1278	Formation - Abutment B	1 d	26/2/2011	27/2/2011	26/2/2011	27/2/2011
1279	Formwork and rebar tying (Abutment B, footing)	1 d	27/2/2011	28/2/2011	27/2/2011	28/2/2011
1280	Concreting (Abutment B, footing)	3 d	28/2/2011	31/2/2011	28/2/2011	31/2/2011
1281	Stripping off formwork (Abutment B, footing)	3 d	31/2/2011	3/3/2011	31/2/2011	3/3/2011
1282	Rebar tying and shuttering formwork (Abutment B, column)	5 d	3/3/2011	8/3/2011	3/3/2011	8/3/2011
1283	Stripping off formwork (Abutment B, column)	1 d	8/3/2011	9/3/2011	8/3/2011	9/3/2011
1284	Concreting (Abutment B, column)	3 d	9/3/2011	12/3/2011	9/3/2011	12/3/2011
1285	Stripping off formwork (Abutment B, column)	3 d	12/3/2011	15/3/2011	12/3/2011	15/3/2011
1286	Formwork and rebar tying for stacking	20 d	1/1/2011	20/1/2011	1/1/2011	20/1/2011
1287	Concreting (stacking)	3 d	1/1/2011	4/1/2011	1/1/2011	4/1/2011
1288	Stripping off formwork (stacking)	5 d	4/1/2011	9/1/2011	4/1/2011	9/1/2011
1289	Railing installation (stacking)	372 d	6/2/2011	14/2/2012	6/2/2011	14/2/2012
1290	Gabion (ch 330-345 LHS) T03 (replaced AD1)	65 d	2/1/2011	28/1/2011	2/1/2011	28/1/2011
1291	Trench excavation and replacing grade 200	2 d	1/1/2011	3/1/2011	1/1/2011	3/1/2011
1292	Formation of gabion wall with G200	2 d	1/1/2011	3/1/2011	1/1/2011	3/1/2011
1293	1st layer - 5th layer (ch 330-345 LHS)	10 d	3/1/2011	13/1/2011	3/1/2011	13/1/2011
1294	G200 tie in front of gabion	3 d	13/1/2011	16/1/2011	13/1/2011	16/1/2011
1295	Step 4 (ch 346) (1.4m)	14 d	1/2/2011	14/2/2011	1/2/2011	14/2/2011
1296	Formation	3 d	1/2/2011	4/2/2011	1/2/2011	4/2/2011
1297	Formwork and rebar tying	5 d	4/2/2011	9/2/2011	4/2/2011	9/2/2011
1298	Concreting	2 d	9/2/2011	11/2/2011	9/2/2011	11/2/2011
1299	Stripping off formwork	3 d	11/2/2011	14/2/2011	11/2/2011	14/2/2011
1300	Retaining Wall (ch 346-360 LHS) TR1 (replaced by AD1)	47 d	1/2/2011	16/3/2011	1/2/2011	16/3/2011
1301	Bulk excavation	10 d	1/2/2011	11/2/2011	1/2/2011	11/2/2011
1302	Formation	5 d	11/2/2011	16/2/2011	11/2/2011	16/2/2011

Project: Revised M. Prog (Rev 03)
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 Consultant: AECOM

Chiu Hing Construction & Transportation Co., Ltd

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ID	Task Name	Duration	Early Start	Early Finish	Start	Finish	2007	2008	2009	2010	2011	2012	2013
1303	Formwork and rebar fixing (base slab)	10 d	15/12/2010	27/12/2010	16/12/2010	27/12/2010							
1304	Concreting (base slab)	3 d	28/12/2010	30/12/2010	28/12/2010	30/12/2010							
1305	Stripping off formwork (wall stem)	2 d	31/12/2010	1/1/2011	31/12/2010	1/1/2011							
1306	Formwork and rebar fixing (wall stem)	10 d	2/1/2011	11/1/2011	2/1/2011	11/1/2011							
1307	Concreting (wall stem)	2 d	12/1/2011	13/1/2011	12/1/2011	13/1/2011							
1308	Stripping off formwork (wall stem)	3 d	14/1/2011	16/1/2011	14/1/2011	16/1/2011							
1309	Demolition of existing Footbridge TB-B (ch 350)	12 d	11/1/2011	23/1/2011	11/1/2011	23/1/2011							
1310	Demolition works	12 d	11/1/2011	23/1/2011	11/1/2011	23/1/2011							
1311	Footbridge TBAS (ch 350)	31 d	8/2/2011	18/3/2011	8/2/2011	18/3/2011							
1312	Bulk excavation for footing (Abutment A)	10 d	8/2/2011	17/2/2011	8/2/2011	17/2/2011							
1313	Formation - Abutment A	1 d	18/2/2011	18/2/2011	18/2/2011	18/2/2011							
1314	Formwork and rebar fixing (Abutment A, footing)	5 d	19/2/2011	23/2/2011	19/2/2011	23/2/2011							
1315	Concreting (Abutment A, footing)	1 d	24/2/2011	24/2/2011	24/2/2011	24/2/2011							
1316	Stripping off formwork (Abutment A, footing)	3 d	26/2/2011	29/2/2011	26/2/2011	29/2/2011							
1317	Rebar fixing and shuttering formwork (Abutment A, column)	5 d	29/2/2011	4/3/2011	29/2/2011	4/3/2011							
1318	Concreting (Abutment A, column)	1 d	5/3/2011	5/3/2011	5/3/2011	5/3/2011							
1319	Stripping off formwork (Abutment A, column)	3 d	6/3/2011	8/3/2011	6/3/2011	8/3/2011							
1320	Bulk excavation for footing (Abutment B)	10 d	27/2/2011	3/3/2011	27/2/2011	3/3/2011							
1321	Formation - Abutment B	1 d	4/3/2011	4/3/2011	4/3/2011	4/3/2011							
1322	Formwork and rebar fixing (Abutment B, footing)	5 d	5/3/2011	9/3/2011	5/3/2011	9/3/2011							
1323	Concreting (Abutment B, footing)	1 d	10/3/2011	10/3/2011	10/3/2011	10/3/2011							
1324	Stripping off formwork (Abutment B, footing)	3 d	11/3/2011	13/3/2011	11/3/2011	13/3/2011							
1325	Rebar fixing and shuttering formwork (Abutment B, column)	5 d	14/3/2011	18/3/2011	14/3/2011	18/3/2011							
1326	Concreting (Abutment B, column)	1 d	19/3/2011	19/3/2011	19/3/2011	19/3/2011							
1327	Stripping off formwork (Abutment B, column)	3 d	20/3/2011	22/3/2011	20/3/2011	22/3/2011							
1328	Formwork and rebar fixing for decking	20 d	11/1/2011	20/1/2011	11/1/2011	20/1/2011							
1329	Concreting (decking)	20 d	11/1/2011	20/1/2011	11/1/2011	20/1/2011							
1330	Stripping off formwork (decking)	3 d	11/2/2011	13/2/2011	11/2/2011	13/2/2011							
1331	Rebar installation (decking)	5 d	14/2/2011	18/2/2011	14/2/2011	18/2/2011							
1332	Ch. 380-400	410 d	2/1/2011	15/2/2011	2/1/2011	15/2/2011							
1333	Retaining Wall (ch 380-400 LHS) TR1 (replaced by AD1)	77 d	1/2/2011	11/2/2011	1/2/2011	11/2/2011							
1334	Bulk excavation	40 d	1/2/2011	11/2/2011	1/2/2011	11/2/2011							
1335	Formation	5 d	10/1/2011	14/1/2011	10/1/2011	14/1/2011							
1336	Formwork and rebar fixing (base slab)	12 d	5/1/2011	17/1/2011	5/1/2011	17/1/2011							
1337	Concreting (base slab)	3 d	27/1/2011	29/1/2011	27/1/2011	29/1/2011							
1338	Stripping off formwork (wall stem)	2 d	30/1/2011	31/1/2011	30/1/2011	31/1/2011							
1339	Formwork and rebar fixing (wall stem)	10 d	1/2/2011	11/2/2011	1/2/2011	11/2/2011							
1340	Concreting (wall stem)	3 d	13/2/2011	15/2/2011	13/2/2011	15/2/2011							
1341	Stripping off formwork (wall stem)	77 d	1/1/2011	18/1/2011	1/1/2011	18/1/2011							
1342	Retaining Wall (ch 380-400 RHS) TR1 (replaced by AD1)	40 d	1/1/2011	11/1/2011	1/1/2011	11/1/2011							
1343	Bulk excavation	5 d	1/1/2011	5/1/2011	1/1/2011	5/1/2011							
1344	Formation	12 d	11/2/2011	23/2/2011	11/2/2011	23/2/2011							
1345	Formwork and rebar fixing (base slab)	3 d	24/2/2011	27/2/2011	24/2/2011	27/2/2011							
1346	Concreting (base slab)	2 d	28/2/2011	29/2/2011	28/2/2011	29/2/2011							
1347	Stripping off formwork (wall stem)	2 d	1/1/2011	1/1/2011	1/1/2011	1/1/2011							
1348	Formwork and rebar fixing (wall stem)	10 d	12/1/2011	21/1/2011	12/1/2011	21/1/2011							
1349	Concreting (wall stem)	3 d	13/1/2011	15/1/2011	13/1/2011	15/1/2011							
1350	Stripping off formwork (wall stem)	3 d	14/1/2011	17/1/2011	14/1/2011	17/1/2011							
1351	Demolition of existing Footbridge TB-C (ch 380)	12 d	17/1/2011	29/1/2011	17/1/2011	29/1/2011							
1352	Demolition works	14 d	17/1/2011	31/1/2011	17/1/2011	31/1/2011							
1353	Step 5 (ch 400) (1.4m)	14 d	1/2/2011	14/2/2011	1/2/2011	14/2/2011							
1354	Formation	3 d	1/2/2011	3/2/2011	1/2/2011	3/2/2011							
1355	Formwork and rebar fixing	6 d	4/2/2011	9/2/2011	4/2/2011	9/2/2011							
1356	Concreting	2 d	10/2/2011	11/2/2011	10/2/2011	11/2/2011							
1357	Stripping off formwork	3 d	12/2/2011	14/2/2011	12/2/2011	14/2/2011							
1358	Footbridge TB8E (ch 400)	381 d	15/2/2011	17/1/2012	15/2/2011	17/1/2012							
1359	Bulk excavation for footing (Abutment A)	10 d	15/2/2011	24/2/2011	15/2/2011	24/2/2011							
1360	Formation - Abutment A	1 d	25/2/2011	25/2/2011	25/2/2011	25/2/2011							
1361	Formwork and rebar fixing (Abutment A, footing)	5 d	26/2/2011	30/2/2011	26/2/2011	30/2/2011							
1362	Concreting (Abutment A, footing)	1 d	31/2/2011	31/2/2011	31/2/2011	31/2/2011							
1363	Stripping off formwork (Abutment A, footing)	3 d	1/3/2012	3/3/2012	1/3/2012	3/3/2012							
1364	Rebar fixing and shuttering formwork (Abutment A, column)	5 d	4/3/2012	8/3/2012	4/3/2012	8/3/2012							

Project: Revised M. Prog (Rev.08)
Data Date: Aug 2009
Consultant: AECOM

Task: Task Progress

Critical Task Progress: Critical Task Progress

Milestones: Milestones

Summary: Summary

Relied Up Progress: Relied Up Progress

Relied Up Critical Task: Relied Up Critical Task

Relieve Up Milestone: Relieve Up Milestone

Relied Up Progress: Relied Up Progress

Split: Split

External Tasks: External Tasks

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Chiu Hing Construction & Transportation Co., Ltd

Drainage Services Department

River Improvement Works in Upper Lam Tsuen River, Sha Shin River and Upper Tai Po River Revised Master Programme (Rev. 06)

Contract No. DC/2007/06

ID	Task Name	Duration	Early Start	Early Finish	Start	Finish	2007	2008	2009	2010	2011	2012	2013
1365	Concreting (Abutment A, column)	1 d	9/2/2010	9/2/2010	9/2/2010	9/2/2010							
1366	Stripping off formwork (Abutment A, column)	3 d	10/2/2010	12/2/2010	10/2/2010	12/2/2010							
1367	Bulk excavation for footing (Abutment B)	10 d	2/1/2010	11/1/2010	2/1/2010	11/1/2010							
1368	Formwork and rebar fixing (Abutment B)	1 d	12/1/2010	12/1/2010	12/1/2010	12/1/2010							
1369	Formwork and rebar fixing (Abutment B, footing)	5 d	13/1/2010	17/1/2010	13/1/2010	17/1/2010							
1370	Concreting (Abutment B, footing)	1 d	18/1/2010	18/1/2010	18/1/2010	18/1/2010							
1371	Stripping off formwork (Abutment B, footing)	3 d	19/1/2010	21/1/2010	19/1/2010	21/1/2010							
1372	Rebar fixing and shuttering formwork (Abutment B, column)	5 d	23/1/2010	28/1/2010	23/1/2010	28/1/2010							
1373	Concreting (Abutment B, column)	1 d	27/1/2010	27/1/2010	27/1/2010	27/1/2010							
1374	Stripping off formwork (Abutment B, column)	3 d	28/1/2010	30/1/2010	28/1/2010	30/1/2010							
1375	Formwork and rebar fixing for decking	20 d	2/1/2010	20/1/2010	2/1/2010	20/1/2010							
1376	Concreting (decking)	20 d	2/1/2010	20/1/2010	2/1/2010	20/1/2010							
1377	Stripping off formwork (decking)	3 d	1/1/2011	3/1/2011	1/1/2011	3/1/2011							
1378	Rebar installation (decking)	5 d	3/1/2011	7/1/2011	3/1/2011	7/1/2011							
1379	Ch 400-525	487 d	8/1/2009	20/2/2011	8/1/2009	20/2/2011							
1380	Retaining Wall (ch 400-420 LHS) TR1 (replaced by AD1)	87 d	1/1/2010	5/1/2010	1/1/2010	5/1/2010							
1381	Bulk excavation	3 d	1/1/2010	3/1/2010	1/1/2010	3/1/2010							
1382	Formwork	5 d	1/1/2010	5/1/2010	1/1/2010	5/1/2010							
1383	Formwork and rebar fixing (base slab)	12 d	1/1/2010	13/1/2010	1/1/2010	13/1/2010							
1384	Concreting (base slab)	5 d	16/1/2010	20/1/2010	16/1/2010	20/1/2010							
1385	Stripping off formwork (wall stem)	2 d	21/1/2010	22/1/2010	21/1/2010	22/1/2010							
1386	Formwork and rebar fixing (wall stem)	10 d	23/1/2010	2/2/2011	23/1/2010	2/2/2011							
1387	Concreting (wall stem)	2 d	2/2/2011	3/2/2011	2/2/2011	3/2/2011							
1388	Stripping off formwork (wall stem)	3 d	4/2/2011	6/2/2011	4/2/2011	6/2/2011							
1389	Formwork	72 d	1/1/2010	1/1/2011	1/1/2010	1/1/2011							
1390	Formwork and rebar fixing (wall stem)	35 d	1/1/2010	5/1/2010	1/1/2010	5/1/2010							
1391	Bulk excavation	5 d	6/1/2010	10/1/2010	6/1/2010	10/1/2010							
1392	Formwork and rebar fixing (base slab)	12 d	11/1/2010	22/1/2010	11/1/2010	22/1/2010							
1393	Concreting (base slab)	3 d	23/1/2010	25/1/2010	23/1/2010	25/1/2010							
1394	Stripping off formwork (wall stem)	3 d	25/1/2010	27/1/2010	25/1/2010	27/1/2010							
1395	Formwork and rebar fixing (wall stem)	10 d	28/1/2010	5/1/2011	28/1/2010	5/1/2011							
1396	Concreting (wall stem)	2 d	7/1/2011	8/1/2011	7/1/2011	8/1/2011							
1397	Stripping off formwork (wall stem)	3 d	8/1/2011	11/1/2011	8/1/2011	11/1/2011							
1398	Formwork and rebar fixing (wall stem)	6 d	12/1/2011	17/1/2011	12/1/2011	17/1/2011							
1399	Formwork and rebar fixing (wall stem)	6 d	12/1/2011	17/1/2011	12/1/2011	17/1/2011							
1400	Formwork and rebar fixing (wall stem)	6 d	12/1/2011	17/1/2011	12/1/2011	17/1/2011							
1401	Trench excavation and replacing grade 200	50 d	2/1/2010	20/2/2011	2/1/2010	20/2/2011							
1402	Formation of 960mm well with G200	2 d	2/1/2011	2/1/2011	2/1/2011	2/1/2011							
1403	1st layer - 2in layer (ch 420-430 LHS)	10 d	23/1/2011	1/2/2011	23/1/2011	1/2/2011							
1404	G500 toe in front of pylon	3 d	2/2/2011	2/2/2011	2/2/2011	2/2/2011							
1405	Retaining Wall (ch 435-450 RHS) TR2 (replaced by AD1)	67 d	15/1/2010	20/1/2011	15/1/2010	20/1/2011							
1406	Bulk excavation	30 d	15/1/2010	14/2/2010	15/1/2010	14/2/2010							
1407	Formation	12 d	15/1/2010	19/1/2010	15/1/2010	19/1/2010							
1408	Formwork and rebar fixing (base slab)	2 d	20/1/2010	20/1/2010	20/1/2010	20/1/2010							
1409	Concreting (base slab)	3 d	1/1/2011	3/1/2011	1/1/2011	3/1/2011							
1410	Stripping off formwork (wall stem)	10 d	4/1/2011	5/1/2011	4/1/2011	5/1/2011							
1411	Formwork and rebar fixing (wall stem)	10 d	8/1/2011	15/1/2011	8/1/2011	15/1/2011							
1412	Concreting (wall stem)	2 d	15/1/2011	15/1/2011	15/1/2011	15/1/2011							
1413	Stripping off formwork (wall stem)	3 d	18/1/2011	20/1/2011	18/1/2011	20/1/2011							
1414	Box Culvert TB01 (ch 460)	38 d	1/1/2009	8/1/2010	1/1/2009	8/1/2010							
1415	Bulk excavation	10 d	1/1/2009	11/1/2009	1/1/2009	11/1/2009							
1416	Formation of box culvert	3 d	1/1/2009	4/1/2009	1/1/2009	4/1/2009							
1417	Formwork and rebar fixing (base slab)	3 d	1/1/2009	4/1/2009	1/1/2009	4/1/2009							
1418	Concreting (base slab)	5 d	4/1/2009	14/1/2009	4/1/2009	14/1/2009							
1419	Stripping off formwork (base slab)	2 d	18/1/2009	19/1/2009	18/1/2009	19/1/2009							
1420	Formwork and rebar fixing (wall stem and roof slab)	2 d	21/1/2009	21/1/2009	21/1/2009	21/1/2009							
1421	Concreting (wall stem and roof slab)	12 d	23/1/2009	3/2/2010	23/1/2009	3/2/2010							
1422	Stripping off formwork	3 d	4/2/2010	4/2/2010	4/2/2010	4/2/2010							
1423	Retaining Wall (ch 450-480 LHS) TR2	37 d	1/1/2010	5/2/2011	1/1/2010	5/2/2011							
1424	Bulk excavation	60 d	1/1/2010	30/1/2011	1/1/2010	30/1/2011							
1425	Formation	5 d	31/1/2010	4/1/2011	31/1/2010	4/1/2011							
1426	Formwork and rebar fixing (base slab)	12 d	5/1/2011	16/1/2011	5/1/2011	16/1/2011							

Task **Task Progress** **Critical Task** **Milestone** **Summary** **Relief Up Task** **Relief Up Critical Task** **Relief Up Milestone** **Roll Up Progress** **Roll Up Milestone** **External Task** **Task** **Task Progress** **Critical Task** **Milestone** **Summary** **Relief Up Task** **Relief Up Critical Task** **Relief Up Milestone** **Roll Up Progress** **Roll Up Milestone** **External Task**

Drainage Services Department

Contract No. DC/2007/06 River Improvement Works in Upper Lam Tsuen River, She Shan River and Upper Tai Po River Revised Master Programme (Rev. 08)

ID	Task Name	Duration	Early Start	Early Finish	Start	Finish	2007	2008	2009	2010	2011	2012	2013
1427	Concreting (base slab)	3 d	17/12/2011	18/12/2011	17/12/2011	18/12/2011							
1428	Stripping off formwork (wall stem)	2 d	21/12/2011	21/12/2011	21/12/2011	21/12/2011							
1429	Formwork and rebar fixing (wall stem)	10 d	21/12/2011	23/12/2011	23/12/2011	23/12/2011							
1430	Concreting (wall stem)	2 d	1/1/2012	2/1/2012	2/1/2012	2/1/2012							
1431	Stripping off formwork (wall stem)	3 d	3/1/2012	5/1/2012	5/1/2012	5/1/2012							
1432	Step 6 (ch. 480) (1.Dm)	14 d	1/1/2012	14/1/2012	14/1/2012	14/1/2012							
1433	Formation	3 d	18/2/2012	19/2/2012	19/2/2012	19/2/2012							
1434	Formwork and rebar fixing	6 d	18/2/2012	23/2/2012	23/2/2012	23/2/2012							
1435	Formwork and rebar fixing	6 d	18/2/2012	23/2/2012	23/2/2012	23/2/2012							
1436	Concreting	2 d	10/3/2012	11/3/2012	11/3/2012	11/3/2012							
1437	Stripping off formwork	3 d	12/3/2012	14/3/2012	14/3/2012	14/3/2012							
1438	Retaining Wall (ch. 480-500 UHS) TR2	57 d	10/2/2010	28/1/2011	10/2/2010	28/1/2011							
1439	Bulk excavation	20 d	10/2/2010	20/12/2010	10/2/2010	20/12/2010							
1440	Formation	5 d	21/12/2010	25/12/2010	21/12/2010	25/12/2010							
1441	Formwork and rebar fixing (base slab)	2 d	26/12/2010	28/12/2010	26/12/2010	28/12/2010							
1442	Concreting (base slab)	3 d	7/1/2011	9/1/2011	7/1/2011	9/1/2011							
1443	Stripping off formwork (wall stem)	2 d	12/1/2011	11/1/2011	10/1/2011	11/1/2011							
1444	Formwork and rebar fixing (wall stem)	10 d	12/1/2011	21/1/2011	12/1/2011	21/1/2011							
1445	Concreting (wall stem)	2 d	23/1/2011	23/1/2011	23/1/2011	23/1/2011							
1446	Stripping off formwork (wall stem)	3 d	24/1/2011	26/1/2011	26/1/2011	26/1/2011							
1447	Retaining Wall (ch. 450-500 RH5) TR2	87 d	21/12/2010	28/2/2011	21/12/2010	28/2/2011							
1448	Bulk excavation	50 d	21/12/2010	22/2/2011	21/12/2010	22/2/2011							
1449	Formation	5 d	21/2/2011	25/2/2011	21/2/2011	25/2/2011							
1450	Formwork and rebar fixing (base slab)	3 d	7/3/2011	9/3/2011	7/3/2011	9/3/2011							
1451	Concreting (base slab)	12 d	21/2/2011	2/3/2011	21/2/2011	2/3/2011							
1452	Stripping off formwork (wall stem)	7 d	10/3/2011	16/3/2011	10/3/2011	16/3/2011							
1453	Formwork and rebar fixing (wall stem)	10 d	15/3/2011	24/3/2011	15/3/2011	24/3/2011							
1454	Concreting (wall stem)	2 d	25/3/2011	26/3/2011	25/3/2011	26/3/2011							
1455	Stripping off formwork (wall stem)	3 d	27/3/2011	29/3/2011	27/3/2011	29/3/2011							
1456	Retaining Wall (ch. 500-530 LHS) TR3	57 d	11/2/2010	24/1/2011	11/2/2010	24/1/2011							
1457	Bulk excavation	20 d	11/2/2010	20/12/2010	11/2/2010	20/12/2010							
1458	Formation	5 d	21/12/2010	25/12/2010	21/12/2010	25/12/2010							
1459	Formwork and rebar fixing (base slab)	12 d	28/12/2010	8/1/2011	28/12/2010	8/1/2011							
1460	Concreting (base slab)	3 d	7/1/2011	9/1/2011	7/1/2011	9/1/2011							
1461	Stripping off formwork (wall stem)	2 d	10/1/2011	11/1/2011	10/1/2011	11/1/2011							
1462	Formwork and rebar fixing (wall stem)	10 d	12/1/2011	21/1/2011	12/1/2011	21/1/2011							
1463	Concreting (wall stem)	2 d	23/1/2011	23/1/2011	23/1/2011	23/1/2011							
1464	Stripping off formwork (wall stem)	3 d	24/1/2011	26/1/2011	24/1/2011	26/1/2011							
1465	Retaining Wall (ch. 500-530 RH5) TR3	67 d	21/12/2010	28/2/2011	21/12/2010	28/2/2011							
1466	Bulk excavation	30 d	21/12/2010	21/1/2011	21/12/2010	21/1/2011							
1467	Formation	5 d	12/2/2011	16/2/2011	12/2/2011	16/2/2011							
1468	Formwork and rebar fixing (base slab)	12 d	6/2/2011	17/2/2011	6/2/2011	17/2/2011							
1469	Concreting (base slab)	3 d	16/2/2011	20/2/2011	16/2/2011	20/2/2011							
1470	Stripping off formwork (wall stem)	2 d	21/2/2011	22/2/2011	21/2/2011	22/2/2011							
1471	Formwork and rebar fixing (wall stem)	13 d	23/2/2011	4/3/2011	23/2/2011	4/3/2011							
1472	Concreting (wall stem)	2 d	5/3/2011	6/3/2011	5/3/2011	6/3/2011							
1473	Stripping off formwork (wall stem)	3 d	7/3/2011	9/3/2011	7/3/2011	9/3/2011							
1474	Demolition of existing Footbridge T-B (ch. 625)	12 d	11/12/2010	12/1/2011	11/12/2010	12/1/2011							
1475	Demolition works	12 d	12/1/2011	12/1/2011	12/1/2011	12/1/2011							
1476	Footbridge T/B (ch. 525)	497 d	9/11/2009	20/2/2011	9/11/2009	20/2/2011							
1477	Bulk excavation for forming (Abutment A)	10 d	11/12/2009	16/12/2009	11/12/2009	16/12/2009							
1478	Formation - Abutment A	1 d	18/12/2009	18/12/2009	18/12/2009	18/12/2009							
1479	Formwork and rebar fixing (Abutment A, footing)	5 d	20/11/2009	24/11/2009	20/11/2009	24/11/2009							
1480	Concreting (Abutment A, footing)	1 d	25/11/2009	25/11/2009	25/11/2009	25/11/2009							
1481	Stripping off formwork (Abutment A, footing)	2 d	28/11/2009	29/11/2009	28/11/2009	29/11/2009							
1482	Rebar fixing and abutting formwork (Abutment A, column)	1 d	29/11/2009	29/11/2009	29/11/2009	29/11/2009							
1483	Concreting (Abutment A, column)	1 d	4/12/2009	4/12/2009	4/12/2009	4/12/2009							
1484	Stripping off formwork (Abutment A, column)	3 d	5/12/2009	7/12/2009	5/12/2009	7/12/2009							
1485	Bulk excavation for forming (Abutment B)	10 d	1/12/2009	10/12/2009	1/12/2009	10/12/2009							
1486	Formation - Abutment B	1 d	11/12/2009	11/12/2009	11/12/2009	11/12/2009							
1487	Formwork and rebar fixing (Abutment B, footing)	5 d	12/12/2009	16/12/2009	12/12/2009	16/12/2009							
1488	Concreting (Abutment B, footing)	1 d	17/12/2009	17/12/2009	17/12/2009	17/12/2009							
1489	Stripping off formwork (Abutment B, footing)	3 d	18/12/2009	20/12/2009	18/12/2009	20/12/2009							

Project: Revised M. Prog. (Rev.08) Roller Up Progress
 Date: 20/08/2009 Roller Up Critical Task
 Consultant: AECOM Roller Up Milestone
Roller Up Summary

Drainage Services Department

Contract No. DC/2007/06 River Improvement Works in Upper Lam Teuen River, She Shan River and Upper Tai Po River Revised Master Programme (Rev. 08)

ID	Task Name	Duration	Early Start	Early Finish	Start	Finish	2007	2008	2010	2011	2012	2013
1489	Rebar fixing and shuttering formwork (Abutment B, column)	5.d	21/12/2009	25/12/2009	21/12/2009	25/12/2009						
1490	Concrete (Abutment B, column)	1.d	26/12/2009	26/12/2009	26/12/2009	26/12/2009						
1491	Stripping off formwork (abutment H, column)	3.d	27/12/2009	29/12/2009	27/12/2009	29/12/2009						
1492	Formwork and rebar fixing for decking	20.d	1/1/2010	20/1/2010	1/1/2010	20/1/2010						
1493	Concreting (decking)	20.d	1/1/2010	20/1/2010	1/1/2010	20/1/2010						
1494	Formwork and rebar fixing (wall stem)	3.d	1/1/2010	3/1/2010	1/1/2010	3/1/2010						
1495	Concreting (wall stem)	3.d	1/1/2010	3/1/2010	1/1/2010	3/1/2010						
1496	Stripping off formwork (decking)	3.d	1/1/2010	3/1/2010	1/1/2010	3/1/2010						
1497	Stripping off formwork (decking)	3.d	1/1/2010	3/1/2010	1/1/2010	3/1/2010						
1498	Formwork and rebar fixing (base slab)	14.d	1/1/2010	14/1/2010	1/1/2010	14/1/2010						
1499	Formwork and rebar fixing (base slab)	3.d	1/1/2010	3/1/2010	1/1/2010	3/1/2010						
1500	Concreting	3.d	1/1/2010	3/1/2010	1/1/2010	3/1/2010						
1501	Stripping off formwork	3.d	1/1/2010	3/1/2010	1/1/2010	3/1/2010						
1502	Retaining Wall (ch 635-655 LHS) TR4	57.d	6/1/2010	6/1/2010	6/1/2010	6/1/2010						
1503	Bulk excavation	20.d	6/1/2010	26/1/2010	6/1/2010	26/1/2010						
1504	Formwork	5.d	26/1/2010	31/1/2010	26/1/2010	31/1/2010						
1505	Formwork and rebar fixing (base slab)	12.d	4/1/2010	15/1/2010	4/1/2010	15/1/2010						
1506	Concreting (base slab)	3.d	16/1/2010	18/1/2010	16/1/2010	18/1/2010						
1507	Stripping off formwork (wall stem)	10.d	1/1/2010	11/1/2010	1/1/2010	11/1/2010						
1508	Formwork and rebar fixing (wall stem)	2.d	1/1/2010	3/1/2010	1/1/2010	3/1/2010						
1509	Concreting (wall stem)	2.d	1/1/2010	3/1/2010	1/1/2010	3/1/2010						
1510	Stripping off formwork (wall stem)	3.d	2/1/2010	5/1/2010	2/1/2010	5/1/2010						
1511	Retaining Wall (ch 635-655 RHS) TR4	57.d	2/1/2010	2/1/2010	2/1/2010	2/1/2010						
1512	Bulk excavation	20.d	2/1/2010	22/1/2010	2/1/2010	22/1/2010						
1513	Formwork	5.d	11/1/2010	15/1/2010	11/1/2010	15/1/2010						
1514	Formwork and rebar fixing (base slab)	12.d	16/1/2010	27/1/2010	16/1/2010	27/1/2010						
1515	Concreting (base slab)	3.d	28/1/2010	30/1/2010	28/1/2010	30/1/2010						
1516	Stripping off formwork (wall stem)	2.d	3/1/2010	5/1/2010	3/1/2010	5/1/2010						
1517	Formwork and rebar fixing (wall stem)	10.d	6/1/2010	15/1/2010	6/1/2010	15/1/2010						
1518	Concreting (wall stem)	3.d	16/1/2010	18/1/2010	16/1/2010	18/1/2010						
1519	Stripping off formwork (wall stem)	3.d	19/1/2010	21/1/2010	19/1/2010	21/1/2010						
1520	Retaining Wall (ch 662-666 LHS) TR3	87.d	1/1/2010	1/1/2010	1/1/2010	1/1/2010						
1521	Bulk excavation	50.d	1/1/2010	20/1/2010	1/1/2010	20/1/2010						
1522	Formwork	12.d	21/1/2010	2/1/2010	21/1/2010	2/1/2010						
1523	Formwork and rebar fixing (base slab)	3.d	2/1/2010	4/1/2010	2/1/2010	4/1/2010						
1524	Concreting (base slab)	2.d	10/1/2010	11/1/2010	10/1/2010	11/1/2010						
1525	Stripping off formwork (wall stem)	10.d	13/1/2010	23/1/2010	13/1/2010	23/1/2010						
1526	Formwork and rebar fixing (wall stem)	3.d	23/1/2010	26/1/2010	23/1/2010	26/1/2010						
1527	Concreting (wall stem)	3.d	23/1/2010	26/1/2010	23/1/2010	26/1/2010						
1528	Stripping off formwork (wall stem)	67.d	1/1/2010	28/1/2010	1/1/2010	28/1/2010						
1529	Retaining Wall (ch 555-565 RHS) TR5	50.d	1/1/2010	20/1/2010	1/1/2010	20/1/2010						
1530	Bulk excavation	5.d	21/1/2010	25/1/2010	21/1/2010	25/1/2010						
1531	Formwork	13.d	26/1/2010	8/1/2010	26/1/2010	8/1/2010						
1532	Formwork and rebar fixing (base slab)	5.d	7/1/2010	11/1/2010	7/1/2010	11/1/2010						
1533	Concreting (base slab)	2.d	10/1/2010	11/1/2010	10/1/2010	11/1/2010						
1534	Stripping off formwork (wall stem)	10.d	13/1/2010	23/1/2010	13/1/2010	23/1/2010						
1535	Formwork and rebar fixing (wall stem)	2.d	23/1/2010	25/1/2010	23/1/2010	25/1/2010						
1536	Concreting (wall stem)	2.d	23/1/2010	25/1/2010	23/1/2010	25/1/2010						
1537	Stripping off formwork (wall stem)	3.d	24/1/2010	26/1/2010	24/1/2010	26/1/2010						
1538	Box Culvert TR02 (ch 580)	38.d	16/1/2010	24/1/2010	16/1/2010	24/1/2010						
1539	Bulk excavation	10.d	16/1/2010	25/1/2010	16/1/2010	25/1/2010						
1540	Formwork	3.d	26/1/2010	28/1/2010	26/1/2010	28/1/2010						
1541	Formwork and rebar fixing (base slab)	5.d	29/1/2010	3/1/2010	29/1/2010	3/1/2010						
1542	Concreting (base slab)	2.d	4/1/2010	5/1/2010	4/1/2010	5/1/2010						
1543	Stripping off formwork (base slab)	2.d	6/1/2010	7/1/2010	6/1/2010	7/1/2010						
1544	Formwork and rebar fixing (wall stem) and roof slab)	12.d	8/1/2010	19/1/2010	8/1/2010	19/1/2010						
1545	Concreting (wall stem and roof slab)	2.d	20/1/2010	21/1/2010	20/1/2010	21/1/2010						
1546	Stripping off formwork	3.d	22/1/2010	24/1/2010	22/1/2010	24/1/2010						
1547	Retaining Wall (ch 662-618 LHS) TR3	57.d	2/1/2010	2/1/2010	2/1/2010	2/1/2010						
1548	Bulk excavation	20.d	2/1/2010	22/1/2010	2/1/2010	22/1/2010						
1549	Formwork	5.d	23/1/2010	28/1/2010	23/1/2010	28/1/2010						
1550	Formwork and rebar fixing (base slab)	12.d	27/1/2010	8/1/2010	27/1/2010	8/1/2010						

Task Progress (Solid line) **Critical Task Progress** (Dashed line) **Rolling Up Progress** (Dotted line) **Rolling Up Critical Task** (Dotted line) **External Tasks** (Dotted line)

Task **Task Progress** **Critical Task** **Rolling Up Progress** **Rolling Up Critical Task** **External Tasks**

Project: Revised M. Plot (Rev.08) **Delta Date:** Aug 2009 **Consultant:** AECOM

Chiu Hing Construction & Transportation Co., Ltd

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River Improvement Works in Upper Lam Tsuen River, She Shan River and Upper Tai Po River Revised Master Programme (Rev. 08)

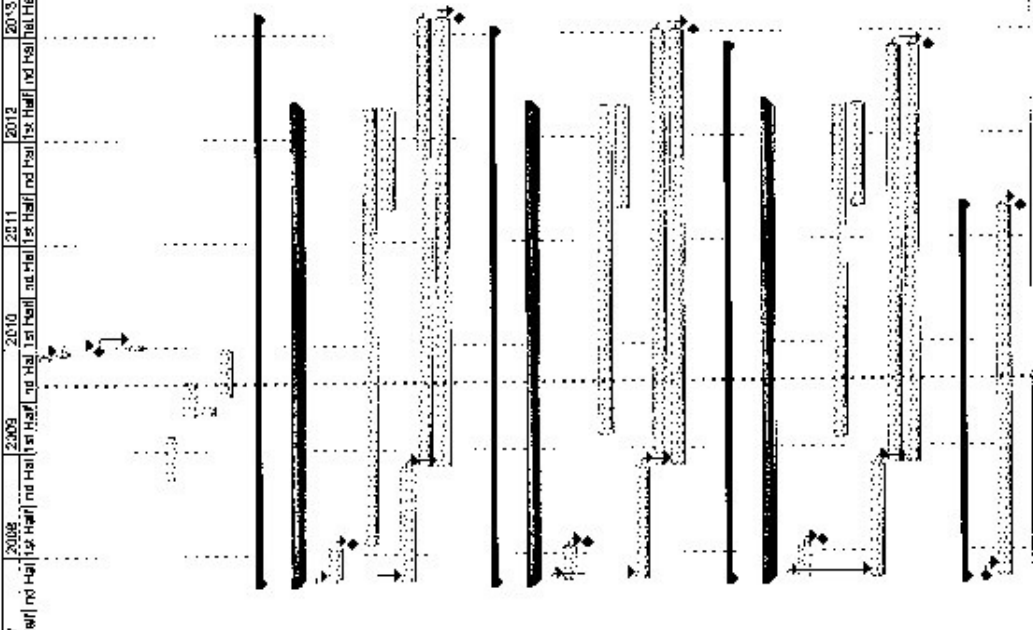
Contract No. DC/2007/06

ID	Task Name	Duration	Early Start	Early Finish	Start	Finish	2007	2008	2009	2010	2011	2012	2013
1551	Concrete (base slab)	3 d	5/12/2009	11/12/2009	5/12/2009	11/12/2009							
1552	Strapping off formwork (wall stem)	2 d	12/12/2009	13/12/2009	12/12/2009	13/12/2009							
1553	Formwork and rebar fixing (wall stem)	15 d	14/12/2009	29/12/2009	14/12/2009	29/12/2009							
1554	Concrete (wall stem)	2 d	24/12/2009	26/12/2009	24/12/2009	26/12/2009							
1555	Strapping off formwork (wall stem)	3 d	26/12/2009	29/12/2009	26/12/2009	29/12/2009							
1556	Formwork and rebar fixing (wall stem)	6 d	29/12/2009	4/1/2010	29/12/2009	4/1/2010							
1557	Bulk excavation	25 d	2/1/2010	26/1/2010	2/1/2010	26/1/2010							
1558	Formwork	5 d	27/1/2010	31/1/2010	27/1/2010	31/1/2010							
1559	Formwork and rebar fixing (base slab)	12 d	2/2/2010	14/2/2010	2/2/2010	14/2/2010							
1560	Concrete (base slab)	3 d	14/2/2010	17/2/2010	14/2/2010	17/2/2010							
1561	Strapping off formwork (wall stem)	2 d	17/2/2010	19/2/2010	17/2/2010	19/2/2010							
1562	Formwork and rebar fixing (wall stem)	10 d	19/2/2010	29/2/2010	19/2/2010	29/2/2010							
1563	Concrete (wall stem)	2 d	29/2/2010	31/2/2010	29/2/2010	31/2/2010							
1564	Strapping off formwork (wall stem)	3 d	3/3/2010	6/3/2010	3/3/2010	6/3/2010							
1565	Pre-cast and Standpipe	465 d	23/10/2008	31/11/2010	23/10/2008	31/11/2010							
1566	PS41 (ch 80 RHS)	31 d	23/10/2008	22/11/2008	23/10/2008	22/11/2008							
1567	PS42 (ch 140 RHS)	31 d	23/10/2008	23/10/2008	23/10/2008	23/10/2008							
1568	PS43 (ch 220 RHS)	9 d	23/11/2008	29/11/2008	23/11/2008	29/11/2008							
1569	PS44 (ch 275 RHS)	30 d	2/12/2008	31/12/2008	2/12/2008	31/12/2008							
1570	PS45 (ch 340 RHS)	30 d	2/12/2008	31/12/2008	2/12/2008	31/12/2008							
1571	PS46 (ch 530 RHS)	30 d	1/12/2008	30/12/2008	1/12/2008	30/12/2008							
1572	PS47 (ch 580 RHS)	30 d	1/12/2008	30/12/2008	1/12/2008	30/12/2008							
1573	Ground settlement marker	435 d	18/10/2008	13/11/2010	18/10/2008	13/11/2010							
1574	GS41 (ch 80 RHS)	31 d	18/10/2008	17/11/2008	18/10/2008	17/11/2008							
1575	GS42 (ch 140 RHS)	1 d	18/10/2008	18/10/2008	18/10/2008	18/10/2008							
1576	GS43 (ch 220 RHS)	1 d	25/10/2008	25/10/2008	25/10/2008	25/10/2008							
1577	GS44 (ch 275 RHS)	12 d	2/11/2008	13/11/2008	2/11/2008	13/11/2008							
1578	GS45 (ch 340 RHS)	12 d	1/12/2008	13/12/2008	1/12/2008	13/12/2008							
1579	GS46 (ch 530 RHS)	12 d	1/12/2008	12/12/2008	1/12/2008	12/12/2008							
1580	GS47 (ch 580 RHS)	12 d	1/12/2008	12/12/2008	1/12/2008	12/12/2008							
1581	Verification Order	915 d	23/10/2008	31/12/2010	23/10/2008	31/12/2010							
1582	VO 4 - Access for house 498	82 d	24/07/2008	18/09/2008	24/07/2008	18/09/2008							
1583	VO 9 - Tubular railing on existing bridges	24 d	20/07/2008	12/08/2008	20/07/2008	12/08/2008							
1584	VO 11 - Revised Detail of Protect Signboard in Upper Tai Po River	10 d	20/07/2008	29/07/2008	20/07/2008	29/07/2008							
1585	VO 21 - Sewerage Diversion at Maintenance Access D	53 d	10/04/2010	1/06/2010	10/04/2010	1/06/2010							
1586	VO 33 - Box Culvert TR33	76 d	2/11/2009	1/03/2010	2/11/2009	1/03/2010							
1587	VO 34 - Modifications of Boulder Trap and Retaining Walls at Maintenance Access D	438 d	2/11/2009	1/02/2011	2/11/2009	1/02/2011							
1588	VO 62 - Modifications of Footbridge TR32 in Upper Tai Po River	368 d	31/12/2009	31/12/2010	31/12/2009	31/12/2010							
1589	VO 73 - Improvement to the Formation of Creakin Walls at Ch. 40 to Ch. 265	47 d	7/02/2009	3/03/2009	7/02/2009	3/03/2009							
1590	VO 74 - Gabion in front of Boulder Trap	21 d	1/12/2009	1/12/2009	1/12/2009	1/12/2009							
1591	VO 86 - Welding of addition steel pipe on existing handrail	3 d	6/5/2009	6/5/2009	6/5/2009	6/5/2009							
1592	VO 89 - Protective flood measure	7 d	12/5/2009	12/5/2009	12/5/2009	12/5/2009							
1593	VO 90 - Partial Demolition and Reinstatement Works of House 43C of She Po Tsai Village	25 d	16/2/2009	10/3/2009	16/2/2009	10/3/2009							
1594	VO 101 - Safety measure at Boulder trap	13 d	6/8/2009	1/8/2009	6/8/2009	1/8/2009							
1595	VO 102 - Provision of Temporary Vehicular Gate at Maintenance Access D	6 d	9/7/2009	14/7/2009	9/7/2009	14/7/2009							
1596	VO 110 - Modification of Footbridge TR33 in Upper Tai Po River	368 d	31/12/2009	31/12/2010	31/12/2009	31/12/2010							
1597	VO 111 - Provision of Chain Link Fence and Modification of Railing	13 d	4/7/2009	18/7/2009	4/7/2009	18/7/2009							
1598	VO 113 - Further Enhancement on the Flood Preventive Measures at Akurikhat Ch.230	10 d	13/7/2009	23/7/2009	13/7/2009	23/7/2009							
1599	VO 121 - Make Good the Damaged Bridge Deck and Re-provision of L-andral for Existing P	18 d	12/8/2009	29/8/2009	12/8/2009	29/8/2009							
1600	Tree Killing	14 d	24/02/2009	6/03/2009	24/02/2009	6/03/2009							
1601	B248, B150, B151, B150, B151 & B152	1 d	24/2/2009	24/2/2009	24/2/2009	24/2/2009							
1602	B252	3 d	4/4/2009	6/4/2009	4/4/2009	6/4/2009							
1603	Site Instruction	5 d	20/7/2008	24/7/2008	20/7/2008	24/7/2008							
1604	Protection of road slope at TR3 after typhoon 2009-Jun-9	5 d	20/7/2008	24/7/2008	20/7/2008	24/7/2008							
1605													
1606	Section 4 - Box Culvert at Ping Loog	837 d	28/09/2007	1/11/2010	28/09/2007	1/11/2010							
1607	Section 4 - Box Culvert (Area A)	819 d	28/09/2007	2/11/2010	28/09/2007	2/11/2010							
1608	Commissioning of Walls	1 d	28/9/2007	28/9/2007	28/9/2007	28/9/2007							
1609	Preparation to Position of the Site (Area A)	0 d	28/9/2007	28/9/2007	28/9/2007	28/9/2007							
1610	Material Submission	90 d	28/9/2007	27/12/2007	28/9/2007	27/12/2007							
1611	Material Submission Approval	0 d	10/12/2008	10/12/2008	10/12/2008	10/12/2008							
1612													

Drainage Services Department

Contract No. DC/2007/06 River Improvement Works in Upper Lam Tsuen River, She Shan River and Upper Tai Po River Revised Master Programme (Rev. 08)

ID	Task Name	Duration	Early Start	Early Finish	Slack	Finish	2007	2008	2009	2010	2011	2012	2013
							1st Half	2nd Half	1st Half	2nd Half	1st Half	2nd Half	1st Half
1678	Road Reimbursement (Stage 2)	18 d	16/11/2009	31/12/2009	18/11/2009	31/12/2009							
1677	Road Paving (Remedial (Stage 1))	18 d	4/11/2009	21/12/2009	4/11/2009	21/12/2009							
1676	Completion of Work at Section 4	D.d.	2/11/2009	2/11/2009	2/11/2009	2/11/2009							
1680	CULP spare duct installation	21 d	22/12/2008	11/1/2010	22/12/2008	11/1/2010							
1681	Variation Order No.23 Construction of 300mm dia. Ductile Iron Pipe underneath the Proposed Piling	190 d	28/9/2008	22/2/2010	28/9/2008	22/2/2010							
1682	Variation Order No. 34 Watermain Diversion Works at Ping Long	125 d	30/4/2009	18/2/2010	30/4/2009	18/2/2010							
1683	Variation Order No. 85 Clearing of Silt/soil Course between Piling Long Box Culvert and Upper Ls	31 d	7/5/2009	6/6/2009	7/5/2009	6/6/2009							
1684	Variation Order No. 115 Manual Vehicular Traffic Signal for TPA at Ping Long	105 d	8/7/2009	2/12/2009	8/7/2009	2/12/2009							
1687	Section 5 - Landscape Establishment Works (Portion B, C, D, E, F, G, H & I)	1360 d?	23/9/2007	27/2/2013	23/9/2007	27/2/2013							
1688	Section 5 Landscape Works	1695 d	28/9/2007	18/4/2012	28/9/2007	18/4/2012							
1689	Commencement of Works	1 d	28/9/2007	28/9/2007	28/9/2007	28/9/2007							
1691	Material Submission	120 d	28/9/2007	26/1/2008	28/9/2007	26/1/2008							
1692	Submission Approval	D.d.	8/2/2008	8/2/2008	8/2/2008	8/2/2008							
1693	Landscape Handworks	1540 d?	31/1/2008	18/4/2012	31/1/2008	18/4/2012							
1694	Landscape Softworks	365 d	20/4/2011	18/4/2012	20/4/2011	18/4/2012							
1695	Submission of Tree Survey	400 d	29/5/2007	1/11/2008	29/5/2007	1/11/2008							
1696	Preservation and Protection of Preserved Trees	1678 d	2/11/2008	27/2/2013	2/11/2008	27/2/2013							
1697	Landscape Establishment Works	1576 d	2/11/2008	27/2/2013	2/11/2008	27/2/2013							
1698	Completion of Works	D.d.	27/2/2013	27/2/2013	27/2/2013	27/2/2013							
1699	Section 6 - Landscape Establishment Works (Portion J, K & M)	1830 d?	28/9/2007	8/1/2013	28/9/2007	8/1/2013							
1701	Section 6 Landscape Works	1663 d	28/9/2007	18/4/2012	28/9/2007	18/4/2012							
1702	Commencement of Works	1 d	28/9/2007	28/9/2007	28/9/2007	28/9/2007							
1703	Material Submission	120 d	28/9/2007	26/1/2008	28/9/2007	26/1/2008							
1704	Submission Approval	D.d.	8/2/2008	8/2/2008	8/2/2008	8/2/2008							
1705	Landscape Handworks	1191 d?	14/2/2009	19/4/2012	14/2/2009	19/4/2012							
1706	Landscape Softworks	365 d	21/4/2011	18/4/2012	21/4/2011	18/4/2012							
1707	Submission of Tree Survey	400 d	28/9/2007	1/11/2008	28/9/2007	1/11/2008							
1708	Preservation and Protection of Preserved Trees	1528 d	2/11/2008	8/1/2013	2/11/2008	8/1/2013							
1709	Landscape Establishment Works	1528 d	2/11/2008	8/1/2013	2/11/2008	8/1/2013							
1710	Completion of Works	D.d.	8/1/2013	8/1/2013	8/1/2013	8/1/2013							
1711	Section 7 - Landscape Establishment Works (Portion L, N & P)	1868 d?	28/9/2007	7/1/2012	28/9/2007	7/1/2012							
1712	Section 7 Landscape Works	1695 d	28/9/2007	18/4/2012	28/9/2007	18/4/2012							
1713	Commencement of Works	1 d	28/9/2007	28/9/2007	28/9/2007	28/9/2007							
1714	Material Submission	120 d	28/9/2007	26/1/2008	28/9/2007	26/1/2008							
1715	Submission Approval	D.d.	8/2/2008	8/2/2008	8/2/2008	8/2/2008							
1716	Landscape Handworks	1176 d?	30/1/2009	18/4/2012	30/1/2009	18/4/2012							
1717	Landscape Softworks	365 d	21/4/2011	18/4/2012	21/4/2011	18/4/2012							
1718	Submission of Tree Survey	400 d	28/9/2007	1/11/2008	28/9/2007	1/11/2008							
1719	Preservation and Protection of Preserved Trees	1467 d	2/11/2008	7/1/2012	2/11/2008	7/1/2012							
1720	Landscape Establishment Works	1467 d	2/11/2008	7/1/2012	2/11/2008	7/1/2012							
1721	Completion of Works	D.d.	7/1/2012	7/1/2012	7/1/2012	7/1/2012							
1722	Section 8 - All Remaining Work at all Portions	1900 d	28/9/2007	18/4/2011	28/9/2007	18/4/2011							
1723	Commencement of Works	D.d.	28/9/2007	28/9/2007	28/9/2007	28/9/2007							
1724	All remaining works at all Areas	1900 d	28/9/2007	18/4/2011	28/9/2007	18/4/2011							
1725	Completion of Works	D.d.	18/4/2011	18/4/2011	18/4/2011	18/4/2011							



Project: Revised M. Prog (Rev.08)
Date: Aug. 2009
Consultant: AECOM

Task Progress: Task
 Critical Task
 External Task

Roll Up Progress: Roll Up Progress
 Roll Up Critical Task
 Roll Up Milestone

Roll Up Milestone: Roll Up Milestone