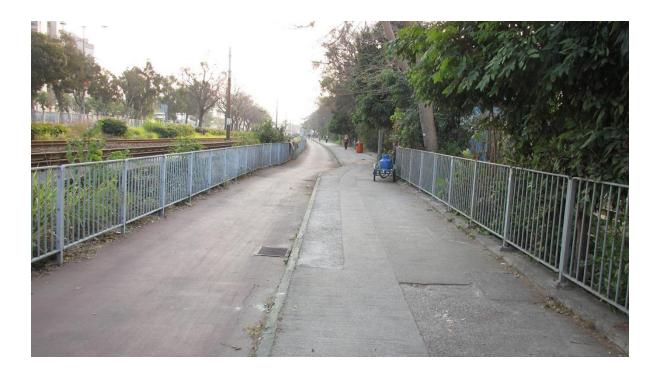


Cycle Tracks from Tuen Mun to Sheung Shui-Stage 1

# Environmental Monitoring and Audit Quarterly EM&A Summary Report No. 9 for May 2016 to July 2016

(Designated Project Works Area)







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REVISION SCHEDULE									
Rev	Date	Details	Prepared by	Reviewed by	Approved by				
0	23 Sep 2016	Quarterly EM&A Report No. 9 - May 2016 to July 2016	Candy Chung	YW Fung	YT Tang				
		Signature	Charge WT	Ye	MALIN				

REVISION RECORD							
Rev	Date	Details	Prepared by	Reviewed by	Approved by		
0	23 Sep 2016	Quarterly EM&A Report No. 9 – May 2016 to July 2016	Candy Chung	YW Fung	YT Tang		

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#### **ABBREVIATION**

- CEDD Civil Engineering and Development Department
- C&D Construction & Demolition
- CNP Construction Noise Permit
- EM&A Environmental Monitoring and Audit
- EMP Environmental Management Plan
- EPD Environmental Protection Department
- ET Environmental Team
- IEC Independent Environmental Checker
- NSR Noise Sensitive Receiver
- NT New Territories
- PME Powered Mechanical Equipment
- RE Resident Engineer
- TTS# Trip-ticket System





#### EXECUTIVE SUMMARY

The Environmental Team (ET) of AECOM Consulting Services Limited (former URS Hong Kong Ltd) is appointed by Civil Engineering and Development Department to undertake the Environmental Monitoring and Audit (EM&A) programme for the Contract No. YL/2013/01 entitled "Cycle Tracks from Tuen Mun to Sheung Shui" (the Project). The Project is regulated under the Environmental Permit no. EP-450/2013 (EP).

This Quarterly EM&A report contains the results and findings of site inspection activities and EM&A works carried out by the Works Contractor as required in the contract from May 2016 to July 2016.

#### **Construction Progress**

The construction works of the Project was commenced in 28 April 2014. The major construction works in this quarter were listed below:

Reporting Month	Construction Works
May 2016	Installation of bicycle parapet, construction of cycle track, drainage, footpath and resting station
June 2016	Installation of bicycle parapet, construction of cycle track, drainage, footpath and resting station
July 2016	Installation of bicycle parapet, construction of cycle track, drainage, footpath and resting station

#### Environmental Issues

Several environmental issues have been identified by the ET during reporting period as listed below:

- Exposed stockpile was observed dry and without proper cover on site
- General wastes were observed in the U-channel
- Oil stains were observed on ground
- Chemical containers and oil drum without drip tray and chemical label were observed
- Accumulated rubbish was observed on site
- Stagnant water was observed accumulated on site
- Construction materials were observed too closed to the trees





#### Environmental Monitoring and Audit Progress

According to the "Construction of Cycle tracks and the Associated Supporting Facilities from Sha Po Tsuen to Shek Sheung River Stage 1 Environmental Review EM&A Manual (2013) (EM&A Manual 2013), no air, water and noise monitoring is required.

As no noise monitoring was specified from the EM&A Manual 2013, setting up of Action / Limit Levels is not required.

According to the weekly site inspections carried out in this quarter, it indicated that the Contractor has implemented mitigation measures to address the environmental problems. The measures taken by the Contractor were considered as adequate and effective to minimize negative impact to the environment. On-going investigations will be carried out to observe performance and effectiveness of those measures.

#### Environmental Complaints, Notices, Summons and Remedial Action

No complaints, summons and notifications were received in this quarter.





#### 1. BASIC PROJECT INFORMATION

#### 1.1. Introduction

- 1.1.1. AECOM Consulting Services Limited (former URS Hong Kong Ltd) has been commissioned by CEDD as ET for the construction works of 'Contract No. YL/2013/01 Cycle Track from Tuen Mun to Sheung Shui Stage 1" (the Project). The Project commenced in November 2013 and is scheduled for completion by the end of 2016. The construction works of the Project was commenced in 28 April 2014.
- 1.1.2. The site layout plans and the construction programme are shown in **Appendix 1** and **Appendix 2** respectively.
- 1.1.3. The Project comprises the following primary works elements:
  - Construction of a new cycle track (with footpath) section from near Yuen Long Sha Po Tsuen connecting to the end of the existing cycle track, along Castle Peak Road – Tam Mi Section and along Pok Wai South Road (namely "Section 1");
  - Construction of a new cycle track (with footpath) section from near Ho Sheung Heung along Sheung Yue River and Shek Sheung River connecting to the existing cycle track in Sheung Shui ("namely "Section 1b");
  - Construction of the associated support facilities including two Resting Stations
     R5 and R9 integrated with Information Kiosk;
  - The associated streetscape, landscape, utilities diversions, traffic aids installation, street lighting, water, sewerage and drainage works; and
  - Provision of environmental mitigation measures.
- 1.1.4. The major construction works in this quarter were listed below:

Reporting Month	Construction Works
May 2016	Installation of bicycle parapet, construction of cycle track, drainage, footpath and resting station
June 2016	Installation of bicycle parapet, construction of cycle track, drainage, footpath and resting station
July 2016	Installation of bicycle parapet, construction of cycle track, drainage, footpath and resting station

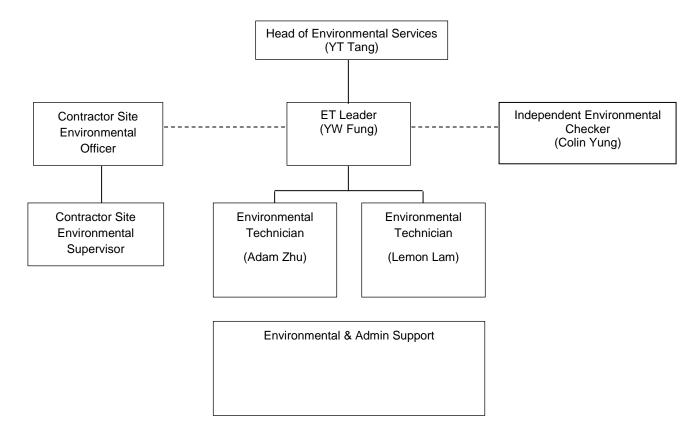




- 1.1.5. The Project is regulated under the Environmental Permit no. EP-450/2013 (EP). According to the EP, the monitoring and audit programme shall be implemented in accordance with the procedures and requirements as set out in the EIA Report and EM&A Manual (Register No. AEIAR–133/2009) & the "Construction of Cycle tracks and the Associated Supporting Facilities from Sha Po Tsuen to Shek Sheung River Stage 1 Environmental Review EM&A Manual (2013) (EM&A Manual (2013)).
- 1.1.6. This Quarterly EM&A report is prepared in accordance with Section 12.5 of the EM&A Manual (2013) to summarize the results and findings of site inspection activities and EM&A works carried out by the Works Contractor as required in the contract from May 2016 to July 2016. The report is to be submitted to the ER, the Contractor, IEC and EPD.
- 1.1.7. The contact persons and telephone numbers of key personnel for enquiries are shown in **Appendix 3**.

#### 1.2. Project Organization and Management

1.2.1. The Project Organization Chart of the ET is shown in **Figure 1**.



#### Figure 1 Organization Chart of Environmental Team





#### 2. SUMMARY OF EM&A REQUIREMENTS

#### 2.1. Environmental Requirements

#### Air Quality

2.1.1. The EM&A Manual (2013) identified that no significant impacts could arise during construction and operation of the project. No specific construction dust monitoring was recommended in the EM&A Manual (2013) given proper implementation of the dust control measures under the Air Pollution Control (Construction Dust) Regulation. General air quality control measures are recommended for implementation as good site practice.

#### <u>Noise</u>

- 2.1.2. The EM&A Manual (2013) identifies that with the use of quiet / silenced PME and noise barriers, where applicable, will result in no unacceptable construction noise. General noise control measures are recommended for implementation as good site practice. No NSR has been identified within 300m of the site working areas and no noise exceedance within the stage 1 designated project works areas were predicted based on the Environmental Review findings, therefore no noise monitoring is recommended under the EM&A Manual (2013). In this connection, setting up of Action / Limit Levels is not required.
- 2.1.3. No construction is planned during restricted hours. If construction is required during restricted hours the Contractor is required to apply for a CNP.

#### Water Quality

- 2.1.4. The EM&A Manual (2013) identifies that best practicable pollution control measures during construction should be effective to control the potential water quality impacts resulting from stormwater runoff into receiving waters. Water Discharge License has been applied by the Contractor.
- 2.1.5. According to the EM&A Manual (2013), no water quality monitoring is considered necessary within stage 1 designated project works areas based on the Environmental Review findings.

#### Waste Management

2.1.6. The EM&A Manual (2013) identifies that with proper on-site handling and storage (covered containers), reuse (of inert construction wastes) and off-site disposal (via approved waste collectors to approved waste facilities and/or disposal grounds) the generation, handling and disposal of these wastes will not give rise to any adverse environmental impacts. Control and mitigation should be implemented as general good site practices.

#### Land Contamination

2.1.7. The EM&A Manual (2013) considers that no specific EM&A requirements are necessary for Land Contamination.





#### **Ecology and Fisheries**

2.1.8. The EM&A Manual (2013) identifies that no significant overall loss of valuable ecological habitat and fishponds and it is considered that no significant negative impacts to surrounding habitats and species and aquaculture or water quality will arise from the construction and operation of the cycle track given that appropriate mitigation measures and good practices are properly implemented. No specific ecological or fisheries monitoring is required.

#### Cultural Heritage

2.1.9. The EM&A Manual (2013) identifies that no adverse impacts on cultural heritage resources would be expected from the construction or operational phase of the Project. No specific monitoring is required during the construction phase. However, care has been taken during construction stage to report any signs of possible discovery of artefacts to minimize potential impacts during the construction phase.

#### Landscape and Visual

2.1.10. Based on the EM&A Manual's recommendation, all measures undertaken during the construction stage shall be audited by the Landscape Architect as a member of the Environmental Team. The site inspections were undertaken for twice a month during this reporting period to ensure all the recommended landscape and visual mitigation measures have been effectively implemented.

#### 2.2. Environmental Site Inspections

2.2.1. Environmental site inspections are required to inspect the construction activities of the Project in order to ensure that appropriate environmental protection and pollution control mitigation measures are properly implemented. Regular site inspections should be carried out once per week during the construction phase.

#### 2.3. Environmental Mitigation Measures

- 2.3.1. Required environmental mitigation measures shall be implemented according to the approved EM&A Manual (2013) as subject to the site condition.
- 2.3.2. The environmental mitigation measures that recommended in the Implementation Schedule in the EM&A Manual (2013) are presented in **Appendix 4**.





#### 3. INSPECTION RESULTS

#### 3.1. Summary of Site Inspections

3.1.1. According to the summary of the weekly site inspections carried out in this quarter, it indicated that the environmental condition has no contrast with the EIA predictions after implementing proper environmental mitigation measures.

#### 3.2. Implementation Status of Environmental Mitigation Measures

- 3.2.1. According to the weekly site inspections carried out in this quarter, it indicated that the Contractor has implemented mitigation measures to address the environmental problems. The measures taken by the Contractor were considered as adequate and effective to minimize negative impact to the environment. On-going investigations will be carried out to observe performance and effectiveness of those measures.
- 3.2.2. Environmental mitigation measures generally implemented in this reporting period are summarized in **Table 3-1**.

Issues	Environmental Mitigation Measures
Water Quality	<ul> <li>Relocated the stockpile and dusty materials from the river</li> <li>Remove of stagnant water</li> <li>Removed or covered the stockpile and dusty materials properly</li> </ul>
Air Quality	<ul> <li>Removed or covered the exposed stockpile and dusty materials</li> <li>Sprayed water during dry weather to minimize dust condition</li> </ul>
Noise	<ul> <li>Temporary noise barriers installed at works area as needed</li> <li>Noise baffles/screens to noisy machines/site activities as necessary</li> </ul>
Waste and Chemical Management	<ul> <li>Removed the machines with chemical leakage from the site</li> <li>Removed the empty chemical containers and materials disposed at U-shaped channel</li> <li>Removed the broken branches from site</li> <li>Disposed of wastes regularly</li> </ul>
General	<ul> <li>Relocated/removed the material and stockpile from trees</li> <li>C&amp;D materials were stored in designated area properly The tree is maintained and protected properly</li> </ul>

 Table 3-1
 Environmental Mitigation Measures





#### 3.3. Status of Environmental Licensing and Permitting

3.3.1. The status of licenses and permits is summarized in **Table 3-2**.

ltem No.	Description	Application Date of Date Issue		Ref. No	Date of Expiry					
1	Environmental Permit (EP)	N.A	30 May 2013	EP-450/2013	N.A.					
2	Registration as a Chemical Waste Producer	N.A	10 Jan 2014	WPN5213-524- S3 777-01	N.A					
3	Effluent Discharge License	N.A	25 Feb 2014	W5/1I3841/1	28 Feb 2019					
4	Account for Disposal of Construction Waste	N.A.	16 Dec 2013	7018953	N.A.					
5	Construction Noise Permit	As required	N.A.	N.A.	N.A.					

#### **Table 3-2** Summary of Environmental Licensing and Permit Status

- 3.3.2. Non-compliance with EP conditions and other requirements associated with the construction of this Contract was not identified in this reporting period.
- 3.3.3. No environmental complaint and environmental summons were received in this reporting period.



#### 3.4. Advice on the Solid and Liquid Waste Management Status

- 3.4.1. The quantities of waste for reuse or disposal in this reporting period are summarized in **Table 3-3**.
- 3.4.2. It is recommended to maximize the reuse or recycle of the C&D material. The Contractor transported the remaining inert C&D material to public fill for disposal and disposed of non-inert wastes such as general refuses and materials segregated to North East New Territory (NENT) Landfill after sorting out the recyclables.

Table 3-3	Summary	of Quantities of Waste for Reuse or Disposal in this Quarter
	Carrier	

	Type of Waste	Quantity	Disposal Location	Cumulative Quantity
	Total Quantity Generated (in '000m <sup>3</sup> )	0	TM Area 38	4.617
Inert	Hard Rock and Large Broken Concrete (in '000m <sup>3</sup> )	0	TM Area 38	0
C&D Materials	Reused in the Contract (in '000m <sup>3</sup> )	0	N.A.	0
	Reused in other Projects (in '000m <sup>3</sup> )	0	N.A.	0.62
	Disposed as Public Fill (in '000m <sup>3</sup> )	0	TM Area 38	3.997
	Metals (in '000kg)	0.03	Recycling Facilities	0.232
	Paper/cardboard packing (in '000kg)	0.03	Recycling Facilities	0.252
C&D	Plastic (in '000kg)	0.03	Recycling Facilities	0.252
Waste	Chemical Waste (in '000kg)	0	Chemical Waste Treatment Centre (CWTC)	0.02
	Others, e.g. general refuse (in '000m <sup>3</sup> )	0.23	NENT / public waste collection facilities	1.208

- 3.4.3. The Contractor should provide sufficient waste storage facilities on site such as rubbish bins and fenced-off waste storage areas. Waste should be regularly removed from around the site.
- 3.4.4. The Contractor was reminded to increase the frequency of inspection to pump accumulated water from stagnant water ponds when necessary.





#### 4. COMMENTS, CONCLUSIONS AND RECOMMENDATIONS

- 4.1.1. In this quarter, major site activities were installation of bicycle parapet, construction of cycle track, drainage, footpath and resting station
- 4.1.2. No environmental complaints, notification of summons and prosecutions with respect to environmental issues were received in this quarter.
- 4.1.3. According to the weekly site inspections carried out in this quarter, it indicated that the Contractor has implemented mitigation measures to address the environmental problems. The measures taken by the Contractor were considered as adequate and effective to minimize negative impact to the environment. On-going investigations will be carried out to observe performance and effectiveness of those measures.
- 4.1.4. According to the environmental site inspections performed in this quarter, the following recommendations were provided:

#### Air Quality

4.1.5. Undertake water spraying or utilisation of tarpaulins on exposed stockpile and dusty materials

#### Water Quality

4.1.6. Remove stagnant water or provide pesticide for the stagnant water

#### **Chemical and Waste Management**

- 4.1.7. Remove machines with chemical leakage from the site and remove oil stains, if applicable;
- 4.1.8. Properly store and label chemical containers and oil drums, drip trays should be provided;
- 4.1.9. Remove and enclose rubbish from site regularly to avoid excessive accumulation; and
- 4.1.10. Remove accumulated general wastes in U-channel and provide channel covers

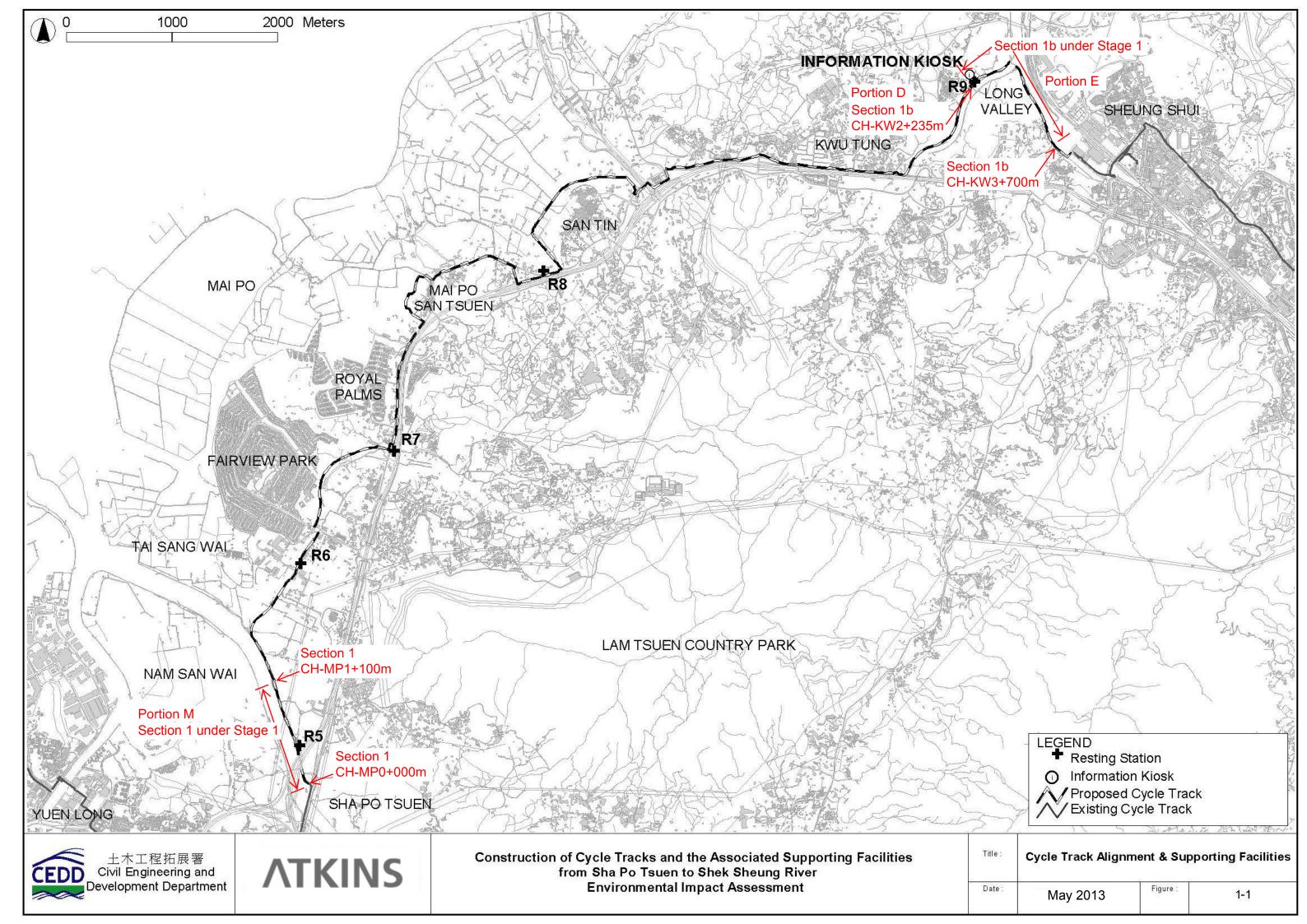
#### <u>Ecology</u>

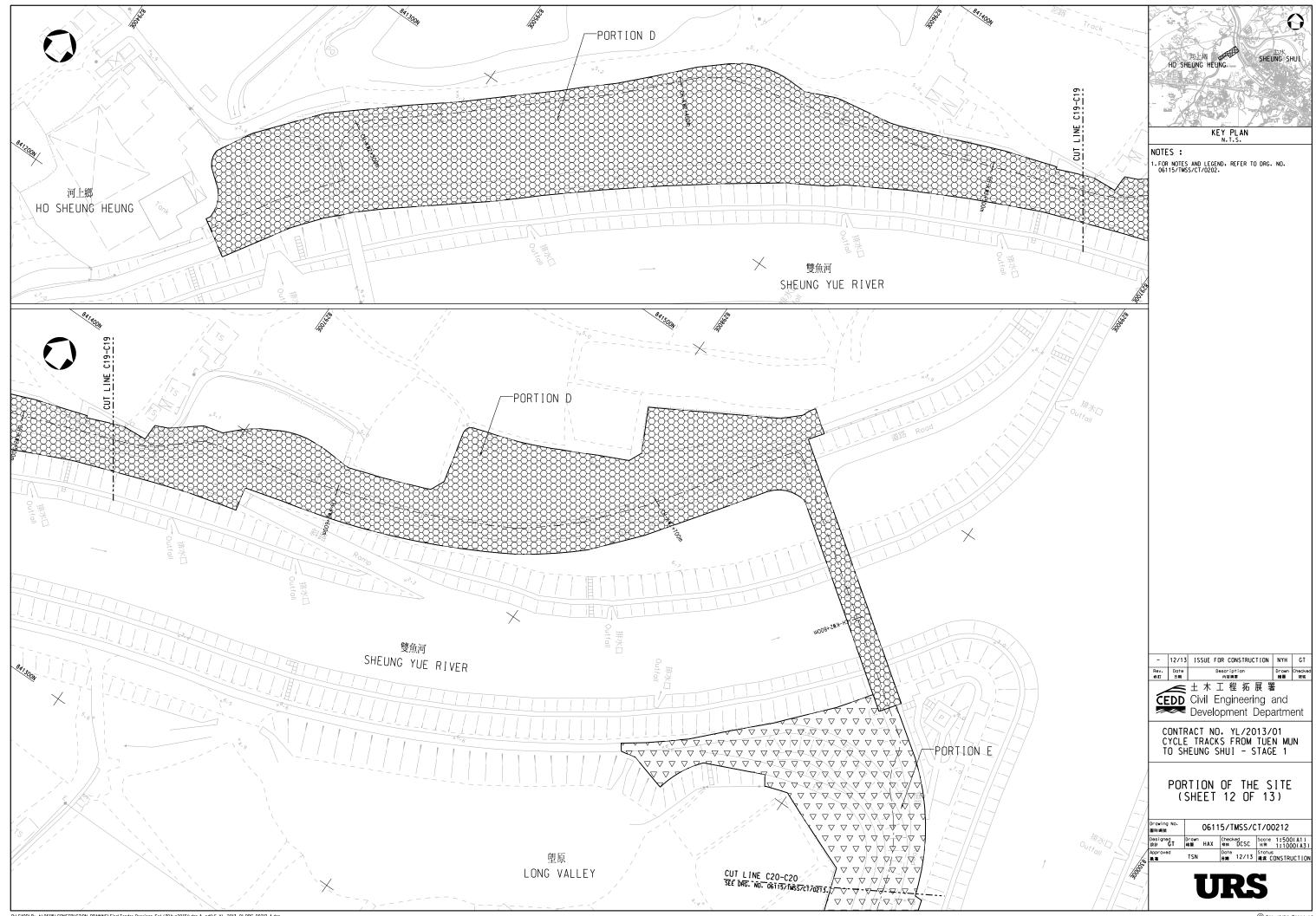
4.1.11. Do not locate construction materials near trees



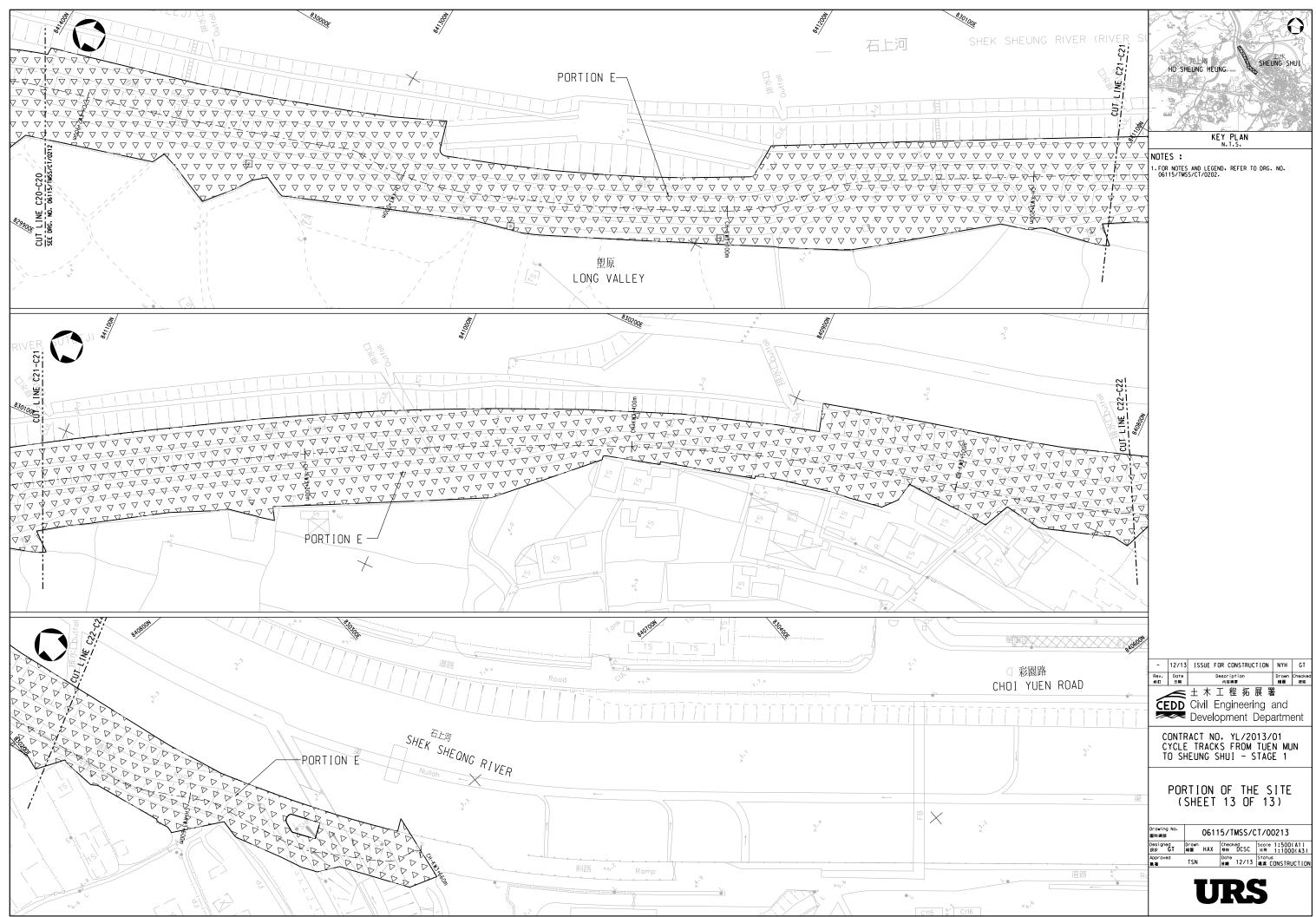


# APPENDIX 1 SITE LAYOUT PLANS



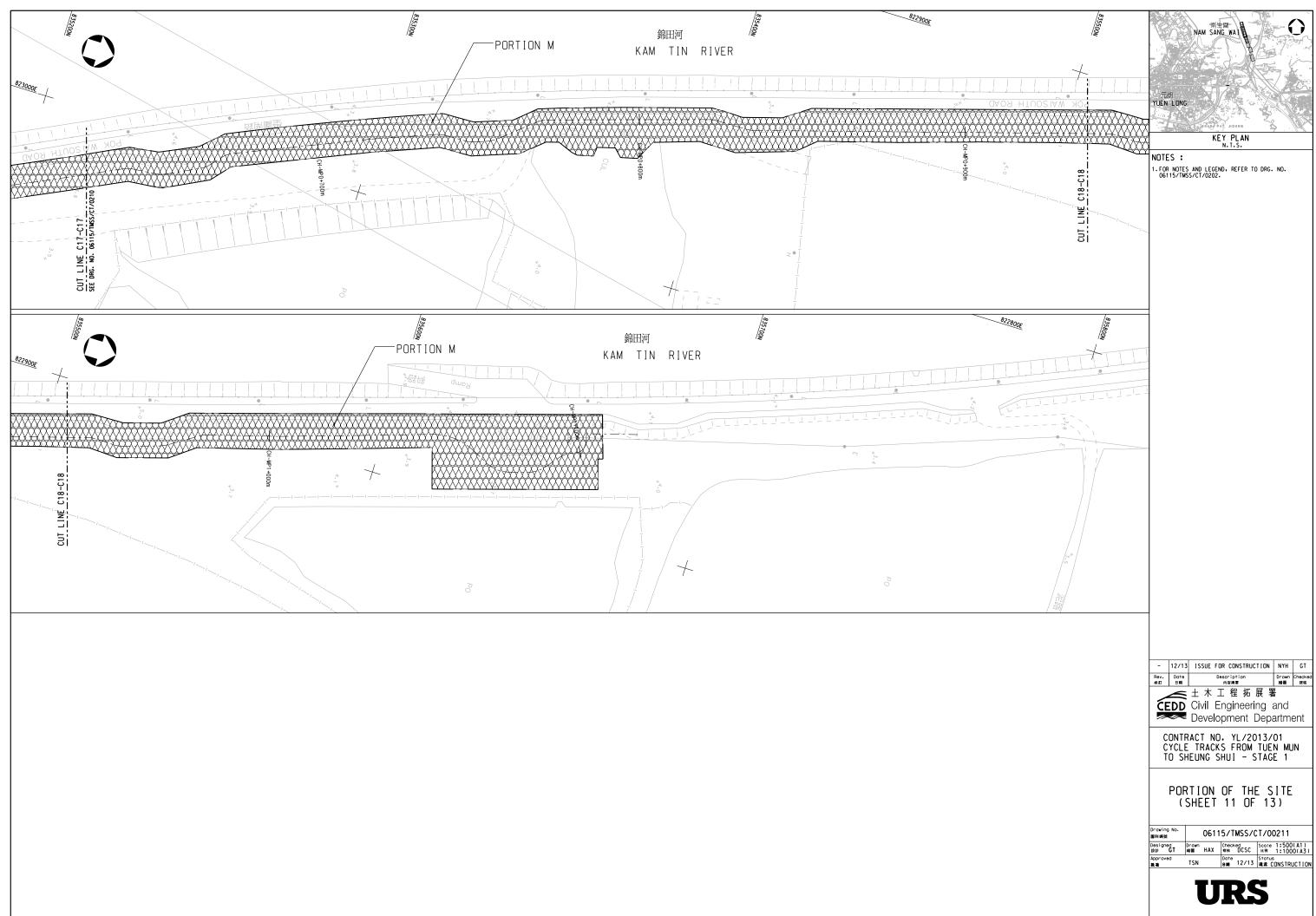


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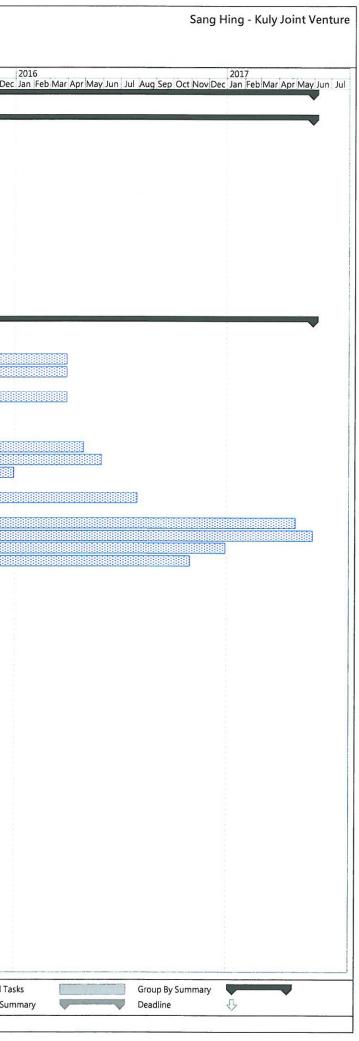


# APPENDIX 2 CONSTRUCTION PROGRAMME

#### Cycle Tracks from Tuen Mun to Sheugn Shui - Stage 1

Project Programme of the Works

110,0	et rogramme of the works				
ID	Task Name	Duration	Start	Finish Predecessors	2014 2015
1	Project Programme of the Works	1279 days	Fri 13 Nov 29	Tue 17 May 30	Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
2					
3	1. Contract Key Dates	1279 days	Fri 13 Nov 29	Tue 17 May 30	V.
4	1.2 Date for Commencement of the Works	0 days	Fri 13 Nov 29		
5	1.3 Site Possession Dates	184 days	Fri 13 Nov 29		
6	Portion A	0 days	Fri 13 Nov 29		
8	Portion B	0 days	Fri 13 Nov 29	Fri 13 Nov 29	
9	Portion C1, C3 & C4 Portion C2	0 days	Fri 13 Nov 29	Fri 13 Nov 29	
10	Portion D	0 days	Sun 14 Mar 2	Sun 14 Mar 2 4FS+94 days	
11	Portion E	0 days 0 days	Fri 13 Nov 29 Fri 13 Nov 29	Fri 13 Nov 29 Fri 13 Nov 29	
12	Portion G1	0 days	Fri 13 Nov 29	Fri 13 Nov 29	
13	Portion G2	0 days	Sat 14 May 31	Sat 14 May 31 4FS+184 days	
14	Portion H	0 days	Wed 14 Apr 30	Wed 14 Apr 30 4FS+153 days	
15	Poriton I	0 days	Wed 14 Apr 30	Wed 14 Apr 30 4FS+153 days	
16	Portion J	0 days	Fri 13 Nov 29	Fri 13 Nov 29	
17	Portion K	0 days	Wed 14 Apr 30	Wed 14 Apr 30 4FS+153 days	
18	Portion M	0 days	Fri 13 Nov 29	Fri 13 Nov 29	
19	1.4 Section Completion of the Works	1279 days	Fri 13 Nov 29	Tue 17 May 30	
20	Section W1A - Portions C1, C3 & C4	548 days	Fri 13 Nov 29	Sat 15 May 30	
21	Section W1B - Portion C2	274 days	Fri 13 Nov 29	Fri 14 Aug 29	
22	Section W2 - Portions D & E	854 days	Fri 13 Nov 29	Thu 16 Mar 31	
23 24	Section W3 - Portions G1 & G2	854 days	Fri 13 Nov 29	Thu 16 Mar 31	
24	Section W4 - Portions H, I & K Section W5 - Portion J	701 days	Fri 13 Nov 29	Fri 15 Oct 30	
26	Section W7 - Portion M	854 days	Fri 13 Nov 29	Thu 16 Mar 31	
27	Section W8A - Landscape Softworks within Portions C1, C3 & C4	639 days 609 days	Fri 13 Nov 29 Fri 13 Nov 29	Sat 15 Aug 29 Thu 15 Jul 30	
28	Section W8B - Landscape Softworks within Portion C2	274 days	Fri 13 Nov 29	Fri 14 Aug 29	
29	Section W8C - Landscape Softworks within Portion G1 & J	883 days	Fri 13 Nov 29	Fri 16 Apr 29	
30	Section W8D - Landscape Softworks within Portion D & E	914 days	Fri 13 Nov 29	Mon 16 May 30	
31	Section W8E - Landscape Softworks within Portions I & K	762 days	Fri 13 Nov 29	Wed 15 Dec 30	
32	Section W8F - Landscape Softworks within Portion M	701 days	Fri 13 Nov 29	Fri 15 Oct 30	
33	Section W9A - Establishment Works within Portions C1, C3 & C4	975 days	Fri 13 Nov 29	Sat 16 Jul 30	
34	Section W9B - Establishment Works within Portion C2	639 days	Fri 13 Nov 29	Sat 15 Aug 29	
35	Section W9C - Establishment Works within Portions G1 & J	1249 days	Fri 13 Nov 29	Sun 17 Apr 30	
36	Section W9D - Establishment Works within Portions D & E	1279 days	Fri 13 Nov 29	Tue 17 May 30	
37	Section W9E - Establishment Works within Portion I & K	1128 days	Fri 13 Nov 29	Fri 16 Dec 30	
38	Section W9F - Establishment Works within Portion M	1067 days	Fri 13 Nov 29	Sun 16 Oct 30	
39					
40	2. Preliminary Works	120 days	Fri 13 Nov 29	Fri 14 Mar 28	
41 42	Design and approval of Hoarding & Fencing Construction of Hoarding & Fencing for Site Offices	21 days	Fri 13 Nov 29	Thu 13 Dec 19 4	
43	Set up Engineer's Office & Temp Accommondation	21 days	Fri 13 Dec 20 Fri 13 Dec 20	Thu 14 Jan 9 41 Mon 14 Feb 17 41	
44	Set up Contractor's Site Office	60 days 45 days	Sat 14 Jan 4	Mon 14 Feb 17 41 Mon 14 Feb 17 43SS+15 days	
45	Submission and construction of Project Signboard	45 days	Fri 13 Dec 20	Sun 14 Feb 2 41	
46	Initial topographic survey	120 days	Fri 13 Nov 29	Fri 14 Mar 28 4	
47	Prepare, submit & Approve ICE	30 days	Fri 13 Nov 29	Sat 13 Dec 28 4	8 8
48	Prepare, Submit Draft Safety Plan	14 days	Fri 13 Nov 29	Thu 13 Dec 12 4	
49	Review & Approve Safety Plan	35 days	Fri 13 Nov 29	Thu 14 Jan 2 4	
50	Prepare, Submit Draft Environmental Management Plan	21 days	Fri 13 Nov 29	Thu 13 Dec 19 4	
51	Review & Approve Environmental Management Plan	45 days	Fri 13 Nov 29	Sun 14 Jan 12 4	
52	Prepare, Submit & Approve Traffic Consultant	30 days	Fri 13 Nov 29	Sat 13 Dec 28 4	
53	Prepare and Submit Smart Card System	30 days	Fri 13 Nov 29	Sat 13 Dec 28 4	
54					
55	3. Section W1A of the works - Portion C1, C3 & C4	548 days	Fri 13 Nov 29	Sat 15 May 30	
56	Portion C3 - Tuen Mun Cycle Track Improvement	548 days	Fri 13 Nov 29	Sat 15 May 30	
57	Preparation work and submissions	90 days	Fri 13 Nov 29	Wed 14 Feb 26	
58	TTM design & submission and XP application	60 days	Fri 14 Oct 10	Mon 14 Dec 8 7655,57	
59	Road Works	128 days	Tue 14 Dec 9	Wed 15 Apr 15 58	
60	Installation of street furnitures / Road marking	60 days	Wed 15 Apr 1	Sat 15 May 30 59FS-15 days	
61	Portion C1 - Resting Station R14	375 days	Fri 13 Nov 29	Mon 14 Dec 8	
62 63	Preparation work and submissions	90 days	Fri 13 Nov 29	Wed 14 Feb 26	
64	Tree Survey and submission Site Clearance	21 days	Mon 14 Mar 3	Sun 14 Mar 23 86SS,62	
65	Site Clearance Tree felling	7 days	Mon 14 Mar 24	Sun 14 Mar 30 63	
66	Free telling Erection of Type 1 Hoarding (100m)	14 days	Mon 14 Mar 24	Sun 14 Apr 6 63	
67	Drainage works	45 days 45 days	Mon 14 Apr 7 Thu 14 May 22	Wed 14 May 21 65,64	
68	Cable duct laying with draw pits	and the second se	Sun 14 Jul 6	Sat 14 Jul 5 66	
69	Installation of irrigation pipe and irrigation point (3 nos.)	28 days 21 days	Sun 14 Jul 6 Sun 14 Jul 6	Sat 14 Aug 2 67 Sat 14 Jul 26 67	
70	Kerb laying	34 days	Sun 14 Jul 6 Sun 14 Aug 3	Sat 14 Jul 26 67 Fri 14 Sep 5 69,68	
	····· - ·····	J- Jays	Jun 14 Aug 3	1111-3ch 2 03/00	
Project: YL	/2013/01 Task	Prog	ess 🗖	Summary	Rolled Up Critical Task
Submissio	n: 09 Dec 2013 Critical Task	Miles			Polled Un Milestone Colit Draigt Sun
<u> </u>					
					Page 1



Cycle Tracks from Tuen Mun to Sheugn Shui - Stage 1

Project Programme of the Works

ID	Task Name	Duration	Start	Finish Predece	ssors 2014 2015
71 O	Coordinate and request HyD to install Public lighting (5 nos)	60 days	Sun 14 Aug 3	Wed 14 Oct 1 70SS	Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov De
72	Installation of bicycle parking racks, shelter with bench	45 days	Sat 14 Sep 6	Mon 14 Oct 20 70	
73	Pavement	49 days	Tue 14 Oct 21	Mon 14 Dec 8 72	
74	Portion C4 - Bike Parking Area at Choy Yee Bridge	146 days	Fri 14 Oct 10	Wed 15 Mar 4	
75	Submission and consent from MTRCL	45 days	Sat 14 Oct 25	Mon 14 Dec 8 7755-45	i days
76	TTM design & submission and XP application	60 days	Fri 14 Oct 10	Mon 14 Dec 8 77SS-60	) days
77	Site clearance	7 days	Tue 14 Dec 9	Mon 14 Dec 15 73	
78	Kerb laying	21 days	Tue 14 Dec 16	Mon 15 Jan 5 77	
79	Installation of bicycle parking racks	28 days	Tue 15 Jan 6	Mon 15 Feb 2 78	
80	Paving block laying	30 days	Tue 15 Feb 3	Wed 15 Mar 4 79	
81 82	Completion of Section W1A	0 days	Sat 15 May 30	Sat 15 May 30 60,80	
83	4. Section W1B of the Works - Portion C2	274 days	Fri 13 Nov 29	Fri 14 Aug 29	
84	Resting Station R2 at Pui To Road (South) Rest Garden	274 days	Fri 13 Nov 29	Fri 14 Aug 29	
85	Pocession of site	94 days	Fri 13 Nov 29	Sun 14 Mar 2	
86	Site clearance	7 days	Mon 14 Mar 3	Sun 14 Mar 9 9,85	
87	Erection of Type 3 Hoarding	21 days	Mon 14 Mar 10	Sun 14 Mar 30 86	
88	Construction of DWAFT wall	58 days	Mon 14 Mar 31	Tue 14 May 27 87	
89	Cable duct laying with draw pits	21 days	Wed 14 May 28	Tue 14 Jun 17 88	
90	kerb laying	15 days	Wed 14 Jun 18	Wed 14 Jul 2 89	
91	Coordinate and request HyD to install Public lighting	30 days	Thu 14 Jul 3	Fri 14 Aug 1 90	
92	Installation of bicycle parking racks, shelter with bench	28 days	Thu 14 Jul 3	Wed 14 Jul 30 90	
93	Pavement	30 days	Thu 14 Jul 31	Fri 14 Aug 29 92	
94	Completion of Section W1B	0 days	Fri 14 Aug 29	Fri 14 Aug 29 93,91	
95 96	5. Section W2 of the Works - Portions D & E	854 days	Fri 13 Nov 29	Thu 16 Mar 31	
96	5. Section W2 of the Works - Portions D & E Portion D	854 days 854 days	Fri 13 Nov 29	Thu 16 Mar 31	
98	Tree survey and submission	45 days	Fri 13 Nov 29	Sun 14 Jan 12	ETERSE.
99	Preparation work	300 days	Mon 14 Jan 13	Sat 14 Nov 8	
100	tree felling / site clearance	120 days	Mon 14 Jan 13	Mon 14 May 12 98	
101	tree transplant	180 days	Fri 14 Mar 14	Tue 14 Sep 9 100SS+	60 days
102	Geotechnical instrumentation	180 days	Tue 14 May 13	Sat 14 Nov 8 10155+	60 days
103	Construction of RW2 (29 Bays) and cycle track / footpath	657 days	Sat 14 Jun 14	Thu 16 Mar 31	
104	Bay 1 - Bay 8	515 days	Sat 14 Nov 1	Tue 16 Mar 29	
105	Preloading exercise	140 days	Sat 14 Nov 1	Fri 15 Mar 20 111	The construction works adjacent to exis
106	RC structure	60 days	Sun 15 Nov 1	Wed 15 Dec 30 105	
107	Backfilling	60 days	Tue 15 Dec 1	Fri 16 Jan 29 106SS+	
108 109	Drainage works & duct laying for lighting	30 days	Thu 15 Dec 31	Fri 16 Jan 29 107SS+	
109	Road works - cycle track & footpath Bay 9 - Bay 16	60 days 290 days	Sat 16 Jan 30 Sat 14 Jun 14	Tue 16 Mar 29 108,107 Mon 15 Mar 30	
111	Preloading exercise	140 days	Sat 14 Jun 14	Fri 14 Oct 31 102SS+:	32 days
112	RC structure	60 days	Sat 14 Nov 1	Tue 14 Dec 30 111	
113	Backfilling	60 days	Mon 14 Dec 1	Thu 15 Jan 29 112SS+	30 days
114	Drainage works & duct laying for lighting	30 days	Wed 14 Dec 31	Thu 15 Jan 29 113SS+3	30 days
115	Road works - cycle track & footpath	60 days	Fri 15 Jan 30	Mon 15 Mar 30 113,114	
116	Bay 17 - Bay 24	290 days	Sat 15 Mar 21	Mon 16 Jan 4	
117	Preloading exercise	140 days	Sat 15 Mar 21	Fri 15 Aug 7 105	
118	RC structure	60 days	Sat 15 Aug 8	Tue 15 Oct 6 117,112	
119	Backfilling	60 days	Mon 15 Sep 7	Thu 15 Nov 5 118SS+	
120	Drainage works & duct laying for lighting	30 days	Wed 15 Oct 7	Thu 15 Nov 5 11955+	
121	Road works - cycle track & footpath	60 days	Fri 15 Nov 6	Mon 16 Jan 4 119,120	
122 123	Bay 25 - Bay 29 Preloading exercise	237 days 135 days	Sat 15 Aug 8 Sat 15 Aug 8	Thu 16 Mar 31 Sun 15 Dec 20 117	
123	RC structure	45 days	Mon 15 Dec 21	Wed 16 Feb 3 123,118	
124	Backfilling	45 days 45 days	Tue 16 Jan 5	Thu 16 Feb 18 124SS+:	
126	Drainage works & duct laying for lighting	30 days	Wed 16 Jan 20	Thu 16 Feb 18 12433+	
127	Road works - cycle track & footpath	42 days	Fri 16 Feb 19	Thu 16 Mar 31 125,126	
128	Construction of Resting Station R9	60 days	Sat 16 Jan 30	Tue 16 Mar 29 107	
129	Construction RW4 (17 Bays) and cycle track / footpath	517 days	Sat 14 Nov 1	Thu 16 Mar 31	
130	Bay 1 - Bay 6	220 days	Sat 14 Nov 1	Mon 15 Jun 8	
131	Preloading exercise	145 days	Sat 14 Nov 1	Wed 15 Mar 25 111	It is expected the duration of preloadin
132	RC structure	30 days	Thu 15 Mar 26	Fri 15 Apr 24 131	
133	Backfilling	30 days	Fri 15 Apr 10	Sat 15 May 9 13255+3	
134	Drainage works & duct laying for lighting	15 days	Sat 15 Apr 25	Sat 15 May 9 133SS+1	
135	Road works - cycle track & footpath	30 days	Sun 15 May 10	Mon 15 Jun 8 133,134	
136	Bay 7 - Bay 12	220 days	Thu 15 Mar 26	Sat 15 Oct 31	
137	Preloading exercise	145 days	Thu 15 Mar 26	Mon 15 Aug 17 131	
138	RC structure	30 days	Tue 15 Aug 18	Wed 15 Sep 16 137,132	
139 140	Backfilling Drainage works & duct laving for lighting	30 days	Wed 15 Sep 2 Thu 15 Sep 17	Thu 15 Oct 1 13855+1 Thu 15 Oct 1 13955+1	
140	Drainage works & duct laying for lighting	15 days	110 15 Seb 1/	110 15 OCL 1 13955+.	
roject: YL/2013/01	Task	Prog	ress	Summa	ry Rolled Up Critical Task Rolled Up Progress External T
ubmission: 09 Dec	2013		tone	Rolled L	
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0					Page 2
		5-950 E			

# Sang Hing - Kuly Joint Venture 2016 Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul xisting fish pond to be undertaken during Dry Season -ding exercise would be shortened, so the 2nd batch of concrete blocks may not require. I Tasks Group By Summary Deadline t Summary ~ 3

#### Cycle Tracks from Tuen Mun to Sheugn Shui - Stage 1

Project Programme of the Works

riojectriogram										
ID Task I	Name		Duration	Start	Finish	Predecessors	2014 Oct Nov Dec Jap Feb M	ArlAnd May Jun Jul Aug Con Docht	2015	
141	Road works - cycle track &	footpath	30 days	Fri 15 Oct 2	2 Sat 15 Oct 31	139,140		Aar Apr May Jun Jul Aug Sep Oct Nor	v Decijan Feb Mar Apr Ma	y Jun Jul Aug Sep Oct Nov Dec
142	Bay 13 - Bay 17		227 days	Tue 15 Aug 18			2			
143	Preloading exercise		152 days	Tue 15 Aug 18						
144	RC structure Backfilling		30 days	Sun 16 Jan 17			1			
145	Drainage works & duct layi	ing for lighting	30 days	Mon 16 Feb 1 Tue 16 Feb 16		14455+15 days				
147	Road works - cycle track &	-	15 days 30 days	Wed 16 Mar 2		145SS+15 days				
148	Portion E	lootpath	854 days	Fri 13 Nov 29						
149	Tree Survey and submission		60 days	Fri 13 Nov 29			Electricity a			
150	Preparation works		255 days	Tue 14 Jan 28			Entrance and			
151	tree felling / site clearance		120 days	Tue 14 Jan 28						
152	tree transplant		240 days	Wed 14 Feb 12		151SS+15 days				
153	Construction of RW1 (36 Bays) and track/footpath/treepits/drainage	d cycle	734 days	Sat 14 Mar 29	9 Thu 16 Mar 31					
154	Bay 1 - Bay 5		150 days	Tue 15 Nov 3						
155 156	Bay 6 - Bay 10		95 days	Sat 14 Mar 29		152SS+45 days				Ť
156	Bay 11 - Bay 15 Bay 16 - Bay 20		95 days	Wed 14 Jul 2						
158	Bay 21 - Bay 25		95 days 95 days	Sun 14 Oct 5 Thu 15 Jan 8						
159	Bay 26 - Bay 30		95 days	Mon 15 Apr 13						
160	Bay 31 - Bay 36		109 days	Fri 15 Jul 17					100000	
161	Construction of RW5 (14 Bays) and	d cycle	284 days	Mon 15 Jun 22						
	track/footpath/treepits/drainage	,	,-		1110 20 11101 02					•
162	Bay 1 - Bay 5		95 days	Mon 15 Jun 22						
163	Bay 6 - Bay 10		95 days	Fri 15 Sep 25						
164 165	Bay 11 - Bay 14		94 days	Tue 15 Dec 29						
202	Construction of RW8 (28 Bays) and	cycle track/footpath/drain	hage 450 days	Sat 14 Mar 29	Sun 15 Jun 21					
166	Bay 1 - Bay 5		75 days	Sat 14 Mar 29	Wed 14 Jun 11	152SS+45 days				
167	Bay 6 - Bay 10		75 days	Thu 14 Jun 12						
168	Bay 11 - Bay 15		75 days	Tue 14 Aug 26	•		1			
169	Bay 16 - Bay 20		75 days	Sun 14 Nov 9	Thu 15 Jan 22	168				
170	Bay 21 - Bay 25		75 days	Fri 15 Jan 23	Tue 15 Apr 7	169	1		Billion and	
171	Bay 26 - Bay 28		75 days	Wed 15 Apr 8	Sun 15 Jun 21	170			10000	
172 173	Completion of Section W2		0 days	Thu 16 Mar 31	Thu 16 Mar 31	127,128,147,154,:	ř			
	Section W3 of the Works - Portions G1 &	& G2	854 days	Fri 13 Nov 29	Thu 16 Mar 31					
175	Tree survey and submission		21 days	Fri 13 Nov 29	Thu 13 Dec 19		ritin			
176	Tree felling / site clearance		60 days	Fri 13 Dec 13	Mon 14 Feb 10	175SS+14 days				
177	Hoarding erection		120 days	Fri 13 Dec 27		176SS+14 days				
178 179	Temp foothpath diversion / Trial pits (2 r	nos.)	28 days	Fri 13 Nov 29						
180	Footpath diversion Utility detection / utility mapping / subm		60 days	Fri 13 Dec 27		176SS+14 days,1	the second s			
181	Utility diversion - CLP/HKBN & removal		45 days pipe 180 days	Fri 13 Nov 29 Fri 13 Nov 29	Sun 14 Jan 12					
101	w/ water points	or street lighting / ingation	hibe 100 gays	FILT2 NOV 29	Tue 14 May 27					
182	Consent from MTRCL		45 days	Fri 13 Nov 29	Sun 14 Jan 12					
183	Tree transplant		150 days	Fri 13 Dec 20	Sun 14 May 18	175	1-1000-0000-007			
184	Constructed & removal of existing under	rground drainage	90 days	Tue 14 Feb 25	Sun 14 May 25	180,179,182				
185	Construction of public toilet		363 days	Mon 14 Jan 13	Sat 15 Jan 10					
186	Excavation for sub-structure		21 days	Mon 14 Jan 13	Sun 14 Feb 2		: - <u>E</u> h			
187 188	Disposal of excavated material to Em	nployer's tip at LianTang	21 days	Mon 14 Jan 13	Sun 14 Feb 2					
188	Construction of concrete footing		42 days	Mon 14 Feb 3				<u>}</u>		
190	RC structures Internal finishes		105 days	Mon 14 Mar 17	Sun 14 Jun 29					
190	Electrical installation		105 days	Mon 14 Jun 30	Sun 14 Oct 12					
191	External finishes		105 days 105 days	Fri 14 Aug 29 Sun 14 Sep 28		190SS+60 days 190SS+90 days	1		<u>22</u>	
193	Construction of Kiosks		462 days	Wed 14 May 28	Tue 15 Sep 1	13032+30 0ays				
194	Excavation for sub-structure		402 days 42 days	Wed 14 May 28 Wed 14 May 28		181,183SS+90 da	a :	NERRE		
195	Disposal of excavated material to Em	nployer's tip at LianTano	42 days	Wed 14 May 28 Wed 14 May 28	Tue 14 Jul 8					
196	Construction of concrete footing		60 days	Wed 14 Jul 9	Sat 14 Sep 6			10000000 BEERE		
197	RC structures		135 days	Sun 14 Sep 7	Mon 15 Jan 19			10000000000000000000000000000000000000		
198	Internal finishes		135 days	Tue 15 Jan 20	Wed 15 Jun 3			Eletetetetetetetetetetetetetetetetetetet		<u>]</u>
199	Electrical installation		135 days	Sat 15 Mar 21	Sun 15 Aug 2	19855+60 days,1	4			
200	External finishes		135 days	Mon 15 Apr 20		19855+90 days,1!	1			
201	Drainage works		90 days	Wed 15 Sep 2						
202	Laying of watermains and irrigation syste	em	60 days	Fri 15 Oct 2						
203	Kerb laying / planter		90 days	Tue 15 Dec 1	Sun 16 Feb 28					
	Construction of paving slab		77 days	Fri 16 Jan 15		203SS+45 days				
205	Construction of cycle track and footpath TTM submission for relocation of Bus Sto		90 days	Tue 15 Dec 1	Sun 16 Feb 28					
	Relocation of Bus Stop and construction		90 days	Wed 15 Sep 2						
		in or layby for cyclists	90 days	Tue 15 Dec 1	Sun 16 Feb 28	20555	:			
	pickup/drop off	1					i			
roject: YL/2013/01 ata Date: 29 Nov 2013	ριεκυρ/ατορ οπ	Task	Prog	ress		Summary		Rolled Up Critical Task	Rolled Up Progress	External Tas
roject: YL/2013/01	рскир/агор оп	Task E				Summary Rolled Up Task		Rolled Up Critical Task	Rolled Up Progress Split	External Tas Project Sum

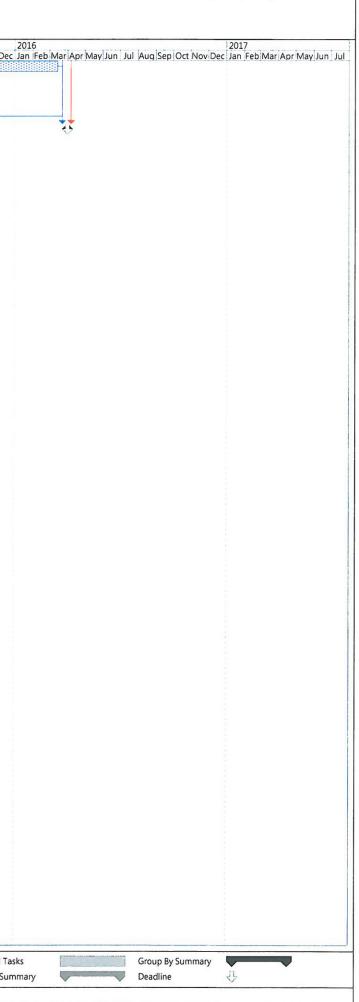
# 2016 Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Tasks Group By Summary Deadline Summary ~ Sr

#### Sang Hing - Kuly Joint Venture

#### Cycle Tracks from Tuen Mun to Sheugn Shui - Stage 1

Project Programme of the Works

					12223	
ID O	Task Name	Duration	Start	Finish Predecessors	2014 Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec	2015 c Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
208	Construction of bicycle parking racks	105 days	Tue 15 Dec 1			
209	Realignment of Cycle track and footpath at Ng Lau Ro		Wed 14 Oct 22			
210	TTM submission	90 days	Wed 14 Oct 22	Mon 15 Jan 19 211SS-90 days		
211	Construction of RWH1	120 days	Tue 15 Jan 20			
212	Backfilling and construction of cycle track and footp	path 150 days	Wed 15 May 20	Fri 15 Oct 16 211		
213	Completion of Section W3	0 days	Thu 16 Mar 31	Thu 16 Mar 31 212,204,207,208,		
214						
215	7. Section W4 of the Works - Portions H, I & K	701 days	Fri 13 Nov 29	Fri 15 Oct 30		
216	Portion H	701 days	Fri 13 Nov 29	Fri 15 Oct 30		
217	Improvement of Cycle Tracks, Footpaths & associa	ated Road 701 days	Fri 13 Nov 29	Fri 15 Oct 30		
218	Works at Lam Tei Preparation work, TTM and submissions	210 dava	5-112 May 20	Thu: 14 his 26		
219	CHA - A7+200 ~ A8+560	210 days	Fri 13 Nov 29			
220	A7+200 ~ A7+300	547 days	Fri 14 May 2		STOCTOTIONS)	
221	A7+300 ~ A7+400	78 days	Fri 14 May 2			
222	A7+400 ~ A7+400 A7+400 ~ A7+500	78 days	Sat 14 Jul 19			
223	A7+400 ~ A7+500 A7+500 ~ A7+600	78 days	Sun 14 Oct 5 Mon 14 Dec 22			
224	A7+600 ~ A7+700	78 days	Tue 15 Mar 10			
225	A7+700 ~ A7+800	78 days	Wed 15 May 27	· · · · · · · · · · · · · · · · · · ·		
226	A7+800 ~ A7+900	78 days				
227	A7+900 ~ A7+900 A7+900 ~ A8+000	79 days	Thu 15 Aug 13	Fri 15 Oct 30 225		Essences
228	A8+000 ~ A8+000	78 days	Fri 14 May 2	Contraction of the second s		
228	A8+000 ~ A8+000 A8+100 ~ A8+200	78 days	Sat 14 Jul 19			
230	A8+100 ~ A8+200 A8+200 ~ A8+300	78 days	Sun 14 Oct 5			
231	A8+300 ~ A8+400	78 days	Mon 14 Dec 22	Mon 15 Mar 9 229		
232	A8+300 ~ A8+300 A8+400 ~ A8+500	78 days	Tue 15 Mar 10			
233	A8+500 ~ A8+560	78 days 79 days	Wed 15 May 27	Wed 15 Aug 12 231 Fri 15 Oct 30 232		
234	Portion I	701 days	Thu 15 Aug 13 Fri 13 Nov 29	Fri 15 Oct 30		56266666666
235	Improvement of Cycle Tracks, Footpaths & associa		Fri 13 Nov 29	Fri 15 Oct 30		
	Works at Hung Shui Kiu	lied Road 701 days	11113 1400 23	1113 02130		
236	Preparation work, TTM and submissions	210 days	Fri 13 Nov 29	Thu 14 Jun 26		
237	CHA - A8+585 ~ A10+169	547 days	Fri 14 May 2	Fri 15 Oct 30		
38	A8+585 ~ A8+700	71 days	Fri 14 May 2			
239	A8+700 ~ A8+800	68 days	Sat 14 Jul 12			
240	A8+800 ~ A8+900	68 days	Thu 14 Sep 18	Mon 14 Nov 24 239		
241	A8+900 ~ A9+000	68 days	Tue 14 Nov 25	Sat 15 Jan 31 240		
42	A9+000 ~ A9+100	68 days	Sun 15 Feb 1	Thu 15 Apr 9 241		
243	A9+100 ~ A9+200	68 days	Fri 15 Apr 10	Tue 15 Jun 16 242		
244	A9+200 ~ A9+300	68 days	Wed 15 Jun 17	Sun 15 Aug 23 243		
245	A9+300 ~ A9+400	68 days	Mon 15 Aug 24	Fri 15 Oct 30 244		
246	A9+400 ~ A9+500	68 days	Fri 14 May 2	Tue 14 Jul 8 15SS+1 day		
247	A9+500 ~ A9+600	68 days	Wed 14 Jul 9	Sun 14 Sep 14 246		
248	A9+600 ~ A9+700	68 days	Mon 14 Sep 15	Fri 14 Nov 21 247		
49	A9+700 ~ A9+800	68 days	Sat 14 Nov 22	Wed 15 Jan 28 248		
250	A9+800 ~ A9+900	68 days	Thu 15 Jan 29	Mon 15 Apr 6 249		
251	A9+900 ~ A10+000	68 days	Tue 15 Apr 7	Sat 15 Jun 13 250		
52	A10+000 ~ A10+100	68 days	Sun 15 Jun 14	Thu 15 Aug 20 251		
:53	A10+100 ~ A10+169	71 days	Fri 15 Aug 21	Fri 15 Oct 30 252		
54	CHA - E0+000 ~ E0+345	272 days	Fri 14 May 2	Wed 15 Jan 28		
55	E0+000 ~ E0+100	68 days	Fri 14 May 2	Tue 14 Jul 8 155S+1 day		
56	E0+100 ~ E0+200	68 days	Wed 14 Jul 9	Sun 14 Sep 14 255		
57	E0+200 ~ E0+300	68 days	Mon 14 Sep 15	Fri 14 Nov 21 256		
58	E0+300 ~ E0+345	68 days	Sat 14 Nov 22	Wed 15 Jan 28 257		
59	CHA - D0+000 ~ D0+380	275 days	Thu 15 Jan 29	Fri 15 Oct 30		
60	D0+000 ~ D0+100	68 days	Thu 15 Jan 29	Mon 15 Apr 6 258		
61	D0+100 ~ D0+200	68 days	Tue 15 Apr 7	Sat 15 Jun 13 260		
62	D0+200 ~ D0+300	71 days	Sun 15 Jun 14	Sun 15 Aug 23 261		
63	D0+300 ~ D0+380	68 days	Mon 15 Aug 24	Fri 15 Oct 30 262		
64	Portion K	701 days	Fri 13 Nov 29	Fri 15 Oct 30		
65	Improvement of Cycle Tracks, Footpaths & associat	ated Road 701 days	Fri 13 Nov 29	Fri 15 Oct 30		
<u></u>	Works at Yuen Long					
66	Preparation work, TTM and submsions	210 days	Fri 13 Nov 29	Thu 14 Jun 26		
67	CHA - E1+100 ~ E1+800 Ping Shan	229 days	Thu 15 Jan 29	Mon 15 Sep 14		
68	E1+100 ~ E1+200	25 days	Thu 15 Jan 29	Sun 15 Feb 22 258		
69	E1+200 ~ E1+300	25 days	Mon 15 Feb 23	Thu 15 Mar 19 268		
70	E1+300 ~ E1+400	25 days	Fri 15 Mar 20	Mon 15 Apr 13 269		
71	E1+400 ~ E1+500	52 days	Tue 15 Apr 14	Thu 15 Jun 4 270		
72	E1+500 ~ E1+600	25 days	Fri 15 Jun 5	Mon 15 Jun 29 271		
73	E1+600 ~ E1+700	25 days	Tue 15 Jun 30	Fri 15 Jul 24 272		
74	E1+700 ~ E1+800	52 days	Sat 15 Jul 25	Mon 15 Sep 14 273		
75	CHA - E2+265 ~ E2+370 Wan Tat Road	46 days	Tue 15 Sep 15	Fri 15 Oct 30 274		
iect: YI /2013/01		provide the second second			Balladita estador a Brandoreza	
ject: YL/2013/01 a Date: 29 Nov 2	013 Task	Prog		Summary	Rolled Up Critical Task	Rolled Up Progress External Tas
mission: 09 Dec	2013 Critical Task	Mile	stone	Rolled Up Task	Rolled Up Milestone 🛇	Split Project Sum
			Contra Contra		Page 4	



Sang Hing - Kuly Joint Venture

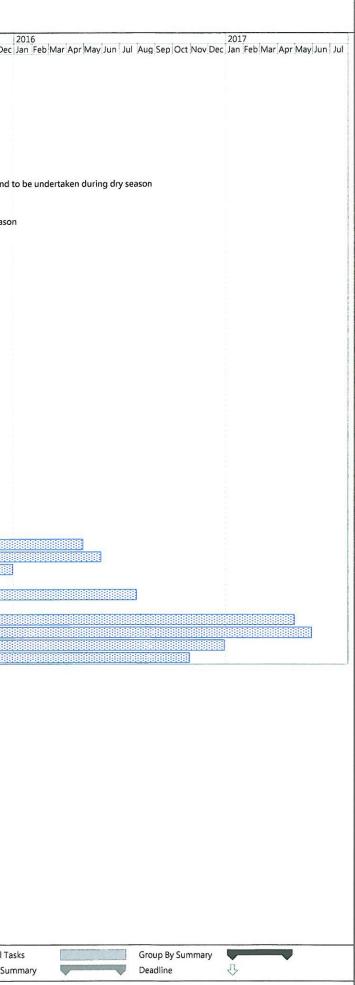
	from Tuen Mun to Sheugn Shui - Stage 1 ramme of the Works				Sang Hing - Kuly Joint Ver
	Task Name	Duration	Start	Finish Predecessors	2014 2015 2016 2017
0					Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun
	CHA - m0+00 ~ m0+200 YOHO Town Phase 3 Development	125 days	Mon 14 Oct 13	Sat 15 Feb 14 282	
1	CHA - E5+840 ~ E5+915 Pok Io	50 days	Sun 15 Feb 15	Sun 15 Apr 5 276	
1	Stream Decking STR1	240 days	Thu 14 May 1	Fri 14 Dec 26	
	Submission and consent from MTRCL	30 days	Thu 14 May 1	Fri 14 May 30 1755	
	ELS / Excavation	60 days	Sat 14 May 31	Tue 14 Jul 29 279	
	Base slab	30 days	Wed 14 Jul 30	Thu 14 Aug 28 280	
	Wall and top Slab	45 days	Fri 14 Aug 29	Sun 14 Oct 12 281	
-	Railing	45 days	Mon 14 Oct 13	Wed 14 Nov 26 282	
	Road works / Pavement	30 days	Thu 14 Nov 27	Fri 14 Dec 26 283	
	Resting Station R4	208 days	Mon 15 Apr 6	Fri 15 Oct 30	
-	Tree survey and submission	14 days	Mon 15 Apr 6	Sun 15 Apr 19 277	
	Site clearance	7 days	Mon 15 Apr 20	Sun 15 Apr 26 286	
-	Erection of temporary chain-link fence	14 days	Mon 15 Apr 27	Sun 15 May 10 287	
-	Tree felling	7 days	Mon 15 May 11	Sun 15 May 17 288	
1	Drainage works Cable duct laying with draw pits	21 days	Mon 15 May 18	Sun 15 Jun 7 289	
-	Cable duct laying with draw pits Installation of irrigation pipe and irrigation point (3 nos.)	25 days	Mon 15 Jun 8 Mon 15 Jun 8	Thu 15 Jul 2 290 Thu 15 Jul 2 290	
-	Kerb laying	25 days 30 days	Fri 15 Jul 3	Sat 15 Aug 1 291,292	
-	Coordinate and request HyD to install Public lighting (4 nos)	60 days	Fri 15 Jul 3 Fri 15 Jul 3	Sat 15 Aug 1 291,292 Mon 15 Aug 31 293SS	
-	Installation of bicycle parking racks, shelter with bench	45 days	Sun 15 Aug 2	Tue 15 Sep 15 293	
1	Pavement	45 days	Wed 15 Sep 16	Fri 15 Oct 30 295	
4	Completion of Section W4	0 days	Fri 15 Oct 30	Fri 15 Oct 30 226,233,245,253,	
1	ar a' de bhann fhannachtagan 1112	c adys		10 00000 220,200,270,200,	$\nabla$
1	8. Section W5 of the Works - Portion J	854 days	Fri 13 Nov 29	Thu 16 Mar 31	
	Tree survey and submission	14 days	Fri 13 Nov 29	Thu 13 Dec 12	
	Tree felling / site clearance	14 days	Fri 13 Dec 6	Thu 13 Dec 19 300SS+7 days	
	Hoarding erection	90 days	Fri 13 Dec 20	Wed 14 Mar 19 301	
	Trial pits (4 nos.)	48 days	Fri 13 Nov 29	Wed 14 Jan 15	
	Utility detection / detection of existing DN1000 rising main sewer / utility	30 days	Fri 13 Nov 29	Sat 13 Dec 28	
	mapping / submission				
	Utility diversion - gas main & PCCW cable by others	90 days	Sun 13 Dec 29	Fri 14 Mar 28 304	
	Tree transplant	90 days	Fri 13 Dec 13	Wed 14 Mar 12 300	
	Construction of food kiosk and metter room	426 days	Mon 14 Feb 3	Sat 15 Apr 4	
	Excavation for sub-structure Disposal of excavated material to Employer's tip at LianTang and DSD Contract DC/2010/02	21 days 21 days	Mon 14 Feb 3 Mon 14 Feb 3	Sun 14 Feb 23 302SS+45 days,3 Sun 14 Feb 23 308SS	
	Construction of concrete footing	45 days	Mon 14 Feb 24	Wed 14 Apr 9 309,308	
	RC structures	150 days	Thu 14 Apr 10	Sat 14 Sep 6 310	
1	Internal finishes	120 days	Sun 14 Sep 7	Sun 15 Jan 4 311	
	Electrical installation	120 days	Thu 14 Nov 6	Thu 15 Mar 5 312SS+60 days	
	External finishes	120 days	Sat 14 Dec 6	Sat 15 Apr 4 312SS+90 days	
	Construction of first aid and cycle rental kiosks	426 days	Sat 14 Mar 29	Thu 15 May 28	
	Excavation for sub-structure	21 days	Sat 14 Mar 29	Fri 14 Apr 18 302SS+60 days,30	
	Disposla of excavated material to Employer's tip at LianTang and DSD Contract DC/2010/02	21 days	Sat 14 Mar 29	Fri 14 Apr 18 316SS	
	Construction of concrete footing RC structures	45 days	Sat 14 Apr 19	Mon 14 Jun 2 317,316,310	
	Internal finishes	150 days	Tue 14 Jun 3	Thu 14 Oct 30 318	
	Electrical installation	120 days 120 days	Fri 14 Oct 31 Tue 14 Dec 30	Fri 15 Feb 27 319 Tue 15 Apr 28 32055+60 days	
	External finishes	120 days 120 days	Thu 15 Jan 29	Thu 15 May 28 32055+60 days	
	Construction of public toilet	426 days	Mon 14 Apr 28	Sat 15 Jun 27	
	Excavation for sub-structure	21 days	Mon 14 Apr 28	Sun 14 May 18 316SS+30 days	
	Disposal of excavated material to Employer's tip at LianTang and DSD	21 days 21 days	Mon 14 Apr 28	Sun 14 May 18 32455	
	Contract DC/2010/02	LI Guys			783 
	Construction of concrete footing	45 days	Mon 14 May 19	Wed 14 Jul 2 325,324,310	
	RC structures	150 days	Thu 14 Jul 3	Sat 14 Nov 29 326	
	Internal finishes	120 days	Sun 14 Nov 30	Sun 15 Mar 29 327	
	Electrical installation	120 days	Thu 15 Jan 29	Thu 15 May 28 328SS+60 days	
	External finishes	120 days	Sat 15 Feb 28	Sat 15 Jun 27 328SS+90 days	
	Drainage works	90 days	Sun 15 Jun 28	Fri 15 Sep 25 314,322,330,312,:	
	Laying of watermains and irrigation system	60 days	Tue 15 Jul 28	Fri 15 Sep 25 331SS+30 days	
	Kerb laying / planter	120 days	Sat 15 Sep 26	Sat 16 Jan 23 332,331	
	Construction of paving slab	128 days	Wed 15 Nov 25	Thu 16 Mar 31 333SS+60 days	
	Completion of Section W5	0 days	Thu 16 Mar 31	Thu 16 Mar 31 334	$\mathbf{A}$
	0. Section 14/7 of the Marker David				
	9. Section W7 of the Works - Portion M	639 days	Fri 13 Nov 29	Sat 15 Aug 29	
	Cycle Tracks, Footpaths & associated Road Works at Kam Tin River	639 days	Fri 13 Nov 29	Sat 15 Aug 29	
	CH - MP0+000 ~ MP1+100	639 days	Fri 13 Nov 29	Sat 15 Aug 29	
	Tree survey and submission	45 days	Fri 13 Nov 29	Sun 14 Jan 12	
	Tree Transplant	150 days	Mon 14 Jan 13	Wed 14 Jun 11 340	
	Construction of cycle track / footpath	504 days	Sun 14 Apr 13	Sat 15 Aug 29	
./2013/01 : 29 Nov 201	13 Task	Progr	255	Summary	Rolled Up Critical Task Rolled Up Progress External Tasks Group By Summary
n: 09 Dec 20		Milest	one 🖌	Rolled Up Task	Rolled Up Milestone 🔷 Split Project Summary Deadline

#### Cycle Tracks from Tuen Mun to Sheugn Shui - Stage 1

Project Programme of the Works

0	Task Name	Duration	Start	Finish Pr	redecessors	2014 Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Aug Sep Oct
	MP0+000 ~ MP0+080 proposed fill slope	120 days	Wed 14 Oct 29	Wed 15 Feb 25 36	68	
	MP0+100 ~ MP0+160 L-shape RW3	90 days	Wed 15 Apr 1	Mon 15 Jun 29 36	61,343	
	MP0+160 ~ MP0+300 widening of existing footpath	60 days	Tue 15 Jun 30	Fri 15 Aug 28 34	44	↑ <u>1</u> 11111
-	MP0+300 ~ MP0+400	45 days	Thu 15 Jul 16	Sat 15 Aug 29 37	72,347	
	MP0+400 ~ MP0+500	45 days	Mon 15 Jun 1	Wed 15 Jul 15 34	48	
1	MP0+500 ~MP0+580 U-shape RW6	87 days	Fri 15 Mar 6	Sun 15 May 31 34	49	
1	MP0+580 ~ MP0+760	60 days	Mon 15 Jan 5	Thu 15 Mar 5 35	53	
1	MP0+760 ~ MP0+830 U-shape RW7	87 days	Mon 14 Aug 11	Wed 14 Nov 5 35	51	
	MP0+830 ~ MP1+025	60 days	Thu 14 Jun 12	Sun 14 Aug 10 35	52	
1	MP1+025 ~ MP1+050 U-shape RW	60 days	Sun 14 Apr 13	Wed 14 Jun 11 34	415S+90 days	
1	MP1+050 ~ MP1+100 DWARF wall	60 days	Thu 14 Nov 6	Sun 15 Jan 4 35	50	The construction works adjacent existing
1	Stream Decking STR2	331 days	Sun 14 Aug 3	Mon 15 Jun 29		
	TDMP design and submission	90 days	Sun 14 Aug 3	Fri 14 Oct 31 35	56SS-90 days	
	Temporary flow diversion for south half portion	14 days	Sat 14 Nov 1	Fri 14 Nov 14		The construction works to be undertaken during
	Demolition of exisitng base slab and wing wall	21 days	Sat 14 Nov 15	Fri 14 Dec 5 35	56	
1	Construction of box culvert and base slab / wing wall W2 of outlet	41 days	Sat 14 Dec 6	Thu 15 Jan 15 35	57	
	Temporary flow diversion for north half portion	14 days	Fri 15 Jan 16	Thu 15 Jan 29 35		
	Demolition of existing base slab and wing wall	21 days	Fri 15 Jan 30	Thu 15 Feb 19 35		
	Construction of box culvert and base slab / wing wall W1 of outlet	40 days	Fri 15 Feb 20	Tue 15 Mar 31 36	60	
	Railing installation and road works	90 days	Wed 15 Apr 1	Mon 15 Jun 29 36	61	
1	Resting Station R5	322 days	Sun 14 Apr 13	Sat 15 Feb 28		
8	Site Clearance	7 days	Sun 14 Apr 13	Sat 14 Apr 19 34	41SS+90 davs	
	Erection of Type 1 Hoarding	30 days	Sun 14 Apr 20	and a second sec		
1	Tree felling / tree tranplant	162 days	Tue 14 May 20	Tue 14 Oct 28 36		
1	Construction of planter wall	120 days	Tue 14 Jun 10	Tue 14 Oct 7 36	66SS+21 days	
	Backfilling	21 days	Wed 14 Oct 8	Tue 14 Oct 28 36	Construction and the second second second	
	Drainage works	60 days	Wed 14 Oct 29	Sat 14 Dec 27 36	68,366	
	Cable duct laying with draw pits	21 days	Wed 14 Oct 29	Tue 14 Nov 18 36	68,366	
	Installation of irrigation pipe and irrigation point (2 nos.)	21 days	Wed 14 Nov 19	Tue 14 Dec 9 37	70	
	Kerb laying	30 days	Wed 14 Dec 10	Thu 15 Jan 8 37	70,371	
	Coordinate and request HyD to install Public lighting (3 nos)	60 days	Wed 14 Dec 10	Sat 15 Feb 7 37	7255	
	Installation of bicycle parking racks, shelter with bench	21 days	Fri 15 Jan 9	Thu 15 Jan 29 37	72	
	Pavement	30 days	Fri 15 Jan 30	Sat 15 Feb 28 37	74	
	Completion of Section W7	0 days	Sat 15 Aug 29	Sat 15 Aug 29 34	45,346,362,375	
			5	5		
1	Section W8A - Landscape Softworks within Portions C1, C3 & C4	609 days	Fri 13 Nov 29	Thu 15 Jul 30		
	Section W8B - Landscape Softworks within Portion C2	274 days	Fri 13 Nov 29	Fri 14 Aug 29		
	Section W8C - Landscape Softworks within Portion G1 & J	883 days	Fri 13 Nov 29	Fri 16 Apr 29		
	Section W8D - Landscape Softworks within Portion D & E	914 days	Fri 13 Nov 29	Mon 16 May 30		
	Section W8E - Landscape Softworks within Portions I & K	762 days	Fri 13 Nov 29	Wed 15 Dec 30		
	Section W8F - Landscape Softworks within Portion M	701 days	Fri 13 Nov 29	Fri 15 Oct 30		
	Section W9A - Establishment Works within Portions C1, C3 & C4	975 days	Fri 13 Nov 29	Sat 16 Jul 30		
	Section W9B - Establishment Works within Portion C2	639 days	Fri 13 Nov 29	Sat 15 Aug 29		
	Section W9C - Establishment Works within Portions G1 & J	1249 days	Fri 13 Nov 29	Sun 17 Apr 30		
1	Section W9D - Establishment Works within Portions D & E	1279 days	Fri 13 Nov 29	Tue 17 May 30		
	Section W9E - Establishment Works within Portion I & K	1128 days	Fri 13 Nov 29	Fri 16 Dec 30		
	Section W9F - Establishment Works within Portion M	1067 days	Fri 13 Nov 29	Sun 16 Oct 30		

Project: YL/2013/01 Data Date: 29 Nov 2013 Submission: 09 Dec 2013	Task Critical Task	Progress Milestone	\$	Summary Rolled Up Task		Rolled Up Critical Task	Rolled Up Progress Split	 External Task Project Sumr
			No. No. 1		Page 6			



Sang Hing - Kuly Joint Venture





### **APPENDIX 3**

## THE CONTACT DETAILS OF KEY PERSONNEL OF THE PROJECT





#### **Contact Details of Key Personnel for the Project**

Company / Department	Name	Position	Telephone
AECOM Consulting Services Limited	Mr. Y.W. Fung	Environmental Team Leader	3922 9366
AECOM Consulting Services Limited (former URS Hong Kong Ltd.)	Mr. Vincent Kwan	Resident Engineer	2672 7938
Sang Hing – Kuly Joint Venture	Mr. Jeff Chan	Project Manager	9606 2398
Sang Hing – Kuly Joint Venture	Mr. W.K. Tang	Site Agent	9300 7037 / 5638 3186 (Hotline)
Sang Hing – Kuly Joint Venture	Mr. Michael Wan	Site Environmental Officer	9222 3089
Fugro Hong Kong Ltd.	Mr. Colin Yung	Independent Environmental Checker	3565 4114





# APPENDIX 4 IMPLEMENTATION SCHEDULE FOR ENVIRONMENTAL MITIGATION MEASURES



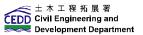
EIA Ref.	EM&A Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
Construction	Phase					
S.3.6.2	S.3.2.3	All the dust control measures as recommended in the Air Pollution Control (Construction Dust) Regulation, where applicable, should be implemented. Typical dust control measures include:	Air Quality (fugitive dust) Control during Construction Phase	Contractors	At all construction areas of the site during the entire construction period	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation
S.3.6.2	S.3.2.3	<ul> <li>The works area for site clearance shall be sprayed with water before, during and after the operation so as to maintain the entire surface wet</li> </ul>	Air Quality (fugitive dust) Control during Construction Phase	Contractors	At all construction areas of the site during the entire construction period	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation
S.3.6.2	S.3.2.3	<ul> <li>Restricting heights from which materials are to be dropped, as far as practicable to minimize the fugitive dust arising from unloading/ loading</li> </ul>	Air Quality (fugitive dust) Control during Construction Phase	Contractors	At all construction areas of the site during the entire construction period	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation
S.3.6.2	S.3.2.3	<ul> <li>Immediately before leaving a construction site, all vehicles shall be washed to remove any dusty materials from the bodies and wheels. However, all spraying of materials and surfaces should avoid excessive water usage</li> </ul>	Air Quality (fugitive dust) Control during Construction Phase	Contractors	At all construction areas of the site during the entire construction period	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation
S.3.6.2	S.3.2.3	<ul> <li>Where a vehicle leaving a construction site is carrying a load of dusty materials, the load shall be covered entirely by clean impervious sheeting to ensure that the dusty materials will not leak from the vehicle</li> </ul>	Air Quality (fugitive dust) Control during Construction Phase	Contractors	At all construction areas of the site during the entire construction period	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation
S.3.6.2	S.3.2.3	<ul> <li>Travelling speeds should be controlled to reduce traffic induced dust dispersion and re-suspension within the site from the operating haul trucks</li> </ul>	Air Quality (fugitive dust) Control during Construction Phase	Contractors	At all construction areas of the site during the entire construction period	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation
S.3.6.2	S.3.2.3	<ul> <li>Erection of hoarding of not less than 2.4 m high from ground level along the site boundary, where appropriate</li> </ul>	Air Quality (fugitive dust) Control during Construction Phase	Contractors	At all construction areas of the site during the entire construction period	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation
S.3.6.2	S.3.2.3	<ul> <li>Any stockpile of dusty materials shall be covered entirely by impervious sheeting; and/or placed in an area sheltered on the top and 4 sides</li> </ul>	Air Quality (fugitive dust) Control during Construction Phase	Contractors	At all construction areas of the site during the entire construction period	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation

#### Table A1-1 Air Quality Impact – Implementation Schedule of Recommended Mitigation Measures

#### Construction of Cycle Tracks and the Associated Supporting Facilities From Sha Po Tsuen and Shek Sheung River



EIA Ref.	EM&A Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?			
S.3.6.2	S.3.2.3	<ul> <li>All dusty materials shall be sprayed with water or a dust suppression chemical immediately prior to any loading, unloading or transfer operation so as to maintain the dusty materials wet</li> </ul>	Air Quality (fugitive dust) Control during Construction Phase	Contractors	At all construction areas of the site during the entire construction period	Annex 4 and Annex 12 of EIAO -TM, Air Pollution Control (Construction Dust) Regulation			
Operational F	Operational Phase								
N/A	N/A	None specific	N/A	N/A	N/A	N/A			



#### Table A1-2 Noise Impact – Implementation Schedule of Recommended Mitigation Measures

EIA Ref.	EM&A Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
Constructio	on Phase					
S.5.5.11	S.4.2.17	In order to prevent potential cumulative construction noise impacts to NSRs at Mai Po San Tsuen and Palm Springs, the works at the cycle track section (near CH-MP5+100m) are recommended to be scheduled to avoid works at the areas near Castle Peak Road of the Proposed Comprehensive Development at Wo Shang Wai (CDWSW) project if the works site of the CDWSW project is less than 300 m away from Castle Peak Road.	Noise control during construction	Contractors, ER	Construction areas near the specified locations during the construction period	EIA, Contractual requirements
S.5.5.14	S.4.2.17	The contractor shall liaise with the Yuen Long and Kam Tin Sewerage and Sewage Disposal Stage 2 (YLKTSSD2) and North West New Territories Salt Water Supply (NWNTSWS) works contractors so as to avoid undertaking works concurrently with the works when they are in the close proximity as far as practicable. As a conservative approach, works for the cycle track shall be carried out when the works from the other projects are over 300 m away. The requirements shall be included in the works contracts.	Noise control during construction	Contractors, ER	Construction areas near the specified locations during the construction period	EIA, Contractual requirements
Table 5-7	S.4.2.19	Use of quiet plant (PME): - mini excavator - mobile crane - dump truck - hand-held electric circular saw - concrete lorry mixer - lorry - vibratory poker - asphalt paver - crane mounted auger - road roller - road ripper, excavator mounted	Noise control during construction	Contractors	At all construction areas of the site during the entire construction period	EIA, Contractual requirements

# Construction of Cycle Tracks and the Associated Supporting Facilities From Sha Po Tsuen and Shek Sheung River



EIA Ref.	EM&A Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
S.5.6.2 Table 5-8	S.4.2.19	Noise barrier in the form of site hoarding shall be used for the following PMEs where practicable:         -       mini excavator         -       mobile crane         -       dump truck         -       hand-held electric circular saw         -       bar bender         -       vibrating hammer         -       generator         -       concrete lorry mixer         -       lorry         -       vibratory poker         -       asphalt paver         -       compactor         -       grout nuixer         -       grout pump         -       drill	Noise control during construction	Contractors	At all construction areas of the site close to identified NSRs during the entire construction period	EIA, Contractual requirements
S.5.6.2	S.4.2.19	Noise enclosure shall be used for the following PMEs where practicable: - air compressor - hand-held breaker	Noise control during construction	Contractors	At all construction areas of the site close to identified NSRs during the entire construction period	EIA, Contractual requirements
S.5.6.2	S.4.2.19	The barrier / enclosure material's surface mass shall be in excess of 7 kg/m <sup>2</sup> .	Noise control during construction	Contractors	At all construction areas of the site during the entire construction period	EIA, Contractual requirements
S.5.6.6	S.4.2.19	Use of alternative quieter plant such as road ripper, excavator mounted instead of handheld breaker during levelling/excavation works.	Noise control during construction	Contractors	At construction areas of the site close to NSR12 and NSR20 during the entire construction period	EIA, Contractual requirements
S.5.6.8	S.4.2.19	The Contractor shall adopt the Code of Practice on Good Management Practice to Prevent Violation of the Noise Control Ordinance (Chapter 400) (for Construction Industry) published by EPD	Noise control during construction	Contractors	At all construction areas of the site during the entire construction period	Annex 5 and Annex 13 of EIAO-TM
S.5.6.8	S.4.2.19	The Contractor shall observe and comply with the statutory and non-statutory requirements and guidelines	Noise control during construction	Contractors	At all construction areas of the site during the entire construction period	Annex 5 and Annex 13 of EIAO-TM

# Construction of Cycle Tracks and the Associated Supporting Facilities From Sha Po Tsuen and Shek Sheung River



EIA Ref.	EM&A Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
S.5.6.8	S.4.2.19	Before commencing any work, the Contractor shall submit to the project Engineer for approval the method of working, equipment and noise mitigation measures intended to be used at the site	Noise control during construction	Contractors	At all construction areas of the site during the entire construction period	Annex 5 and Annex 13 of EIAO-TM
S.5.6.8	S.4.2.19	The Contractor shall devise and execute working methods to minimize the noise impact on the surrounding sensitive uses, and provide experienced personnel with suitable training to ensure that those methods are implemented	Noise control during construction	Contractors	At all construction areas of the site during the entire construction period	Annex 5 and Annex 13 of EIAO-TM
S.5.6.8	S.4.2.19	Noisy equipment and noisy activities should be located as far away from the NSRs as is practical	Noise control during construction	Contractors	At all construction areas of the site during the entire construction period	Annex 5 and Annex 13 of EIAO-TM
S.5.6.8	S.4.2.19	Unused equipment should be turned off. PME should be kept to a minimum and the parallel use of noisy equipment / machinery should be avoided	Noise control during construction	Contractors	At all construction areas of the site during the entire construction period	Annex 5 and Annex 13 of EIAO-TM
S.5.6.8	S.4.2.19	Regular maintenance of all plant and equipment	Noise control during construction	Contractors	At all construction areas of the site during the entire construction period	Annex 5 and Annex 13 of EIAO-TM
S.5.6.8	S.4.2.19	Material stockpiles and other structures should be effectively utilised as noise barriers, where practicable	Noise control during construction	Contractors	At all construction areas of the site during the entire construction period	Annex 5 and Annex 13 of EIAO-TM
S.5.6.8	S.4.2.19	The Contractor shall liaise with the schools that are located near the works sites regarding their examination period and schedule the noisy works to avoid the examination period as far as possible	Noise control during construction	Contractors	At construction areas near schools during the entire construction period	Annex 5 and Annex 13 of EIAO-TM
Operationa	l Phase					
N/A	N/A	None specific	N/A	N/A	N/A	N/A



#### Table A1-3 Water Quality Impact – Implementation Schedule of Recommended Mitigation Measures

EIA Ref.	EM&A Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
Constructio	on Phase					
S. 6.6.1	S.5.2.4	Mitigation measures should be implemented to prevent the uncontrolled discharge of wastewater from the construction site in accordance with Practice Note for Professional Persons ProPECC PN1/94 - Construction Site Drainage	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire construction period	ProPECC PN1/94, Water Pollution Control Ordinance
S. 6.6.1	S.5.2.4	Surface run-off from the construction sites will be directed into storm drains via adequately designed wastewater treatment facilities such as sand traps, silt traps and sediment settling basins. This is important for works immediately along the Kam Tin River, Ngau Tam Mei Main Drainage Channel, River Beas and Shek Sheung River	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire construction period	Water Pollution Control Ordinance
S. 6.6.1	S.5.2.4	Channels, earth bunds or sand bag barriers will be provided on-site to properly direct stormwater to the above-mentioned facilities	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire construction period	Water Pollution Control Ordinance
S. 6.6.1	S.5.2.4	Existing silt removal facilities, channels and manholes along roads and pedestrian walkways will be maintained and the deposited silt and grit will be removed regularly, at the onset of and after each rainstorm to ensure that these facilities are functioning properly at all times	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire construction period	Water Pollution Control Ordinance
S. 6.6.1	S.5.2.4	Other manholes (including any newly constructed ones) will be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris from getting into the drainage system	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire construction period	Water Pollution Control Ordinance
S. 6.6.1	S.5.2.4	Open stockpiles of materials on site will be avoided or where unavoidable covered with tarpaulin or similar fabric during rainstorms. Measures will be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire construction period	Water Pollution Control Ordinance
S. 6.6.1	S.5.2.4	Where possible, works entailing soil excavation will be minimized during the rainy season (i.e. April to September);	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire construction period	Water Pollution Control Ordinance
S. 6.6.1	S.5.2.4	Where applicable, final earthworks surfaces/ slopes will be well compacted and hydro-seeded following completion to prevent	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire	Water Pollution Control Ordinance

#### Construction of Cycle Tracks and the Associated Supporting Facilities From Sha Po Tsuen and Shek Sheung River



EIA Ref.	EM&A Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?
		erosion			construction period	
S. 6.6.1	S.5.2.4	During construction works, chemical toilets will be provided for the use of site staff. These will be provided by a licensed contractor, who will be responsible for appropriate disposal and maintenance of the effluent	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire construction period	Water Pollution Control Ordinance
S. 6.6.1	S.5.2.4	Works adjacent to the fishponds near Kam Tin River inside the conservation area (CA) and Mai Po San Tsuen should be avoided as far as possible during the wet season to avoid runoff into the fishponds	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire construction period	Water Pollution Control Ordinance
S. 6.6.1	S.5.2.4	Wastewater from site facilities (such as toilets) should be discharged to foul sewer, where available. Chemical toilets will be considered where there is no foul sewer connection. There is not expected to be a temporary canteen.	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire construction period	Water Pollution Control Ordinance
S. 6.6.1	S.5.2.4	All site discharges within Water Control Zones must comply with the terms and conditions of a valid discharge licence issued by EPD	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire construction period	Water Pollution Control Ordinance
S. 6.6.1	S.5.2.4	Vehicle wheel washing facilities should be provided, where applicable, at the site exit such that mud, debris, etc. deposited onto the vehicle wheels or body can be washed off before the vehicles are leaving the site area	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire construction period	Water Pollution Control Ordinance
S. 6.6.1	S.5.2.4	Section of the road between the wheel washing bay and the public road should be paved with backfill to reduce vehicle tracking of soil and to prevent site run-off from entering public road drains	Stormwater and Non-point Source Pollution Control	Contractors	At all construction areas of the site during the entire construction period	Water Pollution Control Ordinance
S. 6.6.1	S.5.2.4	The project may occasionally involve the handling of fuel and generates chemical wastes. It must be ensured that all fuel tanks and chemical storage are sited on sealed areas and provided with locks	Protection Against Accidental Spillage	Contractors	At all construction areas of the site during the entire construction period	Water Pollution Control Ordinance
S. 6.6.1	S.5.2.4	The storage areas will be surrounded by bunds with a capacity equal to 110% of the storage capacity of the largest tank to prevent accidentally spilled oil, fuel or chemicals from reaching the receiving waters	Protection Against Accidental Spillage	Contractors	At all construction areas of the site during the entire construction period	Water Pollution Control Ordinance
S. 6.6.1	S.5.2.4	Oil and grease removal facilities will be provided where appropriate, for example, in area near plant workshop/ maintenance areas	Protection Against Accidental Spillage	Contractors	At all construction areas of the site during the entire construction period	Water Pollution Control Ordinance



EIA Ref.	EM&A Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location / Timing of implementation of Measures	What requirements or standards for the measures to achieve?	
S. 6.6.1	S.5.2.4	Chemical waste arising from the site should be properly stored, handled, treated and disposed of in compliance with the requirements stipulated under the Waste Disposal (Chemical Waste) (General) Regulation	Protection Against Accidental Spillage	Contractors	At all construction areas of the site during the entire construction period	Waste Disposal (Chemical Waste) (General) Regulation	
Operationa	Operational Phase						
N/A	N/A	None specific	N/A	N/A	N/A	N/A	



EIA Ref.	EM&A Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location/ Timing of implementation of Measures	What requirements or standards for the measures to achieve?
Construction	Phase			•		
S.7.4.1	S. 6.2.1 – S.6.2.4	An on-site environmental co-ordinator employed by the Contractor should be identified at the outset of the works. Prior to commencement of Project works, the co-ordinator shall prepare a WMP in accordance with the requirements set out in the ETWB TCW No. 19/2005, Waste Management on Construction Sites, for the ER's approval. The WMP shall include monthly and yearly Waste Flow Tables ("WFT") that indicate the amounts of waste generated, recycled and disposed of (including final disposal site), and which should be regularly updated;	Waste management during construction	Contractors	Prior to commencement of Project works, and implemented throughout the entire construction period	ETWB TCW No. 19/2005, Waste Management on Construction Sites
S.7.4.1	S. 6.2.6	Given the potential for secondary environmental impacts (dust, noise, water quality and visual impacts), mitigation measures are required to ensure proper handling, storage, transportation and disposal of materials at the outset and throughout the construction phase of the project	Waste management during construction	Contractors	At all construction areas of the site during the entire construction period	Waste Disposal Ordinance
S.7.4.1	S. 6.2.6	<ul> <li>The reuse/ recycling of all materials on site shall be investigated and exhausted prior to treatment/ disposal off- site</li> </ul>	Waste management during construction	Contractors	At all construction areas of the site during the entire construction period	Waste Disposal Ordinance
S.7.4.1	S. 6.2.6	<ul> <li>Good site practices shall be adopted from the commencement of works to avoid the generation of waste, reduce cross contamination of waste and to promote waste minimisation</li> </ul>	Waste management during construction	Contractors	At all construction areas of the site during the entire construction period	Waste Disposal Ordinance
S.7.4.1	S. 6.2.6	<ul> <li>All waste materials shall be sorted on-site into inert and non- inert C&amp;D materials, and where the materials can be recycled or reused, they shall be further segregated. Inert material, or public fill will comprise stone, rock, masonry, brick, concrete and soil which is suitable for land reclamation and site formation whilst non-inert materials include all other wastes generated from the construction process such as plastic packaging and vegetation (from site clearance).</li> </ul>	Waste management during construction	Contractors	At all construction areas of the site during the entire construction period	Waste Disposal Ordinance

#### Table A1-4 Waste Management Implication – Implementation Schedule of Recommended Mitigation Measures



EIA Ref.	EM&A Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location/ Timing of implementation of Measures	What requirements or standards for the measures to achieve?
S.7.4.1	S. 6.2.6	The Contractor shall be responsible for identifying what materials can be recycled/ reused, whether on-site or off- site. In the event of the latter, the Contractor shall make arrangements for the collection of the recyclable materials. Any remaining non-inert waste shall be collected and disposed of to the Public Filling Areas whilst any inert C&D materials shall be re-used on site as far as possible. Alternatively, if no use of the inert material can be found on- site, the materials can be delivered to a Public Fill Area or Public Fill Bank after obtaining the appropriate licence;	Waste management during construction	Contractors	At all construction areas of the site during the entire construction period	Waste Disposal Ordinance
S.7.4.1	S. 6.2.6	<ul> <li>In order to monitor the disposal of C&amp;D material and solid wastes at public filling facilities and landfills, and control fly- tipping, a trip-ticket system shall be implemented by the Contractor, in accordance with the contract and the requirements of WBTC 31/2004 "Trip Ticket System for Disposal of Construction and Demolition Material".</li> </ul>	Waste management during construction	Contractors	At all construction areas of the site during the entire construction period	WBTC 31/2004 "Trip Ticket System for Disposal of Construction and Demolition Material"
S.7.4.1	S. 6.2.6	Under the Waste Disposal (Chemical Waste) (General) Regulation, the Contractor shall register as a Chemical Waste Producer if chemical wastes such as spent lubricants and paints are generated on site. Only licensed chemical waste collectors shall be employed to collect any chemical waste generated at site. The handling, storage, transportation and disposal of chemical wastes shall be conducted in accordance with the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes and A Guide to the Chemical Waste Control Scheme both published by EPD;	Waste management during construction	Contractors	At all construction areas of the site during the entire construction period	Waste Disposal (Chemical Waste) (General) Regulation
S.7.4.1	S. 6.2.6	<ul> <li>A sufficient number of covered bins shall be provided on site for the containment of general refuse to prevent visual impacts and nuisance to the sensitive surroundings. These bins shall be cleared daily and the collected waste disposed of to the refuse transfer station. Further to the issue of ETWB TCW No. 6/2002A, Enhanced Specification for Site Cleanliness and Tidiness, the Contractor is required to maintain a clean and hygienic site throughout the project works;</li> </ul>	Waste management during construction	Contractors	At all construction areas of the site during the entire construction period	Waste Disposal Ordinance



EIA Ref.	EM&A Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location/ Timing of implementation of Measures	What requirements or standards for the measures to achieve?
S.7.4.1	S. 6.2.6	<ul> <li>All chemical toilets, if any, shall be regularly cleaned and the night-soil collected and transported by a licensed contractor to a Government Sewage Treatment Works facility for disposal; and</li> </ul>	Waste management during construction	Contractors	At all construction areas of the site during the entire construction period	Waste Disposal Ordinance
S.7.4.1	S. 6.2.6	<ul> <li>Toolbox talks should be provided to workers about the concepts of site cleanliness and appropriate waste management procedures, including waste reduction, reuse and recycling.</li> </ul>	Waste management during construction	Contractors	At all construction areas of the site during the entire construction period	Waste Disposal Ordinance
S.7.4.1	S. 6.2.6	<ul> <li>The Contractor shall comply with all relevant statutory requirements and guidelines and their updated versions that may be issued during the course of project construction.</li> </ul>	Waste management during construction	Contractors	At all construction areas of the site during the entire construction period	Waste Disposal Ordinance
Operational	Phase					
S. 7.4.2	S.6.3.2	Waste collection facilities (e.g. litter bins) to be included in the design of the supporting facilities, and at regular intervals along the route. The Government Department responsible for managing the facilities will be responsible for arranging for regular collection of litter from these facilities. Separate collection bins shall be provided for aluminium cans, plastic drinks bottles and paper wastes, which will facilitate recycling of these waste streams	Waste management during operational phase	LCSD for management and maintenance of facilities FEHD for arranging regular collection of refuse	All Resting Stations and along the cycle track. Collection of refuse at regular interval	EIA, Contractual requirements



EIA Ref.	EM&A Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location/ Timing of implementation of Measures	What requirements or standards for the measures to achieve?
Construction	Phase					
S.8.7.2 – S.8.7.3	S.7.2.2	<ul> <li>Preparation of Contamination Assessment Plan (CAP), which should be submitted to EPD for endorsement, prior to investigation.</li> <li>Site investigation and sampling works in accordance with the approved CAP. If contamination is identified, Contamination Assessment Report (CAR) and Remediation Action Plan (RAP) shall be prepared and submitted for EPD's approval.</li> </ul>	To formulate CAP and CAR to assess the land contamination impact	Project Proponent, Contractor	Prior to construction works within the area 5 m of the Project alignment neighbouring Sites A to F, and works area of the cycle track section along Castle Peak Road – San Tin near San Sham Road.	Guidance Note for Contaminated Land Assessment and Guidance Notes for Investigation and Remediation of Contaminated Sites of Petrol Filling Stations, Boatyards, and Car Repair/ Dismantling Workshops
S.8.7.5	S.7.3.1	<ul> <li>The following control measures should be implemented when handling identified contaminated materials:</li> <li>General site safety shall be enforced to include basic practices such as the use of safety boots, hard hats, coveralls, gloves and eye protection;</li> <li>Avoid skin contact, ingestion and inhalation of excavated contaminated soils. Basic personal protective equipment should be used;</li> <li>Site staff and workers shall be given adequate training and instructions specific to the potential hazards, their health and safety responsibilities and safe working practice including basic personal hygiene;</li> <li>Measures shall be implemented to prevent non-workers from approaching the identified works areas in order to avoid exposure to contaminants.</li> </ul>	Safety precautionary measures for identified contaminated materials	Contractors	During construction at works areas neighbouring Sites A to F and works area of the cycle track section along Castle Peak Road – San Tin near San Sham Road	Guidance Note for Contaminated Land Assessment and Guidance Notes for Investigation and Remediation of Contaminated Sites of Petrol Filling Stations, Boatyards, and Car Repair/ Dismantling Workshops

#### Table A1-5 Land Contamination – Implementation Schedule of Recommended Mitigation Measures



EIA Ref.	EM&A Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location/ Timing of implementation of Measures	What requirements or standards for the measures to achieve?
S.8.7.5	S.7.3.1	<ul> <li><u>Management of Contaminated Soils</u></li> <li>Where appropriate, the use of bulk handling equipment should be maximised to reduce the potential contacts between excavated contaminated materials and associated workers;</li> <li>The plants for excavation and transportation of the material shall be cleaned prior to leaving the Site;</li> <li>All temporary stockpiles of the materials shall be completely covered with plastic/ tarpaulin sheets, particularly during heavy rainstorms. The stockpiling areas should be concrete-paved or lined with its perimeter constructed of a concrete bund where appropriate in order to avoid any leachate from migrating out of the area;</li> <li>Any vehicles transporting the material shall be suitably covered to limit potential dust emissions;</li> <li>Surface waters shall be diverted around any contaminated areas or stockpiles to minimize potential runoff into excavations, as runoff might increase the volume of contaminated water requiring disposal and suspended solids in the wastewater stream</li> </ul>	Proper management of contaminated soils	Contractors	During construction at works areas neighbouring Sites A to F and works area of the cycle track section along Castle Peak Road – San Tin near San Sham Road	Guidance Note for Contaminated Land Assessment and Guidance Notes for Investigation and Remediation of Contaminated Sites of Petrol Filling Stations, Boatyards, and Car Repair/ Dismantling Workshops
Operational F	Phase					
N/A	N/A	None specific	N/A	N/A	N/A	N/A



Table A1-6	Ecological & Fisheries Impact – Implementation Schedule of Recommended Mitigation Measures
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EIA Ref.	EM&A Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location/ Timing of implementation of Measures	What requirements or standards for the measures to achieve?
Construction	Phase					
S.9.11.4	S.8.2.3	Prior to tree felling, survey inspections should be made for their suitability for roosting bats. Once these trees have been highlighted, then appropriate checks of each tree for bats should be made prior to removal as a precautionary measure. It is more realistic to further assess the trees with potential for bat roosting at a later stage in the project, programmed at such a time that a survey can be completed in a reasonable timescale prior to felling	Ecological – to minimize ecological impact/ ecological enhancement works	Contractor, ET	During construction	EIA, Contractual requirements
S.9.11.17 - 9.11.19	S.8.2.4	For the Kam Tin section and the Long Valley section of the Project, construction works shall be carried out during the dry season (October to March) which is considered to have no significant impact to wildlife and to avoid the breeding season of Greater Painted-snipes at Long Valley. This is also to prevent any site run-off to adjacent water channels and fishponds including those fishponds along San Tin Tsuen Road.	Ecological – to minimize ecological impact/ ecological enhancement works	Contractor	During construction	EIA, Contractual requirements
S.9.11.23	S.8.2.5	Construction of the section in the vicinity of Mai Po Egretry would need to be completed outside of the recognised breeding season for Ardeids in Hong Kong to prevent any disturbance to the nesting birds. This breeding season is from March to August inclusive. Therefore, construction should take place between the months of <u>September to February</u> to avoid any disturbance to breeding and nesting birds	Ecological – to minimize ecological impact/ ecological enhancement works	Contractor	During construction	EIA, Contractual requirements
S.9.11.25	S.8.2.6	Planting of tall bamboo or other vegetation could also be implemented at the corner of Mai Po Road and Castle Peak Road on the northern side to act as a screen between the cycle track and egretry. This may help to reduce any potential disturbance to breeding ardeids	Ecological – to minimize ecological impact/ ecological enhancement works	Contractor	During construction	EIA, Contractual requirements
S.9.11.7	S.8.2.6	<i>In situ</i> compensation planting should occur at the Information Kiosk and R9, to provide continuing function of the bamboo and plantation (as well as the provision of potential roosting habitats for birds, an anticipated benefit of the mitigation planting from a previous project (Maunsell 1998).	Ecological – to minimize ecological impact/ ecological enhancement works	Contractor	During construction	EIA, Contractual requirements



EIA Ref.	EM&A Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location/ Timing of implementation of Measures	What requirements or standards for the measures to achieve?
S.10.5.1	S.8.2.2	Local narrowing of the cycle track (from 4m to 3m) shall be implemented to avoid the impact of the cycle track on the single, inactive fishpond edge just outside Mai Po Village (see Figure 10-1 of the EIA Report).	Fisheries – to minimize impact to fisheries	Contractor	During construction	EIA, Contractual requirements
S.10.5.4	S.8.2.7	Good site practice must be employed at all times, particularly in the areas close to fishponds. Practice Note for Professional Persons ProPECC PN1/94 – Construction Site Drainage shall be implemented	Fisheries – to minimize impact to fisheries	Contractor	During construction	EIA, Contractual requirements
S.10.5.4	S.8.2.8	Along Pok Wai South Road and San Tin Tsuen Roads, once the final construction sequencing is known, liaison with local residents and aquaculturists should be implemented in order to minimize temporary road blockages and to identify the best timing for works along this area	Fisheries – to minimize impact to fisheries	Contractor	During construction	EIA, Contractual requirements
S.10.5.3	S.8.2.9	During wet seasons, surface run-off from the construction sites will need to be directed into storm drains via adequately designed wastewater treatment facilities such as sand traps, silt traps and sediment settling basins. Works adjacent to the fishponds near NTMDC inside the Wetland Conservation Area (WCA) and Mai Po San Tsuen should be avoided, as far as practicable, during the wet season to avoid runoff into the fishponds	Fisheries – to minimize impact to fisheries	Contractor	During construction	EIA, Contractual requirements
S.9.11.27	S.8.2.11	<ul> <li>The following good work practices are recommended:</li> <li>Avoid soil storage against trees;</li> <li>Fence off any potentially ecologically sensitive areas;</li> <li>Delineation of works area to prevent encroachment onto adjacent habitats;</li> <li>Reinstatement of habitat after works;</li> <li>No on-site burning of waste;</li> <li>Waste and refuse in appropriate receptacles;</li> <li>Staff training/toolbox talks for site work near Long Valley and WCA – important areas for birds therefore staff should reduce amount of noise whilst working and during breaks where possible;</li> <li>Regular ecological checks; and</li> <li>Silt/ Sediment/ Oil traps for drainage to prevent site run-off</li> </ul>	Ecological – to minimize ecological impact/ ecological enhancement works	Contractor	During construction	EIA, Contractual requirements



EIA Ref.	EM&A Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location/ Timing of implementation of Measures	What requirements or standards for the measures to achieve?
Operational	Phase					
S.9.11.26	S.8.2.10	Implementation of signage at the Resting Stations to indicate that wildlife may be present and that noise levels and activities should be kept to a minimum could be implemented to help to reduce any potential disturbance to wildlife.	Ecological – to minimize ecological impact/ ecological enhancement works	Contractor	During construction	EIA, Contractual requirements
S.9.11.26	S.8.2.10	At Long Valley, to mitigate against potential indirect human disturbance to Greater Painted-snipe, planting could be undertaken as appropriate along the proposed cycle track at meander 8 to act as screening.	Ecological – to minimize ecological impact/ ecological enhancement works	Contractor	During construction	EIA, Contractual requirements
S.9.13.2	S.8.3.1	Operational Phase EM&A will comprise of an audit undertaken by the ET Leader during the first year of operation of the cycle track to ensure appropriate implementation of mitigation measures including signage, mitigation planting at Mai Po Egretry, R9 and planting for screening at meander 8 in Long Valley.	Ecological – to minimize ecological impact/ ecological enhancement works	Contractor, ET	During operation	EIA, Contractual requirements



#### Table A1-7 Cultural Heritage Impact – Implementation Schedule of Recommended Mitigation Measures

EIA Ref.	EM&A Ref.	Recommended Environmental Protection Measures/ Mitigation Measures	Objectives of the recommended measures & main concerns to address	Who to implement the measures?	Location/ Timing of implementation of Measures	What requirements or standards for the measures to achieve?	
Construction	Construction Phase						
S.11.5.1	S.9.2.1	Care should be taken during the construction stage to report any signs of possible discovery of artefacts.	Cultural heritage protection	Contractors	During the construction period	АМО	
Operational F	Operational Phase						
N/A	N/A	None specific	N/A	N/A	N/A	N/A	



Table A1-8	Landscape & Visual Impact – Implementation Schedule of Recommended Mitigation Measures
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		Recommended Mitigation			Implementation/	Polovant Standard or	Implementation Stages			Timing of	Objectives of the Recommended
EIA Ref.	Mit. Code	Recommended Mitigation Measures	Location	Funding	Implementation/ Maintenance Agent	Relevant Standard or Requirement	D	С	0	Timing of Implementation	Recommended Measure and Main Concern to address
Detailed Design	n Phase										
Table 12-11	CP1	A detailed tree survey to be carried out by the IDC Consultant during the detailed design stage. The recommendations of the preliminary tree survey shall be reviewed and confirmed during the detailed survey. Should tree felling be required, tree felling application is required in accordance with ETWB TCW No. 3/2006, Tree Preservation	Site	Project Proponent	Project Proponent, IDC Consultant	EIA, Contractual requirements Annex 10 and Annex 18 of EIAO-TM, ETWB TCW No. 3/2006 & WBTC No. 14/2002	×			During detailed design	Landscape mitigation measures
S.12.9.3	CP6	It has been agreed that the proposed landscape areas under DSD's 4215DS project which falls within the cycle track works area will be implemented by Project proponent of this Project in form of roadside amenity areas after completion of the cycle track. During the detailed design, the works programme of this Project shall be coordinated with the above-mentioned DSD project in order to avoid abortive planting works and impact on landscape resources between the interface of different public works. The proposed landscape areas under 4215DS falled within the cycle track works area shall be incorporated in the final landscape design of this Project.	Site	Project Proponent	Project Proponent, IDC Consultant	EIA, Contractual requirements Annex 10 and Annex 18 of EIAO-TM, ETWB TCW No. 3/2006 & WBTC No. 14/2002				During detailed design	Landscape mitigation measures



		_			Implementation/		Implen	nentation	Stages		Objectives of the Recommended n Measure and Main Concern to address
EIA Ref.	Mit. Code	Recommended Mitigation Measures	Location	Funding	Implementation/ Maintenance Agent	Relevant Standard or Requirement	D	С	0	Timing of Implementation	
S.12.10.1	OP1	The Design Concept Drawings and Conceptual Landscape Master Plan of cycle track and associated facilities demonstrate landscape and visual mitigation strategies and design measures including integrated design approach, amenity and compensatory planting proposals and treatment of retaining structure and slopes have been recommended in the EIA. More detailed landscape and compensatory planting proposals shall be developed by IDC consultants at later stage during detailed design and construction phase of this project following the completion of the detailed Tree Survey Report and approval from relevant departments at that stage	Site	Project Proponent	Project Proponent, IDC Consultant	EIA, Contractual requirements Annex 10 and Annex 18 of EIAO-TM, ETWB TCW No. 3/2006 & WBTC No. 14/2002	<b>~</b>			During detailed design	Landscape mitigation measures
Construction P	hase Lands	scape and Visual Mitigation Measures									
Table 12-11	CP1	Preservation of Existing Vegetation									
	CP1.1	To retain trees, which have high amenity or ecology value and contribute most to the landscape and visual amenity of the site and its immediate environs.	Site	Project Proponent	Project Landscape Architect / Contractor, Project Proponent	Annex 10 and Annex 18 of EIAO-TM, ETWB TCW No. 3/2006 & WBTC No. 14/2002	~			Throughout design phase	To minimize the disturbance to the existing landscape resources.
	CP1.2	Creation of precautionary area around trees to be retained equal to half of the trees canopy diameter. Precautionary area to be fenced.	Site	Project Proponent	Contractor / Contractor	Annex 10 and Annex 18 of EIAO-TM, ETWB TCW No. 3/2006 & WBTC No. 14/2002		~		Before Construction phase Commence	To ensure the success of the tree preservation proposals.



	N 4:4	. Recommended Mitigation			Implementation/	Relevant Standard or	Implementation Stages			Timing of	Objectives of the Recommended
EIA Ref.	Mit. Code	Recommended Mittigation Measures	Location	Funding	Maintenance Agent	Relevant Standard or Requirement	D	С	0	Timing of Implementation	Measure and Main Concern to address
	CP1.3	Prohibition of the storage of materials including fuel, the movement of construction vehicles, and the refuelling and washing of equipment including concrete mixers within the precautionary area.	Site	Project Proponent	Contractor / Contractor	Annex 10 and Annex 18 of EIAO-TM, ETWB TCW No. 3/2006 & WBTC No. 14/2002		✓		Throughout construction phase	To ensure the success of the tree preservation proposals.
	CP1.4	Phased segmental root pruning for trees to be retained and transplanted over a suitable period (determined by species and size) prior to lifting or site formation works which affect the existing rootball of trees identified for retention. The extent of the pruning will be based on the size and the species of the tree in each case.	Site	Project Proponent	Contractor / Contractor	Annex 10 and Annex 18 of EIAO-TM, ETWB TCW No. 3/2006 & WBTC No. 14/2002		✓		Throughout construction phase	To ensure the success of the tree preservation proposals.
	CP1.5	Pruning of the branches of existing trees identified for transplantation and retention to be based on the principle of crown thinning maintaining their form and amenity value.	Site	Project Proponent	Contractor / Contractor	Annex 10 and Annex 18 of EIAO-TM, ETWB TCW No. 3/2006 & WBTC No. 14/2002		✓		Throughout construction phase	To ensure the success of the tree preservation proposals.
	CP1.6	The watering of existing vegetation particularly during periods of excavation when the water table beneath the existing vegetation is lowered.	Site	Project Proponent	Contractor / Contractor	Annex 10 and Annex 18 of EIAO-TM, ETWB TCW No. 3/2006 & WBTC No. 14/2002		✓		Throughout construction phase	To ensure the success of the tree preservation proposals.
	CP1.7	The rectification and repair of damaged vegetation following the construction phase to it's original condition prior to the commencement of the works or replacement using specimens of the same species, size and form where appropriate to the design	Site	Project Proponent	Contractor / Contractor	Annex 10 and Annex 18 of EIAO-TM, ETWB TCW No. 3/2006 & WBTC No. 14/2002		✓		Throughout construction phase	To ensure the success of the tree preservation proposals.



	N 414	Deserves de l Mitigetier			Implementation/	Relevant Standard or	Implen	nentation	Stages	Timin a of	Objectives of the
EIA Ref.	Mit. Code	Recommended Mitigation Measures	Location	Funding	Maintenance Agent	Requirement	D	с	0	Timing of Implementation	Recommended Measure and Main Concern to address
		intention of the area affected									
	CP1.8	All works affecting the trees identified for retention and transplantation will be carefully monitored. This includes the key stages in the preparation of the trees, the implementation of protection measures and health monitoring through out the construction period	Site	Project Proponent	Contractor / Contractor	Annex 10 and Annex 18 of EIAO-TM, ETWB TCW No. 3/2006 & WBTC No. 14/2002		*		Throughout construction phase	To ensure the success of the tree preservation proposals.
	CP1.9	Detailed landscape and tree preservation proposals will be submitted to the relevant government departments for approval under the lease conditions and in accordance with ETWB TCW No. 2/2004 and WBTC No. 14/2002.	Site	Project Proponent	Project Proponent, Project Landscape Architect / NA	Annex 10 and Annex 18 of EIAO-TM, ETWB TCW No. 3/2006 & WBTC No. 14/2002	~			Throughout design phase	To ensure the tree preservation and planting proposals are integrated with the existing landscape context and that the landscape resources are preserved where appropriate.
	CP2.0	The tree preservation works should be implemented by approved Landscape Contractors and inspected and approved on site by a qualified Landscape Architect. A tree protection specification would be included within the contract documents.	Site	Project Proponent	Landscape Architect, Project Proponent / NA	Annex 10 and Annex 18 of EIAO-TM, ETWB TCW No. 3/2006 & WBTC No. 14/2002	~	*		Throughout design and construction phases	To ensure the tree preservation and planting proposals are integrated with the existing landscape context and that the landscape resources are preserved where appropriate.
Table 12-11	CP2	Preservation of Existing Topsoil	1		I	1	1	1	1	I	
	CP2.1	Topsoil disturbed during the construction phase should be tested using a standard soil testing methodology and where it is found to be worthy of retention stored for re-use.	Site	Project Proponent	Contractor / Contractor	Annex 10 and Annex 18 of EIAO-TM		✓		Throughout construction phase	To provide a viable growing medium suited to the existing conditions and reduce the need for the importation of topsoil.



	Mit.	Recommended Mitigation			Implementation/	Relevant Standard or	Implen	nentation	Stages	Timing of	Objectives of the Recommended Measure and Main Concern to address
EIA Ref.	Code	Measures	Location	Funding	Maintenance Agent	Requirement	D	С	0	Implementation	
	CP2.2	The soil will be stockpiled to a maximum height of 2m and will be either temporarily vegetated with hydroseeded grass during construction or covered with a waterproof covering to prevent erosion.	Site	Project Proponent	Contractor / Contractor	Annex 10 and Annex 18 of EIAO-TM		✓		Throughout construction phase	To provide a viable growing medium suited to the existing conditions and reduce the need for the importation of topsoil.
	CP2.3	The stockpile should be turned over on a regular basis to avoid acidification and the degradation of the organic material, and reused after completion. Alternatively, if this is not practicable, it should be considered for use elsewhere, including other projects.	Site	Project Proponent	Contractor / Contractor	Annex 10 and Annex 18 of EIAO-TM		~		Throughout construction phase	To provide a viable growing medium suited to the existing conditions and reduce the need for the importation of topsoil.
Table 12-11	CP3	Works Area and Temporary Works A	reas				Ĩ	r	ſ		
	CP3.1	Where appropriate to the final design the landscape of these works areas should be restored following the completion of the construction phase.	Site	Project Proponent	Contractor / Contractor	Annex 10 and Annex 18 of EIAO-TM		~		Through out construction phase	To minimize the disturbance to existing landscape resources and change of visual amenity.
	CP3.2	Construction site controls should be enforced including the storage of materials, the location and appearance of site accommodation and the careful design of site lighting to prevent light spillage.	Site	Project Proponent	Contractor / Contractor	Annex 10 and Annex 18 of EIAO-TM		✓		Through out construction phase	To minimize the disturbance to existing landscape resources and change of visual amenity.
	CP3.3	Screen the works area during the construction phase through the use of decorative hoarding along the site boundary facing adjacent VSRs	Site	Project Proponent	Contractor / Contractor	Annex 10 and Annex 18 of EIAO-TM		*		Through out construction phase	To minimize the disturbance to existing landscape resources and change of visual amenity.



							Implen	nentation	Stages		Objectives of the
EIA Ref.	Mit. Code	Recommended Mitigation Measures	Location	Funding	Implementation/ Maintenance Agent	Relevant Standard or Requirement	D	С	0	Timing of Implementation	Recommended Measure and Main Concern to address
Table 12-11	CP4	Mitigation Planting	r	T		Γ	1		1	I	
	CP4.1	Replanting of disturbed vegetation should be undertaken at the earliest possible stage of the construction phase	Site	Project Proponent	Contractor / Contractor	Annex 10 and Annex 18 of EIAO-TM, ETWB TCW No. 3/2006 & WBTC No. 14/2002		✓ 		After the site formation and on completion of planting area.	To minimize the disturbance to existing landscape resources and minimize the impacts on the visual amenity of the area.
	CP4.2	Use of native plant species predominantly in the planting design for the buffer areas.	Site	Project Proponent	Project Landscape Architect/ NA	Annex 10 and Annex 18 of EIAO-TM, ETWB TCW No. 3/2006 & WBTC No. 14/2002	✓ 	✓ 		After the site formation and on completion of planting area.	To enhance the local landscape and ecological value.
	CP4.3	The tree planting works should be implemented by approved Landscape Contractors and inspected and approved on site by a qualified Landscape Architect. A tree planting specification would be included within the contract documents.	Site	Project Proponent	Landscape Architect, Project Proponent / NA	Annex 10 and Annex 18 of EIAO-TM, ETWB TCW No. 3/2006 & WBTC No. 14/2002	*	✓		Throughout design and construction phases	To ensure the tree preservation and planting proposals are integrated with the existing landscape context and that valuable landscape resources are preserved where appropriate to the final design.
Table 12-11	CP5	Transplantation of Existing Trees	1				1	1	1		
	CP5.1	The tree transplanting works should be implemented by approved Landscape Contractors and inspected and approved on site by a qualified Landscape Architect. A tree protection / transplanting specification would be included within the contract documents.	Site	Project Proponent	Project Proponent / Contractor	Annex 10 and Annex 18 of EIAO-TM, ETWB TCW No. 3/2006 & WBTC No. 14/2002	*	•		Throughout design and construction phases	To ensure the tree preservation and planting proposals are integrated with the existing landscape context and that valuable landscape resources are preserved where appropriate to the final design.



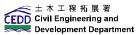
	Mit.	Recommended Mitigation		Implementation/	Relevant Standard or	Implen	nentation	Stages	Timing of	Objectives of the Recommended	
EIA Ref.	Code	Measures	Location	Funding	Maintenance Agent	Requirement	D	С	0	Implementation	Measure and Main Concern to address
	CP5.2	The implementation program should reserve enough time for advance tree transplanting preparation.	Site	Project Proponent	Project Proponent / Contractor	Annex 10 and Annex 18 of EIAO-TM, ETWB TCW No. 3/2006 & WBTC No. 14/2002	✓ 	✓		Throughout design and construction phases	To ensure the tree preservation and planting proposals are integrated with the existing landscape context and that valuable landscape resources are preserved where appropriate to the final design.
•	1	cape and Visual Mitigation Measures									
Table 12-12	OP1	Design of Cycle Track and Associate	ed Facilities		1	T	1	1		1	
	OP1.1	Where possible integrate the alignment, as far as technically feasible, with existing built structures. Select responsive The locations for the associated facilities away from landscape and visually sensitive areas.	Site	Project Proponent	Project Engineer and Architect/ NA	Annex 10 and Annex 18 of EIAO-TM and BD	✓			Throughout Design phase	To ensure the proposals are integrated with the existing landscape and visual context, and avoid cluster effect.
	OP1.2	Where possible adopt a simple building design and building height profile, single-storey (lower than the adjacent village houses), responding to the village houses in the context.	Site	Project Proponent	Project Engineer and Architect/ NA	Annex 10 and Annex 18 of EIAO-TM and BD	*			Throughout Design phase	To ensure the proposals are integrated with the existing landscape and visual context, and avoid cluster effect.
	OP1.3	Use of natural materials such as wooden framing or sustainable materials such as recycle plastic for built structure.	Site	Project Proponent	Project Engineer and Architect/ NA	Annex 10 and Annex 18 of EIAO-TM and BD	×			Throughout Design phase	Responsive building façade treatment to reduce the apparent visual mass of the facilities and reduce the glare effect from the reflection of sunlight.



	Mit.	Recommended Mitigation			Implementation/	Relevant Standard or	Implen	nentation	Stages	Timing of	Objectives of the Recommended
EIA Ref.	Code	Measures	Location	Funding	Maintenance Agent	Requirement	D	С	0	Implementation	Measure and Main Concern to address
	OP1.4	Use of natural tones with non- reflective finishes on the outward facing building facades to reduce glare effect. Sustainable material such as recycle plastic shall be considered.	Site	Project Proponent	Project Engineer and Architect/ NA	Annex 10 and Annex 18 of EIAO-TM, HKPSG and BD	×			Throughout Design phase	To reduce the nighttime glare effect to the surrounding environs.
	OP1.5	Formulate lighting operation management programme to minimize potential light spillage and glare impacts.	Site	Project Proponent	HyD and ArchSD/ HyD and ArchSD	Annex 10 and Annex 18 of EIAO-TM			~	Through out Operation phase	To reduce the nighttime glare effect to the surrounding environs.
Table 12-12	OP2	Roadside and Amenity Planting					<b>T</b>				
	OP2.1	Utilise large ornamental trees with high canopy and thin foliage to allow some through views from the adjacent neighbourhood and give accent to the existing road planting and wooded areas with the advantage of creating a more coherent landscape framework whilst native species will utilise on sloping area improving the ecological connectivity between existing woodland habitats.	Site	Project Proponent	Project Landscape Architect / AFCD and LCSD	Annex 10 and Annex 18 of EIAO-TM, HKPSG and BD	✓ 		•	Through out Design phase	Provide a linkage with the existing roadside and woodland planting areas creating a more coherent landscape framework.
	OP2.2	Large Feature Trees will utilise within the resting station and education centre or along the cycle tracks where space allows	Site	Project Proponent	Project Landscape Architect / AFCD and LCSD	Annex 10 and Annex 18 of EIAO-TM, HKPSG & BD	~		*	Through out Design phase	Conserve and enhance the landscape interest.



	Mit.	Recommended Mitigation			Implementation/	Relevant Standard or	Implementation Stages			Timing of	Objectives of the Recommended
EIA Ref.	Code	Measures	Location	Funding	Maintenance Agent	Requirement	D	с	0	Implementation	Measure and Main Concern to address
Table 12-12	OP3	Compensatory Planting Proposals		-			-				
	OP3.1	Utilise ornamental species along the track and within the resting stations and education whilst species native to Hong Kong will be added the roadside planting along cycle track or on sloping area	Site	Project Proponent	Project Landscape Architect / AFCD and LCSD	Annex 10 and Annex 18 of EIAO-TM, HKPSG and BD	✓		✓	Through out Design phase	The planting proposal seeks to compensate for the predicted tree loss resulting from the construction of the proposed works, visually integrate the proposals within its existing landscape framework and provide an improved visual amenity for future residents.
	OP3.2	A qualified or registered landscape architect will be involved in the design, construction supervision and monitoring, and maintenance period to oversee the implementation of the recommended landscape and visual mitigation measures including the tree preservation and landscape works on site.	Site	Project Proponent	Project Proponent / NA	Annex 10 and Annex 18 of EIAO-TM, HKPSG and BD	✓			Through out Design phase	The planting proposal seeks to compensate for the predicted tree loss resulting from the construction of the proposed works, visually integrate the proposals within its existing landscape framework and provide an improved visual amenity for future users.



	Mit.	Recommended Mitigation			Implementation/	Relevant Standard or	Impler	nentation	Stages	Timing of	Objectives of the Recommended
EIA Ref.	Code	Measures	Location	Funding	Maintenance Agent	Requirement	D	С	0	Implementation	Measure and Main Concern to address
Table 12-12	OP4	Treatment of Retaining Wall and Slop	pes		_						
	OP4.1	Use of soft landscape works including tree and shrub planting to give man-made slopes a more natural appearance blending into the woodland setting for the development	Site	Project Proponent	Project Landscape Architect / AFCD	Annex 10 and Annex 18 of EIAO-TM, HKPSG and BD GEO Publication No. 1/2000 "Technical Guidelines on Landscape Treatment and Bio-engineering for Man-made Slopes and Retaining Walls"	✓			Through out Design phase	The design seeks to visually integrate the engineered slope feature within the rural and riverside landscapes.
	OP4.2	Utilise whip sized planting on the face of soil cut slopes and at the crest and toe of the slope, and within berm planters these smaller, younger plants adapt to their new growing conditions more quickly than larger sized stock and establish a naturalistic effect more rapidly.	Site	Project Proponent	Project Landscape Architect/ AFCD	Annex 10 and Annex 18 of EIAO-TM, HKPSG and BD GEO Publication No. 1/2000 "Technical Guidelines on Landscape Treatment and Bio-engineering for Man-made Slopes and Retaining Walls"	*		~	Through out Design phase	The planting proposal seeks to integrate the engineered slope feature within the rural and riverside landscapes.

Legend: D – Design, C – Construction, O - Operation

Note: BD– Building Ordinance

ETWB TCW – Environmental and Transport Works Bureau Technical Circular

HKPSG - Hong Kong Planning Standards and Guidelines

EIAO-TM – Technical Memorandum on Environmental Impact Assessment Process

TPO – Town Planning Ordinance

WBTC - Works Bureau Technical Circulars