Issue No.

1

Issue Date

December 2012

Project No.

944

CONSTRUCTION OF A SECONDARY
BOUNDARY FENCE AND NEW
SECTION OF PRIMARY BOUNDARY
FENCE AND BOUNDARY PATROL
ROAD (SECTION 2 LOK MA CHAU
CONTROL POINT TO NG TUNG
RIVER)

ENVIRONMENTAL MONITORING & AUDIT REPORT (NOVEMBER 2012)

Prepared By:

ALLIED ENVIRONMENTAL CONSULTANTS LTD.

**COMMERCIAL-IN-CONFIDENCE** 









Ref.: ASDBFBPREM00 0 0442L.12

7 December 2012

Mott MacDonald Hong Kong Limited 20/F Two Landmark East, 100 How Ming Street, Kwun Tong, Hong Kong

By Fax (2827 1823) and Post

Attention: Mr. James Kam / Mr. F. Y. Wong

Dear Sirs,

Re: Environmental Permit No. EP-347/2009/A and FEP-02/347/2009/A Contract No. SSW306 - Section 2
Construction of a Secondary Boundary Fence and New Section of Primary Boundary Fence and Boundary Patrol Road from Lok Ma Chau Control Point to Ng Tung River
Monthly EM&A Report for November 2012

Reference is made to the Environmental Team's submission of the draft Monthly EM&A Report for November 2012 (Issue No. 1) by E-mail on 6 December 2012.

We are pleased to inform you that we have no further comments on the captioned report. We write to verify that the captioned submission in accordance with Condition 4.5 of EP-347/2009/A and FEP-02/347/2009/A.

Thank you for your attention and please feel free to contact the undersigned should you have any queries.

Yours faithfully,

David Yeung

Independent Environmental Checker

c.c. ArchSD Attn: Mr. W. K. Yiu (CPM203) / Mr. Laurence Kwan (SPM225) Fax: 2810 5372

MMHK(site) Attn: Mr. Peter Tsang Fax: 2683 1195 AEC (ETL) Attn: Ms. Grace Kwok Fax: 2815 5399

Able Attn: Mr. Gavin Lee Fax: 2796 0519

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Issue No. : 1

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Certified by:

Grace M. H. Kwok Environmental Team Leader

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Prepared By:

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Author:

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This report has been prepared by Allied Environmental Consultants Limited with all reasonable skill, care and diligence within the terms of the Agreement with the client, incorporating our General Terms and Conditions of Business and taking account of the resources devoted to it by agreement with the client.

We disclaim any responsibility to the client and others in respect of any matters outside the scope of the above.

This report is confidential to the client and we accept no responsibility of whatsoever nature to third parties to whom this report, or any part thereof, is made known. Any such party relies upon the report at their own risk.

Environmental Monitoring & Audit Report (November 2012)

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## **EXECUTIVE SUMMARY**

Architectural Services Department (ArchSD) has awarded the contract for the Construction of a Secondary Boundary Fence and New Section of Primary Boundary Fence and Boundary Patrol Road - Section 2 Lok Ma Chau Control Point to Ng Tung River. (hereafter referred to as the "Project") to Able Engineering Co. Ltd. ("the Contractor"). The contractor has appointed Allied Environmental Consultants Limited (AEC) as the Environmental Team (ET) to undertake Environmental Monitoring and Audit (EM&A) programme in accordance with the EM&A Manual, the Environmental Permit (EP-347/2009/A) and Further Environmental Permit (FEP-02/347/2009/A) for the Project. The site preparation works and EM&A programme commenced on 25<sup>th</sup> March 2010 and the construction works were commenced on 12<sup>th</sup> April 2010. This report is the thirty-third monthly EM&A report, which details the EM&A results recorded during the period from 1<sup>st</sup> November 2012 to 30<sup>th</sup> November 2012.

According to the EM&A Manual, there are total 10 designated noise monitoring locations for the entire Construction of a Secondary Boundary Fence and New Sections of Primary Boundary Fence and Boundary Patrol Road project, where only MTL01 is within 300m from the construction area for Section 2 (Lok Ma Chau Control Point to Ng Tung River), thus only MTL01 is covered in this EM&A report for Section 2. Impact noise monitoring for the Project was carried out on 6<sup>th</sup>, 15<sup>th</sup>, 21<sup>st</sup> and 27<sup>th</sup> November 2012. Noise monitoring was conducted within the period of 0700-1900, non-restricted hours.

Noise monitoring results at the monitoring location MTL01, based on the monitoring results, the noise levels comply with the environmental requirements in EM&A Manual. There was no exceedance of the action and limit levels during the reporting month.

Four environmental site inspections were conducted by the Contractor and the ET on 9<sup>th</sup>, 16<sup>th</sup>, 19<sup>th</sup> and 30<sup>th</sup> November 2012. Major findings and deficiency were summarized at *Table 8* of this report. No non-compliance was observed in the reporting month.

There were no environmental complaints received in the reporting month.

No notification of summons or prosecution was received in the reporting month.

A total of 13m<sup>3</sup> of inert C&D waste was disposed to Tuen Mun Area 38 Fill Bank. A total of 59m<sup>3</sup> of general refuse was disposed to NENT Landfill in this reporting period.

According to Section 3.2 of the FEP, no construction works using power mechanical equipment shall be allowed between 15<sup>th</sup> November and 15<sup>th</sup> March inclusive in any consecutive year. Thus, construction activities to be undertaken in December 2012 will include sealant caulking, road marking and fixing the defects. Potential environmental impacts include dust emission relating to the dry weather; noise from loading, unloading and handling of materials and storage of various C&D and chemical wastes. The Contractor should properly implement environmental mitigation measures as per the implementation schedule in the EM&A manual to ensure no adverse environmental impacts to be arisen from the construction works. The Contractor was reminded to maintain good housekeeping at the site.

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Environmental Monitoring & Audit Report (November 2012)

## 1. PROJECT BACKGROUND

The Frontier Closed Area (FCA) is an integral part of the package of measures for maintaining the integrity of the Hong Kong SAR's boundary with the Mainland and for combating illegal immigration and other cross-boundary criminal activities. Following a recent review, the Government has concluded that with the erection of a secondary boundary fence (SBF) along the boundary patrol road (BPR) and construction of new sections of the BPR and primary boundary fence (PBF) at certain sections along the boundary, the FCA coverage can be substantially reduced without affecting the objective of maintaining the integrity of the boundary. The PBF and SBF will be erected along the northern and southern curbs of the realigned BPR respectively to facilitate the Police in combating cross-boundary criminal activities. The reduced FCA will comprise a narrow strip of land covering the realigned BPR and areas to its north, together with the points of crossing the boundary (i.e. the Boundary Control Points and Sha Tau Kok town). Areas south of the SBF will generally be excised from the FCA. The site location plan is shown in *Figure 1*.

The proposed Secondary Boundary Fence is categorized as a Designated Project (DP) under the Environmental Impact Assessment Ordinance (EIAO) and therefore a detailed Environmental Impact Assessment (EIA- 161/2008) was conducted in year 2009.

An Environmental Permit (EP-347/2009) and a Variation of Environmental Permit (EP-347/2009/A) for the construction of whole project was issued by Environmental Protection Department in June 2009 and June 2010 respectively. A Further Environmental Permit (FEP-02/347/2009) and a Variation of Further Environmental Permit (FEP-02/347/2009/A) for the construction of the subject project was issued in February 2010 and July 2010 respectively.

Architectural Services Department (ArchSD) as the works agent has awarded the construction contract of the Project to Able Engineering Co. Ltd. ("the Contractor"). The Contractor has appointed Allied Environmental Consultants Limited (AEC) as the Environmental Team (ET) to undertake Environmental Monitoring and Audit (EM&A) programme in accordance with the EM&A Manual under the approved EIA report, which details the EM&A requirements for the construction of the Project, the EP-347/2009/A and FEP-02/347/2009/A.

The Construction Programme of the Project is shown in *Appendix A*. The site preparation works and EM&A programme commenced on 25<sup>th</sup> March 2010 and the construction works commenced on 12<sup>th</sup> April 2010. This report is the thirty-third monthly EM&A report, which details the EM&A results recorded during the period from 1<sup>st</sup> November 2012 to 30<sup>th</sup> November 2012.

#### 1.1 Project Organization and Contact Personnel

Key personnel and contact particulars are summarized in *Table 1*.

Role	Department / Company	Names	Contact Number	Fax Number	
Engineer Representative	Mott McDonald Hong Kong Limited	Mr. FY Wong	2828 5740	2827 1823	
	Rong Emilied		2828 5921	2827 1823	
Main Contractor Able Engineering Co., Limited		Mr. Gavin Lee	9282 8158	2676 7966	
Environmental Allied Environmental		Ms. Grace Kwok	2815 7028	2815 5399	
Team Leader Consultants Limited					
Independent ENVIRON Hong Kong		Mr. David Yeung	3743 0788	3548 6988	
Environmental Limited					
Checker					

Table 1 Contact Details of Key Personnel

The organizational structure and lines of communication during the construction work with respect to environmental management is given in Appendix B.

## 2. CONSTRUCTION WORKS & PROGRAMME

Construction activities undertaken during 1<sup>st</sup> November 2012 to 14<sup>th</sup> November 2012 including the following works items:

- XPM Mesh fixing to PBF / SBF fence;
- Painting to PBF / SBF flat bar / lamp pole and bollard;

Construction activities undertaken works during 15<sup>th</sup> November 2012 to 30<sup>th</sup> November 2012 including the following works items:

- Mesh fixing
- Painting to bollard

The interrelationship between construction activities and environmental mitigation measures in the reporting month are shown in *Table 2*.

Environmental Monitoring & Audit Report (November 2012)

Measures	
ecord of waste	
censed collector	
intained.	
chemical should	
ntities and record	

Construction Works	Major Environmental Impact	Mitigation Measures
XPM Mesh fixing to	Waste management	Quantities and record of waste
PBF / SBF fence		transferred to licensed collector
		should be well- maintained.
Painting to PBF /	Waste management	Proper storage of chemical should
SBF flat bar / lamp		be provided. Quantities and record
pole and bollard		of chemical waste transferred to
		licensed collector should be well-
		maintained.
Table 2 Intermelationalin he	turan Construction Activities and Mitiga	diam Managana

Table 2 Interrelationship between Construction Activities and Mitigation Measures

## 3. SUMMARY OF EM&A REQUIREMENT

Weekly site inspection is required for air quality, noise quality, water quality, waste management, ecology, cultural heritage and landscape and visual. The inspection is to ensure mitigation measures recommended in EIA and EM&A manual implemented during construction phase. Mitigation measures implementation schedule and their status are given in Appendix F

For regular impact noise monitoring, the sampling frequency of at least once a week for a  $L_{eq(30mins)}$ . The Action and Limit Levels for Impact noise are summarized in *Table 3*.

Time Period	Action Level	Limit Level	
Daytime (0700-1900) except general holidays and Sunday	When one documented complaint is received.	75 dB(A)	
Measurements in Leq (30min)	_		

Table 3 Action and Limit Level for Noise Impact Monitoring

**AEC** Issue 1

Should non-compliance of the above Action and Limit levels occurs, actions in accordance with the Event and Action Plan in *Table 4*.

Event	Action						
	ET Leader	IEC	ER	Contractor			
Action Level	<ol> <li>Notify IEC and the Contractor.</li> <li>Carry out investigation.</li> <li>Report the results of investigation to IEC and the Contractor.</li> </ol>	Review with     analyzed results     submitted by ET     Review the     proposed     remedial     measures by the	<ol> <li>Confirm receipt         of notification of         exceedance in         writing,</li> <li>Notify the         Contractor.</li> <li>Require the</li> </ol>	Submit noise mitigation proposals to IEC.      Implement noise mitigation			
	<ul><li>4. Discuss with the Contractor and formulate remedial measures.</li><li>5. Increase monitoring</li></ul>	Contractor and advise ER accordingly. 3. Supervise the implement of	Contractor to propose remedial measures for the analyzed noise	proposals.			
	frequency to check mitigation measures.	remedial measures.	problem. 4. Ensure remedial measures are properly implemented.				
Limit Level	<ol> <li>Identify the source.</li> <li>Notify IEC, ER, EPD and the Contractor.</li> <li>Repeat measurement to confirm findings.</li> <li>Increase monitoring frequency.</li> <li>Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented.</li> <li>Inform IEC, ER and EPD to causes &amp; actions taken for the exceedances.</li> <li>Assess effectiveness of the Contractor's remedial actions and keep IEC, EPD and ER informed of the results.</li> <li>If exceedance stops, cease additional monitoring.</li> </ol>	1. Discuss amongst ER, ET Leader and the Contractor on the potential remedial actions.  2. Review the Contractor's remedial actions whenever necessary to assure their effectiveness and advise ER accordingly.  3. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of exceedance in writing. 2. Notify the Contractor. 3. Require the Contractor to propose remedial measures for the analyzed noise problem. 4. Ensure remedial measures are properly implemented. 5. If exceedance continues, consider what activity of the work is responsible and instruct the Contractor to stop that activity of work until the exceedance is abate.	<ol> <li>Take immediate action to avoid further exceedance.</li> <li>Submit proposals for remedial actions to IEC within 3 working days of notification.</li> <li>Implement the agreed proposals.</li> <li>Resubmit proposals if problem still not under control.</li> <li>Stop the relevant activity of works as determined by the ER until the exceedance is abated.</li> </ol>			

Table 4 Event and Action Plan

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#### 4. NOISE MONITORING METHODOLOGY

#### 4.1 Noise Monitoring Procedure

Noise monitoring was conducted at the designated noise monitoring location between 0700-1900 hours using a sound level meter which complies with the International Electrotechnical Commission Publications 651:1979 (Type 1) and 804:1985 (Type 1). Noise instrumentation details are given in *Table 5*.

Manufacturer	Type/Model No.	Equipment		
RION Model NL 31		Precision Sound Level Analyser		
		with windshield		
RION	Model NC 73 Calibrator			

Table 5 Noise Monitoring Equipment

Noise levels measurements were recorded in terms of thirty minutes A-weighted equivalent continuous sound pressure level (Leq(30mins)) on a weekly basis. The sound level meter was calibrated immediately prior to and following each noise measurement. The meter was mounted on a tripod at a height of 1.2m and the microphone was positioned at 1m away the building façade of the noise monitoring station facing the construction site. The sound level meters, including the calibrators, are verified by the manufacturer every one year to ensure they perform to the same level of accuracy as stated in the manufacturer's specifications. The calibration certificates for the sound level meter and calibrator are given in *Appendix C*.

Noise measurements were not made in the presence of fog, rain, and wind with a steady speed exceeding 5m/s or wind with gusts exceeding 10m/s. The wind speed was checked with a portable anemometer capable of measuring the wind speed in m/s.

#### **4.2** Noise Monitoring Programme

Noise monitoring was conducted at designated noise monitoring locations during construction phase: a village house at Village House at Ma Tso Lung (MTL01) as shown in *Figure 2* on  $6^{th}$ ,  $15^{th}$ ,  $21^{st}$  and  $27^{th}$  November 2012. Details of the noise monitoring stations are shown in *Table 6*. *Appendix D* shows detailed schedule of the monitoring programme in the reporting month and upcoming month.

ID Monitoring Location		<b>Monitoring Location</b>	Description of Monitoring Location				
	MTL01	Village House at Ma Tso Lung	G/F boundary wall of Village House at Ma Tso Lung				

Table 6 Descriptions of Noise Monitoring Locations

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## 5. RESULTS

Noise monitoring results and weather conditions during the monitoring period is summarized in Table 7. Detailed results and graphical plots of noise monitoring are given in Appendix E. There were no exceedances of the action and limit levels during the reporting month.

Location	Date	Weather Condition	Wind Speed (m/s)	Time	L <sub>eq</sub> (30mins)	L <sub>10</sub> (30mins)	L <sub>90</sub> (30mins)	Remarks
	6 November 12	Sunny	0.5	15:05 – 15:35	44.9	46.8	40.0	Noise from birdcall
MTI 01	15 November 12	Cloudy	0.3	16:40 – 17:10	49.0	51.2	39.2	Noise from birdcall and traffic noise
MTL-01	21 November 12	Cloudy	0.3	13:10 – 13:40	49.4	51.0	41.0	Noise from birdcall and traffic noise
	27 November 12	Cloudy	0.5	15:05 – 15:35	46.8	48.5	41.0	Noise from birdcall and traffic noise

Table 7 Noise Monitoring Results

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#### 6. SITE INSPECTION & AUDIT

A total of four site inspections were conducted by the Environmental Team (ET) in this reporting month. Observations by the ET, actions by the Contractor and outcome are summarized in the *Table 8*.

Date	Observations	Action taken by	Outcome
		Contractor	
9 November	No major environmental	-	-
2012	deficiency		
16 November	No major environmental	-	-
2012	deficiency		
19 November	General refuse was	The contractor was	The situation was
2012	accumulated on the	requested to clear	rectified as observed on
	patrol road.	general refuse more	30 November 2012.
		frequently.	(Closed)
30 November	No major environmental	-	-
2012	deficiency		

Table 8 Summary of Site Inspections

During site inspections in the reporting month, no non-conformance of implementation of environmental mitigation measures was identified. All environmental mitigation measures for construction stages as stated in approved EIA Report, EM&A Manual and EP-347/2009/A were carried out properly in the reporting month. The mitigation measures implementation schedule is shown in *Appendix F*.

# 7. NON-COMPLIANCE, COMPLAINTS, NOTIFICATIONS OF SUMMONS AND SUCCESSFUL PROSECUTIONS

In this reporting period, no complaint, notification of summons or prosecution was received. No non-compliance for general works and no non-compliance against EP condition were recorded. The complaint log is appended in *Appendix G*.

## 8. WASTE MANAGEMENT

There are 13m³ inert C&D waste was disposed to Tuen Mun Area 38 Fill Bank, 0m³ of timber, 0m³ of metal wastes, 0m³ of paper/cardboard packing, 0m³ of plastics and 59m³ of general refuse were disposed to North East New Territories(NENT) Landfill. There are 0m³ of chemical waste was transported off site to Chemical Waste Treatment Centre at Tsing Yi in this reporting period. The monthly Waste Flow Table is given in *Appendix H*.

Construction of a Secondary Boundary Fence and New Section of Primary Boundary Fence and Boundary Patrol Road (Section 2 Lok Ma Chau Control Point to Ng Tung River)
Environmental Monitoring & Audit Report (November 2012)

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Good site practice shall be maintained and specific procedures in dealing with different kind of wastes shall be followed during construction. The Contractor shall maintain and record all triptickets as stipulated in the Waste Management Plan (WMP) and project EM&A Manual and make a thorough reference from the relevant Legislations and guidelines by the EPD.

#### 9. STATUS OF LICENSE AND PERMIT

A summary of relevant permits, licences, and notifications on environmental protection for the Project is given in *Appendix I*.

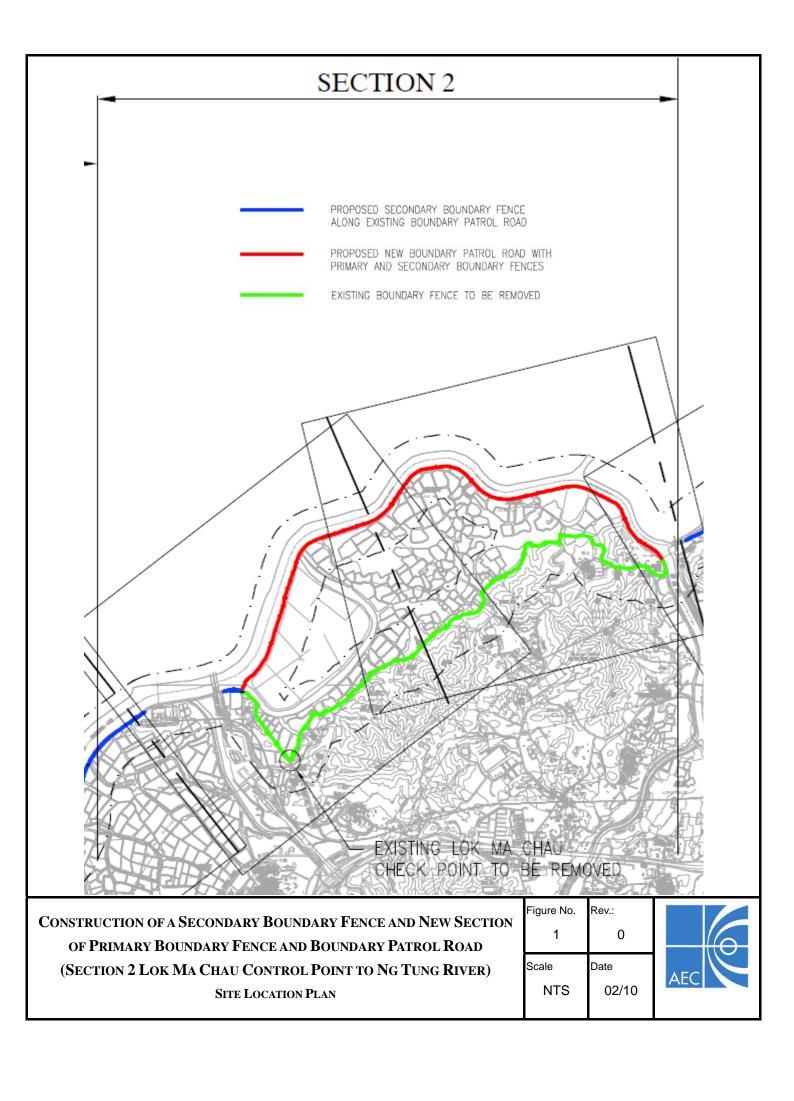
#### 10. CONCLUSIONS AND FUTURE KEY ISSUES

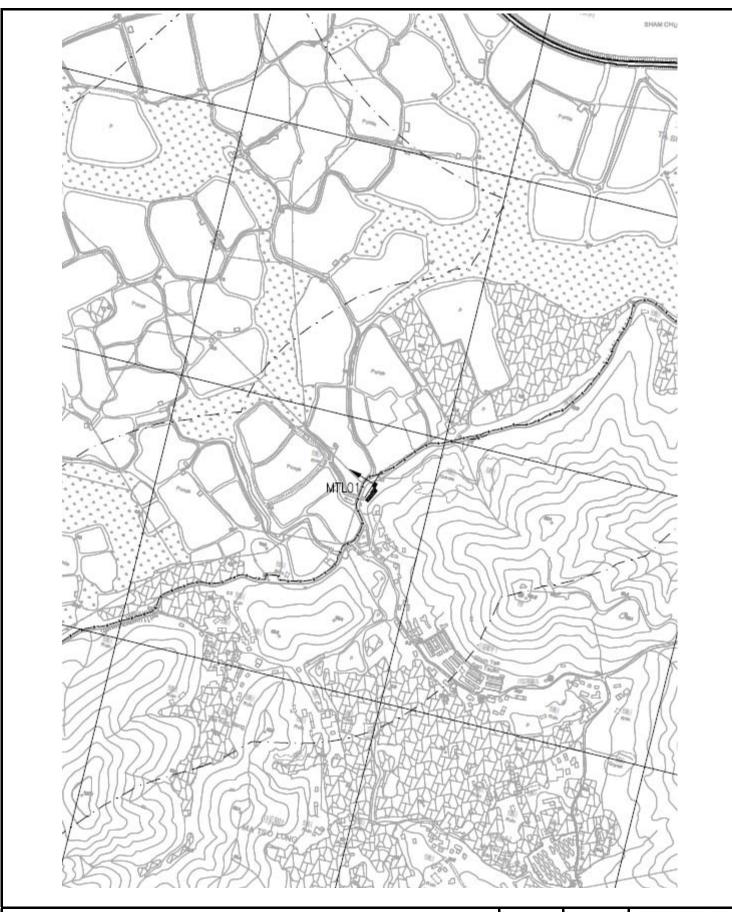
Environmental monitoring was carried out for the Construction of a Secondary Boundary Fence and New Section of Primary Boundary Fence and Boundary Patrol Road (Section 2 Lok Ma Chau Control Point to Ng Tung River) in the reporting month. Noise monitoring was conducted at a village house at Ma Tso Lung (MTL01) during the period from 1<sup>st</sup> November 2012 to 30<sup>th</sup> November 2012.

Noise monitoring was conducted at the monitoring location MTL01. All monitoring results complied with the relevant action and limit levels.

A total of 13m<sup>3</sup> of inert C&D waste was disposed to Tuen Mun Area 38 Fill Bank. A total of 59m<sup>3</sup> of general refuse was disposed to NENT Landfill in this reporting period.

According to Section 3.2 of the FEP, no construction works using power mechanical equipment shall be allowed between 15<sup>th</sup> November and 15<sup>th</sup> March inclusive in any consecutive year. Thus, construction activities to be undertaken in December 2012 will include sealant caulking, road marking and fixing the defects. Potential environmental impacts include dust emission relating to the dry weather; noise from loading, unloading and handling of materials and storage of various C&D and chemical wastes. The Contractor should properly implement environmental mitigation measures as per the implementation schedule in the EM&A manual to ensure no adverse environmental impacts to be arisen from the construction works. The Contractor was reminded to maintain good housekeeping at the site.





CONSTRUCTION OF A SECONDARY BOUNDARY FENCE AND NEW SECTION
OF PRIMARY BOUNDARY FENCE AND BOUNDARY PATROL ROAD
(SECTION 2 LOK MA CHAU CONTROL POINT TO NG TUNG RIVER)
LOCATION OF NOISE MONITORING STATION

Figure No. Rev.:
2 0

Scale Date

NTS 02/10





<u>Master Programme</u>

Construction of a Secondary Boundary Fence and New Section of Primary Boundary Fence and Boundary Patrol Road Able Engineering Company Limited Date: 30-10-2012 from Lok Ma Chau Control Point to Ng Tung River (Contract No.: SSW306) ID 任務名稱 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 Duration Section A 1071 days Wed 30/12/09 Tue 4/12/12 Site Possession 0 days Wed 30/12/09 Wed 30/12/09 ◆30/12 Application entrance permit 14 days Wed 30/12/09 Tue 12/1/10 4 Site Office Erection 9 days Wed 13/1/10 Thu 21/1/10 Site Condition / Tree Survey 50 days Sun 17/1/10 Sun 7/3/10 6 Preparation works 90 days Tue 2/2/10 Sun 2/5/10 Mobilization for preparation works 14 days Tue 16/3/10 Mon 29/3/10 Set up wheel wish equipment 14 days Tue 9/2/10 Mon 22/2/10 9 0 days Trial Mix design submission for concrete Tue 2/2/10 Tue 2/2/10 10 60 days Trial Mix inspection for concrete Thu 4/3/10 Sun 2/5/10 11 0 days TTA Submission Thu 25/3/10 Thu 25/3/10 12 Submission to EPD 58 days Wed 13/1/10 Fri 12/3/10 13 Registration as a chemical waste producer 0 days Thu 4/3/10 Thu 4/3/10 14 Further EP application 0 days Wed 13/1/10 Wed 13/1/10 15 Further EP approval 0 days Fri 19/2/10 Fri 19/2/10 19/2 16 Landscape plan submission 0 days Fri 12/3/10 Fri 12/3/10 17 Base line monitoring record submission 0 days Wed 10/3/10 Wed 10/3/10 10/3 18 Tree transplanting 985 days Sat 20/3/10 Wed 28/11/12 19 Tree Protection 21 days Sat 20/3/10 Fri 9/4/10 20 Pruning 70 days Sat 1/5/10 Fri 9/7/10 21 Transplanting 45 days Sat 10/7/10 Mon 23/8/10 22 Planting 120 days Wed 1/8/12 Wed 28/11/12 23 Hydroseeding Thu 15/11/12 14 days Wed 28/11/12 24 25 Zone 1 SBF CH3000 to CH 150 (Footing, 1st layer Backfilling ~600mm THK) 553 days Mon 3/5/10 Sun 6/11/11 26 CH3000 -2920 46 days Fri 29/4/11 Mon 13/6/11 27 CH2920-2840 46 days Thu 5/5/11 Sun 19/6/11 28 CH2840-2760 46 days Wed 11/5/11 Sat 25/6/11 29 CH2760-2680 46 days Tue 17/5/11 Fri 1/7/11 30 CH2680-2600 46 days Mon 23/5/11 Thu 7/7/11 31 CH2600-2520 46 days Sun 14/8/11 Wed 28/9/11 32 CH2520-2440 46 days Sat 20/8/11 Tue 4/10/11 33 CH2440-2360 46 days Fri 26/8/11 Mon 10/10/11 34 CH2360-2280 46 days Mon 3/5/10 Thu 17/6/10 35 CH2280-2200 46 days Sun 9/5/10 Wed 23/6/10 36 CH2200-2120 46 days Sat 15/5/10 Tue 29/6/10 37 CH2120-2040 46 days Fri 21/5/10 Mon 5/7/10 38 CH2040-1960 46 days Thu 27/5/10 Sun 11/7/10 39 CH1960-1880 46 days Wed 2/6/10 Sat 17/7/10 40 CH1880-1800 46 days Sun 29/5/11 Wed 13/7/11 CH1800-1720 41 46 days Sun 16/5/10 Wed 30/6/10 42 CH1720-1640 Sat 22/5/10 46 days Tue 6/7/10 43 CH1640-1560 46 days Fri 28/5/10 Mon 12/7/10 44 CH1560-1480 46 days Sat 4/6/11 Tue 19/7/11 45 CH1480-1400 46 days Fri 10/6/11 Mon 25/7/11 46 CH1400-1320 46 days Thu 3/6/10 Sun 18/7/10 47 CH1320-1240 46 days Wed 9/6/10 Sat 24/7/10 48 CH1240-1160 46 days Tue 15/6/10 Fri 30/7/10 49 CH1160-1080 46 days Thu 16/6/11 Sun 31/7/11 50 CH1080-1000 46 days Wed 2/6/10 Sat 17/7/10 CH1000-920 51 46 days Thu 24/6/10 Sun 8/8/10 52 CH920-840 46 days Wed 30/6/10 Sat 14/8/10 53 CH840-760 Wed 22/6/11 46 days Sat 6/8/11 54 CH760-680 46 days Tue 28/6/11 Fri 12/8/11 55 CH680-600 Mon 12/7/10 46 days Thu 26/8/10 56 CH600-520 46 days Mon 23/8/10 Thu 7/10/10 57 CH520-440 46 days Fri 10/6/11 Mon 25/7/11 58 CH440-360 46 days Thu 16/6/11 Sun 31/7/11 59 CH360-280 46 days Wed 22/6/11 Sat 6/8/11 60 CH280-200 46 days Mon 19/9/11 Thu 3/11/11 61 CH200-150 46 days Thu 22/9/11 Sun 6/11/11 T 任務 進度 摘要 外部任務 Master Programme Rev 8 30-10-2012(s 專案摘要報告 分割 里程碑 外部里程碑 1 of 4

<u>Master Programme</u>

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**Able Engineering Company Limited** <u>Master Programme</u>

Construction of a Secondary Boundary Fence and New Section of Primary Boundary Fence and Boundary Patrol Road Rev 8 Date: 30-10-2012 from Lok Ma Chau Control Point to Ng Tung River (Contract No.: SSW306) ID 任務名稱 Duration 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12 1 123 CH3800-3720 46 days Wed 30/6/10 Sat 14/8/10 124 CH3720-3640 46 days Fri 29/4/11 Mon 13/6/11 125 CH3640-3560 46 days Thu 5/5/11 Sun 19/6/11 126 CH3560-3480 46 days Wed 11/5/11 Sat 25/6/11 127 CH3480-3400 46 days Tue 17/5/11 Fri 1/7/11 128 CH3400-3320 46 days Mon 23/5/11 Thu 7/7/11 129 CH3320-3240 46 days Sun 29/5/11 Wed 13/7/11 130 CH3240-3160 46 days Fri 9/4/10 Mon 24/5/10 131 46 days CH3160-3080 Sat 4/6/11 Tue 19/7/11 132 CH3080-3000 Fri 10/6/11 46 days Mon 25/7/11 133 134 415 days Zone 2 PBF CH 5000-3000 (Footing & 2nd layer Backfilling up to sub-base) Sat 31/7/10 Sun 18/9/11 135 CH5000-4920 46 days Fri 29/7/11 Mon 12/9/11 136 46 days CH4920-4840 Thu 4/8/11 Sun 18/9/11 137 46 days CH4840-4760 Fri 10/6/11 Mon 25/7/11 138 46 days CH4760-4680 Sun 12/6/11 Wed 27/7/11 139 46 days CH4680-4600 Sat 18/6/11 Tue 2/8/11 140 CH4600-4520 46 days Sat 30/7/11 Tue 13/9/11 141 CH4520-4440 46 days Tue 17/5/11 Fri 1/7/11 142 CH4440-4360 46 days Mon 23/5/11 Thu 7/7/11 143 CH4360-4280 46 days Sun 29/5/11 Wed 13/7/11 144 CH4280-4200 46 days Sat 4/6/11 Tue 19/7/11 145 CH4200-4120 46 days Fri 10/6/11 Mon 25/7/11 146 CH4120-4040 46 days Sat 31/7/10 Tue 14/9/10 147 CH4040-3960 46 days Fri 6/8/10 Mon 20/9/10 148 CH3960-3880 46 days Thu 12/8/10 Sun 26/9/10 149 CH3880-3800 Wed 18/8/10 46 days Sat 2/10/10 150 CH3800-3720 46 days Tue 24/8/10 Fri 8/10/10 151 CH3720-3640 46 days Mon 30/8/10 Thu 14/10/10 152 CH3640-3560 46 days Sun 5/9/10 Wed 20/10/10 153 CH3560-3480 46 days Sat 11/9/10 Tue 26/10/10 154 CH3480-3400 46 days Fri 17/9/10 Mon 1/11/10 155 CH3400-3320 46 days Thu 23/9/10 Sun 7/11/10 156 CH3320-3240 46 days Wed 29/9/10 Sat 13/11/10 157 CH3240-3160 46 days Mon 30/5/11 Thu 14/7/11 158 CH3160-3080 46 days Sun 5/6/11 Wed 20/7/11 159 CH3080-3000 46 days Sat 11/6/11 Tue 26/7/11 160 161 Zone 2 Patrol road CH 5000-3000 (Back filling, E&M & CLP pipe duct & Road surface) 510 days Wed 1/6/11 Mon 22/10/12 162 Backfilling CH5000-3000 464 days Wed 1/6/11 Thu 6/9/12 163 Road Surface CH5000-3000 46 days Fri 7/9/12 Mon 22/10/12 164 165 Zone 3 SBF CH5700 to CH5000 (Footing, 1st layer Backfilling ~600mm THK) 487 days Wed 14/7/10 Sat 12/11/11 166 CH5700-5640 46 days Wed 28/9/11 Sat 12/11/11 167 CH5640-5560 46 days Thu 2/6/11 Sun 17/7/11 168 CH5560-5480 46 days Wed 8/6/11 Sat 23/7/11 169 CH5480-5400 46 days Wed 14/9/11 Sat 29/10/11 170 CH5400-5320 46 days Tue 20/9/11 Fri 4/11/11 171 CH5320-5240 46 days Tue 13/9/11 Fri 28/10/11 172 CH5240-5160 46 days Wed 14/7/10 Sat 28/8/10 173 CH5160-5080 46 days Tue 20/7/10 Fri 3/9/10 174 CH5080-5000 46 days Mon 26/7/10 Thu 9/9/10 175 176 Zone 3 PBF CH5700 to CH5000 (Footing) 152 days Wed 15/6/11 Sun 13/11/11 177 CH5700-5640 35 days Thu 15/9/11 Wed 19/10/11 178 CH5640-5560 35 days Tue 20/9/11 Mon 24/10/11 35 days 179 CH5560-5480 Sun 25/9/11 Sat 29/10/11 35 days 180 CH5480-5400 Wed 5/10/11 Tue 8/11/11 35 days 181 CH5400-5320 Mon 10/10/11 Sun 13/11/11 182 CH5320-5240 35 days Tue 19/7/11 Mon 22/8/11 CH5240-5160 183 35 days Sun 24/7/11 Sat 27/8/11

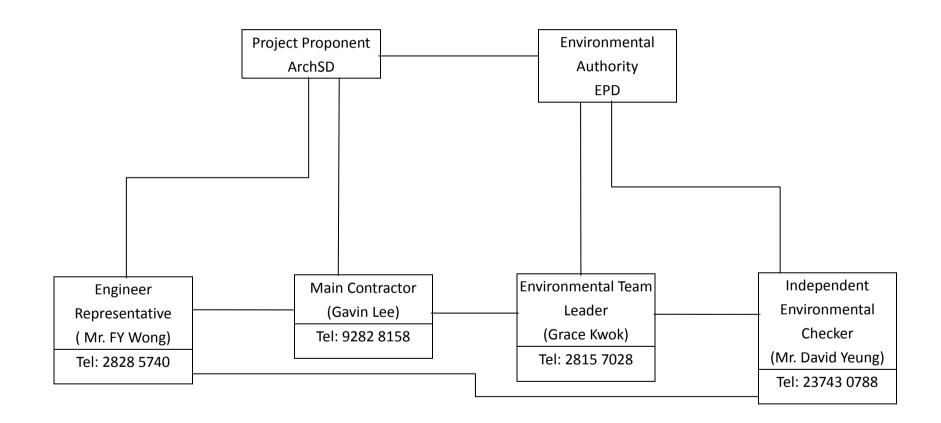
外部任務  $\Omega$ 任務 進度 Master Programme Rev 8 30-10-2012(s 分割 里程碑 專案摘要報告 外部里程碑 3 of 4

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Appendix B
Organization Chart

## — Line of communication







Sun Creation Engineering Limited

Calibration and Testing Laboratory

# Certificate of Calibration

校正證書

Certificate No.: C123580

證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號: IC12-1472)

Description / 儀器名稱

Sound Level Meter

Manufacturer / 製造商

Rion

Model No. / 型號 Serial No. / 編號

NL-31 00410224

Supplied By / 委託者

Envirotech Services Co.

Shop 6, G/F., Casio Mansion, 209 Shaukeiwan Road,

Hong Kong

TEST CONDITIONS / 測試條件

Temperature / 溫度 :

 $(23 \pm 2)^{\circ}$ C

Relative Humidity / 相對濕度 :

 $(55 \pm 20)\%$ 

Line Voltage / 電壓 :

TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期

15 June 2012

TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.

All results are within manufacturer's specification.

The results are detailed in the subsequent page(s).

The test equipment used for calibration are traceable to National Standards via:

- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory
- Rohde & Schwarz Laboratory, Germany
- Fluke Precision Measurement Ltd., UK
- Fluke Everett Service Center, USA
- Agilent Technologies, USA

Tested By 測試

Certified By

核證

Date of Issue

15 June 2012

簽發日期 K C Lee

The test equipment used for calibration are traceable to the Nation Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory

本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗所書面批准。

Sun Creation Engineering Limited - Calibration & Testing Laboratory

c/o 4/F, Tsing Shan Wan Exchange Building, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong 輝創工程有限公司 - 校正及檢測實驗所

c/o 香港新界屯門興安里一號青山灣機樓四樓

Tel/電話: 2927 2606 Fax/傳真: 2744 8986

E-mail/電郵: callab@suncreation.com

Website/網址: www.suncreation.com

Page 1 of 3



#### Sun Creation Engineering Limited

Calibration and Testing Laboratory

# Certificate of Calibration 校正證書

Certificate No.: C123580

證書編號

The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours, and switched on to warm 1. up for over 10 minutes before the commencement of the test.

Self-calibration was performed before the test. 2.

The results presented are the mean of 3 measurements at each calibration point. 3.

Test equipment:

Equipment ID CL280 CL281

40 MHz Arbitrary Waveform Generator Multifunction Acoustic Calibrator

Certificate No. C120016 DC110233

Test procedure: MA101N.

6. Results:

Sound Pressure Level 6.1

6.1.1 Reference Sound Pressure Level

	UU	JT Setting		Applied	l Value	UUT	IEC 61672 Class 1
Range	Mode	Frequency	Time	Level	Freq.	Reading	Spec.
(dB)		Weighting	Weighting	(dB)	(kHz)	(dB)	(dB)
30 - 120	$L_{A}$	A	Fast	94.00	1	93.7	± 1.1

6.1.2 Linearity

UUT Setting				Applied	Value	UUT
Range	Mode	Frequency	Time	Level	Freq.	Reading
(dB)		Weighting	Weighting	(dB)	(kHz)	(dB)
30 - 120	$L_{A}$	A	Fast	94.00	1	93.7 (Ref.)
				104.00		103.7
				114.00		113.7

IEC 61672 Class 1 Spec. :  $\pm$  0.6 dB per 10 dB step and  $\pm$  1.1 dB for overall different.

6.2 Time Weighting

	UU	T Setting		Applied	Value	UUT	IEC 61672 Class 1
Range	Mode	Frequency	Time	Level	Freq.	Reading	Spec.
(dB)		Weighting	Weighting	(dB)	(kHz)	(dB)	(dB)
30 - 120	$L_A$	A	Fast	94.00	1	93.7	Ref.
			Slow			93.6	± 0.3

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Sun Creation Engineering Limited

Calibration and Testing Laboratory

# Certificate of Calibration

校正證書

6.3 Frequency Weighting

6.3.1 A-Weighting

1	A-weighting	2						
	UUT Setting			Applied Value		UUT	IEC 61672 Class 1	
	Range	Mode	Frequency	Time	Level	Freq.	Reading	Spec.
	(dB)	_	Weighting	Weighting	(dB)		(dB)	(dB)
	30 - 120	$L_A$	A	Fast	94.00	63 Hz	67.3	$-26.2 \pm 1.5$
						125 Hz	77.4	$-16.1 \pm 1.5$
						250 Hz	85.0	-8.6 ± 1.4
						500 Hz	90.4	$-3.2 \pm 1.4$
	_					1 kHz	93.7	Ref.
						2 kHz	95.0	$+1.2 \pm 1.6$
						4 kHz	94.8	$+1.0 \pm 1.6$
						8 kHz	92.7	-1.1 (+2.1; -3.1)
						12.5 kHz	89.8	-4.3 (+3.0; -6.0)

6.3.2 C-Weighting

C- weighting							
	UUT Setting			Appl	ied Value	UUT	IEC 61672 Class 1
Range	Mode	Frequency	Time Weighting	Level	Freq.	Reading	Spec.
(dB)		Weighting		(dB)		(dB)	(dB)
30 - 120	L <sub>C</sub>	С	Fast	94.00	63 Hz	92.8	$-0.8 \pm 1.5$
		-			125 Hz	93.5	$-0.2 \pm 1.5$
					250 Hz	93.7	$0.0 \pm 1.4$
					500 Hz	93.8	$0.0 \pm 1.4$
					1 kHz	93.7	Ref.
					2 kHz	93.6	$-0.2 \pm 1.6$
		1 - 5			4 kHz	93.1	$-0.8 \pm 1.6$
					8 kHz	90.8	-3.0 (+2.1; -3.1)
					12.5 kHz	88.0	-6.2 (+3.0; -6.0)

Remarks: - Mfr's Spec.: IEC 61672 Class 1

- Uncertainties of Applied Value : 94 dB : 63 Hz - 125 Hz :  $\pm$  0.35 dB

104 dB : 1 kHz : ± 0.10 dB (Ref. 94 dB) 114 dB : 1 kHz : ± 0.10 dB (Ref. 94 dB)

Certificate No.:

證書編號

C123580

- The uncertainties are for a confidence probability of not less than 95 %.

#### Note:

The values given in this Certificate only relate to the values measured at the time of the test and any uncertainties quoted will not include allowance for the equipment long term drift, variations with environment changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. Sun Creation Engineering Limited shall not be liable for any loss or damage resulting from the use of the equipment.

Tel/電話: 2927 2606 Fax/傳真: 2744 8986

E-mail/電郵: callab@suncreation.com

Website/網址: www.suncreation.com

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Sun Creation Engineering Limited

Calibration and Testing Laboratory

## Certificate of Calibration 校正證書

Certificate No.:

C124011

證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號: IC12-1674)

Description / 儀器名稱 :

Sound Level Calibrator

Manufacturer / 製造商

Rion

Model No./型號

NC-73

Serial No. / 編號

10997142

Supplied By / 委託者

Envirotech Services Co.

Shop 6, G/F., Casio Mansion, 209 Shaukeiwan Road,

Hong Kong

TEST CONDITIONS / 測試條件

Temperature / 溫度 :

 $(23 \pm 2)^{\circ}$ C

Relative Humidity / 相對濕度 :

 $(55 \pm 20)\%$ 

Line Voltage / 電壓 : -

---

TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期

9 July 2012

#### TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.

All results are within manufacturer's specification.

The results are detailed in the subsequent page(s).

The test equipment used for calibration are traceable to National Standards via:

- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory
- Rohde & Schwarz Laboratory, Germany
- Fluke Everett Service Center, USA
- Agilent Technologies, USA

Tested By 測試

:

L K Yeung

Certified By 核證

K C Lee

Date of Issue

:

10 July 2012

簽發日期

10 July 2012

The test equipment used for calibration are traceable to the Nation Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.

本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗所書面批准。

Sun Creation Engineering Limited – Calibration & Testing Laboratory

c/o 4/F, Tsing Shan Wan Exchange Building, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong

輝創工程有限公司 - 校正及檢測實驗所 c/o 香港新界屯門興安里一號青山灣機樓四樓

Tel 電話: 2927 2606 Fax 傳真: 2744 8986 1

《傳真: 2744 8986 E-mail/電郵: callab@suncreation.com

Website/網址: www.suncreation.com



#### Sun Creation Engineering Limited

Calibration and Testing Laboratory

## Certificate of Calibration 校正證書

Certificate No.:

C124011

證書編號

1. The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours before the commencement of the test.

2. The results presented are the mean of 3 measurements at each calibration point.

3. Test equipment:

Equipment ID CL130 CL281 TST150A <u>Description</u>
Universal Counter
Multifunction Acoustic Calibrator
Measuring Amplifier

Certificate No. C123541 DC110233 C120886

4. Test procedure: MA100N.

5. Results:

5.1 Sound Level Accuracy

UUT	Measured Value	Mfr's Spec.	Uncertainty of Measured Value
Nominal Value	(dB)	(dB)	(dB)
94 dB, 1 kHz	94.0	± 0.5	± 0.2

5.2 Frequency Accuracy

1 Todata j 1 Todatao j			
UUT Nominal Value	Measured Value	Mfr's	Uncertainty of Measured Value
(kHz)	(kHz)	Spec.	(Hz)
1	0.990	$1 \text{ kHz} \pm 2 \%$	± 1

Remark: The uncertainties are for a confidence probability of not less than 95 %.

#### Note:

The values given in this Certificate only relate to the values measured at the time of the test and any uncertainties quoted will not include allowance for the equipment long term drift, variations with environment changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. Sun Creation Engineering Limited shall not be liable for any loss or damage resulting from the use of the equipment.

The test equipment used for calibration are traceable to the Nation Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.

本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗所書面批准。



Schedule for noise monitoring programme of Construction of a Secondary Boundary Fence and New Section of Primary Boundary Fence and Boundary Patrol Road (Section 2 Lok Ma Chau Control Point to Ng Tung River)

## Monitoring schedule for the reporting month

Date	Time
6 <sup>th</sup> November 2012	15:05
15 <sup>th</sup> November 2012	16:40
21 <sup>st</sup> November 2012	13:10
27 <sup>th</sup> November 2012	15:05

## Monitoring schedule of the coming month

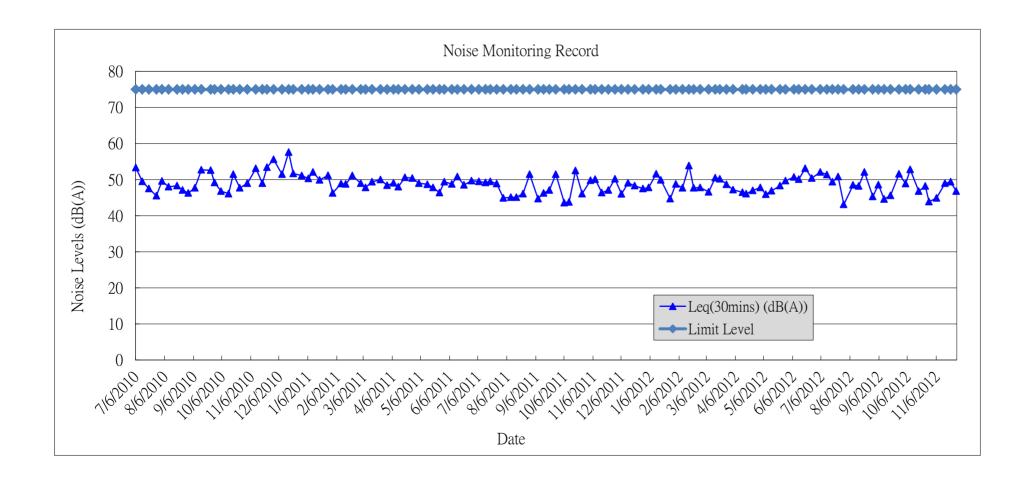
Date	Time
4 <sup>th</sup> December 2012	To be confirmed
13 <sup>th</sup> December 2012	To be confirmed
20 <sup>th</sup> December 2012	To be confirmed
27 <sup>th</sup> December 2012	To be confirmed

	Appendix E

Summary and Graphical Plot of Noise Monitoring Record Noise Monitoring Result for Construction of a Secondary Boundary Fence and New Section of Primary Boundary Fence and Boundary Patrol Road (Section 2 Lok Ma Chau Control Point to Ng Tung River)

**Month: November 2012** 

Date	Time	Leq(30mins) (dB(A))	L10(30mins) (dB(A))	L90(30mins) (dB(A))	Limit Level
11/6/2012	15:05 – 15:35	44.9	46.8	40	75
11/15/2012	16:40 – 17:10	49	51.2	39.2	75
11/21/2012	13:10 – 13:40	49.4	51	41	75
11/27/2012	15:05 – 15:35	46.8	48.5	41	75





Mitigation Measures Implementation Schedule for Construction Stage

## **Appendix F** Environmental Mitigation Implementation Schedule

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
<u>Air Quality</u>								
During Construction								
2.5.2	3.2.2	The following good site practice should be implemented:	To minimize	Contractor	Constructi	During	EIAO-TM, Air Pollution	٨
		any excavated dusty materials or stockpile of dusty materials should be covered	construction dust		on Work	Construction	Control	
		entirely by impervious sheeting or sprayed with water so as to maintain the	impact		Sites		(Construction Dust)	
		entire surface wet, and recovered or backfilled or reinstated within 24 hours of					Regulation	
		the excavation or unloading;						
		• the working area of excavation should be sprayed with water immediately						٨
		before, during and immediately after the operations so as to maintain the entire						
		surface wet;						
		dusty materials carried by vehicle leaving a construction site should be covered						٨
		entirely by clean impervious sheeting;						
		• the area where vehicle washing takes place and the section of the road between						٨
		the washing facilities and the exit point should paved with concrete, bituminous						
		materials or hardcores;						

Remarks: ^ Implement mitigation measure in the reporting month;

N/A Not Applicable in the reporting month;

X Non-compliance of mitigation measure;

\* Not satisfactory but rectified by the contractor.

As updated on 5 December 2012

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
		• the portion of road leading only to a construction site that is within 30m of						^
		designated vehicle entrance or exit should be kept clear of dusty materials;						
		all dusty materials should be sprayed with water prior to any loading, unloading						^
		or transfer;						
		vehicle speed should be limited to 10kph except on completed access roads;						^
		• every vehicle should be washed to remove any dusty materials from its body						^
		and wheels before leaving the construction sites.						
Noise								
Durin	g Constru	uction						
3.8.14	4.8.1	The following good site practical should be implemented:	To mitigate	Contractor	Constructi	During	EIAO-TM, NCO	
			construction noise		on Work	Construction		
		The Contractor shall adopt the Code of Practice on Good Management Practice	impact		Sites			
		to Prevent Violation of the Noise Control Ordinance (Chapter 400) (for						^
		Construction Industry) published by EPD;						
		The Contractor shall observe and comply with the statutory and non-statutory						^
		requirements and guidelines;						

Remarks: ^ Implement mitigation measure in the reporting month;

X Non-compliance of mitigation measure;

N/A Not Applicable in the reporting month;

Not satisfactory but rectified by the contractor.

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
		Before commencing any work, the Contractor shall submit to the Engineer						٨
		Representative for approval the method of working, equipment and noise						
		mitigation measures intended to be used at the site;						
		The Contractor shall devise and execute working methods to minimise the noise						^
		impact on the surrounding sensitive uses, and provide experienced personnel						
		with suitable training to ensure that those methods are implemented;						
		Noisy equipment and noisy activities should be located as far away from the						N/A
		NSRs as is practical;						
		Unused equipment should be turned off. PME should be kept to a minimum						N/A
		and the parallel use of noisy equipment / machinery should be avoided;						
		Regular maintenance of all plant and equipment;						^
		Material stockpiles and other structures should be effectively utilised as noise						N/A
		barriers, where practicable.						

Remarks: ^ Implement mitigation measure in the reporting month;

N/A Not Applicable in the reporting month;

X Non-compliance of mitigation measure;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
3.8.1	4.8.2	Other than good site practice, the Contractor is required to adopt Levels 1 and 2	To mitigate	Contractor	Constructi	During	EIAO-TM, NCO	N/A
-3.8.3	-4.8.3	site-specific direct mitigation measures as specified below during the construction	construction noise		on work	construction		
		phase.	impact		sites			
		With construction / demolition work undertaken at a distance of 60m or less to the						
		NSRs, below mitigation measures should be included:						
		Level 1 – Use of Quiet Plant and Movable Noise Barrier						
		• The Contractor shall obtain particular models of plant that are quieter than						
		standards given in GW-TM.						
		Purpose-built movable noise barriers should be used to mitigate construction						
		noise directly at sources that are not usually mobile provide that the direct line						
		of sight to the source is blocked.						

Remarks: ^ Implement mitigation measure in the reporting month;

N/A Not Applicable in the reporting month;

X Non-compliance of mitigation measure;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
3.8.9	4.8.4	In addition to the use of quiet plant and movable noise barrier, alternative	To mitigate	Contractor	Constructi	Before the	EIAO-TM, NCO	N/A
		demolition method of existing boundary fence at Section 2-3 shall be used where	construction noise		on work	commenceme		
		demolition works would be undertaken at a distance of 12m or less to the NSRs.	impact for demolition		sites	nt of		
		These particular mitigation measures should be included:	of existing boundary		(Section 2	demolition		
			fence		- 3)	works		
		Level 2 – Alternative Demolition Method of Existing Boundary Fence						
		The use of welder is recommended to replace the use of hand-held driller;						
		• The use of hand-held breaker with movable noise barrier is recommended to						
		replace the use of mini-robot mounted breaker; and the duration for the use of						
		hand-held breaker is minimal as only the surface level of the footing to be						
		broken; and						
		The removal of the footing of the existing boundary fence should be carried by						
		concrete crusher mini-robot mounted after the surface level broken by						
		hand-held breaker.						

Remarks: ^ Implement mitigation measure in the reporting month;

N/A Not Applicable in the reporting month;

X Non-compliance of mitigation measure;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
Wate	r Quality							
Durir	ng Constr	uction						
4.7.1	5.3.1	Good site practices in addition to the implementation of mitigation measures would	To avoid site runoff	Contractor	Constructi	During	Practice Note for	^
		minimize the impact to the surrounding environment.	and chemical leakage		on work	construction	Professional Persons with	
					sites		regard to site drainage	
		General Prevention and Precaution Measures					(ProPECC PN 1/94) and	
		The site should be confined to avoid silt runoff to the site.					TM standard	^
		No discharge of silty water into the storm drain and drainage channel within					under the WPCO	^
		and the vicinity of the site.						
		Any soil contaminated with chemicals/oils shall be removed from site and the						^
		void created shall be filled with suitable materials.						
		Stockpiles to be covered by tarpaulin to avoid spreading of materials during						^
		rainstorms;						
		Suitable containers shall be used to hold the chemical wastes to avoid leakage						^
		or spillage during storage, handling and transport;						

Remarks: ^ Implement mitigation measure in the reporting month;

N/A Not Applicable in the reporting month;

X Non-compliance of mitigation measure;

Not satisfactory but rectified by the contractor.

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
		Chemical waste containers shall be labelled with appropriate warning signs in						٨
		English and Chinese to avoid accidents. there shall also be clear instructions						
		showing what action to take in the event of an accidental;						
		Storage areas shall be selected at safe locations on site and adequate space shall						٨
		be allocated to the storage area;						
		Any construction plant which causes pollution to the water system due to						N/A
		leakage of oil or fuel shall be removed off-site immediately;						
		Spillage or leakage of chemical waste to be controlled by using suitable						٨
		absorbent materials;						
		Chemicals will always be stored on drip trays or in bunded areas where the						٨
		volume is 110% of the stored volume;						
		Regular clearance of domestic waste generated in the temporary sanitary						٨
		facilities to avoid waste water spillage.						
		• Temporary sanitary facilities to be provided for on-site workers during						^
		construction.						

Remarks: ^ Implement mitigation measure in the reporting month;

N/A Not Applicable in the reporting month;

X Non-compliance of mitigation measure;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
4.7.2 –	5.3.2-5.	Concreting Work	To collect runoff	Contractor	Constructi	During	Practice Note for	^
4.7.3	3.3	A temporary drainage channel and associated facilities should be provided to collect	generated and prevent		on work	construction	Professional Persons with	
		the runoff generated and prevent concrete-contaminated water from entering	concrete-contaminated		sites		regard to site drainage	
		watercourses. Adjustment of pH can be achieved by adding a suitable neutralising	water from entering				(ProPECC PN 1/94) and	
		reagent to wastewater prior to discharge.	watercourses				TM standard under the	
							WPCO	
		The concreting works should be temporarily isolated with proper methods, such as					CEDD General	

Remarks: ^ Implement mitigation measure in the reporting month;

N/A Not Applicable in the reporting month;

X Non-compliance of mitigation measure;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
		by placing of sandbags or silt curtains with lead edge at bottom and properly	To prevent adverse				Specification- Protection	N/A
		supported props.	impacts on the water		Work sites		of natural streams/rivers-	
			quality of Lin Ma		of Section		Clause 25.09	
			Hang Stream SSSI		3 in the			
					proximity			
					of Lin Ma			
					Hang			
					Stream			
					SSSI			
4.7.4	5.3.4	Soil Excavation and Stockpiling	To avoid site runoff	Contractor	Constructi	During	Practice Note for	N/A
		Excavated soil which needs to be temporarily stockpiled should be stored in a			on work	construction	Professional Persons with	
		specially designated area and provided with a tarpaulin cover to avoid runoff into			Sites		regard to site drainage	
		the drainage channels.					(ProPECC PN 1/94) and	
							TM standard under the	
							WPCO	

Remarks: ^ Implement mitigation measure in the reporting month;

N/A Not Applicable in the reporting month;

X Non-compliance of mitigation measure;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
4.7.5 -	5.3.5-5.	Site Depot	To avoid wash-out of	Contractor	Constructi	During	Practice Note for	N/A
4.7.6	3.6	All compounds in works areas should be located on areas of hard standing with	oil during storm		on work	construction	Professional Persons with	
		provision of drainage channels and settlement ponds where necessary to allow	conditions		Sites		regard to site drainage	
		interception and controlled release of settled/treated water. Hard standing					(ProPECC PN 1/94) and	
		compounds should drain via an oil interceptor. The oil interceptor should be					TM standard under the	
		regularly inspected and cleaned to avoid wash-out of oil during storm conditions. A					WPCO	
		bypass should be provided to avoid overload of the interceptor's capacity. Any						
		contractor generating waste oil or other chemicals as a result of his activities should						

Remarks: ^ Implement mitigation measure in the reporting month;

N/A Not Applicable in the reporting month;

X Non-compliance of mitigation measure;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
		register as a chemical waste producer. Disposal of the waste oil should be done by a						۸
		licensed collector.						
		Good housekeeping practices should be implemented to minimise careless spillage						
		and to keep the storage and the work space in a tidy and clean condition.						
		Appropriate training including safety codes and relevant manuals should be given to						
		the personnel who regularly handle the chemicals on site.						
4.7.7	5.3.7	Construction of Checkpoint	To avoid disposal of	Contractor	Constructi	During	N/A	N/A
		Sewage system should be constructed to divert domestic sewage, which will be	domestic sewage into		on work	construction		
		generated from the sanitary facilities provided in the new checkpoint at Shek Chung	watercourses.		Site at			
		Au, to public sewer connected to government sewage treatment facilities.			Checkpoin			
					t			
Waste	Manage	<u>ment</u>						
Durin	g Constr	action						

Remarks: ^ Implement mitigation measure in the reporting month;

N/A Not Applicable in the reporting month;

X Non-compliance of mitigation measure;

Not satisfactory but rectified by the contractor.

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
5.6.7	6.3.6	Site Clearance	Prevent the generation	Contractor	Constructi	During	Waste Disposal	^
		The topsoil and vegetation removed and excavated material may have to be	of dust and pollution		on work	construction	Ordinance (Cap.354);	
		temporarily stockpiled on-site. Control measures should be taken at the stockpiling	of storm water		sites		ETWBTC No. 15/2003,	
		area to prevent the generation of dust and pollution of stormwater channels, fish	channels				Waste Management on	
		ponds or river channels. However, to eliminate the risk of blocking drains in the wet					Construction Site	
		season, it is recommended that stockpiling of excavated materials during the wet						
		season should be avoided as far as practicable.						
5.6.10	6.3.8	Construction and Demolition Materials	Minimize	Contractor	Constructi	During	Waste Disposal	^
_		Careful design, planning and good site management can minimize over-ordering	over-ordering and		on work	construction	Ordinance (Cap.354);	
5.6.12		and generation of waste materials such as concrete mortars and cement grouts. The	generation of waste		sites		ETWBTC No. 15/2003,	
		design of formwork should maximize the use of standard wooden panels so to	materials				Waste Management on	
		achieve high reuse levels. Alternatives such as steel formwork or plastic facing					Construction Site	
		should be considered to increase the potential for reuse.						
						_		

Remarks: ^ Implement mitigation measure in the reporting month;

N/A Not Applicable in the reporting month;

X Non-compliance of mitigation measure;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
		The Contractor should recycle as much of the C&D materials as possible on-site.						٨
		Proper segregation of waste on-site will increase the feasibility of certain						
		components of the waste stream by the recycling contractors. Different areas of						
		the worksite shall be designated for such segregation and storage wherever site						
		conditions permit.						
		Trip-ticket system should be employed to monitor the disposal of C&D material						
		and solid at public filling facilities and landfills, and to control fly-tipping.						
		Government has established a differentiated charging scheme for the disposal of						
		waste to landfill, construction waste sorting facilities and public fill facilities. This						
		will provide additional incentives to reduce the volume of waste generated and to						
		ensure proper segregation of wastes.						
5.6.13-	6.3.9 –	Chemical Waste	To avoid chemical	Contractor	Constructi	During	Code of Practice on the	٨
5.6.14	6.3.13	For those processes which generate chemical waste, it may be possible to find	leakage		on work	construction	Packaging, Labelling and	
		alternatives which generate reduced quantities or even no chemical waste, or less			sites	planning	Storage of Chemical	
		dangerous types of chemical waste.					Wastes, Waste Disposal	

Remarks:

Implement mitigation measure in the reporting month;

Not Applicable in the reporting month;

X Non-compliance of mitigation measure;

<sup>\*</sup> Not satisfactory but rectified by the contractor.

EIA Ref.	EM&A Log Ref.		Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measure?	Location of the measure	When to implement the measure?	What requirements or standards for the measure to achieve?	Status
		Chemical waste that is produced, as defined by Schedule 1 of the Waste Disposal					(Chemical Waste)	^
		(Chemical Waste) (General) Regulation, should be handed in accordance with the					(General) Regulation	
		Code of Practice on the Packaging, Handling and Storage of Chemical Waste as						
		follows:						
		Containers used for the storage of chemical wastes should:						^
		be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed:						^
		<ul> <li>have a capacity of less than 450 litres unless the specification have been approved by the EPD; and</li> </ul>						٨
		• display a label in English and Chinese in accordance with instructions prescribed in Schedule 2 of the Regulations,						^
		The storage area for chemical wastes should:						٨
		be clearly labelled and used solely for the storage of chemical waste;						٨
		• be enclosed on at least 3 sides;						٨
		<ul> <li>have an impermeable floor and bunding, of capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical waste stored in that area whichever is the greatest;</li> </ul>						^

Remarks: ^ Implement mitigation measure in the reporting month;

X Non-compliance of mitigation measure;

N/A Not Applicable in the reporting month;

Not satisfactory but rectified by the contractor.

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
		have adequate ventilation;						^
		• be covered to prevent rainfall entering (water collected within the bund must be						^
		tested and disposed as chemical waste if necessary); and						
		be arranged so that incompatible materials are adequately separated.						^
		Disposal of chemical waste should:						^
		be via a licensed waste collector; and						^
		• be to a facility licensed to receive chemical waste, such as the Chemical Waste						^
		Treatment Facility which also offers a chemical waste collection service and						
		can supply the necessary storage containers, or						
		• to be re-user of the waste, under approval from the EPD.						N/A
5.6.16	6.3.15	General Refuse	Minimise odour, pest	Contractor	Constructi	During	Public Health and	*
		Should be stored in enclosed bins or compaction units separate from C&D and	and litter impacts		on work	construction	Municipal Services	
		chemical wastes. The Contractor should employ a reputable waste collector to			sites		Ordinance (Cap. 132)	
		remove general refuse from the site, separate from C&D and chemical wastes, on a						
		regular basis to minimise odour, pest and litter impacts. Burning of refuse on						
		construction sites is prohibited by law.						

Remarks: ^ Implement mitigation measure in the reporting month;

N/A Not Applicable in the reporting month;

X Non-compliance of mitigation measure;

Not satisfactory but rectified by the contractor.

	EM&A Log Ref.		Objectives of the Recommended Measures & Main	Who to implement the measure?	Location of the measure	When to implement the measure?	What requirements or standards for the measure to achieve?	Status
			Concerns to address					
5.6.18		Construction Waste Management Plan  A construction waste management plan (CWMP) should be prepared and developed by the contractor to ensure proper collection, treatment and disposal of waste on site. This CWMP will also take into account the requirement to handle chemical wastes on site which will need to be managed by a licensed waste collection contractor.	Waste management during construction	Contractor	Constructi on work sites	During construction	ETWB TCW No. 19/2005, Waste Management on Construction Sites	٨
Ecolo	ogy							
Table 6.38		Ecological Impacts on Floral Species of Conservation Concern  Erection of protective fencing to protect the plant during construction period	Protect the plant during construction period	Contractor	Constructi on work sites	During construction	EIAO	۸

Remarks: ^ Implement mitigation measure in the reporting month;

N/A Not Applicable in the reporting month;

X Non-compliance of mitigation measure;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
Table	7.2	Potential Ecological Impacts on Offsite Habitats	To avoid site runoff	Contractor	Constructi	During	EIAO / Air Pollution	٨
6.40		Good site practices for controlling the dust and water quality (avoid stockpiles	and dust impact		on work	construction	Control	
		adjacent to wetlands, covering the stockpiles with impervious sheeting, control of			sites		(Construction Dust)	
		vehicle speed, no discharge of silty water to the rivers, streams and drainage					Regulation / WPCO	
		channels);						
		Clear definition of works limit to avoid impact on adjacent habitats						

Remarks: ^ Implement mitigation measure in the reporting month;

N/A Not Applicable in the reporting month;

X Non-compliance of mitigation measure;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
Table	7.2	Disturbance to Wetland-Dependent Birds, Raptors, Terrestrial Birds and	To minimize	Contractor	Constructi	During	EIAO / Air Pollution	^
6.39-T		Egretry	disturbance to wildlife		on work	construction	Control	
able		Good working practices include switching off unused equipment, keep minimum			sites		(Construction Dust)	
6.45		number of powered mechanical equipment in operation at the same period, the use					Regulation / WPCO	
		of stockpiles and other structures to form noise barriers where practicable,						
		avoidance of feeding the wildlife to cause disturbance, site confinement and proper						
		cover of stockpiles with impervious sheeting to minimize construction noise,						
		uncontrolled surface runoff and discharge of silts;						
		Avoidance of construction works using Power Mechanical Equipments within the						
		Wetland Conservation Area during bird migratory season (15th November – 15th						
		March); and						
		Restriction of excavation works within a 150m buffer zone from the egretry						
		to ardeid non-breeding season (from August to February).						
Cultur	al Herita	nge						

Remarks: ^ Implement mitigation measure in the reporting month;

N/A Not Applicable in the reporting month;

X Non-compliance of mitigation measure;

Not satisfactory but rectified by the contractor.

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
8.7.1 –	8.1.1 -	An archaeological survey should be undertaken at the study areas of Pak Fu Shan	Assess the	Contractor	The study	After land	Antiquities and	N/A
8.7.4	8.1.4	and Lin Ma Hang of Section 3 after land resumption and before commencement of	archaeological impact	(through	areas of	resumption	Monuments Ordinance /	
		construction works	on the two identified	professional	Pak Fu	and before	EIAO	
			sites of archaeological	archaeologist)	Shan and	commenceme		
			potential.		Lin Ma	nt of		
					Hang of	construction		
					Section 3	works		

Remarks: ^ Implement mitigation measure in the reporting month;

N/A Not Applicable in the reporting month;

X Non-compliance of mitigation measure;

Not satisfactory but rectified by the contractor.

19/32

	EM&A Log Ref.		Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measure?	Location of the measure	When to implement the measure?	What requirements or standards for the measure to achieve?	Status
8.7.6	8.2.1	Built Heritage Resources	Avoid impacts to built	Contractor	The works	During	EIAO	N/A
		Mitigation in the form of buffer zones and safe public access have been proposed	heritage resources		that are	Construction		
		for one shrine (BF-HB1) and two graves (BF-G1 and G2)			located in			
					the vicinity			
		BF-HB1			of built			
		A buffer zone of a minimum distance of 1 metres should be established between the			heritage			
		shrine and any construction works in close proximity. The buffer zone should be			resources			
		marked out by temporary fencing. Safe public access should be provided to the			(BF-HB1			
		shrine during any construction works in close proximity.			and BF-G1			
					and G2)			
		BF-G1 and BF-G2						
		A buffer zone of a minimum distance of 1 metres should be established between the						
		graves and any construction works in close proximity. The buffer zone should be						
		marked out by temporary fencing. Safe public access should be provided to the						
		graves during any construction works in close proximity.						

Remarks: ^ Implement mitigation measure in the reporting month;

N/A Not Applicable in the reporting month;

X Non-compliance of mitigation measure;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
Lands	cape and	Visual						
		Preservation of Existing Vegetation						
Table 7-13	Table 9-1	To retain trees that have high amenity or ecology value and contribute most to the landscape and visual amenity of the site and its immediate environs.	Preservation of Existing Vegetation	Project Landscape Architect / Contractor	Site	Throughout construction phase	TM-EIA Annex 18, ETWB TCW No. 2/2004 & ETWB TCW No.	۸
CP1							3/2006	
Table 7-13	Table 9-1	Creation of precautionary area around trees to be retained equal to half of the trees canopy diameter. Precautionary area to be fenced.	To ensure the success of the tree preservation proposals.	Project Landscape Architect /	Site	Before construction phase commences	TM-EIA	^
CP1				Contractor				
Table 7-13	Table 9-1	<ul> <li>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.</li> </ul>	To ensure the success of the tree preservation proposals.	Project Landscape Architect /	Site	Throughout construction phase	TM-EIA Annex 18, ETWB TCW No. 2/2004 & ETWB TCW No.	^
CP1				Contractor			3/2006	

Remarks: ^ Implement mitigation measure in the reporting month;

N/A Not Applicable in the reporting month;

X Non-compliance of mitigation measure;

\* Not satisfactory but rectified by the contractor.

	EM&A Log Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measure?	Location of the measure	When to implement the measure?	What requirements or standards for the measure to achieve?	Status
Table 7-13 CP1	Table 9-1	<ul> <li>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.</li> </ul>	To ensure the success of the tree preservation proposals.	Project Landscape Architect / Contractor	Site	Throughout construction phase	TM-EIA Annex 18, ETWB TCW No. 2/2004 & ETWB TCW No. 3/2006	^
Table 7-13 CP1	Table 9-1	<ul> <li>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.</li> </ul>	To ensure the success of the tree preservation proposals.	Project Landscape Architect / Contractor	Site	Throughout construction phase	TM-EIA Annex 18, ETWB TCW No. 2/2004 & ETWB TCW No. 3/2006	^
Table 7-13 CP1	Table 9-1	The watering of existing vegetation particularly during periods of excavation when the water table beneath the existing vegetation is lowered.	To ensure the success of the tree preservation proposals.	Project Landscape Architect / Contractor	Site	Throughout construction phase	TM-EIA Annex 18, ETWB TCW No. 2/2004 & ETWB TCW No. 3/2006	N/A
Table 7-13 CP1	Table 9-1	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 intention of the area affected	of the tree	Project Landscape Architect / Contractor	Site	Throughout construction phase	Annex 18, ETWB TCW No. 2/2004 & ETWB TCW No. 3/2006	N/A

Remarks:

Implement mitigation measure in the reporting month;

N/A Not Applicable in the reporting month;

X Non-compliance of mitigation measure;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
Table	Table	• All works affecting the trees identified for retention and transplantation will be carefully monitored. This includes the key stages in the preparation of the		Project	Site	Throughout	TM-EIA Annex 18,	٨
7-13	9-1	trees, the implementation of protection measures and health monitoring through	preservation	Landscape		construction phase	ETWB TCW No. 2/2004	
		out the construction period	proposals.	Architect /			& ETWB TCW No.	
CP1				Contractor			3/2006	
Table	Table	• Detailed landscape and tree preservation proposals will be submitted to the relevant government departments for approval under the lease conditions and in	To ensure the tree	Project	Site	Throughout construction	TM-EIA Annex 18,	^
7-13	9-1	accordance with ETWB TCW No. 2/2004 and WBTC No. 3/2006.	preservation and	Landscape		phase	ETWB TCW No. 2/2004	
			planting proposals are integrated with the	Architect /			& ETWB TCW No.	
CP1			existing landscape	Contractor			3/2006	
			context and that the					
			landscape resources					
			are preserved where					
			appropriate.					

Remarks: ^ Implement mitigation measure in the reporting month;

N/A Not Applicable in the reporting month;

X Non-compliance of mitigation measure;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
Table	Table	The tree preservation works should be implemented by approved Landscape Contractors and inspected and approved on site by a qualified Landscape	To ensure the tree	Contractor	Site	Throughout	TM-EIA Annex 18,	^
7-13	9-1	Architect. A tree protection specification would be included within the contract	preservation and			construction phase	ETWB TCW No. 2/2004	
		documents.	planting proposals are			r	& ETWB TCW No.	
CP1			integrated with the				3/2006	
CFI			existing landscape context and that the				3/2000	
			landscape resources					
			are preserved where					
			appropriate.					
		Preservation of Existing Topsoil						
Table	Table	Topsoil disturbed during the construction phase should be tested using a standard soil testing methodology and where it is found to be worthy of	To provide a viable	Contractor	Site	Throughout	TM-EIA Annex 18	^
7-13	9-1	retention stored for re-use.	growing medium			construction	Ailliex 16	
			suited to the existing			phase		
CP2			conditions and reduce					
			the need for the					
			importation of top					
			soil.					

Remarks: ^ Implement mitigation measure in the reporting month;

N/A Not Applicable in the reporting month;

X Non-compliance of mitigation measure;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
Table	Table	• The soil will be stockpiled to a maximum height of 2m and will be either temporarily vegetated with hydroseeded grass during construction or covered	To provide a viable	Contractor	Site	Throughout	TM-EIA	۸
7-13	9-1	with a waterproof covering to prevent erosion.	growing medium			construction	Annex 18	
			suited to the existing			phase		
CP2			conditions and reduce					
			the need for the					
			importation of top					
			soil.					
Table	Table	• The stockpile should be turned over on a regular basis to avoid acidification and the degradation of the organic material, and reused after completion.	To provide a viable	Contractor	Site	Throughout	TM-EIA Annex 18	۸
7-13	9-1	Alternatively, if this is not practicable, it should be considered for use elsewhere, including other projects.	growing medium			construction	Aimex 18	
		ersewhere, merdding other projects.	suited to the existing			phase		
CP2			conditions and reduce					
			the need for the					
			importation of top					
			soil.					
		Permanent and Temporary Works Areas						

Remarks: ^ Implement mitigation measure in the reporting month;

N/A Not Applicable in the reporting month;

X Non-compliance of mitigation measure;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
Table	Table	<ul> <li>Where appropriate to the final design the landscape of these works areas should be restored following the completion of the construction phase.</li> </ul>	To minimise the disturbance to existing	Contractor	Site	Through out construction	TM-EIA Annex 18	N/A
7-13	9-1	·	landscape resources and change of visual amenity.			phase	Tallica 10	
CP3								
Table	Table	<ul> <li>Construction site controls should be enforced including the storage of materials, the location and appearance of site accommodation and the careful design of</li> </ul>	disturbance to existing	Contractor	Site	Through out construction	TM-EIA Annex 18	^
7-13	9-1	site lighting to prevent light spillage.	landscape resources and change of visual amenity.			phase		
CP3								
		Mitigation Planting						
Table	Table	<ul> <li>Replanting of disturbed vegetation should be undertaken at the earliest possible stage of the construction phase</li> </ul>	To minimise the disturbance to existing	Contractor	Site	Through out construction	TM-EIA Annex 18	N/A
7-13	9-1		landscape resources and change of visual amenity.			phase	Tamica 10	
CP4								

Remarks: ^ Implement mitigation measure in the reporting month;

N/A Not Applicable in the reporting month;

X Non-compliance of mitigation measure;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
Table	Table	<ul> <li>Use of native plant species predominantly in the planting design for the buffer areas.</li> </ul>	To minimise the disturbance to existing	Contractor	Site	Through out construction	TM-EIA	N/A
7-13	9-1		landscape resources and change of visual amenity.			phase	Annex 18	
CP4								
Table	Table	• The tree planting works should be implemented by approved Landscape Contractors and inspected and approved on site by a qualified Landscape		Contractor	Site	Through out construction	TM-EIA	۸
7-13	9-1	Architect. A tree planting specification would be included within the contract documents.	landscape resources and change of visual amenity.			phase	Annex 18	
CP4								
		Transplantation of Existing Trees		•	•	1		
Table	Table	• The tree transplanting works should be implemented by approved Landscape Contractors and inspected and approved on site by a qualified Landscape	To minimise the	Contractor	Site	Prior to the	TM-EIA	٨
7-13	9-1	Architect. A tree protection / transplanting specification would be included	landscape resources			commencem	Annex 18, ETWB TCW	
		within the contract documents.	and minimize the impacts on the visual			ent of the	No. 2/2004 & ETWB	
CP5			amenity of the area.			proposed	TCW No. 3/2006	
						works		
		Design of the Fence and associated Structures		•		•		

Remarks: ^ Implement mitigation measure in the reporting month;

N/A Not Applicable in the reporting month;

X Non-compliance of mitigation measure;

\* Not satisfactory but rectified by the contractor.

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
Table	Table	<ul> <li>Design of Boundary Fence, Boundary Patrol Road and Police Check Point –</li> <li>These structural elements will be designed in accordance with security</li> </ul>	Responsive design to	ArchSD	Site	Throughout	TM-EIA	۸
7-14	9-2	requirement from Police Force and incorporate design features as part of	integrate the proposals			design phase	Annex 18 and BD	
		design mitigation measures including:	into their landscape					
OP1			and visual context.					
		Integrated design approach – the boundary fence should integrated, as						^
		far as technically feasible, with existing built structures such as existing						
		road, footpath and track and embankment of fishponds, river and						
		drainage channel as part of design mitigation measures to reduce the						
		potential cumulative impact of the proposed works. The location and						
		orientation of the police check points should be away from landscape						
		and visually sensitive areas such wetland, fishpond and agricultural						
		field.						
		2. Building massing - the proposed use of simple responsive design for the						N/A
		built structures with a low building height profile to reduce the potential						
		visual mass of the structure within a rural context.						

Remarks: ^ Implement mitigation measure in the reporting month;

N/A Not Applicable in the reporting month;

X Non-compliance of mitigation measure;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
		Treatment of built structures - the architectural design should seek to						N/A
		reduce the apparent visual mass of the facilities further through the use						
		of natural materials such as wooden frame, vertical greening or other						
		sustainable materials such as recycled plastic.						
		4. Responsive building and fence finishes - In terms of the proposed						N/A
		finishes natural tones should be considered for the colour palette with						
		non-reflective finishes are recommended to reduce glare effect. The use						
		of colour blocking on the proposed fence could be used to break up the						
		visual mass of the structure.						

Remarks: ^ Implement mitigation measure in the reporting month;

N/A Not Applicable in the reporting month;

X Non-compliance of mitigation measure;

	EM&A Log Ref.		Objectives of the Recommended Measures & Main Concerns to address	Who to implement the measure?	Location of the measure	When to implement the measure?	What requirements or standards for the measure to achieve?	Status
		<ul> <li>5. Responsive lighting design – Aesthetic design of architectural and track lighting with following glare design measures:</li> <li>Directional and full cut off lighting is recommended particularly for areas adjacent to existing village to minimise light spillage.</li> <li>Minimise geographical spread of lighting, only applied for safety and security reasons;</li> <li>Limited lighting intensity to meet the minimum safety and operation requirement; and</li> <li>High-pressure sodium road lighting is recommended for more stringent light control reducing spillage and thus visual impacts.</li> </ul>						N/A
		Compensatory Planting Proposals						
Table 7-14 OP2	Table 9-2	Utilise native to Hong Kong will be utilized within the buffer planting areas.	Planting will serve to visually integrate the proposals within the existing landscape framework.	Contractor	Site	Throughout design phase	TM-EIA Annex 18, HKPSG and BD	N/A

Remarks:

Implement mitigation measure in the reporting month;

N/A Not Applicable in the reporting month;

X Non-compliance of mitigation measure;

Not satisfactory but rectified by the contractor.

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
Table	Table	• A qualified or registered landscape architect will be involved in the design, construction supervision and monitoring, and maintenance period to oversee the		Contractor	Site	Throughout design phase	TM-EIA	^
7-14	9-2	implementation of the recommended landscape and visual mitigation measures				8 I	Annex 18, HKPSG and BD	
			framework whilst also					
OP 2 /			improving the ecological					
3			connectivity between					
			existing and proposed woodland habitats.					
Table	Table	• Tree and Shrub Planting – Given the rural nature of the proposed alignment it is recommended that the where possible tree and shrub species which are	The planting proposal	Contractor	Site	Throughout design phase		N/A
7-14	9-2	native to Hong Kong be used. In addition where possible the planting of new	for the predicted tree			design phase	Annex 18, HKPSG and BD	
		trees and shrubs will aim to link together existing woodland areas and small	loss.					
OP 2		tree groups to improve the connectivity between habitats and create more coherent landscape framework. The planting of small groups of trees along the						
OP 2		alignment of the proposed fence will serve to de-emphasise the horizontality of						
		the fence structure and provide for better sense of visual integration with the landscape context. Where practicable vertical greening measures should also						
		be considered on engineering structures.						

Remarks: ^ Implement mitigation measure in the reporting month;

N/A Not Applicable in the reporting month;

X Non-compliance of mitigation measure;

EIA	EM&A	Recommended Mitigation Measures	Objectives of the	Who to	Location	When to	What requirements or	Status
Ref.	Log		Recommended	implement	of the	implement	standards for the	
	Ref.		Measures & Main	the measure?	measure	the measure?	measure to achieve?	
			Concerns to address					
Table	Table	Compensatory Planting Proposals – Given the works extent is largely limited along existing roadside embankment to minimise impact to existing village	The planting proposal seeks to compensate	Contractor	Site	Throughout design phase	TM-EIA Annex 18, HKPSG and BD	N/A
7-14	9-2	settlements and valuable landscape resources such as wetland, fishpond,	for the predicted tree					
		stream course and existing trees, and considered the importance of tree retention within the works area, new tree planting will concentrate in selected	1033.					
OP 3		new amenity areas along the alignment, infilling between retained and transplanted trees. The preliminary planting proposals for the proposed works						
		include the planting of some 357 new trees utilising a combination of mature						
		to light standard sized stock (i.e. approximately 15% of mature trees, 75% of standard trees, and 10% light standard trees). These trees will be planted in						
		woodland clumps and small tree groups at strategic locations to de-emphasise						
		the horizontality of the fence alignment. Based on preliminary findings the proposed planting will result in a compensatory planting ratio of 1:1 (new						
		planting: trees recommended for felling). This compares favourably with the						
		report's assertion that some 357 trees would be felled due to the proposed works. With the proposed preservation of existing trees, transplantation of						
		trees in conflict with the proposals and the planting of new trees the project						
		area will contain approximately 2000 trees. Trees forming part of the new						
		planting will provide screening to neighbourhood villagers and will utilise species native to Hong Kong. These proposals will be subject to review at						
		detailed design stage of the project.						

Remarks: ^ Implement mitigation measure in the reporting month;

N/A Not Applicable in the reporting month;

X Non-compliance of mitigation measure;

Appendix	$\overline{G}$
Complaint La	g

#### Appendix G – Complaint Logs

# Complaints

Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
	Location	Location Received Date	Location Received Date Details of Complaint	Location Received Date Details of Complaint Investigation/Mitigation Action



Architectural	Sarvicas	Donortmont
Arcintectural	Services	Department

Form No. D/OI.03/09.002

Contract No. / Works Order No.: -

SS W 306

# Monthly Summary Waste Flow Table for November [to be submitted not later than the 15<sup>th</sup> day of each month following reporting month]

(All quantities shall be rounded off to 3 decimal places.)

		Actual Quantities of In-	ert Construction Waste Ge	enerated Monthly	
Month	(a)=(b)+(c)+(d)+(e) Total Quantity Generated	(b) Broken Concrete (see Note 4)	(c) Reused in the Contract	(d) Reused in other Projects	(e) Disposed of as Public Fill
	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )	(in '000m <sup>3</sup> )
Jan	0	0	0	0	0
Feb	0	0	0	0	0
Mar	0	0	0	0	0
Apr	0	0	0	0	0
May	0	0	0	0	0
Jun	0	0	0	0	0
Sub-total	0	0	0	0	0
Jul	0	0	0	0	0
Aug	0.130	0	0	0	0.130
Sep	0.514	0	0	0	0.514
Oct	0.182	0	0	0	0.182
Nov	0.013	0	0	0	0.013
Dec					
Total	0.839	0	0	0	0.839

Form No. D/OI.03/09.002

		Actual Quantities of Non-inert Construction Waste Generated Monthly											
Month	Timber		Metals		Paper/ cardboard packaging		Plastics (see Note 3)		Chemical Waste		Other Recyclable Materials  (pls. specify)		General Refuse disposed of at Landfill
	(in '0	00kg)	(in '0	00kg)	(in '0	00kg)	(in '0	00kg)	(in '0	00kg)	(in '0	00kg)	(in '000m <sup>3</sup> )
	generated	recycled	generated	recycled	generated	recycled	generated	recycled	generated	recycled	generated	recycled	generated
Jan	0	0	0	0	0	0	0	0	0	0	0	0	0
Feb	0	0	0	0	0	0	0	0	0	0	0	0	0
Mar	0	0	0	0	0	0	0	0	0	0	0	0	0.013
Apr	0	0	0	0	0	0	0	0	0	0	0	0	0.007
May	0	0	0	0	0	0	0	0	0	0	0	0	0.007
Jun	0	0	0	0	0	0	0	0	0	0	0	0	0.007
Sub-total	0	0	0	0	0	0	0	0	0	0	0	0	0.034
Jul	0	0	0	0	0	0	0	0	0	0	0	0	0.013
Aug	0	0	0	0	0	0	0	0	0	0	0	0	0.007
Sep	0	0	0	0	0	0	0	0	0	0	0	0	0.007
Oct	0	0	0	0	0	0	0	0	0	0	0	0	0.026
Nov	0	0	0	0	0	0	0	0	0	0	0	0	0.059
Dec													
Total	0	0	0	0	0	0	0	0	0	0	0	0	0.146

Description of mode and details of recycling if any for the month e.g. XX kg of used timber was sent to YY site for transformation into fertilizers								

Notes:

- (1) The performance targets are given in the Particular Specification on Environmental Management Plan.
- (2) The waste flow table shall also include construction waste that are specified in the Contract to be imported for use at the site.
- (3) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.
- (4) Broken concrete for recycling into aggregates.
- (5) If necessary, use the conversion factor: 1 full load of dumping truck being equivalent to 6.5 m<sup>3</sup> by volume.



## Appendix I-Status of License and Permit

Item	Permit/License /Ref.	Validity		Remarks
item	No.	From	То	Remarks
Variation of Further Environmental Permit	FEP-02/347/2009/A	13 <sup>th</sup> Jul 2010	N.A.	
Variation of Environmental Permit	EP-347/2009/A	9 <sup>th</sup> Jun 2010	N.A.	
Notification Pursuant to Section 3(1) of The Air Pollution Control	313192	8 <sup>th</sup> Jan 2010	N.A.	
(Construction Dust) Regulation				
Registration of Chemical Waste Producer	5213-542-A2587-02	4 <sup>th</sup> Mar 2010	N.A.	
Construction Noise Permit for Generator	GW-RN0273-12	5 <sup>th</sup> Jun 2012	4 <sup>th</sup> Dec 2012	