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| Issue No. | : | 1 |
| Issue Date | : | June 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 (MAY 2012)

Prepared By:

**ALLIED ENVIRONMENTAL CONSULTANTS LTD.**

**COMMERCIAL-IN-CONFIDENCE**

Allied Environmental Consultants Limited
Acousticians & Environmental Engineers

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AEC 沛然環境評估工程顧問有限公司

ENVIRON

Ref.: ASDBFBPREM00_0_0385L.12.doc 4 June 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 May 2012**

Reference is made to the Environmental Team's submission of the draft Monthly EM&A Report for May 2012 (Issue No. 1) by E-mail on 4 June 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. C. L. Wong (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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**COMMERCIAL-IN-CONFIDENCE**

Certified by: _____

Grace M. H. Kwok
Environmental Team Leader

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# ENVIRONMENTAL MONITORING & AUDIT REPORT (MAY 2012)

Prepared By:

**ALLIED ENVIRONMENTAL CONSULTANTS LTD.**

**COMMERCIAL-IN-CONFIDENCE**

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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 25th March 2010 and the construction works were commenced on 12th April 2010. This report is the twenty-seventh monthly EM&A report, which details the EM&A results recorded during the period from 1st May 2012 to 31st May 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 2nd, 8th, 14th, 23rd and 29th May 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 10th, 17th, 25th and 28th May 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 7$m^3$ of general refuse was disposed to NENT Landfill and no inert C&D waste was disposed in this reporting period.

Construction activities to be undertaken from 1st June to 30th June 2012 will include fixing and painting of PBF / SBF post, concreting to Boundary patrol road, U/G ducting work, backfilling / compaction to proposed boundary patrol road, XPM Mesh fixing to PBF fence, concreting to 450 U channel and tree planting. 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.

# 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$^{th}$ March 2010 and the construction works commenced on 12$^{th}$ April 2010. This report is the twenty-seventh monthly EM&A report, which details the EM&A results recorded during the period from 1$^{st}$ May 2012 to 31$^{st}$ May 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 |
| | | Mr. Peter Tsang | 2828 5921 | 2827 1823 |
| Main Contractor | Able Engineering Co., Limited | Mr. Gavin Lee | 9282 8158 | 2676 7966 |
| Environmental Team Leader | Allied Environmental Consultants Limited | Ms. Grace Kwok | 2815 7028 | 2815 5399 |
| Independent Environmental Checker | ENVIRON Hong Kong Limited | Mr. David Yeung | 3743 0788 | 3548 6988 |

***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 1st May 2012 to 31st May 2012 including the following works items:

- Fixing and painting of PBF / SBF post;
- Concreting to Boundary patrol road;
- U/G ducting work;
- Backfilling / compaction to proposed Boundary patrol road;
- XPM Mesh fixing to PBF fence;
- Concreting to 450 U channel; and
- Tree planting.

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

| Construction Works | Major Environmental Impact | Mitigation Measures |
|---|---|---|
| Fixing of PBF / SBF post | Waste management. | Quantities and record of waste transferred to licensed collector should be well- maintained. |
| Concreting to boundary patrol road | Wastewater, air quality, noise quality impacts and waste management. | Proper treatment should be made prior to discharge of wastewater. Water spraying provided when necessary. Well-maintained or quiet plants were used. Quantities and record of waste transfer should be well-maintained. |
| U/G ducting work | Waste management. | Quantities and record of waste transferred to licensed collector should be well- maintained. |
| Backfilling / compaction to proposed Boundary patrol road | Wastewater, air quality, noise quality impacts and waste management. | Proper treatment should be made prior to discharge of wastewater. Water spraying provided when necessary. Well-maintained or quiet plants were used. Quantities and record of waste transfer should be well-maintained. |
| XPM Mesh fixing to PBF fence | Waste management. | Quantities and record of waste transferred to licensed collector should be well- maintained. |
| Concreting to 450 U channel | Wastewater, air quality, noise quality impacts and waste management. | Proper treatment should be made prior to discharge of wastewater. Water spraying provided when necessary. Well-maintained or quiet plants were used. Quantities and record of waste transfer should be well-maintained. |
| Tree planting | Air quality | Water spraying provided when necessary |

***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<br><br>Measurements in Leq (30min) | When one documented complaint is received. | 75 dB(A) |

***Table 3 Action and Limit Level for Noise Impact Monitoring***

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 | 1. Notify IEC and the Contractor.<br>2. Carry out investigation.<br>3. Report the results of investigation to IEC and the Contractor.<br>4. Discuss with the Contractor and formulate remedial measures.<br>5. Increase monitoring frequency to check mitigation measures. | 1. Review with analyzed results submitted by ET<br>2. Review the proposed remedial measures by the Contractor and advise ER accordingly.<br>3. Supervise the implement of remedial measures. | 1. Confirm receipt of notification of exceedance in writing,<br>2. Notify the Contractor.<br>3. Require the Contractor to propose remedial measures for the analyzed noise problem.<br>4. Ensure remedial measures are properly implemented. | 1. Submit noise mitigation proposals to IEC.<br>2. Implement noise mitigation proposals. |
| Limit Level | 1. Identify the source.<br>2. Notify IEC, ER, EPD and the Contractor.<br>3. Repeat measurement to confirm findings.<br>4. Increase monitoring frequency.<br>5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented.<br>6. Inform IEC, ER and EPD to causes & actions taken for the exceedances.<br>7. Assess effectiveness of the Contractor's remedial actions and keep IEC, EPD and ER informed of the results.<br>8. If exceedance stops, cease additional monitoring. | 1. Discuss amongst ER, ET Leader and the Contractor on the potential remedial actions.<br>2. Review the Contractor's remedial actions whenever necessary to assure their effectiveness and advise ER accordingly.<br>3. Supervise the implementation of remedial measures. | 1. Confirm receipt of notification of exceedance in writing.<br>2. Notify the Contractor.<br>3. Require the Contractor to propose remedial measures for the analyzed noise problem.<br>4. Ensure remedial measures are properly implemented.<br>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. | 1. Take immediate action to avoid further exceedance.<br>2. Submit proposals for remedial actions to IEC within 3 working days of notification.<br>3. Implement the agreed proposals.<br>4. Resubmit proposals if problem still not under control.<br>5. Stop the relevant activity of works as determined by the ER until the exceedance is abated. |

***Table 4 Event and Action Plan***

# 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 2nd, 8th, 14th, 23rd and 29th May 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 | 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***

# 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 | $L_{eq}$ (30mins) | $L_{10}$ (30mins) | $L_{90}$ (30mins) | Remarks |
|---|---|---|---|---|---|---|---|---|
| MTL-01 | 02 May 12 | Cloudy | 0.3 | 14:00 – 14:30 | 47.8 | 50.7 | 38.6 | Noise from birdcall and transient noise from excavation works by adjacent DSD site. |
| | 08 May 12 | Sunny | 0.4 | 16:30 – 17:00 | 45.9 | 47.5 | 41.9 | Noise from birdcall. |
| | 14 May 12 | Sunny | 0.3 | 08:50 – 09:20 | 46.9 | 48.9 | 40.8 | Noise from birdcall and traffic noise. |
| | 23 May 12 | Sunny | 0.3 | 15:20 – 15:50 | 48.3 | 52.5 | 39.2 | Noise from birdcall. |
| | 29 May 12 | Cloudy | 0.3 | 16:20 – 16:50 | 49.7 | 51.9 | 39.8 | Noise from birdcall. |

***Table 7 Noise Monitoring Results***

# 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 Contractor | Outcome |
|---|---|---|---|
| 10 May 12 | No major environmental deficiency. | - | - |
| 17 May 12 | No major environmental deficiency. | - | - |
| 25 May 12 | No major environmental deficiency. | - | - |
| 28 May 12 | Accumulation of mud, rock and sandy materials were observed in the U channel along the patrol road. | Requested to remove the mud, rock and sandy materials from the U channel/ provide sandbags. | The situation was rectified as photo recorded on 30 May 2012 (Closed). |

***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 no inert C&D waste was disposed to Tuen Mun Area 38 Fill Bank, 0$m^3$ of metal wastes, 0$m^3$ of paper and cardboard packing and 7$m^3$ of general refuse were disposed to North East New Territories Landfill. There are a total of 0$m^3$ 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***.

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 trip-tickets 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***.

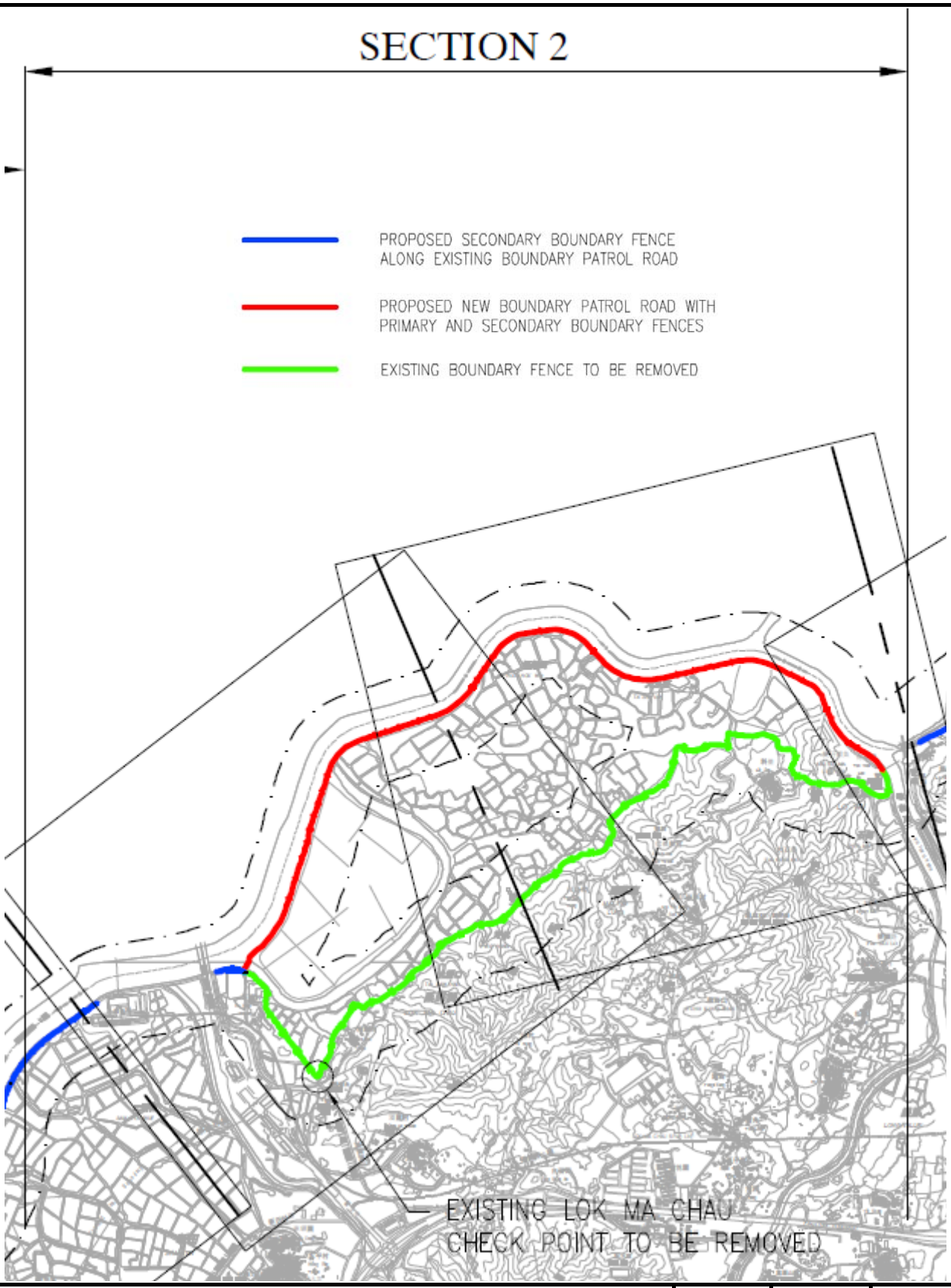
# 10. CONCLUSIONS AND FUTURE KEY ISSUES

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 1st May 2012 to 31st May 2012.

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

A total of 7$m^3$ of general refuse was disposed to NENT Landfill. No inert C&D waste was disposed in this reporting period.

Construction activities to be undertaken from 1st June to 30th June 2012 will include fixing and painting of PBF / SBF post, concreting to Boundary patrol road, U/G ducting work, backfilling / compaction to proposed boundary patrol road, XPM Mesh fixing to PBF fence, concreting to 450 U channel and tree planting. 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)**

**SITE LOCATION PLAN**

| Figure No. | Rev.: |
|---|---|
| 1 | 0 |
| Scale: NTS | Date: 02/10 |

AEC


**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 |

AEC

# *Appendix A*

# *Project Construction Programme*

ABLE ENGINEERING COMPANY LIMITED
安保工程有限公司
*A member of Vantage International (Holdings) Limited 盈信控股有限公司附屬機構*

Our Ref.: 23909/01/S0867

21st November, 2011

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

**By Hand**

**Attn: Mr. James Kam**

**Dear Sirs,**

**Re: ASD Contract No. SS W306**
**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**
**Submission of Master Program Revision 4**

With reference to your letter SHC/JK/FYW/LW/DC/C216727/306/12/L-0162 dated 22/08/11 regarding granted EOT 6 of the captioned project, we would like to submit herewith our Master program revision 4 as per attached for your earlier comment and approval.

Thank you for your kind attention.

**Yours faithfully**
**For and on behalf of**
**ABLE ENGINEERING CO., LTD.**

**Gavin Lee**
**Site Agent**
GL/KMT/kmt
Encl.

c.c. CPM203, ArchSD (Attn: Mr. C. L. Wong / Mr. Sammy Yue) w/e
ER/COW- SCOW/KE, ArchSD (Attn: Mr. Y. Y. Chan) w/e
RE / PCOW Mottmac (Attn: Mr. Peter Tsang / Mr. Paul Chong) w/e
PBSI Mottmac (Att.: Mr. C. K. Hui) w/e
Site office / SQS w/e

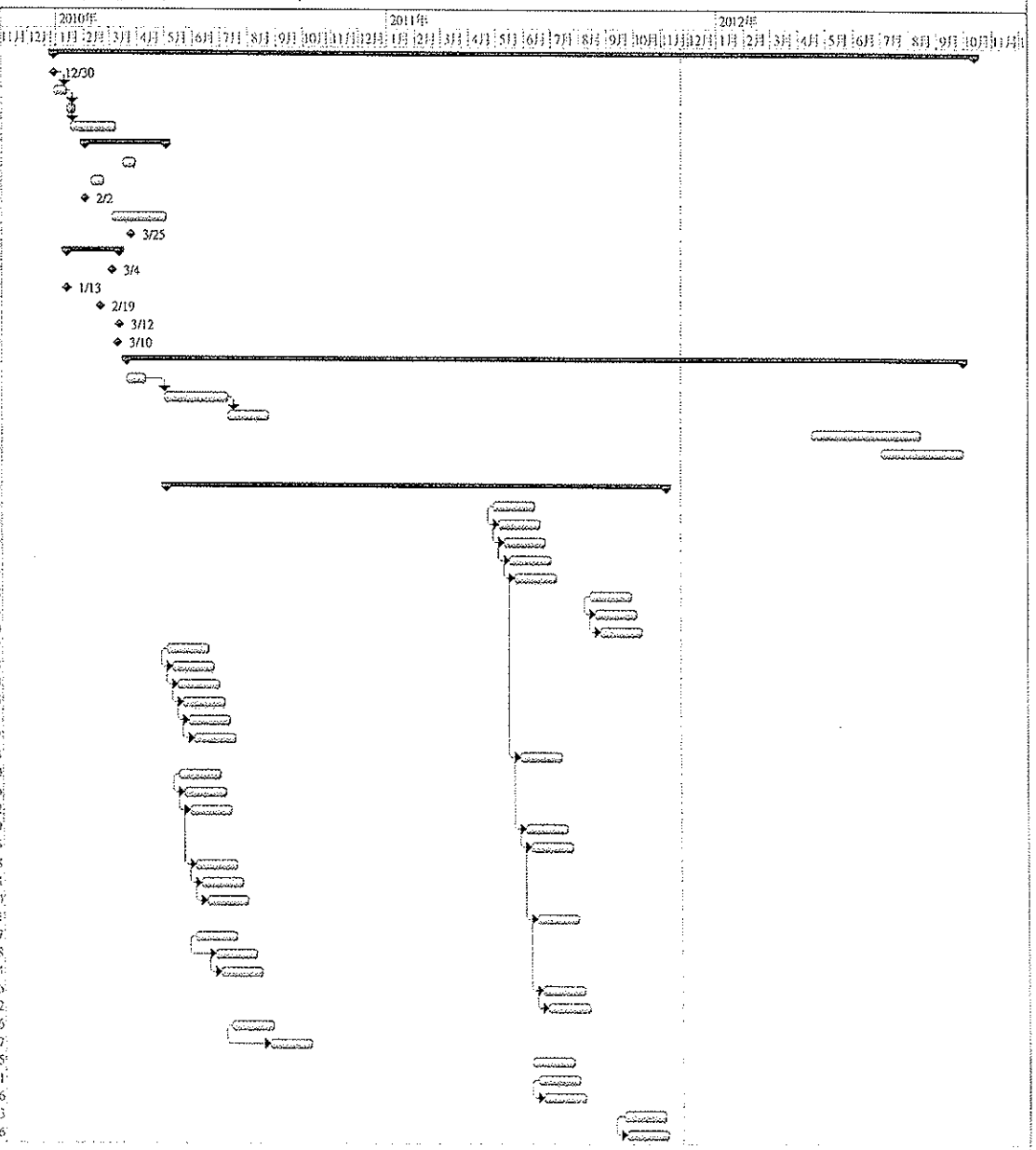
Able Engineering Company Limited

**Master Programme**

**Construction of a Secondary Boundary Fence and New Section of Primary Boundary Patrol Road from Lok Ma Chau Control Point to Ng Tung River (Contract No. : SSW306)**

Rev 4
Date: 19-11-2011

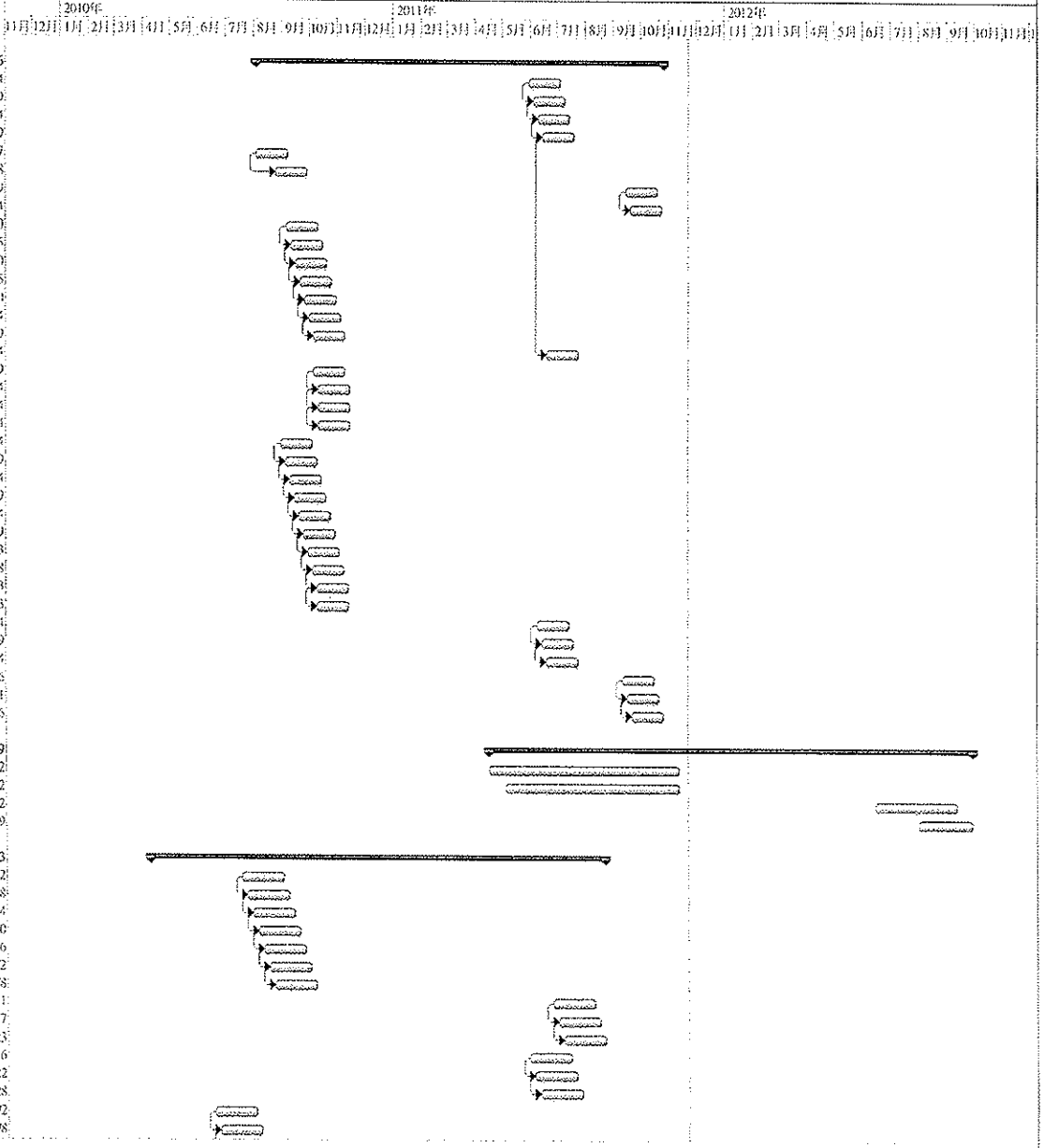
| 識別號 | 任務名稱 | 工期 | 開始時間 | 完成時間 |
|---|---|---|---|---|
| 1 | Section A | 1018 days | 2009/12/30 | 2012/10/12 |
| 2 | Site Possession | 0 days | 2009/12/30 | 2009/12/30 |
| 3 | Application entrance permit | 14 days | 2009/12/30 | 2010/1/12 |
| 4 | Site Office Erection | 9 days | 2010/1/13 | 2010/1/21 |
| 5 | Site Condition / Tree Survey | 50 days | 2010/1/17 | 2010/3/7 |
| 6 | Preparation works | 90 days | 2010/2/2 | 2010/5/2 |
| 7 | Mobilization for preparation works | 14 days | 2010/3/16 | 2010/3/29 |
| 8 | Set up wheel wish equipment | 14 days | 2010/2/9 | 2010/2/22 |
| 9 | Trial Mix design submission for concrete | 0 days | 2010/2/2 | 2010/2/2 |
| 10 | Trial Mix inspection for concrete | 60 days | 2010/3/4 | 2010/5/2 |
| 11 | TTA Submission | 0 days | 2010/3/25 | 2010/3/25 |
| 12 | Submission to EPD | 58 days | 2010/1/13 | 2010/3/12 |
| 13 | Registration as a chemical waste producer | 0 days | 2010/3/4 | 2010/3/4 |
| 14 | Further EP application | 0 days | 2010/1/13 | 2010/1/13 |
| 15 | Further EP approval | 0 days | 2010/2/19 | 2010/2/19 |
| 16 | Landscape plan submission | 0 days | 2010/3/12 | 2010/3/12 |
| 17 | Base line monitoring record submission | 0 days | 2010/3/10 | 2010/3/10 |
| 18 | Tree transplanting | 925 days | 2010/3/20 | 2012/9/29 |
| 19 | Tree Protection | 21 days | 2010/3/20 | 2010/4/9 |
| 20 | Pruning | 70 days | 2010/5/1 | 2010/7/9 |
| 21 | Transplanting | 45 days | 2010/7/10 | 2010/8/23 |
| 22 | Planting | 120 days | 2012/4/16 | 2012/8/13 |
| 23 | Hydroseeding | 90 days | 2012/7/2 | 2012/9/29 |
| 24 | | | | |
| 25 | Zone 1 SBF CH3000 to CH 150 (Footing, 1st layer Backfilling ~600mm THK) | 553 days | 2010/5/3 | 2011/11/6 |
| 26 | CH3000 -2920 | 46 days | 2011/4/29 | 2011/6/13 |
| 27 | CH2920-2840 | 46 days | 2011/5/5 | 2011/6/19 |
| 28 | CH2840-2760 | 46 days | 2011/5/11 | 2011/6/25 |
| 29 | CH2760-2680 | 46 days | 2011/5/17 | 2011/7/1 |
| 30 | CH2680-2600 | 46 days | 2011/5/23 | 2011/7/7 |
| 31 | CH2600-2520 | 46 days | 2011/8/14 | 2011/9/28 |
| 32 | CH2520-2440 | 46 days | 2011/8/20 | 2011/10/4 |
| 33 | CH2440-2360 | 46 days | 2011/8/26 | 2011/10/10 |
| 34 | CH2360-2280 | 46 days | 2010/5/3 | 2010/6/17 |
| 35 | CH2280-2200 | 46 days | 2010/5/9 | 2010/6/23 |
| 36 | CH2200-2120 | 46 days | 2010/5/15 | 2010/6/29 |
| 37 | CH2120-2040 | 46 days | 2010/5/21 | 2010/7/5 |
| 38 | CH2040-1960 | 46 days | 2010/5/27 | 2010/7/11 |
| 39 | CH1960-1880 | 46 days | 2010/6/2 | 2010/7/17 |
| 40 | CH1880-1800 | 46 days | 2011/5/29 | 2011/7/13 |
| 41 | CH1800-1720 | 46 days | 2010/5/16 | 2010/6/30 |
| 42 | CH1720-1640 | 46 days | 2010/5/22 | 2010/7/6 |
| 43 | CH1640-1560 | 46 days | 2010/5/28 | 2010/7/12 |
| 44 | CH1560-1480 | 46 days | 2011/6/4 | 2011/7/19 |
| 45 | CH1480-1400 | 46 days | 2011/6/10 | 2011/7/25 |
| 46 | CH1400-1320 | 46 days | 2010/6/3 | 2010/7/18 |
| 47 | CH1320-1240 | 46 days | 2010/6/9 | 2010/7/24 |
| 48 | CH1240-1160 | 46 days | 2010/6/15 | 2010/7/30 |
| 49 | CH1160-1080 | 46 days | 2011/6/16 | 2011/7/31 |
| 50 | CH1080-1000 | 46 days | 2010/6/2 | 2010/7/17 |
| 51 | CH1000-920 | 46 days | 2010/6/24 | 2010/8/8 |
| 52 | CH920-840 | 46 days | 2010/6/30 | 2010/8/14 |
| 53 | CH840-760 | 46 days | 2011/6/22 | 2011/8/6 |
| 54 | CH760-680 | 46 days | 2011/6/28 | 2011/8/12 |
| 55 | CH680-600 | 46 days | 2010/7/12 | 2010/8/26 |
| 56 | CH600-520 | 46 days | 2010/8/23 | 2010/10/7 |
| 57 | CH520-440 | 46 days | 2011/6/30 | 2011/7/25 |
| 58 | CH440-360 | 46 days | 2011/6/16 | 2011/7/31 |
| 59 | CH360-280 | 46 days | 2011/6/22 | 2011/8/6 |
| 60 | CH280-200 | 46 days | 2011/9/19 | 2011/11/3 |
| 61 | CH200-150 | 46 days | 2011/9/22 | 2011/11/6 |



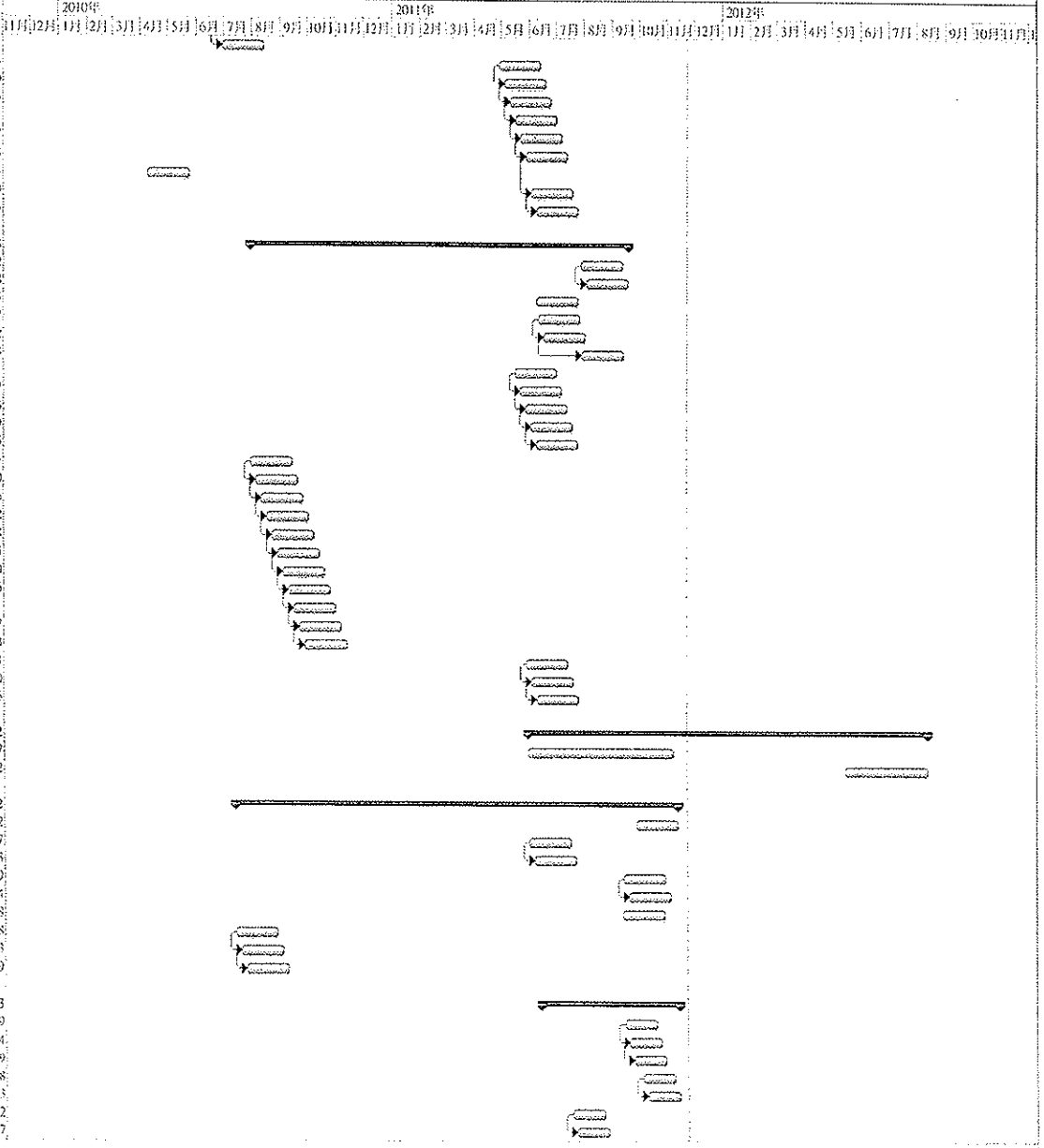

Master Programme Rev 4 19-11-2011.ts

任務 進度 摘要 外部任務 期限
分割 電程碑 專案摘要報告 外部里程碑

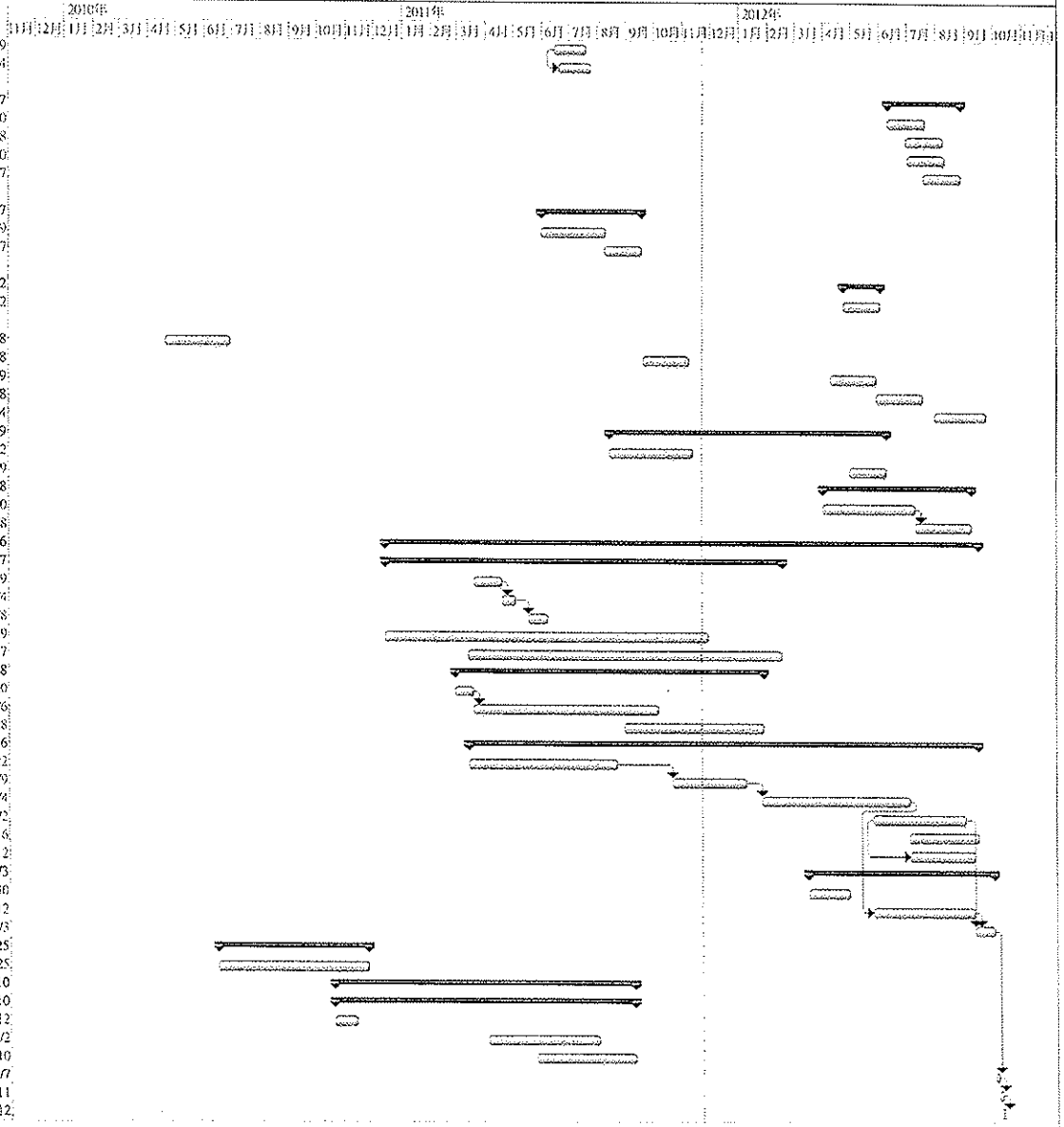
| 識別碼 | 任務名稱 | 工期 | 開始時間 | 完成時間 |
|---|---|---|---|---|
| 62 | | | | |
| 63 | Zone 1 PBF CH3000 to CH 150 (Footing) | 449 days | 2010/8/4 | 2011/10/26 |
| 64 | CH3000-2920 | 35 days | 2011/5/31 | 2011/7/4 |
| 65 | CH2920-2840 | 35 days | 2011/6/5 | 2011/7/9 |
| 66 | CH2840-2760 | 35 days | 2011/6/10 | 2011/7/14 |
| 67 | CH2760-2680 | 35 days | 2011/6/15 | 2011/7/19 |
| 68 | CH2680-2600 | 35 days | 2010/8/4 | 2010/9/7 |
| 69 | CH2600-2520 | 35 days | 2010/8/25 | 2010/9/28 |
| 70 | CH2520-2440 | 35 days | 2011/9/15 | 2011/10/19 |
| 71 | CH2440-2360 | 35 days | 2011/9/20 | 2011/10/24 |
| 72 | CH2360-2280 | 35 days | 2010/9/6 | 2010/10/10 |
| 73 | CH2280-2200 | 35 days | 2010/9/11 | 2010/10/15 |
| 74 | CH2200-2120 | 35 days | 2010/9/16 | 2010/10/20 |
| 75 | CH2120-2040 | 35 days | 2010/9/21 | 2010/10/25 |
| 76 | CH2040-1960 | 35 days | 2010/9/26 | 2010/10/30 |
| 77 | CH1960-1880 | 35 days | 2010/10/1 | 2010/11/4 |
| 78 | CH1880-1800 | 35 days | 2010/10/6 | 2010/11/9 |
| 79 | CH1800-1720 | 35 days | 2011/6/20 | 2011/7/24 |
| 80 | CH1720-1640 | 35 days | 2010/10/6 | 2010/11/9 |
| 81 | CH1640-1560 | 35 days | 2010/10/11 | 2010/11/14 |
| 82 | CH1560-1480 | 35 days | 2010/10/11 | 2010/11/14 |
| 83 | CH1480-1400 | 35 days | 2010/10/11 | 2010/11/14 |
| 84 | CH1400-1320 | 35 days | 2010/8/31 | 2010/10/4 |
| 85 | CH1320-1240 | 35 days | 2010/9/5 | 2010/10/9 |
| 86 | CH1240-1160 | 35 days | 2010/9/10 | 2010/10/14 |
| 87 | CH1160-1080 | 35 days | 2010/9/15 | 2010/10/19 |
| 88 | CH1080-1000 | 35 days | 2010/9/20 | 2010/10/24 |
| 89 | CH1000-920 | 35 days | 2010/9/25 | 2010/10/29 |
| 90 | CH920-840 | 35 days | 2010/9/30 | 2010/11/3 |
| 91 | CH840-760 | 35 days | 2010/10/5 | 2010/11/8 |
| 92 | CH760-680 | 35 days | 2010/10/10 | 2010/11/13 |
| 93 | CH680-600 | 35 days | 2010/10/10 | 2010/11/13 |
| 94 | CH600-520 | 35 days | 2011/6/10 | 2011/7/14 |
| 95 | CH520-440 | 35 days | 2011/6/15 | 2011/7/19 |
| 96 | CH440-360 | 35 days | 2011/6/20 | 2011/7/24 |
| 97 | CH360-280 | 35 days | 2011/9/12 | 2011/10/16 |
| 98 | CH280-200 | 35 days | 2011/9/17 | 2011/10/21 |
| 99 | CH200-150 | 35 days | 2011/9/22 | 2011/10/26 |
| 100 | | | | |
| 101 | Zone 1 Patrol road CH3000 to CH 150 (Back filling, E&M & CLP pipe duct & Road surf. | 531 days | 2011/4/18 | 2012/9/29 |
| 102 | Backfilling CH3000-1000 | 209 days | 2011/4/18 | 2011/11/12 |
| 103 | Backfilling CH1000-150 | 191 days | 2011/5/6 | 2011/11/12 |
| 104 | Road surface CH3000-1000 | 90 days | 2012/6/15 | 2012/9/12 |
| 105 | Road surface CH1000-150 | 60 days | 2012/8/1 | 2012/9/29 |
| 106 | | | | |
| 107 | Zone 2 SBF CH 5000 to CH3000 (Footing, 1st layer Backfilling ~600mm THK) | 502 days | 2010/4/9 | 2011/8/23 |
| 108 | CH5000-4920 | 46 days | 2010/7/19 | 2010/9/2 |
| 109 | CH4920-4840 | 46 days | 2010/7/25 | 2010/9/8 |
| 110 | CH4840-4760 | 46 days | 2010/7/31 | 2010/9/14 |
| 111 | CH4760-4680 | 46 days | 2010/8/6 | 2010/9/20 |
| 112 | CH4680-4600 | 46 days | 2010/8/12 | 2010/9/26 |
| 113 | CH4600-4520 | 46 days | 2010/8/18 | 2010/10/2 |
| 114 | CH4520-4440 | 46 days | 2010/8/24 | 2010/10/8 |
| 115 | CH4440-4360 | 46 days | 2011/6/27 | 2011/8/11 |
| 116 | CH4360-4280 | 46 days | 2011/7/3 | 2011/8/17 |
| 117 | CH4280-4200 | 46 days | 2011/7/9 | 2011/8/23 |
| 118 | CH4200-4120 | 46 days | 2011/6/1 | 2011/7/16 |
| 119 | CH4120-4040 | 46 days | 2011/6/7 | 2011/7/22 |
| 120 | CH4040-3960 | 46 days | 2011/6/13 | 2011/7/28 |
| 121 | CH3960-3880 | 46 days | 2010/6/18 | 2010/8/2 |
| 122 | CH3880-3800 | 46 days | 2010/6/24 | 2010/8/8 |



| 識別號 | 任務名稱 | 工期 | 開始時間 | 完成時間 |
|---|---|---|---|---|
| 123 | CH3800-3720 | 46 days | 2010/6/30 | 2010/8/14 |
| 124 | CH3720-3640 | 46 days | 2011/4/29 | 2011/6/13 |
| 125 | CH3640-3560 | 46 days | 2011/5/5 | 2011/6/19 |
| 126 | CH3560-3480 | 46 days | 2011/5/11 | 2011/6/25 |
| 127 | CH3480-3400 | 46 days | 2011/5/17 | 2011/7/1 |
| 128 | CH3400-3320 | 46 days | 2011/5/23 | 2011/7/7 |
| 129 | CH3320-3240 | 46 days | 2011/5/29 | 2011/7/13 |
| 130 | CH3240-3160 | 46 days | 2010/4/9 | 2010/5/24 |
| 131 | CH3160-3080 | 46 days | 2011/6/4 | 2011/7/19 |
| 132 | CH3080-3000 | 46 days | 2011/6/10 | 2011/7/25 |
| 133 | | | | |
| 134 | Zone 2 PBF CH 5000-3000 (Footing & 2nd layer Backfilling up to sub-base) | 415 days | 2010/7/31 | 2011/9/18 |
| 135 | CH5000-4920 | 46 days | 2011/7/29 | 2011/9/12 |
| 136 | CH4920-4840 | 46 days | 2011/8/4 | 2011/9/18 |
| 137 | CH4840-4760 | 46 days | 2011/6/10 | 2011/7/25 |
| 138 | CH4760-4680 | 46 days | 2011/6/12 | 2011/7/27 |
| 139 | CH4680-4600 | 46 days | 2011/6/18 | 2011/8/2 |
| 140 | CH4600-4520 | 46 days | 2011/7/30 | 2011/9/13 |
| 141 | CH4520-4440 | 46 days | 2011/5/17 | 2011/7/1 |
| 142 | CH4440-4360 | 46 days | 2011/5/23 | 2011/7/7 |
| 143 | CH4360-4280 | 46 days | 2011/5/29 | 2011/7/13 |
| 144 | CH4280-4200 | 46 days | 2011/6/4 | 2011/7/19 |
| 145 | CH4200-4120 | 46 days | 2011/6/10 | 2011/7/25 |
| 146 | CH4120-4040 | 46 days | 2010/7/31 | 2010/9/14 |
| 147 | CH4040-3960 | 46 days | 2010/8/6 | 2010/9/20 |
| 148 | CH3960-3880 | 46 days | 2010/8/12 | 2010/9/26 |
| 149 | CH3880-3800 | 46 days | 2010/8/18 | 2010/10/2 |
| 150 | CH3800-3720 | 46 days | 2010/8/24 | 2010/10/8 |
| 151 | CH3720-3640 | 46 days | 2010/8/30 | 2010/10/14 |
| 152 | CH3640-3560 | 46 days | 2010/9/5 | 2010/10/20 |
| 153 | CH3560-3480 | 46 days | 2010/9/11 | 2010/10/26 |
| 154 | CH3480-3400 | 46 days | 2010/9/17 | 2010/11/1 |
| 155 | CH3400-3320 | 46 days | 2010/9/23 | 2010/11/7 |
| 156 | CH3320-3240 | 46 days | 2010/9/29 | 2010/11/13 |
| 157 | CH3240-3160 | 46 days | 2011/5/30 | 2011/7/14 |
| 158 | CH3160-3080 | 46 days | 2011/6/5 | 2011/7/20 |
| 159 | CH3080-3000 | 46 days | 2011/6/11 | 2011/7/26 |
| 160 | | | | |
| 161 | Zone 2 Patrol road CH 5000-3000 (Back filling, E&M & CLP pipe duct & Road surface) | 439 days | 2011/6/1 | 2012/8/12 |
| 162 | Backfilling CH5000-3000 | 160 days | 2011/6/1 | 2011/11/7 |
| 163 | Road Surface CH5000-3000 | 90 days | 2012/5/15 | 2012/8/12 |
| 164 | | | | |
| 165 | Zone 3 SBF CH5700 to CH5000 (Footing, 1st layer Backfilling ~600mm THK) | 487 days | 2010/7/14 | 2011/11/12 |
| 166 | CH5700-5640 | 46 days | 2011/9/28 | 2011/11/12 |
| 167 | CH5640-5560 | 46 days | 2011/6/2 | 2011/7/17 |
| 168 | CH5560-5480 | 46 days | 2011/6/8 | 2011/7/23 |
| 169 | CH5480-5400 | 46 days | 2011/9/14 | 2011/10/29 |
| 170 | CH5400-5320 | 46 days | 2011/9/20 | 2011/11/4 |
| 171 | CH5320-5240 | 46 days | 2011/9/13 | 2011/10/28 |
| 172 | CH5240-5160 | 46 days | 2010/7/14 | 2010/8/28 |
| 173 | CH5160-5080 | 46 days | 2010/7/20 | 2010/9/3 |
| 174 | CH5080-5000 | 46 days | 2010/7/26 | 2010/9/9 |
| 175 | | | | |
| 176 | Zone 3 PBF CH5700 to CH5000 (Footing) | 152 days | 2011/6/15 | 2011/11/13 |
| 177 | CH5700-5640 | 35 days | 2011/9/15 | 2011/10/19 |
| 178 | CH5640-5560 | 35 days | 2011/9/20 | 2011/10/24 |
| 179 | CH5560-5480 | 35 days | 2011/9/25 | 2011/10/29 |
| 180 | CH5480-5400 | 35 days | 2011/10/5 | 2011/11/8 |
| 181 | CH5400-5320 | 35 days | 2011/10/10 | 2011/11/13 |
| 182 | CH5320-5240 | 35 days | 2011/7/19 | 2011/8/22 |
| 183 | CH5240-5160 | 35 days | 2011/7/24 | 2011/8/27 |



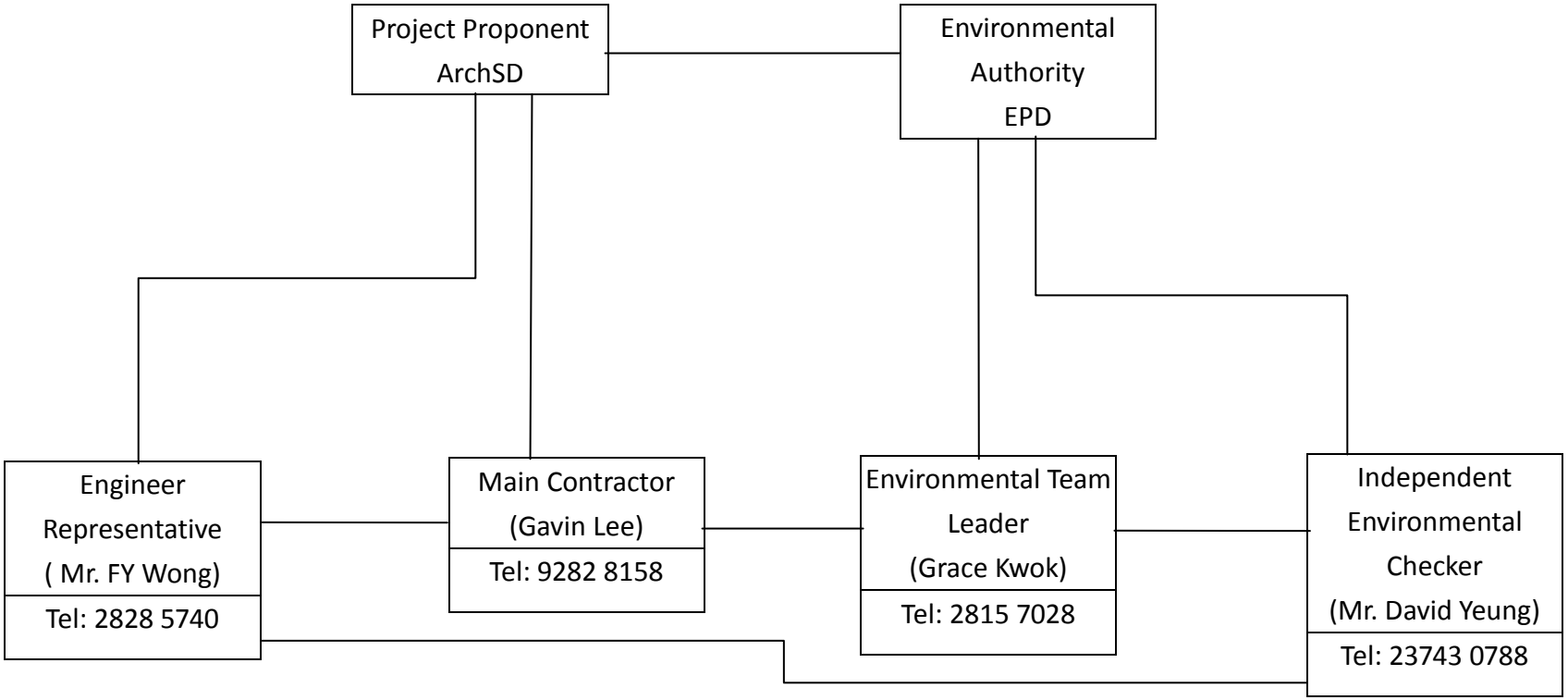
| 識別號 | 任務名稱 | 工期 | 開始時間 | 完成時間 |
|---|---|---|---|---|
| 184 | CH5160-5080 | 35 days | 2011/6/15 | 2011/7/29 |
| 185 | CH5080-5000 | 35 days | 2011/6/30 | 2011/7/24 |
| 186 | | | | |
| 187 | Zone 3 Patrol road CH5700 to CH5000 (Back filling, E&M & CLP pipe duct & Road surf | 78 days | 2012/6/11 | 2012/8/27 |
| 188 | Backfilling CH5700-5400 | 40 days | 2012/6/11 | 2012/7/20 |
| 189 | Road Surface CH5700-5400 | 40 days | 2012/6/30 | 2012/8/8 |
| 190 | Backfilling CH5400-5000 | 40 days | 2012/7/2 | 2012/8/10 |
| 191 | Road Surface CH5400-5000 | 40 days | 2012/7/19 | 2012/8/27 |
| 192 | | | | |
| 193 | Zone 4 SBF CH150( near by Gate 98) to CH000 (Footing, 1st layer Backfilling -600mm | 109 days | 2011/6/1 | 2011/9/17 |
| 194 | Application for excavation permit & approval | 70 days | 2011/6/1 | 2011/8/8 |
| 195 | CH150-CH000 | 40 days | 2011/8/9 | 2011/9/17 |
| 196 | | | | |
| 197 | Zone 4 Patrol road CH150( near by Gate 98) to CH000 (Back filling, E&M & Road surfa | 40 days | 2012/4/24 | 2012/6/2 |
| 198 | CH150-CH000 | 40 days | 2012/4/24 | 2012/6/2 |
| 199 | | | | |
| 200 | 1st Backfilling From CH4300 to CH5575 | 70 days | 2010/4/20 | 2010/6/28 |
| 201 | 2nd Backfilling From CH4300 to CH5575 | 50 days | 2011/9/20 | 2011/11/8 |
| 202 | Modification works for the U-channel & Catch Pit | 50 days | 2012/4/10 | 2012/5/29 |
| 203 | New Catch Pit | 50 days | 2012/5/30 | 2012/7/18 |
| 204 | Road mark | 55 days | 2012/8/1 | 2012/9/24 |
| 205 | RC meter Kiosk | 300 days | 2011/8/15 | 2012/6/9 |
| 206 | CH150~ CH3000 | 90 days | 2011/8/15 | 2011/11/12 |
| 207 | CH3000~ CH5700 | 40 days | 2012/5/1 | 2012/6/9 |
| 208 | Bollard | 160 days | 2012/4/2 | 2012/9/8 |
| 209 | Steel bollard installation | 100 days | 2012/4/2 | 2012/7/10 |
| 210 | Painting | 60 days | 2012/7/11 | 2012/9/8 |
| 211 | PBF & SBF & Lamp Post | 642 days | 2010/12/15 | 2012/9/16 |
| 212 | Steel Work | 430 days | 2010/12/15 | 2012/2/17 |
| 213 | Trial Panel for BF sample erection | 30 days | 2011/3/21 | 2011/4/19 |
| 214 | Steel work testing | 15 days | 2011/4/20 | 2011/5/4 |
| 215 | Material Order | 21 days | 2011/5/19 | 2011/6/8 |
| 216 | Fabrication | 350 days | 2010/12/15 | 2011/11/29 |
| 217 | Material Delivery | 340 days | 2011/3/15 | 2012/2/17 |
| 218 | Lamp Post | 334 days | 2011/3/1 | 2012/1/28 |
| 219 | Material Order | 20 days | 2011/3/1 | 2011/3/20 |
| 220 | Fabrication | 200 days | 2011/3/21 | 2011/10/6 |
| 221 | Material Delivery | 151 days | 2011/8/31 | 2012/1/28 |
| 222 | Site installation | 551 days | 2011/3/16 | 2012/9/16 |
| 223 | PBF / SBF / Lamp Post erection (CH1500-CH3500) | 160 days | 2011/3/16 | 2011/8/22 |
| 224 | PBF / SBF / Lamp Post erection (CH0150-CH1500) | 80 days | 2011/10/22 | 2012/1/9 |
| 225 | PBF / SBF / Lamp Post erection (CH3500-CH5700) | 160 days | 2012/1/27 | 2012/7/4 |
| 226 | XPM mesh fixing | 100 days | 2012/5/26 | 2012/9/2 |
| 227 | Painting | 75 days | 2012/7/4 | 2012/9/16 |
| 228 | Razor Barbed wire fixing | 70 days | 2012/7/5 | 2012/9/12 |
| 229 | E&M works | 201 days | 2012/3/17 | 2012/10/3 |
| 230 | Flood light installation | 45 days | 2012/3/17 | 2012/4/30 |
| 231 | Wiring works & Miscellaneous works | 110 days | 2012/5/26 | 2012/9/12 |
| 232 | T&C inspection | 21 days | 2012/9/13 | 2012/10/3 |
| 233 | Section B CH 4200 to CH 5400 | 164 days | 2010/6/15 | 2010/11/25 |
| 234 | New wave wall ~ CH 4200 to ~CH 5400 | 164 days | 2010/6/15 | 2010/11/25 |
| 235 | Section D CH150 to CH4200 | 326 days | 2010/10/20 | 2011/9/10 |
| 236 | Strengthen the wave wall footing | 326 days | 2010/10/20 | 2011/9/10 |
| 237 | Preparation works | 24 days | 2010/10/20 | 2010/11/12 |
| 238 | Zone 1 | 120 days | 2011/4/5 | 2011/8/2 |
| 239 | Zone 2 | 107 days | 2011/5/27 | 2011/9/10 |
| 240 | Pre - handover inspection | 4 days | 2012/10/4 | 2012/10/7 |
| 241 | Genal Cleaning | 4 days | 2012/10/8 | 2012/10/11 |
| 242 | Handover | 1 day | 2012/10/12 | 2012/10/12 |



# *Appendix B*
# *Organization Chart*

Appendix B – Organization Chart

——————— Line of communication



# *Appendix C*

# *Calibration Certificates of Noise Monitoring Instruments*

輝創工程有限公司
Sun Creation Engineering Limited Calibration and Testing Laboratory

Certificate No. : C113270

# Certificate of Calibration

This is to certify that the equipment

Description : Sound Level Meter

Manufacturer : Rion

Model No. : NL-31

Serial No. : 00410224

has been calibrated for the specific items and ranges.
The results are shown in the Calibration Report No. C113270.

The equipment is supplied by

Co. Name : Envirotech Services Co.

Address : Shop 6, G/F., Casio Mansion, 209 Shaukeiwan Road, Hong Kong

Date of Issue : 10 June 2011

Certified by : H C Chan



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

輝創工程有限公司
Sun Creation Engineering Limited Calibration and Testing Laboratory

Certificate No. : C113870

# Certificate of Calibration

This is to certify that the equipment

Description : Sound Level Calibrator

Manufacturer : Rion

Model No. : NC-73

Serial No. : 10997142

has been calibrated for the specific items and ranges.
The results are shown in the Calibration Report No. C113870.

The equipment is supplied by

Co. Name : Envirotech Services Co.

Address : Shop 6, G/F., Casio Mansion, 209 Shaukeiwan Road, Hong Kong

Date of Issue : 11 July 2011

Certified by : H C Chan



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

*Appendix D*

*Detail Schedule of Noise Monitoring Programme*

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 | Start Time |
|---|---|
| 2nd May 2012 | 14:00 |
| 8th May 2012 | 16:30 |
| 14th May 2012 | 08:50 |
| 23rd May 2012 | 15:20 |
| 29th May 2012 | 16:20 |

Monitoring schedule of the coming month

| Date | Time |
|---|---|
| 7th June 2012 | To be confirmed |
| 13th June 2012 | To be confirmed |
| 19th June 2012 | To be confirmed |
| 26th June 2012 | To be confirmed |

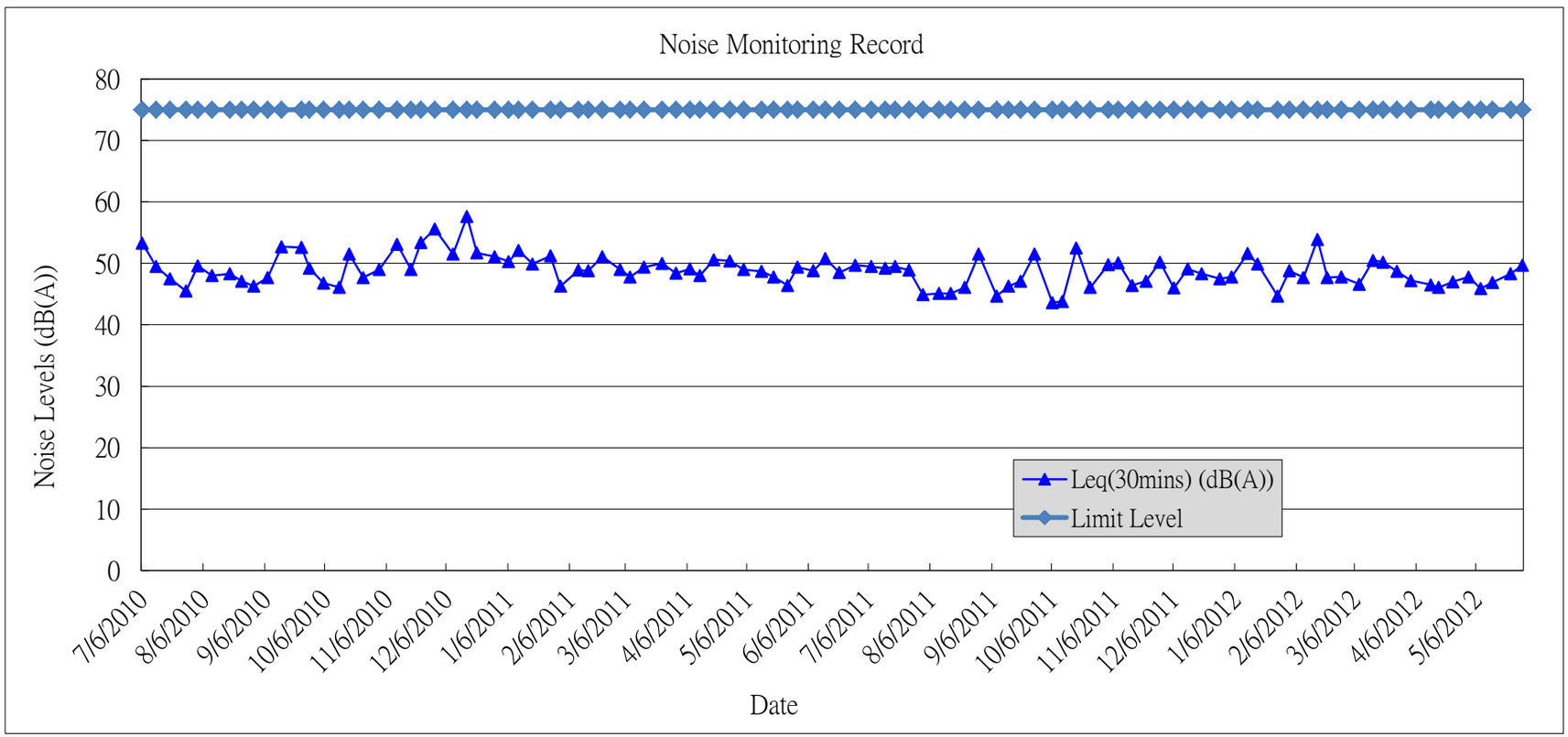
*Appendix E*

*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: May 2012**

| Date | Time | Leq(30mins) (dB(A)) | L10(30mins) (dB(A)) | L90(30mins) (dB(A)) | Limit Level |
|---|---|---|---|---|---|
| 2/5/2012 | 14:00 – 14:30 | 47.8 | 50.7 | 38.6 | 75 |
| 8/5/2012 | 16:30 – 17:00 | 45.9 | 47.5 | 41.9 | 75 |
| 14/5/2012 | 08:50 – 09:20 | 46.9 | 48.9 | 40.8 | 75 |
| 23/5/2012 | 15:20 – 15:50 | 48.3 | 52.5 | 39.2 | 75 |
| 29/5/2012 | 16:20 – 16:50 | 49.7 | 51.9 | 39.8 | 75 |



# *Appendix F*

# *Mitigation Measures Implementation Schedule for Construction Stage*

# Appendix F Environmental Mitigation Implementation Schedule

| EIA Ref. | 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 |
|---|---|---|---|---|---|---|---|---|
| **Air Quality** | | | | | | | | |
| **During Construction** | | | | | | | | |
| 2.5.2 | 3.2.2 | The following good site practice should be implemented:<br>• any excavated dusty materials or stockpile of dusty materials should be covered entirely by impervious sheeting or sprayed with water so as to maintain the entire surface wet, and recovered or backfilled or reinstated within 24 hours of the excavation or unloading;<br>• the working area of excavation should be sprayed with water immediately before, during and immediately after the operations so as to maintain the entire surface wet;<br>• dusty materials carried by vehicle leaving a construction site should be covered entirely by clean impervious sheeting;<br>• the area where vehicle washing takes place and the section of the road between the washing facilities and the exit point should paved with concrete, bituminous materials or hardcores; | To minimize construction dust impact | Contractor | Construction Work Sites | During Construction | EIAO-TM, Air Pollution Control (Construction Dust) Regulation | ^<br>^<br>^<br>^ |

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.

## Appendix F Environmental Mitigation Implementation Schedule

| EIA Ref. | 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 |
|---|---|---|---|---|---|---|---|---|
| | | • 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;<br>• all dusty materials should be sprayed with water prior to any loading, unloading or transfer;<br>• vehicle speed should be limited to 10kph except on completed access roads;<br>• every vehicle should be washed to remove any dusty materials from its body and wheels before leaving the construction sites. | | | | | | ^<br>^<br>^<br>^ |
| **Noise** | | | | | | | | |
| **During Construction** | | | | | | | | |
| 3.8.14 | 4.8.1 | The following good site practical should be implemented:<br>• The Contractor shall adopt the Code of Practice on Good Management Practice to Prevent Violation of the Noise Control Ordinance (Chapter 400) (for Construction Industry) published by EPD;<br>• The Contractor shall observe and comply with the statutory and non-statutory requirements and guidelines; | To mitigate construction noise impact | Contractor | Construction Work Sites | During Construction | EIAO-TM, NCO | ^<br>^ |

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.

## Appendix F Environmental Mitigation Implementation Schedule

| EIA Ref. | 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 |
|---|---|---|---|---|---|---|---|---|
| | | • Before commencing any work, the Contractor shall submit to the Engineer Representative for approval the method of working, equipment and noise mitigation measures intended to be used at the site;<br>• 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;<br>• Noisy equipment and noisy activities should be located as far away from the NSRs as is practical;<br>• Unused equipment should be turned off. PME should be kept to a minimum and the parallel use of noisy equipment / machinery should be avoided;<br>• Regular maintenance of all plant and equipment;<br>• Material stockpiles and other structures should be effectively utilised as noise barriers, where practicable. | | | | | | ^<br>^<br>^<br>^<br>^<br>N/A |

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| 3.8.1 -3.8.3 | 4.8.2 -4.8.3 | Other than good site practice, the Contractor is required to adopt Levels 1 and 2 site-specific direct mitigation measures as specified below during the construction phase.<br><br>With construction / demolition work undertaken at a distance of 60m or less to the NSRs, below mitigation measures should be included:<br><br>**Level 1 – Use of Quiet Plant and Movable Noise Barrier**<br>• The Contractor shall obtain particular models of plant that are quieter than standards given in GW-TM.<br>• 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. | To mitigate construction noise impact | Contractor | Construction work sites | During construction | EIAO-TM, NCO | N/A |

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| 3.8.9 | 4.8.4 | In addition to the use of quiet plant and movable noise barrier, alternative demolition method of existing boundary fence at Section 2-3 shall be used where demolition works would be undertaken at a distance of 12m or less to the NSRs. These particular mitigation measures should be included:<br><br>**Level 2 – Alternative Demolition Method of Existing Boundary Fence**<br>• The use of welder is recommended to replace the use of hand-held driller;<br>• 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<br>• 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. | To mitigate construction noise impact for demolition of existing boundary fence | Contractor | Construction work sites (Section 2 - 3) | Before the commencement of demolition works | EIAO-TM, NCO | ^ |

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| **Water Quality** | | | | | | | | |
| **During Construction** | | | | | | | | |
| 4.7.1 | 5.3.1 | Good site practices in addition to the implementation of mitigation measures would minimize the impact to the surrounding environment.<br><br>*General Prevention and Precaution Measures*<br>• The site should be confined to avoid silt runoff to the site.<br>• No discharge of silty water into the storm drain and drainage channel within and the vicinity of the site.<br>• Any soil contaminated with chemicals/oils shall be removed from site and the void created shall be filled with suitable materials.<br>• Stockpiles to be covered by tarpaulin to avoid spreading of materials during rainstorms;<br>• Suitable containers shall be used to hold the chemical wastes to avoid leakage or spillage during storage, handling and transport; | To avoid site runoff and chemical leakage | Contractor | Construction work sites | During construction | Practice Note for Professional Persons with regard to site drainage (ProPECC PN 1/94) and TM standard under the WPCO | *<br><br>^<br>*<br><br>^<br><br>^<br><br>^ |

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| | | • Chemical waste containers shall be labelled with appropriate warning signs in English and Chinese to avoid accidents. there shall also be clear instructions showing what action to take in the event of an accidental;<br>• Storage areas shall be selected at safe locations on site and adequate space shall be allocated to the storage area;<br>• Any construction plant which causes pollution to the water system due to leakage of oil or fuel shall be removed off-site immediately;<br>• Spillage or leakage of chemical waste to be controlled by using suitable absorbent materials;<br>• Chemicals will always be stored on drip trays or in bunded areas where the volume is 110% of the stored volume;<br>• Regular clearance of domestic waste generated in the temporary sanitary facilities to avoid waste water spillage.<br>• Temporary sanitary facilities to be provided for on-site workers during construction. | | | | | | ^<br>^<br>N/A<br>^<br>^<br>^<br>^ |

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| 4.7.2 – 4.7.3 | 5.3.2-5.3.3 | **Concreting Work**<br>A temporary drainage channel and associated facilities should be provided to collect the runoff generated and prevent concrete-contaminated water from entering watercourses. Adjustment of pH can be achieved by adding a suitable neutralising reagent to wastewater prior to discharge.<br><br>The concreting works should be temporarily isolated with proper methods, such as | To collect runoff generated and prevent concrete-contaminated water from entering watercourses | Contractor | Construction work sites | During construction | Practice Note for Professional Persons with regard to site drainage (ProPECC PN 1/94) and TM standard under the WPCO<br><br>CEDD General | ^ |

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| | | by placing of sandbags or silt curtains with lead edge at bottom and properly supported props. | To prevent adverse impacts on the water quality of Lin Ma Hang Stream SSSI | | Work sites of Section 3 in the proximity of Lin Ma Hang Stream SSSI | | Specification- Protection of natural streams/rivers- Clause 25.09 | N/A |
| 4.7.4 | 5.3.4 | **Soil Excavation and Stockpiling**<br>Excavated soil which needs to be temporarily stockpiled should be stored in a specially designated area and provided with a tarpaulin cover to avoid runoff into the drainage channels. | To avoid site runoff | Contractor | Construction work Sites | During construction | Practice Note for Professional Persons with regard to site drainage (ProPECC PN 1/94) and TM standard under the WPCO | ^ |

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| 4.7.5 - 4.7.6 | 5.3.5-5.3.6 | **Site Depot**<br>All compounds in works areas should be located on areas of hard standing with provision of drainage channels and settlement ponds where necessary to allow interception and controlled release of settled/treated water. Hard standing compounds should drain via an oil interceptor. The oil interceptor should be regularly inspected and cleaned to avoid wash-out of oil during storm conditions. A 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 | To avoid wash-out of oil during storm conditions | Contractor | Construction work Sites | During construction | Practice Note for Professional Persons with regard to site drainage (ProPECC PN 1/94) and TM standard under the WPCO | N/A |

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| | | register as a chemical waste producer. Disposal of the waste oil should be done by a licensed collector.<br><br>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**<br>Sewage system should be constructed to divert domestic sewage, which will be generated from the sanitary facilities provided in the new checkpoint at Shek Chung Au, to public sewer connected to government sewage treatment facilities. | To avoid disposal of domestic sewage into watercourses. | Contractor | Construction work Site at Checkpoint | During construction | N/A | N/A |
| **Waste Management** | | | | | | | | |
| **During Construction** | | | | | | | | |

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| 5.6.7 | 6.3.6 | **Site Clearance**<br>The topsoil and vegetation removed and excavated material may have to be temporarily stockpiled on-site. Control measures should be taken at the stockpiling area to prevent the generation of dust and pollution of stormwater channels, fish ponds or river channels. However, to eliminate the risk of blocking drains in the wet season, it is recommended that stockpiling of excavated materials during the wet season should be avoided as far as practicable. | Prevent the generation of dust and pollution of storm water channels | Contractor | Construction work sites | During construction | Waste Disposal Ordinance (Cap.354); ETWBTC No. 15/2003, Waste Management on Construction Site | ^ |
| 5.6.10 – 5.6.12 | 6.3.8 | **Construction and Demolition Materials**<br>Careful design, planning and good site management can minimize over-ordering and generation of waste materials such as concrete mortars and cement grouts. The design of formwork should maximize the use of standard wooden panels so to achieve high reuse levels. Alternatives such as steel formwork or plastic facing should be considered to increase the potential for reuse. | Minimize over-ordering and generation of waste materials | Contractor | Construction work sites | During construction | Waste Disposal Ordinance (Cap.354); ETWBTC No. 15/2003, Waste Management on Construction Site | ^ |

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| | | The Contractor should recycle as much of the C&D materials as possible on-site. 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.<br><br>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. | | | | | | ^ |
| 5.6.13-5.6.14 | 6.3.9 – 6.3.13 | **Chemical Waste**<br>For those processes which generate chemical waste, it may be possible to find alternatives which generate reduced quantities or even no chemical waste, or less dangerous types of chemical waste. | To avoid chemical leakage | Contractor | Construction work sites | During construction planning | Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes, Waste Disposal | ^ |

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| | | Chemical waste that is produced, as defined by Schedule 1 of the Waste Disposal (Chemical Waste) (General) Regulation, should be handed in accordance with the Code of Practice on the Packaging, Handling and Storage of Chemical Waste as follows:<br>Containers used for the storage of chemical wastes should:<br>• be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed:<br>• have a capacity of less than 450 litres unless the specification have been approved by the EPD; and<br>• display a label in English and Chinese in accordance with instructions prescribed in Schedule 2 of the Regulations,<br>The storage area for chemical wastes should:<br>• be clearly labelled and used solely for the storage of chemical waste;<br>• be enclosed on at least 3 sides;<br>• 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; | | | | | (Chemical Waste) (General) Regulation | ^<br>^<br>^<br>^<br>^<br>^<br>^<br>^<br>^ |

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| | | • have adequate ventilation;<br>• be covered to prevent rainfall entering (water collected within the bund must be tested and disposed as chemical waste if necessary); and<br>• be arranged so that incompatible materials are adequately separated.<br>Disposal of chemical waste should:<br>• be via a licensed waste collector; and<br>• 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<br>• to be re-user of the waste, under approval from the EPD. | | | | | | ^<br>^<br>^<br>^<br>^<br>^<br>N/A |
| 5.6.16 | 6.3.15 | **General Refuse**<br>Should be stored in enclosed bins or compaction units separate from C&D and chemical wastes. The Contractor should employ a reputable waste collector to 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. | Minimise odour, pest and litter impacts | Contractor | Construction work sites | During construction | Public Health and Municipal Services Ordinance (Cap. 132) | ^ |

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| 5.6.18 | 6.3.16 | **Construction Waste Management Plan**<br>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 | Construction work sites | During construction | ETWB TCW No. 19/2005, Waste Management on Construction Sites | ^ |
| **Ecology** | | | | | | | | |
| Table 6.38 | 7.2 | **Ecological Impacts on Floral Species of Conservation Concern**<br>Erection of protective fencing to protect the plant during construction period | Protect the plant during construction period | Contractor | Construction work sites | During construction | EIAO | ^ |

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| Table 6.40 | 7.2 | **Potential Ecological Impacts on Offsite Habitats**<br>Good site practices for controlling the dust and water quality (avoid stockpiles adjacent to wetlands, covering the stockpiles with impervious sheeting, control of vehicle speed, no discharge of silty water to the rivers, streams and drainage channels);<br>Clear definition of works limit to avoid impact on adjacent habitats | To avoid site runoff and dust impact | Contractor | Construction work sites | During construction | EIAO / Air Pollution Control (Construction Dust) Regulation / WPCO | ^ |

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| Table 6.39-Table 6.45 | 7.2 | **Disturbance to Wetland-Dependent Birds, Raptors, Terrestrial Birds and Egretry**<br>Good working practices include switching off unused equipment, keep minimum number of powered mechanical equipment in operation at the same period, the use 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;<br>Avoidance of construction works using Power Mechanical Equipments within the Wetland Conservation Area during bird migratory season (15th November – 15th March); and<br>Restriction of excavation works within a 150m buffer zone from the egretry to ardeid non-breeding season (from August to February). | To minimize disturbance to wildlife | Contractor | Construction work sites | During construction | EIAO / Air Pollution Control (Construction Dust) Regulation / WPCO | ^ |
| **Cultural Heritage** | | | | | | | | |

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| 8.7.1 – 8.7.4 | 8.1.1 - 8.1.4 | An archaeological survey should be undertaken at the study areas of Pak Fu Shan and Lin Ma Hang of Section 3 after land resumption and before commencement of construction works | Assess the archaeological impact on the two identified sites of archaeological potential. | Contractor (through professional archaeologist) | The study areas of Pak Fu Shan and Lin Ma Hang of Section 3 | After land resumption and before commencement of construction works | Antiquities and Monuments Ordinance / EIAO | N/A |

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| 8.7.6 | 8.2.1 | Built Heritage Resources<br>Mitigation in the form of buffer zones and safe public access have been proposed for one shrine (BF-HB1) and two graves (BF-G1 and G2)<br><br>BF-HB1<br>A buffer zone of a minimum distance of 1 metres should be established between the shrine 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 shrine during any construction works in close proximity.<br><br>BF-G1 and BF-G2<br>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. | Avoid impacts to built heritage resources | Contractor | The works that are located in the vicinity of built heritage resources (BF-HB1 and BF-G1 and G2) | During Construction | EIAO | N/A |

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| **Landscape and Visual** | | | | | | | | |
| | | Preservation of Existing Vegetation | | | | | | |
| Table 7-13 CP1 | 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. 3/2006 | ^ |
| Table 7-13 CP1 | 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 / Contractor | Site | Before construction phase commences | TM-EIA | ^ |
| Table 7-13 CP1 | Table 9-1 | • 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. | 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 | ^ |

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| Table 7-13<br>CP1 | Table 9-1 | • 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. | 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<br>CP1 | Table 9-1 | • 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. | 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<br>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 | ^ |
| Table 7-13<br>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 | To ensure the success of the tree preservation proposals. | Project Landscape Architect / Contractor | Site | Throughout construction phase | Annex 18, ETWB TCW No. 2/2004 & ETWB TCW No. 3/2006 | N/A |

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| Table 7-13<br><br>CP1 | Table 9-1 | • All works affecting the trees identified for retention and transplantation will be carefully monitored. This includes the key stages in the preparation of the trees, the implementation of protection measures and health monitoring through out the construction period | 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<br><br>CP1 | Table 9-1 | • Detailed landscape and tree preservation proposals will be submitted to the relevant government departments for approval under the lease conditions and in accordance with ETWB TCW No. 2/2004 and WBTC No. 3/2006. | To ensure the tree preservation and planting proposals are integrated with the existing landscape context and that the landscape resources are preserved where appropriate. | Project Landscape Architect / Contractor | Site | Throughout construction phase | TM-EIA Annex 18, ETWB TCW No. 2/2004 & ETWB TCW No. 3/2006 | ^ |

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|---|---|---|---|---|---|---|---|---|
| Table 7-13<br><br>CP1 | Table 9-1 | • The tree preservation works should be implemented by approved Landscape Contractors and inspected and approved on site by a qualified Landscape Architect. A tree protection specification would be included within the contract documents. | To ensure the tree preservation and planting proposals are integrated with the existing landscape context and that the landscape resources are preserved where appropriate. | Contractor | Site | Throughout construction phase | TM-EIA Annex 18, ETWB TCW No. 2/2004 & ETWB TCW No. 3/2006 | ^ |
| | | **Preservation of Existing Topsoil** | | | | | | |
| Table 7-13<br><br>CP2 | Table 9-1 | • Topsoil disturbed during the construction phase should be tested using a standard soil testing methodology and where it is found to be worthy of retention stored for re-use. | To provide a viable growing medium suited to the existing conditions and reduce the need for the importation of top soil. | Contractor | Site | Throughout construction phase | TM-EIA Annex 18 | ^ |

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.

## Appendix F Environmental Mitigation Implementation Schedule

| EIA Ref. | 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<br><br>CP2 | Table 9-1 | • The soil will be stockpiled to a maximum height of 2m and will be either temporarily vegetated with hydroseeded grass during construction or covered with a waterproof covering to prevent erosion. | To provide a viable growing medium suited to the existing conditions and reduce the need for the importation of top soil. | Contractor | Site | Throughout construction phase | TM-EIA Annex 18 | ^ |
| Table 7-13<br><br>CP2 | Table 9-1 | • The stockpile should be turned over on a regular basis to avoid acidification and the degradation of the organic material, and reused after completion. Alternatively, if this is not practicable, it should be considered for use elsewhere, including other projects. | To provide a viable growing medium suited to the existing conditions and reduce the need for the importation of top soil. | Contractor | Site | Throughout construction phase | TM-EIA Annex 18 | ^ |
| | | **Permanent and Temporary Works Areas** | | | | | | |

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.

## Appendix F Environmental Mitigation Implementation Schedule

| EIA Ref. | 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 CP3 | Table 9-1 | • Where appropriate to the final design the landscape of these works areas should be restored following the completion of the construction phase. | To minimise the disturbance to existing landscape resources and change of visual amenity. | Contractor | Site | Through out construction phase | TM-EIA Annex 18 | N/A |
| Table 7-13 CP3 | Table 9-1 | • Construction site controls should be enforced including the storage of materials, the location and appearance of site accommodation and the careful design of site lighting to prevent light spillage. | To minimise the disturbance to existing landscape resources and change of visual amenity. | Contractor | Site | Through out construction phase | TM-EIA Annex 18 | ^ |
| | | **Mitigation Planting** | | | | | | |
| Table 7-13 CP4 | Table 9-1 | • Replanting of disturbed vegetation should be undertaken at the earliest possible stage of the construction phase | To minimise the disturbance to existing landscape resources and change of visual amenity. | Contractor | Site | Through out construction phase | TM-EIA Annex 18 | N/A |

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.

## Appendix F Environmental Mitigation Implementation Schedule

| EIA Ref. | 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<br>CP4 | Table 9-1 | • Use of native plant species predominantly in the planting design for the buffer areas. | To minimise the disturbance to existing landscape resources and change of visual amenity. | Contractor | Site | Through out construction phase | TM-EIA Annex 18 | N/A |
| Table 7-13<br>CP4 | Table 9-1 | • The tree planting works should be implemented by approved Landscape Contractors and inspected and approved on site by a qualified Landscape Architect. A tree planting specification would be included within the contract documents. | To minimise the disturbance to existing landscape resources and change of visual amenity. | Contractor | Site | Through out construction phase | TM-EIA Annex 18 | ^ |
| | | **Transplantation of Existing Trees** | | | | | | |
| Table 7-13<br>CP5 | Table 9-1 | • The tree transplanting works should be implemented by approved Landscape Contractors and inspected and approved on site by a qualified Landscape Architect. A tree protection / transplanting specification would be included within the contract documents. | To minimise the disturbance to existing landscape resources and minimize the impacts on the visual amenity of the area. | Contractor | Site | Prior to the commencement of the proposed works | TM-EIA Annex 18, ETWB TCW No. 2/2004 & ETWB TCW No. 3/2006 | ^ |
| | | **Design of the Fence and associated Structures** | | | | | | |

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.

## Appendix F Environmental Mitigation Implementation Schedule

| EIA Ref. | 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 7-14<br><br>OP1 | Table 9-2 | • Design of Boundary Fence, Boundary Patrol Road and Police Check Point – These structural elements will be designed in accordance with security requirement from Police Force and incorporate design features as part of design mitigation measures including: | Responsive design to integrate the proposals into their landscape and visual context. | ArchSD | Site | Throughout design phase | TM-EIA<br>Annex 18 and BD | ^ |
| | | 1. 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 built structures with a low building height profile to reduce the potential visual mass of the structure within a rural context. | | | | | | N/A |

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.

## Appendix F Environmental Mitigation Implementation Schedule

| EIA Ref. | 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 |
|---|---|---|---|---|---|---|---|---|
| | | 3. Treatment of built structures - the architectural design should seek to 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. | | | | | | N/A |
| | | 4. Responsive building and fence finishes - In terms of the proposed 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. | | | | | | N/A |

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.

## Appendix F Environmental Mitigation Implementation Schedule

| EIA Ref. | 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 |
|---|---|---|---|---|---|---|---|---|
| | | 5. Responsive lighting design – Aesthetic design of architectural and track lighting with following glare design measures:<br>▪ Directional and full cut off lighting is recommended particularly for areas adjacent to existing village to minimise light spillage.<br>▪ Minimise geographical spread of lighting, only applied for safety and security reasons;<br>▪ Limited lighting intensity to meet the minimum safety and operation requirement; and<br>▪ High-pressure sodium road lighting is recommended for more stringent light control reducing spillage and thus visual impacts. | | | | | | N/A |
| | | **Compensatory Planting Proposals** | | | | | | |
| Table 7-14<br><br>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; X Non-compliance of mitigation measure;
N/A Not Applicable in the reporting month; * Not satisfactory but rectified by the contractor.

## Appendix F Environmental Mitigation Implementation Schedule

| EIA Ref. | 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 7-14<br><br>OP 2 / 3 | Table 9-2 | • A qualified or registered landscape architect will be involved in the design, construction supervision and monitoring, and maintenance period to oversee the implementation of the recommended landscape and visual mitigation measures including the tree preservation and landscape works on site. | Provide a linkage with the existing wooded areas creating a more coherent landscape framework whilst also improving the ecological connectivity between existing and proposed woodland habitats. | Contractor | Site | Throughout design phase | TM-EIA<br>Annex 18, HKPSG and BD | ^ |
| Table 7-14<br><br>OP 2 | Table 9-2 | • 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 native to Hong Kong be used. In addition where possible the planting of new trees and shrubs will aim to link together existing woodland areas and small tree groups to improve the connectivity between habitats and create more coherent landscape framework. The planting of small groups of trees along the 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. | The planting proposal seeks to compensate for the predicted tree loss. | Contractor | Site | Throughout design phase | TM-EIA<br>Annex 18, HKPSG and BD | N/A |

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.

## Appendix F Environmental Mitigation Implementation Schedule

| EIA Ref. | 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 7-14<br><br>OP 3 | Table 9-2 | • Compensatory Planting Proposals – Given the works extent is largely limited along existing roadside embankment to minimise impact to existing village settlements and valuable landscape resources such as wetland, fishpond, stream course and existing trees, and considered the importance of tree retention within the works area, new tree planting will concentrate in selected 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. | The planting proposal seeks to compensate for the predicted tree loss. | Contractor | Site | Throughout design phase | TM-EIA<br>Annex 18, HKPSG and BD | N/A |

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.

# *Appendix G*
# *Complaint Log*

Appendix G – Complaint Logs

## Complaints

| Log Ref. | Location | Received Date | Details of Complaint | Investigation/Mitigation Action | Status |
|---|---|---|---|---|---|
| | | | | | |

# *Appendix H*

## *Monthly Waste Flow Table*

| **Architectural Services Department** | **Form No. D/OI.03/09.002** |
|---|---|

**Contract No. / Works Order No.: -** **SS W 306**

# Monthly Summary Waste Flow Table for May 2012 [to be submitted not later than the 15th day of each month following reporting month]

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

| Month | Actual Quantities of Inert Construction Waste Generated Monthly | | | | |
|---|---|---|---|---|---|
| | (a)=(b)+(c)+(d)+(e)<br>Total Quantity Generated | (b)<br>Broken Concrete<br>(see Note 4) | (c)<br>Reused in the Contract | (d)<br>Reused in other Projects | (e)<br>Disposed of as Public Fill |
| | (in '000$m^3$) | (in '000$m^3$) | (in '000$m^3$) | (in '000$m^3$) | (in '000$m^3$) |
| 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 | | | | | |
| Sub-total | **0** | **0** | **0** | **0** | **0** |
| Jul | | | | | |
| Aug | | | | | |
| Sep | | | | | |
| Oct | | | | | |
| Nov | | | | | |
| Dec | | | | | |
| Total | **0** | **0** | **0** | **0** | **0** |

| Month | Actual Quantities of Non-inert Construction Waste Generated Monthly | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Timber | | Metals | | Paper/ cardboard packaging | | Plastics (see Note 3) | | Chemical Waste | | Other Recyclable Materials _____ (pls. specify) | | General Refuse disposed of at Landfill |
| | (in '000kg) | | (in '000kg) | | (in '000kg) | | (in '000kg) | | (in '000kg) | | (in '000kg) | | (in '000$m^3$) |
| | 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 | | | | | | | | | | | | | |
| Sub-total | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0.027** |
| Jul | | | | | | | | | | | | | |
| Aug | | | | | | | | | | | | | |
| Sep | | | | | | | | | | | | | |
| Oct | | | | | | | | | | | | | |
| Nov | | | | | | | | | | | | | |
| Dec | | | | | | | | | | | | | |
| Total | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0.027** |

| 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 $m^3$ by volume.

*Appendix I*

*Status of License and Permit*

Appendix I-Status of License and Permit

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