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**Development at Former Marine Police  
Headquarters KIL 11161  
Quarterly Environmental Monitoring & Audit  
Report for March 2008 – May 2008**

**(Ref No. 3.12/050/2006)**

**July 2008**

**Report Certified by  
the Environmental  
Team Leader:**

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**Report Verified by the  
Independent  
Environmental  
Checker:**

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## Content

### EXECUTIVE SUMMARY

1. Introduction
2. Project Information and Progress
3. Monitoring Results
4. Waste Management
5. Summary of Non-compliance, Complaints, Notification of Summons and Successful Prosecutions, Environmental Licensing and Permitting
6. Conclusion

### Appendices

- Appendix A: The construction programme with milestones of environmental protection/mitigation activities
- Appendix B: Implementation schedule for recommended mitigation measures
- Appendix C: Graphical presentations of the air impact monitoring results
- Appendix D: Summary of exceedances
- Appendix E: Graphical presentations of the noise impact monitoring results

## EXECUTIVE SUMMARY

This is the sixteenth Quarterly Environmental Monitoring & Audit Report prepared by Nature & Technologies (HK) Ltd. for the development of the former Marine Police Headquarter. This report documents the impact environmental monitoring and audit work in the period from March 2008 to May 2008. Site audit inspections were performed by Environmental Team at least once per week and by the Independent Environmental Checker at least once per month.

Infrastructure furnishing was the major construction activity carried out within the Project site for the quarter.

Measurement at A3 stopped after 7 April 2008 due to the removal of hoarding to suit to the construction needs. Approval was received to shift the air quality monitoring at A3 to A3a to suit site development and this was implemented on 21 May 2008.

Air and noise monitoring have been carried out in accordance with the EM&A Manual. Tree photographic survey is also provided in Appendices of the Monthly EM&A Reports for March 2008 to May 2008.

The contractor advised that termination of monument measurement and has been approved in March 2008 and hence monument measurement results are not made in the reporting quarter.

Bi-monthly water quality sampling was conducted in April 2008 and the result complied with the discharge requirement.

There were two complaints logged by public and EPD concerning the dust nuisance and the water discharge arrangement in site respectively. After investigation, tarpaulin screen plus increased water sprays were used to reduce the dust nuisance and the water discharge to the gully by possibly utility workers was removed. Communication within the site was enhanced to prevent improper water discharge by other parties. The complaints are thus resolved.

There were eleven Limit Level exceedances on noise received in the quarter but these were confirmed not to be due to the site operations. There was no other notification of summons, prosecutions or non-compliance.

No other notifications of summons, prosecutions or non-compliances were received. The site was generally satisfactory and some improvement measures are recommended for further pursuit. These include removal of water poundings found within site, improvement of wheel washing facility and wastewater treatment system, ensuring the compressors are operating with door closed, improvement of water spraying to suppress dust emission, proper covering and storage of general refuse and stockpiles, improvement of wheel washing facility and avoidance of tire tracks at entrance, use of drip tray for all oily containers and continuing protection of preserved historical building and trees.

## **1. Introduction**

- 1.1 Hien Lee Engineering Co., Ltd. ["HL"] has taken over the site in May 2007 to carry out the remaining excavation work, building foundation and superstructure & furnishing for the development of FMPHQ. HL in turn has commissioned N&T to continue with the EM&A work for the project from May 2007 onwards.
- 1.2 Pursuant to Clauses 2.3 of the Environmental Permit ["EP"] EP-184/2004 of the project, the draft EM&A Manual was submitted on 29 April 2004 and the revised version was later approved in end July 2004. Due to project changes, the EM&A Manual was revised in May 2006. Further revision of the EM&A Manual to cater for the present phase of the construction works was submitted to EPD and approval was granted on 22 June 2007.
- 1.3 This report documents the quarterly EM&A work and summarizes its findings for the quarterly period from March 2008 to May 2008. This is the sixteenth quarterly report documenting the EM&A work since the commencement of the construction work.

## 2. Project Information and Progress

### Environmental Status

- 2.1 The location, site layout, historic buildings and structures to be preserved of the Project are shown in Figure 2.1.
- 2.2 Mr Alex Chan was approved as the new Independent Environmental Checker [“IEC”] by EPD on 24 April 2008.
- 2.3 The project organization, management structure and general lines of communication with respect to environmental protection works are shown in Figure 2.2 and the present key contacts are given in Table 2.1. Environmental Protection Department [“EPD”] is the control authority and may contact any party where necessary for their statutory duties.

Table 2.1 Key Contacts of the Project Team

Party	Company	Contact Person	Phone
Permit Holder	Flying Snow Ltd.	Mr H S Chan	2112 2634
Project Architect	A+T Design Ltd.	Mr Daniel Lin	2858 4778
Contractor (up to April 2007)	Konwall Construction & Eng. Co., Ltd.	Mr Eric Kwok	2563 1233
Contractor (commencing May 2007)	Hien Lee Engineering Co., Ltd.	Mr Howard Lui	9108 3955
Independent Environmental Checker	CH2M HILL Hong Kong Limited	Mr. Alex Chan	3105 8686
Environmental Team [“ET”] Leader	Nature & Technologies (HK) Ltd.	Ir Dr Gabriel C K Lam	2877 3122

### Construction Programme, Works Undertaken & Status

- 2.4 The updated construction programme with milestones of environmental protection / mitigation activities annotated is given in Appendix A.
- 2.5 Superstructure furnishing was the main activity carried out within the project site in the quarter.

### Monitoring Locations

- 2.6 Designated air quality and noise monitoring locations were selected for impact monitoring based on the EM&A Manual Section 3.8. They are shown in Figure 2.3. Air quality monitoring locations are briefly described below:
- A1 is located on the rooftop of the Consumer Council office east of the construction site, estimated to be about 11m above ground.
  - A2 is at the Cultural Centre Studio Theatre podium level south of the construction site, estimated to be about 5m above ground. Monitoring at this location has not yet commenced at the time of preparation of this report as permission to carry out monitoring there has not been received.
  - A2a is at south boundary of the construction site facing the Cultural Centre Studio Theatre selected as an alternative location to A2 in consultation with the IEC, estimated to be about 6m above ground. This is needed since permission from the Cultural Centre for monitoring there is not yet received and in order to reduce the delay to the construction programme by the permission.

- A3 is at the west site boundary of the construction site on top of the existing hoarding, estimated to be about 5m above ground. This position is slightly different to that originally proposed in the Project Profile due to the inability to obtain permission to gain access to the building at Star House or Marco Polo Hongkong Hotel for measurement and that the present revised position will provide a more conservative measurement for environmental protection
- A3a is situated just outside of the cordon area of the tree T96, positioned as close to Canton Road as possible and is about 20m south-east of the earlier station A3. The replacement of A3 with A3a was required due to the dismantling of west hoardings hence the removal of platform that host the air sampler. Approval for the replacement was granted by EPD on 14 May 2008 and monitoring at A3a was commenced on 21 May 2008 after installation completion.
- A4 is at the site boundary north of the construction site on top of the existing hoarding, estimated to be about 13m above ground.

2.7 The noise monitoring locations, namely CN1a (on the roof of Po Yip Building) & CN2a (on the 4/F YMCA), were selected for the impact noise monitoring. These locations are made up for the locations at CN1 & CN2 (podium of Hankow Centre east of the construction site) carried out for the baseline noise monitoring as Hankow Centre no longer permit to enter the premises for noise measurement since 28 May 2004. These locations are also shown in Figure 2.3 and are located on the roof of Po Yip Building and 4/F YMCA facing the east of the site.

2.8 The other monitoring locations are indoor of Hong Kong Cultural Centre ["HKCC"] (4/F Studio Theatre End Stage, 1/F Concert Hall & 1/F Grand Theatre) and Hong Kong Space Museum ["HKSM"] (G/F Lecture Room, 1/F Recording Studio & 1/F Sky Theatre) for ground-borne noise monitoring purpose.

### Summary of EM&A Requirements

2.9 The environmental monitoring requirements given in this manual can be summarised as follows:

Table 2.2 Environmental Monitoring Summary Requirements

1.	Air monitoring for 24-hour Total Suspended Particulates ["TSP"] with high volume samplers at four locations <ul style="list-style-type: none"> <li>• Baseline – continuously for 14 consecutive days</li> <li>• Impact – once every six-days</li> </ul>
2.	Air monitoring for 1-hour TSP with portable equipment at four locations <ul style="list-style-type: none"> <li>• Baseline – 3 times per day for 14 days</li> <li>• Impact – 3 times per day, one day for every six-days</li> </ul>
3.	Noise measurement at two noise sensitive receiver locations ( $L_{eq,30 \text{ min}}$ , $L_{eq,5 \text{ min}}$ , $L_{10}$ and $L_{90}$ ) <ul style="list-style-type: none"> <li>• Baseline – daily between 0700-1900 for 2 weeks</li> <li>• Impact – weekly between 0700-1900 hours on a normal weekday</li> </ul>
4.	Ground-borne noise measurement inside HKSM and HKCC ( $L_{eq,30 \text{ min}}$ / $L_{eq,5 \text{ min}}$ ) <ul style="list-style-type: none"> <li>• Baseline – one time before commencement of piling works</li> <li>• Impact – once per month on a normal weekday</li> </ul>
5.	Building Settlement Marker <ul style="list-style-type: none"> <li>• Baseline – one time before commencement of piling works</li> <li>• Impact – once per two days on a normal weekday</li> </ul>
6.	Ground Settlement Marker <ul style="list-style-type: none"> <li>• Baseline – one time before commencement of piling works</li> <li>• Impact – once per two days on a normal weekday</li> </ul>

7.	Crack Monitoring (Tell-Tale Device) <ul style="list-style-type: none"> <li>• Baseline – one time before commencement of piling works</li> <li>• Impact – once per two days on a normal weekday</li> </ul>
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2.10 Site inspection by the ET should be carried out at least once per week and IEC at least once per month to monitor the timely implementation of proper environmental management practices and mitigation measures in the Project site. Report submissions should include Baseline Monitoring Report, Monthly, Quarterly and Final EM&A Reports. These reports should include photographic records for landscape and tree preservation, and monument structure monitoring records for heritage protection.

Environmental Quality Performance Limits

2.11 The calculation of the Action and Limit [“AL”] Levels for dust and noise were based on the baseline monitoring results. The AL levels for dust are set in Table 2.3.

Table 2.3 AL levels for 1-hour and 24-hr TSP

Location	1-hour TSP		24-hour TSP	
	Action	Limit	Action	Limit
A1	382	500	191	260
A2a	394	500	193	260
A3 / A3a*	389	500	182	260
A4	384	500	187	260

\* Monitoring at A3 was stopped on 7 April 2008 while A3a was commenced on 21 May 2008

2.12 As per requirements of the EM&A Manual, the AL Levels for noise were established as in Table 2.4 AL levels.

Table 2.4 AL levels for impact noise monitoring locations

Time Period	Action	Limit
0700-1900 hrs on normal weekdays	When one documented complaint is received	75* dB(A)
0700-2300 hrs on holidays; and 1900-2300 hrs on all other days		65** dB(A)
2300-0700 hrs of next day		50** dB(A)

\* reduce to 70 dB(A) for schools and 65 dB(A) during school examination periods.

\*\* Based on Area Sensitivity Rating 'B'.

2.13 The corresponding AL levels for ground borne noise indoor of HKCC and HKSM are as per Table 2.5.

Table 2.5 AL levels for HKCC and HKSM

Location	Action	Limit
HKCC	When one documented complaint is received	60 dB(A)
HKSM Recording Studio (1/F)		60 dB(A)
HKSM Sky Theatre (1/F)		60 dB(A)
HKSM Lecture Room (G/F)		60 dB(A)

- 2.14 For monitoring of the monument structure during construction works, the AL levels given in Table 2.6 are adopted.

Table 2.6 AL levels of monument structural monitoring

Instrument	Unit	Alert	Alarm	Action
Ground Settlement Markers	Mm	10	15	20
Building Settlement Markers	Mm	5	8	10
Building tilting & settlement	-	1:2000	1:1500	1:1000
Tell-tales	Mm	5	8	10

#### Implementation Status

- 2.15 The construction and operational phase impacts of the project have been assessed and presented in the Project Profile submitted in November 2003. The Project Profile also specified the recommended environmental mitigation measures to minimize the potential adverse environmental impacts identified. An implementation schedule of the recommended environmental mitigation measures is prepared as part of the Project Profile is contained in Appendix B.
- 2.16 Site environmental audits were carried out by ET on a weekly basis and by IEC, at least once per month to monitor the timely implementation of proper environmental management practices and mitigation measures in the Project site. Site audit checklist reports and recommendations are given in Appendices of the Monthly EM&A Reports for March 2008 to May 2008.
- 2.17 The conditions of the site and the implementation of various environmental protection measures have been generally satisfactory. Excavation and superstructure furnishing were the major construction activities in the reporting quarter. The followings were noted for this quarterly period:
- Removal of water poundings found within site.
  - Proper cover and storage of general refuse.
  - Enhancement of water spraying for dust suppression.
  - Improvement of wheel washing facility and avoid tire track left on road.
  - Reinstatement of wastewater treatment system
  - Ensure the compressors are operated with door closed.
  - Use of drip tray for all oily containers.
  - Continual protection and closer monitoring of the trees and historical buildings.

- 2.18 The summary status of the submission under the EP is given in Table 2.7.

Table 2.7 Status of submission under EP up to 31 May 2008



<b>Item No.</b>	<b>Description</b>	<b>Submission Date to EPD</b>
1.	Method Statement detailing the protective measures on declared monument buildings	06/02/2004
2.	Landscape Mitigation and Tree Preservation Proposal	06/02/2004
3.	Draft EM&A Manual	29/4/2004
4.	Revised Landscape Mitigation and Tree Preservation Proposal	15/05/2004
5.	Draft Waste Management Plan	14/06/2004
6.	Final Method Statement detailing the protective measures on declared monument buildings which is approved	14/06/2004
7.	Final Landscape Mitigation and Tree Preservation Proposal	21/06/2004
8.	Baseline Monitoring Report	25/06/2004
9.	Monthly EM&A Report for June 2004	21/07/2004
10.	Revised EM&A Manual (Rev. 1) which is approved	26/07/2004
11.	Revised Landscape Mitigation and Tree Preservation Proposal which is approved	26/07/2004
12.	Revised Waste Management Plan which is approved	17/08/2004
13.	Monthly EM&A Report for July 2004	25/08/2004
14.	Revised EM&A Manual (Rev. 2) which is approved	06/09/2004
15.	Monthly EM&A Report for August 2004	21/09/2004
16.	Quarterly EM&A Report for June to August 2004	06/10/2004
17.	Monthly EM&A Report for September 2004	27/10/2004
18.	Monthly EM&A Report for October 2004	15/11/2004
19.	Monthly EM&A Report for November 2004	25/12/2004
20.	Quarterly EM&A Report for September to December 2004	20/01/2005
21.	Monthly EM&A Report for December 2004	28/01/2005
22.	Monthly EM&A Report for January 2005	18/03/2005
23.	Monthly EM&A Report for February 2005	04/04/2005
24.	Monthly EM&A Report for March 2005	10/04/2005
25.	Quarterly EM&A Report for December 2004 to February 2005	13/04/2005
26.	Revised EM&A Manual (April 2005) which is approved	11/05/2005
27.	Revised Waste Management Plan (April 2005) which is approved	11/05/2005
28.	Monthly EM&A Report for April 2005	13/06/2005
29.	Monthly EM&A Report for May 2005	09/07/2005
30.	Quarterly EM&A Report for March to May 2005	29/07/2005
31.	Monthly EM&A Report for June 2005	08/08/2005
32.	Monthly EM&A Report for July 2005	02/09/2005
33.	Monthly EM&A Report for August 2005	14/10/2005
34.	Quarterly EM&A Report for June to August 2005	28/10/2005
35.	Monthly EM&A Report for September 2005	04/11/2005
36.	Monthly EM&A Report for October 2005	21/12/2005
37.	Monthly EM&A Report for November 2005	7/1/2006
38.	Quarterly EM&A Report for September to November 2005	12/1/2006
39.	Monthly EM&A Report for December 2005	09/2/2006
40.	Monthly EM&A Report for January 2006	07/3/2006
41.	Monthly EM&A Report for February 2006	31/3/2006
42.	Quarterly EM&A Report for December 2005 to February 2006	6/4/2006
43.	Monthly EM&A Report for March 2006	11/5/2006
44.	Revised EM&A Manual	11/5/2006
45.	Revised Waste Management Plan (WMP)	11/5/2006
46.	Monthly EM&A Report for April 2006	9/6/2006
47.	Monthly EM&A Report for May 2006	13/7/2006

Table 2.7(continued) Status of submission under EP up to 31 May 2008

<b>Item No.</b>	<b>Description</b>	<b>Submission Date to EPD</b>
48.	Monthly EM&A Report for June 2006	11/8/2006
49.	Quarterly EM&A Report for March 2006 to May 2006	11/8/2006
50.	Monthly EM&A Report for July 2006	14/9/2006
51.	Monthly EM&A Report for August 2006	11/10/2006
52.	Quarterly EM&A Report for June 2006 to August 2006	28/10/2006
53.	Monthly EM&A Report for September 2006	6/11/2006
54.	Monthly EM&A Report for October 2006	15/12/2006
55.	Monthly EM&A Report for November 2006	6/1/2007
56.	Monthly EM&A Report for December 2006	2/3/2007
57.	Monthly EM&A Report for January 2007	16/3/2007
58.	Monthly EM&A Report for February 2007	17/4/2007
59.	Monthly EM&A Report for March 2007	4/5/2007
60.	Quarterly EM&A Report for December 2006 to February 2007	4/5/2007
61.	Revised EM&A Manual	12/6/2007
62.	Revised Waste Management Plan (WMP)	12/6/2007
63.	Monthly EM&A Report for April 2007	12/6/2007
64.	Monthly EM&A Report for May 2007	14/7/2007
65.	Quarterly EM&A Report for March 2007 to May 2007	14/7/2007
66.	Monthly EM&A Report for June 2007	14/8/2007
67.	Monthly EM&A Report for July 2007	10/9/2007
68.	Monthly EM&A Report for August 2007	16/10/2007
69.	Quarterly EM&A Report for June 2007 to August 2007	16/10/2007
70.	Monthly EM&A Report for September 2007	28/11/2007
71.	Monthly EM&A Report for October 2007	27/12/2007
72.	Monthly EM&A Report for November 2007	19/1/2008
73.	Quarterly EM&A Report for September 2007 to November 2007	19/1/2008
74.	Monthly EM&A Report for December 2007	15/2/2008
75.	Monthly EM&A Report for January 2008	11/3/2008
76.	Monthly EM&A Report for February 2008	14/4/2008
77.	Quarterly EM&A Report for December 2007 to February 2008	14/4/2008
78.	Monthly EM&A Report for March 2008	24/5/2008

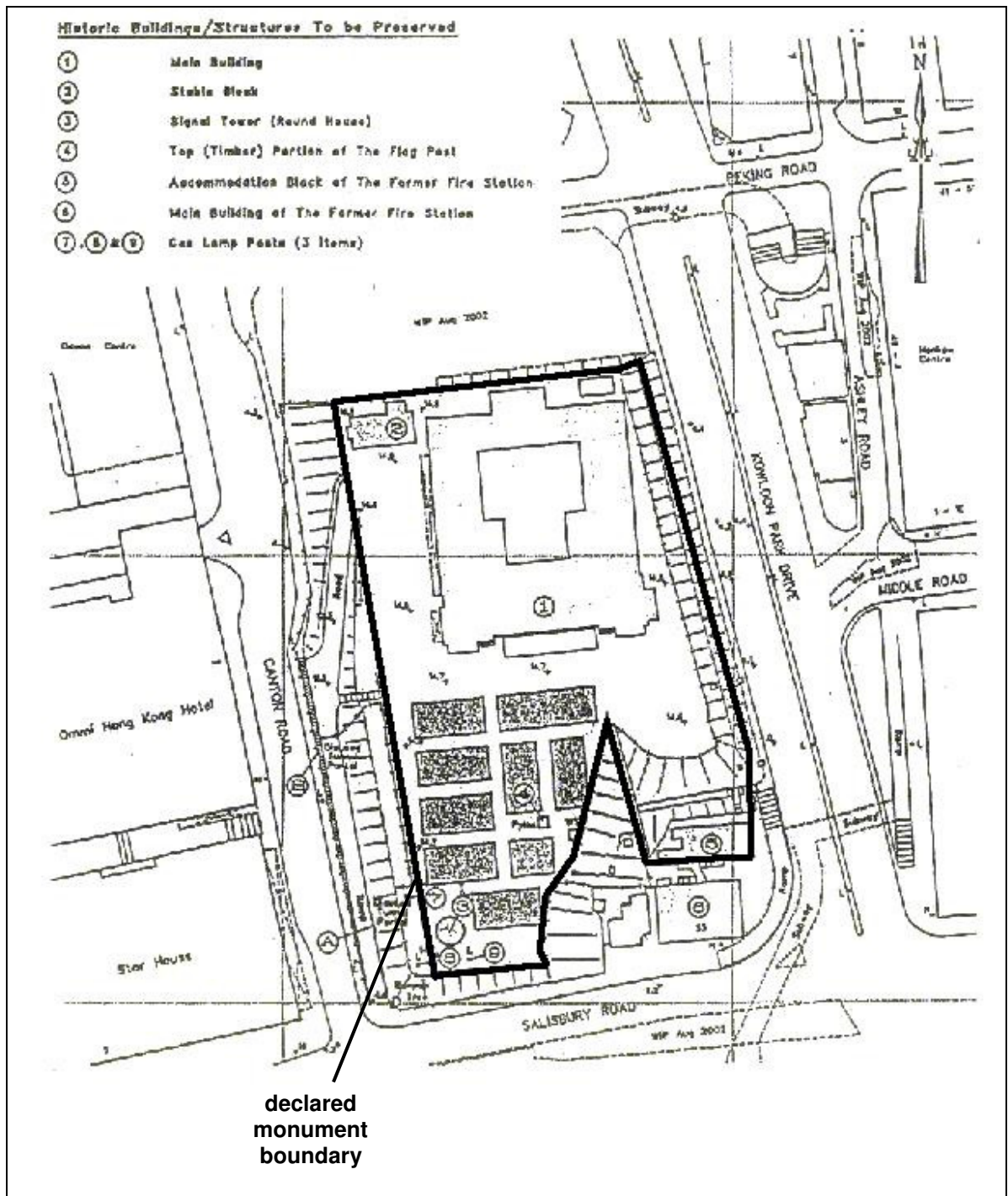


Figure 2.1 Location, site layout, historic buildings and structures to be preserved

Scale: N.T.S

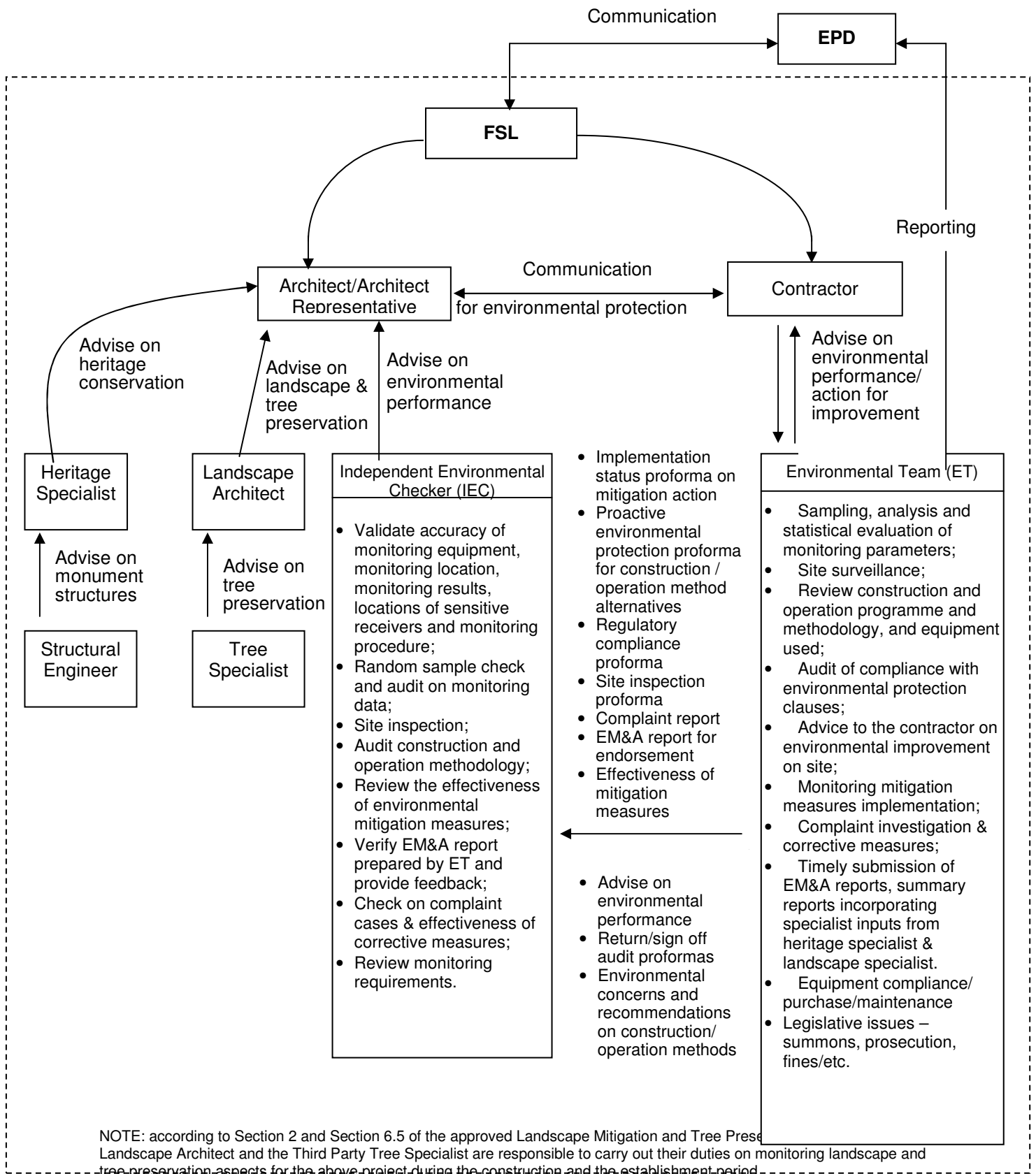


Figure 2.2 Project Organisation, Management & Lines of Communication

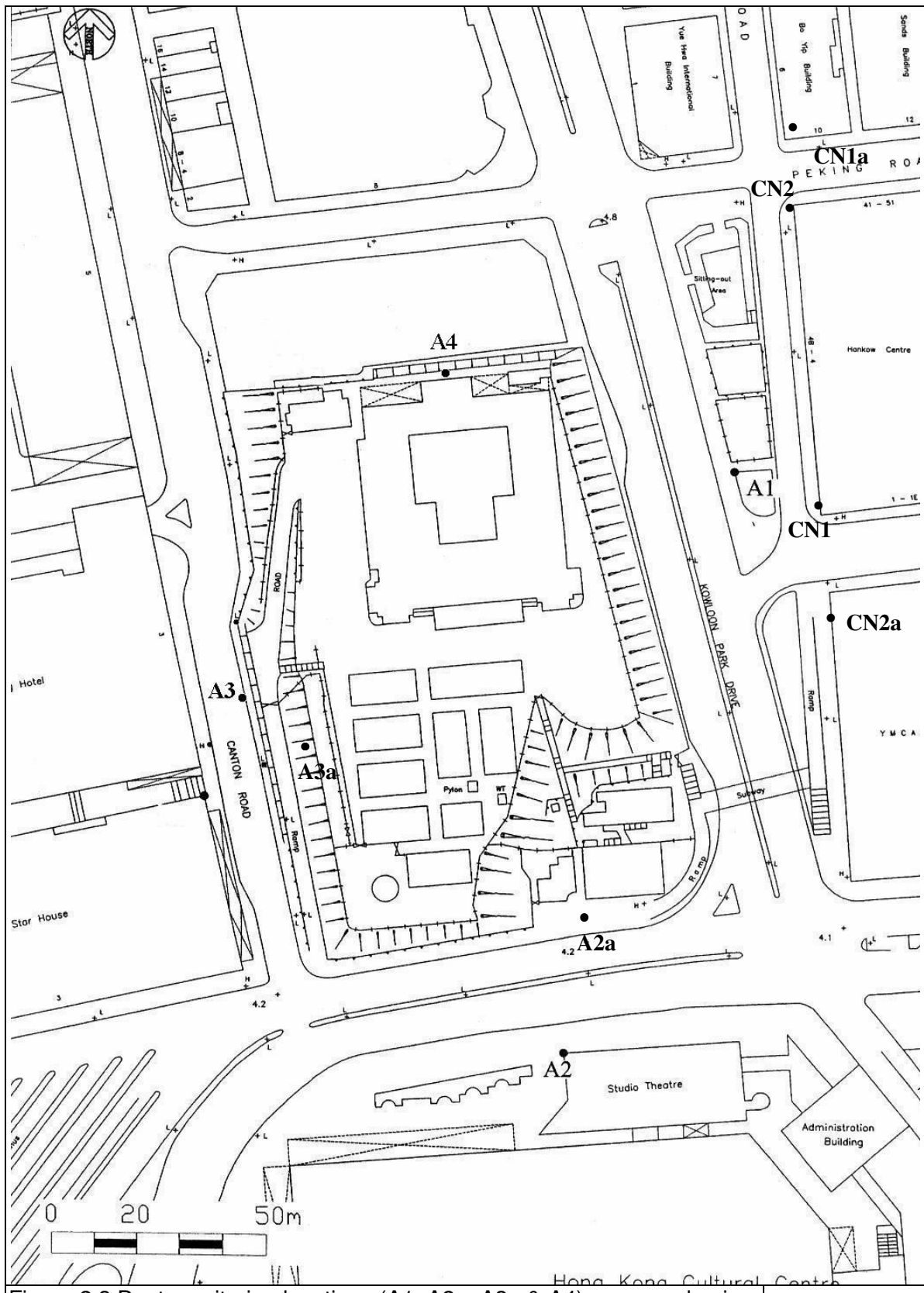


Figure 2.3 Dust monitoring locations (A1, A2a, A3a & A4), proposed noise monitoring locations (CN1 and CN2) and alternative noise monitoring locations (CN1a and CN2a).

Scale: N.T.S

### **3. Monitoring Results**

#### Weather Condition

- 3.1 The weather during monitoring sessions varied from sunny to cloudy. The weather conditions for each individual monitoring session were presented in the field record sheets.

#### Air Quality

- 3.2 The monitoring data of 1-hour and 24-hour TSP levels are attached in Appendices of the Monthly EM&A Reports for March 2008 to May 2008. The graphical presentations of the monitoring results are shown in Appendix C.
- 3.3 The summary of the air quality exceedances is attached in Appendix D.
- 3.4 All 1-hour and 24-hour TSP monitoring were conducted as scheduled in the quarter. No AL Levels exceedance for 1-hour and 24-hour TSP was recorded in the quarter.

#### Noise

- 3.5 All noise monitoring for CN1a & CN2a were conducted as scheduled in the quarter. Noise monitoring data are attached in Appendices of the Monthly EM&A Reports for March 2008 to May 2008. The graphical presentations of the monitoring results are shown in Appendix E. Ground-borne noise measurements were not conducted inside Hong Kong Science Museum (HKSM) and in Hong Kong Cultural Centre (HKCC) for the quarter as there were no piling and excavation conducted in the reporting period.
- 3.6 Eleven Limit Level exceedances were recorded during March 2008 to May 2008. Summary of the noise exceedances is attached in Appendix D.

#### Water Quality

- 3.7 Wastewater was treated on-site by a sedimentation system and discharged at the designated discharge point specified in the License. Bi-monthly water quality sampling required by the Wastewater Discharge License was made in April and the result complied with the discharge requirement.

#### Cultural Heritage and Landscape

- 3.8 The monitoring results of monument structure in the period from March 2008 to May 2008 are presented in Appendices of the Monthly EM&A Reports for the corresponding month. The settlement monitoring was stopped in end April following approval by government as advised by the Contractor. No adverse comments on the structural integrity of the protected monuments have been received from the Heritage Specialist.
- 3.9 Tree canopy for T10 have been recovered after the insecticide treatment.
- 3.10 80% of canopy recovered on T54 as observed during tree inspection on 27 March 2008.
- 3.11 Insecticide treatment similar to T10 has carried out to T66, T67. Works near to T66 and T67 were closely monitored to prevent damage to trees.

- 3.12 Tree canopy for T96 was recovered. Construction works being carried out near T96 as observed in May 2008. Contractor has been reminded to avoid any damage made to the tree.
- 3.13 90% loss of leaves observed during tree inspection on 27 March 2008 for T120, T121 and T122. The tree canopies had fully recovered as observed during tree inspection on 29 April 2008
- 3.14 Construction works has carried out close to T129 as observed during a site inspection carried out on 22 April 2008. Contractor has been reminded to avoid any damage made to the tree.
- 3.15 Close monitoring will be continued on T10, T54, T66, T67, T96, T120, T121 and T122.
- 3.16 Detailed on-site and off-site tree matters are being covered in the separate submissions to Planning Department under the approved landscape Mitigation and Tree Preservation Proposal.

#### 4. Waste Management

- 4.1 According to the Waste Management Plan, all Construction & Demolition materials were recorded in the period from March 2008 to May 2008.
- 4.2 Types, quantities and disposal location of all surplus excavated materials and wastes arising from the site are summarised in Table 4.1 based on information from the Contractor. There were only general refuse and excavated soil disposal in the quarter.

Table 4.1 Summary of the wastes arising from the site from March 2008 to May 2008

Date	Quantity (tonnes)		
	Soil	Sorting Facilities	General Refuse
March 2008	0	94.3	29.8
April 2008	82.4	94.1	7.0
May 2008	354.7	136.9	51.7

Note: SENT – South East New Territories Landfill Site  
SYP – Public filling barging point at Sai Ying Pun (Public Filling Facility)  
TKO – Fill Bank at Tseung Kwan O Area 137 (Public Filling Facility)  
QB – Quarry Bay Barging Point  
TM – Fill Bank at Tuen Mun Area 38  
MW – Ma Wan Development –VDA Phase 3

- 4.3 There is need for the Contractor to obtain disposal records from the Authority as soon as the wastes are disposed at the Public Filling Facility and/or Landfill to check against the estimated quantities removed off site.
- 4.4 Timber consumption forecast up to June 2008 was made to the Architect.
- 4.5 To suit project progress, the general refuse storage location has been changed from that originally indicated in the Waste Management Plan. The updated waste storage locations were given in the monthly EM&A report for February 2008. There is need to improve coverage for general refuse together with improvement of general site cleanliness.
- 4.6 The Contractor is reminded to maintain proper records for used chemical containers returning to suppliers for refill and chemical wastes.



## 5. Summary of Non-compliance, Complaints, Notification of Summons and Successful Prosecutions, Environmental Licensing and Permitting

5.1 Further revision of the WMP to cater for the present phase of the construction works was submitted and approved by EPD on 12 June 2007.

5.2 No environmental prosecution was received in the quarter.

5.3 Status of environmental licensing and permitting are summarized as follows:

Table 5.1 Status of Environmental Licensing and Permitting

Description	Permit / Licence No.	Status	Permit Holder
Environmental Permit	EP-184/2004	Remain valid since 9 February 2004	Flying Snow Ltd.
Construction Noise Permit	GW-RE5095-07 GW-RE5096-07	Valid until 2 September 2007	Hien Lee Engineering Co., Ltd
WPCO Discharge Licence	RE/0907/211/1	Valid until 30 June 2012	Hien Lee Engineering Co., Ltd
Chemical Waste Producer Registration	5213-111-H2929-14	Remains valid since 2 August 2007	Hien Lee Engineering Co., Ltd

5.4 There were two complaints received in the quarter. One complaint on dust nuisance was received on 1 April 2008 and rectified by increased dust suppression and use of screen. Another complaint was received from EPD on 3 April 2008 on possible water discharge without proper treatment by utility installation workers. Improved communications with other work personnel and rectification of the site wastewater treatment plant were made. The complaint logbooks are also provided in Appendices of the Monthly EM&A Reports for April 2008.

5.5 No other notifications of summons, prosecutions or non-compliances were received. Eleven exceedences on noise Limit Level were recorded on 4, 10, 20 and 26 March 2008, 7, 17 and 23 April 2008, 5, 15 and 27 May 2008. The exceedences were confirmed not to be due to the site operations but suspected to have been caused by the KCRC road works at Kowloon Park Drive. Noisy operation had been completed in the quarter.

5.6 Summary on the complaints received since works commencement are summarised in Table 5.2

Table 5.2 Summary of the Complaints Received Since Work Commencement

Log No.	Date of Complaint	Description	Status
2004-001	19 and 21/6/2004	Noise from piling affected 1 Peking Road during the daytime	Resolved by rescheduling
2004-002	19/8/2004	1-hr TSP Exceeded the Limit level at A1, A2a, A3 and A4	Investigation showed nothing special on site. Repeat sampling had been conducted and result is pass
2004-003	16/9/2004	1-hr TSP Exceeded the Limit level at A1, A3 and A4	Investigation showed no site activities during the monitoring period, no repeat sampling was done
2005-001	27/1/2005	Noise from piling affected 1 Peking Road during the daytime	No percussive piling was used, complaint resolved by rescheduling
2005-002	27 and 30/4/2005	Noise from construction affected Marco Polo Hongkong Hotel	Resolved as the noise level is acceptable
2005-003	8 and 22/8/2005	Muddy water overflow from site to nearby storm water drainage system	Resolved after mitigation measures were made
2005-004	8 and 22/8/2005	Muddy water overflow from site to nearby storm water drainage system	Resolved after mitigation measures were made
2006-001	15/12/2006	Consistent noise affected Hong Kong Cultural Center	Resolved by rescheduling
2007-001	3/1/2007	Public complaint concerning possible use of percussive piling	Resolved after investigation showed no percussive piling was used and mitigation was made
2007-002	19/1/2007	24-hr TSP exceedance at A3	Resolved after mitigation suggested and subsequent measurement pass the limit level
2007-003	23/1/2007	Construction noise affected performance in Hong Kong Cultural Center	Resolved after obtaining performance schedule in HKCC and reschedule excavation to avoid disturbance
2007-004	2/2/2007	Construction noise affected YMCA Hotel guests	Additional noise mats were suggested to be installed
2007-005	5/3/2007	Construction noise affected YMCA Hotel guests	Additional noise mats were suggested to be installed
2007-006	5/3/2007	Noise level exceedance at N2 (YMCA) recorded	Additional noise mats were suggested to be installed
2007-007	5/3/2007	Violation to Noise Control Ordinances by not showing proper noise labels for operating compressors	Resolved after contractor was reminded to put the original copy on site.
2007-008	9/3/2007	Noise level exceedance at N2 (YMCA) recorded	Additional noise mats were suggested to be installed

<b>Log No.</b>	<b>Date of Complaint</b>	<b>Description</b>	<b>Status</b>
2007-009	16/3/2007	Air nuisance affected the public	Resolved after tarpaulin sheets were installed
2007-010	15/3/2007	Construction noise affected YMCA Hotel guests	Resolved after excavation completed
2007-011	20/3/2007	Construction noise affected YMCA Hotel guests	Resolved after excavation completed
2007-012	3/4/2007	Construction noise affected YMCA Hotel guests	Resolved after excavation completed
2007-013	10/4/2007	Noise level exceedance at N2 (YMCA) recorded	Resolved after excavation completed
2007-014	19/4/2007	Noise level exceedance at N2 (YMCA) recorded	Resolved after excavation completed
2007-015	5/5/2007	Construction noise affected performance in Hong Kong Cultural Center	Resolved after communication channel agreed for future noise sensitive performances
2008-001	1/4/2008	Public complaint against air nuisance	Resolved after mitigation measures has been installed
2008-002	3/4/2008	EPD observed the water treatment system was idle and plastic pipe installed to a roadside gully	Resolved after communication was made with all subcontractors

## 6. Conclusion

- 6.1 EM&A work for March 2008 to May 2008 has been successfully completed.
- 6.2 Bi-monthly water quality sampling was conducted in April 2008 and the result complied with the discharge requirement.
- 6.3 Eleven Limit Level exceedances on noise were found in the quarter. The exceedances were not due to the site construction works as discussed earlier.
- 6.4 There were two complaints received in the quarter. One complaint on dust nuisance was received on 1 April 2008 and rectified by increased dust suppression and use of screen. Another complaint was received from EPD on 3 April 2008 on possible water discharge without proper treatment by utility installation workers. Improved communications with other work personnel and rectification of the site wastewater treatment plant were made. The complaint logbooks are also provided in Appendices of the Monthly EM&A Reports for April 2008.
- 6.5 No other notifications of summons, prosecutions or non-compliances were received in the reporting quarter. Proper environmental licence and permits are in place.
- 6.6 Monitoring of the monument structure and trees was also made.
- 6.7 Site audits were carried out by ET on a weekly basis and by IEC at least once per month. The following improvements are to be further pursued:
- Removal of water poundings found within site.
  - Proper cover and storage of general refuse.
  - Enhancement of water spraying for dust suppression.
  - Improvement of wheel washing facility and avoid tire track left on road.
  - Reinstatement of wastewater treatment system
  - Ensure the compressors are operated with door closed.
  - Use of drip tray for all oily containers.
  - Continual protection and closer monitoring of the trees and historical buildings.

**Appendix A: The construction programme with milestones of environmental protection/mitigation activities**



## **Appendix B: Implementation schedule for recommended mitigation measures**

**Implementation Schedule**  
**Redevelopment of Former Marine Police Headquarters, KIL11161**

Project Profile Ref.:	Recommended Mitigation Measures	Location of the measure	Who to implement the measure	When to implement the measures	What requirements or standards for the measure to achieve*	Objectives of the Recommended Measure & Main Concern to address
	<b>Fugitive Dust Impact on the Surrounding Sensitive Uses</b>					
4.1.2.10	To erect site hoarding of at least 2.4m high along the boundaries of the Project Site (particularly along the northern boundary adjacent to No. 1, Peking Road) except at the site entrance/ exit	Site (site boundary)	Site Formation Contractor (for maintenance or improvement as the hoarding was already erected by the Hoarding Contractor earlier)	Construction Phase (prior to construction)	TM-EIA, APC(CD)R & AQO in APCO	To control fugitive dust emissions in accordance with the requirements of Air Pollution Control (Construction Dust) Regulation in principle; Provide shielding against dispersion of fugitive dust
	To control truck speed to within 8 km/hr and that dusty vehicle loads transported to and from the work location should be covered by tarpaulin sheets and should not be overloaded	Site	Site Formation Contractor	Construction Phase	TM-EIA, APC(CD)R & AQO in APCO	To control fugitive dust emissions in accordance with the requirements of Air Pollution Control (Construction Dust) Regulation in principle; Reduce fugitive emission wherever possible
	To provide vehicle wheel washing facilities including high pressure water jets at designated vehicle exit points	Site	Site Formation Contractor	Construction Phase	TM-EIA, APC(CD)R & AQO in APCO	To control fugitive dust emissions in accordance with the requirements of Air Pollution Control (Construction Dust) Regulation in principle; Reduce fugitive emission wherever possible
	To use impervious sheeting where practicable for side enclosure and covering of any aggregate or other dusty material storage piles, to place stockpiles in an area sheltered on the top and the three sides, and/or to spray with water	Site	Site Formation Contractor	Construction Phase	TM-EIA, APC(CD)R & AQO in APCO	To control fugitive dust emissions in accordance with the requirements of Air Pollution Control (Construction Dust) Regulation in principle; Reduce fugitive emission wherever possible
	To cover the demolished items by impervious sheeting or to place in area sheltered on the top and the three sides within a day of demolition.	Site	Site Formation Contractor	Construction Phase	TM-EIA, APC(CD)R & AQO in APCO	To control fugitive dust emissions in accordance with the requirements of Air Pollution Control (Construction Dust) Regulation in principle; Reduce fugitive emission wherever possible



<b>Project Profile Ref.:</b>	<b>Recommended Mitigation Measures</b>	<b>Location of the measure</b>	<b>Who to implement the measure</b>	<b>When to implement the measures</b>	<b>What requirements or standards for the measure to achieve*</b>	<b>Objectives of the Recommended Measure &amp; Main Concern to address</b>
	To spray all dusty material with water prior to loading, unloading or transfer so as to maintain the C&D material wet	Site	Site Formation Contractor	Construction Phase	TM-EIA, APC(CD)R & AQO in APCO	To control fugitive dust emissions in accordance with the requirements of Air Pollution Control (Construction Dust) Regulation in principle; Reduce fugitive emission wherever possible
	To apply wet suppression at least four times per day at the worksites with active dusty operations and to water all dust emission sources when necessary. The frequency shall be increased when the weather is dry	Site	Site Formation Contractor	Construction Phase	TM-EIA, APC(CD)R & AQO in APCO	To control fugitive dust emissions in accordance with the requirements of Air Pollution Control (Construction Dust) Regulation in principle; Reduce fugitive emission wherever possible
	To control the drop height of excavated materials to a minimum to limit fugitive dust generation from unloading as far as practicable	Site	Site Formation Contractor	Construction Phase	TM-EIA, APC(CD)R & AQO in APCO	To control fugitive dust emissions in accordance with the requirements of Air Pollution Control (Construction Dust) Regulation in principle; Reduce fugitive emission wherever possible
5.2.1.3	To carry out EM&A programme	Site	Site Formation Contractor & Superstructure Contractor	Pre-Construction and Construction Phase	TM-EIA & AQO in APCO	To proactively monitor fugitive dust impact and take necessary action against any unacceptable impact

Project Profile Ref.:	Recommended Mitigation Measures	Location of the measure	Who to implement the measure	When to implement the measures	What requirements or standards for the measure to achieve*	Objectives of the Recommended Measure & Main Concern to address
	<b>Construction Noise Impact on the Surrounding Sensitive Uses</b>					
4.2.1.5	To restrict operation to within non-restricted hours only	Site	Site Formation Contractor & Superstructure Contractor	Construction Phase	NCO	To avoid generation of noise during restricted hours under NCO
4.2.1.11	To use quiet PME with lower sound power level	Site	Site Formation Contractor & Superstructure Contractor	Construction Phase	TM-EIA	To reduce noise generation and in turn the construction noise impact
	To provide site hoarding of 4m to 6m high along the eastern boundary with sufficient surface density (10 to 15 kg/m <sup>2</sup> ), use of noise curtain or other mitigation measures for noise abatement as soon as Action Level is exceeded and confirmed to be due to the construction works	Site	Site Formation Contractor & Superstructure Contractor	Construction Phase	TM-EIA	To provide noise shielding or equivalent measures to reduce construction noise impact as per @ or equivalent subject to IEC/ AR's agreement.
	To adopt noise enclosure and temporary noise barriers with sufficient surface density (10 to 15 kg/m <sup>2</sup> ) (vertical and cantilevered types)	Site	Site Formation Contractor & Superstructure Contractor	Construction Phase	TM-EIA	To provide noise shielding to reduce construction noise impact or equivalent measures subject to IEC/ AR's agreement.
	To make use of the topography by carrying out excavation from west to east so that the original platform can act as effective noise barrier	Site	Site Formation Contractor	Construction	TM-EIA	To provide noise shielding to reduce construction noise impact or equivalent measures subject to IEC/ AR's agreement.

Project Profile Ref.:	Recommended Mitigation Measures	Location of the measure	Who to implement the measure	When to implement the measures	What requirements or standards for the measure to achieve*	Objectives of the Recommended Measure & Main Concern to address
4.2.1.12	<p>To implement good site practice and noise management</p> <ul style="list-style-type: none"> <li>▪ To submit to the Engineer for approval the method of working, equipment and sound-reducing measures intended to be used at the site before the commencement of any work</li> <li>▪ To allow only well-maintained plants to operate on-site;</li> <li>▪ To service the plants regularly during the construction program;</li> <li>▪ To shut down or throttle down machines that may be in intermittent use to a minimum between work periods;</li> <li>▪ To utilize and maintain silencer and mufflers on construction equipment during the construction program;</li> <li>▪ To schedule noisy activities to minimise exposure of nearby NSRs to high levels of construction noise. For example, noisy activities can be scheduled for midday or at times coinciding with periods of high background noise (such as during peak traffic hours);</li> <li>▪ To site noisy equipment such as emergency generators as far away as possible from NSRs;</li> <li>▪ To site mobile plants as far away from NSRs as possible; and</li> <li>▪ To utilize material stockpiles and other structures as noise barrier, where practicable.</li> </ul>	Site	Site Formation Contractor & Superstructure Contractor	Construction Phase	NCO & TM-EIA	To reduce noise generation and its impact in accordance with NCO and its subsidiary regulations

<b>Project Profile Ref.:</b>	<b>Recommended Mitigation Measures</b>	<b>Location of the measure</b>	<b>Who to implement the measure</b>	<b>When to implement the measures</b>	<b>What requirements or standards for the measure to achieve*</b>	<b>Objectives of the Recommended Measure &amp; Main Concern to address</b>
4.2.1.23	No percussive piling	Site	Site Formation Contractor	Construction Phase	TM-EIA & NCO	To eliminate possibility of generating any significant ground borne noise impact
4.2.1.81	To avoid concurrent pipe piles driving near the tree ring and the Main Building when the pipes near the Main Building is about to penetrate the bedrock	Site	Site Formation Contractor	Construction Phase	TM-EIA & NCO	To avoid adverse cumulative ground borne noise impact
	To conduct on-site noise measurement at the HKCC and the HKSM when the works at the FMPH commences to verify the level of transmitted ground-borne noise	Site	Site Formation Contractor	Construction Phase	TM-EIA & NCO	To avoid adverse cumulative ground borne noise impact
	To establish a communication channel with HKCC and HKSM to stagger, if necessary, the ground-borne noise causing construction activities to avoid clashing with hours of performance at both venues	Site	Site Formation Contractor	Construction Phase	TM-EIA & NCO	To avoid adverse cumulative ground borne noise impact
5.2.1.3	To carry out EM&A program	Site	Site Formation Contractor & Superstructure Contractor	Pre-Construction and Construction Phase	TM-EIA	To proactively monitor construction noise impact and take necessary action against any unacceptable impact

Project Profile Ref.:	Recommended Mitigation Measures	Location of the measure	Who to implement the measure	When to implement the measures	What requirements or standards for the measure to achieve*	Objectives of the Recommended Measure & Main Concern to address
	<b>Construction Phase Water Quality Impact</b>					
4.3.1.7	To carry out the Works in such a manner as to minimize adverse impacts on the water quality during execution of the works. In particular he shall arrange his method of working to minimize the effects on the water quality within and outside the Site, on the transport routes and at the loading, dredging and dumping areas.	Site	Site Formation Contractor & Superstructure Contractor	Construction Phase	WPCO	To comply with the Water Pollution Control Ordinance and its subsidiary regulation.
	To follow the practices, and be responsible for the design, construction, operation and maintenance of all the mitigation measures as specified in the Professional Persons Environmental Consultative Committee Practice Note (ProPECC PN) 1/94 "Construction Site Drainage" issued by the Director of Environmental Protection. The design of the mitigation measures shall be submitted by the Contractor to the Engineer for approval.	Site	Site Formation Contractor & Superstructure Contractor	Construction Phase	ProPECC PN1/94 & WPCO	To comply with the Water Pollution Control Ordinance and its subsidiary regulation.
	To contain within the Site all surface runoff generated from foundation works, dust control and vehicle washing, etc.	Site	Site Formation Contractor & Superstructure Contractor	Construction Phase	WPCO	To comply with the Water Pollution Control Ordinance and its subsidiary regulation.

Project Profile Ref.:	Recommended Mitigation Measures	Location of the measure	Who to implement the measure	When to implement the measures	What requirements or standards for the measure to achieve*	Objectives of the Recommended Measure & Main Concern to address
	To avoid discharge directly or indirectly or cause or permit or suffer to be discharged into any public sewer, stormwater drain, channel, stream-course or sea any trade effluent or foul or contaminated water or cooling or hot water without the prior written consent of the Engineer in consultation with the Director of Environmental Protection and Director of Water Supplies, who may as a condition of granting his consent require the Contractor to provide, operate and maintain at the Contractor's own expense to the satisfaction of the Engineer suitable works for the treatment and disposal of such trade effluent or foul or contaminated or cooling or hot water. [The design of such treatment works shall be submitted to the Engineer for approval not less than one month before the commencement of the relevant works.]	Site	Site Formation Contractor & Superstructure Contractor	Construction Phase	WPCO	To comply with the Water Pollution Control Ordinance and its subsidiary regulation.
	To direct foul water effluent to a foul sewer or to a sewage treatment and disposal facility either directly or indirectly by means of pumping or other means approved by the Engineer if any office, site canteen or toilet facilities is erected	Site	Site Formation Contractor & Superstructure Contractor	Construction Phase	WPCO	To comply with the Water Pollution Control Ordinance and its subsidiary regulation.

Project Profile Ref.:	Recommended Mitigation Measures	Location of the measure	Who to implement the measure	When to implement the measures	What requirements or standards for the measure to achieve*	Objectives of the Recommended Measure & Main Concern to address
	<b>Operational Phase Water Quality Impact</b>					
4.3.2.1	To discharge sewage/wastewater generated from the Project to the nearby public sewers	Site	Project Proponent/Operator	Design / Operational Phase	WPCO	To meet the requirement as stipulated in the Technical Memorandum on Water Pollution Control Ordinance
	<b>Waste Management</b>					
4.5.1.7	To minimize the production of construction waste through careful design, planning, good site management, and control of ordering procedures, segregation and reuse of materials; To arrange for private contractors to collect used formwork materials for reuse.	Site	Site Formation Contractor & Superstructure Contractor	Construction Phase	WDO	To follow relevant regulations (Waste Disposal Ordinance) in all circumstances.
4.5.1.8	To dispose of any chemical wastes such as lubricating oil or solvent in strict accordance with the Waste Disposal (Chemical Waste) (General) Regulation	Site	Site Formation Contractor & Superstructure Contractor	Construction Phase	WDO	To follow relevant regulations (Waste Disposal Ordinance) in all circumstances.
4.5.1.9	To assign a reliable waste collector to collect general refuse generated from the construction site on a daily basis to minimise the potential odour, pest and litter impacts.	Site	Site Formation Contractor & Superstructure Contractor	Construction Phase	WDO	To follow relevant regulations (Waste Disposal Ordinance) in all circumstances.
4.5.2.1	To identify requirements on proper waste management for implementation during the operation of the Project	Site	Operator	Operational Phase	WDO	To follow relevant regulations (Waste Disposal Ordinance) in all circumstances.

Project Profile Ref.:	Recommended Mitigation Measures	Location of the measure	Who to implement the measure	When to implement the measures	What requirements or standards for the measure to achieve*	Objectives of the Recommended Measure & Main Concern to address
	<b>Construction Phase Landscape and Visual Impact</b>					
4.6.2.2	To screen the works area during the construction phase through the use of decorative hoarding along the site boundary with unified edge treatment and interface	Site	Site Formation Contractor & Superstructure Contractor	Construction Phase	A&MO, TM-EIA, Project Profile ["PP"], Landscape Mitigation and Tree Preservation Proposal ["LMTPP"] & WBTC No. 14/2002	Interim measures designed to ensure acceptable landscape and visual impact on completion. Implementation of the LMTPP to the mature trees during the construction period.
4.6.2.11	Creation of precautionary area (Cordon Area) around trees to be retained equal to the spread of the trees canopy diameter. Precautionary area to be fenced. Following the completion of the piling the Cordon Area would be based on the retained rootball.	Site	Specialist Landscape Contractor	Construction Phase	A&MO, TM-EIA, PP, LMTPP & WBTC No. 14/2002	Interim measures designed to ensure acceptable landscape and visual impact on completion. Implementation of the LMTPP to the mature trees during the construction period.
	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 Cordon Area.	Site	Site Formation Contractor & Superstructure Contractor	Construction Phase	A&MO, TM-EIA, PP, LMTPP & WBTC No. 14/2002	Interim measures designed to ensure acceptable landscape and visual impact on completion. Implementation of the LMTPP to the mature trees during the construction period.
	Phased segmental root pruning for trees to be retained over a six-month period prior to or site formation works, which affect the existing rootball of trees identified for retention. The extent of the pruning shall be based on a minimum half canopy and has been determined on a tree by tree basis.  Phased segmental root pruning over a three-month period prior to lifting the trees identified for transplantation.	Site	Specialist Landscape Contractor	Construction Phase	A&MO, TM-EIA, PP, LMTPP & WBTC No. 14/2002	Interim measures designed to ensure acceptable landscape and visual impact on completion. Implementation of the LMTPP to the mature trees during the construction period.



<b>Project Profile Ref.:</b>	<b>Recommended Mitigation Measures</b>	<b>Location of the measure</b>	<b>Who to implement the measure</b>	<b>When to implement the measures</b>	<b>What requirements or standards for the measure to achieve*</b>	<b>Objectives of the Recommended Measure &amp; Main Concern to address</b>
	Pruning of the branches of existing trees identified for transplantation and retention to be based on the principle of crown thinning maintaining their form and amenity value	Site	Specialist Landscape Contractor	Construction Phase	A&MO, TM-EIA, PP, LMTTP & WBTC No. 14/2002	Interim measures designed to ensure acceptable landscape and visual impact on completion. Implementation of the LMTTP to the mature trees during the construction period.
	The watering of existing vegetation particularly during periods of excavation when the water table beneath the existing vegetation is lowered.	Site	Specialist Landscape Contractor	Construction Phase	A&MO, TM-EIA, PP, LMTTP & WBTC No. 14/2002	Interim measures designed to ensure acceptable landscape and visual impact on completion. Implementation of the LMTTP to the mature trees during the construction period.
	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	Site	Specialist Landscape Contractor	Construction Phase	A&MO, TM-EIA, PP, LMTTP & WBTC No. 14/2002	Interim measures designed to ensure acceptable landscape and visual impact on completion. Implementation of the LMTTP to the mature trees during the construction period.
	All works affecting the trees identified for retention and transplantation will be carefully monitored. This includes the key stages in the preparation of the trees, the implementation of protection measures and health monitoring through out the construction period	Site	Specialist Landscape Contractor	Construction Phase	A&MO, TM-EIA, PP, LMTTP & WBTC No. 14/2002	Interim measures designed to ensure acceptable landscape and visual impact on completion. Implementation of the LMTTP to the mature trees during the construction period.
	The tree transplanting and planting 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. Tree preservation proposals and procedures for the protection and preservation of the existing trees to be reviewed by third party Tree Specialist including the provision of an additional level of monitoring during the construction phase.	Site	Specialist Landscape Contractor	Construction Phase	A&MO, TM-EIA, PP, LMTTP & WBTC No. 14/2002	Interim measures designed to ensure acceptable landscape and visual impact on completion. Implementation of the LMTTP to the mature trees during the construction period.
	<b>Operational Phase Landscape and Visual Impact</b>					

<b>Project Profile Ref.:</b>	<b>Recommended Mitigation Measures</b>	<b>Location of the measure</b>	<b>Who to implement the measure</b>	<b>When to implement the measures</b>	<b>What requirements or standards for the measure to achieve*</b>	<b>Objectives of the Recommended Measure &amp; Main Concern to address</b>
4.6.3.4	To retain trees that have historic value and contribute most to the landscape and visual amenity of the site and its immediate environs	Site	Project Proponent/ Operator	Design, Construction and Operational Phase	TPO, A&MO, TM-EIA, PP, LMTTP & WBTC No. 14/2002	Long term measures deigned to ensure creation of a high quality urban landscape
4.6.3.5	To restore the main buildings and to create landscaped gardens in order to beneficially affect the landscape character and quality of the area	Site	Project Proponent/ Operator	Design, Construction and Operational Phase	TPO, A&MO, TM-EIA, PP, LMTTP & WBTC No. 14/2002	Long term measures deigned to ensure creation of a high quality urban landscape
	To create the plaza to the south of the main colonial buildings to increase public access to the site and to open up views of the building façade	Site	Project Proponent/ Operator	Design, Construction and Operational Phase	TPO, A&MO, TM-EIA, PP, LMTTP & WBTC No. 14/2002	Long term measures deigned to ensure creation of a high quality urban landscape
	To provide where conditions allow new street planting along Canton Road, from No. 1 Peking Road to the intersection at Salisbury Road, and along the Salisbury Road frontage in order to create a boulevard type landscape to partially screen the development, and to enhance the green edge effect that is a dominant feature of both the site and its urban context.	Site	Project Proponent/ Operator	Design, Construction and Operational Phase	TPO, A&MO, TM-EIA, PP, LMTTP & WBTC No. 14/2002	Long term measures deigned to ensure creation of a high quality urban landscape
	To conduct new paving works at the street level as a result of the development and the widening of Canton Road which will lead to a significant improvement in the landscape and visual amenity of the streetscape within the study area	Site	Project Proponent/ Operator	Design, Construction and Operational Phase	TPO, A&MO, TM-EIA, PP	Long term measures deigned to ensure creation of a high quality urban landscape
	Detailed landscape and tree preservation proposals will be submitted to the relevant government departments for approval under the lease conditions and in accordance with WBTC No. 14/2002.	Site	Project Proponent/ Operator	Design, Construction and Operational Phase	TPO, A&MO, TM-EIA, PP & WBTC No. 14/2002	Long term measures deigned to ensure creation of a high quality urban landscape
4.6.3.8	All landscape and visual mitigation works will be funded, implemented managed and maintained by the project proponent.	Site	Project Proponent/ Operator	Design, Construction and Operational Phase	TPO, A&MO, TM-EIA, PP & WBTC No. 14/2002	Long term measures deigned to ensure creation of a high quality urban landscape

Project Profile Ref.:	Recommended Mitigation Measures	Location of the measure	Who to implement the measure	When to implement the measures	What requirements or standards for the measure to achieve*	Objectives of the Recommended Measure & Main Concern to address
	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. Tree preservation proposals to be reviewed by third party Tree Specialist including monitoring during the establishment period.	Site	Project Proponent/ Operator	Design, Construction and Operational Phase	TPO, A&MO, TM-EIA, PP & WBTC No. 14/2002	Long term measures deigned to ensure creation of a high quality urban landscape

Project Profile Ref.:	Recommended Mitigation Measures	Location of the measure	Who to implement the measure	When to implement the measures	What requirements or standards for the measure to achieve*	Objectives of the Recommended Measure & Main Concern to address
	<b>Cultural Heritage Impact</b>					
4.7.1.1	All monuments within the site will be preserved to an extent given according to the in the tender requirement	Site	Project Proponent	Design, Construction and Operational Phase	Tender Document	To preserve the monument
4.7.4.1	To prepare and submit a detailed study report comprising the historic archives, measured drawings, photographic records and full bibliography in support of the historic evidence prepared by experts in cultural heritage for their approval under the Antiquities and Monuments Ordinance (Cap. 53)	Site	Project Proponent	Design Phase	A&MO	To observed principles in the Charter of Venice (ICOMOS) and the Burra Charter (ICOMOS Australia) and requirement of A&MO
4.7.4.2	To submit detailed descriptions, plans for building and mitigation works and implementation programme to AMO for their approval and monitoring before commencement of works.	Site	Project Proponent	Design Phase	A&MO	To observed principles in the Charter of Venice (ICOMOS) and the Burra Charter (ICOMOS Australia) and requirement of A&MO
4.7.4.3	To preserve the Historic Buildings to meet international standard. Relevant legislations, standards, Charters and planning guidelines will be observed.	Site	Project Proponent	Design, Construction & Operational Phase	A&MO	To observed principles in the Charter of Venice (ICOMOS) and the Burra Charter (ICOMOS Australia) and requirement of A&MO
4.7.4.4	To allow only alteration or addition works to the Historic Buildings, which are reversible except those, considered to be minor by AMO.	Site	Superstructure Contractor	Construction Phase	A&MO	To observed principles in the Charter of Venice (ICOMOS) and the Burra Charter (ICOMOS Australia) and requirement of A&MO
4.7.4.5	To take necessary precautions during construction and excavation work to prevent any damage to the Historic Buildings. Structural monitoring system will be designed and supervised by a Registered Structural Engineer during the whole of construction works on the site.	Site	Site Formation Contractor & Superstructure Contractor	Construction Phase	A&MO	To prevent any damage to the historic buildings and structures during the site formation.
4.7.4.8	A comprehensive management plan including a heritage building maintenance guideline for the operation of FMPHQ would be prepared by conservation experts.	Site	Agent appointed by Project Proponent	Prior to Operational Phase	A&MO	To maintain the historic site and buildings in a proper manner

<b>Project Profile Ref.:</b>	<b>Recommended Mitigation Measures</b>	<b>Location of the measure</b>	<b>Who to implement the measure</b>	<b>When to implement the measures</b>	<b>What requirements or standards for the measure to achieve*</b>	<b>Objectives of the Recommended Measure &amp; Main Concern to address</b>
4.7.4.9	Periodic site inspection to heritage buildings on external areas, interior decoration and covered-up areas to ensure a constant monitoring of building condition is conducted.	Site	Agent appointed by Project Proponent	Operational Phase	A&MO	To maintain the historic site and buildings in a proper manner
4.7.4.10	The Permit on routine maintenance would be applied to AMO under the A & M Ordinance.	Site	Agent appointed by Project Proponent	Operational Phase	A&MO	To maintain the historic site and buildings in a proper manner

**\*Abbreviation**

TM-EIA – Technical Memorandum on Environmental Impact Assessment Process

AQO – Air Quality Objectives

APCO – Air Pollution Control Ordinance

APC(CD)R - Air Pollution Control (Construction Dust) Regulation

HKPSG – Hong Kong Planning Standards and Guidelines

TPO – Town Planning Ordinance

NCO – Noise Control Ordinance

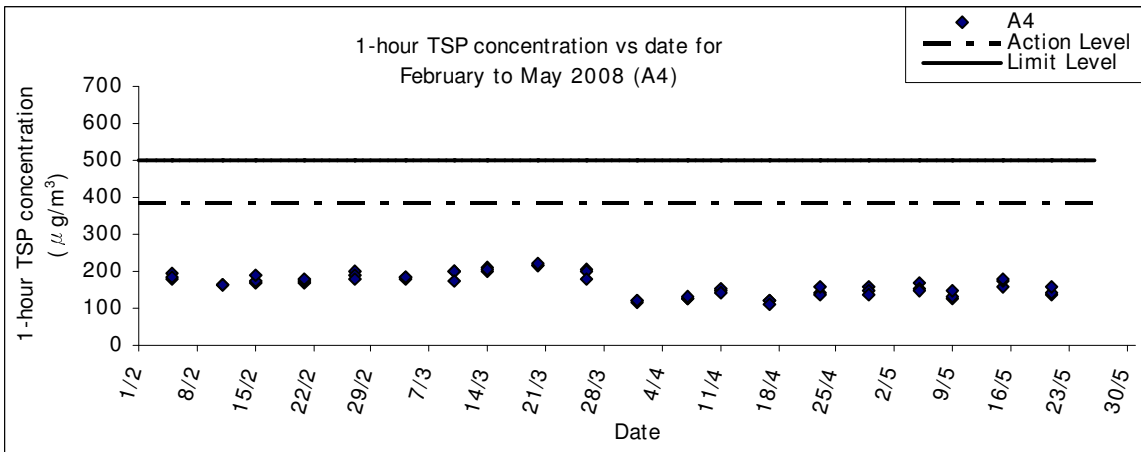
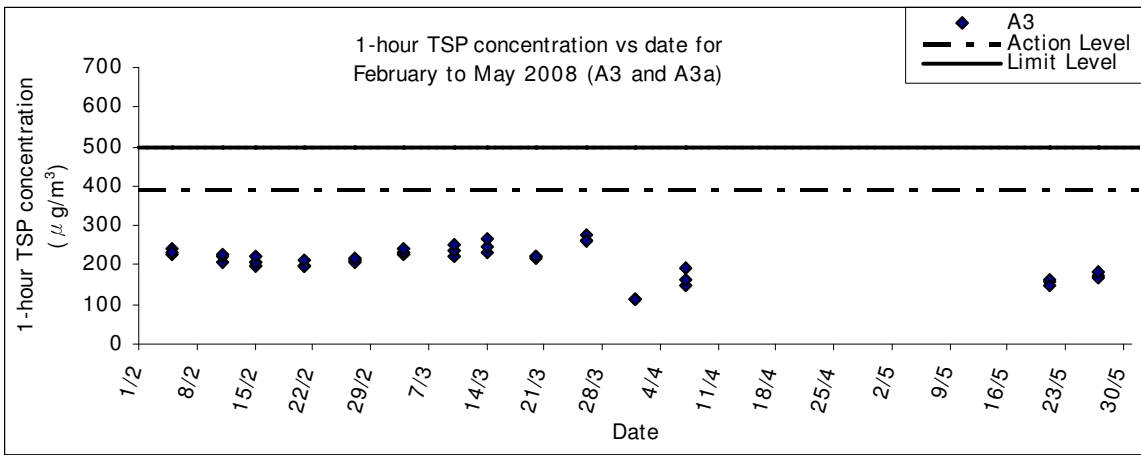
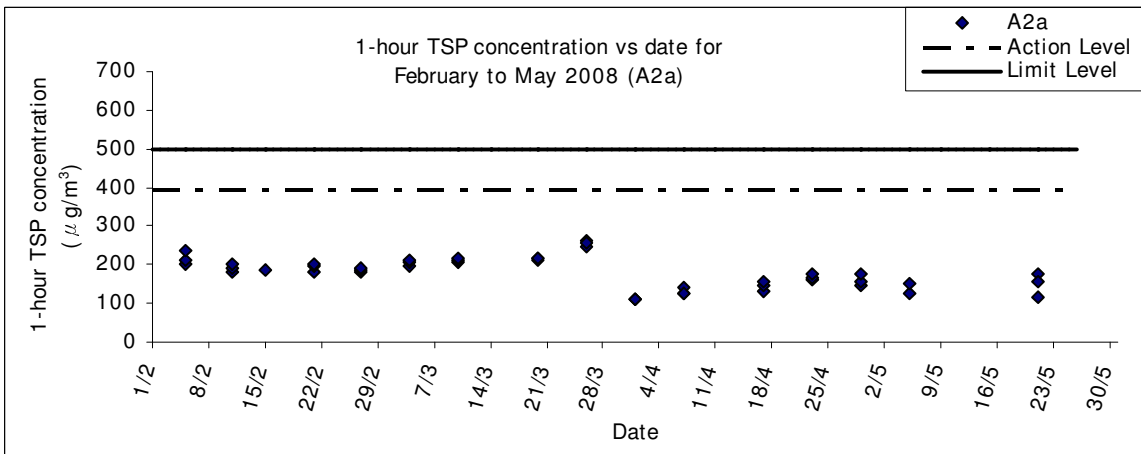
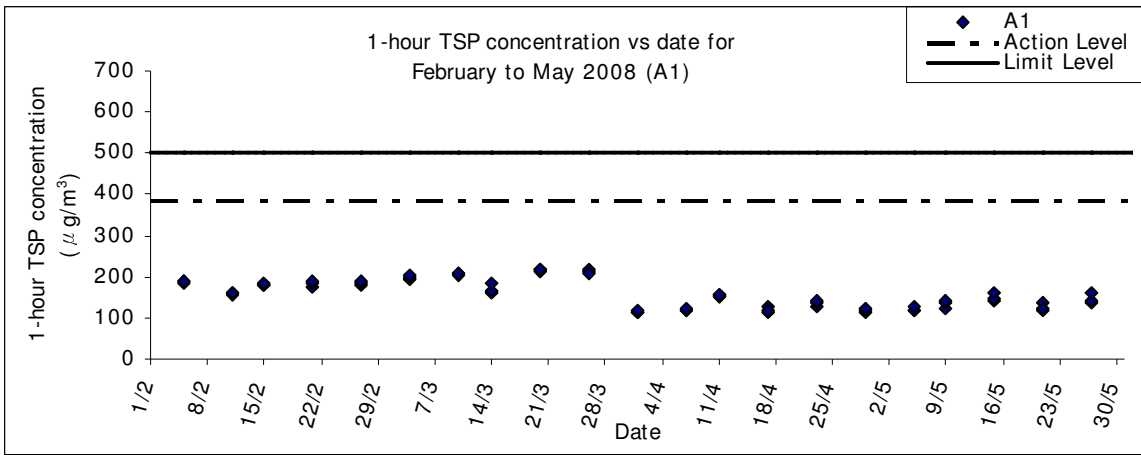
WPCO – Water Pollution Control Ordinance

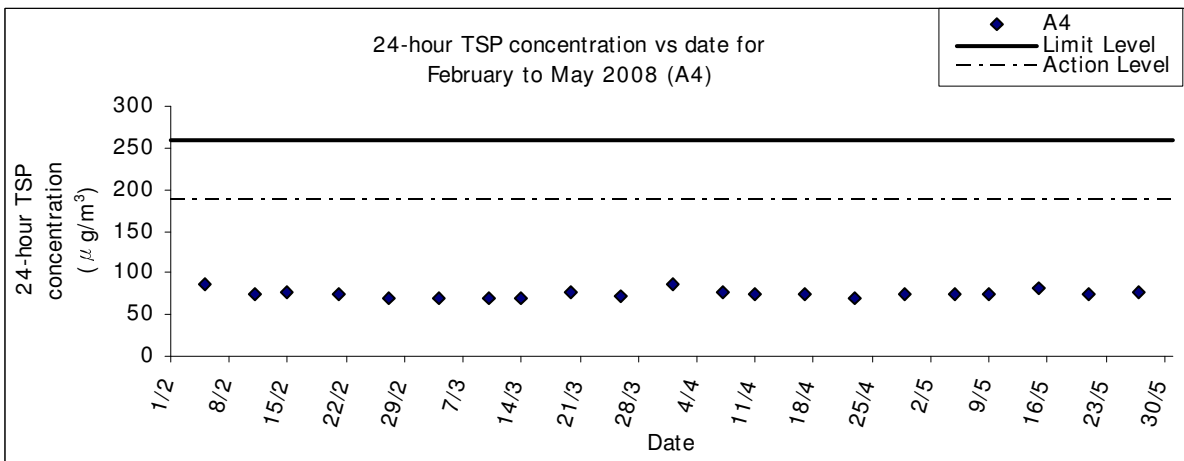
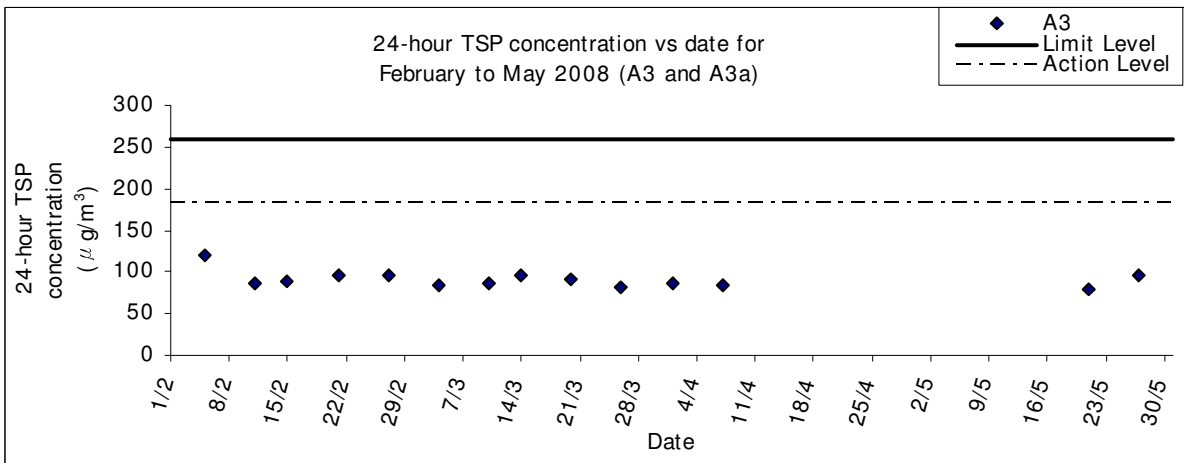
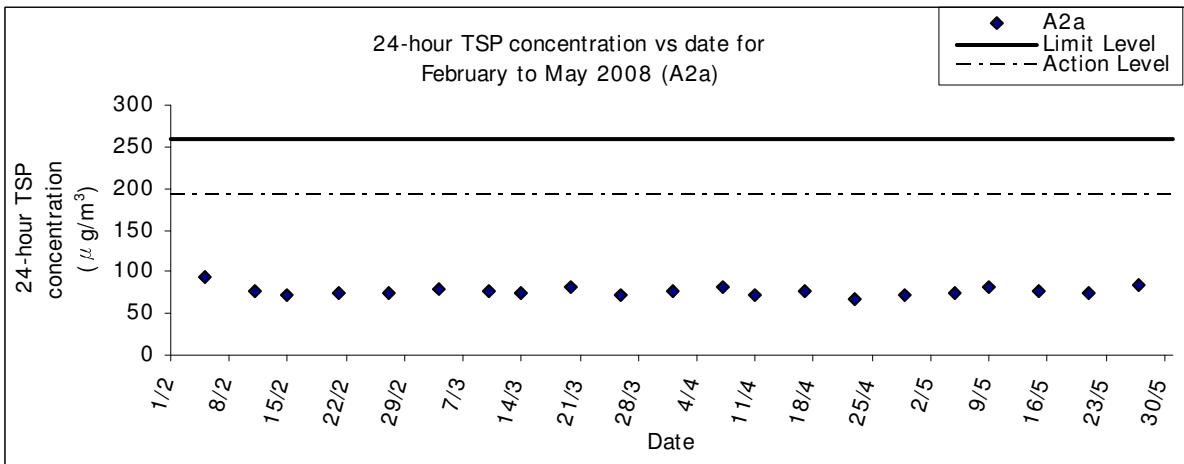
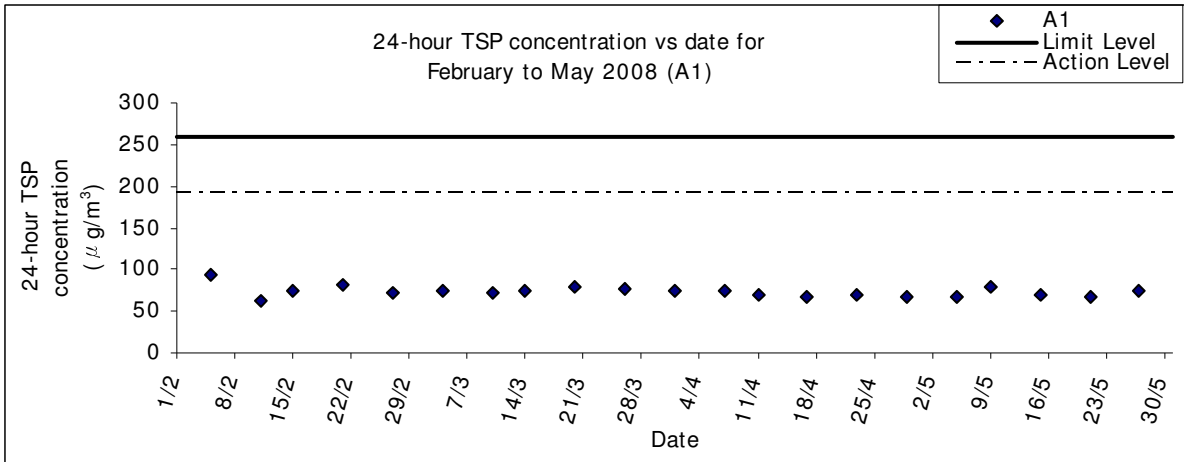
PN1/94 - Professional Persons Environmental Consultative Committee Practice Note (ProPECC PN) 1/94 "Construction Site Drainage"

WDO – Waste Disposal Ordinance

A&MO - Antiquities and Monuments Ordinance

**Appendix C: Graphical presentations of the air impact monitoring results**







## **Appendix D: Summary of exceedances**

Parameter	Location	Monitoring Period	No. of Exceedance(s)	
			Action Level	Limit Level
Air (1-hour TSP)	A1	01/03/2008 – 31/05/2008	0	0
	A2a	01/03/2008 – 31/05/2008	0	0
	A3a	01/03/2008 – 31/05/2008	0	0
	A4	01/03/2008 – 31/05/2008	0	0
Air (24-hour TSP)	A1	01/03/2008 – 31/05/2008	0	0
	A2a	01/03/2008 – 31/05/2008	0	0
	A3a	01/03/2008 – 31/05/2008	0	0
	A4	01/03/2008 – 31/05/2008	0	0
Noise	CN1a	01/03/2008 – 31/05/2008	0	2
	CN2a	01/03/2008 – 31/05/2008	0	9
	Lecture Room	01/03/2008 – 31/05/2008	0	0
	Sky Theatre	01/03/2008 – 31/05/2008	0	0
	Recording Studio	01/03/2008 – 31/05/2008	0	0
Water	Outlet of treatment facility	01/03/2008 – 31/05/2008	0	0

**Appendix E: Graphical presentations of the noise impact monitoring results**

