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**Development at Former Marine Police  
Headquarters KIL 11161  
Quarterly Environmental Monitoring & Audit  
Report for June 2005 – August 2005**

(Ref No. 3.12/003/2004)

October 2005

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

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

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## EXECUTIVE SUMMARY

This is the fifth 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 June to August 2005. Site audit inspections were performed by Environmental Team at least once per week and by the Independent Environmental Checker at least once per month.

Piling, excavation and grouting work were the major construction activities carried out within the Project site for the reporting period.

Air and noise monitoring have been carried out in accordance with the EM&A Manual. Monument settlement measurement data and tree photographic survey are also provided in Appendices of the Monthly EM&A Reports for June to August 2005.

Ground-borne noise measurements were also conducted inside Hong Kong Space Museum in June and July 2005 and these were the only vacant slots available for noise measurements in this reporting quarter.

Bi-monthly water quality samplings originally scheduled for July 2005 was collected in August 2005 and the analysis showed that it was within the stipulated limit.

Summary of non-compliance of reporting period is tabulated in Table I.

Table I Summary table for non-compliance recorded from June to August 2005

|           | No. of Exceedance(s) |      |        |             |      |        |
|-----------|----------------------|------|--------|-------------|------|--------|
|           | Action Level         |      |        | Limit Level |      |        |
|           | June                 | July | August | June        | July | August |
| 1-hr TSP  | 0                    | 0    | 0      | 0           | 0    | 0      |
| 24-hr TSP | 0                    | 0    | 0      | 0           | 0    | 0      |
| Noise     | 0                    | 0    | 0      | 0           | 0    | 0      |
| Water     | 0                    | 0    | 0      | 0           | 0    | 0      |

There were two complaints received in August from Environmental Protection Department in this reporting month regarding the muddy water flooding from Former Marine Police Headquarter into nearby stormwater drainage system. Flooding was due to prolonged period of heavy rainstorm and the failure of the pumping system of the wastewater treatment plant. The pumping problem has been fixed but further improvements are being carried out to prevent the flooding.

Other than the two complaints, no Action/Limit level exceedance on air, noise and water limits was found in the reporting period.

There were no notifications of summons, prosecutions or other non-compliance. The site was generally satisfactory and some improvement measures are recommended for further pursuit. These include the improvement of the noise mats, avoidance of placing chemical containers on bare soil, improved monitoring on waste movements and dust suppression water sprays, improved protection of the preserved monument structure and trees. Storage locations for waste materials have been altered and there is also need to ensure proper cover of the general refuse, to improve general site cleanliness and to encourage site staffs to practise recycling.

## 1. Introduction

- 1.1 Konwall Construction and Engineering Co. Ltd. ["KCE"] is contracted to carry out the site formation work for the development of the Former Marine Police Headquarters ["FMPHA"]. KCE in turn has commissioned Nature & Technologies (HK) Ltd. ["N&T"] to conduct the environmental monitoring and audit ["EM&A"] work for the project.
- 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 EM&A Manual was approved on 26 July 2004.
- 1.3 This report documents the quarterly EM&A work and summarizes its findings for the quarterly period from June to August 2005. This is the fifth 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 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                        | Konwall Construction & Eng. Co., Ltd. | Mr Eric Kwok          | 2563 1233 |
| Independent Environmental Checker | CH2M-IDC Hong Kong Ltd.               | Mr Peter Lee          | 2872 2935 |
| Environmental Team ["ET"] Leader  | Nature & Technologies (HK) Ltd.       | Ir Dr Gabriel C K Lam | 2877 3122 |

### Construction Programme, Works Undertaken & Status

- 2.3 The updated construction programme with milestones of environmental protection / mitigation activities annotated is given in Appendix A.
- 2.4 Piling, excavation and grouting were the main activities carried out within the project site in the reporting period.

### Monitoring Locations

- 2.5 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

- A4 is at the site boundary north of the construction site on top of the existing hoarding, estimated to be about 13m above ground.

2.6 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.

2.7 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"] (1/F Recording Studio & 1/F Sky Theatre) for ground-borne noise monitoring purpose.

#### Summary of EM&A Requirements

2.8 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>  |

2.9 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

2.10 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       | 389        | 500   | 182         | 260   |
| A4       | 384        | 500   | 187         | 260   |

2.11 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'.

- 2.12 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) |

- 2.13 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

- 2.14 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 minimise 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.
- 2.15 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 June to August 2005.
- 2.16 The conditions of the site and the implementation of various environmental protection measures have been generally satisfactory. Piling, excavation and grouting work were the major construction activities in the reporting quarter. The followings are noted for June to August 2005:
- It needs to ensure that the noise mats could provide sufficient noise screening along the eastern boundary of the site for compliance with the Project Profile.



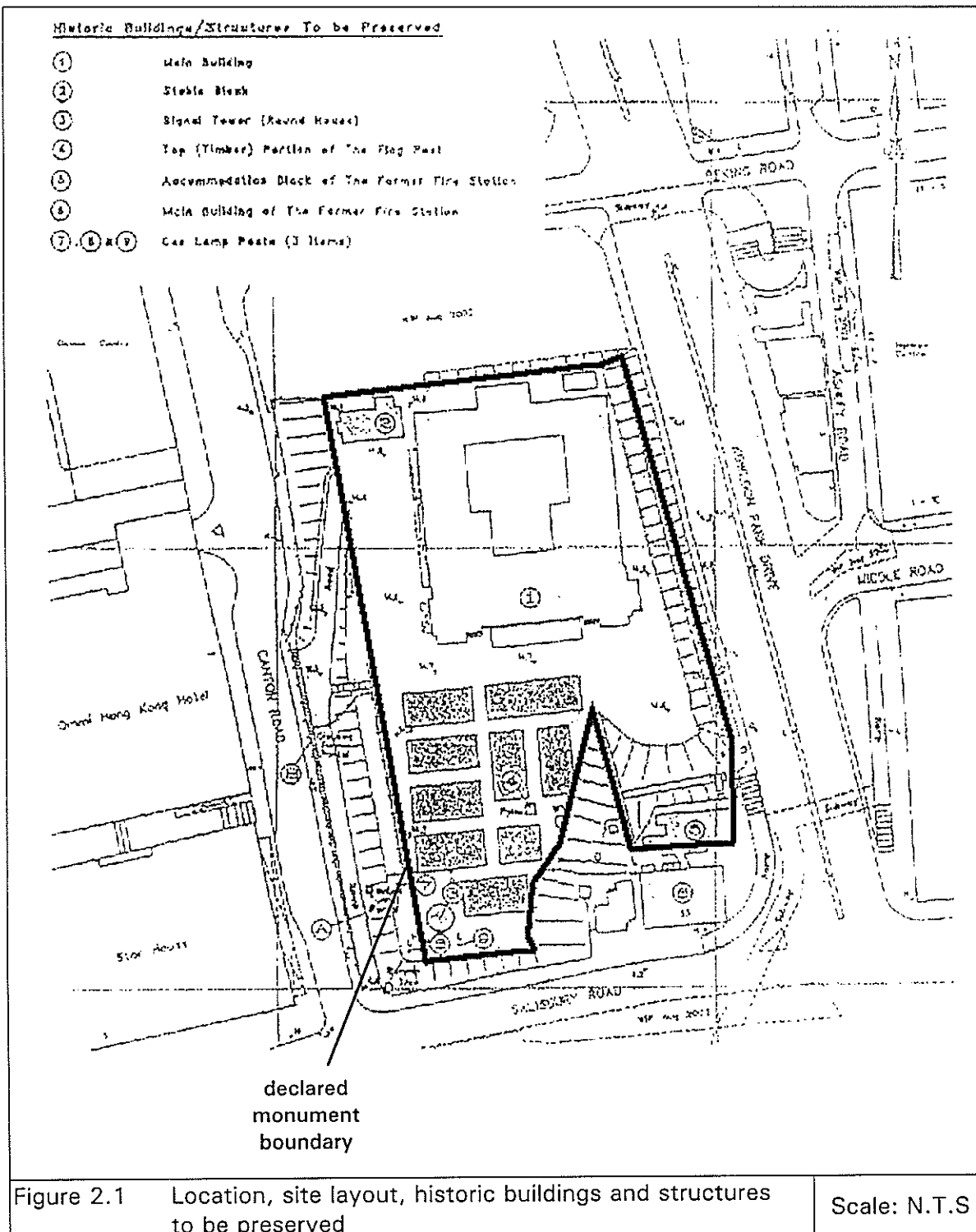
- Close attention should be given to avoid laying chemical containers on bare soil without trays.
- Storage locations for general refuse and steel fragments have been changed as per Figure 5.1 of the Monthly EM&A Report for July 2005. The three colour coded recycling bins have been disappeared. There is need to improve coverage for general refuse, encourage staff to practise recycling and to enhance general site cleanliness.
- Proper record keeping for environmental management have to be enforced. For instance, records for briefing of the new project team members of the requirements of the EM&A Manual and waste management plan, dust suppression water sprays, waste disposal records should be readily made available for close monitoring.
- Improvement measures are needed to prevent site muddy water runoff from contaminating the surrounding storm drains.
- Close attention should be given to ensure proper tarpaulin cover of the monument structure to preserve the historical buildings and to avoid disturbances to trees.

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

Table 2.2 Status of submission under EP up to 30 August 2005

| Item No. | Description   | Submission Date to EPD |
|----------|---|------------------------|
| 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 |



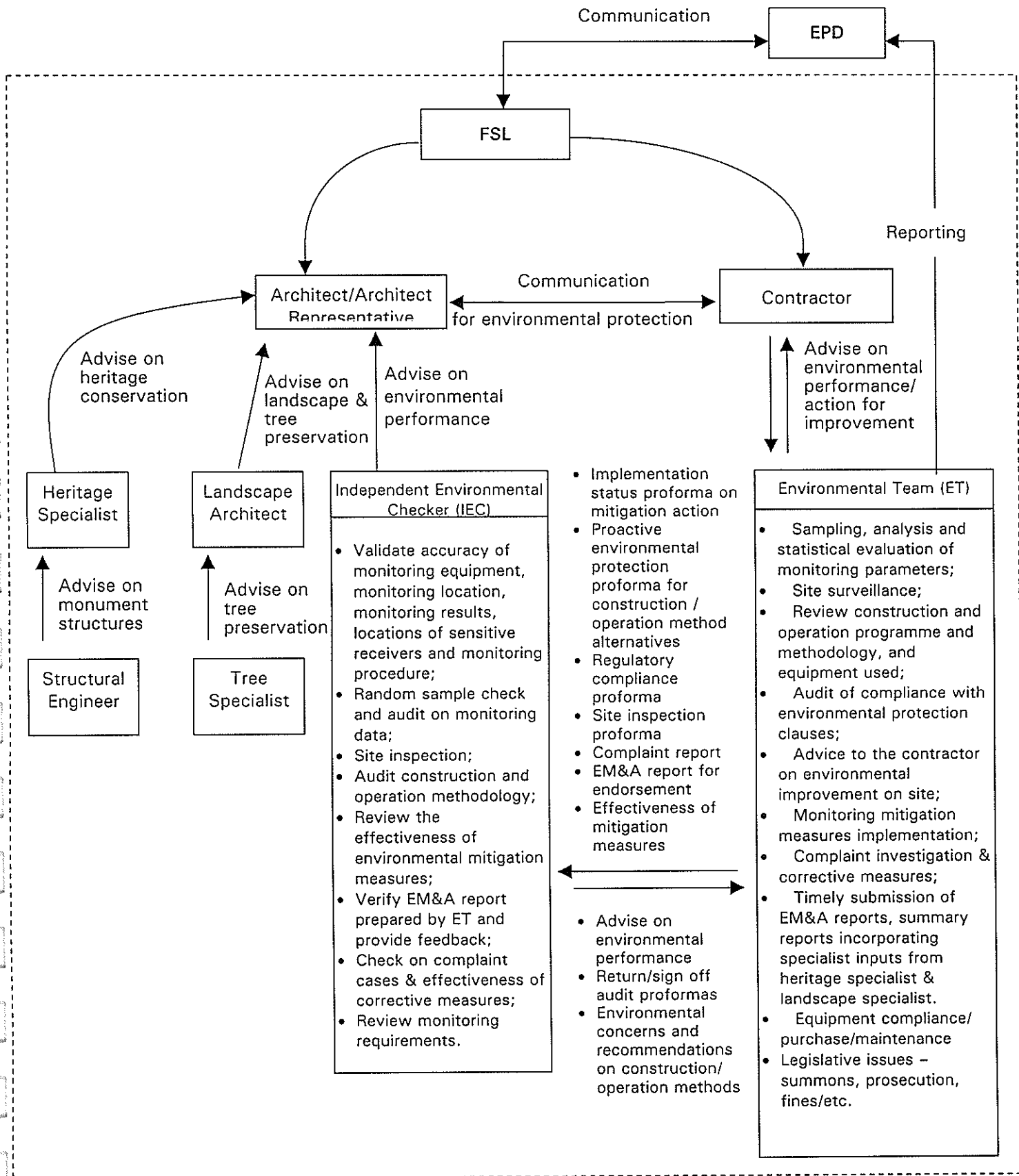


Figure 2.2 Project Organisation, Management & Lines of Communication

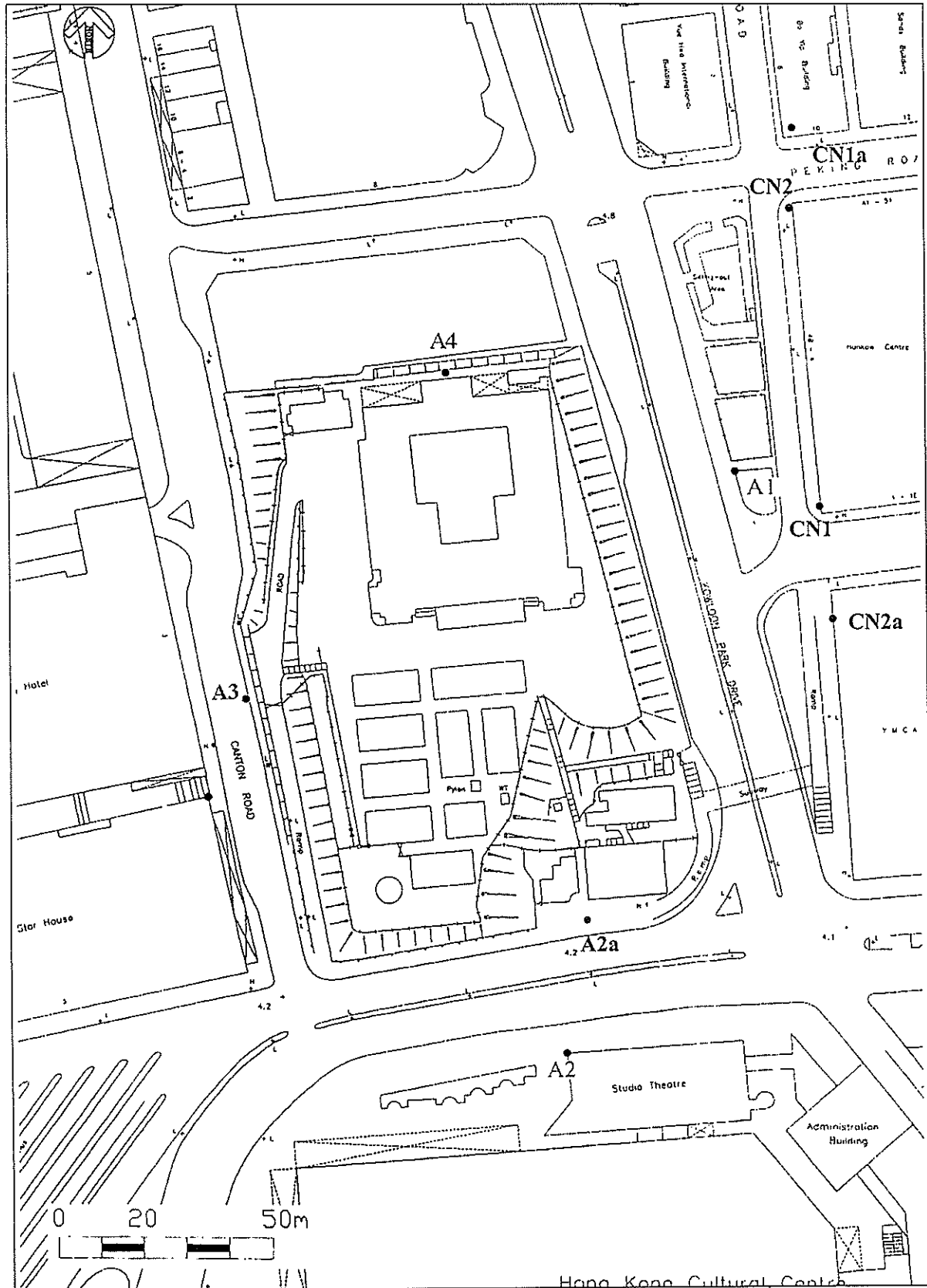


Figure 2.3 Dust monitoring locations (A1, A2a, A3 & A4), proposed noise monitoring locations (CN1 and CN2) and alternative noise monitoring locations (CN1a and CN2a).

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 June to August 2005. 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 this reporting period. No AL Levels exceedance for 1-hour and 24-hour TSP was recorded in this reporting period.

#### Noise

- 3.5 All noise monitoring for CN1a & CN2a were conducted as scheduled in this reporting period. Noise monitoring data are attached in Appendices of the Monthly EM&A Reports for June to August 2005. The graphical presentations of the monitoring results are shown in Appendix E.
- 3.6 Ground-borne noise measurements were also conducted inside HKSM in June and July 2005 but not in August 2005 due to unavailability of vacant slot for measurements. Due to the same reason, ground-borne noise measurements were not carried out inside HKCC as well. For HKSM, graphical presentations of the monitoring results are also shown in Appendix E. Detailed of measurement point in HKSM is shown in the Appendix of EM&A Report for the said months.
- 3.7 No exceedance of the ground-borne noise criteria found for the reporting period.
- 3.8 Summary of the noise exceedances is attached in Appendix D.

#### Water Quality

- 3.9 Wastewater was treated by on-site coagulation, flocculation and sedimentation system and discharged at the designated discharge point specified in the Licence. Bi-monthly water quality samplings required by the Wastewater Discharge Licence and originally scheduled for July 2005 was made up for in August 2005. Analysis shows that the concentrations of suspended solids were well below the licence limit 80mg/L. For better quality control, there is need to shorten the time needed to analyse water sample and to record date when water sample is taken to laboratory.
- 3.10 The summary of the water quality exceedances is attached in Appendix D.

Cultural Heritage and Landscape

- 3.11 The monitoring results of monument structure in the period between June to August 2005 are presented in Appendices of the Monthly EM&A Reports for the corresponding month. No adverse comments on the structural integrity of the protected monuments have been received from the Heritage Specialist. However, there is need to ensure proper cover of the monument structure by tarpaulin to preserve the historical buildings.
- 3.12 Photographic surveys of trees have been taken for June to August 2005 and are presented in Appendices of the corresponding Monthly EM&A Reports. Regular inspections by the Landscape Architect were made and confirmed that the retained, felled and transplanted trees have been maintained in accordance with the recommendations made in the Phase 1 and Phase 2 Tree Preservation Proposal.
- 3.13 There were minor disturbances to tree T10 during the construction of tree ring. Backfilling of the void on the inside of the newly constructed tree wing with special topsoil was made and no adverse consequence on the tree as a whole was confirmed.

#### 4. Waste Management

- 4.1 According to the Waste Management Plan, all Construction & Demolition materials were recorded in the period from June to August 2005.
- 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 reporting period.

Table 4.1 Summary of the wastes arising from the site from June to August 2005

| Date        | Quantity (tonnes) |                   | Quantity (tonnes) |                   |
|-------------|-------------------|-------------------|-------------------|-------------------|
|             | Soil              | Disposal Location | General Refuse    | Disposal Location |
| June 2005   | 189.12            | TKO / QB / SYP    | 0                 | N/A               |
| July 2005   | 0                 | N/A               | 0                 | N/A               |
| August 2005 | 8460              | TKO / QB / TM     | 62.4              | SENT              |

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

- 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 There was no timber consumption for the construction activities in this reporting period.
- 4.5 Storage locations for general refuse and steel fragments have been changed as per Figure 5.1 of the Monthly EM&A Report for July 2005. The three colour coded recycling bins have been disappeared. There is need to improve coverage for general refuse, encourage staff to practise recycling and to enhance general site cleanliness.



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

5.1 There were two complaints received from EPD on 8 & 22 August 2005 regarding the muddy water flooding from FMPHQ into nearby stormwater drainage system. The muddy water flooding was probably due to the prolonged heavy downpour during the period and failure of piping system for pumping the muddy water into the wastewater treatment system. The piping system has been repaired. As confirmed by Contractor, sand bags have been placed for enhancing the prevention of overflow of muddy water into Canton Road. Site audit has been carried out on 23 August 2005 and found there was no overflow of muddy water from the site. There would, however, be need to improve the site runoff water leakage prevention measures. Construction noise permit should also be considered to allow night-time operation of the pumps for pumping wastewater into the wastewater treatment plant.

5.2 Details of the complaint are shown in the log-book attached in the Appendix of the Monthly EM&A Report for August 2005.

5.3 No environmental prosecution was received in the reporting period.

5.4 Status of environmental licensing and permitting can be summarized as follows:

| Description            | Permit / Licence No. | Status   | Permit Holder                                |
|------------------------|----------------------|--|--|
| Environmental Permit   | EP-184/2004          | Remain valid since 9 February 2004   | Flying Snow Ltd.                             |
| WPCO Discharge Licence | EP482/211/0863/I     | Application made on 18 May 2004 and licence was granted on 7 July 2004 and valid till 31 July 2009 | Konwall Construction & Engineering Co., Ltd. |

## 6. Conclusion

6.1 EM&A work for June to August 2005 has been successfully completed.

6.2 No exceedance in the environmental quality monitoring was found.

6.3 Two complaints regarding the muddy water flooding from FMPHQ into nearby stormwater drainage system were received in this reporting month. Flooding was due to prolonged heavy downpour and the failure of the pumping system of the wastewater treatment plant. The problem has been fixed and further improvements are being installed to prevent the flooding.

6.4 There were no notification of summons and prosecutions.

6.5 Monitoring of the monument structure and trees was also made.

6.6 Site audits were carried out by ET on a weekly basis and by IEC, at least once per month. The conditions of the site were generally satisfactory. The following improvements are to be further pursued:

- Noise mats need to be extended on the eastern site boundary as far as practicable to prevent noise leaking towards sensitive receivers and for compliance with the recommendations of the Project Profile
- Close attention should be given to avoid laying chemical containers on bare soil without trays.
- Proper keeping of records for dust suppression water sprays and waste disposal are needed.
- Storage locations of waste materials have been altered. Proper cover for the general refuse should be provided and general site cleanliness should be improved. Considerations should be given to encourage recycling efforts among site workers with re-installation of the three colour coded recycling bins.
- Improvement measures needed to prevent leakage of site muddy runoff water into surrounding storm drains.
- Continual protection of the preserved monuments and trees. Close attention should be given to ensure proper tarpaulin cover of the preserved of historical buildings and to avoid disturbances to trees.

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

| Phase | Description   | Year 2004                          |   |   |   |   |   |   |   |   |    |    |    | Year 2005 |   |   |   |   |   |   |   |   |    |    |    | Year 2006 |   |   |   |   |   |   |   |   |    |    |    |
|-------|---|------------------------------------|---|---|---|---|---|---|---|---|----|----|----|-----------|---|---|---|---|---|---|---|---|----|----|----|-----------|---|---|---|---|---|---|---|---|----|----|----|
|       |   | 1                                  | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 1         | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 1         | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 1     | Site Formation  |                                    |   |   |   |   |   |   |   |   |    |    |    |           |   |   |   |   |   |   |   |   |    |    |    |           |   |   |   |   |   |   |   |   |    |    |    |
| 1.1   | Site Formation - Tree Retaining, Underpinning & Tree Column |                                    |   |   |   |   |   |   |   |   |    |    |    | █         |   |   |   |   |   | █ |   |   |    |    |    |           |   |   |   |   |   |   |   |   |    |    |    |
| 1.2   | Site Formation – Retaining wall for Main Building           | █                                  |   |   |   |   |   | █ |   |   |    |    |    | █         |   |   |   |   |   |   |   |   |    |    |    |           |   |   |   |   |   |   |   |   |    |    |    |
| 1.3   | Site Formation - Open Cut Excavation                        |                                    |   |   |   |   |   |   |   |   |    |    |    | █         |   |   |   |   |   |   |   |   |    |    |    |           |   |   |   |   |   |   |   |   |    |    |    |
| 1.4   | Site Formation - Remaining Excavation                       |                                    |   |   |   |   |   |   |   |   |    |    |    |           |   |   |   |   |   |   |   |   |    |    |    | █         |   |   |   |   |   |   |   |   |    |    |    |
| 2     | Building Foundation   | <i>To be carried out by others</i> |   |   |   |   |   |   |   |   |    |    |    |           |   |   |   |   |   |   |   |   |    |    |    |           |   |   |   |   |   |   |   |   |    |    |    |
| 3     | Superstructure & Furnishing                                 | <i>To be carried out by others</i> |   |   |   |   |   |   |   |   |    |    |    |           |   |   |   |   |   |   |   |   |    |    |    |           |   |   |   |   |   |   |   |   |    |    |    |

↑  
All mitigation measures in place except wheel washing pond & barrier mat (7/6/2004)

↑  
Sound barrier mat ready (25/6/2004)

↑  
Wheel washing pond provided (9/7/2004)

← → ↑  
Zero discharge from site      Discharge Licence approval (9/7/2004)

**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            |

| 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 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 |
|                       | 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 |

| 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  |
|-----------------------|---|-------------------------|---|---|--|--|
| 4.2.1.23              | 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   |
|-----------------------|---|-------------------------|---|--------------------------------|--|---|
|                       | Construction Phase Landscape and Visual Impact  |                         |   |                                |  |   |
| 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. |

| 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   |
|-----------------------|--|-------------------------|---------------------------------|--------------------------------|--|---|
|                       | <p>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.</p> <p>Phased segmental root pruning over a three-month period prior to lifting the trees identified for transplantation.</p> | 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. |
|                       | 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. |

| 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   |
|-----------------------|--|-------------------------|---------------------------------|--|--|---|
|                       | 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. |
|                       | Operational Phase Landscape and Visual Impact  |                         |                                 |  |  |   |
| 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   |



| 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 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 |
|                       | 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.                                 |

| 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 |
|-----------------------|--|-------------------------|--------------------------------------|--------------------------------|--|---|
| 4.7.4.8               | 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  |
| 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

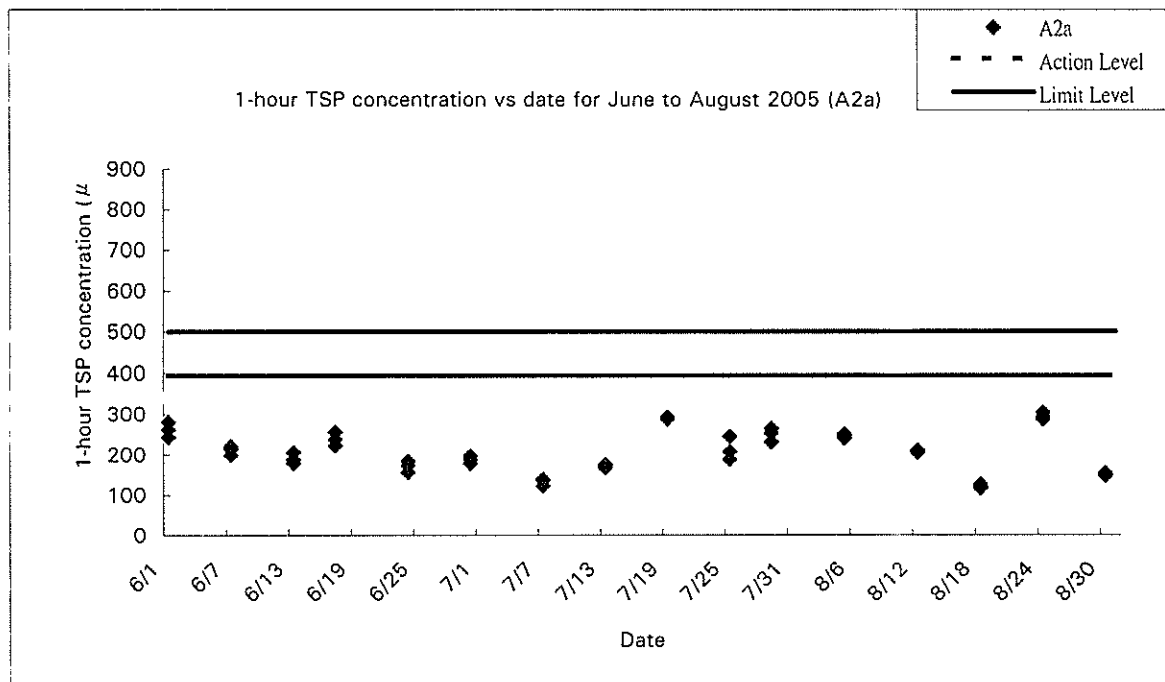
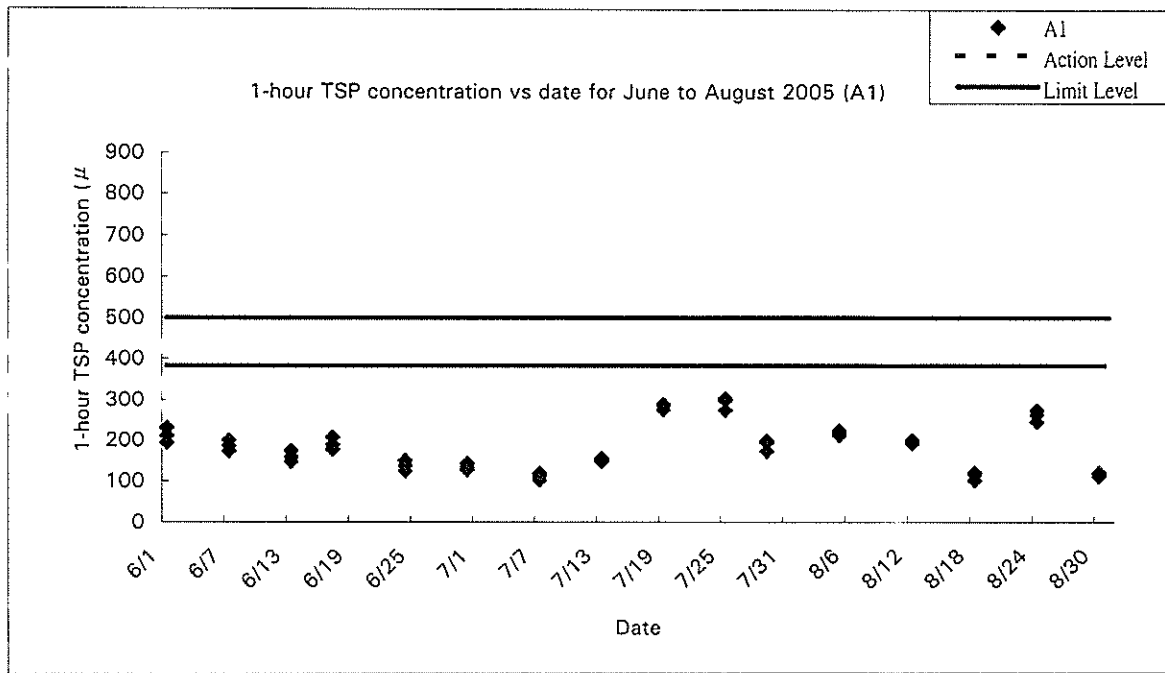
WPCO – Water Pollution Control Ordinance

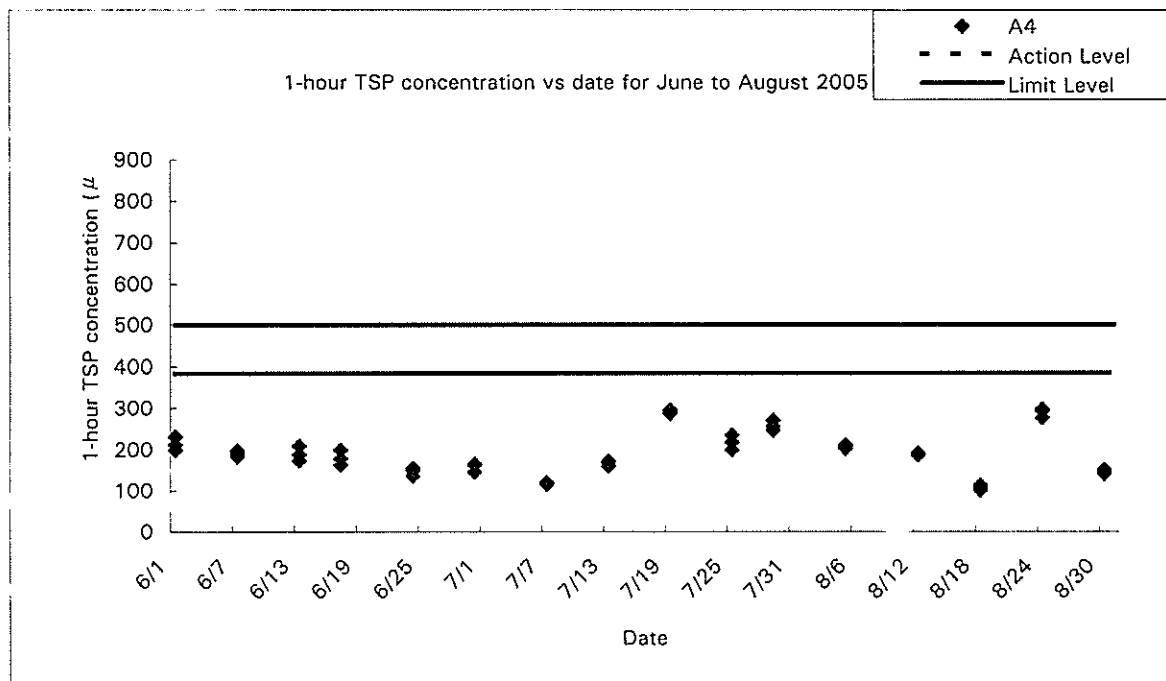
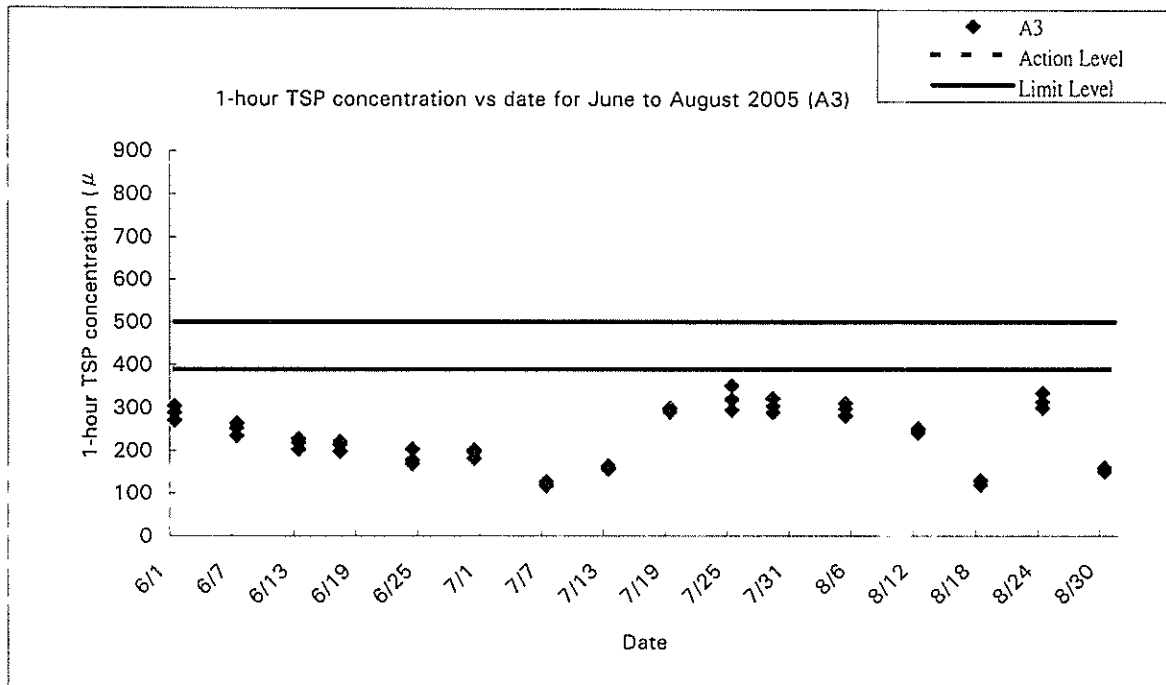
PN1/94 - Professional Persons Environmental Consultative Committee Practice Note (ProPECC PN) 1/94 "Construction Site Drainage"

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<br>(1-hour TSP)  | A1                           | 01/06/2005 – 31/08/2005 | 0                    | 0           |
|                      | A2a                          | 01/06/2005 – 31/08/2005 | 0                    | 0           |
|                      | A3                           | 01/06/2005 – 31/08/2005 | 0                    | 0           |
|                      | A4                           | 01/06/2005 – 31/08/2005 | 0                    | 0           |
| Air<br>(24-hour TSP) | A1                           | 01/06/2005 – 31/08/2005 | 0                    | 0           |
|                      | A2a                          | 01/06/2005 – 31/08/2005 | 0                    | 0           |
|                      | A3                           | 01/06/2005 – 31/08/2005 | 0                    | 0           |
|                      | A4                           | 01/06/2005 – 31/08/2005 | 0                    | 0           |
| Noise                | CN1a                         | 01/06/2005 – 31/08/2005 | 0                    | 0           |
|                      | CN2a                         | 01/06/2005 – 31/08/2005 |                      | 0           |
|                      | HKSM                         | 01/06/2005 – 31/08/2005 |                      | 0           |
|                      | HKCC                         | 01/06/2005 – 31/08/2005 |                      | 0           |
| Water                | Outlet of treatment facility | 01/06/2005 – 31/08/2005 | 0                    | 0           |



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

