MONTHLY EM&A REPORT

The Jockey Club CPS Limited

Central Police Station Conservation and Revitalisation Project: Thirty-second Monthly EM&A Report (1 June to 30 June 2014)

Issue Date: July 2014

Environmental Resources Management

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The Jockey Club CPS Limited

Central Police Station Conservation and Revitalisation Project: Thirty-second Monthly EM&A Report (From 1 June to 30 June 2014)

Issue Date: July 2014 Reference 0095646

For and on behalf of					
ERM-Hong Kong, Limited					
Approved b	oy: Frank Wan				
	Warder H.T.				
Signed:	The same of the sa				
Position:	Partner				
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Certified by	T: What				
	vironmental Team Leader – Winnie Ko)				
Date: _	11 July 2014				

This report has been prepared by ERM-Hong Kong, Limited with all reasonable skill, care and diligence within the terms of the Contract with the client, incorporating our General Terms and Conditions of Business and taking account of the resources devoted to it by agreement with the client.

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

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



Date:

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15 July 2014

By Email and Post

ERM-Hong Kong Limited, 16/F DCH Commercial Centre, 25 Westlands Road, Quarry Bay, Hong Kong

Attn: Ms Winnie Ko

Dear Winnie,

Central Police Station Conservation and Revitalization Project Verification of Monthly EM&A Report No.32

We refer to your letter dated 15 June 2014 regarding the Monthly EM&A Report No.32. Atkins China Ltd. verifies, in the capacity of Independent Environmental Checker, that the report, in principle, conforms the requirements provided in Condition 3.4 of the Environmental Permit (EP-408/2011/B).

Yours sincerely, For Atkins China Ltd.

Sharifah Or

Independent Environmental Checker

HKJC - Mr. Kenneth Lee C.C. Rocco Design Architect - Mr. Charles Kung

By Email By Email

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EXECUTIVE SUMMARY

The construction works of **Central Police Station Conservation and Revitalisation Project** commenced on 24 October 2011. This is the thirty-second monthly Environmental Monitoring and Audit (EM&A) report presenting the EM&A works carried out during the period from 1 June to 30 June 2014 in accordance with the EM&A Manual.

Summary of Construction Works undertaken during Reporting Period

The major construction works undertaken during the reporting period include:

- Structural addition and alteration works at Block 2, Block 3, Block 4, Block
 9, Block 10, Block 11, Block 12, Block 13, Block 14, Block 15 and Block 17;
- Roof tiling replacement works at Block 9 and Block 10;
- Demolition works at Block 3, Block 14 and Block 15;
- New RC structure construction at Block 3, Block 8, Block 13, Block 14 and Block 15;
- Permanent steel works erection and RC structure construction at Block 8;
- E&M opening, conceal conduit construction and E&M installation at Block
 1;
- Construction of left out portion of basement plant room top slab, BW in basement plant room;
- Timber doors and windows repair works at Block 9;
- Paint stripping and plaster works at Block 1, Block 3, Block 4, Block 9 and Block 14;
- Metal works repair at Block 15;
- Façade works at Block 1, Block 3, Block 6, Block 7, Block 9 and Block 14;
- Structural timber floor repair at Block 4 and Block 6;
- Balcony repair at Block 1, Block 4, Block 6, Block 7, Block 9 and Block 10;
- Water/FS pipes at upper portion and drainage pipes and backfill 1st layer at middle portion of Pottinger Ramp (L1);
- Demolition of existing concrete slab at M3;
- Arbuthnot Road West utilities diversion works and carriageway;
- Core wall construction at Arbuthnot Wing;
- External and lateral support works at Old Bailey Wing; and
- R177 upgrading..

Environmental Monitoring and Audit Progress

A summary of the monitoring activities in this reporting period is listed below:

•	Construction noise monitoring during normal weekdays at each	
	monitoring station	5 times
•	Joint environmental site inspection	1 time
•	Heritage site inspections	20 times
•	Landscape & visual monitoring	1 time
•	Tree inspection	1 time
•	Vibration monitoring for piling works	120 times
•	Vibration monitoring for other construction works	72 times

Noise

5 sets of 30-minute construction noise measurements were carried out at each of the monitoring stations (NM2 and NM6) during normal weekdays of the reporting period. No exceedance of the Action or Limit Level of construction noise was recorded during the reporting period.

Cultural Heritage

Vibration monitoring carried out for the trial piling and piling works during the reporting period are listed below:

- 24 vibration monitoring measurements for the basement construction at Parade Ground;
- 24 vibration monitoring measurements at Block 8;
- 24 vibration monitoring measurements at Old Bailey Wing (Block 50);
- 24 vibration monitoring measurements at Block 51; and
- 24 vibration monitoring measurements at Block 17.

Vibration monitoring carried out for other construction works during the reporting period are listed below:

- 24 vibration monitoring measurements for the structural addition and alteration works at Block 1;
- 24 vibration monitoring measurements for the structural addition and alteration works at Block 14.
- 24 vibration monitoring measurements for the structural addition and alteration works at Block 11.

No exceedance of the Alert, Alarm and Action Levels was recorded during the reporting period.

Heritage site audits were conducted on 3, 4, 5, 6, 9, 10, 11, 12, 13, 16, 17, 18, 19, 20, 23, 24, 25, 26, 27 and 30 June 2014 by the Heritage Checker during the reporting period. Major observations and recommendations during the site inspections were listed below:

9 June 2014

• It was observed that the new brickwork infill below 01/WG/19 of Block 1 was in a poor workmanship condition. The Contractor was informed to follow up.

10 June 2014

 Colour differences between new bricks and approved sample, new mortar repair and existing brickwork were observed for the brickwork repairs at Block 1 south elevation top two lifts.

13 June 2014

• It was observed that the floor drains of Block 1 balconies did not comply with contract documents. The Contractor was informed to follow up.

23 June 2014

- It was observed that the metalwork repairs and finish of Block 7 north balcony did not comply with contract documents. The Contractor was informed to follow up.
- The timber handrails and concrete cornices at Block 7 balcony were observed being covered with black paint and white primer due to lack of protection. The Contractor was informed to follow up.

24 June 2014

• The shop drawing submission of the Block 1 glass balustrade did not comply with the previous comments from conservation architect. The Contractor was informed to follow up.

The Contractor was urged to follow-up the necessary rectification based on the inspection findings.

The follow-up actions recommended in the heritage site audits from the last reporting period (May 2014) have generally been implemented.

Landscape & Visual

Landscape and visual monitoring has commenced since October 2011 on a monthly basis. Tree inspection was conducted on 3 June 2014 by the arborist during the reporting period. There was no observation or recommendation from the arborist.

Waste Management

Wastes generated from this Project include inert construction and demolition (C&D) materials and non-inert C&D materials. A total of 2,176.81 tonnes of inert C&D materials were generated during the reporting period. 148.8 tonnes of non-inert C&D materials comprising general refuse were generated and disposed of at the SENT Landfill. 11,350 kg of metal and 242 kg of paper/cardboard packaging were produced and sent to recyclers for recycling. No plastic waste was generated during the reporting period. No chemical waste was produced during the reporting period.

Environmental Site Inspection

A joint environmental site inspection was carried out by the representatives of the Contractor, the IEC and the ET on 19 June 2014. There was no major observation during the site inspection.

Environmental Exceedance/Non-conformance/Compliant/Summons and Prosecution

No exceedance of Action or Limit Level of construction noise was recorded at designated monitoring stations during the reporting period.

No exceedance of the Alert, Alarm and Action Levels of vibration was recorded during the reporting period.

No enquiry was received during the reporting period.

No non-compliance event was recorded during the reporting period.

No complaint was received during the reporting period.

No summons/prosecution was received during the reporting period.

Future Key Issues

Works to be undertaken in the next month include:

- Structural addition and alteration works at Block 2, Block 3, Block 4, Block
 9, Block 10, Block 11, Block 12, Block 13, Block 14, Block 15 and Block 17;
- Roof repair works at Block 4, Block 9 and Block 10;
- Demolition works to Block 3, Block 4, Block 9 and Block 13;
- Paint stripping and plaster repair at Block 1, Block 3, Block 4, Block 9 and Block 14;
- Timber doors and windows repair works at Block 6, Block 7, Block 9, and Block 10;
- E&M installation at Block 1;
- Structural timber floor repair at Block 3, Block 4, Block 6, Block 7 and Block 10;

- Façade works at Block 1, Block 3, Block 6, Block 7, Block 9 and Block 14;
- Balcony repair at Block 1, Block 4, Block 6, Block 7, Block 9 and Block 10;
- External and lateral support and basement construction work at Old Bailey Wing;
- Arbuthnot Wing core wall structure construction;
- Backfill in upper portion, water/FS pipes in middle portion of Pottinger Ramp (L1);
- Excavation in L2 and M3;
- Works at Arbuthnot Road; and
- R177/R22 upgrading.

Potential environmental impacts arising from the above construction activities are mainly associated with dust, construction noise, site runoff and waste management.

1 INTRODUCTION

ERM-Hong Kong, Limited (ERM) was appointed by the Jockey Club CPS Limited (the CPS Ltd) as the Environmental Team (ET) to undertake the Environmental Monitoring and Audit (EM&A) programme for the **Central Police Station Conservation and Revitalisation Project** (the Project).

1.1 Purpose of the Report

This is the thirty-second EM&A report which summarises the impact monitoring results and audit findings for the EM&A programme during the reporting period from 1 June to 30 June 2014.

1.2 STRUCTURE OF THE REPORT

The structure of the report is as follows:

Section 1: Introduction

details the scope and structure of the report.

Section 2: **Project Information**

summarises background and scope of the Project, site description, project organization and contact details, construction programme, the construction works undertaken and the status of Environmental Permit(s)/License(s) during the reporting period.

Section 3: Environmental Monitoring Requirements

summarises the monitoring parameters, monitoring programmes, monitoring methodologies, monitoring frequency, monitoring locations, Action and Limit Levels, Event/Action Plans, environmental mitigation measures as recommended in the EIA report and relevant environmental requirements.

Section 4: Implementation Status on Environmental Protection Requirements

summarises the implementation of environmental protection measures during the reporting period.

Section 5: Monitoring Results

summarises the monitoring results obtained in the reporting period.

Section 6: Environmental Site Inspection

summarises the audit findings of the site inspections undertaken within the reporting period.

Section 7: Environmental Non-conformance

summarises any monitoring exceedance, environmental complaints and environmental summons within the reporting period.

Section 8: Future Key Issues

summarises the impact forecast and monitoring schedule for the next reporting month.

Section 9: **Conclusions**

2 PROJECT INFORMATION

2.1 BACKGROUND

The Chief Executive (CE)'s 2007-2008 Policy Address highlighted revitalisation as the guiding principle of heritage conservation and the Project was one of the specific proposals put forward by the CE in the same Policy Address. At the meeting of the Executive Council (ExCo) on 15 July 2008, the ExCo advised and the CE ordered that Government should enter into a partnership with the Hong Kong Jockey Club (HKJC) in the form of an agreement (or agreements) to take forward the conservation and revitalisation of the CPS project based on various guiding parameters. The Project is now being undertaken in partnership with the Development Bureau of the HKSAR Government. The HKJC has taken on board the decision at the ExCo meeting and further investigated the design and implementation of the Project. The Project is now implemented by the Jockey Club CPS Limited.

2.2 SITE DESCRIPTION

The location of the Project Site is shown in *Annex A1*. The Site is bounded by Hollywood Road to the north, Arbuthnot Road to the east, Chancery Lane to the south and Old Bailey Street to the west.

The Site comprises three Declared Monuments designated under the *Antiquities and Monuments Ordinance* in 1995. They are:

- Central Police Station;
- Former Central Magistracy; and
- Victoria Prison Compound.

They are collectively named the Central Police Station (CPS). *Annex A2* shows the location of the Declared Monuments within CPS and the buildings within the CPS.

2.3 CONSTRUCTION ACTIVITIES

A summary of the major construction activities undertaken in this reporting period is shown in *Table 2.1* and illustrated in *Annex A3*.

Construction Activities Undertaken

- Structural addition and alteration works at Block 2, Block 3, Block 4, Block 9, Block 10, Block 11, Block 12, Block 13, Block 14, Block 15 and Block 17;
- Roof tiling replacement works at Block 9 and Block 10;
- Demolition works at Block 3, Block 14 and Block 15;
- New RC structure construction at Block 3, Block 8, Block 13, Block 14 and Block 15;
- Permanent steel works erection and RC structure construction at Block 8;
- E&M opening, conceal conduit construction and E&M installation at Block 1;
- Construction of left out portion of basement plant room top slab, BW in basement plant room;
- Timber doors and windows repair works at Block 9;
- Paint stripping and plaster works at Block 1, Block 3, Block 4, Block 9 and Block 14;
- Metal works repair at Block 15;
- Façade works at Block 1, Block 3, Block 6, Block 7, Block 9 and Block 14;
- Structural timber floor repair at Block 4 and Block 6;
- Balcony repair at Block 1, Block 4, Block 6, Block 7, Block 9 and Block 10;
- Water/FS pipes at upper portion and drainage pipes and backfill 1st layer at middle portion of Pottinger Ramp (L1);
- Demolition of existing concrete slab at M3;
- Arbuthnot Road West utilities diversion works and carriageway;
- Core wall construction at Arbuthnot Wing;
- External and lateral support works at Old Bailey Wing; and
- R177 upgrading.

2.4 PROJECT ORGANISATION

The Project organisation chart and contact details are shown in *Annex B*.

2.5 STATUS OF ENVIRONMENTAL APPROVAL DOCUMENTS

A summary of the relevant permits, licences, and/or notifications on environmental protection for this Project since the granting of the EP in April 2011 is presented in *Table 2.2*.

Table 2.2 Summary of Environmental Licensing, Notification and Permit Status

Permit/ Licences/ Notification	Reference	Validity Period	Remarks
Environmental Permit (EP)	EP-408/2011	-	Superseded on 10 January 2012
	EP-408/2011/A	-	Superseded on 22 March 2012
	EP-408/2011/B	Throughout the Contract	Permit granted on 22 March 2012
Notification of Construction Works as required under <i>Air</i>	Ref. No. 332920	Throughout the Contract	-

Pollution Control (Construction Dust) Regulation			
Registration of Waste Producer under Waste Disposal Ordinance	Waste Producer No.: 5213-122-G2347-25	Throughout the Contract	-
Effluent Discharge License under Water Pollution Control Ordinance	License No. WT00010633-2011	21 Oct 2011 – 31 Oct 2016	-
Notification of Commencement of Asbestos Abatement Work under Air Pollution Control Ordinance		Throughout the Contract	EPD's letter (EPD's ref.: (5) in EPAC/A/4/000/23 3 II) dated 2 December 2011 satisfied that the content of the asbestos abatement plan (Report No.: 0210/11/ED/0078A) is in accordance with the APCO
Approval of Asbestos Abatement Work (Phase 2)	-	Earliest commencement date on 26 January 2012	EPD's letter (EPD's ref:() in EPAC/A/4/000/23 3) dated 18 January 2012.
Construction Noise Permit (CNP)	GW-RS0734-12	11 July 2012 at 0200 hours to 2 August 2012 at 0400 hours	Expired.
	GW-RS0839-12	13 August 2012 at 1900 hours to 31 December 2012 at 0700 hours	Expired.
	GW-RS1162-12	1 December 2012 at 0000 hours to 28 March 2013 at 0600 hours	Expired.
	GW-RS0113-13	1 February 2013 at 0200 hours to 31 May 2013 at 0400 hours	Expired.
	GW-RS1301-12	2 January 2013 at 1900 hours to 29 June 2013 at 2300 hours	Expired.
	GW-RS0084-13	24 January 2013 at 1900 hours to 29 June 2013 at 0700 hours	Expired.
	GW-RS0638-13	16 June 2013 at 0700 hours to 15 September 2013 at 1900 hours	Expired.
	GW-RS0901-13	14 August 2013 at 0000 hours to 31	Expired.

	October 2013 at 0600 hours	
GW-RS0714-13	29 June 2013 at 1900 hours to 28 December 2013 at 2400 hours	Expired.
GW-RS0745-13	5 July 2013 at 1900 hours to 30 December 2013 at 2300 hours	Expired.
GW-RS1110-13	7 October 2013 at 0200 hours to 31 December 2013 at 0400 hours	Expired.
GW-RS1205-13	4 November 2013 at 0000 hours to 30 January 2014 at 2400 hours	Expired.
GW-RS1275-13	13 November 2013 at 0000 hours to 30 April 2014 at 2400 hours	Expired.
GW-RS0062-14	10 February 2014 at 0000 hours to 31 March 2014 at 2400 hours.	Expired.
GW-RS1461-13	29 December 2013 at 0000 hours to 28 June 2014 at 2400 hours.	Expired.
GW-RS0271-14	1 April 2014 at 0100 hours to 30 June 2014 at 0600 hours	Expired.
GW-RS0434-14	8 May 2014 at 0000 hours to 30 September 2014 at 2400 hours	-
GW-RS0651-14	28 July 2014 at 0000 hours to 26 September 2014 at 2400 hours	-
GW-RS0658-14	29 June 2014 at 0000 hours to 28 December 2014 at 2400 hours	-

3.1 Noise Monitoring

3.1.1 Monitoring Location

The construction noise monitoring locations are listed in *Table 3.1* and are shown in *Annex C*.

Table 3.1 Construction Phase Noise Monitoring Station

Monitoring Location	Proposed Construction Noise Monitoring Station			
	ID in EM&A Manual	ID	Type of Measurement	Remark
Rooftop of Ho Fook Building	N2	NM2	Façade	-
Rooftop of Chancery Mansion		NM6	Façade	Accesses to the original proposed monitoring location in the EM&A Manual, Chancery House (N5), were denied; alternative location of Chancery Mansion (N6), were therefore proposed and approved by the Authorised Person (AP), the Independent Environmental Checker (IEC) and EPD.

The noise sensitive receivers are also shown in *Annex C*.

3.1.2 Monitoring Parameters, Frequency and Programme

Weekly construction noise monitoring was conducted in accordance with the requirements stipulated in the EM&A Manual. The monitoring programme for this reporting period is shown in *Annex D*.

The construction noise levels were measured in terms of A-weighted equivalent continuous sound pressure level (L_{eq}) in decibels dB(A). $L_{eq~(30min)}$ were used as the monitoring parameter for the time period in between 0700 – 1900 hours on normal weekdays. Supplementary information for data auditing, two statistical sound levels L_{10} and L_{90} - the levels exceeded for 10 and 90 percent of the time respectively, were also recorded during the monitoring for reference. The measured noise levels were logged in every 5 minutes throughout the impact monitoring period.

3.1.3 Monitoring Equipment and Methodology

Construction noise measurements were conducted in accordance with the calibration and measurement procedures as stated in *Annex – General Calibration and Measurement Procedures* of *Technical Memorandum on Noise from Construction Work other than Percussive Piling (GW-TM)* issued under the *Noise Control Ordinance (NCO)* (Cap 400).

The sound level meters and calibrator used for the noise measurement, as listed in *Table 3.2*, complies with the IEC 651: 1979 and 804:1985 (Type 1) specifications. The calibration certificates of the sound level meters are appended in *Annex E*.

Table 3.2 Noise Monitoring Equipment

Monitoring Stations	Monitoring Equipment (Sound Level Meter and Calibrator)
NM2, NM6	<u>Calibrator</u> Rion NC-73 (S/N 10786708)
	Sound Level Meter
	Rion NL-52 (S/N 00131627)

Immediately prior to and following the noise measurements, the accuracy of the measurement equipment was checked using an acoustic calibrator generating a known sound pressure level at a known frequency.

Measurements were accepted as the calibration level from before and after the noise measurement agree to within 1.0 dB(A).

3.1.4 Event / Action Plan

Table 3.3 Action and Limit Levels for Construction Noise Monitoring

Noise Monitoring Location	Action Level	Limit Level, L _{eq(30mins), dB(A)}	Remark
NM2, NM6	When one documented complaint is received from any one of the sensitive receivers	75 (note)	Applicable during 0700 – 1900 hours on normal weekdays.

Notes:

- a) Acceptable Noise Levels for Area Sensitivity Rating of A/B/C. Limit Level is reduced to 70dB(A) for schools and 65dB(A) during school examination periods.
- b) If works are to be carried out during restricted hours, the conditions stipulated in the CNP issued by the NCA have to be followed.

The Event / Action Plan (EAP) for noise monitoring is presented in *Annex F*.

3.1.5 Mitigation Measures

The mitigation measures in accordance with the EP, EIA and EM&A Manual and their implementation status are presented in *Annex G*.

3.2 CULTURAL HERITAGE

3.2.1 Vibration Monitoring

In accordance with the EM&A Manual, vibration monitoring is required and the vibration control limits and vibration monitoring proposal are defined by a specialist for AMO's approval.

A set of initial readings should be recorded prior to commencement of each stage of demolition works or trial piling works. The baseline vibration monitoring should be conducted for duration of 5 minutes on the measurement day(s) at each vibration monitoring location.

Vibration Monitoring for Demolition Works

There are five phases/stages of vibration monitoring to be carried out for demolition works, namely Initial Reading Phase, Monitoring Stage 1, Monitoring Stage 2, Monitoring Stage 3 and Monitoring Stage 4. The vibration monitoring should be conducted for duration of 5 minutes on the days with demolition works at each vibration monitoring location.

Vibration Monitoring for Trial Piling and Pipe/Bored Piling Works

Vibration monitoring for trial piling works and pipe/bored piling works is required. The monitoring location is shown in *Annex L*. The vibration monitoring should be conducted for duration of 5 minutes on the days with trial piling works or pipe/bored piling works at each vibration monitoring location.

Vibration Monitoring for Other Construction Works

Vibration monitoring for specific construction works other than demolition works, trial piling works and pipe/bored piling works is also required in accordance with Building Department's requirement. The monitoring location is shown in *Annex M*. The number and location of monitoring location will depend on the location of the specific construction works. The vibration monitoring should be conducted for duration of 5 minutes on a daily basis (working day) at each vibration monitoring location.

Alert, Alarm and Action Levels

The Alert, Alarm and Action (AAA) Levels are to be implemented during the vibration monitoring and shown in *Table 3.4*.

Table 3.4 Alert, Alarm and Action (AAA) Levels for Vibration Monitoring

Instrument Type	Item Monitored	Alert Level	Alarm Level	Action Level
Vibration	Horizontal	2.0 mm/s	2.5 mm/s	3.0 mm/s
Monitoring	Movement			

The Event / Action Plan (EAP) for vibration monitoring is shown in *Table 3.5*.

Table 3.5 Event and Action Plan for Vibration Monitoring

Events	Action
Exceedance of Alert Level	Notify Management Contractor
Exceedance of Alarm Level	Notify Authorised Person/ Resident Engineer

Events	Action		
Exceedance of Action Level	Cease Works and submit mitigation		

3.2.2 Mitigation Measures

Cultural heritage mitigation measures (including those for archaeology) in accordance with the EP, EIA and EM&A Manual were implemented by the Contractor and the implementation status is given in *Annex G*.

3.3 LANDSCAPE AND VISUAL MONITORING

In accordance with the EM&A Manual, inspections of affected trees were conducted by an experienced and appropriately trained arborist. All irregularities that deviate from the recommended tree protection measures or could impose deleterious impacts on the protected trees were reported. Besides, implementation of mitigation measures for landscape and visual resources recommended in the EIA Report were also monitored during the site inspection.

3.3.1 Mitigation Measures

Landscape and visual mitigation measures in accordance with the EP, EIA and EM&A Manual were implemented by the Contractor and the implementation status is given in *Annex G*.

3.4 ENVIRONMENTAL REQUIREMENTS IN CONTRACT DOCUMENTS

The environmental requirements as specified in the contract documents were reviewed and were covered in the EIA's requirements.

4 IMPLEMENTATION STATUS ON ENVIRONMENTAL PROTECTION REQUIREMENTS

The Contractor has generally implemented the environmental mitigation measures (including those for archaeology) and requirements as stated in the EIA Report, the EP and EM&A Manual and the contract documents. The implementation status during the reporting period is summarized in *Annex G*.

Status of required submissions under the EP during the reporting period is presented in *Table 4.1*.

Table 4.1 Status of Required Submissions

Submission		Submission Date
EP Condition		
Condition 3.4	Thirty-first Monthly EM&A Report	13 June 2014

5 MONITORING RESULTS

5.1 Noise

A total of 5 sets of 30-minute construction noise measurements were carried out at the monitoring stations (NM2 and NM6) during normal weekdays of the reporting period. The monitoring results together with graphical presentations are presented in *Annex H*. The local impacts observed near the monitoring stations of NM2 and NM6 were summarised below:

- NM2: construction noise from activities in the Project Site and traffic noise from Old Bailey Street.
- NM6: construction noise from activities in the Project Site and traffic noise from Chancery Lane.

No exceedance of the Action or Limit Level of construction noise was recorded during the reporting period.

5.2 CULTURAL HERITAGE

5.2.1 Vibration Monitoring

Trial Piling and Piling works

Vibration monitoring carried out for the trial piling and piling works during the reporting period are listed below:

- 24 vibration monitoring measurements for the basement construction at Parade Ground;
- 24 vibration monitoring measurements at Block 8;
- 24 vibration monitoring measurements at Old Bailey Wing (Block 50);
- 24 vibration monitoring measurements at Block 51; and
- 24 vibration monitoring measurements at Block 17.

The monitoring results are presented in *Annex L*.

Other Construction Works

Vibration monitoring carried out for other construction works during the reporting period are listed below:

• 24 vibration monitoring measurements for the structural addition and alteration works at Block 1;

- 24 vibration monitoring measurements for the structural addition and alteration works at Block 14;
- 24 vibration monitoring measurements for the structural addition and alteration works at Block 11.

The monitoring results are presented in *Annex M*.

All monitoring results were below the Alert/Alarm/Action Levels.

5.2.2 Heritage Site Audit

Heritage site audits were conducted on 3, 4, 5, 6, 9, 10, 11, 12, 13, 16, 17, 18, 19, 20, 23, 24, 25, 26, 27 and 30 June 2014 by the Heritage Checker during the reporting period. Major observations and recommendations during the site inspections were listed below:

9 June 2014

• It was observed that the new brickwork infill below 01/WG/19 of Block 1 was in a poor workmanship condition. The Contractor was informed to follow up.

10 June 2014

• Colour differences between new bricks and approved sample, new mortar repair and existing brickwork were observed for the brickwork repairs at Block 1 south elevation top two lifts.

13 June 2014

• It was observed that the floor drains of Block 1 balconies did not comply with contract documents. The Contractor was informed to follow up.

23 June 2014

- It was observed that the metalwork repairs and finish of Block 7 north balcony did not comply with contract documents. The Contractor was informed to follow up.
- The timber handrails and concrete cornices at Block 7 balcony were observed being covered with black paint and white primer due to lack of protection. The Contractor was informed to follow up.

24 June 2014

• The shop drawing submission of the Block 1 glass balustrade did not comply with the previous comments from conservation architect. The Contractor was informed to follow up.

The Contractor was urged to follow-up the necessary rectification based on the inspection findings.

The follow-up actions recommended in the heritage site audits from the last reporting period (May 2014) have been implemented.

5.3 LANDSCAPE AND VISUAL

The tree inspection was conducted by the arborist on 3 June 2014 and major observations and recommendations in the reporting period are summarised in *Table 5.1*. The tree inspection report is contained in *Annex J*.

Table 5.1 Findings of Monthly Tree Inspection in the Reporting Period

Tree No.	Botanical Name	Overall Health Condition	Arborist's Observations / Recommendations		
Tree -5	Mangifera indica	Good	No further action required.		
Tree -6	Aleurites moluccana	Fair	No further action required.		
Tree-7	Aleurites moluccana	Fair	 No further action required. 		
Tree-8	Plumeria rubra	Fair	 No further action required. 		
Tree-9	Araucaria cunninghamia	Fair	No further action required.		
Tree-11	Dracaena marginata	Fair	 A dead log present on upper branches. 		

5.4 WASTE MANAGEMENT

Wastes generated from this Project include inert construction and demolition (C&D) materials and non-inert C&D materials. Non-inert C&D materials were made up of wastes such as general refuse. With reference to relevant handling records and trip tickets of this Project, the quantities of different types of waste generated in the reporting period are summarised in *Table 5.2*. The non-inert C&D materials and general refuse generated from the Project were disposed of at the SENT Landfill. 11,350 kg of metal and 242 kg of paper/cardboard packaging was generated and sent to recyclers for recycling. No plastic waste was generated during the reporting period. No chemical waste was produced during the reporting period.

Table 5.2 Quantities of Waste Generated from the Project

Month / Year	Quantity						
-	C&D	C&D	Chemical Waste		Recycled materials		
	Materials (inert) ^(a)	Materials (non-inert) (b)	Solid	Liquid	Paper / cardboard	Plastics	Metals
June 2014	2,176.81	148.8	0 kg	0 L	242 kg	0 kg	11,350
	tonnes	tonnes					kg

Notes:

- (a) Inert C&D materials include bricks, concrete, building debris, rubble and excavated soil.
- (b) The figure presented under non-inert C&D materials represents quantities of non-recyclable materials such as general refuse which were disposed of at SENT Landfill. Recycled materials are reported separately.

6 ENVIRONMENTAL SITE INSPECTION

Joint environmental site inspection was conducted by the representatives of the Contractor, IEC and the ET in the reporting period on 19 June 2014. There was no non-compliance recorded during the site inspection.

Follow-up Actions for the Last Site Audit

• The chemical waste store near the Parade Ground has been locked.

Observations and Recommendations of this Reporting Month

• Nil.

7 ENVIRONMENTAL NON-CONFORMANCE

7.1 SUMMARY OF MONITORING EXCEEDANCE

No exceedance of Action or Limit Level of construction noise or Alert, Alarm and Action Levels of vibration was recorded during the reporting period.

7.2 SUMMARY OF ENQUIRY

No enquiry was recorded during the reporting period.

7.3 SUMMARY OF ENVIRONMENTAL NON-COMPLIANCE

No non-compliance event was recorded during the reporting period.

7.4 SUMMARY OF ENVIRONMENTAL COMPLAINT

No complaint was received during the reporting period.

The cumulative number of complaints is presented in *Annex K*.

7.5 SUMMARY OF ENVIRONMENTAL SUMMONS AND SUCCESSFUL PROSECUTION

No summons was received during the reporting period.

FUTURE KEY ISSUES

8

8.1 KEY ISSUES FOR THE COMING MONTH

Works to be undertaken for the coming monitoring period are summarised in *Table 8.1*.

Table 8.1 Construction Works to be Undertaken in the Coming Month

Work to be Undertaken

- Structural addition and alteration works at Block 2, Block 3, Block 4, Block 9, Block 10, Block 11, Block 12, Block 13, Block 14, Block 15 and Block 17;
- Roof repair works at Block 4, Block 9 and Block 10;
- Demolition works to Block 3, Block 4, Block 9 and Block 13;
- Paint stripping and plaster repair at Block 1, Block 3, Block 4, Block 9 and Block 14;
- Timber doors and windows repair works at Block 6, Block 7, Block 9, and Block 10;
- E&M installation at Block 1;
- Structural timber floor repair at Block 3, Block 4, Block 6, Block 7 and Block 10;
- Façade works at Block 1, Block 3, Block 6, Block 7, Block 9 and Block 14;
- Balcony repair at Block 1, Block 4, Block 6, Block 7, Block 9 and Block 10;
- External and lateral support and basement construction work at Old Bailey Wing;
- Arbuthnot Wing core wall structure construction;
- Backfill in upper portion, water/FS pipes in middle portion of Pottinger Ramp (L1);
- Excavation in L2 and M3;
- Works at Arbuthnot Road; and
- R177/R22 upgrading.

Potential environmental impacts arising from the above construction activities are mainly associated with dust, construction noise, site runoff and waste management.

8.2 MONITORING SCHEDULE FOR THE NEXT MONTH

The tentative schedule of noise monitoring for the next reporting period is presented in *Annex D*.

8.3 CONSTRUCTION PROGRAMME FOR THE NEXT MONTH

The most updated construction programme for the Project is presented in *Annex I*.

9 CONCLUSIONS

The *Environmental Monitoring and Audit (EM&A) Report* presents the EM&A works undertaken during the period from 1 June to 30 June 2014 in accordance with EM&A Manual and the requirement under EP-408/2011/B.

No exceedance of Action or Limit Level of construction noise was recorded at designated monitoring stations during the reporting period.

No exceedance of Alert, Alarm and Action Levels of vibration was recorded during the reporting period.

No enquiry was received during the reporting period.

No non-compliance event was recorded during the reporting period.

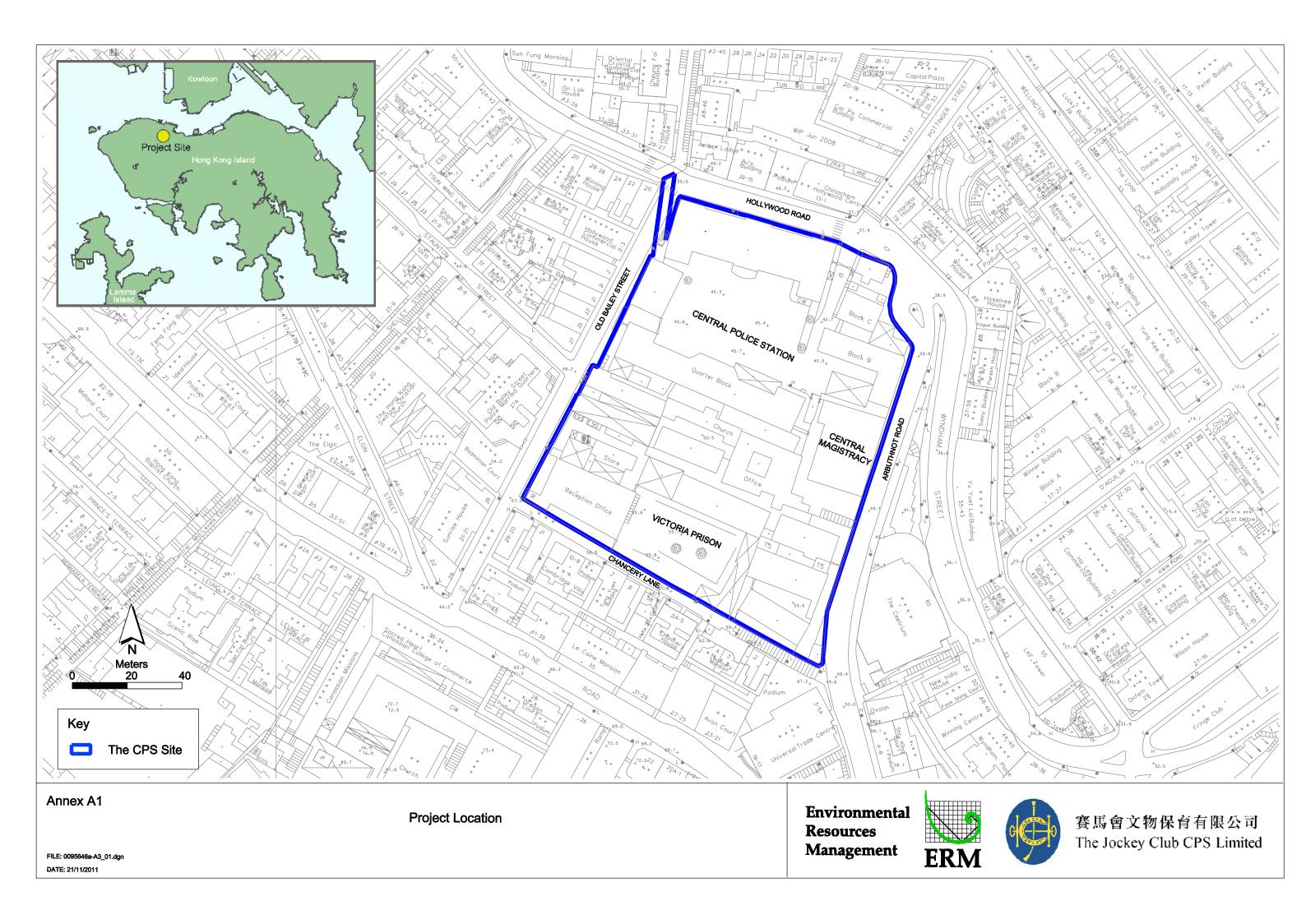
No complaint was received during the reporting period.

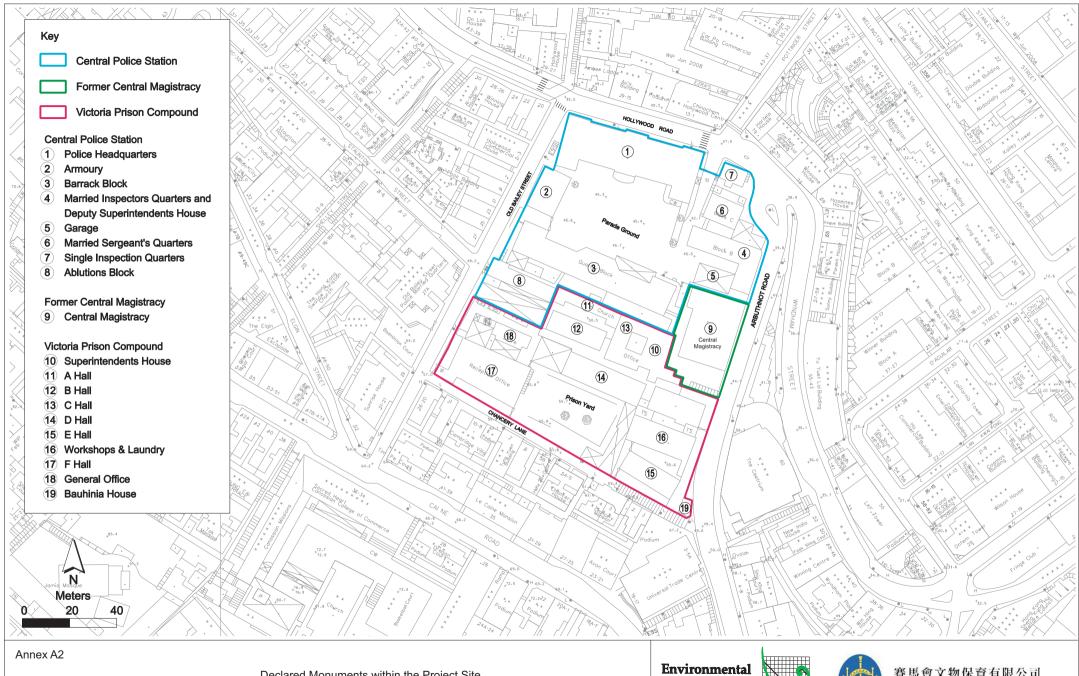
No summons/prosecution was received during the reporting period.

The ET will keep track on the EM&A programme to ensure compliance of environmental requirements and the proper implementation of all necessary mitigation measures.

Annex A

Locations of Works Areas and the Surroundings





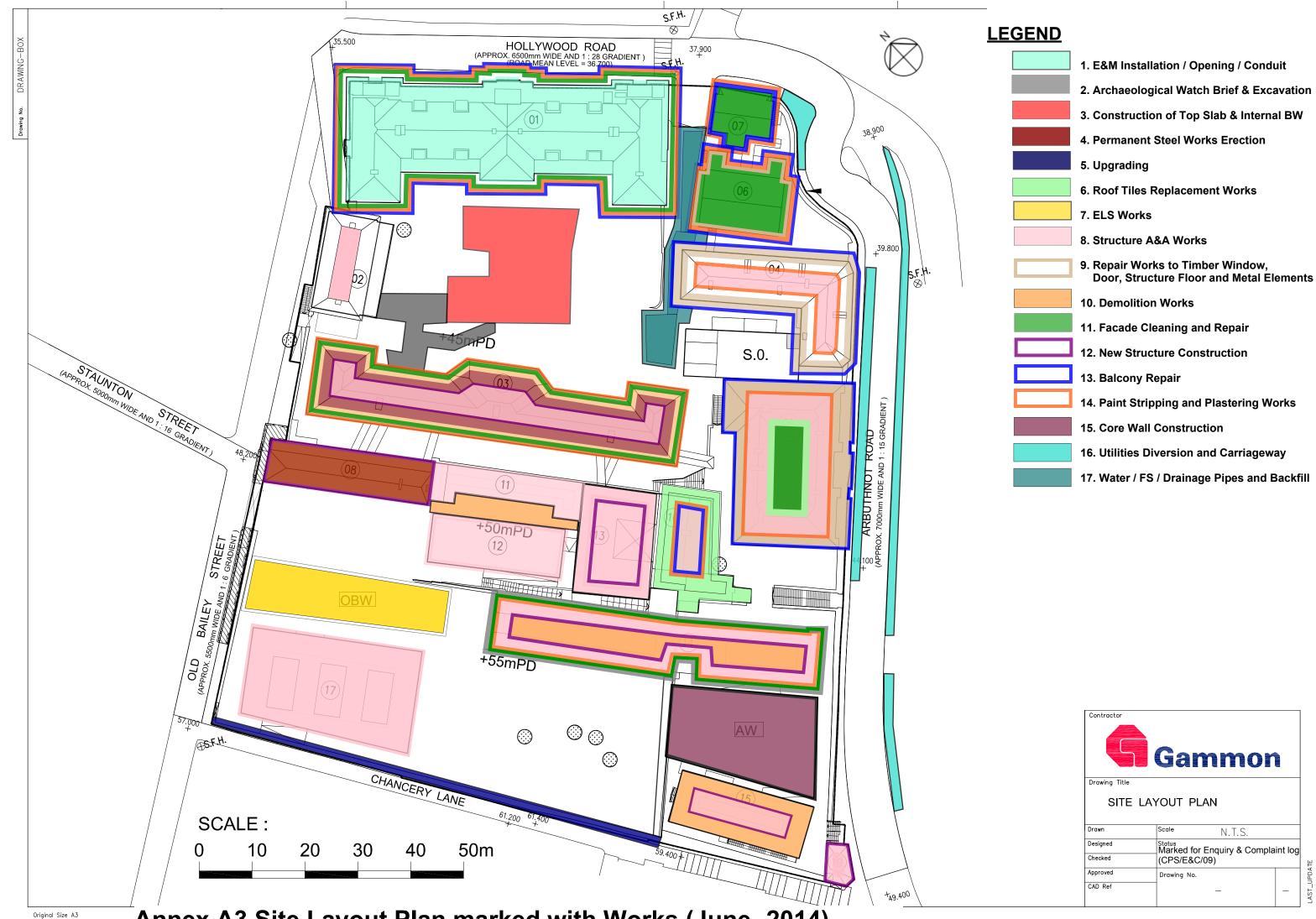
FILE: 0095646b1-A3.dgn DATE: 07/12/2011

Declared Monuments within the Project Site

Resources Management



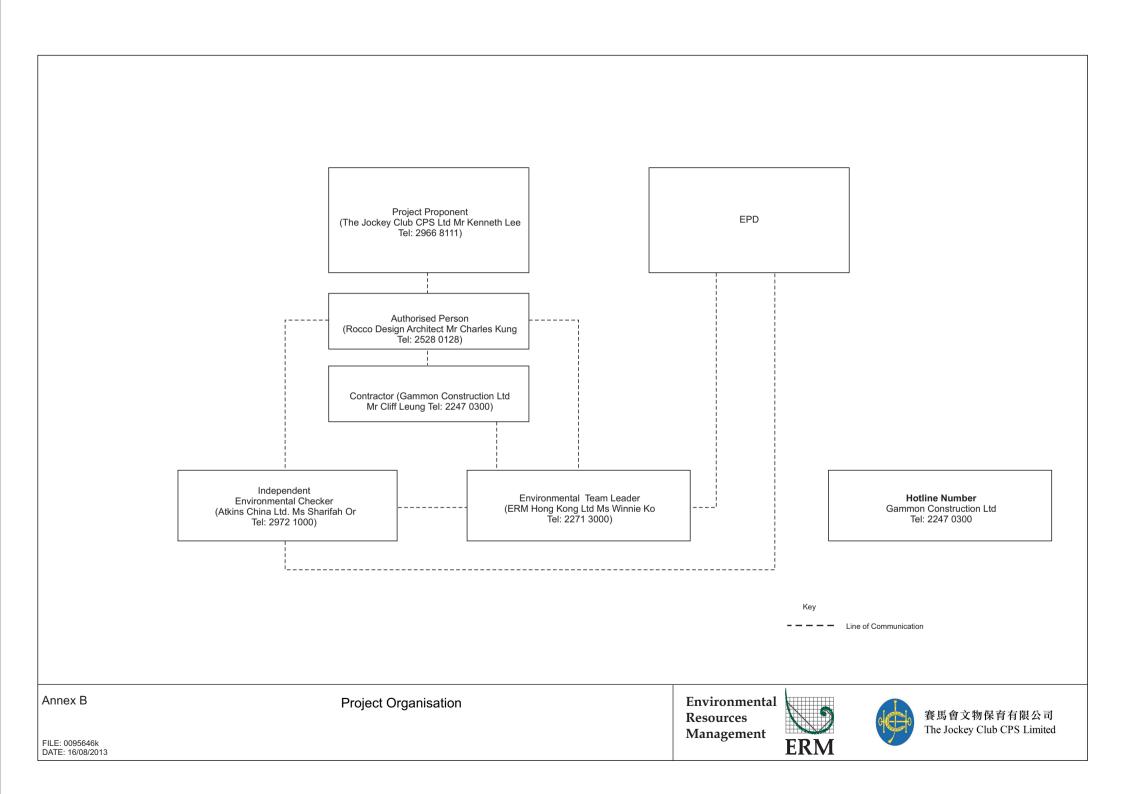




Annex A3 Site Layout Plan marked with Works (June- 2014)

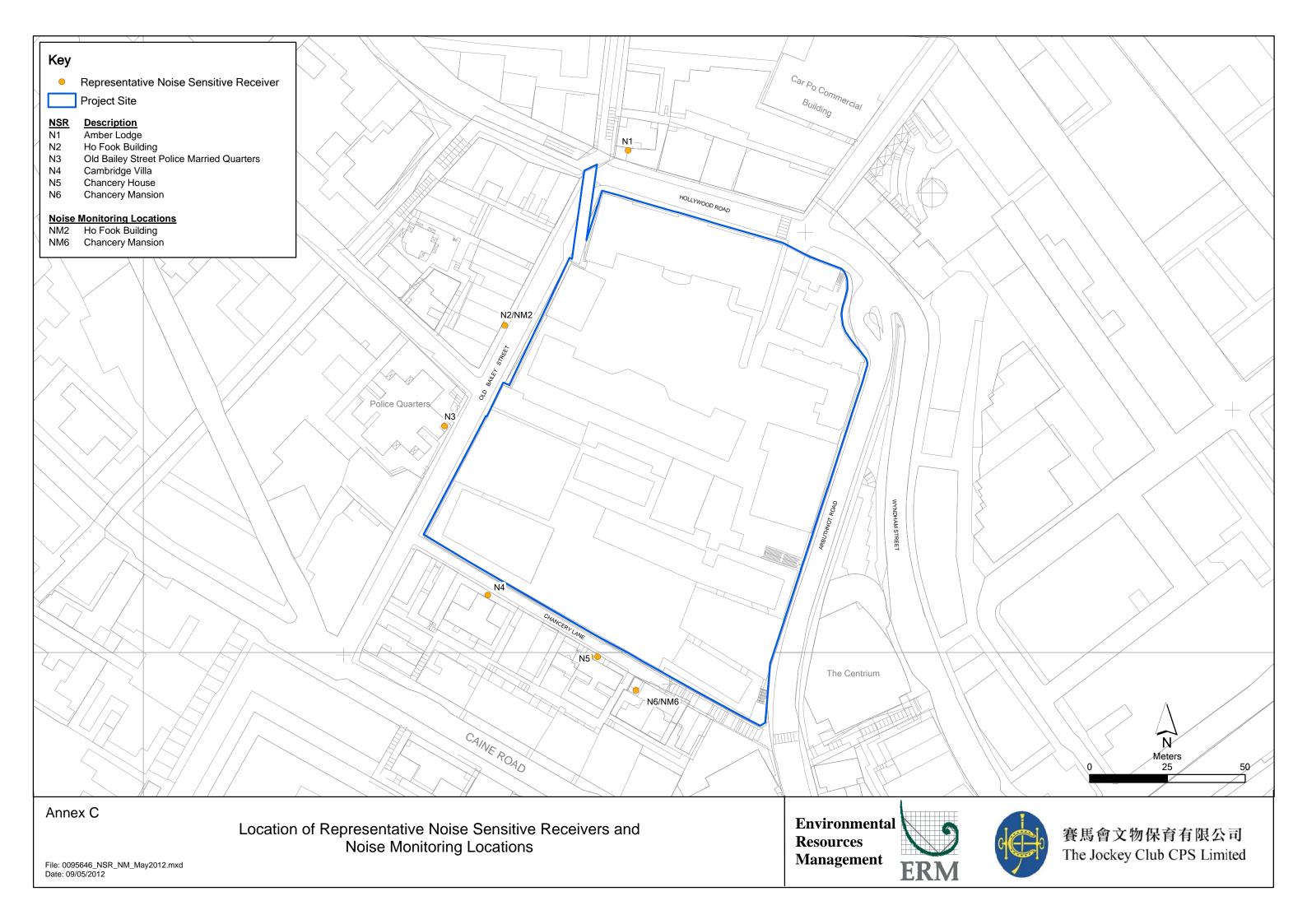
Annex B

Project Organization Chart and Contact Detail



Annex C

Locations of Noise Monitoring Stations and Noise Sensitive Receivers



Annex D

Monitoring Schedule of the Reporting Period and Next Month

Central Police Station Compound Conservation and Revitalisation (Ho Fook Building - NM2 & Chancery Mansion - NM6) Monitoring Schedule for Reporting Month - June 2014

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1-Jun	2-Jun	3-Jun	4-Jun	5-Jun	6-Jun	7-Jun
	Public Holiday	Noise Monitoring at NM2 & NM6				
8-Jun	9-Jun	10-Jun	11-Jun	12-Jun	13-Jun	14-Jun
	Noise Monitoring at NM2 & NM6					Noise Monitoring at NM2 & NM6
15-Jun	16-Jun	17-Jun	18-Jun	19-Jun	20-Jun	21-Jun
					Noise Monitoring at NM2 & NM6	
22-Jun	23-Jun	24-Jun	25-Jun	26-Jun	27-Jun	28-Jun
				Noise Monitoring at NM2 & NM6		
29-Jun	30-Jun					

Central Police Station Compound Conservation and Revitalisation (Ho Fook Building - NM2 & Chancery Mansion - NM6) Monitoring Schedule for Next Reporting Month - July 2014

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1-Jul	2-Jul	3-Jul	4-Jul	5-Jul
	Public Holiday		Noise Monitoring at NM2 & NM6			
6-Jul	7-Jul	8-Jul	9-Jul	10-Jul	11-Jul	12-Jul
		Noise Monitoring at NM2 & NM6				
13-Jul	14-Jul	15-Jul	16-Jul	17-Jul	18-Jul	19-Jul
	Noise Monitoring at NM2 & NM6					Noise Monitoring at NM2 & NM6
20-Jul	21-Jul	22-Jul	23-Jul	24-Jul	25-Jul	26-Jul
					Noise Monitoring at NM2 & NM6	
27-Jul	28-Jul	29-Jul	30-Jul	31-Jul		
				Noise Monitoring at NM2 & NM6		

Annex E

Calibration Reports for Calibrators and Sound Level Meters



輝 創 工 程 有 限 公 司

Sun Creation Engineering Limited

Calibration and Testing Laboratory

Certificate of Calibration

校正證書

Certificate No.:

C141622

證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號: IC14-0645)

Date of Receipt / 收件日期: 11 March 2014

Description / 儀器名稱

Sound Level Meter

Manufacturer / 製造商 Model No. / 型號

Rion

Serial No. / 編號

NL-52 00131627

Supplied By / 委託者

Envirotech Services Co.

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

Hong Kong

TEST CONDITIONS / 測試條件

Temperature / 温度 :

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

Relative Humidity / 相對濕度 :

 $(55 \pm 20)\%$

Line Voltage / 電壓 :

TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期

17 March 2014

TEST RESULTS / 測試結果

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

All results are within manufacturer's specification.

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

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

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

Tested By 測試

Project Engineer

Certified By 核證

K M Wu Engineer Date of Issue

20 March 2014

簽發日期

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

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Sun Creation Engineering Limited - Calibration & Testir g Laboratory

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

co香港新界屯門與安里一號青山灣機樓四樓 Tel 電話: 2927 2606 Fax/傳真: 2744 8986

E-ma l/電郵: callab@suncreation.com

Website/網址: www.suncreat on.com

Page 1 of 3



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Certificate of Calibration 校正證書

Certificate No.: C141622

證書編號

- 1. The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours, and switched on to warm up for over 10 minutes before the commencement of the test.
- 2. Self-calibration was performed before the test.
- 3. The results presented are the mean of 3 measurements at each calibration point.
- 4. Test equipment:

Equipment ID CL280 CL281 <u>Description</u>
40 MHz Arbitrary Waveform Generator
Multifunction Acoustic Calibrator

Certificate No. C140016

- 5. Test procedure: MA101N.
- 6. Results:
- 6.1 Sound Pressure Level

6.1.1 Reference Sound Pressure Level

	UUT Setting				Applied Value		IEC 61672
Range	Function	Frequency	Time	Level	Freq.	UUT Reading	Class 1 Spec.
(dB)	1 011011	Weighting	Weighting	(dB)	(kHz)	(dB)	(dB)
30 - 130	L _A	A	Fast	94.00	1	94.1	± 1.1

6.1.2 Linearity

	UU	Γ Setting	Applie	d Value	UUT	
Range	Function	Frequency	Time	Level	Freq.	Reading
(dB)		Weighting	Weighting	(dB)	(kHz)	(dB)
30 - 130	L_{A}	A	Fast	94.00	1	94.1 (Ref.)
				104.00		104.1
				114.00		114.1

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

6.2 Time Weighting

UUT Setting				Applied Value		UUT	IEC 61672
Range	Function	Frequency	Time	Level	Freq.	Reading	Class 1 Spec.
(dB)		Weighting	Weighting	(dB)	(kHz)	(dB)	(dB)
30 - 130	L_A	A	Fast	94.00	1	94.1	Ref.
			Slow			94.1	± 0.3

Sun Creation Engineering Limited - Calibration & Testing Laboratory

軍創工程有限公司 - 校正及檢測實驗所

。 香港新界屯門興安里一號青山灣機樓四樓

Tel 電話: 2927 2606 Fax/傳真: 2744 8986 E-mail/電郵: callab@suncreation.com Website/網址: www.suncreatic i.com

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Sun Creation Engineering Limited

Calibration and Testing Laboratory

Certificate of Calibration 定正證書

Certificate No.: C141622

證書編號

6.3 Frequency Weighting

6.3.1 A-Weighting

Tr Weighting										
	UUT	Setting		Appl	ied Value	UUT	IEC 61672			
Range	Function	Frequency	Time	Level	Freq.	Reading	Class 1 Spec.			
(dB)		Weighting	Weighting	(dB)		(dB)	(dB)			
30 - 130	L_A	A	Fast	94.00	63 Hz	67.8	-26.2 ± 1.5			
					125 Hz	77.8	-16.1 ± 1.5			
					250 Hz	85.4	-8.6 ± 1.4			
					500 Hz	90.8	-3.2 ± 1.4			
					1 kHz	94.1	Ref.			
					2 kHz	95.3	$+1.2 \pm 1.6$			
					4 kHz	95.1	$+1.0 \pm 1.6$			
					8 kHz	93.0	-1.1 (+2.1; -3.1)			
					12.5 kHz	89.6	-4.3 (+3.0; -6.0)			

6.3.2 C-Weighting

	UUT Setting			Applied Value		UUT	IEC 61672
Range	Function	Frequency	Time	Level	Freq.	Reading	Class 1 Spec.
(dB)		Weighting	Weighting	(dB)		(dB)	(dB)
30 - 130	L _A	С	Fast	94.00	63 Hz	93.2	-0.8 ± 1.5
					125 Hz	93.8	-0.2 ± 1.5
					250 Hz	94.0	0.0 ± 1.4
					500 Hz	94.1	0.0 ± 1.4
					1 kHz	94.1	Ref.
					2 kHz	93.9	-0.2 ± 1.6
					4 kHz	93.3	-0.8 ± 1.6
					8 kHz	91.1	-3.0 (+2.1; -3.1)
					12.5 kHz	87.7	-6.2 (+3.0 ; -6.0)

Remarks: - UUT Microphone Model No.: UC-59 & S/N: 04663

- Mfr's Spec. : IEC 61672 Class 1

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

250 Hz - 500 Hz : $\pm 0.30 \text{ dB}$ 1 kHz $:\pm 0.20 \text{ dB}$ 2 kHz - 4 kHz $: \pm 0.35 \text{ dB}$ 8 kHz $: \pm 0.45 \text{ dB}$ 12.5 kHz

 $: \pm 0.70 \text{ dB}$ 104 dB: 1 kHz $: \pm 0.10 \text{ dB (Ref. 94 dB)}$

114 dB: 1 kHz $: \pm 0.10 \text{ dB (Ref. 94 dB)}$

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

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

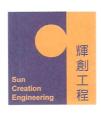
Sun Creation Engineering Limited - Calibration & Testing Laboratory

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

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Tel 電話: 2927 2606 Fax/傳真: 2744 8986 E-mail/電郵: callab@suncreation.com Website/網址: www.suncreatic i.com

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Sun Creation Engineering Limited

Calibration and Testing Laboratory

Certificate of Calibration

校正證書

Certificate No.:

C134306

證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號: IC13-1709)

Description / 儀器名稱

Sound Level Calibrator

Manufacturer / 製造商 Model No. / 型號

Rion NC-73

Serial No./編號

10786708

Supplied By / 委託者

Envirotech Services Co.

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

Hong Kong

TEST CONDITIONS / 測試條件

Temperature / 溫度 :

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

Relative Humidity / 相對濕度:

 $(55 \pm 20)\%$

Line Voltage / 電壓 :

TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期

12 July 2013

TEST RESULTS / 測試結果

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

All results are within manufacturer's specification.

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

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

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

Tested By

測試

Certified By 核證

K C/Lee

K M Wu

Date of Issue

Website/網址: www.suncreation.com

15 July 2013

簽發日期

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Sun Creation Engineering Limited

Calibration and Testing Laboratory

Certificate of Calibration 校正證書

Certificate No.:

C134306

證書編號

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

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

3. Test equipment:

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

Measuring Amplifier

Certificate No. C133632 DC130171 C120886

4. Test procedure: MA100N.

5. Results:

5.1 Sound Level Accuracy

UUT	Measured Value	Mfr's Spec.	Uncertainty of Measured Value
Nominal Value	(dB)	(dB)	(dB)
94 dB, 1 kHz	93.8	± 0.5	± 0.2

5.2 Frequency Accuracy

rrequericy Accuracy			
UUT Nominal Value	Measured Value	Mfr's	Uncertainty of Measured Value
(kHz)	(kHz)	Spec.	(Hz)
1	0.990	1 kHz ± 2 %	± 1

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

Note

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

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Annex F

Event / Action Plans for Noise

Annex F Event and Action Plan for Noise

Event	Action									
	Environmental Team (ET)		dependent Environmental tecker (IEC)	A	uthorised Person (AP)	C	ontractor			
Action Level	 Notify IEC and Contractor; Carry out investigation; Report the results of investigation to the IEC, AP and Contractor; Discuss with the Contractor and formulate remedial measures; Increase monitoring frequency to check mitigation effectiveness. 	3.	Review the analysed results submitted by the ET; Review the proposed remedial measures by the Contractor and advise the AP accordingly; Supervise the implementation of remedial measures.	 2. 3. 4. 	Confirm receipt of notification of failure in writing; Notify Contractor; Require Contractor to proposed remedial measures for the analysed noise problem; Ensure remedial measures are properly implemented.	1.	Submit noise mitigation proposals to IEC; Implement noise mitigation proposals.			
Limit Level	 Identify source; Inform IEC and AP; Repeat measurements to confirm findings; Increase monitoring frequency; Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; Inform IEC, AP and EPD the causes and actions taken for the exceedances; Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and AP informed of the results; If exceedance stops, cease additional monitoring. 	2.	Discuss amongst AP, ET, and Contractor on the potential remedial actions; Review Contractors remedial actions whenever necessary to assure their effectiveness and advise the AP accordingly; Supervise the implementation of remedial measures.	 1. 2. 3. 4. 5. 	Confirm receipt of notification of failure in writing; Notify Contractor; Require Contractor to propose remedial measures for the analysed noise problem; Ensure remedial measures properly implemented; If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated.	 1. 2. 3. 4. 5. 	Take immediate action to avoid further exceedance; Submit proposals for remedial actions to IEC within 3 working days of notification; Implement the agreed proposals; Resubmit proposals if problem still not under control; Stop the relevant portion of works as determined by the AP until the exceedance is abated.			

Annex G

Summary of Implementation Status

Annex G Implementation Schedule for Environmental Protection Measures

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
Culture	al Heritag	ge e			
S3.9.1	S3.2.6	Subject to the outcome of the archaeological investigation, if archaeological deposits are identified to be impacted by the proposed development, appropriate mitigation measures will be recommended and agreed with AMO.	In accordance with the recommendations in the Archaeological Action Plan (AAP) issued on 21 Dec 11 and approved on 30 Dec 11 by AMO	During detailed design and construction	No field work in the reporting month.
S3.9.2	S3.3.1	Vibration Monitoring A baseline condition survey and baseline vibration impact will be conducted by a specialist for the approval of AMO and Buildings Department prior to commencement of the construction works to define the vibration control limits and recommend a vibration monitoring proposal for the concerned historic buildings and structures in and outside CPS for AMO's prior approval before commencement of the construction works.	Historic buildings and structures in CPS, the granite walls at Old Bailey Street and the proposed Grade 3 historic building (No. 20 Hollywood Road)	During detailed design and construction	√
S3.9.2	\$3.3.3	Compliance of the Approved Measures and Auditing Staff training by an experience building conservation expert or relevant competent person(s) in the environmental team of the project should be provided to the on-site staffs, contractors, sub-contractors and workers of the project before commencement of works to ensure their full understanding of the approved protection schedule, restoration proposal and work methodologies related to cultural heritage, and their respective responsibilities in the implementation of the environmental protection measures. Regular site audit for cultural heritage should be carried out in the construction phase by an experience building conservation expert in the environmental team ("the Heritage Checker") to investigate the site practice of the contractors and workers and their compliance of the approved work methodologies with respect of conservation works, mitigations for cultural heritage and any related works. A detailed	Whole site	Prior to and during construction	

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
		proposal of the regular audit such as methodology (e.g. performance and monitoring indicators, control tools, frequency of the audit, etc.) and the conservation professionals to be engaged should be agreed with AMO prior to work commencement. The Heritage Checker shall also attend the regular site meetings with AMO and report the compliance and effectiveness of the mitigation measures for cultural heritage.			
S3.9.3	53.3.4	Archival Recording An archival recording should be conducted to provide a detailed reference for the update of the Conservation Management Plan and inventory of historical features of the monuments, the preparation of asbuilt drawings showing the condition of the historic buildings and structures after the completion of the construction works. These archival records will be a reference source for future maintenance of the character defining elements, conservation of the monuments, interpretation and conservation education of the Site. The archival recording shall include but not limit to the video and photographic recording on the detailed process of the repair trials for different kinds of historical features, conservation works of character defining elements and historic fabrics of the monuments, and a written records of any new changes to the detailed design made in the construction phase illustrate with photos and drawings. A full set of the archives records (including both hard and soft copies) should be submitted to the AMO for approval after the work completion for record purpose. Any new findings related to the conservation of built heritage in the Site identified during the detailed design stage and construction phases shall be properly recorded in details for notification to the AMO and update of the Conservation Management Plan.	Whole Site	During detailed design, construction and prior to operation	N/A – Archival recording will be conducted at later stage.
S3.7.3	-	General Construction Methods Prior to the commencement of the modification/refurbishment works at an existing building or structure (e.g. masonry walls near the Old Bailey Wing), a site survey will be carried out by the design team, and all building dimensions and levels of the building/structure shown will be	Whole site	During construction	

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
S3.7.1 & 3.7.2	-	checked and confirmed by the contractor. Non-percussive piling methods will be adopted for the construction of the foundation for the new buildings. Protective and precaution measures to the existing buildings and structure adjacent to the work area (including the proposed Grade 3 historic building (No. 20 Hollywood road) and the granite boundary walls between the Ablutions Block of the police station (building no. 08) and the General Office of the prison area (building no. 18) which is adjacent to the new construction of the Old Bailey Wing and for an old granite walls at Old Bailey Street within 15m from the new construction) shall be provided to avoid damage to the existing features and to safeguard the structural integrity during the course of construction. Small scale handheld pneumatic tools with minimal vibration impact to the existing buildings/ structures are selected so as to have a better logistic and handling at the existing buildings and structures, which usually have only narrow working areas. In cases of the local demolition of structural elements, demountable platforms will be erected to temporarily support the affected area and divert the loading from above to avoid instability and create excessive cracking and settlement of the building/structure. Implementation and update of the Conservation Management Plan (CMP). Any new findings related to the conservation of the built heritage in the site identified during the detailed design and construction stage shall be properly recorded in details for the notification to the AMO and update in the CMP. After the construction, a cartographic and photographic recording on the restored historic buildings, historic features and the site shall be conducted and the following records shall be included into the CMP as appendices for updating and record purpose: • one set of measured drawings and photographic records showing the as-built condition of historic buildings and structures; and • an updated inventory list of the historic features together with the	Whole site	During detailed design, construction, post-construction and operation	√- CMP was implemented during the reporting month. There were no updates for the CMP.

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
Landsca	ipe & Visu	al		1	
S4.7.27	-	In-situ Tree Protection - Cordon Zone (CZ) Cordon off each tree along its drip line (below the crown) with a chain-link fencing of 2.5 m height with padlocked gate, allowing limited access to area only to authorized persons. The base of the perimeter fence will be sealed up to 30 cm height to ensure that no construction drainage water will enter. If grouting is to be conducted less than 5 m from the edge of the CZ, a waterproof membrane will be installed below the ground to a depth of 1.5 m on the outer edge of the CZ to prevent the subsurface lateral movement of contaminated construction wastewater from intruding the soil inside the CZ.	Whole site	During construction	√ - Part of the cordon zone of Tree-5 has been used as a worker storage room. The Contractor was recommended to pay utmost attention to potential land pollution at the worker storage room at all times. Scaffolding has been set up close to Tree-5 within the cordon zone. The Contractor was reminded to perform proper measures to protect Tree-5 during the carrying out of works within the cordon zone.
S4.7.2	-	All edges of the CZ that will be affected by excavation will undergo root pruning by a trained arborist or horticulturist, in advance of the earth work. The entire affected length of the CZ, plus 3 m additional length at both ends, shall be designated as the root pruning segment (RPS). The require trench will be opened manually in the RPS, be 1.5 m deep and 1 m wide, and closed on the same day after pruning with a good soil mix. All roots with a diameter >20 mm encountered in the course of trench opening shall be cut flushed with the inner wall of the trench. If the RPS exceeds one-quarter of the CZ circumference, the root pruning should be conducted in two stages. Each phase will tackle half of the RPS length. After the first phase, the tree will be allowed to recuperate for not less than four months before the second phase root pruning is conducted. The RPS shall be protected by sheet piles along the outer edge. The rig that installs the piles and the associated operations shall not intrude into the CZ or injure the protected tree.	Whole site	During construction	N/A – no root pruning has been conducted yet
S4.7.2	-	In-situ Tree Protection - Foliage cleansing system A sprinkler cleansing system will be installed either in the crown of the tree or at a suitable location on an adjacent building to provide the	Whole site	During construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
		means to wash the foliage of the accumulated dust when necessary, particularly in the dry season.			
S4.7.2	S4	In-situ Tree Protection - Monthly inspection Monthly inspection of affected trees by an experienced and appropriately trained arborist or horticulturist using Form 1 – Tree Group Inspection Form and Form 2 – Tree Risk Assessment Form developed by Development Bureau (http://www.trees.gov.hk/en/doc/TRAGuideline_July2010version_combine.pdf) or a form designed by a tree expert and approved by Tree Management Office. All irregularities that deviate from the recommended tree protection measures, or could impose deleterious impacts on the protected trees, must be reported to the authorized person or the tree expert within two days.	Whole site	During construction	✓
S4.7.2	-	Light Control Control of night-time lighting shall be implemented to minimise impact to adjacent VSRs.	Whole site	During construction and operation	√
S4.7.2	S4	A new planting site has been identified for compensatory tree planting in the Parade Ground. The planting is to compensate for felling of T10. The existing tree site will be enlarged to become a wide tree strip to accommodate at least six trees. The entire strip of land that accommodates T1 to T4 should be revamped to improve the soil condition for future tree growth. The new tree strip should be 4 m wide and covered by porous unit pavers to permit the entry of rain and irrigation water and air exchange between the soil and the atmosphere. The unit pavers should be supported by small columns to create a vault-like structure so as to avoid compaction of the underlying soil due to pedestrian trampling. The unit pavers will be movable to provide access to the soil underneath so that fertilizers and conditioners could be added on a	At identified compensatory tree planting location at the Parade Ground	During detailed design and construction	N/A – Compensatory Tree Planting will be conducted at later stage.

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
		regular basis. The air conditioner unit currently located near the proposed planting site should also be removed. This new tree planting site should also be provided with proper irrigation.			
		Pursuant to the "Environment, Transport and Works Bureau Technical Circular (Works) No. 3/2006 Tree Preservation", the compensation ratio should preferably be 1:1 according to trunk girth. T10 has a DBH of 20 cm (<i>Table 4.3</i>), and it is proposed that six trees of heavy standard size be planted, each with a DBH of around 10 cm and root balls of not less than 0.75 m diameter and 0.75 m depth,. Since the aggregate DBH of the new trees would be 60 cm, the rate of compensation is equivalent to three times the DBH of T10, far beyond the requirements			
		The six replacement trees should be planted in the new tree strip in two staggered rows, maximising distance between each tree to avoid mutual interference in the future. It is recommended that the species selected should have a small final dimension of less than 10 m height given the proximity to built structures such as the retaining wall and buildings. Two each of the outstanding and related flowering tree species connected to local natural history are suggested::			
		 Bauhinia 'Blakeana' a native evergreen species with deep mauve flowers and an exceptionally long flowering period from late autumn to early spring. 			
		 Bauhinia purpure, a native evergreen with lighter purple flowers from late autumn to early winter. 			
		 Bauhinia variegata, an exotic deciduous species, with pale pinkish flowers in spring to early summer often when the tree has little or no leaves. 			
S4.7.2	S4	Vertical Greening	Inner Southern Wall	During detailed design and	N/A – No vertical greening was conducted during the reporting month.
		Within the limitations of the conservation of the CPS character, greening of vertical structures should be provided where possible.		construction	
		As such it is recommended that the inner southern wall of the Site be planted as a green wall. The plantings should be inserted in between each of the large protruding piers and an offset be made from both the			

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
		top and bottom edge so that old and new are equally visible. An independent frame should be strategically positioned in order to ensure minimal disturbance to the original wall, and provide the main structural support and planting surface for the green wall. The frame on to which the new green will be planted should contain its own irrigation system so that moisture for the plants will remain mainly on the planting surface and not the exiting wall behind. The planting chosen should be appropriate to the Hong Kong climate, requiring relatively little maintenance to sustain the quality of both plants and wall.			
S4.7.2	-	New Custom Paving New, Patterned, High Quality, Concrete Custom Pavers should replace most of the existing paving in the open spaces.	Whole site	During detailed design and construction	N/A – No custom paving was conducted during the reporting month.
S4.7.2	S4	In-situ Tree Protection - Quarterly inspection Quarterly Inspection of affected and newly planted trees by an experienced and appropriately trained arborist or horticulturist using Form 1 – Tree Group Inspection Form and Form 2 – Tree Risk Assessment Form developed by Development Bureau (http://www.trees.gov.hk/en/doc/TRAGuideline_July2010version_combine.pdf) or a form designed by a tree expert and approved by Tree Management Office for a period of 12 months after construction.	Whole site	During post construction and operation	N/A – The quarterly inspection will be conducted at later stage.
Noise	II.			1	
S5.9	-	 The following site practices should be followed during the construction of the Project: Only well-maintained plant will be operated on-site and plant will be serviced regularly during the construction phase; Silencers or mufflers on construction equipment will be utilised and will be properly maintained during the construction phase; Mobile plant, if any, will be sited as far away from NSRs as possible; 	Whole Site	During construction	

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
		 Machines and plant (such as trucks) that may be in intermittent use will be shut down between work periods or will be throttled down to a minimum; Plant known to emit noise strongly in one direction will, wherever possible, be orientated so that the noise is directed away from the nearby NSRs; and Material stockpiles and other structures will be effectively utilised, wherever practicable, in screening noise from on-site construction activities. 			
S5.9	-	Noise insulating sheet would be adopted for certain PME (eg drill rig, excavator for demolition of existing structures, etc). The noise insulating sheet should be deployed such that there would be no opening or gaps on the joints.	Whole Site	During construction	√ ·
S5.9	-	Use temporary noise barriers to mitigate the noise impact arising from the construction works, particularly for low-rise NSRs. Movable noise barriers of 3 m in height with skid footing should be used and located within a few metres of stationary plant and mobile plant such that the line of sight to the NSR is blocked by the barriers. The length of the barrier should be at least five times greater than its height. The noise barrier material should have a superficial surface density of at least 7 kg m ⁻² and have no openings or gaps.	Whole Site	During construction	√
S5.9	-	Use quiet PME as far as practicable to mitigate the construction noise impact.	Whole Site	During construction	√ ·
S5.9	-	Scheduling of construction activities with identified grouping of PMEs.	Whole Site	During construction	√
S5.11	S5	Weekly noise monitoring will be undertaken at the representative NSRs N2 Ho Fook Building and N5 Chancery House. Monthly site audits will be conducted to ensure that the recommended mitigation measures are properly implemented during the construction stage.	Whole Site	During construction	√ ·
Air Qu S6.8.1		Dust control measures stipulated in the <i>Air Pollution Control</i> (<i>Construction Dust</i>) <i>Regulation</i> will be implemented during the construction phase to control the potential fugitive dust emissions.	Whole Site	During construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
S6.8.1	-	In particular: Temporary stockpiles of dusty materials will be either covered entirely by impervious sheets; placed in an area sheltered on the top and three sides; or sprayed with water to maintain the entire surface wet at all the time.	Whole Site	During construction	√ ·
S6.8.1	-	Impervious sheet will be provided for skip hoist for material transport.	Whole Site	During construction	$\sqrt{}$
S6.8.1	-	Vehicle washing facilities will be provided at the designated vehicle exit points.	Whole Site	During construction	√
S6.8.1	-	Every vehicle will be washed to remove any dusty materials from its chassis and wheels immediately before leaving the worksite.	Whole Site	During construction	V
S6.8.1	-	Road sections between vehicle-wash areas and vehicular entrances will be paved.	Whole Site	During construction	V
S6.8.1	-	The load carried by the trucks will be covered entirely to ensure no dust emission from the vehicles.	Whole Site	During construction	√
S6.8.1	-	Hoarding of not less than 2.4m high from ground level will be provided along the Project Site boundary adjoining a road where the new buildings (Old Bailey Wing and Arbuthnot Wing) will be constructed.	Whole Site	During construction	V
S6.8.1	-	Stockpiles of more than 20 bags of cement, dry pulverised fuel ash and dusty construction materials will be covered entirely by impervious sheeting sheltered on top and 3-sides.	Whole Site	During construction	V
S6.8.1	-	An effective dust screen will be provided to enclose scaffolding, if required, from the ground floor level of building for construction of superstructure of the new buildings.	Whole Site	During construction	√
S6.8.1	-	Impervious dust screen or sheeting will be implemented for demolition of structures and renovation of outer surfaces of structures that abuts or fronts open area accessible to the public to no less than 1m higher than the highest level of the structure being demolished.	Whole Site	During construction	√
S6.8.1	-	The area at which demolition work takes place will be sprayed with water or dust suppression chemical immediately prior to, during and immediately after the demolition activity.	Area for Demolition Work	During construction	V

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
S6.8.1	-	ULSD will be used for all construction plant on-site.	Whole Site	During construction	V
S6.8.1	-	The engine of the construction equipment or trucks during idling will be switched off.	Whole Site	During construction	V
S6.8.1	-	Site practices such as regular maintenance and checking of construction equipment deployed on-site will be conducted to avoid any black smoke emissions and to minimise gaseous emissions.	Whole Site	During construction	N/A – Not observed.
S6.10	S3.2	Monthly environmental site audits to ensure that appropriate dust control measures are properly implemented and good construction site practices are adopted throughout the construction period.	Whole Site	During construction	V
Water (Quality		I		
S7.6	-	Channels, earth bunds or sand bag barriers will be provided on site to direct stormwater to silt removal facilities. The design of silt removal facilities will make reference to the guidelines in <i>Appendix A1</i> of <i>ProPECC PN 1/94</i> . All drainage facilities and erosion and sediment control structures will be inspected on a regular basis and maintained to confirm proper and efficient operation at all times and particularly during rainstorms. Deposited silt and grit will be removed regularly.	Whole Site	During construction	V
S7.6	-	All drainage facilities and erosion and sediment control structures will be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rainstorms. Deposited silt and grit will be removed regularly and disposed of.	Whole Site	During construction	N/A – Not observed.
S7.6	-	Measures will be taken to reduce the ingress of stormwater into excavation areas. If the excavation of the concrete foundation is to be carried out in wet season, they will be dug and backfilled in short sections wherever practicable. Water pumped out from trenches or foundation excavations will be discharged into stormwater drains via silt removal facilities.	Whole Site	During construction	N/A – Not observed.
S7.6	-	Open stockpiles of excavated and demolition materials will be covered with tarpaulin or similar fabric during rainstorms. Measures will be taken to prevent the washing away of residues, chemicals or debris into any drainage system.	Whole Site	During construction	V

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
S7.6	-	Manholes (including newly constructed ones) will always be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system.	Whole Site	During construction	N/A – Not observed.
S7.6	-	Precautions will be taken when a rainstorm is imminent or forecasted, and actions to be taken during or after rainstorms are summarised in Appendix A2 of <i>ProPECC PN 1/94</i> . Particular attention will be paid to the control of silty surface runoff during storm events.	Whole Site	During construction	N/A – Not observed.
S7.6	-	All temporary and permanent drainage pipes and culverts provided to facilitate runoff discharge will be adequately designed for the controlled release of stormwater flows. All sediment traps will be regularly cleaned and maintained. The temporary diverted drainage will be reinstated to the original condition when the construction work has finished or the temporary diversion is no longer required.	Whole Site	During construction	N/A – Not observed.
S7.6	-	Vehicle and plant servicing areas, vehicle washing bays and lubrication bays will, as far as possible, be located within roofed areas. The drainage in these covered areas will be connected to foul sewers via a petrol interceptor.	Whole Site	During construction	N/A – Not observed.
S7.6	-	Oil leakage or spillage will be contained and cleaned up immediately. Waste oil will be collected and stored for recycling or disposal.	Whole Site	During construction	N/A – Not observed.
S7.6	-	Waste streams classifiable as chemical wastes will be properly stored, collected and treated.	Whole Site	During construction	V
S7.6	-	All fuel tanks and chemical storage areas will be provided with locks and be sited on paved areas.	Whole Site	During construction	V
S7.6	-	The storage areas will be surrounded by bunds with a capacity equal to 110% of the storage capacity of the largest tank to prevent spilled oil, fuel and chemicals from reaching the receiving waters.	Whole Site	During construction	V
S7.6	-	The Contractors will prepare guidelines and procedures for immediate clean-up actions following any spillages of oil, fuel or chemicals.	Whole Site	During construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
S7.6	-	Surface runoff from bunded areas will pass through oil/grease traps prior to discharge to the stormwater system	Whole Site	During construction	N/A – Not observed.
S7.6	-	The stormwater discharge from the site will be monitored as part of the routine monitoring under the WPCO licence, if applicable.	Whole Site	During construction	N/A – Not observed.
S7.6	-	The existing toilet facilities of the CPS will be available to the construction workforce. The sewage will be discharged to the public sewer.	Whole Site	During construction	√
S7.8	S5.2	Monthly site audits of the works areas will be carried out during the construction phase to monitor the environmental performance of the Project and to enable prompt actions to rectify any malpractice which may give rise to water pollution problem.	Whole Site	During construction	√
Waste N	Manageme	nt			
S8.5	\$6.3.1 & Table 6.1	General The Contractor shall apply for and obtain all the necessary waste disposal permits or licences are obtained prior to the commencement of the construction works.	Whole Site	During construction	√
S8.5	-	Management of Waste Disposal The construction contractor will open a billing account with the EPD. Every construction waste or public fill load to be transferred to the Government waste disposal facilities such as public fill reception facilities, sorting facilities, landfills will require a valid "chit" which contains the information of the account holder to facilitate waste transaction recording and billing to the waste producer.	Whole Site	During construction	√
S8.5	S6.2	A trip-ticket system will also be established to monitor the disposal of construction waste at landfill and to control fly-tipping. The trip-ticket system will be included as one of the contractual requirements and implemented by the contractor.	Whole Site	During construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
S8.5	S6 & Table 6.1	A recording system for the amount of wastes generated/recycled and disposed of will be established during the construction phase.	Whole Site	During construction	V
S8.5	S6.3	Reduction of Construction Waste Generation C&D material will be segregated on-site into public fill and construction waste and stored in different containers or skips to facilitate reuse of the public fill and proper disposal of the construction waste. Specific areas of the work site will be designated for such segregation and storage if immediate use is not practicable.	Whole Site	During construction	√
S8.5	S6	<u>Chemical Waste</u> The contractor will register as a chemical waste producer with the EPD.	Whole Site	During construction and operation	V
S8.5	S6	 Containers used for storage of chemical waste shall: Be suitable for the substance they are holding, resistant to corrosion, maintained in a good condition, and securely closed; Have a capacity of less than 450 L unless the specifications have been approved by the EPD; and Display a label in English and Chinese in accordance with instructions prescribed in <i>Schedule 2</i> of the <i>Regulations</i>. 	Whole Site	During construction and operation	V
S8.5	S6	 Storage areas for chemical waste shall: Be clearly labelled and used solely for the storage of chemical waste; Be enclosed on at least 3 sides; Have an impermeable floor and bunding, of capacity to accommodate 110% of the volume of the largest container or 20% by volume of the chemical waste stored in that area, whichever is the greatest; Have adequate ventilation; Be covered to prevent rainfall entering (water collected within the bund must be tested and disposed of as chemical waste, if necessary); and Be arranged so that incompatible materials are appropriately separated. 	Whole Site	During construction and operation	

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
S8.5	S6	A licensed contractor shall be employed to collect chemical waste for delivery to a licensed treatment facility.	Chemical Waste Treatment Centre at Tsing Yi	During construction and operation	√ ·
S8.5	S6 & Table 6.1	General Refuse General refuse will be stored in enclosed bins separately from construction and chemical wastes. The general refuse will be delivered to the transfer station, separately from construction and chemical wastes, on a daily basis to reduce odour, pest and litter impacts.	Whole site	During construction	V
S8.5	S6	Recycling bins will be provided at strategic locations to facilitate recovery of aluminium can and waste paper from the Site. Materials recovered will be sold for recycling.	Whole site	During construction and operation	√
S8.5	S6	Staff Training At the commencement of the construction works, training will be provided to workers on the concepts of site cleanliness and on appropriate waste management procedures, including waste reduction, reuse and recycling.	Whole site	Commencement of construction	√ ·
S8.7	S6.1 & 6.3	Monthly audits of the waste management practices will be carried out during the construction phases to determine if wastes are being managed in accordance with the recommended good site practices. The audits will examine all aspects of waste management including waste generation, storage, recycling, transport and disposal.	Whole site	During construction	√

Remark:

- $\sqrt{}$ Compliance of Mitigation Measures
- Compliance of Mitigation but need improvement
- x Non-compliance of Mitigation Measures
- ▲ Non-compliance of Mitigation Measures but rectified by Gammon Construction Ltd
- Δ Deficiency of Mitigation Measures but rectified by Gammon Construction Ltd
- N/A Not Applicable in Reporting Period

Annex H

Noise Monitoring Results

Annex H Noise Monitoring Results

Daytime Noise Monitoring Results

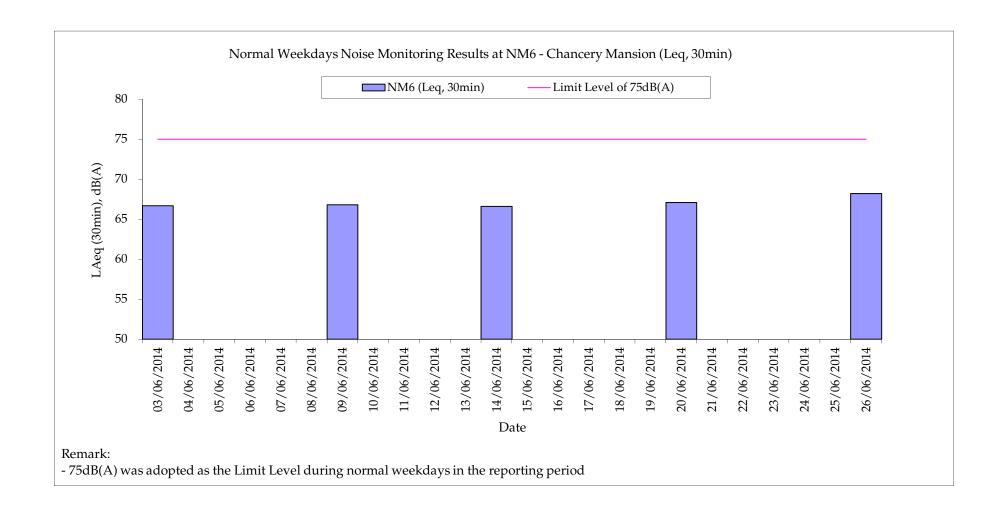
NM6 Chancery Mansion

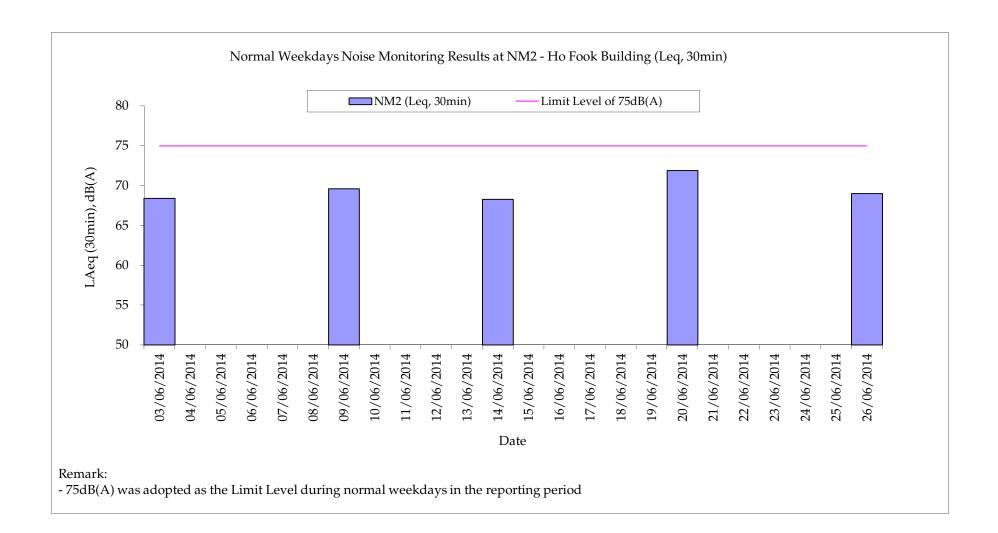
Date	Start Time	End Time	Weather	Noise level (dB(A)), 30 min			Major Construction Noise Source(s) Observed	Other Noise Source(s)	Remarks	Wind Speed (m/s)	Noise Meter Model / ID	Calibrator Model / ID
				Leq	L10	L90		Observed		(/		
3-Jun-14	10:08	10:38	Fine	66.7	68.2	64.3	Interior fitting, lifting (within the project site)	Traffic Noise	-	0.2	RION- NL52 (S/N 00131627)	RION - NC73 (S/N 10786708)
9-Jun-14	9:43	10:13	Sunny	66.8	67.7	65.7	Interior fitting, lifting (within the project site)	Traffic Noise	-	0.2	RION- NL52 (S/N 00131627)	RION - NC73 (S/N 10786708)
14-Jun-14	9:50	10:20	Sunny	66.6	68.2	64.2	Interior fitting, lifting (within the project site)	Traffic Noise	-	0.2	RION- NL52 (S/N 00131627)	RION - NC73 (S/N 10786708)
20-Jun-14	13:00	13:30	Cloudy	67.1	68.6	65.3	Interior fitting, lifting (within the project site)	Traffic Noise	-	0.2	RION- NL52 (S/N 00131627)	RION - NC73 (S/N 10786708)
26-Jun-14	10:28	10:58	Sunny	68.2	69.5	66.8	Interior fitting (within the project site)	Traffic Noise	-	0.2	RION- NL52 (S/N 00131627)	RION - NC73 (S/N 10786708)
			Min.	66.6								
			Max.	68.2								

NM2 Ho Fook Building

Date	Start Time	End Time	Weather	Noise level (dB(A)), 30 min			Major Construction Noise	Other Noise		Wind Speed	Noise Meter	Calibrator
				Leq	L10	L90	Source(s) Observed	Source(s) Observed	Remarks	(m/s)	Model / ID	Model / ID
3-Jun-14	10:45	11:15	Fine	68.4	70.2	65.5	Interior fitting, lifting within the project site)	Traffic noise	-	0.2	RION- NL52 (S/N 00131627)	RION - NC73 (S/N 10786708)
9-Jun-14	10:20	10:50	Sunny	69.6	71.0	66.2	Interior fitting, lifting (within the project site)	Traffic Noise	-	0.2	RION- NL52 (S/N 00131627)	RION - NC73 (S/N 10786708)
14-Jun-14	10:27	10:57	Sunny	68.3	69.7	65.3	Interior fitting, lifting (within the project site)	Traffic Noise	-	0.2	RION- NL52 (S/N 00131627)	RION - NC73 (S/N 10786708)
20-Jun-14	13:38	14:08	Cloudy	71.9	73.7	68.6	Lifting, interior fitting (within the project site)	Traffic Noise	-	0.2	RION- NL52 (S/N 00131627)	RION - NC73 (S/N 10786708)
26-Jun-14	8:34	9:04	Sunny	69.0	70.6	65.5	Interior fitting (within the project site)	Traffic Noise	-	0.2	RION- NL52 (S/N 00131627)	RION - NC73 (S/N 10786708)
			Min.	68.3								

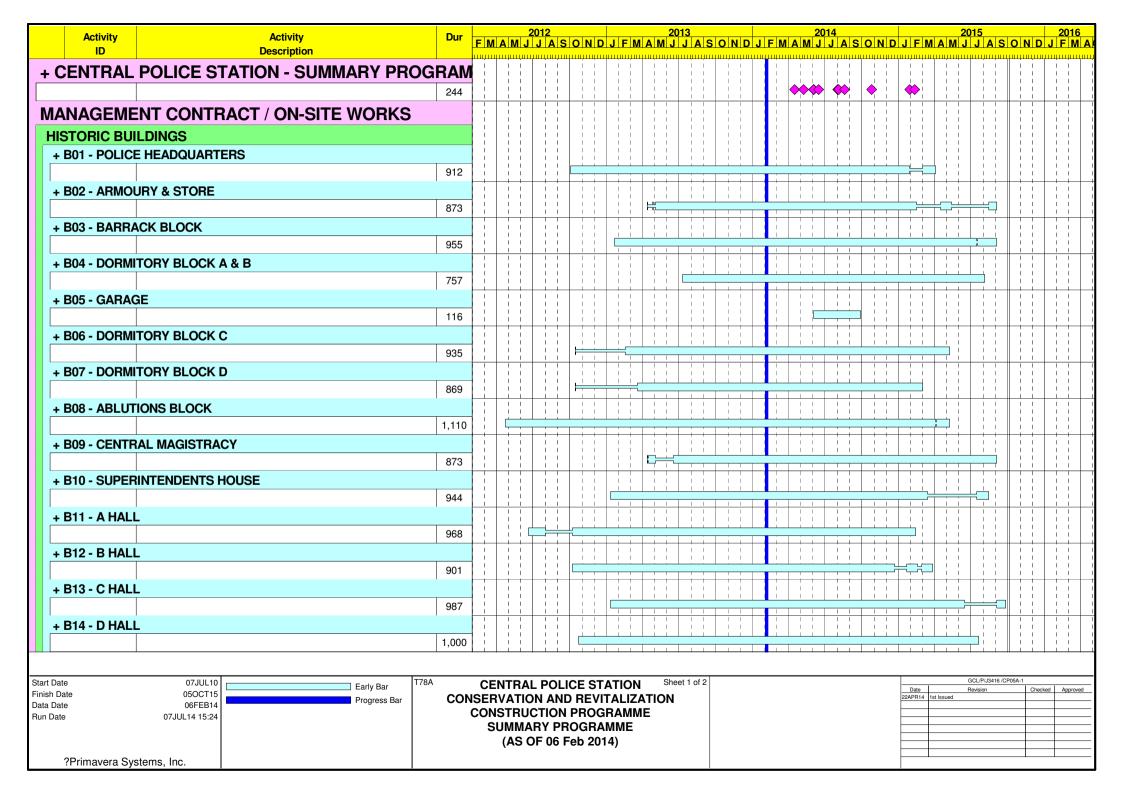
Min. 68.3 Max. 71.9

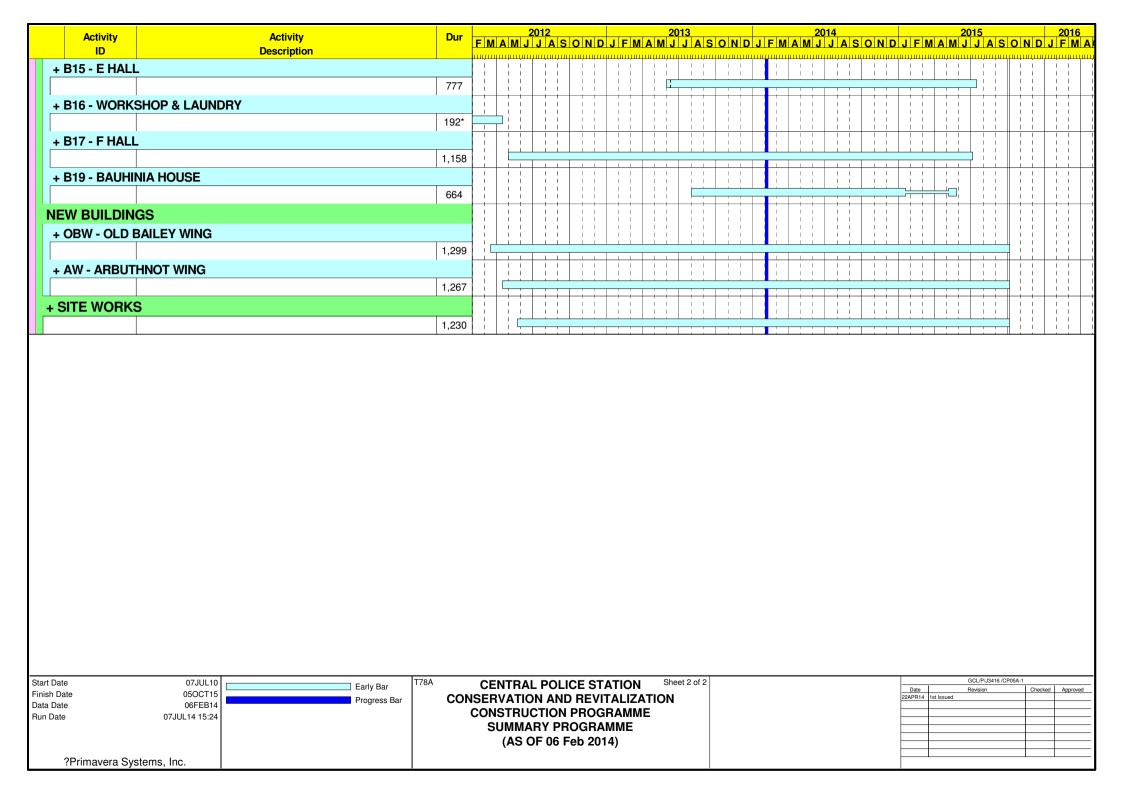




Annex I

Construction Programme for the Project





Annex J

Tree Inspection Reports

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Our Ref.: YW/TP/GAMMON/2014/06/1

30th June 2014

Gammon Construction Limited 28/F Devon House, TaiKoo Place 979 King's Road Hong Kong Tel. 2516 8823 Fax.2516 6260

Attn: Mr. Cliff C.H. LEUNG, Mr. Ariel LUI

Dear Sirs,

Summary of Monthly Inspection Report for the Six Existing Trees at Central Police Station Compound for June 2014 (Contract Ref. : J3416/400.4/D00025)

Tree	Botanical	Date of	Overall Health Condition		
No.	Name	Inspection	Good/Fair/Poor		Remarks
Tree-5	Mangifera indica	3 rd June 2014	Good	1.	No further action is
	芒果				required.
Tree-6	Aleurites moluccana	3 rd June 2014	Fair	1.	No further action is
	石栗				required.
Tree-7	Aleurites moluccana	3 rd June 2014	Fair	1.	No further action is
	石栗				required.
Tree-8	Plumeria rubra	3 rd June 2014	Fair	1.	No further action is
	紅雞蛋花				required.
Tree-9	Araucaria cunninghamia	3 rd June 2014	Fair	1.	No further action is
	花旗杉				required.
Tree-11	Dracaena marginata	3 rd June 2014	Fair	1.	A dead log appears on the
	馬尾鐵				upper branches.



Yan Wing (Hong Kong) Environment Management Limited

香港 新界 沙頭角 新樓街 15 號 二樓 No. 15, San Lau Street, 1/F., Sha Tau Kok, N.T., Hong Kong

通信地址 (Mail Address): 上水郵局信箱 八八九 號 (Sheung Shui Post Office Box 889)

Tel: 9776 1987, 2486 2317 Fax: 2482 4667 E-mail: yanwinghk@netvigator.com

Tree Inspection Reports and Tree Group Inspection Form (Form 1) are attached for your reference and record, please.

I should be much grateful if you could endorse the attached Invoice (No.1072) and fax it to my Office at 2482 4667. Thank you.

Yours faithfully

For and on behalf of Yan Wing (HK) Environment Management Ltd.

(WONG Pak Hay)

Contract Manager

FORM 1: TREE GROUP INSPECTION FORM 表格 1: 樹群檢查表格

General Int			Constant	on I td	Name of Trac Inches	tion officer Ma	本人員社夕.	LAU Man Chung
1 2 2			mmon Construction Ltd V/TP/GAMMON/2014/06/2		Name of Tree Inspection officer 巡查人 Name of Endorsement Officer 覆核人		核人員姓名:	WONG Pak Hay
Date of Insp			une 3, 2014	4/00/2	Name of Endorseme	in Officer &	仅八只红石.	WONGTAKITAY
Project/Con				416/400.4/D00025				
Troject/Con	iract No.	17 11 11 11 11 11 11 11 11 11 11 11 11 1	. 03	410/400.4/200023				
Location In								
Location 地黑	占: Cen	tral Police St	ation Compound. Ne		Nearby Utility Po	Nearby Utility Post No. 就近公用設施編號:		
Location Types	地點類別:		Roadside	路旁		Commun	ity Hall / Centre 竜	上區會堂 / 中心
Address :			X Open s	pace 空地		Roadsid	le Planter 路旁花廊	ŦĪ.
(multiple answ			Exhibition	on Centre 展覽中心		Rain shelt	er/pavilion 避雨	亭 / 涼亭
可選多於一項)		☐ View Po	int 觀景台		Sitting out	area 休憩處	
			☐ Walking	/ nature trail 行山徑 .	/ 自然徑			
			Others (olease specify)其他 (訓	審說 印):			
				2,7,2,1,2,1,0				
General Tr	ee Informa	ation 基本模	才資料					請把不合適的刪除
Main tree spe			x. number	Range of tree	Overall health	Overall		rks (Any special tree
or minority tr			s in the	height (m)	condition	structural condition		e.g. dying/dead, e problem and structural
significant siz 在群組內的			nt species or of tree	該樹種高度範圍	整體健康狀況 (good, fair,	整體結構狀況		d soil condition
胸徑或高度			01 1100		poor	(good, fair,	其他評語	
的樹種			在群組內		好,良,差)	poor好,良		例如:凋謝/枯樹/病蟲害
(Note 2)		的百份	}比/數目*			差)	或結構問	題; 及泥土狀况)
Mangifera in	dica 芒果	17%,	1 No.	16M	GOOD	GOOD		NFA
Aleurites n	noluccana	32%	2 Nos.	10-13M	FAIR	FAIR		NFA
D	石栗	32 /6	21103.	10-15/11	******	1711		
Plumeria i	ubra 紅雞蛋	花 17%	1 No.	7M	FAIR	FAIR		NFA
Araucaria		170/	1 No.	13M	FAIR	FAIR		NFA
cunningha Dracaena	mu 化膜		4 3 1	03.5	EATD	EAID	A dood loo	ammanus on the tree
marginata	馬尾銀	载 17%	1 No.	8M	FAIR	FAIR	A dead log	appears on the tree
Does target	exist? 目標:	是否存在?[x Yes 是	☐ No 否	e) 目標 <i>(因樹木倒塌</i>	或枝條斷裂而受	影響的人或財產	
Can target b	e moved?能	否移除目標:	Yes	是 x No 否				
Can the use					s 是 No 否			
Frequency of								
-	nal use偶爾		termittent u		Frequent use經常使	用	stant use恆常使	用
J 4: 6: 4:	of Tues	for Dome	dial Aatia	n on Dotoiled T	woo Dielz Assessm	ont		
					ree Risk Assessm	ent		
				樹木風險評估				
Trees falling						Number of to 樹木數量	Komodan	action or detailed tree risk assessmen
樹木屬於以了	任何一項或	多於一項類	刊			以小数集	緩減措施	或進行詳細樹木風險評估
(1)				ural or health prob	olems	NII		
		,結構或健康						
(2)				s with brittle woo conditions with fa	od structure and hav illure potential	ving NII		

Trees growing in very stressful site conditions with failure potential	NII
生長於非常擠壓環境而有倒塌風險的樹木 (Note 1)	

屬木質脆弱品種並已達成熟期及有倒塌風險的樹木 (Note 1)

Tree with major defects or health problems

(3)

(4)

NII



Signature of Tree Inspection Officer: Signature of Endorsement Officer:

Name of Contractor

Yan Wing (HK) Environment Management Ltd.

Date:

30-6-2014

Note 1: If remedial action (such as pruning) undertaken cannot mitigate the potential risk of tree or branch failure, detailed tree risk assessment (using Form 2) should be carried out.

備註 1: 若風險緩減措施(如枝幹修剪)仍未能解決倒塌或枝條斷裂的潛在風險,應爲該樹進行詳細的樹木風險評估(表格 2)。
Note 2: Please read in conjunction with TMO's Guidelines on Tree Risk Assessment and Management Arrangement (Para. 4.3, refers.)

備註 2: 請參閱樹木管理辨事處的樹木風險評估安排及管理指引(第 4.3 節)

Inspection Report for the 6 Existing Trees at Central Police Station Compound

(Contract Ref.: J3416/400.4/D00025)

I. TREE NUMBER: Tree-5 Mangifera indica 芒果

II. BASIC INFORMATION:

Height (m)	16m	Crown spread (m)	18m
DBH (mm)	1000mm	Overall Health Condition	Good
		Good/Fair/Poor	
Date of Inspection	3 rd June 2014	Last Inspection Date	2 nd May 2014

III. COMMENTS:

- 1. Overall health condition of the tree is good.
- 2. The planter is full of mulch.
- 3. Renovation works are in progress near the tree.
- 4. The small cordon zone is in good order.
- 5. Construction works are in progress outside the cordon zone.
- 6. The site outside the cordon zone is clean and tidy.

IV. RECOMMENDATIONS:

1. No further action is required.





Fig 2. Root collar of Tree-5 is good. The planter is full of mulch.



Fig. 3 Health condition of the mid trunk is good.





Fig. 4 Health condition of the upper trunk also is good.



Fig. 5 Renovation works are in progress near the tree.

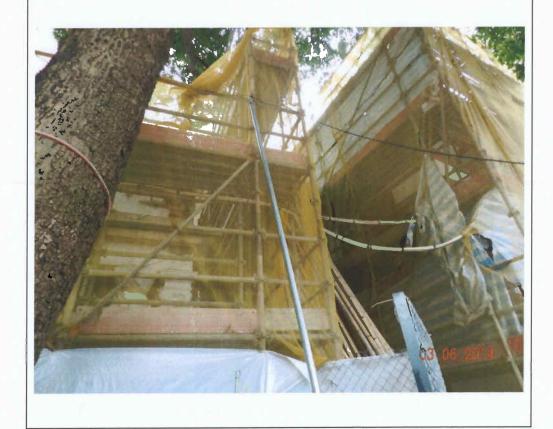




Fig. 6 The small cordon zone is in good order.



Fig. 7 The crown is full of dense and green leaves.





Fig. 8 The store-room next to the tree is clean and tidy.



Fig. 9 The site near the planter is clean and tidy.





Fig. 10 The site outside the cordon zone is clean and tidy.



Fig. 11 Construction works are in progress outside the cordon zone.





Fig. 12 Overall view of Tree-5 during inspection on 3rd June 2014.



Signature of Inspection Officer: (Mr. LAU Man-chung, ISA CA-HK0050A)
Signature of Endorsement Officer: (Mr. WONG Pak-hay, Contract Manager)

Name of Contractor:

Dated this:

Yan Wing (HK) Environment Management Ltd.

30th June 2014.



Inspection Report for the 6 Existing Trees

at Central Police Station Compound

(Contract Ref. : J3416/400.4/D00025)

I. TREEE NUMBER: Tree-6 Aleurites moluccana 石栗

II. BASIC INFORMATION:

Height (m)	10m	Crown spread (m)	10m
DBH (mm)	510mm	Overall Health Condition	Fair
		Good/Fair/Poor	
Date of Inspection	3 rd June 2014	Last Inspection Date	2 nd May 2014

III. COMMENTS:

- 1. Overall health condition of the tree is fair.
- 2. The planter is full of mulch.
- 3. Many bulky items are placed near the planter.
- 4. The crown is full of green and dense leaves.
- 5. The site outside the cordon zone is clean and tidy.

IV. RECOMMENDATIONS:

1. No further action is required.





Fig 2. The root collar is normal. The planter is full of mulch.



Fig. 3 Health condition of the mid trunk is fair.





Fig. 4 Health condition of the upper trunk is fair.



Fig. 5 The crown is full of green and dense leaves.





Fig. 6 The small cordon zone is in good order.



Fig. 7 Many bulky items are placed near the planter.





Fig. 8 A pipe leads water to the tree-top for irrigation.

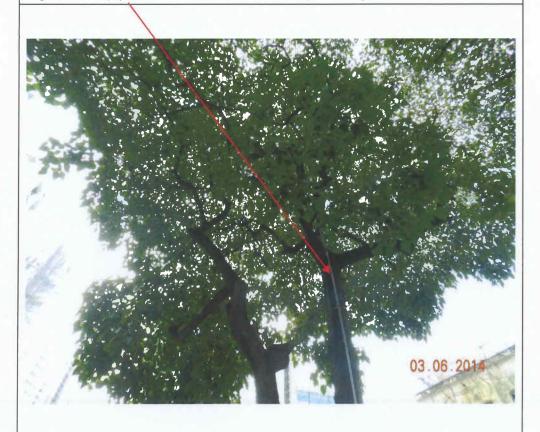


Fig. 9 Construction works are in progress outside the cordon zone.





Fig.10 The site outside the cordon zone is clean and tidy.



Fig. 11 The access near the tree also is clean and tidy.





Overall view of Tree-6 during inspection on 3rd June 2014. Fig. 12

Signature of Inspection Officer: (Mr. LAU Man-chung, ISA CA–HK0050A)
Signature of Endorsement Officer: (Mr. WONG Pak-hay, Contract Manager)

Name of Contractor:

Dated this:

Yan Wing (HK) Environment Management Ltd.



Inspection Report for the 6 Existing Trees at Central Police Station Compound

(Contract Ref. : J3416/400.4/D00025)

I. TREEE NUMBER: Tree-7 Aleurites moluccana 石栗

II. BASIC INFORMATION:

Height (m)	13m	Crown spread (m)	12m
DBH (mm)	650mm	Overall Health Condition	Fair
		Good/Fair/Poor	
Date of Inspection	3 rd June 2014	Last Inspection Date	2 nd May 2014

III. COMMENTS:

- 1. Overall health condition of the tree is fair.
- 2. The planter is full of mulch.
- 3. Many bulky items are placed near the planter.
- 4. The small cordon is in good order.
- 5. The crown is full of green and dense leaves.
- 6. Construction works are in progress outside the cordon zone.

IV. RECOMMENDATIONS:

1. No further action is required.





Fig 2. Root collar of Tree-7 is good. The planter is full of mulch.



Fig. 3 Health condition of the mid trunk is fair.





Fig. 4 Health condition of the upper trunk also is fair.



Fig. 5 The crown is full of vigorous and dense leaves.





Fig. 6 A pipe leads water to the tree-top for irrigation.



Fig. 7 The small cordon zone is in good order.





Fig. 8 Many bulky items are placed near the planter.



Fig. 9 Construction works are in progress outside the cordon zone. Tree-7





Fig. 10 Overall view of Tree-7 during inspection on 3rd June 2014.



Signature of Inspection Officer: (Mr. Lau Man-chung, ISA CA–HK0045A)
Signature of Endorsement Officer: (Mr. WONG Pak-hay, Contract Manager)

Name of Contractor:

Dated this:

Yan Wing (HK) Environment Management Ltd.



Inspection Report for the 6 Existing Trees at Central Police Station Compound

(Contract Ref.: J3416/400.4/D00025)

I. TREEE NUMBER: Tree-8 Plumeria rubra 紅雞蛋花

II. BASIC INFORMATION:

Height (m)	7m	Crown spread (m)	9m
DBH (mm)	430mm	Overall Health Condition	Fair
		Good/Fair/Poor	
Date of Inspection	3 rd June 2014	Last Inspection Date	2 nd May 2014

III. COMMENTS:

- 1. Overall health condition of the tree is fair.
- 2. The planter is full of mulch.
- 3. The small cordon zone is in good order.
- 4. Young and green leaves appear on the tree.
- 5. Many bulky items are placed near the planter.

IV. RECOMMENDATIONS:

1. No further action is required.

Fig 1. Tree number

Tree - 8

Plumeria rubra

Maintained by:

103 06.2014



Fig 2. The root collar is normal. The planter is full of mulch.



Fig. 3 Health condition of the mid trunk is fair.





Fig. 4 Health condition of the upper trunk also is fair.



Fig. 5 Dense and green leaves appear on the tree.

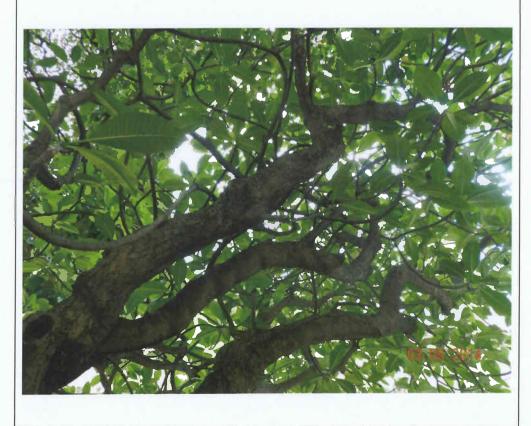




Fig. 6 The small cordon zone is in good order.



Fig. 7 Many bulky items are placed near the planter.





Fig. 8 The access near Tree-8 is clean and tidy.



Fig. 9 Construction works are in progress outside the cordon zone. Tree-8





Fig. 10 Overall view of Tree-8 during inspection on 3rd June 2014



Signature of Inspection Officer: (Mr. LAU Man-chung, ISA CA—HK0050A) Signature of Endorsement Officer: (Mr. WONG Pak-hay, Contract Manager)

Name of Contractor:

Dated this:

Yan Wing (HK) Environment Management Ltd.



Inspection Report for the 6 Existing Trees at Central Police Station Compound

(Contract Ref. : J3416/400.4/D00025)

I. TREEE NUMBER: Tree - 9 Araucaria cunninghamia 花旗杉

II. BASIC INFORMATION:

Height (m)	13m	Crown spread (m)	5m
DBH (mm)	230mm	Overall Health Condition	Fair
		Good/Fair/Poor	
Date of Inspection	3 rd June 2014	Last Inspection Date	2 nd May 2014

III. COMMENTS:

- 1. Overall health condition of the tree is fair.
- 2. Many construction items are placed near the planter.
- 3. The small cordon zone is in good order.
- 4. Green and vigorous leaves appear on the tree.
- 5. The access outside the cordon zone is clean and tidy.

IV. RECOMMENDATIONS:

1. No further action is required.





Fig 2. Root collar of Tree-9 is normal. The planter is full of mulch.



Fig. 3 Health condition of the mid trunk is fair





Fig. 4 Sap flow disappears on the trunk.



Fig. 5 Green and vigorous leaves appear on the tree.





Fig. 6 The small cordon zone is in good order.



Fig. 7 Many construction items are placed near the planter.





Fig. 8 Construction works are in progress outside the cordon zone.



Fig. 9 The access outside the cordon zone is clean and tidy.





Fig. 10 Overall view of Tree-9 during inspection on 3rd June 2014.

Signature of Inspection Officer: (Mr. LAU Man-chung, ISA CA-HK0050A) Signature of Endorsement Officer: (Mr. WONG Pak-hay, Contract Manager)

Name of Contractor:

Dated this:

Yan Wing (HK) Environment Management Ltd.



Inspection Report for the 6 Existing Trees at Central Police Station Compound (Contract Ref.: 13/16/100 //D00025.)

(Contract Ref. : J3416/400.4/D00025)

I. TREEE NUMBER: Tree -11 Dracaena marginata 馬尾鐵

II. BASIC INFORMATION:

Height (m)	8m	Crown spread (m)	2m
DBH (mm)	170mm	Overall Health Condition	Fair
		Good/Fair/Poor	
Date of Inspection	3 rd June 2014	Last Inspection Date	2 nd May 2014

III. COMMENTS:

- 1. Overall health condition of the tree is fair.
- 2. The planter is full of mulch.
- 3. The small cordon zone is in order.
- 4. Renovation works are in progress near the tree.
- 5. A dead log appears on the upper branches.

IV. RECOMMENDATIONS:

1. To prune the dead log after the renovation works have been completed.

Fig 1. Tree number

Tree - 11

Dracaena marginata 馬尾鏡

Maintained by:

欣榮(香港)環境管理有限公司

Tel. 9776 1987



Fig. 2 The root collar is normal. The planter is full of mulch.



Fig. 3 Health condition of the mid trunk is normal.

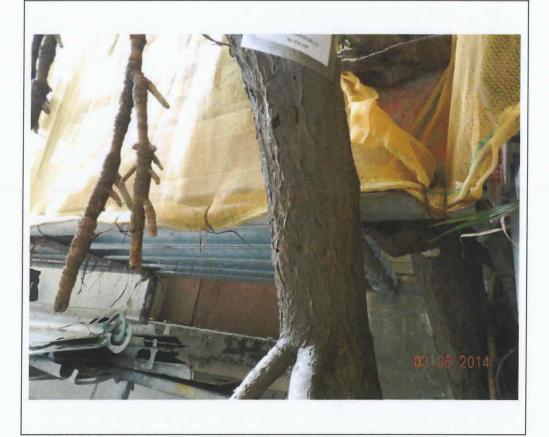




Fig. 4 Health condition of the upper trunk also is fair.



Fig. 5 The crown is full of vigorous and green leaves.





Fig. 6 A dead log appears on the upper branches.



Fig. 7 Renovation works are in progress near the tree.





Fig. 8 The small cordon zone is in good order.



Fig. 9 The site outside the cordon zone is clean and tidy.





Fig. 10 Overall view of Tree-11 during inspection on 3rd June 2014.



Signature of Inspection Officer: (Mr. LAU Man-chung, ISA CA–HK0050A) Signature of Endorsement Officer: (Mr. WONG Pak-hay, Contract Manager)

Name of Contractor:

Dated this:

Yan Wing (HK) Environment Management Ltd.

30th June 2014



Annex K

Environmental Complaint, Environmental Summons and Prosecution Log

Annex K Cumulative Complaint and Summons/Prosecutions Log

Reporting Month	Number of Complaints in Reporting Month	Number of Summons/Prosecutions in Reporting Month
November 2011	0	0
December 2011	0	0
January 2012	0	0
February 2012	0	0
March 2012	4	0
April 2012	0	0
May 2012	0	0
June 2012	2	0
July 2012	1	0
August 2012	0	0
September 2012	0	0
October 2012	0	0
November 2012	2	0
December 2012	0	0
January 2013	0	0
February 2013	1	0
March 2013	1	0
April 2013	0	0

Reporting Month	Number of Complaints in Reporting Month	Number of Summons/Prosecutions in Reporting Month
May 2013	0	0
June 2013	0	0
July 2013	0	0
August 2013	0	0
September 2013	0	0
October 2013	0	0
November 2013	0	0
December 2013	0	0
January 2014	2	0
February 2014	1	0
March 2014	1	0
April 2014	1	0
May 2014	0	0
June 2014	0	0
Overall Total	16	0

Annex L

Records of Vibration Monitoring for Piling works





Vibration Monitoring Record (JUNE)

	Parade Ground								
Point	VM1-1	VM1-1 VM1-2 VM2-1 VM3-1 VM3							
Date	mm/s	mm/s	mm/s	mm/s	mm/s				
01-Jun-14			Sunday						
02-Jun-14			Holiday						
03-Jun-14	0.429	0.444	0.392	0.430	0.365				
04-Jun-14	0.361	0.228	0.176	0.339	0.216				
05-Jun-14	0.169	0.281	0.310	0.185	0.167				
06-Jun-14	0.132	0.201	0.177	0.244	0.298				
07-Jun-14	0.398	0.196	0.639	0.285	0.266				
08-Jun-14			Sunday						
09-Jun-14	0.281	0.359	0.354	0.114	0.139				
10-Jun-14	0.346	0.160	0.106	0.137	0.166				
11-Jun-14	0.240	0.318	0.371	0.570	0.150				
12-Jun-14	0.137	0.097	0.209	0.098	0.164				
13-Jun-14	0.206	0.171	0.305	0.286	0.225				
14-Jun-14	0.120	0.395	0.200	0.093	0.102				
15-Jun-14		•	Sunday	•	•				
16-Jun-14	0.648	0.319	0.208	0.106	0.103				
17-Jun-14	0.102	0.402	0.216	0.128	0.243				
18-Jun-14	0.105	0.761	0.189	0.208	0.106				
19-Jun-14	0.198	0.165	0.256	0.171	0.794				
20-Jun-14	0.151	0.186	0.164	0.291	0.220				
21-Jun-14	0.395	0.172	0.202	0.635	0.196				
22-Jun-14		•	Sunday	•	•				
23-Jun-14	0.904	0.306	0.290	0.176	0.700				
24-Jun-14	0.154	0.166	0.158	0.335	0.157				
25-Jun-14	0.291	0.118	0.221	0.396	0.152				
26-Jun-14	0.395	0.298	0.146	0.285	0.124				
27-Jun-14	0.212	0.138	0.197	0.632	0.241				
28-Jun-14	0.281	0.191	0.400	0.184	0.177				
29-Jun-14			Sunday						
30-Jun-14	0.311	0.197	0.173	0.491	0.205				



Win Win Way Construction Company Ltd.

Trigger Levels						
Alert level	Alarm level	Action level				

(Block 8 Foundation)

Monitoring Check Pts.	Trigger Levels				
	Alert level	Alarm level	Action level		
Vibrating Monitoring	2mm/s	2.5mm/s	3mm/s		
#Vibration at largest span of	5.0mm/s	6.0mm/s	7.5mm/s		
highest Structural level	J.OIIIII/8	0.011111/5	7.511111//8		

Project Title: Central Police Station Conservation & Revitalization			Project No: WP201	Project No: WP201 1-Jun-2014 to				
POINT	[VM8-1	VM11-1#	VM11-2				
DATE	PD/(m)	mm/s	mm/s	mm/s				
19-Jun-2012	(Initial)	0.56	0.13	0.19				
1-Jun-2014					Sunday			
2-Jun-2014					Holiday			
3-Jun-2014		0.75	0.286	0.174				
4-Jun-2014		0.76	0.223	0.351				
5-Jun-2014		0.71	0.612	0.179				
6-Jun-2014		0.70	0.143	0.120				
7-Jun-2014		0.69	0.150	0.162				
8-Jun-2014					Sunday			
9-Jun-2014		0.67	0.239	0.209				
10-Jun-2014		0.65	0.098	0.209				
11-Jun-2014		0.64	0.139	0.112				
12-Jun-2014		0.66	0.095	0.102				
13-Jun-2014		0.63	0.221	0.271				
14-Jun-2014		0.62	0.097	0.097				
15-Jun-2014					Sunday			
16-Jun-2014		0.64	0.303	0.108				
17-Jun-2014		0.63	0.291	0.100				
18-Jun-2014		0.61	0.113	0.194				
19-Jun-2014		0.62	0.231	0.428				
20-Jun-2014		0.59	0.335	0.201				
21-Jun-2014		0.58	0.167	0.282				
22-Jun-2014					Sunday			
23-Jun-2014		0.57	0.213	0.259				
24-Jun-2014		0.59	0.135	0.145				
25-Jun-2014		0.58	0.361	0.285			_	
26-Jun-2014		0.56	0.199	0.206				
27-Jun-2014		0.54	0.385	0.165				
28-Jun-2014		0.51	0.183	0.232				
29-Jun-2014					Sunday			
30-Jun-2014		0.55	0.394	0.521				

Mini-piles with post-pressurized grout in CDG and Steel Shear H-piles at Block 1, STREET 11SW-B/R18 11SW-B/R17-Shill King The Centrium CONT 11SW-B/R806 11SW-B/R23-11SW-B/R52 NG Kun-shing Chief Stractoral Engineer for BUILIPHG AUTHORITY 11SW-B/R24 W 1 9 MAR 2012 11SW-B/R53 11SW-B/R19-11SW-B/R174 11SW-B/R175 BD SUBMISSION wing Status 罗斯状识 LEGEND · 的文字是是是是一个一个一个一个 Chara and valify of altremones on sa 有有尺寸必能加工地指揮者非為資訊 STREET LIGHTING NO. 33488-A1 853-2/ 11SW-B/R19-11SW-B/R177 11SW-B/R55 EXISTING LY ELECTRICITY CABLE HERZOG&DEMEURON EXISTING TELECOMMUNICATION DUCT (HIJTCHISON OF OBAL COMMUNICATIONS LAMITED) EXISTING STORMWATER DRAIN ROCCO 许学 EXISTING FOUL SEWER R. JRP ARUP Projec 項註 CENTRAL POLICE STATION CONSERVATION AND REVITALISATION PROJECT EXISTING DRILLHOLE WITH 11SW-B/R54 STANDPIPE/PIEZOMETER Drawing Tale 整体 MONITORING LAYOUT PLAN 11SW-B/R178 8 PROPOSED BUILDING SETTLEMENT POINTS/THUTMETER RS174-1/RT174-PROPOSED INCLINOMETER TO BE BUILT IN BORIED PILE WALL OR PIPE PILE WALL 1:300**0**A1 K.C.(a) MOIES

JULIES SETLEMENT POINTS (UTI TO UT6)
SHALL ONLY BE INSTALLED AFTER EXCONATION
PERMIT IS OBTAINED, AS ALTERNATIVE.
SETTLEMENT POINTS (ISS AND ISSI) MAY BE
INSTALLED.
SHOULD UTI TO UT6 BE RESTALLED, ISSIB AND
ISSID SHALL NOT BE REQUIRED.
JETHER UTILITIES SETTLEMENT MARKETS (UTI TO
UT6) OR GROUND SETTLEMENT MARKETS (UTI TO
UT6) OR GROUND SETTLEMENT MARKETS (USI TO
COMMENCEMENT OF OLD BALEY WING ELS
WORKS. 00-0AP209674-G-001 PROPOSED GROUND SETTLEMENT POINTS PROPOSED UTILITY MONITORING POINTS PROPOSED VIBRATION MONITORING POINTS MONITORING ZONE A PROPOSED ADDITIONAL DESELHOLE



(Block 17 Foundation Works)						
Monitoring Check Pts.	Trigger Levels					
Monitoring Check Fts.	Alert level	Alarm level	Action level			
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s			
# Vibration at largest span of	5.0mm/s	6.0mm/s	7.5mm/s			
highest Structural level	5.0mm/s	6.0mm/s				

Project Title: (oject Title: Central Police Station Conservation & Revitalization		zation	Project No: WP2	201	1-Jun-2014	to	30-Jun-2014	
POINT		V M17-1	VM17-3 #						
DATE	PD/(m)	mm/s	mm/s						
19-Jun-2012 ((Initial)	0.13	0.37						
Surveying Date									
1-Jun-2014					Sunday				
2-Jun-2014					Holiday				
3-Jun-2014		0.35	0.62						
4-Jun-2014	+ +	0.31	0.63	1					
5-Jun-2014	+ +	0.29	0.61						
6-Jun-2014	+ +	0.29	0.62	 					
7-Jun-2014	+	0.27	0.60						
8-Jun-2014	+ +	0.27	0.00		Sunday				
9-Jun-2014	1	0.26	0.60		Sunday				
10-Jun-2014	+		 						
	+	0.28	0.61						
11-Jun-2014		0.30	0.59						
12-Jun-2014		0.29	0.58						
13-Jun-2014		0.27	0.60						
14-Jun-2014		0.26	0.58						
15-Jun-2014			,	1	Sunday				•
16-Jun-2014		0.25	0.59						
17-Jun-2014		0.24	0.55						
18-Jun-2014		0.25	0.58						
19-Jun-2014	+	0.24	0.56 0.54						
20-Jun-2014 21-Jun-2014	+	0.21	0.53	+					
22-Jun-2014		0.22	0.33	<u> </u>	Sunday				
23-Jun-2014		0.21	0.53		Sunday				
24-Jun-2014		0.22	0.52						
25-Jun-2014		0.20	0.50						
26-Jun-2014		0.18	0.48						
27-Jun-2014		0.19	0.47						
28-Jun-2014	\perp	0.21	0.45						
29-Jun-2014			T		Sunday		1		1
30-Jun-2014		0.19	0.41						

Bored Pile Walls / Pipe Pile Walls at Block 50 WYNDHAM & B.D. Ref. No. 原宇書標案編成 3/3053/11 (日に 17 & 5 b) (Hは)(5) STREET 11SW-B/R18 No.编集 Des No. 編集 Description 說明 Date 日期 Approved 宴
- BD SUBMISSION 12/11 JS 11SW-B/R22 A DA TONHTUBAA Shiu King The Centrium Court 11SW-B/R805 11SW-B/R806 11SW-B/R23 11SW-B/R52 Plan Approved RS53-17 RT53-17 NG Kin¹shing Chief Structural Engineer for BUILDING AUTHORITY 11SW-B/R24 BS14-13/2 PMH-4 20 FEB 2012 RS19-7 BS3-7 -11SW-B/R53 -11SW-B/R176 →IN1-3 BS3-5/ BT3-3 **★**VM13-1/ 11SW-B/R19 BS3-8/ BT3-4 11SW-B/R174 BS14-7 11SW-B/R175 BD SUBMISSION Drawing Status 製圖狀況 36.73 LEGEND 833900 E Do not take measurements 切勿直接從圖紙上量度尺寸 Check and verify all dimensions or site 所有尺寸必須在工地現場複查及署核。 EXISTING FRESH WATER MAIN and all other related drawings. 此圈抵必须與双格以明書及其它有關國紙一併閱讀。 EXISTING SALT WATER MAIN EXISTING STREET LIGHTING NO. 33488-A1 BS2-3 BS3-2/ 11SW-B/R19 EXISTING STREET LIGHTING CABLE 11SW-B/R177 署馬會文物保育有限公司 1SW-B/R55-30 RS177-2 BS17-BT17-EXISTING LV ELECTRICITY CABLE HERZOG & DE MEURON EXISTING TELECOMMUNICATION DUCT (HUTCHISON GLOBAL COMMUNICATIONS LIMITED)
EXISTING STORMWATER DRAIN ROCCO 许字严 ADH3(S/P) DH19(BS17-11/ PROPOSED FOUL SEWER E & M Engineer JRP SITE BOUNDARY ARUP 11SW-B/R54 EXISTING RETAINING WALL ryoped দুল CENTRAL POLICE STATION CONSERVATION AND REVITALISATION PROJECT → DH1 (S,P) UT: EXISTING DRILLHOLF WITH STANDPIPE/PIEZOMETER Drawing Title III 3 UT2 RS178−1/ ⊠ RS178−1/ BS1-1/BT1-1 PROPOSED BUILDING SETTLEMENT POINTS/TILTMETER MONITORING LAYOUT PLAN OEC 23 P 2:09 PROPOSED RETAINING WALL SETLEMENT POINTS/TILTMETER RS174-1/RT174-1 PERMIT IS CRITAINED AS ALTERNATIVE PERMIT IS CRITAINED AS ALTERNATIVE 1 **→**IN1-1 PERSONNES OBTAINED AS ALTERNATIVE SETTLEMENT FORMY (SELECTION OF SELECTION OF STATE OF SETTLEMENT AS AS AS OF SETTLEMENT AS AS AS OF SETTLEMENT HARRES SETTLEMENT HARRES SUIT TO 19 THE LOCAL AS SETTLEMENT HARRES SUIT TO 19 THE LOCAL ASSOCIATION OF SETTLEMENT HARRES SUIT TO 19 THE SETTLEMENT SUI PROPOSED INCLINOMETER TO BE BUILT IN BORED PILE OR FIPE PILE WALL K.C.Lai 1:300@A1 Ø^{GS1} Drawing No. 国状 00-0AP209674-G-001 PROPOSED GROUND SETTLEMENT POINTS 2011 UT1 Loon PROPOSED UTILITY MONITORING POINTS SETTINES WITH THE STETT LEMENT ATTENTY OF CUT BALLEY WING TO THE CONTROL OF CONTROL OF CONTROL OF CUT BALLEY WING TELS WEEKS **→**VM1−1 9817 PROPOSED VIBRATION MONITORING POINTS ACH1(S/P) PROPOSED ADDITIONAL DRILLHOLE



(Bored Pile Walls / Pipe Pile Walls at Block 50)

Monitoring Check Pts.		Trigger Levels				
Widintoning Check Fts.	Alert level	Alarm level	Action level			
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s			
# Vibration at largest span of	5.0mm/s	6.0mm/s	7.5mm/s			
highest Structural level	5.011111/5	0.011111/5	8/1111116.7			

Project Title: Central	Police Station	Conservation a	& Revitalization	on	Project No: W	/P201	1-Jun-2014	to	30-Jun-201
POINT	VM8-1	VM11-1#	VM11-2	VM12-1#	VM12-2	VM14-3	VM 1 7 -1	VM17-2	VM17-3 #
DATE PD/(m)	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s
19-Jun-2012 (Initial)	0.56	0.13	0.19	0.22	0.13	0.21	0.13	0.13	0.37
Surveying Date									
1-Jun-2014					Sunday				
2-Jun-2014					Holiday				
3-Jun-2014	0.75	0.46	0.47	0.43	0.38	0.51	0.35	0.65	0.62
4-Jun-2014	0.76	0.45	0.46	0.44	0.41	0.52	0.31	0.67	0.63
5-Jun-2014	0.71	0.40	0.41	0.39	0.37	0.48	0.29	0.59	0.61
6-Jun-2014	0.70	0.41	0.42	0.38	0.39	0.46	0.29	0.64	0.62
7-Jun-2014	0.69	0.39	0.39	0.38	0.40	0.42	0.27	0.59	0.60
8-Jun-2014					Sunday				
9-Jun-2014	0.67	0.35	0.37	0.37	0.39	0.40	0.26	0.60	0.60
10-Jun-2014	0.65	0.38	0.40	0.35	0.37	0.45	0.28	0.62	0.61
11-Jun-2014	0.64	0.39	0.36	0.36	0.34	0.44	0.30	0.63	0.59
12-Jun-2014	0.66	0.36	0.35	0.34	0.36	0.46	0.29	0.60	0.58
13-Jun-2014	0.63	0.35	0.37	0.36	0.35	0.45	0.27	0.61	0.60
14-Jun-2014	0.62	0.37	0.35	0.34	0.33	0.44	0.26	0.59	0.58
15-Jun-2014	•	•	-	•	Sunday	•	•	•	•
16-Jun-2014	0.64	0.36	0.36	0.35	0.33	0.43	0.25	0.60	0.59
17-Jun-2014	0.63	0.35	0.34	0.34	0.32	0.42	0.24	0.54	0.55
18-Jun-2014	0.61	0.36	0.35	0.35	0.31	0.44	0.25	0.57	0.58
19-Jun-2014	0.62	0.34	0.34	0.34	0.32	0.43	0.24	0.58	0.56
20-Jun-2014	0.59	0.33	0.35	0.33	0.31	0.42	0.21	0.59	0.54
21-Jun-2014	0.58	0.34	0.32	0.32	0.30	0.42	0.22	0.54	0.53
22-Jun-2014					Sunday				
23-Jun-2014	0.57	0.33	0.31	0.30	0.31	0.42	0.21	0.53	0.53
24-Jun-2014	0.59	0.32	0.32	0.31	0.30	0.41	0.22	0.52	0.52
25-Jun-2014	0.58	0.34	0.30	0.30	0.29	0.38	0.20	0.50	0.50
26-Jun-2014	0.56	0.32	0.29	0.29	0.28	0.36	0.18	0.49	0.48
27-Jun-2014	0.54	0.32	0.28	0.28	0.26	0.34	0.19	0.48	0.47
28-Jun-2014	0.51	0.30	0.26	0.26	0.27	0.37	0.21	0.43	0.45
29-Jun-2014					Sunday				
30-Jun-2014	0.55	0.31	0.27	0.26	0.27	0.35	0.19	0.45	0.41

Shaft Granted Pre-boved H-piles at Block 51 (Arbithnot Wing) WYNDHAM & STREET 11SW-B/R18 11SW-B/R22 BO SUBMISSION (50) 12/1
BO SUBMISSION (01) 03/1:
BO SUBMISSION (01) 03/1:
BO SUBMISSION (17) 03/1:
BO SUBMISSION RV BATCH 1 03/1:
FOR INFROMATION (50) 03/1: 11SW-B/R17-Shiu King The Centrium Court 11SW-B/R23-115W-B/R52 Chief Streetural Engineer for BUILDING AUTRORITY -11SW-B/R24 W BS13-4 13 JUL 2012 - 11SW-B/R53 -11SW-8/R176 ₩13-1/ 11SW-B/R19-B\$1-14 853-8/ 813-4 11SW-B/R174-MONITORING ZONE A 11SW-B/R175-BD SUBMISSION Drawing Status 製腦狀況 Do not take measure/cents o 切的直接位额统上偏径尺寸。 Chock and verify 20 corrections on th 所有尺寸必須在工地批學資金以棄紙 Read this displayed on computation was used at other related displaying.

企業就分享其他近郊者及其它有新疆以一切阅读。 EXISTING SALT WATER MAIN EXISTING STREET LICHTING NO. 33488-AT 11SW-8/R19 11SW-B/R177-EXISTING STREET LIGHTING CABLE 要馬會支票部分有限公司 EXISTING TELECOMMUNICATION DUCT **最終終於國際首都於2016年11月2日** 17月2日 EXISTING FOUL SEWER ROCCO DH19(BS17-11) JRP ARUP EXISTING RETAINING WALL Project WE CENTRAL POLICE STATION CONSERVATION AND REVITALISATION PROJECT 11SW-B/R54 Drawing Tale M.E.
MONITORING LAYOUT PLAN BS1-1/BI1-1 PROPOSED BUILDING SETTLEMENT POINTS/TICTMETER RS174-1/RT174-1 PROPOSED RETAINING WALL SETTLEMENT POINTS/TILTMETER 1:3008A1 K.C.L.cs AL Frankrig No. 36th C.C.L.cs AL Frankrig No. 36 PROPOSED GROUND SETTLEMENT POINTS ₩. PROPOSED UTILITY MONITORING POINTS 2,4 **₩**1-1 PROPOSED VIBRATION MONITORING POINTS CHAPTER ERAC YORY PROPOSED ADDITIONAL ORILLHOLE Motore Participal county Within

₩₩ 恆誠建築工程有限公司

Win Win Way Construction Company Ltd.

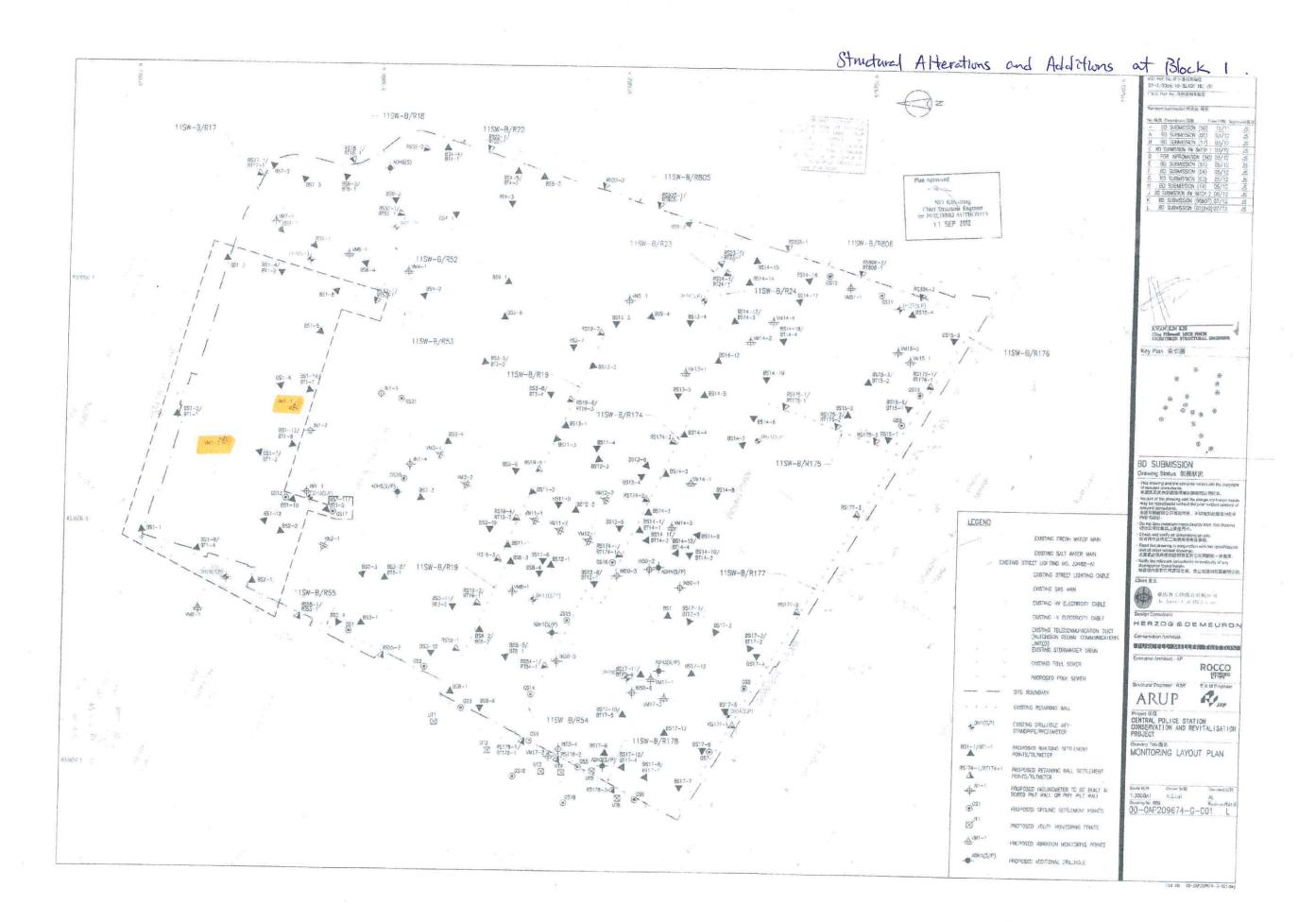
(Shaft Grouted Pre-bored H-piles at Block 51)

Manitaring Chaple Dtg	Trigger Levels				
Monitoring Check Pts.	Alert level	Alarm level	Action level		
Vibrating Monitoring	2mm/s	2.5mm/s	3mm/s		

Project Title: Central	Police Station	n Conservation	& Revitalization	Project No: WP201	1-Jun-2014	to	30-Jun-201
POINT	VM 14-4	VM15-2	VM51-1				
DATE PD/(m)	mm/s	mm/s	mm/s				
03-Dec-2012 (Initial)	0.14	0.21	0.3				
1-Jun-2014		•	•	Sunday			
2-Jun-2014				Holiday			
3-Jun-2014	0.26	0.228	0.12				
4-Jun-2014	0.26	0.391	0.12				
5-Jun-2014	0.28	0.712	0.12				
6-Jun-2014	0.23	0.207	0.14				
7-Jun-2014	0.25	0.117	0.15				
8-Jun-2014	0.23	0,117	0.13	Sunday			-
9-Jun-2014	0.24	0.354	0.15				
10-Jun-2014	0.24	0.117	0.13				
11-Jun-2014	0.28	0.087	0.13				
12-Jun-2014	0.23	0.097	0.11				
13-Jun-2014		0.206			+		
14-Jun-2014	0.35		0.12				
14-Jun-2014 15-Jun-2014	0.35	0.097	0.12	Sunday			
16-Jun-2014	0.25	0.139	0.15	Sullday			
17-Jun-2014	0.32	0.105	0.13				
18-Jun-2014	0.33	0.178	0.12				
19-Jun-2014	0.31	0.601	0.13				
20-Jun-2014	0.37	0.468	0.16				
21-Jun-2014	0.38	0.310	0.25				
22-Jun-2014		1		Sunday	T T		
23-Jun-2014	0.33	0.331	0.21				
24-Jun-2014 25-Jun-2014	0.31 0.25	0.337 0.662	0.13 0.22				
26-Jun-2014 26-Jun-2014	0.25	0.465	0.22				
27-Jun-2014	0.30	0.691	0.13				
28-Jun-2014	0.32	0.405	0.14				
29-Jun-2014				Sunday	<u> </u>		
30-Jun-2014	0.31	0.556	0.12				

Annex M

Records of Vibration Monitoring for Other Construction Works



Structural Additions and Alterations at Block 11 WYNDHAM \$ STREET 22-3/3066/10/BLK11 (HU) (S) F.S.D. Ref No. 消防療機築編號 11SW-B/R18 11SW-B/R17 Shiu King The Centrium Gourt - 11SW-B/R806 11SW-B/R23-11SW-B/R52 GS12 - 11SW-B/R24 BS14-17 CHIONG Kam-yueng lacky Chief Structural Engineer for BUILDING AUTHORITY BS13-3 - 3 OCT 2612 ₩15-2 11SW-B/R53 11SW-B/R176 **Д**VM15−1 BS3-5/ BT3-3 11SW-B/R19 BS1-14/ BT1-7 11SW-8/R174 ₩BS14-6 DH21(S,P) BD SUBMISSION 11SW-B/R175-Drawing Status 製圖狀況 GS20 retevant consultants。 未經有關解問公司書而同意。不包裝製此區級內任何 次交替1954 LEGEND Do not take measurements directly from 切勿直沒從雪紙上豐度尺寸。 Check and verify all dimensions on site 符有尺寸必須在工地現場按查及審核 EXISTING FRESH WATER MAIN Read this drawing in conjunction with the specification and all other related drawings.
 此匯纸必須與根格投明實及其它有關團級一併閱讀。 IN50-2 -3 — ADH4(S/P) EXISTING STREET LIGHTING NC. 33488-A1 discrepancy found herein, 如發現內容存任何朦朧之處。應立刻通知初聲明問公元 BS2-3 BS3-2/ 11SW-B/R19 EXISTING STREET LIGHTING CABLE 11SW-B/R177 -11SW-B/R55 EXISTING HV ELECTRICITY CABLE EXISTING IN FLECTRICITY CARLE HERZOG & DE MEURON EXISTING TELECOMMUNICATION DUCT (HUTCHISON GLOBAL COMMUNICATIONS LIMITED)
EXISTING STORMWATER DRAIN EXISTING FOUL SEWER ROCCO PROPOSED FOUL SEWER Structural Engineer / RSE E & M Engineer JRP ARUP EXISTING RETAINING WALL Project ঘটি CENTRAL POLICE STATION CONSERVATION AND REVITALISATION PROJECT DH1(S,P) 11SW-B/R54 EXISTING DRILLHOLE WITH BS17-13 - 11SW-B/R178 STANDPIPE/PIEZONETER Drawing Title 劉名 BS1-1/BT1-1 MONITORING LAYOUT PLAN RS174-1/RT174-1 PROPOSED RETAINING WALL SETTLEMENT POINTS/TILTMETER PROPOSED INCLINOMETER TO BE BUILT IN BORED PILE WALL OR PIPE PILE WALL 1:300名1 K.C.Lai AL Revision博改版 00-0AP209674-G-001 M PROPOSED GROUND SETTLEMENT POINTS U∏1 ⊠ PROPOSED UTILITY MONITORING POINTS PROPOSED VIBRATION MONITORING POINTS ADH1(S/P) PROPOSED ADDITIONAL DRILLHOLE Cod Re : 00-0AP2095/4-G-001.deg



Vibration Monitoring Record (JUNE)

	Blo	ck 1	Block 2	Blo	ck 3	Block 4	Block	6 & 7	Block 9	Bloc	k 11	Bloc	k 12	Block 13	Bloc	k 15
Point	VM1-1	VM1-2	VM2-1	VM3-1	VM3-2	VM4-1	VM6-1	VM7-1	VM9-1	VM11-1	VM11-2	VM12-1	VM12-2	VM13-1	VM15-1	VM15-2
Date	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s	mm/s
01-Jun-14		Sunday														
02-Jun-14								Hol	iday							
03-Jun-14	0.429	0.444	0.392	0.430	0.365	0.244	0.517	0.505	0.302	0.286	0.174	0.451	0.197	0.215	0.358	0.228
04-Jun-14	0.361	0.228	0.176	0.339	0.216	0.397	0.216	0.364	0.221	0.223	0.351	0.314	0.209	0.183	0.242	0.391
05-Jun-14	0.169	0.281	0.310	0.185	0.167	0.311	0.201	0.297	0.135	0.612	0.179	0.301	0.174	0.220	0.336	0.712
06-Jun-14	0.132	0.201	0.177	0.244	0.298	0.204	0.402	0.275	0.490	0.143	0.120	0.112	0.140	0.160	0.100	0.207
07-Jun-14	0.398	0.196	0.639	0.285	0.266	0.335	0.209	0.574	0.467	0.150	0.162	0.125	0.388	0.113	0.103	0.117
08-Jun-14		Sunday														
09-Jun-14	0.281	0.359	0.354	0.114	0.139	0.405	0.239	0.433	0.102	0.239	0.209	0.102	0.438	0.102	0.377	0.354
10-Jun-14	0.346	0.160	0.106	0.137	0.166	0.208	0.705	0.316	0.337	0.098	0.209	0.579	0.098	0.177	0.098	0.117
11-Jun-14	0.240	0.318	0.371	0.570	0.150	0.668	0.256	0.340	0.183	0.139	0.112	0.087	0.087	0.125	0.222	0.087
12-Jun-14	0.137	0.097	0.209	0.098	0.164	0.182	0.095	0.104	0.097	0.095	0.102	0.098	0.098	0.098	0.097	0.097
13-Jun-14	0.206	0.171	0.305	0.286	0.225	0.611	0.334	0.197	0.231	0.221	0.271	0.233	0.161	0.117	0.358	0.206
14-Jun-14	0.120	0.395	0.200	0.093	0.102	0.108	0.106	0.216	0.108	0.097	0.097	0.111	0.098	0.098	0.094	0.097
15-Jun-14								Sur	nday							
16-Jun-14	0.648	0.319	0.208	0.106	0.103	0.398	0.635	0.415	0.194	0.303	0.108	0.129	0.227	0.230	0.132	0.139
17-Jun-14	0.102	0.402	0.216	0.128	0.243	0.248	0.207	0.095	0.393	0.291	0.100	0.350	0.102	0.106	0.758	0.105
18-Jun-14	0.105	0.761	0.189	0.208	0.106	0.184	0.108	0.102	0.113	0.113	0.194	0.120	0.128	0.106	0.199	0.178
19-Jun-14	0.198	0.165	0.256	0.171	0.794	0.319	0.351	0.245	0.231	0.231	0.428	0.240	0.313	0.593	0.307	0.601
20-Jun-14	0.151	0.186	0.164	0.291	0.220	0.246	0.214	0.167	0.385	0.335	0.201	0.146	0.139	0.291	0.531	0.468
21-Jun-14	0.395	0.172	0.202	0.635	0.196	0.691	0.304	0.245	0.519	0.167	0.282	0.367	0.282	0.165	0.337	0.310
22-Jun-14				l .				Sui	nday	l .		l .			l .	
23-Jun-14	0.904	0.306	0.290	0.176	0.700	0.194	0.370	0.303	0.124	0.213	0.259	0.245	0.436	0.277	0.560	0.331
24-Jun-14	0.154	0.166	0.158	0.335	0.157	0.147	0.163	0.201	0.350	0.135	0.145	0.293	0.255	0.147	0.541	0.337
25-Jun-14	0.291	0.118	0.221	0.396	0.152	0.254	0.220	0.169	0.197	0.361	0.285	0.119	0.621	0.225	0.286	0.662
26-Jun-14	0.395	0.298	0.146	0.285	0.124	0.361	0.193	0.281	0.204	0.199	0.206	0.268	0.152	0.190	0.361	0.465
27-Jun-14	0.212	0.138	0.197	0.632	0.241	0.199	0.354	0.265	0.265	0.385	0.165	0.367	0.213	0.331	0.225	0.691
28-Jun-14	0.281	0.191	0.400	0.184	0.177	0.294	0.259	0.222	0.194	0.183	0.232	0.202	0.206	0.176	0.199	0.405
29-Jun-14		Sunday														
30-Jun-14	0.311	0.197	0.173	0.491	0.205	0.334	0.298	0.243	0.176	0.394	0.521	0.175	0.139	0.149	0.278	0.556
				1												





		(Block 14 Str	uctural A&A)						
Manitanina Charle I	M '4 ' Cl 1 D4		Trigger Levels						
Monitoring Check F	TS.	Alert level	Alarm level	Action level					
Vibration Monitorin	g	2mm/s	2.5mm/s	3mm/s					
# Vibration at largest sp highest Structural lev		5.0 _{mm/s}	6.0mm/s	7.5mm/s					

Project Title: Ce	ntral Police Statio	on Conservation	& Revitalizati	on Proj	ect No: WP201	1-Jun-2014	to	30-Jun-201
POINT	VM14-1 #	VM14-2#	VM14-3	VM14-4				
DATE PD	/(m) mm/s	mm/s	mm/s	mm/s				
19-Nov-12 (Initia	0.103	0.112	0.147	0.136				
1-Jun-2014					Sunday			
2-Jun-2014					Holiday			
3-Jun-2014	0.22	0.13	0.18	0.35				
4-Jun-2014	0.24	0.12	0.17	0.36				
5-Jun-2014	0.24	0.13	0.15	0.34				
6-Jun-2014	0.22	0.12	0.13	0.32			·	
7-Jun-2014	0.21	0.11	0.12	0.32				
8-Jun-2014					Sunday			
9-Jun-2014	0.20	0.15	0.40	0.33				
10-Jun-2014	0.24	0.14	0.45	0.34				
11-Jun-2014	0.25	0.14	0.44	0.39				
12-Jun-2014	0.19	0.17	0.46	0.30				
13-Jun-2014	0.19	0.12	0.45	0.35				
14-Jun-2014	0.21	0.13	0.44	0.32				
15-Jun-2014					Sunday			
16-Jun-2014	0.21	0.11	0.43	0.36				
17-Jun-2014	0.20	0.10	0.42	0.38				
18-Jun-2014	0.23	0.14	0.44	0.34				
19-Jun-2014	0.23	0.14	0.43	0.40				
20-Jun-2014	0.22	0.13	0.42	0.35				
21-Jun-2014	0.24	0.12	0.42	0.36				
22-Jun-2014					Sunday			
23-Jun-2014	0.23	0.14	0.42	0.34				
24-Jun-2014	0.22	0.13	0.41	0.32				
25-Jun-2014	0.23	0.14	0.38	0.34				
26-Jun-2014	0.23	0.13	0.36	0.35			<u> </u>	
27-Jun-2014	0.22	0.14	0.34	0.34			·	
28-Jun-2014	0.21	0.12	0.37	0.35				
29-Jun-2014					Sunday			
30-Jun-2014	0.25	0.16	0.35	0.30				