

The Jockey Club CPS Limited

Central Police Station Conservation
and Revitalisation Project:
Fifth Quarterly EM&A Report
(1 November 2012 to 31 January
2013)

Issue Date: March 2013

Environmental Resources Management

16/F

DCH Commercial Centre
25 Westlands Road
Quarry Bay, Hong Kong
Telephone: (852) 2271 3000
Facsimile: (852) 2723 5660
E-mail: post.hk@erm.com
<http://www.erm.com>

The Jockey Club CPS Limited

Central Police Station Conservation
and Revitalisation Project:
Fifth Quarterly EM&A Report
(1 November 2012 to 31 January
2013)

Issue Date: March 2013

Reference 0095646

For and on behalf of ERM-Hong Kong, Limited
Approved by: <u>Frank Wan</u>
Signed: <u></u>
Position: <u>Partner</u>
Certified by: <u></u> (Environmental Team Leader – Winnie Ko)
Date: <u>4 March 2013</u>

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.

Your ref. 0095646_let_Atkins_20130311 Fifth Quarterly EM&A Report.doc
Our ref. 4690/OC040/SO

Date: 12 March 2013

By Email and Post

ERM-Hong Kong Limited,
21/F Lincoln House,
979 King's Road,
Taikoo Place, Island East,
Hong Kong

Attn: Ms Winnie Ko

Dear Winnie,

Central Police Station Conservation and Revitalization Project Verification of Fifth Quarterly EM&A Report

We refer to your letter dated 11 March 2013 regarding the fifth Quarterly EM&A Report. Atkins China Ltd. verifies, in the capacity of Independent Environmental Checker, that the report, in principle, conforms the requirements provided in Section 10.4 of the EM&A Manual.

**Yours sincerely,
For Atkins China Ltd.**



**Sharifah Or
Independent Environmental Checker**

c.c. HKJC – Mr. Kenneth Lee,
Rocco Design Architect – Mr. Charles Kung,

By Email
By Email

CONTENTS

	<i>EXECUTIVE SUMMARY</i>	<i>I</i>
<i>1</i>	<i>INTRODUCTION</i>	<i>1</i>
<i>1.1</i>	<i>PURPOSE OF THE REPORT</i>	<i>1</i>
<i>1.2</i>	<i>STRUCTURE OF THE REPORT</i>	<i>1</i>
<i>2</i>	<i>PROJECT INFORMATION</i>	<i>3</i>
<i>2.1</i>	<i>BACKGROUND</i>	<i>3</i>
<i>2.2</i>	<i>SITE DESCRIPTION</i>	<i>3</i>
<i>2.3</i>	<i>CONSTRUCTION ACTIVITIES</i>	<i>3</i>
<i>2.4</i>	<i>CONSTRUCTION PROGRAMME</i>	<i>4</i>
<i>2.5</i>	<i>PROJECT ORGANISATION AND MANAGEMENT STRUCTURE</i>	<i>4</i>
<i>2.6</i>	<i>STATUS OF ENVIRONMENTAL APPROVAL DOCUMENTS</i>	<i>4</i>
<i>3</i>	<i>ENVIRONMENTAL MONITORING REQUIREMENTS</i>	<i>6</i>
<i>3.1</i>	<i>NOISE MONITORING</i>	<i>6</i>
<i>3.2</i>	<i>CULTURAL HERITAGE</i>	<i>8</i>
<i>3.3</i>	<i>LANDSCAPE AND VISUAL MONITORING</i>	<i>9</i>
<i>4</i>	<i>IMPLEMENTATION STATUS ON ENVIRONMENTAL MITIGATION MEASURES</i>	<i>10</i>
<i>5</i>	<i>MONITORING RESULTS</i>	<i>11</i>
<i>5.1</i>	<i>NOISE</i>	<i>11</i>
<i>5.2</i>	<i>LANDSCAPE AND VISUAL MONITORING</i>	<i>11</i>
<i>5.3</i>	<i>CULTURAL HERITAGE</i>	<i>12</i>
<i>5.4</i>	<i>WASTE MANAGEMENT</i>	<i>13</i>
<i>5.5</i>	<i>EFFECTIVENESS OF MITIGATION MEASURES AND MONITORING</i>	<i>14</i>
<i>6</i>	<i>ENVIRONMENTAL SITE INSPECTION</i>	<i>15</i>
<i>7</i>	<i>ENVIRONMENTAL NON-CONFORMANCE</i>	<i>16</i>
<i>8</i>	<i>REVIEW OF THE EM&A DATA AND EIA PREDICTIONS</i>	<i>19</i>
<i>8.1</i>	<i>NOISE</i>	<i>19</i>
<i>8.2</i>	<i>WASTE MANAGEMENT</i>	<i>19</i>
<i>8.3</i>	<i>SUMMARY OF REVIEW</i>	<i>19</i>
<i>9</i>	<i>CONCLUSIONS</i>	<i>21</i>

LIST OF TABLES

Table 2.1	<i>Summary of Construction Activities undertaken in this Reporting Period</i>
Table 2.2	<i>Summary of Environmental Licensing, Notification and Permit Status</i>
Table 3.1	<i>Construction Phase Noise Monitoring Locations</i>
Table 3.2	<i>Noise Monitoring Equipment</i>
Table 3.3	<i>Action and Limit Levels for Construction Noise Monitoring</i>
Table 3.4	<i>Alert, Alarm and Action (AAA) Levels for Vibration Monitoring</i>
Table 3.5	<i>Event and Action Plan for vibration monitoring</i>
Table 4.1	<i>Status of Required Submissions</i>
Table 5.1	<i>Findings of Monthly Tree Inspection in the Reporting Period</i>
Table 5.2	<i>Quantities of Waste Generated from the Project</i>
Table 7.1	<i>Summary of Complaints Received</i>
Table 8.1	<i>Comparison of Construction Noise Standard and Noise Monitoring Results</i>
Table 8.2	<i>Quantity of Actual Amount of C&D Materials, General Wastes and Chemical Wastes Generated and EIA Estimation</i>

LIST OF ANNEXES

Annex A	<i>Locations of Works Areas and the Surroundings</i>
Annex A1	<i>Project Location</i>
Annex A2	<i>Declared Monuments within the Project Site</i>
Annex A3	<i>Site Layout Plan marked with Works</i>
Annex B	<i>Project Organization Chart and Contact Detail</i>
Annex C	<i>Locations of Noise Monitoring Stations and Noise Sensitive Receivers</i>
Annex D	<i>Monitoring Schedule of the Reporting Period</i>
Annex E	<i>Calibration Reports for Calibrators and Sound Level Meters</i>
Annex F	<i>Event/Action Plans for Noise</i>
Annex G	<i>Summary of Implementation Status</i>
Annex H	<i>Noise Monitoring Results</i>
Annex I	<i>Construction Programme of the Project</i>
Annex J	<i>Waste Flow Table</i>
Annex K	<i>Environmental Complaint, Enquiry, Environmental Summons and Prosecution Log</i>
Annex L	<i>Records of Vibration Monitoring for Trial Piling and Pipe / Bored Piling Works</i>
Annex M	<i>Records of Vibration Monitoring for Other Construction Works</i>
Annex N	<i>A Summary of Current Condition of Character Defining Elements</i>

EXECUTIVE SUMMARY

The construction works of **Central Police Station Conservation and Revitalisation Project** commenced on 24 October 2011. This is the fifth quarterly Environmental Monitoring and Audit (EM&A) summary report presenting the EM&A works carried out during the period from 1 November 2012 and 31 January 2013 in accordance with the EM&A Manual.

Environmental Monitoring and Audit Progress

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

- Construction Noise Monitoring during normal weekdays at each monitoring station 16 times
- Joint Environmental Site Inspection 3 times
- Joint Heritage Site Inspection 3 times
- Landscape & Visual Monitoring 3 times
- Tree Inspection 3 times
- Vibration monitoring for trial piling works 60 times
- Vibration monitoring for pipe/bored piling works 74 times
- Vibration monitoring for other construction works 73 times

Noise

16 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 Limit Level of construction noise was recorded during the reporting period. An exceedance of Action Level of noise (complaint received) was recorded during the reporting period. An investigation was carried out to identify the cause of the exceedance.

Cultural Heritage

60 vibration measurement events for trial piling works near Block 17 and 74 vibration measurement events for pipe/bored piling works at Old Bailey Wing (Block 50) were undertaken during the reporting period. Additionally, a total of 73 numbers of vibration monitoring events for demolition, underpinning, and excavation works as well as pre-drilling works at Block 8 were carried out throughout the reporting period.

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

Three monthly heritage site inspections were conducted and the Contractor has generally implemented the necessary protection measures as recommended.

Landscape & Visual

Landscape and visual monitoring has commenced since October 2011 on a monthly basis. Three monthly tree inspections have been conducted by the arborist during the reporting period. Most recommended actions have been performed by the Contractor as advised in the reporting period.

Waste Management

Wastes generated from this Project include inert construction and demolition (C&D) materials and non-inert C&D materials. 1325 tonnes of inert C&D materials and 412.27 tonnes of non-inert C&D materials were generated during the reporting period. The non-inert C&D materials and general refuse generated from the Project were disposed of at the SENT Landfill. 41,000 kg of metals and 172 kg of paper/cardboard packaging were produced and sent to recyclers for recycling. No plastics waste or chemical waste was generated during the reporting period.

Environmental Site Inspection

Three joint environmental site inspections were carried out by the representatives of the Contractor, the IEC and the ET during the reporting period. The Contractor has generally implemented the mitigation measures as recommended.

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

No exceedance of Limit Level of construction noise was recorded at designated monitoring stations during the reporting period. An exceedance of Action Level of noise (complaint received) was recorded during the reporting period.

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

One enquiry was received during the reporting period.

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

Two complaints were received during the reporting period.

No summons/prosecutions were received in this reporting period.

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 fifth quarterly EM&A summary report, which summarises the impact monitoring results and audit findings for the EM&A programme during the reporting period from 1 November 2012 and 31 January 2013.

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 contract 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 Mitigation Measures**

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

Section 5 : **Monitoring Results**

summarises the monitoring and waste management results obtained in the reporting period.

Section 6 : **Environmental Site Inspection**

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

Section 7 : **Environmental Non-conformance**

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

Section 8 : **Review of the EM&A Data and EIA Predictions**

compares the monitoring data and waste quantity against predictions in the approved Project EIA report.

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 among 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 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*.

Table 2.1 Summary of Construction Activities undertaken in this Reporting Period

Construction Activities Undertaken
<ul style="list-style-type: none"> • Trial pile loading test near Block 14; • Demolition, underpinning and excavation works at Block 8; • Ground improvement (grouting) works at Block 14 and Block 17; • Construction of pipe pile walls and bored pile walls at Old Bailey Wing (Block 50); • Metal scaffolding erection at Block 11 and Block 12; • Protection works of Tree 5; • Air duct and E&M removal works at Block 1; • Structural open up investigation at Block 17; • General strip out works at Block 1; • Pre-drilling works at Block 8, Block 17, Old Bailey Wing and Arbuthnot Wing; • Archaeological Watch Brief works at Arbuthnot Wing; • Grouting works at Parade Ground; • Demolition of northeast corner toilet and ground floor slab at Block 17; • Structural addition and alteration works at Block 1; • Furniture strip out works at Block 11 and Block 12; and • Construction of pipe pile wall at Parade Ground.

2.4 CONSTRUCTION PROGRAMME

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

2.5 PROJECT ORGANISATION AND MANAGEMENT STRUCTURE

The Project organization chart, hotline number and contact details are shown in *Annex B*.

2.6 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 Pollution Control (Construction Dust) Regulation</i>	Ref. No. 332920	Throughout the Contract	-

Permit/ Licences/ Notification	Reference	Validity Period	Remarks
Registration of Waste Producer under <i>Waste Disposal Ordinance</i>	Waste Producer No.: 5213-122-G2347-25	Throughout the Contract	-
Effluent Discharge License under <i>Water Pollution Control Ordinance</i>	License No. WT00010633-2011	21 Oct 2011 – 31 Oct 2016	-
Notification of Commencement of Asbestos Abatement Work under <i>Air Pollution Control Ordinance</i>	-	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	-
	GW-RS1301-12	2 January 2013 at 1900 hours to 29 June 2013 at 2300 hours	-
	GW-RS0113-13	1 February 2013 at 0200 hours to 31 May 2013 at 0400 hours	-

3.1 NOISE MONITORING

3.1.1 Monitoring Location

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

Table 3.1 Construction Phase Noise Monitoring Locations

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 rejected; 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 IEC 651: 1979 and 804:1985 (Type 1) specification. The calibration certificates of the sound level meters are included 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 10997142; S/N 10786708) <u>Sound Level Meter</u> Rion NL-31 (S/N 00603867)

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.

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:

- 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.
- 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.

Baseline Monitoring

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 monitoring location is shown in *Annex L*. 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 Monitoring	Horizontal Movement	2.0 mm/s	2.5 mm/s	3.0 mm/s

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
Exceedance of Action Level	Cease Works and submit mitigation

3.2.2 *Mitigation Measures*

Cultural heritage 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*.

3.3 *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.

IMPLEMENTATION STATUS ON ENVIRONMENTAL MITIGATION MEASURES

The Contractor has generally implemented the environmental mitigation measures (including those for archaeology) and requirements as stated in the EIA Report, EM&A Manual, EP and the contract documents. The implementation status during the reporting period is summarised 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
<i>EP Condition</i>		
Conditions 3.4	• Twelfth Monthly EM&A Report	14 November 2012
	• Thirteenth Monthly EM&A Report	17 December 2012
	• Fourteenth Monthly EM&A Report	14 January 2013
<i>EM&A Manual</i>		
Section 10.4	Fourth Quarterly EM&A Report	12 December 2012

5.1 NOISE

A total of 16 sets of 30-minute construction noise measurements were carried out at each monitoring station, 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 Limit level of construction noise was recorded during the reporting period. An exceedance of Action Level of noise (complaint received) was recorded during the reporting period. The investigation was carried out and findings are presented in *Section 7.1.4*.

5.2 LANDSCAPE AND VISUAL MONITORING

Three monthly tree inspections were conducted by the arborist during the reporting period on 1 November 2012, 11 December 2012 and 30 January 2013 and key findings and recommendations are summarised in *Table 5.1*.

Table 5.1 Findings of Monthly Tree Inspections in the Reporting Period

Tree No.	Botanical Name	Overall Health Condition	Arborist's Observation / Recommendations
1 November 2012			
Tree -5	<i>Mangifera indica</i>	Good	<ul style="list-style-type: none"> • No further action required.
Tree -6	<i>Aleurites moluccana</i>	Fair	<ul style="list-style-type: none"> • To check for any signs of new crack weekly; • The drooping branches and leaves have been trimmed on 1 November 2012.
Tree-7	<i>Aleurites moluccana</i>	Fair	<ul style="list-style-type: none"> • To check for any signs of new crack weekly; • To remove the remaining drooping branches and leaves.
Tree-8	<i>Plumeria rubra</i>	Fair	<ul style="list-style-type: none"> • No further action required.
Tree-9	<i>Araucaria cunninghamia</i>	Fair	<ul style="list-style-type: none"> • No further action required.
Tree-11	<i>Dracaena marginata</i>	Fair	<ul style="list-style-type: none"> • No further action required.
11 December 2012			
Tree -5	<i>Mangifera indica</i>	Good	<ul style="list-style-type: none"> • To remove the defective

Tree No.	Botanical Name	Overall Health Condition	Arborist's Observation / Recommendations
Tree -6	<i>Aleurites moluccana</i>	Fair	branches and parasitic plant. <ul style="list-style-type: none"> To check for any signs of new cracks weekly.
Tree-7	<i>Aleurites moluccana</i>	Fair	<ul style="list-style-type: none"> To check for any signs of new cracks weekly; To remove the remaining drooping branches and leaves.
Tree-8	<i>Plumeria rubra</i>	Fair	<ul style="list-style-type: none"> No further action required.
Tree-9	<i>Araucaria cunninghamia</i>	Fair	<ul style="list-style-type: none"> To remove the undergrowth near the planter.
Tree-11	<i>Dracaena marginata</i>	Fair	<ul style="list-style-type: none"> No further action required.
30 January 2013			
Tree -5	<i>Mangifera indica</i>	Good	<ul style="list-style-type: none"> The defective branches and parasitic plant have been removed.
Tree -6	<i>Aleurites moluccana</i>	Fair	<ul style="list-style-type: none"> No further action required.
Tree-7	<i>Aleurites moluccana</i>	Fair	<ul style="list-style-type: none"> To remove the remaining drooping branches and leaves.
Tree-8	<i>Plumeria rubra</i>	Fair	<ul style="list-style-type: none"> No further action required.
Tree-9	<i>Araucaria cunninghamia</i>	Fair	<ul style="list-style-type: none"> The undergrowth near the planter has been removed.
Tree-11	<i>Dracaena marginata</i>	Fair	<ul style="list-style-type: none"> No further action required.

Follow-up actions needed to be implemented were recommended to the Contractor and the status of the follow-up actions was reviewed during the subsequent monthly site inspections. Recommendations have generally been implemented by the Contractor during the reporting period.

5.3 CULTURAL HERITAGE

5.3.1 Vibration Monitoring

26 and 22 vibration monitoring measurements for trial piling works near Block 17 were carried out in November and December 2012, respectively. Vibration monitoring measurements for the trial piling works near Block 17 were conducted on weekdays from 2 to 12 January 2013 and then weekly from 13 January 2013 onwards following the completion of the trial piling works. The records of vibration monitoring are shown in *Annex L*.

A total of 26, 22 and 26 vibration monitoring events were undertaken in November 2012, December 2012 and January 2013, respectively, for the construction of pipe pile walls at Old Bailey Wing (Block 50). The monitoring readings during the reporting period are presented in *Annex L*.

26 and 21 numbers of vibration monitoring measurements were carried out for the demolition, underpinning and excavation works at Block 8 in November 2012 and December 2012, respectively. Also, 26 vibration

monitoring events were carried out for the pre-drilling works at Block 8 in January 2013. The records of vibration monitoring are presented in *Annex M*.

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

5.3.2 *Heritage Site Audit*

Three monthly heritage site audits were conducted on 15 November 2012, 13 December 2012, and 17 January 2013 by the Heritage Checker. Follow-up actions were undertaken as reported by the Contractor and observed in the subsequent monthly site inspections conducted in the reporting period. Key site audit findings and recommendations are summarised below.

15 November 2012

- Guano was observed on the verandah of the Barrack Block. The Contractor was recommended to enhance the polythene sheet protection to floors and to carry out cleaning of guano daily as agreed;
- A scaffold pole was touching the revetment wall below the north elevation of D Hall (Block 14). It was rectified by the Contractor immediately;
- Protection is required to the southwest corner of B Hall (Block 12) to protect the brickwork; and
- Protection to the doors on North Balconies of Block 1 is required.

13 December 2012

- No major observation or finding was recorded during the site inspection.

17 January 2013

- Damage to the timber floor boards in Block 1 was observed due to works not being carried out in accordance with the specifications/method statements;
- Damage to the timber door lining in Block 1 was observed due to poor handling of the door during its removal; and
- Re-briefing sessions with the Contractors were carried out before allowing them to resume with the timber floor board works. It was also recommended to provide more supervision.

A summary of the current condition of character defining elements, historic buildings and structures is contained in *Annex N*.

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 summary of Waste Flow Table prepared by the Contractor is shown in *Annex J*. The non-inert C&D materials and general refuse generated from the Project were disposed of at the SENT Landfill. 41,000 kg of metals and 172 kg of paper/cardboard packaging were produced and sent to recyclers for recycling. No plastics waste or chemical waste was generated during the reporting period.

Table 5.2 *Quantities of Waste Generated from the Project*

Month / Year	Quantity						
	C&D Materials (inert) (tonnes) ^(a)	C&D Materials (non-inert) (tonnes) ^(b)	Chemical Waste		Recycled materials		
			Liquid (L)	Solid (kg)	Paper/cardboard (kg)	Plastics (kg)	Metals (kg)
November 2012	843.86	47.44	0	0	0	0	5,650
December 2012	207.50	88.66	0	0	0	0	27,230
January 2013	273.64	276.17	0	0	172	0	8,120
Total	1325.00	412.27	0	0	172	0	41,000

Notes:

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

5.5

EFFECTIVENESS OF MITIGATION MEASURES AND MONITORING

The mitigation measures recommended in the EIA report and required by the EP are considered effective in minimising environmental impacts.

The EM&A for the Project was conducted as scheduled during the reporting period. No non-compliance events were observed during site inspections but one exceedance of Action Level of noise (complaint received) was recorded during the reporting period. The EM&A programme is considered effective.

Three monthly environmental site inspections were conducted on 15 November 2012, 13 December 2012 and 17 January 2013 during the reporting period. There was no non-compliance recorded during the site inspections. Key site audit findings and recommendations are summarised below. Monthly recommendations and observations were implemented and rectified by the Contractor in the subsequent monthly site inspections.

15 November 2012

- Steel collars for noise reduction were not installed to some of the hand-held breakers for the slab demolition works at Block 8. The Contractor was recommended to provide steel collars to all the hand-held breakers;
- Considerable noise was emitted from the operating air compressor near Block 14. The Contractor was advised to enclose the air compressor with acoustic mat; and
- A few oil drums were observed being stored without a drip tray near Block 14. The Contractor was reminded to put the oil drums on a drip tray to prevent potential land contamination if oil spillage occurred.

There is no major observation or finding recorded during the site inspections on 13 December 2012 and 17 January 2013.

7.1.1 *Summary of Monitoring Exceedance*

An exceedance of Action Level of noise (complaint received) was recorded during the reporting period. An investigation has been carried out and additional mitigation measures have been undertaken. No exceedance of Limit Level of construction noise or Alert, Alarm and Action Level of vibration was recorded during the reporting period.

7.1.2 *Summary of Enquiry*

One enquiry was received during the reporting period. An email enquiry from a nearby resident was received by the Lands Department, which was later referred to the Development Bureau and transferred to JCCPS on 22 November 2012. The enquirer mentioned that the construction works at the medium level of Old Bailey Street were being carried out during early morning time (i.e. 0730 hrs) and requested for a timetable/completion date of the construction works at the location. JCCPS has sent a draft reply to the Development Bureau for review and a formal reply has been provided to the enquirer.

7.1.3 *Summary of Environmental Non-Compliance*

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

7.1.4 *Summary of Environmental Complaint*

Two complaints were received during the reporting period. A complaint about noise nuisance was received by Gammon Construction Limited (GCL) on 15 November 2012. Another complaint about smell nuisance was received by the EPD and transferred to GCL on 23 November 2012.

Table 7.1 *Summary of Complaints Received*

Date of Complaint Received by the Contractor	Means by which complaint was received	Nature of complaint
15 November 2012	Gammon Construction Limited (Contractor)	Noise nuisance
23 November 2012	Environmental Protection Department	Smell nuisance

On 15 November 2012 at 1010 hrs, GCL received a complaint on noise nuisance generated from the construction site at around 0730 hrs for a duration of about 15 minutes. According to the information provided by the Contractor, relocation of piling machine was carried out near Block 8 at about 0730 hrs on 15 November 2012. Other major construction activities undertaken on 15 November included slab demolition works at Block 8 and grouting works at Block 17, both commenced at around 0900 hrs. The noise nuisance indicated by the complainant was likely resulted from the movement

of the piling machine against the inclined steel platform during the relocation works. Subsequent to the receipt of the noise complaint, it has been agreed with the Contractor that the relocation of piling machine will be carried out, as far as possible, at the end of the working day instead of during early morning time. The Contractor has been reminded to ensure that acoustic curtains are properly installed prior to conducting the piling machine relocation. Additionally, the Contractor has been advised to notify all workers and operation supervisor about the complaint on 15 November 2012 and to remind them to minimise noise generation as far as possible during the relocation of the piling machine as well as other construction work activities.

On 23 November 2012, GCL received a complaint transferred from the EPD with regard to nuisance from operating machinery emissions. The complainant living along Chancery Lane mentioned that diesel smell was perceived at his location and suspected that the emissions were originated from the construction site. According to the information provided by the Contractor, the diesel exhaust emissions may be generated by the following operating plant in the vicinity of Chancery Lane on 23 November 2012:

- Three operating air compressors near Block 14;
- An operating mobile crane near Block 17; and
- Three drilling machines being operated concurrently during the grouting works at the north elevation of Block 17.

It has been confirmed with GCL that all on-site machineries are using Ultra-Low Sulphur Diesel (ULSD) and that diesel is directly filled into the machinery. There was no on-site storage of diesel oil. However, exhaust emissions from the above diesel-powered mechanical equipment may be dispersed beyond the construction site boundary, potentially affecting nearby residents along Chancery Lane.

The Contractor has been recommended to implement measures to direct the diesel exhaust emissions away from the nearby sensitive receivers as far as practicable, particularly residents along Chancery Lane (to the south and Old Bailey Street) to the west of the construction site. As reported by the Contractor, a number of mitigation measures have been implemented to facilitate the dispersion of the exhaust emissions:

- 1) Two ventilation fans have been installed near the exhaust of the air compressors where the exhaust emissions are directed towards the open space at Arbuthnot Wing via an air duct;
- 2) A ventilation fan has been installed to the exhaust of each of the three drilling machines on the north elevation of Block 17. The ventilation fans were connected to air ducts which divert the exhaust emissions to the north towards the Old Bailey Wing; and

- 3) The exhaust of the mobile crane was connected to an air duct through which the emissions were filtered by a drum filled with water.

Furthermore, the Contractor has been reminded to monitor any irregular and excessive exhaust emissions from all operating plant. The Contractor should ensure that there is no oil leakage from all operating machineries and provide drip trays, where applicable. Additionally, the Contractor has been reminded to ensure that all mitigation measures as reported are properly implemented prior to operating any PME that is likely to generate considerable exhaust emissions. The Contractor has also been advised to notify all workers and operation supervisor of the emission complaint on 23 November.

The complaint investigation reports and the cumulative number of complaints are presented in *Annex K*.

7.1.5 *Summary of Environmental Summons and Successful Prosecution*

No summons was received during the reporting period. The cumulative summons/prosecution log is shown in *Annex K*.

8.1 NOISE

A comparison was made between the monitoring results in this reporting period and the Noise Standard for general construction works during 0700 – 1900 hrs on normal weekdays (*Table 8.1*).

Table 8.1 Comparison of Construction Noise Standard and Noise Monitoring Results

Reporting Month	Monitoring Stations	Corresponding NSR in EIA	Noise Limit Level	Predicted Construction Noise Level (With Mitigation) in EIA	Measured Construction Noise Level
				L _{wq, 30 min} dB(A)	
November 2012	NM2	N2	75	67 - 72	64.1 – 67.6
	NM6	N6	75	73 - 75	64.3 – 68.5
December 2012	NM2	N2	75	67 - 72	63.4 – 65.5
	NM6	N6	75	73 - 75	67.2 – 69.8
January 2013	NM2	N2	75	67 - 72	64.4 – 73.1
	NM6	N6	75	73 - 75	66.5 – 70.7

The monitoring results recorded since the commencement of the construction works have been well below the Limit Level and comparable to the predicted construction noise level in the approved EIA. Recommended mitigation measures in *Section 5.9.1* of EIA will continue to be implemented throughout the construction stage.

8.2 WASTE MANAGEMENT

The estimated amount of waste generated in the approved EIA and the accumulated quantities of waste generated up to this reporting period are presented in *Table 8.2*. The accumulated amount of inert and non-inert C&D materials is within the estimated amount in EIA. The major chemical waste generated on site was primarily asbestos which was not estimated in the approved EIA and hence no data is available for comparison. Recommended mitigation measures in *Section 8.5.1* of the EIA will continue to be implemented throughout the construction stage.

Table 8.2 *Quantity of Actual Amount of C&D Materials, General Wastes and Chemical Wastes Generated and EIA Estimation*

Type of Material	Estimated Amount of Waste in EIA	Accumulated Actual Amount of Waste Recorded ^(a) ^(b)
Amount of C&D Materials (Inert) Arising	16,440 m ³	2906 m ³
Amount of C&D Materials (Non-inert) Arising	890 m ³	1092 m ³
General Refuse	130 kg per day	- ^(c)
Chemical Waste	Less than 100L per month	- 45 L (June 2012) - 40 kg (June 2012) - 7,000 kg of asbestos generated

Notes:

- (a) The accumulated actual amount of C&D Materials was recorded since the commencement of construction works.
- (b) The volume of waste materials are provided by the Contractor based on the updated waste record in January 2013.
- (c) The amount of general refuse generated was not recorded.

8.3

SUMMARY OF REVIEW

The EIA predictions and the monitoring results since the commencement of construction works have been reviewed. The EIA concluded that the Project would not cause adverse impacts to the environment and the monitoring results have also indicated the same so far. Mitigation measures (including those for archaeology) recommended in the EP, EIA and EM&A Manual were implemented by the Contractor as far as practicable and were considered effective. The recommended mitigation measures will continue to be implemented throughout the construction phase of the Project.

The effectiveness of the monitoring programme has been exhibited therefore change to the programme is not considered to be necessary.

CONCLUSIONS

This fifth Quarterly EM&A Report presents the EM&A works undertaken during the reporting period from 1 November 2012 to 31 January 2013 in accordance with EM&A Manual and the requirements under EP-408/2011/B.

No exceedance of Limit Level of construction noise was recorded at designated monitoring stations during the reporting period. An exceedance of Action Level of construction noise (complaint received) was recorded during the reporting period.

Tree inspections were conducted in this reporting period. Most of the necessary landscape and visual mitigation measures recommended in the EIA Report were implemented by the Contractor.

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

One enquiry was received during the reporting period.

No non-compliance event for heritage and environmental site inspections was recorded during the reporting period.

Two complaints were received during the reporting period.

No summons/prosecution was received during the reporting period.

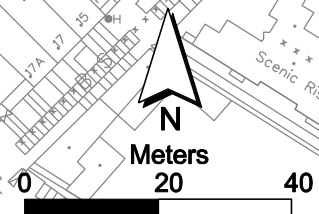
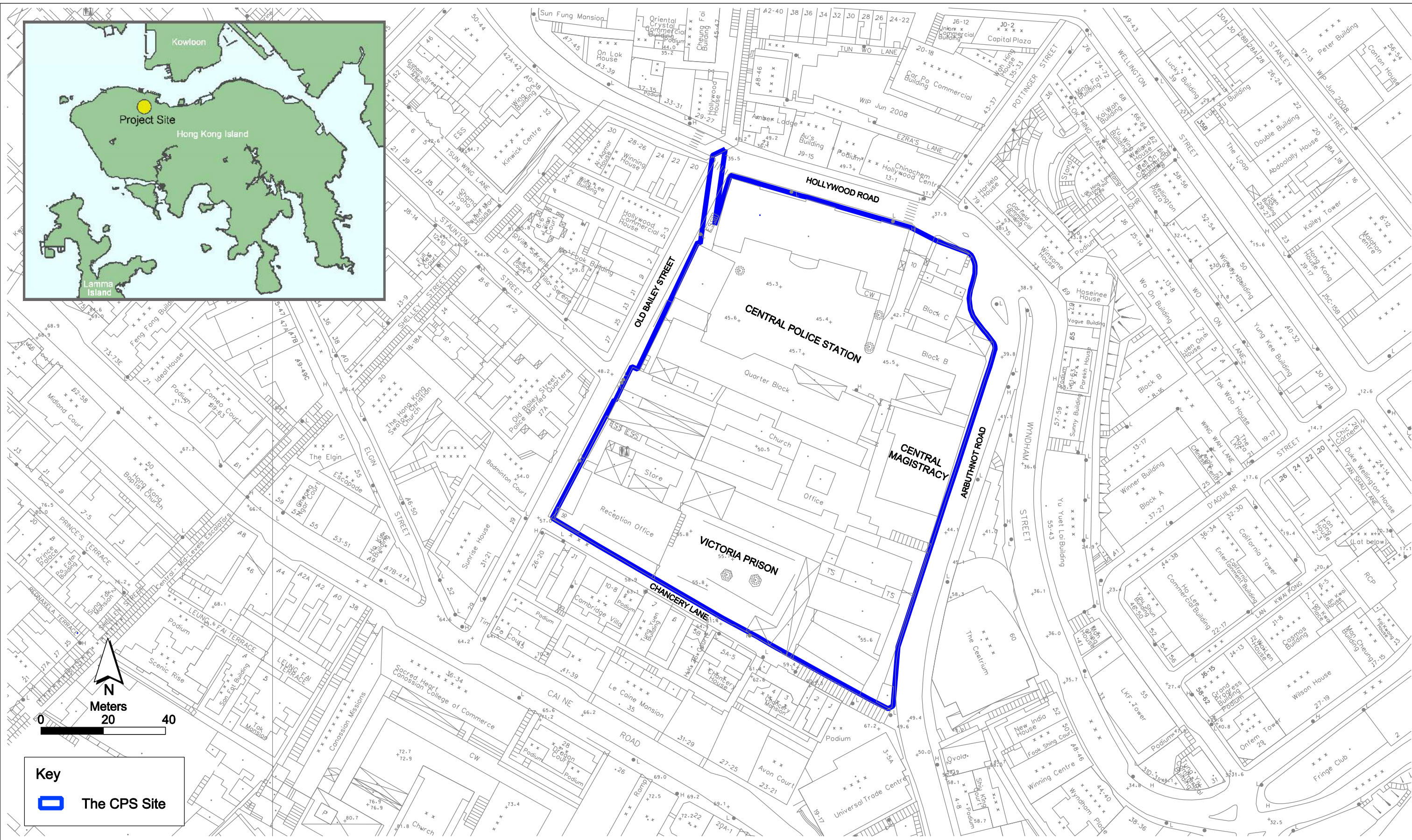
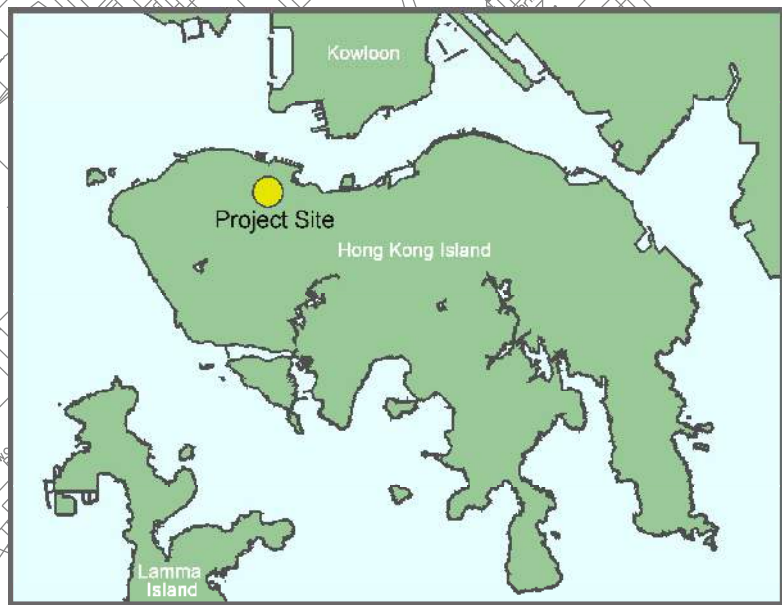
The monitoring programme was considered effective in reflecting the environmental conditions at the designated representative sensitive receivers. The monitoring results also indicate that the Project have not caused adverse impacts on the environment with implementation of appropriate mitigation measures. Change to the monitoring programme is not considered to be necessary. 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 in the coming periods.

Annex A


Location of Works Areas and the Surroundings

Annex A1

Project Location



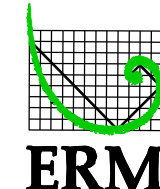
Key

 The CPS Site

Annex A1

Project Location

**Environmental
Resources
Management**



賽馬會文物保育有限公司
The Jockey Club CPS Limited

Annex A2

Declared Monuments within the Project Site



Annex A2

Declared Monuments within the Project Site

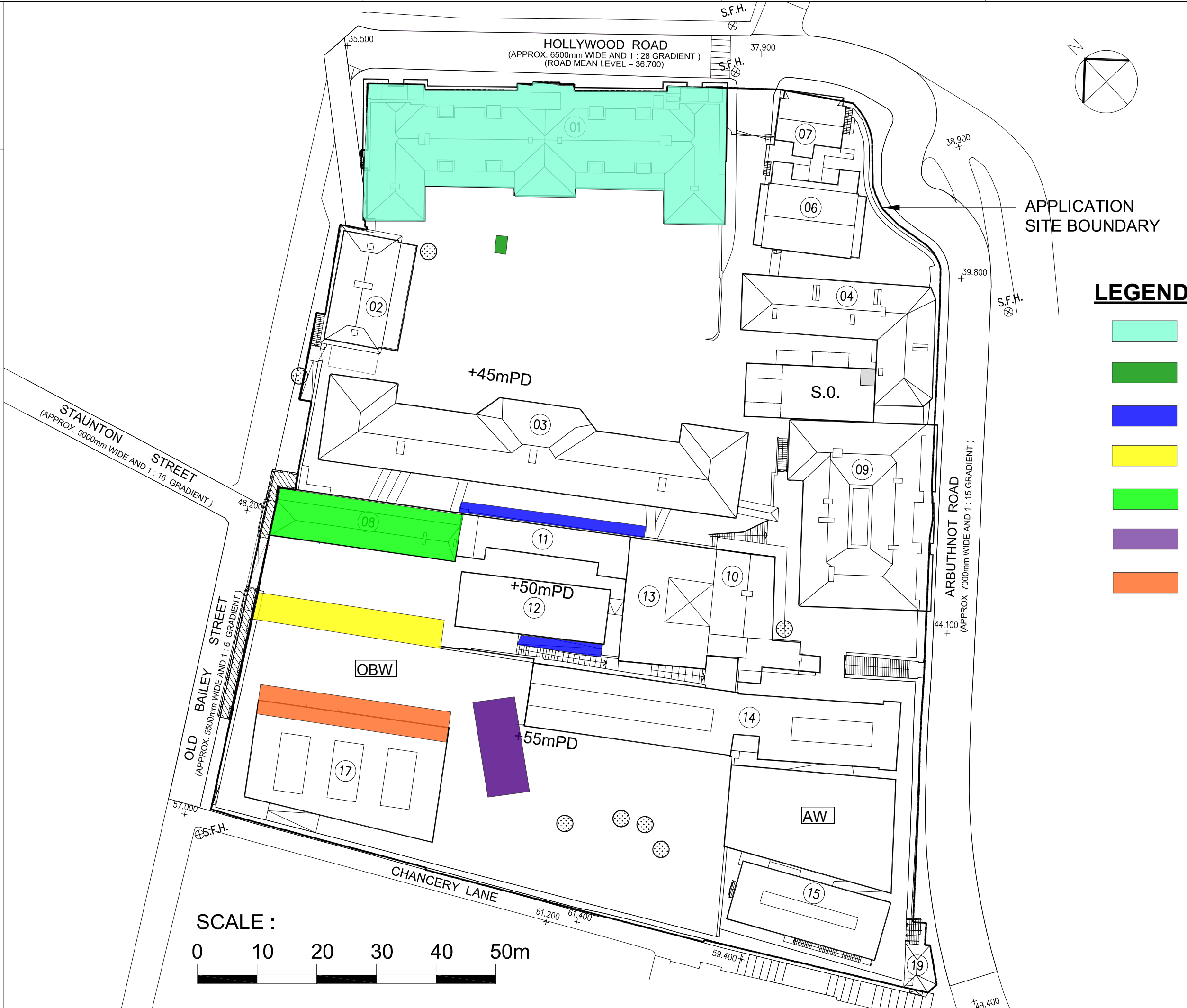
Environmental Resources Management



賽馬會文物保育有限公司
The Jockey Club CPS Limited

Annex A3

Site Layout Plan marked with Works

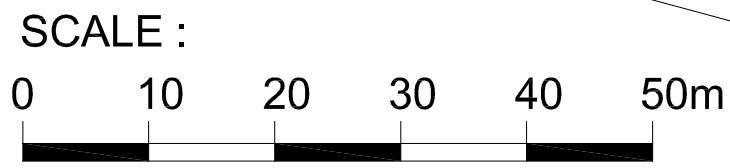


© Gammon Construction Limited
 This document and the copyright in it is the property of Gammon Construction Limited. Gammon Construction Limited shall forthwith take all appropriate action against any infringer of its copyright.

APPLICATION SITE BOUNDARY

LEGEND

- 1. Air Duct and E&M Removal Works
- 2. Protection Works of Tree 5
- 3. Metal Scaffold Erection
- 4. Pipe Pile Wall Piling Works
- 5. Excavation Works
- 6. Loading Test of Trial Piles
- 7. Ground Improvement Works



CENTRAL POLICE STATION

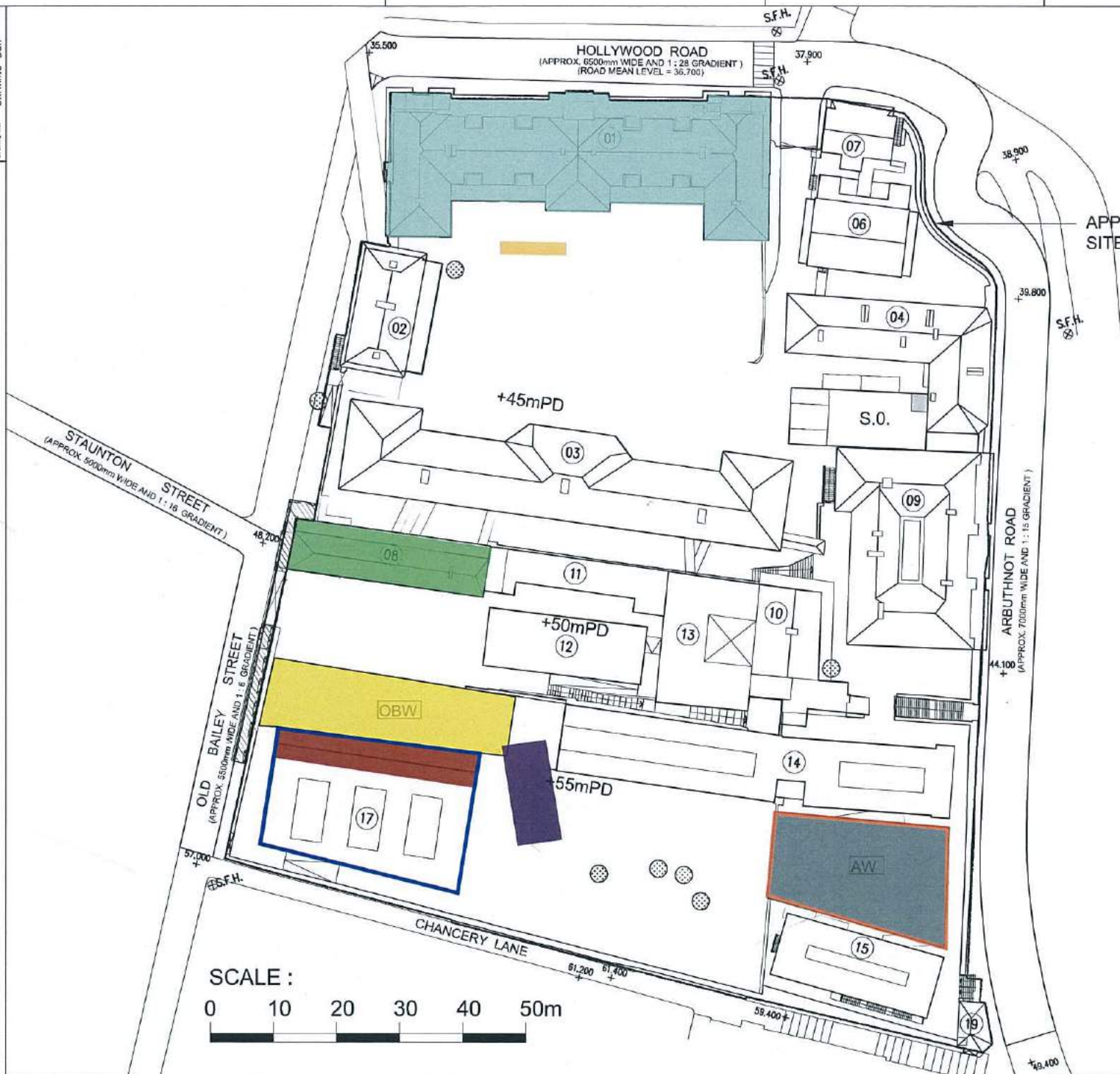
Client
 賽馬會文物保育有限公司
 The Jockey Club CPS Limited

Contractor
Gammon

Drawing Title
SITE LAYOUT PLAN

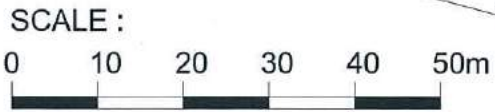
Drawn	Scale	N.T.S.
Designed	Status	Marked for Enquiry & Complaint log (CPS/E&C/09)
Checked		
Approved	Drawing No.	
CAD Ref		

Annex A3 Site Layout Plan marked with Works (November - 2012)



APPLICATION SITE BOUNDARY
LEGEND

- 1. General Strip Out Works
- 2. Grouting Works
- 3. Structural Open Up Investigation
- 4. Pipe Pile Wall Piling Works
- 5. Underpinning and Excavation Works
- 6. Loading Test of Trial Piles
- 7. Ground Improvement Works
- 8. Pre-drilling Works
- 9. Archaeological Watch Brief Works



© Gammon Construction Limited
This document and the copyright in it is the property of Gammon Construction Limited. Gammon Construction Limited shall forthwith take all appropriate action against any infringer of its copyright.

CENTRAL POLICE STATION

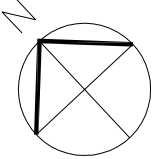
Client
 賽馬會文物保育有限公司
The Jockey Club CPS Limited

Contractor
Gammon

Drawing Title
SITE LAYOUT PLAN

Drawn	Scale	N.T.S.
Designed	Status	Marked for Enquiry & Complaint log (CPS/E&C/09)
Checked		
Approved	Drawing No.	
CAD Ref		

Annex A3 Site Layout Plan marked with Works (December - 2012)



LEGEND

- 1. General Strip Out Works
- 2. Structural A&A works
- 3. Pipe Pile Wall Construction
- 4. Structural Open Up Investigation
- 5. Pipe Pile Wall and Bored Pile Wall
- 6 Ground Improvement Works
- 7. Pre-drilling Works
- 8. Demolition of NE corner Toilet and G/F Slab
- 9. Furniture Strip Out Works

© Gammon Construction Limited
 This document and the copyright in it is the property of Gammon Construction Limited. Gammon Construction Limited shall forthwith take all appropriate action against any infringer of its copyright.

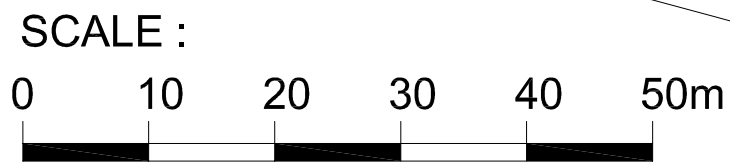
CENTRAL POLICE STATION

Client
 賽馬會文物保育有限公司
 The Jockey Club CPS Limited

Contractor
Gammon

Drawing Title
SITE LAYOUT PLAN

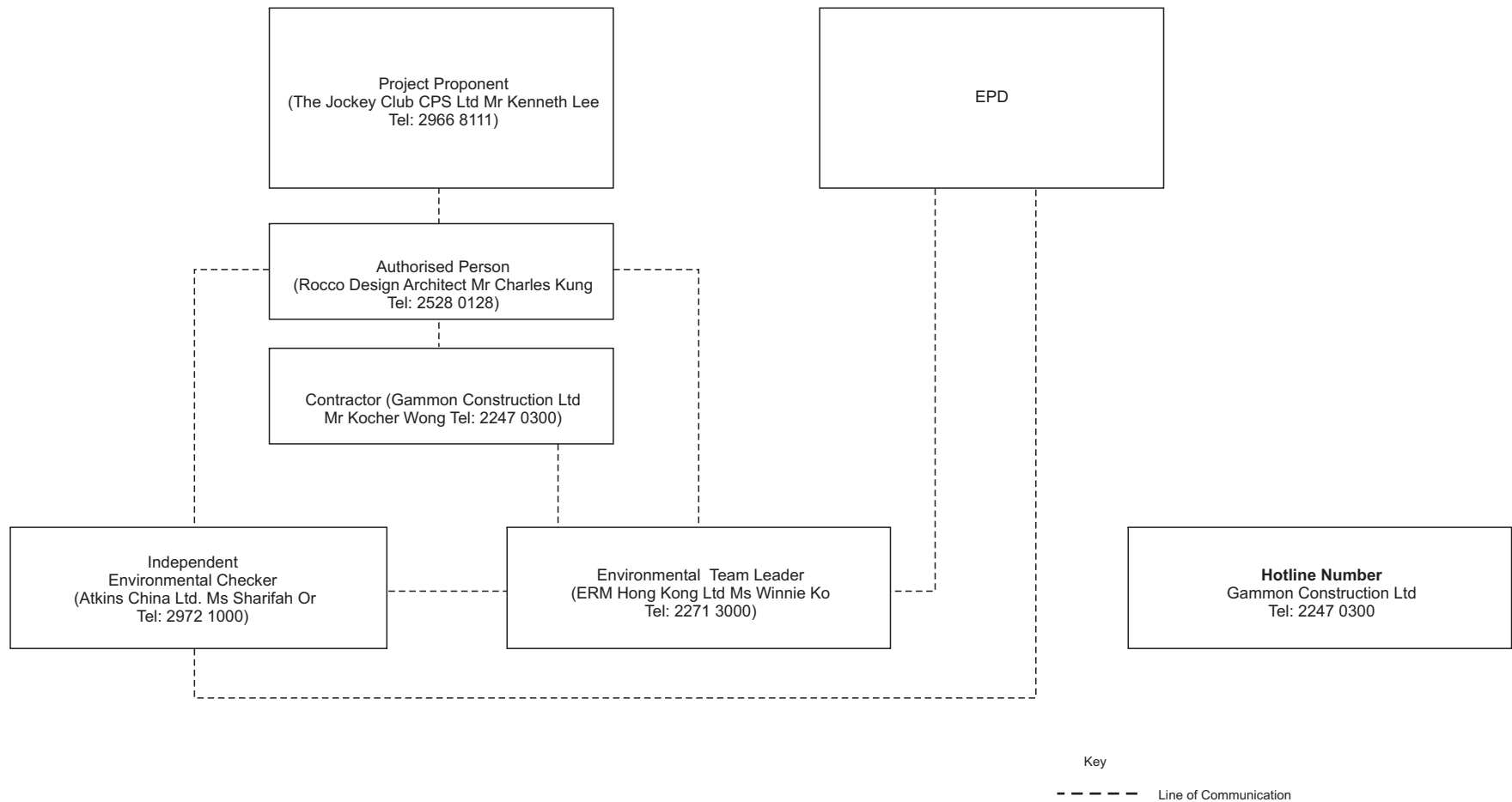
Drawn		Scale	N.T.S.
Designed		Status	Marked for Enquiry & Complaint log (CPS/E&C/09)
Checked			
Approved		Drawing No.	
CAD Ref			



Annex A3 Site Layout Plan marked with Works (January- 2013)

Annex B

Project Organization Chart and Contact Detail



Annex C

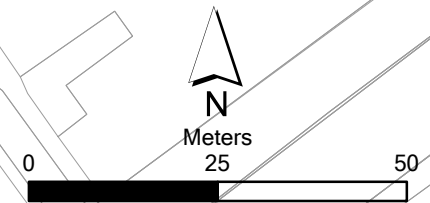
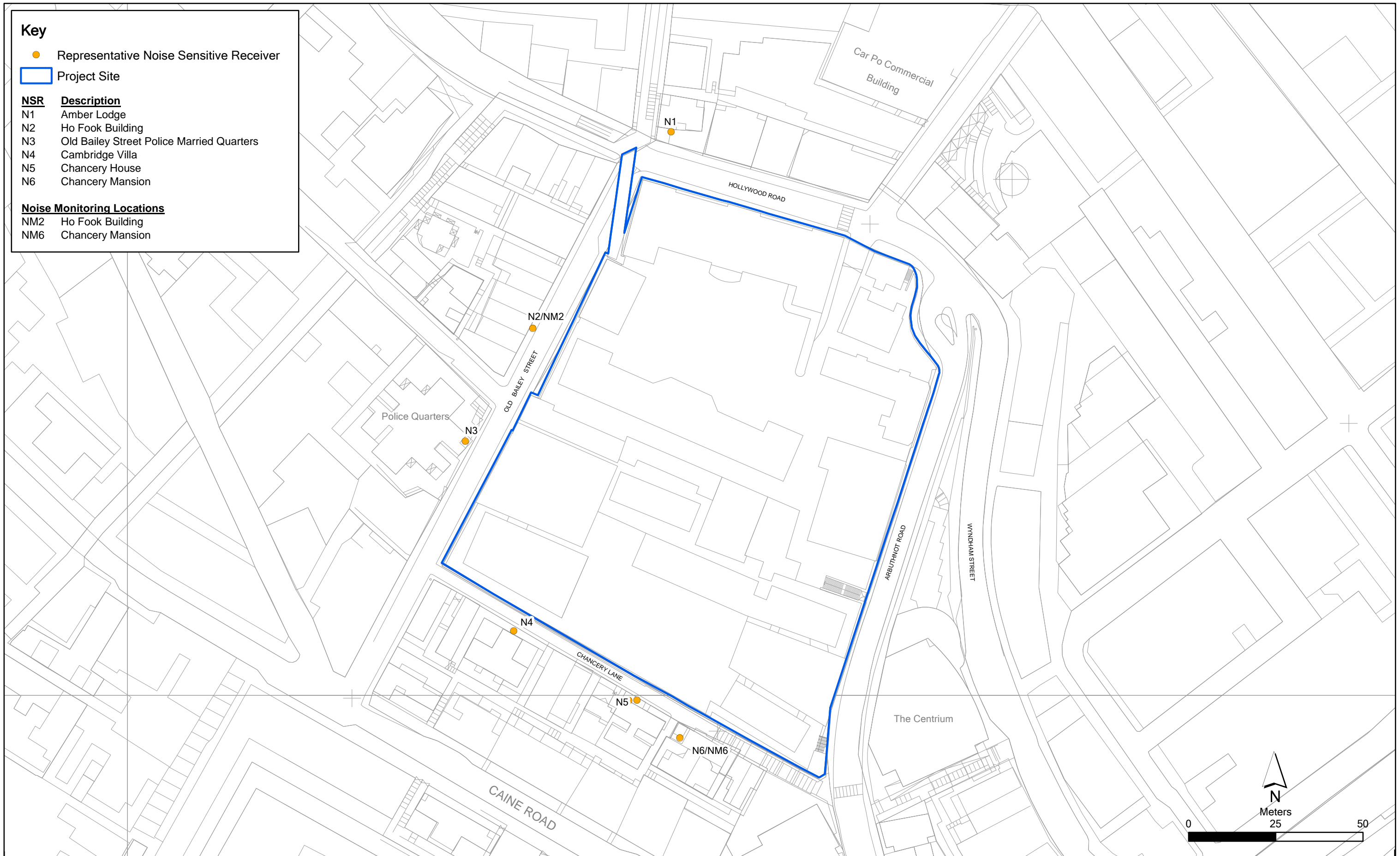
Locations of Noise
Monitoring Stations and
Noise Sensitive Receivers

Key

- Representative Noise Sensitive Receiver
- ▭ Project Site

NSR	Description
N1	Amber Lodge
N2	Ho Fook Building
N3	Old Bailey Street Police Married Quarters
N4	Cambridge Villa
N5	Chancery House
N6	Chancery Mansion

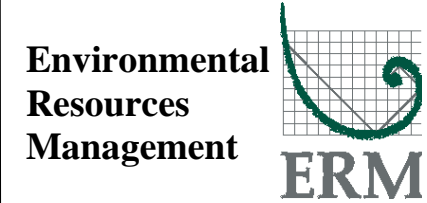
Noise Monitoring Locations	
NM2	Ho Fook Building
NM6	Chancery Mansion



Annex C

Location of Representative Noise Sensitive Receivers and Noise Monitoring Locations

File: 0095646_NSR_NM_May2012.mxd
Date: 09/05/2012



賽馬會文物保育有限公司
The Jockey Club CPS Limited

Annex D

Monitoring Schedule of the Reporting Period

**Central Police Station Compound Conservation and Revitalisation
(Ho Fook Building - NM2 & Chancery Mansion - NM6)
Monitoring Schedule for Reporting Month - November 2012**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				01-Nov	02-Nov	03-Nov
				Noise Monitoring at NM2 & NM6		
04-Nov	05-Nov	06-Nov	07-Nov	08-Nov	09-Nov	10-Nov
			Noise Monitoring at NM2 & NM6			
11-Nov	12-Nov	13-Nov	14-Nov	15-Nov	16-Nov	17-Nov
		Noise Monitoring at NM2 & NM6				
18-Nov	19-Nov	20-Nov	21-Nov	22-Nov	23-Nov	24-Nov
	Noise Monitoring at NM2 & NM6					Noise Monitoring at NM2 & NM6
25-Nov	26-Nov	27-Nov	28-Nov	29-Nov	30-Nov	
					Noise Monitoring at NM2 & NM6	

**Central Police Station Compound Conservation and Revitalisation
(Ho Fook Building - NM2 & Chancery Mansion - NM6)
Monitoring Schedule for Reporting Month - December 2012**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
						01-Dec
02-Dec	03-Dec	04-Dec	05-Dec	06-Dec	07-Dec	08-Dec
				Noise Monitoring at NM2 & NM6		
09-Dec	10-Dec	11-Dec	12-Dec	13-Dec	14-Dec	15-Dec
			Noise Monitoring at NM2 & NM6			
16-Dec	17-Dec	18-Dec	19-Dec	20-Dec	21-Dec	22-Dec
		Noise Monitoring at NM2 & NM6				
23-Dec	24-Dec	25-Dec	26-Dec	27-Dec	28-Dec	29-Dec
	Noise Monitoring at NM2 & NM6					Noise Monitoring at NM2 & NM6
30-Dec	31-Dec					

**Central Police Station Compound Conservation and Revitalisation
(Ho Fook Building - NM2 & Chancery Mansion - NM6)
Monitoring Schedule for Reporting Month - January 2013**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		01-Jan	02-Jan	03-Jan	04-Jan	05-Jan
					Noise Monitoring at NM2 & NM6	
06-Jan	07-Jan	08-Jan	09-Jan	10-Jan	11-Jan	12-Jan
				Noise Monitoring at NM2 & NM6		
13-Jan	14-Jan	15-Jan	16-Jan	17-Jan	18-Jan	19-Jan
			Noise Monitoring at NM2 & NM6			
20-Jan	21-Jan	22-Jan	23-Jan	24-Jan	25-Jan	26-Jan
		Noise Monitoring at NM2 & NM6				
27-Jan	28-Jan	29-Jan	30-Jan	31-Jan		
	Noise Monitoring at NM2 & NM6					

Annex E

Calibration Reports for Calibrators and Sound Level Meters

Certificate of Calibration

校正證書

Certificate No. : C124011
證書編號

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

Description / 儀器名稱 : Sound Level Calibrator
Manufacturer / 製造商 : Rion
Model No. / 型號 : NC-73
Serial No. / 編號 : 10997142
Supplied By / 委託者 : Envirotech Services Co.
Shop 6, G/F., Casio Mansion, 209 Shaukeiwan Road,
Hong Kong

TEST CONDITIONS / 測試條件

Temperature / 溫度 : $(23 \pm 2)^{\circ}\text{C}$ Relative Humidity / 相對濕度 : $(55 \pm 20)\%$
Line Voltage / 電壓 : ---

TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期 : 9 July 2012

TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.
All results are within manufacturer's specification.
The results are detailed in the subsequent page(s).

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

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

Tested By : 
測試 : L K Yeung

Certified By : 
核證 : K C Lee

Date of Issue : 10 July 2012
簽發日期

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

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

Certificate of Calibration

校正證書

Certificate No. : C124011
證書編號

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours before the commencement of the test.
- The results presented are the mean of 3 measurements at each calibration point.
- Test equipment :

<u>Equipment ID</u>	<u>Description</u>	<u>Certificate No.</u>
CL130	Universal Counter	C123541
CL281	Multifunction Acoustic Calibrator	DC110233
TST150A	Measuring Amplifier	C120886

- Test procedure : MA100N.

- Results :

5.1 Sound Level Accuracy

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

5.2 Frequency Accuracy

UUT Nominal Value (kHz)	Measured Value (kHz)	Mfr's Spec.	Uncertainty of Measured Value (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.

Certificate of Calibration

校正證書

Certificate No. : C124184
證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC12-1770)

Description / 儀器名稱 : Sound Level Calibrator
Manufacturer / 製造商 : Rion
Model No. / 型號 : 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 : $(23 \pm 2)^{\circ}\text{C}$ 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 July 2012

TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.
All results are within manufacturer's specification.
The results are detailed in the subsequent page(s).

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

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

Tested By : 
測試 : L K Yeung

Certified By : 
核證 : K C Lee

Date of Issue : 18 July 2012
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.

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

Certificate of Calibration

校正證書

Certificate No. : C124184
證書編號

- The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours before the commencement of the test.
- The results presented are the mean of 3 measurements at each calibration point.
- Test equipment :

<u>Equipment ID</u>	<u>Description</u>	<u>Certificate No.</u>
CL130	Universal Counter	C123541
CL281	Multifunction Acoustic Calibrator	DC110233
TST150A	Measuring Amplifier	C120886

- Test procedure : MA100N.

- Results :

5.1 Sound Level Accuracy

UUT Nominal Value	Measured Value (dB)	Mfr's Spec. (dB)	Uncertainty of Measured Value (dB)
94 dB, 1 kHz	93.9	± 0.5	± 0.2

5.2 Frequency Accuracy

UUT Nominal Value (kHz)	Measured Value (kHz)	Mfr's Spec.	Uncertainty of Measured Value (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.

Certificate of Calibration

校正證書

Certificate No. : C124191
證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC12-1770)

Description / 儀器名稱 : Sound Level Meter
Manufacturer / 製造商 : Rion
Model No. / 型號 : NL-31
Serial No. / 編號 : 00603867
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 ± 2)°C
Line Voltage / 電壓 : ---
Relative Humidity / 相對濕度 : (55 ± 20)%

TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期 : 18 July 2012

TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.
All results are within manufacturer's specification.
The results are detailed in the subsequent page(s).

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

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

Tested By : 
測試 : L K Yeung

Certified By : 
核證 : K C Lee

Date of Issue : 18 July 2012
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.

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

Certificate of Calibration

校正證書

Certificate No. : C124191
證書編號

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

<u>Equipment ID</u>	<u>Description</u>	<u>Certificate No.</u>
CL280	40 MHz Arbitrary Waveform Generator	C120016
CL281	Multifunction Acoustic Calibrator	DC110233

- Test procedure : MA101N.

- Results :

6.1 Sound Pressure Level

6.1.1 Reference Sound Pressure Level

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)		
30 - 120	L _A	A	Fast	94.00	1	93.8	± 1.1

6.1.2 Linearity

UUT Setting				Applied Value		UUT Reading (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)	
30 - 120	L _A	A	Fast	94.00	1	93.8 (Ref.)
				104.00		103.8
				114.00		113.8

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

6.2 Time Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)		
30 - 120	L _A	A	Fast	94.00	1	93.8	Ref.
			Slow			93.7	± 0.3

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

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

Certificate of Calibration

校正證書

Certificate No. : C124191
證書編號

6.3 Frequency Weighting

6.3.1 A-Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq.		
30 - 120	L _A	A	Fast	94.00	63 Hz	67.6	-26.2 ± 1.5
					125 Hz	77.6	-16.1 ± 1.5
					250 Hz	85.1	-8.6 ± 1.4
					500 Hz	90.6	-3.2 ± 1.4
					1 kHz	93.8	Ref.
					2 kHz	95.1	+1.2 ± 1.6
					4 kHz	95.0	+1.0 ± 1.6
					8 kHz	92.8	-1.1 (+2.1 ; -3.1)
					12.5 kHz	89.9	-4.3 (+3.0 ; -6.0)

6.3.2 C-Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq.		
30 - 120	L _C	C	Fast	94.00	63 Hz	93.0	-0.8 ± 1.5
					125 Hz	93.6	-0.2 ± 1.5
					250 Hz	93.8	0.0 ± 1.4
					500 Hz	93.9	0.0 ± 1.4
					1 kHz	93.9	Ref.
					2 kHz	93.7	-0.2 ± 1.6
					4 kHz	93.2	-0.8 ± 1.6
					8 kHz	90.9	-3.0 (+2.1 ; -3.1)
					12.5 kHz	88.1	-6.2 (+3.0 ; -6.0)

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

- Uncertainties of Applied Value : 94 dB : 63 Hz - 125 Hz : ± 0.35 dB
 250 Hz - 500 Hz : ± 0.30 dB
 1 kHz : ± 0.20 dB
 2 kHz - 4 kHz : ± 0.35 dB
 8 kHz : ± 0.45 dB
 12.5 kHz : ± 0.70 dB
 104 dB : 1 kHz : ± 0.10 dB (Ref. 94 dB)
 114 dB : 1 kHz : ± 0.10 dB (Ref. 94 dB)

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

Note :

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

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

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

Annex F

Event/Action Plans for Noise

Annex F Event and Action Plan for Noise

Event	Action			
	Environmental Team (ET)	Independent Environmental Checker (IEC)	Authorised Person (AP)	Contractor
Action Level	<ol style="list-style-type: none"> 1. Notify IEC and Contractor; 2. Carry out investigation; 3. Report the results of investigation to the IEC, AP and Contractor; 4. Discuss with the Contractor and formulate remedial measures; 5. Increase monitoring frequency to check mitigation effectiveness. 	<ol style="list-style-type: none"> 1. Review the analysed results submitted by the ET; 2. Review the proposed remedial measures by the Contractor and advise the AP accordingly; 3. Supervise the implementation of remedial measures. 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Require Contractor to proposed remedial measures for the analysed noise problem; 4. Ensure remedial measures are properly implemented. 	<ol style="list-style-type: none"> 1. Submit noise mitigation proposals to IEC; 2. Implement noise mitigation proposals.
Limit Level	<ol style="list-style-type: none"> 1. Identify source; 2. Inform IEC and AP; 3. Repeat measurements to confirm findings; 4. Increase monitoring frequency; 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; 6. Inform IEC, AP and EPD the causes and actions taken for the exceedances; 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and AP informed of the results; 8. If exceedance stops, cease additional monitoring. 	<ol style="list-style-type: none"> 1. Discuss amongst AP, ET, and Contractor on the potential remedial actions; 2. Review Contractors remedial actions whenever necessary to assure their effectiveness and advise the AP accordingly; 3. Supervise the implementation of remedial measures. 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Require Contractor to propose remedial measures for the analysed noise problem; 4. Ensure remedial measures properly implemented; 5. 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. 	<ol style="list-style-type: none"> 1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC within 3 working days of notification; 3. Implement the agreed proposals; 4. Resubmit proposals if problem still not under control; 5. 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 (1 November to 30 November 2012)

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
<i>Cultural Heritage</i>					
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.	To be advised	During detailed design and construction	√
S3.9.2	S3.3.1	<u>Vibration Monitoring</u> 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	S3.3.3	<u>Compliance of the Approved Measures and Auditing</u> 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 proposal of the regular audit such as methodology (e.g. performance	Whole site	Prior to and during construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
		<p>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.</p> <p>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.</p>			
S3.9.3	S3.3.4	<p><u>Archival Recording</u></p> <p>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 as-built 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.</p>	Whole Site	During detailed design, construction and prior to operation	N/A – Archival recording will be conducted at later stage.
S3.7.3	-	<p><u>General Construction Methods</u></p> <p>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 checked and confirmed by the contractor. Non-percussive piling</p>	Whole site	During construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
		<p>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.</p>			
S3.7.1 & 3.7.2	-	<p>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:</p> <ul style="list-style-type: none"> • 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 cross referenced location plans and photo records. <p>One set of updated CMP shall be submitted to the AMO for approval before the operation stage of the project.</p>	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
<i>Landscape & Visual</i>					
S4.7.27	-	<p><u><i>In-situ Tree Protection - Cordon Zone (CZ)</i></u></p> <p>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.</p>	Whole site	During construction	√
S4.7.2	-	<p><u><i>In-situ Tree Protection - Advanced & Phased Root Pruning</i></u></p> <p>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.</p>	Whole site	During construction	N/A – no root pruning has been conducted yet
S4.7.2	-	<p><u><i>In-situ Tree Protection - Foliage cleansing system</i></u></p> <p>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</p>	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	<p><u>In-situ Tree Protection - Monthly inspection</u></p> <p>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.</p>	Whole site	During construction	√
S4.7.2	-	<p><u>Light Control</u></p> <p>Control of night-time lighting shall be implemented to minimise impact to adjacent VSRs.</p>	Whole site	During construction and operation	√
S4.7.2	S4	<p><u>Compensatory Tree Planting</u></p> <p>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.</p> <p>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</p>	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
		<p>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.</p> <p>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 (Table 4.3), 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</p> <p>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::</p> <ul style="list-style-type: none"> – <i>Bauhinia</i> ‘Blakeana’ a native evergreen species with deep mauve flowers and an exceptionally long flowering period from late autumn to early spring. – <i>Bauhinia purpure</i>, a native evergreen with lighter purple flowers from late autumn to early winter. – <i>Bauhinia variegata</i>, 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	<p><u>Vertical Greening</u></p> <p>Within the limitations of the conservation of the CPS character, greening of vertical structures should be provided where possible.</p> <p>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</p>	Inner Southern Wall	During detailed design and construction	N/A – No vertical greening was conducted during the reporting month.

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 existing 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	-	<i>New Custom Paving</i> 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	<i>In-situ Tree Protection - Quarterly inspection</i> 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.
<i>Noise</i>					
S5.9	-	The following site practices should be followed during the construction of the Project: <ul style="list-style-type: none"> • 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	N/A – Not observed.

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
		<ul style="list-style-type: none"> 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	√
<i>Air Quality</i>					
S6.8.1	-	Dust control measures stipulated in the <i>Air Pollution Control (Construction Dust) 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	√
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	√
S6.8.1	-	Road sections between vehicle-wash areas and vehicular entrances will be paved.	Whole Site	During construction	√
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	√
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	N/A – Not observed.
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	√

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	N/A – Not observed.
S6.8.1	-	The engine of the construction equipment or trucks during idling will be switched off.	Whole Site	During construction	√
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	√
<i>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 of 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	√
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	√

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	√
S7.6	-	All fuel tanks and chemical storage areas will be provided with locks and be sited on paved areas.	Whole Site	During construction	√
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	√
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	√
<i>Waste Management</i>					
S8.5	S6.3.1 & Table 6.1	<u>General</u> 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	-	<u>Management of Waste Disposal</u> 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	√
S8.5	S6.3	<u>Reduction of Construction Waste Generation</u> 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	√
S8.5	S6	Containers used for storage of chemical waste shall: <ul style="list-style-type: none"> • 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 of the Regulations</i>. 	Whole Site	During construction and operation	√
S8.5	S6	Storage areas for chemical waste shall: <ul style="list-style-type: none"> • 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	N/A – Not observed.
S8.5	S6 & Table 6.1	<u>General Refuse</u> 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	√
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	<u>Staff Training</u> 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	Commence-ment 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:

- √ 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 G Implementation Schedule for Environmental Protection Measures (1 December to 31 December 2012)

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
<i>Cultural Heritage</i>					
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.	To be advised	During detailed design and construction	√
S3.9.2	S3.3.1	<p><u>Vibration Monitoring</u></p> <p>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.</p>	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	S3.3.3	<p><u>Compliance of the Approved Measures and Auditing</u></p> <p>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.</p> <p>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 proposal of the regular audit such as methodology (e.g. performance</p>	Whole site	Prior to and during construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
		<p>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.</p> <p>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.</p>			
S3.9.3	S3.3.4	<p><u>Archival Recording</u></p> <p>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 as-built 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.</p>	Whole Site	During detailed design, construction and prior to operation	N/A – Archival recording will be conducted at later stage.
S3.7.3	-	<p><u>General Construction Methods</u></p> <p>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 checked and confirmed by the contractor. Non-percussive piling</p>	Whole site	During construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
		<p>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.</p>			
S3.7.1 & 3.7.2	-	<p>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:</p> <ul style="list-style-type: none"> • 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 cross referenced location plans and photo records. <p>One set of updated CMP shall be submitted to the AMO for approval before the operation stage of the project.</p>	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
<i>Landscape & Visual</i>					
S4.7.27	-	<p><u><i>In-situ Tree Protection - Cordon Zone (CZ)</i></u></p> <p>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.</p>	Whole site	During construction	√
S4.7.2	-	<p><u><i>In-situ Tree Protection - Advanced & Phased Root Pruning</i></u></p> <p>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.</p>	Whole site	During construction	N/A – no root pruning has been conducted yet
S4.7.2	-	<p><u><i>In-situ Tree Protection - Foliage cleansing system</i></u></p> <p>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</p>	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	<p><u>In-situ Tree Protection - Monthly inspection</u></p> <p>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.</p>	Whole site	During construction	√
S4.7.2	-	<p><u>Light Control</u></p> <p>Control of night-time lighting shall be implemented to minimise impact to adjacent VSRs.</p>	Whole site	During construction and operation	√
S4.7.2	S4	<p><u>Compensatory Tree Planting</u></p> <p>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.</p> <p>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</p>	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
		<p>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.</p> <p>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 (Table 4.3), 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</p> <p>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::</p> <ul style="list-style-type: none"> - <i>Bauhinia</i> 'Blakeana' a native evergreen species with deep mauve flowers and an exceptionally long flowering period from late autumn to early spring. - <i>Bauhinia purpure</i>, a native evergreen with lighter purple flowers from late autumn to early winter. - <i>Bauhinia variegata</i>, 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	<p><u>Vertical Greening</u></p> <p>Within the limitations of the conservation of the CPS character, greening of vertical structures should be provided where possible.</p> <p>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</p>	Inner Southern Wall	During detailed design and construction	N/A – No vertical greening was conducted during the reporting month.

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 existing 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	-	<i>New Custom Paving</i> 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	<i>In-situ Tree Protection - Quarterly inspection</i> 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.
<i>Noise</i>					
S5.9	-	The following site practices should be followed during the construction of the Project: <ul style="list-style-type: none"> • 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	N/A – Not observed.

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
		<ul style="list-style-type: none"> 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	√
<i>Air Quality</i>					
S6.8.1	-	Dust control measures stipulated in the <i>Air Pollution Control (Construction Dust) 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	√
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	√
S6.8.1	-	Road sections between vehicle-wash areas and vehicular entrances will be paved.	Whole Site	During construction	√
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	√
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	N/A – Not observed.
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	√

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	N/A – Not observed.
S6.8.1	-	The engine of the construction equipment or trucks during idling will be switched off.	Whole Site	During construction	√
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	√
<i>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 of 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	√
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	√

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	√
S7.6	-	All fuel tanks and chemical storage areas will be provided with locks and be sited on paved areas.	Whole Site	During construction	√
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	√
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	√
<i>Waste Management</i>					
S8.5	S6.3.1 & Table 6.1	<u>General</u> 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	-	<u>Management of Waste Disposal</u> 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	√
S8.5	S6.3	<u>Reduction of Construction Waste Generation</u> 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	√
S8.5	S6	Containers used for storage of chemical waste shall: <ul style="list-style-type: none"> • 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 of the Regulations</i>. 	Whole Site	During construction and operation	√
S8.5	S6	Storage areas for chemical waste shall: <ul style="list-style-type: none"> • 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	N/A – Not observed.
S8.5	S6 & Table 6.1	<u>General Refuse</u> 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	√
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	<u>Staff Training</u> 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	Commence-ment 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:

- √ 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
- △ Deficiency of Mitigation Measures but rectified by Gammon Construction Ltd
- N/A Not Applicable in Reporting Period

Annex G Implementation Schedule for Environmental Protection Measures (1 January to 31 January 2013)

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
<i>Cultural Heritage</i>					
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	Recommendations under the AAP: <ul style="list-style-type: none"> • Preservation by Record (PBR) at the Old Bailey Wing, Arbuthnot Wing, proposed underground passageway at A H Yard and Proposed E&M Trench in Prison Yard completed Additional archaeological investigation at F Hall was conducted in September 2012.
S3.9.2	S3.3.1	<u>Vibration Monitoring</u> 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	S3.3.3	<u>Compliance of the Approved Measures and Auditing</u> 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	Whole site	Prior to and during construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
		<p>approved work methodologies with respect of conservation works, mitigations for cultural heritage and any related works. A detailed 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.</p> <p>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.</p>			
S3.9.3	S3.3.4	<p><u>Archival Recording</u></p> <p>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 as-built 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.</p>	Whole Site	During detailed design, construction and prior to operation	N/A – Archival recording will be conducted at later stage.
S3.7.3	-	<p><u>General Construction Methods</u></p> <p>Prior to the commencement of the modification/refurbishment works at an existing building or structure (e.g. masonry walls near the Old Bailey</p>	Whole site	During construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
		<p>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 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.</p>			
S3.7.1 & 3.7.2	-	<p>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:</p> <ul style="list-style-type: none"> • 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 cross referenced location plans and photo records. <p>One set of updated CMP shall be submitted to the AMO for approval</p>	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
		before the operation stage of the project.			
<i>Landscape & Visual</i>					
S4.7.27	-	<p><u><i>In-situ Tree Protection - Cordon Zone (CZ)</i></u></p> <p>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.</p>	Whole site	During construction	√
S4.7.2	-	<p><u><i>In-situ Tree Protection - Advanced & Phased Root Pruning</i></u></p> <p>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.</p>	Whole site	During construction	N/A – no root pruning has been conducted yet
S4.7.2	-	<p><u><i>In-situ Tree Protection - Foliage cleansing system</i></u></p> <p>A sprinkler cleansing system will be installed either in the crown of the</p>	Whole site	During construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
		tree or at a suitable location on an adjacent building to provide the means to wash the foliage of the accumulated dust when necessary, particularly in the dry season.			
S4.7.2	S4	<p><u>In-situ Tree Protection - Monthly inspection</u></p> <p>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.</p>	Whole site	During construction	√
S4.7.2	-	<p><u>Light Control</u></p> <p>Control of night-time lighting shall be implemented to minimise impact to adjacent VSRs.</p>	Whole site	During construction and operation	√
S4.7.2	S4	<p><u>Compensatory Tree Planting</u></p> <p>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.</p> <p>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</p>	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
		<p>underneath so that fertilizers and conditioners could be added on a 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.</p> <p>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 (Table 4.3), 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</p> <p>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::</p> <ul style="list-style-type: none"> - <i>Bauhinia</i> 'Blakeana' a native evergreen species with deep mauve flowers and an exceptionally long flowering period from late autumn to early spring. - <i>Bauhinia purpure</i>, a native evergreen with lighter purple flowers from late autumn to early winter. - <i>Bauhinia variegata</i>, 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	<p><u>Vertical Greening</u></p> <p>Within the limitations of the conservation of the CPS character, greening of vertical structures should be provided where possible. 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</p>	Inner Southern Wall	During detailed design and construction	N/A – No vertical greening was conducted during the reporting month.

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
		each of the large protruding piers and an offset be made from both the 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 existing 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	-	<i>New Custom Paving</i> 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	<i>In-situ Tree Protection - Quarterly inspection</i> 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.
<i>Noise</i>					
S5.9	-	The following site practices should be followed during the construction of the Project: <ul style="list-style-type: none"> • 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 	Whole Site	During construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
		<p>possible;</p> <ul style="list-style-type: none"> • 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	√
<i>Air Quality</i>					
S6.8.1	-	Dust control measures stipulated in the <i>Air Pollution Control (Construction Dust) Regulation</i> will be implemented during the	Whole Site	During construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
		construction phase to control the potential fugitive dust emissions.			
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	√
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	√
S6.8.1	-	Road sections between vehicle-wash areas and vehicular entrances will be paved.	Whole Site	During construction	√
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	√
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	√
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	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
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	√
S6.8.1	-	ULSD will be used for all construction plant on-site.	Whole Site	During construction	√
S6.8.1	-	The engine of the construction equipment or trucks during idling will be switched off.	Whole Site	During construction	√
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	√
<i>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 of 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	√
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.

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
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	√
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	√
S7.6	-	All fuel tanks and chemical storage areas will be provided with locks and be sited on paved areas.	Whole Site	During construction	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
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	√
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	√
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	√
<i>Waste Management</i>					
S8.5	S6.3.1 & Table 6.1	<u>General</u> 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	-	<u>Management of Waste Disposal</u> 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	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
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	√
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	√
S8.5	S6.3	<u>Reduction of Construction Waste Generation</u> 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	√
S8.5	S6	Containers used for storage of chemical waste shall: <ul style="list-style-type: none"> • 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 of the Regulations</i>. 	Whole Site	During construction and operation	√
S8.5	S6	Storage areas for chemical waste shall: <ul style="list-style-type: none"> • 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 	Whole Site	During construction and operation	√

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Location	When to Implement the Measure	Status
		<p>bund must be tested and disposed of as chemical waste, if necessary); and</p> <ul style="list-style-type: none"> • Be arranged so that incompatible materials are appropriately separated. 			
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	<p><u>General Refuse</u></p> <p>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.</p>	Whole site	During construction	√
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	<p><u>Staff Training</u></p> <p>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.</p>	Whole site	Commence-ment of construction	√
S8.7	S6.1 & 6.3	<p>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.</p>	Whole site	During construction	√

Remark:

- √ 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

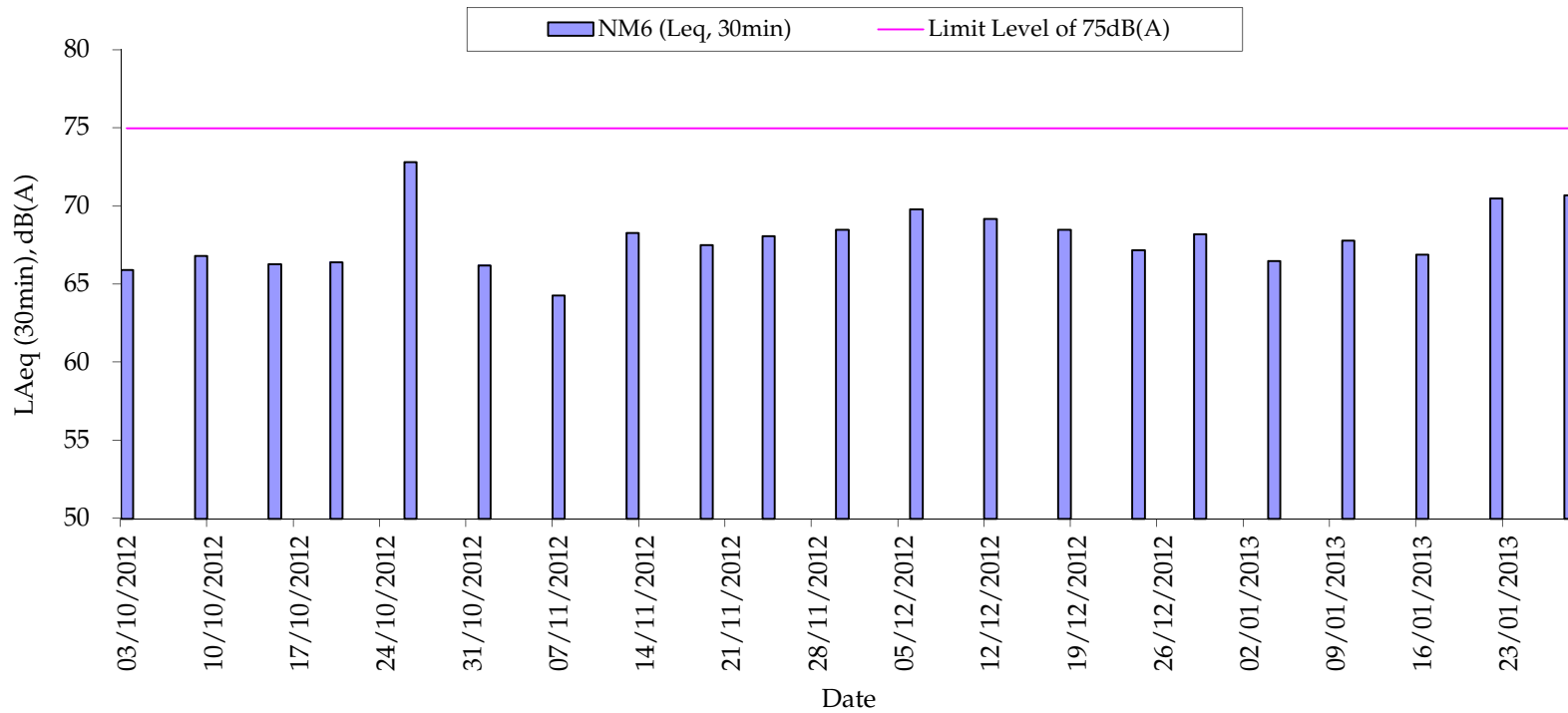
NM6 Chancery Mansion

Date	Start Time	End Time	Weather	Noise level (dB(A)), 30 min			Major Construction Noise Source(s) Observed	Other Noise Source(s) Observed	Remarks	Wind Speed (m/s)	Noise Meter Model / ID	Calibrator Model / ID
				Leq	L10	L90						
06-Dec-12	15:00	15:30	Fine	69.8	71	68.5	Excavation, lifting, compressor (within the project site)	Traffic Noise	-	0.3	RION- NL31 (S/N 00603867)	RION - NC73 (S/N 10786708)
12-Dec-12	11:20	11:50	Fine	69.2	70.4	67.8	Interior fitting, lifting, compressor (within the project site)	Traffic Noise	-	0.5	RION- NL31 (S/N 00603867)	RION - NC73 (S/N 10786708)
18-Dec-12	14:23	14:53	Cloudy	68.5	69.6	67.5	Compressor, crawler crane, interior fitting (within the project site)	Traffic Noise	-	0.5	RION- NL31 (S/N 00603867)	RION - NC73 (S/N 10786708)
24-Dec-12	15:15	15:45	Sunny	67.2	68.5	66.4	Crawler crane, interior fitting (within the project site)	Traffic Noise	-	0.3	RION- NL31 (S/N 00603867)	RION - NC73 (S/N 10786708)
29-Dec-12	15:00	15:30	Cloudy	68.2	69.2	66.3	Lifting, interior fitting (within the project site)	Traffic Noise	-	0.5	RION- NL31 (S/N 00603867)	RION - NC73 (S/N 10786708)
Min.				67.2								
Max.				69.8								

NM2 Ho Fook Building

Date	Start Time	End Time	Weather	Noise level (dB(A)), 30 min			Major Construction Noise Source(s) Observed	Other Noise Source(s) Observed	Remarks	Wind Speed (m/s)	Noise Meter Model / ID	Calibrator Model / ID
				Leq	L10	L90						
06-Dec-12	14:16	14:46	Fine	63.4	65.9	61	Lifting, excavation (within the project site)	Traffic noise	-	0.3	RION- NL31 (S/N 00603867)	RION - NC73 (S/N 10786708)
12-Dec-12	9:20	9:50	Fine	64.6	66.3	62.3	Excavation, fitting, lifting (within the project site)	Traffic Noise	-	0.4	RION- NL31 (S/N 00603867)	RION - NC73 (S/N 10786708)
18-Dec-12	13:05	13:35	Cloudy	65.5	67.6	62.9	Crawler crane, interior fitting (within the project site)	Traffic Noise	-	0.5	RION- NL31 (S/N 00603867)	RION - NC73 (S/N 10786708)
24-Dec-12	13:05	13:35	Sunny	65.2	67.5	61.7	Crawler crane, interior fitting (within the project site)	Traffic Noise	-	0.3	RION- NL31 (S/N 00603867)	RION - NC73 (S/N 10786708)
29-Dec-12	14:15	14:45	Cloudy	63.6	65.3	61.5	Lifting, interior fitting (within the project site)	Traffic Noise	-	0.5	RION- NL31 (S/N 00603867)	RION - NC73 (S/N 10786708)
Min.				63.4								
Max.				65.5								

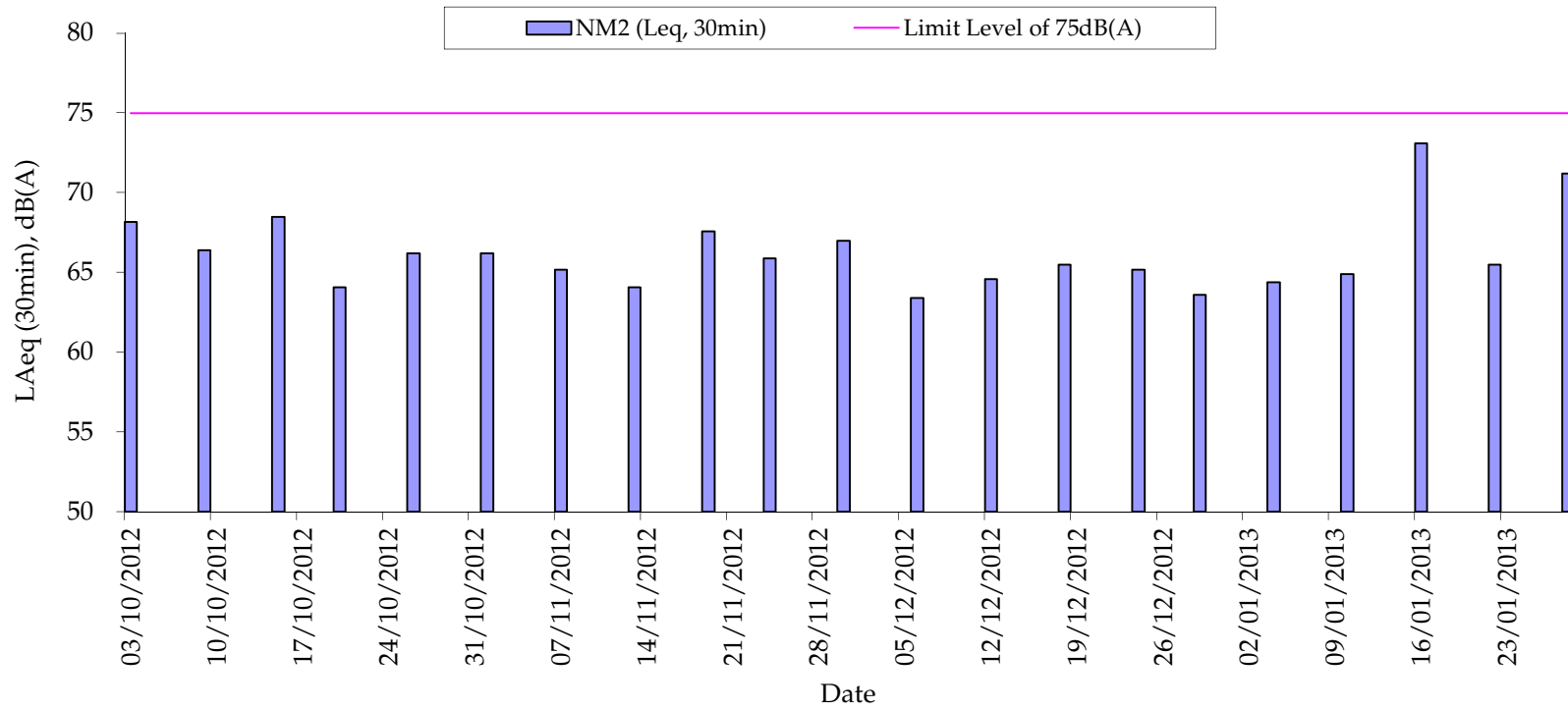
Normal Weekdays Noise Monitoring Results at NM6 - Chancery Mansion (Leq, 30min)



Remark:

- 75dB(A) was adopted as the Limit Level during normal weekdays in the reporting period

Normal Weekdays Noise Monitoring Results at NM2 - Ho Fook Building (Leq, 30min)



Remark:
- 75dB(A) was adopted as the Limit Level during normal weekdays in the reporting period

Annex I

Construction Programme of the Project

Activity ID	Activity Description	Duration in Days	2011		2012				2013				2014				2015				2016																																	
			J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S
GENERAL																																																						
S110	PRECONSTRUCTION WORKS	592	PRECONSTRUCTION WORKS																																																			
EXISTING BUILDINGS																																																						
160010	BLOCK 16 WORKSHOP & LAUNDRY (DEMOLITION WORKS)	198	BLOCK 16 WORKSHOP & LAUNDRY (DEMOLITION WORKS)																																																			
180010	BLOCK 18/14 ANNEX/BLDG F/G/H/ (DEMOLITION WORKS)	149	BLOCK 18/14 ANNEX/BLDG F/G/H/ (DEMOLITION WORKS)																																																			
080010	BLOCK 08 ABLUTIONS BLOCK	731	BLOCK 08 ABLUTIONS BLOCK																																																			
170005	BLOCK 17 F HALL	593	BLOCK 17 F HALL																																																			
010005	BLOCK 01 POLICE HEADQUARTERS BLOCK	593	BLOCK 01 POLICE HEADQUARTERS BLOCK																																																			
140005	BLOCK 14 D HALL	645	BLOCK 14 D HALL																																																			
120010	BLOCK 12 B HALL	341	BLOCK 12 B HALL																																																			
110010	BLOCK 11 A HALL	311	BLOCK 11 A HALL																																																			
100010	BLOCK 10 SUPERINTENDENT'S HOUSE	484	BLOCK 10 SUPERINTENDENT'S HOUSE																																																			
130010	BLOCK 13 C HALL	484	BLOCK 13 C HALL																																																			
060005	BLOCK 06 MARRIED SERGEANTS' QUARTERS	223	BLOCK 06 MARRIED SERGEANTS' QUARTERS																																																			
070005	BLOCK 07 SINGLE INSPECTORS' QUARTERS	225	BLOCK 07 SINGLE INSPECTORS' QUARTERS																																																			
030005	BLOCK 03 BARRACK BLOCK	440	BLOCK 03 BARRACK BLOCK																																																			
020005	BLOCK 02 ARMOURY	392	BLOCK 02 ARMOURY																																																			
090005	BLOCK 09 CENTRAL MAGISTRACY	392	BLOCK 09 CENTRAL MAGISTRACY																																																			
150010	BLOCK 15 E HALL	304	BLOCK 15 E HALL																																																			
040005	BLOCK 04 MARRIED INSPECTORS' QUARTERS	349	BLOCK 04 MARRIED INSPECTORS' QUARTERS																																																			
190005	BLOCK 19 BAUHINIA HOUSE	277	BLOCK 19 BAUHINIA HOUSE																																																			
050002	BLOCK 05 (DEMOLITION WORKS)	119	BLOCK 05 (DEMOLITION WORKS)																																																			
OTHER WORKS																																																						
253110	REVTMENT WALL / U/G UTILITIES / ROAD WORKS	679	REVTMENT WALL / U/G UTILITIES / ROAD WORKS																																																			
NEW BUILDINGS																																																						
S200	OBW OLD BAILEY WING	1,097	OBW OLD BAILEY WING																																																			
S300	AW ARBUTHNOT WING	1,056	AW ARBUTHNOT WING																																																			
BASEMENT PLANTROOM AND SERVICES TRENCH																																																						
202005	BASEMENT PLANTROOM / SERVICES TRENCH	588	BASEMENT PLANTROOM / SERVICES TRENCH																																																			
NEW FOOTBRIDGE																																																						
2300125	PROPOSED FOOTBRIDGE	699	PROPOSED FOOTBRIDGE																																																			



T76G

**CENTRAL POLICE STATION CONSERVATION AND REVITALIZATION
(MANAGEMENT CONTRACT)
CONSTRUCTION PROGRAMME
SUMMARY PROGRAMME**

Sheet 1 of 1

Date		Revision		Checked	Approved
13NOV12	for EPD				

GCL / P / J3416 /SUM/CP01

Annex J

Waste Flow Table

Annex J – Waste Flow Table

Month / Year	Quantity										
	C&D Materials (inert) (tonnes) ^(a)	Number of Trucks for C&D Materials Disposal (inert)	Volume of C&D Materials (inert) (m ³) ^(c)	C&D Materials (non-inert) (tonnes) ^(b)	Number of Trucks for C&D Materials Disposal (non-inert)	Volume of C&D Materials (non-inert) (m ³) ^(c)	Chemical Waste (Solid /kg)	Chemical Waste (Liquid/L)	Recycled materials		
									Paper/cardboard (kg)	Plastics (kg)	Metals (kg)
October 2011 – November 2011	0	0	0	33.5	12	58.50	0	0	38	6	36423
December-11	0	0	0	18.25	6	29.25	0	0	112	0	24000
January-12	354.14	40	195.00	16.88	5	24.38	2400	0	0	0	3820
February-12	252.35	15	73.13	17.13	5	24.38	1400	0	223	0	8910
March-12	666.43	62	302.25	28.56	9	43.88	3200	0	0	0	48490
April-12	688.68	72	351.00	17.54	5	24.38	0	0	0	0	124030
May-12	492.33	61	297.38	36.33	13	63.38	0	0	266	0	0
June-12	383.11	45	219.38	27.41	8	39.00	40	45	0	0	1100
July-12	217.98	25	121.88	23.22	8	39.00	0	0	302	0	1750
August-12	341.87	42	204.75	48.87	16	78.00	0	0	0	0	2310
September-12	227.7	29	141.38	37.99	12	58.50	0	0	383	0	1410
October-12	290.58	44	214.50	30.34	8	39.00	0	0	86	0	3150
November-12	843.86	100	487.50	47.44	15	73.13	0	0	0	0	5650
December-12	207.5	27	131.63	88.66	28	136.50	0	0	0	0	27230
January-13	273.64	34	165.75	276.17	74	360.75	0	0	172	0	8120
Total	5240.17	596	2905.50	748.29	224	1092.00	7040	45	1582	6	296393

Notes:

(a) Inert C&D materials (public fill) include bricks, concrete, building debris, rubble and excavated soil.

(b) Non-inert C&D materials include steel, paper / cardboard packaging waste, plastics and other wastes such as general refuse. Steel materials generated from the Project are grouped into construction wastes as the materials were not disposed of with other inert C&D materials and were recycled. The non-inert C&D materials other than steel, plastics and paper/ cardboard packaging were disposed of at SENT Landfill.

(c) If necessary, use the conversion factor: 3/4 load of dumping truck being equivalent to 6.5 m³ by volume.

Annex K

Environmental Complaint,
Enquiry, 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
Overall Total	9	0

COMPLAINT INVESTIGATION REPORT

Basic Information of Complaint

Log Number:	2012/11/001
Date of Complaint Received	15 November 2012
Location of Complaint	Project Site
Nature of Complaint	Noise nuisance
Complaint Received by	Gammon Construction Limited (GCL)
Complainant	Mr. Chan

Details of Complaint

GCL has received a complaint on noise nuisance at 10:10am on 15 November 2012. The complainant, a resident living along Old Bailey street, mentioned that noise was generated from the construction site at around 7:30am for a duration of about 15 minutes. The complainant also indicated that this has been occurring for the past few months.

Investigation Report

1. According to the information provided by the Contractor, relocation of piling machine, which was done as a preparation for the subsequent pipe piling works, was carried out near Block 8 at 7:30am on 15 November 2012. Other major construction activities undertaken on 15 November 2012 included slab demolition works at Block 8 and grouting works at Block 17, both commenced at around 9:00am.
2. The locations of the work areas are presented in Figure 1.

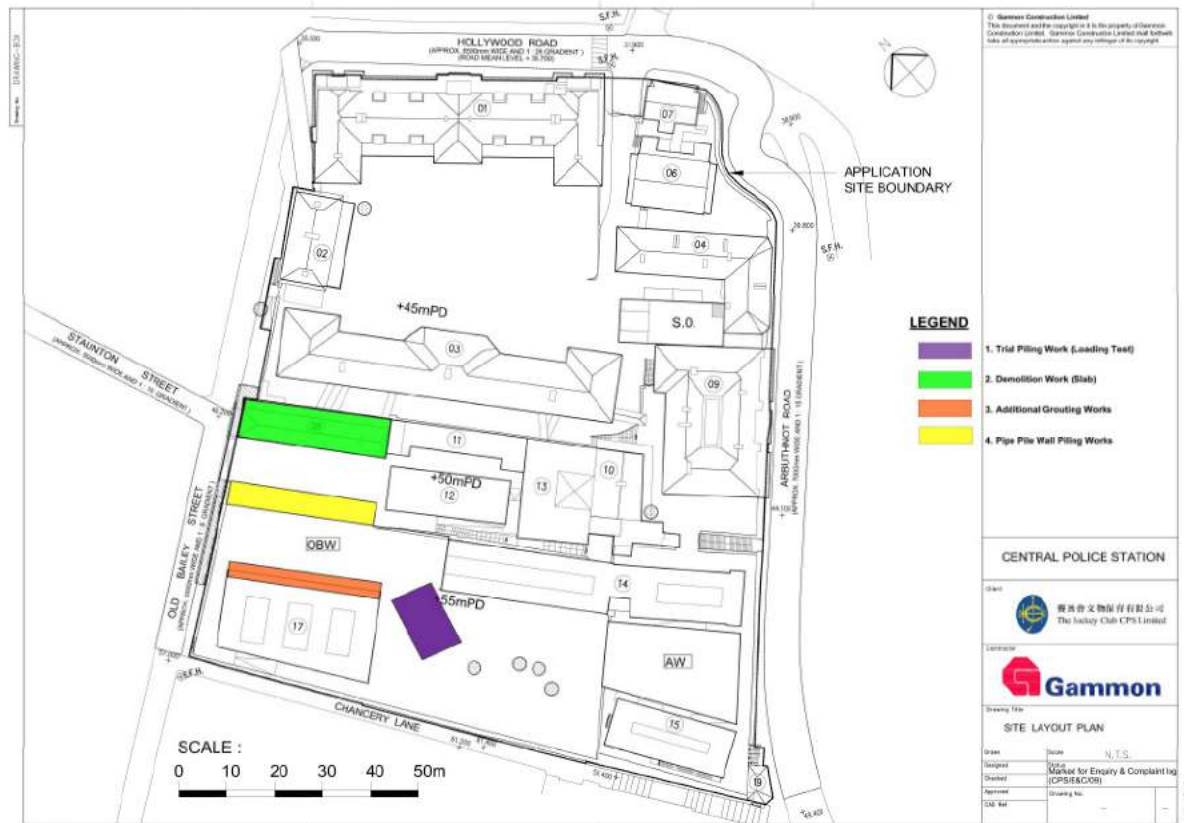


Figure 1. Locations of works being carried out on 15 November 2012

3. The noise nuisance indicated by the complainant was likely caused by the relocation of piling machine on the inclined steel platform near Block 8 at 7:30am. Friction between the track of the piling machine and the inclined steel platform as a result of the piling machine relocation could potentially generate considerable noise, which may affect residents living along the Old Bailey Street. As reported by the Contractor, acoustic curtain has been installed on the hoarding during the relocation of the piling machine. To avoid potential noise nuisance in the future, follow-up actions are proposed.

Mitigation Measures and Follow-up Actions Recommended to Contractor

The Contractor should follow all relevant noise requirements specified in EIA, EM&A Manual, EMP, Method Statements, General and Particular Specifications of this Project. It has been agreed with the Contractor that the relocation of piling machine will be carried out, as far as possible, at the end of the working day instead of during early morning time. The Contractor has been reminded to ensure that acoustic curtains are properly installed prior to conducting the piling machine relocation. Additionally, the Contractor has been advised to notify all workers and operation supervisor of the complaint dated 15 November 2012 and to remind them to minimise the potential noise generated as far as possible during the relocation of piling machine as well as other work activities.

Date of File Closed : 20 November 2012

Approved by:

ET Leader

IEC

JCCPS's
Representative

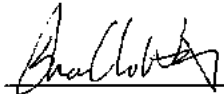
Rocco Design
Architect's
Representative



(Name: Winnie Ko)
Date: 20 November 2012



(Name: Sharifah Or)
Date: 22 November 2012




(Name: C W Sham)
Date: 18 Dec 2012



(Name: CHARLES KUNG)
Date: 23 Nov 2012

Gammon's
Representative



(Name: Cliff Leung)
Date: 2012-11-20

COMPLAINT INVESTIGATION REPORT

Basic Information of Complaint

Log Number:	2012/11/002
Date of Complaint Received	23 November 2012
Location of Complaint	Project Site
Nature of Complaint	Nuisance from operating machinery emissions
Complaint Received by	Environmental Protection Department (EPD)
Complainant	Mr. Tang

Details of Complaint

EPD has received a complaint on nuisance from operating machinery emissions on 23 November 2012. The complainant, a resident living along Chancery Lane, mentioned that diesel smell were perceived at his location and suspected that the emissions were originated from the construction site. The complaint was transferred to Gammon Construction Limited (GCL) on 23 November 2012 at around 16:30.

Investigation Report

- According to the information provided by GCL, the diesel exhaust emissions may be generated by the following operating plant and/or work activities carried out in the vicinity of Chancery Lane on 23 November 2012:
 - Three operating air compressors near Block 14;
 - An operating mobile crane near Block 17; and
 - Grouting works were being conducted at the north elevation of Block 17 and three drilling machines were being operated concurrently.
- The locations of the plant/work activities are presented in *Figure 1*.

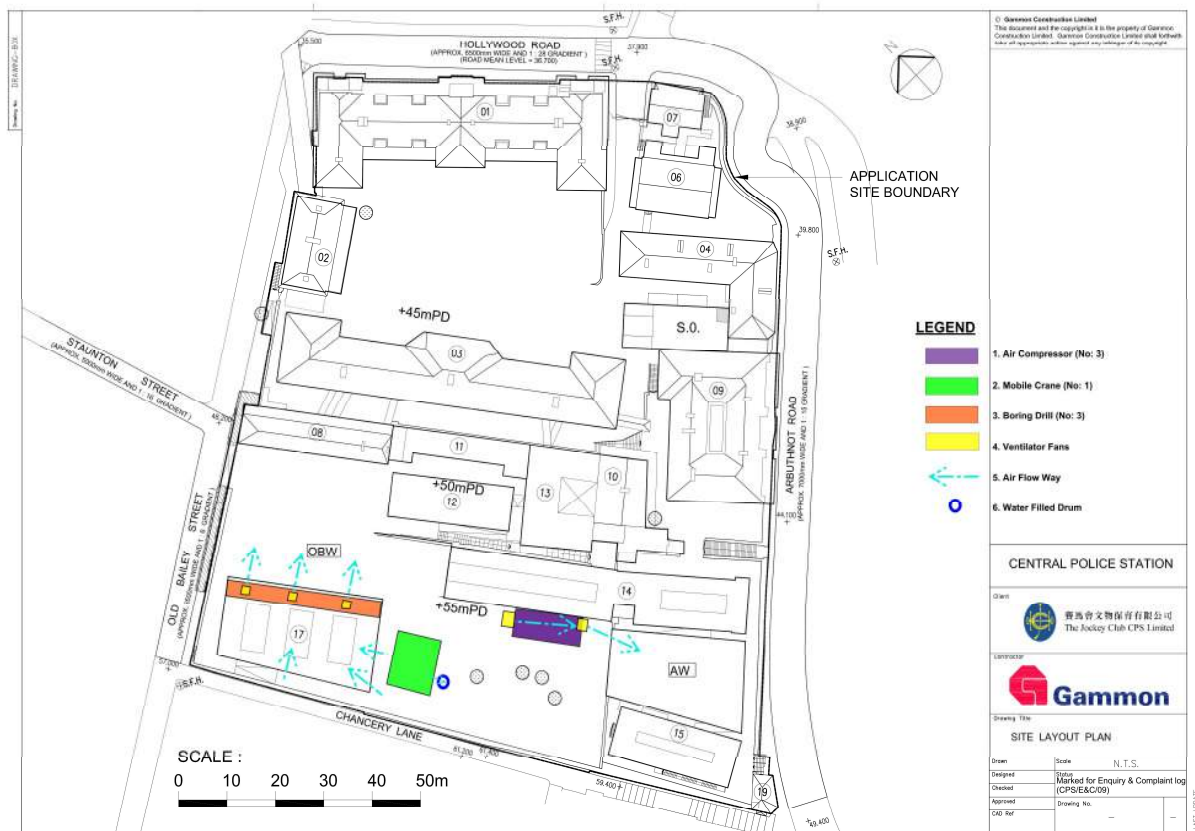


Figure 1. Locations of plant being operated on 23 November 2012 and subsequently implemented mitigation measures for potential diesel exhaust emissions

- The emission nuisance perceived by the complainant living along Chancery Lane may potentially be originated from the plant being operated close to Chancery Lane on 23 November 2012, as listed above. Exhaust emissions from these diesel-powered mechanical equipment may be dispersed beyond the construction site boundary, potentially affecting nearby residents living along Chancery Lane. As reported by the Contractor, corrective actions are being implemented immediately following the receipt of the emission complaint.
- As confirmed with GCL, all on-site machinery is operated on Ultra-Low Sulphur Diesel (ULSD), which is in with the statutory requirement in Hong Kong.
- As reported by GCL, diesel is directly filled into the machinery and there is no on-site storage of diesel oil. Air compressors are provided with drip trays and the motor crane and drilling machines were inspected with no diesel leakage observed.

Mitigation Measures and Follow-up Actions Recommended to Contractor

The Contractor has been recommended to implement measures to direct the diesel exhaust emissions away from the nearby sensitive receivers as far as practicable, particularly residents along Chancery Lane to the south and Old Bailey Street to the west of the construction site. According to the Contractor, mitigation measures have been implemented to facilitate the dilution of exhaust emissions and direct them away from nearby sensitive receivers (Figure 1):

- 1) Two ventilation fans have been installed near the exhaust of the air compressors where the exhaust emissions are directed towards the open space at Arbuthnot Wing via an air duct;
- 2) A ventilation fan has been installed to the exhaust of each of the three drilling machines on the north elevation of Block 17. The ventilation fans were connected to air ducts which divert the exhaust emissions to the north towards the Old Bailey Wing; and
- 3) The exhaust of the mobile crane was connected to an air duct through which exhaust emissions from the mobile crane were delivered to a drum filled with water.

The Contractor has been reminded to monitor any irregular and excessive exhaust emissions from all operating plant. The Contractor should ensure that there is no oil leakage from all operating machinery and provide drip trays where applicable. Additionally, the Contractor has been reminded to ensure that all mitigation measures as reported are properly implemented prior to operating any PME that is likely to cause considerable exhaust emissions. The Contractor has also been advised to notify all workers and operation supervisor of the emission complaint dated 23 November 2012.

Date of File Closed : 30 November 2012

Approved by:

ET Leader

IEC

JCCPS's
Representative

Rocco Design
Architect's
Representative



(Name: Winnie Ko)
Date: 30 November 2012



(Name: Sharifah Or)
Date: 3 December 2012

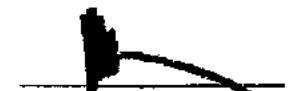


(Name: C W Sham)
Date: 13 Dec 2012



(Name: CHARLES KUNG)
Date: 23 Nov 2012

Gammon's
Representative



(Name: CLIFF LEUNG)
Date: 30 NOV 2012

Annex L

Records of Vibration
Monitoring for Trial Piling
and Pipe/Bored Piling
Works

Vibration Monitoring Locations for Trial Pile near Block 17



F.S.C. Ref No. 000000000000

Rev. No. / Description / Date / Approved by

-	BD SUBMISSION	07/11	JS
A	TENDER DRAWING	08/11	JS
B	TENDER ADDENDUM	09/11	JS
C	BD RE-SUBMISSION	09/11	JS

Plan Approved

NG KUO-ming
Chief Structural Engineer
for BUILDING AUTHORITY
17 NOV 2011



LEGEND

3157/011	EXISTING BOREHOLE (DONE BY OTHERS)
13470/011	EXISTING TRIAL PIT (DONE BY OTHERS)
39295/012-C1	EXISTING COREHOLE (DONE BY OTHERS)
DH1	EXISTING DRILLHOLE (DONE BY GAP)
TP1	EXISTING TRIAL PIT (DONE BY GAP)
H-CH1/B-CH1	EXISTING HORIZONTAL/INCLINED CORE-HOLE (DONE BY GAP)
CH1	EXISTING VERTICAL CORE-HOLE (DONE BY GAP)
I-1	EXISTING INCLINED DRILLHOLE (DONE BY GAP)
(S,P)	DENSITY STANDPIPE/PNEUMETER (DH18, DH20 & DH27)
---	SITE BOUNDARY
TP-H1	TRIAL PILE (SHAFT-GROUTED FIBROGLASS F-PILE)
TP-M1	TRIAL PILE (SHAFT-GROUTED MINI-PILE)
PS1	PROPOSED BUILDING SETTLEMENT POINTS / MILLIMETER (BS1/B11 TO BS7/B17)
GS1	PROPOSED GROUND SETTLEMENT POINTS (GS1 TO GS8)
VW1	PROPOSED VIBRATING MONITORING (VM1 TO VM2) (DURING PILE CONSTRUCTION ONLY)
---	EXISTING FRESH WATER MAIN
---	EXISTING SALT WATER MAIN
---	EXISTING STREET LIGHTING NO. 33488-A1
---	EXISTING STREET LIGHTING CABLE
---	EXISTING GAS MAIN
---	EXISTING HV ELECTRICITY CABLE
---	EXISTING LV ELECTRICITY CABLE
---	EXISTING TELECOMMUNICATION DUCT (HUGHSON GLOBAL COMMUNICATIONS LIMITED)
---	EXISTING STORMWATER DRAIN
---	EXISTING POUL SEWER
---	PROPOSED POUL SEWER

BD SUBMISSION

Drawing Status: 製圖狀況

- The drawing and its contents form and the copyright of relevant consultants.
此圖紙及其內容均屬有關專業顧問的版權。
- No part of this drawing and its design contained herein may be reproduced without the prior written consent of relevant consultants.
本圖紙或其內容均不得未經有關專業顧問之事先書面同意而作任何复制或轉載。
- Do not take measurements directly from this drawing.
切勿直接從圖紙量取尺寸。
- Check and verify all dimensions on site.
所有尺寸必須於現場核實。
- Read this drawing in conjunction with the specifications and all other related drawings.
此圖紙必須與規格書及其他有關圖紙一併閱讀。
- Note: the relevant consultants immediately of any discrepancy to and hereby.
如發現圖紙有任何錯誤之處，請立即通知有關顧問公司。

Client 業主
The Hong Kong Jockey Club Charities Trust

Design Consultant
HERZOG & DE MEURON

Conservation Architect
ROCCO

Architect I/P
ARUP

Structural Engineer / RSE
ARUP

E & M Engineer
ARUP

Project 項目
**CENTRAL POLICE STATION
CONSERVATION AND REVITALISATION**

Drawing 圖紙
**LAYOUT PLAN FOR SHAFT
GROUTED PILE FOUNDATION
(TRIAL PILE & MONITORING)**

Scale 比例
1:3000(A1)

Drawn 繪圖
K.C. Lai

Checked 校核
AL

Drawing No. 圖紙號碼
F/005

Revision 修訂
C

TRIAL PILE SCHEDULE

TRIAL PILE NO.	COORDINATE EASTING (m) / NORTHING (m)	EXISTING GROUND LEVEL (mPD)	CUT-OFF LEVEL (mPD)	INTERFACE LEVEL BETWEEN COLUMN AND COG2 (mPD)	TENTATIVE FOUNDING LEVEL (mPD)	TENTATIVE PILE LENGTH (m)	ULTIMATE PILE CAPACITY (kN)
TP-H1	833889 815781	+55.70	+55.90	+44.00	-6.82	62.72	18000
TP-H2	833916 815766	+55.70	+55.90	+44.00	-10.62	66.52	18000
TP-M1	833981 815774	+55.70	+56.45	+44.00	+22.22	34.27	4710
TP-M2	833876 815820	+50.00	+50.79	+34.00	+12.56	38.23	4710

RECEIVED BY
2011 SEP 19 2:51
B & D ENGINEER
BUILDINGS DEPARTMENT



恆誠建築工程有限公司

Win Win Way Construction Company Ltd.

(Trial Pile) near Block 17

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibrating Monitoring	5mm/s	6mm/s	7.5mm/s

Vibration Record

Project Title: Central Police Station Conservation & Revitalization Project No: WP201 21-Oct-2012 to 3-Nov-2012

POINT	VM1	VM2	VM3	VM4	VM5	VM6	VM7	VM8	VM9	VM10	VM11	VM12	VM13	VM14	VM15	
DATE	PD/(m)	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	
2-Apr-2012 (Initial)		0.58	0.18	0.18	0.66	1.4	0.25	1.14	0.65	0.28	0.22	0.18	0.22	0.18	0.22	0.22
21-Oct-2012		Sunday														
22-Oct-2012		0.18	0.18	0.17	0.18	0.21	0.36	0.24	1.24	0.17	0.13	0.17	0.18	0.25	0.13	0.27
23-Oct-2012		Holidays														
24-Oct-2012		0.12	0.22	0.15	0.14	0.16	0.33	0.20	0.14	0.20	0.19	0.16	0.12	0.14	0.15	0.21
25-Oct-2012		0.32	0.15	0.27	0.26	0.13	0.25	0.14	0.14	0.12	0.21	0.13	0.15	0.23	0.12	0.12
26-Oct-2012		0.12	0.10	0.19	0.10	0.14	0.21	0.12	0.12	0.14	0.23	0.15	0.13	0.22	0.10	0.16
27-Oct-2012		0.25	0.18	0.16	0.16	0.16	0.22	0.16	0.17	0.15	0.16	0.76	0.14	0.18	0.19	0.14
28-Oct-2012		Sunday														
29-Oct-2012		0.16	1.25	0.19	0.29	0.18	0.18	0.18	0.13	0.23	0.16	0.15	0.16	0.16	0.17	0.14
30-Oct-2012		0.22	0.22	0.25	0.14	0.14	0.14	0.44	0.19	0.18	0.18	0.20	0.22	0.14	0.21	0.21
31-Oct-2012		0.13	0.15	0.26	0.18	0.14	0.13	0.13	0.14	0.13	0.14	0.15	0.22	0.12	0.13	0.12
1-Nov-2012		0.12	0.27	0.24	0.37	0.09	0.14	0.38	0.15	0.15	0.15	0.14	0.36	0.15	0.12	0.13
2-Nov-2012		0.33	0.21	0.18	0.15	0.12	0.14	0.46	0.14	0.15	0.15	0.14	0.13	0.16	0.12	0.18
3-Nov-2012		0.87	0.14	0.22	0.15	0.89	0.66	0.12	0.13	0.66	0.12	0.13	0.12	0.15	0.14	0.11

Prepared by : Lo wing yue (Surveyor)

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibrating Monitoring	5mm/s	6mm/s	7.5mm/s

Vibration Record

Project Title: Central Police Station Conservation & Revitalization Project No: WP201 4-Nov-2012 to 17-Nov-2012

POINT	VM1	VM2	VM3	VM4	VM5	VM6	VM7	VM8	VM9	VM10	VM11	VM12	VM13	VM14	VM15	
DATE	PD/(m)	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	
2-Apr-2012 (Initial)		0.58	0.18	0.18	0.66	1.4	0.25	1.14	0.65	0.28	0.22	0.18	0.22	0.18	0.22	0.22
4-Nov-2012		Sunday														
5-Nov-2012		0.12	0.13	0.13	0.26	0.15	0.14	0.14	0.25	0.15	0.14	0.20	0.22	0.28	0.13	0.12
6-Nov-2012		0.10	0.17	0.18	0.14	0.22	0.23	0.20	0.30	0.15	0.15	0.23	0.13	0.10	0.13	Blocked
7-Nov-2012		0.20	0.14	0.14	0.14	0.25	0.14	0.29	0.14	0.16	0.51	0.14	0.15	0.25	0.10	Blocked
8-Nov-2012		0.13	0.15	0.13	0.15	0.34	0.10	0.93	0.73	0.85	0.57	0.51	0.15	0.22	0.21	Blocked
9-Nov-2012		0.12	0.24	0.24	0.29	0.11	0.14	0.34	0.32	0.12	0.22	0.26	0.20	0.33	0.11	Blocked
10-Nov-2012		0.24	0.19	0.12	0.29	0.14	0.13	0.36	0.46	0.91	0.65	0.14	0.39	0.67	0.12	Blocked
11-Nov-2012		Sunday														
12-Nov-2012		0.15	0.15	0.16	0.38	0.23	0.17	0.31	0.14	0.19	0.15	0.19	0.16	0.27	0.29	Blocked
13-Nov-2012		0.13	0.12	0.12	0.54	0.12	0.13	0.35	0.23	0.27	0.18	0.12	0.31	0.43	0.11	Blocked
14-Nov-2012		0.13	0.23	0.22	0.18	0.15	0.14	0.29	0.13	0.24	0.14	0.32	0.20	0.15	0.15	Blocked
15-Nov-2012		0.23	0.33	0.20	0.25	0.19	0.23	0.14	0.25	0.21	0.36	0.19	0.13	0.21	0.33	Blocked
16-Nov-2012		0.13	0.16	0.27	0.48	0.29	0.26	0.15	0.15	0.35	0.19	0.13	0.12	0.35	0.14	Blocked
17-Nov-2012		0.29	0.16	0.15	0.15	0.26	0.15	0.22	0.15	0.18	0.20	0.15	0.15	0.17	0.20	Blocked

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibrating Monitoring	5mm/s	6mm/s	7.5mm/s

Vibration Record

Project Title: Central Police Station Conservation & Revitalization Project No: WP201 18-Nov-2012 to 1-Dec-2012

POINT		VM1	VM2	VM3	VM4	VM5	VM6	VM7	VM8	VM9	VM10	VM11	VM12	VM13	VM14	VM15
DATE	PD/(m)	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
2-Apr-2012	(Initial)	0.58	0.18	0.18	0.66	1.4	0.25	1.14	0.65	0.28	0.22	0.18	0.22	0.18	0.22	0.22
18-Nov-2012																
Sunday																
19-Nov-2012		0.13	0.14	0.13	0.15	0.14	0.14	0.28	0.13	0.12	0.12	0.13	0.15	0.14	0.13	Blocked
20-Nov-2012		0.21	0.11	0.13	0.10	0.13	0.15	0.22	0.14	0.14	0.26	0.13	0.23	0.21	0.14	Blocked
21-Nov-2012		0.18	0.14	0.11	0.18	0.27	0.14	0.15	0.13	0.14	0.16	0.13	0.11	0.11	0.15	Blocked
22-Nov-2012		0.18	0.11	0.12	0.13	0.14	0.22	0.13	0.16	0.21	0.12	0.13	0.14	0.26	0.18	Blocked
23-Nov-2012		0.15	0.12	0.16	0.13	0.15	0.19	0.12	0.10	0.13	0.14	0.22	0.24	0.14	0.14	Blocked
24-Nov-2012		0.11	0.14	0.15	0.14	0.15	0.15	0.15	0.10	0.14	0.57	0.12	0.10	0.11	0.13	Blocked
25-Nov-2012																
Saturday																
26-Nov-2012		0.45	0.12	0.14	0.11	0.11	0.13	0.14	0.13	0.13	0.15	0.26	0.11	0.11	0.20	Blocked
27-Nov-2012		0.23	0.13	0.15	0.17	0.18	0.19	0.14	0.14	0.17	0.09	0.58	0.17	0.21	0.12	Blocked
28-Nov-2012		0.14	0.14	0.15	0.14	0.13	0.14	0.14	0.12	0.15	0.14	0.15	0.14	0.17	0.14	Blocked
29-Nov-2012		0.14	0.14	0.14	0.14	0.14	0.15	0.13	0.14	0.14	0.11	0.22	0.14	0.17	0.16	Blocked
30-Nov-2012		0.20	0.13	0.12	0.12	0.21	0.82	0.14	0.13	0.14	0.28	0.11	0.10	0.14	0.11	Blocked
1-Dec-2012		0.24	0.15	0.14	0.16	0.15	0.13	0.16	0.12	0.28	0.25	0.14	0.22	0.14	0.12	Blocked

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Warning level
Vibrating Monitoring	5mm/s	6mm/s	7.5mm/s

Vibration Record

Project Title: Central Police Station Conservation & Revitalization										Project No: WP201		2-Dec-2012		to		15-Dec-2012	
POINT	VM1	VM2	VM3	VM4	VM5	VM6	VM7	VM8	VM9	VM10	VM11	VM12	VM13	VM14	VM15		
DATE	PD/(m)	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		
2-Apr-2012 (Initial)		0.58	0.18	0.18	0.66	1.4	0.25	1.14	0.65	0.28	0.22	0.18	0.22	0.18	0.22	0.22	
2-Dec-2012																	
3-Dec-2012		0.12	0.10	0.10	0.18	0.18	0.26	0.12	0.17	0.12	0.14	0.17	0.16	0.37	0.18	Blocked	
4-Dec-2012		0.09	0.15	0.12	0.12	0.10	0.33	0.20	0.15	0.26	0.14	0.15	0.14	0.14	0.14	Blocked	
5-Dec-2012		0.28	0.13	0.32	0.14	0.28	0.16	0.11	0.14	0.12	0.24	0.16	0.11	0.14	0.12	Blocked	
6-Dec-2012		0.29	0.13	0.13	0.09	0.14	0.13	0.15	0.14	0.12	0.10	0.14	0.11	0.15	0.17	Blocked	
7-Dec-2012		0.09	0.14	0.13	0.15	0.11	0.16	0.17	0.13	0.13	0.14	0.16	0.15	0.14	0.09	Blocked	
8-Dec-2012		0.15	0.16	0.14	0.13	0.31	0.20	0.14	0.16	0.14	0.13	0.15	0.13	0.14	0.23	Blocked	
9-Dec-2012																	
10-Dec-2012		0.14	0.10	0.13	0.11	0.13	0.13	0.12	0.12	0.13	0.27	0.14	0.14	0.13	0.50	Blocked	
11-Dec-2012		0.14	0.15	0.30	0.27	0.24	0.18	0.45	0.22	0.19	0.24	0.23	0.15	0.14	0.18	Blocked	
12-Dec-2012		0.12	0.12	0.09	0.13	0.29	0.23	0.25	0.13	0.12	0.12	0.16	0.30	0.20	0.19	Blocked	
13-Dec-2012		0.14	0.10	0.15	0.13	0.42	0.12	0.15	0.15	0.21	0.22	0.09	0.23	0.21	0.14	Blocked	
14-Dec-2012		0.10	0.16	0.12	0.19	0.36	0.12	0.16	0.13	0.13	0.12	0.32	0.17	0.29	0.23	Blocked	
15-Dec-2012		0.13	0.13	0.14	0.13	0.13	0.10	0.13	0.13	0.15	0.13	0.14	0.10	0.17	0.09	Blocked	
Remark																firm floor slab was removed	


Prepared by : Lo wing yue (Surveyor)

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibrating Monitoring	5mm/s	6mm/s	7.5mm/s

Vibration Record

Project Title: Central Police Station Conservation & Revitalization Project No: WP201 16-Dec-2012 to 29-Dec-2012

POINT	VM1	VM2	VM3	VM4	VM5	VM6	VM7	VM8	VM9	VM10	VM11	VM12	VM13	VM14	VM15	
DATE	PD/(m)	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	
2-Apr-2012 (Initial)		0.58	0.18	0.18	0.66	1.4	0.25	1.14	0.65	0.28	0.22	0.18	0.22	0.18	0.22	
16-Dec-2012	Sunday															
17-Dec-2012		0.10	0.10	0.13	0.12	0.10	0.13	0.11	0.27	0.15	0.13	0.13	0.13	0.19	0.19	Blocked
18-Dec-2012		0.12	0.14	0.23	0.24	0.23	0.16	0.14	0.27	0.14	0.18	0.21	0.13	0.16	0.09	Blocked
19-Dec-2012		0.14	0.59	0.14	0.14	0.15	0.27	0.16	0.21	0.16	0.12	0.13	0.33	0.26	0.11	Blocked
20-Dec-2012		0.13	0.11	0.28	0.21	0.10	0.26	0.14	0.49	0.52	0.21	0.21	0.15	0.12	0.11	Blocked
21-Dec-2012		0.14	0.14	0.23	0.15	0.18	0.15	0.13	0.17	0.15	0.14	0.15	0.14	0.14	0.12	Blocked
22-Dec-2012		0.31	0.24	0.14	0.26	0.13	0.15	0.14	0.31	0.21	0.31	0.18	0.11	0.17	0.15	Blocked
23-Dec-2012	Sunday															
24-Dec-2012		0.15	4.08	0.56	0.18	0.90	0.29	0.36	2.34	0.91	0.45	0.10	0.49	0.24	0.22	Blocked
25-Dec-2012	Public Holiday															
26-Dec-2012	Public Holiday															
27-Dec-2012		0.13	0.10	0.09	0.14	0.13	0.30	0.14	0.18	0.17	0.37	0.58	0.19	0.33	0.26	Blocked
28-Dec-2012		0.32	0.31	0.18	0.97	0.67	0.15	0.15	0.33	0.18	0.53	0.27	0.15	0.14	0.14	0.16
29-Dec-2012		0.13	0.10	0.34	0.31	0.17	0.25	0.39	0.19	0.19	0.23	0.15	0.18	0.19	0.20	0.19

Monitoring Check Pts.	Trigger Levels		
	Alert level:	Alarm level:	
Vibrating Monitoring	5mm/s	6mm/s	7.5mm/s

Vibration Record

Project Title: Central Police Station Conservation & Revitalization Project No: WP201 16-Jan-2013 to 23-Jan-2013

POINT	VM1	VM2	VM3	VM4	VM5	VM6	VM7	VM8	VM9	VM10	VM11	VM12	VM13	VM14	VM15	
DATE	PD/(m)	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	
2-Apr-2012 (Initial)		0.58	0.18	0.18	0.66	1.4	0.25	1.14	0.65	0.28	0.22	0.18	0.22	0.18	0.22	0.22
1-Jan-2013		Public Holiday														
2-Jan-2013		0.10	0.17	0.12	0.19	0.11	0.28	0.24	0.11	0.11	0.13	0.26	0.12	0.46	0.09	0.25
3-Jan-2013		0.21	0.14	0.15	0.13	0.11	0.12	0.14	0.11	0.14	0.14	0.14	0.21	0.13	0.10	0.19
4-Jan-2013		0.10	0.10	0.13	0.13	0.15	0.13	0.10	0.23	0.14	0.13	0.39	0.15	0.35	0.24	0.25
5-Jan-2013		0.18	0.13	0.10	0.11	0.14	0.11	0.15	0.13	0.22	0.16	0.13	0.20	0.23	0.11	0.11
6-Jan-2013		Sunday														
7-Jan-2013		0.17	0.16	0.18	0.17	0.22	0.17	0.21	0.15	0.17	0.35	0.43	0.18	0.18	0.15	0.17
8-Jan-2013		0.13	0.13	0.13	0.12	0.14	0.15	0.19	0.15	0.15	0.21	0.35	0.18	0.18	0.23	0.20
9-Jan-2013		0.24	0.21	0.34	0.22	0.11	0.33	0.17	0.14	0.11	0.13	0.14	0.13	0.18	0.12	0.14
10-Jan-2013		0.18	0.19	0.59	0.14	0.28	0.23	0.19	0.12	0.22	0.18	0.13	0.22	0.28	0.13	0.14
11-Jan-2013		0.22	0.20	0.13	0.17	0.15	0.13	0.14	0.21	0.18	0.23	0.17	0.25	0.13	0.12	0.14
12-Jan-2013		0.20	0.24	0.14	0.12	0.12	0.24	0.10	0.19	0.17	0.28	0.15	0.14	0.11	0.12	0.26
16-Jan-2013		0.16	0.14	0.15	0.13	0.14	0.14	0.14	0.14	0.12	0.17	0.14	0.15	0.24	0.72	0.15
23-Jan-2013		0.15	0.15	0.25	0.29	0.30	0.14	0.15	0.13	0.27	0.14	0.14	0.22	0.13	0.09	0.13



E.D. Ref. No. 工程編號
 3053/11 (B/L 173/56) (H/O) (S)
 F.S.D. Ref. No. 測量編號
 Revision/Submission 修訂/提交
 No. 編號 Description 說明 Date 日期 Approved 核准
 - BD SUBMISSION 12/11 JS

Plan Approved
 NG Kinshing
 Chief Structural Engineer
 for BUILDING AUTHORITY
 20 FEB 2012



BD SUBMISSION
 Drawing Status 製圖狀況
 This drawing and the contents herein are the copyright of relevant consultants.
 本圖紙及其內容均受版權所有權歸顧問公司所有。
 No part of the drawing and the design contained herein may be reproduced without the prior written consent of relevant consultants.
 本圖紙內任何部分均不得複製，不得再行製圖或再行刊印。
 Do not take measurements directly from this drawing.
 切勿直接從圖紙上量取尺寸。
 Check and verify all dimensions on site.
 請在現場量取所有尺寸並核實。
 Read this drawing in conjunction with the specifications and all other related drawings.
 此圖紙必須與規格書及其他有關圖紙一併閱讀。
 Notify the relevant consultant immediately of any discrepancy found herein.
 如發現任何不符之處，應立即通知有關顧問公司。

Client 業主

 The Jockey Club CPS Limited
 Design Consultant
HERZOG & DEMEUREN
 Conservation Architect

 Hil Johnson Global Communications Limited
 Executive Architect / AP
ROCCO
 許李平

Structural Engineer / RSE E & M Engineer
ARUP
 Project 項目
**CENTRAL POLICE STATION
 CONSERVATION AND REVITALISATION
 PROJECT**
 Drawing Title 圖名
MONITORING LAYOUT PLAN
 Scale 比例尺
 1:3000A1
 Drawing 圖號
 00-OAP209674-G-001

- LEGEND**
- EXISTING FRESH WATER MAIN
 - EXISTING SALT WATER MAIN
 - EXISTING STREET LIGHTING NO. 33480-A1
 - EXISTING STREET LIGHTING CABLE
 - EXISTING GAS MAIN
 - EXISTING HV ELECTRICITY CABLE
 - EXISTING LV ELECTRICITY CABLE
 - EXISTING TELECOMMUNICATION DUCT (HIL JOHNSON GLOBAL COMMUNICATIONS LIMITED)
 - EXISTING STORMWATER DRAIN
 - EXISTING FOUL SEWER
 - PROPOSED FOUL SEWER
 - SITE BOUNDARY
 - EXISTING RETAINING WALL
 - EXISTING DRILLHOLE WITH STANDPIPE/PIEZOMETER
 - PROPOSED BUILDING SETTLEMENT POINTS/TILTMETER
 - PROPOSED RETAINING WALL SETTLEMENT POINTS/TILTMETER
 - PROPOSED INCLINOMETER TO BE BUILT IN BORED PILE OR TIE PILE WALL
 - PROPOSED GROUND SETTLEMENT POINTS
 - PROPOSED UTILITY MONITORING POINTS
 - PROPOSED VIBRATION MONITORING POINTS
 - PROPOSED ADDITIONAL DRILLHOLE

NOTES
 1. UTILITIES SETTLEMENT POINTS (UTI TO UT6) SHALL ONLY BE INSTALLED AFTER EXCAVATION PERMIT IS OBTAINED AS ALTERNATIVE SETTLEMENT POINTS (BS1 TO BS5) MAY BE INSTALLED.
 2. SETTLEMENT POINTS (BS1 TO BS5) SHOULD NOT BE INSTALLED AS 18 AND 20 SHALL NOT BE OBTAINED.
 3. EITHER UTILITIES SETTLEMENT MARKERS (UTI TO UT6) OR GROUND SETTLEMENT MARKERS (BS1 TO BS5) SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF OLD BAILIE WORKS.

RECEIVED BY
 2011 DEC 23 P 2:09
 R.A.D. Sze
 Planning Department

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



Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

Vibration Record

Project Title: Central Police Station Conservation & Revitalization Project No: WP201 21-Oct-2012 to 3-Nov-2012

POINT		VM8-1	VM11-1	VM11-2	VM12-1	VM12-2	VM14-3	VM17-1	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										
21-Oct-2012		Sunday								
22-Oct-2012		0.21	0.20	0.17	0.19	0.17	0.19	0.18	0.16	0.25
23-Oct-2012		Holiday								
24-Oct-2012		0.25	0.22	0.27	0.17	0.26	0.16	0.14	0.15	0.13
25-Oct-2012		0.16	0.23	0.18	0.22	0.30	0.20	0.15	0.18	0.22
26-Oct-2012		0.17	0.22	0.14	0.23	0.17	0.12	0.11	0.13	0.13
27-Oct-2012		0.15	0.16	0.18	0.16	0.15	0.24	0.15	0.16	0.16
28-Oct-2012		Sunday								
29-Oct-2012		0.12	1.60	0.17	0.12	0.17	0.24	0.15	1.25	0.40
30-Oct-2012		0.22	0.14	0.23	0.22	0.14	0.15	0.19	0.25	0.16
31-Oct-2012		0.10	0.13	0.13	0.10	0.12	0.14	0.10	0.12	0.13
1-Nov-2012		0.31	0.28	0.14	0.22	0.25	0.24	0.19	0.19	0.35
2-Nov-2012		0.29	0.13	0.23	0.13	0.16	0.14	0.09	0.12	0.14
3-Nov-2012		0.12	0.14	0.09	0.10	0.11	0.47	0.10	0.11	0.89

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

Vibration Record

Project Title: Central Police Station Conservation & Revitalization Project No: WP201 4-Nov-2012 to 17-Nov-2012

POINT		VM8-1	VM11-1	VM11-2	VM12-1	VM12-2	VM14-3	VM17-1	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										
4-Nov-2012										
5-Nov-2012		0.22	0.23	0.11	0.30	0.13	0.14	0.24	0.45	0.31
6-Nov-2012		0.31	0.20	0.30	0.25	0.16	0.32	0.13	0.30	0.16
7-Nov-2012		0.09	0.19	0.27	0.30	0.27	0.15	0.20	0.17	0.13
8-Nov-2012		Blocked	0.15	0.14	0.14	0.28	0.14	0.16	0.14	0.28
9-Nov-2012		Blocked	0.17	0.20	0.32	0.15	0.27	0.14	0.30	0.29
10-Nov-2012		Blocked	0.14	0.14	0.17	0.21	0.14	0.40	0.39	0.38
11-Nov-2012										
12-Nov-2012		Blocked	0.22	0.22	0.26	0.14	0.15	0.15	0.14	0.14
13-Nov-2012		Blocked	0.14	0.30	0.52	0.23	0.29	0.36	0.26	0.12
14-Nov-2012		Blocked	0.13	0.14	0.29	0.20	0.14	0.15	0.10	0.34
15-Nov-2012		Blocked	0.36	0.13	0.19	0.32	0.26	0.12	0.25	0.13
16-Nov-2012		Blocked	0.10	0.13	0.22	0.33	0.35	0.28	0.18	0.15
17-Nov-2012		Blocked	0.21	0.18	0.23	0.23	0.15	0.13	0.25	0.22

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

Vibration Record

Project Title: Central Police Station Conservation & Revitalization Project No: WP201 18-Nov-2012 to 1-Dec-2012


POINT		VM8-1	VM11-1	VM11-2	VM12-1	VM12-2	VM14-3	VM17-1	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										
18-Nov-2012		Sunday								
19-Nov-2012		Blocked	0.13	0.23	0.14	0.15	0.28	0.16	0.12	0.22
20-Nov-2012		Blocked	0.12	0.14	0.18	0.14	0.24	0.14	0.12	0.15
21-Nov-2012		Blocked	0.18	0.14	0.24	0.14	0.13	0.16	0.11	0.15
22-Nov-2012		Blocked	0.25	0.13	0.23	0.14	0.20	0.12	0.17	0.19
23-Nov-2012		Blocked	0.11	0.14	0.16	0.17	0.17	0.14	0.20	0.15
24-Nov-2012		Blocked	0.14	0.12	0.13	0.14	0.11	0.14	0.11	0.11
25-Nov-2012		Sunday								
26-Nov-2012		Blocked	0.29	0.12	0.12	0.11	0.12	0.18	0.30	0.13
27-Nov-2012		Blocked	0.20	0.26	0.23	0.18	0.12	0.25	0.42	0.25
28-Nov-2012		Blocked	0.17	0.15	0.22	0.22	0.14	0.15	0.11	0.14
29-Nov-2012		Blocked	0.12	0.13	0.19	0.13	0.12	0.14	0.10	0.11
30-Nov-2012		Blocked	0.29	0.20	0.22	0.15	0.20	0.15	0.23	0.30
1-Dec-2012		Blocked	0.20	0.27	0.25	0.22	0.14	0.17	0.33	0.31

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

Vibration Record

Project Title: Central Police Station Conservation & Revitalization Project No: WP201 2-Dec-2012 to 15-Dec-2012

POINT		VM8-1	VM11-1	VM11-2	VM12-1	VM12-2	VM14-3	VM17-1	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										
2-Dec-2012		Sunday								
3-Dec-2012		Blocked	0.14	0.33	0.18	0.36	0.10	0.13	0.11	0.22
4-Dec-2012		Blocked	0.17	0.14	0.27	0.15	0.16	0.18	0.48	0.17
5-Dec-2012		Blocked	0.19	0.17	0.11	0.15	0.15	0.14	0.18	0.28
6-Dec-2012		Blocked	0.15	0.15	0.14	0.14	0.14	0.14	0.12	0.09
7-Dec-2012		Blocked	0.22	0.13	0.14	0.28	0.15	0.15	0.15	0.27
8-Dec-2012		Blocked	0.16	0.19	0.15	0.23	0.14	0.15	0.17	0.15
9-Dec-2012		Sunday								
10-Dec-2012		Blocked	0.13	0.14	0.18	0.14	0.23	0.19	0.13	0.14
11-Dec-2012		Blocked	0.17	0.19	0.13	0.13	0.17	0.20	0.28	0.37
12-Dec-2012		Blocked	0.09	0.13	0.22	0.34	0.13	0.23	0.24	0.15
13-Dec-2012		Blocked	0.14	0.15	0.13	0.13	0.15	0.13	0.22	0.13
14-Dec-2012		Blocked	0.10	0.12	0.14	0.35	0.29	0.36	0.18	0.33
15-Dec-2012		Blocked	0.16	0.13	0.13	0.18	0.14	0.12	0.30	0.12
Remark		Excavation work in progress inside Blk 8								


 Prepared by : Lo wing yue (Surveyor)

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

Vibration Record

Project Title: Central Police Station Conservation & Revitalization Project No: WP201 16-Dec-2012 to 29-Dec-2012


POINT		VM8-1	VM11-1	VM11-2	VM12-1	VM12-2	VM14-3	VM17-1	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										
16-Dec-2012		Sunday								
17-Dec-2012		Blocked	0.09	0.14	0.26	0.11	0.13	0.19	0.13	0.13
18-Dec-2012		Blocked	0.13	0.21	0.14	0.16	0.21	0.21	0.30	0.14
19-Dec-2012		Blocked	0.10	0.16	0.14	0.14	0.14	0.20	0.15	0.15
20-Dec-2012		Blocked	0.15	0.18	0.44	0.21	0.56	0.36	0.16	0.22
21-Dec-2012		Blocked	0.20	0.14	0.16	0.15	0.33	0.14	0.14	0.14
22-Dec-2012		Blocked	0.22	0.17	0.14	0.13	0.16	0.13	0.14	0.14
23-Dec-2012		Sunday								
24-Dec-2012		Blocked	0.14	0.17	0.17	0.14	0.16	0.13	0.14	0.14
25-Dec-2012		Public Holiday								
26-Dec-2012										
27-Dec-2012		Blocked	0.20	0.28	0.19	0.24	0.32	0.23	0.15	0.30
28-Dec-2012		Blocked	0.77	0.17	0.23	0.20	0.14	0.14	0.14	0.13
29-Dec-2012		0.20	0.19	0.34	0.17	0.23	0.18	0.16	0.46	0.20
Remark		Excavation work in progress inside Blk 8								

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

Vibration Record

Project Title: Central Police Station Conservation & Revitalization Project No: WP201 30-Dec-2012 to 12-Jan-2013

POINT		VM8-1	VM11-1	VM11-2	VM12-1	VM12-2	VM14-3	VM17-1	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										
30-Dec-2012		Sunday								
31-Dec-2012		0.11	0.14	0.12	0.21	0.15	0.24	0.40	0.15	0.13
1-Jan-2013		Public Holiday								
2-Jan-2013		0.11	0.10	0.13	0.22	0.13	0.14	0.40	0.13	0.38
3-Jan-2013		0.25	0.20	0.16	0.13	0.15	0.12	0.14	0.15	0.14
4-Jan-2013		0.10	0.09	0.13	0.13	0.13	0.14	0.14	0.26	0.12
5-Jan-2013		0.13	0.10	0.11	0.15	0.17	0.14	0.24	0.11	0.28
6-Jan-2013		Sunday								
7-Jan-2013		0.12	0.12	0.12	0.11	0.20	0.19	0.17	0.18	0.28
8-Jan-2013		0.17	0.12	0.21	0.19	0.13	0.15	0.27	0.19	0.18
9-Jan-2013		0.12	0.26	0.26	0.18	0.14	0.10	0.13	0.18	0.17
10-Jan-2013		0.14	0.19	0.31	0.15	0.14	0.14	0.35	0.38	0.25
11-Jan-2013		0.13	0.09	0.21	0.38	0.23	0.14	0.14	0.19	0.26
12-Jan-2013		0.26	0.12	0.12	0.14	0.49	0.15	0.14	0.27	0.27
Remark										


 Prepared by :Lo wing yue (Surveyor)

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

Vibration Record

Project Title: Central Police Station Conservation & Revitalization Project No: WP201 13-Jan-2013 to 26-Jan-2013

POINT		VM8-1	VM11-1	VM11-2	VM12-1	VM12-2	VM14-3	VM17-1	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										
13-Jan-2013		Sunday								
14-Jan-2013		0.18	0.14	0.18	0.38	0.31	0.35	0.17	0.26	0.26
15-Jan-2013		0.13	0.09	0.14	0.11	0.12	0.25	0.14	0.13	0.15
16-Jan-2013		0.14	0.16	0.17	0.18	0.11	0.14	0.26	0.18	0.14
17-Jan-2013		0.24	0.09	0.14	0.22	0.22	0.13	0.13	0.18	0.13
18-Jan-2013		0.13	0.09	0.11	0.13	0.12	0.10	0.13	0.23	0.19
19-Jan-2013		0.10	0.10	0.13	0.25	0.18	0.12	0.23	0.12	0.11
20-Jan-2013		Sunday								
21-Jan-2013		0.09	0.15	0.13	0.11	0.18	0.17	0.19	0.18	0.21
22-Jan-2013		0.11	0.09	0.18	0.19	0.33	0.14	0.13	0.17	0.10
23-Jan-2013		0.13	0.14	0.14	0.13	0.13	0.15	0.17	0.23	0.31
24-Jan-2013		0.15	0.18	0.14	0.14	0.11	0.12	0.15	0.28	0.13
25-Jan-2013		0.19	0.10	0.14	0.15	0.15	0.15	0.13	0.36	0.16
26-Jan-2013		0.15	0.18	0.17	0.13	0.16	0.13	0.15	0.15	0.19
Remark										

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

WW 恆誠建築工程有限公司
Win Win Way Construction Company Ltd.

Monitoring Check Pts.	Trigger Levels		
	Alert level	Alarm level	Action level
Vibration Monitoring	2mm/s	2.5mm/s	3mm/s
Vibration at largest span of highest Structural level	5.0mm/s	6.0mm/s	7.5mm/s

Vibration Record

Project Title: Central Police Station Conservation & Revitalization Project No: WP201 27-Jan-2013 to 9-Feb-2013

POINT		VM8-1	VM11-1	VM11-2	VM12-1	VM12-2	VM14-3	VM17-1	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										
27-Jan-2013		Sunday								
28-Jan-2013		0.18	0.24	0.18	0.15	0.35	0.20	0.23	0.18	0.61
29-Jan-2013		0.35	0.22	0.21	0.16	0.25	0.36	0.14	0.39	0.11
30-Jan-2013		0.13	0.14	0.14	0.14	0.14	0.17	0.15	0.13	0.41
31-Jan-2013		0.29	0.12	0.21	0.19	0.24	0.13	0.21	0.16	0.13
1-Feb-2013										
2-Feb-2013										
3-Feb-2013		Sunday								
4-Feb-2013										
5-Feb-2013										
6-Feb-2013										
7-Feb-2013										
8-Feb-2013										
9-Feb-2013										
Remark										


Prepared by :Lo wing yue (Surveyor)

Annex M

Records of Vibration
Monitoring for Other
Construction Works



B.O. Ref. No. 00-0209674-001

F.S.D. Ref. No. 00-0209674-001

Revision/Description	Date	Approved
BD SUBMISSION	12/11	JS

FOR INFORMATION ONLY

Plan Approved

NG Kin-shing
Chief Structural Engineer
for BUILDING AUTHORITY
20 FEB 2012



BD SUBMISSION
Drawing Status 製圖狀況

This drawing and the contents herein are the copyright of the consultant.
此圖紙及其內容均為顧問公司的版權。

No part of this drawing and the design contained herein may be reproduced without the prior written consent of the relevant consultants.
未經有關顧問公司書面同意，不得複製此圖紙或其內容。

Do not take measurements directly from this drawing.
切勿直接從圖紙上量取尺寸。

Check and verify all dimensions on site.
核對及校核所有尺寸於現場。

Read site drawing in conjunction with the specifications and all other related drawings.
此圖紙須與規格及其他有關圖紙一併閱讀。

Hold the relevant consultants immediately of any discrepancy found herein.
如發現圖紙有任何錯誤之處，請立即通知有關顧問公司。

Client 業主
新加坡文物保育有限公司
The Jockey Club CPS Limited

Design Consultant
HERZOG & DE MEURON

Conservation Architect
HUTCHINSON GLOBAL COMMUNICATIONS LIMITED

Executive Architect / AP
ROCCO

Structural Engineer / RSE E & M Engineer
ARUP **JRP**

Project 項目
**CENTRAL POLICE STATION
CONSERVATION AND REVITALISATION
PROJECT**

Drawing Title 圖名
MONITORING LAYOUT PLAN

Scale 比例
1:50000A1
Drawing No. 圖號
00-0209674-G-001

Drawn 繪圖
K.C.Loi
Checked 校核
AJ

LEGEND

	EXISTING FRESH WATER MAIN
	EXISTING SALT WATER MAIN
	EXISTING STREET LIGHTING NO. 3348B-A1
	EXISTING STREET LIGHTING CABLE
	EXISTING GAS MAIN
	EXISTING HV ELECTRICITY CABLE
	EXISTING LV ELECTRICITY CABLE
	EXISTING TELECOMMUNICATION DUCT (HUTCHINSON GLOBAL COMMUNICATIONS LIMITED)
	EXISTING STORMWATER DRAIN
	EXISTING FOUL SEWER
	PROPOSED FOUL SEWER
	SITE BOUNDARY
	EXISTING RETAINING WALL
	EXISTING DRILLHOLE WITH STANDPIPE/PIEZOMETER
	PROPOSED BUILDING SETTLEMENT POINTS/TILT METER
	PROPOSED RETAINING WALL SETTLEMENT POINTS/TILT METER
	PROPOSED INCLINOMETER TO BE BUILT IN BORED PILE WALL OR PIPE PILE WALL
	PROPOSED GROUND SETTLEMENT POINTS
	PROPOSED UTILITY MONITORING POINTS
	PROPOSED VIBRATION MONITORING POINTS
	PROPOSED ADDITIONAL DRILLHOLE

NOTES

1. ALL UTILITY SETTLEMENT POINTS (UT1 TO UT6) SHALL ONLY BE INSTALLED AFTER EXCAVATION PERMIT OBTAINED. AS ALTERNATIVE SETTLEMENT POINTS (GS18 AND GS19) MAY BE INSTALLED.

2. SHOULD UT1 TO UT6 BE INSTALLED, GS18 AND GS19 SHALL NOT BE REQUIRED.

3. AFTER UTILITIES SETTLEMENT MARKERS (UT1 TO UT6) OR GROUND SETTLEMENT MARKERS (GS18 AND GS19) SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF OLD BAILEY WALLS WORKS.





仁利建築有限公司
Yan Lee Construction Co., Ltd.

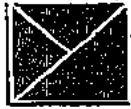
Monitoring Check Pts.	Trigger Levels		
	Alert level	Action level	Action level
Vibrating Monitoring	2mm/s	2.5mm/s	3mm/s

Vibration Record

Project Title: Central Police Station Conservation & Revitalization Project No: WP203 Date: 4-11-2012 To 17-11-2012

POINT		VM8-1	VM11-1	VM11-2												
DATE	PD(m)	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
23-Apr-12 (Initial)		0.212	0.087	0.116												
4-Nov-2012																
5-Nov-2012		0.656	0.284	0.170												
6-Nov-2012		1.450	0.700	0.438												
7-Nov-2012		0.238	0.249	0.217												
8-Nov-2012		0.398	0.094	0.593												
9-Nov-2012		0.270	0.102	0.178												
10-Nov-2012		0.273	0.136	0.146												
11-Nov-2012																
12-Nov-2012		0.601	0.102	0.236												
13-Nov-2012		0.386	0.176	0.232												
14-Nov-2012		0.762	0.242	0.333												
15-Nov-2012		1.430	0.305	0.212												
16-Nov-2012		0.334	0.152	0.343												
17-Nov-2012		1.110	0.116	0.270												

Prepared by: Chung Wai Ching (Leveller)



仁利建築有限公司
Yan Lee Construction Co., Ltd.

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

Vibration Record

Project Title: Central Police Station Conservation & Revitalization

Project No: WP203

Date: 18-11-2012 to 1-12-2012

POINT		VM8-1	VM11-1	VM11-2												
DATE	PD(m)	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
23/4/2012	(Initial)	0.212	0.087	0.116												
18-11-2012																
19-11-2012		0.170	0.151	0.212												
20-11-2012		0.207	0.094	0.111												
21-11-2012		0.471	0.120	0.143												
22-11-2012		0.144	0.093	0.102												
23-11-2012		0.605	0.137	0.263												
24-11-2012		0.447	0.297	1.010												
25-11-2012																
26-11-2012		0.621	0.317	0.450												
27-11-2012		0.215	0.108	0.217												
28-11-2012		0.226	0.105	0.159												
29-11-2012		1.020	0.602	0.177												
30-11-2012		0.304	0.139	0.218												
1-12-2012		0.463	0.112	0.178												

清

Prepared by: CHEUNG WAI CHING (Leveller)



仁利建築有限公司
Yan Lee Construction Co., Ltd.

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

Vibration Record

Project Title: Central Police Station Conservation & Revitalization

Project No: WP203

Date: 02-12-2012 To 15-12-2012

POINT		VM8-1	VM11-1	VM11-2												
DATE	PD/(m)	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
23-Apr-12 (Initial)		0.212	0.087	0.116												
2-Dec-2012																
3-Dec-2012		0.113	0.091	0.211												
4-Dec-2012		0.117	0.128	0.209												
5-Dec-2012		0.397	0.278	1.210												
6-Dec-2012		0.264	0.102	0.212												
7-Dec-2012		0.127	0.113	0.153												
8-Dec-2012		0.093	0.102	1.640												
9-Dec-2012																
10-Dec-2012		0.165	0.102	0.175												
11-Dec-2012		0.106	0.119	0.218												
12-Dec-2012		0.685	0.116	0.192												
13-Dec-2012		0.131	0.197	0.283												
14-Dec-2012		0.252	0.102	0.160												
15-Dec-2012		0.151	0.111	0.117												

27/12

Prepared by : Cheung Wai Ching (Leveller)



仁利建築有限公司
Yan Lee Construction Co., Ltd.

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

Vibration Record

Project Title: Central Police Station Conservation & Revitalization

Project No: WP203

Date: 16-12-2012 To 28-12-2012

POINT		VM8-1	VM11-1	VM11-2												
DATE	PD/(m)	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
23-Apr-12 (Initial)		0.212	0.087	0.116												
16-Dec-2012																
17-Dec-2012		0.225	0.117	0.145												
18-Dec-2012		0.160	0.194	0.294												
19-Dec-2012		0.164	0.171	0.360												
20-Dec-2012		0.303	0.098	0.196												
21-Dec-2012		0.670	0.206	0.163												
22-Dec-2012		0.100	0.104	0.275												
23-Dec-2012																
24-Dec-2012		0.540	0.209	0.234												
25-Dec-2012																
26-Dec-2012																
27-Dec-2012		0.087	0.186	0.201												
28-Dec-2012		0.087	0.120	0.424												

Prepared by : Cheung Wai Ching (Leveller)



仁利建築有限公司
Yan Lee Construction Co., Ltd.

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

Vibration Record

Project Title: Central Police Station Conservation & Revitalization Project No: WP203 Date: 16-12-2012 To 28-12-2012

POINT	VM8-1	VM11-1	VM11-2													
DATE	PD/(m)	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
23-Apr-12 (Initial)		0.212	0.087	0.116												
30-Dec-2012																
31-Dec-2012		0.11	0.14	0.12												
1-Jan-2013																
2-Jan-2013		0.11	0.10	0.13												
3-Jan-2013		0.25	0.20	0.16												
4-Jan-2013		0.10	0.09	0.13												
5-Jan-2013		0.13	0.10	0.11												
6-Jan-2013																
7-Jan-2013		0.12	0.12	0.12												
8-Jan-2013		0.17	0.12	0.21												
9-Jan-2013		0.12	0.26	0.26												
10-Jan-2013		0.14	0.19	0.31												
11-Jan-2013		0.13	0.09	0.21												
12-Jan-2013		0.26	0.12	0.12												

Prepared by : Cheung Wai Ching (Leveller)



仁利建築有限公司
Yan Lee Construction Co., Ltd.

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

Vibration Record

Project Title: Central Police Station Conservation & Revitalization

Project No: WP203

Date: 16-12-2012 To 28-12-2012

POINT	VM8-1	VM11-1	VM11-2													
DATE	PD/(m)	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
23-Apr-12 (Initial)		0.212	0.087	0.116												
13-Jan-2013					Sunday											
14-Jan-2013		0.18	0.14	0.18												
15-Jan-2013		0.13	0.09	0.14												
16-Jan-2013		0.14	0.16	0.17												
17-Jan-2013		0.24	0.09	0.14												
18-Jan-2013		0.13	0.09	0.11												
19-Jan-2013		0.1	0.1	0.13												
20-Jan-2013					Sunday											
21-Jan-2013		0.09	0.15	0.13												
22-Jan-2013		0.11	0.09	0.18												
23-Jan-2013		0.13	0.14	0.14												
24-Jan-2013		0.15	0.18	0.14												
25-Jan-2013		0.19	0.1	0.14												
26-Jan-2013		0.15	0.18	0.17												

清

Prepared by : Cheung Wai Ching (Leveller)

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

Vibration Record

Project Title: Central Police Station Conservation & Revitalization Project No: WP201 27-Jan-2013 to 9-Feb-2013

POINT		VM8-1	VM11-1	VM11-2					
DATE	PD/(m)	mm/s	mm/s	mm/s					
23-Apr-2012 (Initial)		0.212	0.087	0.116					
27-Jan-2013		Sunday							
28-Jan-2013		0.18	0.24	0.18					
29-Jan-2013		0.35	0.22	0.21					
30-Jan-2013		0.13	0.14	0.14					
31-Jan-2013		0.29	0.12	0.21					
1-Feb-2013		0.23	0.24	0.17					
2-Feb-2013									
3-Feb-2013		Sunday							
4-Feb-2013									
5-Feb-2013									
6-Feb-2013									
7-Feb-2013									
8-Feb-2013									
9-Feb-2013									



Prepared by : Lo wing yue (Surveyor)

Annex N

A Summary of Current
Condition of Character
Defining Elements

Schedule of Character Defining Elements

Central Police Station

CENTRAL POLICE STATION, HONG KONG

SCHEDULE OF CHARACTER DEFINING ELEMENTS

This Schedule of Character Defining Elements has been prepared at the request of the Antiquities and Monuments Office (AMO) to support applications for S.6 approval under the Antiquities and Monuments Ordinance and the Environmental Impact assessment Ordinance. The levels of significance and their meanings are derived from the work of James Semple Kerr.

For each element, the level of significance is stated, together with the planned outcome and associated mitigation measure, where applicable, and the resultant impact upon the significance. Generally, only those items subject to change are noted, and the impacts should be read as negative . Where elements are deemed currently to be adverse, the impact of the changes should be read as positive.

The levels of significance and definitions as defined by Kerr are stated below. The criteria used to assess the significance of each element are, as directed by AMO : (i) the association with the operation of the Central Police Station Compound; and (ii) its architectural quality. Where these criteria conflict, the resultant assessment score is aggregated.



Each entry in the schedule is accompanied by a photograph of a sample of the item described. The location of each photograph is noted on the floor plans attached in the appendix to the schedule. Similar examples of each item can be seen by observation.

Schedule of Character Defining Elements

Central Police Station



	Level of significance	Meaning
Positive	Exceptional	Where an individual space or element is assessed as displaying a strong contribution to the overall significance of the place. Spaces, elements or fabric exhibit a high degree of intactness and quality, though minor alterations or degradation may be evident.
	High	Where an individual space or element is assessed as making a substantial contribution to the overall significance of the place. Spaces, elements or fabric originally of substantial quality, yet may have undergone considerable alteration or adaption resulting in presentation which is either incomplete or ambiguous. The category also includes spaces, elements or fabric of average quality in terms of design and materials, but which exhibit a high degree of intactness.
	Moderate	Where an individual space or element is assessed as making a moderate contribution to the overall significance of the place. Spaces, elements or fabric originally of some intrinsic quality, and may have undergone alteration or degradation. In addition, elements of relatively new construction, where the assessment of significance is difficult, may be included. This category also includes original spaces, elements or fabric of any quality which have undergone extensive alteration or adaption.
	Low	Where an individual space or element is assessed as making a minor contribution to the overall significance of the place, especially when compared to other features. Spaces, elements or fabric originally of little intrinsic quality, any may have undergone alteration or degradation. This category also includes original spaces, elements or fabric of any quality which have undergone extensive alteration or adaption to the extent that only isolated remnants survive (resulting in a low degree of intactness and quality of presentation).
	Neutral	Where an individual space or element is assessed as having an unimportant relationship with the overall significance of the place. Spaces, elements or fabric are assessed as having little or no significance.
	Adverse	Where an individual space or element detracts from the appreciation of cultural significance, by adversely affecting or obscuring other significant areas, elements or items.

01 Police Headquarters

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.001	Flat plywood ceiling lining with plain rectangular cover battens		Adverse	Replace with T&G boarding to match existing	Not applicable	High
01.002	Plaster coving at abutments of walls and ceilings		Low	Remove in exceptional cases eg, where adjacent new lift shaft	Cut back neatly to a square edge and ensure remaining section is secure.	Low



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.003	Lay-in grid suspended ceiling		Adverse	Remove	Not applicable	High
01.004	Timber thresholds at external doors and internal doors between main corridor and individual rooms		Low	Remove to enable level access	Splice extensions to door jambs, extend width of bottom rail of doors to match existing	Low



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.005	Plaster box cornice		Moderate	Remove in exceptional cases eg. where adjacent new lift shafts	Cut back neatly to a square edge and ensure remaining section is secure.	Moderate
01.006	Panelled doors		Moderate	Replace where necessary to achieve fire resistance to comply with Code	Re-use where possible. Record design on survey drawings where element cannot be re-used.	Moderate



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.007	External shutters		High	Reinstate to match existing pattern	Not applicable	High
01.008	External terraces at 1/F		High	Overlay existing concrete paving with timber deck to provide level access	New deck to be reversible	Low


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.009	Plaster ceilings on GF and LG1		Moderate	Install cloud ceilings to accommodate new services	Install fixed grid to minimise damage to ceiling	High
01.010	Timber door frames and architraves		Moderate	Conceal in exceptional cases eg. where adjacent new lift shaft	Retain architrave and door frame in situ. Avoid damage to joinery.	High


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.011	Concrete floor		Low	Replace where new kitchens and plant rooms to be installed	Carefully remove and retain existing floorboards for re-use. Ensure controlled demolition of concrete structure and removal of debris from building to avoid damage to adjacent surfaces. Protect or carefully remove and set aside adjacent elements such as skirting boards	Low


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.012	Rainwater goods		Adverse	Replace with cast iron in pattern to match original and in correct locations	Not applicable	High



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.013	Exterior decorations		Adverse	Strip off and redecorate	Sample and analyse existing paint media; select new media to suit substrate and significance	High



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.014	Existing door openings		Moderate	Block opening as part of re-planning of interior	Retain existing door frame and architraves. Use framing and non-combustible sheet linings to block opening.	Moderate
01.015	Existing walls		Moderate	Form new opening as part of re-planning of interiors	New doors and frames to be of their time to avoid confusion about provenance	Moderate



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.016	Altered doors and windows		Adverse	Repair or renew as necessary existing frames to match original patterns	Not applicable	High
01.017	Mezzanine floor in room 01/LG1/13		Adverse	Remove floor and supporting columns to re-create original double-height space	Not applicable	High



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.018	Cast iron grilles above Service Corridor 01/LG1/35		High	Remove existing steel sheet covering [alterations to grilles awaiting confirmation from HdM]		
01.019	Perforated concrete deck above lightwell		Adverse	Remove deck and make good brickwork at abutments	Not applicable	High



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.020	External airconditioning units and other external services		Adverse	Remove and make good brickwork	Not applicable	High
01.021	Stair balustrades		High	Balustrades to be supplemented with additional handrails and supports to mitigate non-compliance with code	New fittings to be of their time and made reversible. Physical intervention to existing stairs and balustrades to be kept to the minimum.	Moderate



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.022	Main corridors		High	Install new lighting, fire sprinklers, fire doors to comply with Fire Services Code	New fittings to be mounted in a manner that is of its time and reversible. Avoid physical intervention with existing plaster box cornices, architraves, dado rails	High
01.023	Painted signs		High	Protect in situ	Not applicable	N/A


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.024	Fixed signs		Low-High	Remove and refix/display in visitors' centre/discard	Record each sign and assess significance individually and treat accordingly	N/A
01.025	Pitched roofs		High	New penetrations through roofs for ventilation ducts and other services	Arrange new penetrations so that they conform with the geometry of the existing roof. Model the size and shape of the new ducts so that the impact on the roofscape is minimised. Finish the new ducts in a non-reflective	High



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
					material in a neutral mid-tone.	
01.026	Enclosure at First Floor landing of main stair		Adverse	Remove	Not applicable	Moderate



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.027	Steel railing enclosure at FF level		Low	Remove	Record on measured drawings and photographs	Low
01.028	Tongued and grooved flat and sloped timber boarded ceilings		Moderate	Repair where necessary and reinstate where missing	Not applicable	Moderate



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.029	Modern partitions		Adverse	Remove	Not applicable	High
01.030	Tiled dado		High	Cut away for enlargement of existing windows to form new doorways	Cut back to joint line and adjust tiling pattern to suit new opening. New tiles to match existing sizes and colours.	Moderate


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.031	Reinforced concrete canopy and sash windows		Moderate	Remove canopy and replace sash windows with new windows to match original	Make good brickwork where canopy removed, Reinstate rendered architraves around new window to match similar window facing on West wing	Moderate
01.032	Arched opening in brick wall above ceiling line		Low	Retain insitu and use to pass through future services. Infill only where opening is within a fire compartment	Use non-combustible material to block opening.	Low

Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref	Significance	Proposal	Mitigation	Impact
01.033	Ceiling void service installation (Cast Iron Water Tank and pipework)		Low	Remove and make good adjacent surfaces	N/A	Low



Schedule of Character Defining Elements

02 Armoury

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
02.001	Lay-in grid suspended ceiling		Adverse	Remove	Not applicable	High
02.002	Modern internal doors		Adverse	Remove	Not applicable	High



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
02.003	Modern partitions		Adverse	Remove	Not applicable	High
02.004	External airconditioning units and other external services		Adverse	Remove and make good brickwork	Not applicable	High



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
02.005	Brickwork walls enclosing rooms at GF and FF East side		Low	Remove and reinstate verandah	Not applicable	High
02.006	Concrete floors		Low	Selected removal to accommodate new stairs and lift shaft	Carefully form openings to ensure structural stability	Low

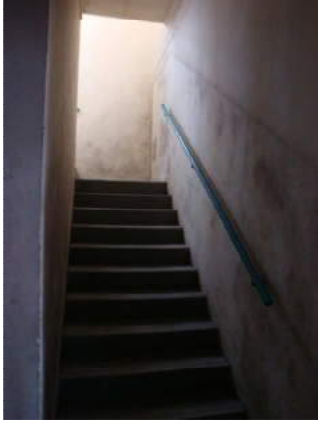

Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
02.007	Rainwater goods		Adverse	Replace with cast iron in pattern to match original and in correct locations	No applicable	High
02.008	Altered doors and windows		Adverse	Repair or renew as necessary existing frames to match original patterns	Not applicable	High


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
02.009	Concrete stairs		Adverse	Remove stairs	Not applicable	Moderate
02.010	Pitched roofs		High	New penetrations through roofs for ventilation ducts and other services	<p>Arrange new penetrations so that they conform with the geometry of the existing roof.</p> <p>Model the size and shape of the new ducts to reduce impact.</p> <p>Finish ducts in a non-reflective material that is neutral in colour and mid-tone.</p>	High


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
02.011	Roof structure and tiled soffit		High	Repair and retain.	N/A	Neutral



Schedule of Character Defining Elements

03 Barracks Block

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
03.001	Lay-in grid suspended ceiling		Adverse	Remove	Not applicable	High



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
3.002	Panelled doors		Moderate	Replace where necessary to achieve fire resistance to comply with Code	Re-use where possible. Record design on survey drawings where item cannot be re-used.	Moderate
03.003	External shutters		High	Reinstate to match existing pattern	Not applicable	High


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
03.004	Timber thresholds at external doors and internal doors between main corridor and individual rooms		Low	Remove to enable level access	Splice extensions to door jambs, extend width of bottom rail of doors to match existing	Low
03.005	Timber spandrel panels below windows		Low	Conceal in exceptional cases eg. where adjacent new lift shaft	Retain frame and spandrel panel where possible. Remove only where necessary in connection with re-planning of interiors. Record on measured survey drawings.	Low



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
03.006	Timber floors		High	Replace where new kitchens and plant rooms to be installed	Limit extent of removal as much as possible. Carefully remove and retain existing floorboards for re-use. Ensure controlled dismantling of timber structure and set aside for possible re-use. Protect or carefully remove and set aside adjacent elements such as skirting boards	Medium



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
03.007	Rainwater goods		Adverse	Replace with cast iron in pattern to match original and in correct locations	No applicable	High
03.008	Exterior decorations		Adverse	Strip off and redecorate	Sample and analyse existing paint media; select new media to suit substrate and significance	High


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
03.009	Block existing door openings		Low	Block opening as part of re-planning of interior	Retain existing door frame and architraves. Use framing and non-combustible sheet linings to block opening.	Low
03.010	Form new door openings		Low	Form new opening as part of re-planning of interiors	New doors and frames to be of their time to avoid confusion about provenance. Re-open original openings where possible. Retain original reveals and arches.	Low



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
03.011	Altered doors and windows		Adverse	Repair or renew as necessary existing frames to match original patterns	Not applicable	High



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
03.012	External airconditioning units and other external services		Adverse	Remove and make good brickwork	Not applicable	High
03.013	Stair balustrades		High	Balustrades to be supplemented with additional handrails and supports to mitigate non-compliance with code	New fittings to be of their time and made reversible. Physical intervention to existing stairs and balustrades to be kept to the minimum.	Moderate



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
03.014	Painted signs		High	Protect in situ	Not applicable	N/A
03.015	Fixed signs		Low-High	Remove and refix/display in visitors' centre/discard	Record each sign and assess significance individually and treat accordingly	N/A



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
03.016	Pitched roofs		High	New penetrations through roofs for ventilation ducts and other services	<p>Arrange new penetrations so that they conform with the geometry of the existing roof.</p> <p>Model the size and shape of the new ducts so that the impact on the roovescape is minimised.</p> <p>Finish the new ducts in a non-reflective material that is neutral in colour and mid-tone.</p>	High
03.017	Lean-to structure adjacent North wall		Moderate	Remove	<p>Record on measured survey drawings.</p> <p>Make good walls where roof structure abuts</p>	Moderate



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
03.018	Metal-frames windows at GF North elevation		Adverse	Remove window frames, masonry spandrel panels below and reinstate verandah	Not applicable	High
03.019	Internal walls at Ground Floor level		Moderate	Remove selected internal walls where strictly necessary as part of re-planning of interiors	Walls of early or original date to be retained in part eg. by leaving a "nib" where the wall is bonded to another wall. At the point where the wall is cut away, form the cut-line on the line of a vertical joint in alternate courses. Bricks in the remaining courses to be left "as cut", and not re-bonded. Record walls on measured survey dwgs.	Moderate



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
03.020	Assembly rooms at centre of building (all floors)		Moderate	Sub-divide two rooms on each floor to provide service core, comprising: lifts, toilets, plant rooms, stores	Form new sub-visions using lightweight partitions to achieve reversibility. Form straight joints at abutments with existing retained walls. Notch new partitions around existing brick corbels at high level as a reminder of current condition.	Moderate
03.021	Exposed soffits of timber floors		Moderate	Underline existing floors to achieve specified fire resistance stated in Code	Avoid unnecessary damage to existing structure. New lining will reduce extent of intervention into existing structure. Keep level of new linings well clear of window heads.	Moderate



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
03.022	Existing window frames/openings		High	Open up selected openings to form new fire escape doors	Retain any salvageable material for possible re-use elsewhere. Retain existing window jambs intact. Cut away masonry to form door openings along same line as window jamb; do not re-bind cut brickwork. Record existing condition on measured survey drawings.	Low
03.023	Single storey outbuildings on south side		Adverse	Demolish	Check for evidence of early route from Magistracy to Prison.	Low



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
03.024	Bridge at east end		Moderate	Retain	Not applicable	Neutral
03.025	Chimneypiece on Ground Floor		Low	Repair and retain in current location	Not applicable	Neutral



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
03.026	Window in south wall; original dormitory space		Moderate	Remove window and take down brickwork spandrel; subdivide space to form new fire-protected escape route.	Record existing condition on measured survey drawings. New partition wall to be reversible.	Low
03.027	Clay-tiled floor in store room adjacent stairs		Low	Remove as part of re-planning of interiors	Record on measured survey drawings	Low



Schedule of Character Defining Elements

04 Dormitory Block A & B

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.001	Lay-in grid suspended ceiling		Adverse	Remove	Not applicable	High
04.002	Timber thresholds at external doors and internal doors between main corridor and individual rooms		Low	Remove to enable level access	Splice extensions to door jambs, extend width of bottom rail of doors to match existing	Low


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.003	Plaster box cornice		Moderate	Remove in exceptional cases where eg. where adjacent new lift shafts	Cut back neatly to a square edge and ensure remaining section is secure.	Moderate
04.004	Rainwater goods		Adverse	Replace with cast iron in pattern to match original and in correct locations	No applicable	High



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.005	Exterior decorations		Adverse	Strip off and redecorate	Sample and analyse existing paint media; select new media to suit substrate and significance	High


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.006	Block existing door openings		Moderate	Block opening as part of re-planning of interior	Retain existing door frame and architraves. Use framing and non-combustible sheet linings to block opening.	Moderate
04.007	Form new door openings		Moderate	Form new opening as part of re-planning of interiors	New doors and frames to be of their time to avoid confusion about provenance	Moderate


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.008	Altered doors and windows		Adverse	Repair or renew as necessary existing frames to match original patterns	Not applicable	High


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.009	Window frames in arcades of North and East elevations		Adverse	Remove window frames and make good masonry reveals and reinstate verandah	Not applicable	High


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.010	External airconditioning units and other external services		Adverse	Remove and make good brickwork	Not applicable	High

Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.011	Stair balustrades		High	Balustrades to be supplemented with additional handrails and supports to mitigate non-compliance with code	New fittings to be of their time and made reversible. Physical intervention to existing stairs and balustrades to be kept to the minimum.	Moderate



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.012	Stair from First to Second Floor		High	Replace stair to improve safety	New stair to be built of steel to comply with Code and to distinguish it as being “of its time”.	Moderate



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.013	External verandahs		High	Install new lighting, fire sprinklers, fire doors to comply with Fire Services Code, extract ducting to external walls	New fittings to be mounted in a manner that is of its time and reversible. Avoid physical intervention with existing plaster box cornices in rooms, architraves, dado rails. Position outlet grilles in external walls on centre-line of arcade arches and above structural arch	High
04.014	Painted signs		High	Protect in situ	Not applicable	N/A


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.015	Fixed signs		Low-High	Remove and refix/display in visitors' centre/discard	Record each sign and assess significance individually and treat accordingly	N/A
04.016	Pitched roofs		High	New penetrations through roofs for ventilation ducts and other services	Arrange new penetrations so that they conform with the geometry of the existing roof. Model the size and shape of the new ducts so that the impact on the roovescape is minimised. Finish the new ducts in a non-reflective material that is neutral in colour.	High


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.017	Toilets at ends of verandahs		Adverse	Remove and make good finishes	Not applicable	High



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.018	Partitions at GF Dormitory A		High	Remove to make way for Interpretation	Prepare measured drawings and photographs before removal.	Moderate



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.019	Switchgear in old porch 04/G/13		Adverse	Open up porch, remove electrical switchgear and make good	Not applicable	High
04.020	Flat plywood ceiling lining with plain rectangular cover battens		Adverse	Replace with T&G boarding to match existing	Not applicable	High


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.021	Steps up to doorway on FF verandah		Moderate	Remove steps and doorway to form new fore escape route	Record steps and doorway on measured drawings	Moderate
04.022	Timber boarded floors with moulded skirtings		High	Retain all boarded floors and skirtings	Reinstate floor boards and skirtings after fire proofing works	Low


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.023	Cantilever balconies		High	<p>Retain and repair as necessary.</p> <p>Reinstate balcony on west elevation.</p>	<p>Avoid highly visible intervention to enhance structural integrity and/or compliance with building codes.</p> <p>Restrict access if necessary to achieve this objective.</p>	Low


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.024	Clay tile floor		Low	Retain and repair as necessary	Not applicable	Neutral
04.025	Matched-boarded ceiling with perforated border		Moderate	Repair and retain insitu	Not applicable	Neutral

Schedule of Character Defining Elements


Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
04.026	Ceiling rose		Low	Repair and retain insitu	Not applicable	Neutral

Schedule of Character Defining Elements



Central Police Station

06 Dormitory C

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
06.001	Granite thresholds at external doors		Low	Retain; install timber deck flush with level of step where necessary	Avoid alteration to step.	Low
06.002	Pitched roof		High	New penetrations through roofs for ventilation ducts and other services	Arrange new penetrations so that they conform with the geometry of the existing roof. Model the size and shape of the new ducts so that the impact on the roofscape is minimised. Finish the new ducts in a non-reflective material that is neutral in colour and mid-tone.	High

Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
06.003	Rainwater goods		Adverse	Replace with cast iron in pattern to match original and in correct locations	Not applicable	High
06.004	Exterior decorations		Adverse	Strip off and redecorate	Sample and analyse existing paint media; select new media to suit substrate and significance	Moderate



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
06.005	Altered doors and windows		Adverse	Adverse	Repair or renew as necessary existing frames to match original patterns	Not applicable
06.006	External airconditioning units and other external services		Adverse	Adverse	Remove and make good brickwork	Not applicable



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
06.007	Painted signs		High	Protect in situ	Not applicable	N/A
06.008	Fixed signs		Low-High	Remove and refix/display in visitors' centre/discard	Record each sign and assess significance individually and treat accordingly	N/A



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
06.009	Cantilever balconies		High	Retain and repair as necessary.	Avoid highly visible intervention to enhance structural integrity and/or compliance with building codes. Restrict access if necessary to achieve this objective.	Low
06.010	Iron balustrades		High	Retain and repair as necessary.	Avoid highly visible intervention to enhance structural integrity and/or compliance with building codes. Restrict access if necessary to achieve this objective.	Low


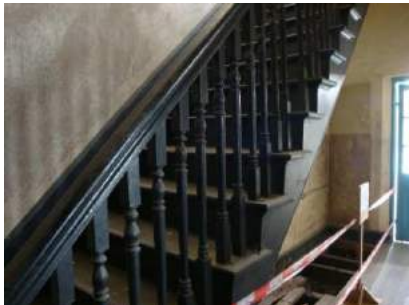
Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
06.011	Perforated margin at perimeter of ceiling		Low	Repair and retain.	Where fire-proofing of floor is required, use a product that can be installed within the floor void, leaving the ceiling lining intact.	Low
06.012	Block existing door openings		Moderate	Block opening as part of re-planning of interior	Retain existing door frame and architraves. Use framing and non-combustible sheet linings to block opening.	Moderate



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
06.013	Form new door openings		Moderate	Form new opening as part of re-planning of interiors	New doors and frames to be of their time to avoid confusion about provenance	Moderate
06.014	Stair balustrades		High	Balustrades to be supplemented with additional handrails and supports to mitigate non-compliance with code	New fittings to be of their time and made reversible. Physical intervention to existing stairs and balustrades to be kept to the minimum.	Moderate


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
06.015	Timber floors		High	Retain all boarded floors and skirtings	Reinstate floor boards and skirtings after fire proofing works	Low
06.016	Vinyl tile floor		Adverse	Remove tiles; renew boarded floor boards if necessary	Not applicable	Moderate

Schedule of Character Defining Elements



Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
06.017	Batten and panel ceiling lining		Low	Replace with lath and plaster ceiling	Not applicable	Low
06.018	Exposed roof covering		Moderate	Retain as existing	Consider insulating between upper and lower layers of roof tiles to provide thermal insulation and vapour barrier	Low

Schedule of Character Defining Elements



Central Police Station

07 Dormitory D

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
07.001	Pitched roofs		High	New penetrations through roofs for ventilation ducts and other services	<p>Arrange new penetrations so that they conform with the geometry of the existing roof.</p> <p>Model the size and shape of the new ducts so that the impact on the roofscape is minimised.</p> <p>Finish the new ducts in a non-reflective material that is neutral in colour and mid-tone.</p>	High
07.002	Rainwater goods		Adverse	Replace with cast iron in pattern to match original and in correct locations	No applicable	High



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
07.003	Exterior decorations		Adverse	Strip off and redecorate	Sample and analyse existing paint media; select new media to suit substrate and significance	High
07.004	Altered doors and windows		Adverse	Repair or renew as necessary existing frames to match original patterns	Not applicable	High



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
07.005	External airconditioning units and other external services		Adverse	Remove and make good brickwork	Not applicable	High
07.006	Clothes drying racks		Adverse	Remove	Not applicable	Low



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
07.008	Lay-in grid suspended ceiling		Adverse	Remove	Not applicable	High
07.009	Corbelled brickwork at perimeter of room		Low	Remove in exceptional cases where eg. where adjacent new lift shafts	Cut back neatly to a square edge and ensure remaining section is secure.	Low



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
07.010	Plywood floor		Adverse	Replace with hardwood floor boards	Not applicable	High
07.011	Timber thresholds at external doors and internal doors between main corridor and individual rooms		Low	Remove to enable level access	Splice extensions to door jambs, extend width of bottom rail of doors to match existing	Low



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
07.012	Form new door openings		Moderate	Form new opening as part of re-planning of interiors	New doors and frames to be of their time to avoid confusion about provenance	Moderate
07.013	Stair balustrades		High	Balustrades to be supplemented with additional handrails and supports to mitigate non-compliance with code	New fittings to be of their time and made reversible. Physical intervention to existing stairs and balustrades to be kept to the minimum.	Moderate


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
07.014	Fixed signs		Low-High	Remove and refix/display in visitors' centre/discard	Record each sign and assess significance individually and treat accordingly	N/A
07.015	Exposed roof tiling		Moderate	Retain as existing	Consider insulating between upper and lower layers of roof tiles to provide thermal insulation and vapour barrier	Low



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
07.016	Concrete floor		Adverse	Overlay with hardwood floor boards	Not applicable	Moderate



Schedule of Character Defining Elements

08 Ablutions Block

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
08.001	Panelled doors		Low	Replace where necessary to achieve compliance with Building Code	Re-use where possible. Record design on survey drawings where element cannot be re-used.	Moderate
08.002	Rainwater goods		Adverse	Replace with cast iron in pattern to match original and in correct locations	No applicable	High



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
08.003	Exterior decorations		Adverse	Strip off and redecorate	Sample and analyse existing paint media; select new media to suit substrate and significance	High
08.004	Block existing door openings		Moderate	Block opening as part of re-planning of interior	Retain existing door frame and architraves. Use framing and non-combustible sheet linings to block opening.	Moderate



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
08.005	Timber roof structure		High	Retain	Not applicable	Neutral
08.006	External stair at west end		Moderate	Retain	Repair as necessary. Alter balustrade to achieve reasonable level of operational safety. Restrict access to repairs and maintenance and means of escape.	Low



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
08.007	External airconditioning units and other external services		Adverse	Remove and make good brickwork	Not applicable	High
08.008	Painted signs		High	Protect in situ	Not applicable	N/A



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
08.009	Wire mesh screens		Adverse	Remove	Not applicable	Low
08.010	Internal walls and concrete floors		Low	Remove and rebuild in new configuration to suit new use	Ensure retained facades are fully supported during construction operations. Protect retained walls against damage during demolition works. Install new walls and floors to respect fenestration; avoid clashes.	Low



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
08.011	Cantilever balconies on north side		Moderate	Repair and retain insitu	Not applicable	
08.012	Bridge access to Barrack Block		Moderate	Retain	Repair as necessary. Alter balustrade to achieve reasonable level of operational safety. Restrict access to repairs and maintenance and means of escape.	Low


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
08.013	Balcony balustrades		Low	<p>Repair as necessary and retain.</p> <p>Remove selected sections to enable installation of new bridge connections to Barrack Block.</p>	<p>Avoid removal of associated iron columns.</p> <p>Form interventions at selected positions so as to maintain the rhythm of the balustrades and ensure proper support at ends.</p>	Low
08.014	Single-storey outbuilding with pitched roof over		Low	Demolish to make way for new loading bay.	<p>Record on measured survey drawings.</p> <p>Infill existing internal opening leaving reveals exposed.</p> <p>Tooth-in new brickwork at abutments after existing walls removed.</p> <p>Salvage cast iron columns for possible re-use.</p>	Low



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
08.015	Corrugated steel sheet on balcony balustrades		Adverse	Remove	Not applicable	Low



Schedule of Character Defining Elements

09 Magistracy

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
09.001	Lay-in grid suspended ceiling		Adverse	Remove	Not applicable	High
09.002	Modern partitions		Adverse	Remove	Not applicable	N/A

Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
09.003	Internal walls		Moderate	Remove selected internal walls where strictly necessary as part of re-planning of interiors	Walls or early or original date to be retained in part eg. By leaving a “nib” where the wall is bonded to another wall. At the point where the wall is cut away, form the cut-line on the line of a vertical joint in alternate courses. Bricks in the remaining courses to be left “as cut”, and not re-bonded, as evidence of the current condition.	Moderate
09.004	Plaster box cornice		Moderate	Remove in exceptional cases eg. Where adjacent new lift shafts	Cut back neatly to a square edge and ensure remaining section is secure.	Moderate


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
09.005	Panelled doors		Moderate	Replace where necessary to achieve fire resistance to comply with Code	Re-use where possible. Record design on survey drawings where element cannot be re-used.	Moderate



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
09.006	Block existing door openings		Moderate	Block opening as part of re-planning of interior	Retain existing door frame and architraves. Use framing and non-combustible sheet linings to block opening.	Moderate
09.007	Form new door openings		Moderate	Form new opening as part of re-planning of interiors	New doors and frames to be of their time to avoid confusion about provenance	Moderate



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
09.008	Stair balustrades		High	Balustrades to be supplemented with additional handrails and supports to mitigate non-compliance with code	New fittings to be of their time and made reversible. Physical intervention to existing stairs and balustrades to be kept to the minimum.	Moderate
09.009	Fixed signs		Low-High	Remove and refix/display in visitors' centre/discard	Record each sign and assess significance individually and treat accordingly	N/A



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
09.010	External airconditioning units and other external services		Adverse	Remove and make good brickwork	Not applicable	High
09.011	Pitched roofs		High	New penetrations through roofs for ventilation ducts and other services	Arrange new penetrations so that they conform with the geometry of the existing roof. Model the size and shape of the new ducts so that the impact on the roofscape is minimised. Finish the new ducts in a non-reflective material that is neutral in colour and mid-tone.	High



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
09.012	Rainwater goods		Moderate	Replace with larger sizes/closer spacing to improve performance	Use cast iron to match original pattern Make good all redundant fixing holes	High
09.013	Metal walkways across lightwell		Adverse	Remove walkways and make good brickwork at abutments	Not applicable	High



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
09.014	Altered doors and windows		Adverse	Repair or renew as necessary existing frames to match original patterns	Not applicable	High
09.015	Sloping canopy over external stair on west side		Adverse	Remove canopy and supporting structure	Not applicable	Moderate



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
09.016	Single storey secure shelter at North West corner		Low	Demolish	Make good brickwork at abutments.	Low
09.017	Iron railing adjacent south side of item 09.016 above		Moderate	Retain; including remains of bars (now removed) between existing railings and east side of Barracks Block.	Not applicable	Neutral


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
09.018	Public toilets in 09/LG1/17, 24		Adverse	Strip out sanitaryware, and fit-out for pottery display/service access. Form new door openings in east walls.	Retain existing door openings and metal-barred gates. Retain external granite steps and existing ground level.	Low
09.019	Cell doors		High	Re-open to provide access to Retail space	Retain existing iron gate	Low



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
09.020	Meeting room at G/02-05		Moderate	Remove timber panelling from walls and sub divide to form new toilets and lift shaft	Record existing wall linings, and any earlier lining behind, on measured survey drawings.	Moderate
09.021	Lobbies within entrance hall G/12		Adverse	Remove	Not applicable	N/A



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
09.022	Public galleries on FF		Adverse	Strip out plant, remove partition walls and restore galleries	Not applicable	High
09.023	Chimney piece		Moderate	Retain	Not applicable	Neutral


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
09.024	Lanterns above entrance hall		Adverse	Remove existing lanterns and install single lantern	Not applicable	Moderate
09.025	Boarded ceilings on Second Floor		High	Repair and retain where possible	Limit extent of penetrations as far as practicable. Record on measured survey drawings where ceilings have exceptionally to be removed.	Low



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
09.026	Iron gates at top of external stair		Moderate	Retain	No applicable	Neutral
09.027	Iron balustrade adjacent terrace at First Floor east side		High	Retain; install structural glass balustrade inboard of ironwork to provide compliance with Building Codes	Avoid penetration of existing tiled pavement when fixing glass balustrade.	Low



Schedule of Character Defining Elements

10 Assistant Superintendent’s Office

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
10.001	Lay-in grid suspended ceiling		Adverse	Remove	Not applicable	High
10.002	Plaster box cornice		Moderate	Remove in exceptional cases eg. Where adjacent new lift shafts	Cut back neatly to a square edge and ensure remaining section is secure.	Moderate



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
10.003	Panelled doors and linings		Moderate	Replace where necessary to achieve fire resistance to comply with Code	Re-use where possible. Record design on survey drawings where element cannot be re-used.	Moderate
10.004	Timber boarded floor with moulded skirtings		High	Repair as necessary and retain	Lift carefully and refix upon completion of fire-proofing and services installation	Low



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
10.005	Exterior decorations		Adverse	Strip off and redecorate	Sample and analyse existing paint media; select new media to suit substrate and significance	High
10.006	Block existing door openings		Moderate	Block opening as part of re-planning of interior	Retain existing door frame and architraves. Use framing and non-combustible sheet linings to block opening.	Moderate


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
10.007	Form new door openings		Moderate	Form new opening as part of re-planning of interiors	New doors and frames to be of their time to avoid confusion about provenance	Moderate
10.008	Altered doors and windows		Adverse	Repair or renew as necessary existing frames to match original patterns	Not applicable	High



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
10.009	External airconditioning units and other external services		Adverse	Remove and make good brickwork	Not applicable	High



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
10.010	Stair balustrades		High	Balustrades to be supplemented with additional handrails and supports to mitigate non-compliance with code	New fittings to be of their time and made reversible. Physical intervention to existing stairs and balustrades to be kept to the minimum.	Moderate
10.011	Fixed signs		Low-High	Remove and refix/display in visitors' centre/discard	Record each sign and assess significance individually and treat accordingly	N/A



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
10.012	Pitched roofs		High	New penetrations through roofs for ventilation ducts and other services	<p>Arrange new penetrations so that they conform with the geometry of the existing roof.</p> <p>Model the size and shape of the new ducts so that the impact on the roofscape is minimised.</p> <p>Finish the new ducts in a non-reflective material that is neutral in colour and mid-tone.</p>	High
10.013	Internal walls		Moderate	Remove selected internal walls where strictly necessary as part of re-planning of interiors	<p>Walls or early or original date to be retained in part eg. By leaving a “nib” where the wall is bonded to another wall.</p> <p>At the point where the wall is cut away, form the cut-line on the line of a vertical joint in alternate courses. Bricks in the remaining courses to be left “as cut”, and not re-bonded, as evidence of</p>	Moderate



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
10.014	Partitions on SF		Moderate	Remove partitions	Record partitions on measured drawings	Moderate
10.015	Blocked windows on south elevation of south-east wing		Adverse	Re-open window openings and reinstate window frames and glazing	Not applicable	Moderate



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
10.016	Open-joisted ceiling on Ground Floor of south-east wing		Moderate	Underline floor to provide fire protection.	Avoid intrusive alteration. Use fire-proofing products and methods that enable existing structure and boarding to be retained.	Low
10.017	Moulded timber picture rail		Low	Repair and retain	Not applicable	Neutral



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
10.018	Timber roof structure above south-east wing		Moderate	Repair as necessary and retain	Avoid intrusive alteration. Retain open appearance/	Low
10.019	Timber stair		Moderate	Underline with fire-resisting lining	Repair as necessary and retain.	Low



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
10.020	Clay/terrazzo tile floor on Ground Floor and steps		Adverse	Adjust levels to enable level access and replace floor finish	Not applicable	Low
10.024	Granite wall on North elevation		High	Construct new external steps adjacent wall	Keep new stair clear of wall; avoid any physical connection between steps and wall.	Low



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
10.025	Single storey outbuilding at South East corner		Moderate	Demolish outbuilding and make good at abutments	Record outbuilding on measured drawings	Low
10.026	Blocked archway on East elevation		Adverse	Demolish infilling and re-open archway	Protect original arch and jambs against damage during demolition	Moderate


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
10.027	Chimney on east elevation		Low	Retain	Not applicable	Neutral
10.028	Cantilever balconies		High	Repair as necessary and retain	Avoid intrusive interventions. Restrict access if necessary to retain existing appearance.	Neutral

Schedule of Character Defining Elements


Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
10.029	Steps on east elevation		Moderate	Repair as necessary and retain	Avoid alteration or obliteration.	Neutral

Schedule of Character Defining Elements



Central Police Station

11 A Hall

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
11.001	Form new door openings		Low	Form new opening as part of re-planning of interiors	New doors and frames to be of their time to avoid confusion about provenance	Low



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
11.002	External airconditioning units and other external services		Adverse	Remove and make good brickwork	Not applicable	High
11.003	Painted signs		High	Protect in situ	Not applicable	N/A



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
11.004	Fixed signs		Low-High	Remove and refix/display in visitors' centre/discard	Record each sign and assess significance individually and treat accordingly	N/A
11.005	Concrete stairs		Low	Remove and rebuild as part of re-planning of interiors	None	Low


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
11.006	Flat roof		Low	Form new rooftop extension at West end to accommodate fire escape stair	Form straight joint at abutment with building 08 Ablutions Block	Low
11.007	Security screen at roof level		Low	Remove	Record on measured survey drawings	Low


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
11.008	Rainwater goods		Adverse	Replace with cast iron in pattern to match original and in correct locations	Not applicable	High


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
11.009	Rainwater goods		Low	Remove embedded cast iron pipework set into wall to reduce long term maintenance burden	Record on measured survey drawings. Make good cavity.	Low



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
11.010	Timber doors		Low	Repair and retain	Not applicable	Neutral


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
11.011	Security screen and door at First Floor		Low	Remove	Record on measured survey drawings	Low
11.012	Door thresholds and plinth		Low	Retain; remove paint media from plinth and brickwork	Not applicable	Neutral

Schedule of Character Defining Elements



Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
11.013	Metal louvres on window openings		Adverse	Remove	Not applicable	Low

Schedule of Character Defining Elements



Central Police Station

12 B Hall

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
12.001	Flat roof		Moderate	Repair and retain	Avoid roof penetrations as far as possible	Low
12.002	Cells at GF level		High	Remove cells in selected locations to accommodate new North-South route across site	Record existing layout on measured survey drawings. Limit number of cells affected to the minimum necessary. Retain floor structure above. Retain remainder of cells at this level for interpretation	Moderate



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
12.003	External airconditioning units and other external services		Adverse	Remove and make good brickwork	Not applicable	High
12.004	Painted signs		High	Protect in situ	Not applicable	N/A

Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
12.005	Fixed signs		Low-High	Remove and refix/display in visitors' centre/discard	Record each sign and assess significance individually and treat accordingly	N/A
12.006	Rainwater goods		Adverse	Replace with cast iron in pattern to match original and in correct locations	Not applicable	High


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
12.007	Corbelled brickwork at high level in cells		Low	Retain	Not applicable	Neutral
12.008	Barbed wire		Moderate	Remove	Record wire on measured drawings	Low


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
12.009	External walls		Moderate	Form openings in North and South walls in conjunction with new North-South route across site	Cut brickwork to form openings in North and South walls; do not re-bond brickwork.	Moderate



Schedule of Character Defining Elements

13 C Hall

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
13.001	External airconditioning units and other external services		Adverse	Remove	Not applicable	Moderate



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
13.002	Door to Ladder Store		Low	Retain	Not applicable	Neutral
13.003	Security bars at window openings		Low	Retain	Not applicable	Neutral



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
13.004	Flat roof		Low	Retain	Avoid roof penetrations as far as possible.	Low
13.005	Eaves detail		Low	Retain	Not applicable	Neutral



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
13.006	Cantilever reinforced concrete canopy		Low	Retain	Not applicable	Neutral
13.007	Internal partition walls		Low	Remove as part of re-planning of interiors	Record on measured survey drawings	Low



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
13.008	Fixed signs		Low-High	Remove and refix/display in visitors' centre/discard	Record each sign and assess significance individually and treat accordingly	N/A
13.009	Metal window frames		Moderate	Repair and retain	Not applicable	Neutral



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
13.010	Internal security screens		Moderate	Retain where possible	Where necessary record on measured survey drawings prior to removal	Low
13.011	Coving at abutments between RC beams and walls		Low	Avoid penetrations for services installations as far as possible.	Cut away neatly for services penetrations and make good at abutments.	Low



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
13.012	Communal cells at Ground Floor		Moderate	Remove as part of re-planning of interiors	Record on measured survey drawings	Low
13.013	Rooflight and security bars over communal cells		Moderate	Remove as part of re-planning of interiors	Record on measured survey drawings	Low


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
13.014	Granite threshold at external door openings		Low	Retain	Not applicable	Neutral
13.015	Timber boarded doors with fanlight over		Low	Repair as necessary and retain	Not applicable	Neutral

Schedule of Character Defining Elements


Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
13.015	Vinyl tile floor		Adverse	Replace	Not applicable	Low

Schedule of Character Defining Elements


Central Police Station

14 D Hall East Wing

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.001	West entrance at Lower Ground Floor		Moderate	Retain as public entrance at this level.	<p>Retain security gate and granite threshold.</p> <p>Adjust adjacent ground level as necessary to achieve barrier-free access.</p> <p>Pin gate back against adjacent wall in the open position if necessary.</p>	Low

Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.002	Half-round headed doorway and side lights		Moderate	Retain	Remove air duct and make good masonry above arch.	Low


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.003	Granite surround to cells (generally north side, alternating with brick surrounds – see next item)		Moderate	Retain door surround and gate wherever possible.	Pin back gate against wall. Remove paint media to expose granite material.	Low



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.004	Brick reveals with bull-nosed arrisses and segmental arch over (generally north side, alternating with granite surrounds – see previous item)		High	Retain door surround and gate wherever possible	Pin back gate against wall	Low



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.005	Arched opening at East end First Floor		Low	Retain as existing	Not applicable	Low
14.006	Concrete floor generally at Lower Ground Floor		Low	Excavate entire floor to install piled underpinning	Record levels on measured survey drawings. Install new floor at the same level.	Low



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.007	Part-blocked windows at Lower Ground Floor - extent of blocking varies.		Moderate	Open up window opening to full extent.	Record existing condition on measured survey drawings. Add further detail during demolition works.	Low
14.008	External granite stair from Lower Ground to Ground Floor level		Moderate	Remove stair to make way for new stair in similar position	Review design proposals to see whether existing stair can be retained.	Low

Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.009	Ashlar pattern on external walls		Moderate	Form new openings for entrance/exit to building	Set out new openings to cause minimum disruption to ashlar pattern. Record existing pattern on measured survey drawings.	Low
14.010	Blocked doorway at south-east corner		Low	Preserve blocked opening intact.	Not applicable	Neutral



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.011	Metal security gate and screen		Low	Retain insitu	Pin gate in open position if necessary	Neutral



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.012	Half-round headed doorway and side lights at Ground Floor west end		Moderate	Retain insitu	Not applicable	Neutral
14.013	Structural steelwork bracing and temporary access stair		Adverse	Remove upon completion of underpinning	Not applicable	Moderate



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.014	RC staircase at north-east corner		Low	Remove	Record on measured drawings	Low
14.015	Vinyl tile floor on suspended timber floor		Adverse	Remove vinyl tiles and restore boards if possible; alternatively, replace boards with new timber to match other boarded floors elsewhere on the site.	Not applicable	Low

Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.016	Cell walls at Ground Floor		Moderate	Retain insitu	Use existing door openings wherever possible. Avoid further alteration to existing altered openings where feasible.	Low
14.017	Mortuary		High	Preserve insitu	Avoid any service penetrations from adjacent spaces	Neutral



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.018	Brickwork surrounds to doorways with segmental arches over		Moderate	Increase width in selected locations to allow wheelchairs to pass	Record on measured survey drawings. Limit interventions as far as possible.	Low


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.019	Granite surrounds to doorways with lintels over		Moderate	Increase width in selected locations to allow wheelchairs to pass	Record on measured survey drawings. Limit interventions as far as possible.	Low
14.020	Flat ceilings at Ground Floor		Low	Form penetrations for services installations where necessary	Avoid disruption of beams.	Low


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.021	Arched opening at east end		Low	Retain insitu	Not applicable	Neutral


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.022	Top-lit central hall		High	Retain insitu	Not applicable	Neutral


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.023	Arches across central hall at First Floor		Moderate	Retain insitu	Not applicable	Neutral


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.024	Inset security gate and screen in First Floor cells		Low	Remove to suit new use	Remove where necessary. Record on measured drawings.	Low



Schedule of Character Defining Elements

14 D Hall West Wing

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.030	Main stair		High	Remove wire mesh and framing	Record on measured drawings	Low



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.031	Brick vault over central hall at Ground Floor		High	Retain insitu	Not applicable	Neutral
14.032	Terrazzo floor in central hall at Ground floor		Moderate	Remove to enable piled underpinning	Record on measured survey drawings	Moderate

Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.033	Brick vaults above cells		High	Retain insitu	Avoid penetrations for services	Neutral
14.034	Cell walls (later additions)		Moderate	Remove where necessary to accommodate new cafe	Record on measured drawings	Low

Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.035	Brickwork spandrels below cell windows on south side at Ground Floor		Moderate	Remove to accommodate new cafe	Record on measured survey drawings	Low


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.036	Cell walls flanking central hall		High	Remove to accommodate new cafe	Record on measured survey drawings. Retain selected cells for interpretation purposes.	Moderate

Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.037	Cell floors		Low	Remove to enable piled underpinning	Record on measured survey drawings	Low



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.038	Partition wall across central hall at Ground Floor		Low	Remove to accommodate new cafe	Record on measured survey drawings	Low

Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.039	Granite pavement in cross-passage between East and West Wings		Moderate	Repair as necessary and retain insitu	Not applicable	Neutral
14.040	Granite threshold at doorway between cross-passage and East Wing		Moderate	Retain insitu	Not applicable	Neutral


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.041	Brick vault over cross-passage		High	Retain insitu	Avoid any services penetrations	Neutral
14.042	Granite floor in central hall at First Floor		Moderate	Retain insitu	Repair where necessary	Neutral


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.043	Cell walls flanking central hall at First Floor		High	Retain insitu	Not applicable	Neutral
14.044	Brickwork spandrels below cell windows at Second Floor		Moderate	Remove to enable new use	Record on measured drawings. Confine changes to one elevation, north or south.	Low


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.045	Metal security screen adjacent main stair		Moderate	Retain insitu	Not applicable	Neutral

Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.046	Double-height central hall at Second Floor		High	Retain insitu	Not applicable	Neutral



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.047	View ports adjacent entrance doors		Moderate	Retain insitu	Not applicable	Neutral
14.048	Services installations		Adverse	Remove	Not applicable	Moderate



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.049	Metalwork and structural steel framing on exterior (typical)		Adverse	Remove	Not applicable	High
14.050	Blind arcade, south elevation		Low	Remove infill brickwork within arched openings at ground level to enable new cafe	Record on measured survey drawings. Observe and record any evidence that brickwork infills were built at the same time as the arched openings or added later	Low

Schedule of Character Defining Elements



Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
14.051	Blind arcade, north elevation		Low	Retain insitu	Not applicable	Neutral
14.052	Fence wall, east end of D Hall Yard		Low	Remove to reinstate access to granite stair to Lower Ground Floor level	Record on measured drawings	Low

Schedule of Character Defining Elements


Central Police Station

15 E Hall

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
15.001	Dividing walls at Lower Ground Floor		Moderate	Remove to enable multi-purpose use	Record on measured survey drawings	Low
15.002	Dividing walls at Lower Ground Floor		Moderate	Remove to enable multi-purpose use	Record on measured survey drawings	Low



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
15.003	Staircase within Laundry Yard		Moderate	Remove to enable construction of Arbuthnot Wing	Record on measured survey drawings	Low



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
15.004	Services installations		Adverse	Remove	Not applicable	Moderate
15.005	Metal louvres over cell window openings		Low	Remove	Record on measured survey drawings	Low


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
15.006	Raised ground level adjacent entrance		Low	Remove to enable level access	Record on measured survey drawings	Low
15.007	Access balconies and apertures		Moderate	Retain apertures	Provide temporary closure as required for operational reasons	Low


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
15.008	Central staircase		High	Retain	Provide secondary staircase within cell blocks to achieve code compliance	Low



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
15.009	Cell walls flanking central hall		High	Retain	Pin back cell doors against walls.	Neutral


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
15.010	Services installations		Adverse	Remove	Not applicable	Moderate
15.011	Balcony balustrades		Moderate	Retain	Install wire net across aperture to avoid need to upgrade balustrade to meet Building Code requirements	Low

Schedule of Character Defining Elements



Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
15.012	Second Floor central hall		High	Retain	Not applicable	Neutral

Schedule of Character Defining Elements



Central Police Station

17 F Hall

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
17.001	Lay-in grid suspended ceiling		Adverse	Remove	Not applicable	High
17.002	Rainwater goods		Low	Remove existing RWPs and install new RWPs externally on North and South Elevations	Improve roof drainage to avoid ponding	Low

Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
17.003	Exterior decorations		Adverse	Strip off and redecorate	Sample and analyse existing paint media; select new media to suit substrate and significance	High
17.004	External airconditioning units and other external services		Adverse	Remove and make good brickwork	Not applicable	High



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
17.005	Fixed signs		Moderate	Remove and refix/display in visitors' centre/discard	Record each sign and assess significance individually and treat accordingly	Moderate
17.006	Security screen at First Floor entrance		Low	Remove	Record on measured drawings	Low



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
17.007	Metal windows		Moderate	Remove at First Floor to accommodate gallery space and block structural openings with blockwork	Record on measured drawings.	Moderate
17.008	Fixed furniture		Moderate	Remove to accommodate gallery space	None	Low



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
17.009	Security screens		Moderate	Remove to accommodate gallery space	Record on measured drawings	Moderate
17.010	Timber windows		Moderate	Remove at First Floor to accommodate gallery space and block structural openings with blockwork	Record on measured drawings	Moderate


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
17.011	Communal washing/lavatory facilities		Moderate	Remove to accommodate gallery space	Record on measured drawings	Low
17.012	Blocked up lantern light		Low	Unblock lantern and fit glazing	Record on measured drawings	Low



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
17.013	Security gates at Ground openings		Moderate	Remove to enable access to Ground Floor gallery space	Record on measured drawings	Low


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
17.014	Interview booths		High	Remove to accommodate new gallery	Rebuild in new location	Moderate
17.015	External stair to First Floor		Moderate	Upgrade balustrade to comply with Building Code	Record on measured drawings. Supplement existing balustrade elements with minimal elements if necessary.	Low



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
17.016	Ground Floor main entrance		Low	Retain as existing.	Keep fixed shut if not required for operational use.	Low



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
17.017	Security screen at Ground Floor main entrance		Low	Remove to accommodate gallery space	Record on measured drawings	Low
17.018	Blue Entrance Gate (facing Old Bailey Street)		High	Retain in situ	Maintain in working order	Neutral



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
17.019	Blue Entrance Gate (inner) and enclosed yard		Moderate	Retain gate and enclosing walls and roof in situ; remove cupboards.	Repair and maintain gate in working order	Low
17.020	Blue Entrance Gate (inner) facing Prison Yard		Moderate	Retain gate and enclosing frame	Repair and maintain in working order	Low



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
17.021	Barbed wire		Moderate	Remove	Record on measured drawings. Make good fixing points where attached to brickwork.	Low
17.022	Metal security bars at windows		Moderate	Remove as part of blocking up window openings to accommodate gallery space at First Floor	Record on measured drawings	Low

Schedule of Character Defining Elements

Central Police Station



Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
17.023	External toilets at Ground Floor adjacent East elevation		Low	Remove	Record on measured drawings	Low
17.024	Open Visit Room		Low	Space reallocated to other uses	Record on measured drawings. Salvage entrance sign and re-use in new layout of interview booths.	Low

Schedule of Character Defining Elements

Central Police Station


Schedule of Character Defining Elements

19 Bauhinia House

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
19.001	Pitched roofs		High	New penetrations through roofs for ventilation ducts and other services	Arrange new penetrations so that they conform with the geometry of the existing roof. Model the size and shape of the new ducts so that the impact on the roofscape is minimised. Finish the new ducts in a non-reflective material that is neutral in colour and mid-tone.	High
19.002	Chimney		High	Repair and retain	Not applicable	Neutral


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
19.003	Rainwater goods and other external services		Adverse	Remove and make good wall surface. Replace defective and non-matching rainwater goods with cast iron fittings to match original.	Not applicable	Moderate


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
19.004	External stone wall facing		High	Carry out close inspection of painted areas to determine extent of original granite facing and remove paint media where applicable.	Not applicable	Moderate


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
19.005	Gun loops		High	Remove concrete infilling and make good stonework where necessary.	Not applicable	Moderate


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
19.006	Look-out turret		High	Repair and retain insitu	Not applicable	Neutral


Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
19.007	Windows		Moderate	Remove and make good stonework as necessary	Record existing windows on measured survey drawings	Moderate



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
19.008	Modern partitions		Adverse	Remove	Not applicable	Moderate



Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
19.009	Electrical services		Adverse	Remove	Not applicable	Moderate
19.010	Lay-in grid suspended ceiling		Adverse	Remove	Not applicable	High

Schedule of Character Defining Elements

Central Police Station

Element no.	Description	Photo ref.	Significance	Proposal	Mitigation	Impact
19.011	Exposed timber roof structure		High	Repair and retain insitu	Not applicable	Neutral
19.012	Timber stair		Moderate	Remove	Record on measured surveys drawings	Low