



**CONTRACT NO: CV/2012/07**

**DEVELOPMENT AT ANDERSON ROAD -  
FOOTBRIDGE D AND ASSOCIATED WORKS AREA**

**QUARTERLY ENVIRONMENTAL MONITORING & AUDIT  
REPORT**

**-APRIL 2017 TO JUNE 2017 -**

**CLIENTS:**

**Lam-Po Wing Joint Venture**

**PREPARED BY:**

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**CERTIFIED BY:**

A handwritten signature in blue ink, appearing to read "Derek Lo".

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Derek Lo  
Environmental Team Leader

**DATE:**

21 July 2017

Ref.: OAPANDSNEM00\_0\_1959L.17

27 July 2017

Engineer's Representative  
Ove Arup & Partners  
Level 5, Festival Walk  
80 Tat Chee Avenue  
Kowloon Tong, Kowloon  
Hong Kong

By Email and Post

Attention: Mr. Dennis Leung

Dear Sir,

**Re: Contract No. CV/2012/07  
Development at Anderson Road  
Footbridge D and Associated Works Area  
Quarterly EM&A Report for April to June 2017**

Reference is made to the Environmental Team's submission of the draft Quarterly EM&A Report for April to June 2017 received by e-mail on 21 July 2017.

Please be informed that we have no adverse comment on the captioned submission.

Thank you very much for your kind attention and please do not hesitate to contact the undersigned should you have any queries.

Yours faithfully,



David Yeung  
Independent Environmental Checker

*Encl.*

c.c. Lam  
LPWJV

Attn.: Mr. Derek Lo  
Attn.: Mr. Tak-Leung Lo

Fax: 2882 3331  
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**EXECUTIVE SUMMARY**

- i. This is the Environmental Monitoring and Audit (EM&A) Quarterly Report – April 2017 to June 2017 project “Development at Anderson Road – Footbridge D and Associated Works Area” (Hereafter called “this Project”). The construction works of this project was commenced on 20 July 2013. This is the 16th quarterly of EM&A report presenting the environmental monitoring findings and information recorded during the period 1 April 2017 to 30 June 2017. With respect to the substantial completion certificate dated on 27 April 2017 issued by ARUP as well as in view of the outstanding works, no major air quality, noise and water quality impact anticipated, the EM&A programme for the construction phase was ceased on 21 June 2017 which propose by ET and verified by IEC.

**Table 1.1 Major Construction Activities for the Reporting Period**

April 2017	May 2017	June 2017
<ul style="list-style-type: none"> <li>● Construction of type 2 railings and barrier beams at Tower A&amp;B along Shun On Road footpath (Shun On Road)</li> <li>● Reinstatement work of slow lane (Shun On Road)</li> <li>● Removal of debris and silt accumulated at cascade (C2)</li> </ul>	<ul style="list-style-type: none"> <li>● Construction of type 2 railings and barrier beams at Tower A&amp;B along Shun On Road footpath (Shun On Road)</li> <li>● Reinstatement work of slow lane (Shun On Road)</li> <li>● Removal of debris and silt accumulated at cascade(C2)</li> <li>● Construction of Buttress for cut slope to the northeast of lift tower behind Cap C (C2)</li> </ul>	<ul style="list-style-type: none"> <li>● Site Clearance</li> </ul>

Noise Monitoring

- ii. Noise monitoring during daytime was conducted at the stations NM1 and NM2 on a weekly basis in the reporting period. No exceedance was recorded in the reporting period.

Air Quality Monitoring

- iii. Air quality monitoring has been conducted at station AQM1. No action or limit level exceedance was recorded in the reporting period.

Complaints, Notifications of Summons and Successful Prosecutions



- iv. No complaint and notifications of summons or successful prosecutions were recorded in this reporting period.

Site Inspections and Audit

- v. The Environmental Team (ET) conducted weekly site inspections for Contract no. CV/2012/07 in the reporting period. Major observations and recommendations made during the audit sessions were rectified by the Contractors. No non-conformance was identified during the site inspections.

## 1. Introduction

### 1.1 Scope of the Report

- 1.1.1. Lam Environmental Services Limited (LES) has been appointed to work as the Environmental Team (ET) to implement the Environmental Monitoring and Audit (EM&A) programme as stipulated in the EM&A Manual of the approved Environmental Impact Assessment (EIA) Report for Development of Anderson Road.
- 1.1.2. This report presents the environmental monitoring and auditing work carried out in accordance to the Section 1.4 of EM&A Manual and “*Environmental Monitoring and Audit Requirements*” under Particular Specification Section 25.
- 1.1.3. The construction works of this project was commenced on 20 July 2013. This report documents the finding of EM&A works for this Project and during the period [1 April 2017 to 30 June 2017](#). This is the final monthly EM&A report of the project due to the EM&A programme for the construction phase was ceased on 21 June 2017 which propose by ET and verified by IEC.

### 1.2 Structure of the Report

**Section 1**     **Introduction** – details the scope and structure of the report.

**Section 2**     **Project Background** – summarizes background and scope of the project, site description, project organization and contact details of key personnel during the reporting period.

**Section 3**     **Monitoring Requirements** – summarizes all monitoring parameters, monitoring methodology and equipment, monitoring locations, monitoring frequency, criteria and respective event and action plan and monitoring programmes.

**Section 4**     **Monitoring Results** – summarizes the monitoring results obtained in the reporting period.

**Section 5**     **Compliance Audit** – summarizes the auditing of monitoring results and environmental site inspection, all exceedances environmental parameters.

**Section 6**     **Complaints, Notification of summons and Prosecution** – summarizes the cumulative statistics on complaints, notification of summons and prosecution

**Section 7**     **Conclusion**

## **2. Project Background**

### **2.1 Background**

- 2.1.1. The main objective of the project “Development at Anderson Road – Footbridge D and Associated Works Area” (Hereafter called “this Project”) is to construct a footbridge, Footbridge D, and associated lift towers across Shun On Road between the existing Shun Tin Estate and the future development platform.
- 2.1.2. For this project, Tin Wan House (NM1) and Ning Po No.2 College (NM2 and AQM1) are the designated monitoring station during the construction period. Owing to this contract is under the master project and on the other hand, the construction area is vicinity to the monitoring station (On Yat House) ID2 and (Sau Nga House) ID3 of the master project, so that the baseline noise and air quality monitoring will adopt the baseline data from those stations instead of conducting baseline monitoring. All the baseline data are referred to the baseline report from the public domain web site ([www.anderson-road.com/main.htm](http://www.anderson-road.com/main.htm)).
- 2.1.3. The construction works of this project was commenced on 20 July 2013. During the construction phase of the project, air quality (dust) and noise impacts from the development site itself and the adjacent Anderson Road Quarry and other nearby construction sites are identified as the major environmental issues of concern. Besides, waste management is also identified in the EIA study as another environmental issue during the construction phase of the project that requires mitigation measures.

### **2.2 Scope of the Project and Site Description**

- 2.2.1. The Project is located mainly near Shun Tin Estate and Ning Po No.2 College, as shown in [Figure 2.1](#).
- 2.2.2. The scope of the Project comprises:
- Construction of footbridge and associated lift towers between Shun On Road and future platform at +152mPD and across Shun On Road. In Conjunction with these footbridge works are the associated furniture, drainage system, irrigation system and traffic signs.
  - Construction of drainage system for diversion of an existing stream on the slope adjoining Footbridge D.
  - Site formation and associated slopeworks for Footbridge D adjacent to Shun On Road.

### **2.3 Project Organization and Contact Personnel**

- 2.3.1. Civil Engineering and Development Department is the overall project controllers for this project. For the construction phase of the Project, Project Engineer, Contractor(s), Environmental Team and Independent Environmental Checker are appointed to manage and control environmental issues.



2.3.2. The proposed project organization and lines of communication with respect to environmental protection works are shown in [Figure 2.2](#). Key personnel and contact particulars are summarized in **Table 2.1**:

**Table 2.1 Contact Details of Key Personnel**

Party	Role	Post	Name	Contact No.	Contact Fax
Ove Arup	Engineer	Chief Resident Engineer	Dennis Leung	2407 0300	2407 8382
		Resident Engineer	Kenneth Lee	3656 3000	3656 1000
Lam-Po Wing Joint Venture	Contractor under Contract no. CV/2012/07	Project Manager	K.C. Wong	2318 0281	3171 7222
		Site Agent	T.L. Lo	2318 0281	
		Safety Officer	K.W. Lau	2318 0281	
		Environmental Officer	K.I. Ip	2318 0281	
Ramboll Environ Hong Kong Limited	Independent Environmental Checker (IEC)	Independent Environmental Checker (IEC)	Mr. David Yeung	3465 2888	3465 2899
Lam Environmental Services Limited	Environmental Team (ET)	Environmental Team Leader (ETL)	Mr. Derek Lo	2882 3939	2882 3331

**Hotline telephone number for the public to make enquiries: (852) 5346 4647**

**3. Monitoring Requirements**

**3.1 Noise Monitoring**

NOISE MONITORING STATIONS

3.1.1. The noise monitoring has been undertaken at the designated locations Tin Wan House (NM1) and Ning Po No.2 College (NM2). The detailed information of monitoring stations for the Project are listed and shown in **Table 3.1** and **Figure 4.1**. **Appendix 4.1** shows the established Action/Limit Levels for the monitoring works.

**Table 3.1 Noise Monitoring Stations**

Station ID	Monitoring Location
NM1	G/F of Tin Wan House
NM2	G/F of Ning Po No.2 College

NOISE MONITORING PARAMETERS, FREQUENCY AND DURATION

3.1.2. The construction noise level shall be measured in terms of the A-weighted equivalent continuous sound pressure level ( $L_{eq}$ ).  $L_{eq}$  (30 minutes) shall be used as the monitoring parameter for the time period between 0700 and 1900 hours on normal weekdays. For all other time periods,  $L_{eq}$  (5 minutes) shall be employed for comparison with the Noise Control Ordinance (NCO) criteria. Supplementary information for data auditing, statistical results such as L10 and L90 shall also be obtained for reference.

3.1.3. Noise monitoring shall be carried out at all the designated monitoring stations. The monitoring frequency shall depend on the scale of the construction activities. The following is an initial guide on the regular monitoring frequency for each station on a weekly basis when noise generating activities are underway:

- One set of measurements between 0700 and 1900 hours on normal weekdays.

3.1.4. If construction works are extended to include works during the hours of 1900 – 0700 as well as public holidays and Sundays, additional weekly impact monitoring shall be carried out during respective restricted hours periods. Applicable permits under NCO shall be obtained by the Contractor.

MONITORING EQUIPMENT

3.1.5. As referred to in the Technical Memorandum (TM) issued under the NCO, sound level meters in compliance with the International Electrotechnical Commission Publications 651: 1979 (Type 1) and 804: 1985 (Type 1) specifications shall be used for carrying out the noise monitoring. Immediately prior to and following each noise measurement the accuracy of the sound level meter shall be checked using an acoustic calibrator generating a known sound pressure level at a known frequency. Measurements may be accepted as valid only if the calibration level from before and after the noise measurement agree to within 1.0 dB.

3.1.6. Noise measurements shall not be made in fog, rain, wind with a steady speed exceeding 5 m/s or wind with gusts exceeding 10 m/s. The wind speed shall be checked with a portable wind speed meter capable of measuring the wind speed in m/s.

### 3.2 Air Monitoring

#### AIR QUALITY MONITORING STATIONS

- 3.2.1. The air monitoring has been conducted at the designated location Ning Po No.2 College (AQM1). The air monitoring stations for the Project are listed and shown in **Table 3.2** and **Figure 4.1**. **Appendix 4.1** shows the established Action/Limit Levels for the monitoring works.

**Table 3.2 Air Monitoring Station**

Station ID	Monitoring Location
AQM1	Roof Top of Ning Po No.2 College

#### AIR MONITORING PARAMETERS, FREQUENCY AND DURATION

- 3.2.2. One-hour and 24-hour TSP levels should be measured to indicate the impacts of construction dust on air quality. The 24-hour TSP levels shall be measured by following the standard high volume sampling method as set out in the Title 40 of the Code of Federal Regulations, Chapter 1 (Part 50), Appendix B.
- 3.2.3. All relevant data including temperature, pressure, weather conditions, elapsed-time meter reading for the start and stop of the sampler, identification and weight of the filter paper, and any other local atmospheric factors affecting or affected by site conditions, etc., shall be recorded down in detail.
- 3.2.4. For regular impact monitoring, the sampling frequency of at least once in every six-days, shall be strictly observed at all the monitoring stations for 24-hour TSP monitoring. For 1-hour TSP monitoring, the sampling frequency of at least three times in every six-days should be undertaken when the highest dust impact occurs.

#### SAMPLING PROCEDURE AND MONITORING EQUIPMENT

- 3.2.5. High volume samplers (HVSs) in compliance with the following specifications shall be used for carrying out the 1-hour and 24-hour TSP monitoring:
- 0.6 - 1.7 m<sup>3</sup> per minute adjustable flow range;
  - equipped with a timing / control device with +/- 5 minutes accuracy for 24 hours operation;
  - installed with elapsed-time meter with +/- 2 minutes accuracy for 24 hours operation;
  - capable of providing a minimum exposed area of 406 cm<sup>2</sup>;
  - flow control accuracy: +/- 2.5% deviation over 24-hour sampling period;
  - equipped with a shelter to protect the filter and sampler;
  - incorporated with an electronic mass flow rate controller or other equivalent devices;
  - equipped with a flow recorder for continuous monitoring;
  - provided with a peaked roof inlet;
  - incorporated with a manometer;
  - able to hold and seal the filter paper to the sampler housing at horizontal position;
  - easily changeable filter; and
  - capable of operating continuously for a 24-hour period.



3.2.6. Initial calibration of dust monitoring equipment shall be conducted upon installation and thereafter at bi-monthly intervals. The transfer standard shall be traceable to the internationally recognized primary standard and be calibrated annually. The calibration data shall be properly documented for future reference by concerned parties such as the IEC. All the data should be converted into standard temperature and pressure equivalents.

LABORATORY MEASUREMENT / ANALYSIS

3.2.7. A clean laboratory with constant temperature and humidity control, and equipped with necessary measuring and conditioning instruments to handle the dust samples collected, shall be available for sample analysis, and equipment calibration and maintenance. The laboratory should be HOKLAS accredited.

3.2.8. If a site laboratory is set up or a non-HOKLAS accredited laboratory is retained for analysis, laboratory equipment shall be provided by the ER in consultation with the IC(E). Measurement performed by the laboratory shall be demonstrated to the satisfaction of the ER and the IC(E). The IC(E) shall conduct regular audit to the measurement performed by the laboratory to ensure the accuracy of measurement results. The ET leader shall provide the ER with one copy of the Title 40 of the Code of Federal Regulations, Chapter 1 (Part 50), and Appendix B for his reference.

3.2.9. Filter paper of size 8" x 10" shall be labelled before sampling. It shall be a clean filter paper with no pinholes, and shall be conditioned in a humidity-controlled chamber for over 24-hours and be pre-weighed before use for the sampling.

3.2.10. After sampling, the filter paper loaded with dust shall be kept in a clean and tightly sealed plastic bag. The filter paper shall then be returned to the laboratory for reconditioning in the humidity controlled chamber followed by accurate weighing by an electronic balance with readout down to 0.1 mg. The balance shall be regularly calibrated against a traceable standard.

3.2.11. All the collected samples shall be kept in a good condition for 6 months prior to disposal.

**4. Monitoring Results**

4.0.1. The environmental monitoring will be implemented based on the sensitive receivers which would be mostly affected. Overall layout showing the work area, latest status of work commencement and monitoring stations are shown in **Figure 2.1** and **Figure 4.1**.

**4.1 Noise Monitoring Results**

4.1.1. The noise monitoring results for Contract no. CV/2012/07 are summarized in **Table 4.1** below:

**Table 4.1 Summary of Noise Monitoring Results at NM1 and NM2**

Date	Time	Location	Leq (dB)	Limit Level
6-Apr-17	10:30	NM1	67.8	75
	9:45	NM2	63.7	70

12-Apr-17	9:10	NM1	65.2	75
	10:30	NM2	64.3	70
18-Apr-17	10:45	NM1	67.0	75
	11:30	NM2	65.5	70
25-Apr-17	10:05	NM1	66.5	75
	11:00	NM2	63.5	70
29-Apr-17	10:15	NM1	65.5	75
	11:00	NM2	63.0	70
5-May-17	10:15	NM1	68.0	75
	11:15	NM2	63.5	70
11-May-17	13:15	NM1	67.5	75
	11:15	NM2	63.0	70
17-May-17	10:15	NM1	67.0	75
	11:18	NM2	62.5	70
23-May-17	11:10	NM1	63.5	75
	10:05	NM2	67.0	70
29-May-17	10:50	NM1	61.8	75
	10:02	NM2	62.3	70
3-Jun-17	10:35	NM1	68.5	75
	11:30	NM2	62.0	70
9-Jun-17	10:30	NM1	67.0	75
	11:30	NM2	62.5	70
15-Jun-17	13:02	NM1	64.9	75
	14:02	NM2	68.0	70
20-Jun-17	15:45	NM1	65.1	75
	15:10	NM2	66.5	70
Limit Level			65 / 70 / 75*	

Note :

- 70dB(A) and 65 dB(A) for schools during normal teaching periods and school examination periods, respectively.

4.1.2. Day time period noise monitoring was conducted at the Tin Wan House (NM1) and Ning Po No.2 College (NM2).

4.1.3. Noise monitoring results measured in this reporting period are reviewed and summarized. No action level exceedance was recorded in the reporting period. Details of noise monitoring results and graphical presentation can be referred in [Appendix 5.2](#).

**4.2 Air Monitoring Results**

4.2.1. The air monitoring results are summarized in **Table 4.2** and **Table 4.3** below. No exceedance was recorded in the reporting period.

**Table 4.2 Summary of Air Monitoring Results at AQM1 - 24 hr TSP Monitoring**

Date	Time	TSP Level, (µg/m <sup>3</sup> )
5-Apr-17	8:00	80
11-Apr-17	8:00	61
17-Apr-17	8:00	58
22-Apr-17	8:00	66
28-Apr-17	8:00	64
4-May-17	8:00	47
10-May-17	8:00	84
16-May-17	8:00	34
22-May-17	8:00	30
27-May-17	8:00	49
2-Jun-17	8:00	62
8-Jun-17	8:00	30
14-Jun-17	8:00	46
20-Jun-17	8:00	32
<b>Action Level</b>		<b>200</b>
<b>Limit Level:</b>		<b>260</b>

**Table 4.3 Summary of Air Monitoring Results at AQM1 - 1 hr TSP Monitoring**

Date	Time	TSP Level, (µg/m <sup>3</sup> )
6-Apr-17	8:02	183
6-Apr-17	9:05	133
6-Apr-17	10:08	144
12-Apr-17	8:05	81
12-Apr-17	9:10	81
12-Apr-17	10:15	108
18-Apr-17	10:40	125
18-Apr-17	13:00	83
18-Apr-17	14:02	142
24-Apr-17	10:30	95
24-Apr-17	13:00	90
24-Apr-17	14:02	96
29-Apr-17	8:55	92
29-Apr-17	9:57	90
29-Apr-17	10:59	107
5-May-17	9:00	75
5-May-17	10:02	102
5-May-17	13:00	89
11-May-17	11:00	78
11-May-17	13:00	49
11-May-17	14:02	53
17-May-17	9:55	45



17-May-17	10:57	31
17-May-17	13:00	31
23-May-17	14:50	53
23-May-17	15:52	51
23-May-17	16:55	42
29-May-17	8:30	63
29-May-17	9:33	63
29-May-17	10:36	62
3-Jun-17	9:08	82
3-Jun-17	10:10	34
3-Jun-17	13:00	34
9-Jun-17	9:15	21
9-Jun-17	10:17	67
9-Jun-17	13:00	37
15-Jun-17	13:00	84
15-Jun-17	14:05	69
15-Jun-17	15:07	31
21-Jun-17	13:00	64
21-Jun-17	14:02	27
21-Jun-17	15:05	31
<b>Action Level</b>		<b>197</b>
<b>Limit Level:</b>		<b>500</b>

4.2.2. Air monitoring results measured in this reporting period are reviewed and summarized. No exceedance was recorded in reporting period. Details of air monitoring results can be referred in [Appendix 5.3](#).

**4.3 Waste Monitoring Results**

4.3.1. Inert C&D waste and General refuse were disposed in this reporting period. Details of the waste flow table are summarized in **Table 4.4**.

**Table 4.4 Details of Waste Disposal for Contract no. CV/2012/07**

Waste Type	Quantity this quarter	Cumulative Quantity-to-Date	Disposal / Dumping Grounds
Inert C&D materials disposed, m <sup>3</sup>	0.056964	12.311198	TKO137
Inert C&D materials recycled, m <sup>3</sup>	0	0	N/A
Non-inert C&D materials disposed, m <sup>3</sup>	0	0	N/A
Non-inert C&D materials recycled, kg	0	34.5436	N/A
Chemical waste disposed, kg	0	0	N/A
General refuse, m <sup>3</sup>	0.031395	0.98557	NENT





**5. Compliance Audit**

5.0.1. The Event Action Plan for construction noise, air quality and water quality are presented in [Appendix 6.1.](#)

**5.1 Noise Monitoring**

5.1.1. No exceedance was recorded in the reporting period.

**5.2 Air Monitoring**

5.2.1. No exceedance was recorded in the TSP monitoring in the reporting period.

**5.3 Environmental Site Audit**

5.3.1. There was no non-compliance from the site audits in the reporting period. During environmental site inspections conducted during the reporting period, minor deficiencies were noted.

**5.4 Review of the Reasons for and the Implications of Non-compliance**

5.4.1. There was no non-compliance from the site audits in the reporting period.

**5.5 Summary of action taken in the event of and follow-up on non-compliance**

5.5.1. There was no particular action taken since no project-related non-compliance was recorded from the site audits and environmental monitoring in the reporting period.

**6. Complaints, Notification of Summons and Prosecution**

- 6.0.1. No complaint and notification of summons or successful prosecutions were recorded in this reporting period.
- 6.0.2. The details of cumulative complaint log and updated summary of complaints are presented in [Appendix 8.1](#).
- 6.0.3. Cumulative statistic on complaints and successful prosecutions are summarized in **Table 6.1** and **Table 6.2** respectively.

**Table 6.1 Cumulative Statistics on Complaints**

Reporting Period	No. of Complaints
April 2017 – June 2017	0
Project-to-Date	1

**Table 6.2 Cumulative Statistics on Successful Prosecutions**

Environmental Parameters	Cumulative No. Brought Forward	No. of Successful Prosecutions this quarter (Offence Date)	Cumulative No. Project-to-Date
Air	-	0	0
Noise	-	0	0
Waste	-	0	0
<b>Total</b>	-	<b>0</b>	<b>0</b>



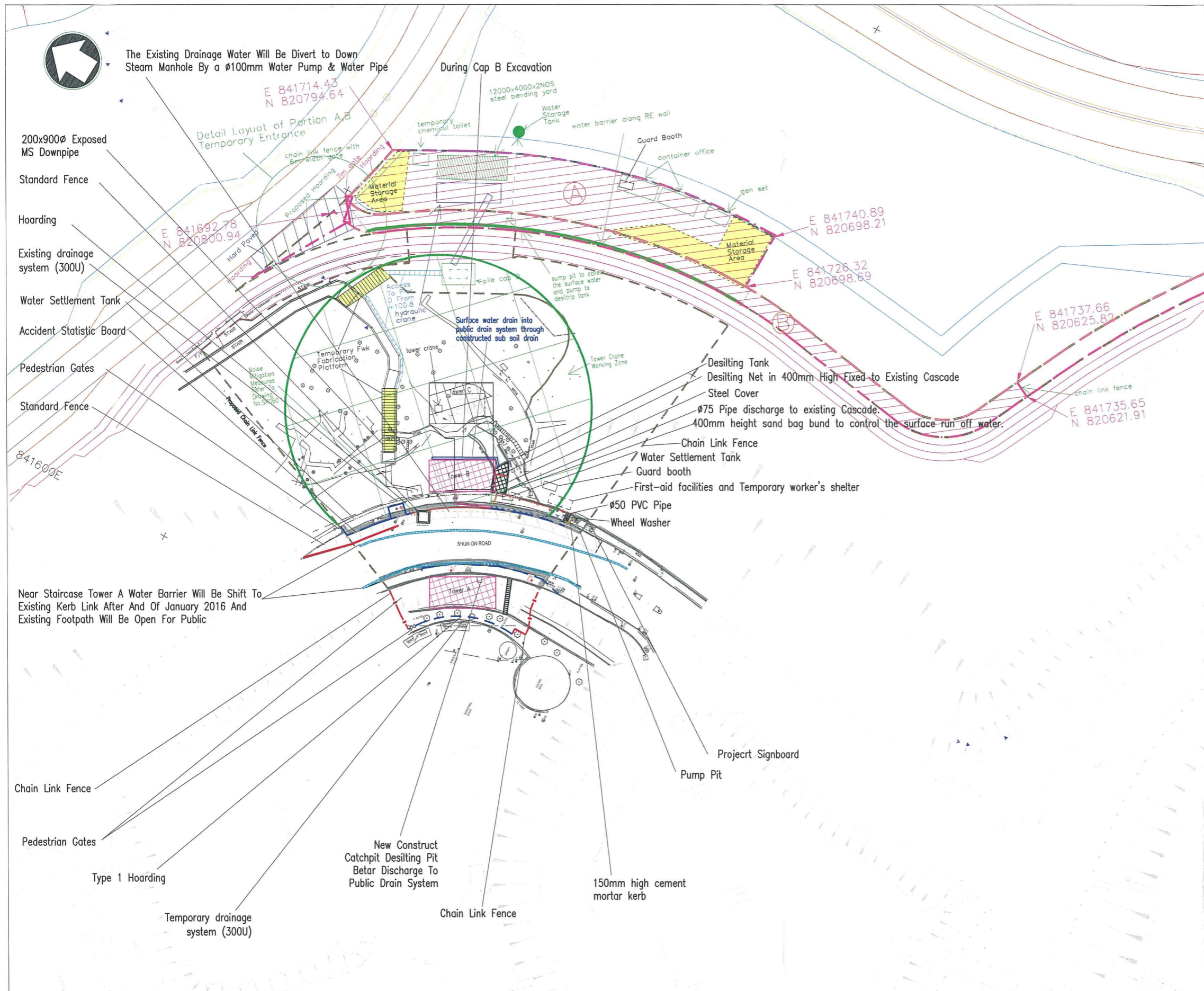
**7. Conclusion**

- 7.0.1. The EM&A programme was carried out in accordance with the EM&A Manual requirements, minor alterations to the programme proposed were made in response to changing circumstances.
- 7.0.2. No construction air and noise monitoring results that triggered the action level and Limit Level was recorded. No complaint of air and noise were received by the ARUP and the contractor. Furthermore, no notification of summons or successful prosecution was received in this reporting period.
- 7.0.3. This is the final quarterly EM&A report of the project due to the EM&A programme for the construction phase was completed on 21 June 2017. The termination of EM&A programme was propose by ET and verification by IEC.



***Figure 2.1***

***Project Layout***



- NOTES:**
1. This drawing shall be read in conjunction with Drawing 24711/1052.
  2. The location of fencing and hoarding is indicative only. The exact location is approved on site by Engineer.
  3. For Detail of Access gate refer to CEDD Standard Drawing No. C1007.
  4. Dimensions Are in Meters Unless Otherwise Shown.
  5. The surface water inside Portion C3 will be collected by a pump pit and pump into water settlement tank for recycle purpose. In case the water inside the settlement tank is overflow, a  $\phi 75$  pipe will discharge the overflow water into existing 300U on slope toe.

- Legend**
- - - - - Proposed Chain Link Fence
  - - - - - Proposed Safety Fence (Type A)
  - - - - - Proposed Hoarding (Type I)
  - - - - - Tower Crane Working radius (Not Encroach to Shun On Road)
  - - - - - As-Built Water Barrier
  - Material Storage Area
  - 12Mx4M Steel Bending Yard
  - Temporary Formwork Fabrication Platform
  - Footprint Of Staircase A&B

SCALE	1:500 @ A3	DATE	18-04-2016
CHECK	SM NG	DRAWN	DAVID TONG
JOB NO.	CV/2012/07	DRAWING NO.	SK011-1
		REV	Q

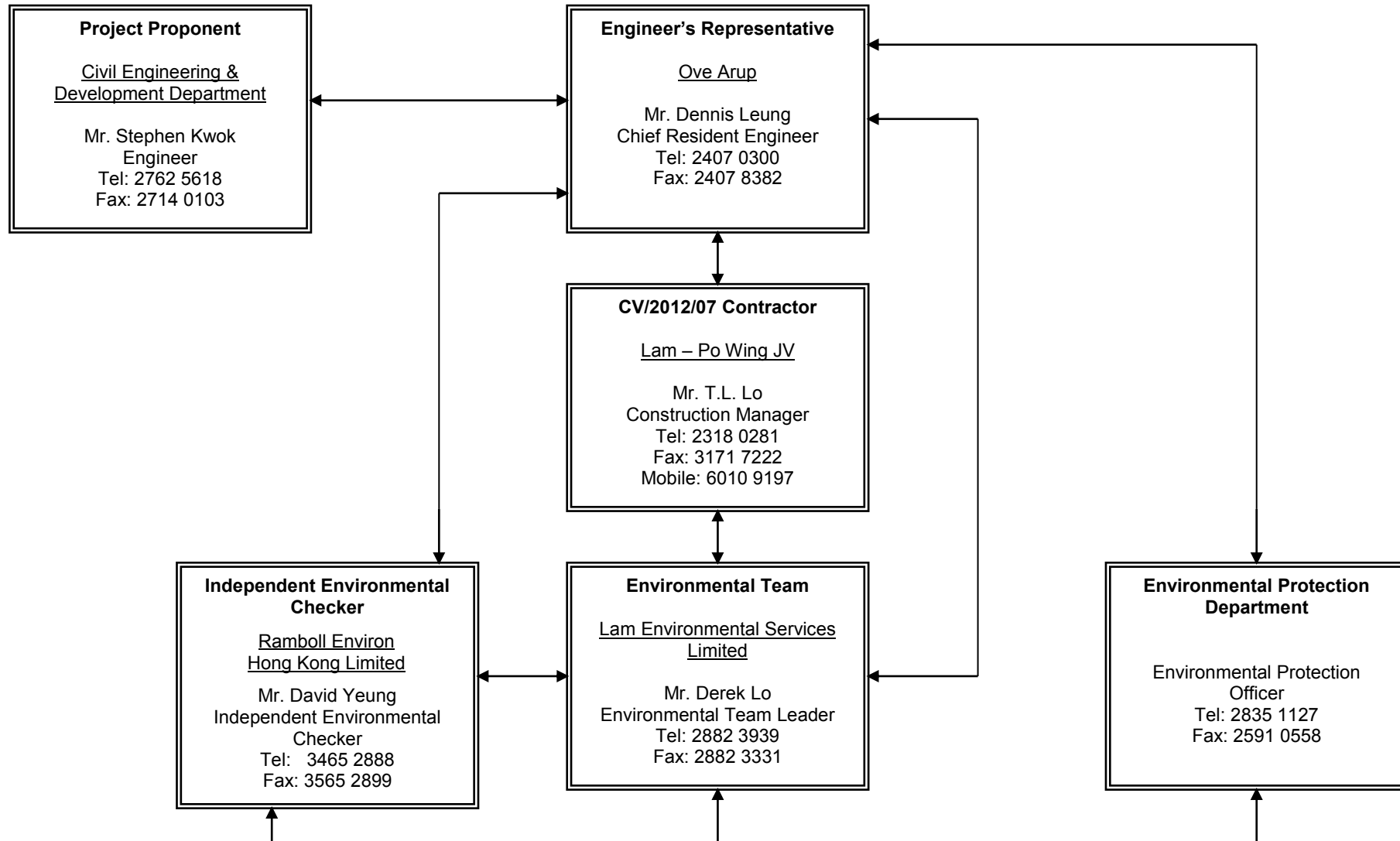


***Figure 2.2***

***Project Organization Chart***



**Project Organization Chart**





***Figure 4.1***

***Locations of Environmental Monitoring Stations***



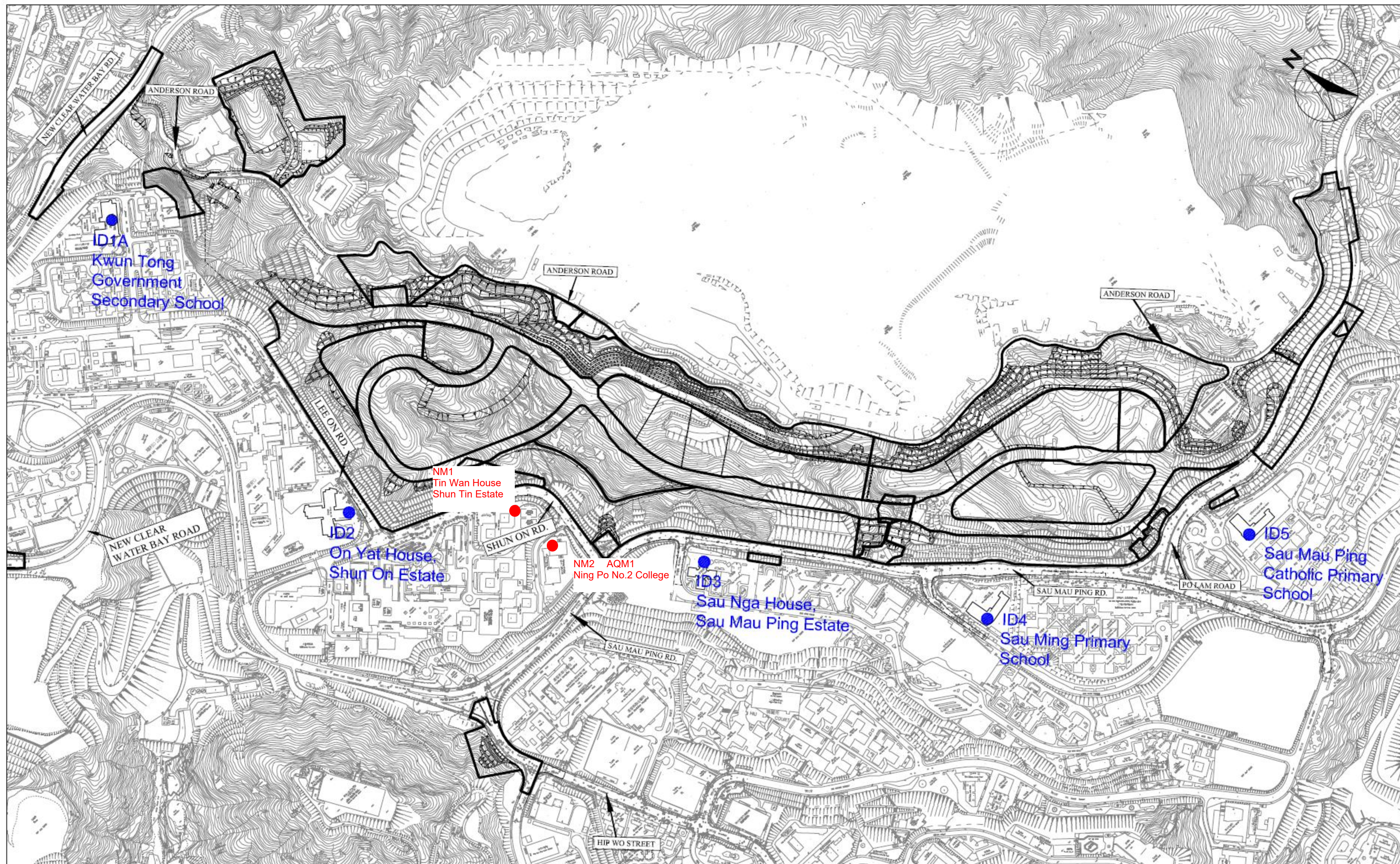


Figure 4.1. Environmental Monitoring Location

- LEGEND
- impact monitoring
  - Monitoring station of master project



*Appendix 3.1*

*Environmental Mitigation Implementation Schedule*



### Environmental Mitigation Implementation Schedule

#### Implementation Schedule for Construction Dust Control

EIA Ref.	EM&A Log Ref.	Environmental Protection Measures	Location (duration/ completion of measures)	Funding Agent	Implementation Agent	Implementation Stages**		Relevant Legislation & Guidelines
						D	C	
S2.7	S1, S2.8	<p><i>Site Practice</i></p> <ul style="list-style-type: none"> <li>• Mean vehicle speed of haulage trucks at 10 km/hr.</li> <li>• Twice daily watering of all open site areas.</li> <li>• Regular watering (once every 1 hour) of all site roads and access roads with frequent truck movement.</li> <li>• Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations.</li> <li>• Establishment and use of vehicle wheel and body washing facilities at the exit points of the site, combined with cleaning of public roads where necessary.</li> <li>• Suitable side and tailboards on haulage vehicles.</li> <li>• Watering of temporary stockpiles.</li> </ul> <p><i>Blasting</i></p> <ul style="list-style-type: none"> <li>• Use of select aggregate and fines to stem the charge with drill holes and watering of blast face.</li> <li>• Use of vacuum extraction drilling methods.</li> <li>• Carefully sequenced blasting.</li> </ul> <p><i>Crushing</i></p> <ul style="list-style-type: none"> <li>• Fabric filters installed for the crushing plant.</li> <li>• Water sprays on the crusher.</li> </ul> <p><i>Loading and Unloading Points, and conveyor Belt System</i></p> <ul style="list-style-type: none"> <li>• Water sprays at all fixed loading and unloading points (at the crusher and conveyor belts).</li> <li>• The loading point at the crusher is enclosed with dust curtains are used for controlling dust.</li> <li>• When transferring materials from conveyor belt or crusher to the dump trucks, chutes or dust curtains are used for controlling dust.</li> <li>• Cover the conveyor belts with steel roof and canvas sides.</li> </ul>	All Construction sites (late 2007 to 2016)	CEDD	Lam – Po Wing JV	√	√	TM on EIA Process, APCO, Air Pollution Control (Construction Dust) Regulation

\* All recommendations and requirements are summarized from approved EIA resulted during the course of EIA Process, including ACE and/or accepted public comment to the proposed project,

\*\* D=Design, C=Construction



Implementation Schedule for Construction Noise Control

EIA Ref.	EM&A Log Ref.	Environmental Protection Measures	Location (duration/ completion of measures)	Funding Agent	Implementation Agent	Implementation Stages**		Relevant Legislation & Guidelines
						D	C	
S3.7	S1, S3.7	<p><i>Site Formation</i></p> <ul style="list-style-type: none"> <li>Silenced powered mechanical equipment (PME) for most equipment5 (including drill rig, backhoe, dump truck, breaker and crane) and the decrease of percentage on time usage of drill rig among the Central Area form 50% to 40% is prosed.</li> <li>Temporary movable noise barrier shall be used to shield the noise emanating from the drilling rig in order to provide adequate shielding for the affected NSRs.</li> </ul>	All Construction sites (late 2007 to 2016)	CEDD	Lam – Po Wing JV	√	√	TM on EIA Process, NCO, TM on Noise from Construction Work other than Percussive Pilling, ProPECC Note PN2/93

\* All recommendations and requirements are summarized from approved EIA resulted during the course of EIA Process, including ACE and/or accepted public comment to the proposed project,

\*\* D=Design, C=Construction



Implementation Schedule for Water Quality Control

EIA Ref.	EM&A Log Ref.	Environmental Protection Measures	Location (duration/ completion of measures)	Funding Agent	Implementation Agent	Implementation Stages**		Relevant Legislation & Guidelines
						D	C	
S6.4	S1	<p><i>Construction Phase</i></p> <ul style="list-style-type: none"> <li>All active working areas should be bounded to retain storm water with sufficient retention time to ensure that suspended solids are not discharged from the site in concentrations above those specified in the TM for the Victor Harbour (Phase I) WCZ. All fuel storage areas should be bounded with drainage directed to an oil interceptor.</li> <li>Separate treatment facilities may be required for effluent from site offices, toilets (unless chemical toilets are used) and canteens.</li> <li>Discharged wastewater from the construction sites to surface water and /or public drainage systems should be controlled through licensing. Discharges should follow fully the terms and conditions in the licences.</li> <li>Relevant practice for dealing with various typr of construction discharges provided in EPD's ProPECC Note 1/94 should be adopted.</li> </ul>	All Construction sites (late 2007 to 2016)	CEDD	Lam – Po Wing JV	√	√	TM on EIA Process, WPCO, ProPECC Note PN 1/94

\* All recommendations and requirements are summarized from approved EIA resulted during the course of EIA Process, including ACE and/or accepted public comment to the proposed project,

\*\* D=Design, C=Construction



Implementation Schedule for Construction Waste Management

EIA Ref.	EM&A Log Ref.	Environmental Protection Measures	Location (duration/ completion of measures)	Funding Agent	Implementation Agent	Implementation Stages**		Relevant Legislation & Guidelines
						D	C	
S8.4	S1,S4	<p><i>Waste Disposal</i></p> <ul style="list-style-type: none"> <li>Different types of wastes should be segregated, stored, transported and disposed of proper practice of waste management.</li> <li>Sorting of wastes should be done on-site. Different types of wastes should be segregated and stored in different stockpiles, containers or skips to enhance recycling of materials and proper disposal of wastes.</li> <li>Excavated spoil should be used as much as possible to minimize off-site fill material requirements and disposal of spoil.</li> <li>During road transportation of excavated spoil, vehicles should be covered to avoid dust impact. Wheel washing facilities should be installed at all site exits together with regular watering of the site access roads.</li> <li>Chemical waste should be recycled on-site or removed by licenced companies. It should be handled according to the Code of practice on the packaging, Labelling and Storage of Chemical Wastes. When off-site disposal is required, it should be collected and delivered by licenced contractors to Tsing Yi Chemical Waste Treatment Facility and disposed of in accordance with the Chemical Waste (General) Regulation.</li> <li>Necessary mitigation measures should be adopted to prevent the uncontrolled disposal of chemical and hazardous waste into air, soil, surface waters and ground waters.</li> </ul>	All Construction sites (late 2007 to 2016)	CEDD	Lam – Po Wing JV	√	√	TM on EIA Process, WDO, DGO, Waste Disposal (Chemical Waste) (General) Regulation



		<p><i>Waste Storage</i></p> <ul style="list-style-type: none"><li>• Chemical material storage areas should be bounded, constructed of impervious materials, and have the capacity to contain 120 percent of the total volume of the containers. Indoor storage areas must have sufficient ventilation to prevent the build-up of fumes, and must be capable of evacuating the space in the event of an accidental release. Outdoor storage areas must be covered with a canopy or contain provisions for the safe removal of rainwater. In both cases, storage areas must not be connected to the foul or stormwater sewer system.</li><li>• Dangerous materials as defined under the DGO, including fuel, oil and lubricants, should be stored and properly labeled on site in accordance with the requirements in the DGO. If transportation of hazardous materials is necessary, hazardous materials, chemical wastes and fuel should be packed or stored in containers or vessels of suitable design and construction to prevent leakage, spillage or escape.</li><li>• Human waste should be discharged into septic tanks provided by the contractors and removed regularly by a hygiene services company. Refuse containers such as open skips should be provided at every work site for use by the workforce; On-site refuse collection points must also be provided.</li></ul>						
--	--	--	--	--	--	--	--	--

\* All recommendations and requirements are summarized from approved EIA resulted during the course of EIA Process, including ACE and/or accepted public comment to the proposed project,

\*\* D=Design, C=Construction



***Appendix 4.1***

***Action and Limit Level***





**Action and Limit Level**

*Action and Limit Level for Noise Monitoring*

Time Period	Action Level	Limit Level
07:00 – 19:00 hours on normal weekdays	When one documented complaint is received.	75 dB(A)/ 70 dB(A)/ 65 dB(A) <sup>Note 1</sup>

Note 1:

- 70dB(A) and 65 dB(A) for schools during normal teaching periods and school examination periods, respectively.
- If works are to be carried out during the restricted hours, the conditions stipulated in the Construction Noise Permit (CNP) issued by the Noise Control Authority have to be followed.

*Action and Limit Level for Air Monitoring*

Monitoring Location	1-hour TSP Level in $\mu\text{g}/\text{m}^3$		24-hour TSP Level in $\mu\text{g}/\text{m}^3$	
	Action Level	Limit Level	Action Level	Limit Level
AQM1	197	500	200	260



***Appendix 4.2***

***Copies of Calibration Certificates***

# Calibration Certificate

Certificate Number 2016005141

**Customer:**

LAM Environmental Services Ltd  
11/F Centre Point  
181-185 Gloucester Road  
Wanchai, , Hong Kong

**Model Number** LxT SE  
**Serial Number** 0004797  
**Test Results** Pass  
**Initial Condition** As Manufactured  
**Description** Sound Expert LxT

**Procedure Number** D0001.8384  
**Technician** Ron Harris  
**Calibration Date** 8 Jun 2016  
**Calibration Due**  
**Temperature** 22.36 °C ± 0.01 °C  
**Humidity** 50.5 %RH ± 0.5 %RH  
**Static Pressure** 86.11 kPa ± 0.03 kPa

**Evaluation Method** *Tested with:* *Data reported in dB re 20 µPa.*  
PRMLxT1L. S/N 042622  
377B02. S/N 163704

**Compliance Standards** Compliant to Manufacturer Specifications and the following standards when combined with Calibration Certificate from procedure D0001.8378:

IEC 60651:2001 Type 1	ANSI S1.4-2014 Class 1
IEC 60804:2000 Type 1	ANSI S1.4 (R2006) Type 1
IEC 61252:2002	ANSI S1.11 (R2009) Class 1
IEC 61260:2001 Class 1	ANSI S1.25 (R2007)
IEC 61672:2013 Class 1	ANSI S1.43 (R2007) Type 1

Issuing lab certifies that the instrument described above meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the SI through the National Institute of Standards and Technology (NIST), or other national measurement institutes, and meets the requirements of ISO/IEC 17025:2005. **Test points marked with a ‡ in the uncertainties column do not fall within this laboratory's scope of accreditation.**

The quality system is registered to ISO 9001:2008.

This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

The uncertainties were computed in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). A coverage factor of approximately 2 sigma (k=2) has been applied to the standard uncertainty to express the expanded uncertainty at approximately 95% confidence level.

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## Standards Used

Description	Cal Date	Cal Due	Cal Standard
SRS DS360 Ultra Low Distortion Generator	06/24/2015	06/24/2016	006311
Hart Scientific 2626-H Temperature Probe	06/17/2015	06/17/2016	006798
Larson Davis CAL200 Acoustic Calibrator	08/12/2015	08/12/2016	007027
Larson Davis Model 831	03/01/2016	03/01/2017	007182
1/2 inch Microphone - P - 0V	03/07/2016	03/07/2017	007185
Larson Davis CAL291 Residual Intensity Calibrator	09/24/2015	09/24/2016	007287

Larson Davis, a division of PCB Piezotronics, Inc  
1681 West 820 North  
Provo, UT 84601, United States  
716-684-0001



**LARSON DAVIS**  
A PCB PIEZOTRONICS DIV.

### Acoustic Calibration

Measured according to IEC 61672-3:2013 10 and ANSI S1.4-2014 Part 3: 10

Measurement	Test Result [dB]	Lower Limit [dB]	Upper Limit [dB]	Expanded Uncertainty [dB]	Result
1000 Hz	114.00	113.80	114.20	0.14	Pass

### Acoustic Signal Tests, C-weighting

Measured according to IEC 61672-3:2013 12 and ANSI S1.4-2014 Part 3: 12 using a comparison coupler with Unit Under Test (UUT) and reference SLM using S-time-weighted sound level

Frequency [Hz]	Test Result [dB]	Expected [dB]	Lower Limit [dB]	Upper Limit [dB]	Expanded Uncertainty [dB]	Result
125	-0.21	-0.20	-1.20	0.80	0.21	Pass
1000	0.03	0.00	-0.70	0.70	0.21	Pass
8000	-2.39	-3.00	-5.50	-1.50	0.21	Pass

-- End of measurement results--

### Self-generated Noise

Measured according to IEC 61672-3:2013 11.1 and ANSI S1.4-2014 Part 3: 11.1

Measurement	Test Result [dB]
Low Range, 20 dB gain	64.17

-- End of measurement results--

-- End of Report--

Signatory: Ron Harris



# Calibration Certificate

Certificate Number 2016010424

**Customer:**

LAM Environmental Services Ltd  
11/F Centre Point  
181-185 Gloucester Road  
Wanchai, , Hong Kong

**Model Number** CAL200  
**Serial Number** 13128  
**Test Results** **Pass**  
**Initial Condition** Inoperable  
**Description** Larson Davis CAL200 Acoustic Calibrator

**Procedure Number** D0001.8386  
**Technician** Scott Montgomery  
**Calibration Date** 22 Nov 2016  
**Calibration Due** 22 Nov 2017  
**Temperature** 24 °C ± 0.3 °C  
**Humidity** 30 %RH ± 3 %RH  
**Static Pressure** 101.4 kPa ± 1 kPa

**Evaluation Method** The data is acquired by the insert voltage calibration method using the reference microphone's open circuit sensitivity. Data reported in dB re 20 µPa.

**Compliance Standards** Compliant to Manufacturer Specifications per D0001.8190 and the following standards:  
IEC 60942:2003 ANSI S1.40-2006

Issuing lab certifies that the instrument described above meets or exceeds all specifications as stated in the referenced procedure (unless otherwise noted). It has been calibrated using measurement standards traceable to the SI through the National Institute of Standards and Technology (NIST), or other national measurement institutes, and meets the requirements of ISO/IEC 17025:2005. **Test points marked with a ‡ in the uncertainties column do not fall within this laboratory's scope of accreditation.**

The quality system is registered to ISO 9001:2008.

This calibration is a direct comparison of the unit under test to the listed reference standards and did not involve any sampling plans to complete. No allowance has been made for the instability of the test device due to use, time, etc. Such allowances would be made by the customer as needed.

The uncertainties were computed in accordance with the ISO Guide to the Expression of Uncertainty in Measurement (GUM). A coverage factor of approximately 2 sigma (k=2) has been applied to the standard uncertainty to express the expanded uncertainty at approximately 95% confidence level.

This report may not be reproduced, except in full, unless permission for the publication of an approved abstract is obtained in writing from the organization issuing this report.

## Standards Used

Description	Cal Date	Cal Due	Cal Standard
Agilent 34401A DMM	09/07/2016	09/07/2017	001021
Sound Level Meter / Real Time Analyzer	04/07/2016	04/07/2017	001051
Microphone Calibration System	08/17/2016	08/17/2017	005446
1/2" Preamp	10/06/2016	10/06/2017	006506
Larson Davis 1/2" Preamp 7-pin LEMO	08/22/2016	08/22/2017	006507
1/2 inch Microphone - RI - 200V	03/15/2016	03/15/2017	006510
Pressure Transducer	07/01/2016	07/01/2017	007368

Larson Davis, a division of PCB Piezotronics, Inc  
1681 West 820 North  
Provo, UT 84601, United States  
716-684-0001



**Output Level**

Nominal Level [dB]	Pressure [kPa]	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
94	101.4	94.00	93.80	94.20	0.14	Pass
114	101.4	114.00	113.80	114.20	0.13	Pass

-- End of measurement results--

**Frequency**

Nominal Level [dB]	Pressure [kPa]	Test Result [Hz]	Lower limit [Hz]	Upper limit [Hz]	Expanded Uncertainty [Hz]	Result
94	101.4	999.97	990.00	1,010.00	0.20	Pass
114	101.4	999.95	990.00	1,010.00	0.20	Pass

-- End of measurement results--

**Total Harmonic Distortion + Noise (THD+N)**

Nominal Level [dB]	Pressure [kPa]	Test Result [%]	Lower limit [%]	Upper limit [%]	Expanded Uncertainty [%]	Result
114	101.4	0.30	0.00	2.00	0.25	Pass
94	101.4	0.41	0.00	2.00	0.25	Pass

-- End of measurement results--

**Level Change Over Pressure**

Tested at: 114 dB, 24 °C, 30 %RH

Nominal Pressure [kPa]	Pressure [kPa]	Test Result [dB]	Lower limit [dB]	Upper limit [dB]	Expanded Uncertainty [dB]	Result
101.3	101.1	0.00	-0.30	0.30	0.04 ‡	Pass
108.0	108.0	-0.05	-0.30	0.30	0.04 ‡	Pass
92.0	91.9	0.04	-0.30	0.30	0.04 ‡	Pass
83.0	83.0	0.04	-0.30	0.30	0.04 ‡	Pass
74.0	74.0	-0.03	-0.30	0.30	0.04 ‡	Pass
65.0	64.9	-0.21	-0.30	0.30	0.04 ‡	Pass

-- End of measurement results--

**Frequency Change Over Pressure**

Tested at: 114 dB, 24 °C, 30 %RH

Nominal Pressure [kPa]	Pressure [kPa]	Test Result [Hz]	Lower limit [Hz]	Upper limit [Hz]	Expanded Uncertainty [Hz]	Result
101.3	101.1	0.00	-10.00	10.00	0.20 ‡	Pass
92.0	91.9	0.00	-10.00	10.00	0.20 ‡	Pass
108.0	108.0	-0.02	-10.00	10.00	0.20 ‡	Pass
83.0	83.0	0.00	-10.00	10.00	0.20 ‡	Pass
74.0	74.0	0.00	-10.00	10.00	0.20 ‡	Pass
65.0	64.9	0.01	-10.00	10.00	0.20 ‡	Pass

-- End of measurement results--



**Total Harmonic Distortion + Noise (THD+N) Over Pressure**

Tested at: 114 dB, 24 °C, 30 %RH

Nominal Pressure [kPa]	Pressure [kPa]	Test Result [%]	Lower limit [%]	Upper limit [%]	Expanded Uncertainty [%]	Result
101.3	101.1	0.30	0.00	2.00	0.25 ‡	Pass
92.0	91.9	0.30	0.00	2.00	0.25 ‡	Pass
108.0	108.0	0.31	0.00	2.00	0.25 ‡	Pass
83.0	83.0	0.28	0.00	2.00	0.25 ‡	Pass
74.0	74.0	0.27	0.00	2.00	0.25 ‡	Pass
65.0	64.9	0.27	0.00	2.00	0.25 ‡	Pass

-- End of measurement results--

Signatory: Scott Montgomery

Larson Davis, a division of PCB Piezotronics, Inc  
 1681 West 820 North  
 Provo, UT 84601, United States  
 716-684-0001





## Calibration Data for High Volume Sampler (TSP Sampler)

Location : Ning Po No.2 College

Calibration Date : 05-May-17

ID : HVS003

Calibration Due Date : 05-Aug-17

### CALIBRATION OF CONTINUOUS FLOW RECORDER

Ambient Condition			
Temperature, $T_a$	299	Kelvin	Pressure, $P_a$
			1014 mmHg

Orifice Transfer Standard Information					
Equipment No.	Ori002	Slope, $m_c$	2.10714	Intercept, $b_c$	-0.05158
Last Calibration Date	20-May-16	$\left( H \times P_a / 1013.3 \times 298 / T_a \right)^{1/2}$ $= m_c \times Q_{std} + b_c$			
Next Calibration Date	20-May-17				

Calibration of TSP						
Calibration Point	Manometer Reading			$Q_{std}$ ( $m^3 / min.$ ) X-axis	Continuous Flow Recorder, W (CFM)	IC ( $W(P_a/1013.3 \times 298/T_a)^{1/2}/35.31$ ) Y-axis
	(up)	(down)	(difference)			
1	1.5	1.5	3.0	0.8454	22	21.9708
2	2.5	2.5	5.0	1.0843	31	30.9588
3	4.0	4.0	8.0	1.3650	36	35.9522
4	5.0	5.0	10.0	1.5232	41	40.9455
5	6.5	6.5	13.0	1.7333	48	47.9362

By Linear Regression of Y on X

Slope, m = 27.8279      Intercept, b = -0.9084

Correlation Coefficient\* = 0.9933

Calibration Accepted = Yes/No\*\*

\* if Correlation Coefficient < 0.990, check and recalibration again.

\*\* Delete as appropriate.

Remarks : As per client's provided information, the equipment reference no. of the calibrated High Volume Sampler has been

re-assigned from EL086 to HVS003 with respect to the update in quality management system.

Calibrated by : Jackey MA

Checked by : Pauline Wong

Date : 05-May-17

Date : 05-May-17





TISCH ENVIRONMENTAL, INC.  
 145 SOUTH MIAMI AVE  
 VILLAGE OF CLEVELAND, OH  
 45002  
 513.467.9000  
 877.263.7610 TOLL FREE  
 513.467.9009 FAX

ORIFICE TRANSFER STANDARD CERTIFICATION WORKSHEET TE-5025A

Date - Mar 20, 2017 Rootsmeter S/N 0438320 Ta (K) - 293  
 Operator Tisch Orifice I.D. - 0005 Pa (mm) - 759.46

PLATE OR Run #	VOLUME START (m3)	VOLUME STOP (m3)	DIFF VOLUME (m3)	DIFF TIME (min)	METER DIFF Hg (mm)	ORFICE DIFF H2O (in.)
1	NA	NA	1.00	1.3960	3.2	2.00
2	NA	NA	1.00	0.9970	6.4	4.00
3	NA	NA	1.00	0.8910	7.8	5.00
4	NA	NA	1.00	0.8500	8.7	5.50
5	NA	NA	1.00	0.6990	12.7	8.00

DATA TABULATION

Vstd	(x axis) Qstd	(y axis)	Va	(x axis) Qa	(y axis)
1.0120	0.7249	1.4257	0.9958	0.7133	0.8784
1.0078	1.0108	2.0163	0.9916	0.9946	1.2423
1.0058	1.1288	2.2543	0.9896	1.1107	1.3889
1.0047	1.1820	2.3643	0.9885	1.1630	1.4567
0.9993	1.4296	2.8514	0.9832	1.4066	1.7568
Qstd slope (m) =		2.02533	Qa slope (m) =		1.26823
intercept (b) =		-0.03593	intercept (b) =		-0.02214
coefficient (r) =		0.99983	coefficient (r) =		0.99983
y axis = $\text{SQRT}[\text{H2O}(\text{Pa}/760)(298/\text{Ta})]$			y axis = $\text{SQRT}[\text{H2O}(\text{Ta}/\text{Pa})]$		

CALCULATIONS

$$\text{Vstd} = \text{Diff. Vol} [(\text{Pa} - \text{Diff. Hg}) / 760] (298 / \text{Ta})$$

$$\text{Qstd} = \text{Vstd} / \text{Time}$$

$$\text{Va} = \text{Diff Vol} [(\text{Pa} - \text{Diff Hg}) / \text{Pa}]$$

$$\text{Qa} = \text{Va} / \text{Time}$$

For subsequent flow rate calculations:

$$\text{Qstd} = 1/m \{ [\text{SQRT}(\text{H2O}(\text{Pa}/760)(298/\text{Ta}))] - b \}$$

$$\text{Qa} = 1/m \{ [\text{SQRT} \text{H2O}(\text{Ta}/\text{Pa})] - b \}$$



***Appendix 5.2***

***Noise Monitoring Results and Graphical Presentations***



JOB NO : CS\_J2013-02\_CV201207

CLIENT : LPWJV

Daytime(07:00-19:00)					
Date	Time	Location	Leq (dB)	L10 (dB)	L90 (dB)
6-Apr-17	10:30	NM1	67.8	69.5	65.0
	9:45	NM2	63.7	67.0	61.3
12-Apr-17	9:10	NM1	65.2	67.0	61.9
	10:30	NM2	64.3	66.8	59.2
18-Apr-17	10:45	NM1	67.0	68.5	62.5
	11:30	NM2	65.5	69.0	63.0
25-Apr-17	10:05	NM1	66.5	67.5	61.0
	11:00	NM2	63.5	65.0	60.0
29-Apr-17	10:15	NM1	65.5	67.0	63.0
	11:00	NM2	63.0	64.5	61.0
5-May-17	10:15	NM1	68.0	69.5	64.0
	11:15	NM2	63.5	65.0	58.5
11-May-17	13:15	NM1	67.5	69.5	63.5
	11:15	NM2	63.0	65.0	57.0
17-May-17	10:15	NM1	67.0	68.0	58.0
	11:18	NM2	62.5	64.0	56.5
23-May-17	11:10	NM1	63.5	66.0	57.5
	10:05	NM2	67.0	69.0	63.0
29-May-17	10:50	NM1	61.8	67.3	56.5
	10:02	NM2	62.3	66.6	58.5
3-Jun-17	10:35	NM1	68.5	70.0	63.5
	11:30	NM2	62.0	65.0	57.0
9-Jun-17	10:30	NM1	67.0	69.0	62.5
	11:30	NM2	62.5	65.0	58.0
15-Jun-17	13:02	NM1	64.9	67.2	61.6
	14:02	NM2	68.0	70.5	61.1
20-Jun-17	15:45	NM1	65.1	68.4	62.1
	15:10	NM2	66.5	69.2	62.4

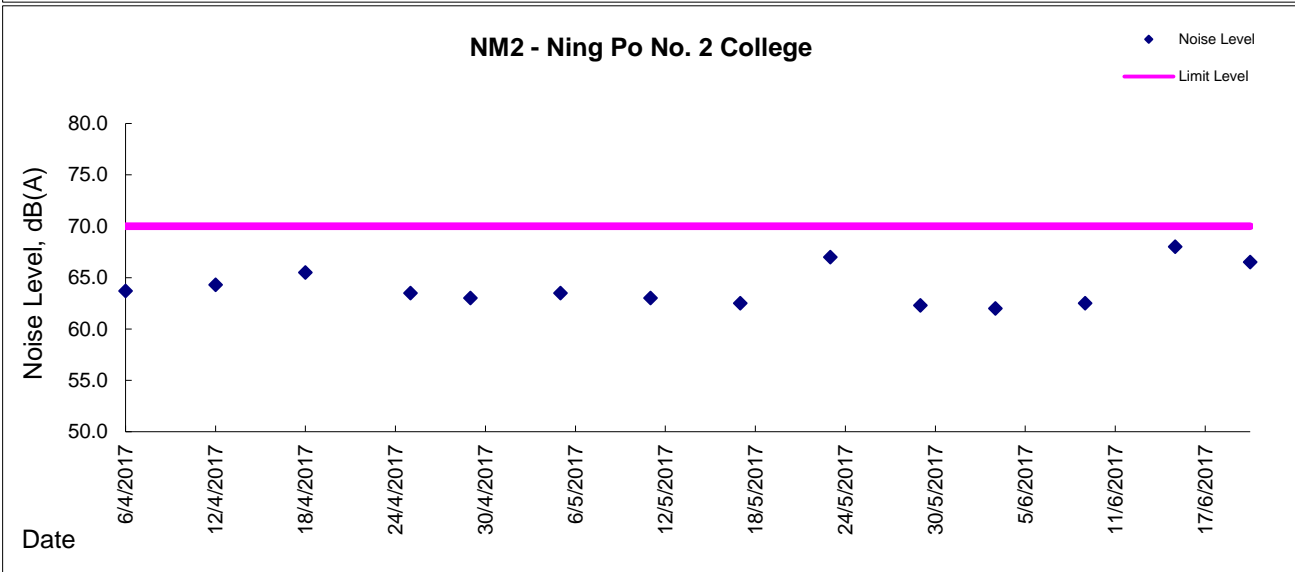
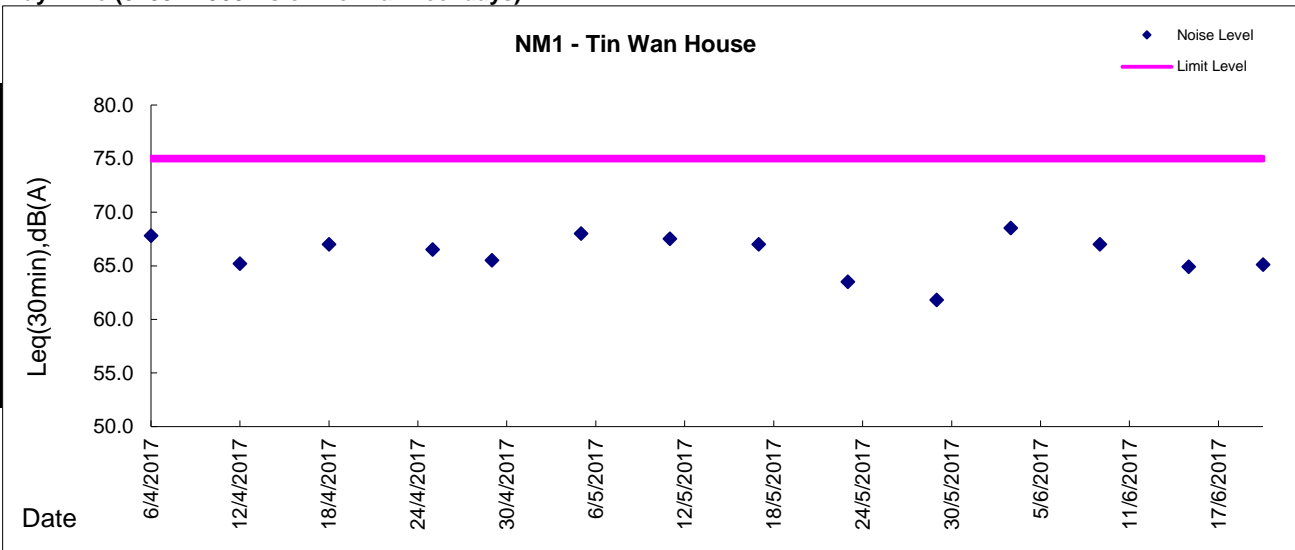
NM1 - Tin Wan House

NM2 - Ning Po No. 2 College



**Graphic Presentation of Noise Monitoring Result**

**Day Time (0700 - 1900hrs on normal weekdays)**





***Appendix 5.3***

***Air Quality Monitoring Results and Graphical Presentations***



Location: AQM1-Ning Po No.2 College

Report on 24-hour TSP monitoring

Action Level ( $\mu\text{g}/\text{m}^3$ ) - 200

Limit Level ( $\mu\text{g}/\text{m}^3$ ) - 260

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, $\text{m}^3/\text{min}$			Total Volume, $\text{m}^3$	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, $Q_{si}$	Final, $Q_{sf}$	Average		
5-Apr-17	8:00	Cloudy	19922	2.9368	3.0849	6508.81	6532.81	24.00	1.28	1.28	1.28	1841	80
11-Apr-17	8:00	Cloudy	20002	2.8383	2.9500	6535.81	6559.81	24.00	1.27	1.28	1.28	1837	61
17-Apr-17	8:00	Fine	19862	2.6728	2.7783	6562.81	6586.81	24.00	1.27	1.27	1.27	1827	58
22-Apr-17	8:00	Cloudy	20131	2.5603	2.6832	6589.81	6613.81	24.00	1.28	1.28	1.28	1849	66
28-Apr-17	8:00	Fine	20212	2.5588	2.6763	6616.81	6640.81	24.00	1.28	1.28	1.28	1844	64
4-May-17	8:00	Rainy	20208	2.5473	2.6343	6643.84	6667.84	24.00	1.27	1.27	1.27	1834	47
10-May-17	8:00	Cloudy	19921	2.9400	3.0942	6670.89	6694.89	24.00	1.27	1.27	1.27	1828	84
16-May-17	8:00	Cloudy	20444	2.4956	2.5572	6691.90	6715.90	24.00	1.27	1.27	1.27	1830	34
22-May-17	8:00	Cloudy	20552	2.5834	2.6377	6724.90	6748.90	24.00	1.27	1.27	1.27	1829	30
27-May-17	8:00	Fine	20635	2.6438	2.7497	6751.90	6775.90	24.00	1.51	1.51	1.51	2176	49
2-Jun-17	8:00	Cloudy	19836	2.6258	2.7377	6778.91	6802.91	24.00	1.26	1.26	1.26	1811	62
8-Jun-17	8:00	Cloudy	20765	2.5464	2.5973	6805.91	6829.91	24.00	1.16	1.16	1.16	1677	30
14-Jun-17	8:00	Rainy	20846	2.8771	2.9607	6832.91	6856.91	24.00	1.27	1.26	1.26	1820	46
20-Jun-17	8:00	Rainy	20920	2.8421	2.8985	6864.90	6888.90	24.00	1.23	1.23	1.23	1774	32

Report on 1-hour TSP monitoring

Action Level ( $\mu\text{g}/\text{m}^3$ ) - 197

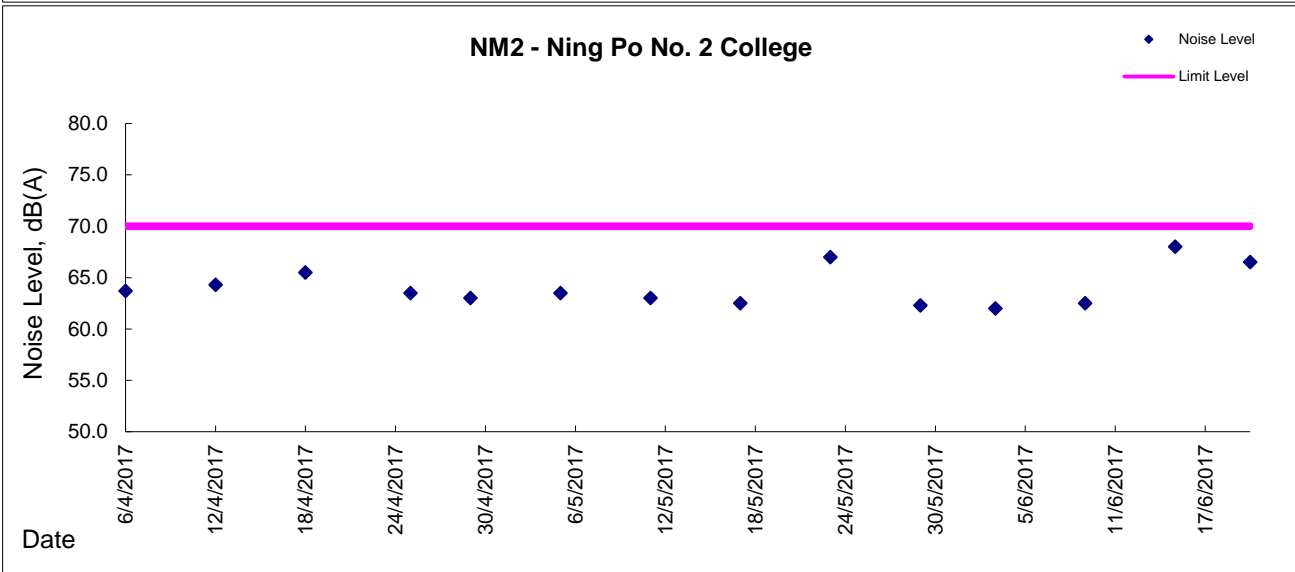
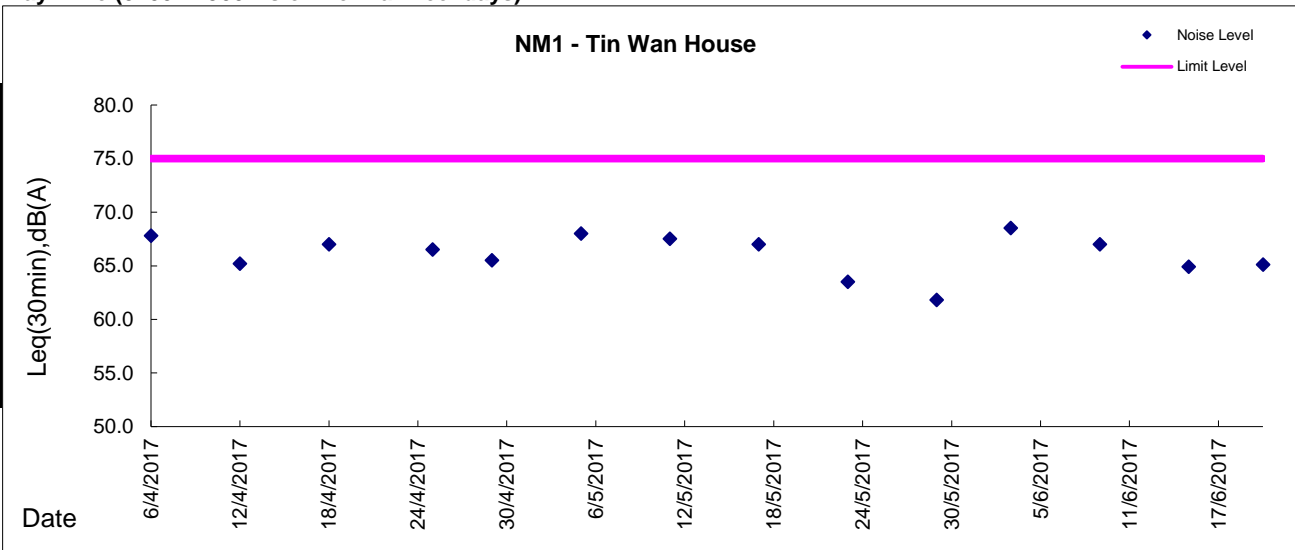
Limit Level ( $\mu\text{g}/\text{m}^3$ ) - 500

Date	Sampling Time	Weather Condition	Filter paper no.	Filter Weight, g		Elapse Time, hr		Sampling Time, hr	Flow Rate, $\text{m}^3/\text{min}$			Total Volume, $\text{m}^3$	TSP Level, $\mu\text{g}/\text{m}^3$
				Initial	Final	Initial	Final		Initial, $Q_{si}$	Final, $Q_{sf}$	Average		
6-Apr-17	8:02	Cloudy	19994	2.8315	2.8455	6532.81	6533.81	1.00	1.28	1.28	1.28	77	183
6-Apr-17	9:05	Cloudy	20003	2.8441	2.8543	6533.81	6534.81	1.00	1.28	1.28	1.28	77	133
6-Apr-17	10:08	Cloudy	19605	2.8577	2.8687	6534.81	6535.81	1.00	1.28	1.28	1.28	77	144
12-Apr-17	8:05	Cloudy	19868	2.6460	2.6522	6559.81	6560.81	1.00	1.28	1.28	1.28	77	81
12-Apr-17	9:10	Cloudy	19847	2.6480	2.6542	6560.81	6561.81	1.00	1.28	1.28	1.28	77	81
12-Apr-17	10:15	Cloudy	19866	2.6324	2.6407	6561.81	6562.81	1.00	1.28	1.28	1.28	77	108
18-Apr-17	10:40	Fine	20134	2.5879	2.5974	6586.81	6587.81	1.00	1.27	1.27	1.27	76	125
18-Apr-17	13:00	Fine	20133	2.5574	2.5637	6587.81	6588.81	1.00	1.27	1.27	1.27	76	83
18-Apr-17	14:02	Fine	20132	2.5613	2.5721	6588.81	6589.81	1.00	1.27	1.27	1.27	76	142
24-Apr-17	10:30	Cloudy	20215	2.5480	2.5553	6613.81	6614.81	1.00	1.28	1.28	1.28	77	95
24-Apr-17	13:00	Cloudy	20214	2.5739	2.5808	6614.81	6615.81	1.00	1.28	1.28	1.28	77	90
24-Apr-17	14:02	Cloudy	20213	2.5449	2.5523	6635.81	6636.81	1.00	1.28	1.28	1.28	77	96
29-Apr-17	8:55	Fine	20211	2.5373	2.5444	6640.84	6641.84	1.00	1.28	1.28	1.28	77	92
29-Apr-17	9:57	Fine	20210	2.5522	2.5591	6641.84	6642.84	1.00	1.28	1.28	1.28	77	90
29-Apr-17	10:59	Fine	20209	2.5610	2.5692	6642.84	6643.84	1.00	1.28	1.28	1.28	77	107
5-May-17	9:00	Fine	20207	2.5481	2.5538	6667.84	6668.84	1.00	1.27	1.27	1.27	76	75
5-May-17	10:02	Fine	20206	2.5138	2.5216	6668.84	6669.84	1.00	1.27	1.27	1.27	76	102
5-May-17	13:00	Fine	20130	2.5735	2.5803	6669.84	6670.84	1.00	1.27	1.27	1.27	76	89
11-May-17	11:00	Cloudy	20446	2.4890	2.4949	6694.90	6695.90	1.00	1.27	1.27	1.27	76	78
11-May-17	13:00	Cloudy	20445	2.5155	2.5192	6695.90	6696.90	1.00	1.27	1.27	1.27	76	49
11-May-17	14:02	Cloudy	20443	2.5119	2.5159	6696.90	6697.90	1.00	1.27	1.27	1.27	76	53
17-May-17	9:55	Cloudy	20555	2.5832	2.5866	6721.90	6722.90	1.00	1.27	1.27	1.27	76	45
17-May-17	10:57	Cloudy	20554	2.5690	2.5714	6722.90	6723.90	1.00	1.27	1.27	1.27	76	31
17-May-17	13:00	Cloudy	20553	2.5667	2.5691	6723.90	6724.90	1.00	1.27	1.27	1.27	76	31
23-May-17	14:50	Cloudy	20628	2.6446	2.6486	6748.90	6749.90	1.00	1.27	1.27	1.27	76	53
23-May-17	15:52	Cloudy	20637	2.6551	2.6590	6749.90	6750.90	1.00	1.27	1.27	1.27	76	51
23-May-17	16:55	Cloudy	20636	2.6453	2.6485	6750.90	6751.90	1.00	1.27	1.27	1.27	76	42
29-May-17	8:30	Fine	19995	2.8292	2.8349	6775.91	6776.91	1.00	1.51	1.51	1.51	91	63
29-May-17	9:33	Fine	19838	2.6348	2.6405	6776.91	6777.91	1.00	1.51	1.51	1.51	91	63
29-May-17	10:36	Fine	19837	2.6209	2.6265	6777.91	6778.91	1.00	1.51	1.51	1.51	91	62
3-Jun-17	9:08	Cloudy	20708	2.5664	2.5721	6802.91	6803.91	1.00	1.16	1.16	1.16	70	82
3-Jun-17	10:10	Cloudy	20707	2.5896	2.5920	6803.91	6804.91	1.00	1.16	1.16	1.16	70	34
3-Jun-17	13:00	Cloudy	20766	2.5625	2.5649	6804.91	6805.91	1.00	1.19	1.19	1.19	72	34
9-Jun-17	9:15	Cloudy	20849	2.8393	2.8409	6829.91	6830.91	1.00	1.26	1.26	1.26	76	21
9-Jun-17	10:17	Cloudy	20848	2.8305	2.8356	6830.91	6831.91	1.00	1.26	1.26	1.26	76	67
9-Jun-17	13:00	Cloudy	20847	2.8484	2.8512	6831.91	6832.91	1.00	1.26	1.26	1.26	76	37
15-Jun-17	13:00	Rainy	20853	2.8597	2.8656	6856.91	6857.91	1.00	1.17	1.17	1.17	70	84
15-Jun-17	14:05	Rainy	20883	2.8488	2.8536	6858.91	6859.91	1.00	1.17	1.17	1.17	70	69
15-Jun-17	15:07	Rainy	20882	2.8325	2.8347	6859.91	6860.91	1.00	1.17	1.17	1.17	70	31
21-Jun-17	13:00	Rainy	20966	2.8406	2.8453	6888.90	6889.90	1.00	1.23	1.23	1.23	74	64
21-Jun-17	14:02	Rainy	20965	2.8527	2.8547	6889.90	6890.90	1.00	1.23	1.23	1.23	74	27
21-Jun-17	15:05	Rainy	20921	2.8624	2.8647	6890.90	6891.90	1.00	1.23	1.23	1.23	74	31



**Graphic Presentation of Noise Monitoring Result**

**Day Time (0700 - 1900hrs on normal weekdays)**





***Appendix 6.1***

***Event Action Plans***





**Event/Action Plan for Construction Noise**

EVENT	ACTION			
	ET	IC(E)	ER	CONTRACTOR
Exceedance for Action Level	<ol style="list-style-type: none"> <li>1. Notify IC(E) and Contractor;</li> <li>2. Carry out investigation;</li> <li>3. Report the results of investigation to IC(E) and Contractor;</li> <li>4. Discuss with Contractor and formulate remedial measures;</li> <li>5. Increase monitoring frequency to check mitigation effectiveness.</li> </ol>	<ol style="list-style-type: none"> <li>1. Review the analysed results submitted by ET;</li> <li>2. Review the proposed remedial measures by the Contractor and advise ER accordingly;</li> <li>3. Supervise the implementation of remedial measures.</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm receipt of notification of failure in writing;</li> <li>2. Notify Contractor;</li> <li>3. Require Contractor to propose remedial measures for the analysed noise problem;</li> <li>4. Ensure remedial measures are properly implemented.</li> </ol>	<ol style="list-style-type: none"> <li>1. Submit noise mitigation proposals to IC(E);</li> <li>2. Implement noise mitigation proposals.</li> </ol>
Exceedance for Limited Level	<ol style="list-style-type: none"> <li>1. Notify IC(E), ER, EPD and Contractor;</li> <li>2. Identify sources;</li> <li>3. Repeat measurements to confirm finding;</li> <li>4. Increase monitoring frequency;</li> <li>5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented;</li> <li>6. Inform IC(E), ER and EPD the causes and actions taken for the exceedances;</li> <li>7. Assess effectiveness of Contractor's remedial actions and keep IC(E), EPD and ER informed of the results;</li> <li>8. If exceedance stops, cease additional monitoring.</li> </ol>	<ol style="list-style-type: none"> <li>1. Discuss amongst ER, ET, and Contractor on the potential remedial actions;</li> <li>2. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise ER accordingly.</li> </ol>	<ol style="list-style-type: none"> <li>1. Confirm receipt of notification of failure in writing;</li> <li>2. Notify Contractor;</li> <li>3. Require Contractor to propose remedial measures for the analysed noise problem;</li> <li>4. Ensure remedial measures are properly implemented;</li> <li>5. If exceedance continues, consider what portion of the work is responsible and instruct Contractor to stop that portion of work until the exceedance is abated.</li> </ol>	<ol style="list-style-type: none"> <li>1. Take immediate action to avoid further exceedance;</li> <li>2. Submit proposals for remedial actions to IC(E) within 3 working days of notification;</li> <li>3. Implement the agreed proposals;</li> <li>4. Resubmit proposals if problem still not under control;</li> <li>5. Stop the relevant portion of works as determined by the ER until the exceedance is abated.</li> </ol>



**Event / Action Plan for Construction Air Quality**

EVENT	ACTION			
	ET	IC(E)	ER	CONTRACTOR
<b>ACTION LEVEL</b>				
1. Exceedance for one sample	<ol style="list-style-type: none"> <li>Identify source;</li> <li>Inform IC(E) and ER;</li> <li>Repeat measurement to confirm finding;</li> <li>Increase monitoring frequency to daily.</li> </ol>	<ol style="list-style-type: none"> <li>Check monitoring data submitted by ET;</li> <li>Check Contractor's working method.</li> </ol>	<ol style="list-style-type: none"> <li>Notify Contractor.</li> </ol>	<ol style="list-style-type: none"> <li>Rectify any unacceptable practice;</li> <li>Amend working methods if appropriate.</li> </ol>
2. Exceedance for two or more consecutive samples	<ol style="list-style-type: none"> <li>Identify source;</li> <li>Inform IC(E) and ER;</li> <li>Repeat measurements to confirm findings;</li> <li>Increase monitoring frequency to daily;</li> <li>Discuss with IC(E) and Contractor for remedial actions required;</li> <li>If exceedance continues, arrange meeting with IC(E) and ER;</li> <li>If exceedance stops, cease additional monitoring.</li> </ol>	<ol style="list-style-type: none"> <li>Check monitoring data submitted by ET;</li> <li>Check Contractor's working method;</li> <li>Discuss with ET and Contractor on possible remedial measures;</li> <li>Advise the ER on the effectiveness of the proposed remedial measures;</li> <li>Supervise Implementation of remedial measures.</li> </ol>	<ol style="list-style-type: none"> <li>Confirm receipt of notification of failure in writing;</li> <li>Notify Contractor;</li> <li>Ensure remedial measures properly implemented.</li> </ol>	<ol style="list-style-type: none"> <li>Submit proposals for remedial actions to IC(E) within 3 working days of notification;</li> <li>Implement the agreed proposals;</li> <li>Amend proposal if appropriate.</li> </ol>
<b>LIMITED LEVEL</b>				
1. Exceedance for one sample	<ol style="list-style-type: none"> <li>Identify source;</li> <li>Inform ER, Contractor and EPD;</li> <li>Repeat measurement to confirm finding;</li> <li>Increase monitoring frequency to daily;</li> <li>Assess effectiveness of Contractor's remedial actions and keep IC(E), EPD and ER informed of the results.</li> </ol>	<ol style="list-style-type: none"> <li>Check monitoring data submitted by ET;</li> <li>Check Contractor's working method;</li> <li>Discuss with ET and Contractor on possible remedial measures;</li> <li>Advise the ER on the effectiveness of the proposed remedial measures;</li> <li>Supervise implementation of remedial measures.</li> </ol>	<ol style="list-style-type: none"> <li>Confirm receipt of notification of failure in writing;</li> <li>Notify Contractor;</li> <li>Ensure remedial measures properly implemented.</li> </ol>	<ol style="list-style-type: none"> <li>Take immediate action to avoid further exceedance;</li> <li>Submit proposals for remedial actions to IEC within 3 working days of notification;</li> <li>Implement the agreed proposals;</li> <li>Amend proposal if appropriate.</li> </ol>
2. Exceedance for two or more consecutive samples	<ol style="list-style-type: none"> <li>Notify IEC, ER, Contractor and EPD;</li> <li>Identify source;</li> <li>Repeat measurement to confirm findings;</li> <li>Increase monitoring frequency to daily;</li> <li>Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented;</li> <li>Arrange meeting with IEC and ER to discuss the remedial actions to be taken;</li> <li>Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results;</li> <li>If exceedance stops, cease additional monitoring.</li> </ol>	<ol style="list-style-type: none"> <li>Discuss amongst ER, ET, and Contractor on the potential remedial actions;</li> <li>Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly;</li> <li>Supervise the implementation of remedial measures.</li> </ol>	<ol style="list-style-type: none"> <li>Confirm receipt of notification of failure in writing;</li> <li>Notify Contractor;</li> <li>In consolidation with the IC(E), agree with the Contractor on the remedial measures to be implemented;</li> <li>Ensure remedial measures properly implemented;</li> <li>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.</li> </ol>	<ol style="list-style-type: none"> <li>Take immediate action to avoid further exceedance;</li> <li>Submit proposals for remedial actions to IC(E) within 3 working days of notification;</li> <li>Implement the agreed proposals;</li> <li>Resubmit proposals if problem still not under control;</li> <li>Stop the relevant portion of works as determined by the ER until the exceedance is abated.</li> </ol>



***Appendix 6.2***

***Summary for Notification of Exceedance\_Air and Noise***





Ref. No.	Date	Time	Location	Construction Noise Level	Unit	Action Level	Limit Level	Follow-up action
N/A	N/A	N/A	N/A	N/A		N/A	N/A	N/A



***Appendix 8.1***

***Complaint Log***



### Environmental Complaints Log

Complaint Log No.	Date of Complaint	Received From and Received By	Location of Complainant	Nature of Complaint	Outcome	Status
140813	13 Aug 2014	Resident complained via hotline by RE	The slope opposite to Tin Wan House, Shun Tin Estate, Kowloon	Noise was emanated from the construction site at the slope opposite to Tin Wan House, Shun Tin Estate, Kowloon at around 1620 hrs on 13 Aug 2014 and requested follow up action by relevant department.	<ol style="list-style-type: none"><li>1) RSS notified ET on 15 Aug 2014</li><li>2) ET confirmed with site staff the major noise generating construction activities undertaken at works area at the slope opposite to Tin Wan House including slope works</li><li>3) After reviewing the noise monitoring data at monitoring stations (NM1 - Tin Wan House and NM2 - Ning Po No.2 College), no limit level exceedances were recorded during routine noise monitoring event on 14 Aug 2014. As similar construction works activities conducted on 13 Aug 2014 was continued across the above monitoring period, the noise emanated from the construction activities under Contract CV/2012/07 was considered to comply with the statutory requirement.</li><li>4) In addition, weekly environmental site inspection was conducted on 12 Aug 2014 at around 10:00. According to the inspection record, no particular observation regarding noise impact was recorded and the mitigation measures including erection of temporary noise barrier was observed in place.</li></ol>	Closed



***Appendix 9.1***

***Construction Programme***



**Master Programme For Contract No. CV/2012/07  
Development at Anderson Road - Footbridge D and Associated Works  
(Rev. 2)**

ID	WBS	Task Name	Duration	Start	Finish	Predecessors	Successors	Total Slack	2013												2014												2015												2016												
									Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	1	<b>Development at Anderson Road - Footbridge D and Associated Works</b>	<b>1119 days</b>	<b>Thu 31/01/13</b>	<b>Wed 30/11/16</b>			<b>0 days</b>																																																	
2	1.1	<b>PRELIMINARY WORK</b>	<b>578 days</b>	<b>Thu 31/01/13</b>	<b>Sun 01/02/15</b>			<b>541 days</b>																																																	
3	1.1.1	Application of XP, Site Access from Highways	140 days	Thu 31/01/13	Wed 31/07/13		88	889 days																																																	
4	1.1.2	Tree Survey	12 days	Mon 18/02/13	Sat 02/03/13		5	0 days																																																	
5	1.1.3	Transplant	30 days	Mon 04/03/13	Thu 11/04/13	4		0 days																																																	
6	1.1.4	Air & noise baseline monitoring	50 days	Mon 18/02/13	Sat 20/04/13		46,47	8 days																																																	
7	1.1.5	Record Survey, Condition Survey and Setting Out	90 days	Thu 31/01/13	Thu 30/05/13			1029 days																																																	
8	1.1.6	Erect Fencing and Hoarding As Directed	48 days	Mon 08/04/13	Tue 04/06/13		16	491 days																																																	
9	1.1.7	Design and material submission	120 days	Thu 31/01/13	Sat 06/07/13		38,79	128 days																																																	
10	1.1.8	Handover of Portion A, B & C1	0 days	Sat 28/09/13	Sat 28/09/13		61	109 days																																																	
11	1.1.9	Handover of Portion E1	0 days	Fri 31/05/13	Fri 31/05/13			1029 days																																																	
12	1.1.10	Handover of Portion E2	0 days	Sun 01/02/15	Sun 01/02/15			541 days																																																	
13	1.2	<b>Section 1</b>	<b>781 days</b>	<b>Mon 08/04/13</b>	<b>Tue 01/12/15</b>			<b>20 days</b>																																																	
14	1.2.1	<b>Lift Tower D-A</b>	<b>475 days</b>	<b>Wed 05/06/13</b>	<b>Wed 14/01/15</b>			<b>491 days</b>																																																	
15	1.2.1.1	Method statement and material submission	30 days	Mon 23/09/13	Tue 29/10/13	18SS-60 days		905 days																																																	
16	1.2.1.2	Excavation for Raft footing	150 days	Wed 05/06/13	Tue 03/12/13	8		17SS	491 days																																																
17	1.2.1.3	Rock Joint Mapping for founding material of raft footing	150 days	Wed 05/06/13	Tue 03/12/13	16SS		18	491 days																																																
18	1.2.1.4	Construct Raft footing	30 days	Wed 04/12/13	Fri 10/01/14	17		19,15SS-60 days	491 days																																																
19	1.2.1.5	Construct RC Lift Tower and Retaining Wall	80 days	Sat 11/01/14	Sat 26/04/14	18		20,41	491 days																																																
20	1.2.1.6	Erect Steelwork for Lift Shaft	70 days	Mon 28/04/14	Tue 22/07/14	19		21,22	491 days																																																
21	1.2.1.7	Installation of Lift	100 days	Wed 23/07/14	Wed 19/11/14	20		22FF+5 days, 23,24FS-60 days, 54	491 days																																																
22	1.2.1.8	M&E Installation	100 days	Tue 29/07/14	Tue 25/11/14	20,21FF+5 days		23,24FS-60 days	550 days																																																
23	1.2.1.9	T & C of M&E Equipment	30 days	Wed 26/11/14	Fri 02/01/15	21,22		24FF+7 days	553 days																																																
24	1.2.1.10	Finishing and Metal Works	100 days	Mon 15/09/14	Wed 14/01/15	21FS-60 days, 22FS-60 days, 23FF+7 days			550 days																																																
25	1.2.2	<b>Lift Tower D-B</b>	<b>480 days</b>	<b>Tue 08/10/13</b>	<b>Mon 01/06/15</b>			<b>439 days</b>																																																	
26	1.2.2.1	Method statement and material submission	30 days	Tue 08/10/13	Tue 12/11/13	27SS-60 days		893 days																																																	
27	1.2.2.2	Excavation for Raft footing	100 days	Wed 18/12/13	Tue 29/04/14	74		28SS,26SS-60 days	379 days																																																
28	1.2.2.3	Rock Joint Mapping for founding material of raft footing	100 days	Wed 18/12/13	Tue 29/04/14	27SS		29	379 days																																																
29	1.2.2.4	Construct Raft footing	30 days	Wed 30/04/14	Thu 05/06/14	28		30	379 days																																																
30	1.2.2.5	Construct RC Lift Tower and Retaining Wall	80 days	Fri 06/06/14	Wed 10/09/14	29		31,41	379 days																																																
31	1.2.2.6	Erect Steelwork for Lift Shaft	70 days	Thu 11/09/14	Wed 03/12/14	30		32,33	379 days																																																
32	1.2.2.7	Installation of Lift	100 days	Thu 04/12/14	Mon 13/04/15	31		33FF,34,35FS-60 days, 54	379 days																																																

Date: Mon 10/06/13  
Prepared By: T.L. Lo



Assume Contract Start On 31-Jan-2013  
and Finish On 30-Nov-2016 (1399 days)  
Duration as shown by week day





