## MTR Corporation Limited

# Shatin to Central Link - Tai Wai to Hung Hom Section and Mong Kok East to Hung Hom Section

Works Contracts 1103, 1106 and 1111

Baseline Environmental Monitoring – Alternative Noise and

Dust Monitoring Location Proposal

(September 2012)

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Verified by:	Tom Chapman
Position: Inc	dependent Environmental Checker
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Certifie	d by:	Richard	Kwan
Position	ı: <u>Enviror</u>	nmental Tea	m Leader
Date:	13/9/	<b>′2012</b>	

### **MTR Corporation Limited**

Consultancy Agreement No. C11033

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Works Contracts 1103, 1106 and 1111
Baseline Environmental Monitoring –
Alternative Noise and Dust Monitoring
Location Proposal

September 2012

	Name	Signature
Prepared & Checked:	Angela Tong	Arpolin
Reviewed & Approved:	Josh Lam	an Angel
	· · · · ·	<u> </u>

Version:	-	Date:	13 September 2012

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AECOM Asia Co. Ltd.

8/F, Grand Central Plaza, Tower 2, 138 Shatin Rural Committee Road, Shatin, NT, Hong Kong Tel: (852) 3922 9000 Fax: (852) 3922 9797 www.aecom.com

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#### 1. INTRODUCTION

#### 1.1 Background

- 1.1.1 The Shatin to Central Link (SCL) is a 17km extension of the existing Ma On Shan Line (MOL) and East Rail Line (EAL) comprising (i) The East-West Corridor which extends the MOL from Tai Wai to Hung Hom via East Kowloon to connect with the West Rail Line (WRL) at Hung Hom Station (HUH) and Stabling Sidings at Hung Hom Freight Yard (HHS); and (ii) The North-South Corridor which is an extension of the EAL at Hung Hom across the harbour to Admiralty Station (ADM).
- 1.1.2 EIA Reports for SCL Tai Wai to Hung Hom Section [SCL (TAW-HUH)], SCL Stabling Sidings at Hung Hom Freight Yard [SCL (HHS)] and SCL Mong Kok East to Hung Hom Section [SCL (MKK-HUH)] were approved on 17 February 2012 under the *Environmental Impact Assessment Ordinance* (EIAO). Following the approval of the EIA Reports, two Environmental Permits (EPs) were granted on 22 March 2012, one covers SCL (TAW-HUH) and SCL (HHS) (EP No: EP-438/2012) and the other covers SCL (MKK-HUH) and SCL (HHS) (EP No: EP-437/2012), for their construction and operation. Variation of Environmental Permit (VEP) was subsequently applied for EP-438/2012 and the latest Environmental Permit (EP No: EP-438/2012/A) was issued by Director of Environmental Protection (DEP) on 12 July 2012.
- 1.1.3 Prior to the commencement of construction works, baseline environmental monitoring should be conducted to review the baseline conditions and establish Action and Limit Levels, according to the approved EM& A Manuals.
- 1.1.4 Table 1.1 presents the tentative construction programme of Works Contracts 1103, 1106 and 1111, and the programme of baseline monitoring at the designated monitoring stations sited in the vicinity of these works areas.

Table 1.1 Tentative Programme of Works Contracts and Baseline Monitoring

Works Contract	Contract Title	Works Covered in Environmental Permit No.	Tentative Contract Award Date	Baseline Monitoring Commencement Date
1103	Hin Keng to Diamond Hill Tunnels	EP-438/2012/A	October 2012	August 2012
1106	Reprovisioning of Heritage Structures & Archaeological Surveys, Lung Cheung Road Diversion, DIH Station	EP-438/2012/A	December 2012	September 2012
1111	Hung Hom North Approach Tunnels	EP-437/2012 & EP-438/2012/A	December 2012	October 2012

#### 1.2 Purpose of this Proposal

1.2.1 According to the approved EM&A Manuals for SCL (TAW-HUH), SCL (HHS) and SCL (MKK-HUH), alternative baseline noise and air quality monitoring locations shall be agreed with the Independent Environmental Checker (IEC) and Environmental Protection Department (EPD). This Proposal presents the reasons for proposing alternative noise and air quality monitoring locations and the proposed alternative locations.

#### 2. BASELINE NOISE AND DUST MONITORING STATIONS

#### 2.1 Monitoring Stations

2.1.1 Noise and dust monitoring should be conducted at the designated monitoring stations during the construction of Works Contract 1103, 1106 and 1111. As the Stabling Sidings at Hung Hom Freight Yard is the selected option for SCL, the associated environmental impacts and the EM&A requirements of SCL (TAW-HUH) and SCL (MKK-HUH) at HUH, KAT and DIH were superseded by the approved SCL (HHS) EIA Report and SCL (HHS) EM&A Manual. Table 2.1 and 2.2 shows the designated noise and dust monitoring stations identified in EM&A Manuals and the corresponding EP respectively.

Table 2.1 Baseline Noise Monitoring Stations

Environmental Permit No.	Noise Monitoring Station ID	NSR ID in EIA	Location
EP-438/2012/A	NMS-CA-1 <sup>(1)</sup>	TAW-6-7 <sup>(1)</sup>	C.U.H.K.A.A. Thomas Cheung School
EP-438/2012/A	NMS-CA-2 <sup>(1)</sup>	DIH-22-1 <sup>(1)</sup>	Price Memorial Catholic Primary School
EP-438/2012/A	NMS-CA-3 <sup>(1)</sup> / NMS-CA-4 <sup>(2)</sup>	DIH-9-1 <sup>(1)(2)</sup>	Shek On House
EP-438/2012/A	NMS-CA-4 <sup>(1)</sup> / NMS-CA-3 <sup>(2)</sup>	DIH-14-5 <sup>(1)(2)</sup>	Rhythm Garden, Block 1 <sup>(4)</sup>
EP-438/2012/A	NMS-CA-5 <sup>(1)</sup> / NMS-CA-2 <sup>(2)</sup>	DIH-14-4 <sup>(1)(2)</sup>	Canossa Primary School (San Po Kong)
EP-438/2012/A & EP-437/2012	NMS-CA-11 <sup>(1)</sup> / NMS-CA-1 <sup>(2)</sup> / NM2 <sup>(3)</sup>	HUH-1-3 <sup>(1)(2)</sup> / HH2 <sup>(3)</sup>	Wing Fung Building
EP-437/2012	NM1 <sup>(3)</sup>	OM4a	Carmel Secondary School (South Block)

#### \Remark:

- (1) Station / NSR ID as identified in approved EM&A Manual / EIA Report for SCL(TAW-HUH).
- (2) Station / NSR ID as identified in approved EM&A Manual / EIA Report for SCL(HHS).
- (3) Station / NSR ID as identified in approved EM&A Manual / EIA Report for SCL (MKK-HUH).
- (4) As shown in Figure 8.2.3 of approved EM&A Manual for SCL(HHS), the noise monitoring station is proposed to be set at north-eastern facade.

Table 2.2 Baseline Dust Monitoring Stations

Environmental Permit	Dust Monitoring Station ID	ASR ID in EIA	Location
EP-438/2012/A	DMS-1 <sup>(1)</sup>	TAW-6-7 <sup>(1)</sup>	C.U.H.K.A.A. Thomas Cheung School
EP-438/2012/A	DMS-2 <sup>(1)</sup>	DIH-22-1 <sup>(1)</sup>	Price Memorial Catholic Primary School
EP-438/2012/A	DMS-3 <sup>(1)</sup> / DMS-4 <sup>(2)</sup>	DIH-9-1 <sup>(1)(2)</sup>	Shek On House
EP-438/2012/A	DMS-4 <sup>(1)</sup> / DMS-3 <sup>(2)</sup>	DIH-14-5 <sup>(1)(2)</sup>	Rhythm Garden, Block 1
EP-438/2012/A & EP-437/2012	DMS-11 <sup>(1)</sup> / DMS-2 <sup>(2)</sup> / AM1 <sup>(3)</sup>	HUH-1-3 <sup>(1)(2)</sup> / HHA2 <sup>(3)</sup>	Wing Fung Building
EP-438/2012/A & EP-437/2012	DMS-12 <sup>(1)</sup> / DMS-1 <sup>(2)</sup> / AM2 <sup>(3)</sup>	HUH-10-1 <sup>(2)</sup> / HHA9 <sup>(3)</sup>	Harbourfront Horizon <sup>(4)</sup>

#### Remark:

- (1) Station / ASR ID as identified in approved EM&A Manual / EIA Report for SCL(TAW-HUH).
- (2) Station / ASR ID as identified in approved EM&A Manual / EIA Report for SCL(HHS).
- (3) Station / ASR ID as identified in approved EM&A Manual / EIA Report for SCL (MKK-HUH).
- (4) The set up of the dust monitoring station at Harbourfront Horizon and the monitoring would be carried out by KTE project. Upon termination of their EM&A programme, the monitoring works would be taken up by SCL(MKK-HUH).
- 2.1.2 Site visits were conducted at the designated monitoring locations in July and August 2012 to obtain access for monitoring. Access to Wing Fung Building, Shek On House and Canossa Primary School (San Po Kong) was however not obtained for monitoring (Appendix 2.1) and

thus alternative monitoring locations are proposed to monitor and check the construction noise and dust impact from the works areas in Diamond Hill and Hung Hom.

#### 2.2 Alternative Monitoring Locations

- 2.2.1 According to the approved EM&A Manuals, alternative noise monitoring location should be chosen based on the following criteria:
  - at locations close to the major site activities which are likely to have noise impacts;
  - close to the most affected existing noise sensitive receivers; and
  - for monitoring locations located in the vicinity of the sensitive receivers, care should be taken to cause minimal disturbance to the occupants during monitoring.
- 2.2.2 Also, alternative dust monitoring location should be chosen based on the following criteria as stated in the approved EM&A Manuals:
  - at the site boundary or such locations close to the major dust emission source;
  - · be close to the sensitive receptors; and
  - take into account the prevailing meteorological conditions.
- 2.2.3 Based on the above selection criteria, further site visits were conducted to identify feasible alternative locations. Site visits revealed that No. 234 238 Chatham Road North (Figure C1103/C/SCL/ACM/M62/010), Hong Kong Sheng Kung Hui Nursing Home and Rhythm Garden Block 1 (Figure C1103/C/SCL/ACM/M62/011) satisfy the selection criteria as discussed in Sections 2.2.1 and 2.2.2. Table 2.3 presents the alternative monitoring locations and the reason of selection.

Table 2.3 Alternative Baseline Noise and Dust Monitoring Stations

Monitoring Station ID	Original Monitoring Location in EM&A Manual	Alternative Monitoring Location	Reason
NMS-CA-11 <sup>(1)</sup> / NMS-CA-1 <sup>(2)</sup> / NM2 <sup>(3)</sup> and DMS-11 <sup>(1)</sup> / DMS-2 <sup>(2)</sup> / AM1 <sup>(3)</sup>	Wing Fung Building	No. 234 - 238 Chatham Road North <sup>(4)</sup>	Site visits have been conducted at the sensitive receivers along Chatham Road North to identify suitable alternative monitoring location. No. 226 – 232 Chatham Road North (漆咸大廈), which is right next to Wing Fung Building, rejected to grant access for monitoring (Appendix 2.1). No. 234 - 238 Chatham Road North, which is the second closest sensitive receiver, is considered suitable for setting up noise and dust monitoring stations. Access to this building for monitoring has also been obtained.  Considering that No. 234 - 238 Chatham Road North is located close to Wing Fung Building and would also be affected by future SCL works areas at Chatham Road North and Hung Hom, it is a suitable alternative noise and dust monitoring location for Wing Fung Building.
NMS-CA-3 <sup>(1)</sup> / NMS-CA-4 <sup>(2)</sup> and DMS-3 <sup>(1)</sup> / DMS-4 <sup>(2)</sup>	Shek On House	Hong Kong Sheng Kung Hui Nursing Home	This Nursing Home is located next to Shek On House and would also be affected by the construction works in Diamond Hill. Site findings also revealed that 6/F level is suitable for noise and dust monitoring. Access for monitoring has been obtained.

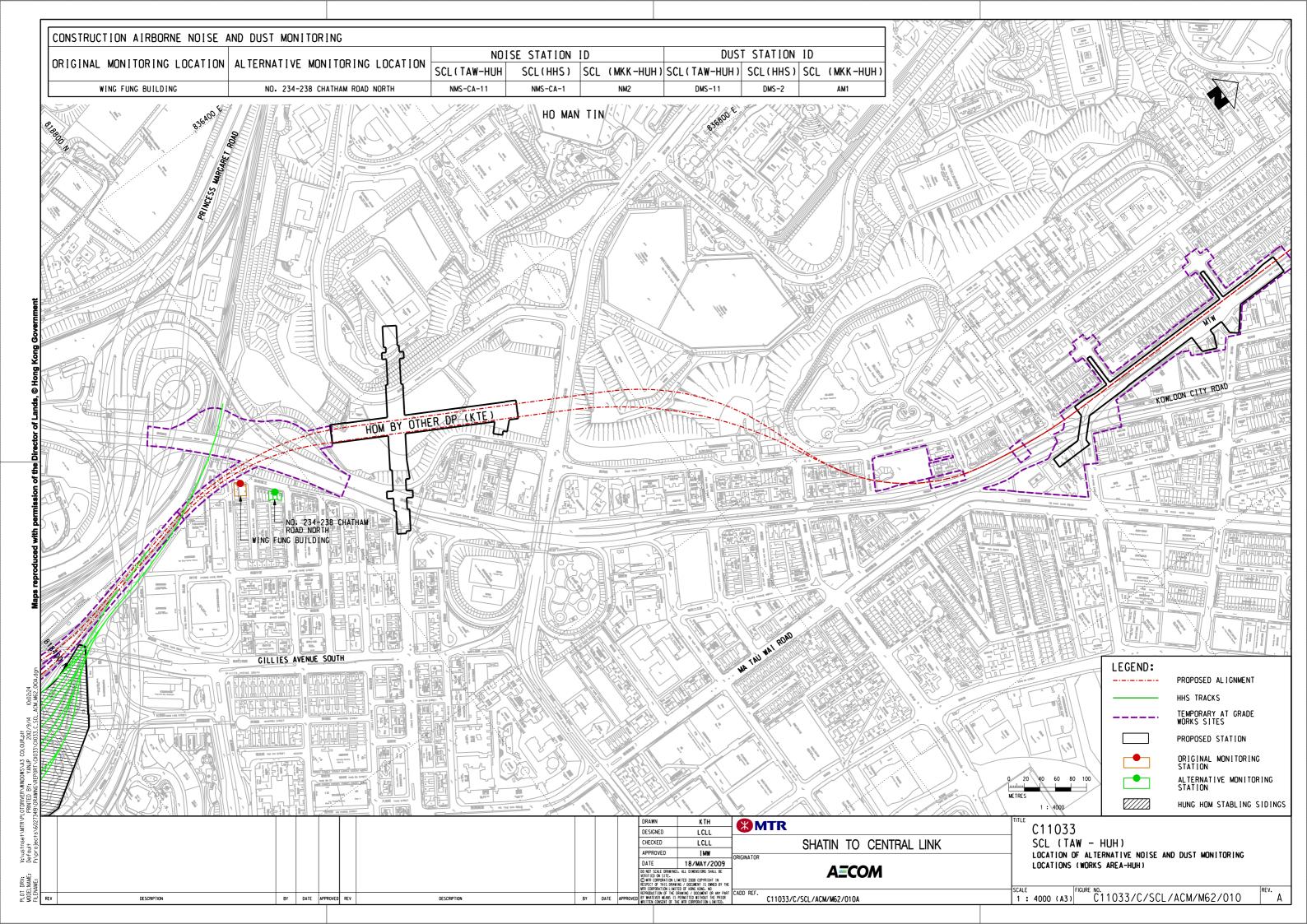
Monitoring Station ID	Original Monitoring Location in EM&A Manual	Alternative Monitoring Location	Reason
NMS-CA-5 <sup>(1)</sup> / NMS-CA-2 <sup>(2)</sup>	Canossa Primary School (San Po Kong)	Rhythm Garden, Block 1 (northern façade)	Given that industrial buildings are located immediate north-west of the school and the nearest NSR is Rhythm Garden, Rhythm Garden is most suitable alternative monitoring location. Considering the northern façade of the school would be affected by the construction works in Diamond Hill, the monitoring station is proposed to be set at northern façade of Rhythm Garden, Block 1 for representing the impact noise level at the school.

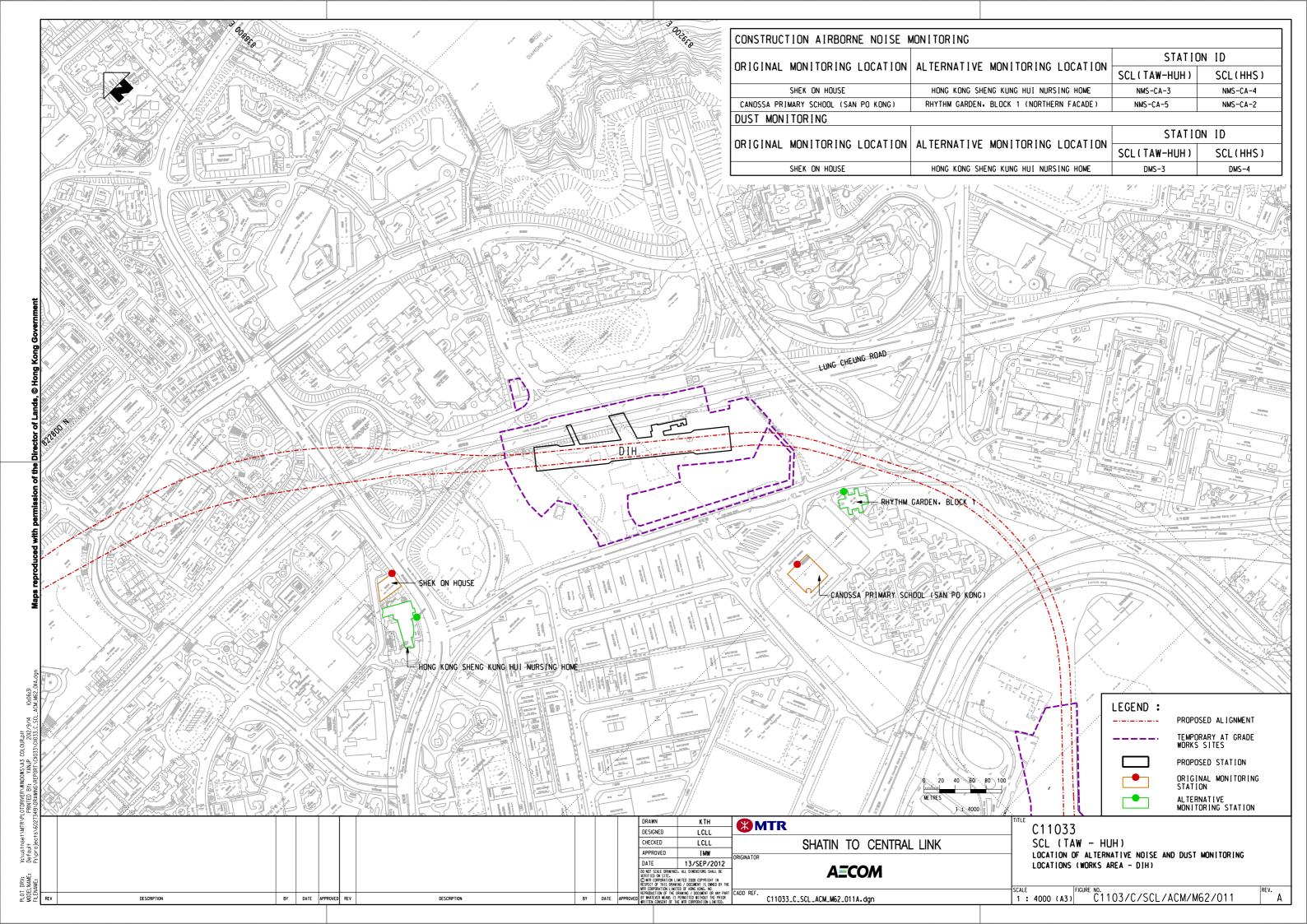
#### Remark:

- (1) Station / ASR ID / NSR ID as identified in approved EM&A Manual / EIA Report for SCL(TAW-HUH).
- (2) Station / ASR ID / NSR ID as identified in approved EM&A Manual / EIA Report for SCL(HHS).
- (3) Station / ASR ID / NSR ID as identified in approved EM&A Manual / EIA Report for SCL (MKK-HUH).
- (4) Although the construction works of Kwun Tong Line Extension (KTE) is being carried out in the vicinity of Chatham Road North and No. 238 Chatham Road North is currently a dust impact monitoring station under KTE EM&A programme, a new set of baseline monitoring data will be collected at this location to present the existing noise and dust background and to establish the Action and Limit Levels accordingly for SCL project.

#### 3. CONCLUSION

3.1.1 Based on the selection criteria and site observations, No. 234 - 238 Chatham Road North, Hong Kong Sheng Kung Hui Nursing Home and Block 1, Rhythm Garden are considered as suitable alternative monitoring locations for Wing Fung Building, Shek On House and Canossa Primary School (San Po Kong) respectively.





### Appendix 2.1

**Reply Slips from Sensitive Receivers** 

## 回條

艾奕康有限公司 (傳真號碼:: 3922-9797 / 3922-9751)

香港沙田鄉事會路138號新城市中央廣場第2座8樓

Acky Yau (STO 15/F) 啓

本人特此提供 \* 許可予香港鐵路有限公司及艾奕康有限公司, 在本樓宇進行環境監察活動。 若大廈能夠提供是次協助,本大廈將收取 646 港元作是次基線評估之電費支出。

\* 請刪去不適用者

聯絡人:	樓宇名稱:
	荡成太废
聯絡電話及傳真號碼:	電郵地址:
簽署:	日期: · VM /2512

檔案編號 60050763/C/twwf206292

# 回條



艾奕康有限公司 (傳真號碼:: 3922-9797)

香港沙田鄉事會路138號新城市中央廣場第2座8樓

#### Flora Tse 啓

本人特此 <u>提供/拒絕提供\*</u> 許可予香港鐵路有限公司及艾奕康有限公司,在本樓宇進行環境監察活動。 若大廈能夠提供是次協助,本大廈將收取 646 港元作是次基線評估之電費支出。

\*請問去不適用者

聯絡人:	樓宇名稱:
本立仁投版	為安楼
聯絡電話及傳真號碼:	電郵地址:
23×1265,23-953-200	
簽署:	日期:
Mr.	2 0 JUL 2012

檔案編號:

60050763/C/twwf207183

- 附件3-

## 回條

艾奕康有限公司 (傅真號碼.: 3922-9797)

香港沙田鄉事會路138號新城市中央廣場第2座8樓

Flora Tse 啓

\* 涵棚去不適用者

Middle As and the second secon	
聯絡人:	學校名稱:
蘇偉欽	喜認撒小學(新滴筒).
聯絡電話及傳真號碼:	電郵地址:
2323.8883 FAM 23236665	can-cpsspk@hkedcity.net
簽署:	<b>四期</b> :
2	23-7-2012

档案編號 60050763/C/twwf207186