

# MATERIALAB CONSULTANTS LIMITED

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## Proposal for Relocation of Monitoring Location KTD2b

**March 2020**

**Client** : Civil Engineering and Development  
Department, HKSAR

**Contract No.** : KLN/2015/07

**Contract Name** : Environmental Monitoring Works for  
Contract KL/2014/03 – Kai Tak Development  
– Stage 3 Infrastructure Works for Developments  
at the Southern Part of the Former Runway

**Report No.** : 0405/15/ED/1238A

EP-337/2009 New Distributor Roads Serving the Planned Kai Tak  
Development Area

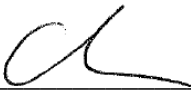
EP-339/2009/A Decommissioning of the Remaining Parts (Ex-GFS  
Building, Radar Station and Hong Kong Aviation Club)  
of the former Kai Tak Airport

EP-451/2013 Trunk Road T2

**Prepared by** : Toby K. H. Wan

**Reviewed by** : Cyrus C. Y. Lai

**Certified by** :

  
\_\_\_\_\_  
Colin K. L. Yung  
Environmental Team Leader  
MaterialLab Consultants Limited

Ref.: CEDKTDS3EM00\_0\_0466L.20

24 March 2020

Hyder-Meinhardt Joint Venture  
17/F, Two Harbour Square,  
180 Wai Yip Street, Kwun Tong  
Kowloon, Hong Kong

By Post and Email

Attention: Mr. Pat Lam

Dear Mr. Lam,

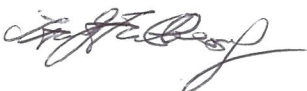
**Re: Contract No. KL/2014/03 – Kai Tak Development – Stage 3 Infrastructure Works for Developments at the Southern Part of the Former Runway Proposal for Relocation of Monitoring Location KTD2b**

Reference is made to the Environmental Team's submission of the captioned proposal we received by e-mail on 23 March 2020.

Please be informed that we have no adverse comment on the proposed relocation of monitoring location KTD2b. We hereby verify the captioned submission according to Condition 3.1 of EP-451/2013.

Thank you for your attention. Please do not hesitate to contact the undersigned should you have any queries.

Yours sincerely,  
For and on behalf of  
Ramboll Hong Kong Limited



F. C. Tsang  
Independent Environmental Checker

c.c. CEDD  
Fugro  
CRBC

Attn.: Mr. Simon Kwok  
Attn.: Mr. Colin K. L. Yung  
Attn.: Mr. Dickey Yau

Fax: 2739 0076  
By Email  
Fax: 2283 1689

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## 1. Introduction

### 1.1 Background

The Kai Tak Development is located in the south-eastern part of Kowloon Peninsula of the HKSAR, comprising the apron and runway areas of the former Kai Tak Airport and existing waterfront areas at To Kwa Wan, Ma Tau Kok, Kowloon Bay, Kwun Tong and Cha Kwo Ling.

Contract No. KL/2014/03 is the works package to construct an approximately 420m long supporting underground structure (SUS) underneath Shing Cheong Road and Cheung Yip Street. The Works to be executed under this Contract shall include but not be limited to the following main items:

#### **EP-451/2013 – Trunk Road T2**

- (i) Construction of approximately 420m long supporting underground structure (SUS) including diaphragm walls, barrettes, piled foundation, top and bottom slabs, end wall and adits underneath Shing Cheong Road and Cheung Yip Street;

#### **EP-337/2009 – New Distributor Roads Serving the Planned Kai Tak Development**

- (ii) Widening and re-alignment of Cheung Yip Street of approximately 330m long and associated footpaths;
- (iii) Demolition, reconstruction and widening of Shing Cheong Road of approximately 410m long and associated footpaths;
- (iv) Construction of drainage outfall and modification of existing seawall;
- (v) Construction of ancillary works including surface drainage, sewerage, water, fire fighting, street lighting, street furniture, road marking, road signage, utilities and services, irrigation and landscape works.

#### **EP-339/2009/A – Decommissioning of the Remaining Parts (Ex-GFS Building, Radar Station and Hong Kong Aviation Club) of the former Kai Tak Airport**

- (vi) Demolition of RADAR Tower and guard house;

#### **Other works not covered by any EP**

- (vii) Construction of two subways between Phase II of New Acute Hospital (Site A) and Hong Kong Children's Hospital (Site C), and between Phase I of New Acute Hospital (Site B) and Site C;
- (viii) Construction of District Cooling System (DCS) along Cheung Yip Street and Shing Cheong Road

The project proponent was the Civil Engineering and Development Department, HKSAR (CEDD). Hyder Meinhardt Joint Venture (HMJV) was commissioned by CEDD as the Engineer for the Project. China Road and Bridge Corporation (Hong Kong) (CRBC) was appointed as the main contractor for the construction works under the contract KL/2014/03. Materialab Consultants Limited (MCL) was appointed as the Environmental Team (ET) by CEDD to implement the EM&A programme for the Project.

### 1.2 Purpose of this Proposal

As informed by Bouygues Travaux Publics (BTP) on 7 March 2020 via email (as shown in **Appendix A**), the existing monitoring location KTD 2b is located within the works area of Contract No. ED/2018/04 (Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron) and will be affected by the construction works. With reference to the site layout plan of Contract No. ED/2018/04 (**Figure 1**), an alternative monitoring location of KTD 2b

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for air quality and noise monitoring is proposed under Condition 3.1 of EP-451/2013 and Section 3.3.1.2 of the approved EM&A Manual for Trunk Road T2 (AEIAR-174/2013).



## 2. Monitoring Locations

### 2.1 Existing Air Quality and Noise Monitoring Location, KTD2b

According to the approved alternative air quality and noise monitoring locations for Trunk Road T2 (EPD reference: EP2/K19/A/21 Pt. 5), the original monitoring location KTD 2 was replaced by the alternative monitoring location KTD 2a.

Due to the handover of part of the site to the Hospital Authority in mid-July 2018 for construction of the New Acute Hospital, the proposal for relocation of monitoring location KTD 2a to KTD 2b for air quality and noise monitoring was approved by EPD on 25 July 2018 (EPD reference: () in EP2/K19/A/21 pt. 6). The location of existing monitoring location KTD 2b is shown in Figure 2.

### 2.2 Alternative Air Quality and Noise Monitoring Location, KTD2c

According to the Section 2.2.19 of EM&A Manual, AEIAR-130/2009 and Section 3.3.1.2 of EM&A Manual, AEIAR-174/2013, when alternative monitoring locations are proposed, the following criteria, as far as practicable, shall be followed:

#### For Air Quality Monitoring

- (i) At the site boundary or such locations close to the major dust emission source;
- (ii) Close to the ASRs;
- (iii) Proper position/sitting and orientation of the monitoring equipment; and
- (iv) Take into account the prevailing meteorological conditions.

#### For Noise Monitoring

- (i) The monitoring locations close to the major construction works activities that are likely to have noise impacts;
- (ii) The monitoring close to the NSRs as defined in the EIAO-TM; and
- (iii) The assurance of the minimal disturbance and working under a safe condition to the occupants during the monitoring in the vicinity of the NSRs.

In view of the above selection criteria, the proposed alternative monitoring location and reasons of selection are listed in **Table 2.1**.



**Table 2.1** Alternative Air Quality and Noise Monitoring Locations

Original Monitoring Location in EM&A Manual, AEIAR-174/2013	Baseline Monitoring Location	Existing Monitoring Location	Alternative Monitoring Location
KTD2	KTD2a	KTD2b <sup>(1)</sup>	KTD2c <sup>(2)</sup>
G/IC Zone next to Kwun Tong Bypass(Future Hospital at Site 3C1)	G/IC Zone next to Kwun Tong Bypass(Future Hospital at Site 3C1)	G/IC Zone next to Kwun Tong Bypass (Next to the site of the New Acute Hospital)	G/IC Zone next to Kwun Tong Bypass (Next to the the Kowloon Bay Sewage Interception Station)
Reason			
1. The existing monitoring location is located within the works area of Contract No. ED/2018/04 (Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron) and the works at the existing monitoring locations would generate non-project related interference to the monitoring. 2. The alternative monitoring location situates next to the Kowloon Bay Sewage Interception Station which is the nearest location and will not hinder by the works, thus, it is a suitable monitoring location.			

Remark:

- (1) The proposal for relocation of monitoring location KTD 2a to KTD 2b for air quality and noise monitoring was approved by EPD on 25 July 2018 (EPD reference: () in EP2/K19/A/21 pt. 6).
- (2) Free-field noise measurement was conducted at KTD2b and will be conducted at KTD2c.

The proposed alternative monitoring locations satisfy the selection criteria as stated above.

The existing monitoring location (KTD2b) and the proposed alternative monitoring location (KTD2c) are indicated in **Figure 2**, photo illustrations of the monitoring locations are shown in **Appendix B**.

2.3 The Action and Limit Level of KTD2b

By considering the proximity (approximately 20 meters) of the location between existing monitoring location (KTD2b) and the proposed alternative monitoring location (KTD2c), and also the same road traffic rate along the Kwun Tong Bypass which contributes one of the major background dust sources and noise sources, the Action and Limit Level of KTD2b will therefore be applicable to KTD2c. The Action Level and Limit Level of KTD2b and KTD2c is shown in **Table 2.2**

**Table 2.2** The Action Level and Limit Level of KTD2b and KTD2c

Parameter	Monitoring Station	Action Level	Limit Level
24-hr TSP in $\mu\text{g}/\text{m}^3$	KTD2b	157 $\mu\text{g}/\text{m}^3$	260 $\mu\text{g}/\text{m}^3$
	KTD2c		
Leq (30min) in dB(A) in 0700-1900 hrs on normal weekdays	KTD2b	When one documented complaint is received	75 dB(A)
	KTD2c		

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### 3. Conclusion

Based on the selection criteria and site observations, the proposed alternative monitoring location (KTD2c) is considered as a suitable monitoring location for air quality and noise monitoring.

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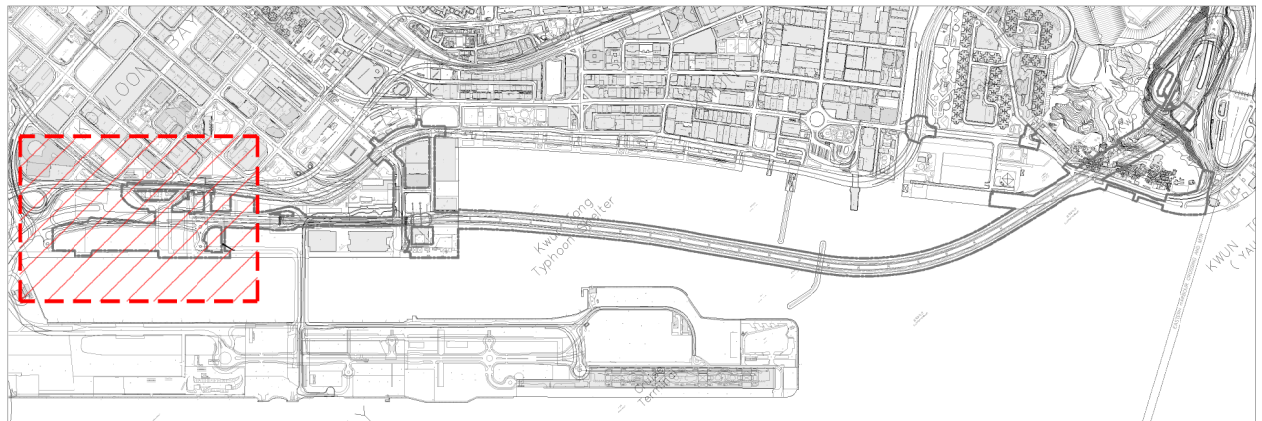
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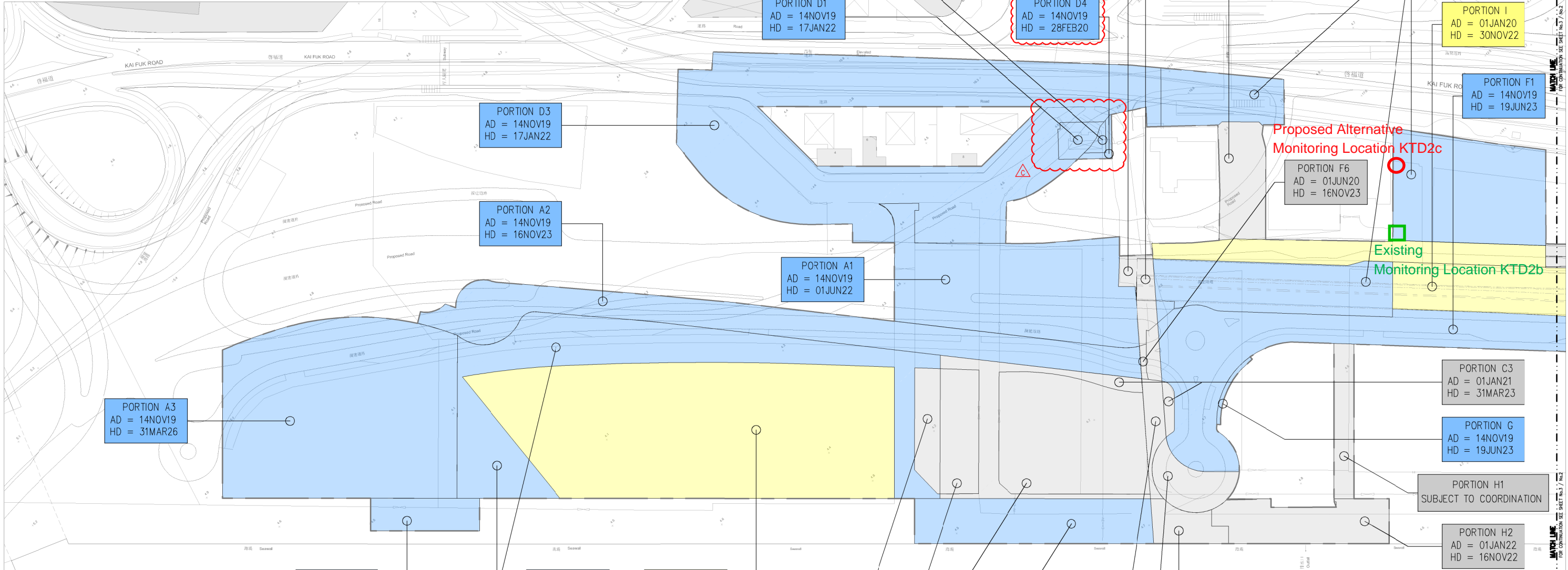
## Figure 1

Layout of Contract No. ED/2018/04  
(Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron)



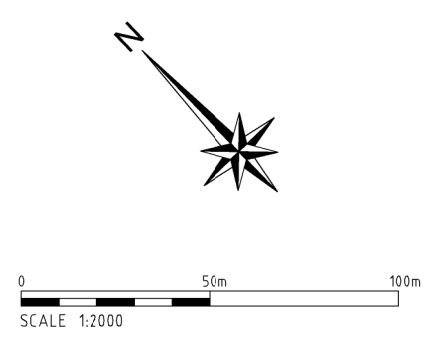


KEY PLAN - HKT2 OVERALL PROJECT  
SCALE - 1:25000



**LEGEND**  
 AD <=> ACCESS DATE  
 HD <=> HANDOVER DATE  
 [Blue Box] - DAY 1 ACCESS - 14/NOV/2019 (30/SEP/2019)  
 [Yellow Box] - JANUARY 2020  
 [Red Box] - MARCH & APRIL 2020  
 [Grey Box] - AFTER APRIL 2020

**NOTES**  
 PROJECT BOUNDARY & SITE PORTIONS AS PER DRAWINGS Nos. EB000560/POS/7001 to EB/000560/POS/7007 FROM ADDEDUM No. 5 - VOL7 PART 1 OF THE TENDER DOCUMENTS.



Project: Contract No. ED/2018/04 Trunk Road T2 and Infrastructure Works for Developments at the Former South Apron						
Drawing Title: PROJECT WIDE - GENERAL HKT2 SITE PORTIONS - ACCESS & H/O DATES KAI TAK (OFFICE & SUPPORT AREA)						
Rev.	Date	Drawn	Design	Verif.	Description	Approved
C	14/JAN/20	AEm	AEm	ECa	F3 dates revised & portion D4 added	ASc
Drawing no.: HKT2-BTP-MDWG-ALL-GEN-000001-C-IFA						Revision: C
Scale: 1:2000 @ A3						Sheet: 02/05
CADD Ref.: ALL-GEN-000001-C-IFA						
Issue Status: ISSUE FOR APPROVAL (IFA)						

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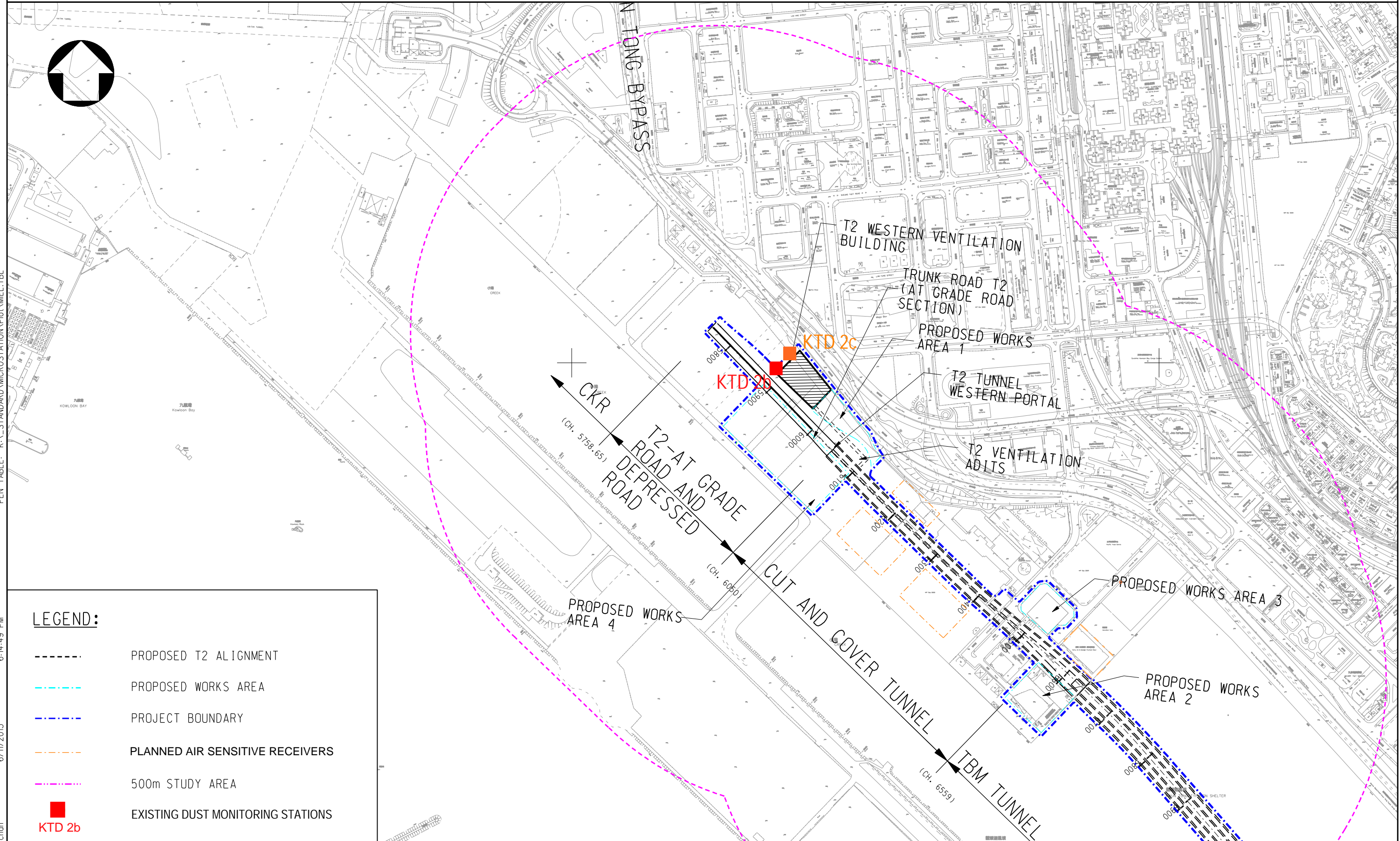
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Figure 2

Existing and the Proposed Alternative Air Quality and Noise Monitoring Locations



**LEGEND:**

- - - - PROPOSED T2 ALIGNMENT
- - - - PROPOSED WORKS AREA
- - - - PROJECT BOUNDARY
- - - - PLANNED AIR SENSITIVE RECEIVERS
- - - - 500m STUDY AREA
- EXISTING DUST MONITORING STATIONS

- PROPOSED ALTERNATIVE DUST MONITORING STATIONS

Drawing title

IDENTIFIED DUST MONITORING STATIONS AT SOUTH APRON OF FORMER KAI TAK AIRPORT

Original Size

**A3**

Scale 1 : 6000

Date 30/01/2012

File name

© Copyright reserved

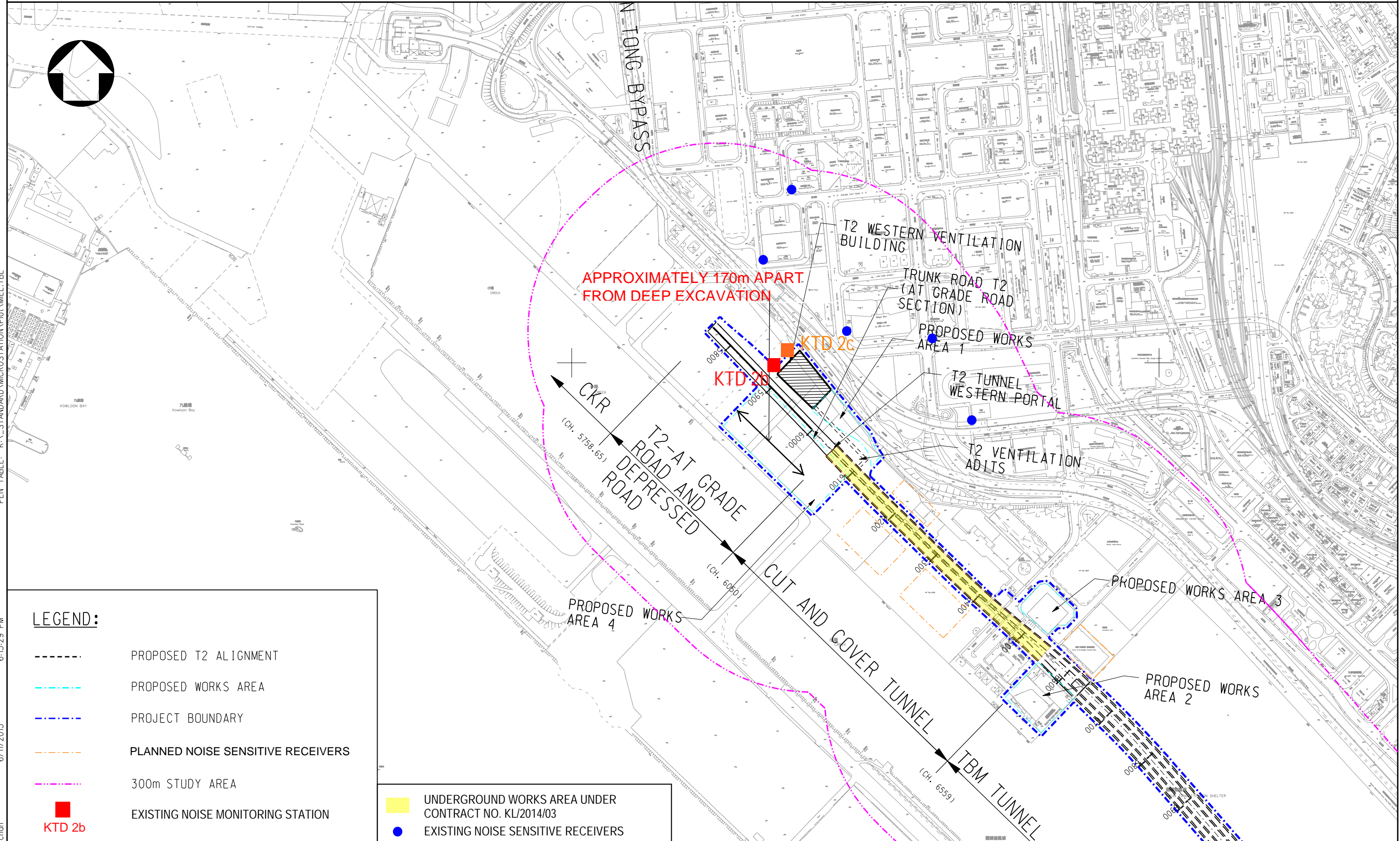
Drawing No.

**FIGURE 2.1a(revised)**

Rev.

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Rev.	Description	Date



**LEGEND:**

- - - - - PROPOSED T2 ALIGNMENT
- - - - - PROPOSED WORKS AREA
- - - - - PROJECT BOUNDARY
- - - - - PLANNED NOISE SENSITIVE RECEIVERS
- - - - - 300m STUDY AREA
- EXISTING NOISE MONITORING STATION  
**KTD 2a**
- UNDERGROUND WORKS AREA UNDER CONTRACT NO. KL/2014/03
- EXISTING NOISE SENSITIVE RECEIVERS
- PROPOSED ALTERNATIVE NOISE MONITORING STATION  
**KTD 2c**

Drawing title

IDENTIFIED NOISE MONITORING STATIONS AT SOUTH APRON OF FORMER KAI TAK AIRPORT

Original Size	A3	Scale	1 : 6000	Date	30/01/2012
© Copyright reserved		File name			
Rev.	Description	Date	Drawing No.	FIGURE 2.2 a (revised)	
				Rev. --	

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## Appendix A

### Email Notice from Bouygues Travaux Publics (BTP)



# Fugro Website Enquiry - Contact - Projects & Services

<https://www.fugro.com/>

Submitted on 07 March 2020, via IP 185.221.69.46 by Anonymous

First name *	Jack
Last name *	WONG
Email address *	<a href="mailto:chikit.wong@dragageshk.com">chikit.wong@dragageshk.com</a>
Company name *	BOUYGUES TRAVAUX PUBLICS
Telephone number	61235113
Project country	Hong Kong
Project region	Asia Pacific region
Subject *	Air Quality Monitoring Point in Kai Tak
Project environment *	Offshore
Your enquiry *	<p>Dear Sir, I am a Engineer from BOUYGUES TRAVAUX PUBLICS, the contractor of project ED/2018/04 Trunk Road T2 and Infrastructure Works for Development at the Former South Apron. There is an Air Quality Monitoring point in our site area, where we have the access in early 2020. We will have construction work at that place so we would like to discuss on the shifting or removal of this Air Quality Monitoring facility. The hotline is no answer for few times so I am approaching here to request for discussion. I am looking forward to get the reply soon so that our construction work will not be affected. Thank you. Best Regards, Jack WONG Senior Site Engineer BOUYGUES TRAVAUX PUBLICS Contract No. ED/2018/04</p>

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## Appendix B

Photos of Proposed Alternative Air Quality and Noise Monitoring Location (KTD2c)

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