

Appendix 3.8 Locations of Nearby Chimneys

Emission Inventory of Hong Kong Baptist Hospital Chimney

Emission Factor for Fuel Oil Combustion

Emission Factor (kg /10 ³ L fuel consumption)			
NOx ¹	Total PM ²	PM10 ²	PM2.5 ²
6.600E+00	2.400E-01	1.296E-01	9.960E-02

Remark:

1. The highest NOx emission factors are adopted from Table 1.3-1, Chapter 1.3, AP-42.
2. PM emission factors of uncontrolled commercial boiler using distillate oil refer to Table 1.3-7, Chapter 1.3, AP-42.

Emission Rate of Hong Kong Baptist Hospital Chimney

Stack ID	Fuel Consumption (L/hr)	Emission rate (g/s)			
		NOx	Total PM	PM10	PM2.5
HKBH	12	2.260E-02	8.219E-04	4.438E-04	3.411E-04

Remark:

Fuel consumption is provided by the Hospital.

Emission Rate of Hong Kong Baptist University Chimney

Stack ID	Fuel Consumption (L/hr)	Emission rate (g/s)			
		NOx	Total PM	PM10	PM2.5
HKBU	12	2.260E-02	8.219E-04	4.438E-04	3.411E-04

Remark:

The emission of diesel boilers of a hospital is considered high for urban chimneys. Thus, emission of Hong Kong Baptist Hospital is adopted for the University as worst-case scenario.

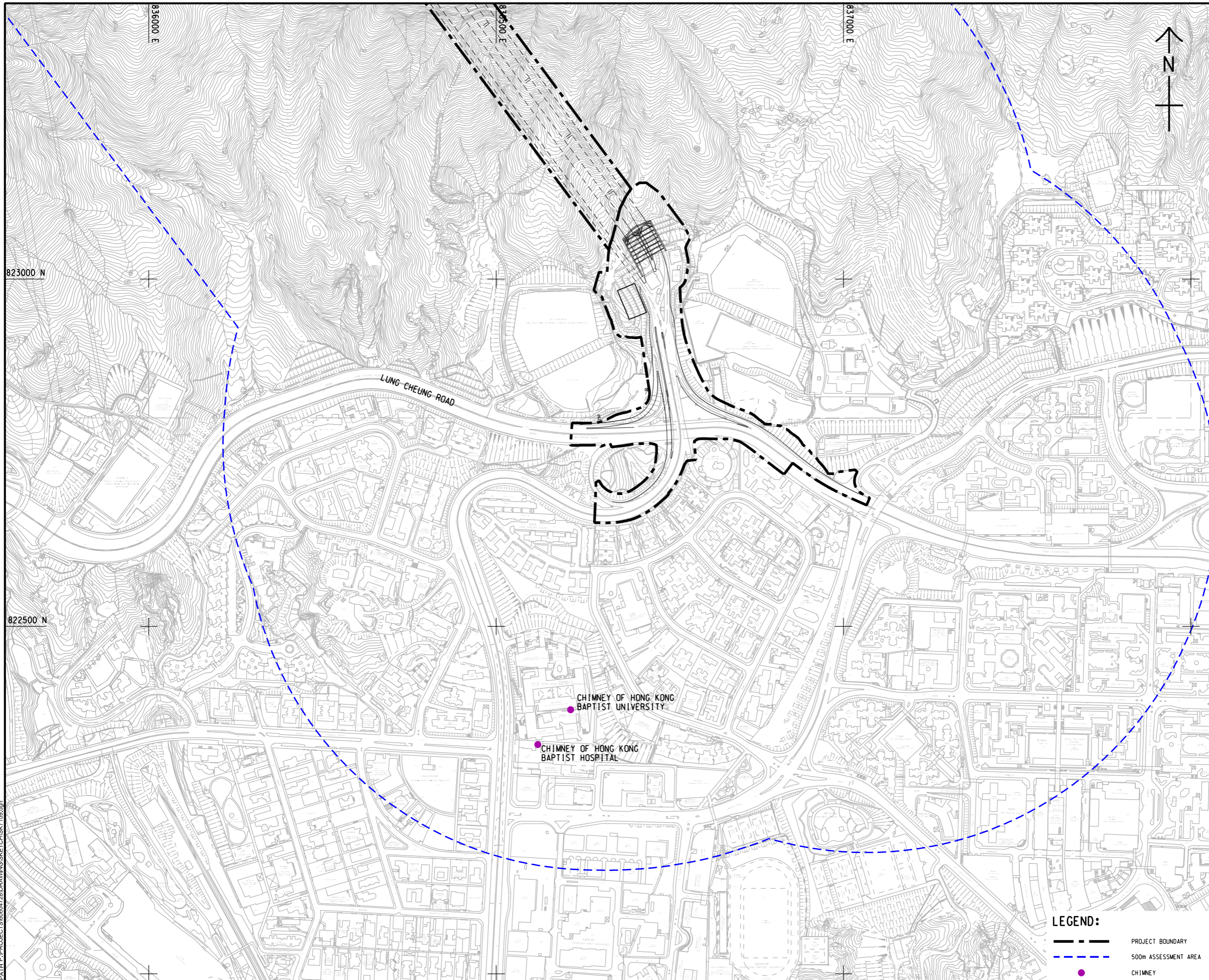
Emission Source Listing in AERMOD

Source ID	Type	X	Y	Base Elevation (m)	Height (mAG)	Exit Temperature (K)	Exit velocity (m/s)	Stack Diameter (m)	Working Hours	NO _x Emission Rate (g/s)	TSP Emission Rate (g/s)	RSP Emission Rate (g/s)	FSP Emission Rate (g/s)
HKBH ^{1,2}	Point	836558.76	822328.86	45.0	49.56	393	7	0.48	00:00 - 24:00	2.260E-02	8.219E-04	4.438E-04	3.411E-04
HKBU ²	Point	836607.72	822379.19	50.0	50.00	393	7	0.48	00:00 - 24:00	2.260E-02	8.219E-04	4.438E-04	3.411E-04

Remark:

1. The location, height and diameter of the stack are provided by the Hospital.
2. Minimum requirements of exit temperature and exit velocity for diesel-fueled furnaces are adopted.

ISO A1 594mm x 841mm
 Approved:
 Checked:
 Designer:
 Project Management Initials:
 2022/2/11
 PATH P:\PROJECTS\60604728\DRAWING\SK7\CHISK7108.dgn



AECOM

PROJECT
**IMPROVEMENT OF
 LION ROCK TUNNEL -
 INVESTIGATION**

CLIENT
 路政署
**HIGHWAYS
 DEPARTMENT**

CONSULTANT
 AECOM Asia Company Ltd.
 www.aecom.com

SUB-CONSULTANTS
 分判工程顧問公司

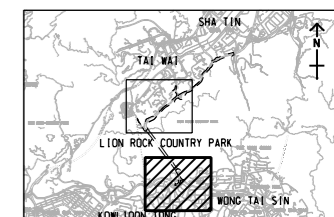
ISSUE/REVISION

IR	DATE	DESCRIPTION	CHK.

STATUS

SCALE
 A3 1:5000
 DIMENSION UNIT
 METRES

KEY PLAN A3 1:20000




PROJECT NO.
 60604728
 AGREEMENT NO.
 CE 48/2018(HY)

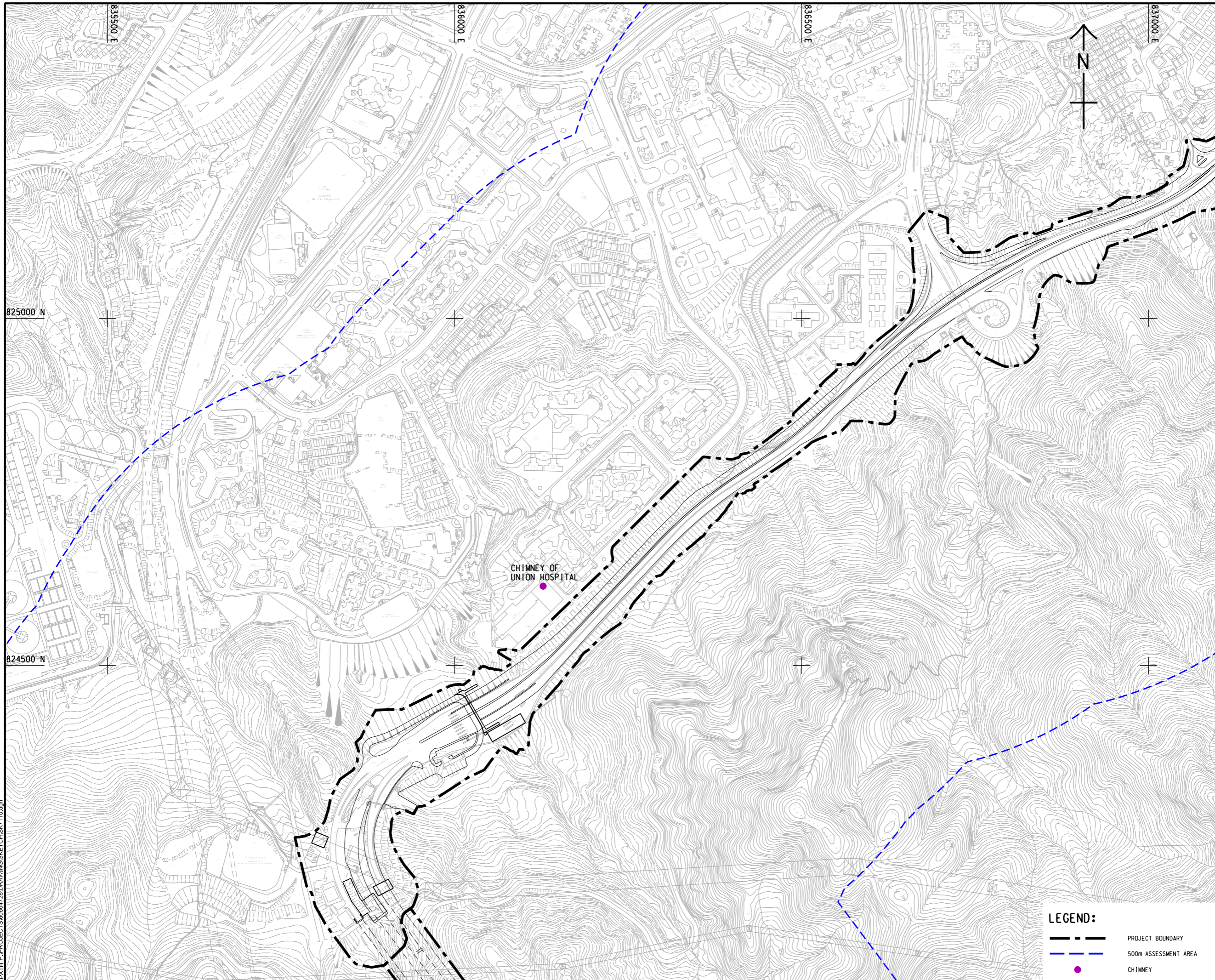
SHEET TITLE
 LOCATION OF NEARBY CHIMNEY
 ON KOWLOON SIDE

SHEET NUMBER
 60604728/SK7109

LEGEND:

-  PROJECT BOUNDARY
-  500m ASSESSMENT AREA
-  CHIMNEY

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and disclaims any liability whatsoever, for any part, that less or relies on this drawing without AECOM's express written consent. All measurements must be obtained from the stated dimensions.



ISSUE/REVISION
 修訂

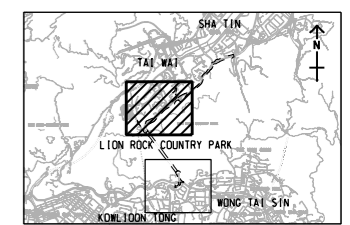
IR 修訂	DATE 日期	DESCRIPTION 修訂描述	CHK. 核對

STATUS
 狀態

SCALE
 比例尺
 A3 1 : 5000

DIMENSION UNIT
 尺寸單位
 METRES

KEY PLAN
 索引圖
 A3 1 : 20000





PROJECT NO.
 項目編號
 60604728

AGREEMENT NO.
 協議編號
 CE 48/2018(HY)

SHEET TITLE
 圖紙名稱
 LOCATION OF NEARBY CHIMNEY
 ON KOWLOON SIDE

SHEET NUMBER
 圖紙編號
 60604728/SK7110

LEGEND:

-  PROJECT BOUNDARY
-  500m ASSESSMENT AREA
-  CHIMNEY

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or relied upon by third parties, except as agreed by AECOM or as required by law. AECOM accepts no responsibility, and disclaims any liability whatsoever, for any part, that is less or relies on this drawing without AECOM's express written consent. All measurements must be obtained from the stated dimensions.