

申請編號：A/YL-SK/435

申請地點：新界元朗八鄉蓮花地丈量約份第 112 約地段編號第 377(部份)、378(部份)、380(部份)、387(部份)、388(部份)

聯絡電話：[REDACTED]

通訊地址：[REDACTED]

補充資料

回應地政總署：

本人將在規劃申請獲批後，為相關地段上的構築物申請短期豁免書。

回應渠務署：

本人已聘請渠務顧問為申請地點作出排水設施建議報告。

申請人 夏佩娟
2025 年 11 月 14 日

致：城規會

城規會編號：TPB/A/YL-SK/435

提議雨水渠務報告 (Proposed)

1. 提議雨水渠道（簡介）
2.
 - a. 申請人提議的渠管道建造是由申請人自費的。
 - b. 申請人提議的渠管道日後維修保養是申請人的責任。
 - c. 申請人提議的渠管道，也明白地權是政府/私人的。
 - d. 申請人承諾會得到政府部門同意/私人地段同意才會建設渠道工程。
 - e. 申請人聘任了 PERRY LEE BUILDING CONSULTANCY COMPANY 作此次渠務顧問。

申請人聯絡方式

電話：[REDACTED]

Email：[REDACTED]

地址：[REDACTED]
[REDACTED]

渠務顧問聯絡方式

電話：[REDACTED]

Email：[REDACTED]

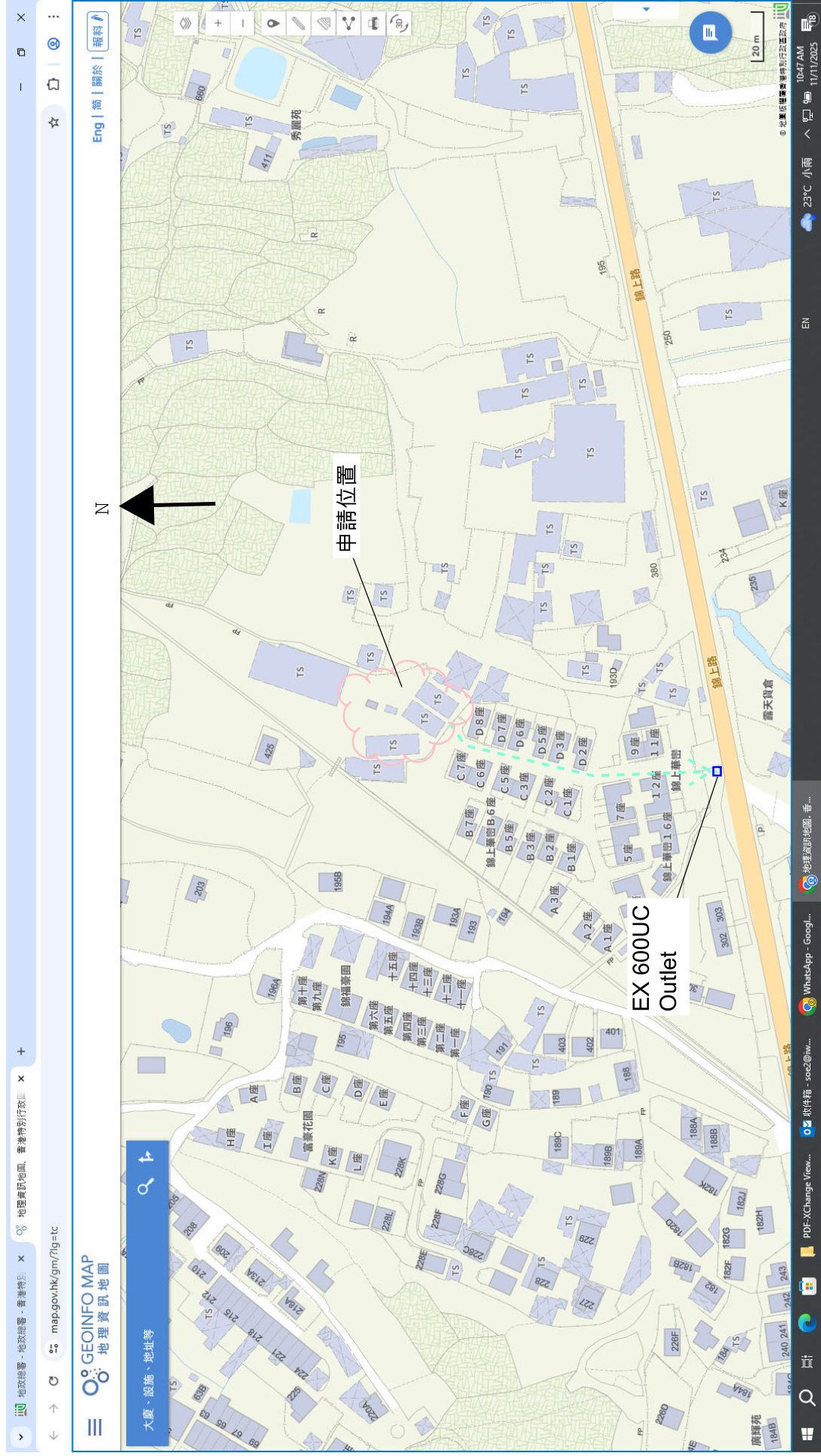
地址：[REDACTED]

2025 年 11 月 12 日

提議渠務報告(Proposed)

簡介

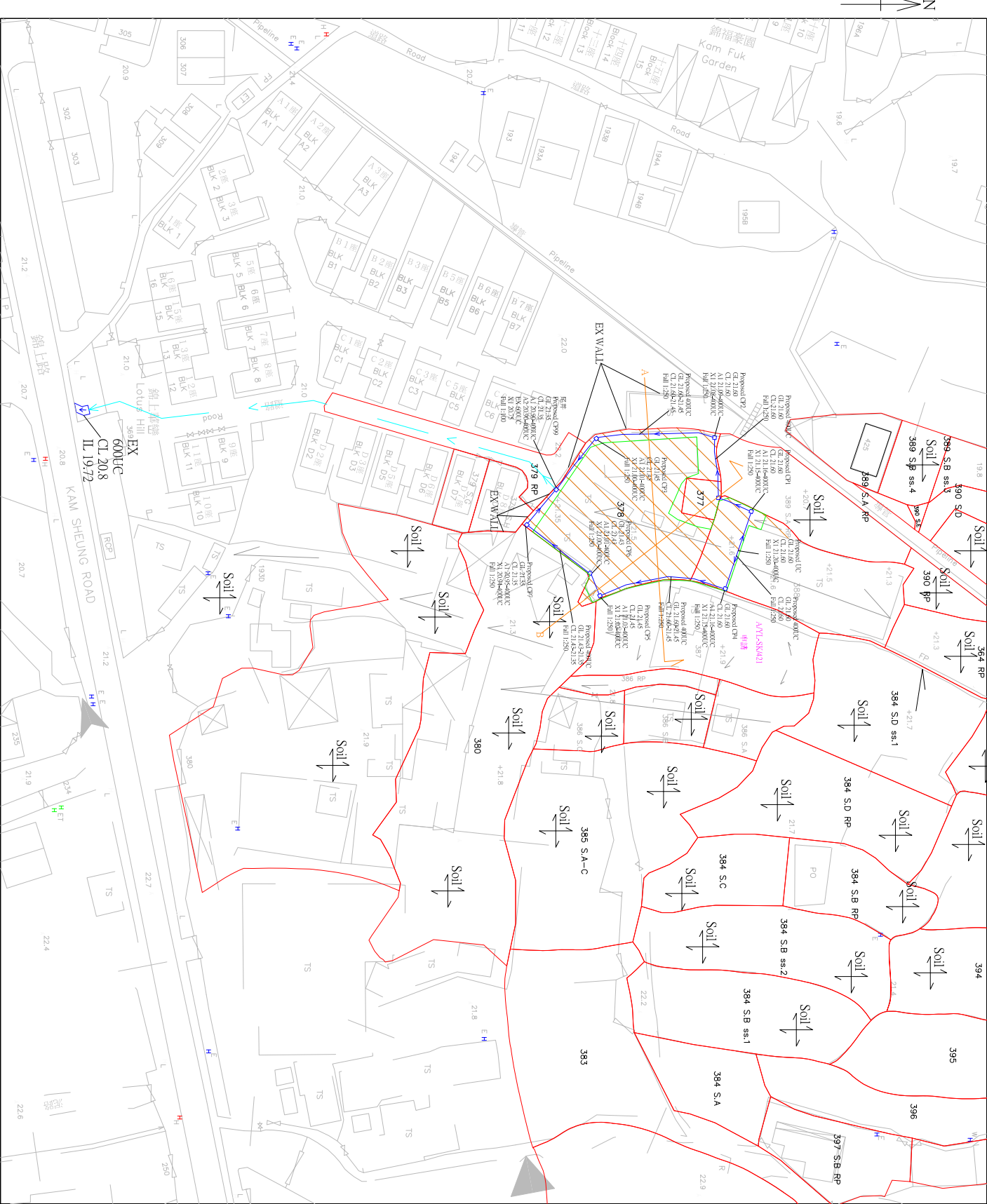
b1	EX Drainage Location
b2	Site Location, Catchmant, Proposed Drainage
b3	MH Schedule
b4	雨水計算
b5~b7	Proposed UC, Proposed MH
c1~c2	現場相片和拍照位置
d1	Section Plan



--- = EX 600UC & Fall 1:100

Location & EX Drainage (雨水) Plan

b1



LEGEND:

EX 600UC:

Lot Boundary :

Cross Fall :

Fall :

Fall :

Section Line :

Site Boundary 申請範圍

EX Ground Level+21.60 ~ +21.35:

Catchment Area 1368 sqm :

Proposed 400UC

Proposed CP99 尾井:

Proposed CP1-CP7:

Proposed drainage plan

LOCATION:

A/TL-SK/435

Scale : N.T.S.

Date : 2025-11-11

Drawing number : b2

Drawing : A4

A/YL-SK/435 MH schedule							
TYPE / DRAWING	MH no	GL	CL	A I.L	X I.L	TO MH / Existing	% Fall
C2405/1	CP1	21.60	21.60	A1 21.16-400UC	X1 21.15-400UC	CP2	1 : 250
C2405/1	CP2	21.60	21.60	A1 21.09-400UC	X1 21.08-400UC	CP3	1 : 250
C2405/1	CP3	21.45	21.45	A1 21.01-400UC	X1 21.00-400UC	CP99 尾井	1 : 250
C2405/1	CP4	21.60	21.60	A1 21.16-400UC	X1 21.15-400UC	CP5	1 : 250
C2405/1	CP5	21.45	21.45	A1 21.03-400UC	X1 21.02-400UC	CP6	1 : 250
C2405/1	CP6	21.43	21.43	A1 20.01-400UC	X1 20.00-400UC	CP7	1 : 250
C2405/1	CP7	21.35	21.35	A1 20.95-400UC	X1 20.94-400UC	CP99 尾井	1 : 250
C2406/1	CP99 尾井	21.35	21.35	A1 20.90-400UC A2 20.90-400UC	X1 20.75-EX 600UC	EX 600UC	1 : 100
ic2412e	CP1-CP2	21.90	21.90			--	1 : 250
ic2412e	CP1-CP2	21.60	21.60			--	1 : 250
ic2412e	CP2-CP3	21.60-21.45	21.60-21.45			--	1 : 250
ic2412e	CP3-CP99	21.45-21.35	21.45-21.35			--	1 : 250
ic2412e	CP4-CP5	21.60-21.45	21.60-21.45			--	1 : 250
ic2412e	CP5-CP6	21.45-21.43	21.45-21.43			--	1 : 250
ic2412e	CP6-CP7	21.43-21.35	21.43-21.35			--	1 : 250
ic2412e	CP7-CP99	21.35	21.35			--	1 : 250

Rational method

$$Q = C i A$$

i = rainfall intensity

$$t_o = \frac{0.14465L}{H^{0.2}A^{0.1}}$$

		SK/435			
		Proposed 400UC			
Cross Fall		0.14465	Concrete		0.14465
	L =	143.2		L =	143.2 m
	H =	0.3		H =	0.3 m
	A =	1368		A =	1368 m ²
				t _o =	12.80 min
50 Year Rainwater Intensity		intensity	185 m/hr		16%
			0.185	/	3600
		intensity =	5.96111E-05 m/s		
Q _p = C x i x A		C =	0.9		
		i =	5.96E-05 m/s		
		A =	1368 m ²		
		Q _p =	0.073393 m ³ /s		

SK/435

Q(m discharge of open channel) 0.164954 m³/s



Area	=	0.4 * 0.4	0.16
P	=	0.4 * 2 + 0.4	1.2
R _h	=		0.133333
n	=		0.016 Concrete
S ₀ = H/L		0.004	1 0.004



SK/435

Q(m³/s) = 0.164954 m³/s

* Steady Uniform flow
* Momentum equation becomes the Manning Equation

SK/435

Q(m³/s) = 0.164954 m³/s

50 Year Rainwater Intensity

Concrete Q(m³/s) = 0.073393 m³/s

$$Q(m^3/s) = \frac{A}{n} R_h^{2/3} S_0^{1/2}$$

* where R_h = hydraulic radius = A/P, P = wetted perimeter, S₀ = bottom slope, n = Mannings roughness coefficient.

SK/435

% = 0.164954

% = 0.073393

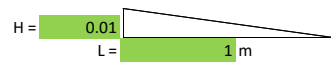
Q(m³/s) = 44.5 % OK

Drainage Impact assessment report of 400mm channel is Acceptable

b4

EX 600UCC

Q(m discharge of open channel) **0.769076 m³/s**



Area	=	0.6 * 0.6	0.36	
P	=	0.6*2+0.6	1.8	
R _h	=		0.200	
n	=		0.016	Concrete
S ₀ = H/L		0.01	1	0.01



EX 600UCC

Q(m³/s) = **0.769076 m³/s**

* Steady Uniform flow

* Momentum equation becomes the Manning Equation

EX 600UCC

Q(m³/s) = **0.769076 m³/s**

50 Year Rainwater Intensity

Q(m³/s) = **0.073393 m³/s**

$$Q(m^3/s) = \frac{A}{n} R_h^{2/3} S_0^{1/2}$$

- where R_h=hydraulic radius = A/P, P=wetted perimeter, S₀=bottom slope, n=Mannings roughness coefficient.

SK/435 to (Existing 600mm UCC)

% = **0.769076**

% = **0.073393**

Q(m³/s) = **9.5 % OK**

Drainage Impact assessment report of 600 mm channel is Acceptable

b4

Concrete

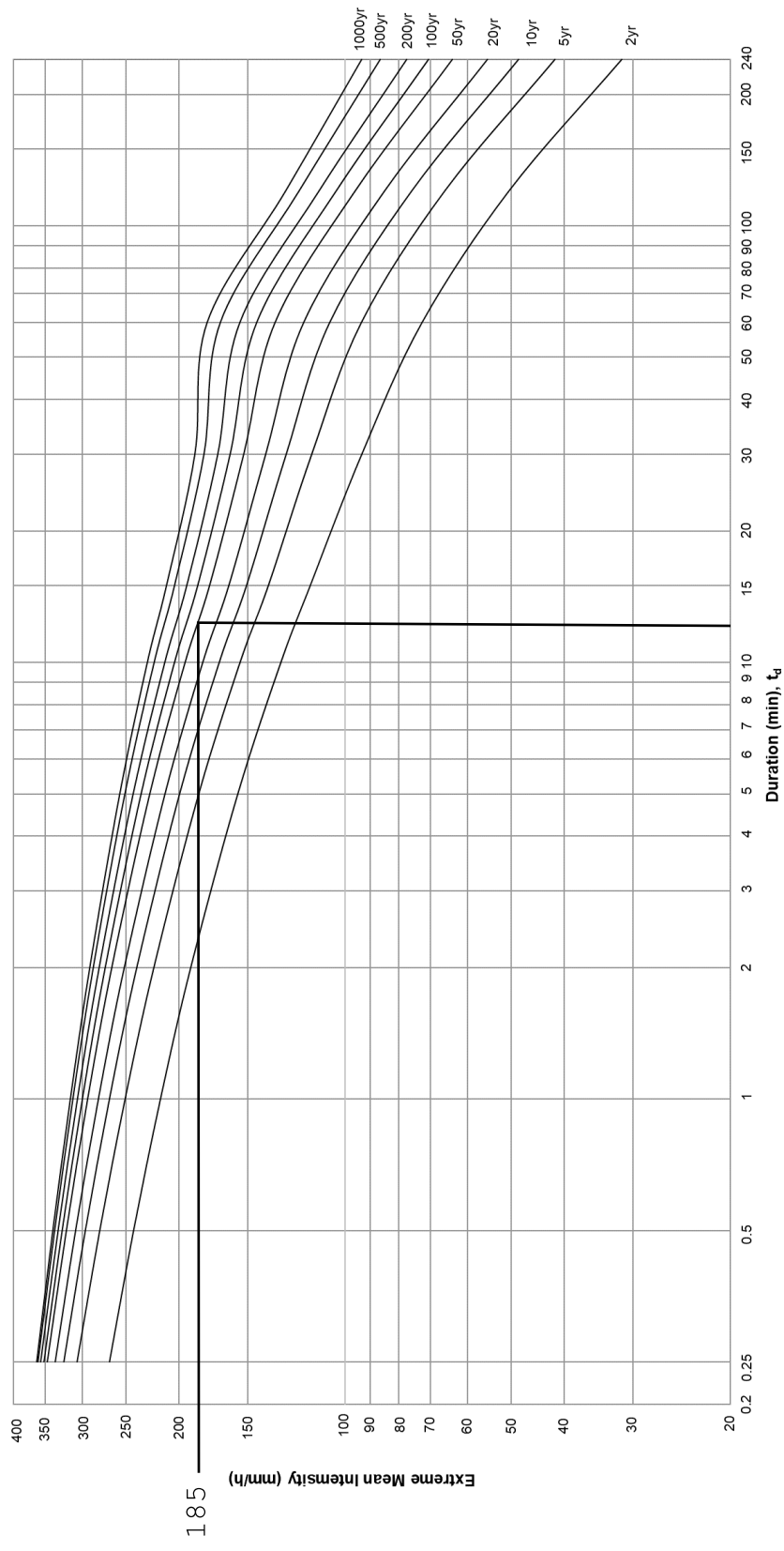
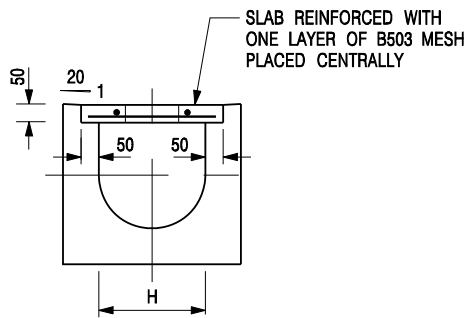


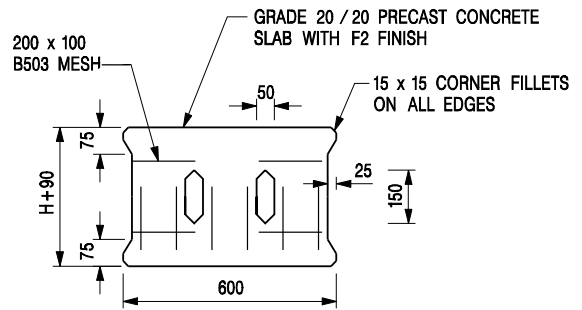
Figure 4a – Intensity-Duration-Frequency Curves of HKO Headquarters
(for durations not exceeding 4 hours)

b4

Proposed 400UC



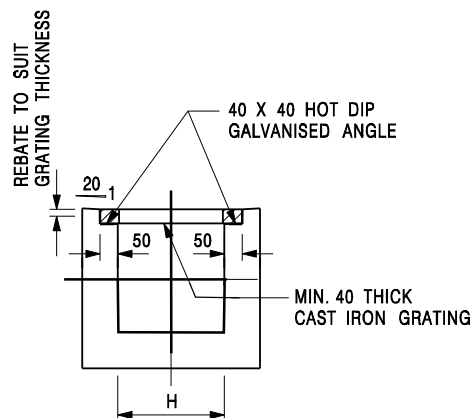
TYPICAL SECTION



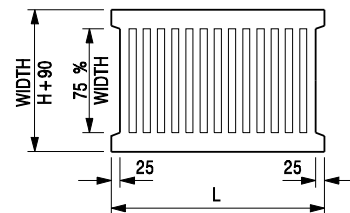
PLAN OF SLAB

U-CHANNELS WITH PRECAST CONCRETE SLABS

(UP TO H OF 525)



TYPICAL SECTION



L = 600mm FOR H ≤ 375mm
L = 400mm FOR H > 375mm

CAST IRON GRATING

(DIMENSIONS ARE FOR GUIDANCE ONLY, CONTRACTOR MAY SUBMIT EQUIVALENT TYPE)

U-CHANNEL WITH CAST IRON GRATING

(UP TO H OF 525)

NOTES:

- ALL DIMENSIONS ARE IN MILLIMETRES.
- H=NOMINAL CHANNEL SIZE.
- ALL CAST IRON FOR GRATINGS SHALL BE GRADE EN-GJL-150 COMPLYING WITH BS EN 1561.
- FOR COVERED CHANNELS TO BE HANDED OVER TO HIGHWAYS DEPARTMENT FOR MAINTENANCE, THE GRATING DETAILS SHALL FOLLOW THOSE AS SHOWN ON HyD STD. DRG. NO. H3156.

b5

E	NOTES 3 & 4 AMENDED.	Original Signed	12.2014
D	NOTE 4 ADDED.	Original Signed	06.2008
C	MINOR AMENDMENT. NOTE 3 ADDED.	Original Signed	12.2005
B	NAME OF DEPARTMENT AMENDED.	Original Signed	01.2005
A	CAST IRON GRATING AMENDED.	Original Signed	12.2002
REF.	REVISION	SIGNATURE	DATE

**COVER SLAB AND CAST IRON
GRATING FOR CHANNELS**



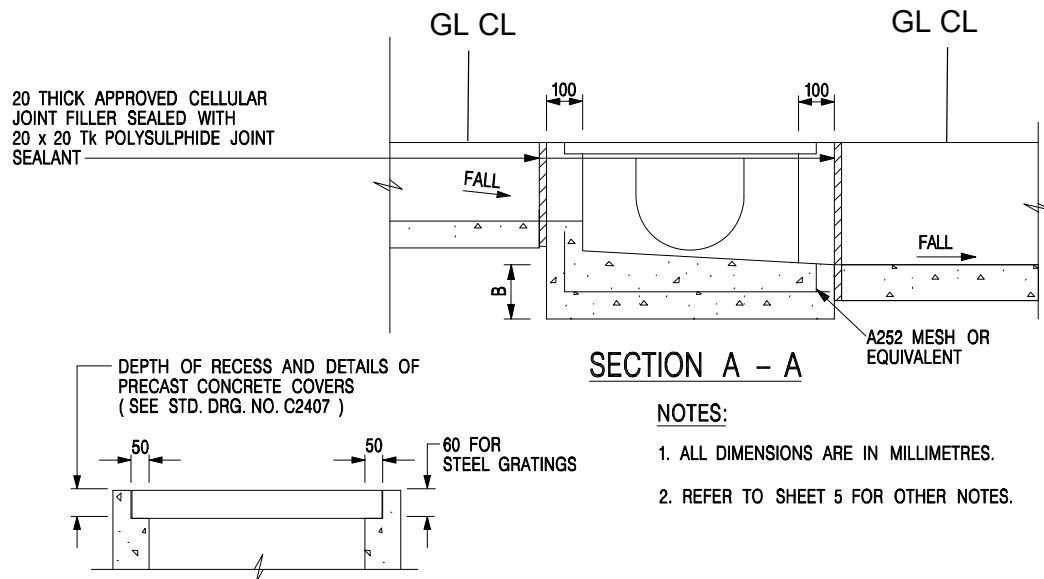
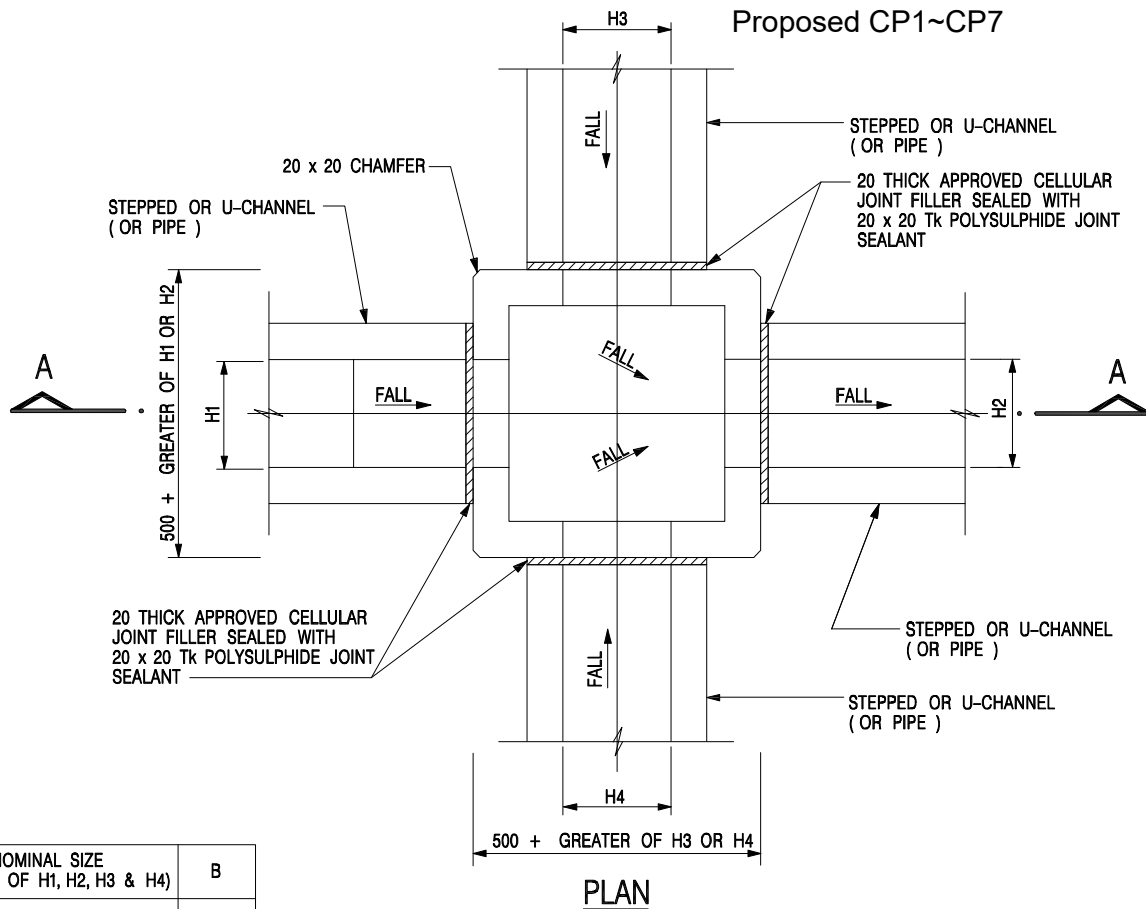
**CIVIL ENGINEERING AND
DEVELOPMENT DEPARTMENT**

SCALE 1 : 20

DATE JAN 1991

DRAWING NO.

C2412E

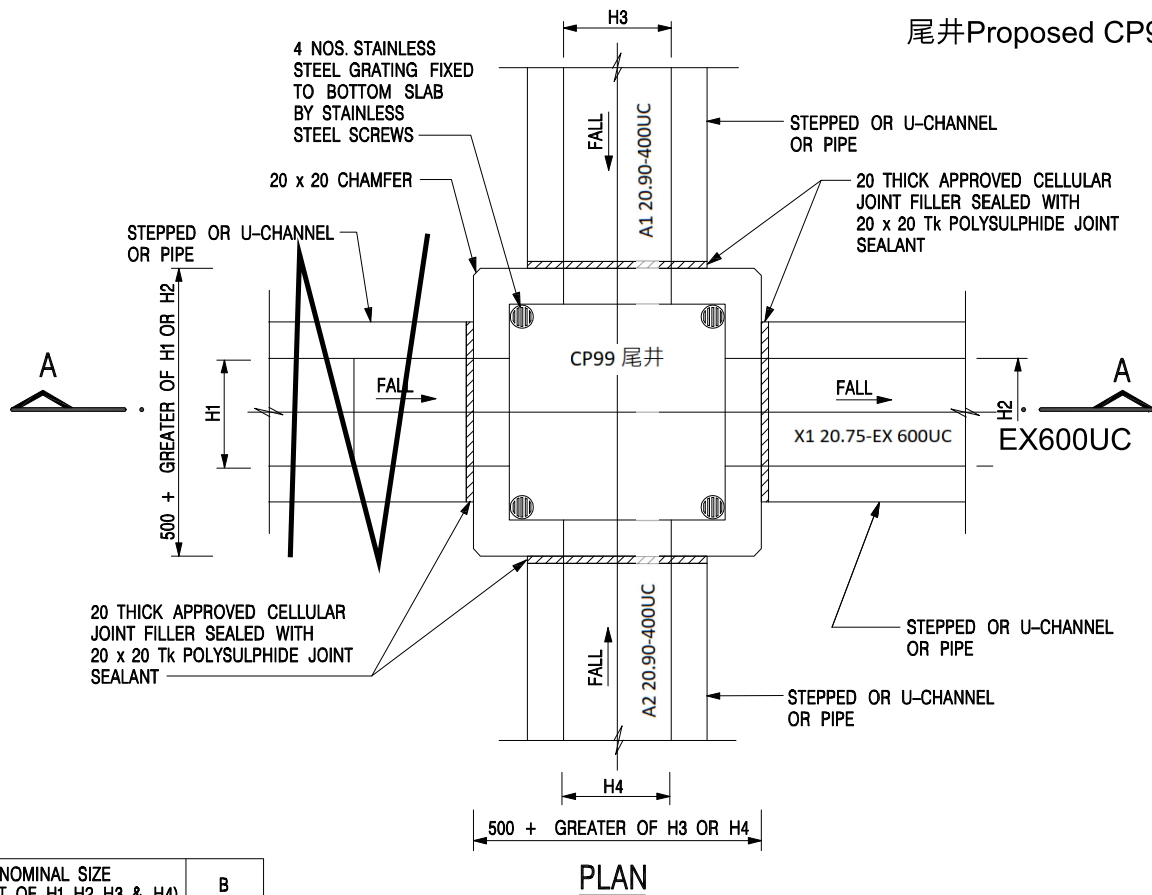


**ALTERNATIVE TOP SECTION FOR
PRECAST CONCRETE COVERS / GRATINGS**

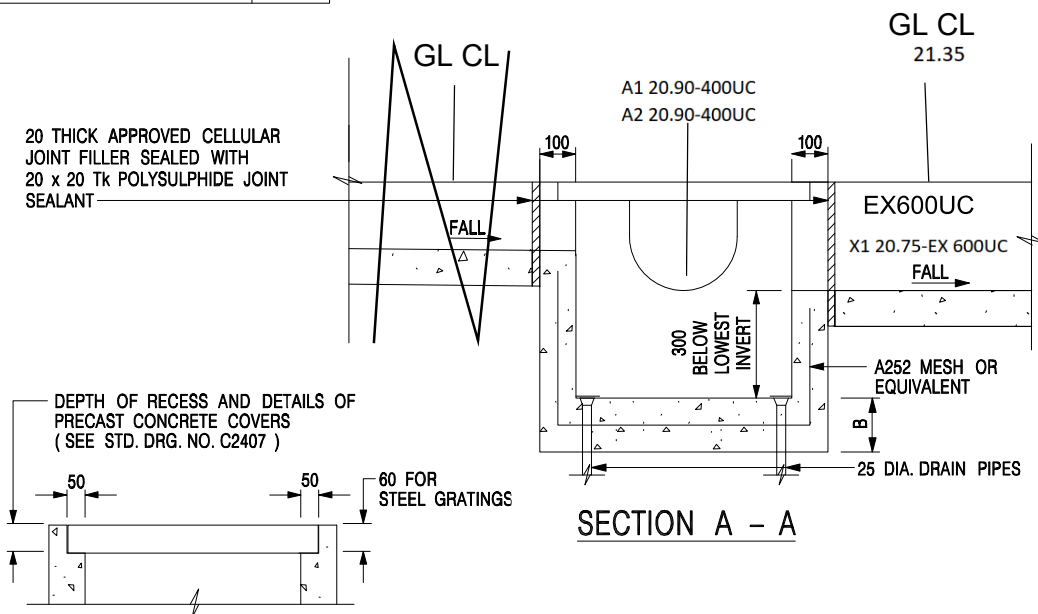
b6

**STANDARD CATCHPIT DETAILS
(SHEET 1)**

REF.	REVISION	Original Signed	SIGNATURE
SCALE 1 : 20		DRAWING NO. C2405 /1	



NOMINAL SIZE (LARGEST OF H1, H2, H3 & H4)	B
225 - 600	150
675 - 900	175



NOTES:

- ALL DIMENSIONS ARE IN MILLIMETRES.
- REFER TO SHEET 2 FOR OTHER NOTES.

b8

REF.	REVISION	Original Signed	DATE
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CATCHPIT WITH TRAP
(SHEET 1)

SCALE 1 : 20
DATE

DRAWING NO.
C2406 /1

1

申請位置



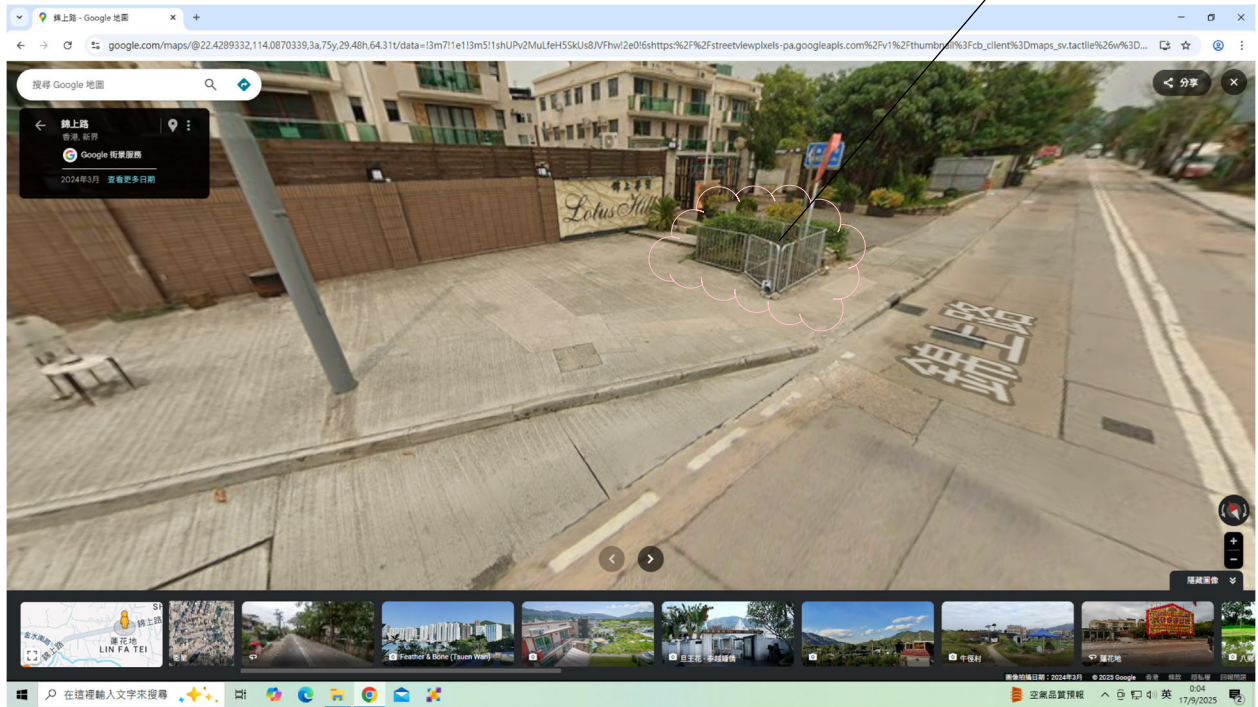
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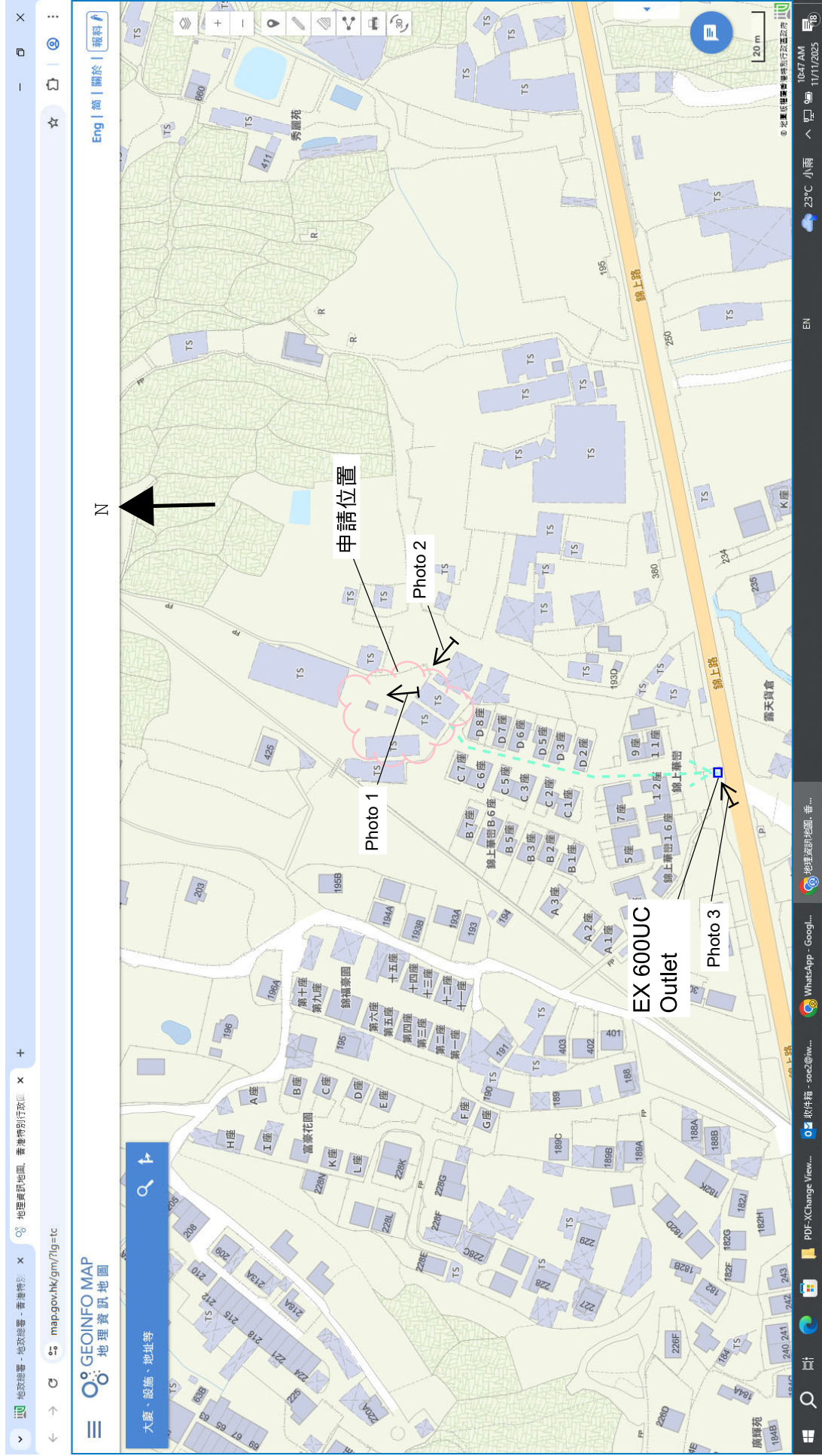
申請位置



EX 600UC

3





--- = EX 600UC & Fall 1:100

Photo Location Plan

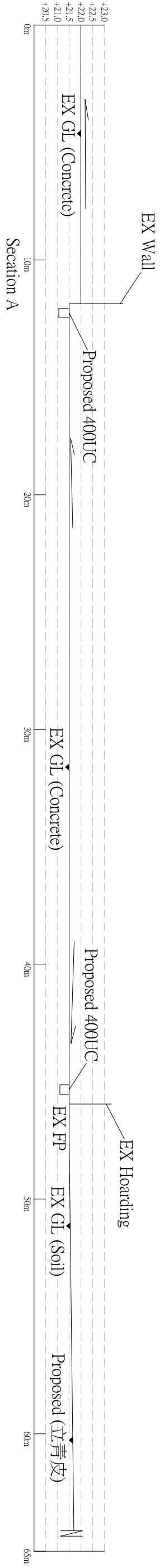
c2

(OUT Site)

(申請範圍)

EX FP

A/YL-SK/421 申請
已有渠務(Proposed)



(OUT Site)

(申請範圍)

(OUT Site)

