致: 城規會

Your Ref: A/YL-TT/704

DD116 LOT 3578RP

提議 3 年臨時渠務報告(Proposed)

事項: 批准附設條件(a)

1. 簡介內示

2. a. 業權人提議的渠管道建造是由我司自費的.

   b. 業權人提議的渠管道日後維修保養是我司的責任.

   c. 業權人提議的渠管道, 也明白地權是政府/私人的.

   d. 業權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. 業權人聘任了 PERRY LEE BUILDING CONSULTANCY COMPANY 作此次渠務顧問

      李生電話: 9453 9388

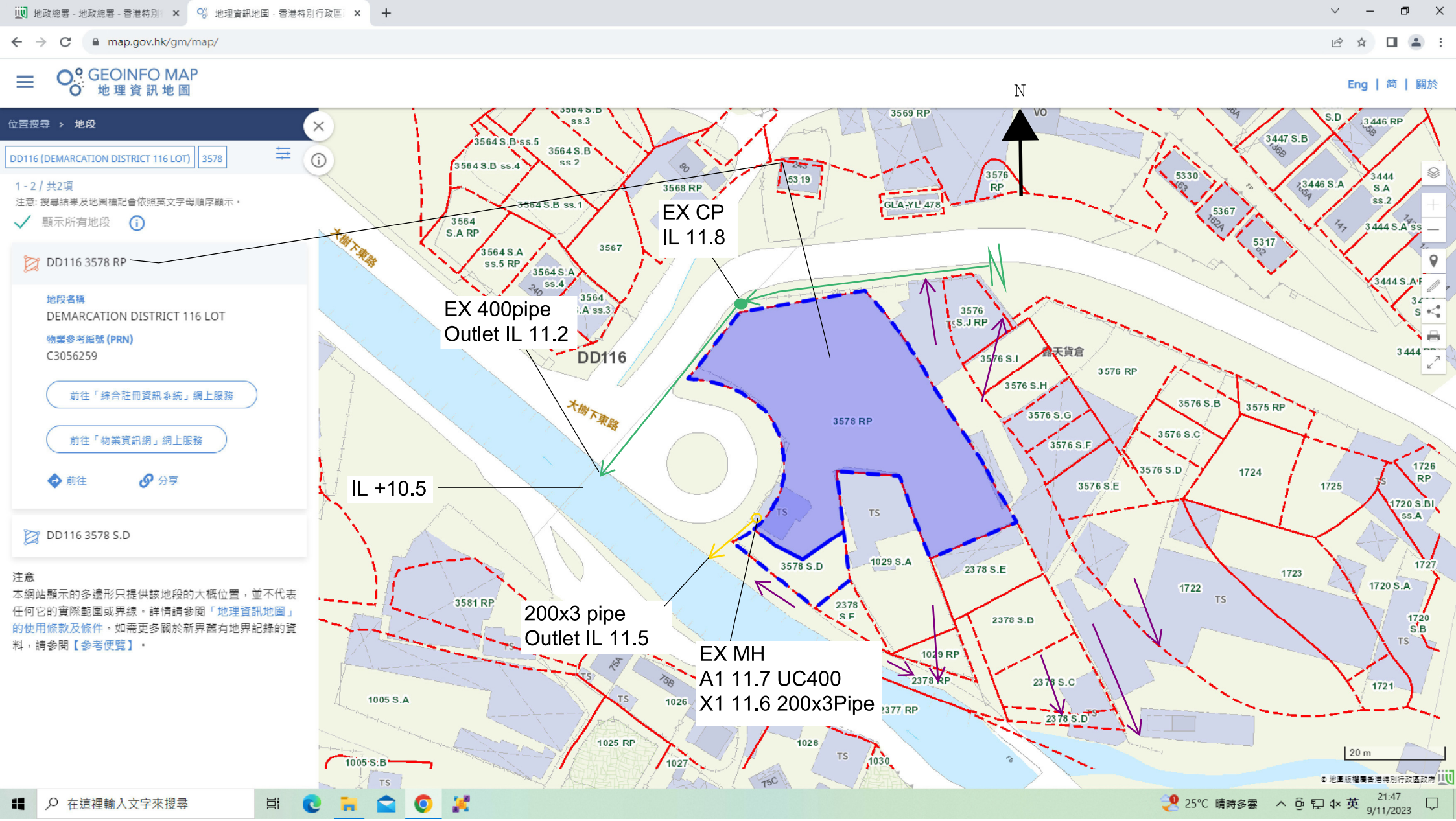
      Email : perry4320my@yahoo.com.hk

      此次渠務聯絡地址: 元朗八鄉牛徑村 52 號

Perry Lee

2025 年 03 月 20 日

簡介



= EX CP (Stormwater)

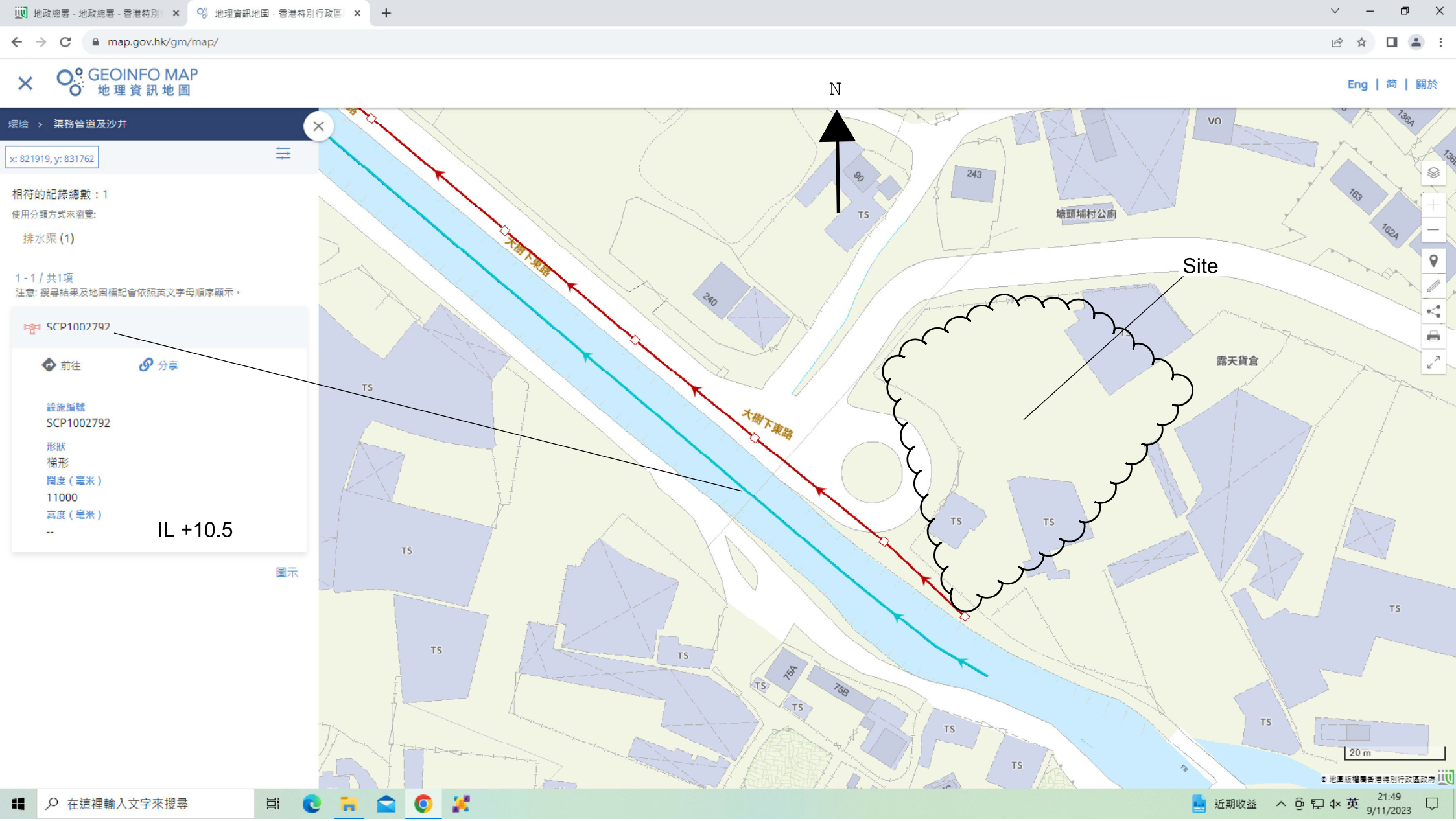
= EX MH (Stormwater)

=Cross Fall

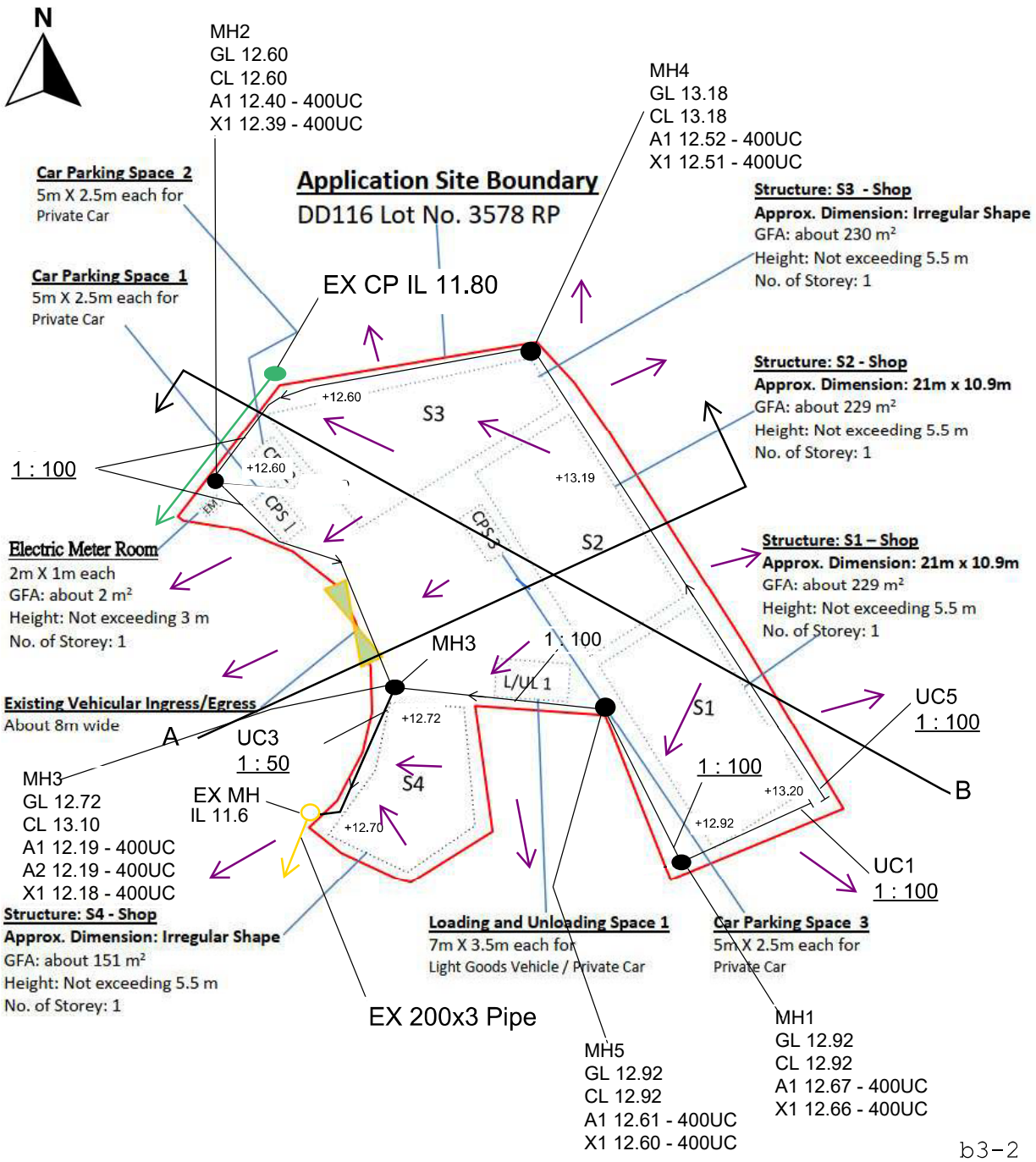
=EX 400mm Concrete Pipe (Stormwater)

= EX 200x3 Pipe (Stormwater)

Site Location & EX Drainage
b1-2



EX Nullah Location Plan
b2-2



Project :

Proposed Temporary Structures for Shop and Services Use for a Period of 3 Years at Remaining Portion of Lot No. 3578, in D.D. 116, Tong Tau Po, Yuen Long, New Territories.

Drawing Title:

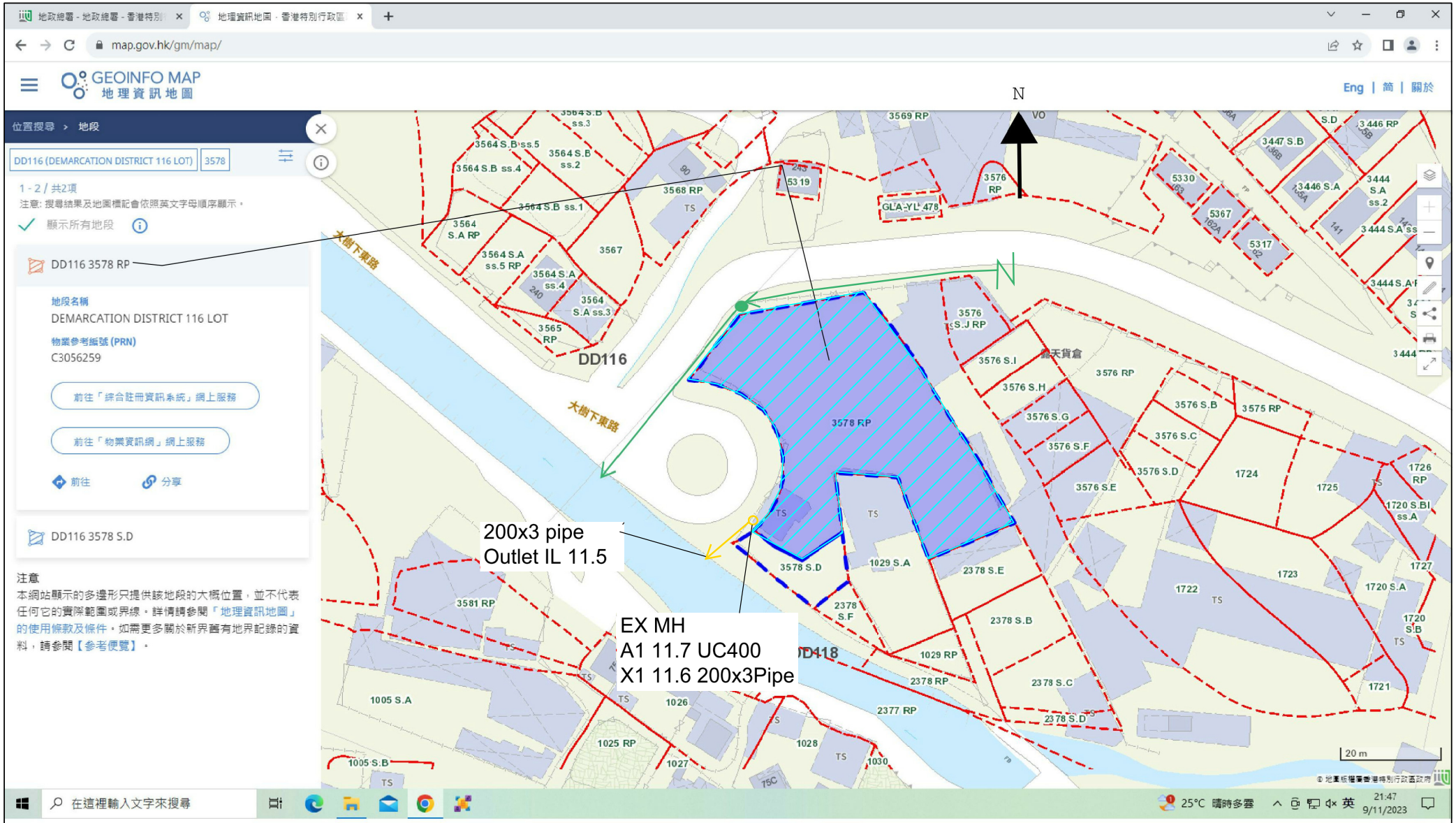
Proposed Drainage (Temporary)
(Stormwater)三年臨時雨水渠

LEGEND :

- EX MH
- Proposed MH
- Cross Fall
- Site Boundary
- Proposed 400UC
- EX 400 Concrete
- Proposed 400UC

DD116 LOT 3578RP Temporary Storm Drainage Schedule

TYPE / DRAWING	MH no	GL	CL	A I.L	X I.L	TO MH / Existing	% Fall
DS_1078A	MH1	12.92	12.92	A1 12.67 - 400UC	X1 12.66 - 400UC	MH5	1 : 100
DS_1078A	MH2	12.60	12.60	A1 12.40 - 400UC	X1 12.39 - 400UC	MH3	1 : 100
C2406/1 尾井	MH3	12.72	13.10	A1 12.19 - 400UC A2 12.19 - 400UC	X1 12.18 - 450UC	EX MH IL 11.6	1 : 100
DS_1078A	MH4	13.18	13.18	A1 12.52 - 400UC	X1 12.51 - 400UC	MH2	1 : 100
DS_1078A	MH5	12.92	12.92	A1 12.61 - 400UC	X1 12.60 - 400UC	MH3	1 : 100
400UC	UC1	13.20	13.20		X1 12.90 - 400UC	MH1	1 : 100
400UC	UC3	12.60	12.60		X1 12.18 - 450UC	EX MH 11.6	1 : 50
400UC	UC5	13.20	13.20		X1 12.90 - 400UC	MH2	1 : 100
EX MH A1 11.6		12.4	12.40		X1 11.6 - 200x3 Pile	SCP1002792	1 : 29



= EX CP (Stormwater)

= Catchment area 1765.7sqM

=EX 400mm Concrete Pipe (Stormwater)

= EX MH (Stormwater)

= EX 200x3 Pipe (Stormwater)

Catchment area Plan
b5-2

Rational method

Q=C i A

i = rainfall intensity

$$t_0 = \frac{0.14465L}{H^{0.2}A^{0.1}}$$

DD116 LOT 3578RP
Proposed 400UC

	0.14465	Concrete		0.14465	
L =	109.1		L =	109.1	m
H =	0.3		H =	0.3	m
A =	1765.7		A =	1765.7	m^2
			t_0 =	9.51	min

10 Year Rainwater Intensity	intensity	170	m/hr			
		0.17	/	3600	*	1.16
	intensity	=	5.47778E-05	m/s		

$Q_p = C \times i \times A$

C =	0.95	
i =	5.48E-05	m/s
A =	1765.7	m^2

Q_p = 0.091885 m^3/s

DD116 LOT 3578RP

Q(m discharge of open channel) 0.182337 m^3/s

H = 0.01
L = 1 m

Area	=	0.4 * 0.3	0.12	
P	=	0.3*2+0.4	1	
R_n	=		0.12	
n	=		0.016	Concrete
S_0 = H/L	0.01	1	0.01	

0.3 m 0.3 m 0.4 m

DD116 LOT 3578RP
Q(m^3/s) = 0.182337 m^3/s

DD116 LOT 3578RP
Q(m^3/s) = 0.182337 m^3/s

10 Year Rainwater Intensity 225mm channel
Q(m^3/s) = 0.091885 m^3/s

DD116 LOT 3578RP

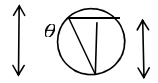
% = 0.182337

% = 0.091885

Q(m3/s) = 50.4 % OK

EX 200mm x3 Concrete PiPe D.D.116

D = 0.2



H = 0.035 m

L = 1 m

S = 0.035

$\cos\theta = \frac{h-(0.18*D)}{0.2*D} = 0.8 = 60°$

S = H/L					=	0.035	m
P = 2/3*3.141592654*D					=	0.41908846	m
A = 2/3*(3.141592654/4*D²)+(D²/4*sin θ *cos θ)					=	0.025161778	m²
R_h = A / P					=	0.0600393	m
n = 0.014					=	0.014	
Q = 1/n * A * $R_h^{2/3}$ *S^1/2					=	0.051555032	m³/S

DD116 LOT 3578RP to (EX 200x3 pipe)

% = 0.154665

% = 0.091885

Q(m3/s) = 59 % OK

Drainage Impact assessment report of 200mm pipe is Acceptable

DD116 LOT 3578RP

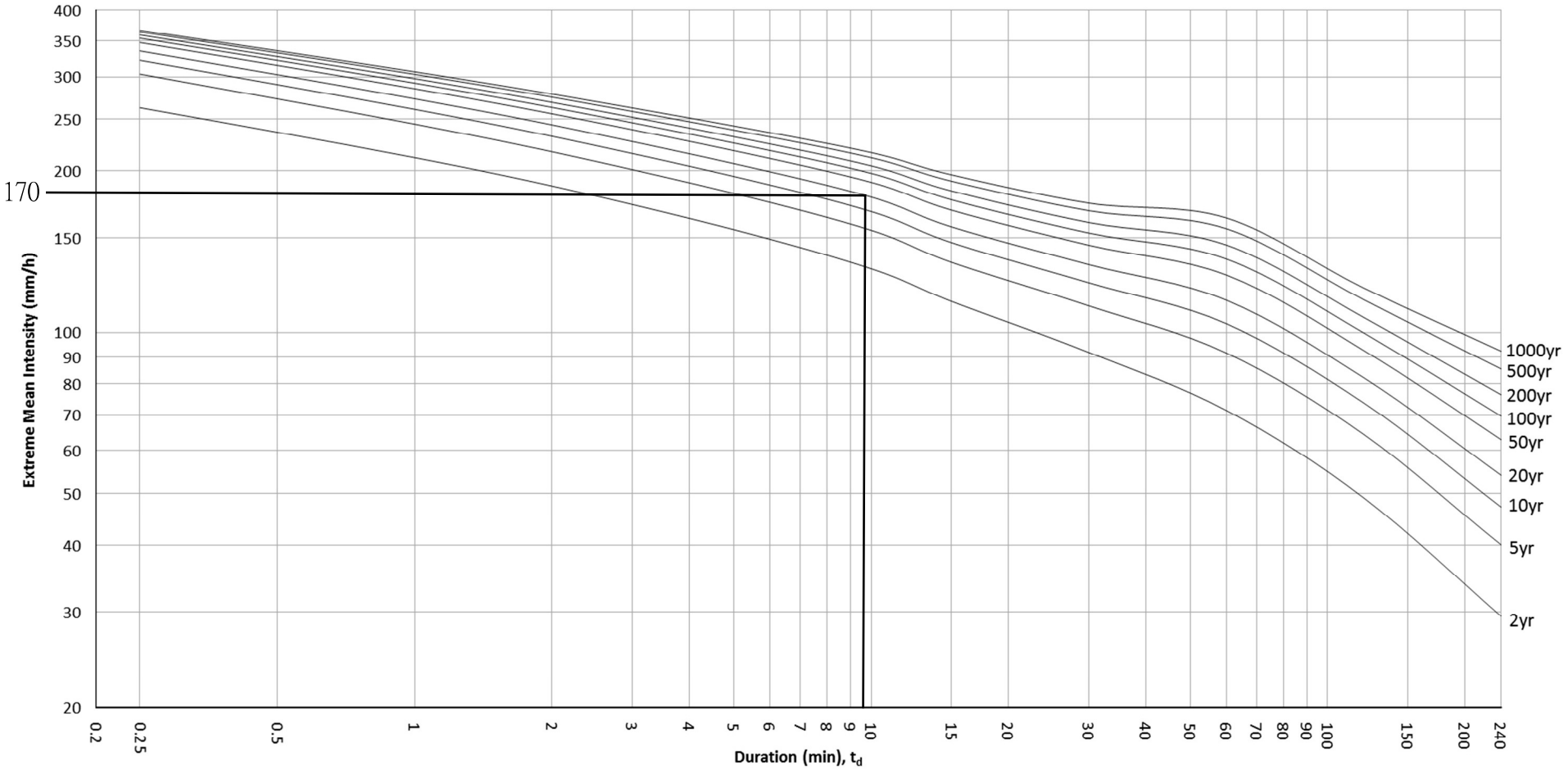
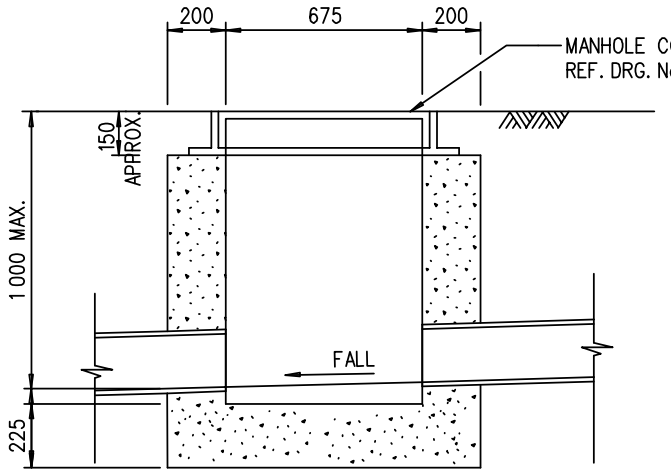


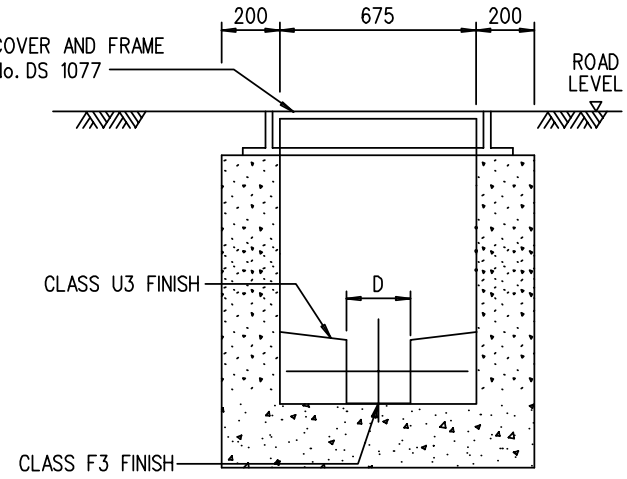
Figure 4a – Intensity-Duration-Frequency Curves of HKO Headquarters
(for durations not exceeding 4 hours)

b6-2

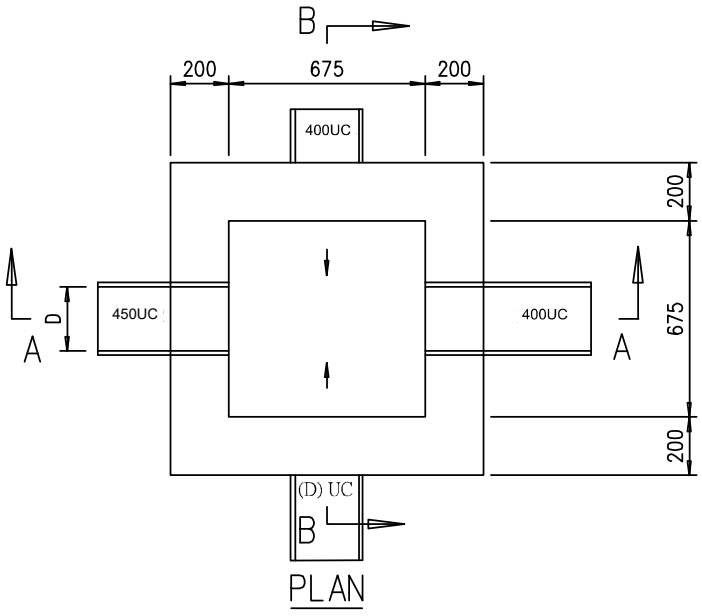
Proposed MH1~MH2



SECTION A-A



SECTION B-B



PLAN

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. DIAMETER : 200 TO 450mm
3. NORMAL RANGE OF DEPTH : MAX. 1000 mm (MEASURED FROM ROAD LEVEL TO LOWEST INVERT)
4. USED IN : STORMWATER DRAIN AND SEWER
5. JUNCTION : POSITION OF JUNCTION TO BE DETERMINED IN INDIVIDUAL CASE.
6. TOP TREATMENT : SEE DRG. No. DS 1032
7. FOUNDATION : FOUNDATION OF MANHOLE VARIES WITH SITE CONDITION. THEREFORE, IT SHOULD BE DETERMINED ON SITE BY THE ENGINEER.
8. CONCRETE : GRADE 30/20
9. COVER AND FRAME NOT SHOWN ON PLAN FOR CLARITY

b7-2

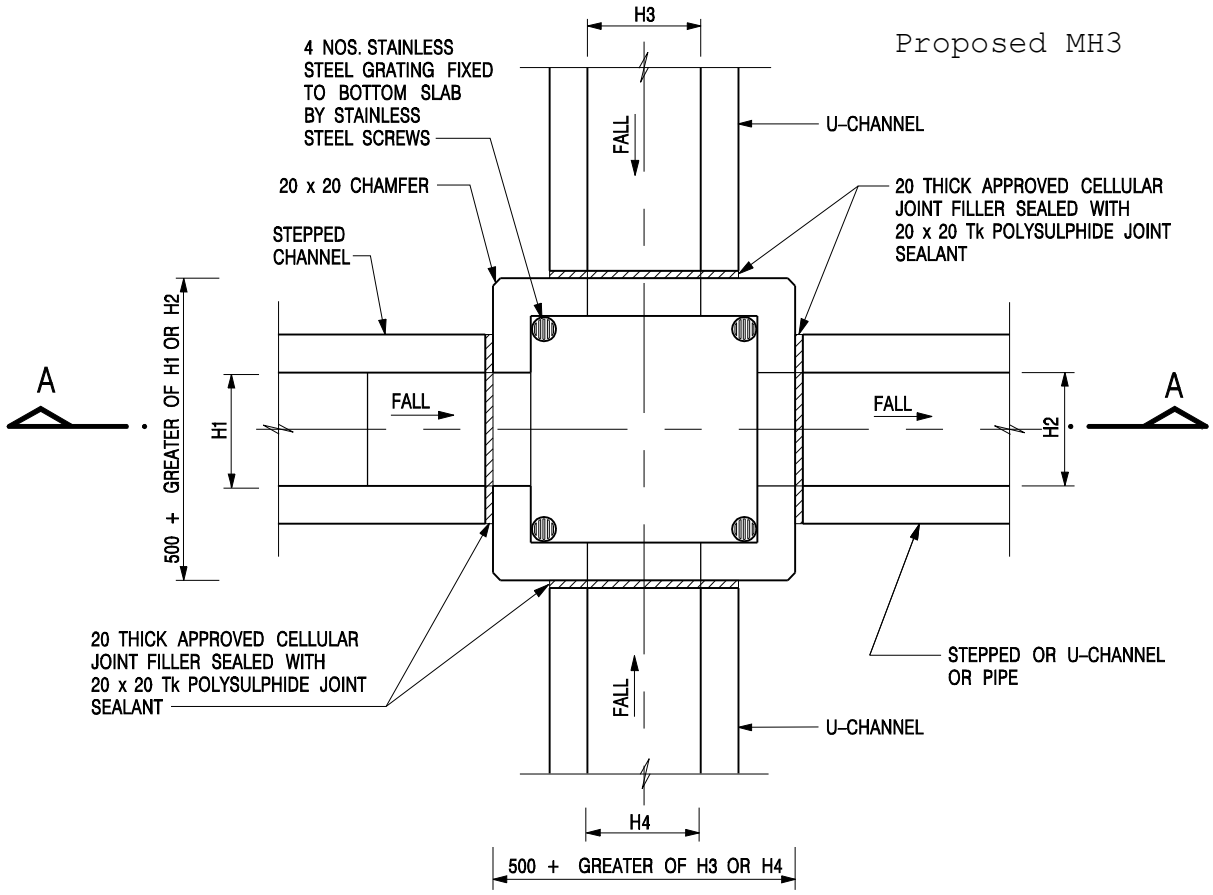
REV.	DESCRIPTION	SIGNATURE	DATE
	NEW ISSUE	ORIGINAL SIGNED	15.8.2007

STANDARD MANHOLE TYPE C1

REFERENCE

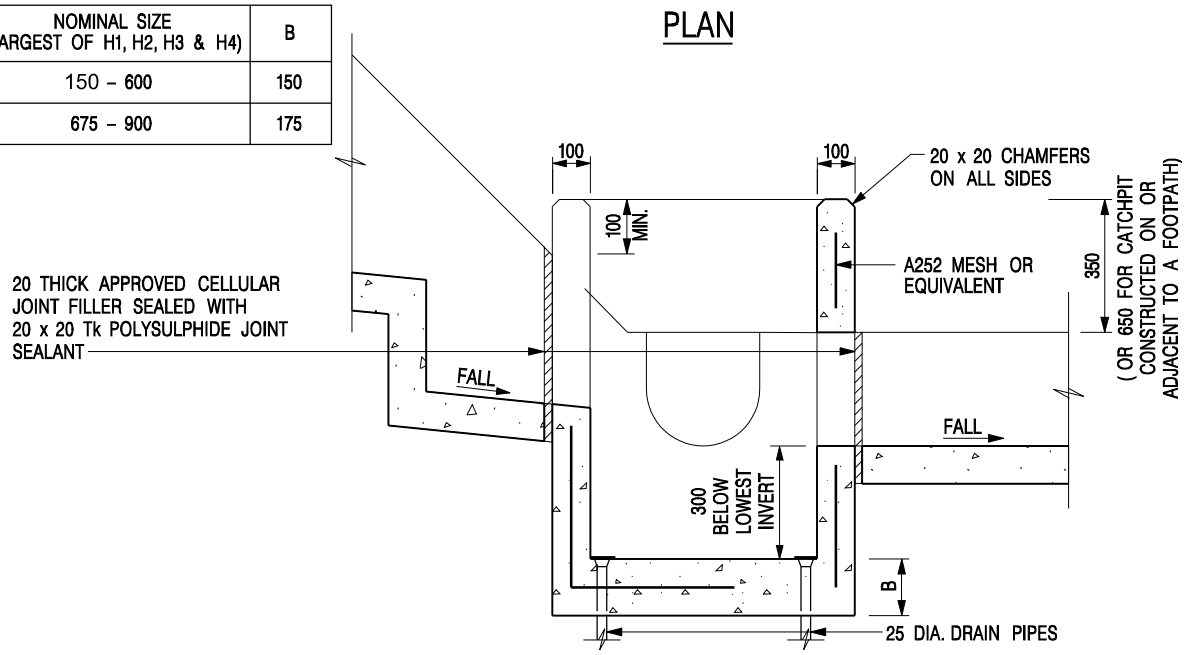
SCALE 1 : 25

DRAWING No. DS 1078A



PLAN

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



SECTION A – A

NOTES:

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

b8-2

REF.	REVISION	SIGNATURE	DATE
–	FORMER DRG. NO. C2406J.	Original Signed	03.2015

CATCHPIT WITH TRAP

(SHEET 1 OF 2)

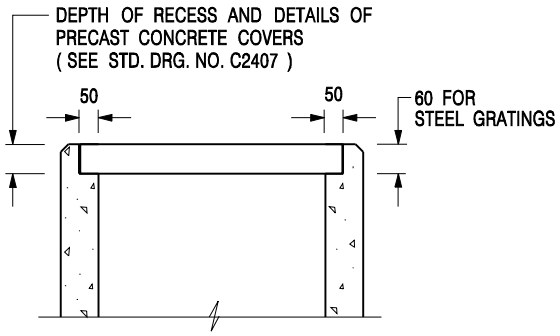
CEDD CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

SCALE 1 : 20

DATE JAN 1991

DRAWING NO. C2406 /1

Proposed MH3



ALTERNATIVE TOP SECTION
FOR PRECAST CONCRETE COVERS / GRATINGS

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. ALL CONCRETE SHALL BE GRADE 20 /20.
3. CONCRETE SURFACE FINISH SHALL BE CLASS U2 OR F2 AS APPROPRIATE.
4. FOR DETAILS OF JOINT, REFER TO STD. DRG. NO. C2413.
5. CONCRETE TO BE COLOURED AS SPECIFIED.
6. UNLESS REQUESTED BY THE MAINTENANCE PARTY AND AS DIRECTED BY THE ENGINEER, CATCHPIT WITH TRAP IS NORMALLY NOT PREFERRED DUE TO PONDING PROBLEM.
7. UPON THE REQUEST FROM MAINTENANCE PARTY, DRAIN PIPES AT CATCHPIT BASE CAN BE USED BUT THIS IS FOR CATCHPITS LOCATED AT SLOPE TOE ONLY AND AS DIRECTED BY THE ENGINEER.
8. FOR CATCHPITS CONSTRUCTED ON OR ADJACENT TO A FOOTPATH, STEEL GRATINGS (SEE DETAIL 'A' ON STD. DRG. NO. C2405 /2) OR CONCRETE COVERS (SEE STD. DRG. NO. C2407) SHALL BE PROVIDED AS DIRECTED BY THE ENGINEER.
9. IF INSTRUCTED BY THE ENGINEER, HANDRAILING (SEE DETAIL 'J' ON STD. DRG. NO. C2405 /5; EXCEPT ON THE UPSLOPE SIDE) IN LIEU OF STEEL GRATINGS OR CONCRETE COVERS CAN BE ACCEPTED AS AN ALTERNATIVE SAFETY MEASURE FOR CATCHPITS NOT ON A FOOTPATH NOR ADJACENT TO IT. TOP OF THE HANDRAILING SHALL BE 1 000 mm MIN. MEASURED FROM THE ADJACENT GROUND LEVEL.
10. MINIMUM INTERNAL CATCHPIT WIDTH SHALL BE 1 000 mm FOR CATCHPITS WITH A HEIGHT EXCEEDING 1 000 mm MEASURED FROM THE INVERT LEVEL TO THE ADJACENT GROUND LEVEL. AND, STEP IRONS (SEE DSD STD. DRG. NO. DS1043) AT 300 c/c STAGGERED SHALL BE PROVIDED. THICKNESS OF CATCHPIT WALL FOR INSTALLATION OF STEP IRONS SHALL BE INCREASED TO 150 mm.
11. FOR RETROFITTING AN EXISTING CATCHPIT WITH STEEL GRATING, SEE DETAIL 'G' ON STD. DRG. NO. C2405 /4.
12. SUBJECT TO THE APPROVAL OF THE ENGINEER, OTHER MATERIALS CAN ALSO BE USED AS COVERS / GRATINGS.

b8-2

REF.	REVISION	SIGNATURE	DATE
A	MINOR AMENDMENT.	Original Signed	04.2016
–	FORMER DRG. NO. C2406J.	Original Signed	03.2015

CATCHPIT WITH TRAP
(SHEET 2 OF 2)

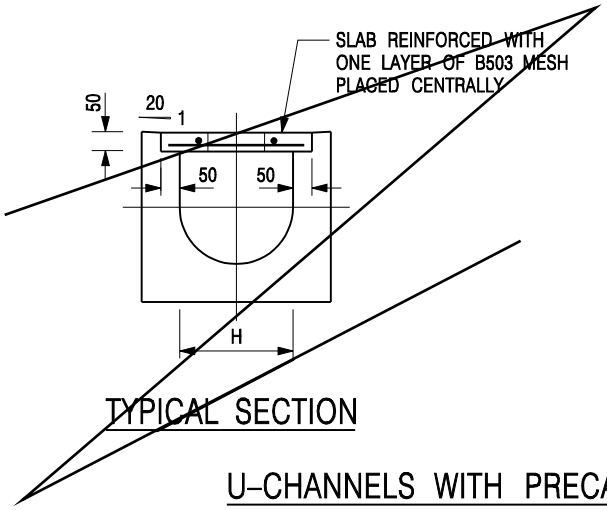
CEDD CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

SCALE 1 : 20

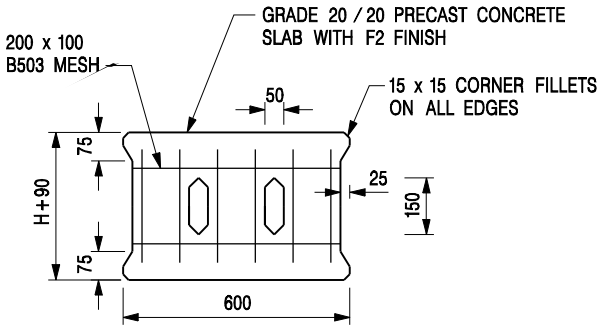
DATE JAN 1991

DRAWING NO. C2406 /2A

Proposed 400UC / 450UC



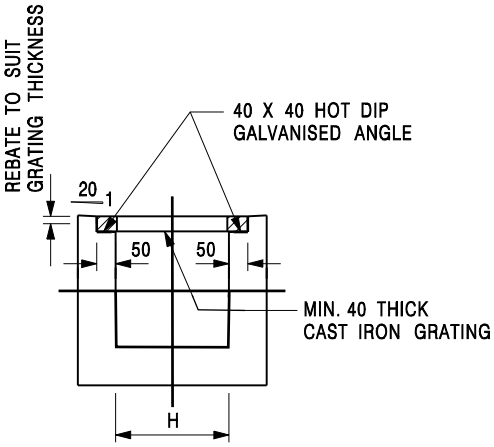
TYPICAL SECTION



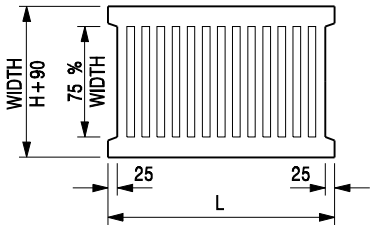
PLAN OF SLAB

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:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. H=NOMINAL CHANNEL SIZE.
3. ALL CAST IRON FOR GRATINGS SHALL BE GRADE EN-GJL-150 COMPLYING WITH BS EN 1561.
4. 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.

b9-2

REF.	REVISION	SIGNATURE	DATE
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

COVER SLAB AND CAST IRON GRATING FOR CHANNELS

CEDD CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

SCALE 1 : 20

DATE JAN 1991

DRAWING NO. C2412E

_Cross Fall →

= EX CP (Stormwater) = EX MH (Stormwater)

=EX 400mm Concrete Pipe (Stormwater) = EX 200x3 Pipe (Stormwater)

1

2

3

4

5

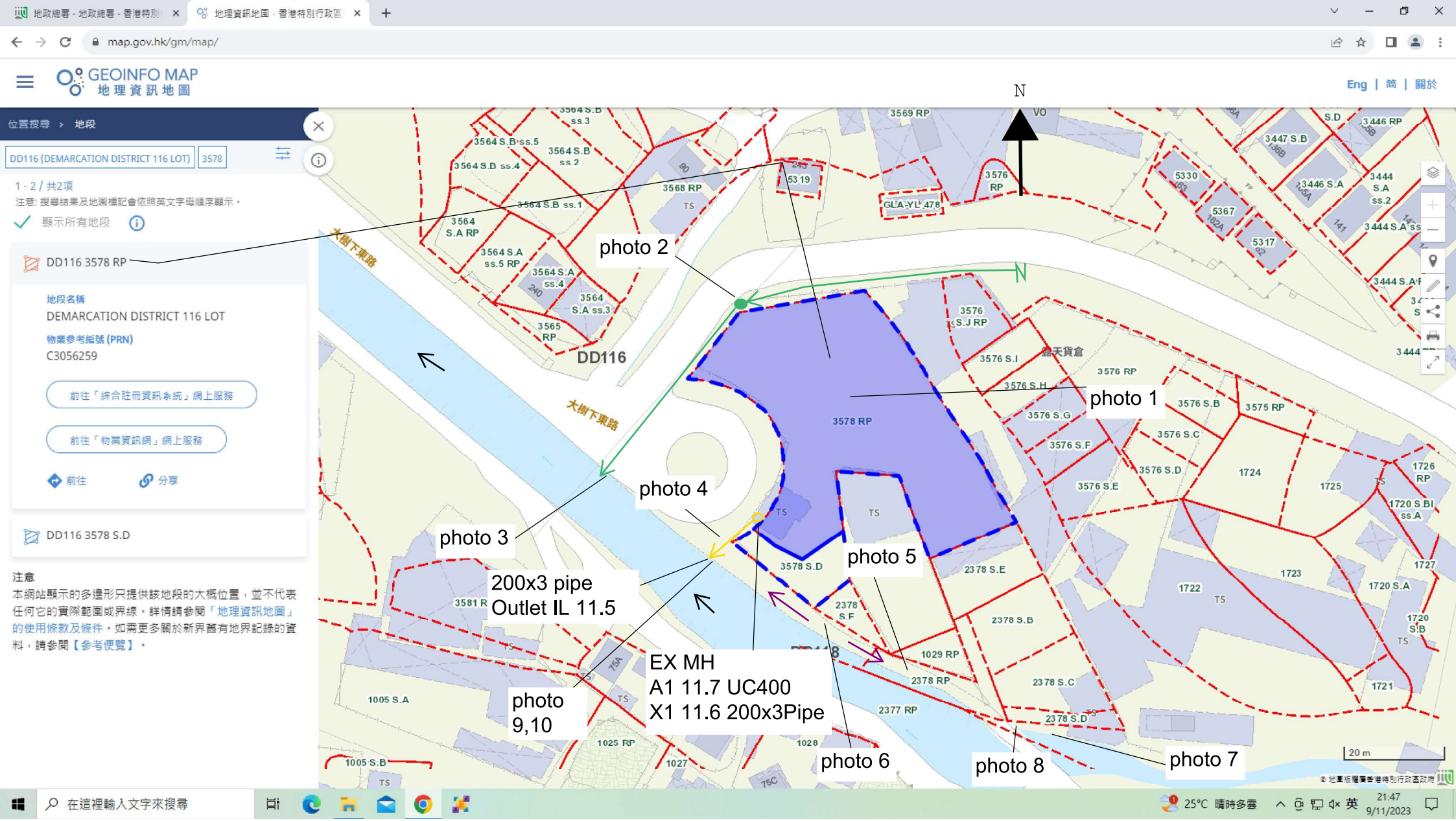
6

7

8

9

10



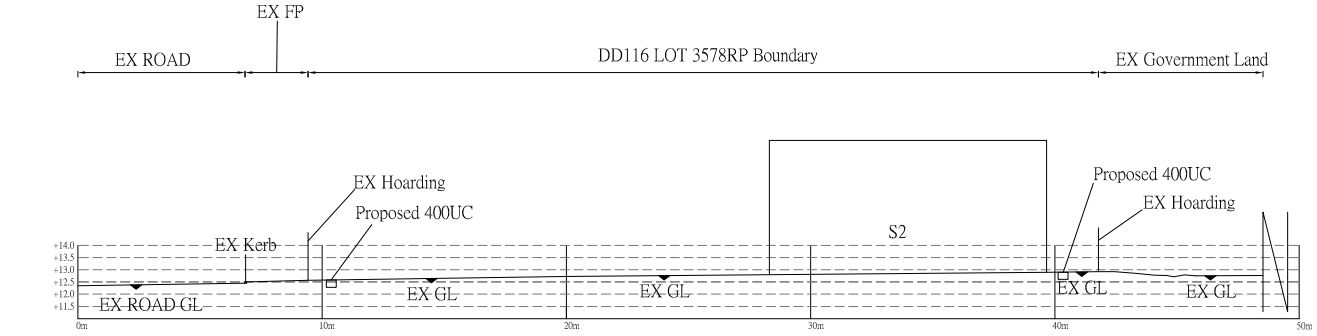
= EX CP (Stormwater)

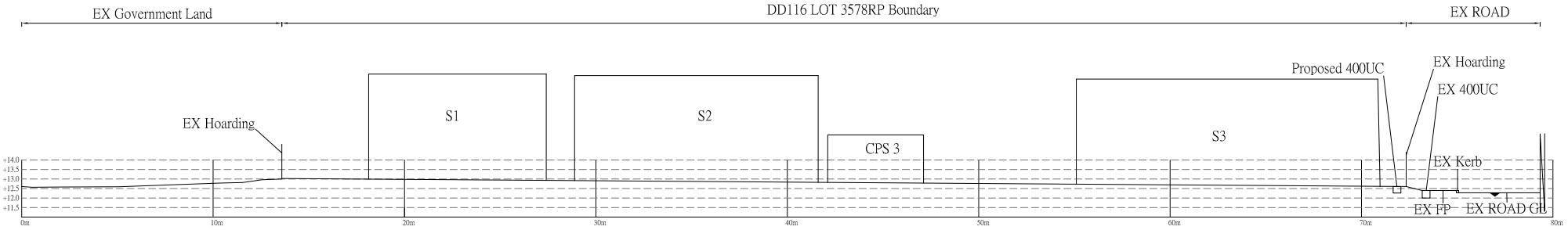
= EX MH (Stormwater)

=EX 400mm Concrete Pipe (Stormwater)

= EX 200x3 Pipe (Stormwater)

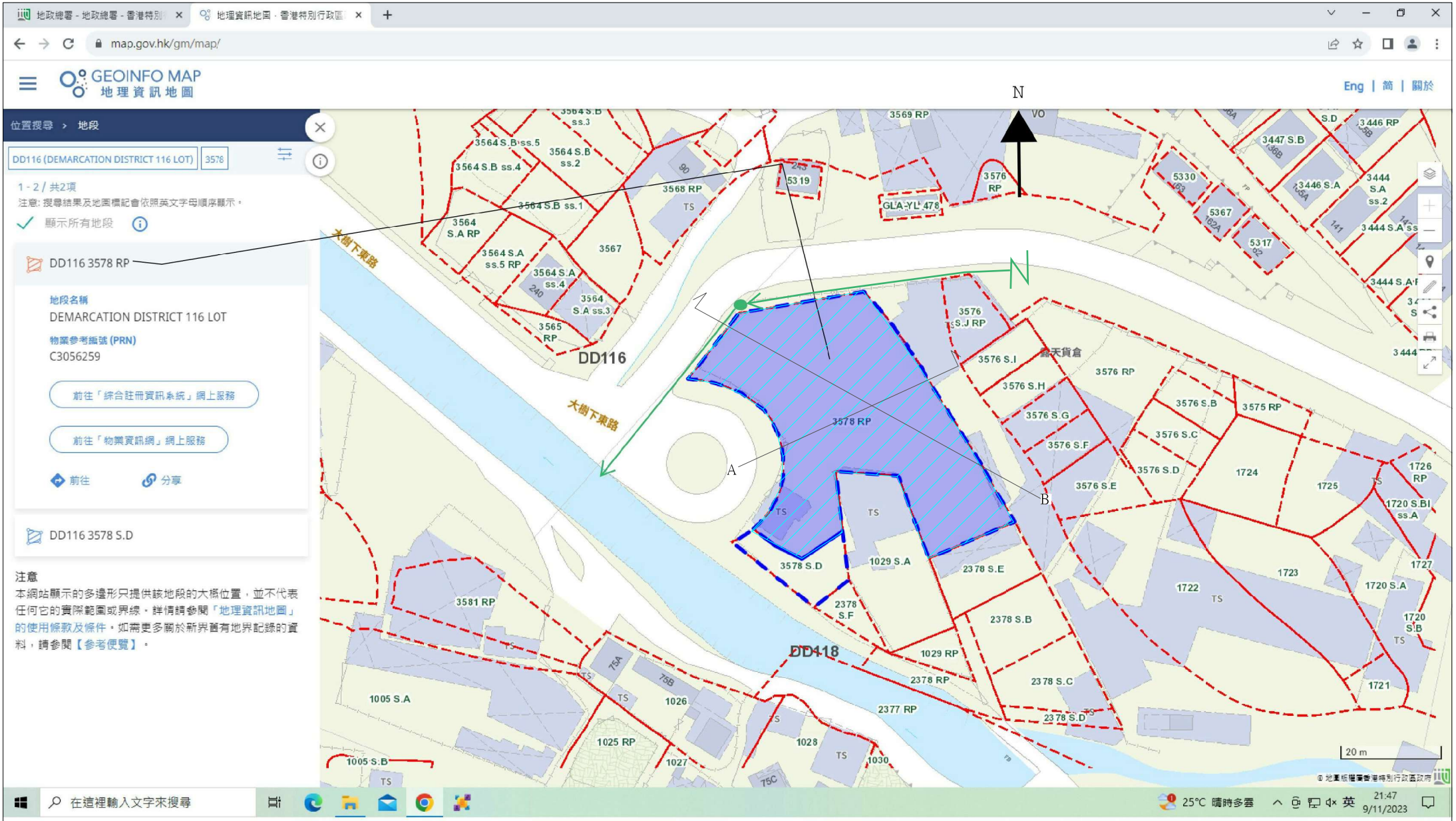
Photo Location Plan
c2-2





d1-1 Secation

Scale : 1:300 A4



= EX CP (Stormwater)

= EX MH (Stormwater)

=EX 400mm Concrete Pipe (Stormwater)

= EX 200x3 Pipe (Stormwater)

Section Plan
d2-2