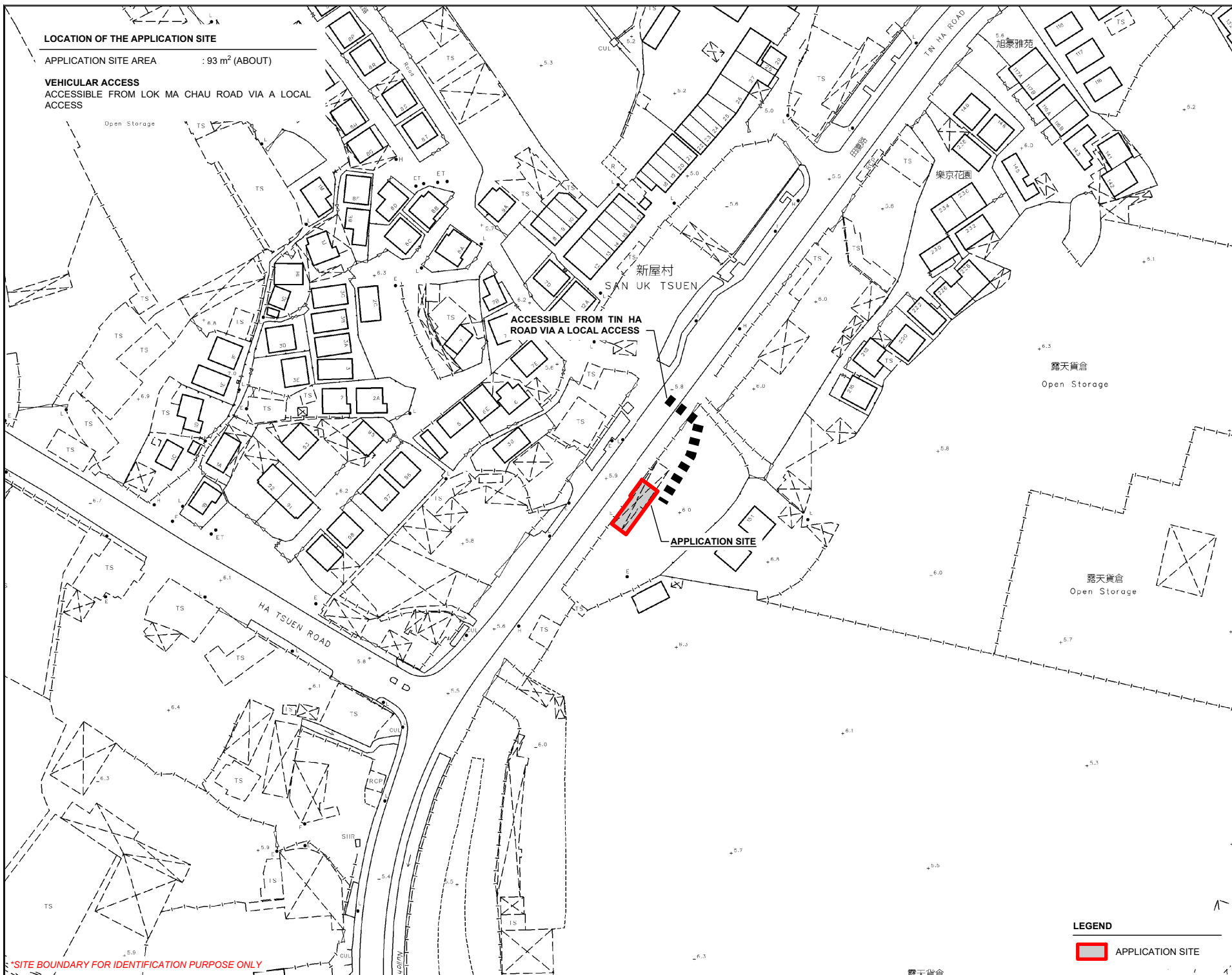
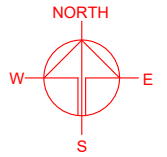


LOCATION OF THE APPLICATION SITE

APPLICATION SITE AREA : 93 m² (ABOUT)

VEHICULAR ACCESS

ACCESSIBLE FROM LOK MA CHAU ROAD VIA A LOCAL ACCESS



*SITE BOUNDARY FOR IDENTIFICATION PURPOSE ONLY

LEGEND

 APPLICATION SITE

PLANNING CONSULTANT



PROJECT

TEMPORARY SHOP AND SERVICES WITH ANCILLARY FACILITIES FOR A PERIOD OF 5 YEARS

SITE LOCATION

LOT 1580 RP (PART) IN D.D. 125, HA TSUEN, YUEN LONG, NEW TERRITORIES

SCALE

1 : 3000 @ A4

DRAWN BY

MN

DATE

29.5.2026

REVISED BY

DATE

APPROVED BY

DATE

DWG. TITLE

LOCATION PLAN

DWG NO.

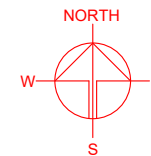
PLAN 1

VER.

001

ZONING OF THE APPLICATION SITE

APPLICATION SITE AREA : 93 m² (ABOUT)
OUTLINE ZONING PLAN : DRAFT HUNG SHUI KIU AND HA TSEUN OZP
OZP PLAN NO. : S/HSK/3
ZONING OF THE SITE : "VILLAGE TYPE DEVELOPMENT" ("V")



*SITE BOUNDARY FOR IDENTIFICATION PURPOSE ONLY

LEGEND

 APPLICATION SITE

PLANNING CONSULTANT



PROJECT

TEMPORARY SHOP AND SERVICES WITH ANCILLARY FACILITIES FOR A PERIOD OF 5 YEARS

SITE LOCATION

LOT 1580 RP (PART) IN D.D. 125, HA TSUEN, YUEN LONG, NEW TERRITORIES

SCALE

1 : 3000 @ A4

DRAWN BY

MN

DATE

29.5.2026

REVISED BY

DATE

APPROVED BY

DATE

DWG. TITLE

ZONING OF THE SITE

DWG NO.

PLAN 2

VER.

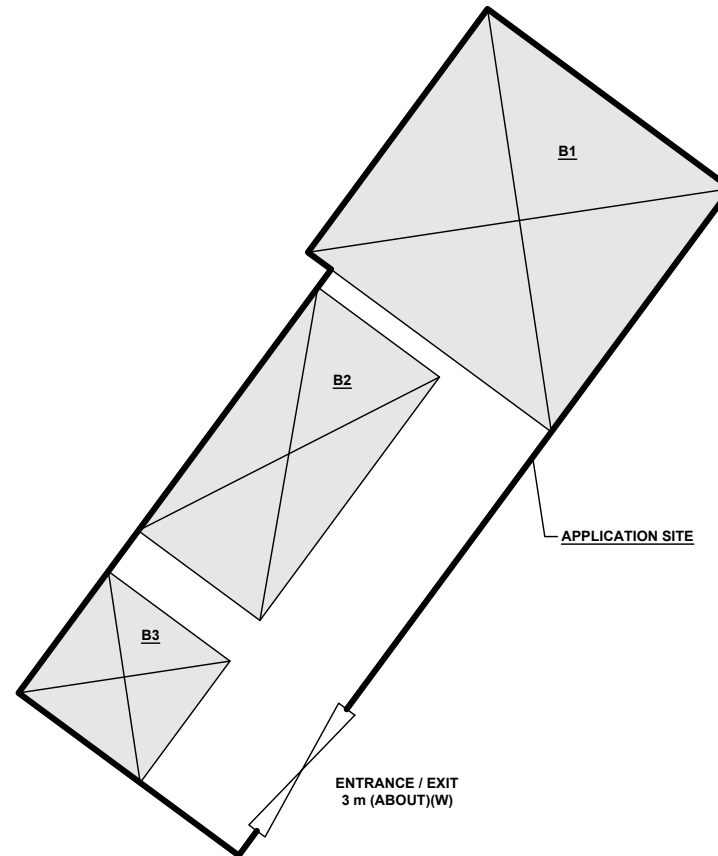
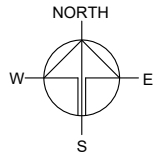
001

DEVELOPMENT PARAMETERS

APPLICATION SITE AREA	: 93 m ²	(ABOUT)
COVERED AREA	: 63 m ²	(ABOUT)
UNCOVERED AREA	: 30 m ²	(ABOUT)
PLOT RATIO	: 1.1	(ABOUT)
SITE COVERAGE	: 68 %	(ABOUT)
NO. OF STRUCTURE	: 3	
DOMESTIC GFA	: NOT APPLICABLE	
NON-DOMESTIC GFA	: 99 m ²	(ABOUT)
TOTAL GFA	: 99 m ²	(ABOUT)
BUILDING HEIGHT	: 3 m - 6 m	(ABOUT)
NO. OF STOREY	: 1 - 2	

NO PARKING AND LOADING/UNLOADING SPACE IS PROVIDED AT THE APPLICATION SITE

STRUCTURE	USE	COVERED AREA	GROSS FLOOR AREA	BUILDING HEIGHT
B1	SHOP AND SERVICES AND OFFICE	36 m ² (ABOUT)	72 m ² (ABOUT)	6 m (ABOUT)(2-STOREY)
B2	SHOP AND SERVICES AND OFFICE	18 m ² (ABOUT)	18 m ² (ABOUT)	3 m (ABOUT)(1-STOREY)
B3	WASHROOM	9 m ² (ABOUT)	9 m ² (ABOUT)	3 m (ABOUT)(1-STOREY)
TOTAL		63 m ² (ABOUT)	99 m ² (ABOUT)	



LEGEND

	APPLICATION SITE
	STRUCTURE
	INGRESS / EGRESS

PLANNING CONSULTANT



PROJECT

TEMPORARY SHOP AND SERVICES WITH ANCILLARY FACILITIES FOR A PERIOD OF 5 YEARS

SITE LOCATION

LOT 1580 RP (PART) IN D.D. 125, HA TSUEN, YUEN LONG, NEW TERRITORIES

SCALE

1 : 150 @ A4

DRAWN BY	DATE
MN	29.5.2026

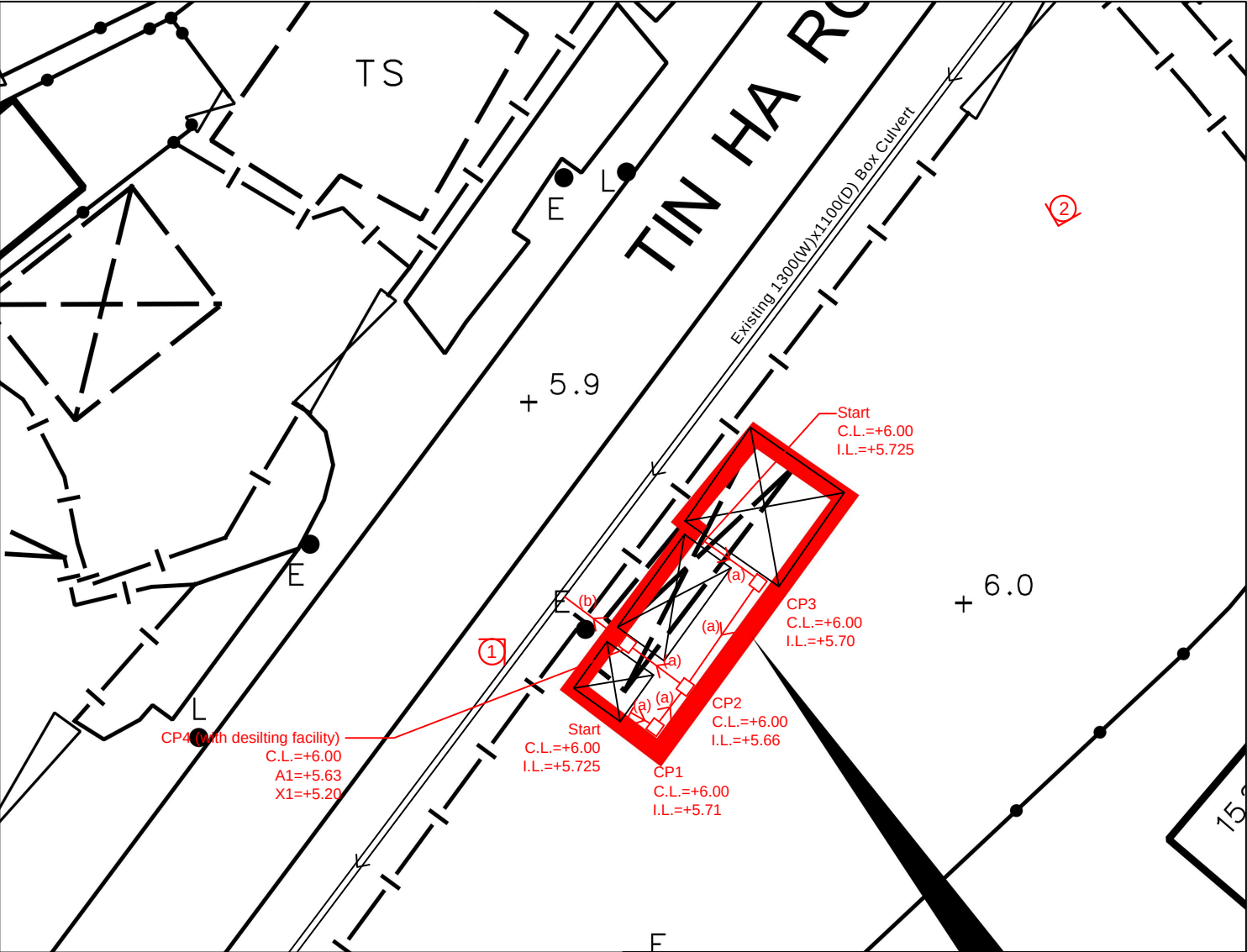
REVISED BY	DATE

APPROVED BY	DATE

DWG. TITLE
LAYOUT PLAN

DWG NO.	VER.
PLAN 4	001

*SITE BOUNDARY FOR IDENTIFICATION PURPOSE ONLY



Note:

1. Catchpits (CP4) with desilting facility shall follow CEDD standard drawing No. C2406I.

2. Catchpit and UC follows Typical Details of Geotechnical Manual for Slope Fig.8.10 and Fig.8.11 respectively.

3. No solid wall to be erected..

LEGEND

☐ CP Proposed CatchPit

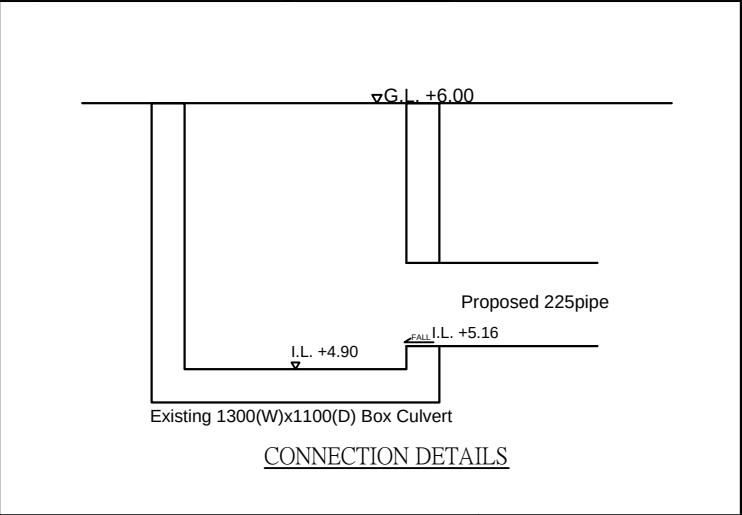
(a) Proposed 225UC (1:150) with Cast Iron Cover

(b) Proposed 225 dia. underground pipe (1:100)

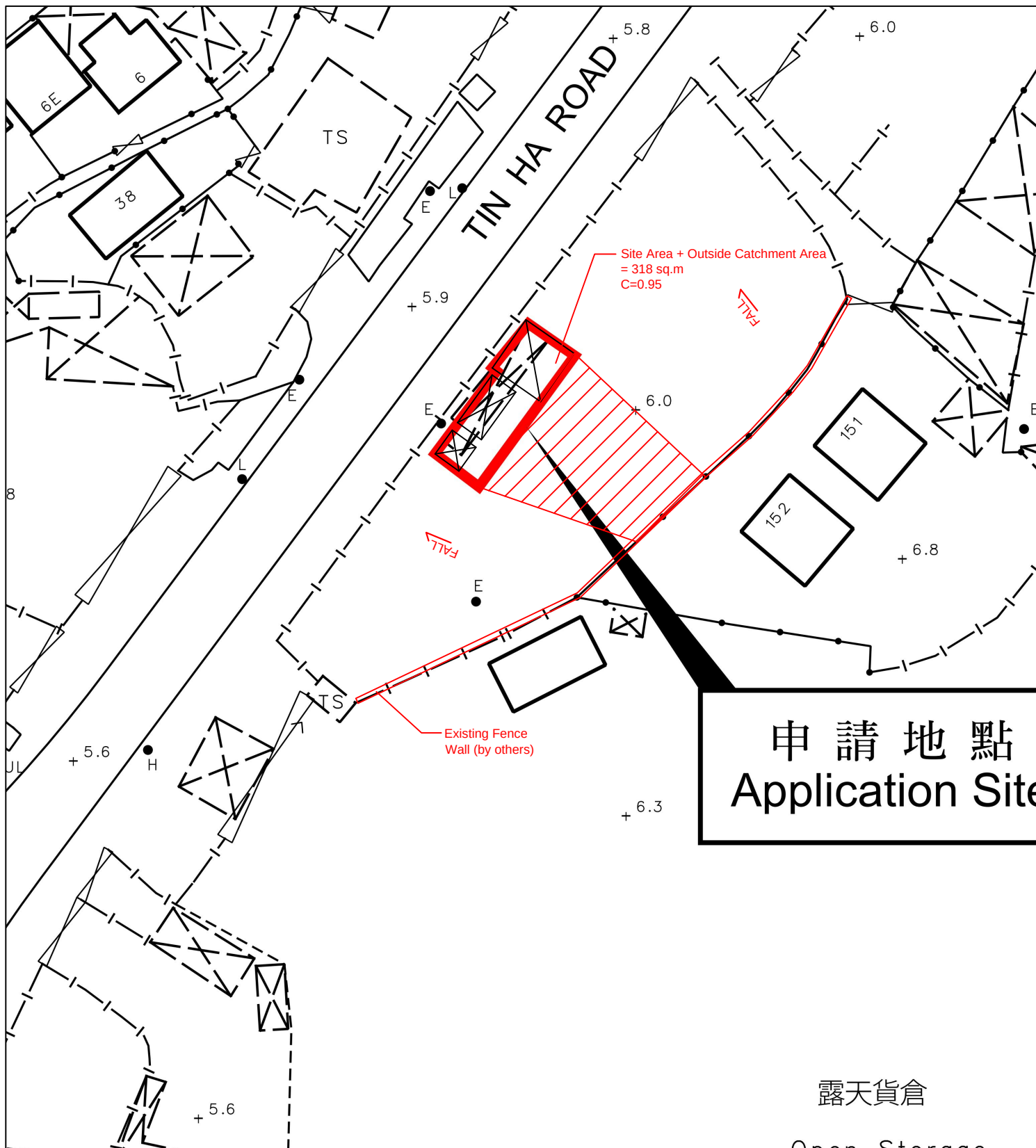
Existing 1300(W)x1100(D) Box Culvert

☒ Proposed Structure

Photo Viewport



正宏工程顧問公司 CHING WAN ENGINEERING CONSULTANTS CO.	Title: Drainage Proposal - LAYOUT		D01
	Drawn by: DM	Date: 17-6-2026	
	Check by: DM	Scale: ----	
Project Proposed Temporary Shop and Services with Ancillary Facilities for a Period of 5 Years at Lot 1580 RP (Part) in D.D. 125, Ha Tsuen, Yuen Long, New Territories (Application No.:A/HSK/475)			



申請地點
Application Site

露天貨倉

Open Storage

正宏工程顧問公司 CHING WAN ENGINEERING CONSULTANTS CO. Project Proposed Temporary Shop and Services with Ancillary Facilities for a Period of 5 Years at Lot 1580 RP (Part) in D.D. 125, Ha Tsuen, Yuen Long, New Territories (Application No.:A/HSK/475)	Title: Catchment Area Plan		D02
	Drawn by: DM	Date: 17-6-2026	
	Check by: DM	Scale: ----	

Photo 1



Photo 2



Site Area + outside catchment area = 318 m²

**Calculation of Design Runoff of the Proposed Development,
For UC design within The Site,**

$$\Sigma Q = \Sigma 0.278 C i A$$

The Site: C = 0.95 (P.42 of Stormwater Drainage Manual)

$$A = 318 \text{ m}^2 \\ = 0.000318 \text{ km}^2$$

$$t = 0.14465 L / H^{0.2} A^{0.1} \\ = 0.14465 * 10 / 1^{0.2} * 318^{0.1} \\ = 0.813 \text{ min}$$

$$i = 1.111 * a / (t+b)^c \quad (10 \text{ yrs return period, Table 3d, Corrigendum 2024, SDM and (11.1\% increase due to climate change)}) \\ = 1.111 * 454.9 / (0.813 + 3.44)^{0.412} \\ = 278.4 \text{ mm/hr}$$

$$\text{Therefore, } Q = 0.278 * 0.95 * 278.4 * 0.000318 / 0.9 \quad (0.9 \text{ factor is adopted for sediment}) \\ = 0.0260 \text{ m}^3/\text{sec} \\ = \underline{1559} \text{ lit/min}$$

Provide 225UC (1:150) is OK

Calculation Maximum Capacity of Proposed 225 UC

$$\text{Manning Equation } V = R^{2/3} * S_f^{0.5} / n$$

$$\text{where } R = (\pi r^2 / 2 + 2r^2) / (\pi r + 2r) \quad r = 0.1125 \text{ m} \\ = 0.078 \text{ m} \quad A = 0.045 \text{ m}^2$$

$$n = 0.014 \text{ s/m}^{1/3} \quad (\text{Table 13 of Stormwater Drainage Manual})$$

$$S_f = 0.00667$$

$$\text{Therefore, } V = 0.078^{2/3} * 0.00667^{0.5} / 0.014 \\ = 1.066 \text{ m/sec}$$

$$\text{Maximum Capacity (Q}_{\text{max}}) = V * A \\ = 0.048 \text{ m}^3/\text{sec} \\ = \underline{2890} \text{ lit/min} \\ > \underline{1559} \text{ lit/min}$$

Check 225mm dia. Pipes by Colebrook-White Equation

$$V = -\sqrt{(8gDs)} \log\left(\frac{ks}{3.7D} + \frac{2.51v}{D\sqrt{(2gDs)}}\right)$$

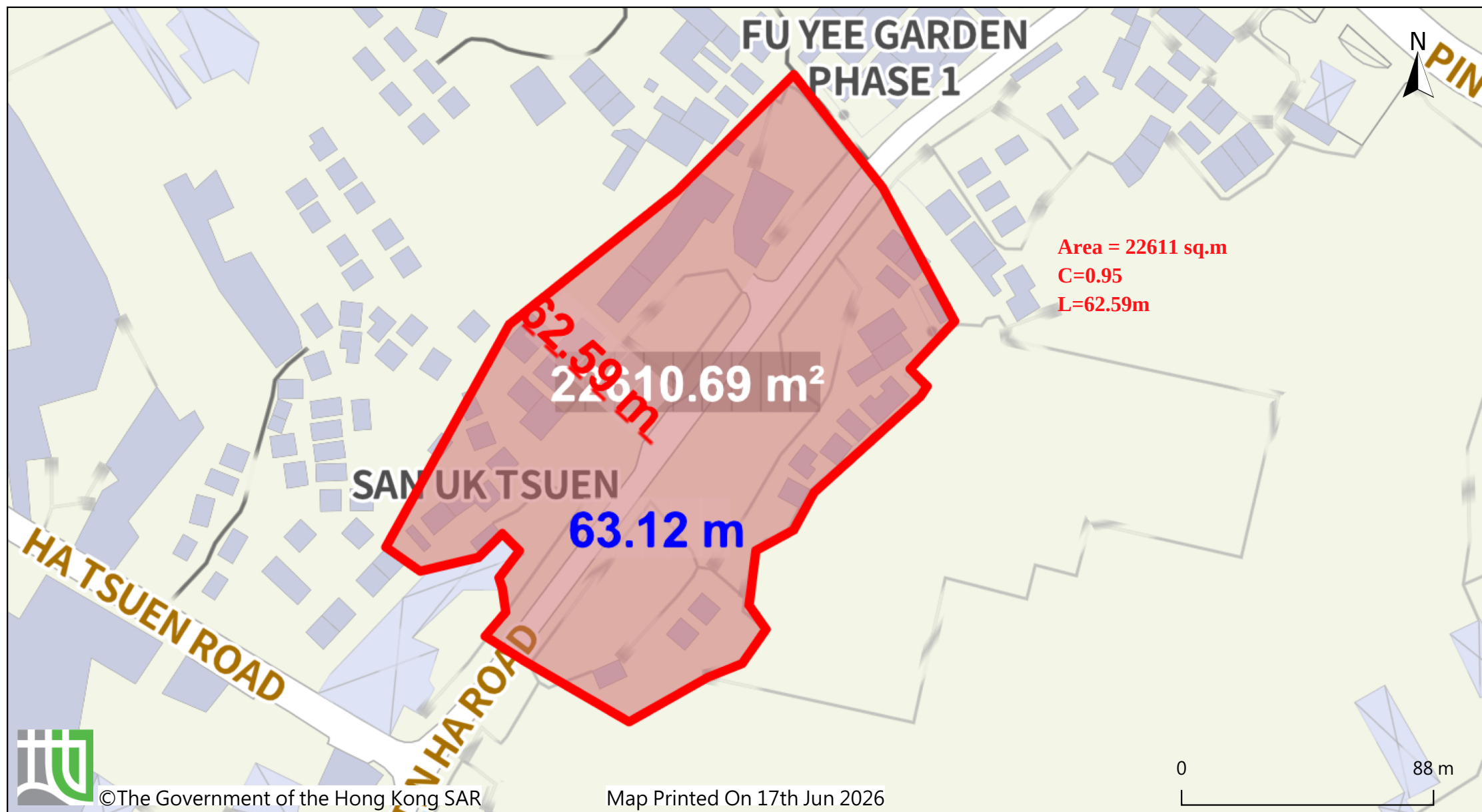
where :

$$V = \text{mean velocity (m/s)} \\ g = 9.81 \text{ m/s}^2 \text{ gravitational acceleration (m/s}^2) \\ D = 0.225 \text{ m internal pipe diameter (m)} \\ ks = 0.00015 \text{ m hydraulic pipeline roughness (m) (Table 14, from DSD SDM 2018, concrete pipe)} \\ v = 1.14E-06 \text{ m}^2/\text{s kinematic viscosity of fluid (m}^2/\text{s)} \\ s = 0.01 \text{ hydraulic gradient (1: 100)}$$

$$\text{Therefore } V = 1.52 \text{ m/s} \\ \text{, design V}$$

$$Q = VA \quad (0.8 \text{ factor for sedimentation}) \\ = 0.060 \text{ m}^3/\text{s} \\ = 3627 \text{ lit/min} \\ > 1559 \text{ lit/min} \quad \text{Ok}$$

Provide 225UC(1:150) inside the site and 300mm dia. concrete pipe (1:100) outfall is OK



$$\text{Total Catchment Area, Area} = 22611 \text{ m}^2$$

Design runoff of Existing Box Culvert,

$$\Sigma Q = \Sigma 0.278 C i A$$

The Site: $C = 0.95$ (P.42 of Stormwater Drainage Manual)

$$A = 22611 \text{ m}^2$$

$$= 0.022611 \text{ km}^2$$

$$t = 0.14465 L / H^{0.2} A^{0.1}$$

$$= 0.14465 * 62.59 / 1^{0.2} * 22611^{0.1}$$

$$= 3.322 \text{ min}$$

$$i = 1.111 * a / (t+b)^c$$

$$= 1.111 * 454.9 / (3.322+3.44)^{0.412}$$

$$= 230.0 \text{ mm/hr}$$

(10 yrs return period, Table 3d, Corrigendum 2024, SDM) and (11.1% increase due to climate change)

Therefore, $Q = 0.278 * 0.95 * 230.0 * 0.022611 / 0.9$ (0.9 factor is adopted for sediment)

$$= 1.5258 \text{ m}^3/\text{sec}$$

$$= \underline{91546} \text{ lit/min}$$

Calculation Maximum Capacity of Ex. 1.3m(W)x1.1m(D) Box Culvert

Manning Equation $V = R^{2/3} * S_f^{0.5} / n$

where $R = A / (w+2D)$

$$= 0.359 \text{ m}$$

$W = 1.3 \text{ m}$
 $D = 0.8 \text{ m}$ (consider 300mm freeboard)
 $A = 1.04 \text{ m}^2$

$$n = 0.016 \text{ s/m}^{1/3}$$

(Talbe 13 of Stormwater Drainage Manual)

$$S_f = 0.01000$$

Therefore, $V = 0.359^{2/3} * 0.01^{0.5} / 0.016$

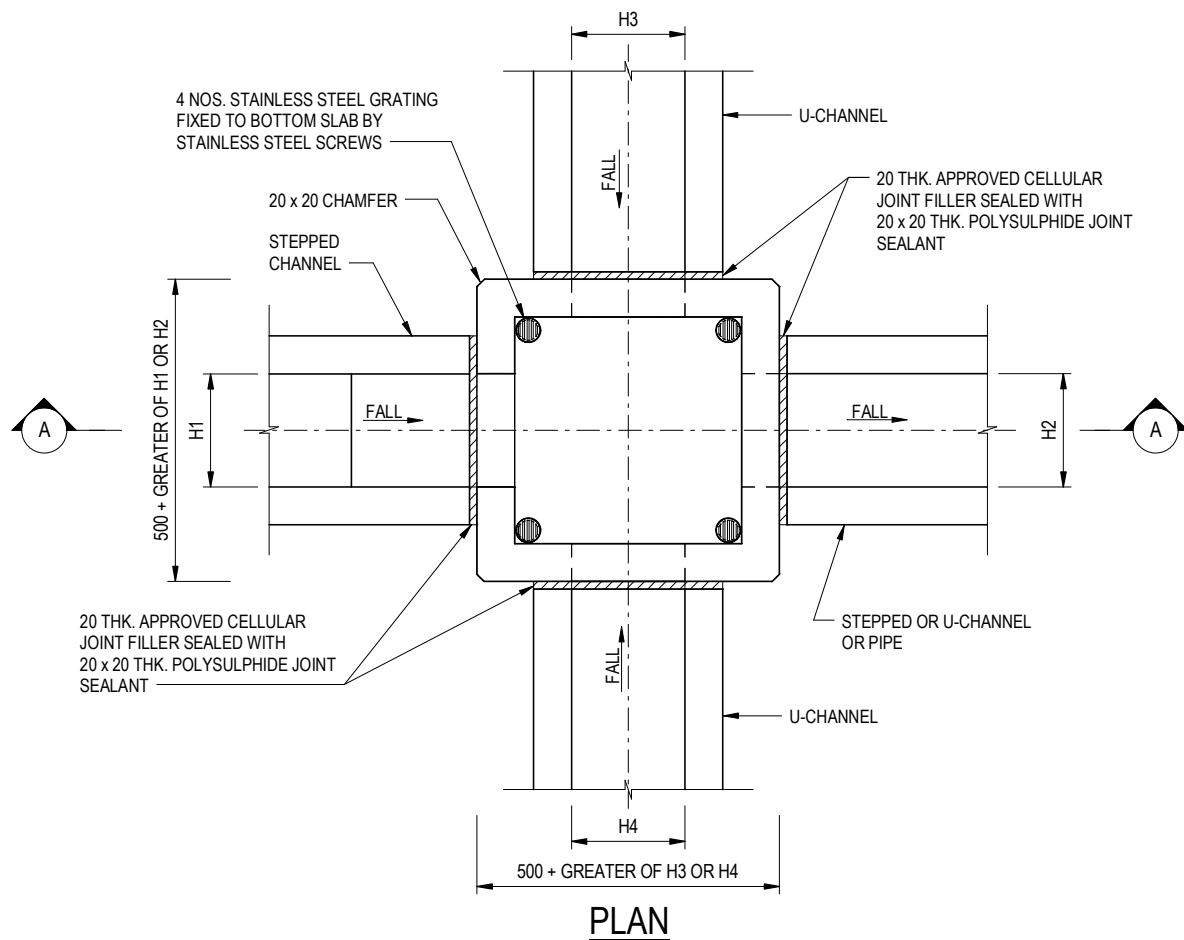
$$= 3.155 \text{ m/sec}$$

Maximum Capacity ($Q_{\max}$) $= V * A$

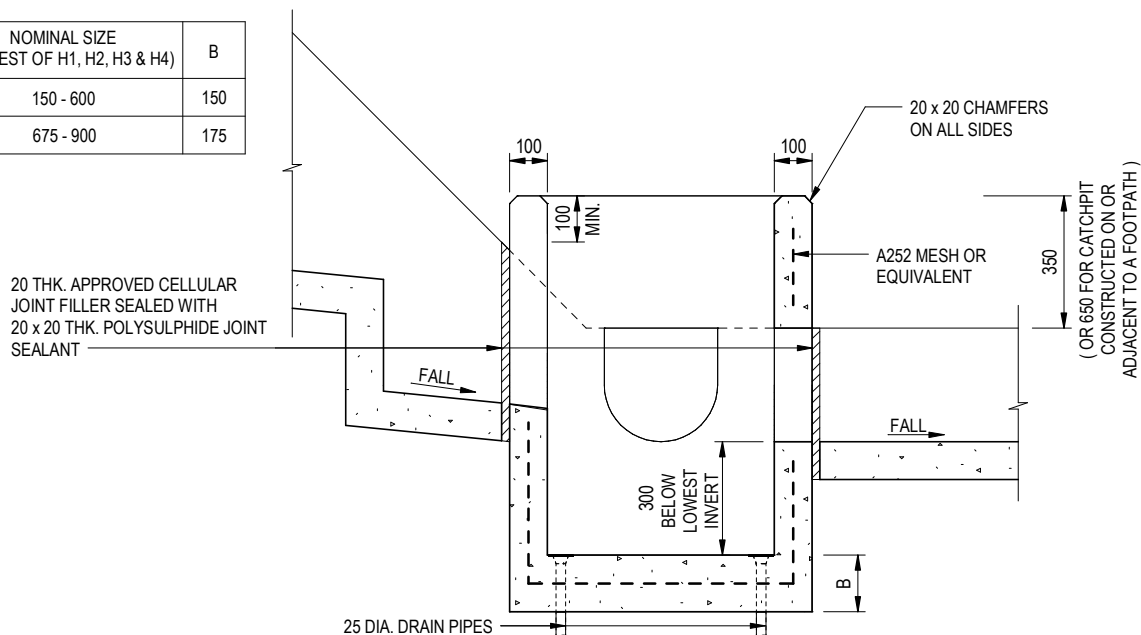
$$= 3.281 \text{ m}^3/\text{sec}$$

$$= \underline{196859} \text{ lit/min}$$

$$> \underline{91546} \text{ lit/min}$$



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



NOTES:

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

**CATCHPIT WITH TRAP
(SHEET 1 OF 2)**

A	BIM OBJECT REVISION.	Original Signed	12.2025
—	FORMER DRG. NO. C2406J.	Original Signed	03.2015
REF.	REVISION	SIGNATURE	DATE



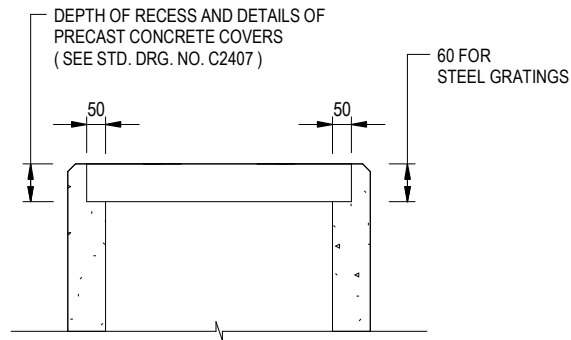
**CIVIL ENGINEERING AND
DEVELOPMENT DEPARTMENT**

SCALE 1 : 20

DATE JAN 1991

DRAWING NO.

C2406 /1A



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 1000 mm MIN. MEASURED FROM THE ADJACENT GROUND LEVEL.
10. MINIMUM INTERNAL CATCHPIT WIDTH SHALL BE 1000 mm FOR CATCHPITS WITH A HEIGHT EXCEEDING 1000 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.

B	BIM OBJECT REVISION.	Original Signed	12.2025
A	MINOR AMENDMENT.	Original Signed	04.2016
—	FORMER DRG. NO. C2406J.	Original Signed	03.2015
REF.	REVISION	SIGNATURE	DATE

**CATCHPIT WITH TRAP
(SHEET 2 OF 2)**



**CIVIL ENGINEERING AND
DEVELOPMENT DEPARTMENT**

SCALE 1 : 20

DATE JAN 1991

DRAWING NO.

C2406 /2B

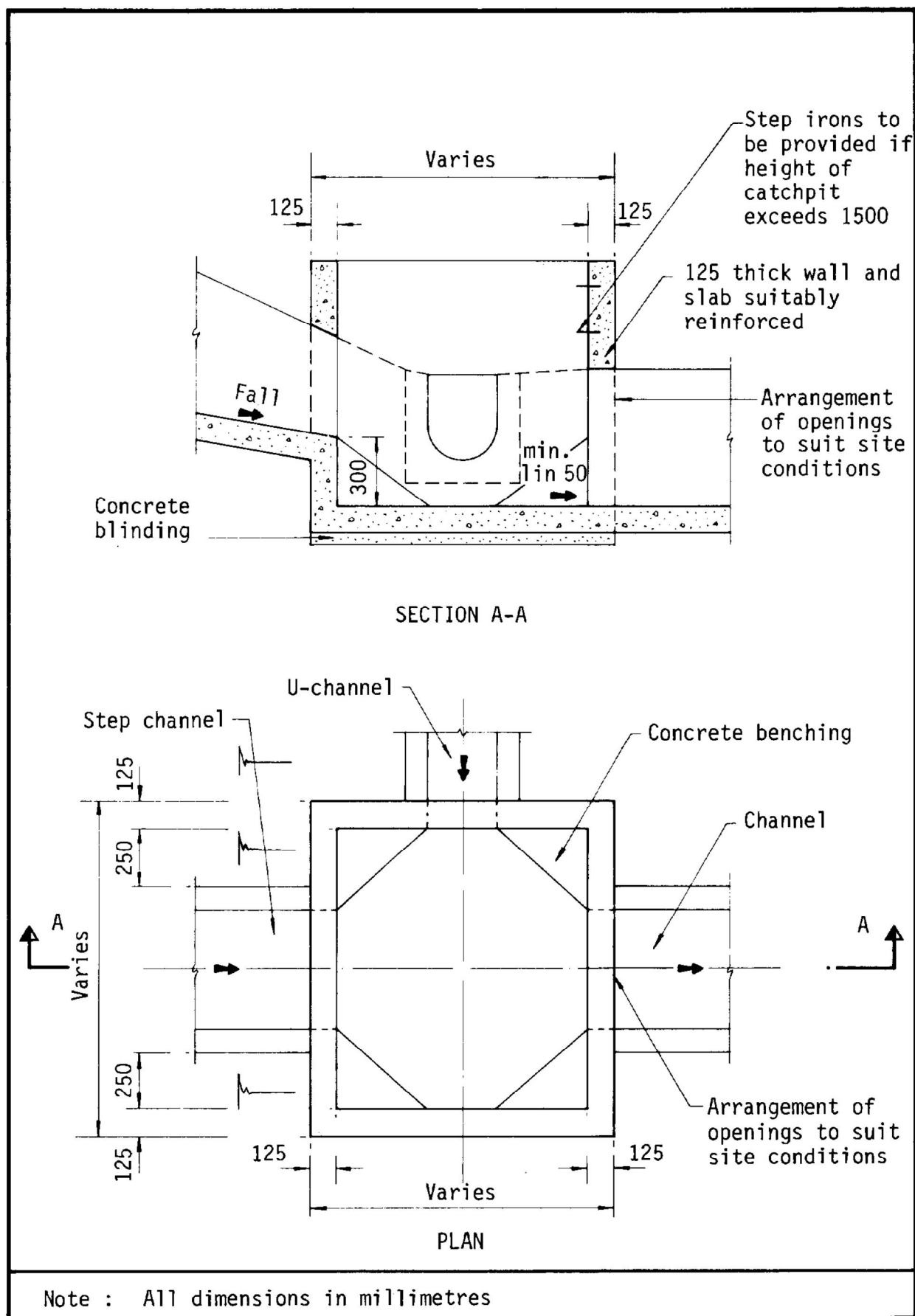
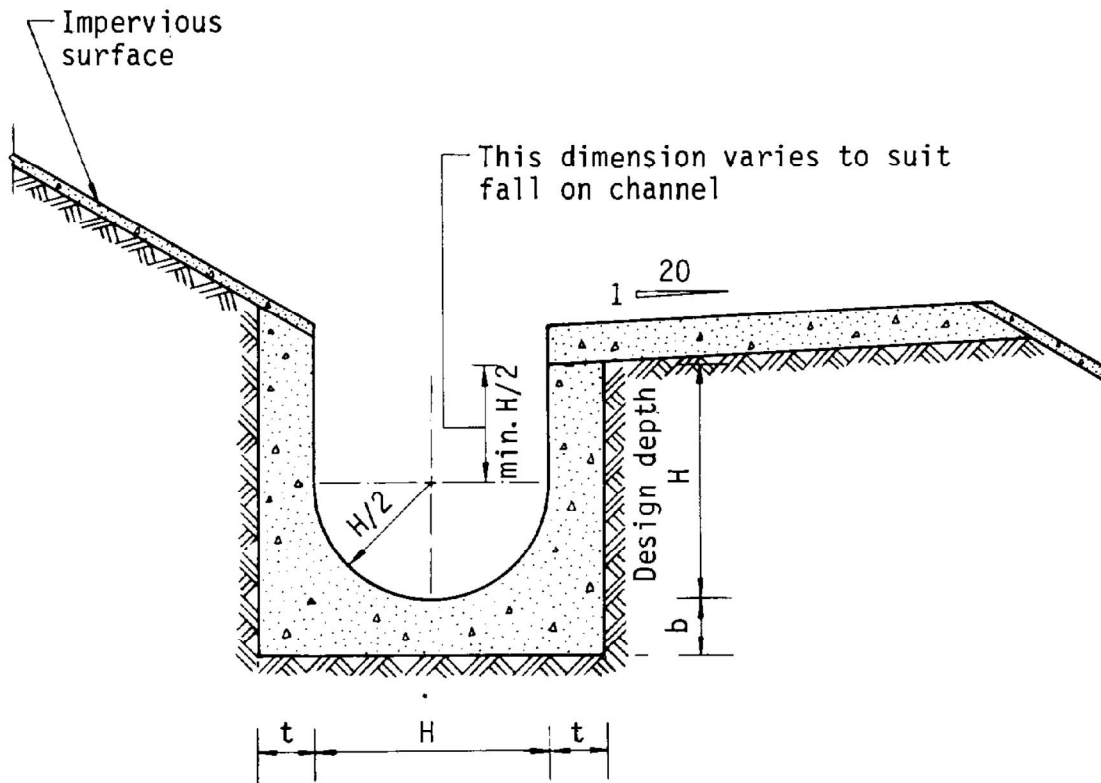


Figure 8.10 - Typical Details of Catchpits



Dimensions of U - channel

Nominal size of channel H (mm)	Thickness t (mm)	Thickness b (mm)
225 to 600	150	150
675 to 1200	175	225

Figure 8.11 - Typical U-channel Details

DEVELOPMENT PARAMETERS

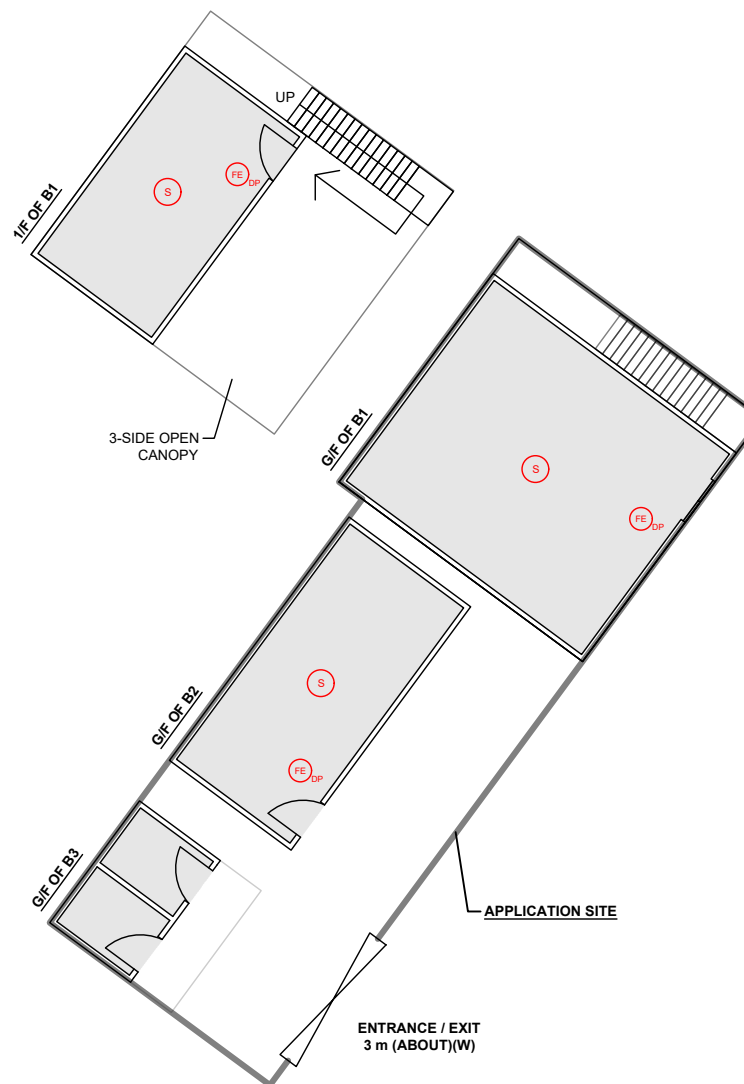
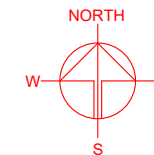
APPLICATION SITE AREA	: 93 m ²	(ABOUT)
COVERED AREA	: 63 m ²	(ABOUT)
UNCOVERED AREA	: 30 m ²	(ABOUT)
PLOT RATIO	: 1.1	(ABOUT)
SITE COVERAGE	: 68 %	(ABOUT)

NO. OF STRUCTURE	: 3
DOMESTIC GFA	: NOT APPLICABLE
NON-DOMESTIC GFA	: 99 m ² (ABOUT)
TOTAL GFA	: 99 m ² (ABOUT)

BUILDING HEIGHT	: 3 m - 6 m (ABOUT)
NO. OF STOREY	: 1 - 2

NO PARKING AND LOADING/UNLOADING SPACE IS PROVIDED AT THE APPLICATION SITE

STRUCTURE	USE	COVERED AREA	GROSS FLOOR AREA	BUILDING HEIGHT
B1	SHOP AND SERVICES AND OFFICE	36 m ² (ABOUT)	72 m ² (ABOUT)	6 m (ABOUT)(2-STOREY)
B2	SHOP AND SERVICES AND OFFICE	18 m ² (ABOUT)	18 m ² (ABOUT)	3 m (ABOUT)(1-STOREY)
B3	WASHROOM	9 m ² (ABOUT)	9 m ² (ABOUT)	3 m (ABOUT)(1-STOREY)
TOTAL		63 m ² (ABOUT)	99 m ² (ABOUT)	



FIRE SERVICE INSTALLATIONS

- STAND-ALONE FIRE DETECTOR
- 4 KG DRY POWDER TYPE FIRE EXTINGUISHER

FS NOTES:

- SUFFICIENT STAND-ALONE FIRE DETECTOR SHALL BE PROVIDED THROUGHOUT THE ENTIRE BUILDING IN ACCORDANCE WITH "STAND-ALONE FIRE DETECTOR GENERAL GUIDELINES ON PURCHASE, INSTALLATION & MAINTENANCE [SEP 2021]".
- IN RELATION TO 1) ABOVE, WHERE TWO OR MORE STAND-ALONE FIRE DETECTORS ARE INSTALLED IN AN ENCLOSED STRUCTURE, ALL STAND-ALONE DETECTORS SHALL BE INTERCONNECTED (EITHER WIRED OR WIRELESSLY) SUCH THAT WHEN ONE OF THE STAND-ALONE FIRE DETECTOR IS TRIGGERED, ALL CONNECTED STAND-ALONE FIRE DETECTORS SHALL SOUND AN ALARM SIMULTANEOUSLY.
- PORTABLE HAND-OPERATED APPROVED APPLIANCE SHALL BE PROVIDED AS REQUIRED BY OCCUPANCY.
- ACCESS IS PROVIDED FOR EMERGENCY VEHICLE TO REACH 30m OF ALL PART OF STRUCTURES.

LEGEND

- APPLICATION SITE
- STRUCTURE
- INGRESS / EGRESS

PLANNING CONSULTANT



PROJECT

TEMPORARY SHOP AND SERVICES WITH ANCILLARY FACILITIES FOR A PERIOD OF 5 YEARS

SITE LOCATION

LOT 1580 RP (PART) IN D.D. 125, HA TSUEN, YUEN LONG, NEW TERRITORIES

SCALE

1 : 150 @ A4

DRAWN BY MN DATE 29.5.2026

REVISED BY DATE

APPROVED BY DATE

DWG. TITLE

FSIs PROPOSAL

DWG NO. APPENDIX II

VER. 001

*SITE BOUNDARY FOR IDENTIFICATION PURPOSE ONLY