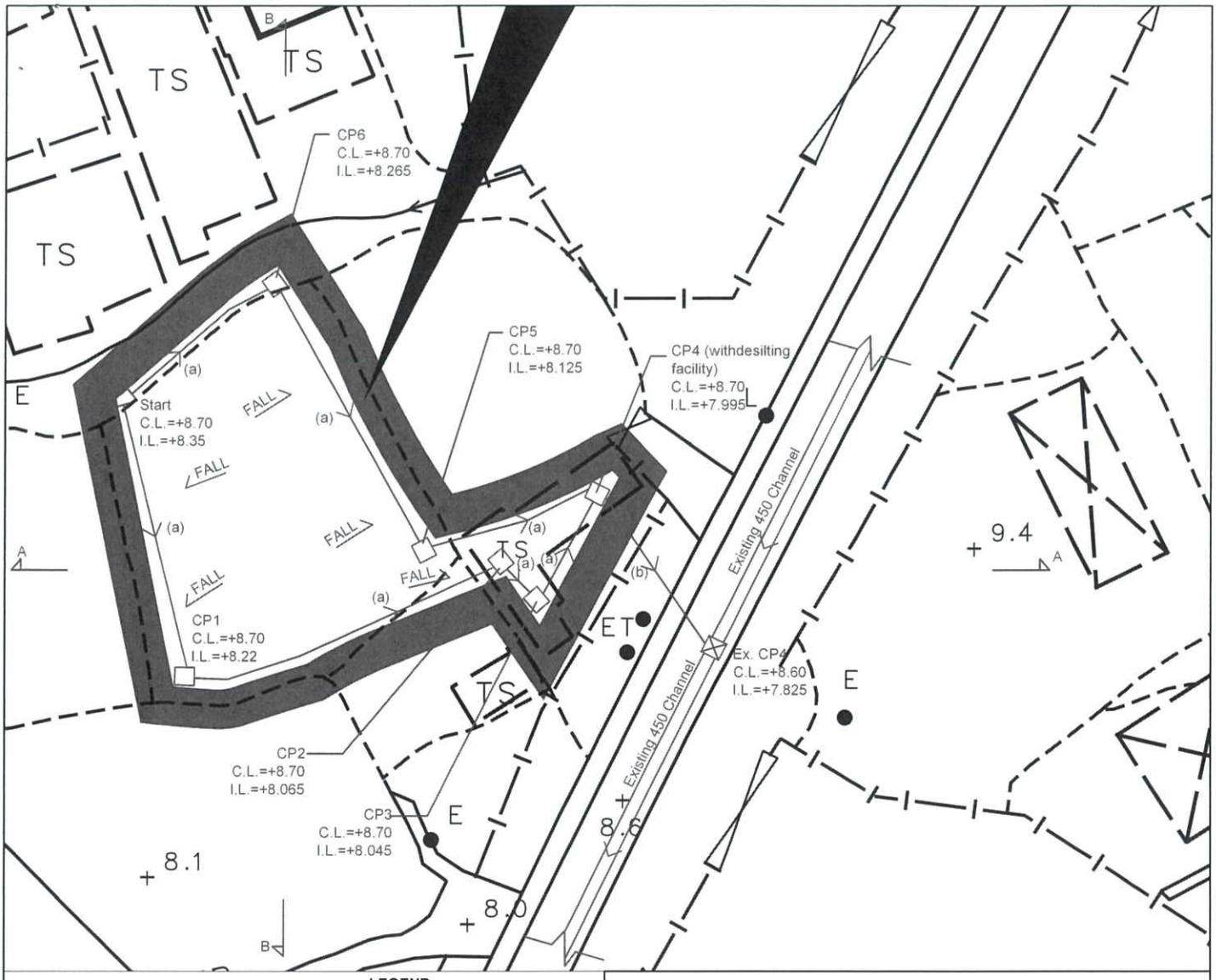
Appendix I

Drainage Proposal

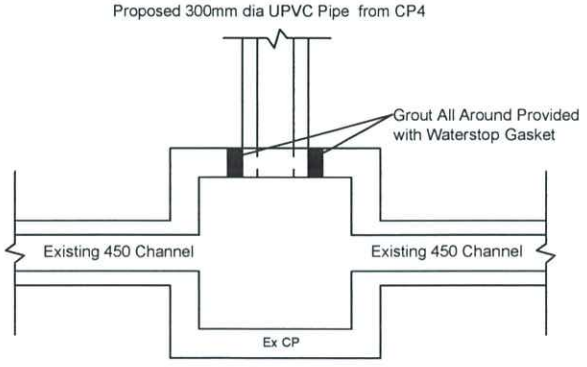


Note:
1. Catchpits (CP4) with desilting facility shall follow CEDD standard drawing No. C2406I.

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

LEGEND

□CP	Proposed CatchPit
(a) →	Proposed 300UC (1:150) with Cast Iron Cover
(b) →	Proposed 300mm dia UPVC Pipe (1:150)
⊠CP	Existing CatchPit
⇉	Existing 450 Channel



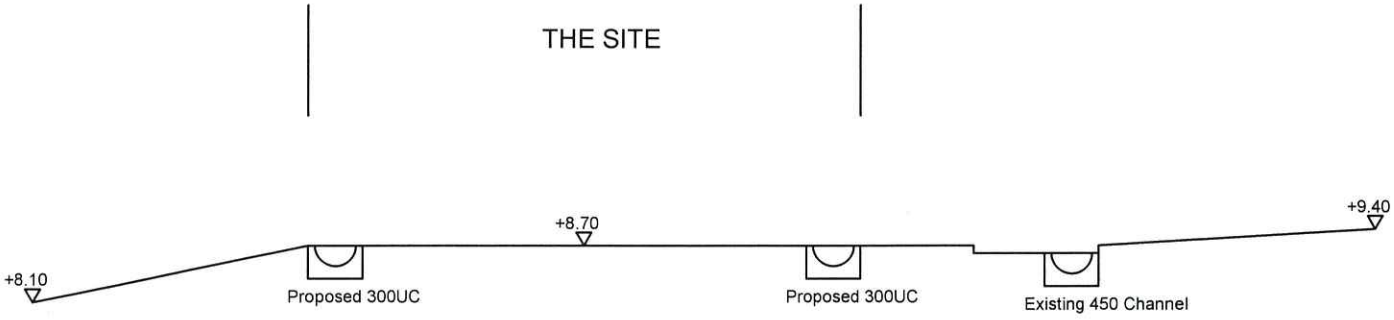
CONNECTION DETAILS

正宏工程顧問公司

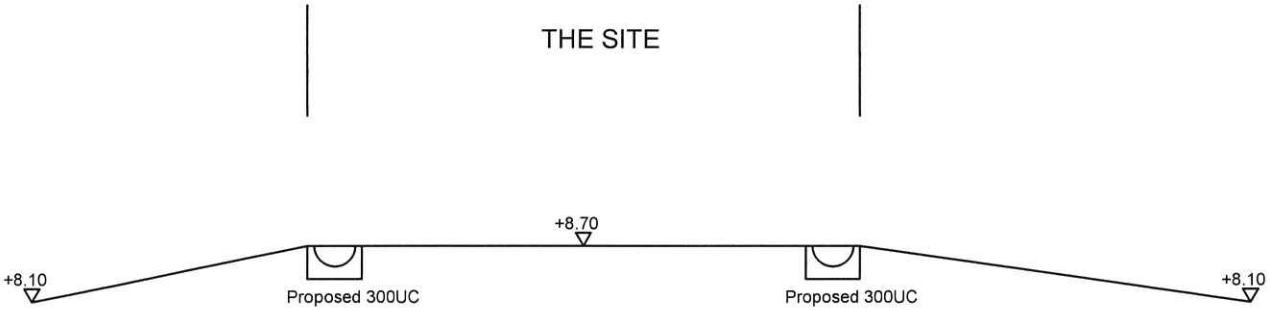
CHING WAN ENGINEERING CONSULTANTS CO.

Project:
Proposed Temporary Use/Development in Rural Areas for a Period of 3 Years at Lots 913 RP (Part) and 914 in D.D. 107, Fung Kat Heung, Kam Tin, Yuen Long, New Territories

Title: Drainage Proposal	D01
Drawn by: DM	Date: 28–6–2025
Check by: DM	Scale: ----

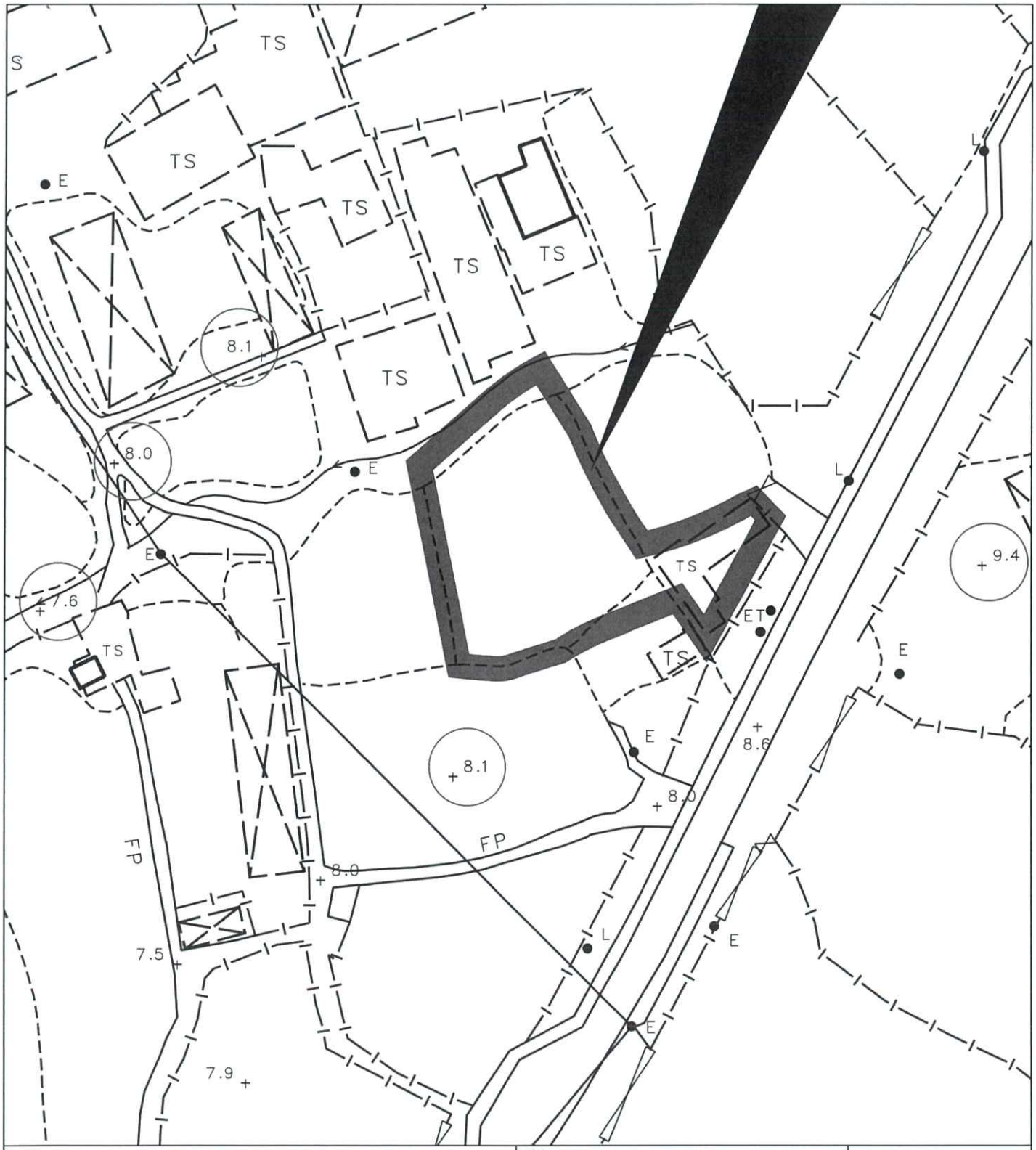


SECTION A-A



SECTION B-B

正宏工程顧問公司 CHING WAN ENGINEERING CONSULTANTS CO.	Title: Sections	D02
Project: **Proposed Temporary Use/Development in Rural Areas for a Period of 3 Years at Lots 913 RP (Part) and 914 in D.D. 107, Fung Kat Heung, Kam Tin, Yuen Long, New Territories**	Drawn by: DM	Date: 28-6-2025
	Check by: DM	Scale: ----



正宏工程顧問公司 CHING WAN ENGINEERING CONSULTANTS CO.	Title: Level in Surrounding Area	D03
	Drawn by: DM	Date: 11–6–2024
Project: **Proposed Temporary Use/Development in Rural Areas for a Period of 3 Years at Lots 913 RP (Part) and 914 in D.D. 107, Fung Kat Heung, Kam Tin, Yuen Long, New Territories**	Check by: DM	Scale: ----

GEOINFO MAP
地理資訊地圖

前往地圖: https://www.map.gov.hk/gm/geo:22.4539,114.0575?z=2257

由「地理資訊地圖」網站提供: https://www.map.gov.hk

Photo 1

Photo 2

Photo 3

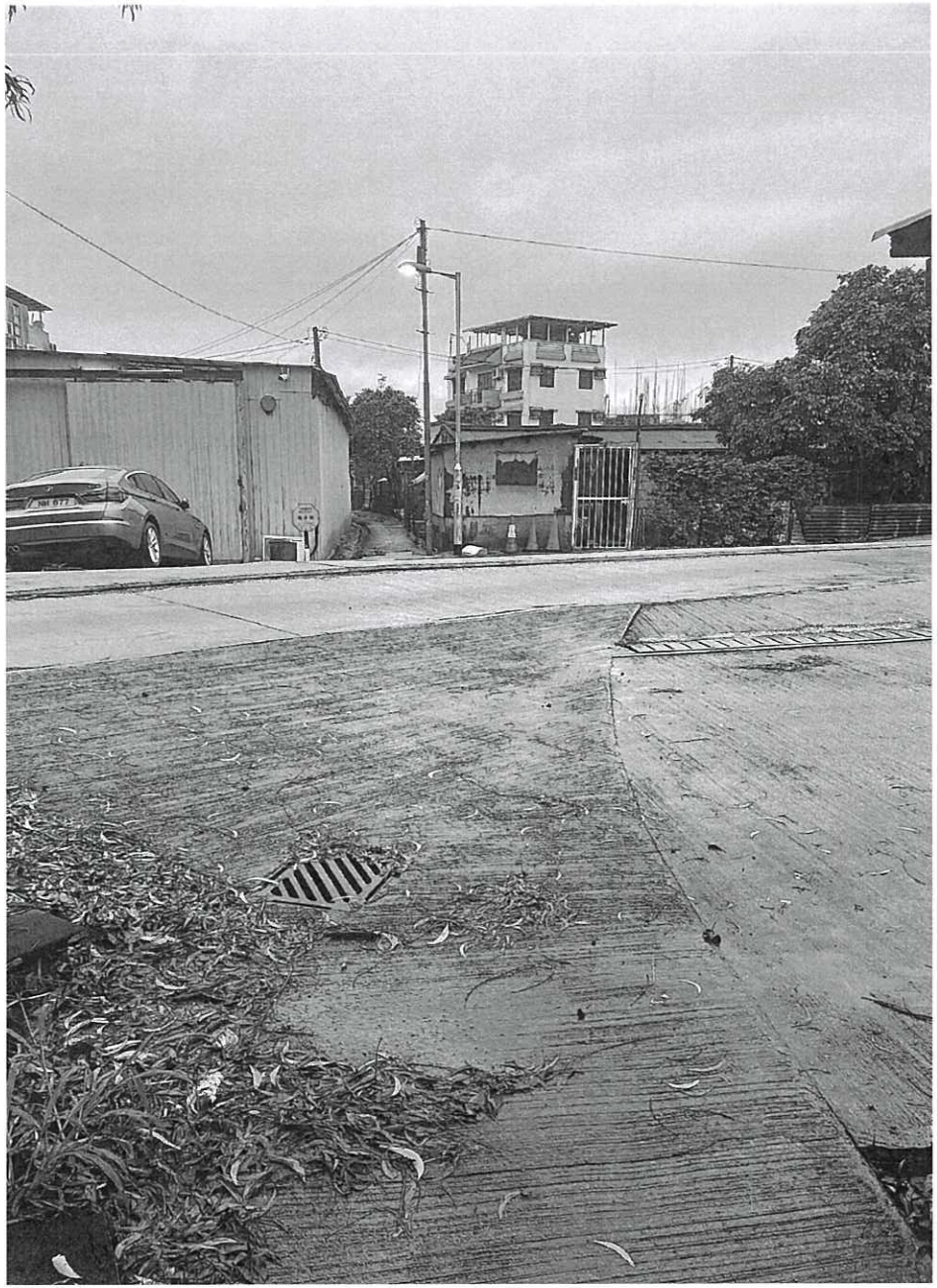
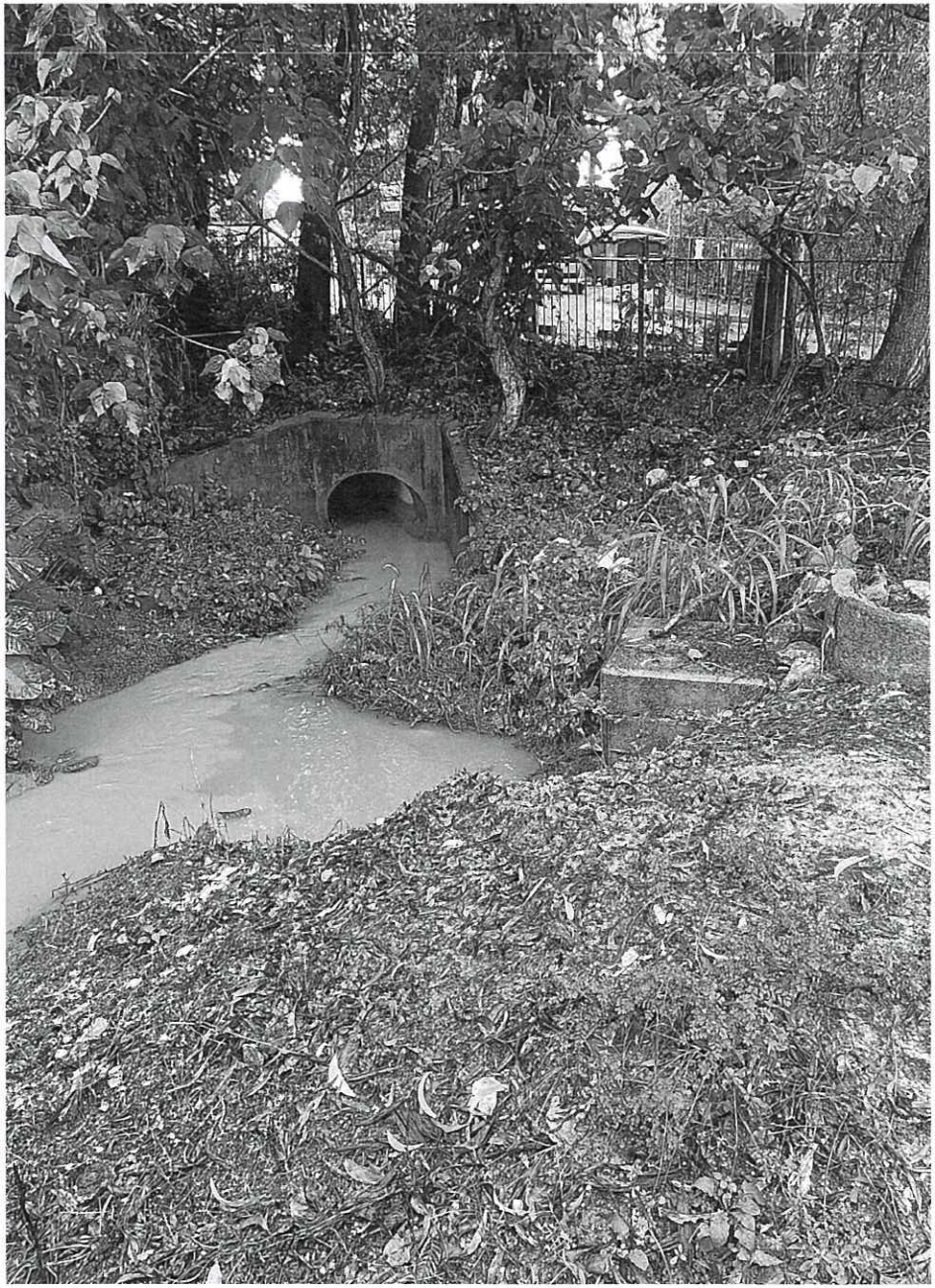


Photo 4



THE SITE, Area = 509 m^2 (C= 0.95)

Calculation of Design Runoff of the Proposed Development,
For the design of drains of northern and eastern side of the site, Catchment Area 1 + The Site

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

A = 509 m^2
= 0.000509 km^2

t = $0.14465\ L/\ H^{0.2} A^{0.1}$
= $0.14465*10/1^{0.2}*509^{0.1}$
= 0.776 min

i = $1.111*a/(t+b)^c$ (50 yrs return period, Table 3a, Corrigendum 2024, SDM) and (11.1% increase due to climate change)
= $1.111*505.5/(0.776+3.29)^{0.355}$
= 341.3 mm/hr

Therefore, Q = 0.278*0.95*341.3*0.000509
= 0.0459 m^3/sec
= 2753 lit/min

Provide 300UC (1:150) is OK

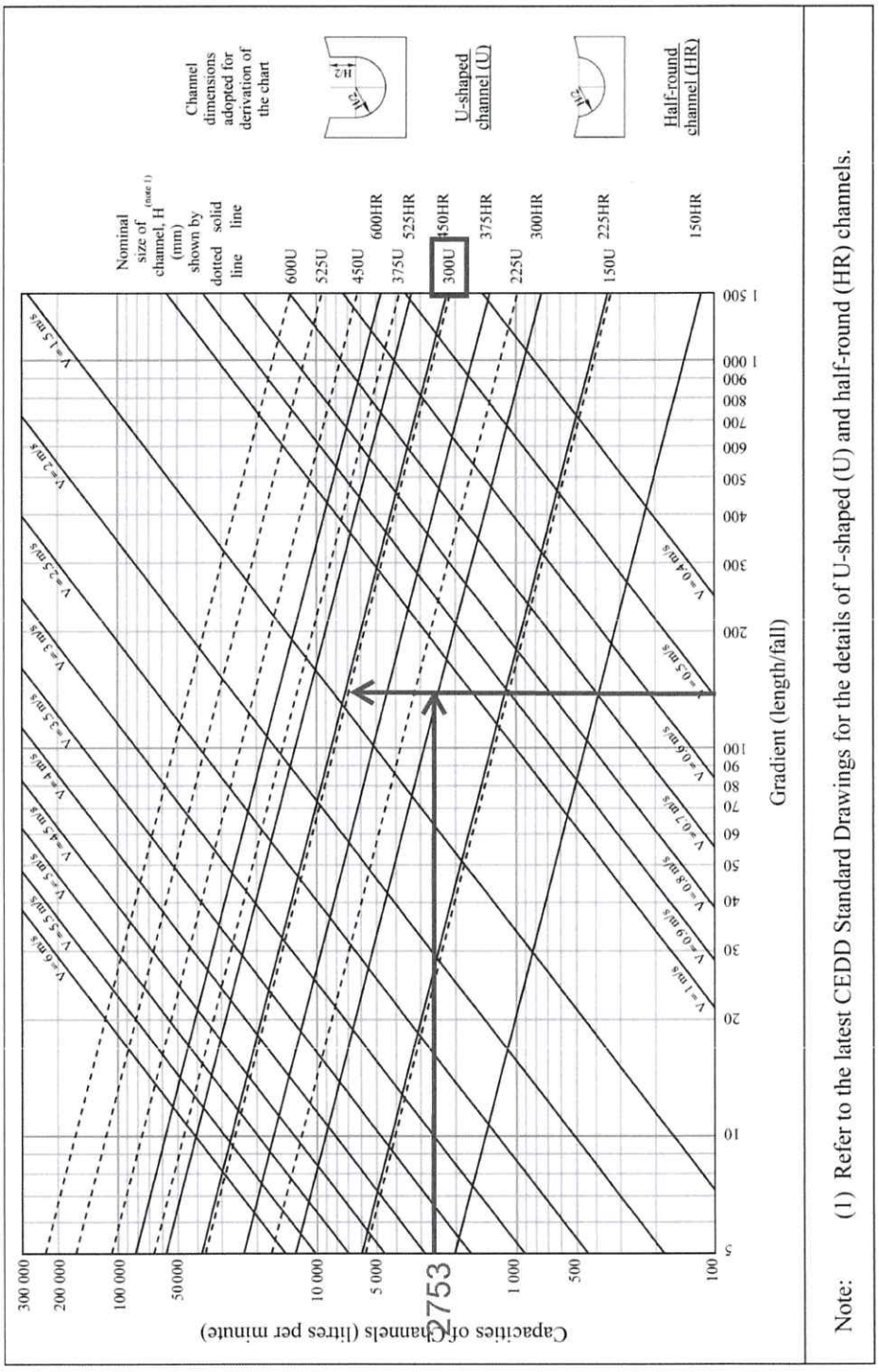


Figure 1 - Chart for the rapid design of U-shaped and half-round channels up to 600 mm

Note: (1) Refer to the latest CEDD Standard Drawings for the details of U-shaped (U) and half-round (HR) channels.

Check 300mm dia. Pipes by Colebrook-White Equation

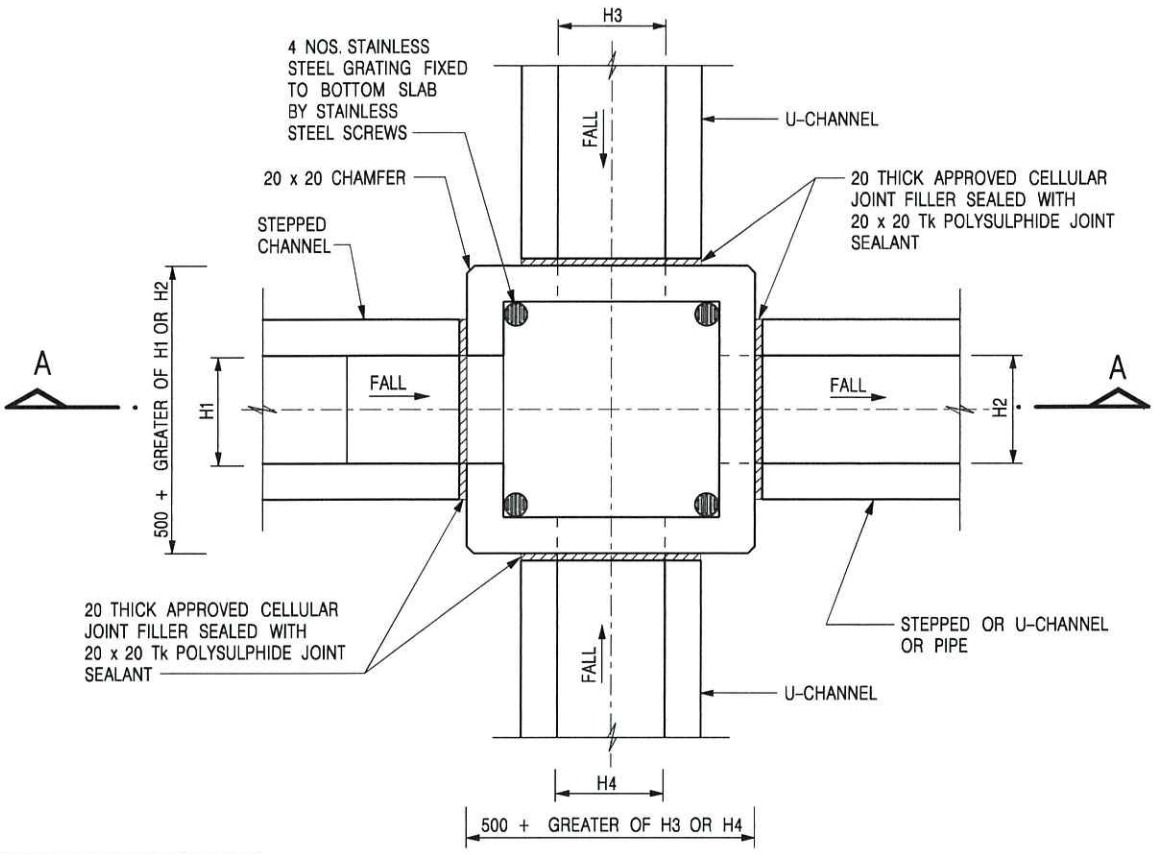
$$V = -\sqrt{(8gDs)}\log\left(\frac{ks}{3.7D} + \frac{2.51v}{D\sqrt{(2gDs)}}\right)$$

where :

V	=			mean velocity (m/s)	
g	=	9.81	m/s2	gravitational acceleration (m/s2)	
D	=	0.3	m	internal pipe diameter (m)	
ks	=	0.000003	m	hydraulic pipeline roughness (m)	(Table14, from DSD SDM 2018, upvc pipe)
v	=	1.14E-06	m2/s	kinematic viscosity of fluid (m2/s)	
s	=	0.01		hydraulic gradient	

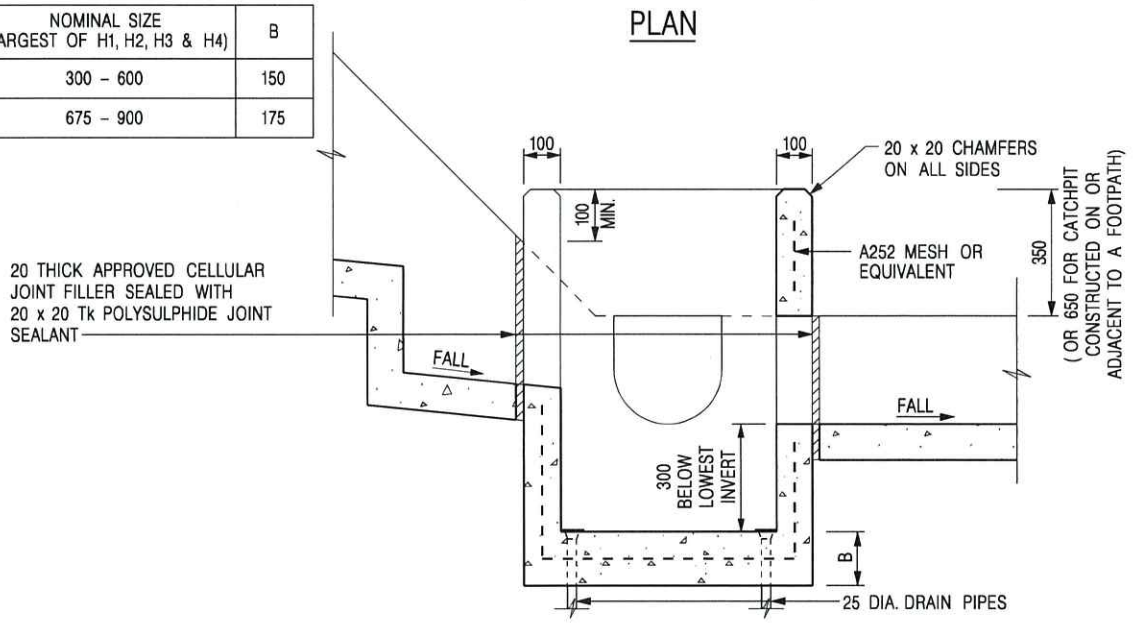
Therefore, design V of pipe capacity = 2.1236 m/s

Q= 0.8VA		(0.8 factor for sedimentation)
= 0.120	m3/s	
= 7205	lit/min	
> 2753	lit/min	Ok



PLAN

NOMINAL SIZE (LARGEST OF H1, H2, H3 & H4)	B
300 – 600	150
675 – 900	175



SECTION A – A

NOTES:

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

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

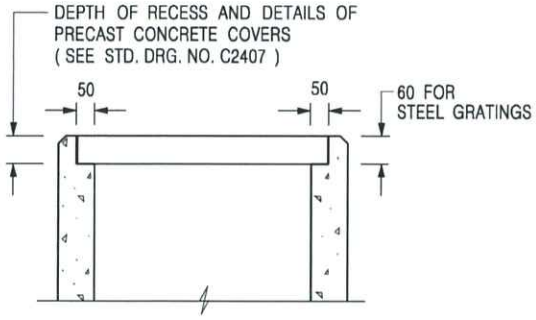
CATCHPIT WITH TRAP

(SHEET 1 OF 2)

CEDD CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

SCALE 1 : 20	DRAWING NO. C2406 /1
DATE JAN 1991	

卓越工程 建設香港 We Engineer Hong Kong's Development



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.

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

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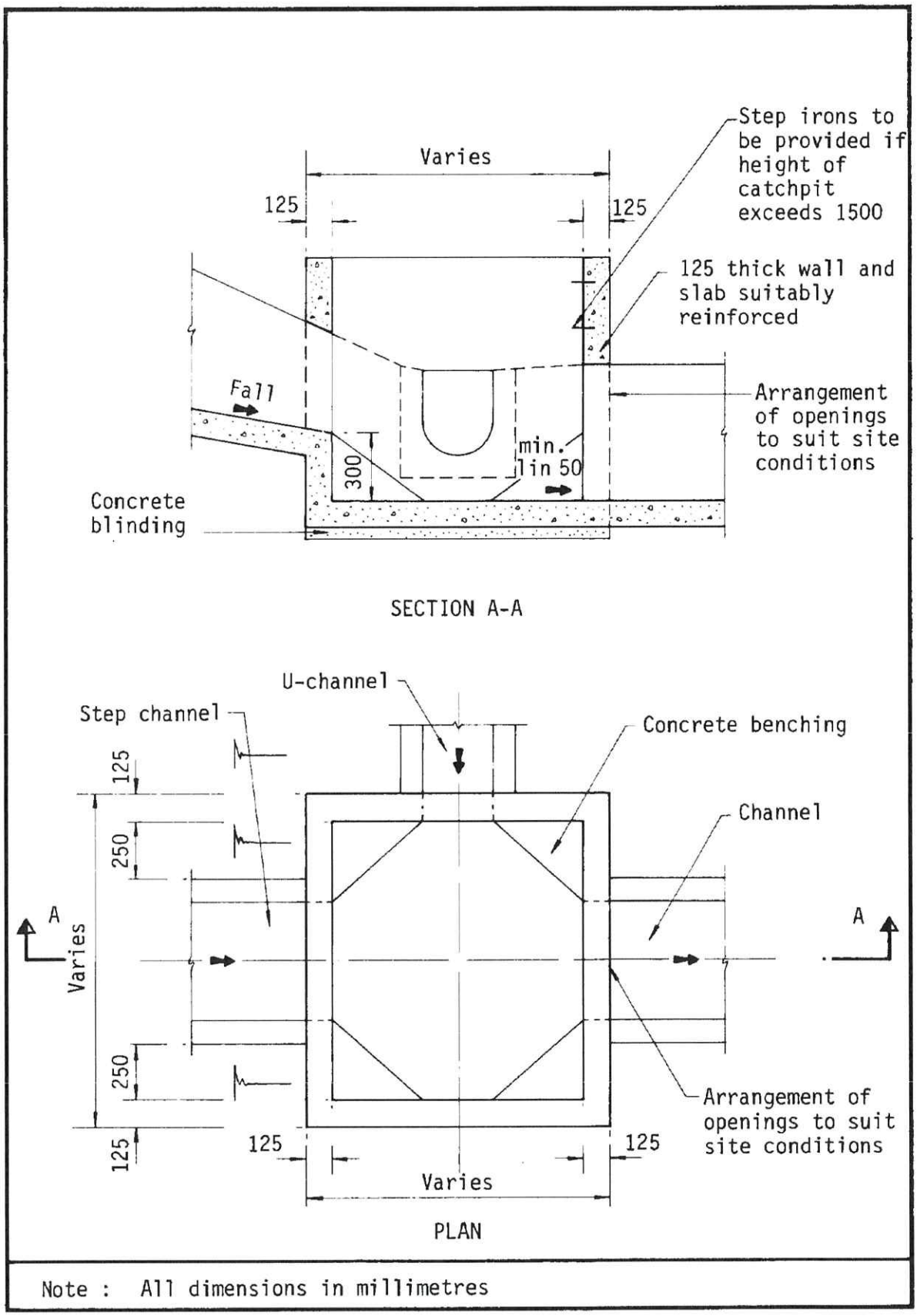
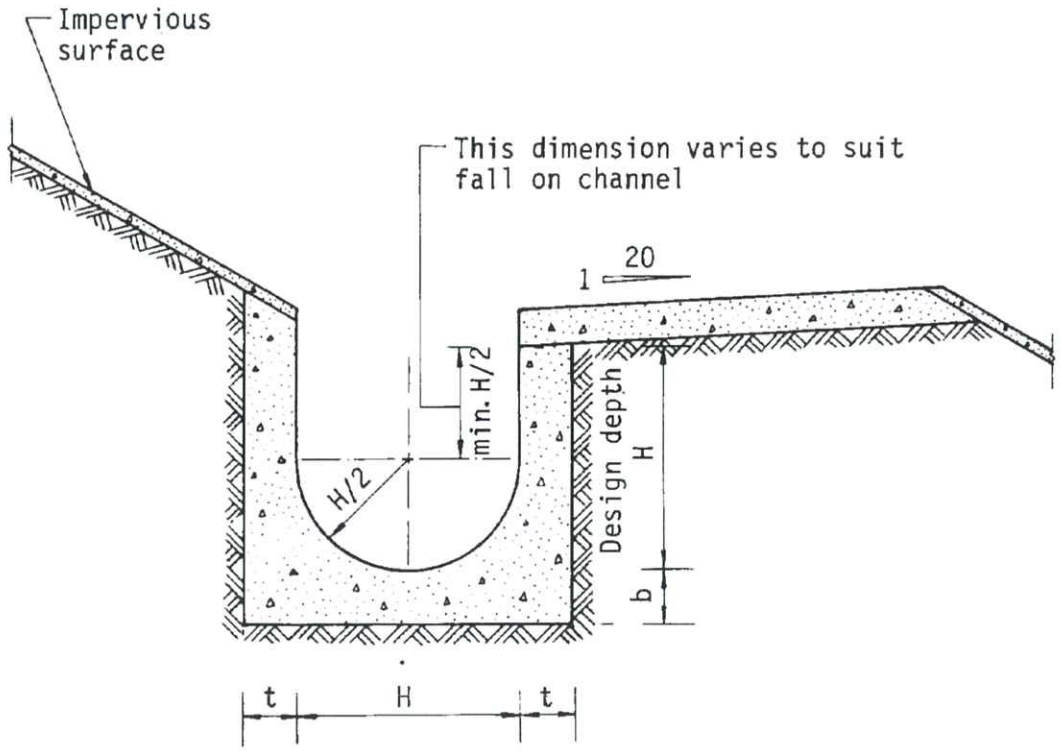


Figure 8.10 - Typical Details of Catchpits



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

Appendix II

Fire Service Installations Proposal

DEVELOPMENT PARAMETERS

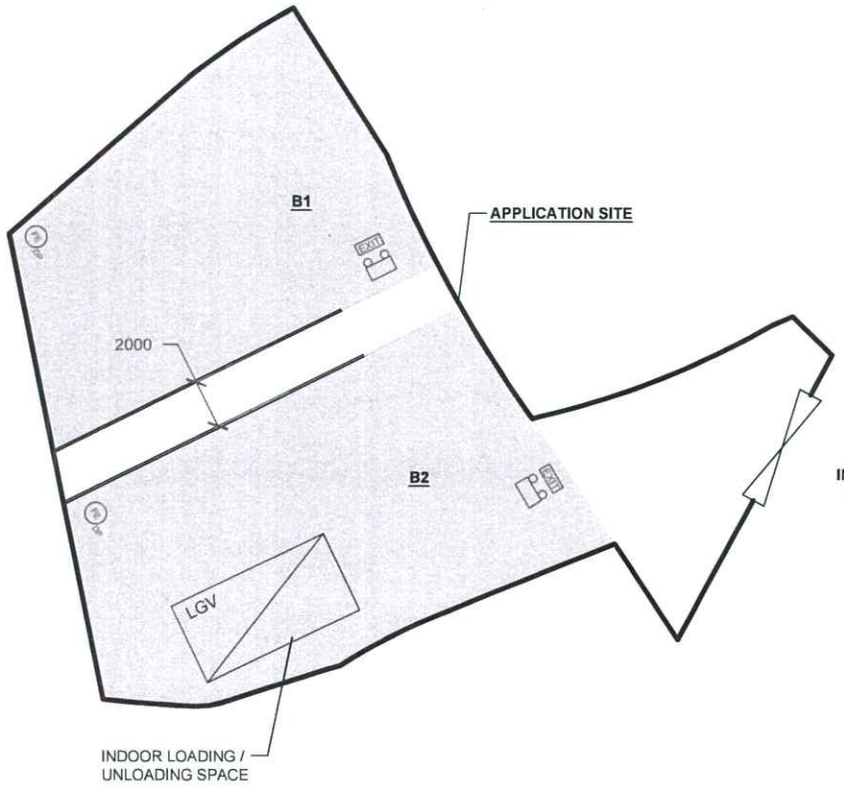
APPLICATION SITE AREA	: 509 m^2	(ABOUT)
COVERED AREA	: 398 m^2	(ABOUT)
UNCOVERED AREA	: 111 m^2	(ABOUT)
PLOT RATIO	: 0.78	(ABOUT)
SITE COVERAGE	: 78%	(ABOUT)
NO. OF STRUCTURE	: 2	
DOMESTIC GFA	: NOT APPLICABLE	
NON-DOMESTIC GFA	: 398 m^2	(ABOUT)
TOTAL GFA	: 398 m^2	(ABOUT)
BUILDING HEIGHT	: 8.23 m	(ABOUT)
NO. OF STOREY	: 1	

LOADING/UNLOADING PROVISION

NO. OF LIGHT GOODS VEHICLE PARKING SPACE	: 1
DIMENSION OF LOADING/UNLOADING SPACE	: 7m (L) X 3.5m (W)

STRUCTURE	USE	COVERED AREA	GROSS FLOOR AREA	BUILDING HEIGHT
B1	WAREHOUSE (EXCLUDING D.G.G.)	178 m^2 (ABOUT)	178 m^2 (ABOUT)	8.23 m (ABOUT)(1-STOREY)
B2	WAREHOUSE (EXCLUDING D.G.G.) AND COVERED L/UL AREA	220 m^2 (ABOUT)	220 m^2 (ABOUT)	8.23 m (ABOUT)(1-STOREY)
	TOTAL	398 m^2 (ABOUT)	398 m^2 (ABOUT)	

D.G.G. - DANGEROUS GOODS GODOWN



FIRE SERVICE INSTALLATIONS

- EXIT SIGN
- EMERGENCY LIGHT
- 4 KG DRY POWDER TYPE FIRE EXTINGUISHER

FS NOTES:

1) SUFFICIENT EMERGENCY LIGHTING SHALL BE PROVIDED THROUGHOUT THE ENTIRE BUILDING IN ACCORDANCE WITH BS5266-1:2016, BS EN 1838:2013 AND THE FSD CIRCULAR LETTER NO. 4/2021.
2) SUFFICIENT DIRECTIONAL AND EXIT SIGN SHALL BE PROVIDED IN ACCORDANCE WITH BS5266-1:2016 AND THE FSD CIRCULAR LETTER 5/2008.
3) PORTABLE HAND-OPERATED APPROVED APPLIANCE SHALL BE PROVIDED AS REQUIRED BY OCCUPANCY.
4) ACCESS IS PROVIDED FOR EMERGENCY VEHICLE TO REACH 30m OF ALL PART OF STRUCTURES.

LEGEND

- APPLICATION SITE
- STRUCTURE
- LOADING / UNLOADING SPACE (LGV)
- INGRESS / EGRESS

NORTH
W E
S

PLANNING CONSULTANT
R-RICHES PLANNING LIMITED

PROJECT
PROPOSED TEMPORARY WAREHOUSE (EXCLUDING DANGEROUS GOODS GODOWN) WITH ANCILLARY FACILITIES AND ASSOCIATED FILLING OF LAND FOR A PERIOD OF 3 YEARS

SITE LOCATION
VARIOUS LOTS IN D.D. 107, KAM TIN, YUEN LONG, NEW TERRITORIES

SCALE	1 : 300 @ A4
DRAWN BY	MN
DATE	20.6.2025
CHECKED BY	
DATE	
APPROVED BY	
DATE	
DWG. TITLE	FSIs PROPOSAL
DWG NO.	APPENDIX II
VER.	001