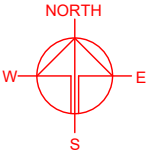


DEVELOPMENT PARAMETERS

APPLICATION SITE AREA	: 5,042 m ²	(ABOUT)
COVERED AREA	: 846 m ²	(ABOUT)
UNCOVERED AREA	: 4,196 m ²	(ABOUT)
PLOT RATIO	: 0.17	(ABOUT)
SITE COVERAGE	: 17 %	(ABOUT)
NO. OF STRUCTURE	: 4	
DOMESTIC GFA	: NOT APPLICABLE	
NON-DOMESTIC GFA	: 846 m ²	(ABOUT)
TOTAL GFA	: 846 m ²	(ABOUT)
BUILDING HEIGHT	: 6 m (ABOUT)	
NO. OF STOREY	: 1	

STRUCTURE	USE	COVERED AREA	GROSS FLOOR AREA	BUILDING HEIGHT
B1	WAREHOUSE (EXCLUDING D.G.G.)	225 m ² (ABOUT)	225 m ² (ABOUT)	6 m (ABOUT)(1-STOREY)
B2	WAREHOUSE (EXCLUDING D.G.G.)	225 m ² (ABOUT)	225 m ² (ABOUT)	6 m (ABOUT)(1-STOREY)
B3	SITE OFFICE, WASHROOM AND METER ROOM, AND WAREHOUSE (EXCLUDING D.G.G.)	180 m ² (ABOUT)	180 m ² (ABOUT)	6 m (ABOUT)(1-STOREY)
B4	WAREHOUSE (EXCLUDING D.G.G.)	216 m ² (ABOUT)	216 m ² (ABOUT)	6 m (ABOUT)(1-STOREY)
TOTAL		846 m ² (ABOUT)	846 m ² (ABOUT)	

*D.G.G. - DANGEROUS GOODS GODOWN



FIRE SERVICE INSTALLATIONS

EXIT	EXIT SIGN
FE	EMERGENCY LIGHT
FE Op	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
	PARKING SPACE (PC)
	LOADING / UNLOADING SPACE (LGV)
	INGRESS / EGRESS

PLANNING CONSULTANT



PROJECT

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

SITE LOCATION

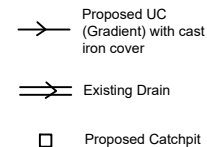
VARIOUS LOTS IN D.D. 107, KAM TIN, YUEN LONG, NEW TERRITORIES

SCALE

1 : 700 @ A4

DRAWN BY	DATE
MN	22.4.2025
REVISED BY	DATE
APPROVED BY	DATE
DWG. TITLE	
FSIs PROPOSAL	
DWG NO.	VER.
APPENDIX I	001

Legend:



Company:



Project:
Lots 1408, 1409, 1410,
1411, 1420 (Part), 1421
(Part) and 1422 (Part) in
D.D. 107, Kam Tin,
Yuen Long, New
Territories

(A/YL-KTN/955)
(Drainage Proposal)

Title:
Drainage layout

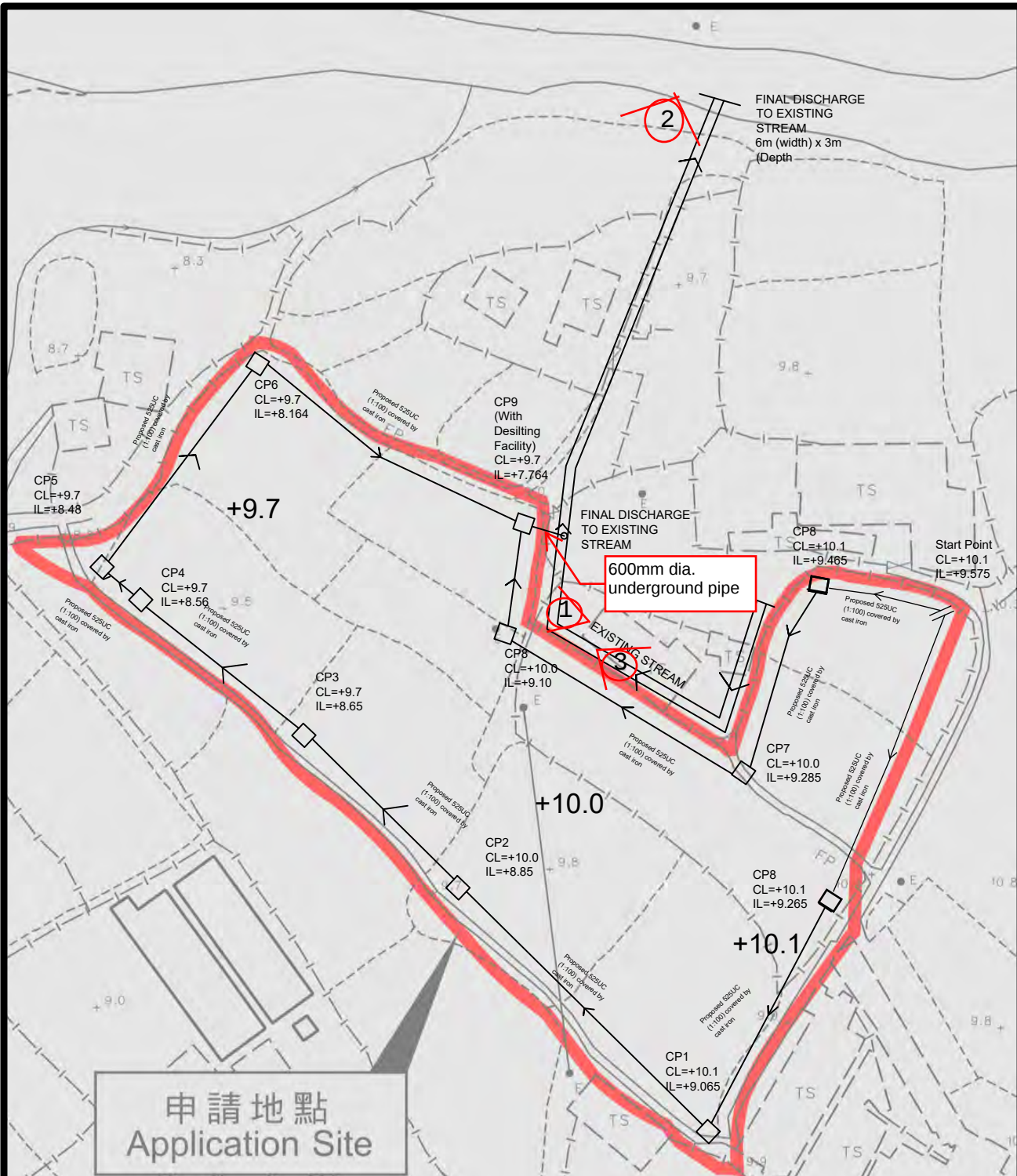
Dwg No:	File:
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Fig.1

Date:
15 February
2024

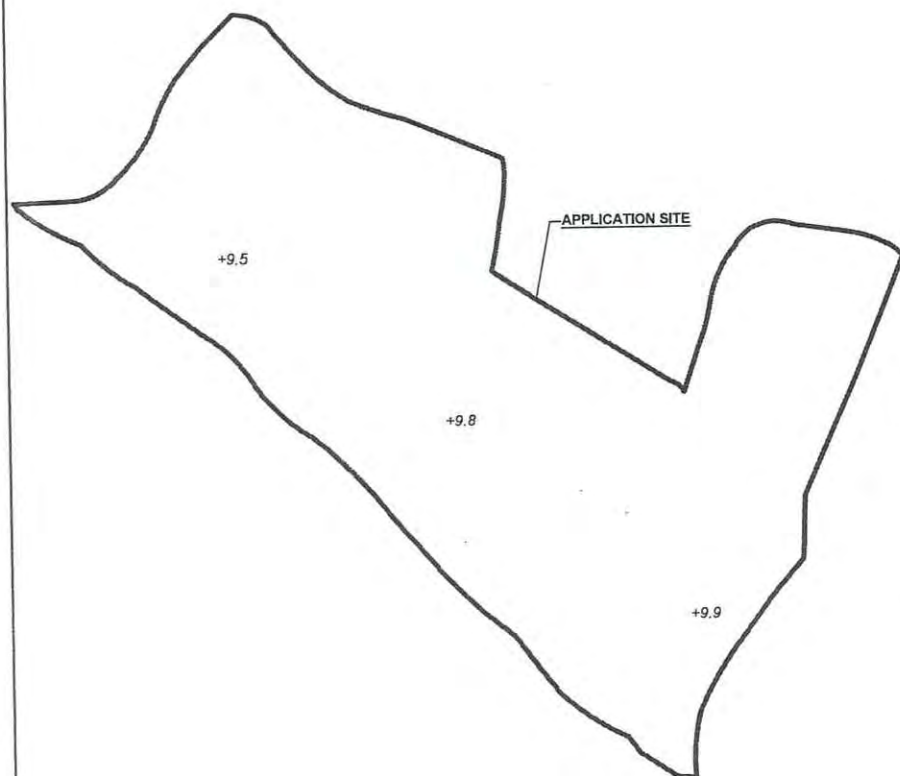
Note:

1. Catchpit (CP9) with desilting facility shall follow CEDD standard drawing No. C2406I.
2. Proposed Catchpit and UC follows Typical Details of Geotechnical Manual for Slope Fig.8.10 and Fig.8.11 respectively.
3. The inverted level of the connection point shall be verified on site prior the commencement of work



APPLICATION SITE BEFORE FILLING OF LAND

APPLICATION SITE AREA : 5,042 m² (ABOUT)
 SITE LEVELS BEFORE FILLING OF LAND : +9.5 mPD TO +9.9 mPD (ABOUT)

申請編號 Application No. : A / YL-KTN / 955

此頁摘自申請人提交的文件。

This page is extracted from applicant's submitted documents.

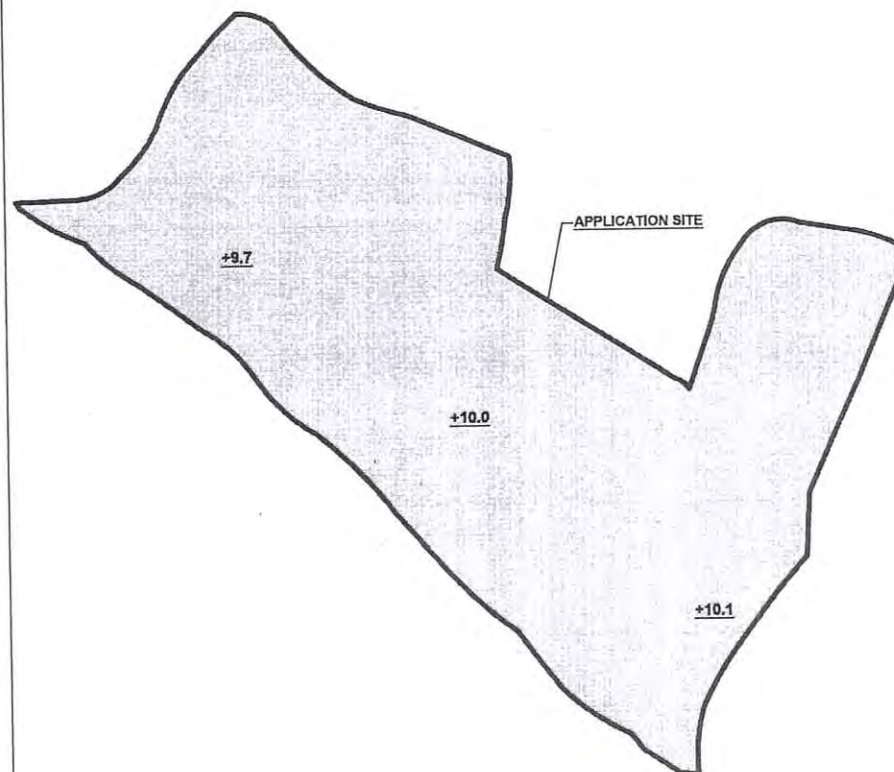
LEGEND

APPLICATION SITE
 +3.4 SITE LEVEL

EXISTING FILLING OF LAND AREA

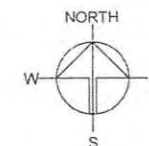
APPLICATION SITE AREA : 5,042 m² (ABOUT)
 COVERED BY STRUCTURE : 1,836 m² (ABOUT)
 EXISTING FILLED AREA : 5,042 m² (ABOUT)
 DEPTH OF LAND FILLING : NOT MORE THAN 0.2 m
 PROPOSED SITE LEVELS : +9.7 mPD TO +10.1 mPD (ABOUT)
 MATERIAL OF LAND FILLING : CONCRETE
 USE : SITE FORMATION OF STRUCTURES, AND CIRCULATION SPACE

THE APPLICATION SITE HAS BEEN FILLED WITH CONCRETE. NO FURTHER FILLING OF LAND WILL BE CARRIED OUT AT THE SITE DURING THE PLANNING APPROVAL PERIOD.



LEGEND

APPLICATION SITE
 LAND FILLING AREA
 +3.4 SITE LEVEL



PLANNING CONSULTANT



PROJECT

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

SITE LOCATION

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

SCALE

1 : 1000 @ A4

DRAWN BY	DATE
MN	17.8.2023

REVISED BY	DATE

APPROVED BY	DATE

DWG. TITLE	
FILLING OF LAND	

DWG NO.	VER.
PLAN 5	001



- Legend:
- Proposed UC (Gradient) with cast iron cover
 - ⇌ Existing Drain
 - Proposed Catchpit
 - ← Fall Direction

Company:



Project:
Lots 1408, 1409, 1410,
1411, 1420 (Part), 1421
(Part) and 1422 (Part) in
D.D. 107, Kam Tin,
Yuen Long, New
Territories

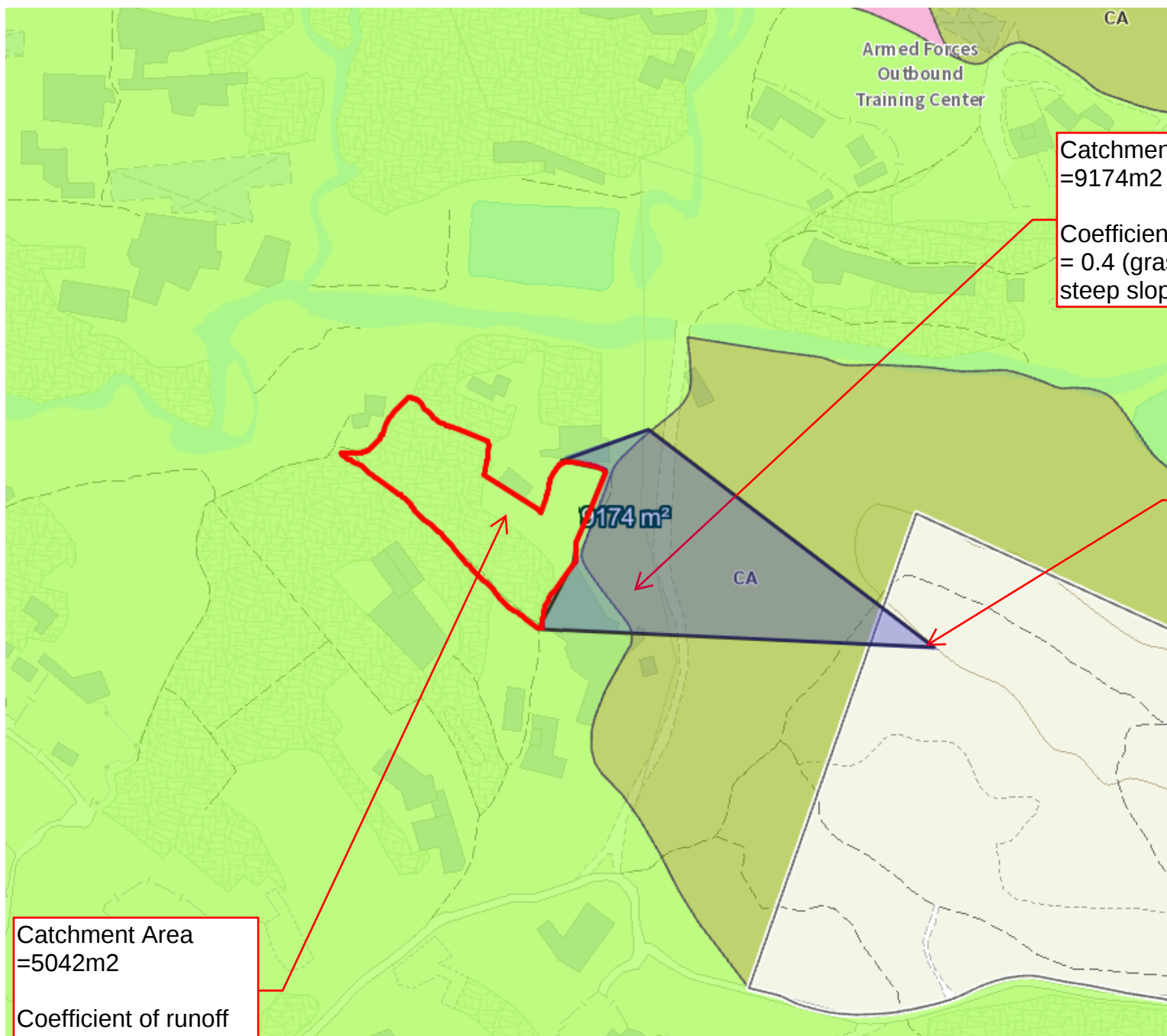
(A/YL-KTN/955)
(Drainage Proposal)

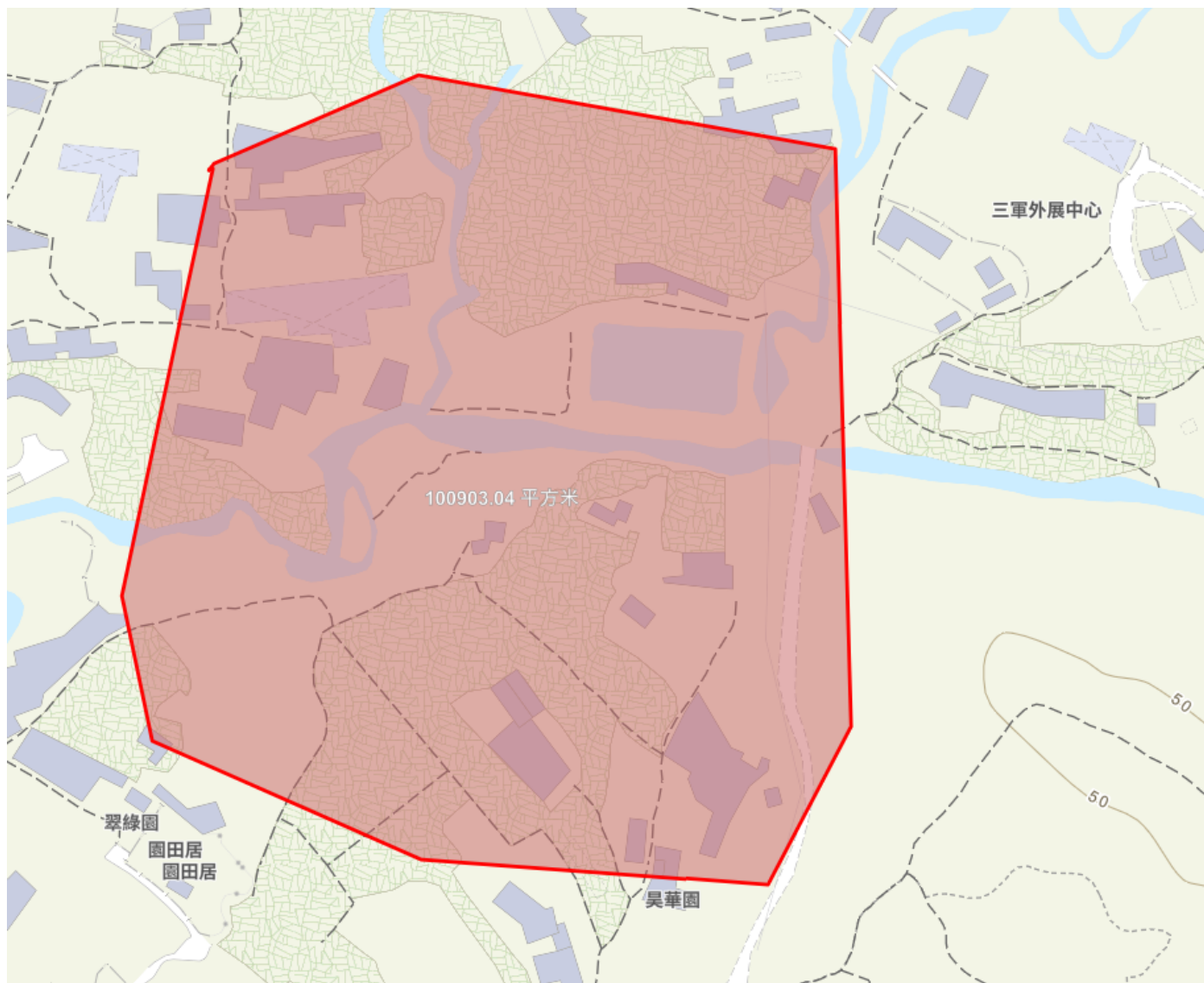
Title:
Catchment Zone

Dwg No: File:

Fig.2

Date:
15 February
2024





For downstream drainage system,
Catchment area = 100903 m²
Surface runoff coefficient = 0.4

$$Q = 0.278(250)(0.4)(100903 \times 10^{-6}) = 2.805 \text{ m}^3/\text{s}$$

Assume return period $T = 50$ years

According to Table 3a of SDM 2018,

$$a = 451.3, b = 2.46, c = 0.337$$

$$i = \frac{a}{(td+b)^c}$$

Duration in minutes is taken as 6 mins

According to Table 28 of SDM, 2018, rainfall increase = 10.4%

$$i = \frac{451.3}{(6+2.46)^{0.337}} (1 + 10.4\%) = 220 \times (1 + 10.4\%) = 243 \text{ min/hr}$$

For conservative design, $i = 250$ min/hr is taken.

Catchment Area = 5042 m^2 (Site Area), Catchment area = 9174 m^2 (Outside area)

Surface runoff coefficient $C = 0.95$ (Site Area) and $C = 0.4$ (for outside catchment area)

$$Q_p = 0.278 C i A$$

$$= 0.278 (0.95) (250) (5042 \times 10^{-6}) + 0.278 (0.40) (250) (9174 \times 10^{-6})$$

$$= 0.5879 \text{ m}^3/\text{s} = 35276 \text{ litre /min}$$

Check proposed 600mm ϕ concrete pipe by Colebrook - white Equation.

$$V = \frac{1.49}{\sqrt{8gDs}} \log \left(\frac{ks}{3.7D} + \frac{2.51V}{D\sqrt{2gDs}} \right)$$

$$g = 9.81 \text{ m/s}^2$$

$$D = 0.6 \text{ m}$$

$K_s = 0.00015 \text{ m}$ (Table 5, from DSD Sewage Manual, concrete pipe)

$$v = 1.14 \times 10^{-6} \text{ m}^2/\text{s}$$

$$S = 0.015$$

$$\text{Cross-Section Area} = \frac{TV(0.6)^2}{4} = 0.2827 \text{ m}^2$$

Therefore, design velocity of pipe capacity = 3.45 m/s

> velocity from catchment area

$$= \frac{0.5879}{0.2827} = 2.08 \text{ m/s} \quad \text{OK!}$$

As a result, proposed 525UC and proposed 650mm dia underground pipe can cater the surface runoff due to proposed development

Checking 6m (width) x 3m(Depth) stream

By Manning's equation,

$$Q = \frac{1}{n} \frac{A^{5/3}}{P^{2/3}} S_o^{1/2}$$

Take $n = 0.015$

$S_o = 0.0015$

$A = 3 \times 6 = 18 \text{m}^2$

$P = 6 + 3 + 3 = 12 \text{m}$



$$Q = \frac{1}{0.015} \times \frac{(18)^{5/3} \times 0.0015^{0.5}}{12^{2/3}}$$

$$= 60.9 \text{ m}^3/\text{hr}$$

$$> 2.805 + 0.5879 = 3.39 \text{ m}^3/\text{hr} \text{ OK!}$$

Existing 6m (W) x 3m (H) open channel (1:150) in the site can cater the surface runoff from proposed development

Checking 0.5m (Lower Base) x 1.5m (Upper Base) x 0.65m(Depth) trapezium existing stream

By Manning's equation,

$$Q = \frac{1}{n} \frac{A^{5/3}}{P^{2/3}} S_o^{1/2}$$

Take $n = 0.015$

$S_o = 0.0015$

$A = (0.5 + 1.5) \times 0.65 / 2 = 0.6825 \text{ m}^2$

$P = 0.82 \times 2 + 0.5 = 2.14 \text{ m}$



$$Q = 1/0.015 \times (0.6825)^{5/3} \times 0.0015^{1/2} / 2.14^{2/3}$$

$$= 0.7583 \text{ m}^3/\text{hr}$$

> 0.6869 m³/hr OK!

$$\begin{aligned} Q &= 0.5879 + 0.278 \text{ CiA} \\ &= 0.5879 + 0.278(0.95)(250(1500 \times 10^{-6})) \\ &= 0.5879 + 0.099 \\ &= 0.6869 \text{ m}^3/\text{hr} \end{aligned}$$



VIEW 1 Existing Stream

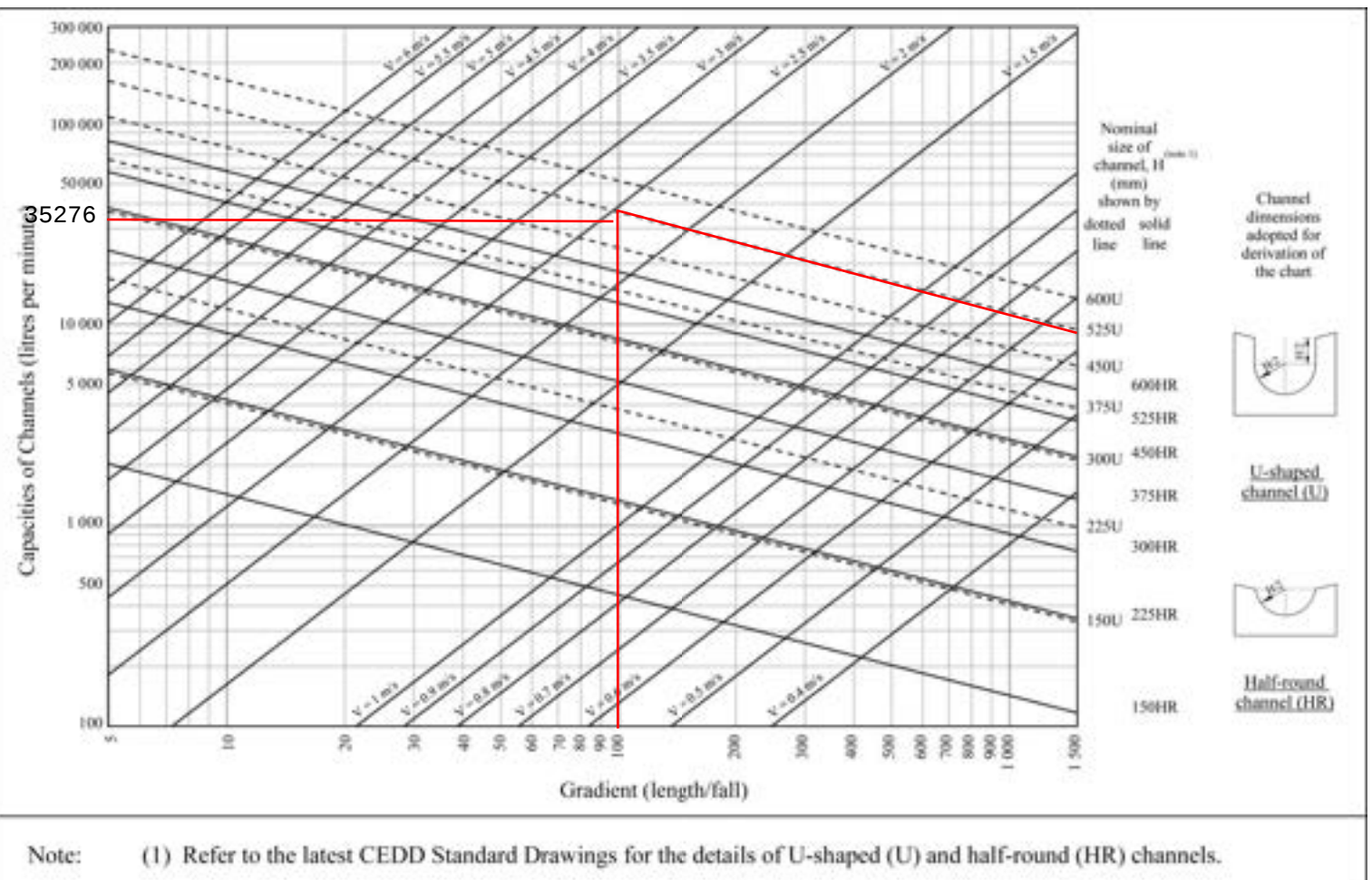
Upgrading Work will be carried out.

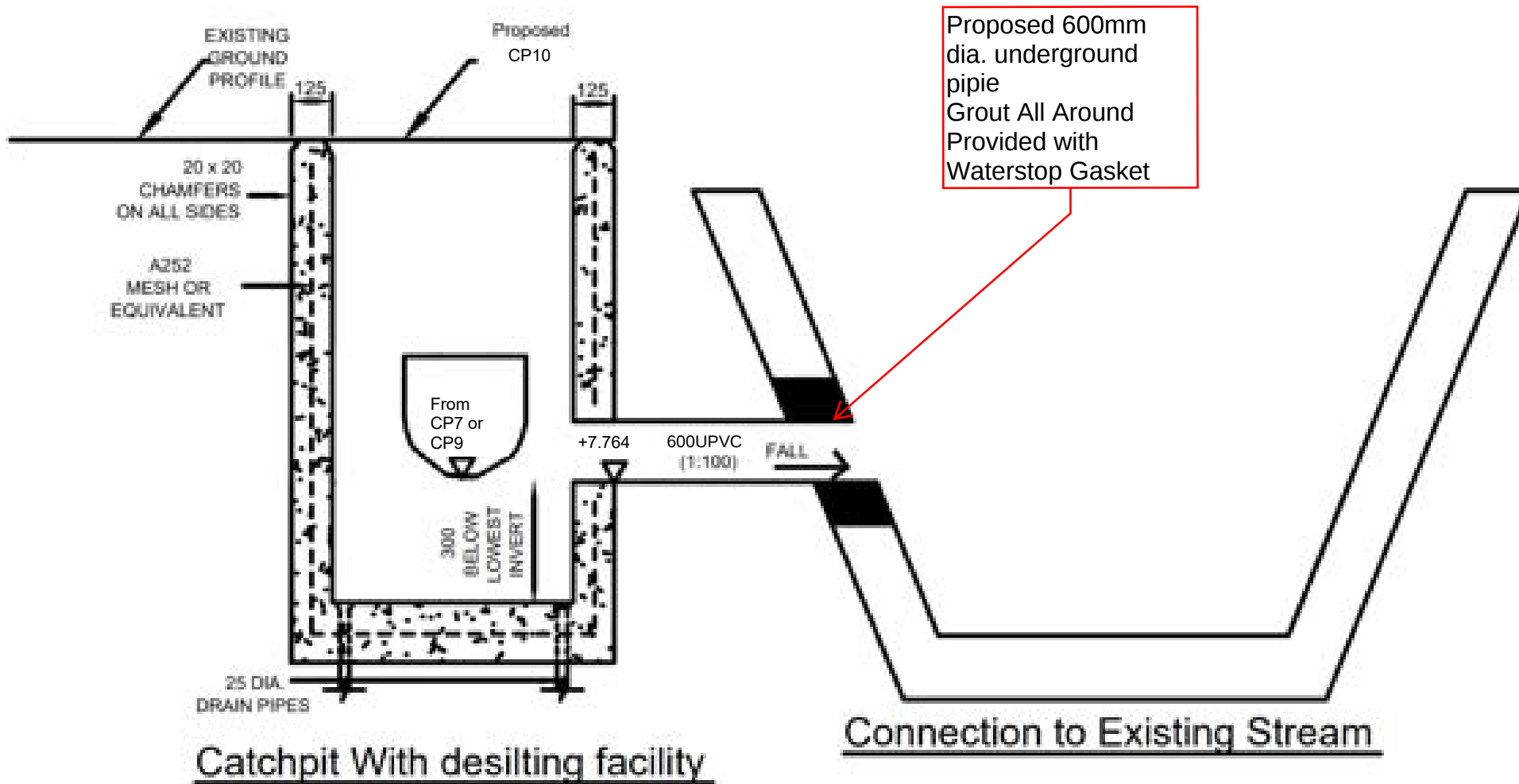
Shotcrete at both side and bottom of the existing stream

Existing 0.5m (Lower Base) x 1.5m (Upper Base) x 0.65m(Depth) trapezium existing stream (1:150) outside the site can cater the surface runoff from proposed development

GEO Technical Guidance Note No. 43 (TGN 43)
Guidelines on Hydraulic Design of U-shaped and Half-round Channels on Slopes

Issue No.: 1 | Revision: - | Date: 05.06.2014 | Page: 3 of 3



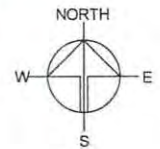
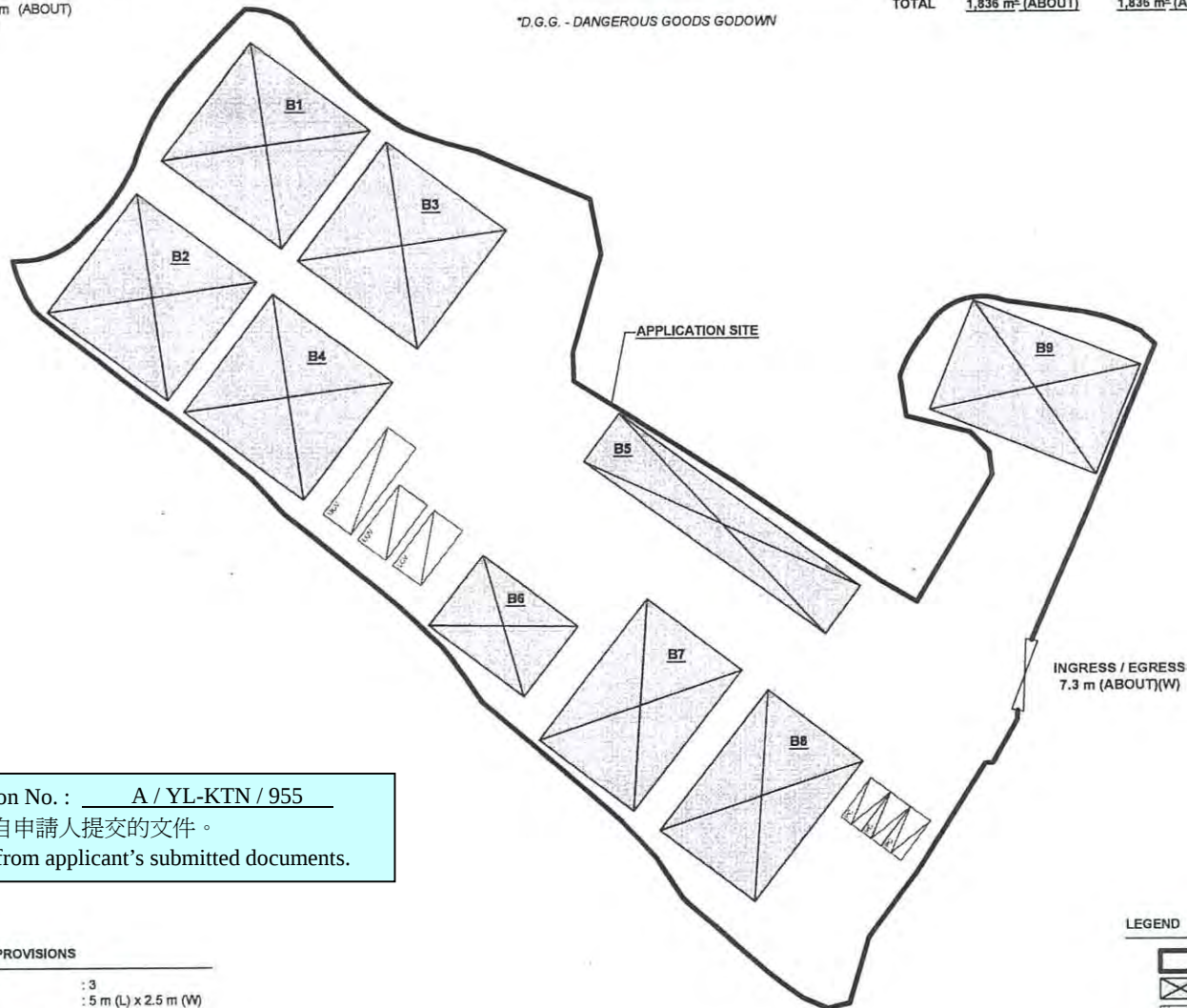


DEVELOPMENT PARAMETERS

APPLICATION SITE AREA	: 5,042 m ²	(ABOUT)
COVERED AREA	: 1,836 m ²	(ABOUT)
UNCOVERED AREA	: 3,206 m ²	(ABOUT)
PLOT RATIO	: 0.36	(ABOUT)
SITE COVERAGE	: 36 %	(ABOUT)
NO. OF STRUCTURE	: 9	
DOMESTIC GFA	: NOT APPLICABLE	
NON-DOMESTIC GFA	: 1,836 m ²	(ABOUT)
TOTAL GFA	: 1,836 m ²	(ABOUT)
BUILDING HEIGHT	: 6 m (ABOUT)	
NO. OF STOREY	: 1	

STRUCTURE	USE	COVERED AREA	GFA	BUILDING HEIGHT
B1	WAREHOUSE (EXCLUDING D.G.G.)	225 m ² (ABOUT)	225 m ² (ABOUT)	6 m (ABOUT)(1-STOREY)
B2	WAREHOUSE (EXCLUDING D.G.G.)	225 m ² (ABOUT)	225 m ² (ABOUT)	6 m (ABOUT)(1-STOREY)
B3	WAREHOUSE (EXCLUDING D.G.G.)	225 m ² (ABOUT)	225 m ² (ABOUT)	6 m (ABOUT)(1-STOREY)
B4	WAREHOUSE (EXCLUDING D.G.G.)	225 m ² (ABOUT)	225 m ² (ABOUT)	6 m (ABOUT)(1-STOREY)
B5	SITE OFFICE, WASHROOM AND METER ROOM	180 m ² (ABOUT)	180 m ² (ABOUT)	6 m (ABOUT)(1-STOREY)
B6	WAREHOUSE (EXCLUDING D.G.G.)	108 m ² (ABOUT)	108 m ² (ABOUT)	6 m (ABOUT)(1-STOREY)
B7	WAREHOUSE (EXCLUDING D.G.G.)	216 m ² (ABOUT)	216 m ² (ABOUT)	6 m (ABOUT)(1-STOREY)
B8	WAREHOUSE (EXCLUDING D.G.G.)	216 m ² (ABOUT)	216 m ² (ABOUT)	6 m (ABOUT)(1-STOREY)
B9	WAREHOUSE (EXCLUDING D.G.G.)	216 m ² (ABOUT)	216 m ² (ABOUT)	6 m (ABOUT)(1-STOREY)
TOTAL		1,836 m ² (ABOUT)	1,836 m ² (ABOUT)	

*D.G.G. - DANGEROUS GOODS GODOWN



PLANNING CONSULTANT



PROJECT

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

SITE LOCATION

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

SCALE

1 : 700 @ A4

DRAWN BY	DATE
MN	17.8.2023
REVISD BY	DATE
APPROVED BY	DATE

DWG. TITLE	VER.
LAYOUT PLAN	
DWG NO.	PLAN 4
VER.	001

申請編號 Application No. : A / YL-KTN / 955

此頁摘自申請人提交的文件。

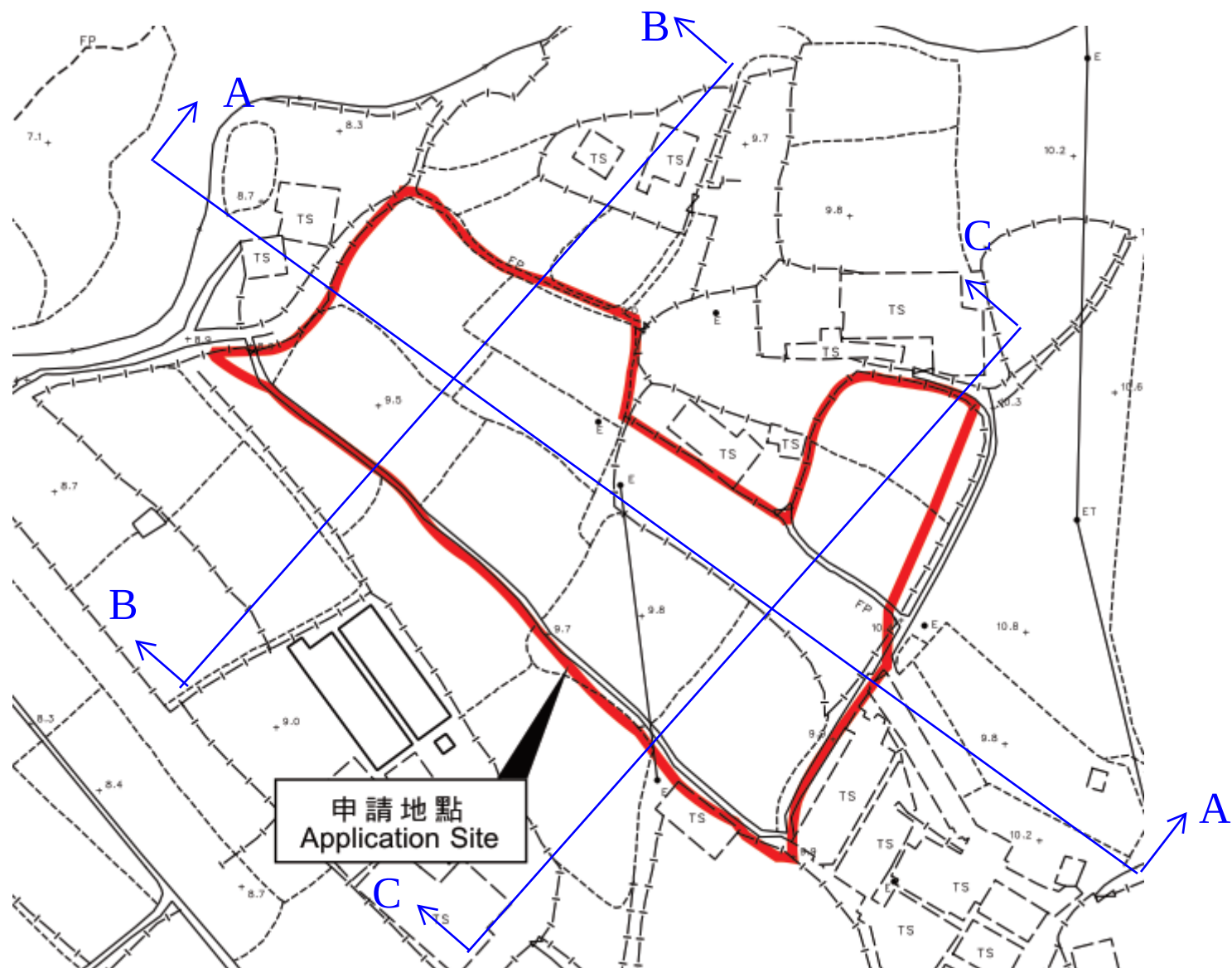
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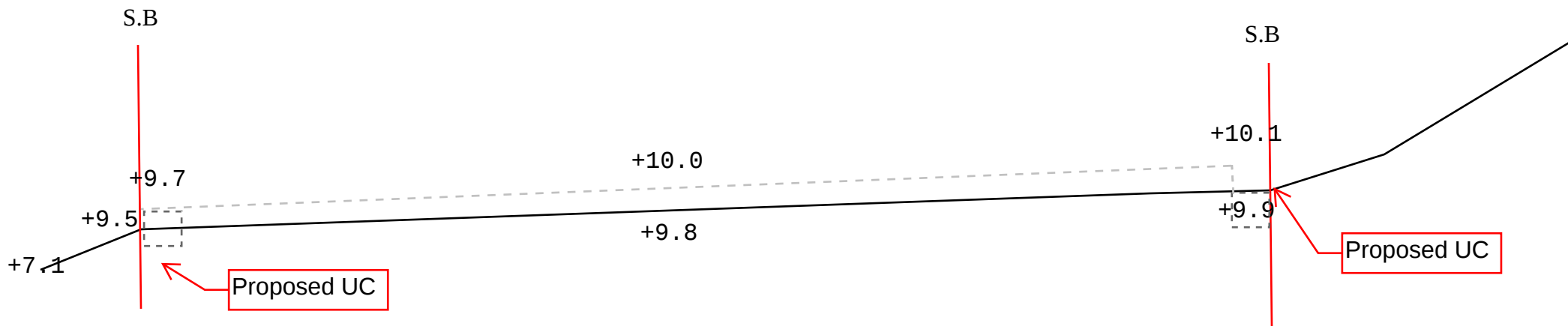
PARKING AND LOADING / UNLOADING PROVISIONS

NO. OF PRIVATE CAR PARKING SPACE	: 3
DIMENSION OF PARKING SPACE	: 5 m (L) x 2.5 m (W)
NO. OF L/U/L SPACE FOR LIGHT GOODS VEHICLE	: 2
DIMENSION OF L/U/L SPACE	: 7 m (L) x 3.5 m (W)
NO. OF L/U/L SPACE FOR MEDIUM GOODS VEHICLE	: 1
DIMENSION OF L/U/L SPACE	: 11 m (L) x 3.5 m (W)

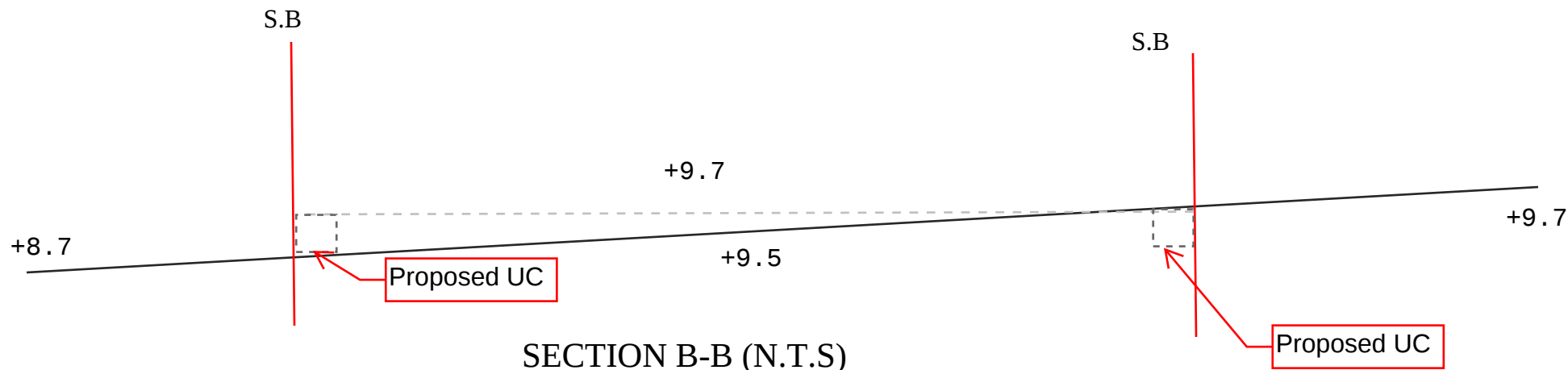
LEGEND

	APPLICATION SITE
	STRUCTURE
	PARKING SPACE (PC)
	LOADING / UNLOADING SPACE (LGV)
	LOADING / UNLOADING SPACE (MGV)
	INGRESS / EGRESS

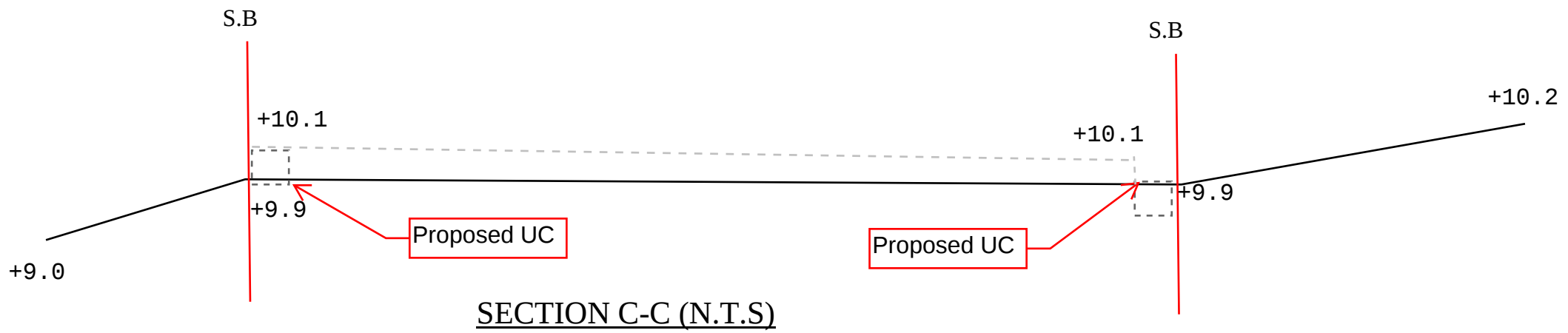


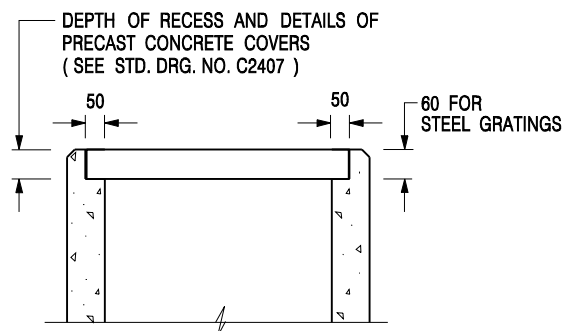


SECTION A-A (N.T.S)



SECTION B-B (N.T.S)





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) 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 'G' ON STD. DRG. NO. C2405; 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 'F' ON STD. DRG. NO. C2405.
12. SUBJECT TO THE APPROVAL OF THE ENGINEER, OTHER MATERIALS CAN ALSO BE USED AS COVERS / GRATINGS.

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

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



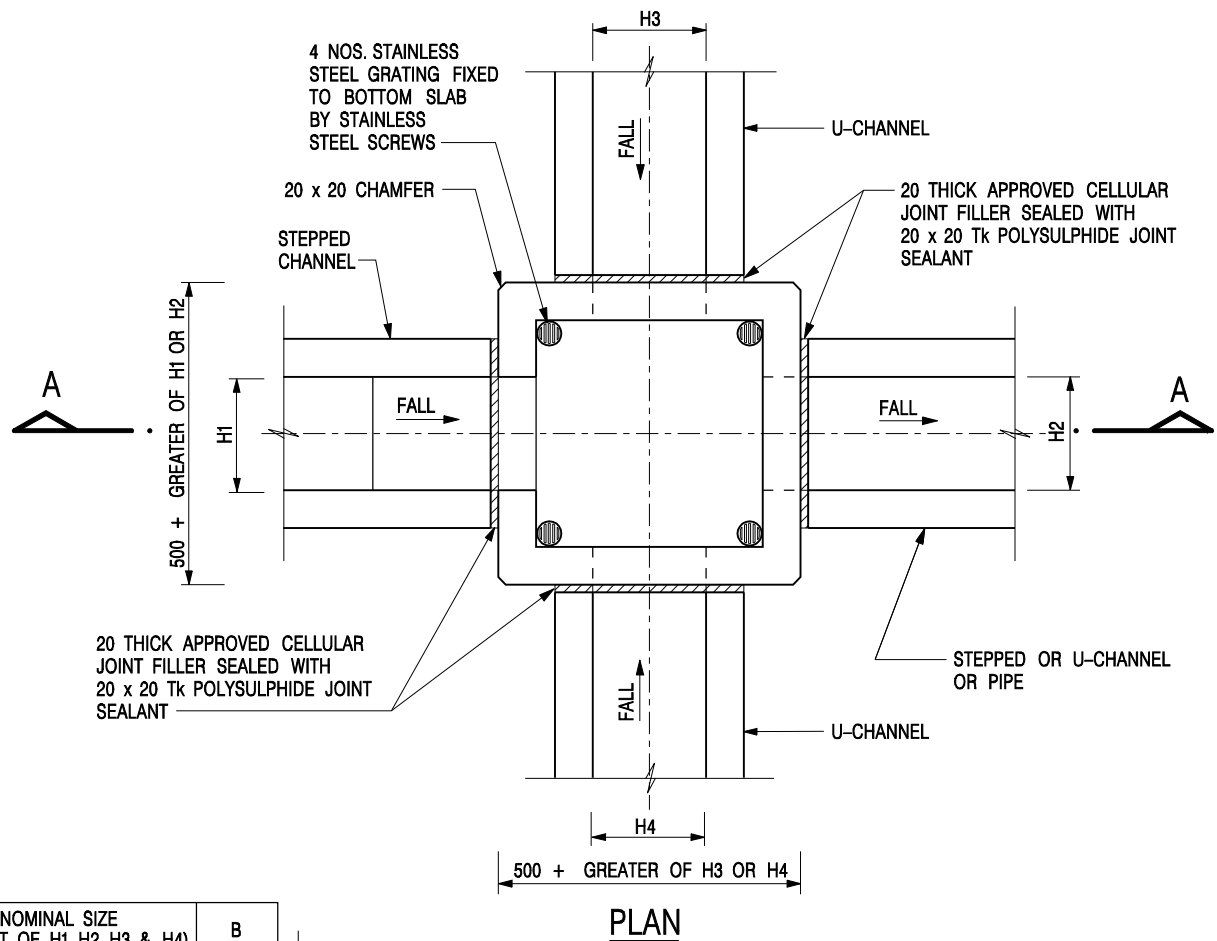
**CIVIL ENGINEERING AND
DEVELOPMENT DEPARTMENT**

SCALE 1 : 20

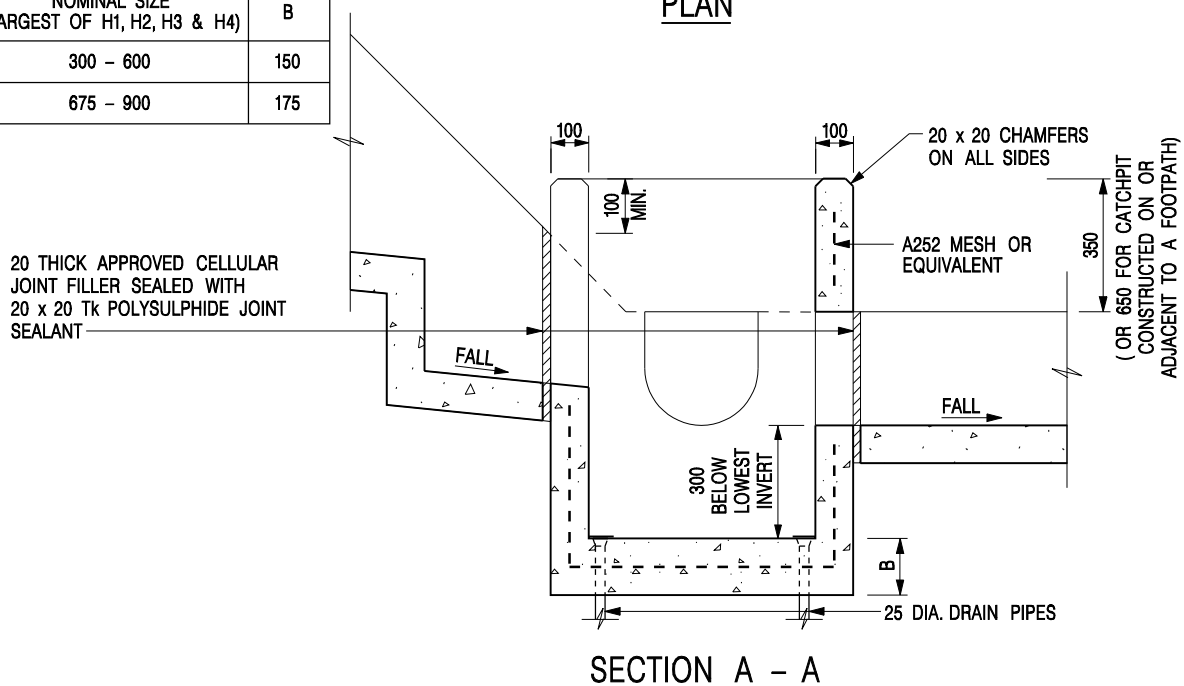
DATE JAN 1991

DRAWING NO.

C2406 /2



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

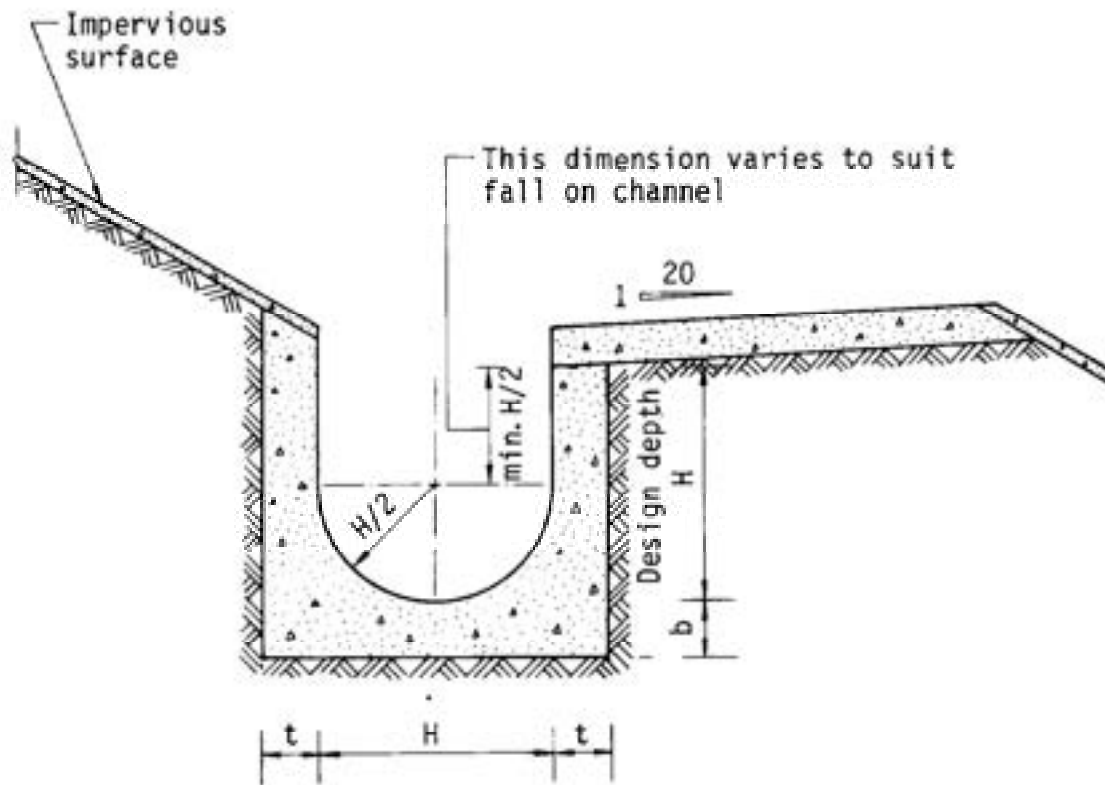


NOTES:

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

CATCHPIT WITH TRAP
(SHEET 1 OF 2)

-	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 /1	



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

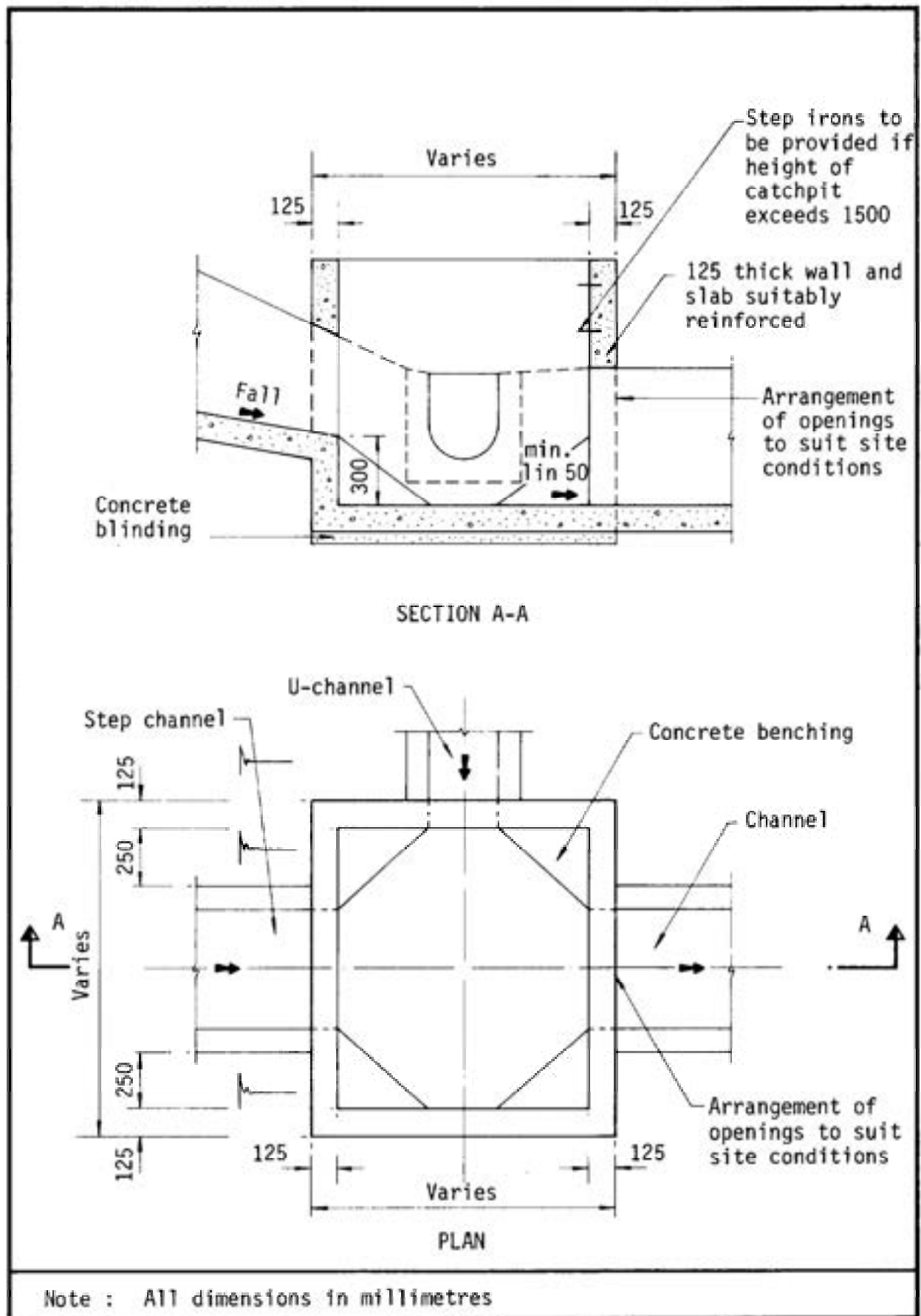


Figure 8.10 - Typical Details of Catchpits



Upgrading Work will be carried out.

Shotcrete at both side and bottom of the existing stream

VIEW 1 Existing Stream



VIEW 2 Final Discharge Point



Proposed 600mm
dia. pipe

VIEW 3 Proposed 600mm dia
outlet location