GoldRich PLANNERS & SURVEYORS LTD.

金 潤 規 劃 測 量 師 行 有 限 公 司

[redacted]

Your Ref.: A/YL-KTS/1101 Our Ref.: P22068A/TL25387 14 November 2025

The Secretary
Town Planning Board
15/F., North Point Government Offices
333 Java Road, North Point, Hong Kong

By E-mail
tpbpd@pland.gov.hk

Dear Sir,

Submission of Further Information (FI)

Temporary Shop and Services (Retail Shop for Hardware Groceries and Construction Materials) with Ancillary Facilities for a Period of 5 Years in "Residential (Group D)" Zone, Lots 670 (Part), 671 (Part), 673 (Part), 674, 675, 676, 677 (Part), 679 (Part) and 680(Part) in D.D. 106 and Adjoining Government Land, Yuen Long, New Territories
(Application No. A/YL-KTS/1101)

We write to submit FI in response to departmental comment(s) conveyed by the Planning Department for the captioned application.

Yours faithfully,
For and on behalf of
Goldrich Planners & Surveyors Ltd.

Francis Lau

Encl.

c.c.
DPO/FSYLE, PlanD (Attn.: Ms. Anna TONG)

Further Information for Planning Application No. A/YL-KTS/1101

Response-to-Comments

Comments from Environmental Protection Department

Contact person: Mr. Kelvin WONG (Tel.: 2835 1117)

I.	Comments		Responses
1.	Please advise whether the proposed use would involve materials of dusty nature (e.g., cement, earth, pulverized fuel ash, aggregates, silt, stonefines, sand, debris, sawdust and wooden chips).		No materials of dusty nature will be involved at the site.

Comments from Drainage Services Department

Contact person: Mr. Kenneth CHAN (Tel.: 2300 1259)

II.	Comments		Responses
1.	We are unable to provide comment on drainage aspect of the application at this stage. Comment on drainage aspect will be provided when the drainage proposal as mentioned in paragraph 23 of the planning statement is received.		Please refer to the drainage proposal (Plans 5.1 and 5.2) and hydraulic calculations for details.

- END -

1 For Catchment Area A

Ref.

Area, A = 972 m^2
Average slope, H = 0.1 m per 100m
Distance on the line of natural flow, L = 21 m

Time of concentraction, t_o = $0.14465L / (H^{0.2}A^{0.1})$ = 0.14465 (21) / (0.1^0.2*972^0.1) — SDM 7.5.2 (d)
= 2.4 min

2 For Existing UC in Catchment Area A

	From	To
Ground level (mPD)	7.80	7.80
Invert level (mPD)	6.95	6.72

Width of u-channel, w = 500 mm
Length of u-channel, L_c = 45.6 m
Depth of vertical part of u-channel, d = 830 mm
Gradient of u-channel, S_f = (6.95-6.72)/45.6 = 0.005

Cross-Section Area, a = $0.5 \pi r^2 + w d$ = 0.5 x 3.14 x 250^2 + 500 x 830
= 0.513 m^2
Wetted Perimeter, p = $\pi r + 2 d$ = 3.14 x 250 + 2 x 830
= 2.445 m
Hydralic radius, R = a / p — SDM 8.2.1
= 0.210 m

3 Use Manning Equation for estimating velocity of stormwater

Take n = 0.016 for concrete lined channels:- — SDM Table 13
Allowable velocity, v = $R^{1/6} x (RS_f)^{1/2}/n$ = (0.21)^1/6 x (0.21 x 0.005)^1/2 / 0.016 — SDM Table 12
= 1.57 m/s
Time of flow, t_f = 0.5 min

4 Use "Rational Method" for calculation of design flow

Design intensity, i = $a / (t_o + t_f + b)^c$ — SDM 4.3.2
= 505.5 / (2.4+0.5+3.29)^0.355 for return period T = 50 years — Corrigendum 1/2024
= 265 — SDM Table 3a

Type of surface	Runoff Coefficient C	Catchment Area A (m^2)	C x A
Flat Glassland(heavy soil)	0.25	0.0	0.0
Concrete Paving	0.95	972.0	923.4
		SUM =	923.4

— SDM 7.5.2 (b)

Upstream flow, Q_u = 0 m^3/s

Design flow, Q_d = $1.16 \times 0.278i \Sigma C_i A_i + Q_u$ where A_i is in km^2 — SDM 7.5.2 (a)
= 1.16 x 0.278 x 265 x 923.4 / 1000000 + 0 — Corrigendum 1/2022
= 0.079 m^3/s

Allowable flow, Q_a = a x v
= 0.513 x 1.57
= 0.804 m^3/s

> Q_d (O.K.)

Reference was made to Stormwater Drainage Manual (SDM) by DSD

Scale: NA	**Hydraulic Calculation**	Goldrich Planners & Surveyors Ltd.
November 2025	Lots 670 (Part), 671 (Part) , 673 (Part) , 674, 675, 676, 677 (Part), 679 (Part) and 680 (Part) in D.D. 106 and Adjoining Government Land, Yuen Long, New Territories	Page 1 (P22068A)

1 For Catchment Area B

				Ref.
Area, A	=	1211	m^2	
Average slope, H	=	0.1	m per 100m	
Distance on the line of natural flow, L	=	25	m	
Time of concentraction, t_o	=	$0.14465L / (H^{0.2}A^{0.1})$ = 0.14465 (25) / (0.1^0.2*1211^0.1)		SDM 7.5.2 (d)
	=	2.8	min	

2 For Existing UC in Catchment Area B

	From	To
Ground level (mPD)	7.80	7.80
Invert level (mPD)	7.30	6.87

Width of u-channel, w	=	500	mm
Length of u-channel, L_c	=	86.3	m
Depth of vertical part of u-channel, d	=	680	mm
Gradient of u-channel, S_f	=	(7.3-6.87)/86.3 = 0.005	
Cross-Section Area, a	=	$0.5\ \pi r^2 + w\ d$ = 0.5 x 3.14 x 250^2 + 500 x 680	
	=	0.438	m^2
Wetted Perimeter, p	=	π r + 2 d = 3.14 x 250 + 2 x 680	
	=	2.145	m
Hydralic radius, R	=	a / p	SDM 8.2.1
	=	0.204	m

3 Use Manning Equation for estimating velocity of stormwater

Take n	=	0.016	for concrete lined channels:-	SDM Table 13
Allowable velocity, v	=	$R^{1/6} x (RS_f)^{1/2}/n$ = (0.204)^1/6 x (0.204 x 0.005)^1/2 / 0.016		SDM Table 12
	=	1.53	m/s	
Time of flow, t_f	=	0.9	min	

4 Use "Rational Method" for calculation of design flow

Design intensity, i	=	$a / (t_o + t_f + b)^c$		SDM 4.3.2
	=	505.5 / (2.8+0.9+3.29)^0.355 for return period T = 50 years		Corrigendum 1/2024
	=	253		SDM Table 3a

Type of surface	Runoff Coefficient C	Catchment Area A (m^2)	C x A	SDM 7.5.2 (b)
Flat Glassland(heavy soil)	0.25	0.0	0.0	
Concrete Paving	0.95	1211.0	1150.5	
		SUM =	1150.5	

Upstream flow, Q_u	=	0	m^3/s	
Design flow, Q_d	=	$1.16 \times 0.278i \Sigma C_iA_i + Q_u$ where A_i is in km^2		SDM 7.5.2 (a)
	=	1.16 x 0.278 x 253 x 1150.45 / 1000000 + 0		Corrigendum 1/2022
	=	0.094	m^3/s	
Allowable flow, Q_a	=	a x v		
	=	0.438 x 1.53		
	=	0.670	m^3/s	
	>	Q_d (O.K.)		

Reference was made to Stormwater Drainage Manual (SDM) by DSD

1 For Connection between CP7 to Existing Watercourse

Ref.

Area, A = **0** m^2
Average slope, H = **0.1** m per 100m
Distance on the line of natural flow, L = **0** m

Time of concentraction, t_o = $0.14465L / (H^{0.2}A^{0.1})$ = 0.14465 (0) / (0.1^0.2*0^0.1) — SDM 7.5.2 (d)
= 0.0 min

2 For Pipe after CP7

Size(Diameter) w = **400** mm
Length of Pipe = **9** m
Design the pipe to 9/10 full bore capactity, then
Area of ventilated portion = 0.1 of pipe area
$½ r^2 \theta - ½ r^2 \sin(\theta)$ = $0.1 \pi r^2$
$\theta - \sin(\theta)$ = 0.2π
θ = 1.63 rad = 93.4^O (By trial and error)

Area A = $0.9 \pi r^2$
= 0.9 x 3.14 x 400^2 — SDM 8.2.1
= 0.452 m^2

Wetted Perimeter P = $2 \pi r - r \theta$ = 1861 mm
Hydralic radius R = A/P
242.9 mm

3 Use Manning Equation for estimating velocity of stormwater

Fall S = 1: **8**
Take n = 0.016 for concrete lined channels:- — SDM Table 13
Allowable velocity, v = $R^{1/6} x (RS_f)^{1/2}/n$ = (242.9)^1/6 * (242.9/8)^1/2 / 0.016 — SDM Table 12
= 8.25 m/s
Time of flow, t_f = 0.02 min

4 Use "Rational Method" for calculation of design flow

Design intensity, i = $a / (t_o + t_f + b)^c$ — SDM 4.3.2
= 505.5 / (0.0+0.02+3.29)^0.355 for return period T = 50 years — Corrigendum 1/2024
= 331 — SDM Table 3a

Type of surface	Runoff Coefficient C	Catchment Area A (m^2)	C x A
Flat Glassland(heavy soil)	0.25	**0.0**	0.0
Concrete Paving	0.95	**0.0**	0.0
Macadam Roadways	0.425	**0.0**	0.0
Wooded Areas	0.105	**0.0**	0.0
		SUM =	0.0

SDM 7.5.2 (b)

Upstream flow, Q_u = **0.173** m^3/s

Design flow, Q_d = $0.278i \Sigma C_i A_i + Q_u$ where A_i is in km^2 — SDM 7.5.2 (a)
= 1.16 x 0.278 x 331 x 0 / 1000000 + 0.173 — Corrigendum 1/2022
= 0.173 m^3/s

Allowable flow, Q_a = a x v
= 0.3974 x 1.35
= 3.729 m^3/s

> Q_d (O.K.)

Reference was made to Stormwater Drainage Manual (SDM) by DSD

1 For Catchment Area C

Ref.

Area, A = 2332 m^2
Average slope, H = 0.1 m per 100m
Distance on the line of natural flow, L = 29 m

Time of concentraction, t_o = 0.14465L / ($H^{0.2}A^{0.1}$) = 0.14465 (29) / (0.1^0.2*2332^0.1) — SDM 7.5.2 (d)
= 3.1 min

2 For Existing UC in Catchment Area C

	From	To
Ground level (mPD)	7.80	7.80
Invert level (mPD)	7.30	6.72

Width of u-channel, w = 500 mm
Length of u-channel, L_c = 118.2 m
Depth of vertical part of u-channel, d = 830 mm
Gradient of u-channel, S_f = (7.3-6.72)/118.2 = 0.005

Cross-Section Area, a = 0.5 πr^2 + w d = 0.5 x 3.14 x 250^2 + 500 x 830
= 0.513 m^2
Wetted Perimeter, p = π r + 2 d = 3.14 x 250 + 2 x 830
= 2.445 m
Hydralic radius, R = a / p — SDM 8.2.1
= 0.210 m

3 Use Manning Equation for estimating velocity of stormwater

Take n = 0.016 for concrete lined channels:- — SDM Table 13
Allowable velocity, v = $R^{1/6}$x $(RS_f)^{1/2}$/n = (0.21)^1/6 x (0.21 x 0.005)^1/2 / 0.016 — SDM Table 12
= 1.55 m/s
Time of flow, t_f = 1.3 min

4 Use "Rational Method" for calculation of design flow

Design intensity, i = a / (t_o + t_f +b)^c — SDM 4.3.2
= 505.5 / (3.1+1.3+3.29)^0.355 for return period T = 50 years — Corrigendum 1/2024
= 246 — SDM Table 3a

Type of surface	Runoff Coefficient C	Catchment Area A (m^2)	C x A
Flat Glassland(heavy soil)	0.25	0.0	0.0
Concrete Paving	0.95	2332.0	2215.4
		SUM =	2215.4

— SDM 7.5.2 (b)

Upstream flow, Q_u = 0 m^3/s

Design flow, Q_d = 1.16 x 0.278i Σ C_iA_i + Q_u where A_i is in km^2 — SDM 7.5.2 (a)
= 1.16 x 0.278 x 246 x 2215.4 / 1000000 + 0 — Corrigendum 1/2022
= 0.176 m^3/s

Allowable flow, Q_a = a x v
= 0.513 x 1.55
= 0.793 m^3/s

> Q_d (O.K.)

Reference was made to Stormwater Drainage Manual (SDM) by DSD

1 For Catchment Area D

				Ref.
Area, A	=	1640	m^2	
Average slope, H	=	0.1	m per 100m	
Distance on the line of natural flow, L	=	50	m	
Time of concentraction, t_o	=	$0.14465L / (H^{0.2}A^{0.1})$ = 0.14465 (50) / (0.1^0.2*1640^0.1)		SDM 7.5.2 (d)
	=	5.5	min	

2 For Existing UC in Catchment Area D

	From	To
Ground level (mPD)	7.80	7.80
Invert level (mPD)	7.17	6.87

Width of u-channel, w	=	500	mm
Length of u-channel, L_c	=	60	m
Depth of vertical part of u-channel, d	=	680	mm
Gradient of u-channel, S_f	=	(7.17-6.87)/60 = 0.005	
Cross-Section Area, a	=	$0.5 \pi r^2 + w d$ = 0.5 x 3.14 x 250^2 + 500 x 680	
	=	0.438	m^2
Wetted Perimeter, p	=	π r + 2 d = 3.14 x 250 + 2 x 680	
	=	2.145	m
Hydralic radius, R	=	a / p	SDM 8.2.1
	=	0.204	m

3 Use Manning Equation for estimating velocity of stormwater

Take n	=	0.016	for concrete lined channels:-	SDM Table 13
Allowable velocity, v	=	$R^{1/6} x (RS_f)^{1/2}/n$ = (0.204)^1/6 x (0.204 x 0.005)^1/2 / 0.016		SDM Table 12
	=	1.53	m/s	
Time of flow, t_f	=	0.7	min	

4 Use "Rational Method" for calculation of design flow

Design intensity, i	=	$a / (t_o + t_f + b)^c$		SDM 4.3.2
	=	505.5 / (5.5+0.7+3.29)^0.355 for return period T = 50 years		Corrigendum 1/2024
	=	228		SDM Table 3a

Type of surface	Runoff Coefficient C	Catchment Area A (m^2)	C x A	SDM 7.5.2 (b)
Flat Glassland(heavy soil)	0.25	0.0	0.0	
Concrete Paving	0.95	1640.0	1558.0	
		SUM =	1558.0	

Upstream flow, Q_u	=	0	m^3/s	
Design flow, Q_d	=	$1.16 \times 0.278i \Sigma C_i A_i + Q_u$ where A_i is in km^2		SDM 7.5.2 (a)
	=	1.16 x 0.278 x 228 x 1558 / 1000000 + 0		Corrigendum 1/2022
	=	0.115	m^3/s	
Allowable flow, Q_a	=	a x v		
	=	0.438 x 1.53		
	=	0.672	m^3/s	
	>	Q_d (O.K.)		

Reference was made to Stormwater Drainage Manual (SDM) by DSD

1 For Connection between CP3 to Existing Public Catchpit

Ref.

Area, A = **0** m^2
Average slope, H = **0.1** m per 100m
Distance on the line of natural flow, L = **0** m

Time of concentraction, t_o = $0.14465L / (H^{0.2}A^{0.1})$ = 0.14465 (0) / (0.1^0.2*0^0.1) — SDM 7.5.2 (d)
= 0.0 min

2 For Pipe after CP3

Size(Diameter) w = **400** mm
Length of Pipe = **30.4** m
Design the pipe to 9/10 full bore capactity, then
Area of ventilated portion = 0.1 of pipe area
$½ r^2 \theta - ½ r^2 \sin(\theta)$ = $0.1 \pi r^2$
$\theta - \sin(\theta)$ = 0.2π
θ = 1.63 rad = 93.4^O (By trial and error)

Area A = $0.9 \pi r^2$
= 0.9 x 3.14 x 400^2 — SDM 8.2.1
= 0.452 m^2

Wetted Perimeter P = $2 \pi r - r \theta$ = 1861 mm
Hydralic radius R = A/P
242.9 mm

3 Use Manning Equation for estimating velocity of stormwater

Fall S = 1: **25**
Take n = 0.016 for concrete lined channels:- — SDM Table 13
Allowable velocity, v = $R^{1/6} x (RS_f)^{1/2}/n$ = (242.9)^1/6 * (242.9/25)^1/2 / 0.016 — SDM Table 12
= 4.67 m/s
Time of flow, t_f = 0.11 min

4 Use "Rational Method" for calculation of design flow

Design intensity, i = $a / (t_o + t_f + b)^c$ — SDM 4.3.2
= 505.5 / (0.0+0.11+3.29)^0.355 for return period T = 50 years — Corrigendum 1/2024
= 327 — SDM Table 3a

Type of surface	Runoff Coefficient C	Catchment Area A (m^2)	C x A
Flat Glassland(heavy soil)	0.25	**0.0**	0.0
Concrete Paving	0.95	**0.0**	0.0
Macadam Roadways	0.425	**0.0**	0.0
Wooded Areas	0.105	**0.0**	0.0
		SUM =	0.0

— SDM 7.5.2 (b)

Upstream flow, Q_u = **0.291** m^3/s

Design flow, Q_d = $0.278i \Sigma C_i A_i + Q_u$ where A_i is in km^2 — SDM 7.5.2 (a)
= 1.16 x 0.278 x 327 x 0 / 1000000 + 0.291 — Corrigendum 1/2022
= 0.291 m^3/s

Allowable flow, Q_a = a x v
= 0.3974 x 1.35
= 2.109 m^3/s

> Q_d (O.K.)

Reference was made to Stormwater Drainage Manual (SDM) by DSD

Application Site

Existing Local Drain

Existing Public UC

Existing Public Catchpit

Proposed 400 Pipe 1:25

CP1 G.L 7.8 I.L 7.11

CP2 G.L 7.8 I.L 6.84

CP3 G.L 7.8 I.L 6.72

CP4 G.L 7.8 I.L 7.17

CP5 G.L 7.8 I.L 7.14

Proposed 500 UC with C.I. cover 1:200

CP6 G.L 7.8 I.L 7.0

CP7 G.L 7.8 I.L 6.87

Proposed 400mm Pipe (1:8)

Existing 500 UC 1:200

Fall

G.L 7.8 I.L 6.95

G.L 7.8 I.L 7.3

G.L 7.8 I.L 7.3

G.L 7.8 I.L 7.17

+ 7.9

Existing watercourse

KAM TIN RIVER

排水口 Outfall

683 RP

681 RP

682 RP

694 RP

661 RP

663

664 S.B

664 S.C

653 S.C

665 S.A

665 RP

652 S.A

652 S.B

652 S.C

667

643

1298

1299

1300

1301

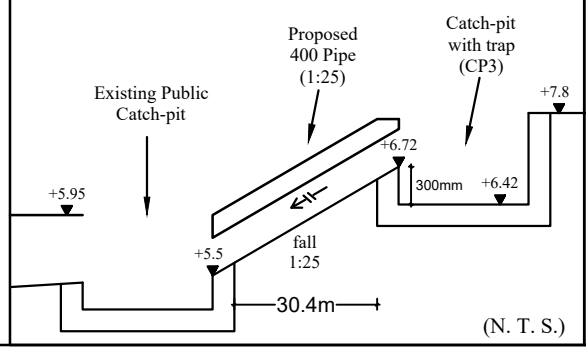
833 100N

Legend:

- Vehicular Ingress/ Egress
- Catch-pit
- Catch-pit with trap
- U-Channel
- U-Channel with C.I. cover
- Pipe

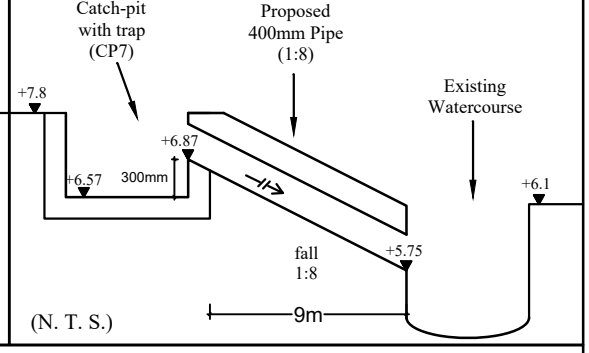
Site Area: 6,147m²

Connection details of proposed outfall between CP3 and existing catchpit

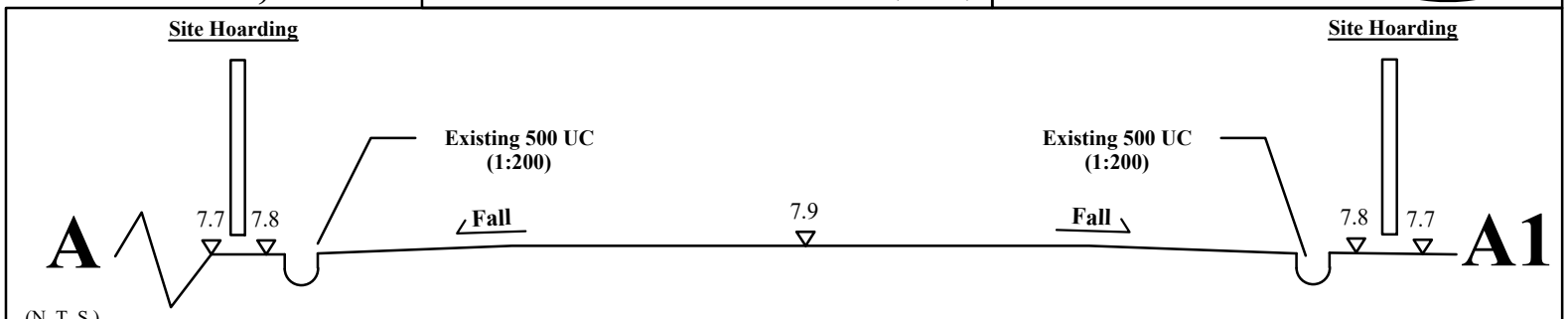


(N. T. S.)

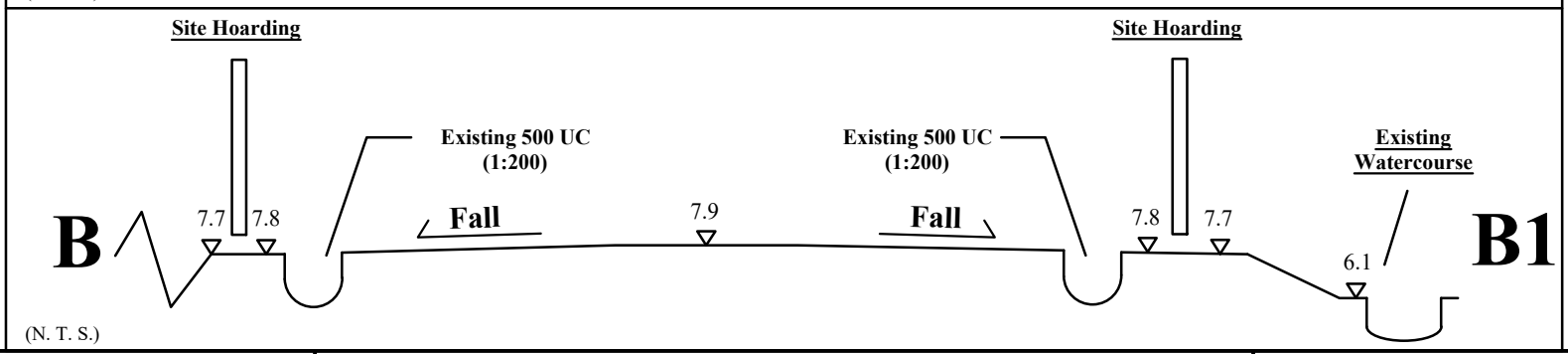
Connection details of proposed outfall between CP7 and existing watercourse



(N. T. S.)

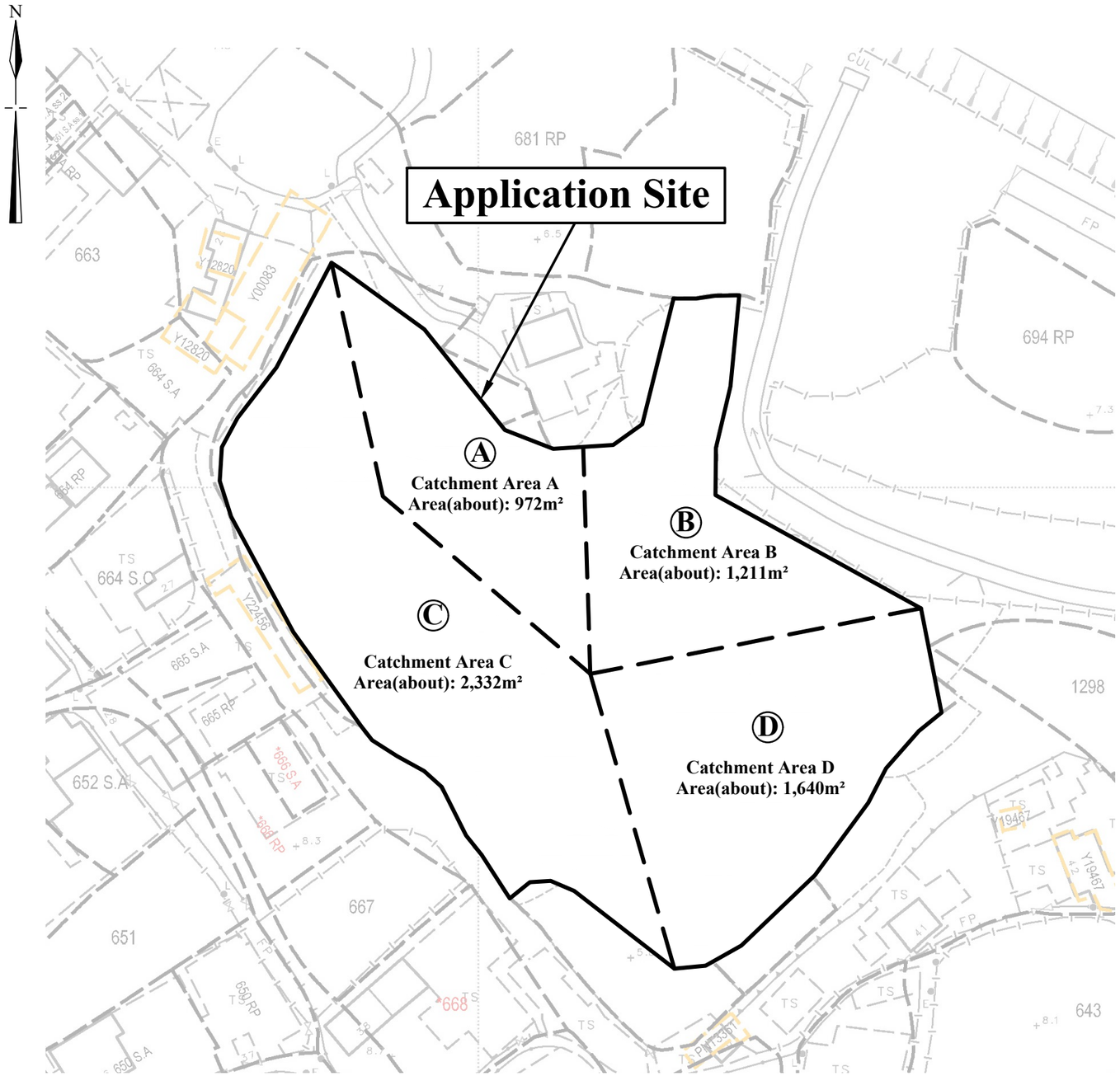


(N. T. S.)

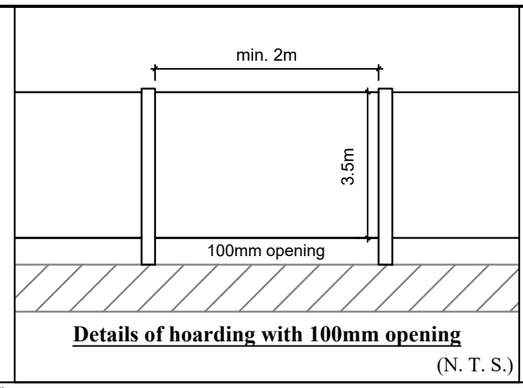


(N. T. S.)

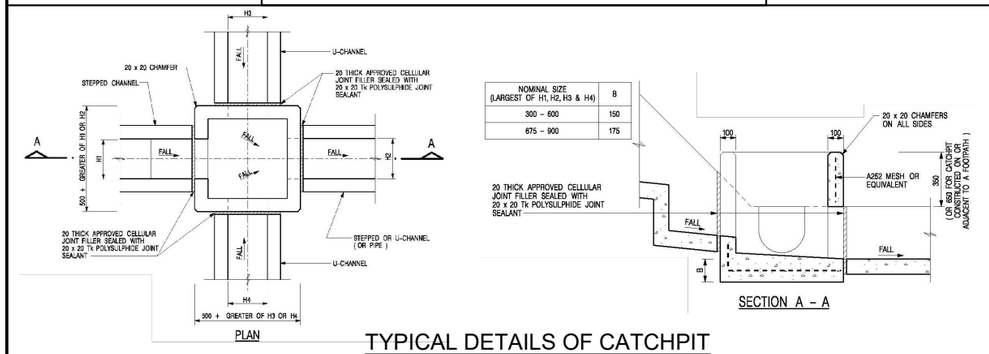
1:750 (A3)	**Drainage Proposal**	Goldrich Planners & Surveyors Ltd.
October 2025	Lots 670(part), 671(part), 673(part), 674, 675, 676, 677(part), 679(part) and 680(part) in DD.106 and adjoining Government Land	Plan 5.1 (P 22068A)



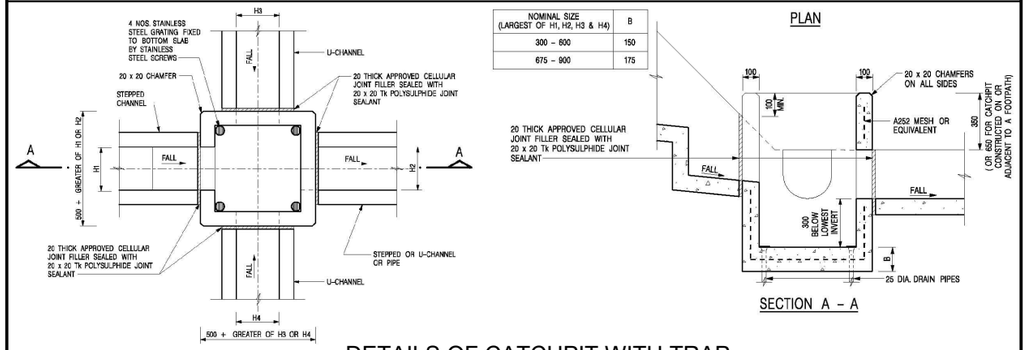
AREA OF CATCHMENT
(N.T.S)



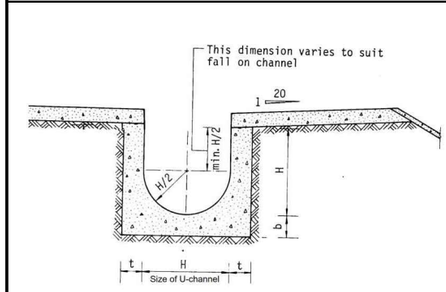
Details of hoarding with 100mm opening
(N. T. S.)



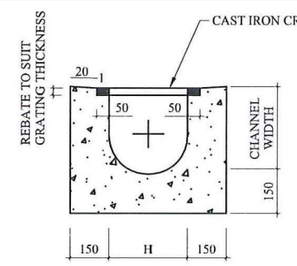
TYPICAL DETAILS OF CATCHPIT
(REFER TO CEDD'S STANDARD DWG. C2406/1)



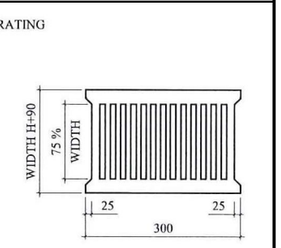
DETAILS OF CATCHPIT WITH TRAP
(REFER TO CEDD'S STANDARD DWG. C2406/1)



TYPICAL DETAILS OF U-CHANNEL
(Refer to DSD'S technical note to prepare a drainage submission)



TYPICAL SECTION OF U-CHANNEL WITH COVER
(N.T.S.)



CAST IRON CRATING
(HEAVY DUTY)

N.T.S	**Drainage Proposal** **Lots 670(part), 671(part), 673(part), 674, 675, 676, 677(part), 679(part) and 680(part) in DD.106 and adjoining Government Land**	**Goldrich Planners & Surveyors Ltd.**
October 2025		**Plan 5.2** **(P 22068A)**