

GoldRich PLANNERS & SURVEYORS LTD.

金 潤 規 劃 測 量 師 行 有 限 公 司

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

Area, A = 972 m²
 Average slope, H = 0.1 m per 100m
 Distance on the line of natural flow, L = 21 m

Time of concentration, $t_o = 0.14465L / (H^{0.2}A^{0.1}) = 0.14465 (21) / (0.1^{0.2} \times 972^{0.1})$
 = 2.4 min

SDM 7.5.2 (d)

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, $a = 0.5 \pi r^2 + w d = 0.5 \times 3.14 \times 250^2 + 500 \times 830$
 = 0.513 m²
 Wetted Perimeter, $p = \pi r + 2 d = 3.14 \times 250 + 2 \times 830$
 = 2.445 m
 Hydraulic radius, $R = a / p = 0.210$ m

SDM 8.2.1

3 Use Manning Equation for estimating velocity of stormwater

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

SDM Table 13
 SDM Table 12

4 Use "Rational Method" for calculation of design flow

Design intensity, $i = a / (t_o + t_f + b)^c$
 = $505.5 / (2.4 + 0.5 + 3.29)^{0.355}$ for return period T = 50 years
 = 265

SDM 4.3.2
 Corrigendum 1/2024
 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, $Q_u = 0$ m³/s

Design flow, $Q_d = 1.16 \times 0.278i \sum C_i A_i + Q_u$ where A_i is in km²
 = $1.16 \times 0.278 \times 265 \times 923.4 / 1000000 + 0$
 = 0.079 m³/s

SDM 7.5.2 (a)
 Corrigendum 1/2022

Allowable flow, $Q_a = a \times v$
 = 0.513×1.57
 = 0.804 m³/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

Area, A = 1211 m²
 Average slope, H = 0.1 m per 100m
 Distance on the line of natural flow, L = 25 m

Time of concentration, $t_c = 0.14465L / (H^{0.2}A^{0.1}) = 0.14465 (25) / (0.1^{0.2} \times 1211^{0.1})$
 = 2.8 min

SDM 7.5.2 (d)

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 = $0.5 \pi r^2 + w d = 0.5 \times 3.14 \times 250^2 + 500 \times 680$
 = 0.438 m²
 Wetted Perimeter, p = $\pi r + 2 d = 3.14 \times 250 + 2 \times 680$
 = 2.145 m
 Hydraulic radius, R = $a / p = 0.204$ m

SDM 8.2.1

3 Use Manning Equation for estimating velocity of stormwater

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

SDM Table 13
 SDM Table 12

4 Use "Rational Method" for calculation of design flow

Design intensity, i = $a / (t_c + t_f + b)^c$
 = $505.5 / (2.8+0.9+3.29)^{0.355}$ for return period T = 50 years
 = 253

SDM 4.3.2
 Corrigendum 1/2024
 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	1211.0	1150.5
SUM =			1150.5

SDM 7.5.2 (b)

Upstream flow, $Q_u = 0$ m³/s

Design flow, $Q_d = 1.16 \times 0.278i \sum C_i A_i + Q_u$ where A_i is in km²
 = $1.16 \times 0.278 \times 253 \times 1150.45 / 1000000 + 0$
 = 0.094 m³/s

SDM 7.5.2 (a)
 Corrigendum 1/2022

Allowable flow, $Q_a = a \times v$
 = 0.438×1.53
 = 0.670 m³/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 2
 (P22068A)

1 For Connection between CP7 to Existing Watercourse

Area, A = 0 m²
 Average slope, H = 0.1 m per 100m
 Distance on the line of natural flow, L = 0 m

Time of concentration, t₀ = 0.14465L / (H^{0.2}A^{0.1}) = 0.14465 (0) / (0.1^{0.2} × 0^{0.1})
 = 0.0 min

Ref.

SDM 7.5.2 (d)

2 For Pipe after CP7

Size(Diameter) w = 400 mm
 Length of Pipe = 9 m
 Design the pipe to 9/10 full bore capacity, then
 Area of ventilated portion = 0.1 of pipe area
 $\frac{1}{2} r^2 \theta - \frac{1}{2} r^2 \sin(\theta) = 0.1 \pi r^2$
 $\theta - \sin(\theta) = 0.2 \pi$
 $\theta = 1.63 \text{ rad} = 93.4^\circ$ (By trial and error)

Area A = 0.9 π r²
 = 0.9 × 3.14 × 400²
 = 0.452 m²

Wetted Perimeter P = 2 π r - r θ = 1861 mm
 Hydraulic radius R = A/P = 242.9 mm

SDM 8.2.1

3 Use Manning Equation for estimating velocity of stormwater

Fall S = 1: 8
 Take n = 0.016 for concrete lined channels:-
 Allowable velocity, v = R^{1/6} × (RS)^{1/2} / n = (242.9)^{1/6} × (242.9/8)^{1/2} / 0.016
 = 8.25 m/s
 Time of flow, t_f = 0.02 min

SDM Table 13
 SDM Table 12

4 Use "Rational Method" for calculation of design flow

Design intensity, i = a / (t₀ + t_f + b)^c
 = 505.5 / (0.0 + 0.02 + 3.29)^{0.355} for return period T = 50 years
 = 331

SDM 4.3.2
 Corrigendum 1/2024
 SDM Table 3a

Type of surface	Runoff Coefficient C	Catchment Area A (m ²)	C x A
Flat Grassland (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 m³/s

Design flow, Q_d = 0.278i Σ C_iA_i + Q_u where A_i is in km²
 = 1.16 × 0.278 × 331 × 0 / 1000000 + 0.173
 = 0.173 m³/s

SDM 7.5.2 (a)
 Corrigendum 1/2022

Allowable flow, Q_a = a × v
 = 0.3974 × 1.35
 = 3.729 m³/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 3
 (P22068A)

1 For Catchment Area C

Area, A = 2332 m²
 Average slope, H = 0.1 m per 100m
 Distance on the line of natural flow, L = 29 m

Time of concentration, $t_c = 0.14465L / (H^{0.2}A^{0.1}) = 0.14465 (29) / (0.1^{0.2} \times 2332^{0.1})$
 = 3.1 min

SDM 7.5.2 (d)

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 = $0.5 \pi r^2 + w d = 0.5 \times 3.14 \times 250^2 + 500 \times 830$
 = 0.513 m²
 Wetted Perimeter, p = $\pi r + 2 d = 3.14 \times 250 + 2 \times 830$
 = 2.445 m
 Hydraulic radius, R = a / p
 = 0.210 m

SDM 8.2.1

3 Use Manning Equation for estimating velocity of stormwater

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

SDM Table 13
 SDM Table 12

4 Use "Rational Method" for calculation of design flow

Design intensity, i = $a / (t_c + t_f + b)^c$
 = $505.5 / (3.1 + 1.3 + 3.29)^{0.355}$ for return period T = 50 years
 = 246

SDM 4.3.2
 Corrigendum 1/2024
 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, $Q_u = 0$ m³/s

Design flow, $Q_d = 1.16 \times 0.278i \sum C_f A_i + Q_u$ where A_i is in km²
 = $1.16 \times 0.278 \times 246 \times 2215.4 / 1000000 + 0$
 = 0.176 m³/s

SDM 7.5.2 (a)
 Corrigendum 1/2022

Allowable flow, $Q_a = a \times v$
 = 0.513×1.55
 = 0.793 m³/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 4
 (P22068A)

1 For Catchment Area D

Area, A = 1640 m²
 Average slope, H = 0.1 m per 100m
 Distance on the line of natural flow, L = 50 m

Time of concentration, $t_c = 0.14465L / (H^{0.2}A^{0.1}) = 0.14465 (50) / (0.1^{0.2} \times 1640^{0.1})$
 = 5.5 min

SDM 7.5.2 (d)

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 = $0.5 \pi r^2 + w d = 0.5 \times 3.14 \times 250^2 + 500 \times 680$
 = 0.438 m²
 Wetted Perimeter, p = $\pi r + 2 d = 3.14 \times 250 + 2 \times 680$
 = 2.145 m
 Hydraulic radius, R = a / p
 = 0.204 m

SDM 8.2.1

3 Use Manning Equation for estimating velocity of stormwater

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

SDM Table 13
 SDM Table 12

4 Use "Rational Method" for calculation of design flow

Design intensity, i = $a / (t_b + t_f + b)^c$
 = $505.5 / (5.5 + 0.7 + 3.29)^{0.355}$ for return period T = 50 years
 = 228

SDM 4.3.2
 Corrigendum 1/2024
 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	1640.0	1558.0
SUM =			1558.0

SDM 7.5.2 (b)

Upstream flow, Q_u = 0 m³/s

Design flow, Q_d = $1.16 \times 0.278i \sum C_f A_i + Q_u$ where A_i is in km²
 = $1.16 \times 0.278 \times 228 \times 1558 / 1000000 + 0$
 = 0.115 m³/s

SDM 7.5.2 (a)
 Corrigendum 1/2022

Allowable flow, Q_a = a x v
 = 0.438 x 1.53
 = 0.672 m³/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 5
 (P22068A)

1 For Connection between CP3 to Existing Public Catchpit

Area, A = 0 m²
 Average slope, H = 0.1 m per 100m
 Distance on the line of natural flow, L = 0 m

Time of concentration, t₀ = 0.14465L / (H^{0.2}A^{0.1}) = 0.14465 (0) / (0.1^{0.2} × 0^{0.1})
 = 0.0 min

SDM 7.5.2 (d)

2 For Pipe after CP3

Size(Diameter) w = 400 mm
 Length of Pipe = 30.4 m
 Design the pipe to 9/10 full bore capacity, then
 Area of ventilated portion = 0.1 of pipe area
 $\frac{1}{2} r^2 \theta - \frac{1}{2} r^2 \sin(\theta) = 0.1 \pi r^2$
 $\theta - \sin(\theta) = 0.2 \pi$
 $\theta = 1.63 \text{ rad} = 93.4^\circ$ (By trial and error)

Area A = 0.9 π r²
 = 0.9 × 3.14 × 400²
 = 0.452 m²

SDM 8.2.1

Wetted Perimeter P = 2 π r - r θ = 1861 mm
 Hydraulic 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:-
 Allowable velocity, v = R^{1/6} × (RS_f)^{1/2} / n = (242.9)^{1/6} × (242.9/25)^{1/2} / 0.016
 = 4.67 m/s
 Time of flow, t_f = 0.11 min

SDM Table 13
 SDM Table 12

4 Use "Rational Method" for calculation of design flow

Design intensity, i = a / (t₀ + t_f + b)^c
 = 505.5 / (0.0 + 0.11 + 3.29)^{0.355} for return period T = 50 years
 = 327

SDM 4.3.2
 Corrigendum 1/2024
 SDM Table 3a

Type of surface	Runoff Coefficient C	Catchment Area A (m ²)	C x A
Flat Grassland (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 m³/s

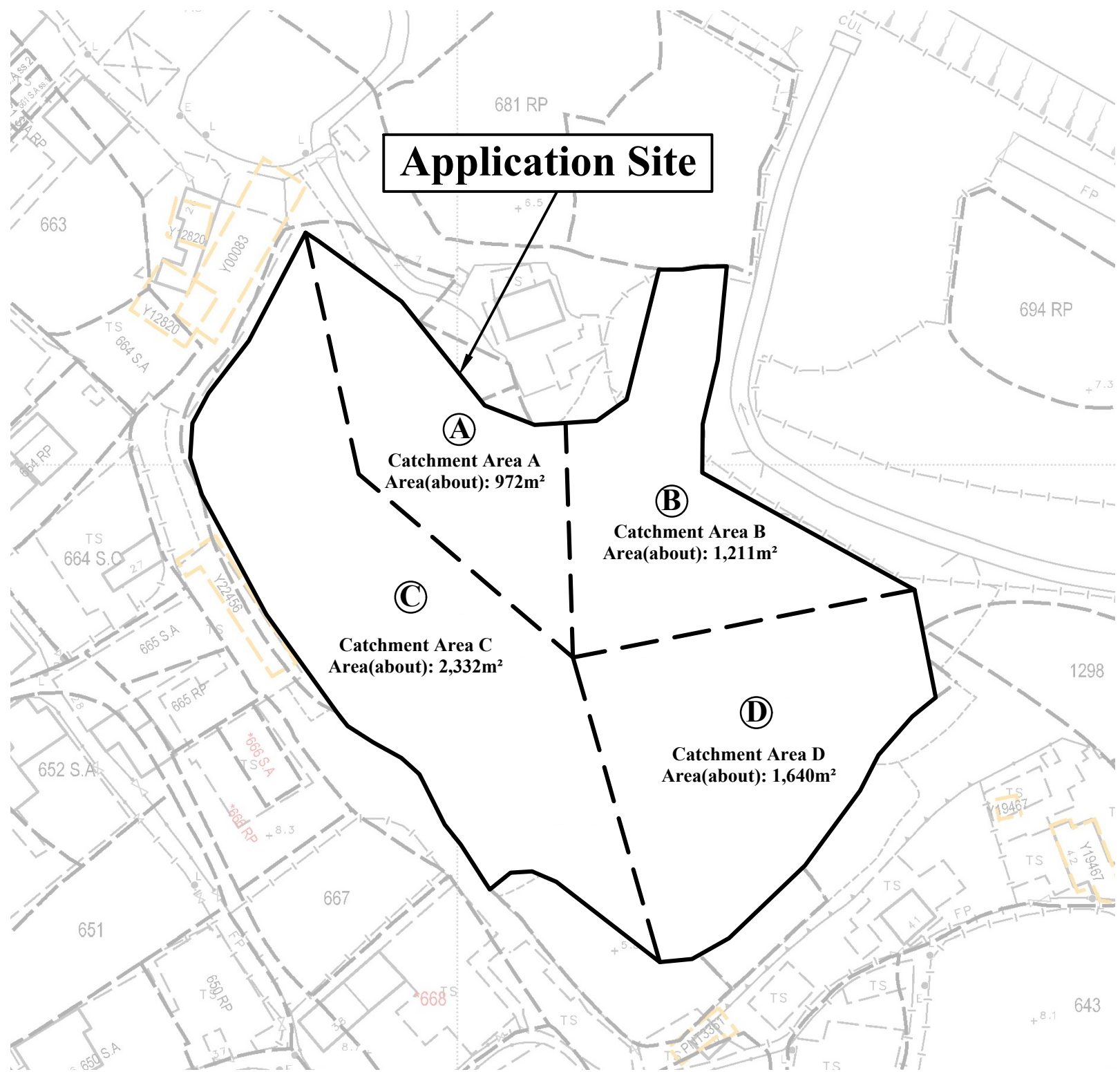
Design flow, Q_d = 0.278i Σ C_fA_f + Q_u where A_f is in km²
 = 1.16 × 0.278 × 327 × 0 / 1000000 + 0.291
 = 0.291 m³/s

SDM 7.5.2 (a)
 Corrigendum 1/2022

Allowable flow, Q_a = a × v
 = 0.3974 × 1.35
 = 2.109 m³/s

> Q_d (O.K.)

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



Application Site

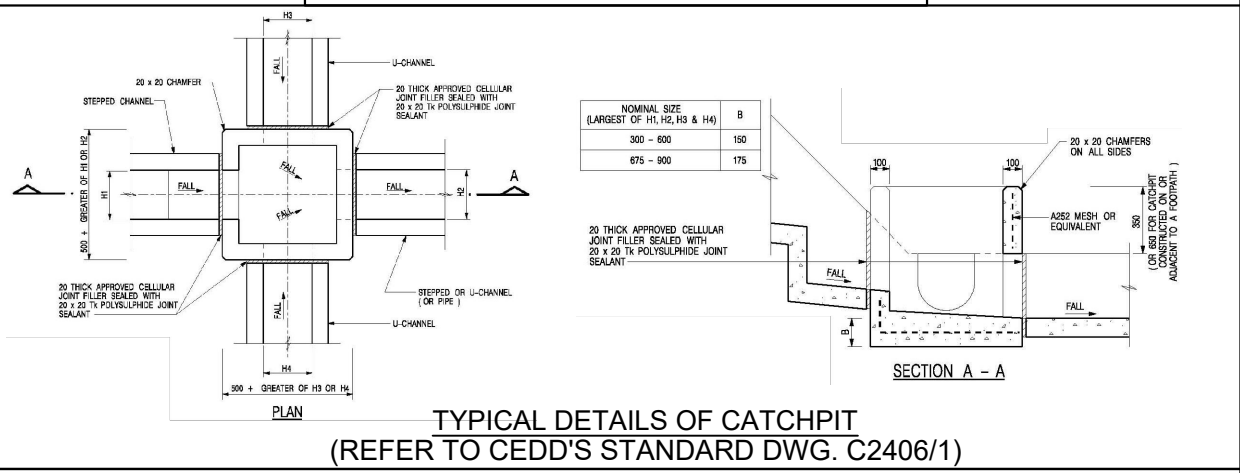
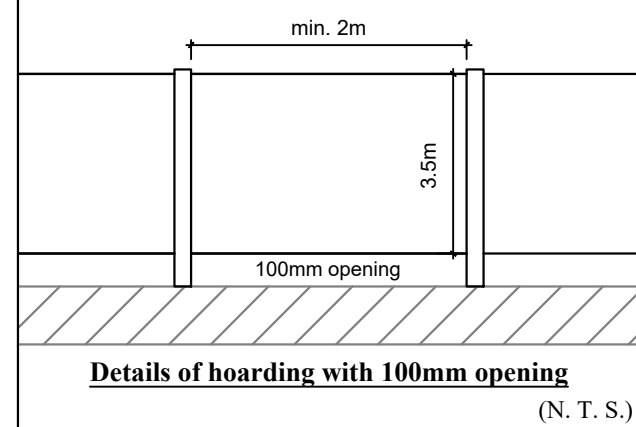
A
Catchment Area A
Area(about): 972m²

B
Catchment Area B
Area(about): 1,211m²

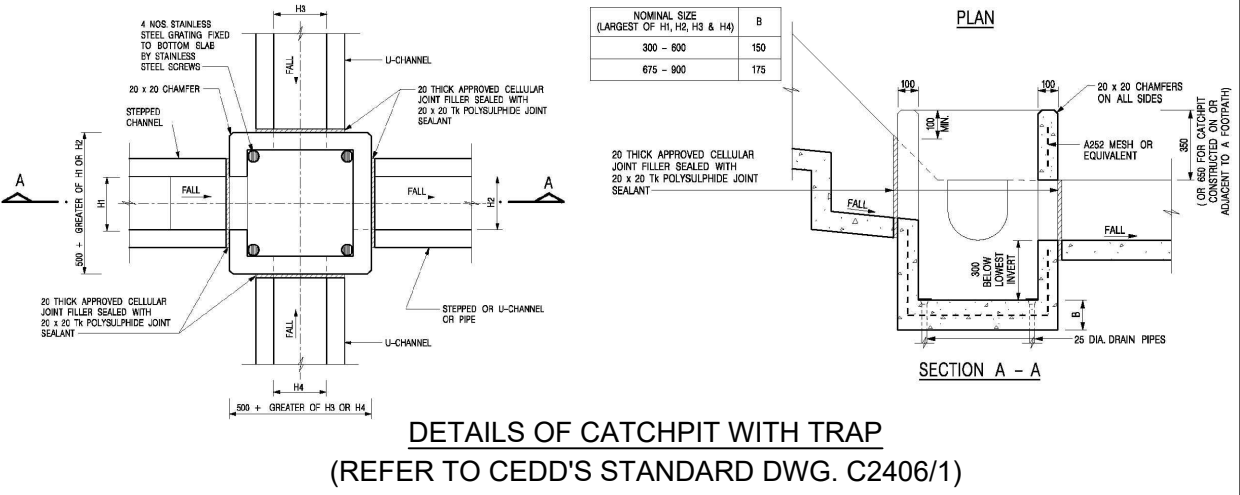
C
Catchment Area C
Area(about): 2,332m²

D
Catchment Area D
Area(about): 1,640m²

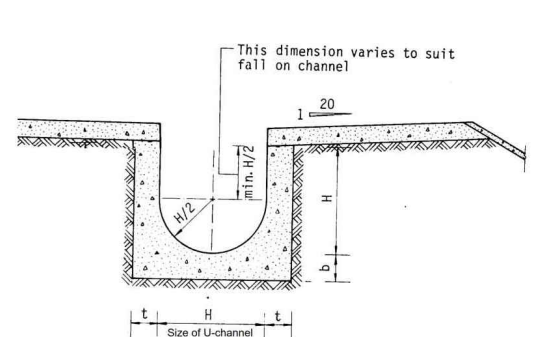
AREA OF CATCHMENT
(N.T.S)



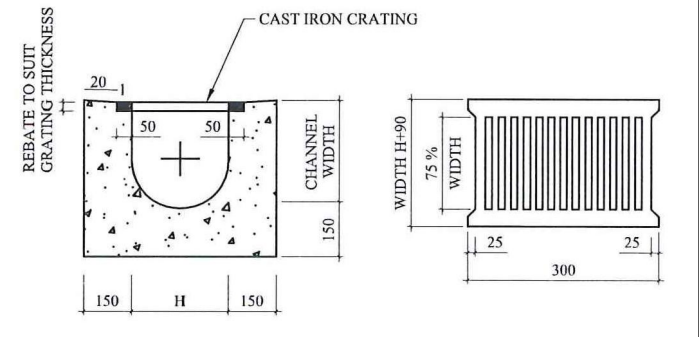
TYPICAL DETAILS OF CATCHPIT
(REFER TO CEDD'S STANDARD DWG. C2406/1)



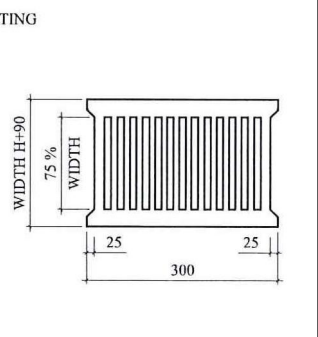
DETAILS OF CATCHPIT WITH TRAP
(REFER TO CEDD'S STANDARD DWG. C2406/1)



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

October 2025

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.

Plan 5.2 (P 22068A)