

GoldRich PLANNERS & SURVEYORS LTD.

金潤規畫測量師行有限公司

Your Ref.: A/YL-KTS/1102

Our Ref.: P22068B/TL26079

3 March 2026

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 681 RP (Part), 682 RP (Part) and 683 RP (Part) in D.D. 106 and Adjoining Government Land, Yuen Long, New Territories (Application No. A/YL-KTS/1102)

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/FS&YLE, PlanD [REDACTED]

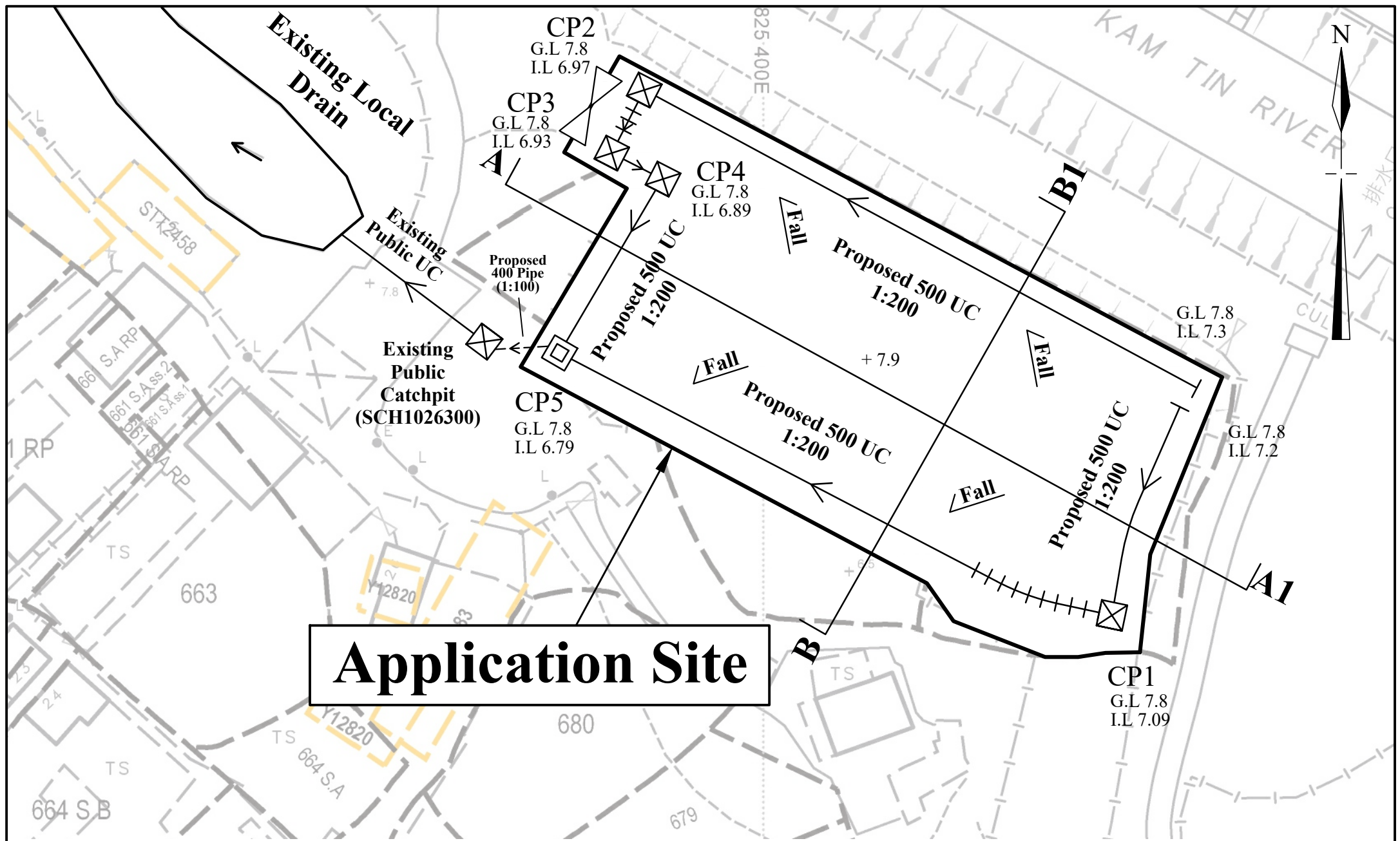
Further Information for Planning Application No. A/YL-KTS/1102**Response-to-Comments****Comments from Drainage Services Department**

Contact person: Mr. Jeff Tse (Tel.: 3965 8921)

I.	Comments	Responses
1.	Please provide peripheral surface channels at the entrance of the site (the northwest side of the application site) to collect the surface runoff accrued on the application site and to intercept the overland flow from the adjacent lands.	Provided. Please refer to Plan 5.1a.
2.	Please indicate the feature number of the existing public catchpit, to which the applicant proposed to discharge the stormwater from the subject site on the drainage plan for clarity. Please also advise whether the existing DSD's drainage facilities (SCH1026300, SGJ1038727 and SGJ1038728, etc.) will be maintained/affected due to the proposed development. Please clearly indicate the above on the drainage plan for reference. Besides, the applicant should check and ensure the hydraulic capacity of the existing drainage facilities would not be adversely affected by the captioned development.	Noted. The existing DSD's drainage facilities (SCH1026300, SGJ1038727 and SGJ1038728, etc.) will be maintained due to the proposed development. The above is indicated on Plan 5.1a.
3.	It is noted that the proposed 400mm pipe connecting from CP3 to the existing public catchpit is quite steep with a gradient of 1:4. Please review the gradient of the proposed drainage system and check the velocity of the flow for such proposed drainage facility for further comments.	The gradient and the invert level is reviewed. Please refer to Plan 5.1a.
4.	Please advise if any site formation/levelling works to be carried out under this application. Cross sections showing the existing and proposed ground levels of the captioned site with respect to the adjacent areas should be given.	No site formation/levelling works to be carried out under this application. Thus, the existing ground levels is equal to the proposed ground levels.

5.	The details of the opening (100mm opening) for the proposed hoarding should be indicated on the drainage plan (Plan 5.1) for clarity.	Noted. Please refer to Plan 5.1a.
6.	Catchpit should be provided at the turning point of the proposed u-channel.	Noted. Catchpit is provided at the turning point of the proposed u-channel.
7.	The development should neither obstruct overland flow and nor adversely affect existing natural streams, village drains, ditches and the adjacent areas, etc.	Noted.
8.	The applicant should resolve any conflict/disagreement with relevant lot owner(s) and seek permission from DLO/YL for laying new drains/channels and/or modifying/upgrading existing ones in other private lots or on Government Land, where required, outside the application site(s).	Noted.
9.	The applicant should submit form HBP1 to this Division for application of technical audit for any proposed connection to DSD's drainage facilities.	Noted.

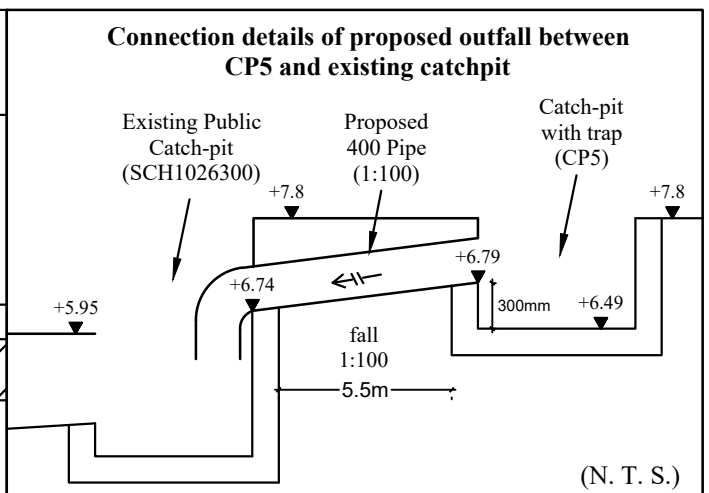
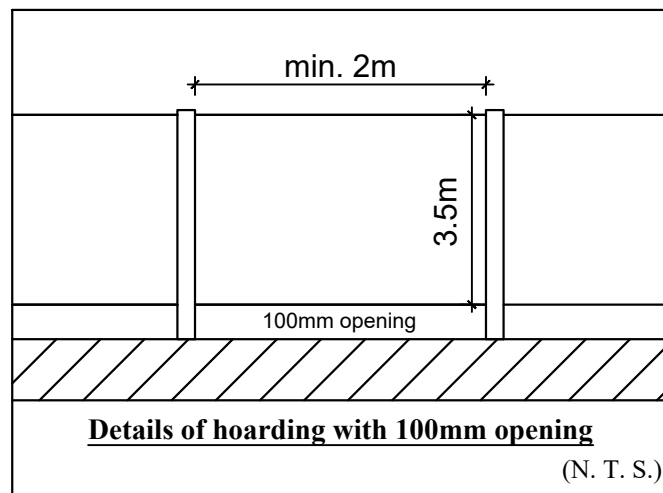
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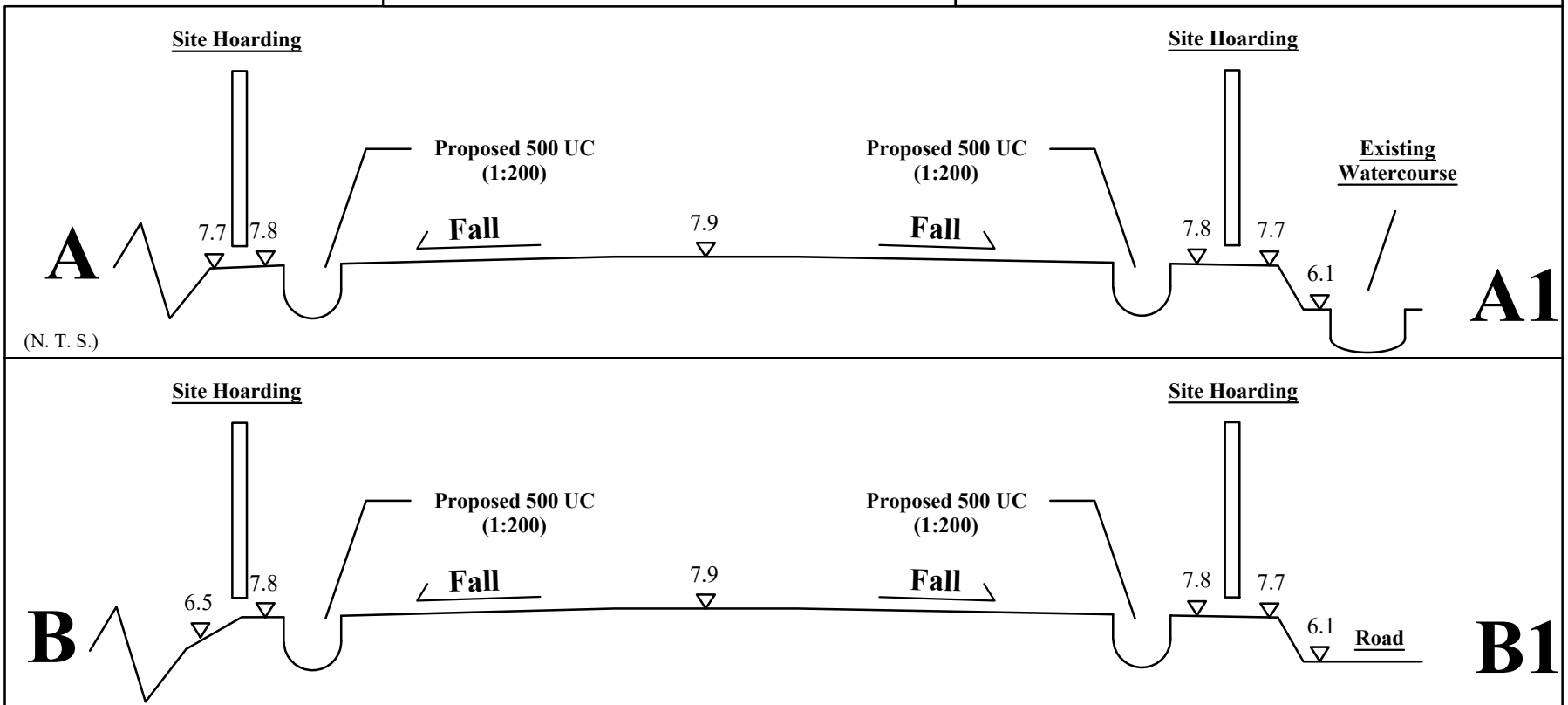
Legend:

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

Note: The existing DSD's drainage facilities (SCH1026300, SGJ1038727 and SGJ1038728, etc.) will be maintained due to the proposed development.



Site Area: 2,258m²



1:500 (A3)

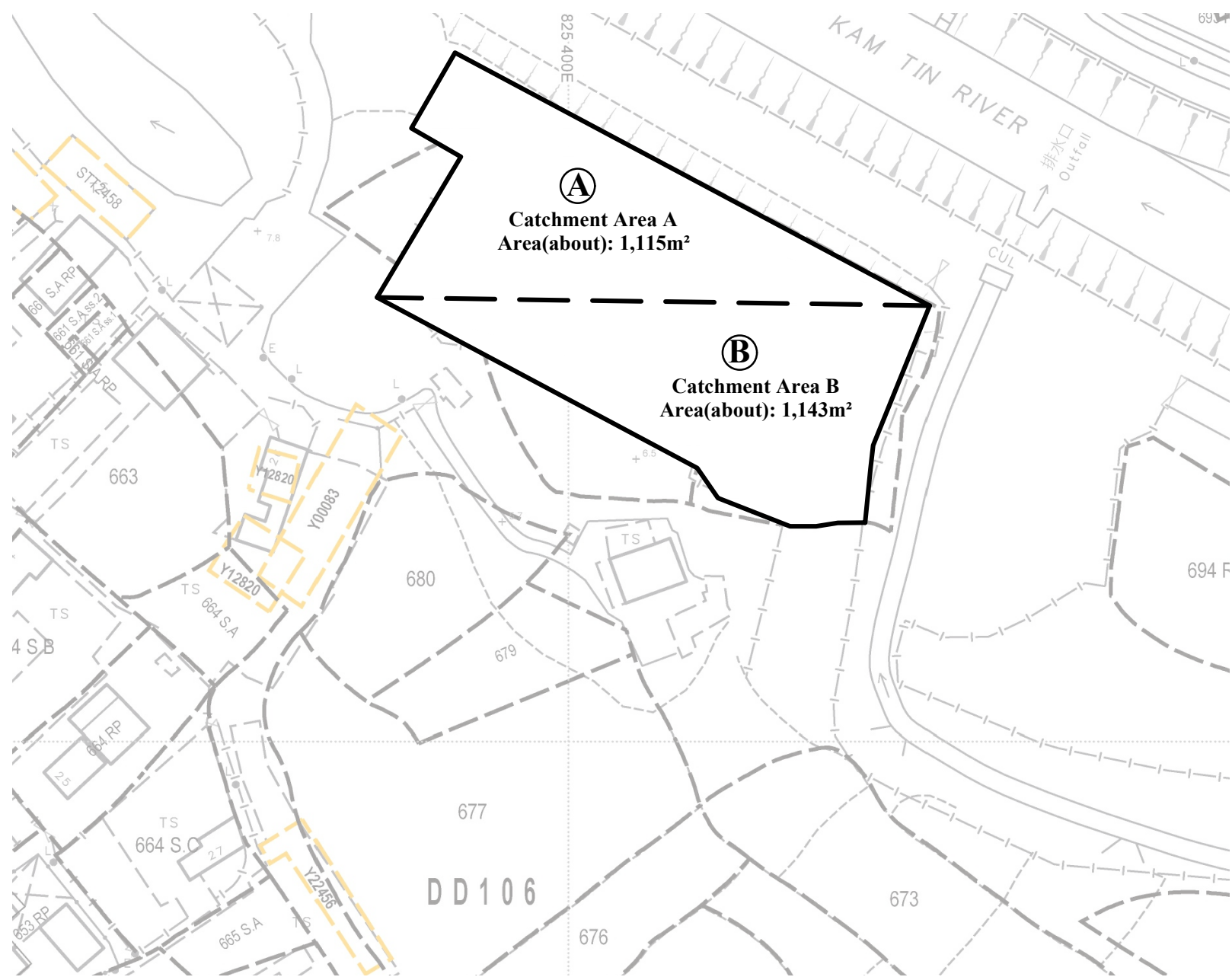
Drainage Proposal

Goldrich Planners & Surveyors Ltd.

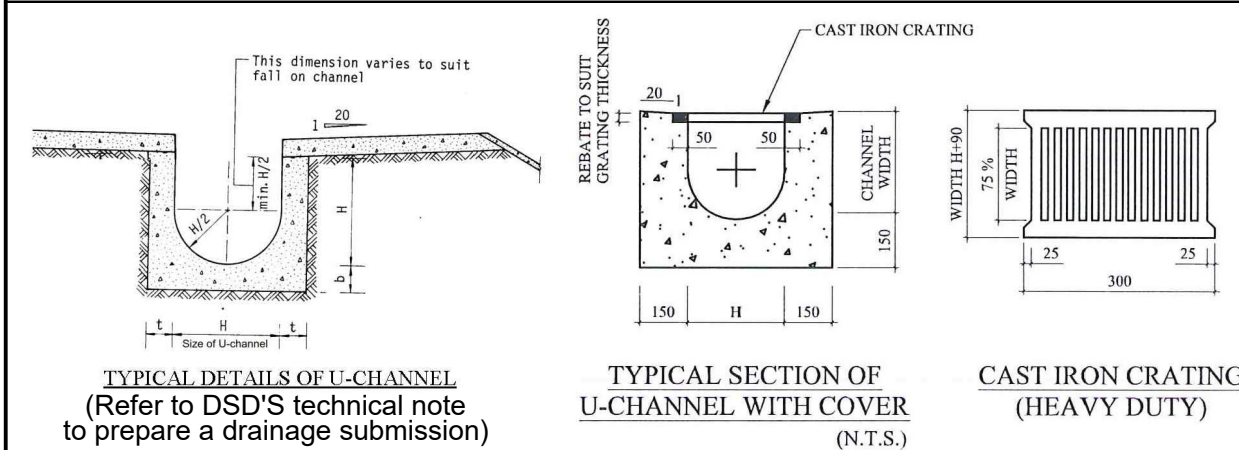
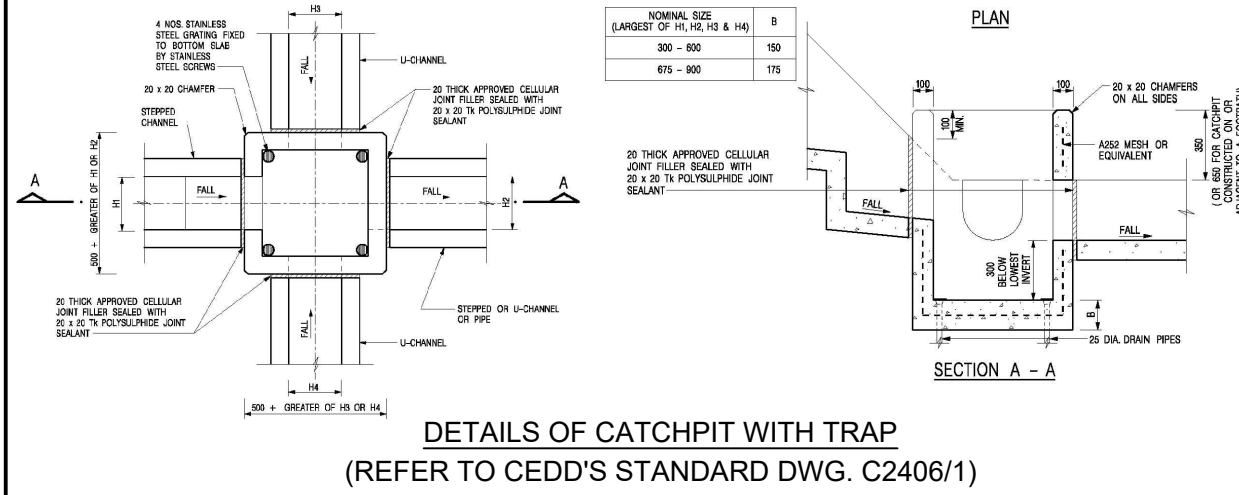
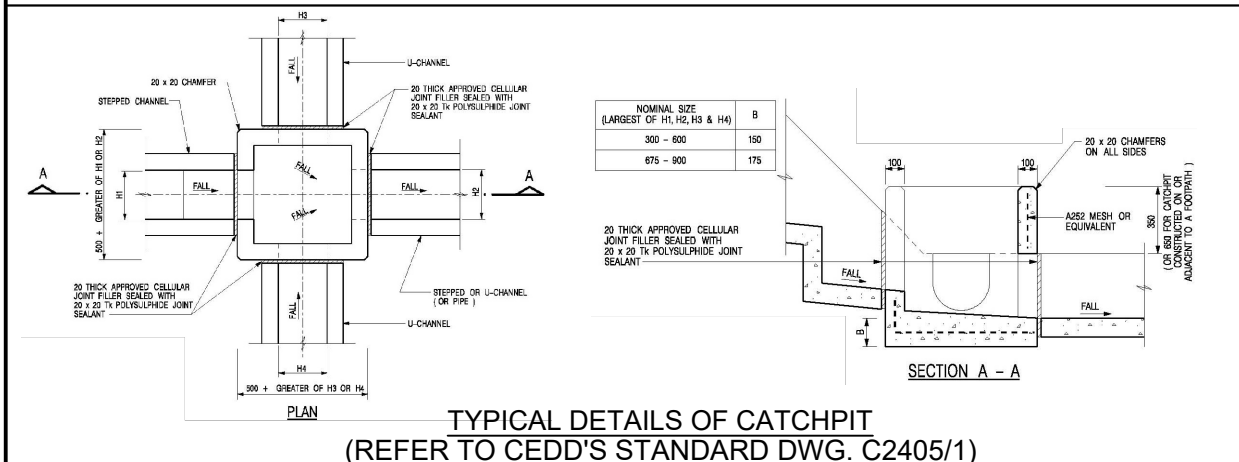
March 2026

Lots 681 RP(part), 682 RP(part) and 683 RP(part) in DD.106 and adjoining Government Land

Plan 5.1a
 (P 22068B)



AREA OF CATCHMENT
(N.T.S)



N.T.S

March 2026

Drainage Proposal

**Lots 681 RP(part), 682 RP(part) and 683 RP(part) in DD.106
and adjoining Government Land**

**Goldrich Planners &
Surveyors Ltd.**

**Plan 5.2a
(P 22068B)**

1 For Catchment Area A

Area, A = 1115 m²
 Average slope, H = 0.1 m per 100m
 Distance on the line of natural flow, L = 17 m

Time of concentration, $t_0 = 0.14465L / (H^{0.2}A^{0.1}) = 0.14465 (17) / (0.1^{0.2} \times 1115^{0.1})$
 = 1.9 min

Ref.

SDM 7.5.2 (d)

2 For Proposed UC in Catchment Area A

	From	To
Ground level (mPD)	7.80	7.80
Invert level (mPD)	7.30	6.79

Width of u-channel, w = 500 mm
 Length of u-channel, $L_c = 102$ m
 Depth of vertical part of u-channel, d = 760 mm
 Gradient of u-channel, $S_f = (7.3-6.79)/102 = 0.005$

Cross-Section Area, $a = 0.5 \pi r^2 + w d = 0.5 \times 3.14 \times 250^2 + 500 \times 760$
 = 0.478 m²
 Wetted Perimeter, $p = \pi r + 2 d = 3.14 \times 250 + 2 \times 760$
 = 2.305 m
 Hydraulic radius, $R = a / p = 0.207$ m

SDM 8.2.1

3 Use Manning Equation for estimating velocity of stormwater

Take n = 0.016 for concrete lined channels:-
 Allowable velocity, $v = R^{1/6} \times (RS_f)^{1/2} / n = (0.207)^{1/6} \times (0.207 \times 0.005)^{1/2} / 0.016$
 = 1.55 m/s
 Time of flow, $t_f = 1.1$ min

SDM Table 13
 SDM Table 12

4 Use "Rational Method" for calculation of design flow

Design intensity, $i = a / (t_0 + t_f + b)^c$
 = $505.5 / (1.9 + 1.1 + 3.29)^{0.355}$ for return period T = 50 years
 = 263

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	1115.0	1059.3
SUM =			1059.3

SDM 7.5.2 (b)

Upstream flow, $Q_u = 0$ m³/s

Design flow, $Q_d = 1.16 \times 0.278i \sum C_f A_f + Q_u$ where A_f is in km²
 = $1.16 \times 0.278 \times 263 \times 1059.25 / 1000000 + 0$
 = 0.090 m³/s

SDM 7.5.2 (a)
 Corrigendum 1/2022

Allowable flow, $Q_a = a \times v$
 = 0.478×1.55
 = 0.740 m³/s

> Q_d (O.K.)

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

Scale: NA

Hydraulic Calculation

Goldrich Planners &
 Surveyors Ltd.

March 2026

Lots 681 RP (Part), 682 RP (Part) and 683 RP (Part) in D.D. 106 and
 Adjoining Government Land, Yuen Long, New Territories

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1 For Catchment Area B

Area, A = 1143 m²
 Average slope, H = 0.1 m per 100m
 Distance on the line of natural flow, L = 16 m

Time of concentration, $t_c = 0.14465L / (H^{0.2}A^{0.1}) = 0.14465 (16) / (0.1^{0.2} \times 1143^{0.1})$
 = 1.8 min

SDM 7.5.2 (d)

2 For Proposed UC in Catchment Area B

	From	To
Ground level (mPD)	7.80	7.80
Invert level (mPD)	7.20	6.79

Width of u-channel, w = 500 mm
 Length of u-channel, L_c = 82 m
 Depth of vertical part of u-channel, d = 760 mm
 Gradient of u-channel, S_f = (7.2-6.79)/82 = 0.005

Cross-Section Area, a = $0.5 \pi r^2 + w d = 0.5 \times 3.14 \times 250^2 + 500 \times 760$
 = 0.478 m²
 Wetted Perimeter, p = $\pi r + 2 d = 3.14 \times 250 + 2 \times 760$
 = 2.305 m
 Hydraulic radius, R = a / p
 = 0.207 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 = $R^{1/6} \times (RS_f)^{1/2} / n = (0.207)^{1/6} \times (0.207 \times 0.005)^{1/2} / 0.016$
 = 1.55 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 / (1.8+0.9+3.29)^{0.355} for return period T = 50 years
 = 268

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	1143.0	1085.9
SUM =			1085.9

SDM 7.5.2 (b)

Upstream flow, Q_u = 0 m³/s

Design flow, Q_d = 1.16 x 0.278i Σ C_fA_i + Q_u where A_i is in km²
 = 1.16 x 0.278 x 268 x 1085.85 / 1000000 + 0
 = 0.094 m³/s

SDM 7.5.2 (a)
 Corrigendum 1/2022

Allowable flow, Q_a = a x v
 = 0.478 x 1.55
 = 0.740 m³/s

> Q_d (O.K.)

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

1 For Connection between CP5 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

Ref.

SDM 7.5.2 (d)

2 For Pipe after CP5

Size(Diameter) w = 400 mm
 Length of Pipe = 5.5 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: 100
 Take n = 0.016 for concrete lined channels:-
 Allowable velocity, v = R^{1/6} × (RS)^{1/2} / n = (242.9)^{1/6} × (242.9/100)^{1/2} / 0.016
 = 2.33 m/s
 Time of flow, t_f = 0.04 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 + 0.04 + 3.29)^{0.355} for return period T = 50 years
 = 330

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 = 0.184 m³/s

Design flow, Q_d = 0.278i Σ C_iA_i + Q_u where A_i is in km²
 = 1.16 × 0.278 × 330 × 0 / 1000000 + 0.184
 = 0.184 m³/s

SDM 7.5.2 (a)
 Corrigendum 1/2022

Allowable flow, Q_a = a × v
 = 0.3974 × 1.35
 = 1.055 m³/s

> Q_d (O.K.)

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

Scale: NA

Hydraulic Calculation

Goldrich Planners &
 Surveyors Ltd.

March 2026

Lots 681 RP (Part), 682 RP (Part) and 683 RP (Part) in D.D. 106 and
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