GoldRich PLANNERS & SURVEYORS LTD.

金 潤 規 劃 測 量 師 行 有 限 公 司

Your Ref.: A/YL-KTN/1177 Our Ref.: P23044/TL25424 8 December 2025

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

By Post and E-mail
tpbpd@pland.gov.hk

Dear Sir,

Submission of Further Information (FI)

Temporary Animal Boarding Establishment with Ancillary Facilities and associated Filling of Land for a period of 5 years in "Agriculture" Zone, Lot Nos. 1493 (Part) and 1500 (Part) in D. D. 107 and Adjoining Government Land, Yuen Long, New Territories (Application No. A/YL-KTN/1177)

We write to submit FI in response to comments from Drainage Services Department and an updated drainage record for the captioned application, which serves to supersede our previous FI submission under our reference P23044/TL25415 dated 4.12.2025.

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

Francis LAU

Encl.

c.c.
DPO/FS&YLE, PlanD *By E-mail only*

Further Information for Planning Application No. A/YL-KTN/1177

Response-to-Comments

Comments from Drainage Services Department

(Contact Person: Ms Jessica KWAN; Tel.: 2300 1444)

I.	Comments		Responses
1.	Sections - Please indicate the hoarding opening in drawings.		Hoarding with opening is provided at the western side of the site. Please refer to updated Drainage Proposal (Plan 6.1b) for details.
2.	Section B - Please review the adjacent site ground levels. According to our record, the adjacent road level is higher than the application site, external catchment area should be considered. Please update the section and calculations if necessary.		Portion of the adjacent road at the west is at a higher level than the site. External catchment area is included. Please refer to updated Drainage Proposal (Plan 6.1b and Plan 6.2b) and Hydraulic Calculations for details.

- END -

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Application Site

This Local Track has a lower ground level than the site

Adjoining Site drainage proposal was approved in previous Approved Planning Application No. A/YL-KTN/1058 with existing drainage system

B

A

A1

B1

Ex. CP1 G.L. 4.3 I.L. 3.80

Ex. CP2 G.L. 4.3 I.L. 3.79

Ex. CP3 G.L. 4,3 I.L. 3.78

Ex. CP4 G.L. 4.12 I.L. 3.77

Ex. CP5 G.L. 3.67 I.L. 3.17

Ex.CP6 G.L. 3.55 I.L. 3.05

G.L 4.3 I.L 4.0

G.L. 4.3 I.L. 3.85

Ex. 300 UC 1:80

Ex. 500mm underground UC +4.1

Ex. 350 UC 1:300

Ex. 500 UC 1:300

Ex. 500 UC 1:100

Ex. 500mm underground pipe 1:300

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

Ex. 500 covered UC 1:100

Existing 500mm UC

Existing 350mm UC

225mm UC

Gutter

Existing 225mm UC 1:200

Existing 350mm UC 1:200

Existing 350mm UC 1:320

Existing 350mm UC 1:180

Existing 300mm UC 1:135

Existing 400mm UC

Existing 450 underground pipe SWD1065683

Existing low fence wall

Existing low fence wall

S1

Existing catchpit SCH1028760

Existing catchpit SCH1028761 G.L. 4.3 I.L. 2.0

Existing 600 underground Pipe SWD1065681

Existing 600 Pipe underground SWD1065682

Proposed 250mm UC 1:200

Proposed 300mm UC 1:100

Proposed 300mm UC 1:100

Existing Nullah

Raised Platform

POND

LGV

CP1 CP2 CP3 CP4 CP5 CP6 (last) CP7 CP8

1:320 1:250 1:200 1:135 1:180

+3.3 +4.1 +4.0 +4.2 +4.7 +3.5

3.8+ 4.15+

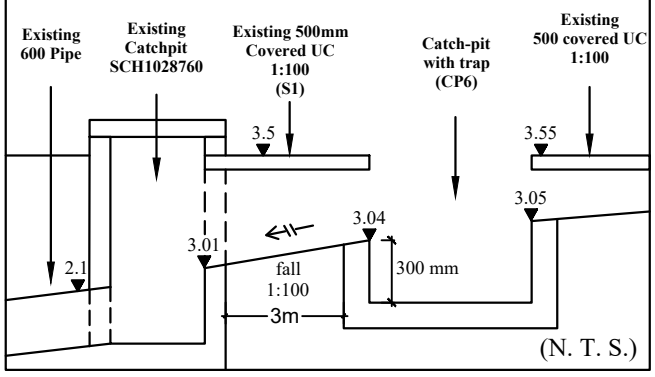
Fall

Adjoining Site drainage proposal was approved in previous Approved Planning Application No. A/YL-KTN/916 with existing drainage system

Legend

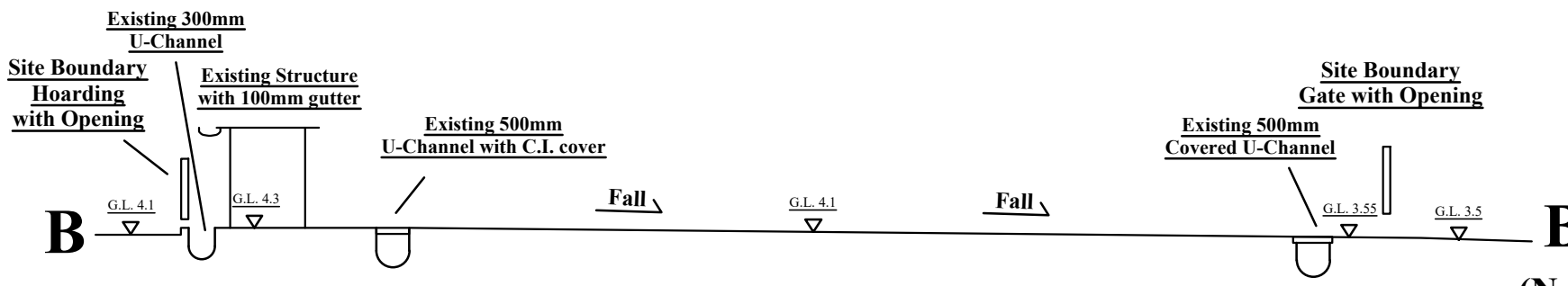
- Catch-pit
- Catch-pit with trap
- U-Channel
- Covered U-Channel
- U-Channel with C.I. cover
- Hoarding with 100mm Opening
- Pedestrian access
- Viewpoint of Drainage Photo
- 100mm gutter
- 100mm downpipe

Connection details of existing outfall between CP6, S1 and existing catchpit



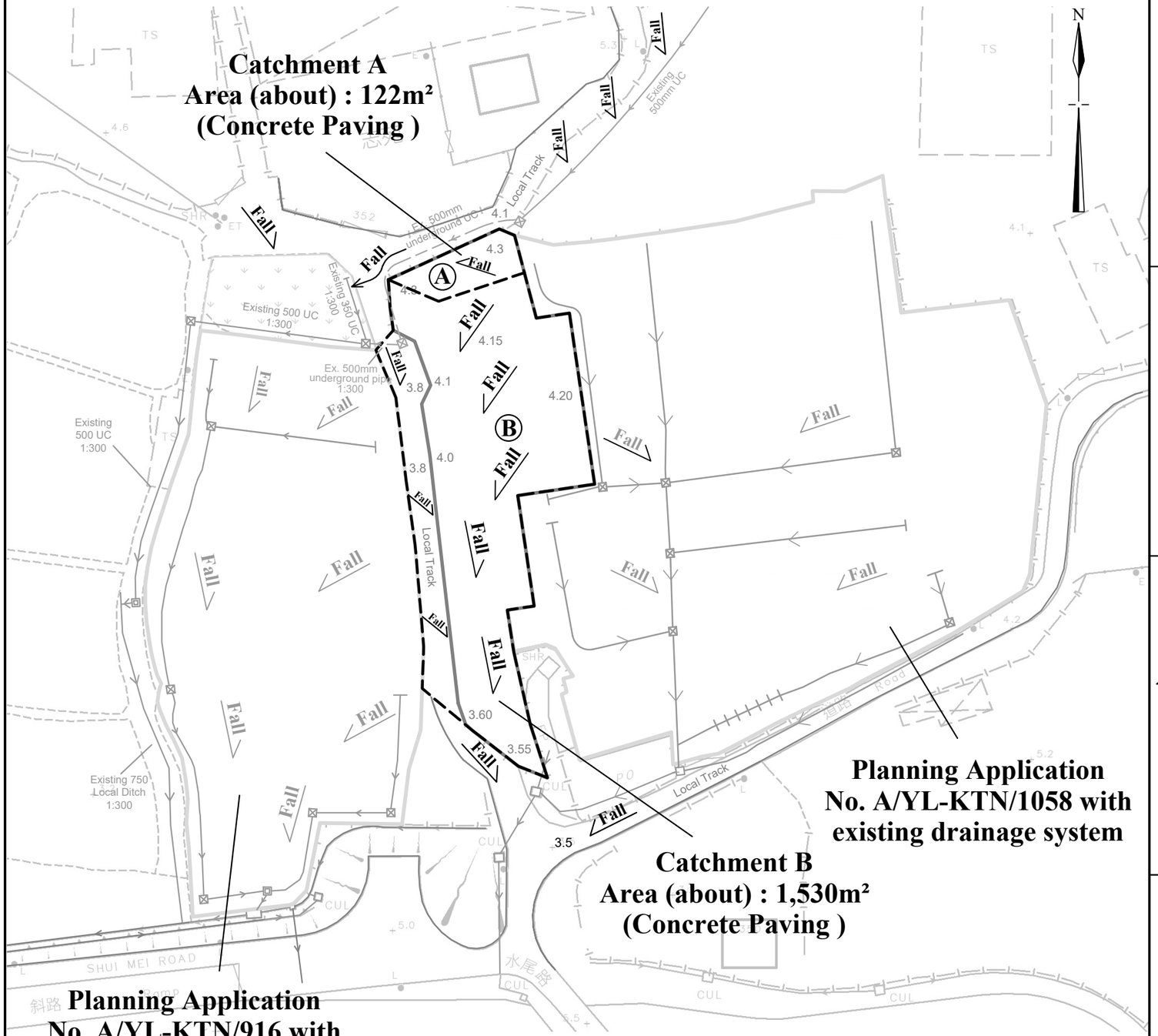
Site Area(about) : 1,381m²

(N.T.S)

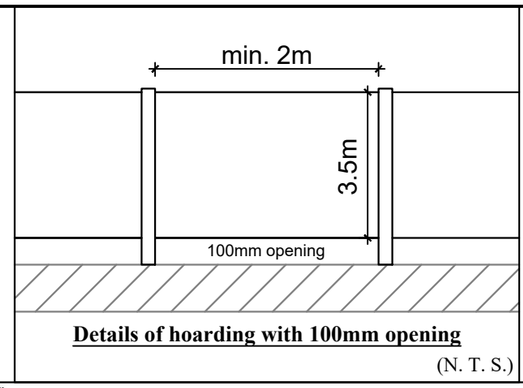


(N.T.S)

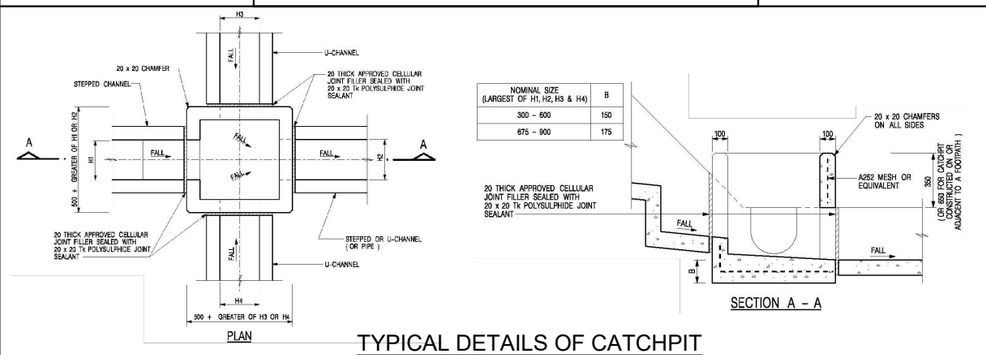
1:500 (A3)	**Drainage Proposal**	Goldrich Planners & Surveyors Ltd.
November 2025	Lots 1493 (part), 1500 (part) in DD. 107 and adjoining government land Kam Tin North, New Territories	Plan 6.1b (P 23044)



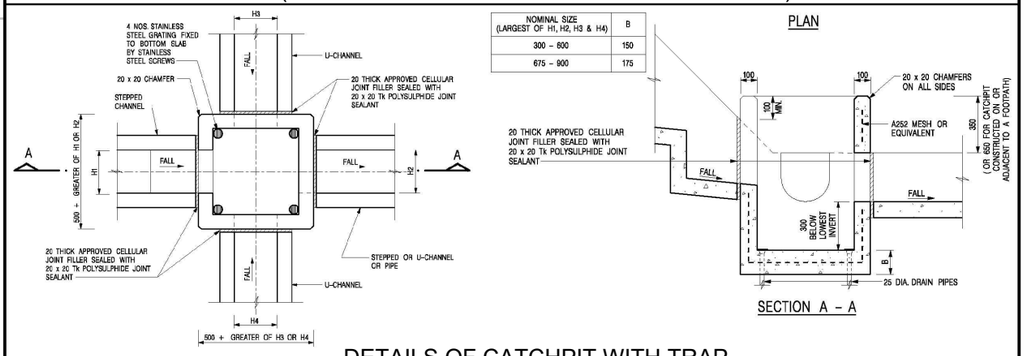
AREA OF CATCHMENT
(N.T.S)



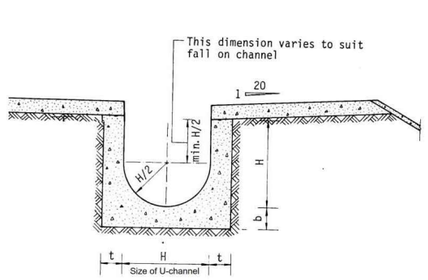
Details of hoarding with 100mm opening
(N. T. S.)



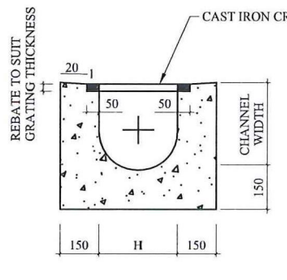
TYPICAL DETAILS OF CATCHPIT
(REFER TO CEDD'S STANDARD DWG. C2406/1)



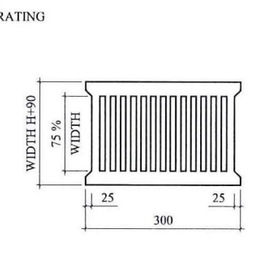
DETAILS OF CATCHPIT WITH TRAP
(REFER TO CEDD'S STANDARD DWG. C2406/1)



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 1493 (part), 1500 (part) in DD. 107 and adjoining government land Kam Tin North, New Territories**	**Goldrich Planners & Surveyors Ltd.**
December 2025		**Plan 6.2b (P 23044)**

Viewpoint 1

Viewpoint 2

Viewpoint 3

Viewpoint 4

Viewpoint 5

Viewpoint 6

Viewpoint 7

Viewpoint 8

Viewpoint 9

Viewpoint 10

The ground level of the Site has been higher than the local track for many years. The surface runoff from the local track will not flow to the Site.

Viewpoint 11

Viewpoint 12

Viewpoint 13

1 For Catchment Area of Subject Site

Ref.

Area, A = **122** m^2
Average slope, H = 0.1 m per 100m
Distance on the line of natural flow, L = **3.5** m

Time of concentraction, t_o = $0.14465L / (H^{0.2}A^{0.1})$ = 0.14465 (3.5) / (0.1^0.2*122^0.1) — SDM 7.5.2 (d)
= 0.5 min

2 For Existing 500mm U-Channel to SCH1028760

	From	To
Ground level (mPD)	**4.30**	**4.30**
Invert level (mPD)	**4.00**	**3.80**

Width of u-channel, w = **300** mm
Length of u-channel, L_c = **16.5** m
Depth of vertical part of u-channel, d = 350 mm
Gradient of u-channel, S_f = (4-3.8)/16.5 = 0.0121

Cross-Section Area, a = $0.5 \pi r^2 + w d$ = 0.5 x 3.14 x 150^2 + 300 x 350 x 0.9 — SDM 9.3 (b)
= 0.126 m^2 — Sedimentation Reduction
Wetted Perimeter, p = $\pi r + 2 d$ = 3.14 x 150 + 2 x 350
= 1.171 m
Hydralic radius, R = a / p — SDM 8.2.1
= 0.108 m

3 Use Manning Equation for estimating velocity of stormwater

Take n = 0.016 for concrete lined channels:- — SDM Table 13
Allowable velocity, v = $R^{1/6} x (RS_f)^{1/2}/n$ = (0.108)^1/6 x (0.108 x 0.012)^1/2 / 0.016 — SDM Table 12
= 1.56 m/s
Time of flow, t_f = 0.2 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 / (0.5+0.2+3.29)^0.35 for return period T = 50 years — Corrigendum 1/2024
= 310 — 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	**122.0**	115.9
		SUM =	115.9

SDM 7.5.2 (b)

Upstream flow, Q_u = **0** m^3/s

Design flow, Q_d = $0.278i \Sigma C_j A_j x 1.16 + Q_u$ where A_j is in km^2 — SDM 7.5.2 (a)
= 0.278 x 310 x 115.9 / 1000000 x 1.16 + 0 — Corrigendum 1/2022
= 0.012 m^3/s

Allowable flow, Q_a = a x v
= 0.126 x 1.56
= 0.177 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.
December 2025	Lots 1486 (Part), 1489 (Part) and adjoining Government Land in D. D. 107 Yuen Long, N. T.	Page 1 (P23044)

1 For Catchment Area of Subject Site

Ref.

Area, A = **1530** 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*1530^0.1) — SDM 7.5.2 (d)
= 2.8 min

2 For Existing 500mm U-Channel to SCH1028760

	From	To
Ground level (mPD)	**4.30**	**3.55**
Invert level (mPD)	**3.80**	**3.05**

Width of u-channel, w = **500** mm
Length of u-channel, L_c = **86** m
Depth of vertical part of u-channel, d = 250 mm
Gradient of u-channel, S_f = (3.8-3.05)/86 = 0.0087

Cross-Section Area, a = $0.5 \pi r^2 + w d$ = 0.5 x 3.14 x 250^2 + 500 x 250 x 0.9 — SDM 9.3 (b)
= 0.201 m^2 — Sedimentation Reduction
Wetted Perimeter, p = $\pi r + 2 d$ = 3.14 x 250 + 2 x 250
= 1.285 m
Hydralic radius, R = a / p — SDM 8.2.1
= 0.156 m

3 Use Manning Equation for estimating velocity of stormwater

Take n = 0.016 for concrete lined channels:- — SDM Table 13
Allowable velocity, v = $R^{1/6} x (RS_f)^{1/2}/n$ = (0.156)^1/6 x (0.156 x 0.009)^1/2 / 0.016 — SDM Table 12
= 1.69 m/s
Time of flow, t_f = 0.8 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+0.8+3.29)^0.35 for return period T = 50 years — Corrigendum 1/2024
= 255 — 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	**1530.0**	1453.5
		SUM =	1453.5

SDM 7.5.2 (b)

Upstream flow, Q_u = **0** m^3/s

Design flow, Q_d = $0.278i \Sigma C_j A_j x 1.16 + Q_u$ where A_j is in km^2 — SDM 7.5.2 (a)
= 0.278 x 255 x 1453.5 / 1000000 x 1.16 + 0 — Corrigendum 1/2022
= 0.119 m^3/s

Allowable flow, Q_a = a x v
= 0.201 x 1.69
= 0.306 m^3/s

> Q_d (O.K.)

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