粉嶺、上水及元朗東規劃處 新界荃灣青山公路388號 中染大应22樓2202室



### Appendix I **Planning Department**

Fanling, Sheung Shui & Yuen Long East District Planning Office Unit 2202, 22/F, CDW Building, 388 Castle Peak Road, Tsuen Wan, N.T.

來函檔號 Your Reference : DD107 Lot 748 本署檔號 Our Reference : TPB/A/YL-KTN/907 電話號碼 Tel. No. : 傳真機號碼 Fax No. :

**R-riches Property Consultants Limited** 

8 April 2025

Dear Sir/Madam,

# Submission for Compliance with Approval Condition (d) the Submission of a Revised Drainage Proposal

# Proposed Temporary Warehouse (excluding Dangerous Goods Godown) with Ancillary Facilities for a Period of 3 Years and Filling of Land in "Agriculture" Zone, Lot 748 (Part) in D.D. 107, Fung Kat Heung, Kam Tin, Yuen Long, New Territories (Application No. A/YL-KTN/907)

I refer to your submission dated 10.3.2025 for compliance with the captioned approval condition. Relevant department has been consulted on your submission. Your submission is considered:

- $\checkmark$ Acceptable. The captioned condition has been complied with. Please find detailed departmental comments in Appendix.
- Acceptable. Since the captioned condition requires both the submission and implementation of the proposal, it has not been fully complied with. Please proceed to implement the accepted proposal for full compliance with the approval condition.
- □ Not acceptable. The captioned condition has not been complied with. Please find detailed departmental comments in Appendix.

Should you have any queries on the departmental comments, please contact Mr. of the Drainage Services Department directly.

Yours faithfully,

(Josephine LO) District Planning Officer/ Fanling, Sheung Shui & Yuen Long East Planning Department



劃出更名可能 ・ 創造無限機遇 Planning a Future of Boundless Opportunities <u>c.c.</u> CE/MN, DSD

<u>Internal</u> CTP/TPB

JL/AY/jc

# <u>Appendix</u>

Comment from the Chief Engineer/Mainland North, Drainage Services Department:

- 1. The applicant should implement the drainage facilities on site in accordance with the agreed drainage proposal.
- 2. The applicant is required to rectify the drainage system if they are found to be inadequate or ineffective during operation. The applicant shall also be liable for and shall indemnify claims and demands arising out of damage or nuisance caused by a failure of the drainage system.
- 3. The proposed development would neither obstruct overland flow nor adversely affected any existing natural streams, village drains, ditches and the adjacent areas.
- 4. The applicant(s) shall resolve any conflict/disagreement with relevant lot owner(s) and seek LandsD's permission 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).



Our Ref.: DD107 Lot 748 Your Ref.: TPB/A/YL-KTN/907

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

By Email 10 March 2025

Dear Sir,

# **Compliance with Approval Condition (d)**

# Proposed Temporary Warehouse (excluding Dangerous Goods Godown) with Ancillary Facilities for a Period of 3 Years and Filling of Land in "Agriculture" Zone, Lot 748 (Part) in D.D. 107, Fung Kat Heung, Kam Tin, Yuen Long

# (S.16 Planning Application No. A/YL-KTN/907)

We are writing to submit a response-to-comments table and a revised drainage proposal for compliance with approval condition (d) of the subject application, i.e. *the submission of a revised drainage proposal* (Appendices I and II).

Should you require more information regarding the application, please contact the undersigned at your convenience. Thank you for your kind attention.

Yours faithfully,

For and on behalf of R-riches Property Consultants Limited

Danny NG Town Planner



Appendix I – Response to the Comments of Chief Engineer/Mainland North, Drainage Services Department (CE/MN, DSD)

Com	nents of the CE/MN, DSD	
(Cont	act Person: Mr. Terence TANG; Tel:	)
(1)	GEO Technical Guidance Note No. 43 should be adopted for u-channel checking as Figure 8.7 of the Gcotechnical Manual for Slopes (GCO, 1984) was superseded.	Noted and revised accordingly (Appendix II).
(2)	SDM Corrigendum No. 1/2022 and 1/2024 should be considered.	It is considered as follows: According to SDM Corrigendum No. 1/2022, rainfall increase = 16%; and According to SDM Corrigendum No. 1/2024, a = 505.5, b = 3.29, c = 0.355
(3)	Drawing No. Appendix I - Please review if the downpipe size is 1500mm dia.	Noted and revised accordingly (Appendix II).
(4)	Please justify with the fall direction of the southern and eastern side of building structure. If no strong justification can be provided, peripheral drains are required.	Peripheral drains are proposed and indicated on the drainage plan ( <b>Appendix II</b> ).
(5)	Photo 1 - It is noted there is another pipe installed under 225mm dia. uPVC from A/YL-KTN/605. Please advise where is the pipe connecting to. The catchment area from this pipe should also be considered in the assessment.	It is considered as follows: The second se
		in <b>Appendix II</b> shown as follows:

(6)	Photo record for final discharge to existing stream should be provided. Please provide latest actual photo record instead of capture from google map or alike.	Noted. Photo record is revised ,which has been taken in this year (Appendix II).





Proposed Catchpit/Start	Cover Level	Invert Level
Point	(mPD)	(mPD)
Start Point	+14.0	+13.7
CP5	+14.0	+13.610
CP1	+14.0	+13.586
CP2	+14.1	+13.366 (From CP1)
(With Desilting Facility)		+13.470 (From CP3)
CP3	+14.1	+13.736
Existing CP4	+15.7	+13.236

Assume return period T = 50years

According to SDM Corrigendum No.1 /2024

a = 505.5, b = 3.29, c = 0.355

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

Duration in minutes is taken as 6 mins

According to SDM Corrigendum No.1 /2022 , rainfall increase = 16%

 $i = (505.5) (1+16\%) = 229 \times (1+16\%) = 266 \text{ mm/hr}$ 

i = 266 mm/hr is taken

Catchment Area =1240m<sup>2</sup> (including outside area)

Surface runoff coeficient C = 0.95

Qp= 0.278CiA

= 0.278 (0.95) (266) (1240 x 10^-6)

= 0.0871m3/s = 5227litre /min

**Geotechnical Engineering Office, Civil Engineering and Development Department The Government of the Hong Kong Special Administrative Region** 

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



ANNEX TGN 43 A1

# Check 300 dia uPVC pipeline:

From A/YL-KTN/605, runoff	=	2971	liter/min Runoff
for existing pipe	=	4912.26	+ 5227
	=	10139.26	liter/min
	=	0.168988	m^3/s

Check 375 dia. Pipe by Colebrook-White Equation

$$V = -\sqrt{(8 g D s)} \log(\frac{k s}{3.7 D} + \frac{2.51 v}{D \sqrt{(2 g D s)}})$$

where :

V	=			mean velocity (m/s)	
g	=	9.81	m/s2	gravitational acceleration (m/s2)	
D	=	0.375	m	internal pipe diameter (m)	
ks	=	0.000003	m	hydraulic pipeline roughness (m) (Table 5, from DSD Sewerage	Manual, uPVC)
V	=	1.14E <b>-</b> 06	m2/s	kinematic viscosity of fluid (m2/s)	
S	=	0.01		hydraulic gradient	
Therefore decign V of nine canacity	, =	2.451	m/s	> Design velocity from = $0.131388 \text{ m}3//\text{s}$ $0.3^2 * \text{pi}/\text{s}$	4
mererere, design v or pipe capacity				catchment area = $2.392$ m/s ==>O.K.	







# Rooftop Drainage System



# Rooftop Drainage System (Other Side)



Figure 8.11 - Typical U-channel Details



Figure 8.10 - Typical Details of Catchpits



# 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.
- 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 ¢ 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. N	O. C2406J. Original Signed 03.2015			
	REF. RE	VISION SIGNATURE DATE			
CATCHPIT WITH TRAP	CIV CEDD DEVE	CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT			
(SHEET 2 OF 2)	SCALE 1:20	DRAWING NO.			
х <i>1</i>	DATE JAN 199	1 02400 / 2			
卓越工程 建設香港 We Engineer Hong Kong's Development					



# SITE PHOTO



# EYE LOCATION With Full alignment



# Existing Condition of CP4 and existing 225mm dia. pipe



Location of CP4









4



5

# A/YL-KTN/605

















Company: Project:

Application No. Date: Proposed Temporary Animal Boarding Establ ishment for a Period of 3 Years at Lots 736 (Part ) and 737 (Part ) in D.D. 107, Fung Kat Heung, Yuen Long (A/YL-KTN/605) 1-Aug-2018

## Calculation for Design of Channels:

Catchment Zone							
Area	=	750 0.0008	m^2 km^2				
Peak runoff in m <sup>3</sup> /s	= = =	0.278 0.0495 2971	x 0.9 m^3/s liter/min	95 x	250 mm/hr	x 0.00075	km^2

According to (Figure 8.7 - Chart for the Rapid Design of Channels), For gradient 1:100, proposed 225UC will be suitable. Existing 225 dia. pipe is also suitable.



Figure 8.7 - Chart for the Rapid Design of Channels





# ALTERNATIVE TOP SECTION FOR PRECAST CONCRETE COVERS / GRATINGS

### NOTES:

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(SHEET 2 OF 2)	SCALE 1:20	DRAWING NO.			
х <i>1</i>	DAIE JAN 199	1 02400 / 2			
卓越工程 建設香港 We Engineer Hong Kong's Development					



Figure 8.10 - Typical Details of Catchpits



Figure 8.11 - Typical U-channel Details

Appendix II

