寄件者:	Louis Tse [redacted]
寄件日期:	2025年09月29日星期一 17:46
收件者:	tpbpd/PLAND
副本:	David Chi Chiu CHENG/PLAND; Gary Kwun Wing CHAN/PLAND; Bon Tang; Matthew Ng; Christian Chim; Danny Ng; Grace Wong; Kevin Lam
主旨:	[FI] S.16 Application No. A/YL-SK/426 - FI to address departmental comments
附件:	FI3 for A_YL-SK_426 (20250929).pdf
類別:	Internet Email

Dear Sir,

Attached herewith the further information to address departmental comments of the subject application.

Should you require more information, please do not hesitate to contact me. Thank you for your kind attention.

Kind Regards,

Louis TSE | Town Planner
R-riches Group (HK) Limited

R-riches Property Consultants Limited | R-riches Planning Limited | R-riches Construction Limited
[redacted]

R-RICHES PLANNING LIMITED

盈卓規劃有限公司

Our Ref. : DD106 Lot 987
Your Ref. : TPB/A/YL-SK/426

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

By Email

29 September 2025

Dear Sir,

3rd Further Information

Proposed Temporary Open Storage of Construction Materials and Vehicles and Associated Filling of Land for a Period of 3 Years in "Agriculture" Zone, Various Lots in D.D.106, Shek Kong, Yuen Long, New Territories

(S.16 Planning Application No. A/YL-SK/426)

We are writing to submit further information to address departmental comments of the subject application (**Appendix I**).

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

Yours faithfully,

For and on behalf of
R-riches Planning Limited

Louis TSE
Town Planner

[redacted]

Responses-to-Comments

Proposed Temporary Open Storage of Construction Materials and Vehicles and Associated Filling of Land for a Period of 3 Years in "Agriculture" Zone, Various Lots in D.D.106, Shek Kong, Yuen Long, New Territories

(Application No. A/YL-SK/426)

(i) A RtoC Table:

Departmental Comments		Applicant's Responses
1. Comments of the Chief Engineer/Mainland North, Drainage Services Department (CE/MN, DSD) (Contact Person: Mr. Kenneth CAN; Tel: [redacted])		
(a)	Please refer to DSD's Stormwater Drainage Manual and its corrigenda for preparation of the drainage assessment/proposal.	Noted. A drainage proposal is provided by the applicant to review the drainage arrangement of the application site (**Annex I**).
(b)	The ground level at the eastern and southern sides of the application site are higher. The applicant should review the existing site condition, take into account any overflow and review the total catchment area adopted in the drainage design and calculation.	
(c)	Land filling is proposed under the application In view of (b) above, please take into account in the proposed drainage arrangement and ensure that the existing drain path / overland flow from adjacent land would not be affected.	
(d)	The size and gradient of the proposed/existing drainage facilities to be discharge from the site and/or the drainage plan. The applicant should check and ensure the hydraulic capacity of the existing drainage facilities would not be adversely affected by the captioned development.	
(e)	Reference should be made to DSD Technical Note No. 1 for the sizes of the proposed u-channels.	
(f)	Where walls or hoarding are erected or laid along the site boundary, adequate opening should be	

	provided to intercept the existing overland flow passing through the site.	
(g)	Cross sections showing the existing and proposed ground levels of the captioned site with respect to the adjacent areas should be given.	
(h)	Standard details should be provided to indicate the sectional details of the proposed u-channel and the catchpit/sand trap.	
(i)	The development should neither obstruct overland flow nor adversely affect existing natural streams, village drains, ditches and the adjacent areas, etc.	
(j)	Please provide hydraulic calculations for the proposed discharging drainage facility demonstrating its capacity to cater for the surface runoff from the entire application site.	
(k)	The existing drainage channel of the proposed discharge point is not maintained by this Department. The applicant 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 outside the application site.	
(l)	Connection details at discharged point (including cross section) with C.L., I.L and catchpit/channel bottom level should be shown in the drawing.	
(m)	Colour photos to indicate the current conditions of the existing drainage facilities should be included in the submission. The photos taken locations and angles should be shown on the layout plan.	

Proposed Temporary Open Storage of Construction Materials and Vehicles and Associated Filling of Land for a Period of 3 Years in "Agriculture" Zone, Various Lots in D.D. 106, Shek Kong, Yuen Long, New Territories

Drainage Proposal

Sep 2025

MARVELLOUS
CONSTRUCTION & DESIGN COMPANY LIMITED

Table of Contents

List of Table

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1 Introduction

1.1 Background

1.1.1 The applicant seeks planning permission from the Town Planning Board (the Board) to use Lots 987, 988, 989 (Part) and 990 S.C (Part) in D.D. 106, Shek Kong, Yuen Long, New Territories (the Site) for 'Proposed Temporary Open Storage of Construction Materials and Vehicles and Associated Filling of Land for a Period of 3 Years'

1.1.2 This report aims to support the development in drainage aspect.

1.2 Application Site

1.2.1 The application site is situated at the south of Shek Kong Airfield. It has an area of approx. 6,427 m^2. The site location is shown in **Figure 1**.

1.2.2 The existing site is already fully paved. The existing site levels are approx. + 13.5 mPD. No major site formation works for the application site is anticipated.

1.2.3 The Application Site runoff is being discharged existing watercourse at the south of the site which would eventually discharge to Kam Tin River. **Figure 2** indicates the existing drainage system of the area.

2 Development Proposal

2.1 The Proposed Development

2.1.1 The total site area is approximately 6,427 m^2. The existing site is already fully paved before development. The catchment plan is shown in **Figure 4**.

Proposed Development Area (Approx.)	
Total Site Area (m^2)	6,427
Paved Area after Development (m^2)	6,427

Table 1 – Site Development Area

3 Assessment Criteria

3.1.1 The Recommended Design Return Period based on Flood Level from SDM (Table 10) is adopted for this report. The recommendation is summarized in **Table 2** below.

Description	Design Return Periods
Intensively Used Agricultural Land	2 – 5 Years
Village Drainage Including Internal Drainage System under a polder Scheme	10 Years
Main Rural Catchment Drainage Channels	50 Years
Urban Drainage Trunk System	200 Years
Urban Drainage Branch System	50 Years

Table 2– Design Return Periods under SDM

3.1.2 The proposed drainage system intended to collect runoff from internal site and external catchment. 1 in 50 years return period is adopted for drainage design.

3.1.3 Stormwater drainage design will be carried out in accordance with the criteria set out in the Stormwater Drainage Manual published by DSD. The proposed design criteria to be adopted for design of this stormwater drainage system and factors which have been considered are summarised below.

1. Intensity-Duration-Frequency Relationship – The Recommended Intensity-Duration-Frequency relationship is used to estimate the intensity of rainfall. It can be expressed by the following algebraic equation.

$$i = \frac{a}{(t_d + b)^c}$$

The site is located within the HKO Zone. Therefore, for 50 years return period, the following values are adopted.

a	=	505.5
b	=	3.29
c	=	0.355

(Corrigendum No.1/2024)

The development is proposed for temporary use for a period of 3 years. 11.1% rainfall increase due to climate change is considered.

2. The peak runoff is calculated by the Rational Method
   i.e. $Q_p = 0.278CiA$

where	Q_p	=	peak runoff in m^3/s
	C	=	runoff coefficient (dimensionless)
	i	=	rainfall intensity in mm/hr
	A	=	catchment area in km^2

3. The run-off coefficient (C) of surface runoff are taken as follows:

   1. Paved Area: C = 0.95
   2. Unpaved Area: C = 0.35

4. Manning's Equation is used for calculation of velocity of flow inside the channels:

Manning's Equation: $v = \frac{R^{\frac{1}{6}}}{n} R^{\frac{1}{2}} S_f^{\frac{1}{2}}$

Where,

V = velocity of the pipe flow (m/s)
S_f = hydraulic gradient
n = manning's coefficient
R = hydraulic radius (m)

5. Colebrook-White Equation is used for calculation of velocity of flow inside the pipes:

Colebrook-White Equation: $\underline{v} = -\sqrt{32gRS}\ log\ log\ (\frac{k_s}{14.8R} + \frac{1.255v}{R\sqrt{32gRS_f}})$

where,

V	=	velocity of the pipe flow (m/s)
S_f	=	hydraulic gradient
k_f	=	roughness value (m)
v	=	kinematics viscosity of fluid
D	=	pipe diameter (m)
R	=	hydraulic radius (m)

4 Proposed Drainage System

4.1. Proposed Channels

4.1.1 There are existing channels within site area constructed under previous planning applications no. A/YL-SK/350. According to checking in **Appendix A**, existing channels in western part of the site are proposed to be maintained. Detail shown in Appendix A.

4.1.2 Proposed Channels are designed for collection of runoffs for internal and external catchment. They are proposed to discharge to existing watercourse (which eventually discharge to Kam Tin River) via existing channel. The design checkings are shown in **Appendix A**. The existing site is already fully paved, no adverse drainage impact to existing drainage system is anticipated.

4.1.3 The design calculations of proposed UChannel are shown in **Appendix A**.

4.1.4 The alignment, size, gradient and details of the proposed drains are shown in **Figure 3**. The catchment plan is shown in **Figure 4**.

4.1.5 Reference Drawings are shown in **Appendix C** for reference.

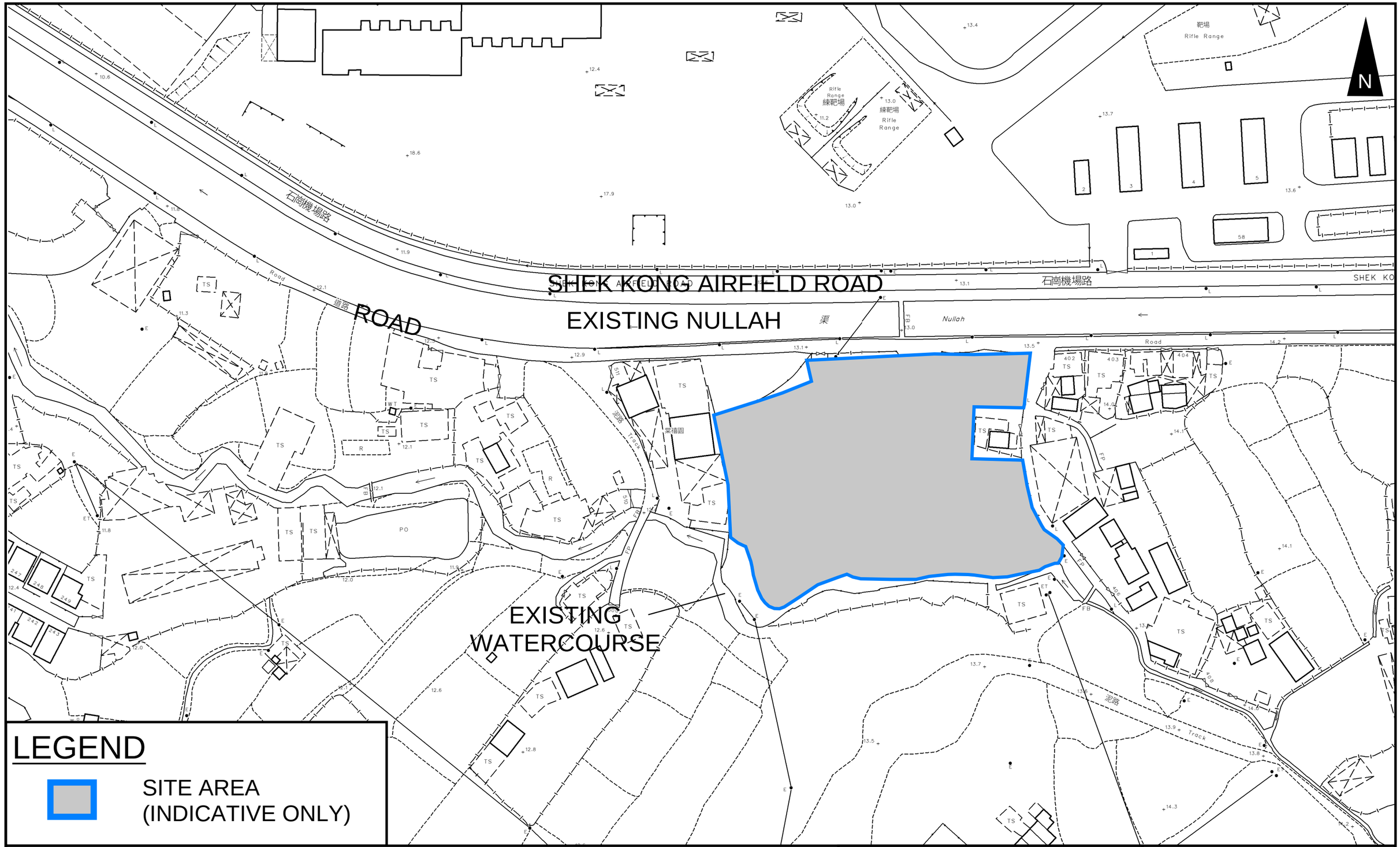
5 Conclusion

5.1.1 Drainage review has been conducted for the Proposed Development. The surface runoff will be collected by the existing/proposed drains and discharged to existing drainage system.

5.1.2 As the existing site is already paved before development, with implementation of the above drainage system, no unacceptable drainage impact is anticipated.

- End of Text -

FIGURES



LEGEND

SITE AREA
(INDICATIVE ONLY)

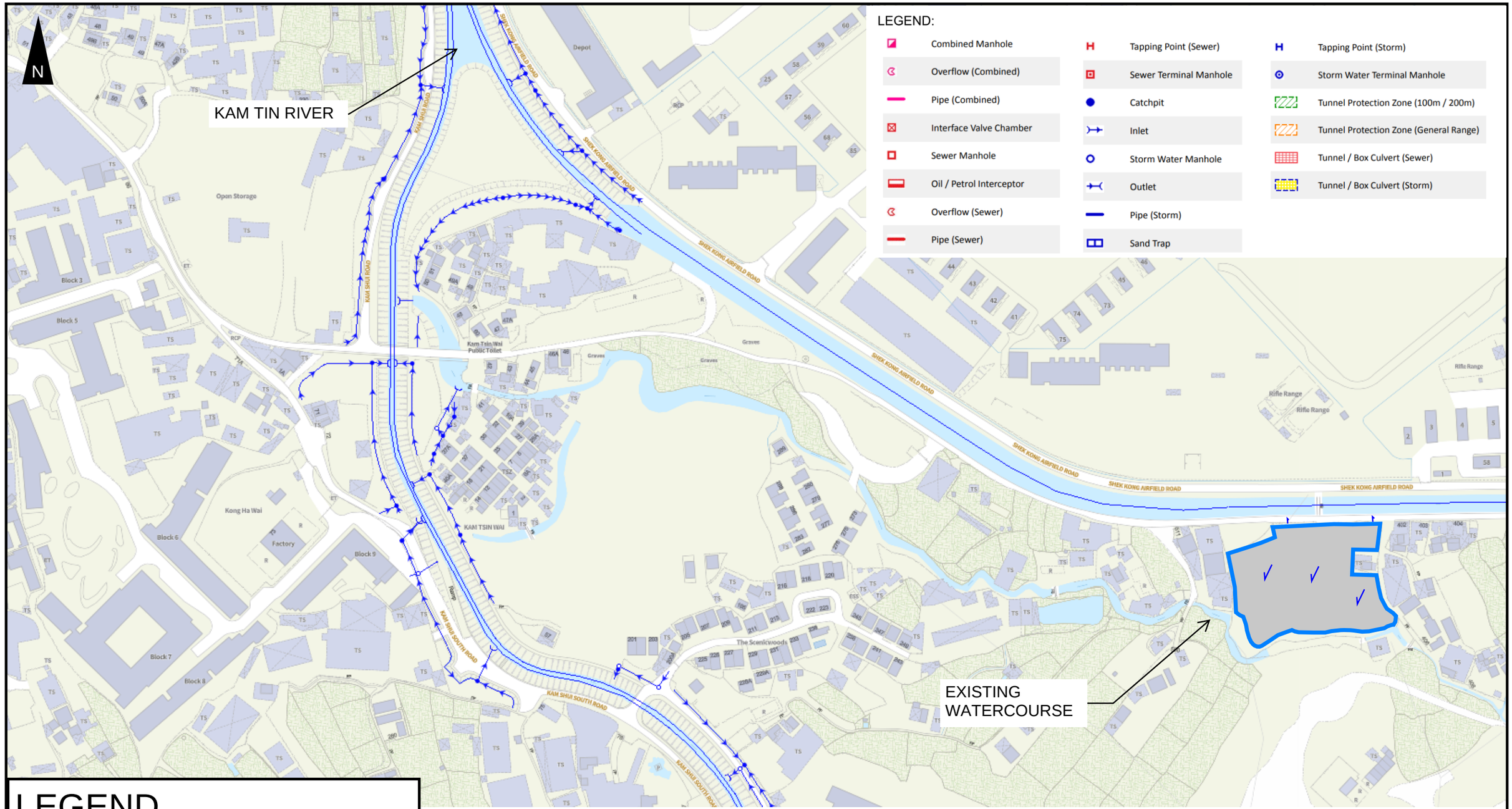
PROJECT:
Proposed Temporary Open Storage of Construction Materials and Vehicles and Associated Filling of Land for a Period of 3 Years in “Agriculture” Zone,

LOCATION:
Various Lots in D.D. 106, Shek Kong, Yuen Long, New Territories

TITLE
SITE LOCATION PLAN

FIGURE NUMBER
FIGURE 1

VER	DESCRIPTION	DATE

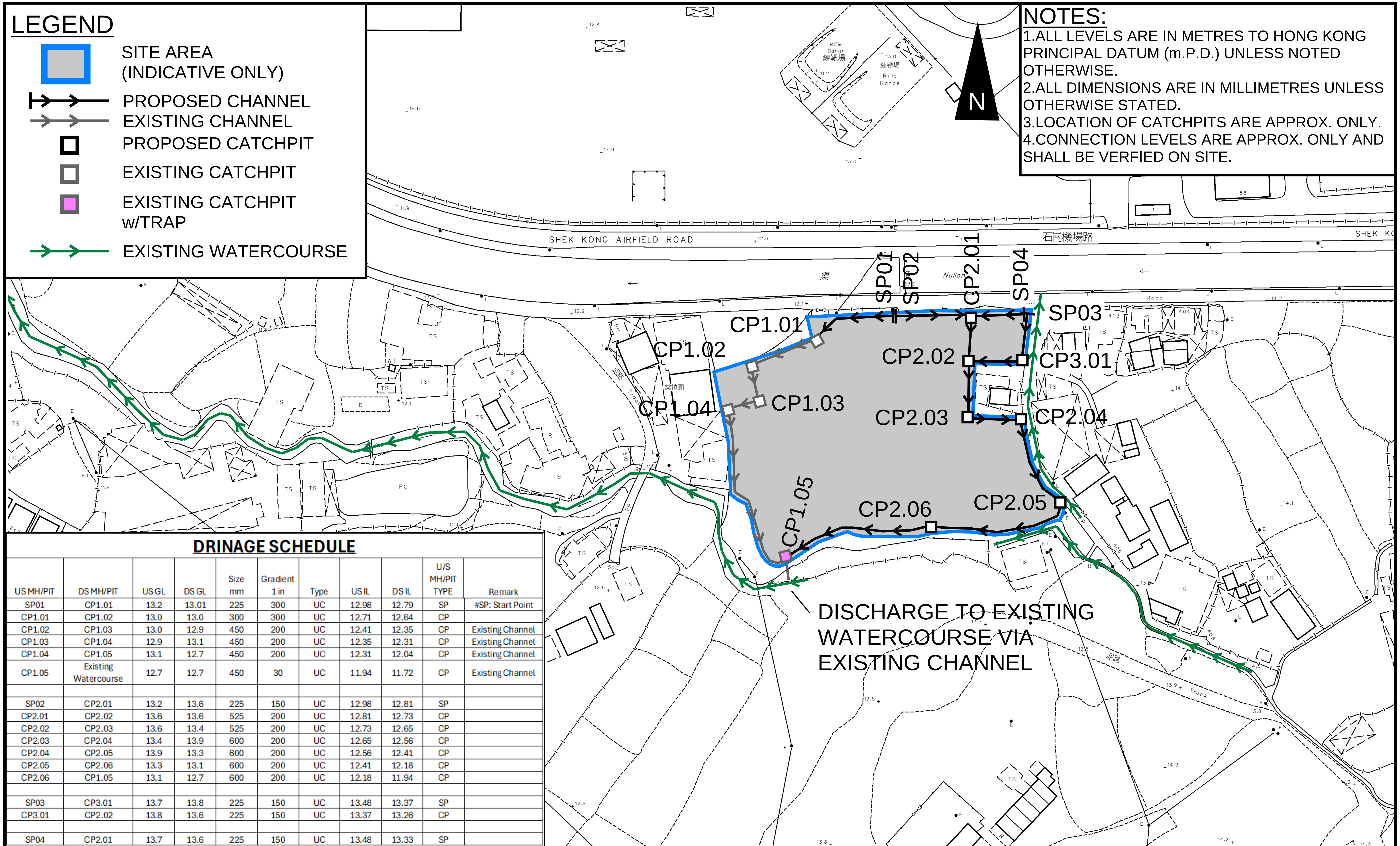


LEGEND

SITE AREA
(INDICATIVE ONLY)

PROJECT: Proposed Temporary Open Storage of Construction Materials and Vehicles and Associated Filling of Land for a Period of 3 Years in “Agriculture” Zone,	TITLE EXISTING DRAINAGE PLAN	FIGURE NUMBER FIGURE 2
LOCATION: Various Lots in D.D. 106, Shek Kong, Yuen Long, New Territories		

VER	DESCRIPTION	DATE



NOTES:
1. ALL LEVELS ARE IN METRES TO HONG KONG PRINCIPAL DATUM (m.P.D.) UNLESS NOTED OTHERWISE.
2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.
3. LOCATION OF CATCHPITS ARE APPROX. ONLY.
4. CONNECTION LEVELS ARE APPROX. ONLY AND SHALL BE VERFIED ON SITE.

DRINAGE SCHEDULE

US MH/PIT	DS MH/PIT	US GL	DS GL	Size mm	Gradient 1 in	Type	US IL	DS IL	U/S MH/PIT TYPE	Remark
SP01	CP1.01	13.2	13.01	225	300	UC	12.98	12.79	SP	#SP: Start Point
CP1.01	CP1.02	13.0	13.0	300	300	UC	12.71	12.64	CP	
CP1.02	CP1.03	13.0	12.9	450	200	UC	12.41	12.35	CP	Existing Channel
CP1.03	CP1.04	12.9	13.1	450	200	UC	12.35	12.31	CP	Existing Channel
CP1.04	CP1.05	13.1	12.7	450	200	UC	12.31	12.04	CP	Existing Channel
CP1.05	Existing Watercourse	12.7	12.7	450	30	UC	11.94	11.72	CP	Existing Channel
SP02	CP2.01	13.2	13.6	225	150	UC	12.98	12.81	SP	
CP2.01	CP2.02	13.6	13.6	525	200	UC	12.81	12.73	CP	
CP2.02	CP2.03	13.6	13.4	525	200	UC	12.73	12.65	CP	
CP2.03	CP2.04	13.4	13.9	600	200	UC	12.65	12.56	CP	
CP2.04	CP2.05	13.9	13.3	600	200	UC	12.56	12.41	CP	
CP2.05	CP2.06	13.3	13.1	600	200	UC	12.41	12.18	CP	
CP2.06	CP1.05	13.1	12.7	600	200	UC	12.18	11.94	CP	
SP03	CP3.01	13.7	13.8	225	150	UC	13.48	13.37	SP	
CP3.01	CP2.02	13.8	13.6	225	150	UC	13.37	13.26	CP	
SP04	CP2.01	13.7	13.6	225	150	UC	13.48	13.33	SP	

PROJECT:
Proposed Temporary Open Storage of Construction Materials and Vehicles and Associated Filling of Land for a Period of 3 Years in “Agriculture” Zone,

TITLE
PROPOSED DRAINAGE SYSTEM

FIGURE NUMBER
FIGURE 3

LOCATION:
Various Lots in D.D. 106, Shek Kong, Yuen Long, New Territories

VER	DESCRIPTION	DATE

LEGEND:

FALL

B1 Paved
298 m²

B2a
Paved
53 m²

B2b
Paved
59 m²

A1a Paved
2,391 m²

A1b Paved
2,716 m²

A2 Paved
284 m²

B3 Paved
262 m²

A3
Paved
1,036 m²

+13.3

+13.6

SHEK KONG AIRFIELD ROAD

石崗機場路

N

PROJECT:
Proposed Temporary Open Storage of Construction Materials and Vehicles
and Associated Filling of Land for a Period of 3 Years in “Agriculture” Zone,

LOCATION:
Various Lots in D.D. 106, Shek Kong, Yuen Long, New Territories

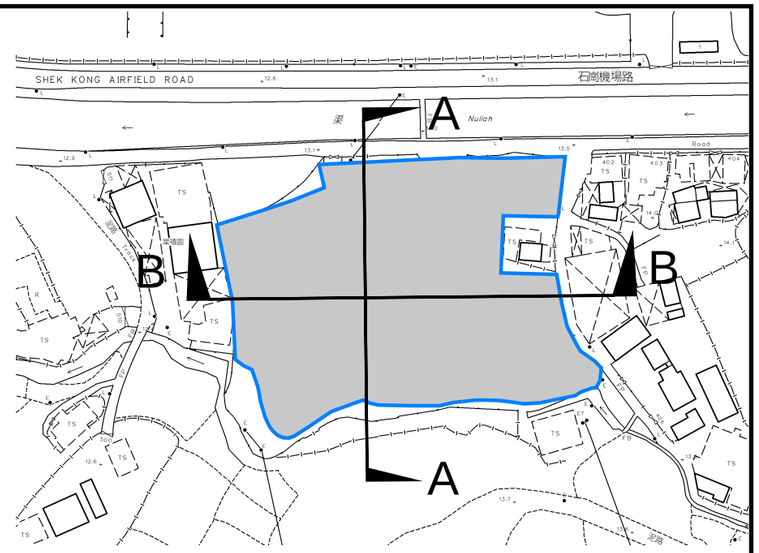
TITLE
CATCHMENT PLAN

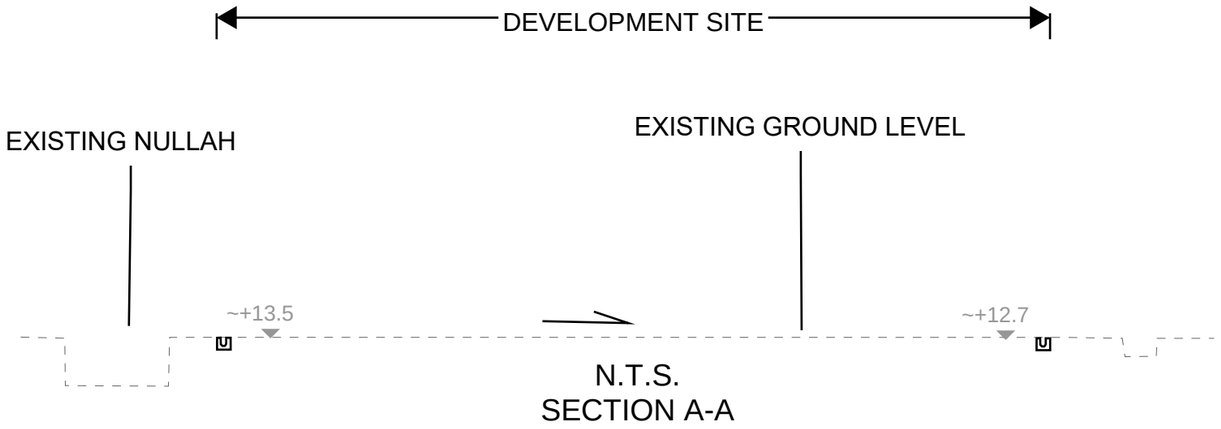
FIGURE NUMBER
FIGURE 4

VER	DESCRIPTION	DATE

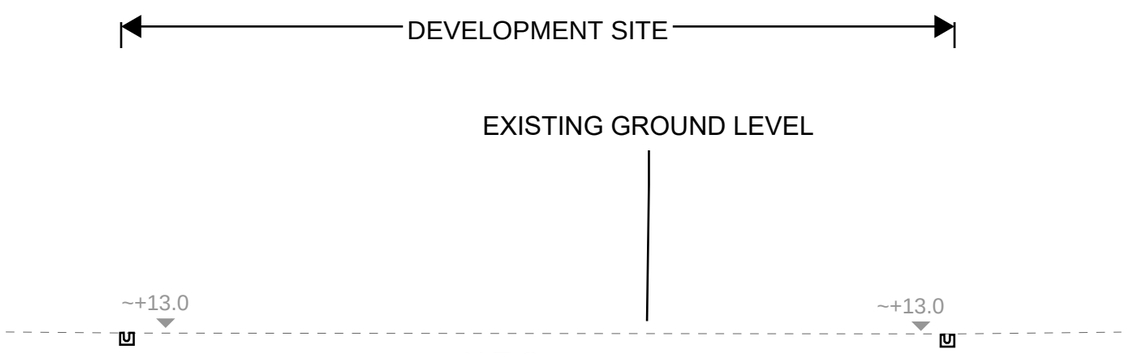
LEGEND

SITE AREA
(INDICATIVE ONLY)





N.T.S.
SECTION A-A



N.T.S.
SECTION B-B

PROJECT: Proposed Temporary Open Storage of Construction Materials and Vehicles and Associated Filling of Land for a Period of 3 Years in “Agriculture” Zone,	TITLE SECTIONS	FIGURE NUMBER FIGURE 5
LOCATION: Various Lots in D.D. 106, Shek Kong, Yuen Long, New Territories		

VER	DESCRIPTION	DATE

APPENDIX

Appendix A: Design Calculation

Zone

HKO

Return Period	1 in	50	years

n	0.014
Ks	0.15
Viscosity	0.000001

Storm Constant	HKO a	505.5
	HKO b	3.29
	HKO c	0.355

Catchment Area Table (Area in m^2)

Catchment	A1a	A1b	A2	A3	B1	B2a	B2b	B3											
Total Area	2391	2716	284	1036	298	53	59	262											
Hard Paved Area	2391	2716	284	1036	298	53	59	262											
Unpaved Area	0	0	0	0	0	0	0	0											
Equival. Area	2271.45	2580.2	269.8	984.2	283.1	50.35	56.05	248.9											

Pavement Type	Hard Paved	Unpaved
Runoff Coefficient	0.95	0.35

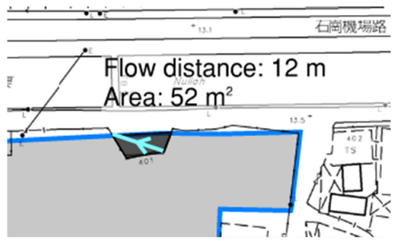
Calculation Table of Drainage System

US MH/PIT	DS MH/PIT	US GL	DS GL	Size mm	Gradient 1 in	Type	US IL	DS IL	U/S MH/PIT TYPE	Length m	V m/s##	Capacity m^3/s	Catchments	Total Equivalent Area m^2	ToC min	Intensity mm/hr ##	Total Discharge m^3/s	Utilitization	Remark
SP01	CP1.01	13.20	13.01	225	300	UC	12.98	12.79	SP	28	0.75	0.03	B2a	50.35	1.20	330	0.005	13.5%	
CP1.01	CP1.02	13.01	12.96	300	300	UC	12.71	12.64	CP	21.8	0.91	0.07	B1,B2a	333.45	1.82	315	0.03	39.8%	
CP1.02	CP1.03	12.96	12.92	450	200	UC	12.41	12.35	CP	11.5	1.47	0.26	A1a,B1,B2a	2604.90	2.22	306	0.22	83.8%	Existing
CP1.03	CP1.04	12.92	13.07	450	200	UC	12.35	12.31	CP	9.5	1.47	0.26	A1a,B1,B2a	2604.90	2.35	304	0.22	83.1%	Existing
CP1.04	CP1.05	13.07	12.74	450	200	UC	12.31	12.04	CP	53.9	1.47	0.26	A1a,B1,B2a	2604.90	2.46	302	0.22	82.5%	Existing
CP1.05	Existing Watercourse	12.74	12.74	450	30	UC	11.94	11.72	CP	6.8	3.78	0.68	A1a,A1b,A2,A3,B1,B2a,B2b,B3	6744.05	3.25	288	0.54	79.1%	Existing
SP02	CP2.01	13.20	13.55	225	150	UC	12.98	12.81	SP	24.5	1.07	0.05	B2b	56.05	1.20	330	0.01	10.7%	
CP2.01	CP2.02	13.55	13.63	525	200	UC	12.81	12.73	CP	15.4	1.62	0.40	A1b,A2,B2b	2906.05	1.58	320	0.26	64.7%	
CP2.02	CP2.03	13.63	13.44	525	200	UC	12.73	12.65	CP	16.9	1.62	0.40	A1b,A2,B2b,B3	3154.95	1.74	316	0.28	69.5%	
CP2.03	CP2.04	13.44	13.85	600	200	UC	12.65	12.56	CP	17.6	1.78	0.57	A1b,A2,A3,B2b,B3	4139.15	1.91	313	0.36	63.1%	
CP2.04	CP2.05	13.85	13.28	600	200	UC	12.56	12.41	CP	31	1.78	0.57	A1b,A2,A3,B2b,B3	4139.15	2.08	309	0.36	62.4%	
CP2.05	CP2.06	13.28	13.13	600	200	UC	12.41	12.18	CP	45.5	1.78	0.57	A1b,A2,A3,B2b,B3	4139.15	2.37	304	0.35	61.2%	
CP2.06	CP1.05	13.13	12.74	600	200	UC	12.18	11.94	CP	47.6	1.78	0.57	A1b,A2,A3,B2b,B3	4139.15	2.80	296	0.34	59.7%	
SP03	CP3.01	13.70	13.80	225	150	UC	13.48	13.37	SP	15.5	1.07	0.05	A2,B2b	325.85	1.20	330	0.03	62.0%	
CP3.01	CP2.02	13.80	13.63	225	150	UC	13.37	13.26	CP	16.4	1.07	0.05	A2,B2b	325.85	1.44	323	0.03	60.8%	
SP04	CP2.01	13.70	13.55	225	150	UC	13.48	13.33	SP	16.6	1.07	0.05	B2b	56.05	1.20	330	0.01	10.7%	

#SP: Start Point
: With 11.1% rainfall increase as per Table 28 of SDM Corrigendum No. 1/2022.

Time of Concentration Checking

Catchment	Flow Distance	Highest Level	Lowest Level	Gradient (per 100m) = (H1-H2)/L x 100	to (min) = 0.14465L/ ($H^{0.2}A^{0.1}$)	tc = to + tf
A	L	H1	H2			
(m2)	(m)	(mPD)	(mPD)		(min)	(min)
52	12	13.3	13.2	0.833	1.2	1.2

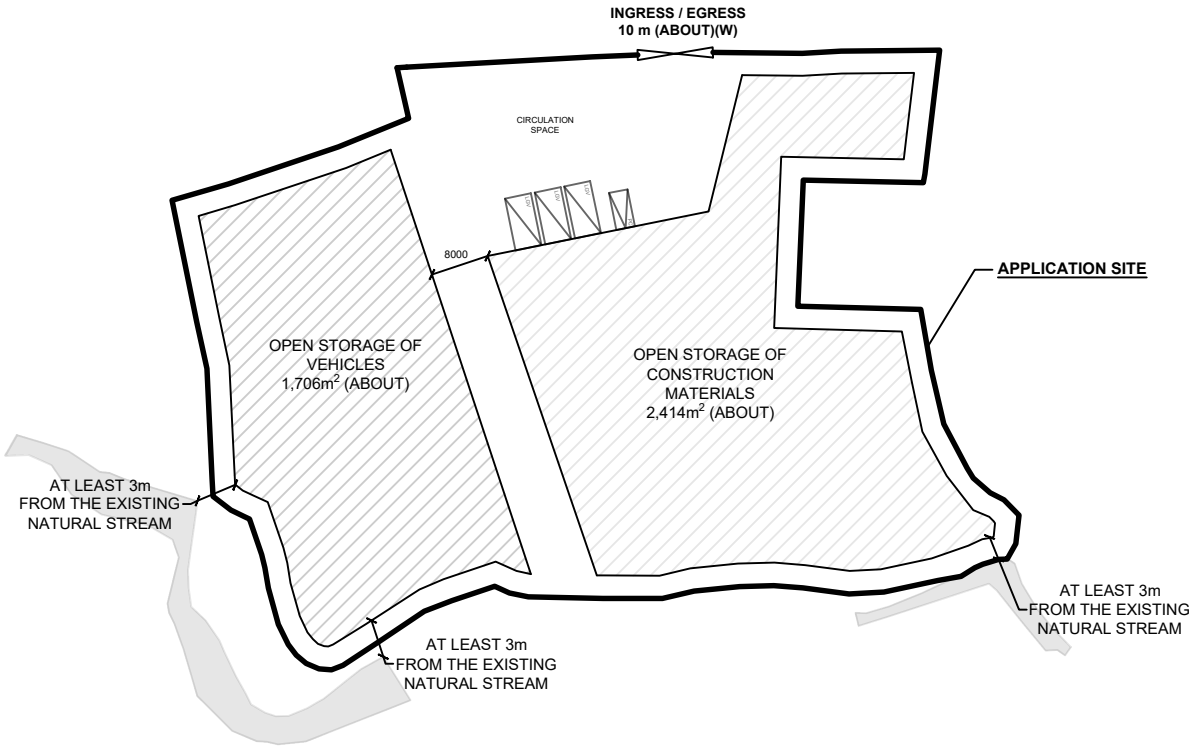


APPENDIX B - PROPOSED SITE LAYOUT PLAN

DEVELOPMENT PARAMETERS

APPLICATION SITE AREA	: 6,427 m^2	(ABOUT)
COVERED AREA	: NOT APPLICABLE	
UNCOVERED AREA	: 6,427 m^2	(ABOUT)
OPEN STORAGE AREA	: 4,120 m^2	(ABOUT)
HEIGHT OF STACKING	: NOT MORE THAN 3 m	

NO STRUCTURE IS PROPOSED AT THE APPLICATION SITE.



PARKING AND LOADING/UNLOADING PROVISION

NO. OF PRIVATE CAR PARKING SPACE	: 1
DIMENSION OF PARKING SPACE	: 5 m (L) X 2.5 m (W)
NO. L/UL SPACE FOR LIGHT GOODS VEHICLE	: 3
DIMENSION OF L/UL SPACE	: 7 m (L) X 3.5 m (W)

LEGEND

- APPLICATION SITE
- PARKING SPACE (PRIVATE CAR)
- L/UL SPACE (LIGHT GOODS VEHICLE)
- INGRESS / EGRESS

NORTH
W E
S

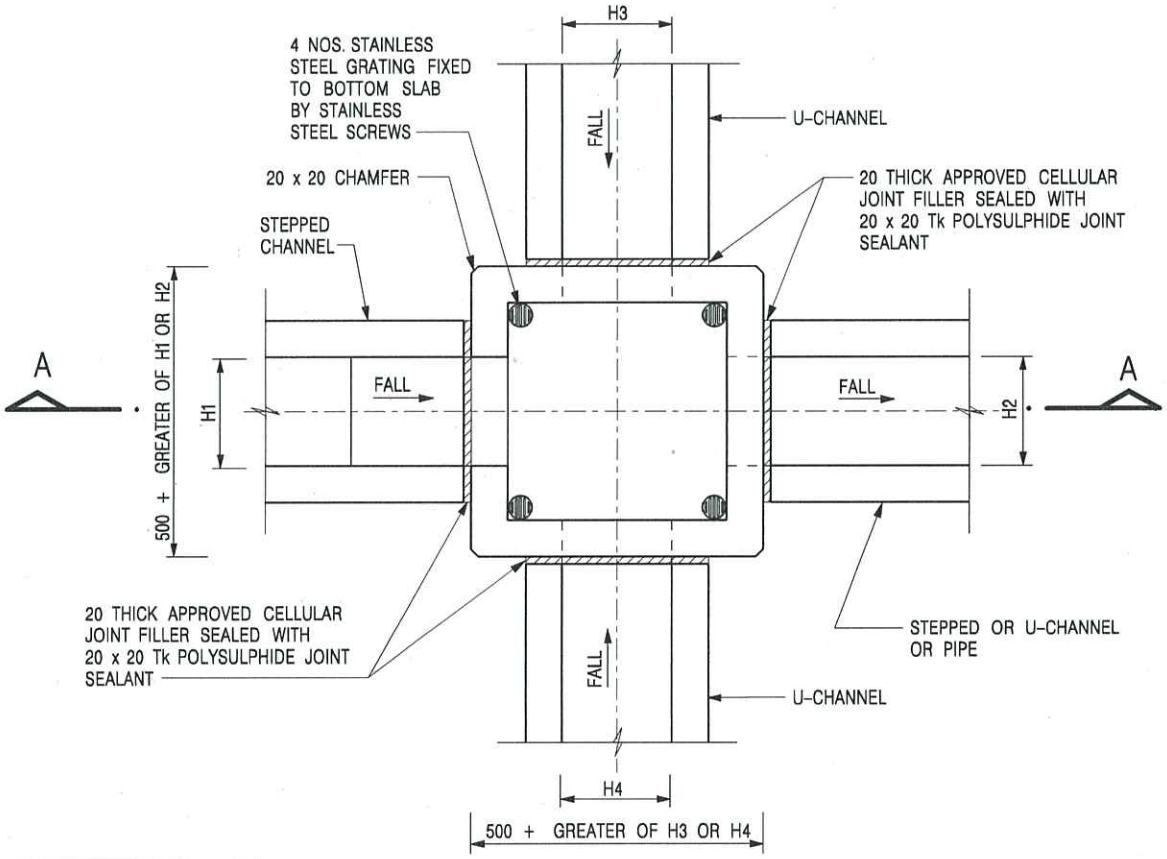
PLANNING CONSULTANT
R-RICHES PLANNING LIMITED

PROJECT
PROPOSED TEMPORARY OPEN STORAGE OF CONSTRUCTION MATERIALS AND VEHICLES AND ASSOCIATED FILLING OF LAND FOR A PERIOD OF 3 YEARS

SITE LOCATION
VARIOUS LOTS IN D.D. 106, SHEK KONG, YUEN LONG, NEW TERRITORIES

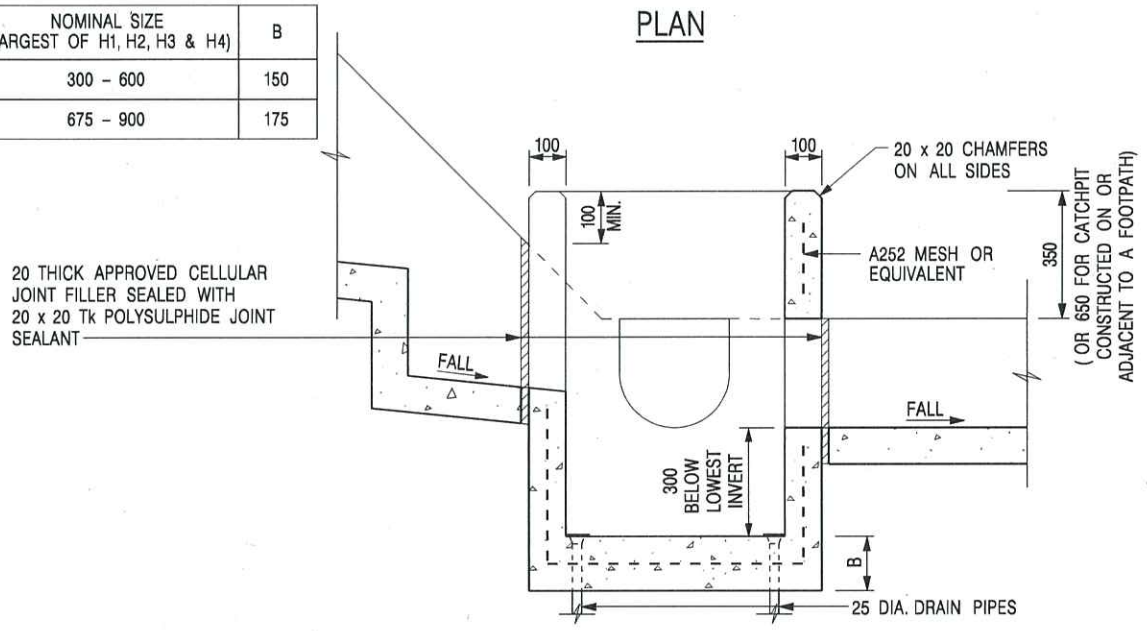
SCALE	1 : 1000 @ A4
DRAWN BY	LT
DATE	11.6.2025
CHECKED BY	
DATE	
APPROVED BY	
DATE	
DWG. TITLE	LAYOUT PLAN
DWG NO.	PLAN 5
VER.	002

Appendix C - Reference Drawings



PLAN

NOMINAL SIZE (LARGEST OF H1, H2, H3 & H4)	B
300 – 600	150
675 – 900	175



SECTION A – A

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. REFER TO SHEET 2 FOR OTHER NOTES.

REF.	REVISION	SIGNATURE	DATE
–	FORMER DRG. NO. C2406J.	Original Signed	03.2015

CATCHPIT WITH TRAP

(SHEET 1 OF 2)

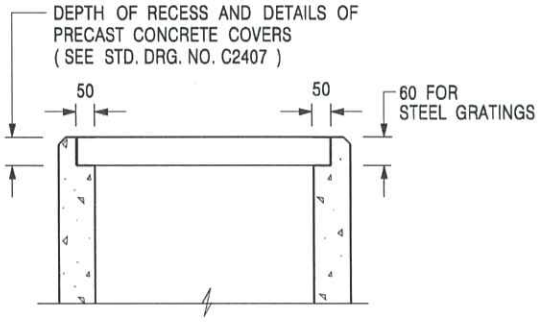
CEDD CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

SCALE 1 : 20

DATE JAN 1991

DRAWING NO. C2406 /1

卓越工程 建設香港 We Engineer Hong Kong's Development



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.
6. 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 /2) 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 'J' ON STD. DRG. NO. C2405 /5; 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 c/c 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 'G' ON STD. DRG. NO. C2405 /4.
12. SUBJECT TO THE APPROVAL OF THE ENGINEER, OTHER MATERIALS CAN ALSO BE USED AS COVERS / GRATINGS.

REF.	REVISION	SIGNATURE	DATE
A	MINOR AMENDMENT.	Original Signed	04.2016
–	FORMER DRG. NO. C2406J.	Original Signed	03.2015

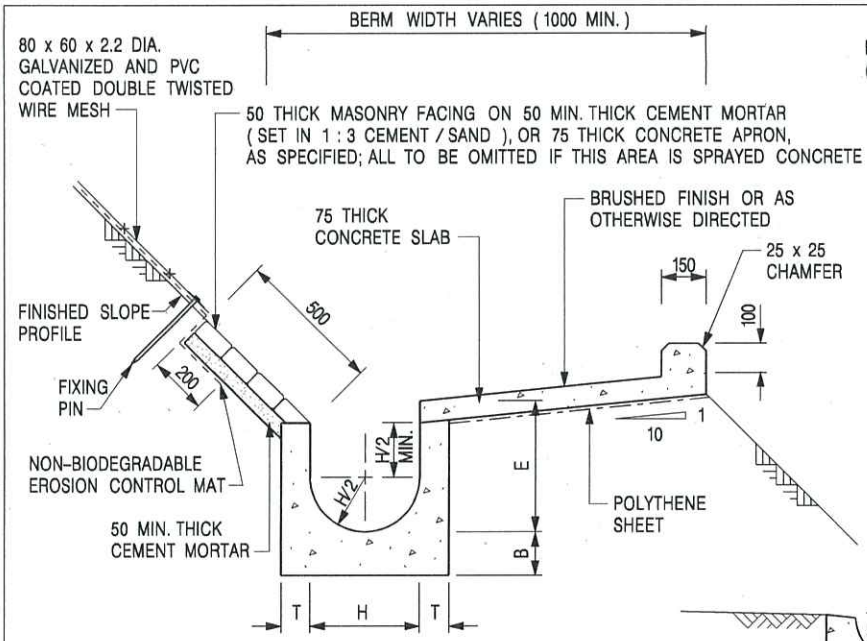
CATCHPIT WITH TRAP
(SHEET 2 OF 2)

CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

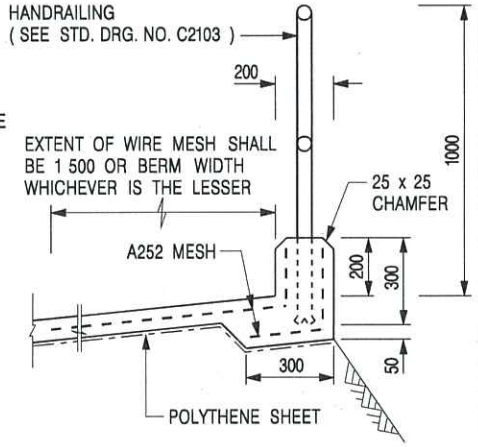
SCALE 1 : 20

DATE JAN 1991

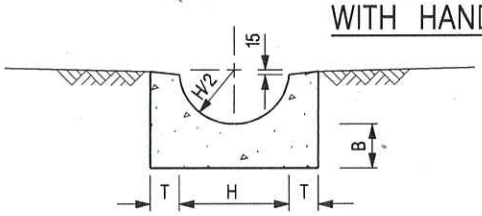
DRAWING NO. C2406 /2A



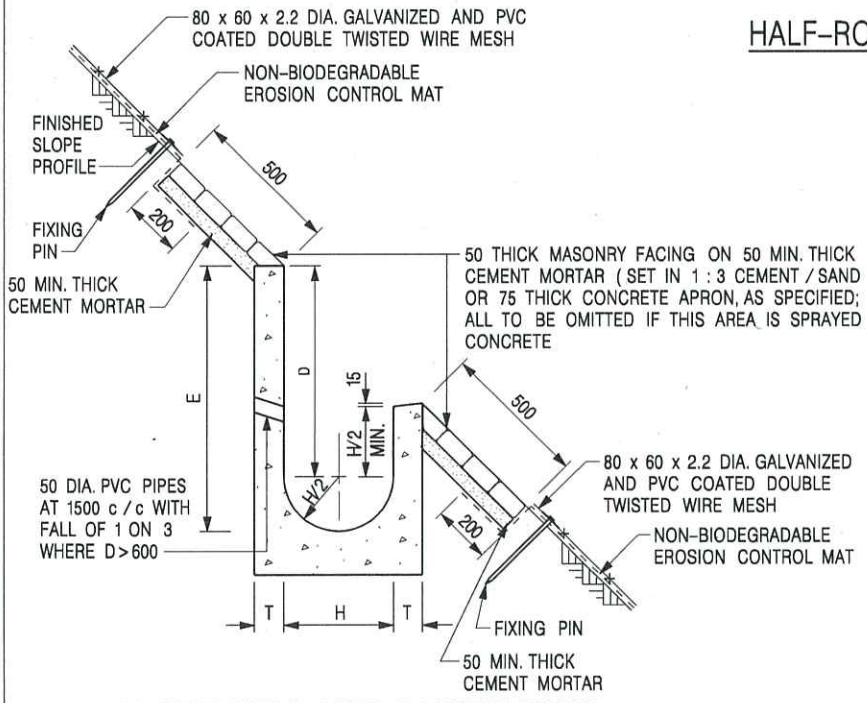
U-CHANNELS CONSTRUCTED ON BERM



DETAILS OF BERM WITH HANDRAILING



HALF-ROUND CHANNEL



U-CHANNELS NOT CONSTRUCTED ON BERM

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. ALL CONCRETE TO BE GRADE 20 / 20.
3. CONCRETE SURFACE FINISH SHALL BE CLASS U2, F2 OR BRUSHED FINISH AS DIRECTED.
4. SPACING OF EXPANSION JOINT IN CHANNELS, BERM SLABS AND APRONS TO BE 10 METRES MAXIMUM, SEE STD. DRG. NO. C2413 FOR DETAILS.
5. JOINTS FOR CHANNELS, BERM SLABS, APRONS AND WALLS, ETC. TO BE ON THE SAME ALIGNMENT.
6. FOR DIMENSIONS T, H, & B, SEE TABLE BELOW.
7. BIODEGRADABLE EROSION CONTROL MAT IF REQUIRED, SEE STD. DRG. NO. C2511/1E.
8. CONCRETE TO BE COLOURED AS SPECIFIED.
9. CONCRETE U-CHANNEL CAN BE CAST IN-SITU OR PRECAST CONCRETE SUBJECT TO THE ENGINEER'S AGREEMENT ON THE DETAILS.
10. DETAILS OF EROSION CONTROL MAT AND WESH MESH ON BERM. (SEE STD DRG. NO. C2511/1E)

NOMINAL SIZE H	T	B	REINFORCEMENT
300	80	100	A252 MESH PLACED CENTRALLY AND T=100 WHEN E>650
375 - 600	100	150	
675 - 900	125	175	A252 MESH PLACED CENTRALLY

REF.	REVISION	SIGNATURE	DATE
I	MINOR AMENDMENT.	Original Signed	07.2018
H	THICKNESS OF MASONRY FACING AMENDED.	Original Signed	01.2005
G	MINOR AMENDMENT.	Original Signed	01.2004
F	GENERAL REVISION.	Original Signed	12.2002
E	DRAWING TITLE AMENDED.	Original Signed	11.2001
D	MINOR AMENDMENT.	Original Signed	08.2001
C	150 x 100 UPSTAND ADDED AT BERM.	Original Signed	6.99
B	MINOR AMENDMENTS.	Original Signed	3.94

DETAILS OF HALF-ROUND AND U-CHANNELS (TYPE A - WITH MASONRY APRON)

CEDD **CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT**

SCALE 1 : 25

DATE JAN 1991

DRAWING NO. C2409I

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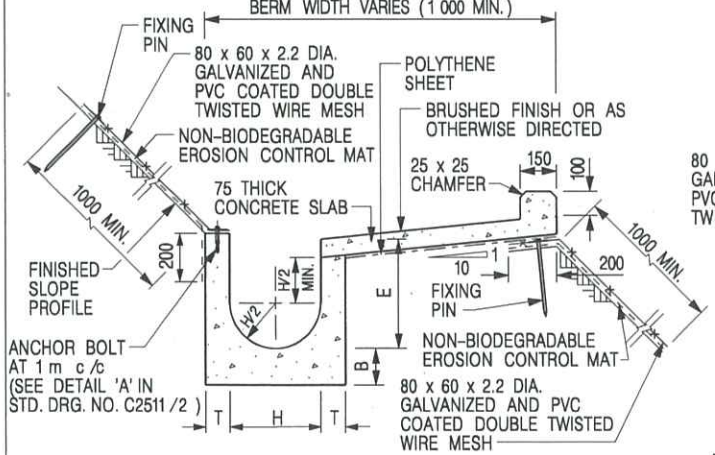
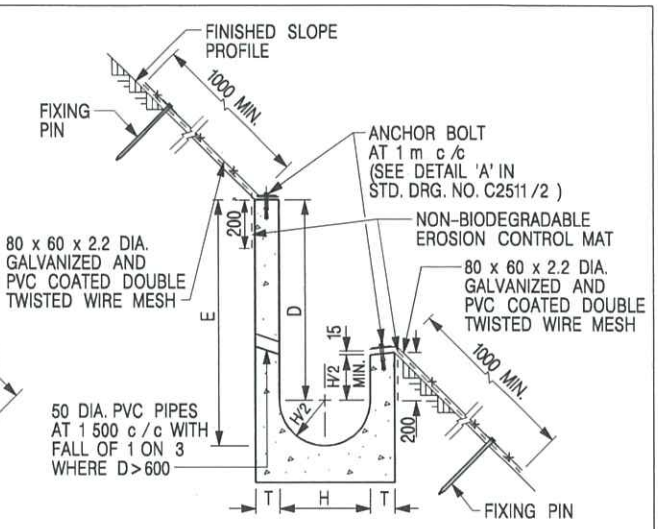
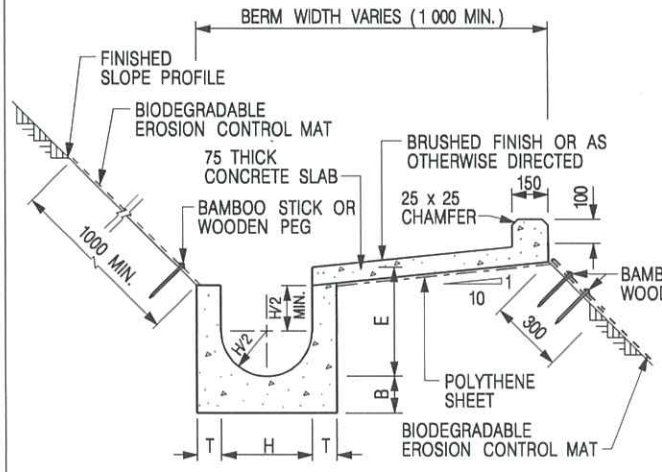


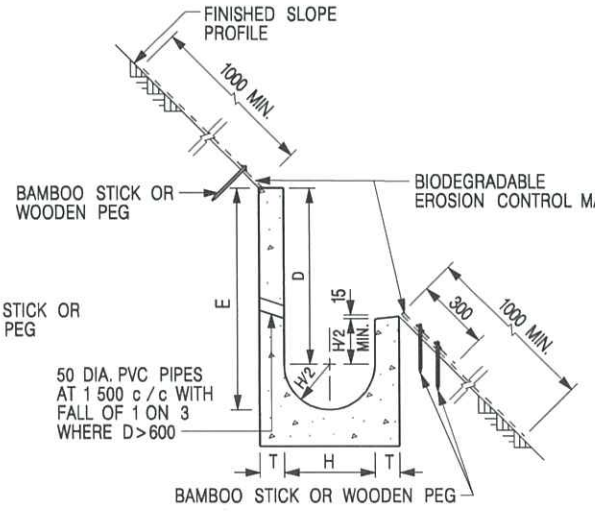
U-CHANNELS CONSTRUCTED ON BERM WITH NON-BIODEGRADABLE EROSION CONTROL MAT



U-CHANNELS NOT CONSTRUCTED ON BERM WITH NON-BIODEGRADABLE EROSION CONTROL MAT



U-CHANNELS CONSTRUCTED ON BERM WITH BIODEGRADABLE EROSION CONTROL MAT



U-CHANNELS NOT CONSTRUCTED ON BERM WITH BIODEGRADABLE EROSION CONTROL MAT

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. ALL CONCRETE TO BE GRADE 20 /20.
3. CONCRETE SURFACE FINISH SHALL BE CLASS U2, F2 OR BRUSHED FINISH AS DIRECTED.
4. SPACING OF EXPANSION JOINT IN CHANNELS, BERM SLABS AND APRONS TO BE 10 METRES MAXIMUM, SEE STD. DRG. NO. C2413 FOR DETAILS.
5. JOINTS FOR CHANNELS, BERM SLABS, APRONS AND WALLS, ETC. TO BE ON THE SAME ALIGNMENT.
6. FOR DIMENSIONS T, H, & B, SEE TABLE BELOW.
7. FOR TYPICAL FIXING PIN DETAILS, SEE STD. DRG. NO. C2511/2.
8. MINIMUM SIZE OF 25 x 50 x 300mm SHALL BE PROVIDED FOR WOODEN PEG.
9. MINIMUM SIZE OF 10mm DIAMETER WITH 200mm LONG SHALL BE PROVIDED FOR BAMBOO STICK.
10. THE FIXING DETAILS OF NON-BIODEGRADABLE AND BIODEGRADABLE EROSION CONTROL MATS ON EXISTING BERM SHALL REFER TO STD. DRG. NO. C2511/1.

NOMINAL SIZE H	T	B	REINFORCEMENT
300	80	100	A252 MESH PLACED CENTRALLY AND T=100 WHEN E>650
375 - 600	100	150	
675 - 900	125	175	A252 MESH PLACED CENTRALLY

REF.	REVISION	SIGNATURE	DATE
I	MINOR AMENDMENT.	Original Signed	07.2018
H	FIXING DETAILS OF BIODEGRADABLE EROSION CONTROL MAT ADDED.	Original Signed	12.2017
G	DIMENSION TABLE AMENDED.	Original Signed	01.2005
F	MINOR AMENDMENT.	Original Signed	01.2004
E	GENERAL REVISION.	Original Signed	12.2002
D	MINOR AMENDMENT.	Original Signed	08.2001
C	150 x 100 UPSTAND ADDED AT BERM.	Original Signed	6.99
B	MINOR AMENDMENT.	Original Signed	3.94
A	MINOR AMENDMENT.	Original Signed	10.92

DETAILS OF HALF-ROUND AND U-CHANNELS (TYPE B - WITH EROSION CONTROL MAT APRON)

CEDD **CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT**

SCALE DIAGRAMMATIC

DATE JAN 1991

DRAWING NO. C2410I

卓越工程 建設香港

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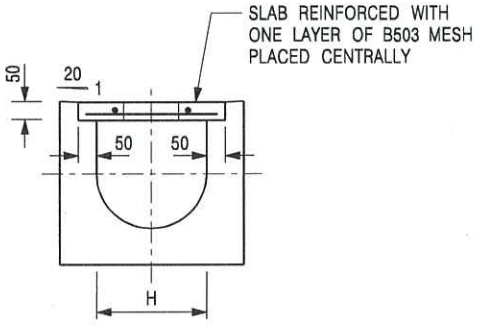
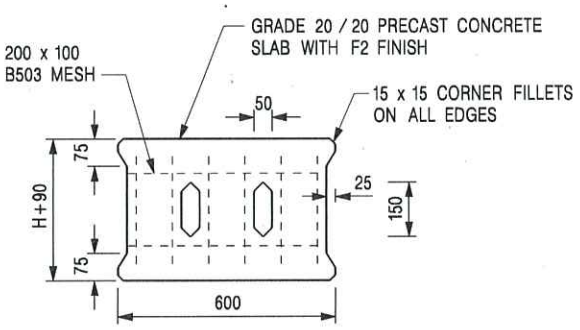


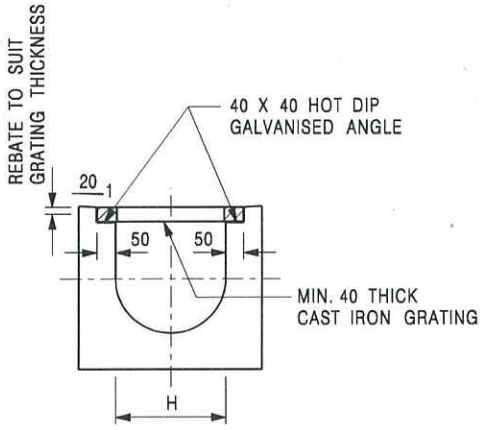
TYPICAL SECTION



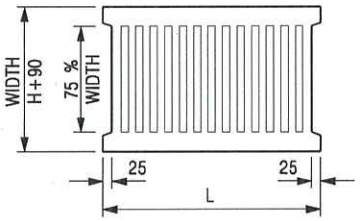
PLAN OF SLAB

U-CHANNELS WITH PRECAST CONCRETE SLABS

(UP TO H OF 525)



TYPICAL SECTION



L = 600mm FOR H ≤ 375mm
L = 400mm FOR H > 375mm

CAST IRON GRATING

(DIMENSIONS ARE FOR GUIDANCE ONLY, CONTRACTOR MAY SUBMIT EQUIVALENT TYPE)

U-CHANNEL WITH CAST IRON GRATING

(UP TO H OF 525)

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. H = NOMINAL CHANNEL SIZE.
3. ALL CAST IRON FOR GRATINGS SHALL BE GRADE EN-GJL-150 COMPLYING WITH BS EN 1561.
4. FOR COVERED CHANNELS TO BE HANDED OVER TO HIGHWAYS DEPARTMENT FOR MAINTENANCE, THE GRATING DETAILS SHALL FOLLOW THOSE AS SHOWN ON HyD STD. DRG. NO. H3156.

REF.	REVISION	SIGNATURE	DATE
E	NOTES 3 & 4 AMENDED.	Original Signed	12.2014
D	NOTE 4 ADDED.	Original Signed	06.2008
C	MINOR AMENDMENT. NOTE 3 ADDED.	Original Signed	12.2005
B	NAME OF DEPARTMENT AMENDED.	Original Signed	01.2005
A	CAST IRON GRATING AMENDED.	Original Signed	12.2002

COVER SLAB AND CAST IRON GRATING FOR CHANNELS

CEDD CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

SCALE 1 : 20

DATE JAN 1991

DRAWING NO. C2412E