R-RICHES PLANNING LIMITED

盈卓規劃有限公司

Our Ref. : DD 109 Lot 348 & VL
Your Ref. : TPB/A/YL-KTS/1088

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

By E-mail

23 September 2025

Dear Sir,

2nd Further Information

Proposed Temporary Shop and Services, Eating Place and Public Vehicle Park (Excluding Container Vehicle) for a Period of 5 Years in "Residential (Group C)" Zone, Lots 347 S.B (Part), 347 S.D (Part) and 348 (Part) in D.D. 109, Kam Tin, Yuen Long, New Territories

(S.16 Planning Application No. A/YL-KTS/1088)

We write to submit further information in response to departmental comments on the captioned application.

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

Yours faithfully,

For and on behalf of
R-riches Planning Limited

Christian CHIM
Town Planner

cc DPO/FSYLE, PlanD (Attn.: Mr. Woody LIN email: wkwlin@pland.gov.hk)
(Attn.: Mr. Michael SO email: mckso@pland.gov.hk)
(Attn.: Ms. Anna TONG email: akytong@pland.gov.hk)

[redacted]

Response-to-Comment (RtC)

Proposed Temporary Shop and Services with Ancillary Facilities and Associated Filling of Land for a Period of 5 Years in "Open Space" Zone, Lot 2882 S.B RP in D.D. 104, Mai Po, Yuen Long, New Territories

(S.16 Application No. A/YL-KTS/1088)

(i) A RtC table:

Departmental Comments		Applicant's Responses
1. Comments from the Chief Engineer/Railway Development 1-1, Railway Development Office, Highways Department (CE/RD1-1, RDO, HyD)		
(a)	Based on the location plan and the Northern Link (NOL) Scheme Gazette Plan, it is noted that the proposed development site is in close proximity to the gazette boundary and the tunnel structure of NOL. Please confirm whether the proposed development shall have no adverse impact to the construction and operation of NOL.	No excavation of land will be carried out at the application site (the Site). Besides, the Site has already been paved, no further filling of land will be conducted at the Site. Given that the application itself and the proposed structures are temporary in nature, no foundation work will be carried out at the Site. As such, the proposed development shall have no adverse impact to the construction and operation of the Norther Link (NOL).
(b)	It is also noted that the estimated trip generation /attraction from the application site would be in the maximum of 6 trips per hour distributed to Kam Sheung Road. Please confirm whether the traffic generated/attracted during their implementation period shall have no adverse impact to the construction and operation of NOL.	Given that the proposed development would only generate and attract a maximum of 6 trips per hour in total, the additional traffic being distributed to Kam Sheung Road is considered minimal when comparing with the existing traffic flow of Kam Sheung Road. As such, the proposed development shall have no adverse impact to the construction and operation of NOL.
(c)	Please note that the construction of NOL will be from 2025 to 2034. The applicant should take into account the construction, operation and maintenance of NOL.	Noted. Noting that the proposed development is of temporary nature for a period of 5 years, its operation would not hinder the operation and maintenance of NOL in the long run.

Departmental Comments		Applicant's Responses
2. Comments of the Chief Engineer/Mainland North, Drainage Services Department (CE/MN, DSD)		
(a)	Please refer to DSD's Stormwater Drainage Manual and its corrigenda for preparation of the drainage assessment /proposal.	Noted. Please refer to the enclosed revised drainage proposal at **Annex 1**.
(b)	If land filling works will be carried out under this application, please ensure that existing drain path/overland flow from the adjacent lands should not be affected.	
(c)	The size and gradient of the proposed/existing drainage facilities to be discharged from the Site and/or the overland flow intercepted from the adjacent lands should be indicated in 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.	
(d)	Reference should be made to DSD Technical Note No. 1 for the sizes of the proposed u-channels.	
(e)	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.	
(f)	Cross sections showing the existing and proposed ground levels of the captioned site with respect to the adjacent areas should be given.	
(g)	Standard details should be provided to indicate the sectional details of the proposed u-channel and the catchpit/sand trap.	
(h)	The development should neither obstruct overland flow nor adversely affect existing natural streams, village drains, ditches and the adjacent areas, etc.	
(i)	Please provide hydraulic calculations for the proposed discharging drainage facility	

	demonstrating its capacity to cater for the surface runoff from the entire application site.	
(j)	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 the Lands Department'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.	
(k)	Connection details at discharge point (including cross section) with C.L., I.L. and catchpit/channel bottom level should be shown in the drawing.	
(l)	Colour photos to indicate the current conditions of the existing drainage facilities should be included in the submission. The photo taken locations and angles should be shown on the layout plan.	

Annex 1

Revised Drainage Proposal

Proposed Temporary Shop and Services, Eating Place and Public Vehicle Park (Excluding Container Vehicle) for a Period of 5 Years in "Residential (Group C)" Zone, Various Lots in D.D. 109, Kam Tin, Yuen Long, New Territories

Drainage Proposal

Sep 2025

MARVELLOUS
CONSTRUCTION & DESIGN COMPANY LIMITED

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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 347 S.B (Part), 347 S.D (Part) and 348 (Part) in D.D. 109, Kam Tin, Yuen Long, New Territories (the Site) for 'Proposed Temporary Shop and Services, Eating Place and Public Vehicle Park (Excluding Container Vehicle) for a Period of 5 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 beside Kat Hing Garden, south of Kam Sheung Road. It has an area of approx. 1,210 m^2. The site location is shown in **Figure 1**.

1.2.2 The existing site is mostly paved. The existing site levels are approx. + 5.50mPD. No major site formation works for the application site is anticipated.

1.2.3 There is an existing minimum 375mm channel by the west boundary of the application site. There is also an existing 525mm channel which would discharge to existing watercourse and eventually discharge to Kam Tin River. **Figure 2** indicate the existing drainage system of the area.

2 Development Proposal

2.1 The Proposed Development

2.1.1 The total site area is approximately 1,210 m^2. The existing planter at the west portion of the site would be maintained. The catchment plan is shown in **Figure 4**.

Proposed Development Area (Approx.)	
Total Site Area (m^2)	1,210
Planter Area before Development (m^2)	223
Planter Area after Development (m^2)	140
Paved Area after Development (m^2)	1,070

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 the 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 5 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 Proposed Channels are designed for collection of runoff for internal catchment. They are proposed to discharge to existing channel and watercourse which will eventually discharge to Kam Tin River. As the change in equivalent area is only 49.8 m^2, the increase of flow due to change of equivalent to existing water course is only 0.1%. The existing channels and watercourse checking are shown in **Appendix A**. They have enough capacity.

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

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

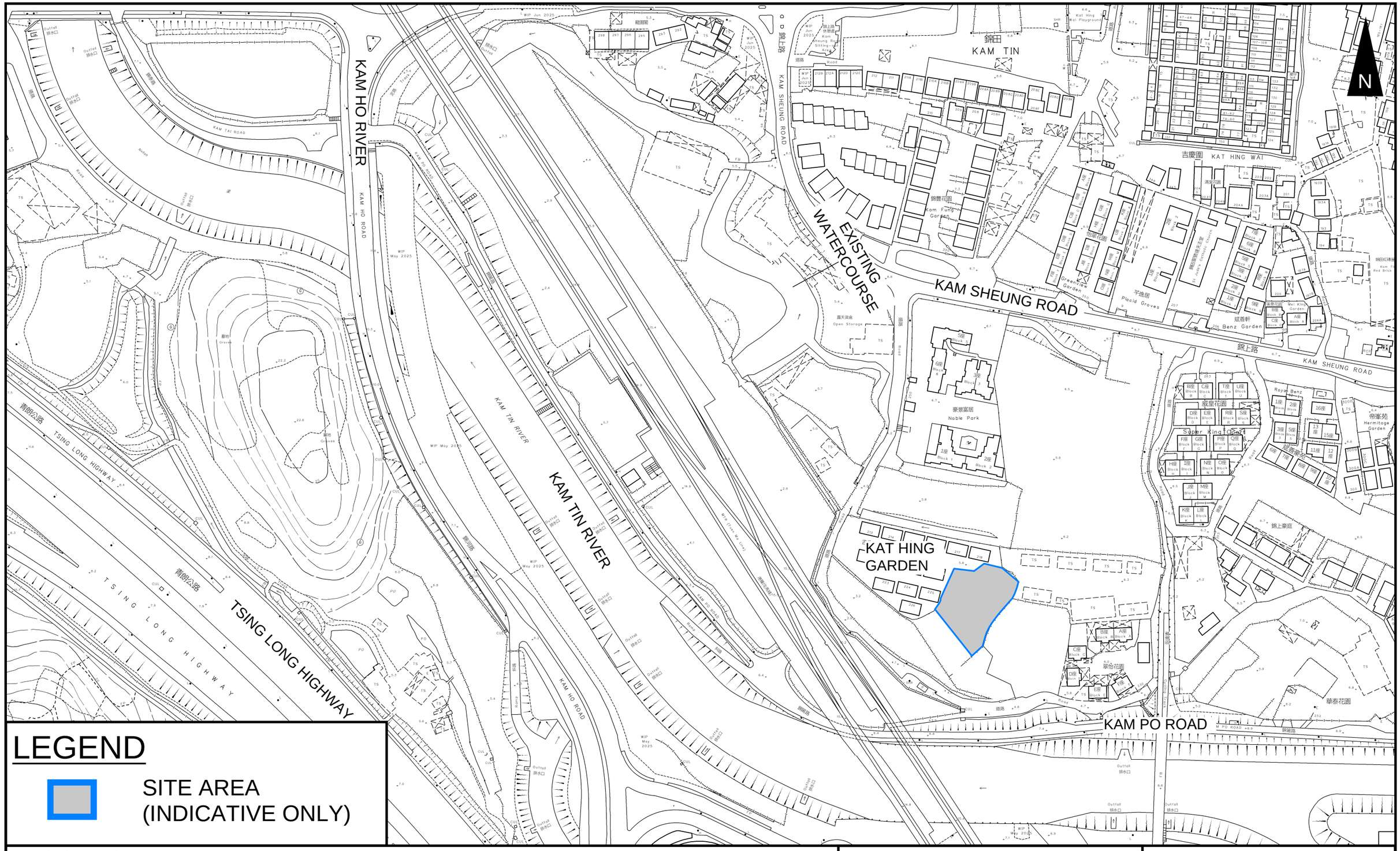
4.1.5 Reference Drawings are shown in **Appendix C** for reference.

5 Conclusion

5.1.1 Drainage review has been conducted for the Proposed Development. The surface runoff will be collected by the proposed drains and discharged to existing drainage system. With implementation of the above drainage system, no unacceptable drainage impact is anticipated.

- End of Text -

FIGURES



LEGEND

SITE AREA
(INDICATIVE ONLY)

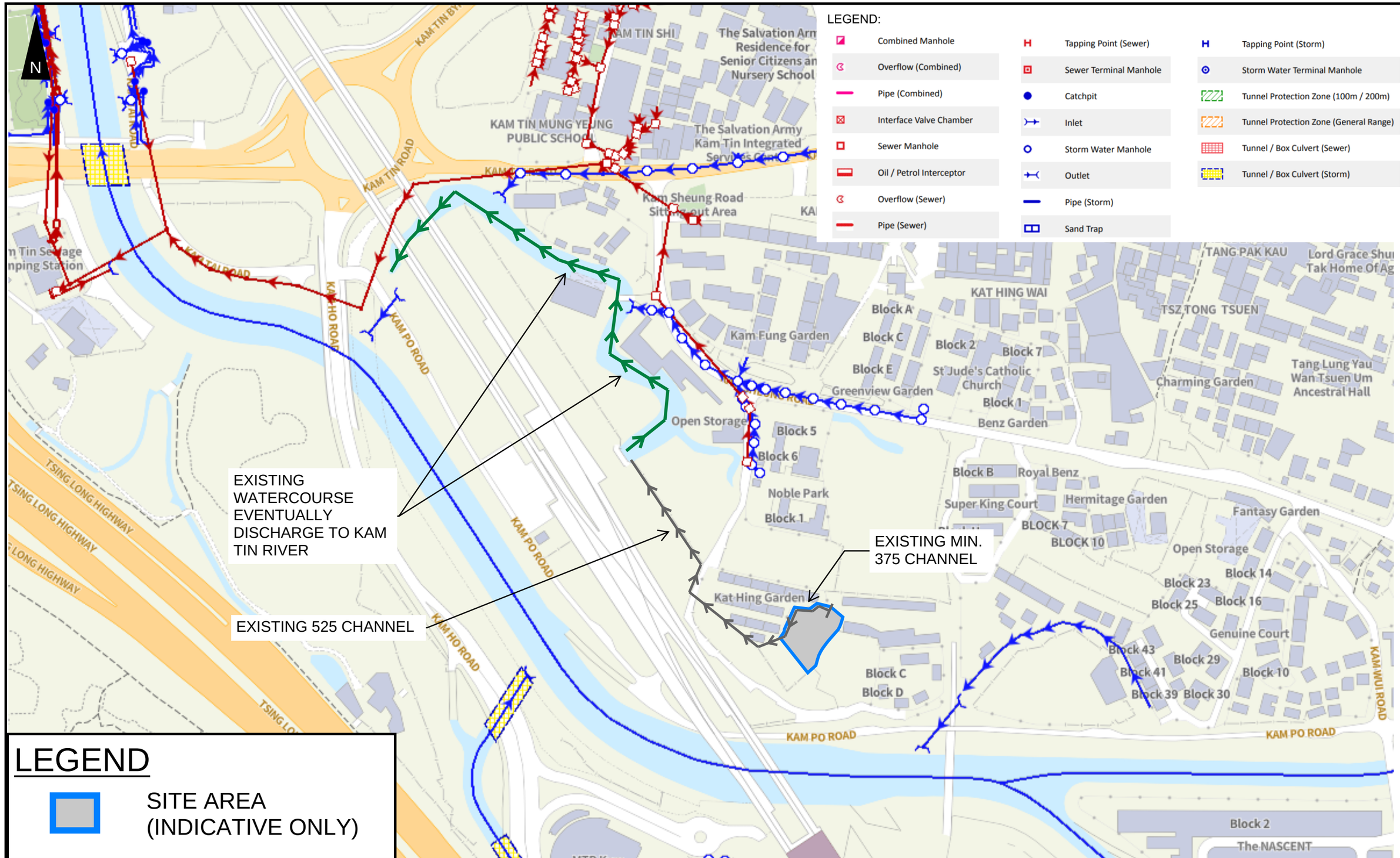
PROJECT:
Proposed Temporary Shop and Services, Eating Place and Public Vehicle Park (Excluding Container Vehicle) for a Period of 5 Years in "Residential (Group C)" Zone

TITLE
SITE LOCATION PLAN

FIGURE NUMBER
FIGURE 1

LOCATION:
Various Lots in D.D. 109, Kam Tin, Yuen Long, New Territories

VER	DESCRIPTION	DATE



PROJECT:
Proposed Temporary Shop and Services, Eating Place and Public Vehicle Park (Excluding Container Vehicle) for a Period of 5 Years in "Residential (Group C)" Zone

LOCATION:
Various Lots in D.D. 109, Kam Tin, Yuen Long, New Territories

TITLE
EXISTING DRAINAGE PLAN

FIGURE NUMBER
FIGURE 2

VER	DESCRIPTION	DATE

LEGEND

- SITE AREA (INDICATIVE ONLY)
- PROPOSED CHANNEL
- PROPOSED CATCHPIT
- PROPOSED CATCHPIT w/TRAP
- EXISTING DRAIN
- EXISTING CHANNEL

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.

EXISTING WATERCOURSE EVENTUALLY DISCHARGE TO KAM TIN RIVER

EXISTING 525 CHANNEL

EXISTING MINIMUM 375 CHANNEL

SP01

CP1.01

CP1.03

CP1.02

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	5.5	5.5	375	300	UC	5.13	5.09	SP	#SP: Start Point
CP1.01	CP1.02	5.5	5.5	375	300	UC	5.09	4.74	CP	
CP1.02	CP1.03	5.5	5.5	375	300	UC	4.74	4.64	CP	

PROJECT:
Proposed Temporary Warehouse (excl. D.G.G.) with Ancillary Facilities and Associate Filling of Land for a Period of 3 Years in “Agriculture” Zone

TITLE
PROPOSED DRAINAGE SYSTEM

FIGURE NUMBER
FIGURE 3

LOCATION:
Lots 136 RP (Part) and 2149 in D.D. 106 and Adjoining GL, Kam Tin, Yuen Long, N.T.

VER	DESCRIPTION	DATE

LEGEND:

FALL

B1 Unpaved
1,163 m²

DEVELOPMENT WITH OWN DRAINAGE SYSTEM

DEVELOPMENT WITH OWN DRAINAGE SYSTEM

EXISTING PLANTER TO BE MAINTAINED
140 m²

EXISTING PLANTER TO BE PAVED
83 m²

Site Area After Development
Total: 1,210 m²
Planter: 140 m²

KAM SHEUNG ROAD

KAM PO ROAD

KAM HO ROAD

PROJECT:

Proposed Temporary Shop and Services, Eating Place and Public Vehicle Park (Excluding Container Vehicle) for a Period of 5 Years in “Residential (Group C)” Zone

TITLE
CATCHMENT PLAN

FIGURE NUMBER
FIGURE 4

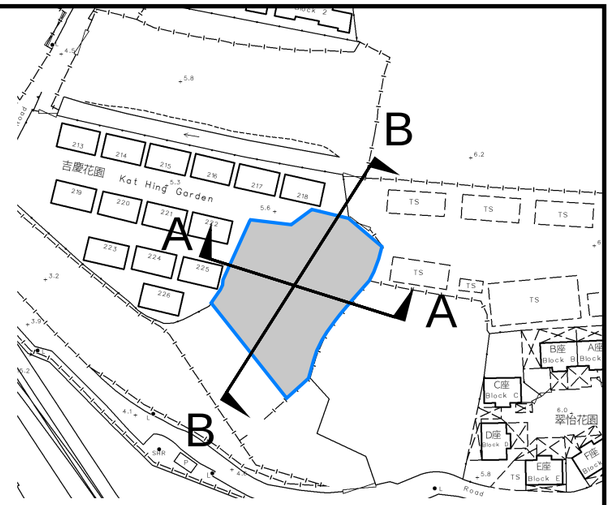
LOCATION:

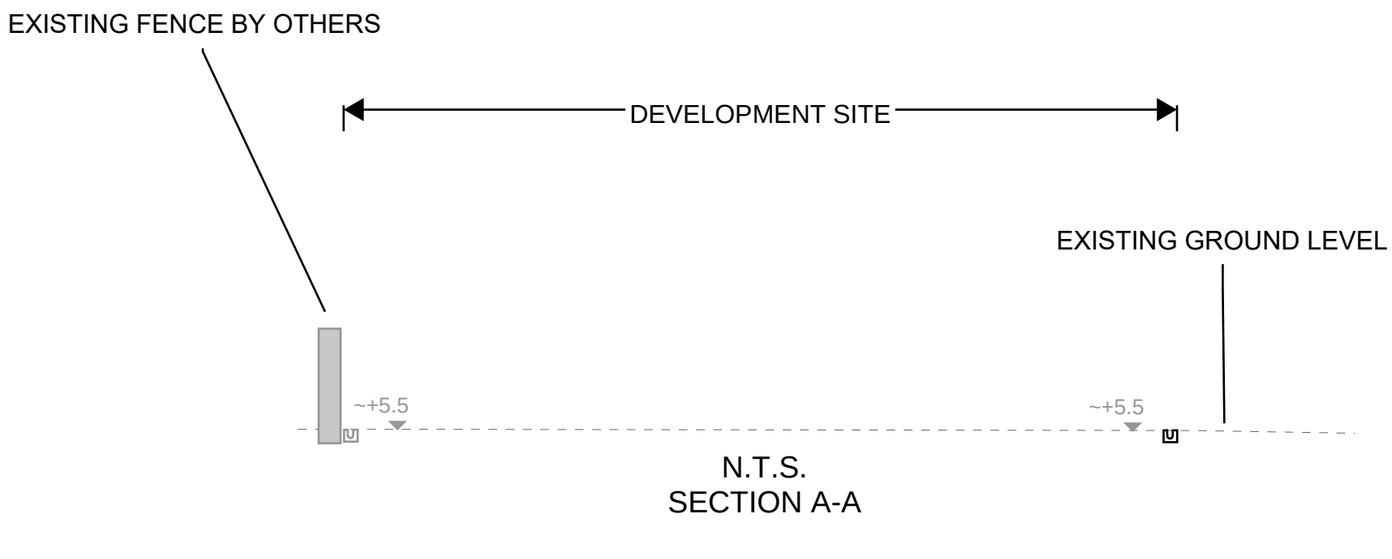
Various Lots in D.D. 109, Kam Tin, Yuen Long, New Territories

VER	DESCRIPTION	DATE

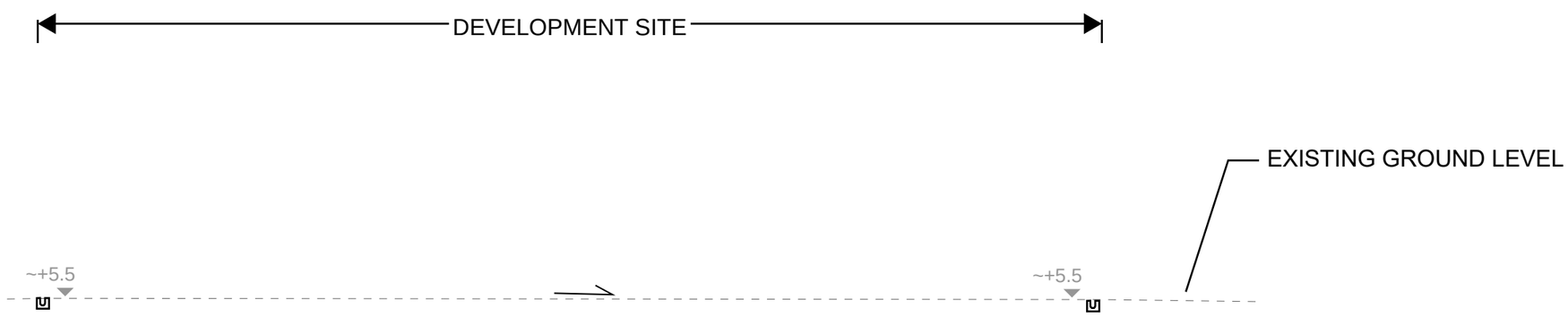
LEGEND

SITE AREA
(INDICATIVE ONLY)





N.T.S.
SECTION A-A



N.T.S.
SECTION B-B

PROJECT: Proposed Temporary Shop and Services, Eating Place and Public Vehicle Park (Excluding Container Vehicle) for a Period of 5 Years in “Residential (Group C)” Zone	TITLE SECTIONS	FIGURE NUMBER FIGURE 5
LOCATION: Various Lots in D.D. 109, Kam Tin, 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	A1	B1	Site Area Before Development	Change of Equivalent Area															
Total Area	1210	1163	1210	-															
Hard Paved Area	1070	0	987	-															
Unpaved Area	140	1163	223	-															
Equival. Area	1065.5	407.05	1015.7	49.8															

Pavement Type	Hard Paved	Unpaved
Runoff Coefficient	0.95	0.35

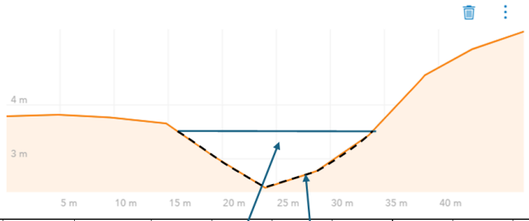
Calculation Table of Drainage System

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	5.50	5.50	375	300	UC	5.13	5.09	SP	9.5	1.06	0.13	A1	1065.50	0.40	353	0.10	78.7%	
CP1.01	CP1.02	5.50	5.50	375	300	UC	5.09	4.74	CP	104.8	1.06	0.13	A1	1065.50	0.55	348	0.10	77.6%	
CP1.02	CP1.03	5.50	5.50	375	300	UC	4.74	4.64	CP	29.9	1.06	0.13	A1	1065.50	2.20	307	0.09	68.3%	
CP1.03	Existing 525 channel			525	100	UC					2.30	0.57	A1,B1	1472.55	2.67	298	0.12	21.6%	
Checking of Existing min. 375 channel				375	200	UC					1.30	0.16	A1	1065.50	0.40	353	0.10	64.2%	
Flow due to change of Equivalent Area													Change of Equivalent Area	49.80	2.67	298	0.004		

#SP: Start Point

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

Capacity Checking of Existing Watercourse against Flow from Development



Assumed Water Depth	Freeboard	Base Width	Width of Water Surface	Flow Area	Wetted Perimeter	Hydralic Radius	Manning's Roughness	Gradient	Velocity	Capacity
m	m	m	m	m2	m	m		1 in	m/s	m3/s
0.70	0.50	-	16.80	6.20	16.87	0.37	0.035	200	1.04	6.43

Total Flow from Site = 0.12 m^3/s See Appendix A
Utilization Rate = 1.9%
Total flow from Development Site only occupy 1.9% of nearby Watercourse.

Flow due to change of Equivalent Area = 0.004 m^3/s See Appendix A
Utilization Rate = 0.1%
Flow due to change of equivalent area only occupy 0.1% of nearby Watercourse.

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)
76	13.1	72	15	435.115	0.4	0.4

APPENDIX B - PROPOSED SITE LAYOUT PLAN

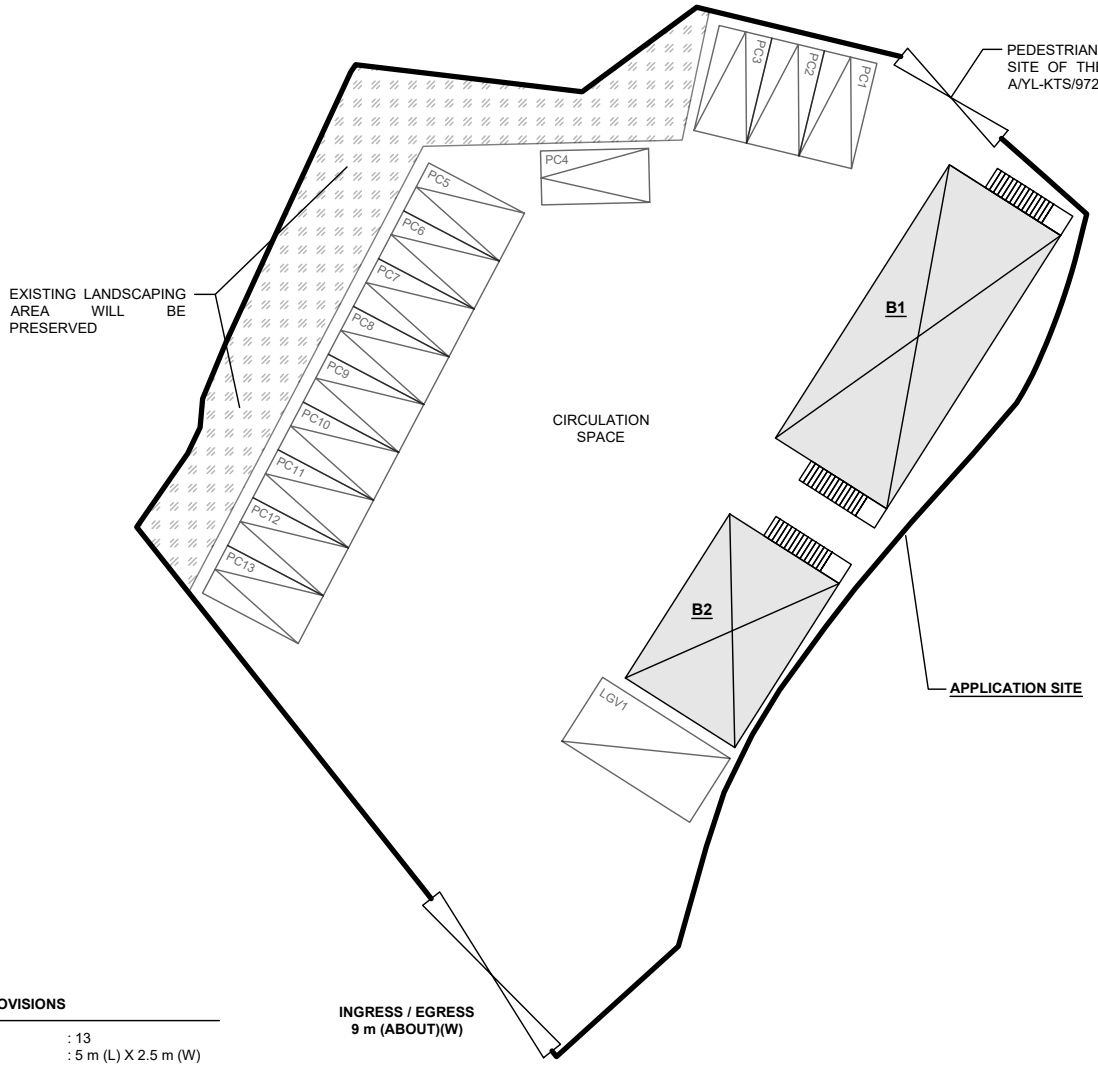
DEVELOPMENT PARAMETERS

APPLICATION SITE AREA	: 1,210 m^2	(ABOUT)
COVERED AREA	: 158 m^2	(ABOUT)
UNCOVERED AREA	: 1,052 m^2	(ABOUT)
PLOT RATIO	: 0.25	(ABOUT)
SITE COVERAGE	: 13 %	(ABOUT)
NO. OF STRUCTURE	: 2	
DOMESTIC GFA	: NOT APPLICABLE	
NON-DOMESTIC GFA	: 304 m^2	(ABOUT)
TOTAL GFA	: 304 m^2	(ABOUT)
BUILDING HEIGHT	: 7.2 m	(ABOUT)
NO. OF STOREY	: 2	

STRUCTURE	USE	COVERED AREA	GROSS FLOOR AREA	BUILDING HEIGHT
B1	SHOP AND SERVICES / EATING PLACE	100 m^2 (ABOUT)	192 m^2 (ABOUT)*	7.2 m (ABOUT)(2-STOREY)
B2	SHOP AND SERVICES / EATING PLACE	58 m^2 (ABOUT)	112 m^2 (ABOUT)#	7.2 m (ABOUT)(2-STOREY)
	TOTAL	**158 m^2 (ABOUT)**	**304 m^2 (ABOUT)**	

* *GFA OF 1/F : 92 m^2 (ABOUT)*
GFA OF G/F : 92 m^2 (ABOUT)
COVERED AREA OF STAIRCASE : 8 m^2 (ABOUT)
TOTAL GFA : 192 m^2 (ABOUT)

\# *GFA OF 1/F : 54 m^2 (ABOUT)*
GFA OF G/F : 54 m^2 (ABOUT)
COVERED AREA OF STAIRCASE : 4 m^2 (ABOUT)
TOTAL GFA : 112 m^2 (ABOUT)



PARKING AND LOADING / UNLOADING (L/UL) PROVISIONS

NO. OF PRIVATE CAR PARKING SPACE	: 13
DIMENSIONS OF PARKING SPACE	: 5 m (L) X 2.5 m (W)
NO. OF L/UL SPACE FOR LIGHT GOODS VEHICLE	: 1
DIMENSIONS OF PARKING SPACE	: 7 m (L) X 3.5 m (W)

LEGEND

- APPLICATION SITE
- STRUCTURE
- 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 SHOP AND SERVICES, EATING PLACE AND PUBLIC VEHICLE PARK (EXCLUDING CONTAINER VEHICLE) FOR A PERIOD OF 5 YEARS

SITE LOCATION
VARIOUS LOTS IN D.D. 109, KAM TIN, YUEN LONG, NEW TERRITORIES

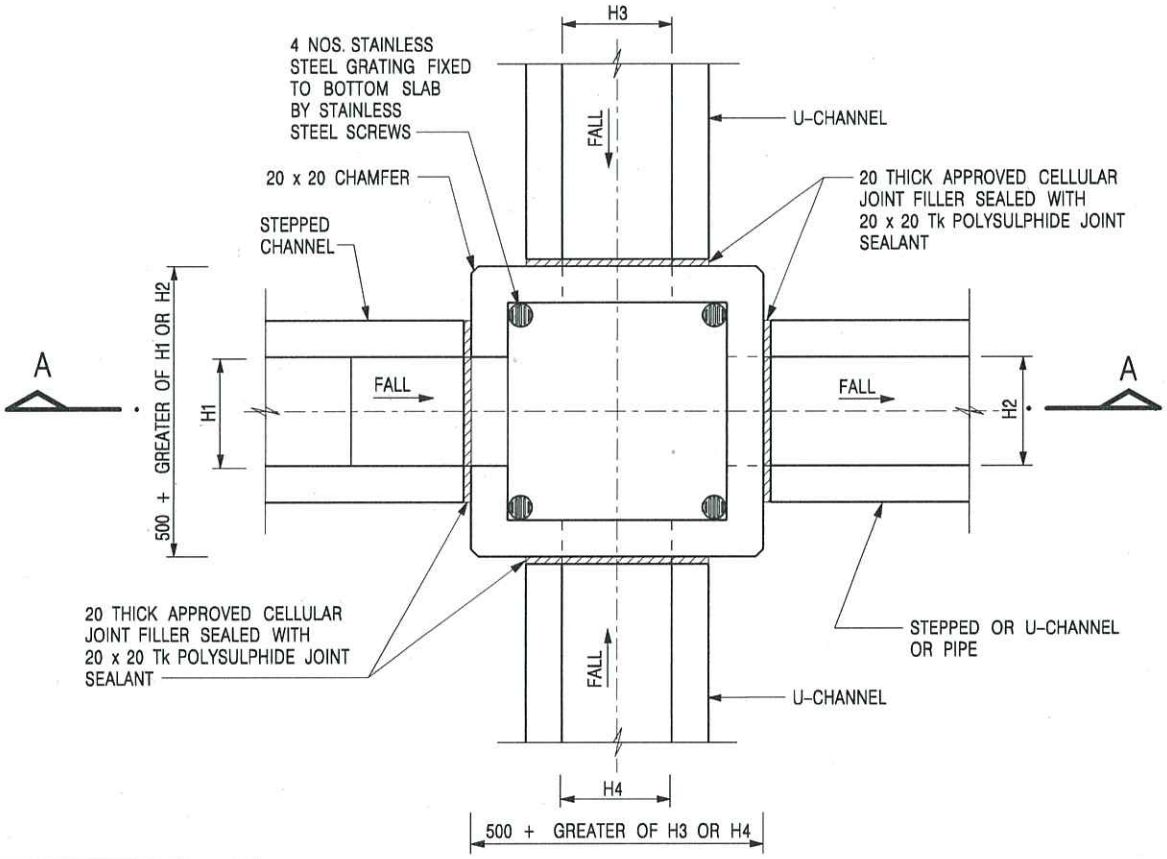
SCALE
1 : 350 @ A4

DRAWN BY	DATE
MN	18.7.2025
CHECKED BY	DATE
APPROVED BY	DATE

DWG. TITLE
LAYOUT PLAN

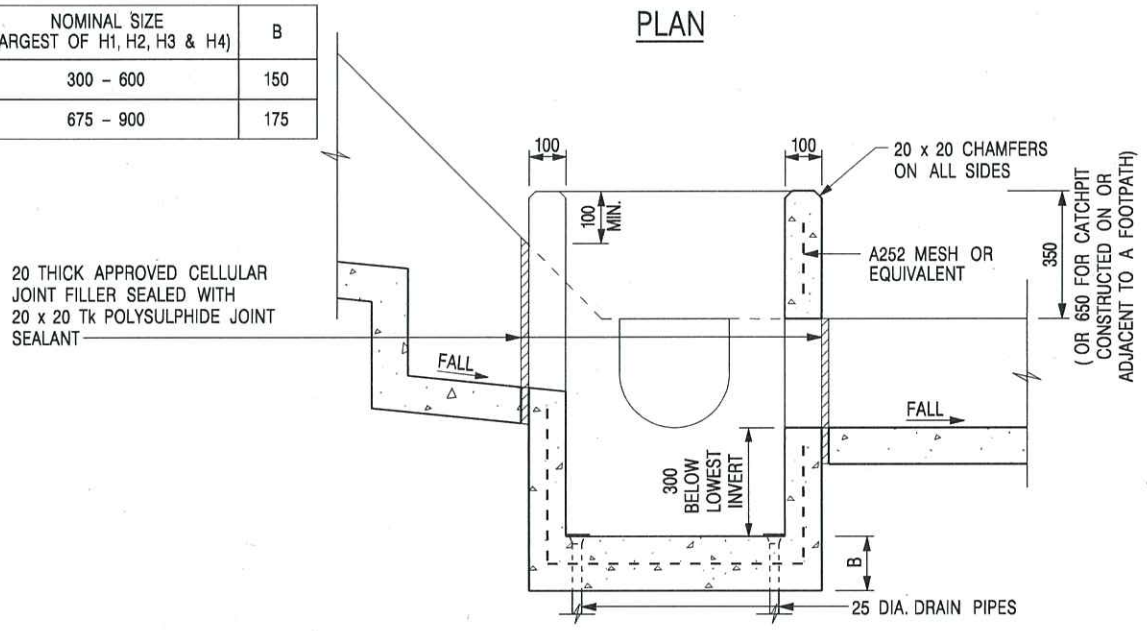
DWG NO.	VER.
PLAN 4	001

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)

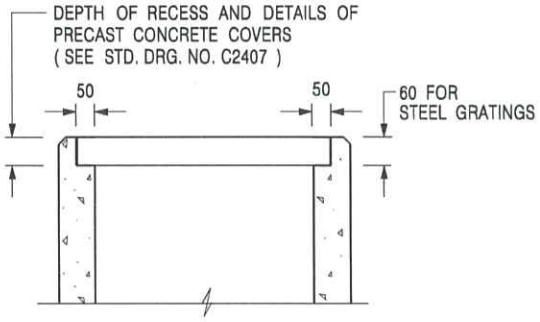
CEDD CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

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

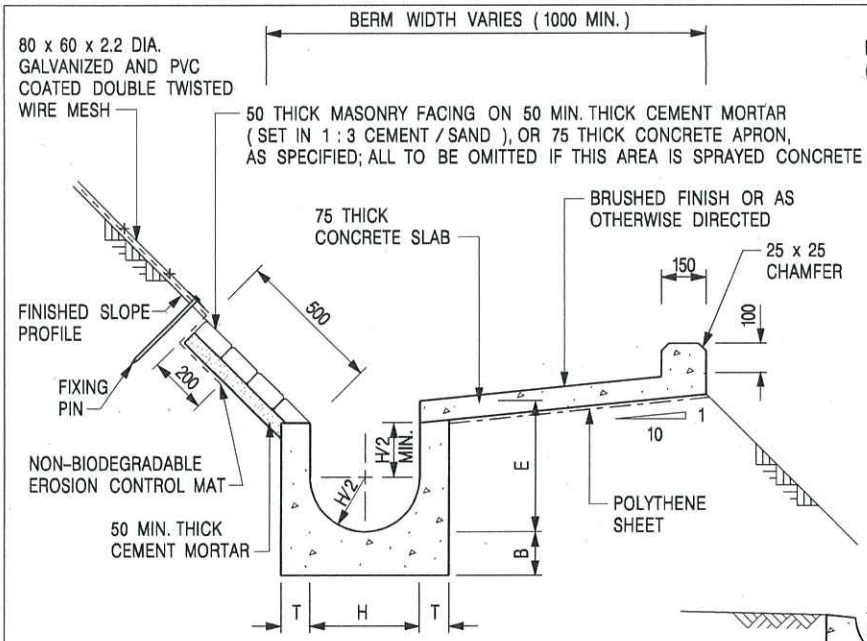
CATCHPIT WITH TRAP
(SHEET 2 OF 2)

CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

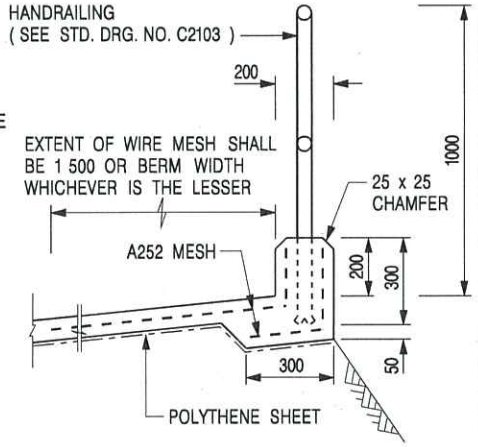
SCALE 1 : 20

DATE JAN 1991

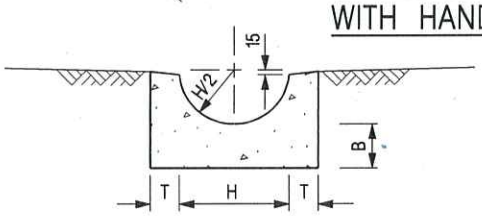
DRAWING NO. C2406 /2A



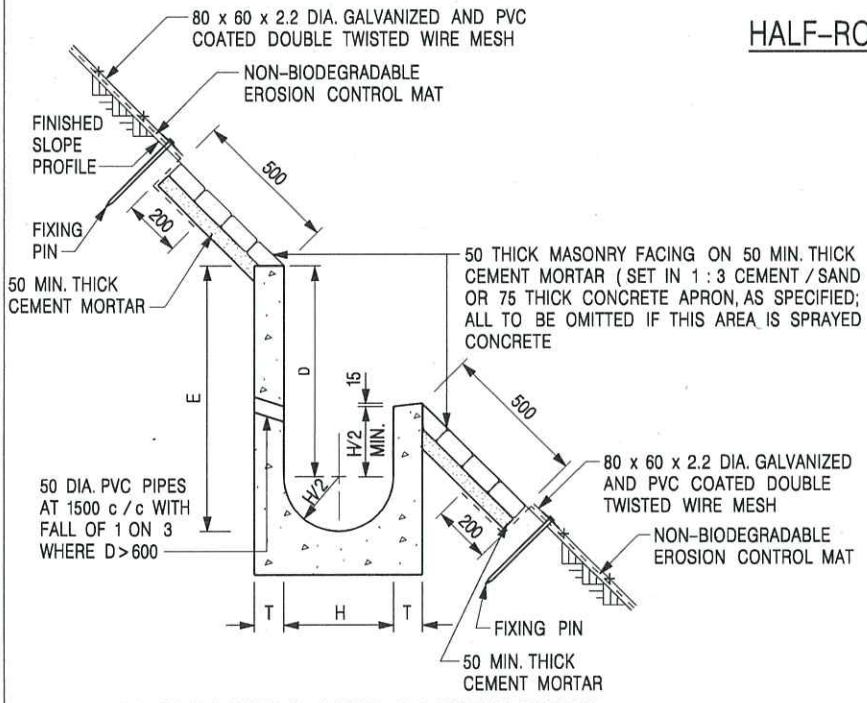
U-CHANNELS CONSTRUCTED ON BERM



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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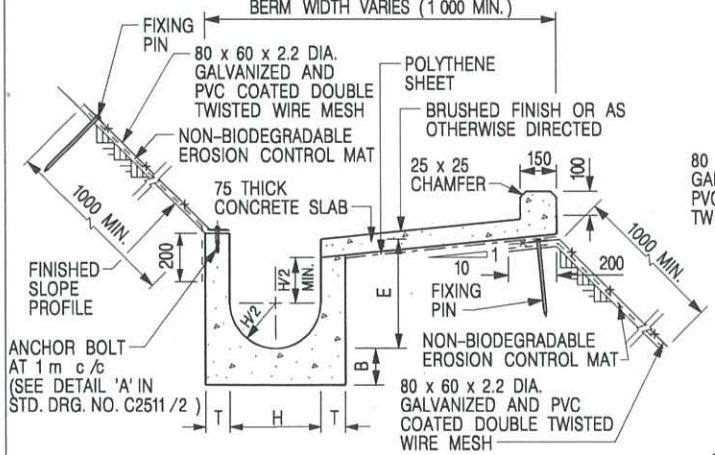
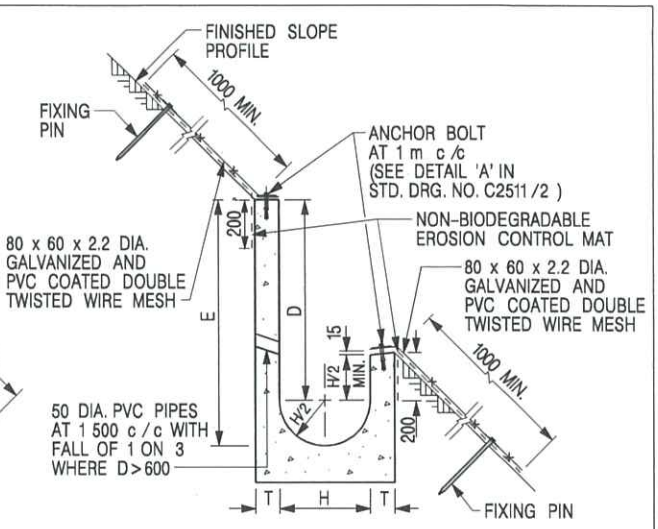
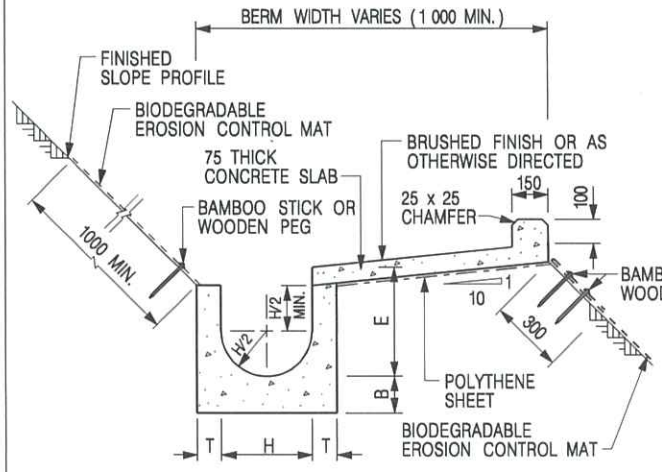


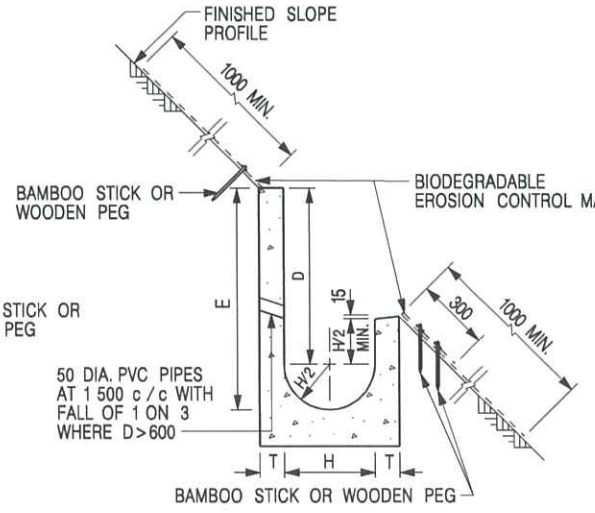
U-CHANNELS CONSTRUCTED ON BERM WITH NON-BIODEGRADABLE EROSION CONTROL MAT



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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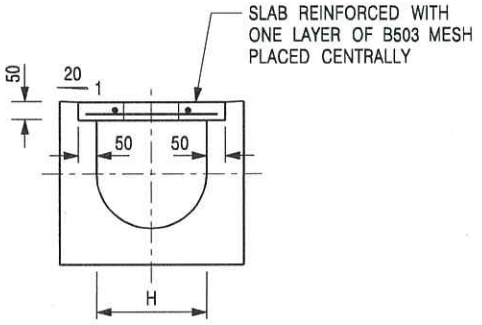
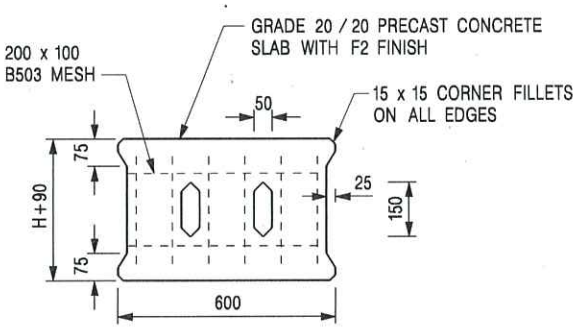


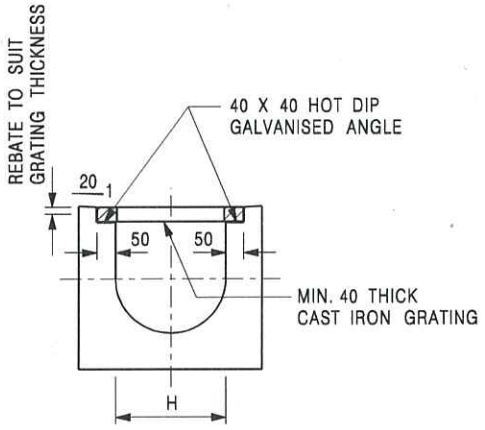
TYPICAL SECTION



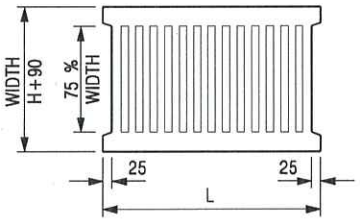
PLAN OF SLAB

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

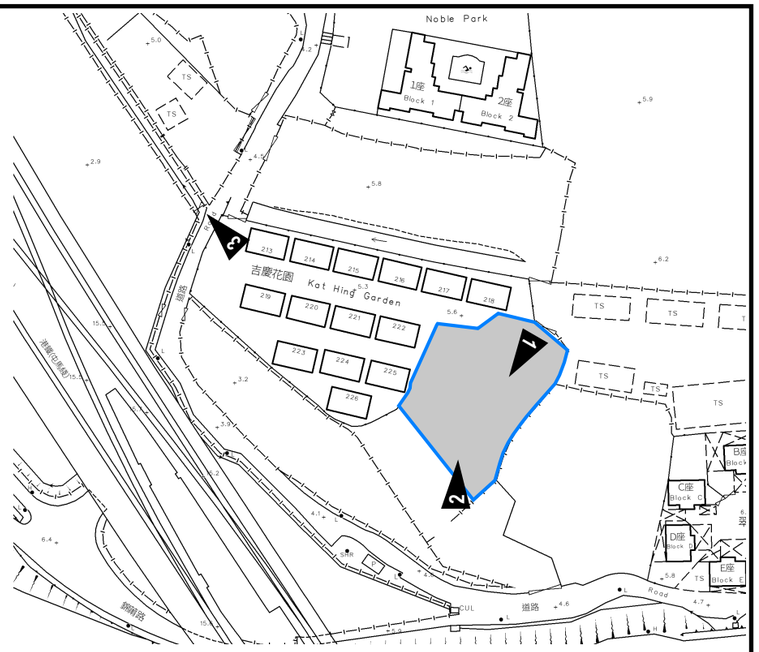
COVER SLAB AND CAST IRON GRATING FOR CHANNELS

CEDD CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

SCALE 1 : 20

DATE JAN 1991

DRAWING NO. C2412E



PROJECT: Proposed Temporary Shop and Services, Eating Place and Public Vehicle Park (Excluding Container Vehicle) for a Period of 5 Years in “Residential (Group C)” Zone	SITE PHOTOS	APPENDIX D
LOCATION: Various Lots in D.D. 109, Kam Tin, Yuen Long, New Territories		

VER	DESCRIPTION	DATE