寄件日期: 2025年09月11日星期四 11:58
收件者: tpbpd/PLAND
副本: Yen PY LEUNG/PLAND; Jet Sze Jet CHEUNG/PLAND
主旨: Fw: S. 16 Planning Application No. A/YL-KTN/1160
附件: AYL-KTN 1160 20250910.pdf

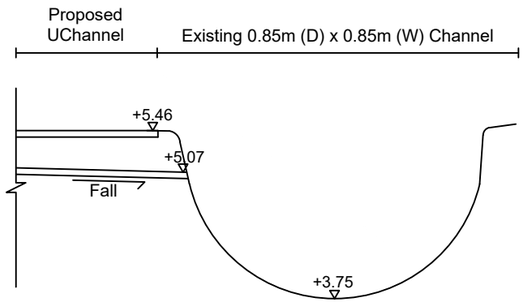
From: Tang Lok San [redacted]

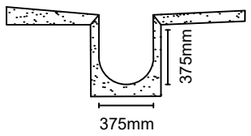
Andrea,

Thank you for the phone call. Please see the attachment for the Fire Service Installation Proposal and Drainage Proposal. Please contact Mr. Tang via email [redacted] if you have any questions regarding to the captioned application.

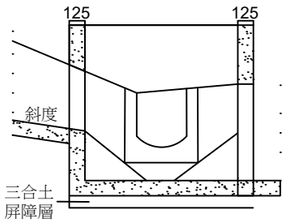
Yours sincerely,
Mr. Tang

Connection Detail

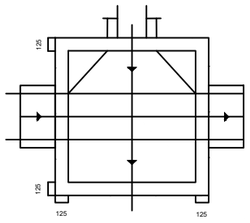




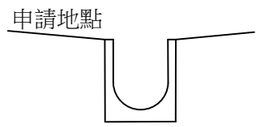
U型明渠切面圖



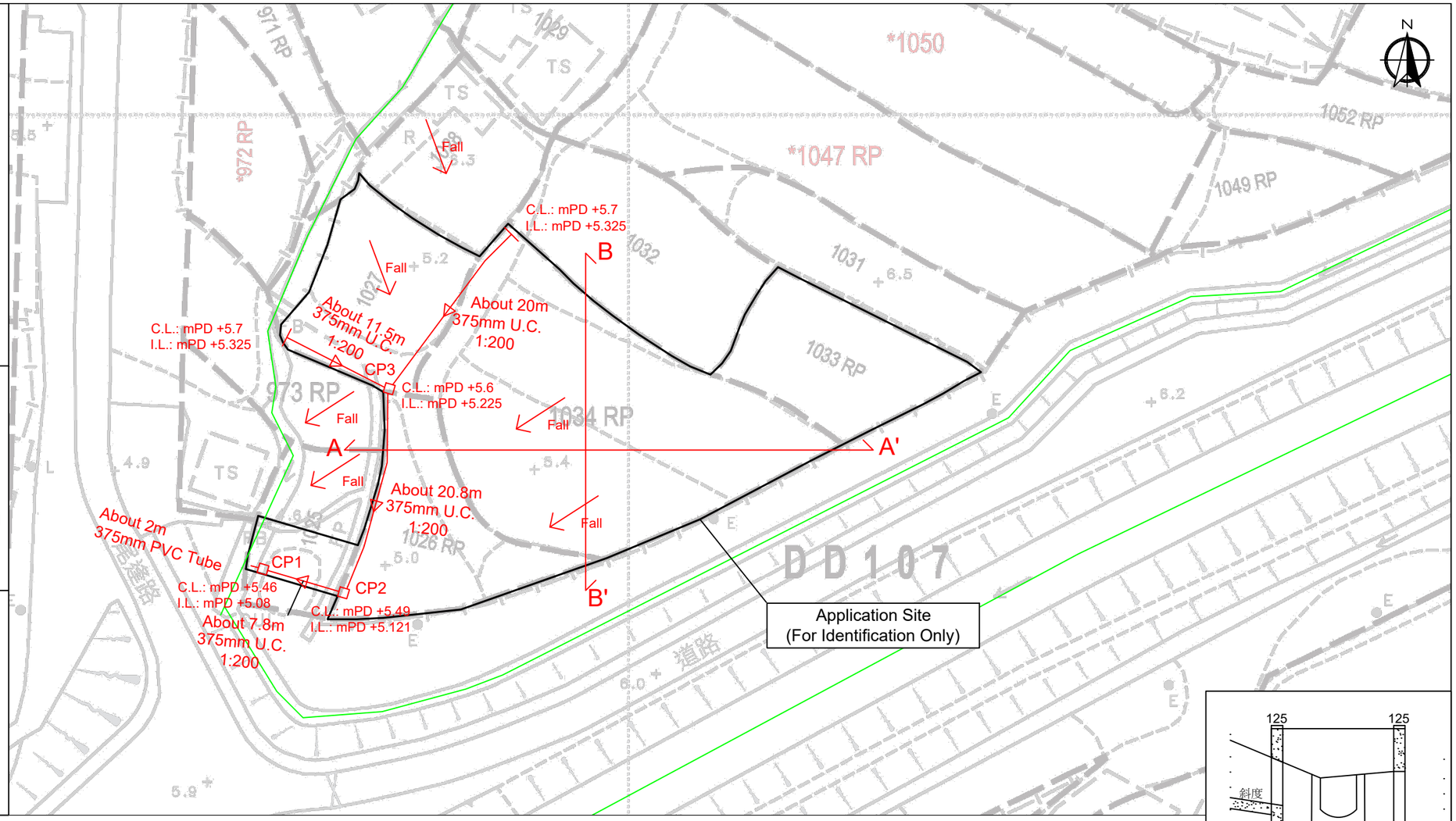
沙井切面圖

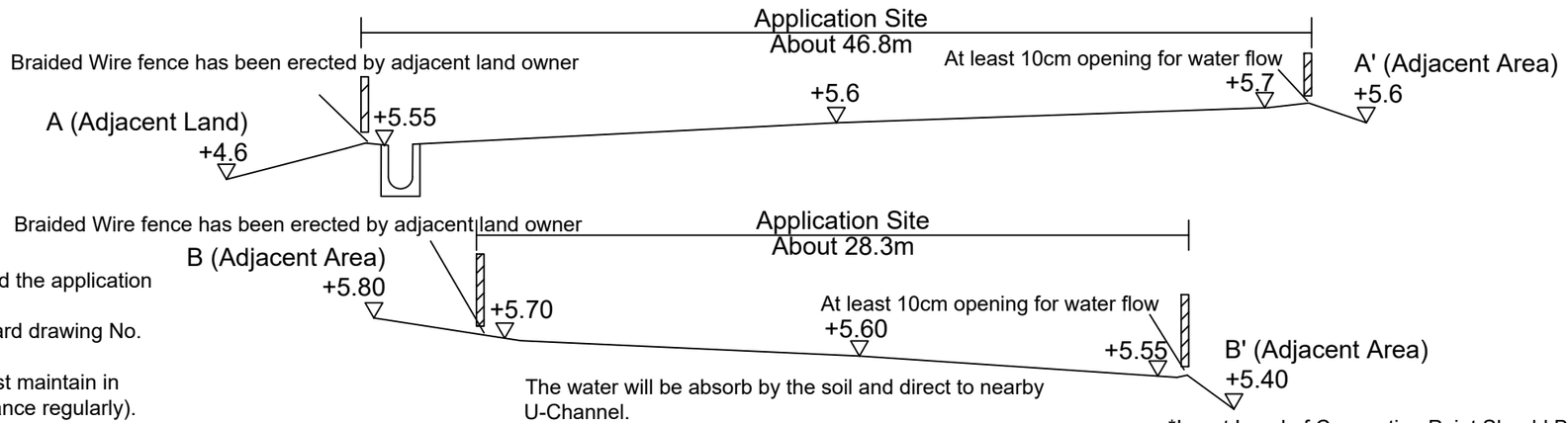


沙井俯視圖



U型明渠切面略圖





Legend:

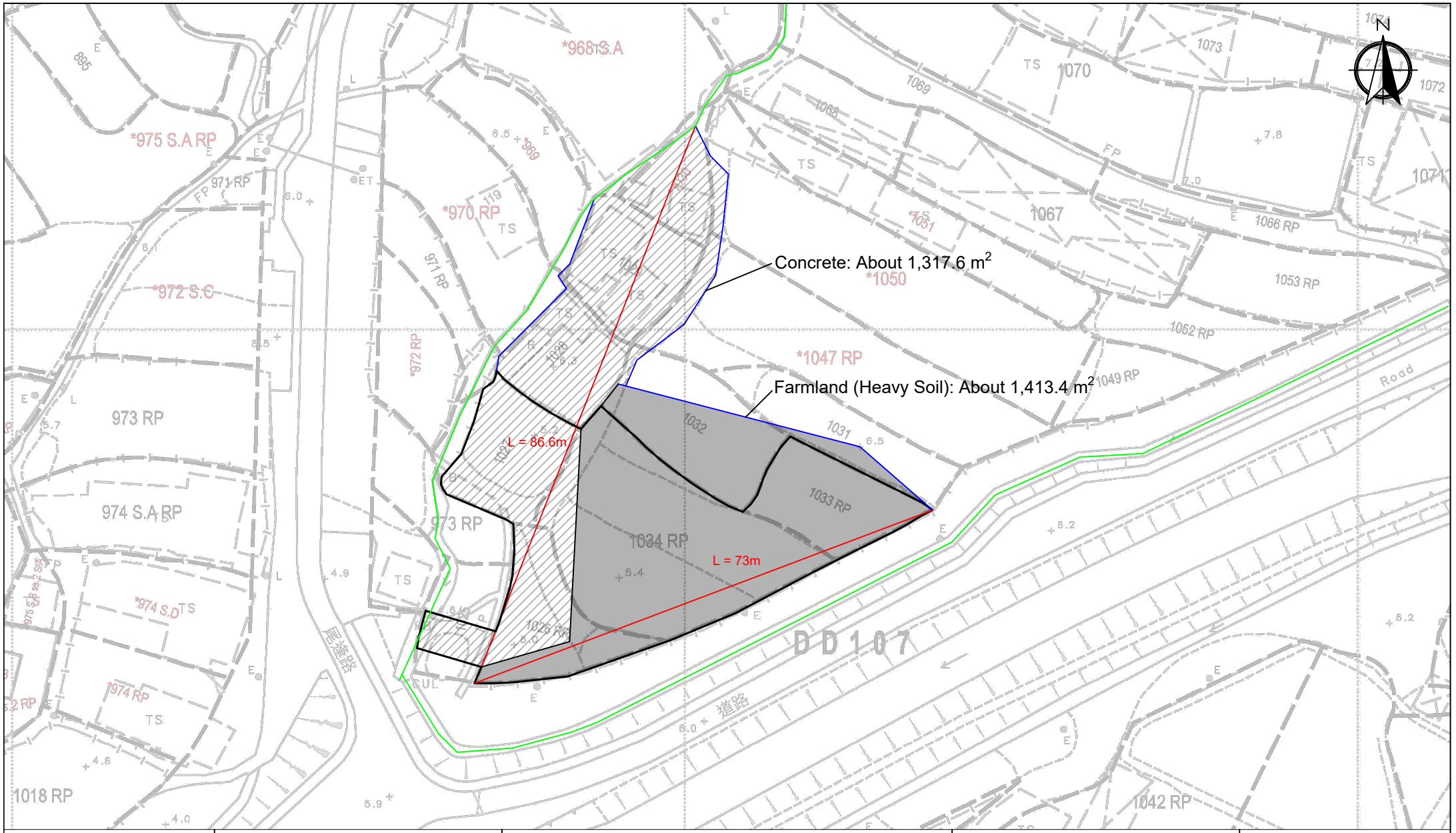
- Proposed Catchpit
- Proposed U-Channel
- Water Flow
- Existing Channel

Note:

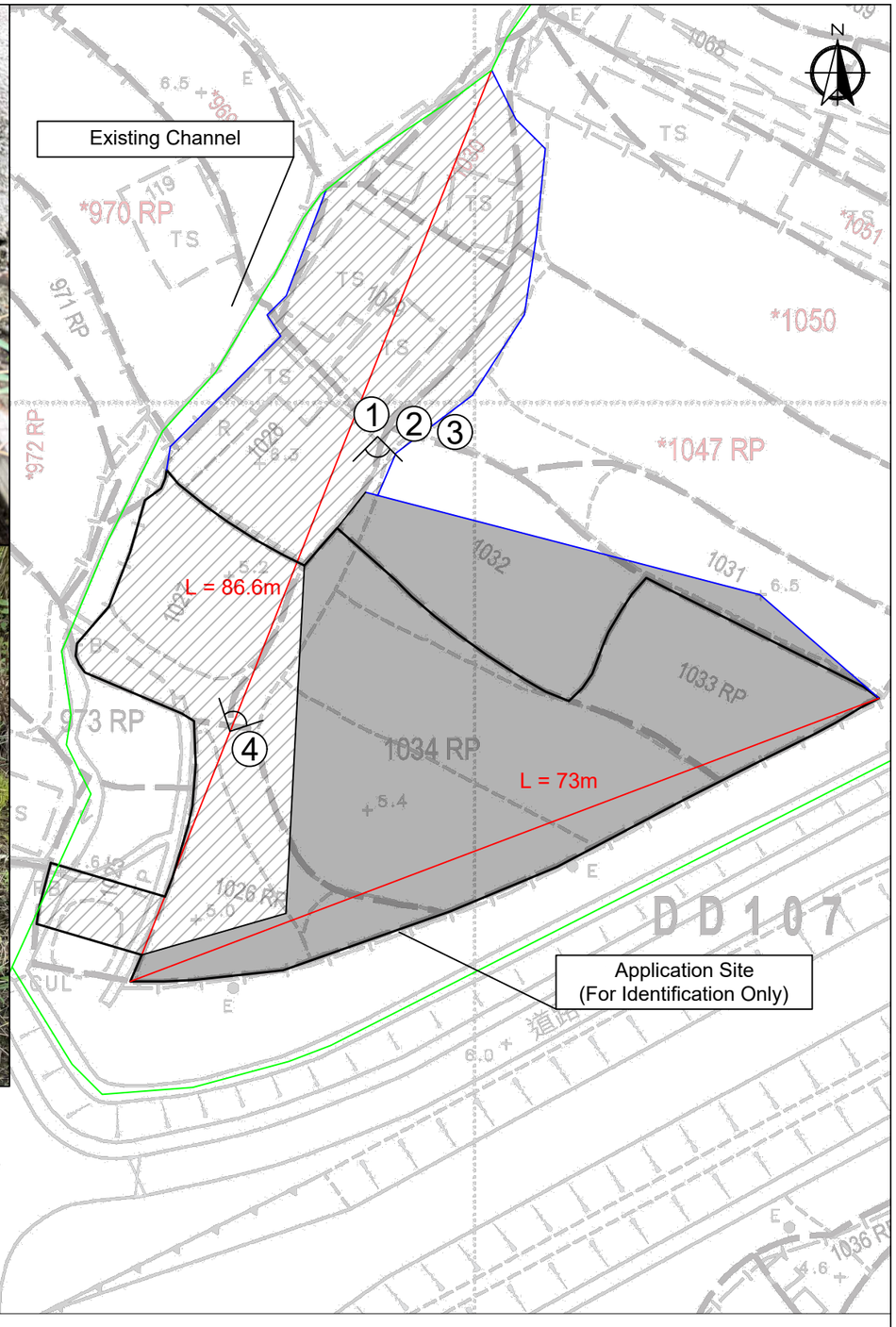
1. Adequate opening will be provided around the application site.
2. Catchpit design shall follow CEDD standard drawing No. C2406I.
3. All proposed U-channel and Catchpit must maintain in good shape (i.e. Inspection and maintenance regularly).
4. Grating Cover is provided to reduce the irregular road surface from entering the site.

*Invert Level of Connection Point Should Be Verified On Site Before Construction.
*Cover Level Are Indicative Only Which Should Be Verified On Site.

Appendix 6	Location: D.D. 107 Lot 1025 (Part), 1026 RP, 1027 (Part), 1033 RP and 1034 RP OZP: S/YL-KTN/11 District: Kam Tin North Zoning: Agriculture	Project: Proposed Temporary Place of Recreation, Sports or Culture (Hobby Farm) with Ancillary Facilities and Associated Filling of Land For a Period of 5 Years	Proposed Drainage Plan and Cross Section	Scale: 1:500 @A4	Drawing No. 6-01 For Identification Only Date: 10 September 2025



Appendix 6.2 Catchment Area	Location: D.D. 107 Lot 1025 (Part), 1026 RP, 1027 (Part), 1033 RP and 1034 RP OZP: S/YL-KTN/11 District: Kam Tin North Zoning: Agriculture	Project: Proposed Temporary Place of Recreation, Sports or Culture (Hobby Farm) with Ancillary Facilities and Associated Filling of Land For a Period of 5 Years	Around 2,731 m² Scale: 1:750 @A4	Drawing No.: 6.2-1 For Identification Only Date: 10/09/2025



Legend:

— Existing Channel

— Application Site

Captured from Lot index plan no. ags_S00000134500_0001

Appendix 6.3	Location: D.D. 107 Lot 1025 (Part), 1026 RP, 1027 (Part), 1033 RP and 1034 RP OZP: S/YL-KTN/11 District: Kam Tin North Zoning: Agriculture	Project: Proposed Temporary Place of Recreation, Sports or Culture (Hobby Farm) with Ancillary Facilities and Associated Filling of Land For a Period of 5 Years	Photos Record of Surroundings and Viewing Point	Scale: Undefined @A4	Drawing No. 6.3-1 For Identification Only Date: 10 September 2025

Catchment Area	=	1,317.6 m^2	(About)	C:	0.95 (Covered with Concrete)
	=	1413.4 m^2	(About)	C:	0.25 (Covered with Grassland (heavy soil)
	=	2,731.0 m^2	(About)		

Calculation of Desgin Runoff of the Proposed Development,
For the design of drains inside the site, For Concrete

$Q_p = 0.278C\ I\ A$

$A = 1{,}317.6\ m^2$
$= 1{,}317.6\ m^2$
$= 0.0013176\ km^2$

$t = 0.14465L/H^{0.2}A^{0.1}$
$= 0.14465*86.6/80^{0.2}*1317.6^{0.1}$
$= 6.810$ min

$i = 1.111*a/(t+b)^c$
$= 1.111*505.5/(6.81+3.29)^{0.355}$
$= 247.11271$

(50 years return period, Table 3a, Corrigendum 2024, SDM) and (11.1% increase due to climate change)

$Q = 0.278*0.95*247*1317.6/1000000$
$= 0.0859898\ m^3/sec$
$= 5159$ lit/min

Catchment Area	=	1,317.6 m^2	(About)	C:	0.95 (Covered with Concrete)
	=	1413.4 m^2	(About)	C:	0.25 (Covered with Grassland (heavy soil)
	=	2,731.0 m^2	(About)		

Calculation of Desgin Runoff of the Proposed Development,
For the design of drains inside the site, For Grassland (Heavy Soil)

$Q_p = 0.278C\ I\ A$

A	=	1,413.4	m^2	
	=	1,413.4	m^2	
	=	0.0014134	km^2	
t	=	$0.14465L/H^{0.2}A^{0.1}$		
	=	$0.14465*73/80^{0.2}*1413.4^{0.1}$		
	=	5.701	min	
i	=	$1.111*a/(t+b)^c$		(50 years return period, Table 3a,
	=	$1.111*505.5/(5.701+3.29)^{0.355}$		Corrigendum 2024, SDM) and
	=	257.53621		(11.1% increase due to climate change)
Q	=	0.278*0.25*258*1413.4/1000000		
	=	0.0252981	m^3/sec	
	=	1518	lit/min	

Total Rainfall lit/min	=	5159	+ 1518	lit/min	
Catchment	=	6677		lit/min	

Provide 375UC (1:200) has enough capacity to accomend the runoff of the Catchment area

Check 375mm dia. Pipes by Colebrook-White Equation

By Colebrook White Equation

$$V = -\sqrt{(8gDs)}\log\left(\frac{k_s}{3.7D} + \frac{2.51v}{D\sqrt{(2gDs)}}\right)$$

where:	V	=	mean velocity (m/s)		
	g	=	gravitational acceleration (m/s^2)		
	D	=	internal pipe diameter (m)		
	k_s	=	hydraulic pipeline roughness (m)	(Table 14, from DSD SDM 2018, concrete pipe)	
	v	=	kinematic viscosity of fluid (m^2/s)	(Transitional flow and water at 15 degree celcius)	
	s	=	hydraulic gradient (energy loss per unit length due to friction)		
	g	=	9.81	m/s^2	
	D	=	0.375	m	
	k_s	=	0.00015	m	
	v	=	1.14E-06	m/s^2	
	s	=	0.01		
Therefore, design V of pipe capacit		=	2.0971193	m/s	
	Q	=	0.8VA	(0.8 factor for sedimentation)	
		=	0.2106109	m^3/s	
		=	12637	lit/min	
		>	6677	lit/min	

Provide 375mm dia. pipe (1:200) has enough capacity to accomend the runoff of the proposed development

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

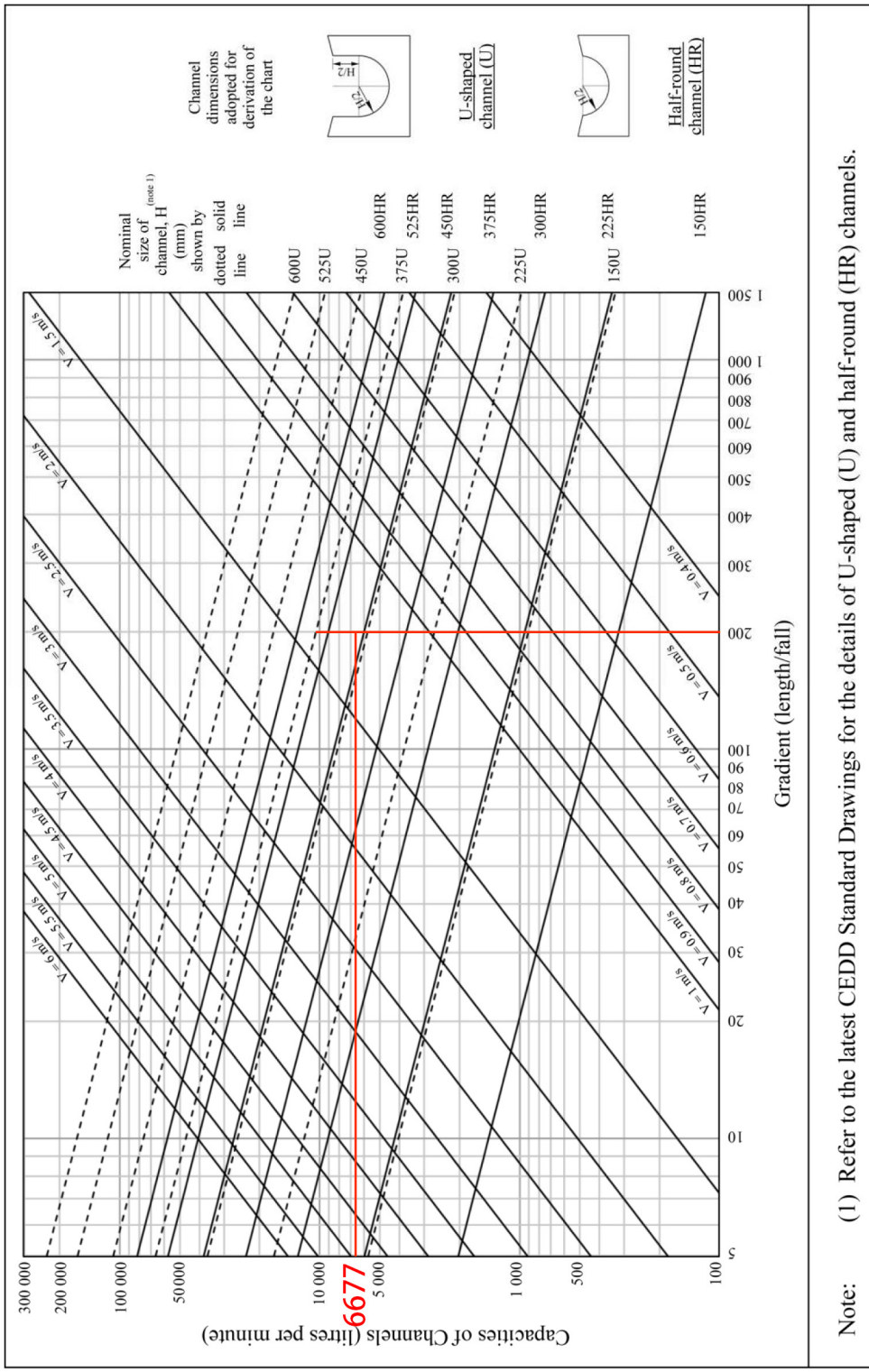
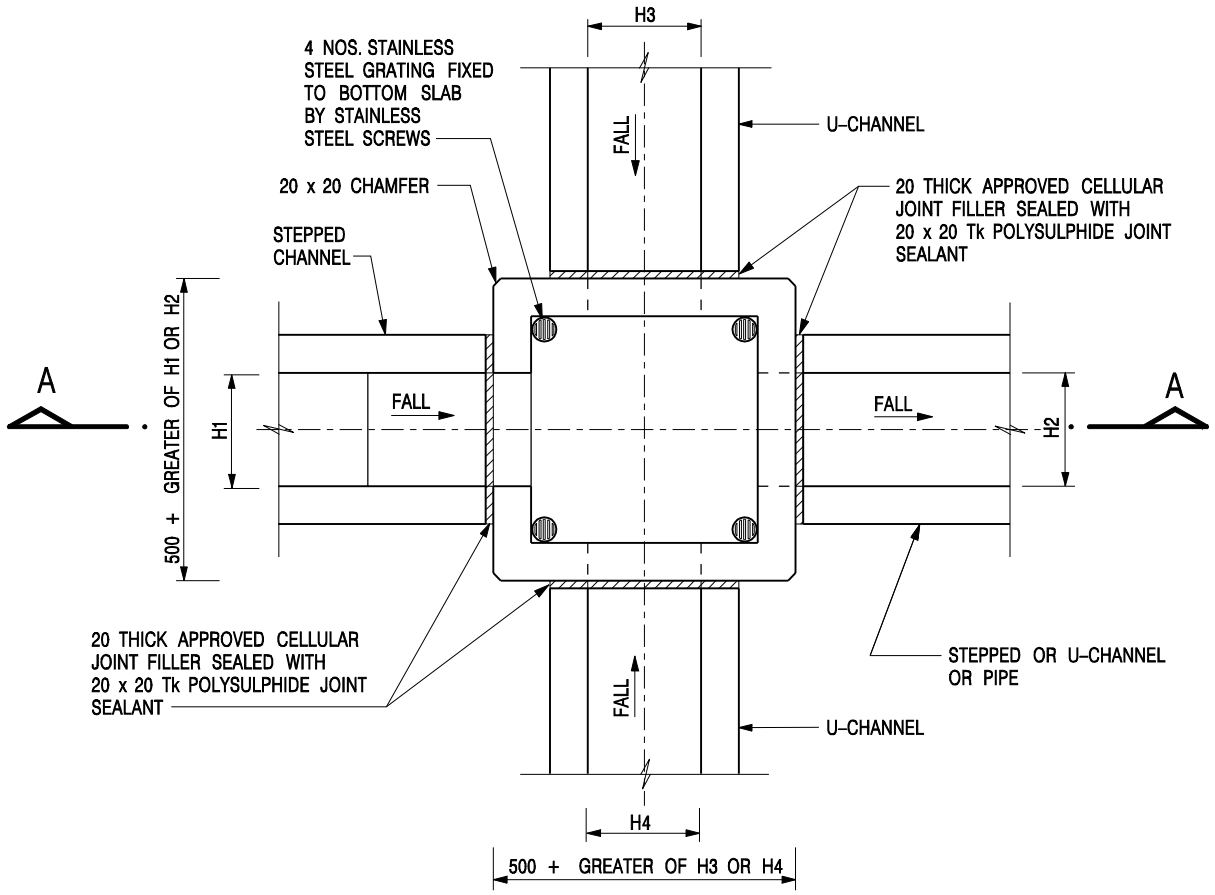


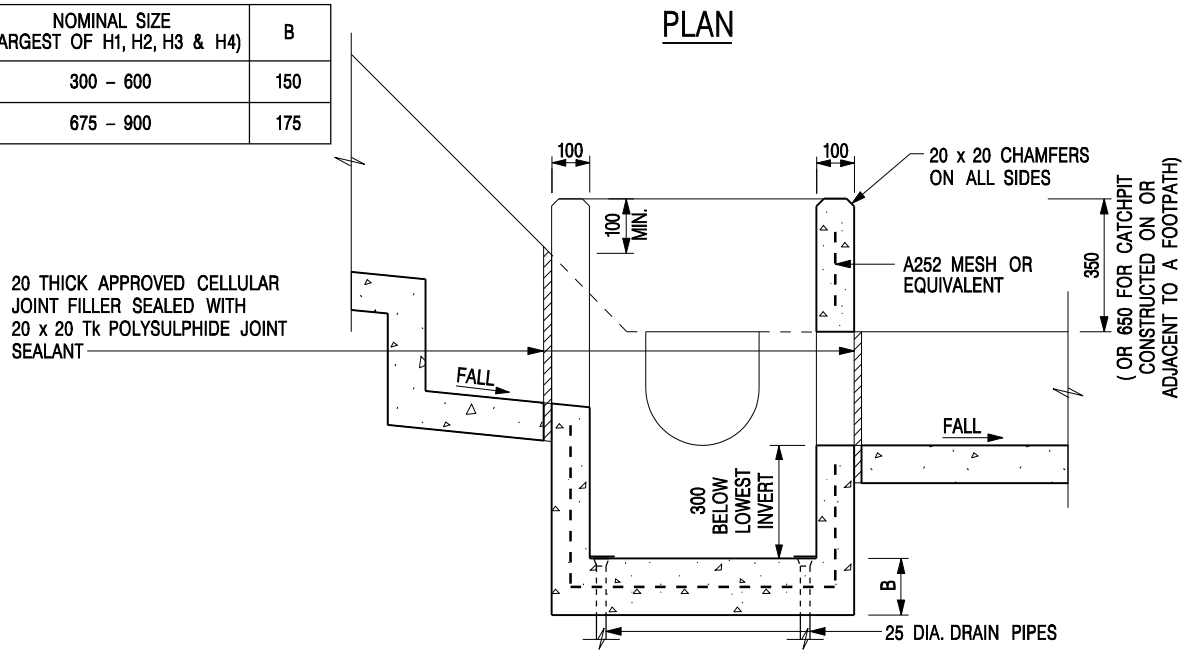
Figure 1 - Chart for the rapid design of U-shaped and half-round channels up to 600 mm

Note: (1) Refer to the latest CEDD Standard Drawings for the details of U-shaped (U) and half-round (HR) channels.



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

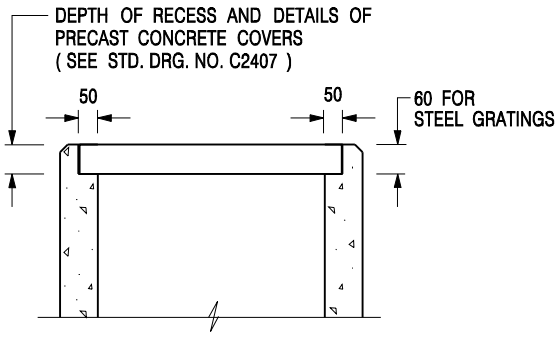
(SHEET 1 OF 2)

CEDD CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

SCALE 1 : 20

DATE JAN 1991

DRAWING NO. C2406 /1



ALTERNATIVE TOP SECTION
FOR PRECAST CONCRETE COVERS / GRATINGS

NOTES:

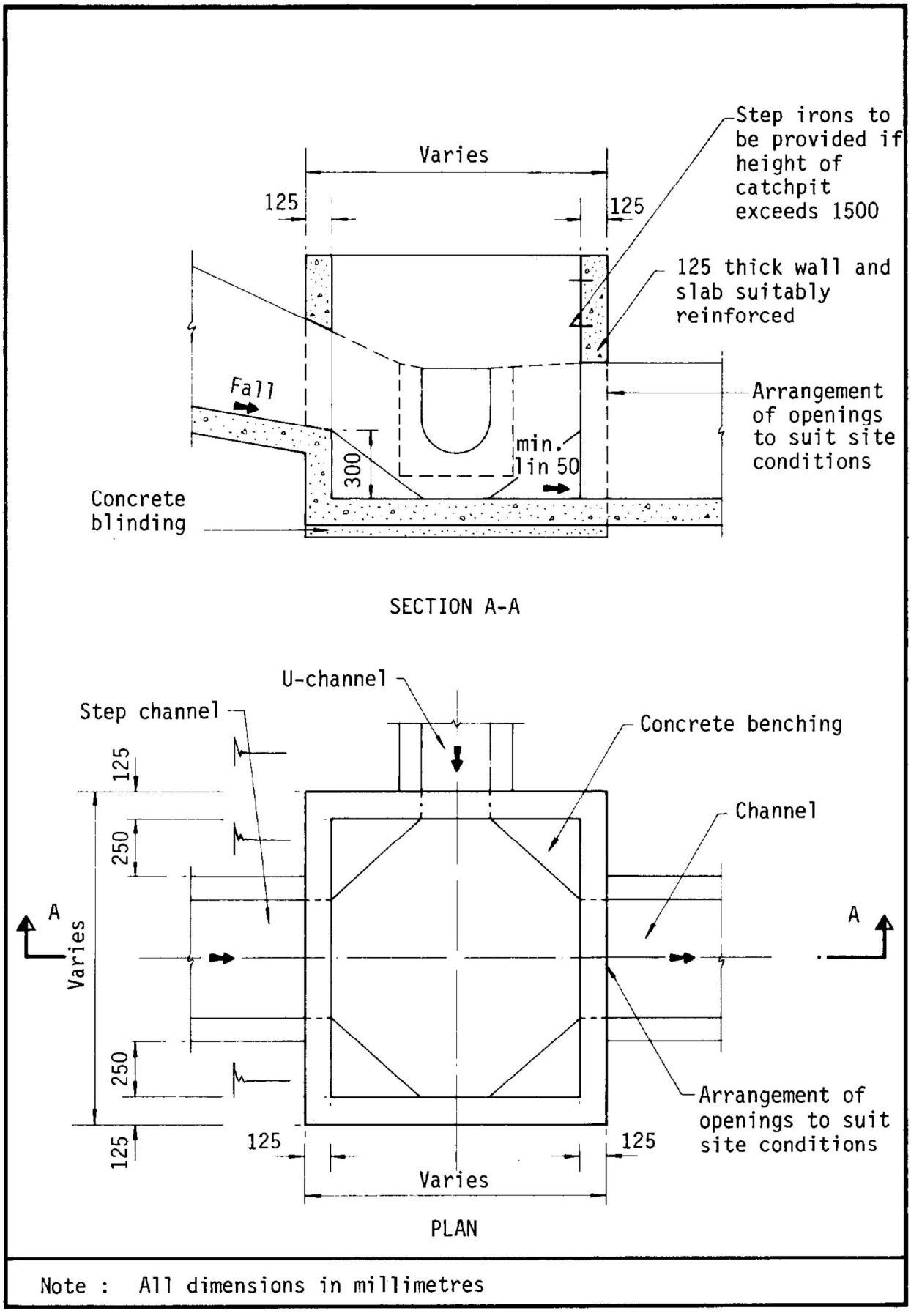
1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. ALL CONCRETE SHALL BE GRADE 20 /20.
3. CONCRETE SURFACE FINISH SHALL BE CLASS U2 OR F2 AS APPROPRIATE.
4. FOR DETAILS OF JOINT, REFER TO STD. DRG. NO. C2413.
5. CONCRETE TO BE COLOURED AS SPECIFIED.
6. UNLESS REQUESTED BY THE MAINTENANCE PARTY AND AS DIRECTED 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) 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 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 'F' ON STD. DRG. NO. C2405.
12. SUBJECT TO THE APPROVAL OF THE ENGINEER, OTHER MATERIALS CAN ALSO BE USED AS COVERS / GRATINGS.

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

CATCHPIT WITH TRAP
(SHEET 2 OF 2)

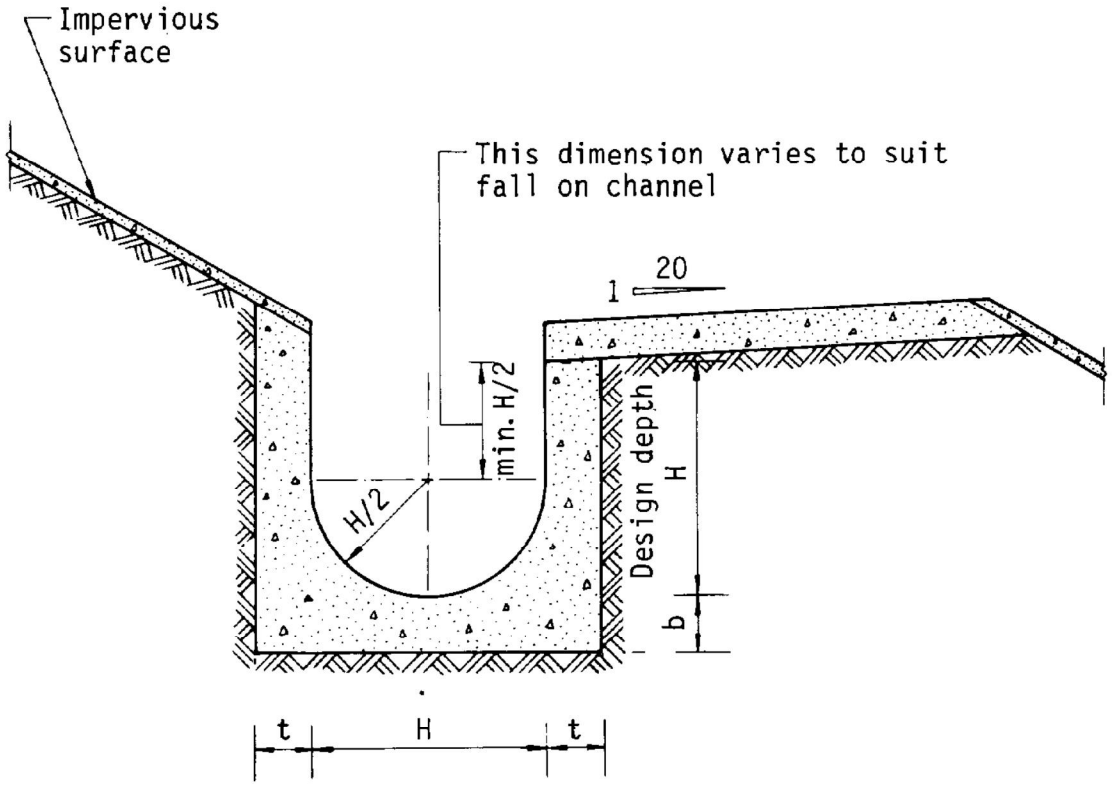
CEDD CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

SCALE 1 : 20	DRAWING NO. C2406 /2
DATE JAN 1991	



Note : All dimensions in millimetres

Figure 8.10 - Typical Details of Catchpits



Dimensions of U - channel

Nominal size of channel H (mm)	Thickness t (mm)	Thickness b (mm)
225 to 600	150	150
675 to 1200	175	225

Figure 8.11 - Typical U-channel Details

Table 3a – Storm Constants for Different Return Periods of HKO Headquarters

Return Period T (years)	2	5	10	20	50	100	200	500	1000
a	446.1	470.5	485.0	496.0	505.5	508.6	508.8	504.6	498.7
b	3.38	3.11	3.11	3.17	3.29	3.38	3.46	3.53	3.55
c	0.463	0.419	0.397	0.377	0.355	0.338	0.322	0.302	0.286

Table 3d – Storm Constants for Different Return Periods of North District Area

Return Period T (years)	2	5	10	20	50	100	200
a	439.1	448.1	454.9	462.3	474.6	486.6	501.4
b	4.10	3.67	3.44	3.21	2.90	2.67	2.45
c	0.484	0.437	0.412	0.392	0.371	0.358	0.348

Table 13 - Values of n to be used with the Manning equation

Source: Brater, E.F. & King, H.W. (1976)

Surface	**Best**	**Good**	**Fair**	**Bad**
Uncoated cast-iron pipe	0.012	0.013	0.014	0.015
Coated cast-iron pipe	0.011	0.012*	0.013*	
Commercial wrought-iron pipe, black	0.012	0.013	0.014	0.015
Commercial wrought-iron pipe, galvanized	0.013	0.014	0.015	0.017
Smooth brass and glass pipe	0.009	0.010	0.011	0.013
Smooth lockbar and welded “OD” pipe	0.010	0.011*	0.013*	
Riveted and spiral steel pipe	0.013	0.015*	0.017*	
Vitrified sewer pipe	0.010	0.013*	0.015	0.017
Common clay drainage tile	0.011	0.012*	0.014*	0.017
Glazed brickwork	0.011	0.012	0.013*	0.015
Brick in cement mortar; brick sewers	0.012	0.013	0.015*	0.017
Neat cement surfaces	0.010	0.011	0.012	0.013
Cement mortar surfaces	0.011	0.012	0.013*	0.015
Concrete pipe	0.012	0.013	0.015*	0.016
Wood stave pipe	0.010	0.011	0.012	0.013
Plank flumes - Planed	0.010	0.012*	0.013	0.014
- Unplaned	0.011	0.013*	0.014	0.015
- With battens	0.012	0.015*	0.016	
Concrete-lined channels	0.012	0.014*	0.016*	0.018
Cement-rubble surface	0.017	0.020	0.025	0.030
Dry-rubble surface	0.025	0.030	0.033	0.035
Dressed-ashlar surface	0.013	0.014	0.015	0.017
Semicircular metal flumes, smooth	0.011	0.012	0.013	0.015
Semicircular metal flumes, corrugated	0.0225	0.025	0.0275	0.030
Canals and ditches				
1. Earth, straight and uniform	0.017	0.020	0.0225*	0.025
2. Rock cuts, smooth and uniform	0.025	0.030	0.033*	0.035
3. Rock cuts, jagged and irregular	0.035	0.040	0.045	
4. Winding sluggish canals	0.0225	0.025*	0.0275	0.030
5. Dredged-earth channels	0.025	0.0275*	0.030	0.033
6. Canals with rough stony beds, weeds on earth banks	0.025	0.030	0.035*	0.040
7. Earth bottom, rubble sides	0.028	0.030*	0.033*	0.035
Natural-stream channels				
1. Clean, straight bank, full stage, no rifts or deep pools	0.025	0.0275	0.030	0.033
2. Same as (1) but some weeds and stones	0.030	0.033	0.035	0.040
3. Winding some pools and shoals, clean	0.033	0.035	0.040	0.045
4. Same as (3), lower stages, more ineffective slope and sections	0.040	0.045	0.050	0.055

Table 13 (Cont'd)

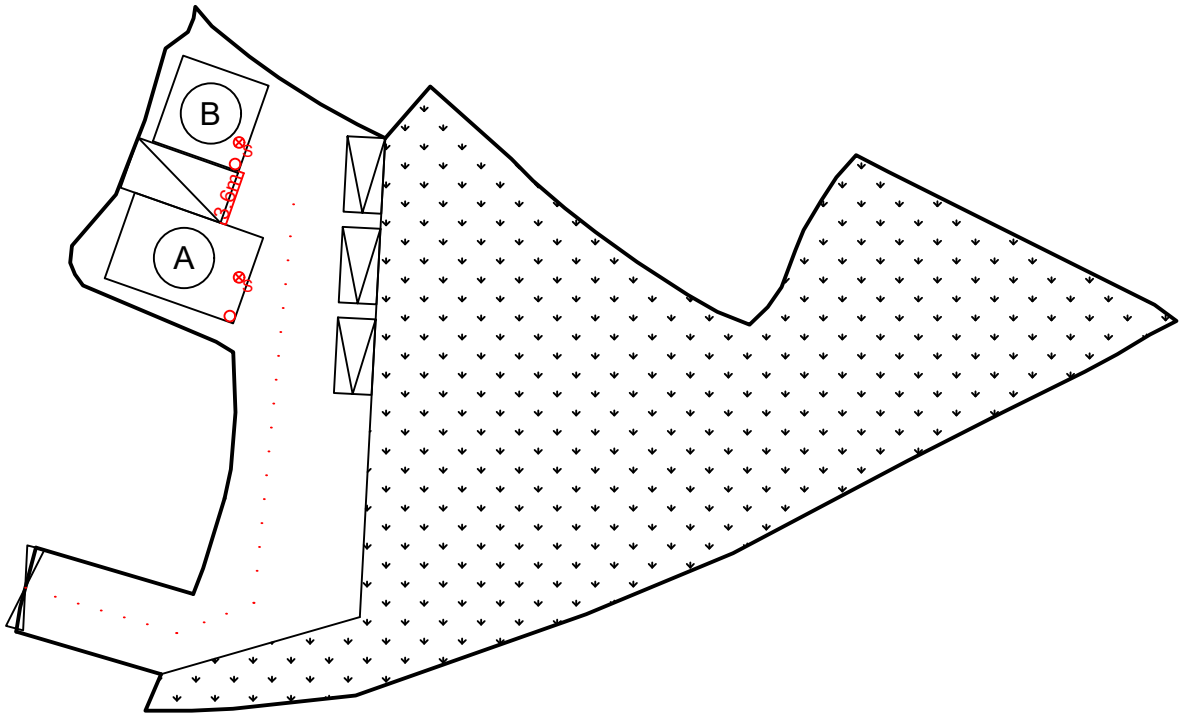
Surface	Best	Good	Fair	Bad
5. Same as (3) some weeds and stones	0.035	0.040	0.045	0.050
6. Same as (4) stony sections	0.045	0.050	0.055	0.060
7. Sluggish river reach, rather weedy or with very deep pools	0.050	0.060	0.070	0.080
8. Very weedy reaches	0.075	0.100	0.125	0.150

Notes: *Values commonly used for design.

Proposed Structures Details

	Structures	Gross Floor Area (GFA)	Height (Not Exceeding)	No. of Storey	Unit(s)
A	Farm Lounge	About 9m x 6m = 54 m^2	4m	1	1
B	Ancillary Office	About 6m x 6m = 36 m^2	4m	1	1
	Total	About 90 m^2			
	Private Car Parking Space	5m x 2.5m			3
	LGV L/UL Space	7m x 3.5m			1

N



*All FSI (includes installation/maintenance/modification/repair work) will be completed by RFSIC.
For Emergency Vehicular Access, Please see Appendix 7.1
*All the enclosed structures are provided with access for emergency vehicles to reach within 30m travel distance from the structures.

Legend:

- ○ 3 kg Portable Dry Powder Type Fire Extinguisher (2 in Total)
- ⊗S Stand-alone Fire Detector (Smoke Detector) (In accordance with the Stand-alone Fire Detector General Guidelines on Purchase, Installation & Maintenance [Sep 2021]) (2 in Total)
- · · · Emergency Vehicular Access
- Private Car Parking Space
- LGV L/UL Space

Appendix 7

Location: DD 107 Lot 1025 (Part)
DD 107 Lot 1026 RP
DD 107 Lot 1027 (Part)
DD 107 Lot 1033 RP
DD 107 Lot 1034 RP
OZP: S/YL-KTN/11
District: Kam Tin North
Zoning: Agriculture

Date: 10 September 2025

Proposed Fire Service Installation Plan
擬議消防設備安裝計劃圖

擬議臨時康體文娛場所（休閒農場）連附屬設施及相關填土工程(為期5年)

Proposed Temporary Place of Recreation, Sports or Culture (Hobby Farm) with Ancillary Facilities and Associated Filling of Land For a Period of 5 Years

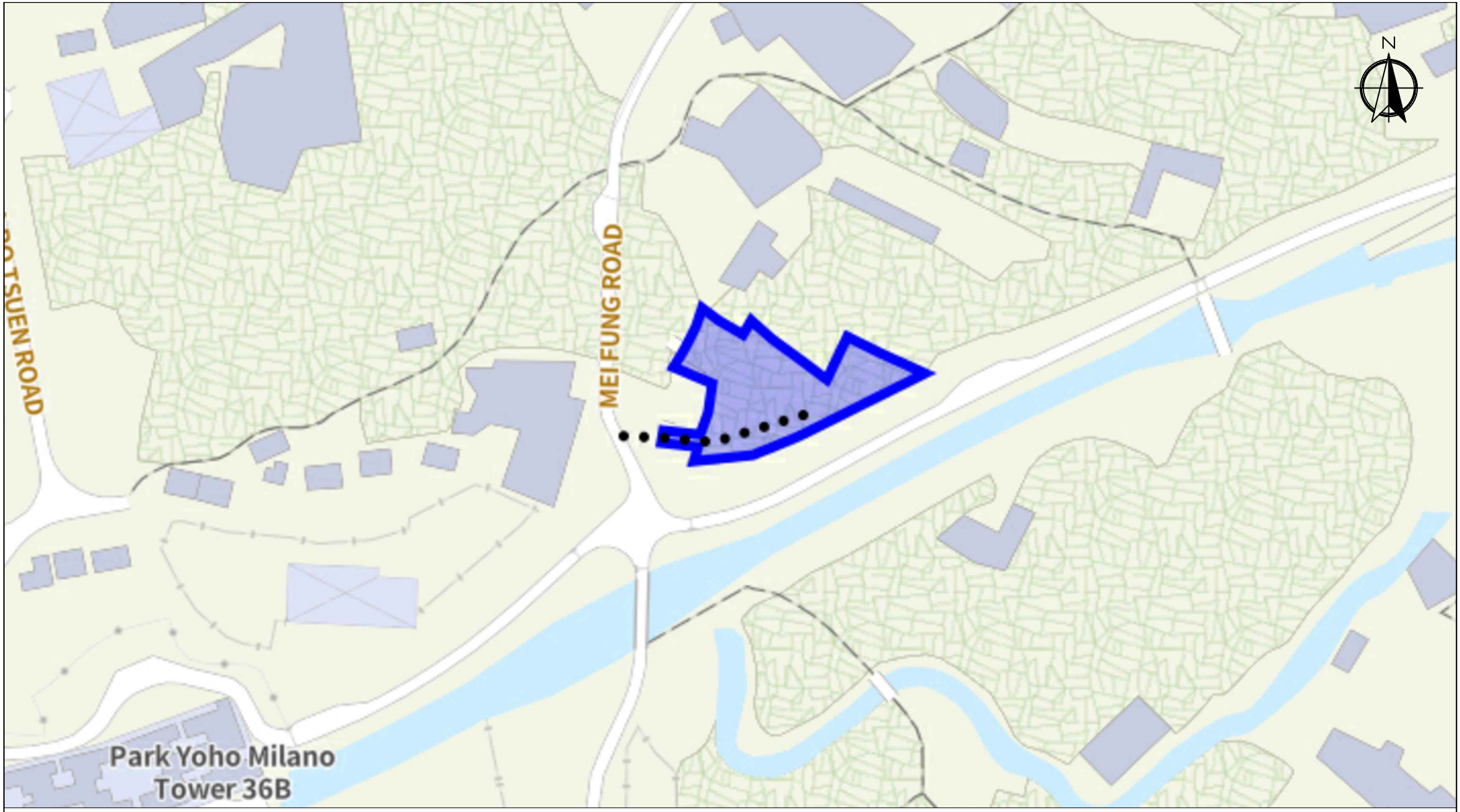
SCALE

1:500

@A4

For Identification Only

Drawing No.: 7-01



Scale: Undefined @A4

Captured from map.gov.hk on 29th December 2024

Appendix 7.1 Emergency Vehicular Access	Location: D.D. 107 Lot 1025 (Part), 1026 RP, 1027 (Part), 1033 RP and 1034 RP OZP: S/YL-KTN/11 District: Kam Tin North Zoning: Agriculture	Project: Proposed Temporary Place of Recreation, Sports or Culture (Hobby Farm) with Ancillary Facilities and Associated Filling of Land For a Period of 5 Years	Width of Mei Fung Road: 3-5m (About) with passing space Map Legend: ●●●●● Road Path —— Site Boundary	Drawing No.: 7.1-1 For Identification Only Date: 10/09/2025