[redacted]

主旨: Fw: Planning Application No. A/NE-TKP/3 - Submission of Further Information
附件: A_NE-TKP_3.pdf; Revised Application Form.pdf; Excavation Plan.pdf

From: pang hingyeun [redacted]
Sent: Monday, September 28, 2026 9:46 AM
To: tpbpd/PLAND <tpbpd@pland.gov.hk>
Subject: Planning Application No. A/NE-TKP/3 - Submission of Further Information

Dear Sir/Madam,

We responded to the department's comments and submitted Further Information

1. Thank you for your reply. Please be informed that Catchpit 22 has been updated to a Backdrop Manhole directly on the drawing.
2. We revised the dimensions for filling of land and excavation of land. Please refer to the revised form and the Excavation Plan.
3. There are no large trees at the proposed application site. Since the area had been left unattended for a long time, small weeds and small bushes have grown.

Therefore, during the construction works, we only need to clear the small weeds and bushes.

At the same time, after the project is completed, we will plant some vegetation in the relevant areas to beautify the environment.

4. About the level 3.4mPD, this is the existing ground level and also the ground level after the completion of the works.
5. We will ensure that a minimum soil cover of 450mm and 900mm should be provided for the connection pipe constructed under footpath and carriageway respectively.

This email supersedes the one sent on 25 September 2026 at 11.28 am.
Thank You !

Regards,
H.Y.Pang

從 Outlook 傳送

RESPONSE TO COMMENTS

Planning Application No. A/NE-TKP/3

Project: Proposed Village Housing
Location: D.D. 293 Lot Nos. 662 S.A, 664 S.B, 668 S.B, 669 RP & 664 S.A, 667 S.C, 668 S.A, 669 S.B, 671 S.B & 654 S.A RP, 658 RP, 659, 660 RP, 661 RP & 658 S.B, 658 S.C, 660 S.B, 660 S.C, 661 S.B, 662 S.B, 662 S.C, To Kwa Peng, Sai Kung North, New Territories
Reference submittal: Drainage Assessment Report dated 25 June 2026

1. Comments on Further Information received by TPB on 3 August 2026

DSD contact: Mr. Hugo DENG (Tel. 3965 8853)

ITEM	DESCRIPTION	RESPONSE
1	The supporting calculation should adopt the parameters stipulated in the latest Stormwater Drainage Manual Corrigendum. Please review the design calculation.	Noted. Appendix B is revised. The adopted parameters are updated to Stormwater Drainage Manual Corrigendum 1/2022 and 1/2024.
2	It is noted that the velocity in few drainage pipes is over 3 m/s. Please review.	Noted. Appendix B is revised. The maximum velocity is smaller than 3m/s.
3	The pipe material for stormwater drainage system should be concrete pipe rather than UPVC pipe. Please review.	Appendix A and B are revised. The pipe material for stormwater drainage system is concrete pipe.
4 a)	Part(s) of the proposed stormwater drainage system is/are within the Government Land near the application site(s). The applicant(s) shall seek Lands Department's permission for laying such newly proposed sewers/drains/channels and/or modifying/upgrading existing ones on Government Land outside the applicable site(s).	Part(s) of the proposed stormwater drainage system is/are within the Government Land near the application site(s). We will seek Lands Department's permission for laying such newly proposed sewers/drains/channels and/or modifying/upgrading existing ones on Government Land outside the applicable site(s).
4 b)	The proposed drainage works, whether within or outside the application site(s), should be constructed and maintained by the applicant(s) at his/their expense.	The proposed drainage work, whether within or outside the application site(s), should be constructed and maintained by our own expense.
4 c)	The applicant(s) should rectify/modify the existing drainage system if it is found to be inadequate or ineffective during operation. The applicant(s) shall also be liable for and shall indemnify Government against claims and demands arising out of damage or nuisance caused by failure of the system.	We will rectify/modify the existing drainage system if it is found to be inadequate or ineffective during operation. We will shall also be liable for and shall indemnify Government against claims and demands arising out of damage or nuisance caused by failure of the system.

ITEM	DESCRIPTION	RESPONSE
4 d)	DSD noticed that the proposed drainage connection(s) to the surrounding/downstream area(s) will run through government land and/or other private lot(s). The applicant(s) shall demonstrate that the proposed drainage construction / improvement / modification works and the operation of the drainage can be practicably implemented on site.	DSD noticed that the proposed drainage connection(s) to the surrounding/downstream area(s) will run through government land and/or other private lot(s). We will ensure that the proposed drainage construction / improvement / modification works and the operation of the drainage can be practicably implemented on site.
4 e)	Please be reminded that the domestic wastewater, such as wastewater from washing machine, kitchen, bathroom, toilet and washbasin are prohibited to discharge into stormwater drainage system.	We will ensure that domestic wastewater, such as wastewater from washing machine, kitchen, bathroom, toilet and washbasin are prohibited to discharge into stormwater drainage system.
4 f)	The applicant(s) should take all precautionary measures to prevent any disturbance, damage and pollution from the development to any parts of the existing drainage facilities in the vicinity of the application site(s). In the event of any damage to the existing drainage facilities, the applicant(s) would be held responsible for the cost of all necessary repair works, compensation and any other consequences arising therefrom.	We will take all precautionary measures to prevent any disturbance, damage and pollution from the development to any parts of the existing drainage facilities in the vicinity of the application site(s). In the event of any damage to the existing drainage facilities, we will be held responsible for the cost of all necessary repair work, compensation and any other consequences arising therefrom.
4 g)	The applicant(s) should also be advised that the limited desk-top checking on the drainage proposal covers only the fundamental aspects of the drainage design which will by no means relieve his/their obligations to ensure that (i) the proposed drainage works will not cause any adverse drainage or environmental impacts in the vicinity; and (ii) the proposed drainage works and the downstream drainage systems have the adequate capacity and are in good conditions to receive the flows collected from the application site(s).	We will ensure that the limited desk-top checking on the drainage proposal covers only the fundamental aspects of the drainage design which will by no means relieve his/their obligations to ensure that (i) the proposed drainage works will not cause any adverse drainage or environmental impacts in the vicinity; and (ii) the proposed drainage works and the downstream drainage systems have the adequate capacity and are in good conditions to receive the flows collected from the application site(s).
5	Please advise the level of existing ground profile and indicate on relevant drawing(s) as appropriate.	Please refer to the Construction Proposal.
6	For the drawing of Construction Proposal as submitted under FI received by TPB on 8.7.2026, please indicate the top and bottom level (in mPD) of the proposed stormwater drain discharge point, the thickness of concrete cover, the top level of the sand and gravel layer, and the top level of footpath on the said drawing.	Please refer to the Construction Proposal.

ITEM	DESCRIPTION	RESPONSE
7	Please advise whether the proposal would involve clearance of vegetation and/or removal of tree(s).	There are no large trees at the proposed application site. Since the area had been left unattended for a long time, small weeds and small bushes have grown. Therefore, during the construction works, we only need to clear the small weeds and bushes. At the same time, after the project is completed, we will plant some vegetation in the relevant areas to beautify the environment.
8	Please advise the location and status (i.e. whether they are existing or proposed house(s)/development(s), and whether permission from LandsD has obtained) of house(s)/development(s) to be connected to the proposed stormwater drain.	There are currently two small houses that have been completed, but the rainwater drainage channels for these houses have not yet been finished. In addition, in this village we already have about 10 small houses that have been approved by the Lands Department. However, due to problems with the drainage outlets, we have been unable to obtain the commencement permit. For details, please refer to the attached proposed small house plan.

2. Preliminary comments on draft Further Information dated 29 June 2026.

ITEM	DESCRIPTION	RESPONSE
1	Section 2.1 (4) refers. The proposed stormwater drain will adopt concrete pipes with flexible joints. However, this is different with the drawings in Appendix A. Please clarify.	Appendix A is revised. The pipe material for stormwater drainage system is concrete pipe.
2	Part(s) of the proposed stormwater drainage system is/are within the private lot(s) near the application site. The applicant(s) shall resolve any conflict / disagreement with relevant lot owner(s) and seek Lands Department's permission for laying new drains/channels and/or modifying/upgrading existing ones in other private lot(s) or on Government land (where required) outside the application site(s).	Noted.
3	Warm reminder from PlanD: any response to departmental comments or further information should make referece to Town Planning Board Guidelines TPB PG-No. 32B and be submitted to TPB with a copy to the Planning Department by the stated deadline.	Noted.

Drainage Assessment Report

Project:
Proposed Village Housing

Location:
D.D. 293 Lot Nos. 662 S.A, 664 S.B, 668 S.B, 669 RP & 664 S.A, 667 S.C, 668 S.A, 669 S.B, 671 S.B & 654 S.A RP, 658 RP, 659, 660 RP, 661 RP & 658 S.B, 658 S.C, 660 S.B, 660 S.C, 661 S.B, 662 S.B, 662 S.C, To Kwa Peng, Sai Kung North, New Territories.

Proposed by

M&D Planning and Construction Consultant Ltd.

Date: 17 August 2026

1. Introduction

This report assesses the drainage design for the proposed village housing development, with particular focus on the use of a **surface channels, underground sewer and 1200mm open channel** for stormwater management.

2. Design Criteria

2.1. Gravity Pipe

In General, drainage design will be carried out in accordance with the criteria set out in the Stormwater Drainage Manual (Drainage Services Department, 2018) and Corrigendum No. 1/2022 and Corrigendum No. 1/2024. The proposed design criteria to be adopted for design of this stormwater drainage and factors which have been considered are discussed below.

1. All hydraulic design is based on Stormwater Drainage Manual and Sewerage Manual published by Drainage Services Department and the relevant Building Regulations.

2. Return periods – The following Return Period has been adopted.

   Stormwater drainage 1 in 200 years

3. Run-off estimated for internal storm drainage has been based on the Rational Method as recommended in the Stormwater Drainage Manual with a run-off coefficient of C=0.95 for paved area and C=0.35 for grassland. However, a standard time of entry five minutes under urban conditions has been adopted instead of using Brands by Williams formula to estimate the time of concentration as this was derived originally from data for moderately sized rural catchment and include flow time natural water courses.

4. Stormwater drains should be of concrete pipes with flexible joints.

5. Colebrook-White Equation and Manning's Equation are given below for calculation of flow velocity of pipes and u-channels respectively.

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

   Manning's Equation: $$\bar{v} = \frac{R^{1/6}}{n}\sqrt{RS_f}$$

6. The roughness value used for

   Precast Concrete Pipes in Colebrook White Equation k_s = 0.6mm

   Manning's Equation N = 0.018mm

7. Wherever possible, the following limiting design velocities in pipelines will be used:-

   Minimum Design Full-bore Velocity = 0.75 m/s

   Maximum Design Full-bore Velocity = 3.00 m/s

2.2. U-Channel

The u-channels are designed adopting the same methodology as that for gravity pipes as detailed in Section 2.1. Manning's Equation will be adopted to evaluate the hydraulic capacities of the drainage channels.

3. Drainage Design

3.1. Drainage Catchment

The drainage catchment plan is included in **Appendix A**.

3.2. U-Channel Design

The hydraulic calculation of u-channels design is included in **Appendix B**.

3.3. Storm Drain Design

The hydraulic calculation of storm drain design is included in **Appendix C**.

Appendix A

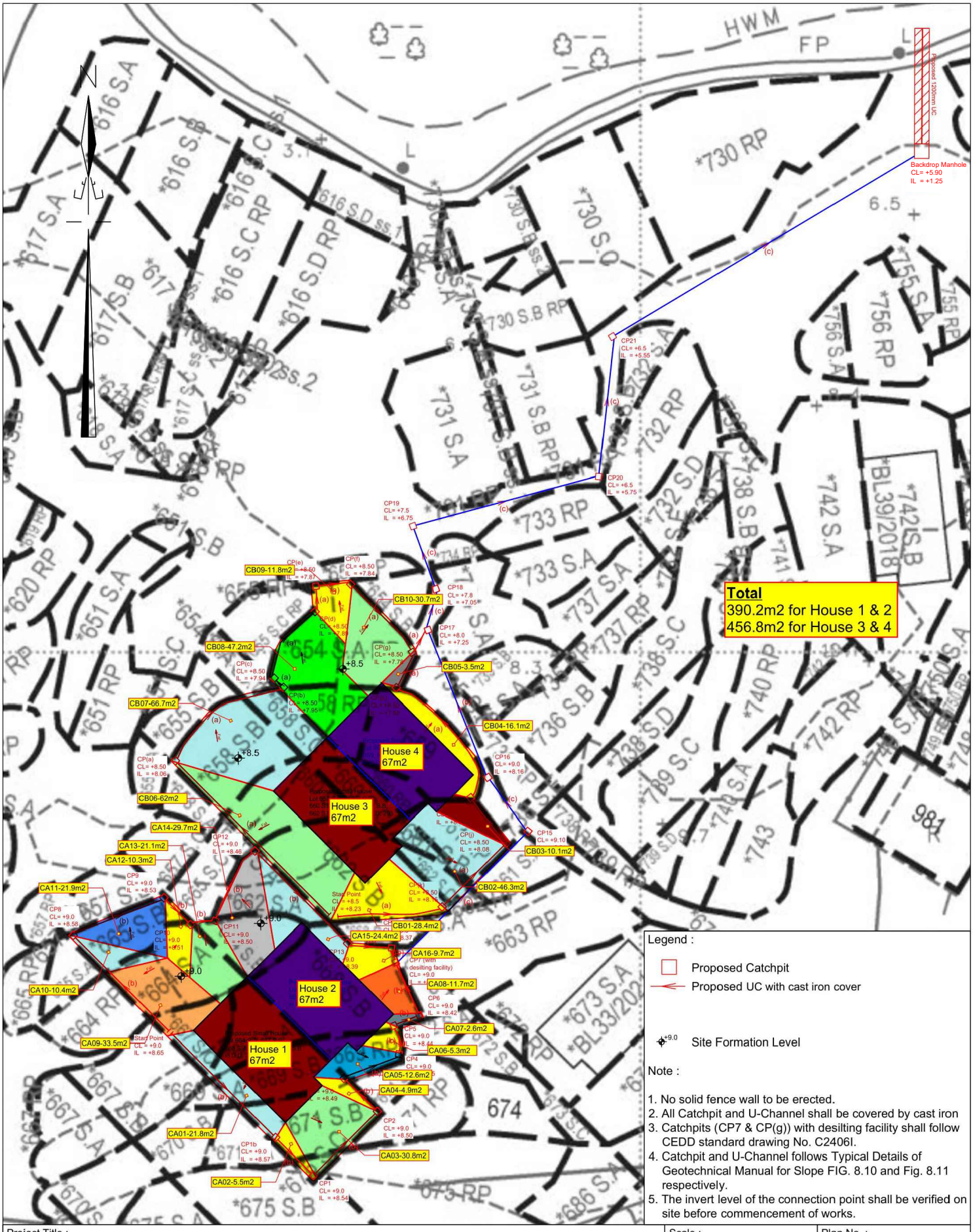
Catchment Plan

Appendix B

U-channel Hydraulic Calculations

Appendix C

Drainage Design



Project Title :

D.D. 293 Lot Nos. 662 S.A, 664 S.B, 668 S.B, 669 RP & 664 S.A, 667 S.C, 668 S.A, 669 S.B, 671 S.B & 654 S.A RP, 658 RP, 659, 660 RP, 661 RP & 658 S.B, 658 S.C, 660 S.B, 660 S.C, 661 S.B, 662 S.B, 662 S.C, To Kwa Peng, Sai Kung North, New Territories.

Scale :	Plan No. :
Not to scale	CW/TKP/DP/04
Date :	Survey Sheet No. :
25-04-2026	8-NE-16A

Drawing Title :

Proposed Stormwater Drainage Plan

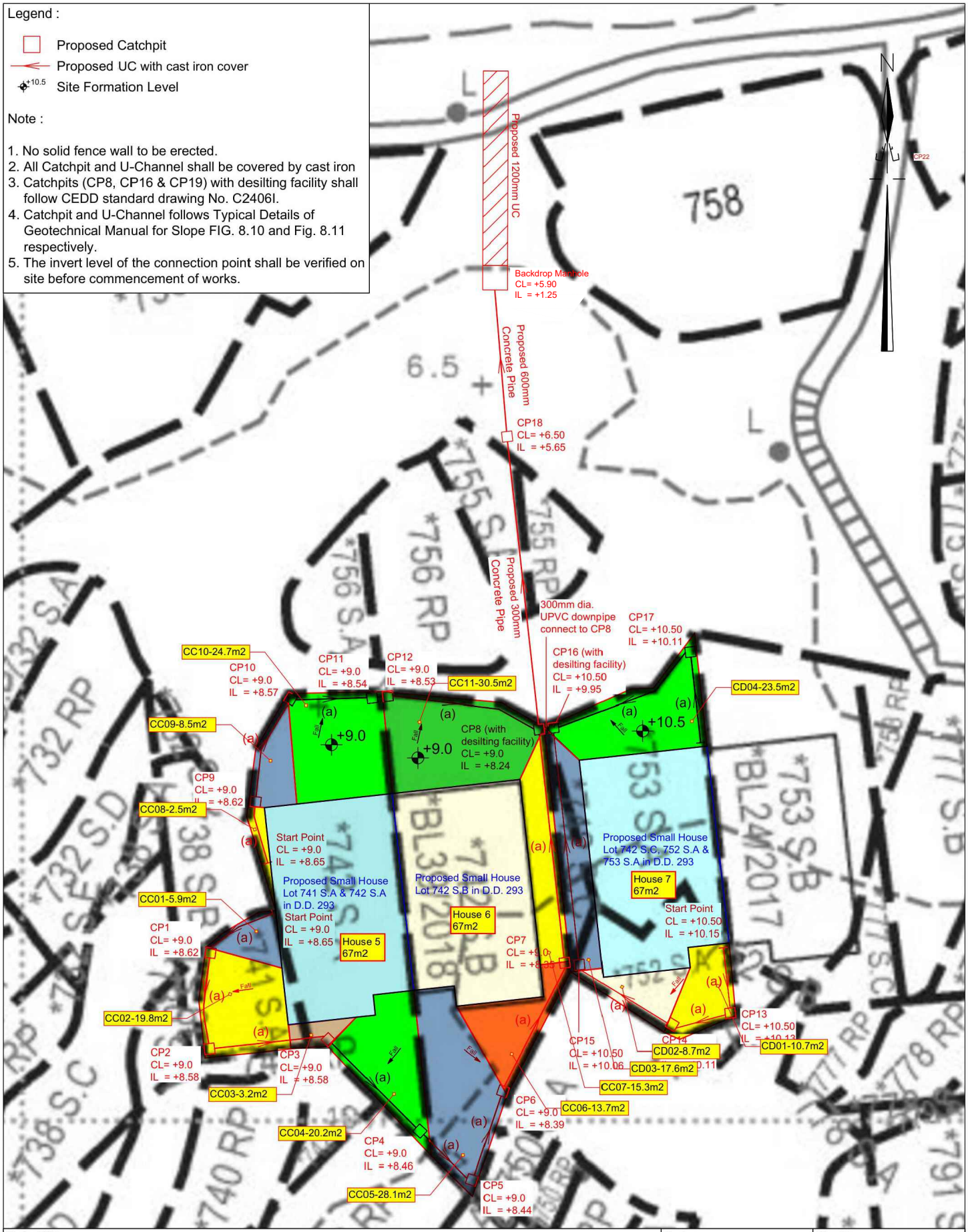
卓 弘 測 量 服 務 公 司
CHUO WANG SURVEY SERVICES COMPANY

Legend :

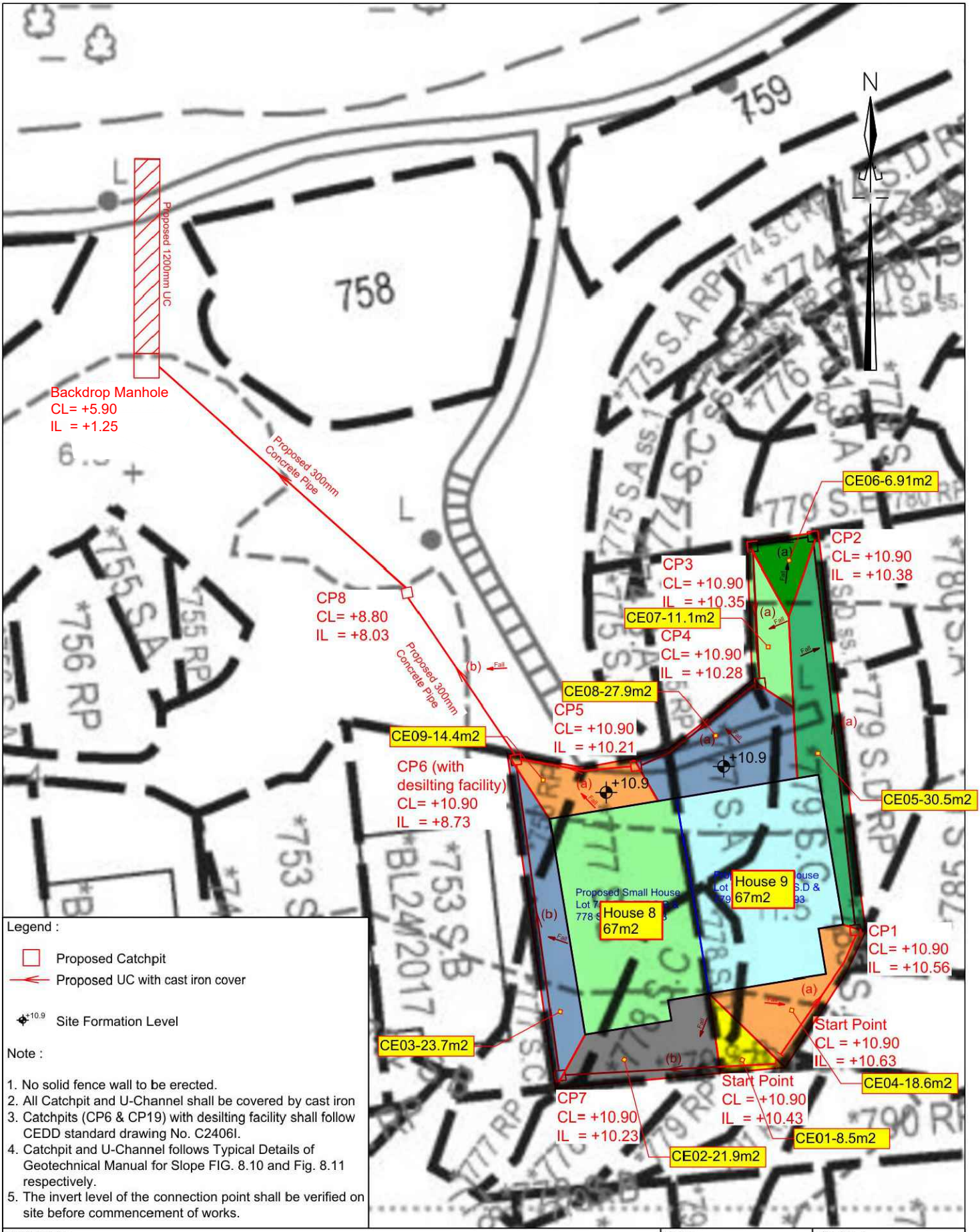
- Proposed Catchpit
- Proposed UC with cast iron cover
- +10.5 Site Formation Level

Note :

1. No solid fence wall to be erected.
2. All Catchpit and U-Channel shall be covered by cast iron
3. Catchpits (CP8, CP16 & CP19) with desilting facility shall follow CEDD standard drawing No. C2406I.
4. Catchpit and U-Channel follows Typical Details of Geotechnical Manual for Slope FIG. 8.10 and Fig. 8.11 respectively.
5. The invert level of the connection point shall be verified on site before commencement of works.



Project Title : D.D. 293 Lot Nos. 741 S.A, 742 S.A & 742 S.B & 742 S.C, 752 S.A, 753 S.A, To Kwa Peng, Sai Kung North, New Territories.	Scale : Not to scale	Plan No. : CW/TKP/DP/01
	Date : 25-04-2026	Survey Sheet No. : 8-NE-16A
Drawing Title : Proposed Stormwater Drainage Plan	卓 弘 測 量 服 務 公 司 CHUO WANG SURVEY SERVICES COMPANY	



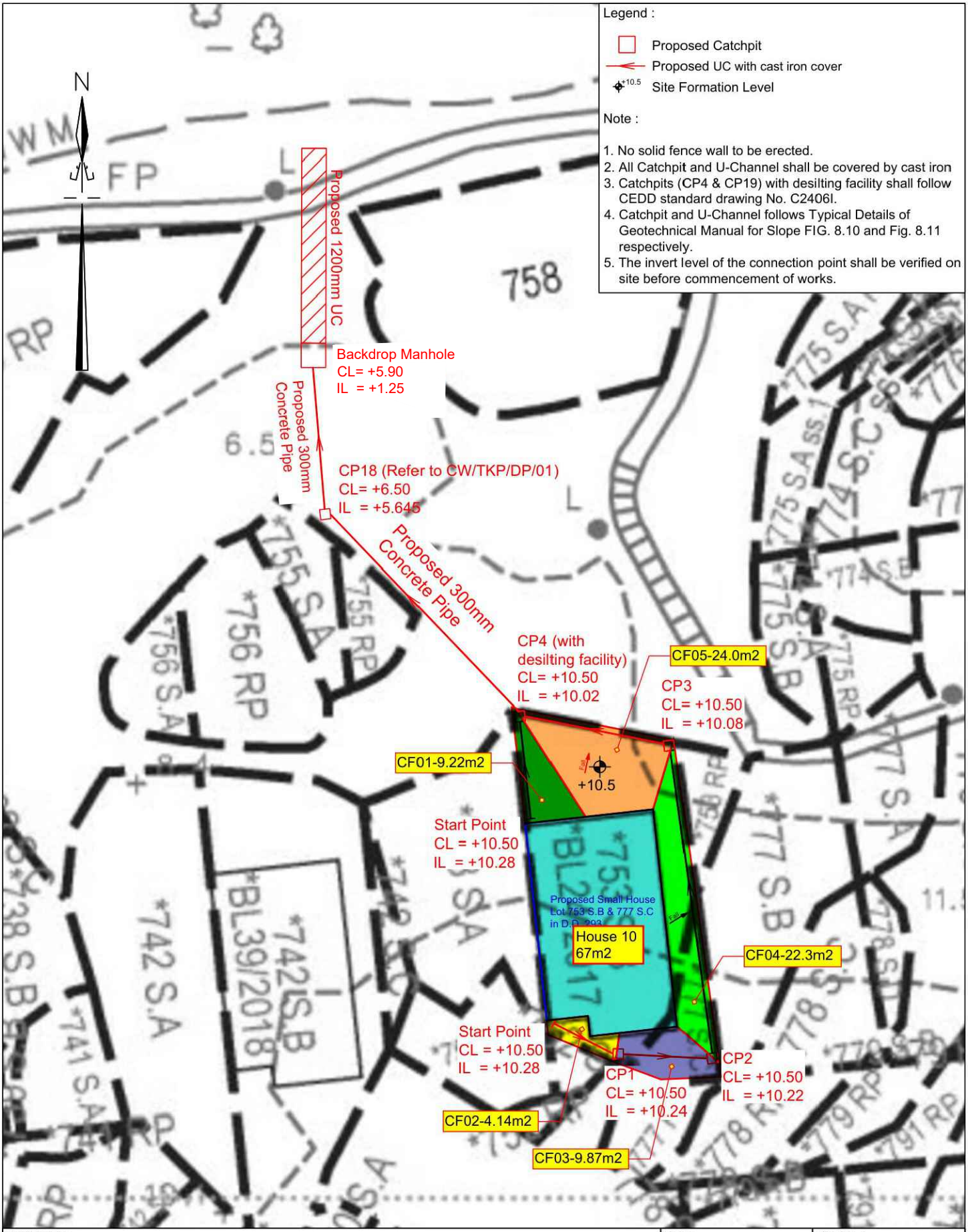
Legend :

- Proposed Catchpit
- Proposed UC with cast iron cover
- +10.9 Site Formation Level

Note :

1. No solid fence wall to be erected.
2. All Catchpit and U-Channel shall be covered by cast iron
3. Catchpits (CP6 & CP19) with desilting facility shall follow CEDD standard drawing No. C2406l.
4. Catchpit and U-Channel follows Typical Details of Geotechnical Manual for Slope FIG. 8.10 and Fig. 8.11 respectively.
5. The invert level of the connection point shall be verified on site before commencement of works.

Project Title : D.D. 293 Lot Nos. 753 RP, 777 S.B, 778 S.C & 777 S.A, 778 S.D, 779 S.C, To Kwa Peng, Sai Kung North, New Territories.	Scale : Not to scale	Plan No. : CW/TKP/DP/03
	Date : 25-04-2026	Survey Sheet No. : 8-NE-16A
Drawing Title : Proposed Stormwater Drainage Plan	卓弘測量服務公司 CHUO WANG SURVEY SERVICES COMPANY	



Project Title : D.D. 293 Lot No. 753 S.B & 777 S.C To Kwa Peng, Sai Kung North, New Territories.	Scale : Not to scale	Plan No. : CW/TKP/DP/02
	Date : 25-04-2026	Survey Sheet No. : 8-NE-16A
Drawing Title : Proposed Stormwater Drainage Plan	卓弘測量服務公司 CHUO WANG SURVEY SERVICES COMPANY	

D.D. 293, TO KWA PENG, SAI KUNG NORTH, NEW TERROTORIES
U-CHANNEL DESIGN CALCULATION

Design assumptions and parameters

1. The time of entry is taken as 5 minutes.
2. The channel is designed with a rainfall return period of 1 in 200 years. (a = 508.8; b = 3.46; c = 0.322)
3. A uniformly distributed rainfall with an intensity determined by the intensity-duration-frequency relationship is used.
4. Rainfall increase due to Climate Change for Mid 21st Century of 11.1% is adopted.
5. Adopted runoff coefficients: (Paved areas: 0.95; unpaved areas: 0.15)
6. Rational method is adopted for runoff estimation.
7. The Manning's equation is adopted for channel capacity estimation.
8. Adopted Manning's coefficient for concrete channels: 0.018 $s/m^{1/3}$

Design calculation for capacity of U-channel

Channel no.	Catchment	Incremental paved catchment area, A_{ip} (m^2)	Incremental unpaved catchment area, A_{iu} (m^2)	Cumulative paved catchment area, A_{cp} (m^2)	Cumulative unpaved catchment area, A_{cu} (m^2)	Length of designed channel section (m)	Time of flow, t_f (min)	Time of concentration, t_c (min)	Rainfall intensity, I (mm/hr)	Rainfall intensity with Climate Change , I (mm/hr)	Design runoff, Q_d (m^3/s)	Channel width, W (mm)	Upstream ground level (mPD)	Downstream ground level (mPD)	Upstream channel invert (mPD)	Downstream channel invert (mPD)	Critical channel sectional area, A (m^2)	Wetted perimeter, P (m)	Hydraulic radius, R (m)	Gradient, S_f (1 in)	Flow velocity, V (m/s)	Channel capacity, Q_c (m^3/s)	%	$Q_c > Q_d$?
Start Point to CP1b	House 1, CA01	88.8	0.0	88.8	0	12.03	0.262	5.26	253.324	281.443	0.007	225	9.000	9.000	8.650	8.570	0.073	1.053	0.070	150	0.767	0.056	11.73%	OK
CP1b to CP1	House 1, CA01, CA02	5.5	0.0	94.3	0	3.94	0.076	5.34	252.617	280.657	0.007	225	9.000	9.000	8.570	8.540	0.091	1.213	0.075	131	0.864	0.079	8.85%	OK
CP1 to CP2	House 1, CA01, CA02, CA03	30.8	0.0	125.1	0	7.02	0.154	5.49	251.208	279.092	0.009	225	9.000	9.000	8.540	8.500	0.098	1.273	0.077	176	0.759	0.074	12.38%	OK
CP2 to CP3	House 1, CA01, CA02, CA03, CA04	4.9	0.0	130.0	0	3.39	0.102	5.59	250.297	278.080	0.010	225	9.000	9.000	8.500	8.490	0.107	1.353	0.079	339	0.556	0.060	16.02%	OK
CP3 to CP4	House 1, CA01, CA02, CA03, CA04, CA05	12.6	0.0	142.6	0	4.62	0.081	5.67	249.584	277.288	0.010	225	9.000	9.000	8.490	8.450	0.109	1.373	0.080	115	0.957	0.105	9.98%	OK
CP4 to CP5	House 1, CA01, CA02, CA03, CA04, CA05, CA06	5.3	0.0	147.9	0	1.96	0.044	5.72	249.200	276.861	0.011	225	9.000	9.000	8.450	8.440	0.118	1.453	0.081	196	0.745	0.088	12.25%	OK
CP5 to CP6	House 1, CA01, CA02, CA03, CA04, CA05, CA06, CA07	2.6	0.0	150.5	0	1.81	0.027	5.75	248.961	276.595	0.011	225	9.000	9.000	8.440	8.420	0.121	1.473	0.082	91	1.101	0.133	8.28%	OK
CP6 to CP7	House 1, CA01, CA02, CA03, CA04, CA05, CA06, CA07, CA08	11.7	0.0	162.2	0	4.36	0.059	5.80	248.451	276.029	0.012	225	9.000	9.000	8.420	8.360	0.125	1.513	0.083	73	1.236	0.155	7.64%	OK
Start Point to CP8	CA09, CA10	43.9	0	43.9	0	11.03	0.245	5.25	253.474	281.610	0.003	225	9.000	9.000	8.650	8.580	0.073	1.053	0.070	158	0.749	0.055	5.94%	OK
CP8 to CP9	CA09, CA10, CA11	21.9	0	65.8	0	7.71	0.162	5.41	251.973	279.943	0.005	225	9.000	9.000	8.580	8.530	0.089	1.193	0.075	154	0.793	0.071	6.88%	OK
CP9 to CP10	CA09, CA10, CA11, CA12	10.3	0	76.1	0	2.64	0.050	5.46	251.517	279.436	0.006	225	9.000	9.000	8.530	8.510	0.100	1.293	0.078	132	0.879	0.088	6.36%	OK
CP10 to CP11	CA09, CA10, CA11, CA12, CA13	21.1	0	97.2	0	1.62	0.034	5.49	251.212	279.097	0.007	225	9.000	9.000	8.510	8.500	0.105	1.333	0.079	162	0.801	0.084	8.53%	OK
CP11 to CP12	CA09, CA10, CA11, CA12, CA13, CA14	29.7	0	126.9	0	6.34	0.130	5.62	250.049	277.804	0.009	225	9.000	9.000	8.500	8.460	0.107	1.353	0.079	159	0.813	0.087	10.68%	OK
CP12 to CP13	CA09, CA10, CA11, CA12, CA13, CA14, CA15	24.4	0	151.3	0	10.40	0.203	5.82	248.274	275.832	0.011	225	9.000	9.000	8.460	8.390	0.116	1.433	0.081	149	0.853	0.099	11.12%	OK
CP13 to CP14	CA09, CA10, CA11, CA12, CA13, CA14, CA15, CA16, House 2	76.7	0	228.0	0	3.23	0.064	5.89	247.722	275.219	0.017	225	9.000	9.000	8.390	8.370	0.132	1.573	0.084	161	0.837	0.110	15.01%	OK
CP14 to CP7	CA09, CA10, CA11, CA12, CA13, CA14, CA15, CA16, House 2	0.0	0	228.0	0	0.74	0.010	5.90	247.638	275.126	0.017	225	9.000	9.000	8.370	8.360	0.136	1.613	0.084	74	1.244	0.170	9.77%	OK

D.D. 293, TO KWA PENG, SAI KUNG NORTH, NEW TERROTORIES
DRAIN PIPE DESIGN CALCULATION

MANHOLE		PIPE			INVERT LEVEL		FINISHED ROAD LEVEL	PIPE BEDDING	PIPE																				
MANHOLE NO.	MANHOLE TYPE	LENGTH	DIAMETER	GRADIENT	INLET	OUTLET			ROUGHNESS Ks (mm)	PERCENTAGE AREA ALLOWANCE FOR SEDIMENT	FLOW AREA, A (m^2)	WETTED PERIMETER, P(m)	HYDRAULIC RADIUS, R(m)	FULL FLOW VELOCITY, V (m/s)	0.75<V<3?	CAPACITY WITH SEDIMENT, Qc (m^3/s)	PIPE MATERIAL	PAVED CATCHMENT AREA (m^2)		UNPAVED CATCHMENT AREA (m^2)		DISCHARGE FROM OTHERS		TIME OF FLOW, tf (MIN)	TIME OF CONC., tc (MIN)	INTENSITY (mm/HOUR)	DISCHARGE WITH CLIMATE CHANGE 11.1%, Q (m^3/s)	% OF CAPACITY	Qc>Q?
		m	mm	1 IN	mPD	mPD	mPD											INCREMENTAL	CUMULATIVE	INCREMENTAL	CUMULATIVE	INCREMENTAL	CUMULATIVE						
CP7	Trapped					8.360	9.000											390.2000	390.2000		0.0000		0.0000						
		15.05	300	100				S I	0.60	0.10	0.07	0.94	0.08	1.57	OK	0.10	CONCRETE							0.160	5.000	255.820	0.029	29.3%	OK
CP15	Catchpit				8.210	8.210	9.100												390.2000		0.0000		0.0000						
		5.10	300	102				S I	0.60	0.10	0.06	0.94	0.07	1.45	OK	0.08	CONCRETE							0.058	5.058	255.253	0.029	35.1%	OK
CP16	Catchpit				8.160	7.760	9.000												390.2000		0.0000		0.0000						
		12.78	300	25				S I	0.60	0.10	0.06	0.94	0.07	2.95	OK	0.17	CONCRETE							0.072	5.131	254.559	0.029	17.2%	OK
CP17	Catchpit				7.250	7.170	8.000											456.8000	847.0000		0.0000		0.0000						
		3.06	300	26				S I	0.60	0.10	0.06	0.94	0.07	2.92	OK	0.17	CONCRETE							0.017	5.148	254.393	0.063	37.7%	OK
CP18	Catchpit				7.050	6.950	7.800												847.0000		0.0000		0.0000						
		5.07	300	25				S I	0.60	0.10	0.06	0.94	0.07	2.93	OK	0.17	CONCRETE							0.029	5.177	254.119	0.063	37.6%	OK
CP19	Catchpit				6.750	6.350	7.500												847.0000		0.0000		0.0000						
		15.55	300	26				S I	0.60	0.10	0.06	0.94	0.07	2.90	OK	0.17	CONCRETE							0.089	5.266	253.278	0.063	37.9%	OK
CP20	Catchpit				5.750	5.750	6.500												847.0000		0.0000		0.0000						
		11.28	300	56				S I	0.60	0.10	0.06	0.94	0.07	1.96	OK	0.11	CONCRETE							0.096	5.362	252.388	0.063	55.8%	OK
CP21	Catchpit				5.550	5.050	6.500												847.0000		0.0000		0.0000						
		29.13	300	25				B	0.60	0.10	0.06	0.94	0.07	2.93	OK	0.17	CONCRETE							0.166	5.528	250.881	0.062	37.1%	OK
CP22	Trapped Catchpit				3.900		5.900												847.0000		0.0000		0.0000						

D.D. 293, TO KWA PENG, SAI KUNG NORTH, NEW TERROTORIES
U-CHANNEL DESIGN CALCULATION

Design assumptions and parameters

1. The time of entry is taken as 5 minutes.
2. The channel is designed with a rainfall return period of 1 in 200 years. (a = 501.4; b = 2.45; c = 0.348)
3. A uniformly distributed rainfall with an intensity determined by the intensity-duration-frequency relationship is used.
4. Rainfall increase due to Climate Change for Mid 21st Century of 11.1% is adopted.
5. Adopted runoff coefficients: (Paved areas: 0.95; unpaved areas: 0.15)
6. Rational method is adopted for runoff estimation.
7. The Manning's equation is adopted for channel capacity estimation.
8. Adopted Manning's coefficient for concrete channels: 0.018 $s/m^{1/3}$

Design calculation for capacity of U-channel

Channel no.	Catchment	Incremental paved catchment area, A_{ip} (m^2)	Incremental unpaved catchment area, A_{iu} (m^2)	Cumulative paved catchment area, A_{cp} (m^2)	Cumulative unpaved catchment area, A_{cu} (m^2)	Length of designed channel section (m)	Time of flow, t_f (min)	Time of concentration, t_c (min)	Rainfall intensity, I (mm/hr)	Rainfall intensity with Climate Change , I (mm/hr)	Design runoff, Q_d (m^3/s)	Channel width, W (mm)	Upstream ground level (mPD)	Downstream ground level (mPD)	Upstream channel invert (mPD)	Downstream channel invert (mPD)	Critical channel sectional area, A (m^2)	Wetted perimeter, P (m)	Hydraulic radius, R (m)	Gradient, S_f (1 in)	Flow velocity, V (m/s)	Channel capacity, Q_c (m^3/s)	%	$Q_c > Q_d$?
Start Point to CP1	CC01	5.9	0.0	5.9	0	12.03	0.427	5.43	244.483	271.620	0.000	225	9.000	9.000	8.650	8.620	0.073	1.053	0.070	401	0.469	0.034	1.23%	OK
CP1 to CO2	CC01, CC02	19.8	0.0	25.7	0	3.94	0.068	5.49	243.754	270.811	0.002	225	9.000	9.000	8.620	8.580	0.080	1.113	0.072	99	0.968	0.078	2.37%	OK
CP2 to CP3	CC01, CC02, CC03	3.2	0.0	28.9	0	7.02	0.111	5.61	242.577	269.503	0.002	225	9.000	9.000	8.580	8.500	0.089	1.193	0.075	88	1.051	0.094	2.20%	OK
CP3 to CP4	CC01, CC02, CC03, CC04	20.2	0.0	49.1	0	3.39	0.051	5.66	242.047	268.914	0.003	225	9.000	9.000	8.500	8.460	0.107	1.353	0.079	85	1.112	0.119	2.93%	OK
CP4 to CP5	CC01, CC02, CC03, CC04	0.0	0.0	49.1	0	4.62	0.113	5.77	240.889	267.627	0.003	225	9.000	9.000	8.460	8.440	0.116	1.433	0.081	231	0.684	0.079	4.37%	OK
CP5 to CP6	CC01, CC02, CC03, CC04, CC05	28.1	0.0	77.2	0	1.96	0.020	5.79	240.690	267.406	0.005	225	9.000	9.000	8.440	8.390	0.121	1.473	0.082	39	1.672	0.202	2.70%	OK
CP6 to CP7	CC01, CC02, CC03, CC04, CC05, CC06, House 6	80.7	0.0	157.9	0	1.81	0.019	5.81	240.496	267.191	0.011	225	9.000	9.000	8.390	8.350	0.132	1.573	0.084	45	1.581	0.208	5.34%	OK
CP7 to CP8	CC01, CC02, CC03, CC04, CC05, CC06, CC07, House 6	15.3	0.0	173.2	0	4.36	0.043	5.85	240.066	266.714	0.012	225	9.000	9.000	8.350	8.240	0.141	1.653	0.085	40	1.708	0.241	5.07%	OK
Start Point to CP9	House 5, CC08	69.5	0	69.5	0	11.03	0.375	5.37	245.048	272.249	0.005	225	9.000	9.000	8.650	8.620	0.073	1.053	0.070	368	0.490	0.036	13.89%	OK
CP9 to CP10	House 5, CC08, CC09	8.5	0	78.0	0	7.71	0.166	5.54	243.264	270.266	0.006	225	9.000	9.000	8.620	8.570	0.080	1.113	0.072	154	0.774	0.062	8.98%	OK
CP10 to CP11	House 5, CC08, CC09, CC10	24.7	0	102.7	0	2.64	0.042	5.58	242.824	269.777	0.007	225	9.000	9.000	8.570	8.540	0.091	1.213	0.075	88	1.056	0.096	7.58%	OK
CP11 to CP12	House 5, CC08, CC09, CC10	0.0	0	102.7	0	1.62	0.034	5.62	242.465	269.379	0.007	225	9.000	9.000	8.540	8.530	0.098	1.273	0.077	162	0.790	0.077	9.42%	OK
CP12 to CP8	House 5, CC08, CC09, CC10, CC11	30.5	0	133.2	0	6.34	0.049	5.67	241.956	268.813	0.009	225	9.000	9.000	8.530	8.240	0.100	1.293	0.078	22	2.161	0.217	4.36%	OK

D.D. 293, TO KWA PENG, SAI KUNG NORTH, NEW TERROTORIES
DRAIN PIPE DESIGN CALCULATION

MANHOLE		PIPE			INVERT LEVEL		FINISHED ROAD LEVEL	PIPE BEDDING	PIPE																			
MANHOLE NO.	MANHOLE TYPE	LENGTH	DIAMETER	GRADIENT	INLET	OUTLET			ROUGHNESS Ks (mm)	PERCENTAGE AREA ALLOWANCE FOR SEDIMENT	FLOW AREA, A (m^2)	WETTED PERIMETER, P(m)	HYDRAULIC RADIUS, R(m)	FULL FLOW VELOCITY, V (m/s)	0.75<V<3?	CAPACITY WITH SEDIMENT, Qc (m^3/s)	PIPE MATERIAL	PAVED CATCHMENT AREA (m^2)		UNPAVED CATCHMENT AREA (m^2)		DISCHARGE FROM OTHERS		TIME OF FLOW, tf (MIN)	TIME OF CONC., tc (MIN)	INTENSITY (mm/HOUR)	DISCHARGE WITH CLIMATE CHANGE 11.1%, Q (m^3/s)	% OF CAPACITY	Qc>Q?
																		INCREMENTAL	CUMULATIVE	INCREMENTAL	CUMULATIVE	INCREMENTAL	CUMULATIVE						
		m	mm	1 IN	mPD	mPD	mPD																					
CP8	Trapped Catchpit					8.240	9.000											433.9000	433.9000		0.0000		0.0000						
		14.04	300	100				S I	0.60	0.10	0.07	0.94	0.08	1.57	OK	0.10	CONCRETE							0.149	5.000	255.820	0.033	32.5%	OK
CP18	Catchpit				8.100	5.650	6.500											136.5300	570.4300		0.0000		0.0000						
		7.02	300	100				S I	0.60	0.10	0.06	0.94	0.07	1.47	OK	0.08	CONCRETE							0.080	5.080	255.048	0.043	50.7%	OK
CP22	Trapped Catchpit				5.580	3.900	5.900												570.4300		0.0000		0.0000						

D.D. 293, TO KWA PENG, SAI KUNG NORTH, NEW TERROTORIES
U-CHANNEL DESIGN CALCULATION

Design assumptions and parameters

1. The time of entry is taken as 5 minutes.
2. The channel is designed with a rainfall return period of 1 in 200 years. (a = 501.4; b = 2.45; c = 0.348)
3. A uniformly distributed rainfall with an intensity determined by the intensity-duration-frequency relationship is used.
4. Rainfall increase due to Climate Change for Mid 21st Century of 11.1% is adopted.
5. Adopted runoff coefficients: (Paved areas: 0.95; unpaved areas: 0.15)
6. Rational method is adopted for runoff estimation.
7. The Manning's equation is adopted for channel capacity estimation.
8. Adopted Manning's coefficient for concrete channels: 0.018 $s/m^{1/3}$

Design calculation for capacity of U-channel

Channel no.	Catchment	Incremental paved catchment area, A_{ip} (m^2)	Incremental unpaved catchment area, A_{iu} (m^2)	Cumulative paved catchment area, A_{cp} (m^2)	Cumulative unpaved catchment area, A_{cu} (m^2)	Length of designed channel section (m)	Time of flow, t_f (min)	Time of concentration, t_c (min)	Rainfall intensity, I (mm/hr)	Rainfall intensity with Climate Change , I (mm/hr)	Design runoff, Q_d (m^3/s)	Channel width, W (mm)	Upstream ground level (mPD)	Downstream ground level (mPD)	Upstream channel invert (mPD)	Downstream channel invert (mPD)	Critical channel sectional area, A (m^2)	Wetted perimeter, P (m)	Hydraulic radius, R (m)	Gradient, S_f (1 in)	Flow velocity, V (m/s)	Channel capacity, Q_c (m^3/s)	%	$Q_c > Q_d$?
Start Point to CP7	CE01, CE02	30.4	0.0	30.4	0	10.47	0.125	5.12	247.833	275.343	0.002	225	10.900	10.900	10.430	10.230	0.100	1.293	0.078	52	1.396	0.140	1.58%	OK
CP7 to CP6	CE01, CE02, CE03, House 8	90.7	0.0	121.1	0	15.31	0.075	5.20	246.980	274.395	0.009	225	10.900	10.900	10.230	8.730	0.145	1.693	0.086	10	3.383	0.492	1.78%	OK
Start Point to CP1	CE04	18.6	0	18.6	0	7.00	0.134	5.13	247.729	275.226	0.001	225	10.900	10.900	10.630	10.560	0.055	0.893	0.062	100	0.869	0.048	2.81%	OK
CP1 to CP2	CE04, CE05, House 9	97.5	0	116.1	0	19.11	0.352	5.49	243.849	270.916	0.008	225	10.900	10.900	10.560	10.380	0.071	1.033	0.069	106	0.905	0.064	12.90%	OK
CP2 to CP3	CE04, CE05, House 9, CE06	6.9	0	123.0	0	2.53	0.038	5.52	243.449	270.472	0.009	225	10.900	10.900	10.380	10.350	0.112	1.393	0.080	84	1.124	0.125	7.00%	OK
CP3 to CP4	CE04, CE05, House 9, CE06, CE07	11.1	0	134.1	0	6.30	0.095	5.62	242.443	269.354	0.010	225	10.900	10.900	10.350	10.280	0.118	1.453	0.081	90	1.100	0.130	7.32%	OK
CP4 to CP5	CE04, CE05, House 9, CE06, CE07, CE08	27.9	0	162.0	0	6.95	0.108	5.73	241.322	268.108	0.011	225	10.900	10.900	10.280	10.210	0.134	1.593	0.084	99	1.071	0.144	7.99%	OK
CP5 to CP6	CE04, CE05, House 9, CE06, CE07, CE08, CE09	14.4	0	176.4	0	5.50	0.016	5.74	241.155	267.923	0.012	225	10.900	10.900	10.210	8.730	0.150	1.733	0.086	4	5.634	0.844	1.48%	OK

D.D. 293, TO KWA PENG, SAI KUNG NORTH, NEW TERROTORIES
DRAIN PIPE DESIGN CALCULATION

MANHOLE		PIPE			INVERT LEVEL		FINISHED ROAD LEVEL	PIPE BEDDING	PIPE									PAVED CATCHMENT AREA (m^2)		UNPAVED CATCHMENT AREA (m^2)		DISCHARGE FROM OTHERS		TIME OF FLOW, tf (MIN)	TIME OF CONC., tc (MIN)	INTENSITY (mm/HOUR)	DISCHARGE WITH CLIMATE CHANGE 11.1%, Q (m^3/s)	% OF CAPACITY	Qc>Q?
MANHOLE NO.	MANHOLE TYPE	LENGTH	DIAMETER	GRADIENT	INLET	OUTLET			ROUGHNESS Ks (mm)	PERCENTAGE AREA ALLOWANCE FOR SEDIMENT	FLOW AREA, A (m^2)	WETTED PERIMETER, P(m)	HYDRAULIC RADIUS, R(m)	FULL FLOW VELOCITY, V (m/s)	0.75<V<3?	CAPACITY WITH SEDIMENT, Qc (m^3/s)	PIPE MATERIAL	INCREMENTAL	CUMULATIVE	INCREMENTAL	CUMULATIVE	INCREMENTAL	CUMULATIVE						
		m	mm	1 IN	mPD	mPD	mPD																					
CP6	Trapped Catchpit					8.730	10.900												297.5100	297.5100		0.0000		0.0000					
		9.42	300	100				S I	0.60	0.10	0.07	0.94	0.08	1.57	OK	0.10	CONCRETE							0.100	5.000	255.820	0.022	22.3%	OK
CP8	Catchpit				8.636	8.030	8.800													297.5100		0.0000		0.0000					
		16.42	300	100				S I	0.60	0.10	0.06	0.94	0.07	1.47	OK	0.08	CONCRETE							0.186	5.186	254.031	0.022	26.3%	OK
CP22	Trapped Catchpit				7.866	3.900	5.900													297.5100		0.0000		0.0000					

D.D. 293, TO KWA PENG, SAI KUNG NORTH, NEW TERROTORIES
U-CHANNEL DESIGN CALCULATION

Design assumptions and parameters

1. The time of entry is taken as 5 minutes.
2. The channel is designed with a rainfall return period of 1 in 200 years. (a = 501.4; b = 2.45; c = 0.348)
3. A uniformly distributed rainfall with an intensity determined by the intensity-duration-frequency relationship is used.
4. Rainfall increase due to Climate Change for Mid 21st Century of 11.1% is adopted.
5. Adopted runoff coefficients: (Paved areas: 0.95; unpaved areas: 0.15)
6. Rational method is adopted for runoff estimation.
7. The Manning's equation is adopted for channel capacity estimation.
8. Adopted Manning's coefficient for concrete channels: 0.018 $s/m^{1/3}$

Design calculation for capacity of U-channel

Channel no.	Catchment	Incremental paved catchment area, A_{ip} (m^2)	Incremental unpaved catchment area, A_{iu} (m^2)	Cumulative paved catchment area, A_{cp} (m^2)	Cumulative unpaved catchment area, A_{cu} (m^2)	Length of designed channel section (m)	Time of flow, t_f (min)	Time of concentration, t_c (min)	Rainfall intensity, I (mm/hr)	Rainfall intensity with Climate Change , I (mm/hr)	Design runoff, Q_d (m^3/s)	Channel width, W (mm)	Upstream ground level (mPD)	Downstream ground level (mPD)	Upstream channel invert (mPD)	Downstream channel invert (mPD)	Critical channel sectional area, A (m^2)	Wetted perimeter, P (m)	Hydraulic radius, R (m)	Gradient, S_f (1 in)	Flow velocity, V (m/s)	Channel capacity, Q_c (m^3/s)	%	$Q_c > Q_d$?
Start Point to CP4	House 10, CF01	76.2	0.0	76.2	0	4.87	0.043	5.04	248.768	276.382	0.006	225	10.500	10.500	10.280	10.020	0.044	0.793	0.056	19	1.869	0.082	6.75%	OK
Start Point to CP1	CF02	4.1	0	4.1	0	3.32	0.062	5.06	248.551	276.140	0.000	225	10.500	10.500	10.280	10.240	0.044	0.793	0.056	83	0.888	0.039	0.77%	OK
CP1 to CP2	CF02, CF03	9.9	0	14.0	0	4.17	0.117	5.18	247.219	274.660	0.001	225	10.500	10.500	10.240	10.220	0.053	0.873	0.061	209	0.595	0.032	3.22%	OK
CP2 to CP3	CF02, CF03, CF04	22.3	0	36.3	0	15.16	0.299	5.48	243.935	271.012	0.003	225	10.500	10.500	10.220	10.080	0.058	0.913	0.063	108	0.845	0.049	5.34%	OK
CP3 to CP4	CF02, CF03, CF04, CF05	24.0	0	60.3	0	7.02	0.129	5.61	242.574	269.500	0.004	225	10.500	10.500	10.080	10.020	0.089	1.193	0.075	117	0.910	0.081	5.29%	OK

D.D. 293, TO KWA PENG, SAI KUNG NORTH, NEW TERROTORIES
DRAIN PIPE DESIGN CALCULATION

MANHOLE		PIPE			INVERT LEVEL		FINISHED ROAD LEVEL	PIPE BEDDING	PIPE																		
MANHOLE NO.	MANHOLE TYPE	LENGTH	DIAMETER	GRADIENT	INLET	OUTLET			ROUGHNESS Ks (mm)	PERCENTAGE AREA ALLOWANCE FOR SEDIMENT	FLOW AREA, A (m^2)	WETTED PERIMETER, P(m)	HYDRAULIC RADIUS, R(m)	FULL FLOW VELOCITY, V (m/s)	0.75<V<3?	CAPACITY WITH SEDIMENT, Qc (m^3/s)	PIPE MATERIAL	PAVED CATCHMENT AREA (m^2)		UNPAVED CATCHMENT AREA (m^2)		DISCHARGE FROM OTHERS		TIME OF FLOW, tf (MIN)	TIME OF CONC., tc (MIN)	INTENSITY (mm/HOUR)	DISCHARGE WITH CLIMATE CHANGE 11.1%, Q (m^3/s)	% OF CAPACITY	Qc>Q?
																		INCREMENTAL	CUMULATIVE	INCREMENTAL	CUMULATIVE	INCREMENTAL	CUMULATIVE						
		m	mm	1 IN	mPD	mPD	mPD																					
CP4	Trapped Catchpit					10.020	10.500											136.5300	136.5300		0.0000		0.0000						
		13.50	300	100				S I	0.60	0.10	0.07	0.94	0.08	1.57	OK	0.10	CONCRETE							0.143	5.000	255.820	0.010	10.2%	OK
CP18	Catchpit				9.885	5.645	6.500												136.5300		0.0000		0.0000						

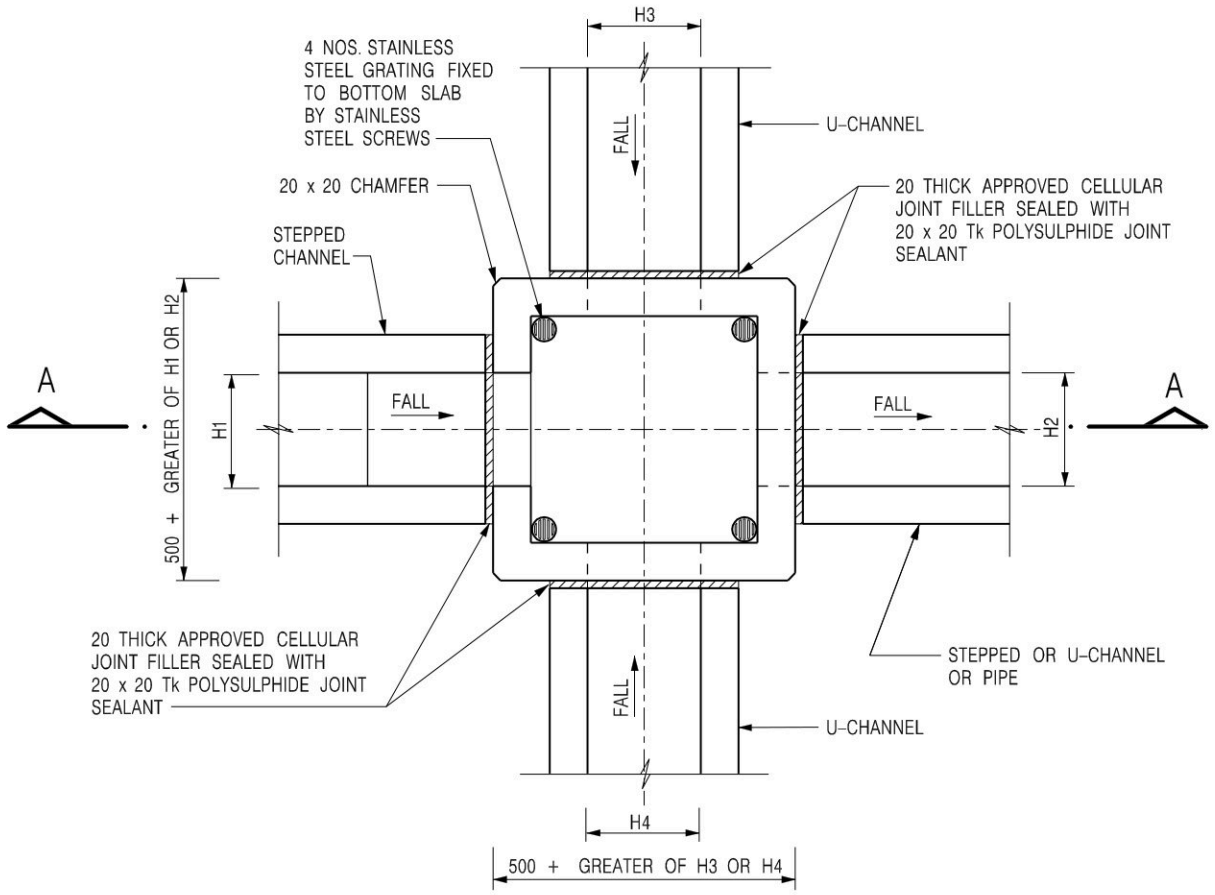
D.D. 293, TO KWA PENG, SAI KUNG NORTH, NEW TERROTORIES
U-CHANNEL DESIGN CALCULATION

Design assumptions and parameters

1. The time of entry is taken as 5 minutes.
2. The channel is designed with a rainfall return period of 1 in 200 years. (a = 501.4; b = 2.45; c = 0.348)
3. A uniformly distributed rainfall with an intensity determined by the intensity-duration-frequency relationship is used.
4. Rainfall increase due to Climate Change for Mid 21st Century of 11.1% is adopted.
5. Adopted runoff coefficients: (Paved areas: 0.95; unpaved areas: 0.15)
6. Rational method is adopted for runoff estimation.
7. The Manning's equation is adopted for channel capacity estimation.
8. Adopted Manning's coefficient for concrete channels: 0.018 $s/m^{1/3}$

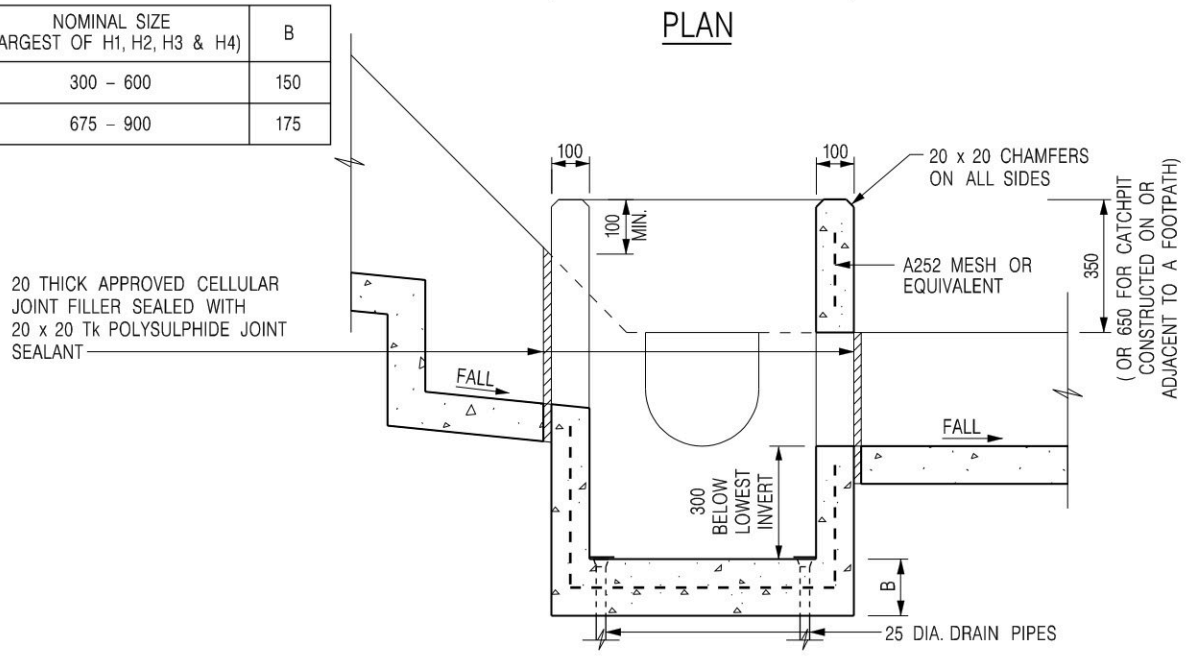
Design calculation for capacity of U-channel

Channel no.	Catchment	Incremental paved catchment area, A_{ip} (m^2)	Incremental unpaved catchment area, A_{iu} (m^2)	Cumulative paved catchment area, A_{cp} (m^2)	Cumulative unpaved catchment area, A_{cu} (m^2)	Length of designed channel section (m)	Time of flow, t_f (min)	Time of concentration, t_c (min)	Rainfall intensity, I (mm/hr)	Rainfall intensity with Climate Change , I (mm/hr)	Design runoff, Q_d (m^3/s)	Channel width, W (mm)	Upstream ground level (mPD)	Downstream ground level (mPD)	Upstream channel invert (mPD)	Downstream channel invert (mPD)	Critical channel sectional area, A (m^2)	Wetted perimeter, P (m)	Hydraulic radius, R (m)	Gradient, S_f (1 in)	Flow velocity, V (m/s)	Channel capacity, Q_c (m^3/s)	%	$Q_c > Q_d$?
CP22 to Existing Stream	All	1714.9	0.0	1714.9	0	9.62	0.078	5.08	248.375	275.945	0.125	1200	5.900	5.900	3.900	3.852	2.245	5.885	0.382	200	2.067	4.641	2.69%	OK



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.

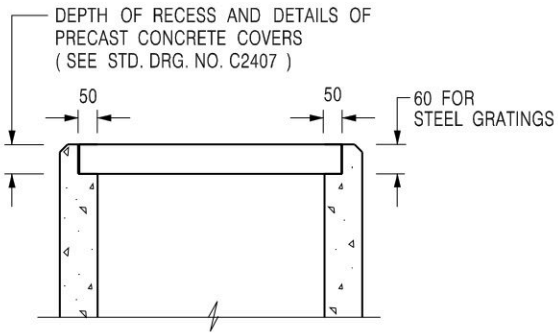
REF.	REVISION	SIGNATURE	DATE
–	FORMER DRG. NO. C2406J.	Original Signed	03.2015

CATCHPIT WITH TRAP

(SHEET 1 OF 2)

CEDD CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

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



ALTERNATIVE TOP SECTION
FOR PRECAST CONCRETE COVERS / GRATINGS

NOTES:

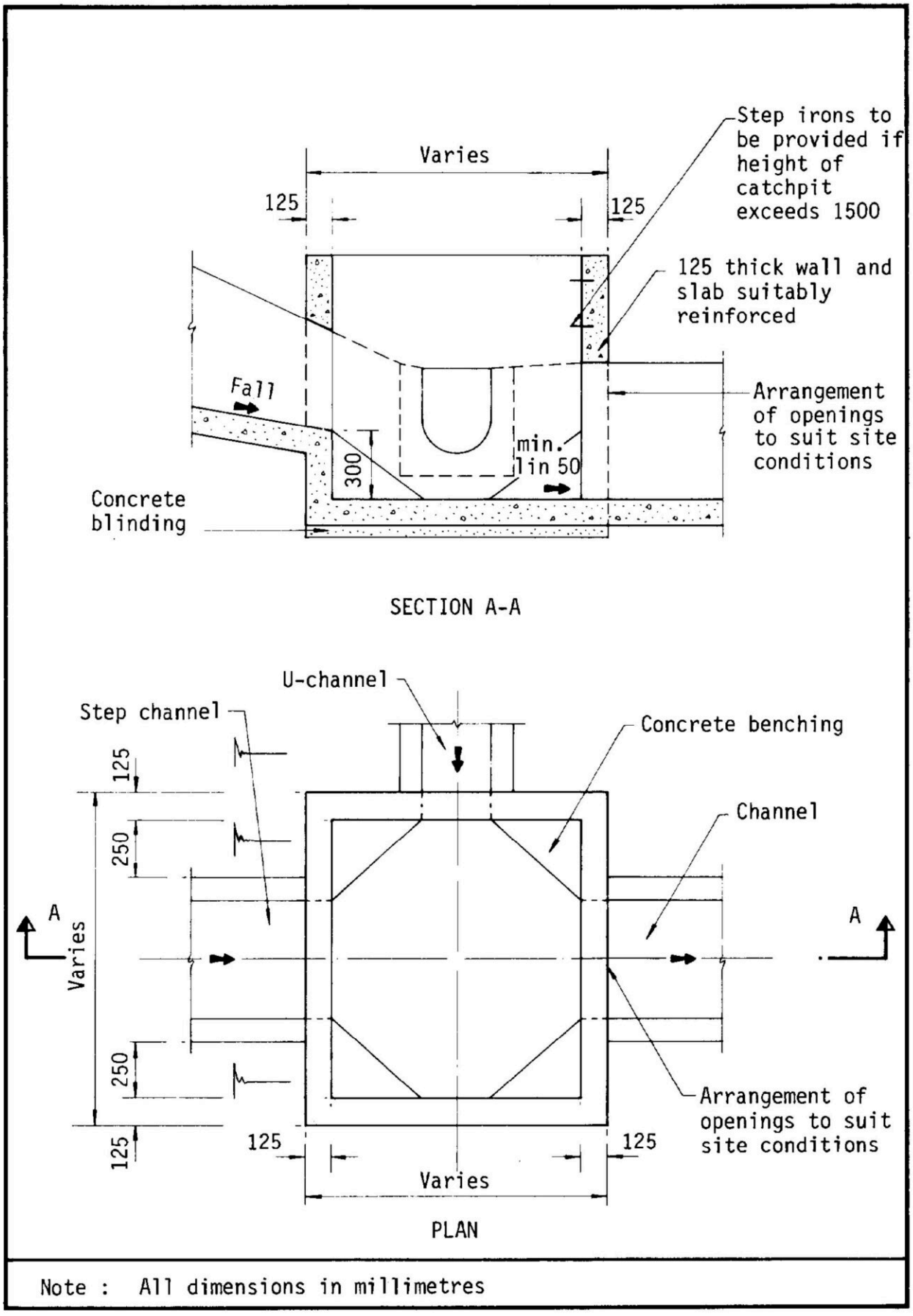
1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. ALL CONCRETE SHALL BE GRADE 20 /20.
3. CONCRETE SURFACE FINISH SHALL BE CLASS U2 OR F2 AS APPROPRIATE.
4. FOR DETAILS OF JOINT, REFER TO STD. DRG. NO. C2413.
5. CONCRETE TO BE COLOURED AS SPECIFIED.
6. UNLESS REQUESTED BY THE MAINTENANCE PARTY AND AS DIRECTED 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)

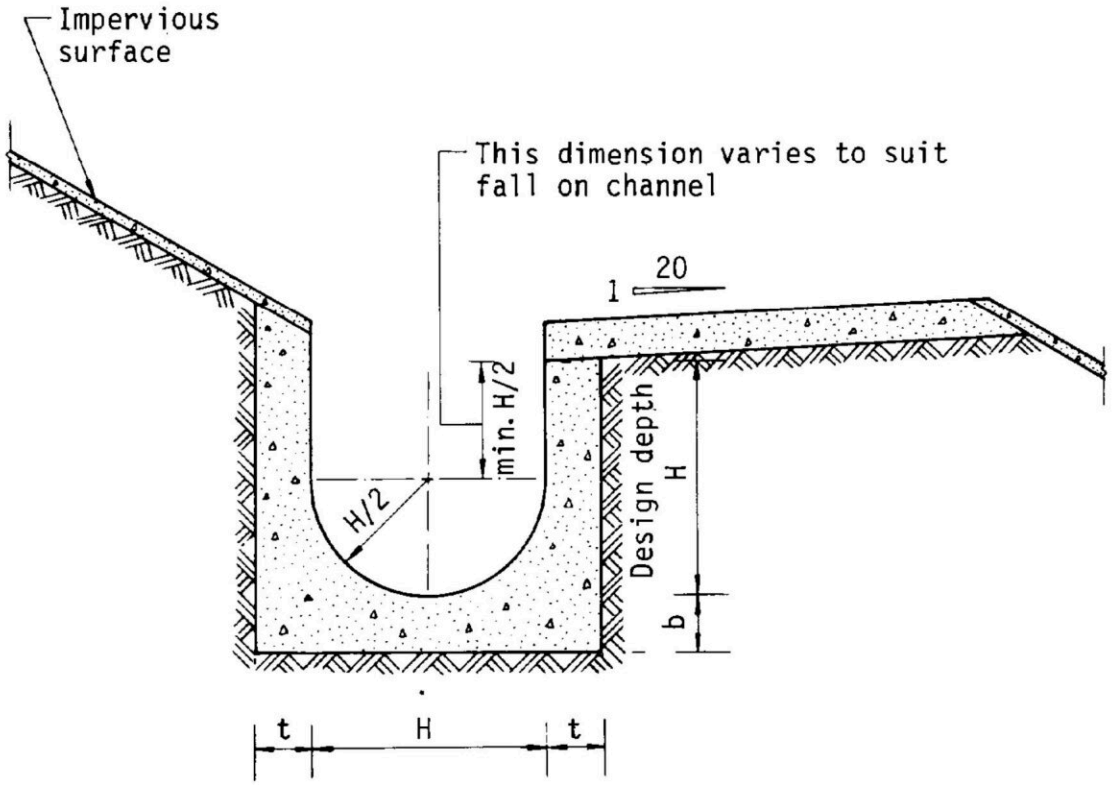
CEDD CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

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



Note : All dimensions in millimetres

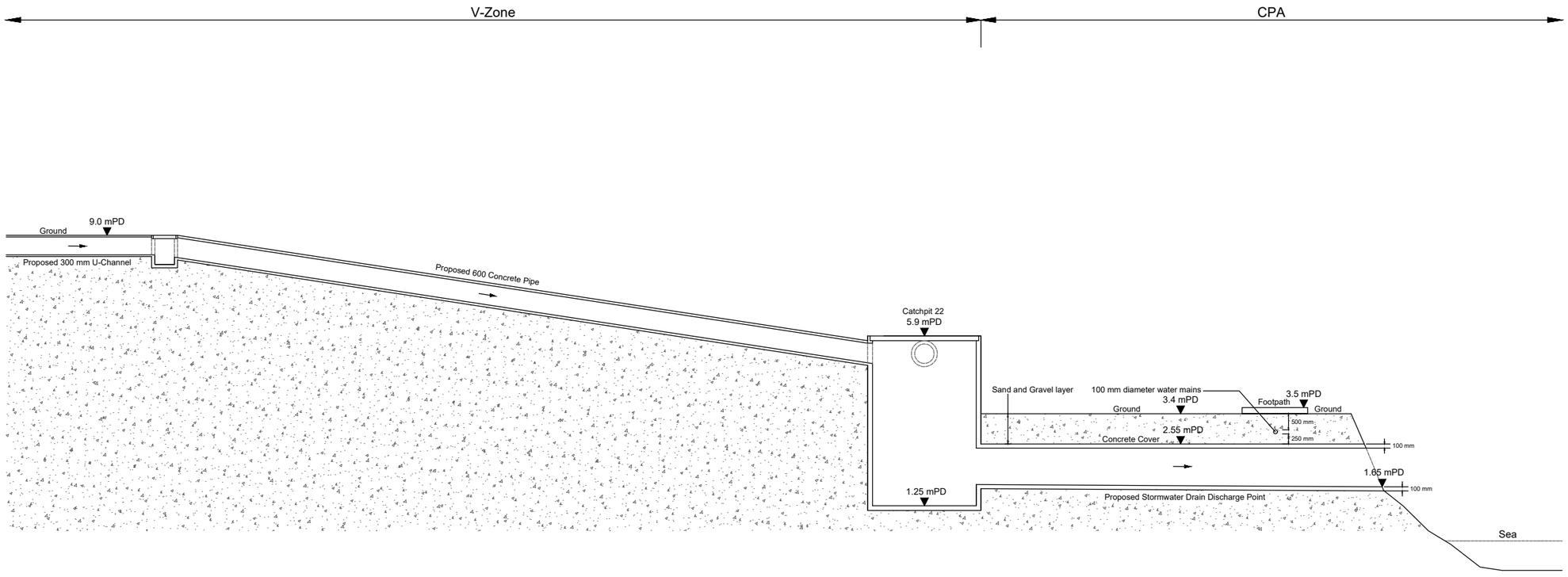
Figure 8.10 - Typical Details of Catchpits



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

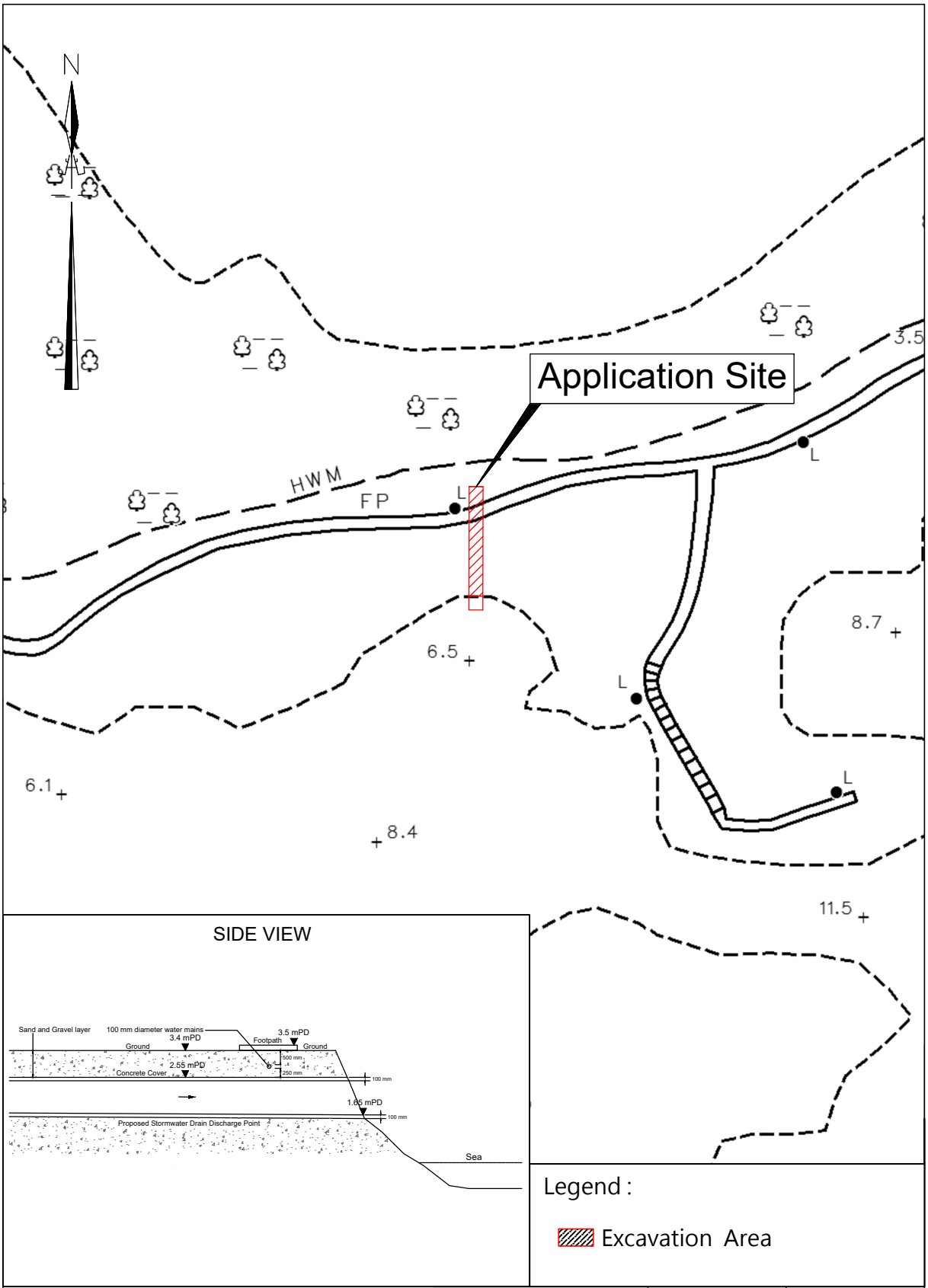


Project Title : Proposed Stormwater Drain Discharge Point	Scale : 1 : 150	Plan No. : CW/TKP/LOP
	Date : 29-08-2026	Survey Sheet No. : 8-NE-16A
Drawing Title : Construction Proposal	CHUO WANG SURVEY SERVICES COMPANY	



Project Title : Proposed Stormwater Drain Discharge Point	Scale : 1 : 500	Plan No. : CW/TKP/SH
	Date : 28-08-2026	Survey Sheet No. : 8-NE-16A
Drawing Title : Proposed Small House	卓 弘 測 量 服 務 公 司 CHUO WANG SURVEY SERVICES COMPANY	

EXCAVATION PLAN



卓 弘 測 量 服 務 公 司 CHUO WANG SURVEY SERVICES COMPANY	Scale : 1 : 500	Survey Sheet No. : 3-NW-25D
	Date : 13-02-2026	Figure No. : FLP/01

(ii) For Type (ii) application 供第(ii)類申請

(a) Operation involved 涉及工程	☐ Diversion of stream 河道改道 ☐ Filling of pond 填塘 Area of filling 填塘面積 ..... sq.m 平方米 ☐About 約 Depth of filling 填塘深度 ..... m 米 ☐About 約 ☐ Filling of land 填土 Area of filling 填土面積 ..... sq.m 平方米 ☐About 約 Depth of filling 填土厚度 ..... m 米 ☐About 約 ☑ Excavation of land 挖土 Area of excavation 挖土面積 .....11.40..... sq.m 平方米 ☑About 約 Depth of excavation 挖土深度 .....1.85..... m 米 ☑About 約 (Please indicate on site plan the boundary of concerned land/pond(s), and particulars of stream diversion, the extent of filling of land/pond(s) and/or excavation of land) (請用圖則顯示有關土地／池塘界線，以及河道改道、填塘、填土及／或挖土的細節及/或範圍))
(b) Intended use/development 有意進行的用途／發展	

(iii) For Type (iii) application 供第(iii)類申請

(a) Nature and scale
性質及規模

☑ Public utility installation 公用事業設施裝置

☐ Utility installation for private project 私人發展計劃的公用設施裝置

Please specify the type and number of utility to be provided as well as the dimensions of each building/structure, where appropriate
請註明有關裝置的性質及數量，包括每座建築物/構築物(倘有)的長度、高度和闊度

Name/type of installation 裝置名稱／種類	Number of provision 數量	Dimension of each installation /building/structure (m) (LxWxH) 每個裝置／建築物／構築物的尺寸 (米) (長 x 闊 x 高)
Stormwater Drain Discharge Point	1	9.5m (L) x 1.2m (W) x 1.85m (H)

(Please illustrate on plan the layout of the installation 請用圖則顯示裝置的布局)

10. Justifications 理由

The applicant is invited to provide justifications in support of the application. Use separate sheets if necessary.
現請申請人提供申請理由及支持其申請的資料。如有需要，請另頁說明。

1. 申請人為西貢北約土瓜坪的原居民代表。
2. 由於土瓜坪的小型屋宇陸續批出，其中批屋條款是需要建造雨水排水渠，而擬議小型屋宇的雨水渠排放點必需經過海岸保護區才能流入海中，因此地政處通知我們需要獲得規劃許可。
3. 由於該些排放點經過海岸保護區，而地政處就這問題不會發出掘地許可證給我們，如我們沒取得規劃許可，我們無法興建排水渠，因而該些小型屋宇沒法取得滿意紙。
4. 由於較早前獲批的小型屋宇的擬議雨水渠報告有4至5個排方點，即是有4至5個多個排方點需要建造於海岸保護區位置，因此經過我們村委及村民商議，我們決定將排放點統一，只經一個排放點排入海中。
5. 我們建議將多個排水渠排放點集中為一個排放點，而這建議亦獲地政處贊成，因這樣除減低影響環境，亦無需於多處位于海岸保護區的位置建造排水口。如設置多個排放點，地政需各自批發掘地許可證，因此亦需於不同位置取得規劃許可，這未必獲得有關部門批准。
6. 擬議的排放點，只收集所有涉及小型屋宇發展的擬議雨水渠，污水系統絕不會流入渠中。
7. 我們這次申請全為土瓜坪村的發展更加有系統，亦由於土瓜坪村位置附近多是保護區，因此我們亦希望盡量保持原貌，將工程影響性減低。
8. 申請位置長約9.5m、闊約1.2m、深約1.85m，建造於地面之下，並與地面齊平，並設有混凝土蓋面。
9. 我們會自費建造及負責維護相關設施。
10. 我們會遵從相關部門的意見。