

Our Ref. : DD130 Lot 1038 S.B & GL Your Ref. : A/TM-LTYY/479

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

<u>By Email</u>

19 July 2024

Dear Sir,

### Submission of Supplementary Information

## Temporary Shop and Services with Ancillary Facilities for a Period of 3 Years in "Residential (Group D)" Zone, Lot 1038 S.B (Part) in D.D. 130 <u>and Adjoining Government Land, Fuk Hang Tsuen, Tuen Mun, New Territories</u>

### (S.16 Planning Application No. A/TM-LTYY/479)

We write to submit a drainage proposal for the consideration of the Town Planning Board.

Should you require more information regarding the application, please contact our Mr. Louis TSE at louistse@r-riches.com.hk or the undersigned at your convenience. Thank you for your kind attention.

Yours faithfully,

For and on behalf of R-riches Property Consultants Limited

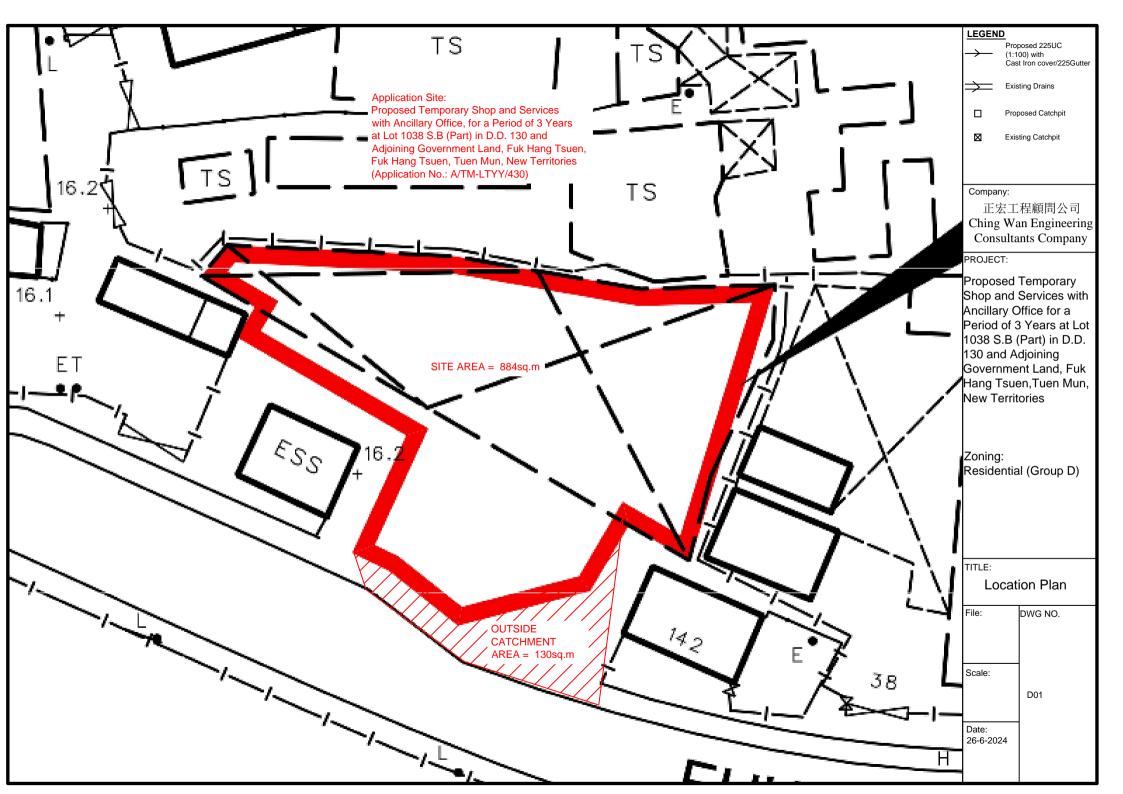
Christian CHIM Town Planner

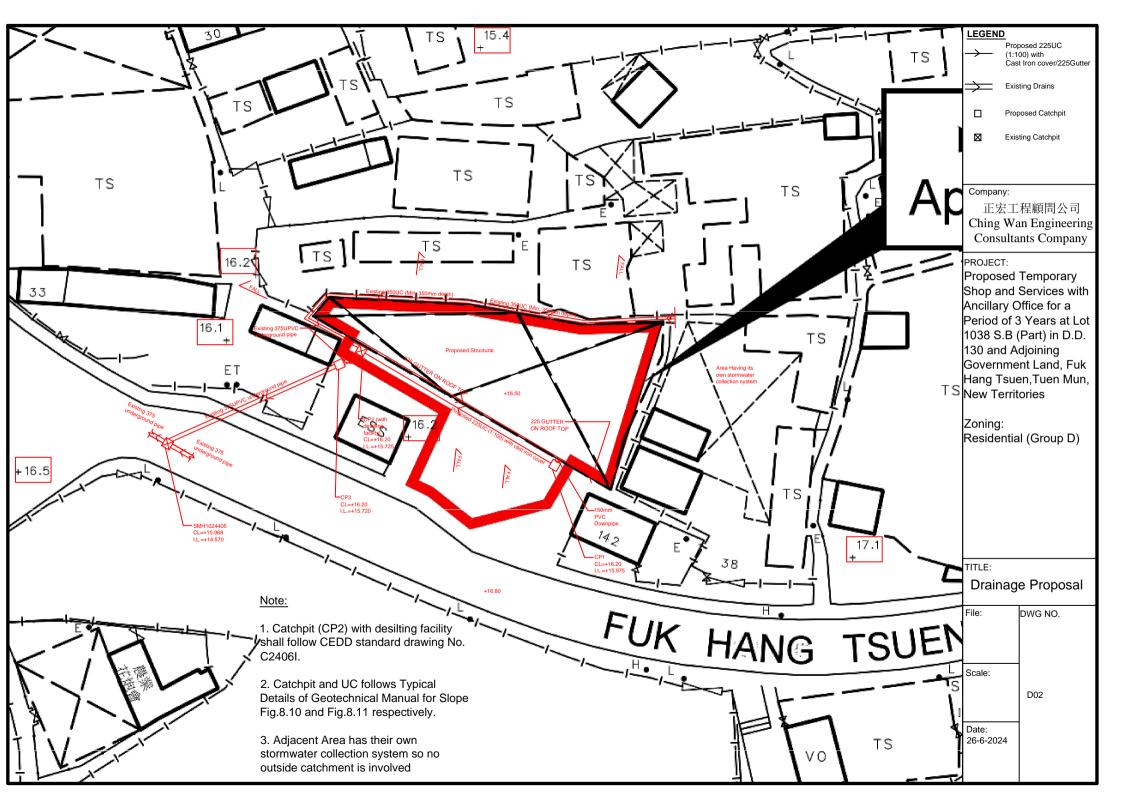
cc DPO/TMYLW, PlanD

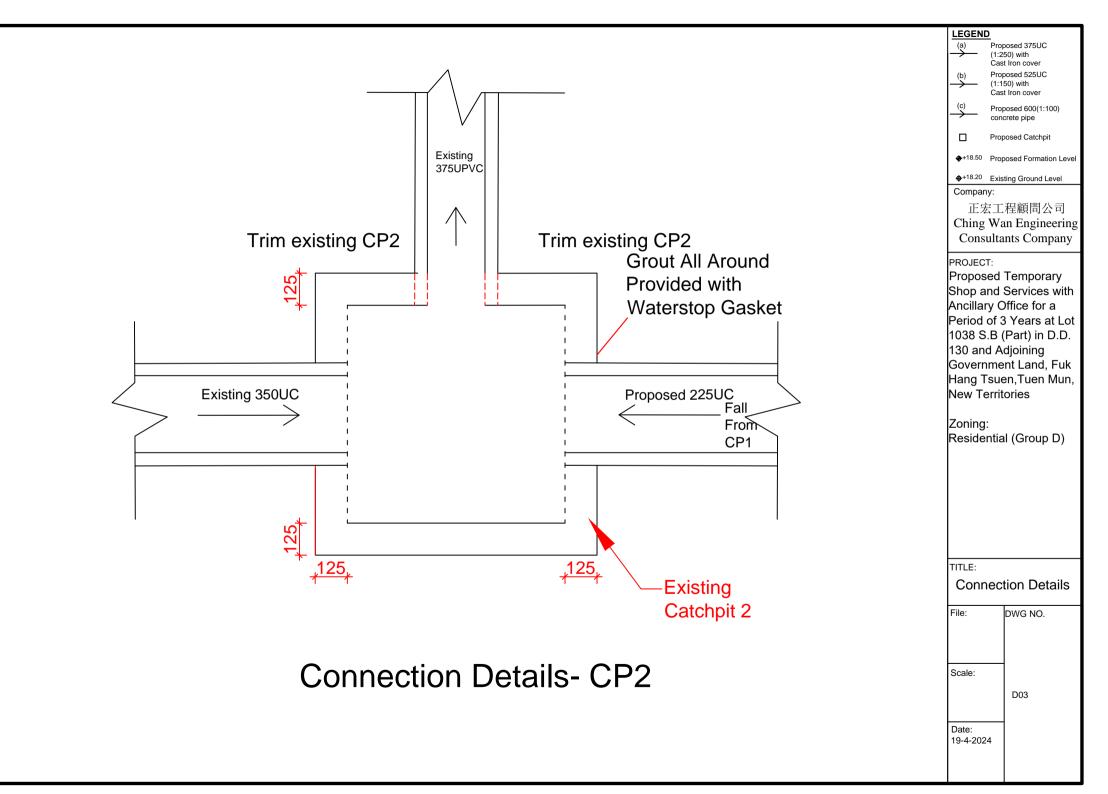
(Attn.: Mr. Johnny TAM (Attn.: Mr. Bosco YUNG email: jkhtam@pland.gov.hk ) email: btkyung@pland.gov.hk )

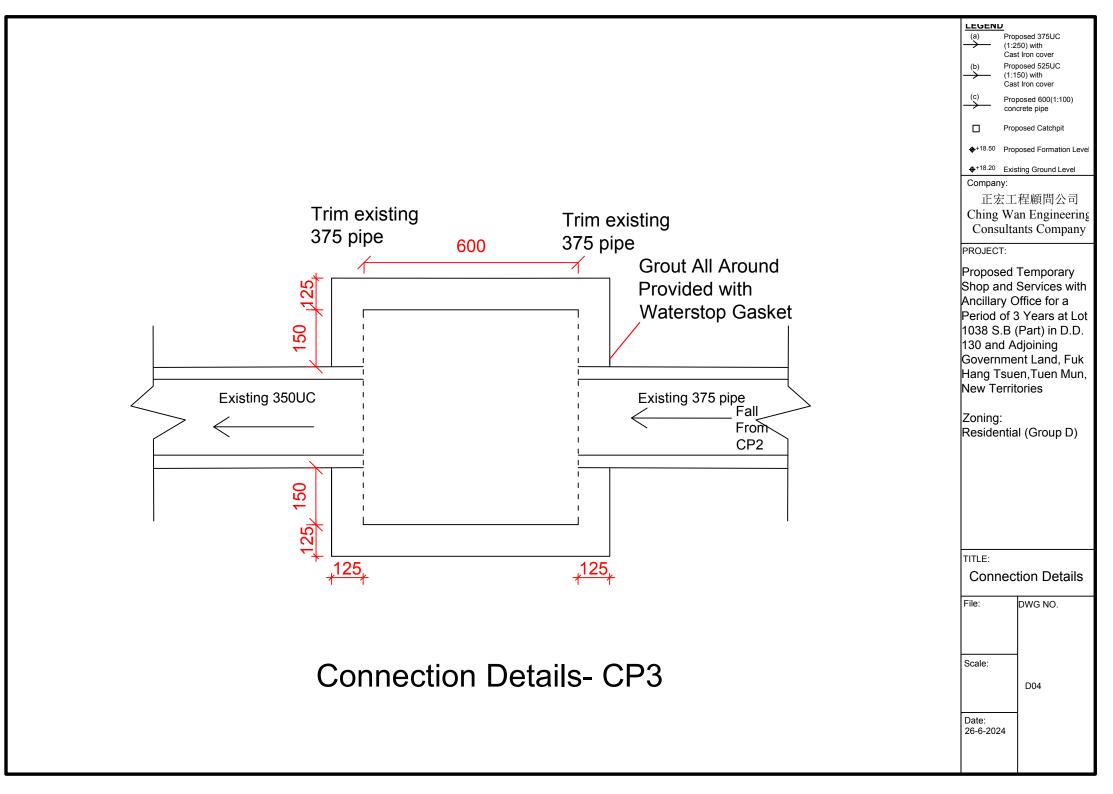
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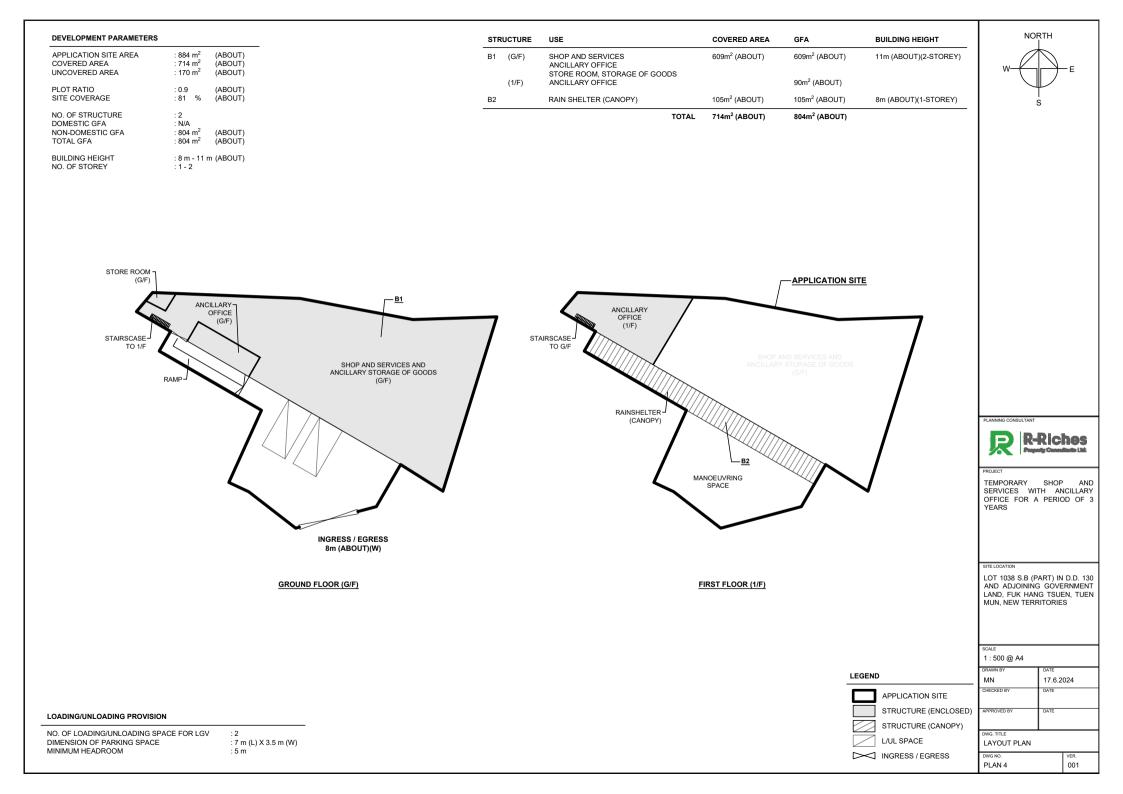
香港新界錦田吉慶圍 236 號盈匯坊 D 座 Block D, The Richfield, 236 Kat Hing Wai, Kam Tin, NT, HK 0-1 0











Company: Project:	Ching Wan Engineeering Consultants Company Lot 1038 S.B (Part) in D.D. 130 and Adjoining Government Land, Fuk Hang Tsuen, Fuk Hang Tsuen, Tuen Mun, New Territories			
Date:	26-Jun-24			
Calculation for Design of Channels:				
All Catchment Area				
Area	$ = 1014 m^{2} m^{2} = 0 m^{2} m^{2} $			
Peak runoff in m^3/s	<ul> <li>= 0.28 x 1 x 177 mm/hr x 0.0010140 km<sup>2</sup> (SDM 2018, Table 2d, 10 years</li> <li>= 0.05 m<sup>3</sup>/s</li> <li>= 2844 liter/min</li> </ul>			
According to (Figure 8.7 - Chart for the Rapid Design of Channels) For gradient 1:100, 225UC or above will be suitable.	,			

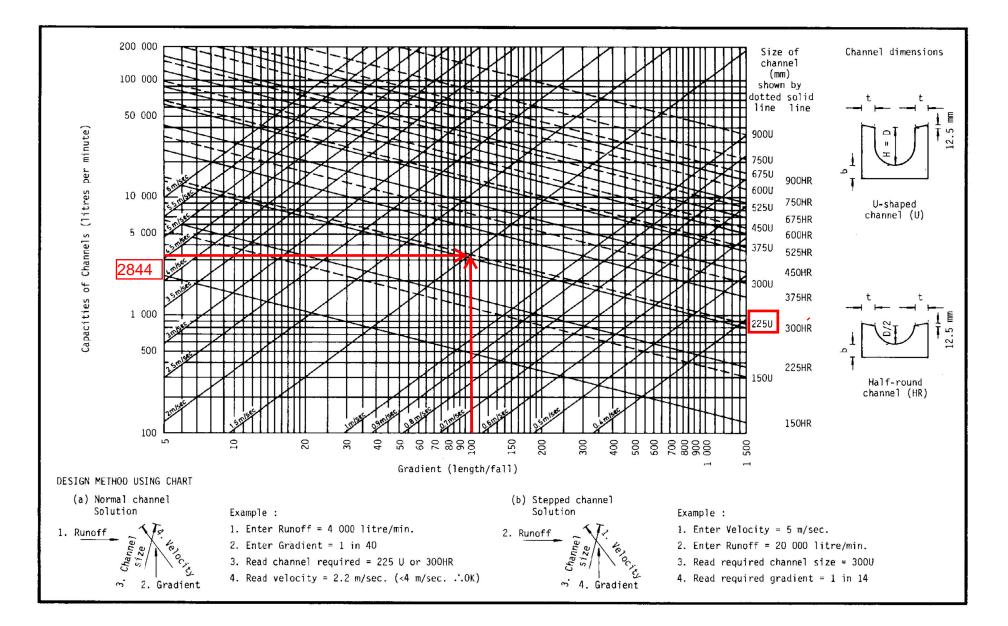
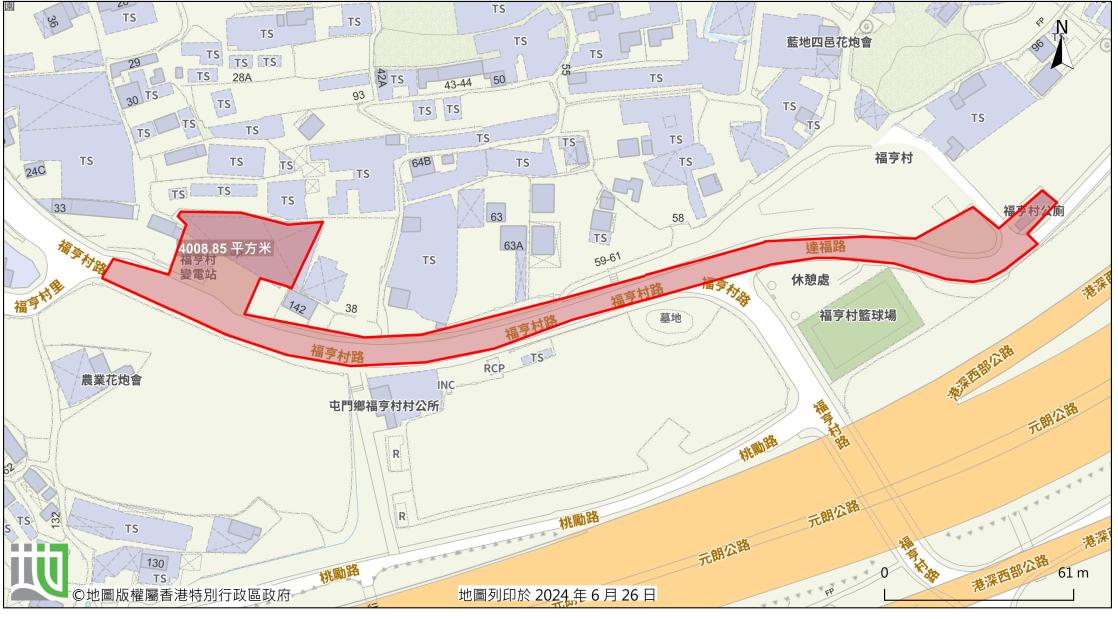


Figure 8.7 - Chart for the Rapid Design of Channels



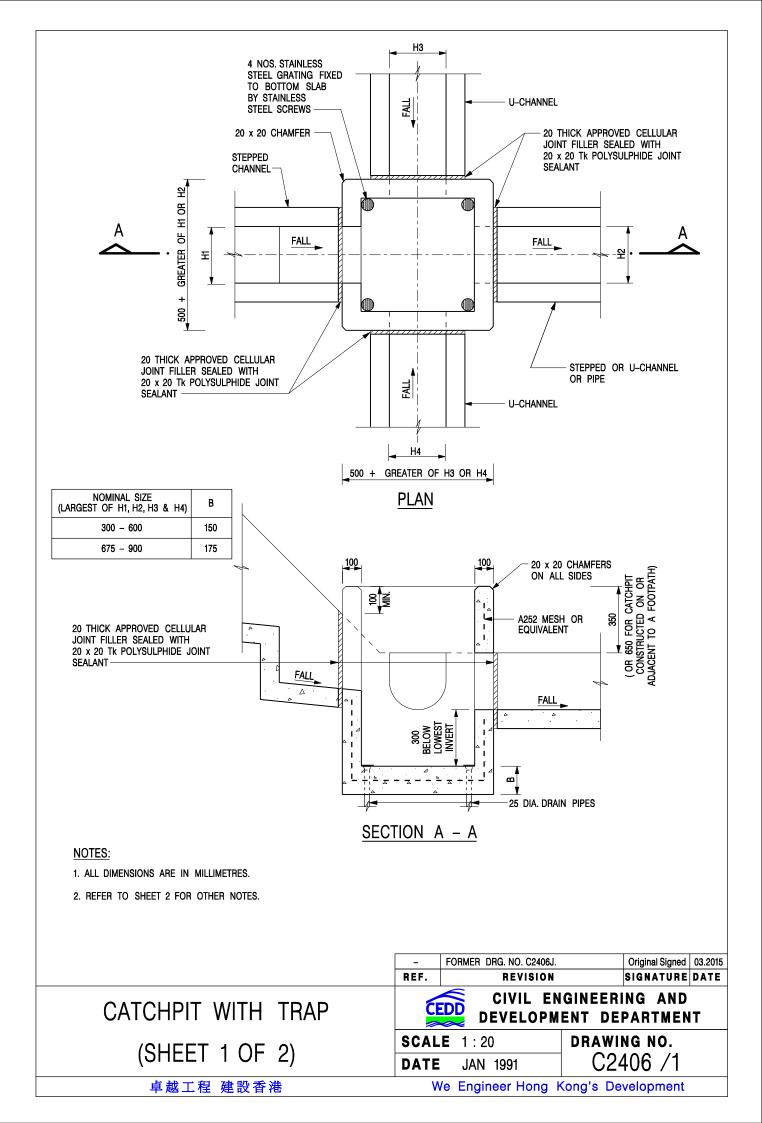
# 前往地圖: https://www.map.gov.hk/gm/geo:22.4169,113.9891?z=1128

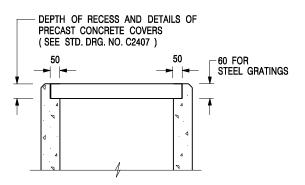




由「地理資訊地圖」網站提供: https://www.map.gov.hk 注意: 使用此地圖受「地理資訊地圖」的使用條款及條件以及知識產權告示約束。

Site Area =	4009	) m2				
Calculation of Runoff from the Proposed Development,						
	Q	= 0.278 C i A				
	С	= 0.95		(P.42 of Stormwater Drainage Manual)		
	А	= 4009	$m^2$			
		= 0.004009	km <sup>2</sup>			
take	i	= 177	mm/hr	(SDM 2018, Table 2d, 10 years return period)		
Therefore,	Q					
		= 0.187 = 11244	m <sup>3</sup> /sec lit/min			
Calculation Maximum Capacity of Existing 375mm dia. Underground pipe.						
Manning Equation	V	$= R^{2/3} * S_f^{0.5} / n$				
where	R	$= \pi r^2 / 2 \pi r$	dia r=	375 mm 0.1875 m		
		= r/2				
		= 0.09375	m			
	n	= 0.012	s/m <sup>1/3</sup>	(Table 13 of Stormwater Drainage Manual)		
1/ 50	$S_{\mathrm{f}}$	= 0.0200				
Therefore,	V	$= 0.0.09375^{2/3} * 0.0000000000000000000000000000000000$	$= 0.0.09375^{2/3} * 0.02^{0.5} / 0.012$			
		= 2.432	m/sec			
Maximum Capacity (Q <sub>max</sub> )		= 0.9*V*A		(0.9 factor is adopted for sedimentation)		
		$= 0.9*2.432* \pi r^{2}$	2			
		= 0.242	m <sup>3</sup> /sec			
1 nos of pipe		= 0.242	m <sup>3</sup> /sec			
		= 14505	lit/min			
		> 11244	lit/min			
Existing 375mm dia underground pipe (1:50) is OK						





## ALTERNATIVE TOP SECTION FOR PRECAST CONCRETE COVERS / GRATINGS

#### NOTES:

- 1. ALL DIMENSIONS ARE IN MILLIMETRES.
- 2. ALL CONCRETE SHALL BE GRADE 20 /20.
- 3. CONCRETE SURFACE FINISH SHALL BE CLASS U2 OR F2 AS APPROPRIATE.
- 4. FOR DETAILS OF JOINT, REFER TO STD. DRG. NO. C2413.
- 5. CONCRETE TO BE COLOURED AS SPECIFIED.
- UNLESS REQUESTED BY THE MAINTENANCE PARTY AND AS DIRECTED BY THE ENGINEER, CATCHPIT WITH TRAP IS NORMALLY NOT PREFERRED DUE TO PONDING PROBLEM.
- 7. UPON THE REQUEST FROM MAINTENANCE PARTY, DRAIN PIPES AT CATCHPIT BASE CAN BE USED BUT THIS IS FOR CATCHPITS LOCATED AT SLOPE TOE ONLY AND AS DIRECTED BY THE ENGINEER.
- 8. FOR CATCHPITS CONSTRUCTED ON OR ADJACENT TO A FOOTPATH, STEEL GRATINGS (SEE DETAIL 'A' ON STD. DRG. NO. C2405 ) OR CONCRETE COVERS (SEE STD. DRG. NO. C2407 ) SHALL BE PROVIDED AS DIRECTED BY THE ENGINEER.
- 9. IF INSTRUCTED BY THE ENGINEER, HANDRAILING (SEE DETAIL 'G' ON STD. DRG. NO. C2405; EXCEPT ON THE UPSLOPE SIDE ) IN LIEU OF STEEL GRATINGS OR CONCRETE COVERS CAN BE ACCEPTED AS AN ALTERNATIVE SAFETY MEASURE FOR CATCHPITS NOT ON A FOOTPATH NOR ADJACENT TO IT. TOP OF THE HANDRAILING SHALL BE 1 000 mm MIN. MEASURED FROM THE ADJACENT GROUND LEVEL.
- 10. MINIMUM INTERNAL CATCHPIT WIDTH SHALL BE 1 000 mm FOR CATCHPITS WITH A HEIGHT EXCEEDING 1 000 mm MEASURED FROM THE INVERT LEVEL TO THE ADJACENT GROUND LEVEL. AND, STEP IRONS (SEE DSD STD. DRG. NO. DS1043) AT 300 ¢ STAGGERED SHALL BE PROVIDED. THICKNESS OF CATCHPIT WALL FOR INSTALLATION OF STEP IRONS SHALL BE INCREASED TO 150 mm.
- 11. FOR RETROFITTING AN EXISTING CATCHPIT WITH STEEL GRATING, SEE DETAIL 'F' ON STD. DRG. NO. C2405.
- 12. SUBJECT TO THE APPROVAL OF THE ENGINEER, OTHER MATERIALS CAN ALSO BE USED AS COVERS / GRATINGS.

	– FORMER DRG.	NO. C2406J. Original Signed 03.2015			
	REF. R	EVISION SIGNATURE DATE			
CATCHPIT WITH TRAP	CI CEDD DEV	CIVIL ENGINEERING AND Development department			
(SHEET 2 OF 2)	<b>SCALE</b> 1:20	DRAWING NO.			
(0=)	DATE JAN 199	en C2406 /2			
卓越工程 建設香港	We Engineer	r Hong Kong's Development			

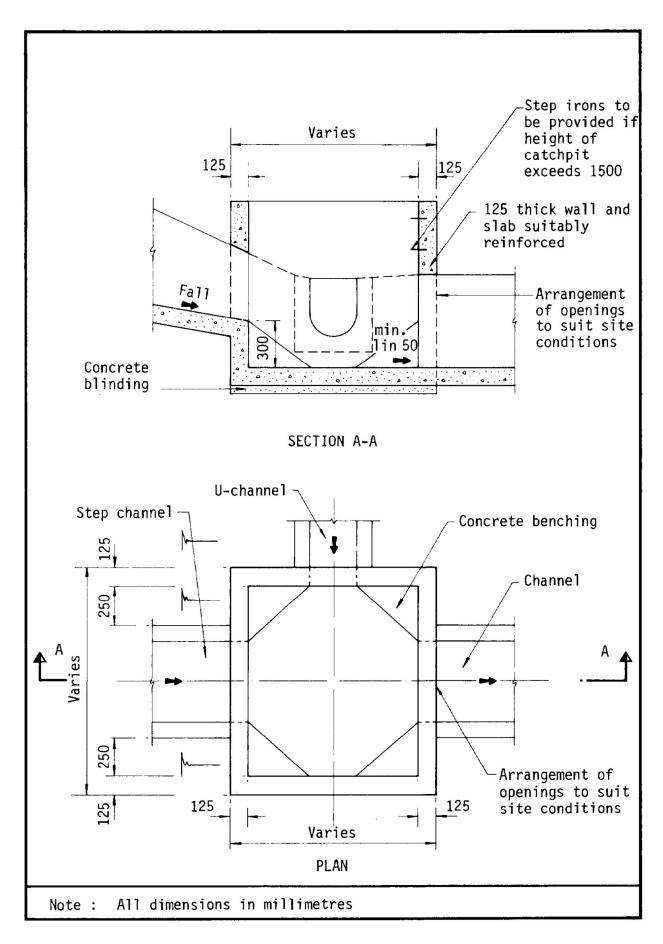


Figure 8.10 - Typical Details of Catchpits

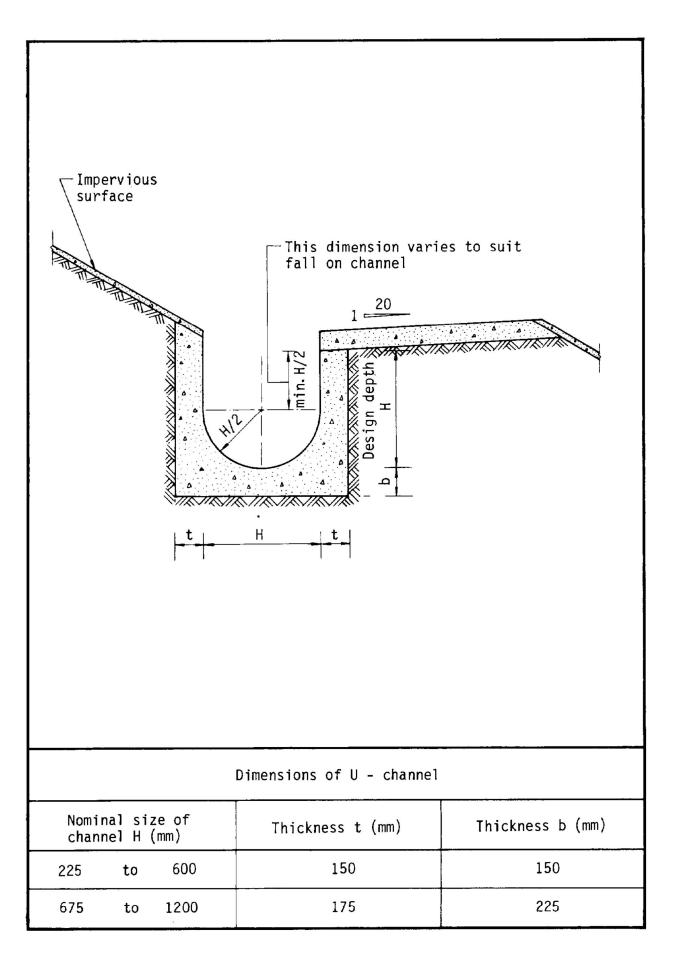


Figure 8.11 - Typical U-channel Details