

新界元朗八鄉蓮花地丈量約份第111約地段
 第2902號(部份)、2905號(部份)、2909號(部份)
 、2910號(部份)、2911號(部份)
 臨時存放建築材料及機械(為期3年)以及
 進行相關的填土工程

排水設施圖

圖樣	解釋	圖樣	解釋
■	沙井位置長60cm x 闊60cm x 高60cm	■	申請範圍
□	U形明渠 約闊30cm x 深30cm	□	有蓋U形渠 約闊30cm x 深30cm (石材渠蓋有多個方形3cmX3cm疏水孔)
2919	地界	2919	地段編號

規劃申請編號：TPB/A/YL-PH/1026

地點:DD111-LOT 2902號(部份), 2905號(部份), 2909號(部份), 2910號(部份), 2911號(部份)

地址:新界八鄉橫台山永寧里

回覆渠務署 排水報告

圖 1 渠道闊度為 30cm，渠道深度約 30cm



圖 2



圖 3 渠道接駁了沙井，闊度為 27cm



圖 4 沙井闊度為 60cm x 60cm，深度約 60cm。



圖 5 渠道闊度為 30cm，渠道深度約 30cm



圖 6 渠道闊度為 30cm，渠道深度約 30cm



圖 7 沙井闊度為 60cm x 60cm，深度約 60cm。



圖 8



圖 9



圖 10



圖 11 接駁了公共雨水渠。



圖 12 接駁了公共雨水渠。

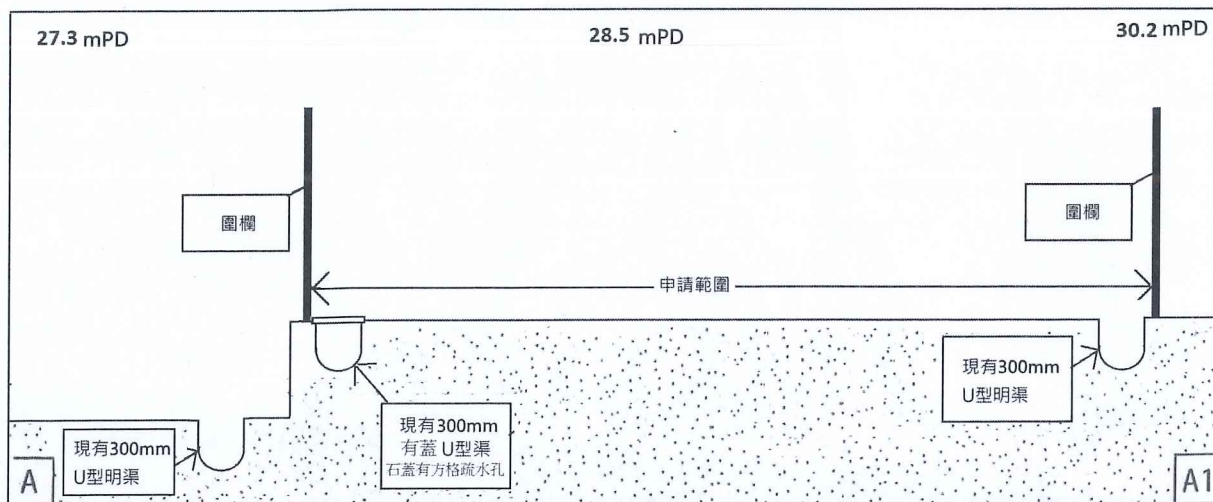


圖 13 接駁了公共雨水渠。

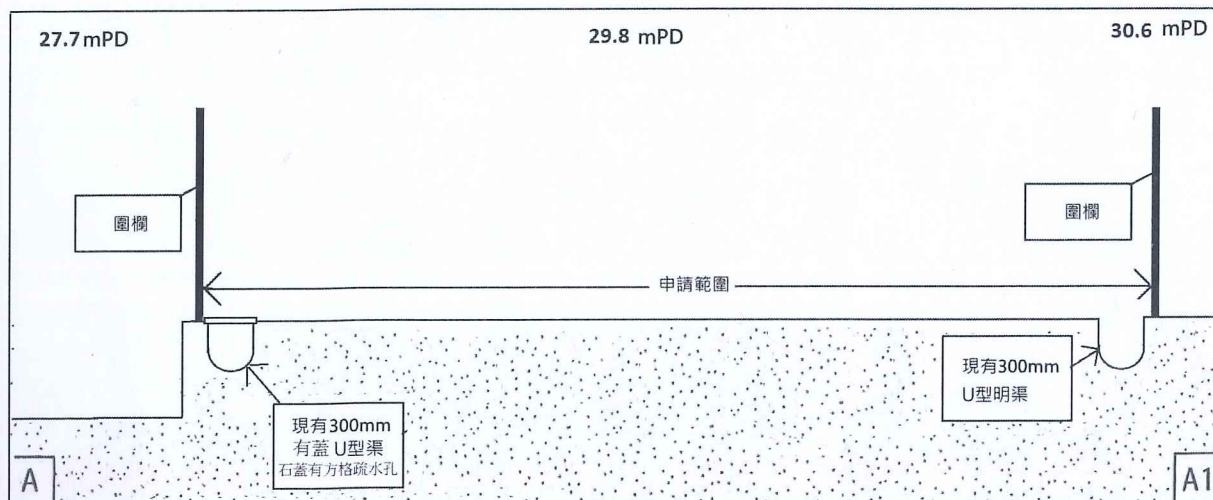


檔案編號: TPB/A/YL-PH

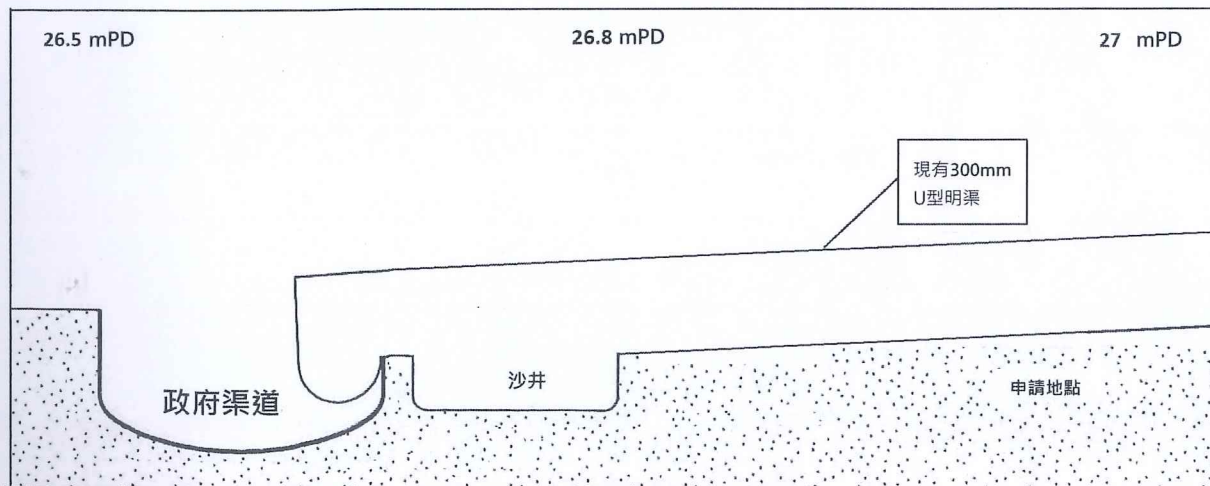
申請地段: DD111-LOT2902號(部份), 2905號(部份), 2909號(部份), 2910號(部份), 2911號(部份)



A-A1橫切面圖



B-B1橫切面圖

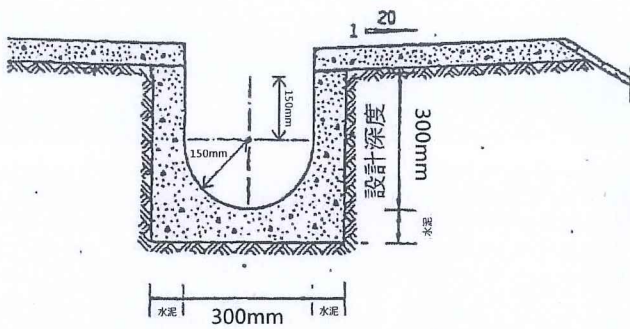


排水口剖面圖

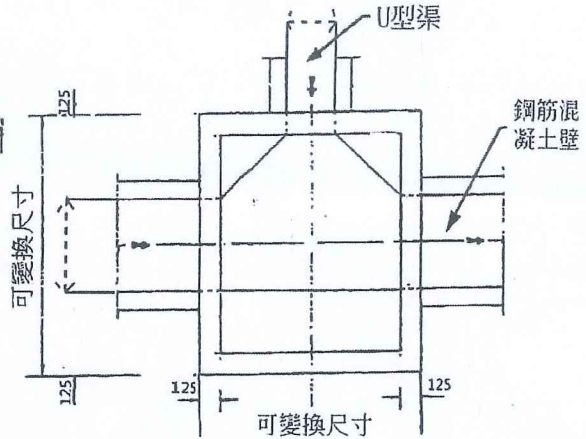
Not To Scale

檔案編號: TPB/A/-PH910

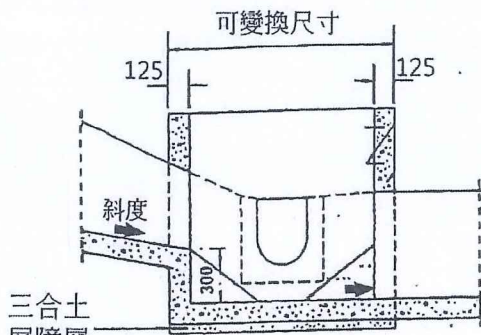
申請地段: DD111-LOT2902號(部份)、2905號(部份)、2909號(部份)、2910號(部份)、2911號(部份)



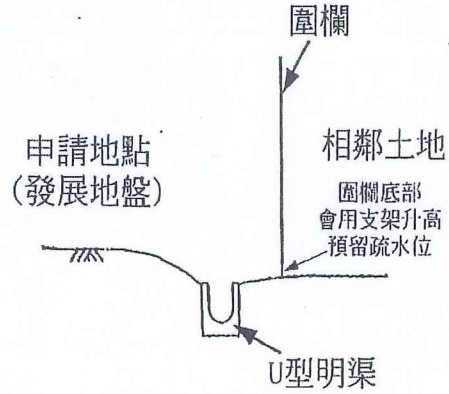
U型明渠切面圖



沙井俯視圖



沙井切面圖



U型明渠切面略圖

Not To Scale

1. Rainfall Intensity

Refer to Table 2a of the Year's Weather - 2023* issued by Hong Kong Observatory (Appendix 1), the month with maximum rainfall recorded in the year of 2023 is in September, and the total rainfall in that month is 1067.1mm

<https://www.weather.gov.hk/tc/cis/monthlyExtract.htm?y=2023>

∴ Rainfall intensity (i) = $1067.1/30 \text{ days}/24 \text{ hours}$
= 1.482mm/hr

2. Calculation of Peak Runoff

The water will be directly discharged to storm drainage system and will not leaked in to soil.

Site Area = 500m²

Peak Run Off in m³/s (Qp)

Peak Run Off is calculated by Rational method as mentioned in pages 36 & 37 of Storm water Drainage Manual- Planning, Design and Management (2018 edition) by DSD.

$$Q_p = 0.278CiA$$

Where	Qp	=	runoff in m ³ /s
	C	=	runoff coefficient
	I	=	Rainfall intensity in mm/hr
	iA	=	Catchment area in km ²

Surface characteristics of the site is "Asphalt/Concrete" referring to runoff coefficient(C) on page 37 of Stormwater Drainage Manual – Planning, Design and Management (2018 edition) by DSD (Diagram 1), the runoff coefficient (C)=0.7-0.95. Hence, 0.95 is adopted in this calculation.

<i>Surfaca Characteristics</i>	<i>Runoff coefficient, C*</i>
Asphalt	0.70 - 0.95
Concrete	0.80 - 0.95
Brick	0.70 - 0.85
Grassland (heavy soil**)	
Flat	0.13 - 0.25
Steep	0.25 - 0.35
Grassland (sandy soil)	
Flat	0.05 - 0.15
Steep	0.15 - 0.20

Diagram 1

$$Q_p = 0.278C_iA$$

$$= 0.278 \times 0.95 \times 1.482 \times 0.0005$$

$$= 0.0001957 \text{m}^3/\text{s}$$

$$\text{Daily runoff} = 0.0001957 \text{m}^3/\text{s} \times 60 \text{s} \times 60 \times 24$$

$$= 16.909 \text{m}^3$$

$$= 17 \text{m}^3 (\text{round-up})$$