

Total: 13 pages

Date: 16 October 2024

TPB Ref.: A/STT/12

By Email

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

Dear Sir,

**Proposed Temporary Public Vehicle Park for Private Car for a Period of 3 Years at Lot 733 S.D ss.11 S.A (Part), 733 S.D ss.11 S.B, 733 S.D ss.11 S.C, 733 S.D ss.11 S.D, 733 S.D ss.11 S.E & 733 S.D ss.11 S.F in D.D. 99, Yan Shau Wai, San Tin, Yuen Long, N.T.**

The details of trip generation with breakdown to justify the provision of 35 parking spaces is shown in the attached page.

Please find attached the drainage proposal and the FSI plan for your further processing of the captioned planning application.

Yours faithfully,



Patrick Tsui

c.c. Fanling, Sheung Shui and Yuen Long East District Planning Office

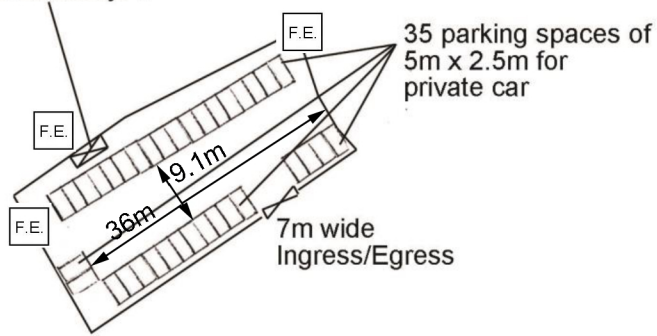
Annex 1 Detailed Traffic Generation at the Application site on 15 October 2024  
(Tuesday)

Time	Private car entering the site	Private car leaving the site
12:00a.m. to 1:00a.m.	0	0
1:00a.m. to 2:00a.m.	0	0
2:00a.m. to 3:00a.m.	0	0
3:00a.m. to 4:00a.m.	0	1
4:00a.m. to 5:00a.m.	0	0
5:00a.m. to 6:00a.m.	0	1
6:00a.m. to 7:00a.m.	0	4
7:00a.m. to 8:00a.m.	2	2
8:00a.m. to 9:00a.m.	4	3
9:00a.m. to 10:00a.m.	2	0
10:00a.m. to 11:00a.m.	0	0
11:00a.m. to 12:00p.m.	1	1
12:00p.m. to 1:00p.m.	0	0
1:00p.m. to 2:00p.m.	1	0
2:00p.m. to 3:00p.m.	0	1
3:00p.m. to 4:00p.m.	1	0
4:00p.m. to 5:00p.m.	4	0
5:00p.m. to 6:00p.m.	3	0
6:00p.m. to 7:00p.m.	4	1
7:00p.m. to 8:00p.m.	2	1
8:00p.m. to 9:00p.m.	3	0
9:00p.m. to 10:00p.m.	0	0
10:00p.m. to 11:00p.m.	1	0
11:00p.m. to 12:00a.m.	0	0



**Structure 1**

Guard room  
 GFA: Not exceeding 20m<sup>2</sup>  
 Height: Not exceeding 3m  
 No. of storey: 1



Project 項目名稱: Proposed Temporary Public Vehicle Park for Private Car for a Period of 3 Years at Lot 733 S.D ss.11 (Part) in D.D. 99, Yan Shau Wai, San Tin, Yuen Long, N.T.	Drawing Title 圖目: Proposed Fire Service Installations Plan	Remarks 備註: <input type="checkbox"/> F.E. 5kg carbon dioxide fire extinguisher
	Drawing No. 圖號: Figure 1	Scale 比例: 1:1000

## **Annex 1 Drainage Assessment**

### A. Site particulars

- 1.1.1 The application site is leading from Tung Wing On Road. (**Figure 1**) It possesses an area of approximately 830m<sup>2</sup>.
- 1.1.2 The application site has been hard paved. It is intended for public parking of private car.
- 1.1.3 The application site is adjacent to some village houses to the south. The site is abutting a pond to the north. A similar public vehicle park was found to the east of the application site.

### B. Level and gradient of the subject site & proposed surface channel

- 1.1.4 The subject site has been hard paved and occupied an area of approximately 830m<sup>2</sup>. It has a very gentle gradient sloping from southwest to northeast from about +3.0mPD to +2.8mPD.
- 1.1.5 In order to follow the topography of the application site, the proposed surface channel will be constructed following the gradient of the site. As demonstrated in the calculation in **Annex 1.3** hereunder, 375mm surface U-channel will be capable to drain surface runoff accrued at the subject site and the same passing through the site from adjacent area.

### C. Catchment area of the proposed drainage provision at the subject site

- 1.1.6 A pond is abutting to the north of the application site. The level of the land to the south of the site (i.e. a road) is slightly higher than the application site and the level to the further south is lower than the road. The land to the west and east is found lower than the application site.
- 1.1.7 In light of the above, an external catchment has been identified in **Figure 1**.

### D. Particulars of the existing drainage facilities to accept the surface runoff collected at the application site

- 1.1.8 According to recent site inspection, a culvert is found to the northwest of the application site. The collected surface runoff will be dissipated to the pond and leading to the culvert. (**Figure 1**)

## **1.2 Runoff Estimation & Proposed Drainage Facilities**

### A. Proposed drainage facilities

- 1.2.1 Subject to the above calculations, it is determined that 375mm surface U-channel

which is made of concrete along the site periphery is adequate to intercept storm water passing through and generated at the application site (**Figure 1**).

- 1.2.2 The collected surface runoff will be conveyed to culvert to the northwest of the application site via the existing pond abutting the northern site boundary. (**Figure 1**)
- 1.2.3 The calculations in **Annex 1.3** shows that the proposed 375mm surface channel has adequate capacity to cater for the surface runoff generated at the subject site and the external catchment.
- 1.2.4 All the proposed drainage facilities, including the section of surface channel proposed in between of the subject site to the open drain, will be provided and maintained at the applicant's own expense. Also, surface U-channel will be cleaned at regular interval to avoid the accumulation of rubbish/debris which would affect the dissipation of storm water.
- 1.2.5 Prior to the commencement of drainage works, the applicant will consult District Lands Office/Yuen Long and relevant land owners for the works outside the application site.
- 1.2.6 The provision of the proposed surface U-channel will follow the gradient of the application site. All the proposed drainage facilities will be constructed and maintained at the expense of the applicant.
- 1.2.7 All proposed works at the site periphery would not obstruct the flow of surface runoff from the adjacent areas, the provision of trees and surface U-channel at site boundary is detailed hereunder:
  - (a) Soil excavation at site periphery, although at minimal scale, is inevitably for the provision of surface U-channel and landscaping. In the reason that the accumulation of excavated soil at the site periphery would obstruct the free flow of the surface runoff from the surroundings, the soil will be cleared at the soonest possible after the completion of the excavation process.
  - (b) No leveling work will be carried at the site periphery. The level of the site periphery will be maintained during and after the works.
  - (c) Some openings will be provided at the toe of hoarding so as to allow unobstructed flow of surface runoff from adjacent area.

## Annex 1.3 Drainage Calculation for the Proposed Provision of Drainage Facilities at Subject Site

### 1. Runoff Estimation

1.1 Rational method is adopted for estimating the designed run-off

$$Q = k \times i \times A / 3,600$$

Assuming that:

- i. The area of the entire catchment is approximately 830m<sup>2</sup> and the size of external catchment is about 170m<sup>2</sup> so that the total area of the catchment is about 1,000m<sup>2</sup>;
- ii. The application site is totally paved with concrete and therefore the value of run-off co-efficient (k) is taken as 1.

$$\text{Difference in Land Datum} = 3.3\text{m} - 2.8\text{m} = 0.5\text{m}$$

$$L = 50\text{m}$$

$$\therefore \text{Average fall} = 0.2\text{m in } 50\text{m} \text{ or } 1\text{m in } 100\text{m}$$

According to the Brandsby-Williams Equation adopted from the “Stormwater Drainage Manual – Planning, Design and Management” published by the Drainage Services Department (DSD),

$$\text{Time of Concentration } (t_c) = 0.14465 [ L / (H^{0.2} \times A^{0.1}) ]$$

$$t_c = 0.14465 [ 50 / (1^{0.2} \times 1,000^{0.1}) ]$$

$$t_c = 3.62 \text{ minutes}$$

With reference to the Intensity-Duration-Frequency Curves provided in the abovementioned manual, the mean rainfall intensity (i) for 1 in 180 recurrent flooding period is found to be 300 mm/hr

$$\text{By Rational Method, } Q = 1 \times 300 \times 1,000 / 3,600$$

$$\therefore Q = 83.33 \text{ l/s} = 5,000 \text{ l/min}$$

In accordance with the Chart or the Rapid Design of Channels in “Geotechnical Manual for Slopes”, 375mm surface U-channel at gradient 1:300 is considered adequate to dissipate all the stormwater accrued by the application site and adjacent land.

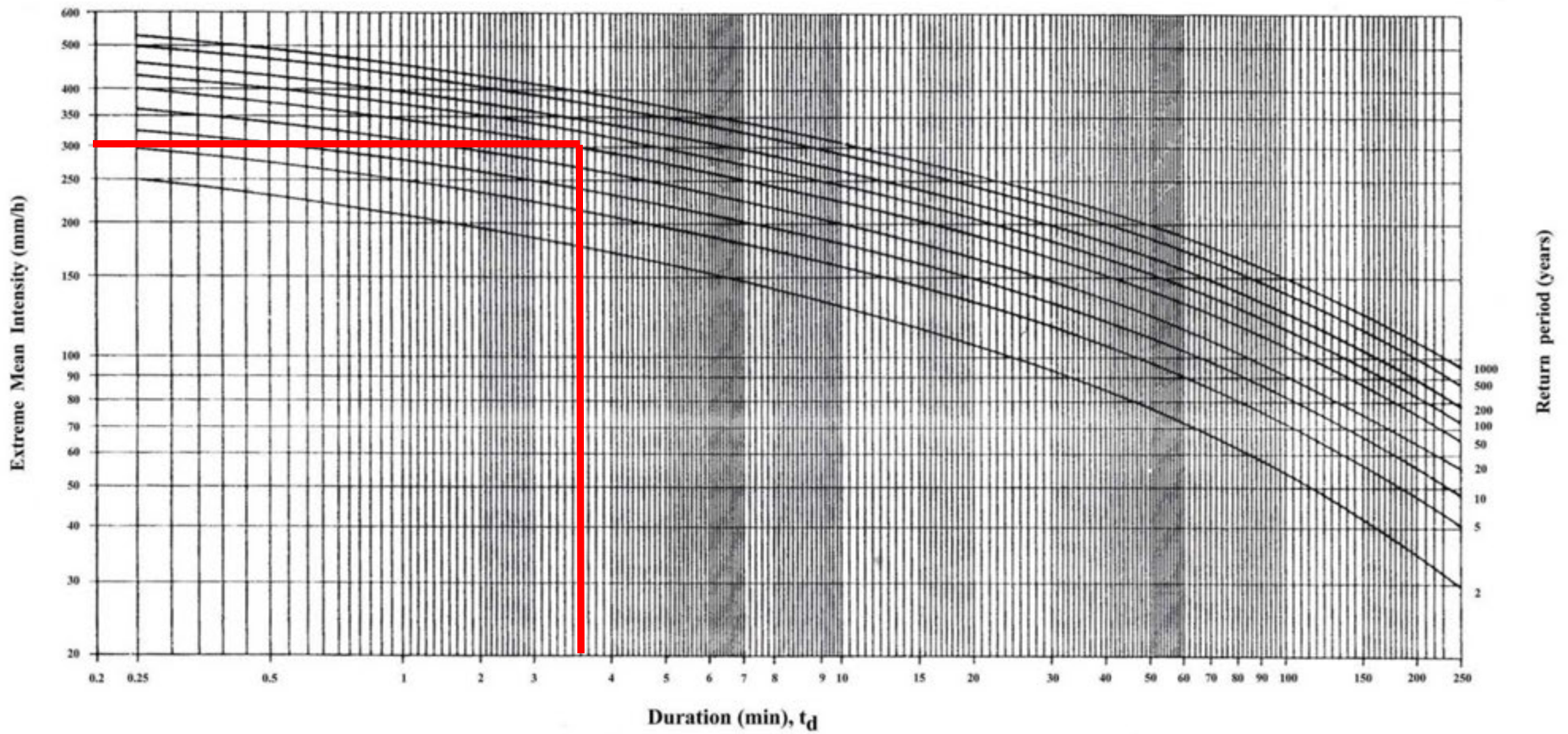


Figure 4. Intensity – Duration – Frequency Curves  
(for durations not exceeding 4 hours)

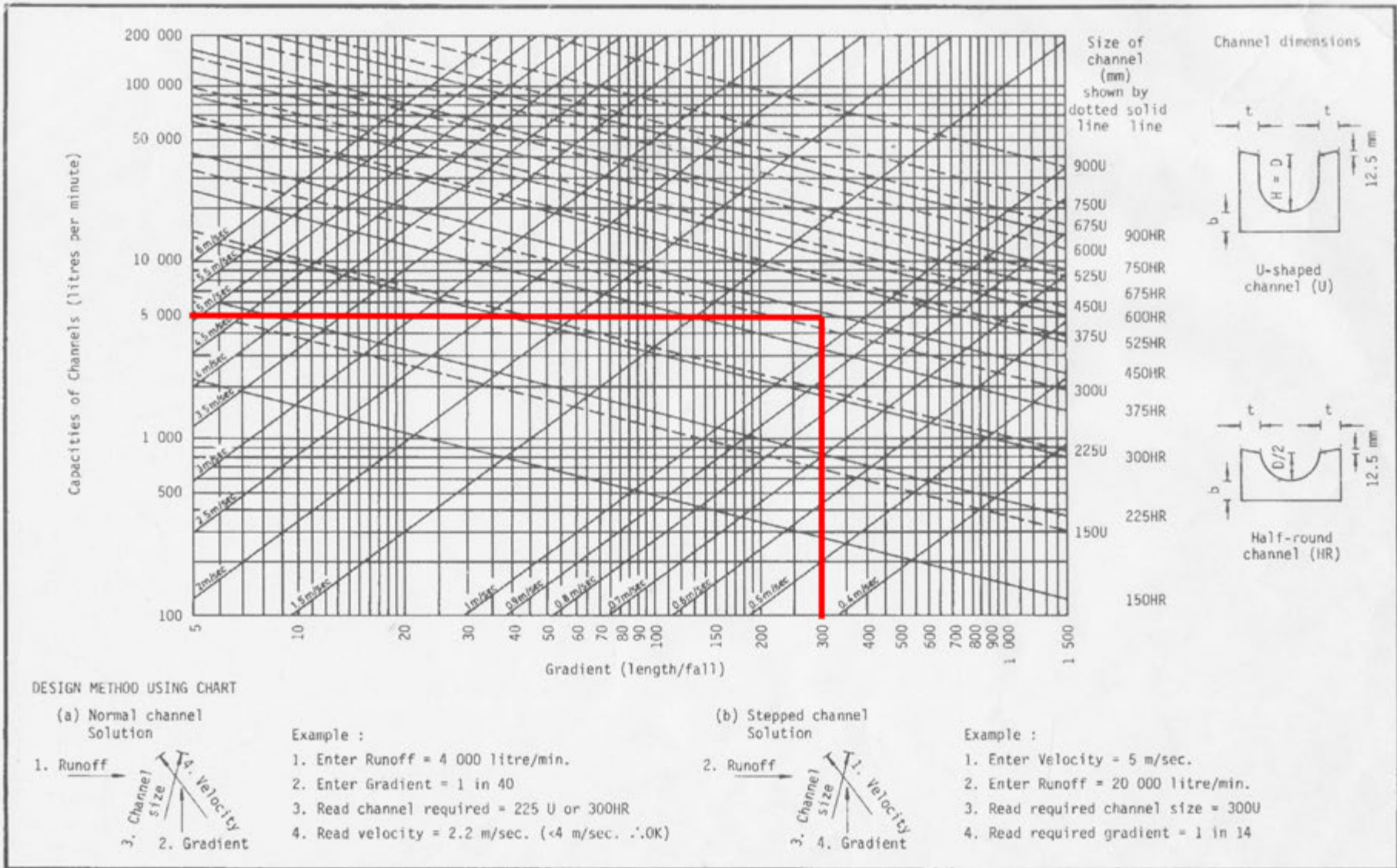
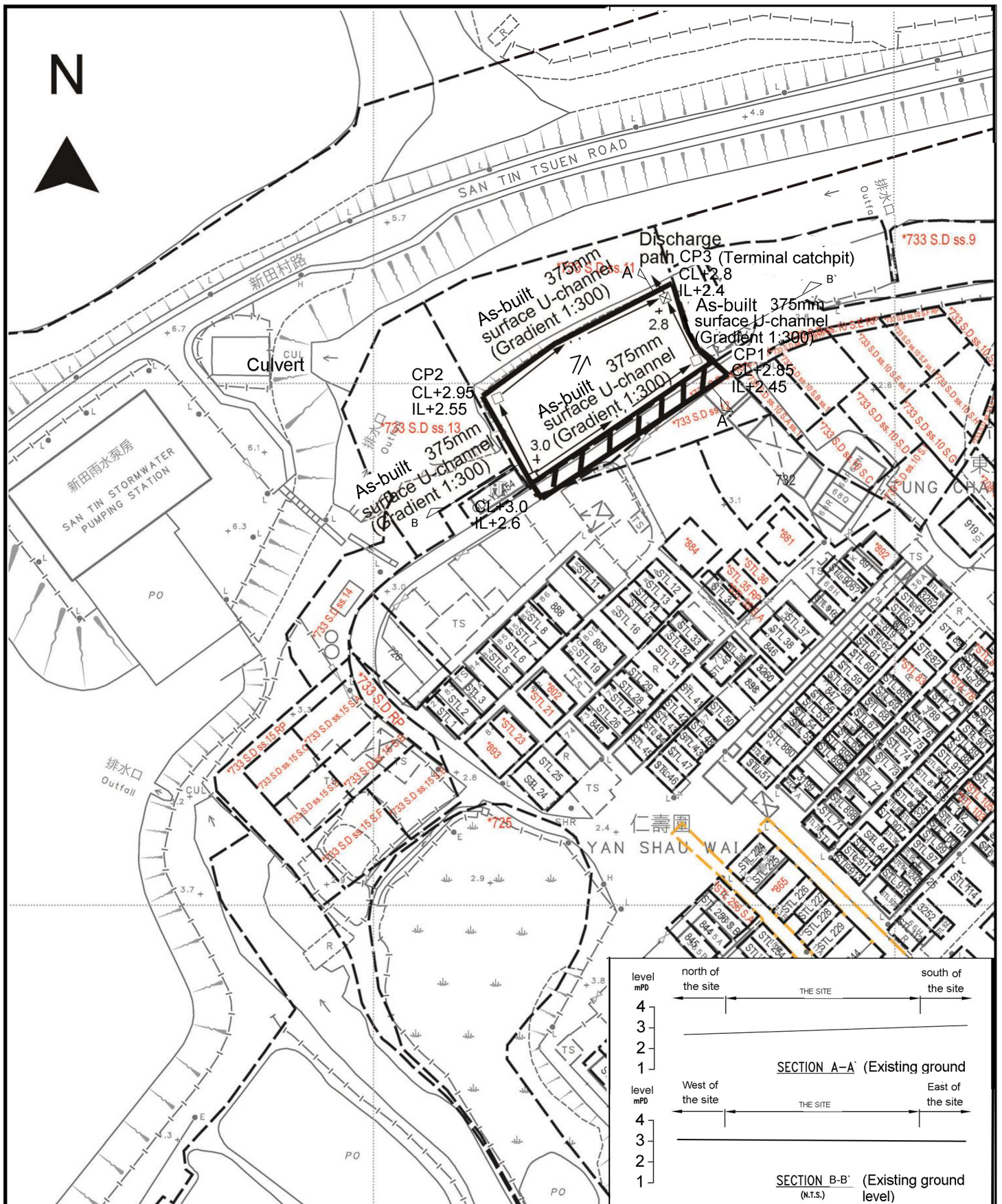


Figure 8.7 - Chart for the Rapid Design of Channels





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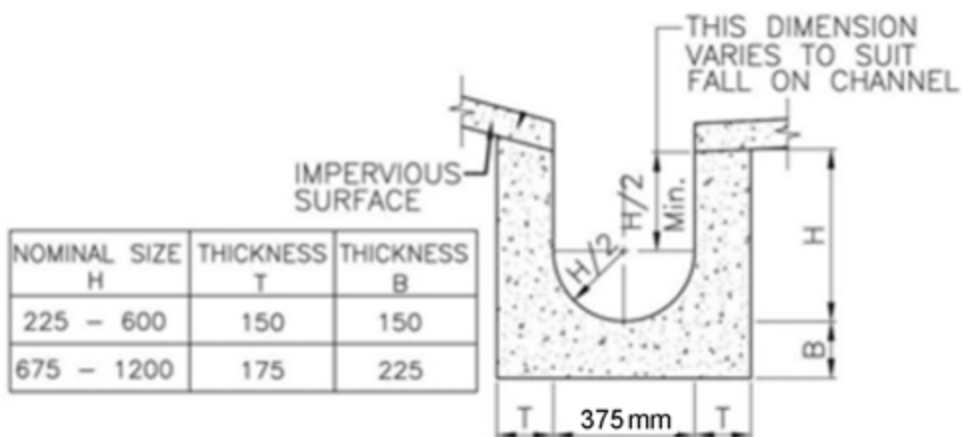
Drawing Title 圖目:  
**As-built Drainage Plan**

Drawing No. 圖號:  
**Figure 1**

Remarks 備註:

- + 3.0 Level (in mPD)
- Flow of surface runoff
- Proposed catchpit with sand trap
- Proposed catchpit
- External catchment
- Application site

Scale 比例:  
**1:500**



**DETAILS OF U-CHANNEL**  
 (REFERENCE : FIG. 8.11 OF  
 GEOTECHNICAL MANUAL FOR SLOPES)  
 (N.T.S.)

Project 項目名稱:

Proposed Temporary Public Vehicle Park for Private Car for a Period of 3 Years at Lot 733 S.D ss.11 (Part) in D.D. 99, Yan Shau Wai, San Tin, Yuen Long, N.T.

Drawing Title 圖目:

Details of Proposed Surface U-channel

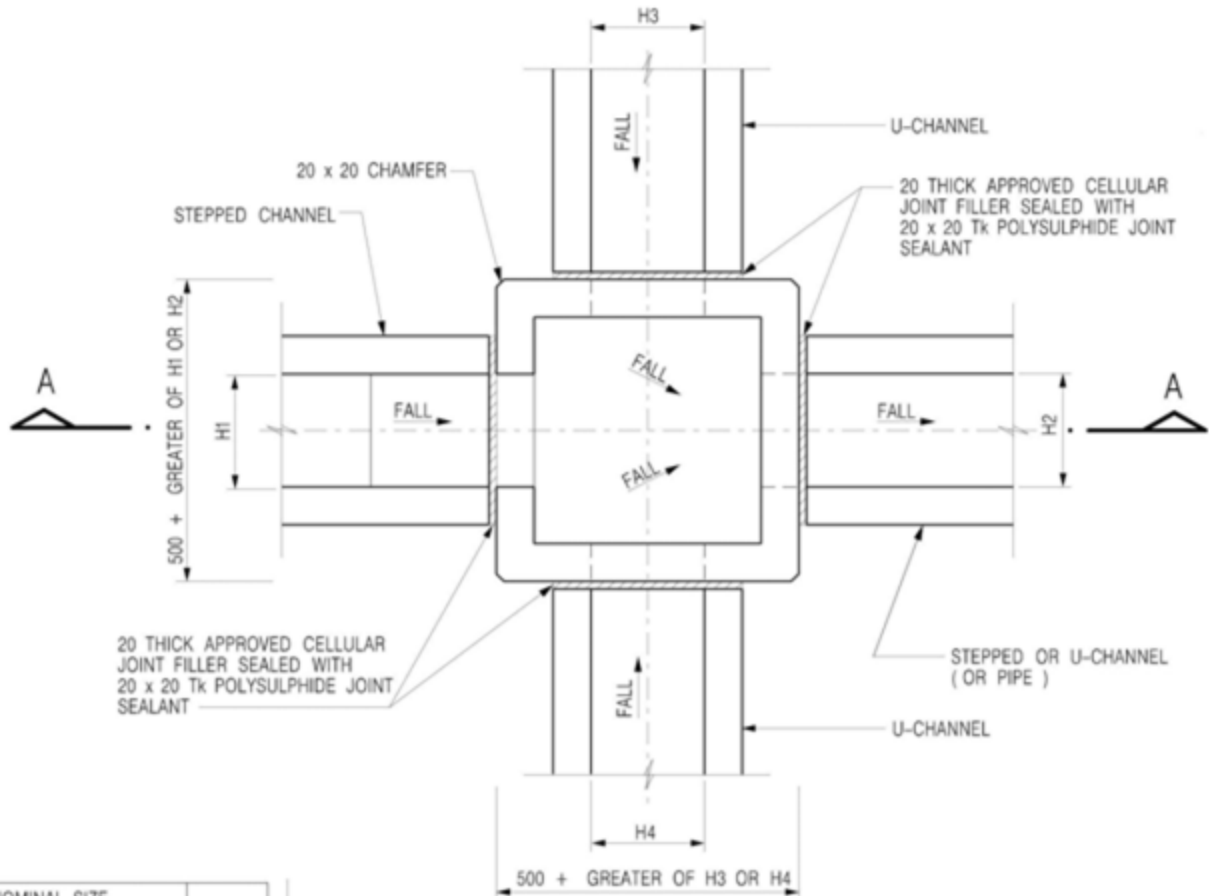
Remarks 備註:

Drawing No. 圖號:

Figure 2

Scale 比例:

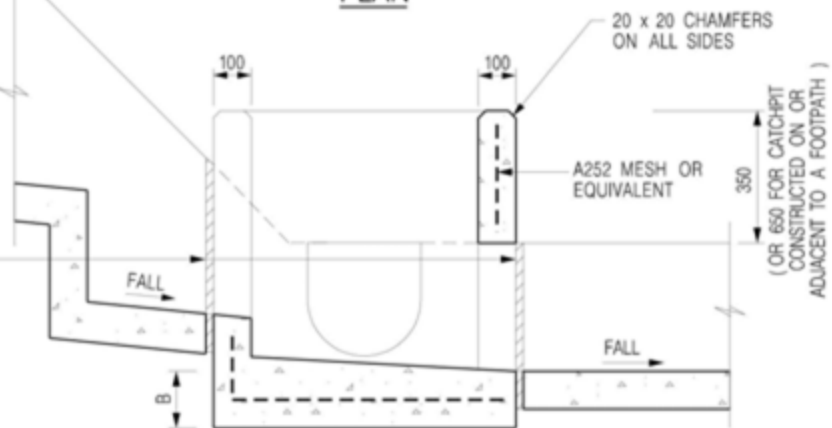
Not to scale



PLAN

NOMINAL SIZE (LARGEST OF H1, H2, H3 & H4)	B
300 - 600	150
675 - 900	175

20 THICK APPROVED CELLULAR JOINT FILLER SEALED WITH 20 x 20 Tk POLYSULPHIDE JOINT SEALANT



SECTION A - A

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. REFER TO SHEET 5 FOR OTHER NOTES.

Project 項目名稱:

Proposed Temporary Public Vehicle Park for Private Car for a Period of 3 Years at Lot 733 S.D ss.11 (Part) in D.D. 99, Yan Shau Wai, San Tin, Yuen Long, N.T.

Drawing Title 圖目:

The Details of the Proposed Catchpit

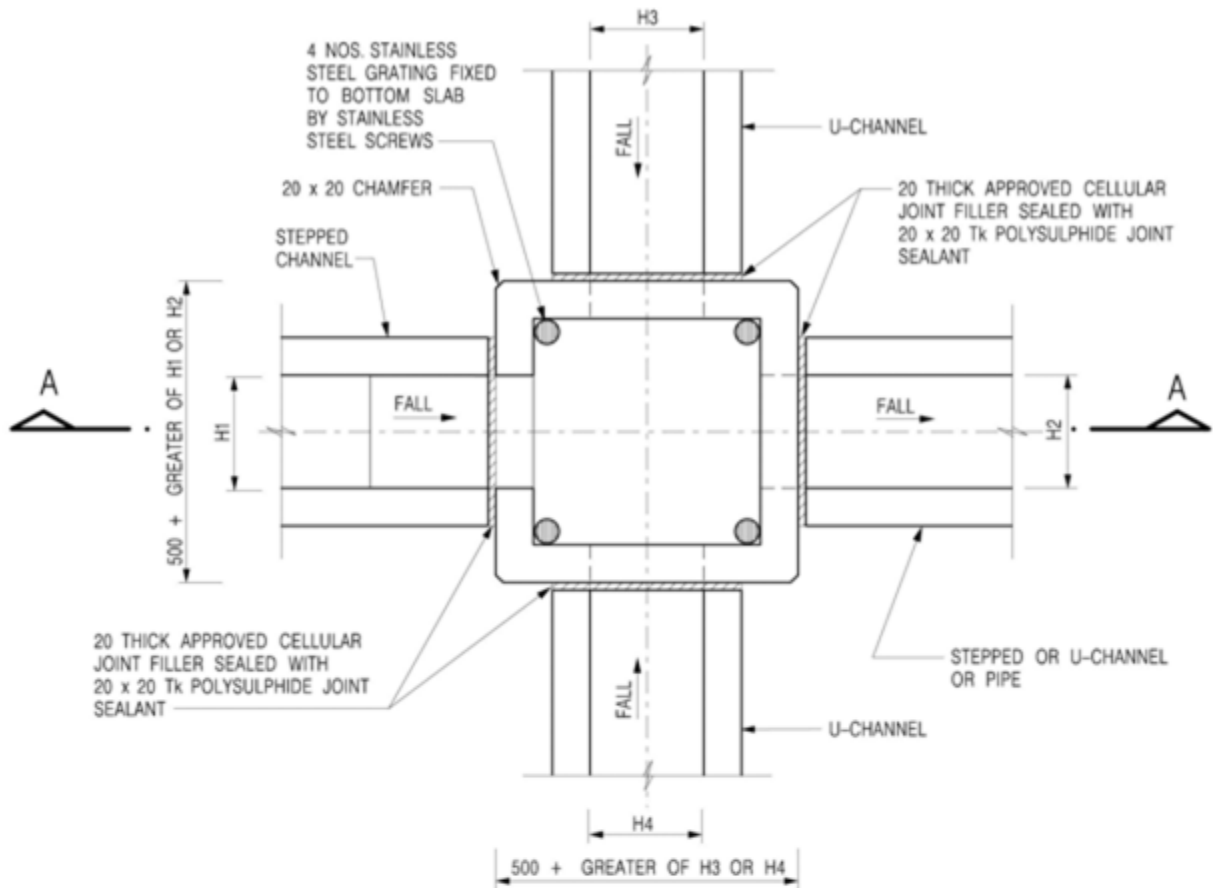
Remarks 備註:

Drawing No. 圖號:

Figure 3

Scale 比例:

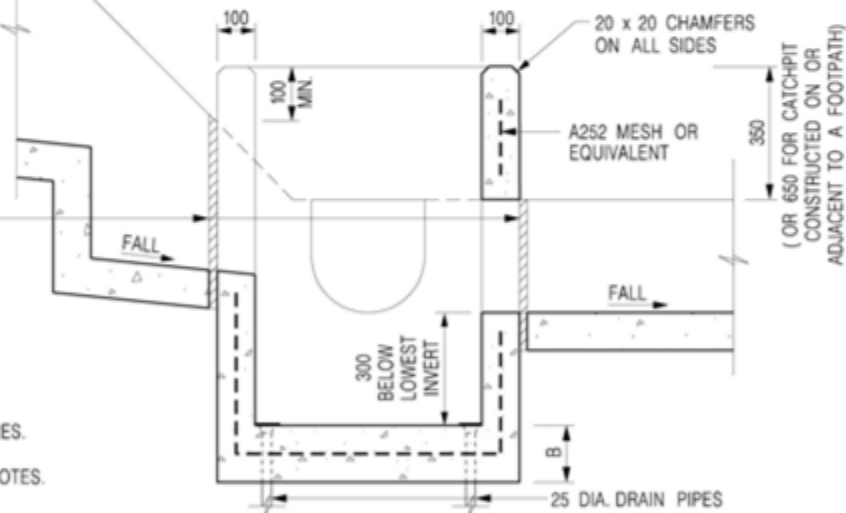
Not to scale



PLAN

NOMINAL SIZE (LARGEST OF H1, H2, H3 & H4)	B
300 - 600	150
675 - 900	175

20 THICK APPROVED CELLULAR JOINT FILLER SEALED WITH 20 x 20 Tk POLYSULPHIDE JOINT SEALANT



SECTION A - A

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. REFER TO SHEET 2 FOR OTHER NOTES.

Project 項目名稱:

Proposed Temporary Public Vehicle Park for Private Car for a Period of 3 Years at Lot 733 S.D ss.11 (Part) in D.D. 99, Yan Shau Wai, San Tin, Yuen Long, N.T.

Drawing Title 圖名:

The Details of Catchpit with Desilting Function

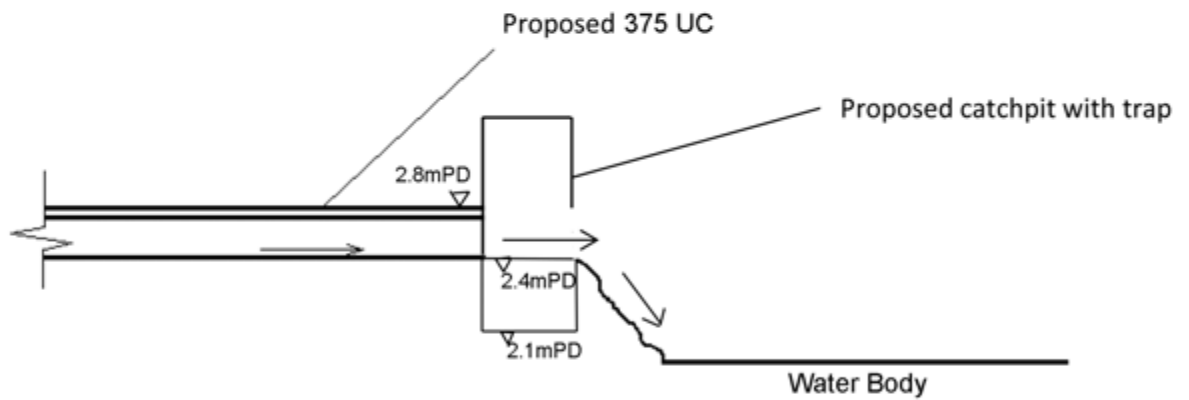
Remarks 備註:

Drawing No. 圖號:

Figure 4

Scale 比例:

Not to scale



Cross sectional plan showing details of the discharge point with invert level