Appendix II

Accepted Drainage Proposal under Previous Application No. A/YL-NTM/456

By Post and Fax [redacted]

規劃署
粉嶺、上水及元朗東規劃處
新界荃灣青山公路388號
中染大廈22樓2202室

Planning Department
Fanling, Sheung Shui & Yuen Long East
District Planning Office
Unit 2202, 22/F, CDW Building,
388 Castle Peak Road, Tsuen Wan, N.T.

來函檔號	Your Reference :	DD104 Lot 630
本署檔號	Our Reference :	( ) in TPB/A/YL-NTM/456
電話號碼	Tel. No. :	3168 4034
傳真機號碼	Fax No. :	3168 4074 / 3168 4045

29 July 2024

[redacted]

Dear Sir,

Compliance with Approval Condition (a)
Submission of a Drainage Proposal

Proposed Temporary Shop and Services for a Period of 5 Years
in "Recreation" Zone, Lot 630 (Part) in D.D. 104, Ngau Tam Mei, Yuen Long
(Planning Application No. A/YL-NTM/456)

I refer to your submission dated 21.6.2024 regarding the submission of a revised drainage proposal for compliance with approval condition (a). Your submission is considered:

☑ Acceptable. The captioned condition has been complied with. Please find detailed comments of the Chief Engineer/Mainland North Division, Drainage Services Department (CE/MN, DSD) at **Appendix**.

☐ Acceptable. Since the captioned condition requires both the submission and implementation of the proposal, it has not been fully complied with. Please proceed to implement the accepted proposal for full compliance with the approval condition.

☐ Not acceptable. The captioned condition has not been complied with.

Yours faithfully,

(Patrick FUNG)
District Planning Officer/
Fanling, Sheung Shui and Yuen Long East
Planning Department

c.c.
CE/MN, DSD (Attn.: Mr. Terence TANG)
CTP/TPB(3)

PF/JL/RC/rc

Appendix

Detailed comments of CE/MN, DSD

(i) The applicant should implement the drainage facilities on site in accordance with the agreed drainage proposal.

(ii) The applicant is required to rectify the drainage system if they are found to be inadequate or ineffective during operation. The applicant shall also be liable for and shall indemnify claims and demands arising out of damage or nuisance caused by a failure of the drainage system.

(iii) The proposed development would neither obstruct overland flow nor adversely affected any existing natural streams, village drains, ditches and the adjacent areas.

(iv) The applicant(s) shall resolve any conflict/disagreement with relevant lot owner(s) and seek LandsD's permission for laying new drains/channels and/or modifying/upgrading existing ones in other private lots or on Government land (where required) outside the application site(s).

R-Riches
Property Consultants Ltd.

顧問有限公司 盈卓物業

Our Ref.: DD104 Lot 630
Your Ref.: TPB/A/YL-NTM/456

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

By Email

21 June 2024

Dear Sir,

Compliance with Approval Condition (a)

Proposed Temporary Shop and Services for a Period of 5 Years in "Recreation" Zone,
Lot 630 (Part) in D.D. 104, Ngau Tam Mei, Yuen Long, New Territories

(S.16 Planning Application No. A/YL-NTM/456)

We are writing to submit a responses-to-comments table and a revised drainage proposal for compliance with approval condition (a) of the subject application, i.e. *the submission of a drainage proposal* (**Appendix I**).

Should you require more information regarding the application, please contact our Mr. Christian CHIM at [redacted] or the undersigned at your convenience. Thank you for your kind attention.

Yours faithfully,

For and on behalf of
R-riches Property Consultants Limited

Louis TSE
Town Planner

cc DPO/FSYLE, PlanD (Attn.: Mr. Ryan CHAN email: rlychan@pland.gov.hk)

[redacted]

Section 16 Planning Application for Temporary Shop and Services for a Period of 5 Years at Lots 630 (Part) in D.D. 104, Ngau Tam Mei, Yuen Long (Application No. A/YL-NTM/456)

Stormwater Drainage Proposal Report

June 2024

LI KOK KEUNG
MEng MICE MiStructE
MHKIE CEng RPE

Contents

Responses to Comments from DSD

Responses to comments from the Drainage Services Department:

Comments	Response
1. In western peripheral channel calculation: The eastern catchment flow should also be considered in the western peripheral channel assessment	Noted. The design calculation has been revised to include the eastern catchment flow in designing the western peripheral channel. The size of the channel is revised from 225 to 300mm UC
2. Drainage Design Calculation: Please justify the assumed time of concentration 10 minutes and 3 minutes.	The time of concentration have been reviewed with reference to the enclosed Figure 2B-3.01: Velocity Versus Slope for Shallow Concentrated Flow extracted from NRCS National Engineering Handbook, Part 630, Chapter 15. The time of concentration is estimated to be 3 minutes.
3. Please also clearly indicate the designed lines in the charts (i.e. Figure 4a and 8.7) provided,	Noted. The designed lines were shown in the charts for reference.
4. Previous comment viii has not been addressed. The existing drainage facilities, to which the stormwater of the development from the subject site would discharge, are not maintained by this office. The applicant should identify the owner of the existing drainage facilities to which the proposed connection will be made. Also, DSD noted that the proposed drainage connection(s) to the surrounding/downstream area(s) will run through other private lot(s). The applicant shall demonstrate that the proposed drainage construction / improvement / modification works and the operation of the drainage can be practically implemented. 5.	As shown in the enclosed lot index plan in Appendix A, the portion of the existing streamcourse to which the stormwater from the application site would discharge is within lot 630 with its downstream portion runs through lot 629 before running into the government lands where the Ngau Tam Mei Road is built. The application site is within lot 630 of which the applicant is the owner. Lot 629 where the downstream portion of the stream course passes through is <u>also owned</u> by the applicant. For this reason, the applicant has the sovereignty to implement and operate the proposed drainage works.
6. The proposed drainage facilities should be shown on cross section drawings	Noted.

1. Introduction

The owners of the captioned lot intend to submit a Section 16 town planning application to the Town Planning Board (TPB) seeking planning permission for Temporary Shop and Services at **Lot 630 (Part) in D.D. 104**, Ngau Tam Mei, Yuen Long for a period of 5 years.

Planning Department has no objection to the application. One of the approval conditions is to submit and provision of the drainage facilities to the satisfaction of the Director of Drainage Services or of the Town Planning Board. The implemented drainage facilities on the site shall be maintained at all times during the planning approval period.

This report outlines the existing drainage facilities on the proposed site and proposes the drainage facilities to be implemented on the site during the planning approved period.

2. The Existing Site

The proposed site is generally flat with site area of about **434m^2** located inside a fenced-off area with level at about + 12.2mPD as shown in the layout plans and site photos enclosed in **Appendix A.** The enclosed site is presently a developed site hard-paved with concrete and is accessible from Ngau Tam Mei Road via a local access.

According to the applicants, the development involves two 2-storey structures with building height of 7m and total floor area of about **288**m^2 for shop and services (convenience store) with ancillary office. In addition, one light goods vehicle loading and unloading bay will be established. The surroundings are rural in character intermixed with vacant land and scattered residential structures/dwellings and storage uses.

3. Existing Drainage Facilities

The existing drainage provisions are shown in the drainage plan **D01** enclosed in **Appendix B.** As shown in the existing drainage plan **D01**, there is an existing natural stream of size about 1.0m wide, 1.0m deep, running along the western boundary of the site (Photo Nos. 1 and 2) conveying rainwater in a south to north direction towards Ngau Tam Mei Road. As shown in the enclosed lots index plan in Appendix A, the existing stream is located within lot 630 with its downstream portion runs through lot 629 before running into the government lands where the Ngau Tam Mei Road is built.

As stated in the above, the existing development site is fenced off by metal hoarding. The bottom parts of the hoardings are constructed about 150 to 200mm higher than the ground level to allow free inflow or outflow of surface water during rainstorm (Photo No.3). The gradient of the site is slightly falling towards the western part of the site. All rainwater falling onto the development site and its adjacent areas is presently being drained to the existing stream without any records of flooding during severe rainstorms.

4. Proposed Drainage Facilities

As stated in the above section, the rainwater entering into the Application Site naturally falls towards the existing stream running along the western boundary of the site without

records of flooding. It is proposed to keep the drainage unchanged. In order to better collect the rainwater from the adjacent areas and drain the runoff within the Application Site, it is proposed to constructed a covered peripheral 300mm U-channel in the Application Site to discharge the stormwater to the existing stream as shown in the proposed drainage plan enclosed in **Plan D02** in **Appendix B**. A catchment area plan is enclosed in **Appendix C** while the cross sections showing the Application Site and its adjacent areas are shown in the **Appendix D**. The overland flows of stormwater are mainly in a east to west direction. The catchment area of the flow from the land west of the Application Site is about 850m^2. The flows will be collected by the peripheral channel along the eastern boundary. The stormwater from within the Application Site will be collected by the peripheral channel at the western site boundary.

The calculations showing that the capacity of the proposed 300UC in discharging the rainwater from the application site and its adjacent lands, and the drainage capability of the existing stream were enclosed in **Appendix C** of this report. The portion of the existing streamcourse to which the stormwater from the application site would discharge is within lot 630. The application site is within lot 630 of which the applicant is the owner. Lot 629 where the downstream portion of the stream course passes through is also owned by the applicant. For this reason, the applicant has the sovereignty to implement and operate the proposed drainage works.

5. Conclusions

The proposed site is small and is located close to an existing natural stream course about 1000mm wide running alongside the site boundary. There are presently no proper drainage provisions in the existing application site. Stormwater from within the application site will fall naturally out of the site to the adjacent stream course.

It is proposed to construct a system of 300mm surface channels and desilting catchpits in the Application Site to collect the rainwater from within the site to a last desilting catchpit, C3, and then discharge the water to the adjacent stream through a proposed 300mm concrete pipe. The application site will only be of temporary use with a period of about five years, the proposed drainage facilities were considered more than sufficient and safe. Being the owner of lots 630 and 629, the owner of the site will have no problem in implementing and keep monitoring the conditions of the drainage establishment within and outside the Application Site and maintain the said system at the owner's cost.

APPENDIX A

Location Plan, Site Plan, Lots Index Plan and Photos of Application Site

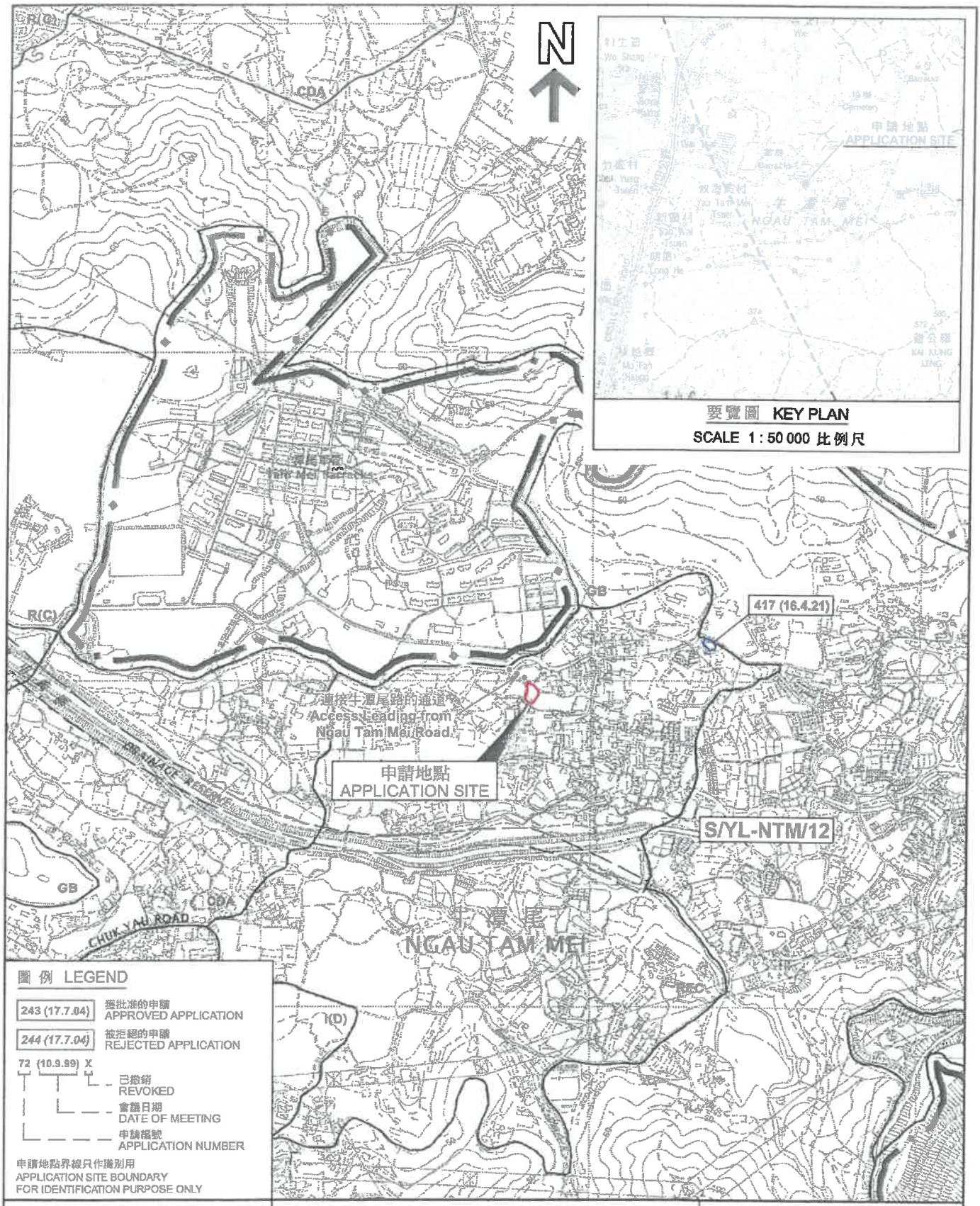


圖 例 LEGEND

243 (17.7.04)	獲批准的申請 APPROVED APPLICATION
244 (17.7.04)	被拒絕的申請 REJECTED APPLICATION
72 (10.9.99) X	已撤銷 REVOKED
	會議日期 DATE OF MEETING
	申請編號 APPLICATION NUMBER

申請地點界線只作識別用
APPLICATION SITE BOUNDARY FOR IDENTIFICATION PURPOSE ONLY

本摘要圖於2023年2月27日擬備，
所根據的資料為於2006年12月5日
核准的分區計劃大綱圖編號 S/YL-NTM/12
EXTRACT PLAN PREPARED ON 27.2.2023
BASED ON OUTLINE ZONING PLAN No.
S/YL-NTM/12 APPROVED ON 5.12.2006

位置圖及同類申請 LOCATION PLAN WITH SIMILAR APPLICATION

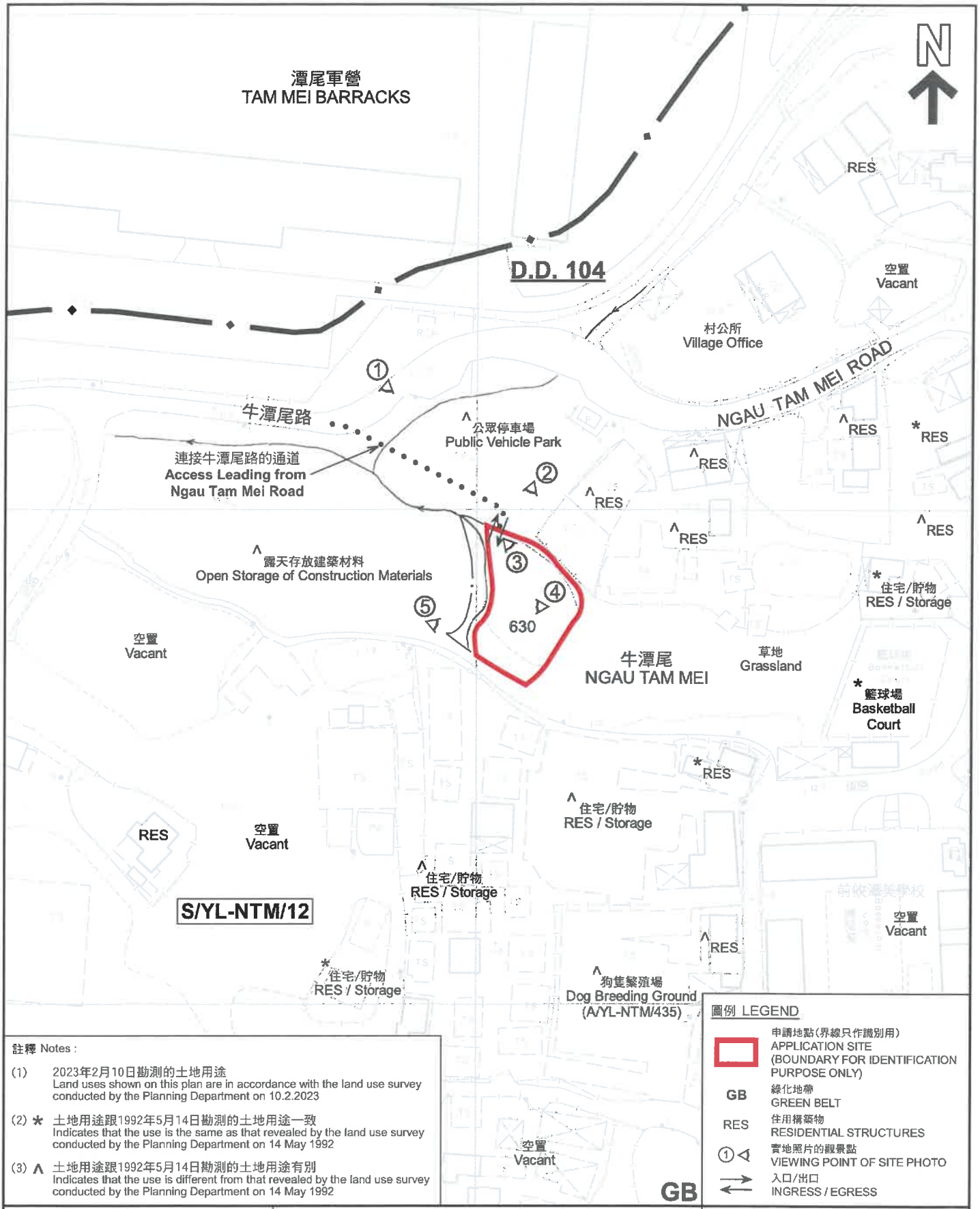
擬議臨時商店及服務行業（為期 5 年）
元朗牛潭尾丈量約份第104約地段第630號(部分)
PROPOSED TEMPORARY SHOP AND SERVICES
FOR A PERIOD OF 5 YEARS
LOT 630 (PART) IN D.D. 104, NGAU TAM MEI, YUEN LONG

SCALE 1 : 7 500 比例尺
米 METRES 100 0 100 200 300 米 METRES

規劃署
PLANNING DEPARTMENT

參考編號 REFERENCE No.
A/YL-NTM/456

圖 PLAN
A-1



註釋 Notes :

(1) 2023年2月10日勘測的土地用途
Land uses shown on this plan are in accordance with the land use survey conducted by the Planning Department on 10.2.2023

(2) * 土地用途跟1992年5月14日勘測的土地用途一致
Indicates that the use is the same as that revealed by the land use survey conducted by the Planning Department on 14 May 1992

(3) ^ 土地用途跟1992年5月14日勘測的土地用途有別
Indicates that the use is different from that revealed by the land use survey conducted by the Planning Department on 14 May 1992

圖例 LEGEND

- 申請地點(界線只作識別用) APPLICATION SITE (BOUNDARY FOR IDENTIFICATION PURPOSE ONLY)
- GB 綠化地帶 GREEN BELT
- RES 住用構築物 RESIDENTIAL STRUCTURES
- ①◁ 實地照片的觀景點 VIEWING POINT OF SITE PHOTO
- 入口/出口 INGRESS / EGRESS

本摘要圖於2023年3月3日擬備，
所根據的資料為測量圖編號
2-SE-17D
EXTRACT PLAN PREPARED ON 3.3.2023
BASED ON SURVEY SHEET No.
2-SE-17D

平面圖 SITE PLAN

擬議臨時商店及服務行業（為期 5 年）
元朗牛潭尾丈量約份第104約地段第630號(部分)
PROPOSED TEMPORARY SHOP AND SERVICES
FOR A PERIOD OF 5 YEARS
LOT 630 (PART) IN D.D. 104, NGAU TAM MEI, YUEN LONG

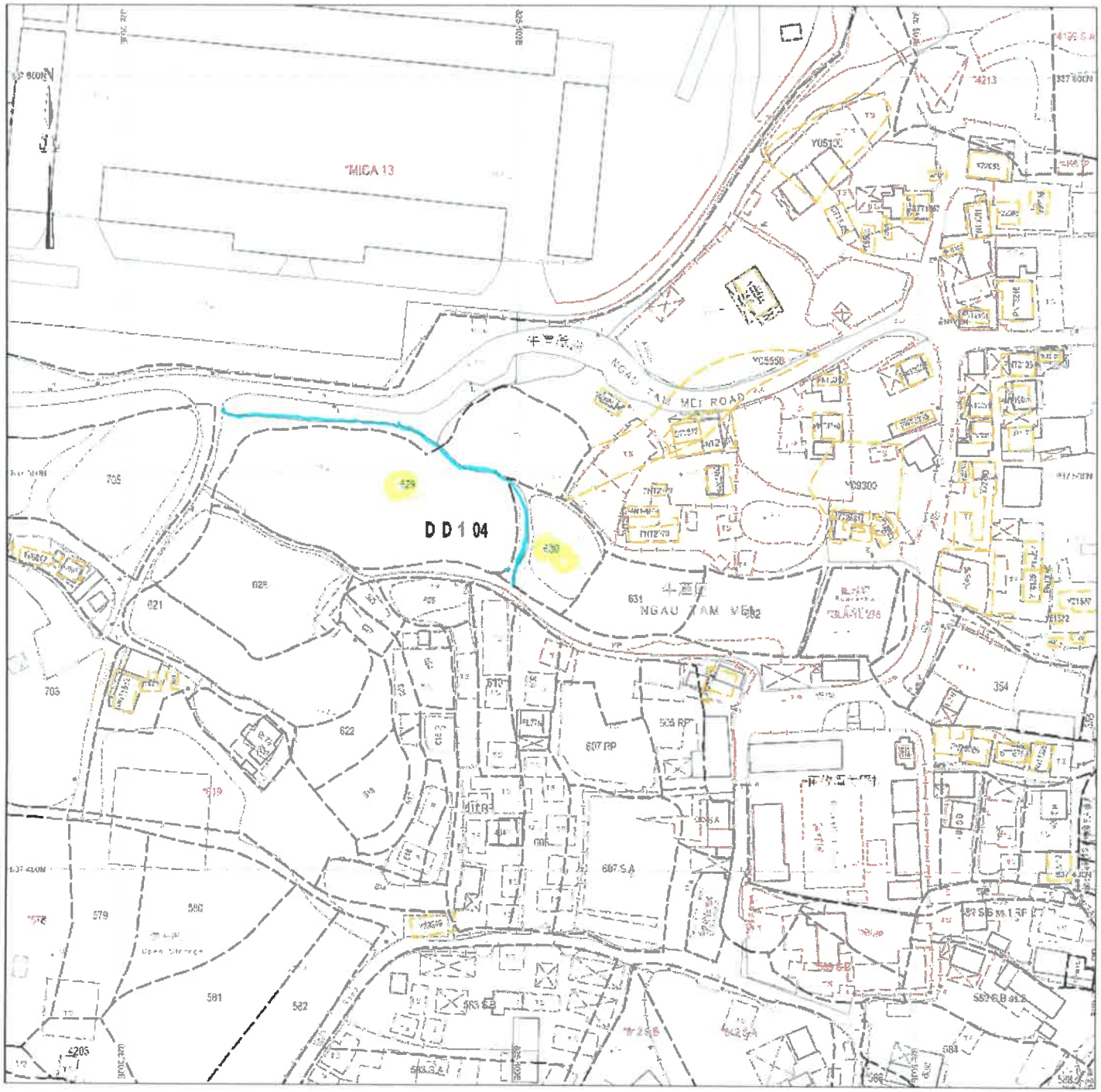
SCALE 1 : 1 000 比例尺

米 METRES 20 0 20 40 米 METRES

規劃署
PLANNING DEPARTMENT

參考編號
REFERENCE No.
A/YL-NTM/456

圖 PLAN
A-2



地段索引圖
LOT INDEX PLAN

Explanatory notes : This plan shows the graphical boundaries of different kinds of permanent and temporary land holdings with the topographic map in the backdrop. The land holdings as shown may include private lots, government land allocations, short term tenancies and other permitted uses of land. It must be noted that: (1) the information shown on this plan is subject to update without prior notification; (2) there may be time lag between an update and the related changes taken place, and (3) the graphical boundaries as shown are for identification purpose only and interpretation of their accuracy and reliability requires the advice from professional land surveyor.
Disclaimer : The Government shall not be responsible for any loss or damage howsoever arising from the use of this plan or in reliance upon its correctness, completeness, timeliness or accuracy.

地政總署測繪處
Survey and Mapping Office
Lands Department

比例尺 SCALE 1 : 1 000

0 10 20 30 40 50 metres

Locality :

Lot Index Plan No. : ags_S00000103591_0001

District Survey Office : Land Information Centre

Date : 17-Nov-2022

Reference No. 2-SE-17D,2-SE-18C


STT812
PNT2530
PNT3387
PNT2979
APPLICATION SITE
PNT2979
PNT2979
PNT2979
629
D D 1 04
630
631
牛潭尾
NGAU TAM ME
632
625
626
627
624
623
610
609
606
TS
FP

PHOTO NO. 1 - EXISTING STREAM

PHOTO NO. 2 - EXISTING STREAM

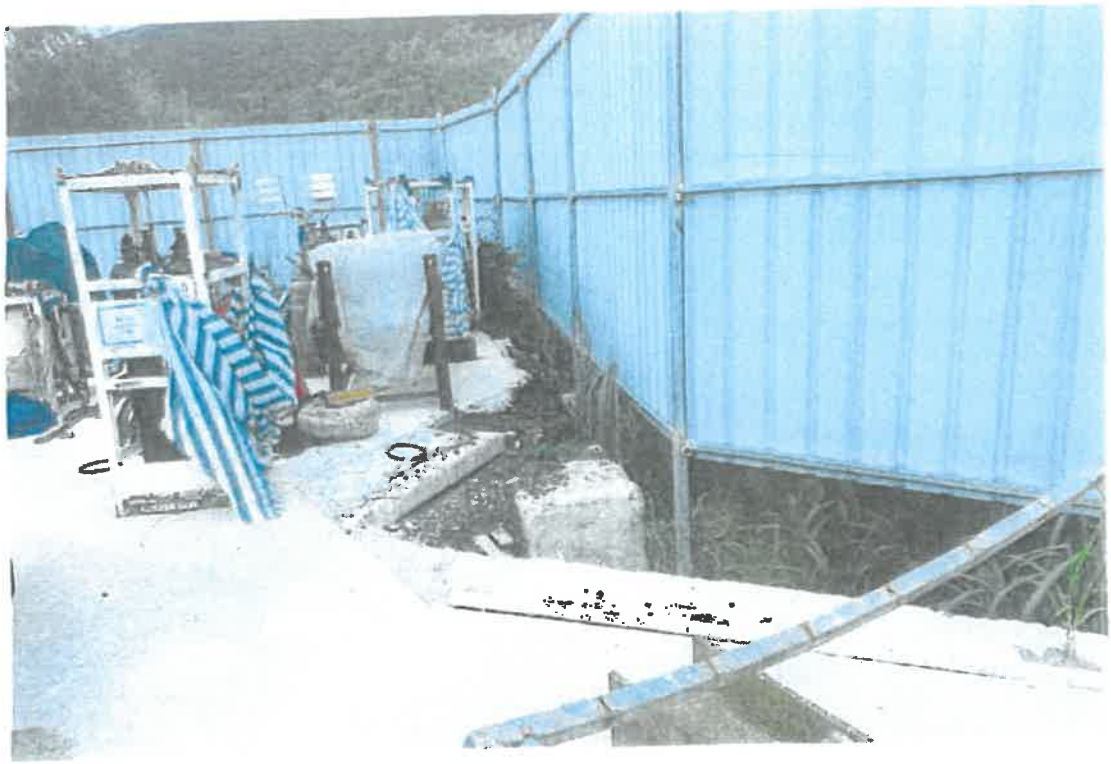


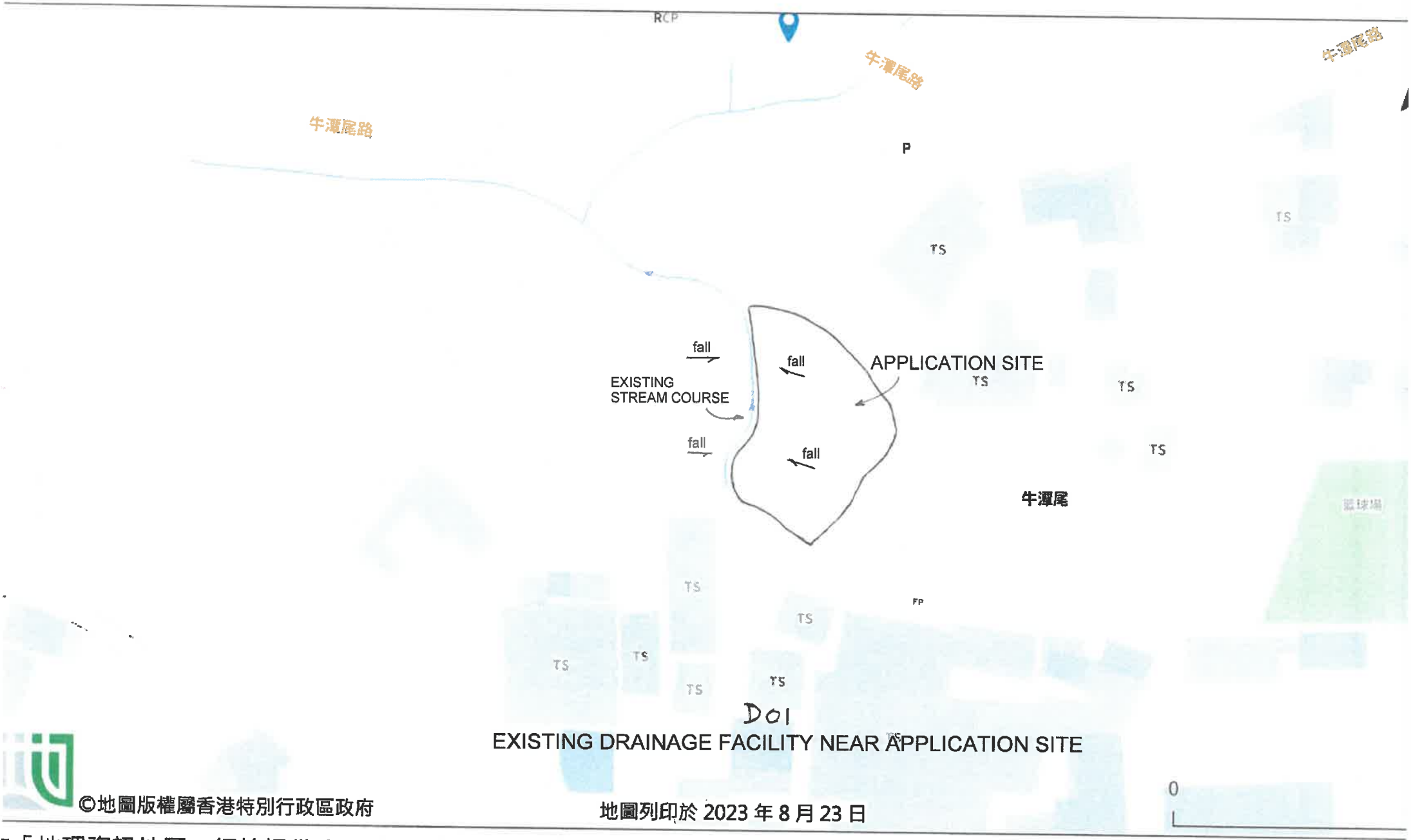
PHOTO NO. 3 - EXISTING HOARDING AND EXISTING STREAM
AT THE WESTERN BOUNDARY OF THE SITE

APPENDIX B

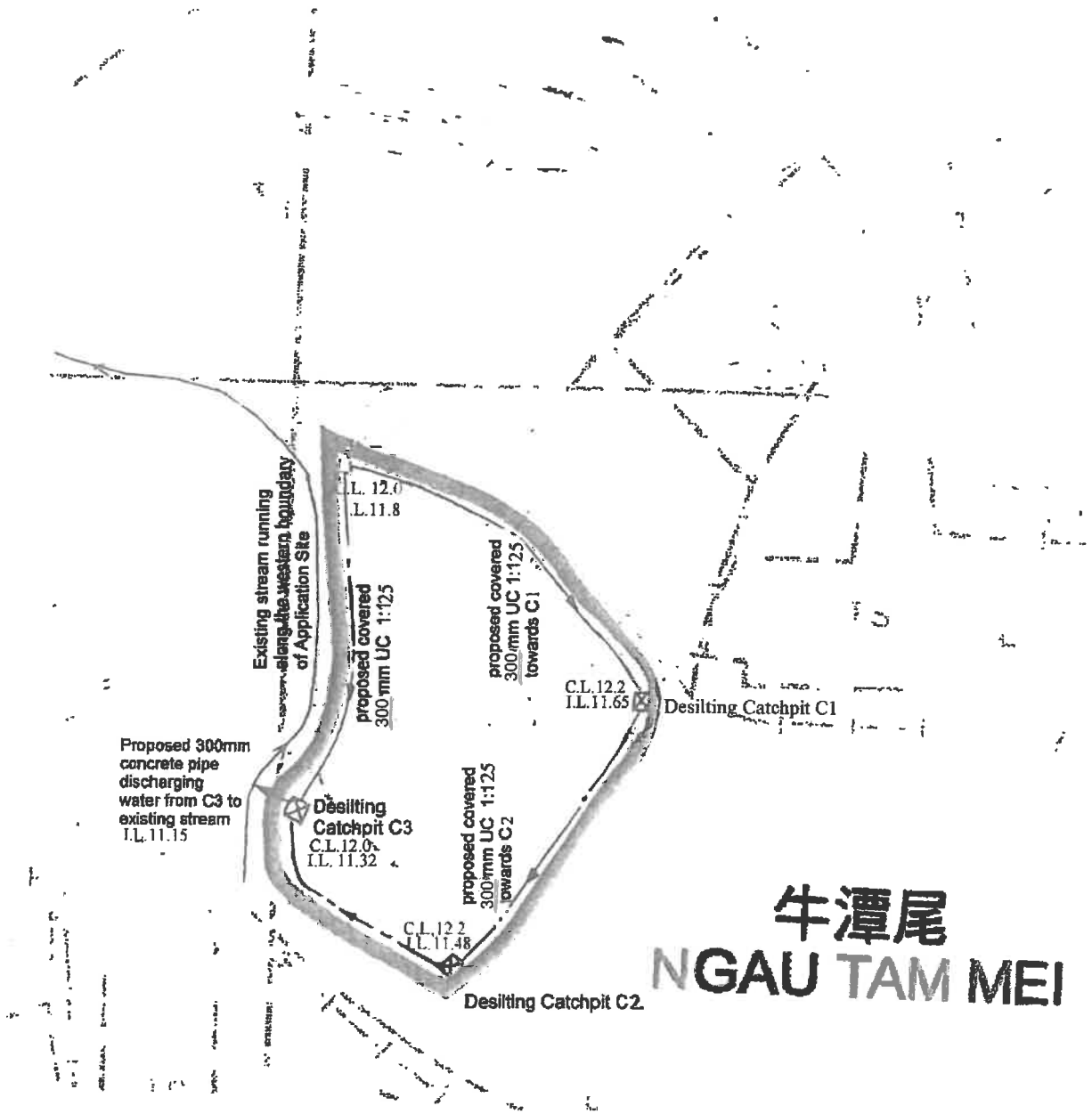
Drainage Plans D01 and D02

地理資訊地圖

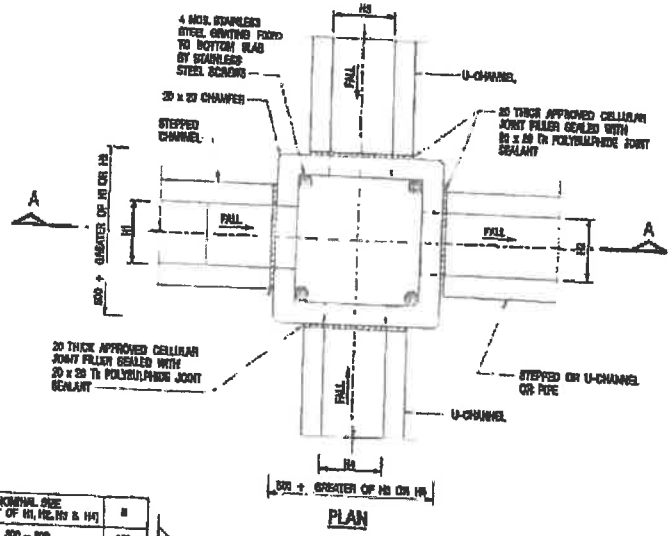
前往地圖: https://www.map.gov.hk/gm/geo:22.4768,114.0710?z=564



地圖列印於 2023 年 8 月 23 日

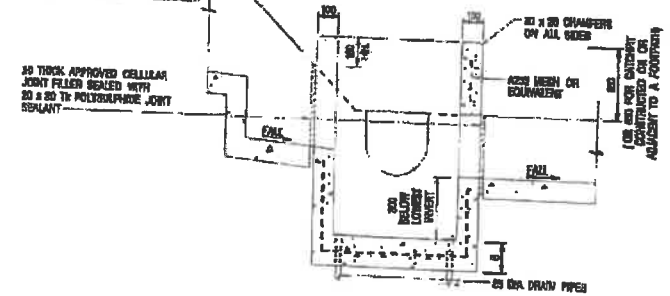


PLAN D02 - PROPOSED DRAINAGE PLAN



PLAN

NOMINAL SIZE (LARGEST OF W1, W2, W3 & W4)	B
300 – 600	150
675 – 900	175

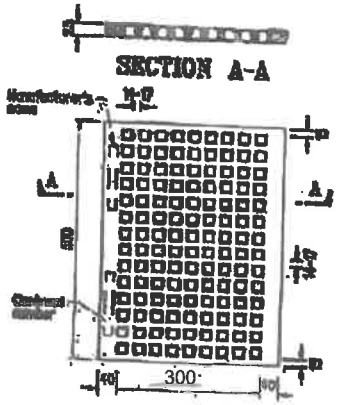


SECTION A – A

NOTES:

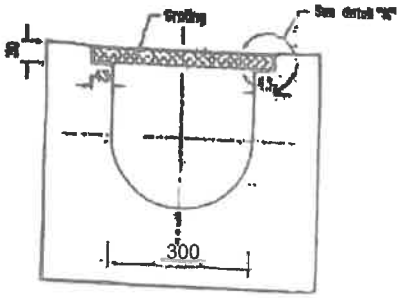
1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. REFER TO SHEET 2 FOR OTHER NOTES.

TYPICAL DETAILS OF CATCHPIT

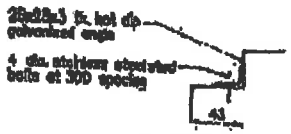


GRATING - SQUARE HOLES PATTERN

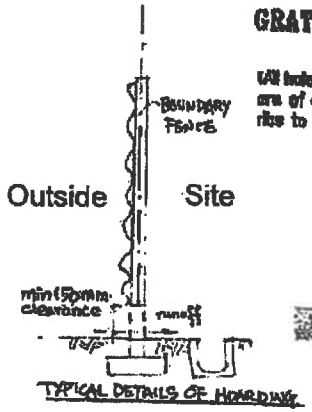
(All holes are 20x20 in size and all ribs are of equal width. Exact no. of holes and ribs to be adjusted to suit channel width)

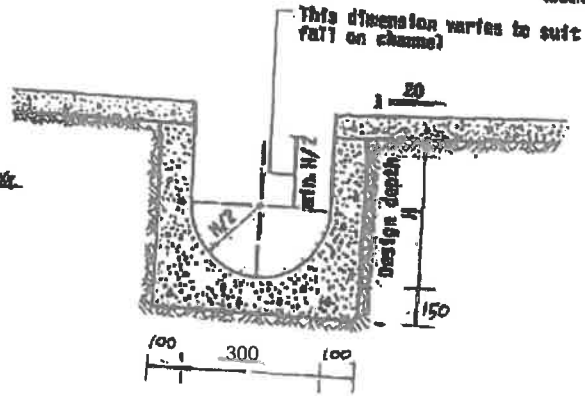


TYPICAL CROSS SECTION OF CHANNEL



DETAIL "Y"
(Scale 1:5)

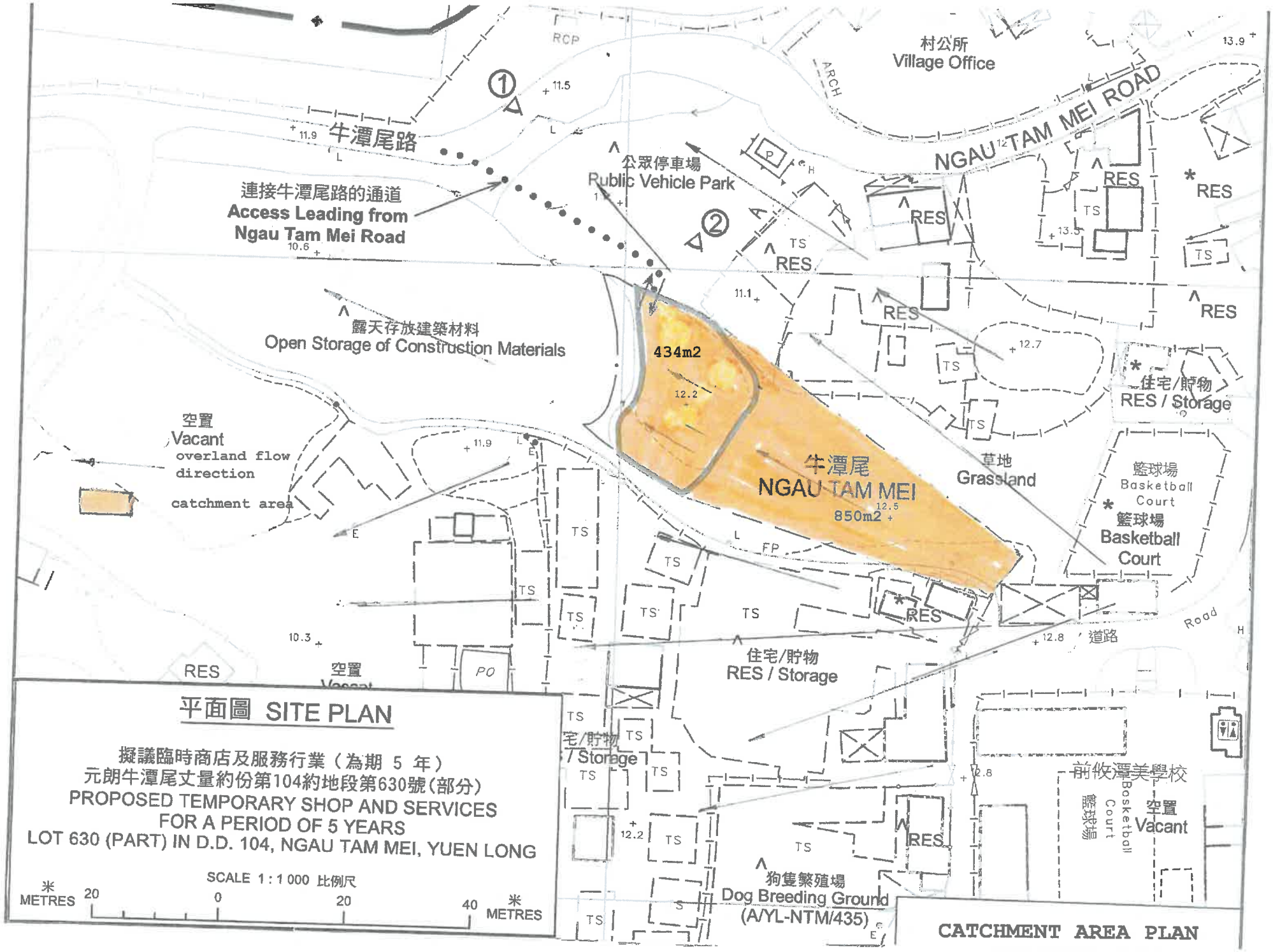




TYPICAL DETAILS OF U CHANNEL

APPENDIX C

Design Checking of Existing Stream and the Proposed 300mm UC

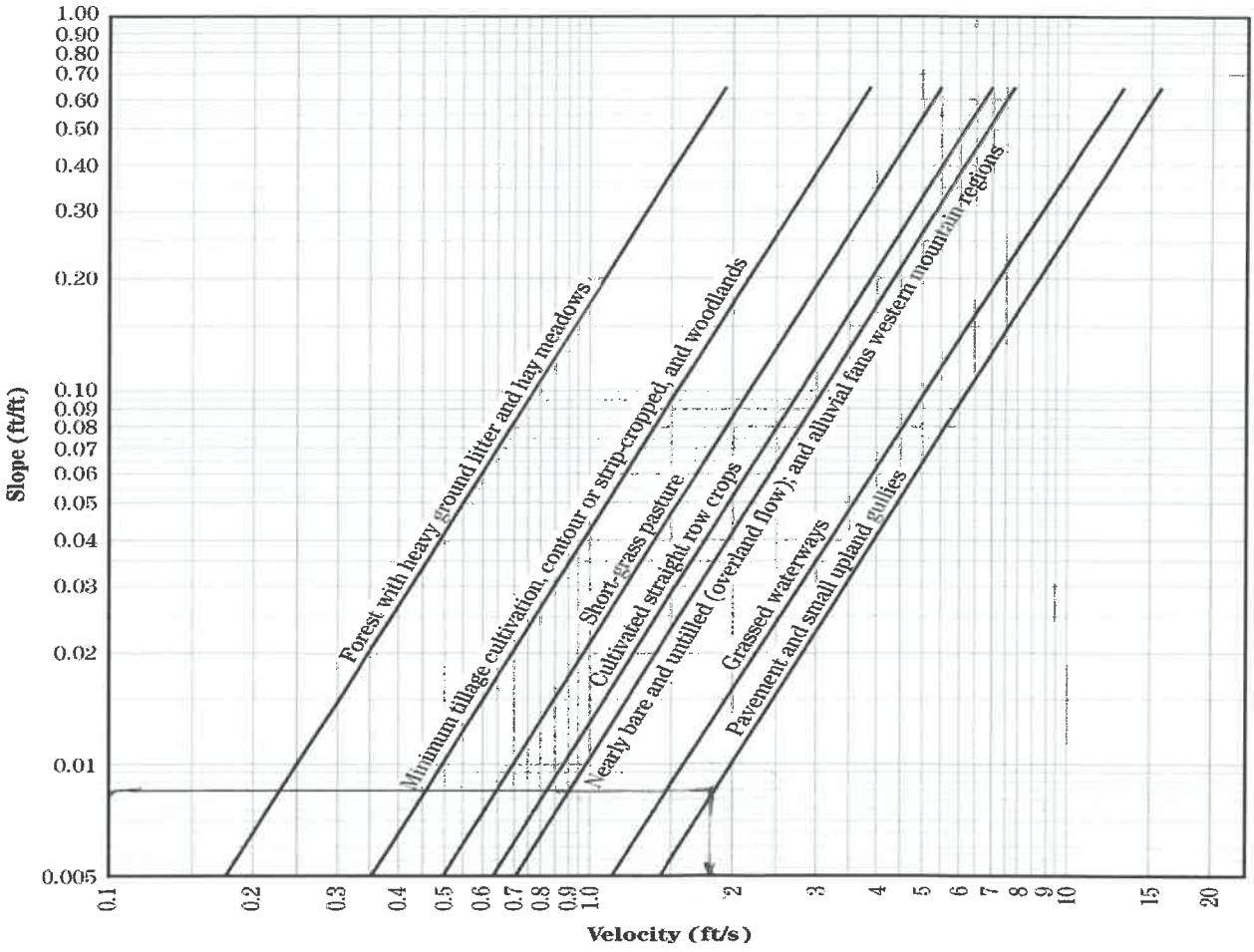

村公所
Village Office
牛潭尾路
NGAU TAM MEI ROAD
公眾停車場
Public Vehicle Park
連接牛潭尾路的通道
Access Leading from
Ngau Tam Mei Road
露天存放建築材料
Open Storage of Construction Materials
434m2
牛潭尾
NGAU TAM MEI
850m2
空置
Vacant
overland flow
direction
catchment area
草地
Grassland
籃球場
Basketball
Court
住宅/貯物
RES / Storage
道路
Road
前牧潭美學校
狗隻繁殖場
Dog Breeding Ground
(A/YL-NTM/435)
RCP
ARCH
RES
TS
PO
FP
平面圖 SITE PLAN
擬議臨時商店及服務行業（為期 5 年）
元朗牛潭尾丈量約份第104約地段第630號(部分)
PROPOSED TEMPORARY SHOP AND SERVICES
FOR A PERIOD OF 5 YEARS
LOT 630 (PART) IN D.D. 104, NGAU TAM MEI, YUEN LONG
SCALE 1 : 1 000 比例尺
米 METRES 20 0 20 40 米 METRES
CATCHMENT AREA PLAN

Drainage Design Calculation

The proposed site was generally flat with site area of about 434m^2. As shown in the enclosed catchment plan, the site mainly receives the flows from its east southern area with area of about 850m^2. Two lines of peripheral surface channels are proposed to manage the flows from the east southern catchment and the flow from within the application site.

For designing the peripheral channels receiving the flow from east southern catchment:-

Total Catchment Area = 850 (sub-catchment) + 434 (the site) = 1284 m^2
Runoff coefficient k = 1.0 (conservatively assumed)
Rainstorm return period = 1 in 50 year
With reference to Figure 2B-3.01: Velocity Versus Slope for Shallow Concentrated Flow extracted from NRCS National Engineering Handbook, Part 630, Chapter 15,



Gradient of eastern catchment = (12.5-12.2)/36.9 = 0.008
Flow velocity = 1.75ft/s = 0.533 m/s
Longest distance from catchment to the point of entry of the channel = 75m
Time of entry = 75/0.533 = 140.7 s = 2.35 min.
Length of channel = 58m, flow velocity = 1.55m/s
Time of flow = 58/1.55= 37.42 s = 0.62 min.
Time of concentration = 2.35 + 0.62 = 3.0 min.

From Figure 4a of Stormwater Design Manual , i = 240 mm/hr

$Q = kAi/3600 = 1 \times 1284 \times 240 / 3600 = 85.6$ l/s = 5,136 l / min.

From Figure 8.7 of "Geotechnical Manual for Slope",

For 300 UC of gradient of 1 : 125,

Q = 6,500 l/min. > 5,136 l/min. O.K.
Flow velocity = 1.55m/s > 1.3 m/s O.K.

Checking of Capacity of Existing Stream:-

The existing stream is trapezoidal in shape and is about 1.0m wide and 1.0m deep with bottom width of about 0.5m. The wetted perimeter, P, is about 1.914m. The sectional area, A, is (1.0 +0.5) x 1.0 /2 = $0.75m^2$

By Manning Formula,

$V = (R^{2/3} S^{1/2})/ n$

Where

R = hydraulic radius =A/P = 0.75/1.914 = 0.392m
S = gradient = 1 in 150 = 0.0067
n= Manning's coefficient = 0.04 for natural stream

V = velocity of flow = $(0.392^{2/3} 0.0067^{1/2}) / 0.04$ = 1.093 m/s
Q = capacity = AV = 0.75 x 1.093 = 0.82 m^3/s = 820 l/s >> 85.6 l/s O.K.

The existing stream is therefore sufficient to carry and discharge the runoff from the development site and its associated areas.

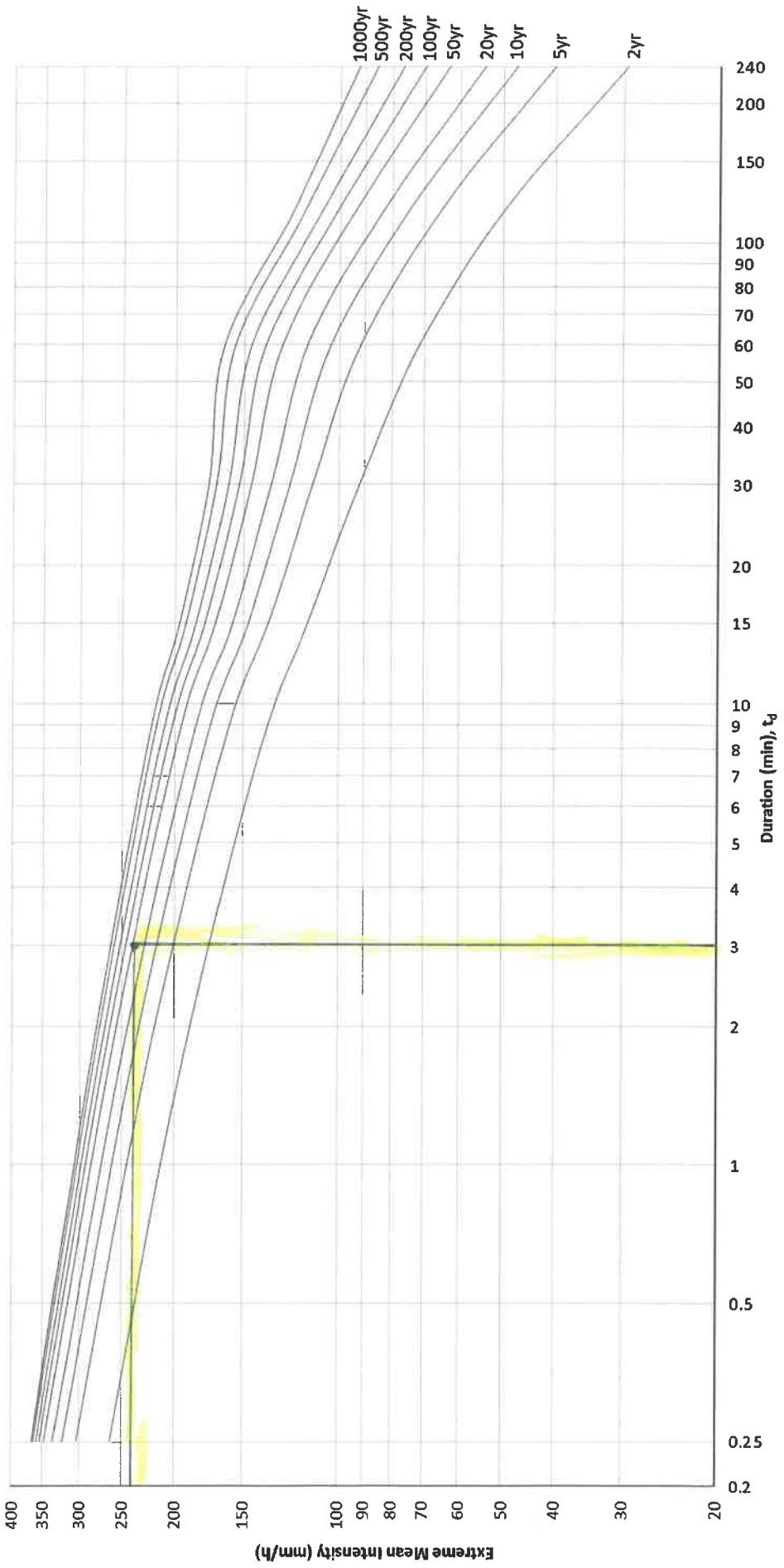


Figure 4a – Intensity-Duration-Frequency Curves of HKO Headquarters
(for durations not exceeding 4 hours)

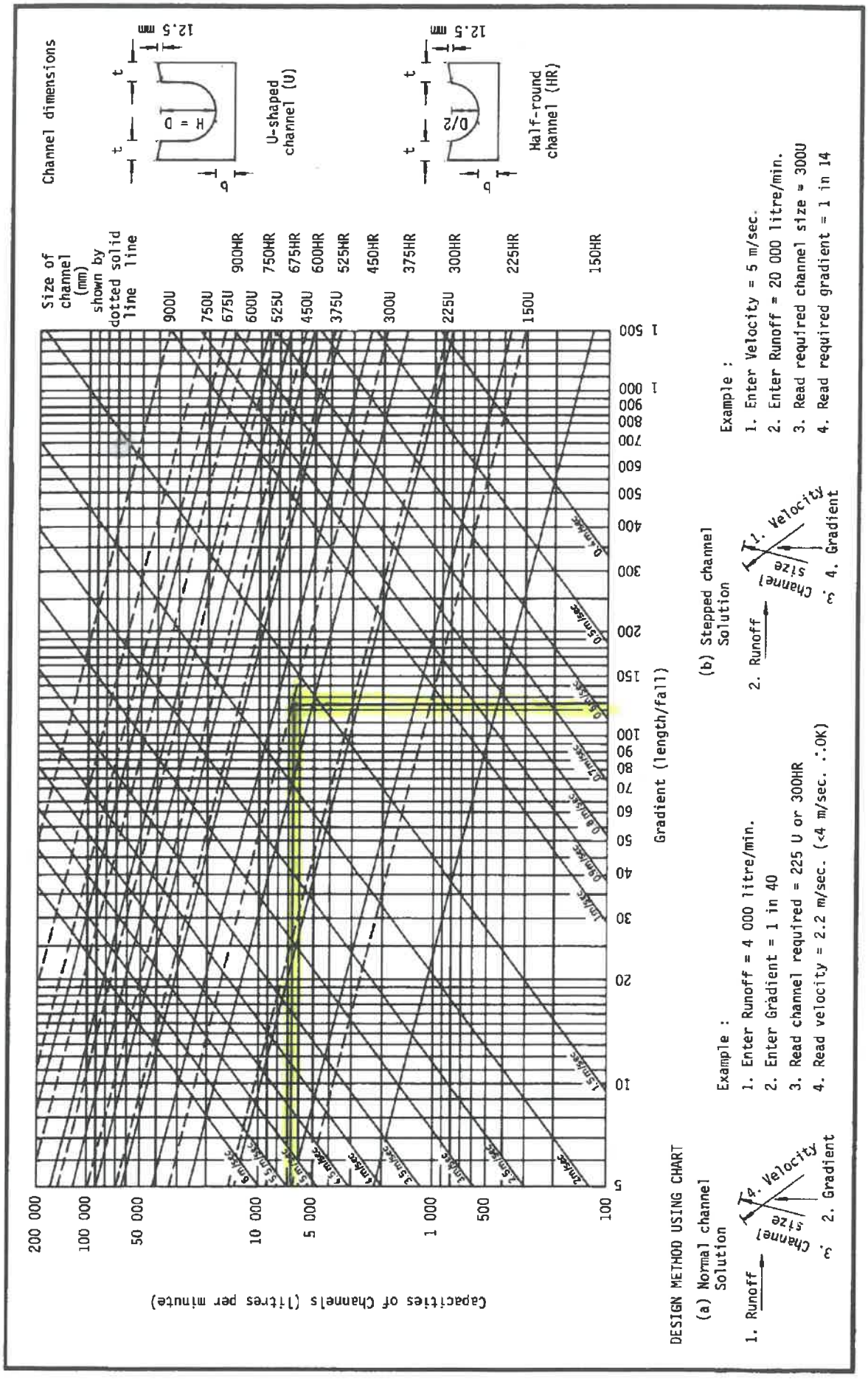
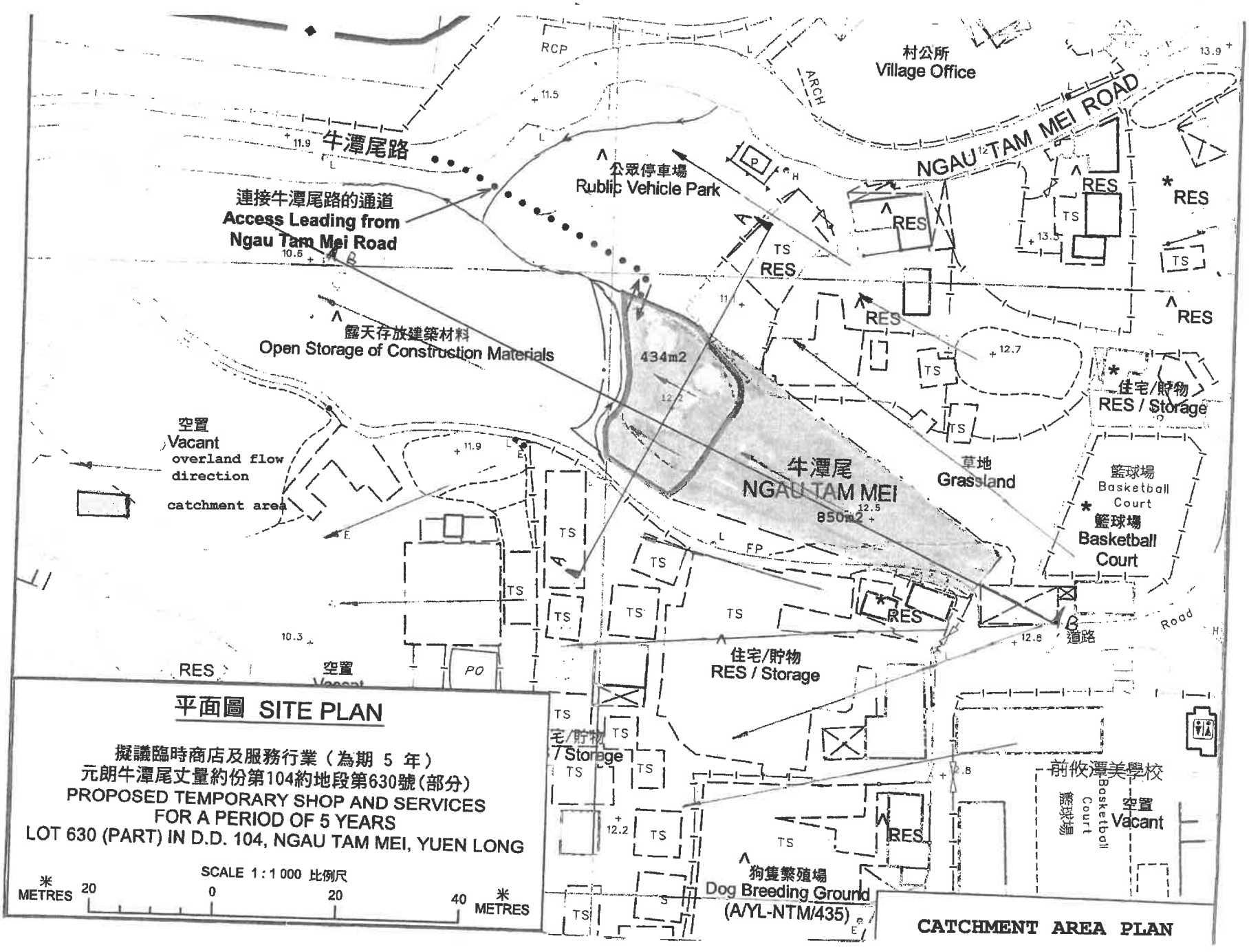


Figure 8.7 - Chart for the Rapid Design of Channels

APPENDIX D

Cross Sections of the Application Site and Adjacent Areas

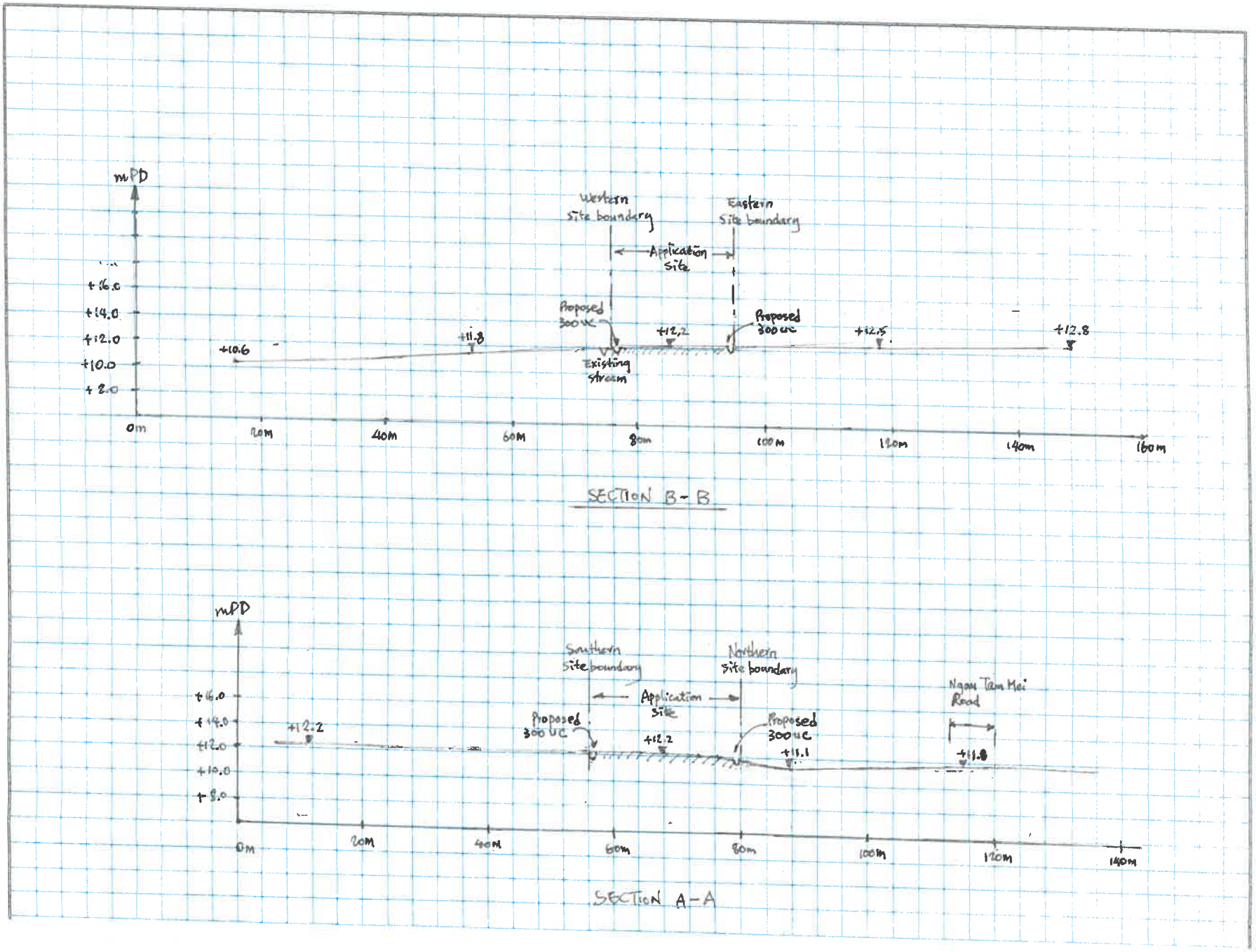


平面圖 SITE PLAN

擬議臨時商店及服務行業（為期 5 年）
元朗牛潭尾丈量約份第104約地段第630號(部分)
PROPOSED TEMPORARY SHOP AND SERVICES
FOR A PERIOD OF 5 YEARS
LOT 630 (PART) IN D.D. 104, NGAU TAM MEI, YUEN LONG

SCALE 1 : 1 000 比例尺

CATCHMENT AREA PLAN


mPD
+16.0
+14.0
+12.0
+10.0
+8.0
Western Site boundary
Eastern Site boundary
Application Site
Proposed 300 uc
Proposed 300 uc
+10.6
+11.8
+12.2
+12.5
+12.8
Existing Stream
0m
20m
40m
60m
80m
100m
120m
140m
160m
SECTION B-B
mPD
+16.0
+14.0
+12.0
+10.0
+8.0
Southern Site boundary
Northern Site boundary
Application Site
Proposed 300 UC
Proposed 300 uc
+12.2
+12.2
+11.1
Ngau Tam Mei Road
+11.8
0m
20m
40m
60m
80m
100m
120m
140m
SECTION A-A