LIST OF APPENDICES

Appendix I Memorandum of Understanding
Appendix II Drainage proposal accepted under previous application

Appendix I

Memorandum of Understanding

規劃申請意向書

受新發展區發展影響的在地經營業務搬遷 - 規劃許可申請

業務經營者 **（甲方）**	:	森記五金有限公司 Sum Kee Metal Company Limited
公司註冊證明書號碼	:	[redacted]
申請人 **（乙方）**	:	豐上有限公司 First Champion Limited
公司註冊證明書號碼	:	[redacted]

森記五金有限公司（甲方）為洪水橋新發展區範圍內的業務經營者，由於受到政府洪水橋新發展區收地影響，因此，需要覓地搬遷以繼續經營。森記五金有限公司（甲方）初步與豐上有限公司（乙方）達成共識，同意豐上有限公司（乙方）作為規劃申請的申請人，向城市規劃委員會提交規劃申請，於*丈量約份第 128 約地段第 385 號餘段（部分）和毗連政府土地*作「擬議臨時露天存放建築材料和建築機械及貯存器材和零件連附屬設施（為期 3 年）及相關填土工程」。

備注: 上述標題地段將會因應規劃許可的需要而有所修訂。

[redacted]

豐上有限公司
申請人簽署
Applicant's Signature

[redacted]

森記五金有限公司
業務經營者簽署
Business Operator Signiture

2024 年 8 月 13 日
13 August 2024

Appendix II

Drainage proposal accepted under previous application

By Post & Fax ([redacted])

規劃署
屯門及元朗西規劃處
香港新界沙田上禾輋路 1 號
沙田政府合署 14 樓

Planning Department
Tuen Mun and Yuen Long West
District Planning Office
14/F., Sha Tin Government Offices,
1 Sheung Wo Che Road, Sha Tin, N.T.

來函檔號	Your Reference	[redacted]
本署檔號	Our Reference	( ) in TPB/A/YL-HTF/1179
電話號碼	Tel. No. :	2158 6330
傳真機號碼	Fax No. :	2489 9711

8 December 2025

[redacted]

(Attn.: Louis TSE/Christian CHIM)

Dear Sir/Madam,

Planning Application No. A/YL-HTF/1179
Compliance with Approval Condition (a)

I refer to your submission dated 14.11.2025 for compliance with the captioned approval condition on the submission of a drainage proposal. Relevant department has been consulted. Your submission is considered:

☑ Acceptable. The captioned condition **has been complied with**. Please find detailed departmental comments at **Appendix I**.

☐ 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.

Should you have any queries on the departmental comments, please contact Mr. Daniel CHAN (Tel: 2332 2471) of the Drainage Services Department direct.

Yours faithfully,

[redacted]

(Kanic KWOK)
for District Planning Officer/
Tuen Mun and Yuen Long West
Planning Department

c.c.
CE/MN, DSD (Attn.: Mr. Daniel CHAN)
Internal
CTP/TPB (2)

Appendix I

Comments from the Chief Engineer/Mainland North, Drainage Services Department (DSD):

The applicant/lot owner is reminded that their drainage facilities shall be properly designed, constructed and maintained in good condition without causing adverse drainage impact to the adjacent areas at all times. The applicant/lot owner is required to rectify/modify the drainage systems if they are found to be inadequate or ineffective to accommodate the additional runoff arisen from the proposed development. The applicant/lot owner shall also be liable for and shall indemnify claims and demands arising out of damage or nuisance caused by failure or ineffectiveness of the drainage systems caused by their proposed development.

In addition, the general comments/requirements on the drainage works as conveyed via the letter of the Planning Department dated 16.6.2025, which are recapped below, are still valid:

(a) The proposed drainage works, whether within or outside the lot boundary, should be constructed and maintained by the applicant/lot owner at their expense.

(b) The existing drainage system proposed for discharge of the runoff from the subject site is not maintained by DSD. Consent from the owner/maintenance party, users of the drainage system and DO(YL) should be sought for the proposed drainage connection. Moreover, the applicant should ensure that the drainage system and the existing downstream drains/channels have adequate capacity to convey the additional runoff arising from the subject site. In addition, regular maintenance should be carried out by the applicant/lot owner to avoid blockage of drain.

(c) The drainage facilities shall be properly designed, constructed and maintained in good condition without causing adverse drainage impact on the adjacent area at all times. The applicant is required to rectify/modify the drainage systems if they are found to be inadequate or ineffective to accommodate the additional runoff arising from the proposed development. The applicant/lot owner shall also be liable for and shall indemnify claims and demands arising out of damage or nuisance caused by failure or ineffectiveness of the drainage systems caused by their development.

(d) For works to be undertaken outside the lot boundary, prior consent and agreement from District Lands Officer/Yuen Long, DO(YL) and/or relevant private lot owners should be sought.

(e) The applicant/lot owner should take all precautionary measures to prevent any disturbance, damage and pollution arising from the development to any parts of the existing drainage facilities in the vicinity of the subject site. In the event of any damage to the existing drainage facilities, the applicant/lot owner would be held responsible for the cost of all necessary repair works, compensation and any other consequences arising therefrom.

(f) A minimum soil cover of 450mm and 900mm should be provided for the connection pipe constructed under footpath and carriageway respectively.

(g) The applicant/lot owner should also be advised that the limited desk-top checking by DSD on the drainage proposal covers only the fundamental aspects of the drainage design which will by no means relieve 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 subject site.

R-Riches
Property Consultants Ltd.

盈卓物業
顧問有限公司

Our Ref.: [redacted]
Your Ref.: TPB/A/YL-HTF/1179

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

By E-mail

14 November 2025

Dear Sir,

Compliance with Approval Condition (a)

Proposed Temporary Open Storage of Construction Materials and Machinery and Storage of Tools and Parts with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land in "Agriculture" Zone, Lot 385 RP (Part) in D.D. 128 and Adjoining Government Land, Ha Tsuen, Yuen Long, New Territories

(S.16 Planning Application No. A/YL-HTF/1179)

We write to submit a revised drainage proposal *(enclosed)* for compliance with approval condition (a) of the captioned application, i.e. *the submission of a drainage proposal*.

Should you require more information regarding the application, please contact our Mr. Danny NG 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

Kevin LAM
Planning Assistant

cc DPO/TMYLW, PlanD (Attn.: Ms. Jessie KWOK email: jmhkwok@pland.gov.hk)
(Attn.: Ms. Tracy LAW email: twslaw@pland.gov.hk)

[redacted]

Proposed Temporary Open Storage of Construction Materials and Machinery and Storage of Tools and Parts with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land in "Agriculture" Zone, Lot 385 RP (Part) in D.D. 128 and Adjoining GL, Ha Tsuen, Yuen Long, New Territories

Drainage Proposal

Oct 2025

MARVELLOUS
CONSTRUCTION & DESIGN COMPANY LIMITED

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1 Introduction

1.1 Background

1.1.1 The applicant seeks planning permission from the Town Planning Board (the Board) under Section (S.) 16 of the Town Planning Ordinance (Cap. 131) (the Ordinance) to use Lot 385 RP (Part) in D.D. 128 and Adjoining Government Land (GL), Ha Tsuen, Yuen Long, New Territories (the Site) for 'Proposed Temporary Open Storage of Construction Materials and Machinery and Storage of Tools and Parts with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land'.

1.1.2 This report aims to support the development in drainage aspect. The update of this report was to revise the internal channel arrangement only.

1.2 Application Site

1.2.1 The application site is situated near Deep Bay Road beside local track. It has an area of approx. 3,514 m^2. The site location is shown in **Figure 1**.

1.2.2 The existing site is mainly unpaved. The existing site levels are proposed to be raised for formation of open storage, formation of structures, parking and circulation area. Proposed levels are shown in sections in **Figure 5**.

1.2.3 There is an existing approx. 10m width channel/stream at the west. It would eventually discharge to Deep Bayat the north. **Figure 2** indicates the existing drainage system of the area.

2 Development Proposal

2.1 The Proposed Development

2.1.1 The total site area is approximately 3,514 m^2. After the development the site would be fully paved. The catchment plan is shown in **Figure 4**.

Proposed Development	
Total Site Area (m^2)	3,514
Paved Area after Development (m^2)	3,514

Table 1 – Site Development Area

3 Assessment Criteria

3.1.1 The Recommended Design Return Period based on Flood Level from SDM (Table 10) is adopted for this report. The recommendation is summarized in **Table 2** below.

Description	Design Return Periods
Intensively Used Agricultural Land	2 – 5 Years
Village Drainage Including Internal Drainage System under a polder Scheme	10 Years
Main Rural Catchment Drainage Channels	50 Years
Urban Drainage Trunk System	200 Years
Urban Drainage Branch System	50 Years

Table 2– Design Return Periods under SDM

3.1.2 The proposed drainage system intended to collect runoff from internal site and external catchment. 1 in 10 years return period is adopted for the drainage design.

3.1.3 Stormwater drainage design will be carried out in accordance with the criteria set out in the Stormwater Drainage Manual published by DSD. The proposed design criteria to be adopted for design of this stormwater drainage system and factors which have been considered are summarised below.

1. Intensity-Duration-Frequency Relationship – The Recommended Intensity-Duration-Frequency relationship is used to estimate the intensity of rainfall. It can be expressed by the following algebraic equation.

$$i = \frac{a}{(t_d + b)^c}$$

The site is located within the HKO Zone. Therefore, for 10 years return period, the following values are adopted.

a	=	485
b	=	3.11
c	=	0.397

(Corrigendum No.1/2024)

The development is proposed for temporary use for a period of 3 years. 11.1% rainfall increase due to climate change is considered.

2. The peak runoff is calculated by the Rational Method
i.e. $Q_p = 0.278CiA$

where	Q_p	=	peak runoff in m^3/s
	C	=	runoff coefficient (dimensionless)
	i	=	rainfall intensity in mm/hr
	A	=	catchment area in km^2

3. The run-off coefficient (C) of surface runoff are taken as follows:

1. Paved Area: C = 0.95
2. Unpaved Area: C = 0.35

4. Manning's Equation is used for calculation of velocity of flow inside the channels:

Manning's Equation: $v = \frac{R^{\frac{1}{6}}}{n} R^{\frac{1}{2}} S_f^{\frac{1}{2}}$

Where,

V = velocity of the pipe flow (m/s)
S_f = hydraulic gradient
n = manning's coefficient
R = hydraulic radius (m)

5. Colebrook-White Equation is used for calculation of velocity of flow inside the pipes:

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

where,

V	=	velocity of the pipe flow (m/s)
S_f	=	hydraulic gradient
k_f	=	roughness value (m)
v	=	kinematics viscosity of fluid
D	=	pipe diameter (m)
R	=	hydraulic radius (m)

4 Proposed Drainage System

4.1. Proposed Channels

4.1.1 Proposed Channels are designed for collection of runoff for internal and external catchment. They are proposed to connect to existing channel in the west which eventually discharge to Deep Bay at the north. The utilization of the existing western stream due to the site is not more than 4.0% according to checking in **Appendix A**.

4.1.2 The design calculations of proposed UChannel are shown in **Appendix A**.

4.1.3 The alignment, size, gradient and details of the proposed drains are shown in **Figure 3**. The catchment plan is shown in **Figure 4**.

4.1.5 Reference Drawings are shown in **Appendix C** for reference.

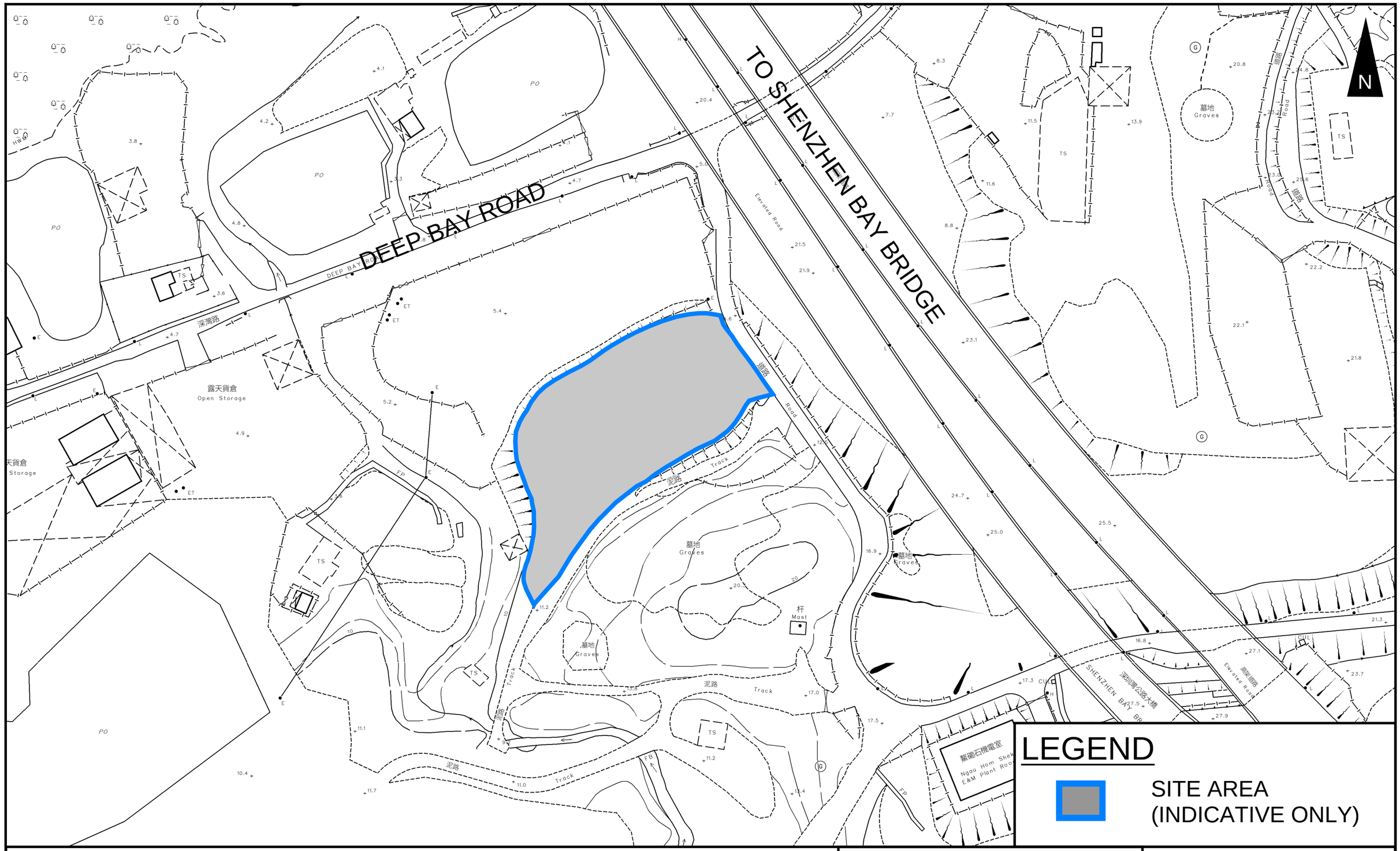
4.1.6 Site Photos and Plan of existing discharge path are shown in **Appendix D** and **E** respectively.

5 Conclusion

5.1.1 Drainage review has been conducted for the Proposed Development. The surface runoff will be collected by the proposed drains and discharged to existing drainage system. With implementation of the above drainage system, no unacceptable drainage impact is anticipated.

- End of Text -

FIGURES



LEGEND

SITE AREA
(INDICATIVE ONLY)

PROJECT:

Proposed Temporary Open Storage of Construction Materials and Machinery and Storage of Tools and Parts with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land in “Agriculture” Zone

TITLE
SITE LOCATION PLAN

FIGURE NUMBER
FIGURE 1

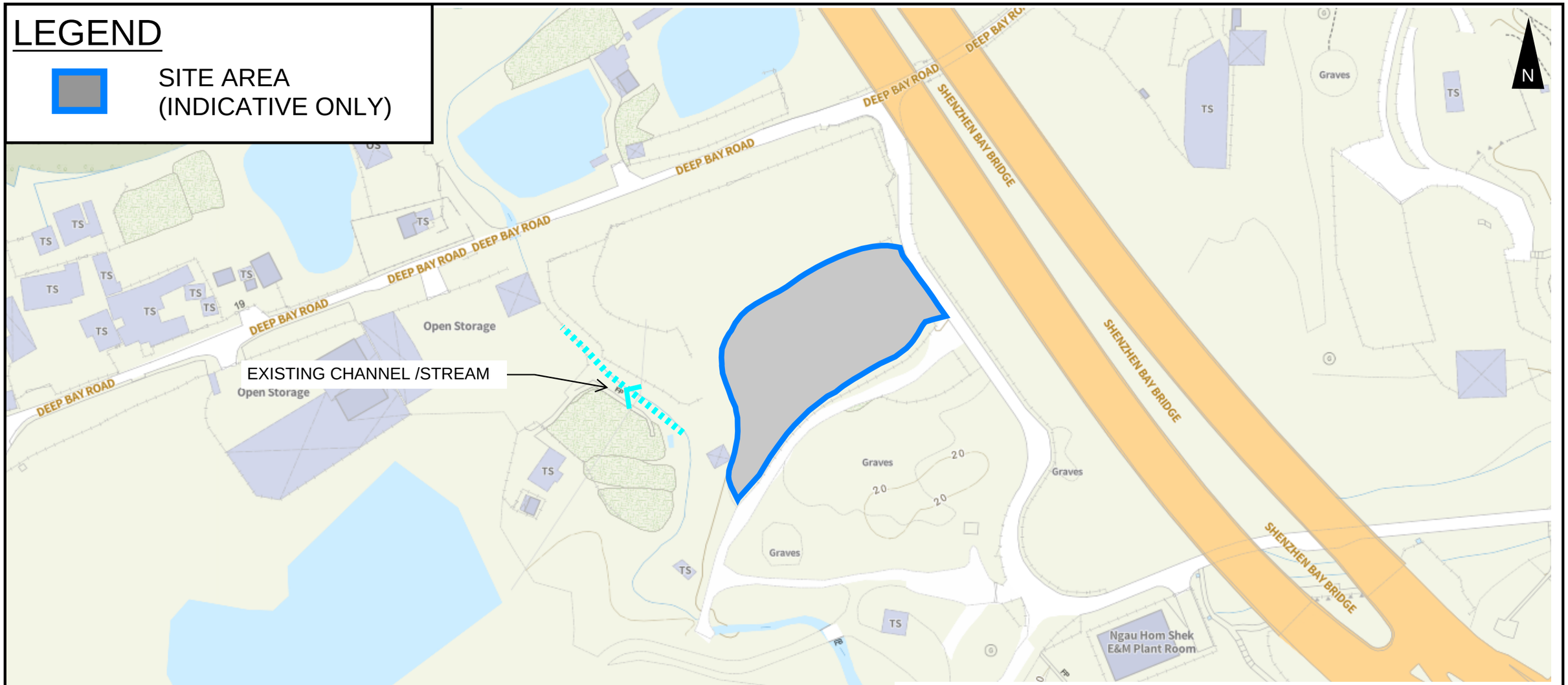
LOCATION:

Lot 385 RP (Part) in D.D. 128 and Adjoining GL, Ha Tsuen, Yuen Long, New Territories

VER	DESCRIPTION	DATE

LEGEND

SITE AREA
(INDICATIVE ONLY)



LEGEND:

Combined Manhole	Tapping Point (Sewer)	Tapping Point (Storm)
Overflow (Combined)	Sewer Terminal Manhole	Storm Water Terminal Manhole
Pipe (Combined)	Catchpit	Tunnel Protection Zone (100m / 200m)
Interface Valve Chamber	Inlet	Tunnel Protection Zone (General Range)
Sewer Manhole	Storm Water Manhole	Tunnel / Box Culvert (Sewer)
Oil / Petrol Interceptor	Outlet	Tunnel / Box Culvert (Storm)
Overflow (Sewer)	Pipe (Storm)	
Pipe (Sewer)	Sand Trap	

PROJECT:

Proposed Temporary Open Storage of Construction Materials and Machinery and Storage of Tools and Parts with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land in “Agriculture” Zone

TITLE
EXISTING DRAINAGE PLAN

FIGURE NUMBER
FIGURE 2

LOCATION:

Lot 385 RP (Part) in D.D. 128 and Adjoining GL, Ha Tsuen, Yuen Long, New Territories

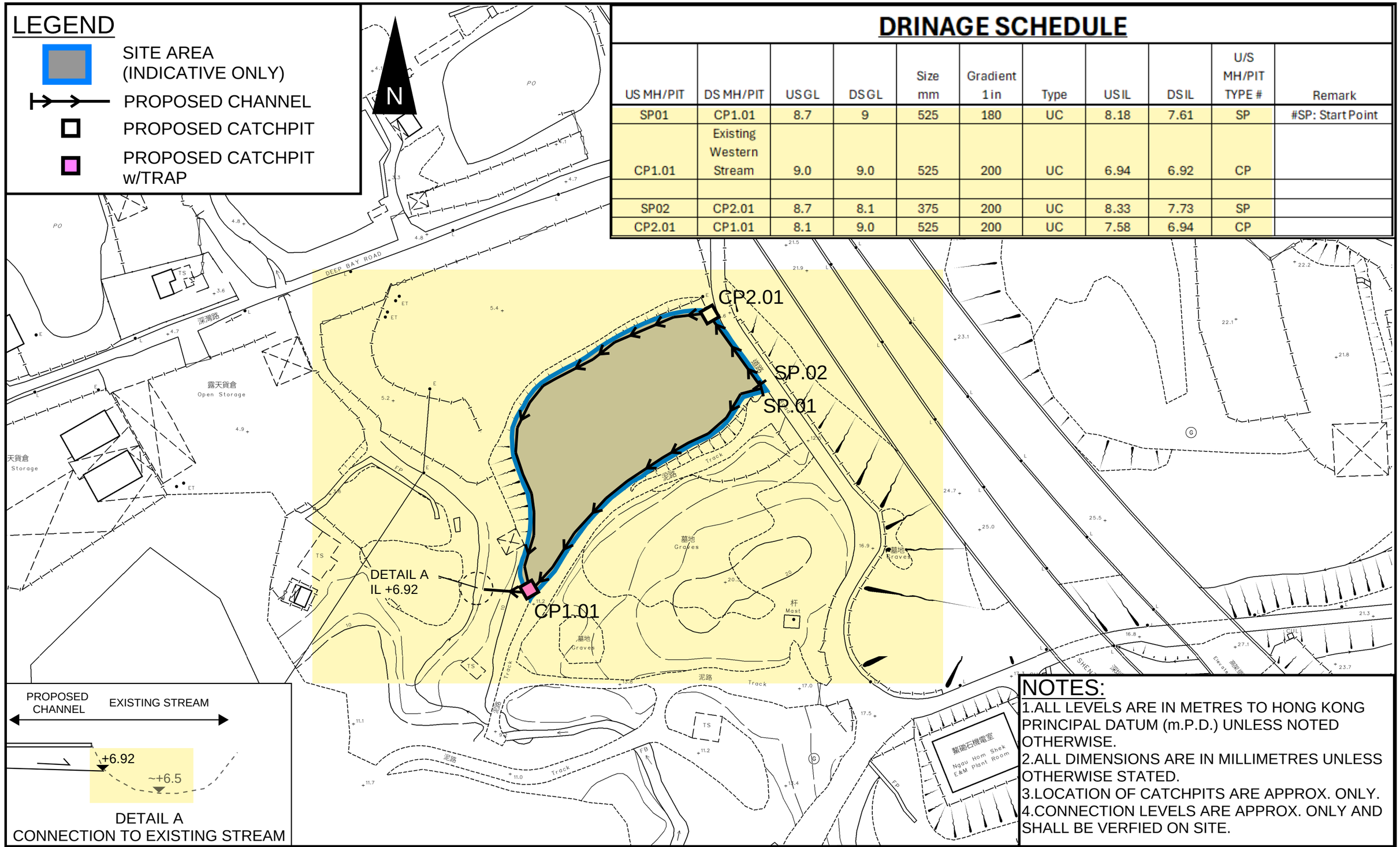
VER	DESCRIPTION	DATE

LEGEND

- SITE AREA (INDICATIVE ONLY)
- PROPOSED CHANNEL
- PROPOSED CATCHPIT
- PROPOSED CATCHPIT w/TRAP

DRINAGE SCHEDULE

US MH/PIT	DS MH/PIT	USGL	DSGL	Size mm	Gradient 1 in	Type	USIL	DSIL	U/S MH/PIT TYPE #	Remark
SP01	CP1.01	8.7	9	525	180	UC	8.18	7.61	SP	#SP: Start Point
CP1.01	Existing Western Stream	9.0	9.0	525	200	UC	6.94	6.92	CP	
SP02	CP2.01	8.7	8.1	375	200	UC	8.33	7.73	SP	
CP2.01	CP1.01	8.1	9.0	525	200	UC	7.58	6.94	CP	



PROPOSED CHANNEL — EXISTING STREAM

DETAIL A
CONNECTION TO EXISTING STREAM

NOTES:

1. ALL LEVELS ARE IN METRES TO HONG KONG PRINCIPAL DATUM (m.P.D.) UNLESS NOTED OTHERWISE.
2. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.
3. LOCATION OF CATCHPITS ARE APPROX. ONLY.
4. CONNECTION LEVELS ARE APPROX. ONLY AND SHALL BE VERFIED ON SITE.

PROJECT:

Proposed Temporary Open Storage of Construction Materials and Machinery and Storage of Tools and Parts with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land in “Agriculture” Zone

LOCATION:

Lot 385 RP (Part) in D.D. 128 and Adjoining GL, Ha Tsuen, Yuen Long, New Territories

TITLE
PROPOSED DRAINAGE SYSTEM

FIGURE NUMBER
FIGURE 3

VER	DESCRIPTION	DATE

LEGEND:

FALL

A4: Paved
1,517 m²

A2:
Paved 1,514 m²

A3:
Paved 240 m²

A1:
Paved 243 m²

B1: Unpaved 3,603 m²

+5.4
+5.2
+8.3
+8.5
+9.1
+6.4
+20.3

N

PROJECT:

Proposed Temporary Open Storage of Construction Materials and Machinery and Storage of Tools and Parts with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land in “Agriculture” Zone

TITLE
CATCHMENT PLAN

FIGURE NUMBER
FIGURE 4

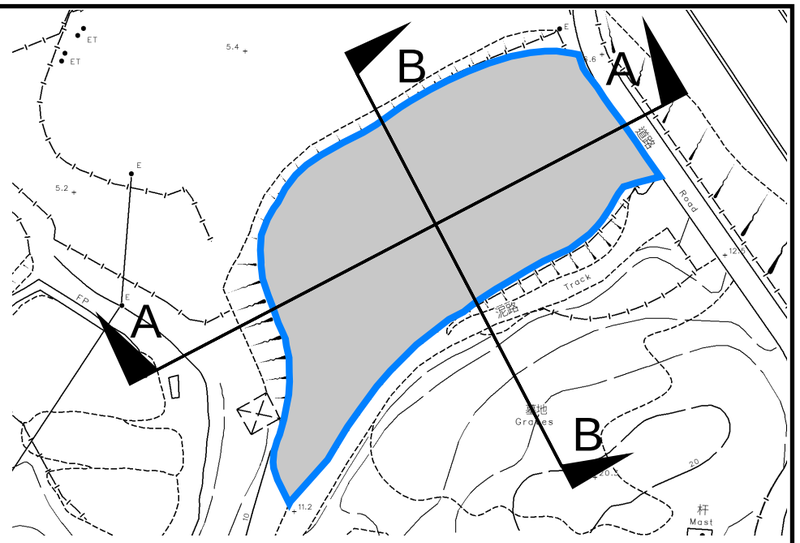
LOCATION:

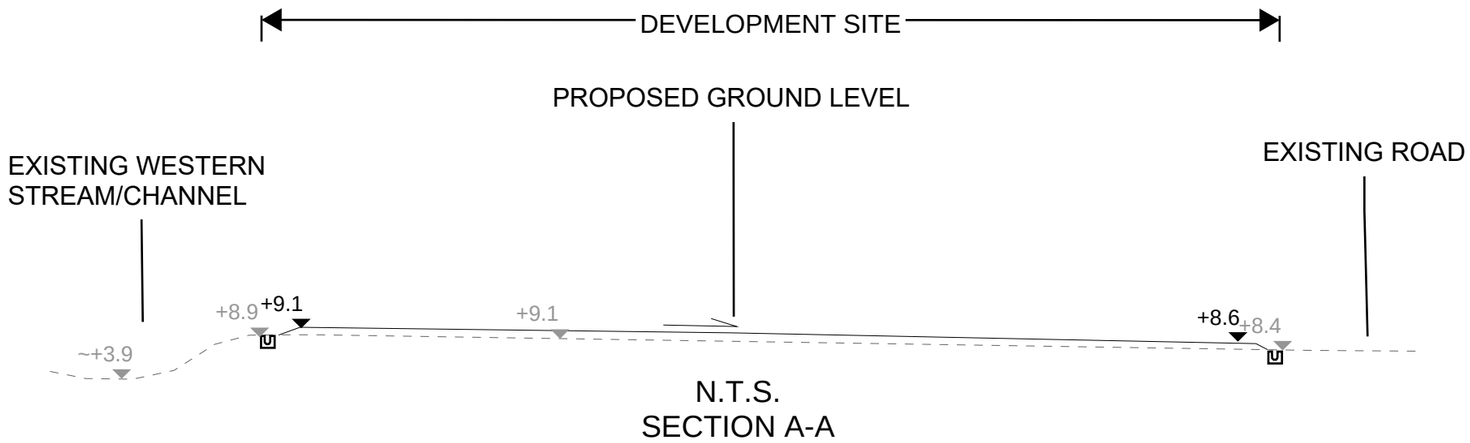
Lot 385 RP (Part) in D.D. 128 and Adjoining GL, Ha Tsuen, Yuen Long, New Territories

VER	DESCRIPTION	DATE

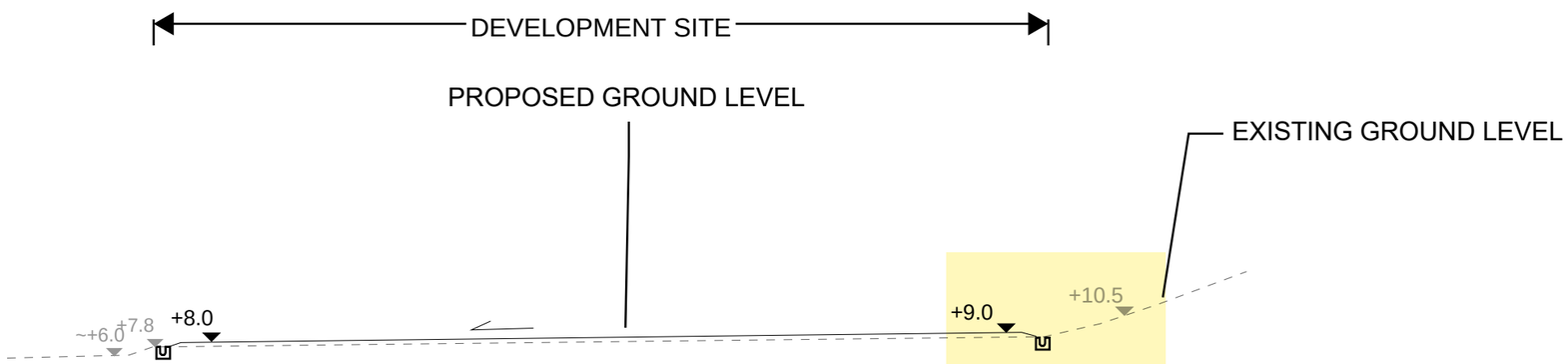
LEGEND

SITE AREA
(INDICATIVE ONLY)





N.T.S.
SECTION A-A



N.T.S.
SECTION B-B

PROJECT: Proposed Temporary Open Storage of Construction Materials and Machinery and Storage of Tools and Parts with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land in “Agriculture” Zone	TITLE SECTIONS	FIGURE NUMBER FIGURE 5
LOCATION: Lot 385 RP (Part) in D.D. 128 and Adjoining GL, Ha Tsuen, Yuen Long, New Territories		VER / DESCRIPTION / DATE

APPENDIX

Appendix A: Design Calculation

Zone

HKO

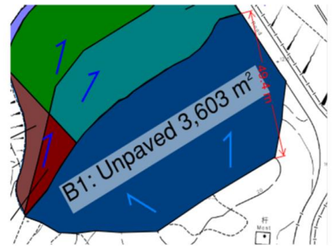
Return Period	1 in	10	years

n	0.014
Ks	0.15
Viscosity	0.000001

Storm Constant	HKO a	485
	HKO b	3.11
	HKO c	0.397

Time of Concentration Checking

Catchment	Flow Distance	Highest Level	Lowest Level	Gradient (per 100m) = (H1-H2)/L x 100	to (min) = 0.14465L/ ($H^{0.2}A^{0.1}$)	tc = to + tf
A	L	H1	H2			
(m2)	(m)	(mPD)	(mPD)		(min)	(min)
3603	49.4	12.3	9.9	4.858	2.3	2.3



Catchment Area Table (Area in m^2)

Catchment	SITE AREA	A1	A2	A3	A4	B1									
Total Area	3514	243	1514	240	1517	3603									
Hard Paved Area	3514	243	1514	240	1517	0									
Unpaved Area	0	0	0	0	0	3603									
Equival. Area	3338.3	230.85	1438.3	228	1441.15	1261.05									

Pavement Type	Hard Paved	Unpaved
Runoff Coefficient	0.95	0.35

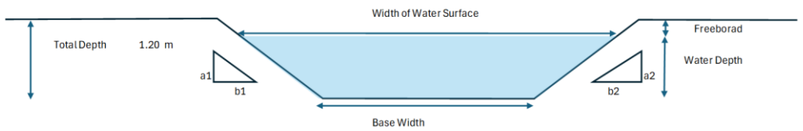
Calculation Table of Drainage System

US MH/PIT	DS MH/PIT	US GL	DS GL	Size mm	Gradient 1 in	Type	US IL	DS IL	U/S MH/PIT TYPE #	Length m	V m/s ##	Capacity m^3/s	Catchment ID1	Catchment ID2	Catchment ID3	Catchment ID4	Catchment ID5	Catchment ID6	Catchment ID7	Catchment ID8	Catchment ID9	Total Equivalent Area m^2	ToC min	Intensity mm/hr ##	Total Discharge m^3/s	Utilitization
SP01	CP1.01	8.70	9.00	525	180	UC	8.18	7.61	SP	102.1	1.71	0.42	A1	A2	A3	A4	B1					4599.35	2.30	276	0.35	83.7%
CP1.01	Existing Western Stream	9.00	9.00	525	200	UC	6.94	6.92	CP	3	1.62	0.40	A1	A2	A3	A4	B1					4599.35	3.98	248	0.32	79.3%
SP02	CP2.01	8.70	8.10	375	200	UC	8.33	7.73	SP	28.5	1.30	0.16	A2									1438.30	2.30	276	0.11	67.7%
CP2.01	CP1.01	8.10	9.00	525	200	UC	7.58	6.94	CP	127.6	1.62	0.40	A1	A2	A3	A4						3338.30	2.67	269	0.25	62.4%

#SP: Start Point

: With 11.1% rainfall increase as per Table 28 of SDM Corrigendum No. 1/2022.

Capacity Checking of Existing Stream from CP1.01



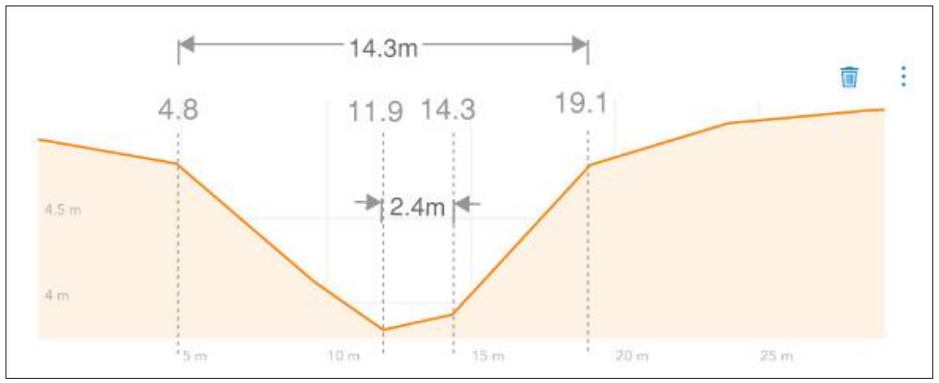
a1	1	
b1	6.9	
a2	1	
b2	6.0	
Total Depth	1.20	m
Base Width	2.40	m
Assumed Water Depth	0.90	m
Freeboard	0.30	m

Assumed Water Depth	Freeboard	Base Width	Width of Water Surface	Flow Area	Wetted Perimeter	Hydralic Radius	Manning's Roughness	Gradient	Velocity	Capacity
m	m	m	m	m^2	m	m		1 in	m/s	m^3/s
0.90	0.30	2.40	14.01	7.38	14.15	0.52	0.035	200	1.31	9.67

Total Flow from The Application Site = 0.32 m^3/s

Utilization Rate = 3.3%

Total flow from CP1.01 only occupy 3.3% of the existing stream.



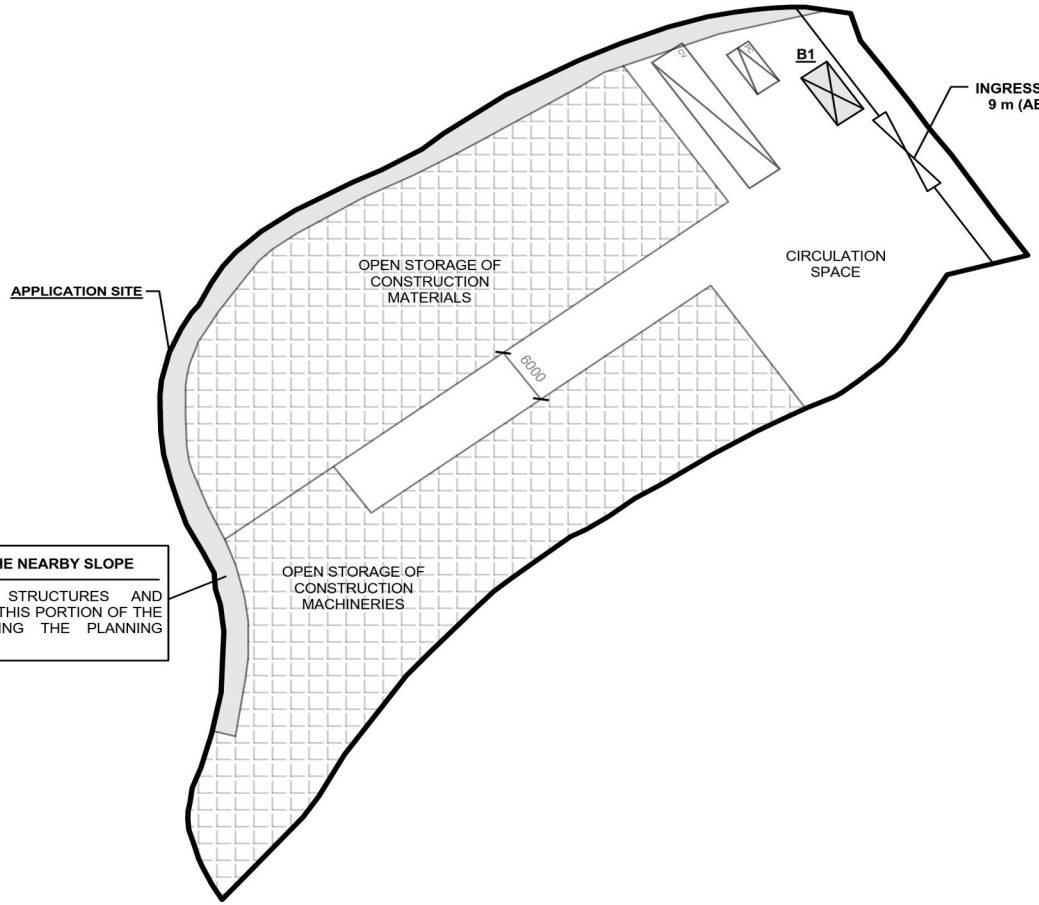
SECTION FROM CEDD LiDAR DATA

APPENDIX B - PROPOSED SITE LAYOUT PLAN

DEVELOPMENT PARAMETERS

APPLICATION SITE AREA	: 3,514 m^2	(ABOUT)
COVERED AREA	: 18 m^2	(ABOUT)
UNCOVERED AREA	: 3,496 m^2	(ABOUT)
PLOT RATIO	: 0.005	(ABOUT)
SITE COVERAGE	: 0.5 %	(ABOUT)
NO. OF STRUCTURE	: 1	
DOMESTIC GFA	: NOT APPLICABLE	
NON-DOMESTIC GFA	: 18 m^2	(ABOUT)
TOTAL GFA	: 18 m^2	(ABOUT)
BUILDING HEIGHT	: 3 m	(ABOUT)
NO. OF STOREY	: 1	
OPEN STORAGE AREA	: 2,196 m^2	(ABOUT)

		AREA		HEIGHT
B1	SITE OFFICE, WASHROOM AND STORAGE OF TOOLS AND PARTS	18 m^2 (ABOUT)	18 m^2 (ABOUT)	3 m (ABOUT)(1-STOREY)
	TOTAL	**18 m^2 (ABOUT)**	**18 m^2 (ABOUT)**	



2m BUFFER ZONE OF THE NEARBY SLOPE

NO CONSTRUCTION OF STRUCTURES AND STORAGE OF MATERIALS AT THIS PORTION OF THE SITE AT ANY TIME DURING THE PLANNING APPROVAL PERIOD.

PARKING AND LOADING / UNLOADING (L/UL) PROVISIONS

NO. OF PRIVATE CAR PARKING SPACE	: 1
DIMENSION OF PARKING SPACE	: 5 m (L) x 2.5 m (W)
NO. OF L/UL SPACE FOR CONTAINER VEHICLE	: 1
DIMENSION OF L/UL SPACE	: 16 m (L) x 3.5 m (W)

LEGEND

- APPLICATION SITE
- STRUCTURE
- OPEN STORAGE AREA
- PARKING SPACE (PC)
- PARKING SPACE (CV)
- INGRESS / EGRESS

W E S

PLANNING CONSULTANT
R-Riches Property Consultants Ltd.

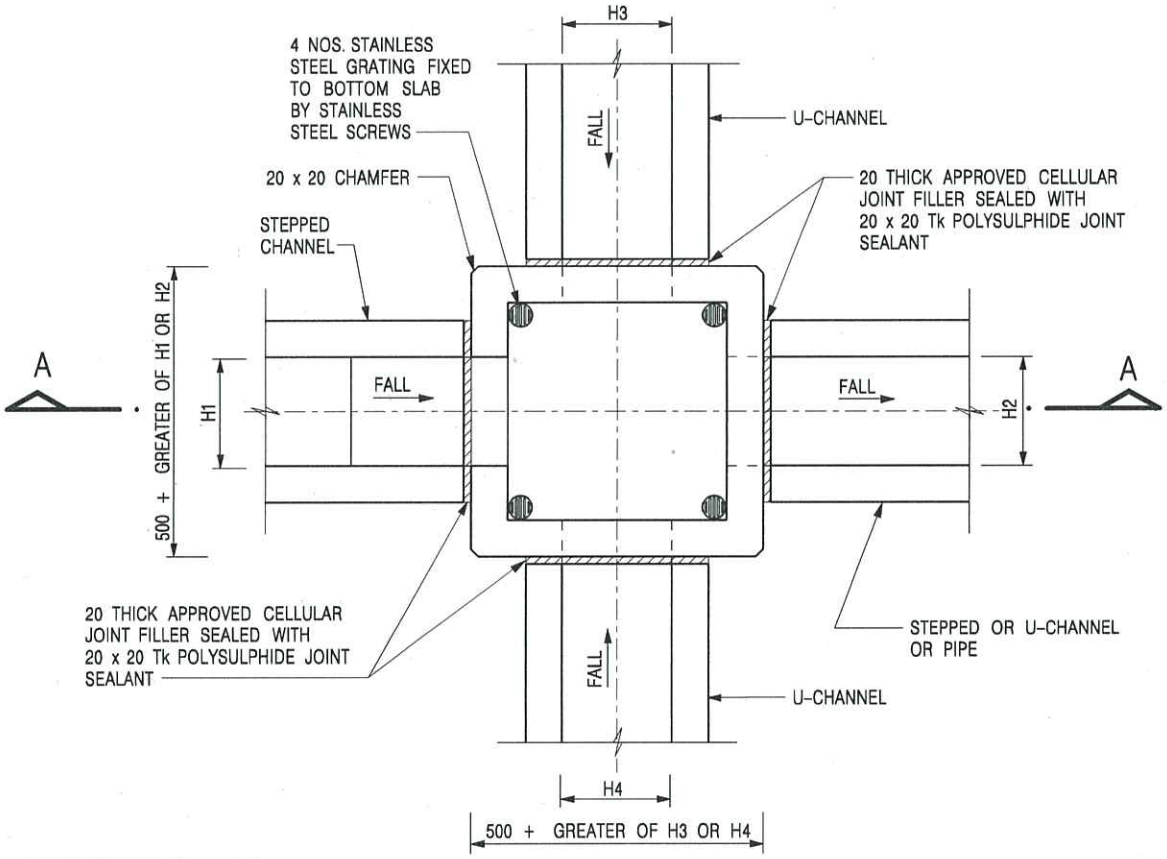
PROJECT
PROPOSED TEMPORARY OPEN STORAGE OF CONSTRUCTION MATERIALS AND MACHINERY AND STORAGE OF TOOLS AND PARTS WITH ANCILLARY FACILITIES FOR A PERIOD OF 3 YEARS AND ASSOCIATED FILLING OF LAND

SITE LOCATION
LOT 385 RP (PART) IN D.D. 128 AND ADJOINING GOVERNMENT LAND, HA TSUEN, YUEN LONG, NEW TERRITORIES

SCALE	~~1 : 700 @ A4~~
DRAWN BY: MN	DATE: 7.10.2024
REVISED BY	DATE
APPROVED BY	DATE
DWG. TITLE: LAYOUT PLAN	
DWG NO.: PLAN 7	VER.: 002

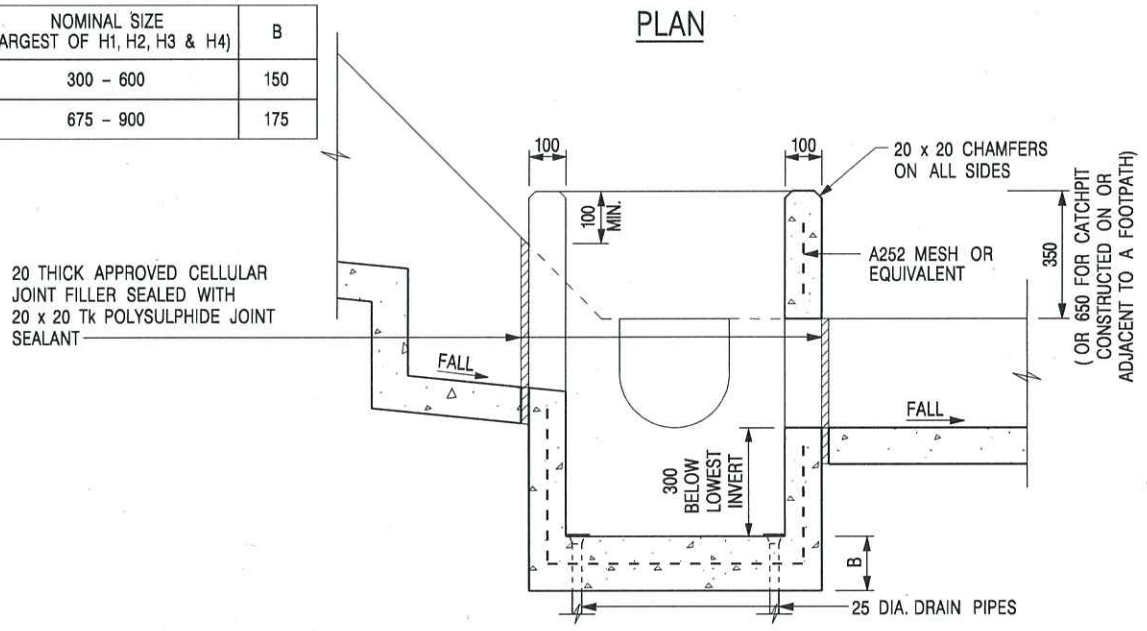
(摘錄自申請人於 22. 10. 2024 呈交的進一步資料)
(Extract from Applicant's Further Information Submitted on 22.10.2024)

參考編號 REFERENCE No.	繪圖 DRAWING
A/YL-HTF/1179	A-1



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)

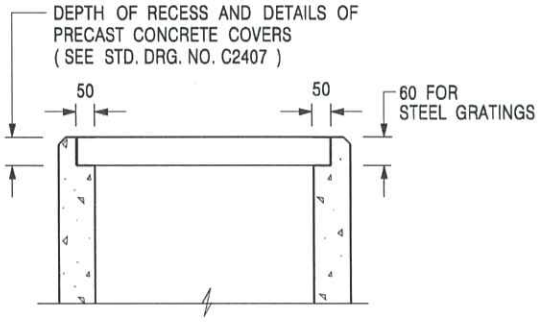
CEDD CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

SCALE 1 : 20

DATE JAN 1991

DRAWING NO. C2406 /1

卓越工程 建設香港 We Engineer Hong Kong's Development



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 /2) 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 'J' ON STD. DRG. NO. C2405 /5; 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 'G' ON STD. DRG. NO. C2405 /4.
12. SUBJECT TO THE APPROVAL OF THE ENGINEER, OTHER MATERIALS CAN ALSO BE USED AS COVERS / GRATINGS.

REF.	REVISION	SIGNATURE	DATE
A	MINOR AMENDMENT.	Original Signed	04.2016
–	FORMER DRG. NO. C2406J.	Original Signed	03.2015

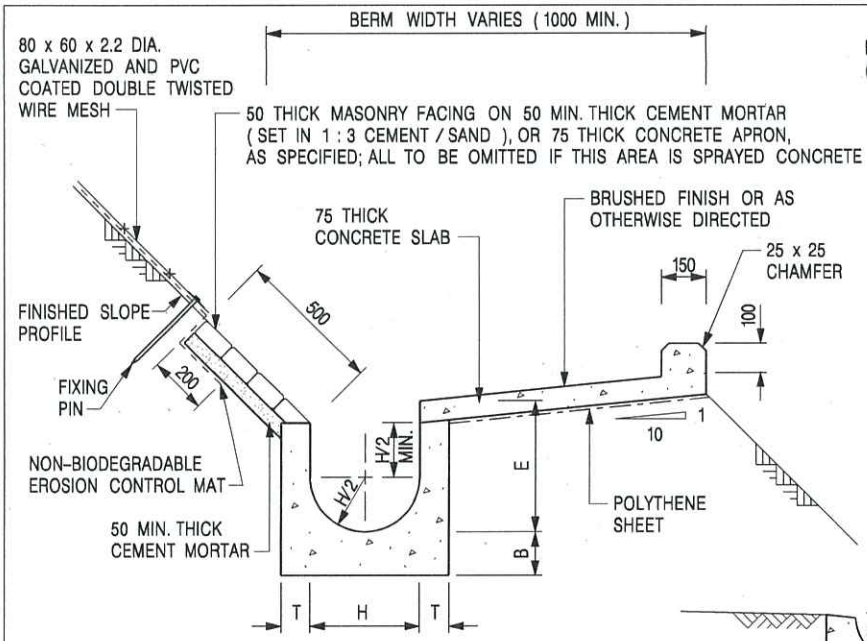
CATCHPIT WITH TRAP
(SHEET 2 OF 2)

CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

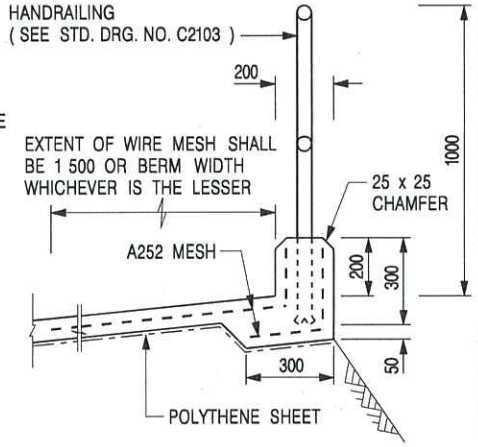
SCALE 1 : 20

DATE JAN 1991

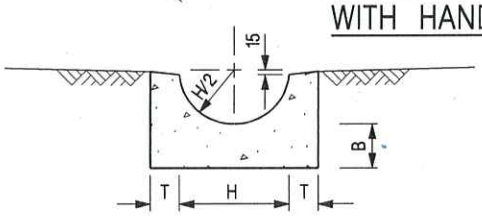
DRAWING NO. C2406 /2A



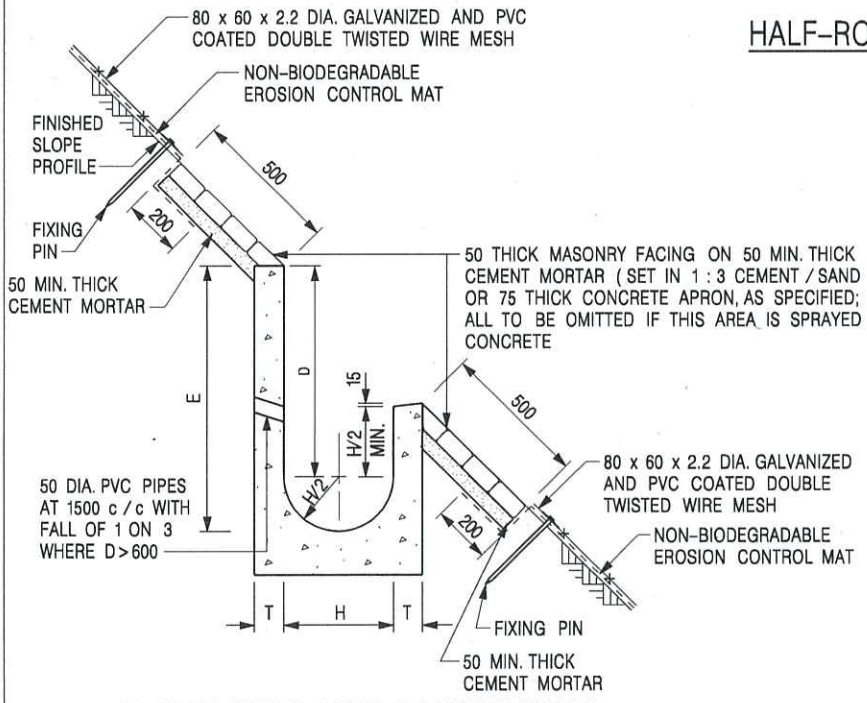
U-CHANNELS CONSTRUCTED ON BERM



DETAILS OF BERM WITH HANDRAILING



HALF-ROUND CHANNEL



U-CHANNELS NOT CONSTRUCTED ON BERM

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. ALL CONCRETE TO BE GRADE 20 / 20.
3. CONCRETE SURFACE FINISH SHALL BE CLASS U2, F2 OR BRUSHED FINISH AS DIRECTED.
4. SPACING OF EXPANSION JOINT IN CHANNELS, BERM SLABS AND APRONS TO BE 10 METRES MAXIMUM, SEE STD. DRG. NO. C2413 FOR DETAILS.
5. JOINTS FOR CHANNELS, BERM SLABS, APRONS AND WALLS, ETC. TO BE ON THE SAME ALIGNMENT.
6. FOR DIMENSIONS T, H, & B, SEE TABLE BELOW.
7. BIODEGRADABLE EROSION CONTROL MAT IF REQUIRED, SEE STD. DRG. NO. C2511/1E.
8. CONCRETE TO BE COLOURED AS SPECIFIED.
9. CONCRETE U-CHANNEL CAN BE CAST IN-SITU OR PRECAST CONCRETE SUBJECT TO THE ENGINEER'S AGREEMENT ON THE DETAILS.
10. DETAILS OF EROSION CONTROL MAT AND WESH MESH ON BERM. (SEE STD DRG. NO. C2511/1E)

NOMINAL SIZE H	T	B	REINFORCEMENT
300	80	100	A252 MESH PLACED CENTRALLY AND T=100 WHEN E>650
375 - 600	100	150	
675 - 900	125	175	A252 MESH PLACED CENTRALLY

REF.	REVISION	SIGNATURE	DATE
I	MINOR AMENDMENT.	Original Signed	07.2018
H	THICKNESS OF MASONRY FACING AMENDED.	Original Signed	01.2005
G	MINOR AMENDMENT.	Original Signed	01.2004
F	GENERAL REVISION.	Original Signed	12.2002
E	DRAWING TITLE AMENDED.	Original Signed	11.2001
D	MINOR AMENDMENT.	Original Signed	08.2001
C	150 x 100 UPSTAND ADDED AT BERM.	Original Signed	6.99
B	MINOR AMENDMENTS.	Original Signed	3.94

DETAILS OF HALF-ROUND AND U-CHANNELS (TYPE A - WITH MASONRY APRON)

CEDD **CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT**

SCALE 1 : 25

DATE JAN 1991

DRAWING NO. C2409I

卓越工程 建設香港

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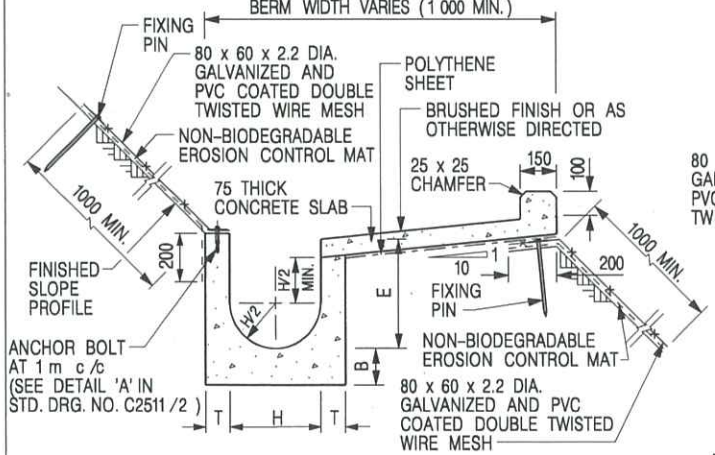
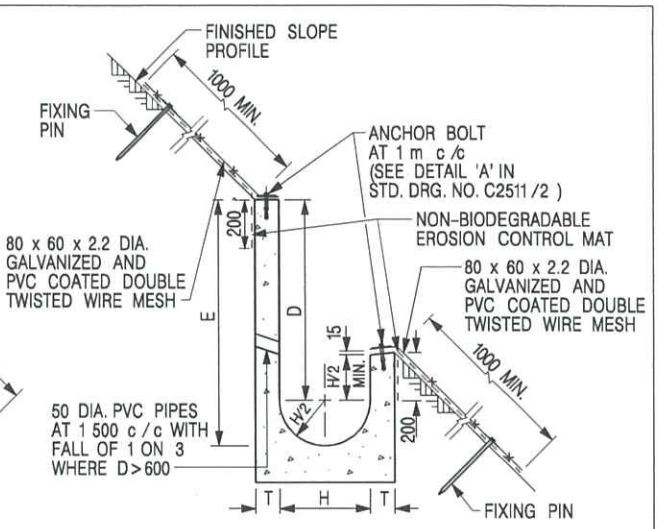
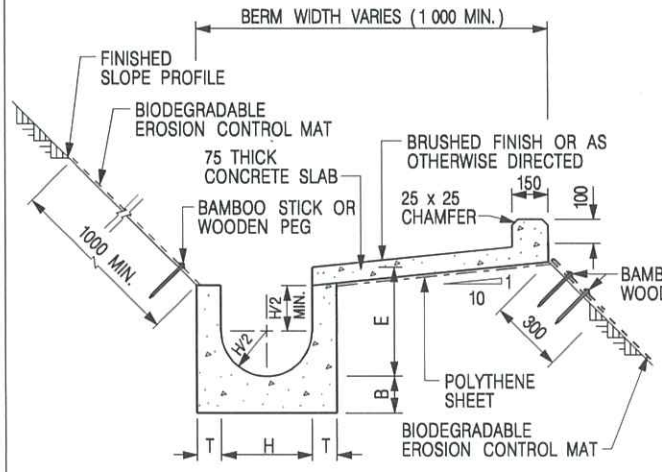


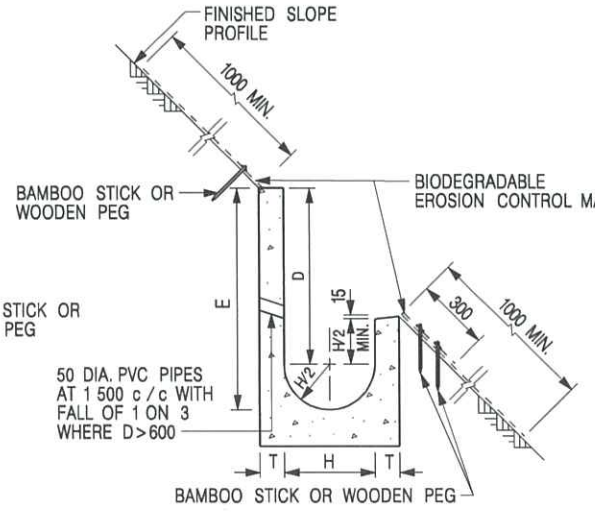
U-CHANNELS CONSTRUCTED ON BERM WITH NON-BIODEGRADABLE EROSION CONTROL MAT



U-CHANNELS NOT CONSTRUCTED ON BERM WITH NON-BIODEGRADABLE EROSION CONTROL MAT



U-CHANNELS CONSTRUCTED ON BERM WITH BIODEGRADABLE EROSION CONTROL MAT



U-CHANNELS NOT CONSTRUCTED ON BERM WITH BIODEGRADABLE EROSION CONTROL MAT

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. ALL CONCRETE TO BE GRADE 20 /20.
3. CONCRETE SURFACE FINISH SHALL BE CLASS U2, F2 OR BRUSHED FINISH AS DIRECTED.
4. SPACING OF EXPANSION JOINT IN CHANNELS, BERM SLABS AND APRONS TO BE 10 METRES MAXIMUM, SEE STD. DRG. NO. C2413 FOR DETAILS.
5. JOINTS FOR CHANNELS, BERM SLABS, APRONS AND WALLS, ETC. TO BE ON THE SAME ALIGNMENT.
6. FOR DIMENSIONS T, H, & B, SEE TABLE BELOW.
7. FOR TYPICAL FIXING PIN DETAILS, SEE STD. DRG. NO. C2511/2.
8. MINIMUM SIZE OF 25 x 50 x 300mm SHALL BE PROVIDED FOR WOODEN PEG.
9. MINIMUM SIZE OF 10mm DIAMETER WITH 200mm LONG SHALL BE PROVIDED FOR BAMBOO STICK.
10. THE FIXING DETAILS OF NON-BIODEGRADABLE AND BIODEGRADABLE EROSION CONTROL MATS ON EXISTING BERM SHALL REFER TO STD. DRG. NO. C2511/1.

NOMINAL SIZE H	T	B	REINFORCEMENT
300	80	100	A252 MESH PLACED CENTRALLY AND T=100 WHEN E>650
375 - 600	100	150	
675 - 900	125	175	A252 MESH PLACED CENTRALLY

REF.	REVISION	SIGNATURE	DATE
I	MINOR AMENDMENT.	Original Signed	07.2018
H	FIXING DETAILS OF BIODEGRADABLE EROSION CONTROL MAT ADDED.	Original Signed	12.2017
G	DIMENSION TABLE AMENDED.	Original Signed	01.2005
F	MINOR AMENDMENT.	Original Signed	01.2004
E	GENERAL REVISION.	Original Signed	12.2002
D	MINOR AMENDMENT.	Original Signed	08.2001
C	150 x 100 UPSTAND ADDED AT BERM.	Original Signed	6.99
B	MINOR AMENDMENT.	Original Signed	3.94
A	MINOR AMENDMENT.	Original Signed	10.92

DETAILS OF HALF-ROUND AND U-CHANNELS (TYPE B - WITH EROSION CONTROL MAT APRON)

CEDD **CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT**

SCALE DIAGRAMMATIC

DATE JAN 1991

DRAWING NO. C2410I

卓越工程 建設香港

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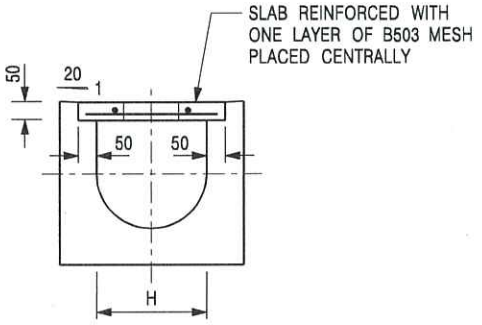
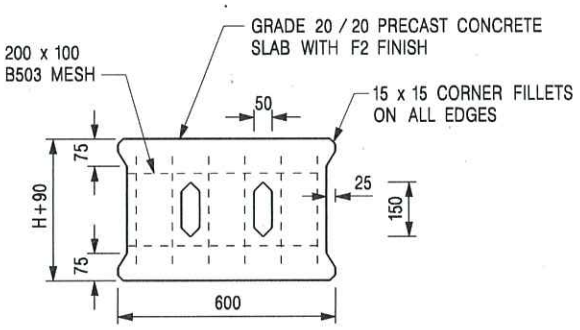


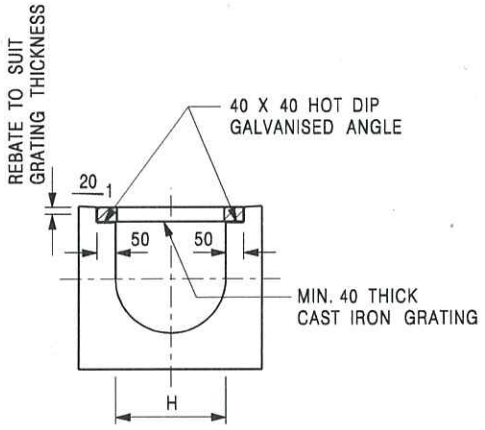
TYPICAL SECTION



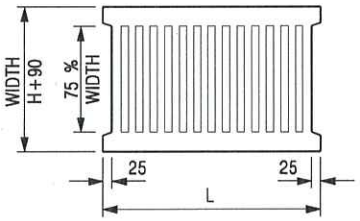
PLAN OF SLAB

U-CHANNELS WITH PRECAST CONCRETE SLABS

(UP TO H OF 525)



TYPICAL SECTION



L = 600mm FOR H ≤ 375mm
L = 400mm FOR H > 375mm

CAST IRON GRATING

(DIMENSIONS ARE FOR GUIDANCE ONLY, CONTRACTOR MAY SUBMIT EQUIVALENT TYPE)

U-CHANNEL WITH CAST IRON GRATING

(UP TO H OF 525)

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. H = NOMINAL CHANNEL SIZE.
3. ALL CAST IRON FOR GRATINGS SHALL BE GRADE EN-GJL-150 COMPLYING WITH BS EN 1561.
4. FOR COVERED CHANNELS TO BE HANDED OVER TO HIGHWAYS DEPARTMENT FOR MAINTENANCE, THE GRATING DETAILS SHALL FOLLOW THOSE AS SHOWN ON HyD STD. DRG. NO. H3156.

REF.	REVISION	SIGNATURE	DATE
E	NOTES 3 & 4 AMENDED.	Original Signed	12.2014
D	NOTE 4 ADDED.	Original Signed	06.2008
C	MINOR AMENDMENT. NOTE 3 ADDED.	Original Signed	12.2005
B	NAME OF DEPARTMENT AMENDED.	Original Signed	01.2005
A	CAST IRON GRATING AMENDED.	Original Signed	12.2002

COVER SLAB AND CAST IRON GRATING FOR CHANNELS

CEDD CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

SCALE 1 : 20

DATE JAN 1991

DRAWING NO. C2412E

PHOTO 1

PHOTO 2

UNABLE TO ACCESS

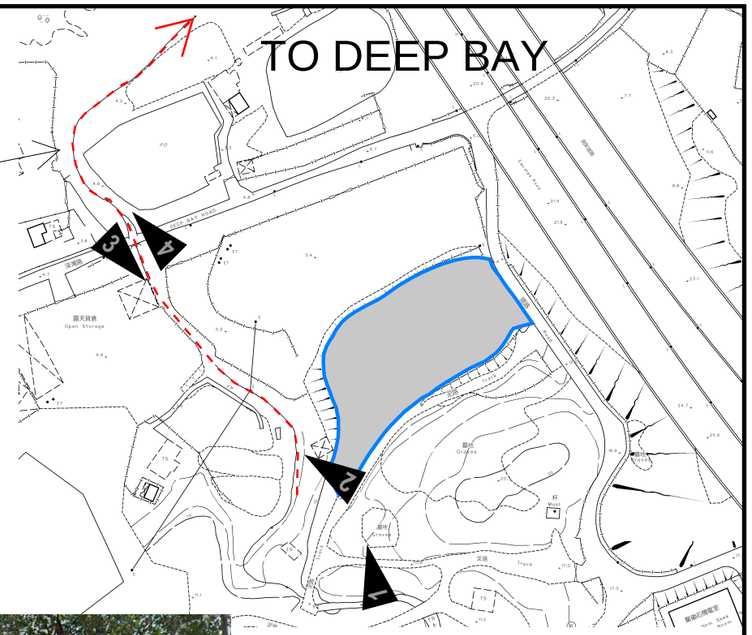


PHOTO 3

PHOTO 4

PROJECT:
Proposed Temporary Open Storage of Construction Materials and Machinery and Storage of Tools and Parts with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land in “Agriculture” Zone

SITE PHOTOS

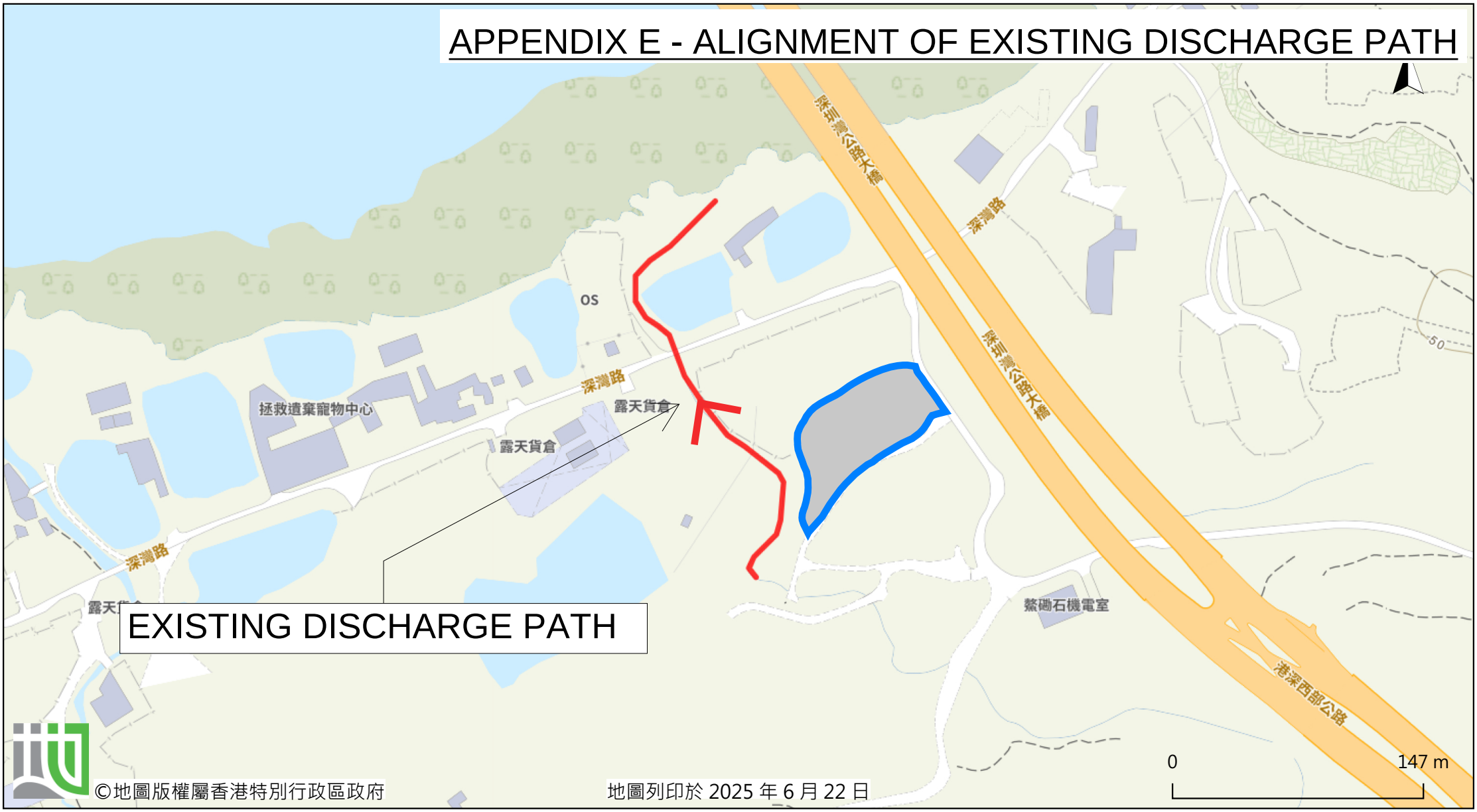
APPENDIX D

LOCATION:
Lot 385 RP (Part) in D.D. 128 and Adjoining GL, Ha Tsuen, Yuen Long, New Territories

VER	DESCRIPTION	DATE

GEOINFO MAP
地理資訊地圖

前往地圖: https://www.map.gov.hk/gm/geo:22.4532,113.9716?z=2257



由「地理資訊地圖」網站提供: https://www.map.gov.hk