Annex 1

Compliance Letter for Approval Condition (e) for Application No. A/YL-LFS/421

By Fax (2329 8422) and Post

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. Hong Kong

7 March 2023

來函檔號	Your Reference	
本署檔號	Our Reference	( ) in TPB/A/YL-LFS/421
電話號碼	Tel. No. :	2158 6290
傳真機號碼	Fax No. :	2489 9711

PlanPlus Consultancy Limited
Room 1025, 10/F, Phase 1, Metro Centre,
32 Lam Hing Street, Kowloon Bay,
Kowloon, Hong Kong
(Attn: Natalie WONG)

Dear Sir/Madam,

Compliance with Approval Condition (e)
Planning Application No. A/YL-LFS/421

I refer to your submission dated 12.12.2022 regarding the submission of a drainage proposal for compliance with the subject approval condition. Your submission is considered:

☑ Acceptable. The captioned condition has been complied with.

☐ Partially acceptable. Since the captioned condition requires both the submission and implementation of the proposal, it has not been fully complied with.

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

Should you have any queries regarding the above, please contact Mr. Victus KWAN (Tel: 2300 1235) of the Drainage Services Department direct.

Yours faithfully,

(Keith WONG)
for District Planning Officer/
Tuen Mun and Yuen Long West
Planning Department

c.c.
CE/MN of DSD (Attn: Mr. Victus KWAN)

Internal
CTP/TPB

Annex 2

Compliance Letter for Approval Condition (h) for Application No. A/YL-LFS/421

By Fax (2329 8422) and Post

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. Hong Kong

14 February 2023

來函檔號	Your Reference	
本署檔號	Our Reference	( ) in TPB/A/YL-LFS/421
電話號碼	Tel. No. :	2158 6290
傳真機號碼	Fax No. :	2489 9711

PlanPlus Consultancy Limited
Room 1025, 10/F, Phase 1, Metro Centre,
32 Lam Hing Street, Kowloon Bay,
Kowloon, Hong Kong
(Attn: Natalie WONG)

Dear Sir/Madam,

Compliance with Approval Condition (h)
Planning Application No. A/YL-LFS/421

I refer to your submission dated 12.12.2022 regarding the submission of a fire service installations proposal for compliance with the subject approval condition. Your submission is considered:

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

☐ Partially acceptable. Since the captioned condition requires both the submission and implementation of the proposal, it has not been fully complied with.

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

Should you have any queries on the departmental comments, please contact Mr. CHOI Wai-lun (Tel: 2733 5845) of the Fire Services Department direct.

Yours faithfully,

(Keith WONG)
for District Planning Officer/
Tuen Mun and Yuen Long West
Planning Department

c.c.
D of FS (Attn: Mr. WONG Ho-yin)

Internal
CTP/TPB

Appendix I

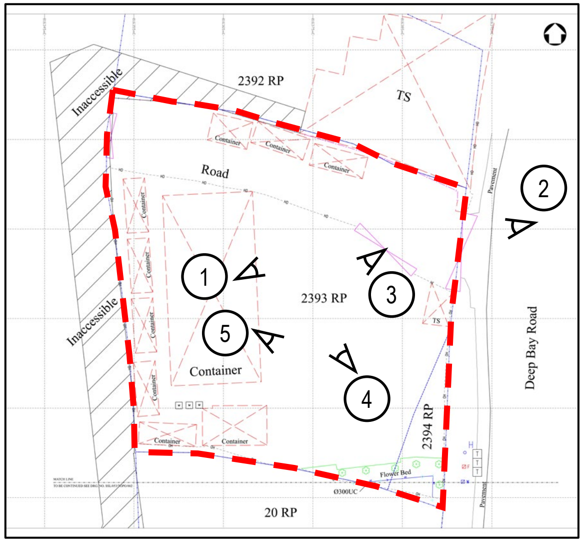
A/YL-LFS/421 – Compliance with approval condition (h)

Comments from the Director of Fire Services (D of FS):

1. You are advised that the installation /maintenance/ modification/ repair work of fire service installation (FSI) shall be undertaken by an Registered Fire Service Installation Contractor (RFSIC). The RFSIC shall after completion of the installation/maintenance/ modification/ repair work issue to the person on whose instruction the work was undertaken a certificate (FS 251) and forward a copy of the certificate to the Director of Fire Services.

Annex 3

Site Photos



Application Site *(For identification only)*

Existing Ingress/Egress Point (View from 1/F)

Proposed Ingress/Egress Point

PLANPLUS CONSULTANCY 思顧 雋問

Figure Title:

Site Photos

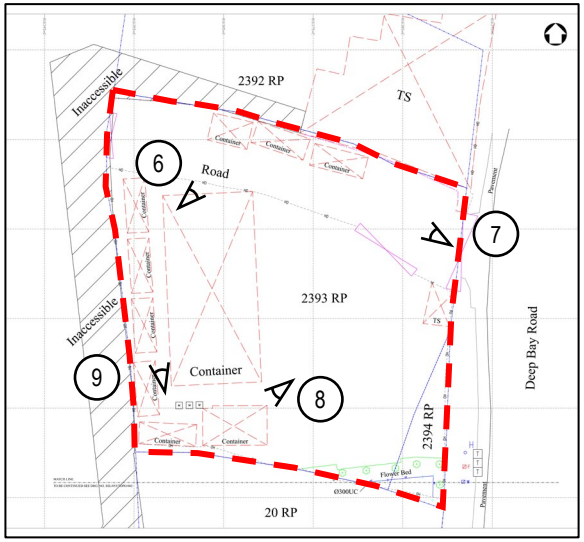
Project No.:

PPC-PLG-10183

Project:

Section 16 Planning Application for Temporary Warehouse for Storage of Metal Ware, Spare Parts and Wires with Ancillary Office for a Period of 3 Years at Lots 2393 RP and 2394 RP in D.D. 129, Lau Fau Shan, Yuen Long, New Territories

Annex:	Scale:	Date:
3	N/A	September 2025



Application Site *(For identification only)*

(View from 1/F)

PLANPLUS 思顧
CONSULTANCY 隽問

Figure Title:
Site Photos

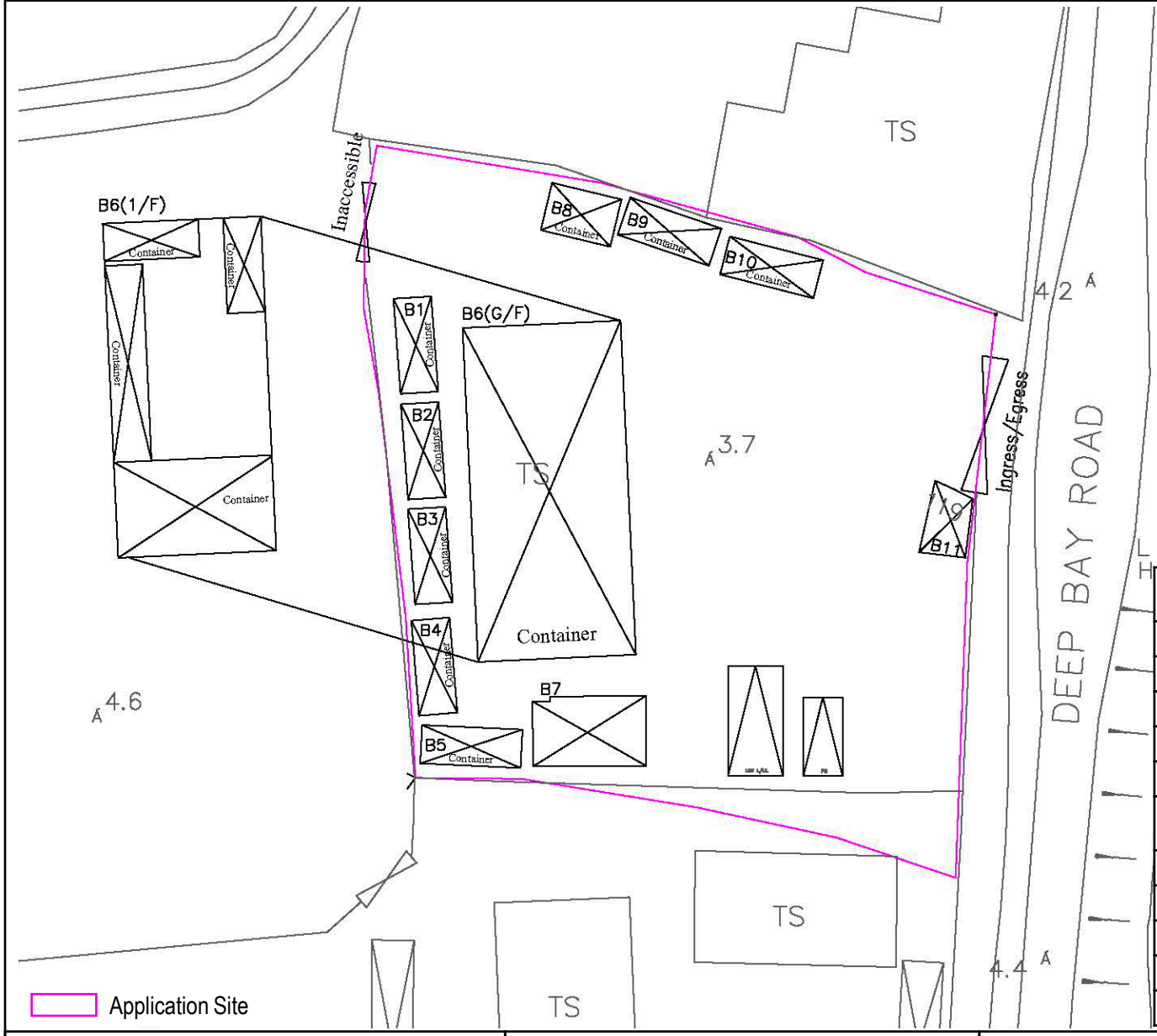
Project No.:
PPC-PLG-10183

Project:
Section 16 Planning Application for Temporary Warehouse for Storage of Metal Ware, Spare Parts and Wires with Ancillary Office for a Period of 3 Years at Lots 2393 RP and 2394 RP in D.D. 129, Lau Fau Shan, Yuen Long, New Territories

Annex:	**Scale:**	**Date:**
3	N/A	September 2025

Annex 4

Layout Plan



NO.	Structure Content	Covered Area (sq.m) (About)	Storey	Height (m) (About)	GFA (sq.m) (About)
B1	Storage	14.6	1	2.59	14.6
B2	Storage	14.6	1	2.59	14.6
B3	Storage	14.6	1	2.59	14.6
B4	Container-Type F.Toilet	14.6	1	2.59	14.6
B5	Container-Type M.Toilet	14.6	1	2.59	14.6
B6	G/F: Storage 1/F: Office & Storage	214.15	2	5.18	335.0
B7	Office & Storage	31.7	1	2.59	31.7
B8	Storage	14.0	1	2.59	14.0
B9	Storage	14.6	1	2.59	14.6
B10	Storage	14.6	1	2.59	14.6
B11	F.S Pump Room	12.0	1	2.59	12.0

PLANPLUS 思顧 CONSULTANCY 隽問

Figure Title:
Layout Plan

Project No.:
PPC-PLG-10183

Project:
Section 16 Planning Application for Temporary Warehouse for Storage of Metal Ware, Spare Parts and Wires with Ancillary Office for a Period of 3 Years at Lots 2393 RP and 2394 RP in D.D. 129, Lau Fau Shan, Yuen Long, New Territories

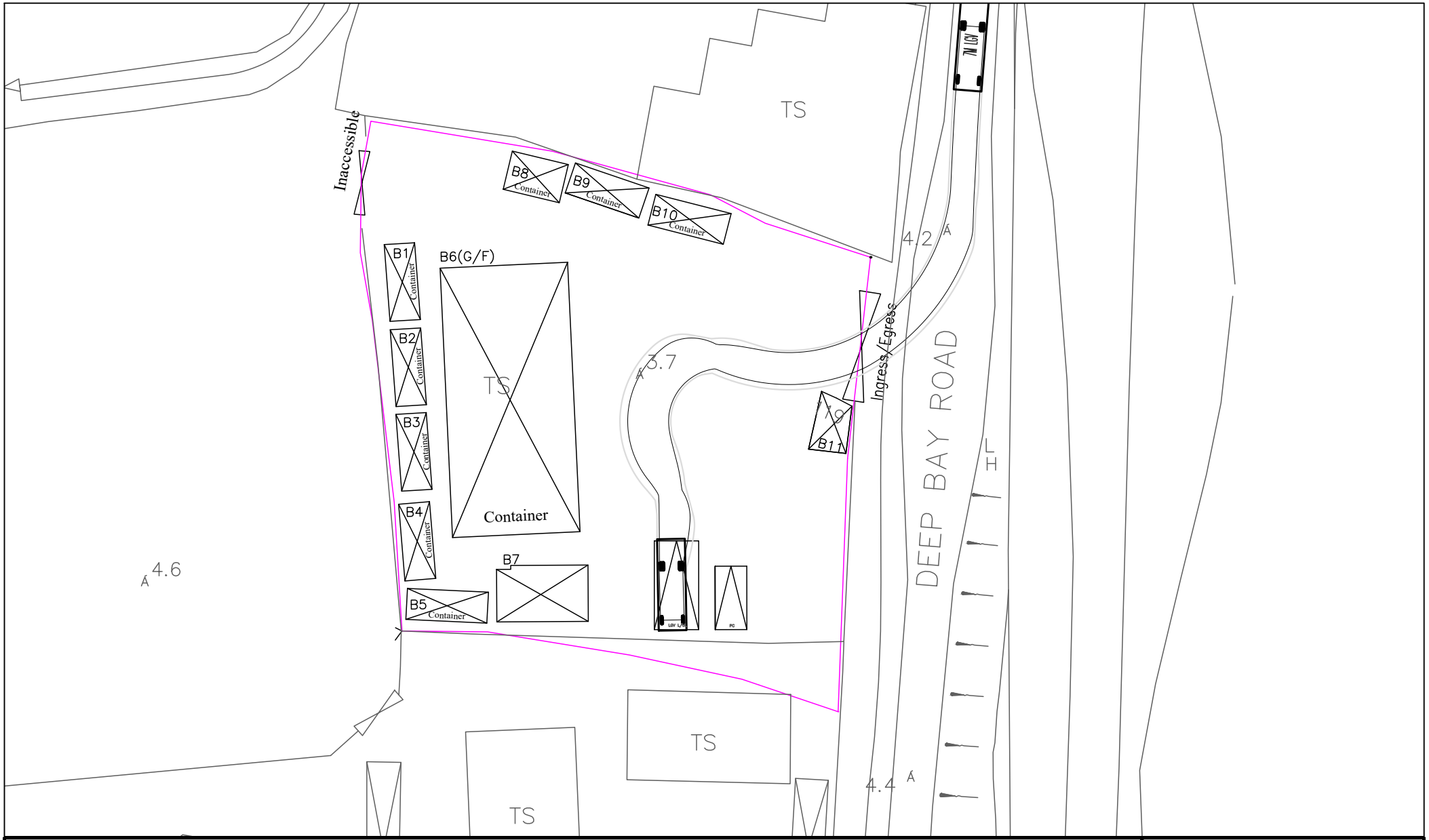
Annex: 4

Scale: N/A

Date: September 2025

Annex 5

Traffic Swept Path Analysis

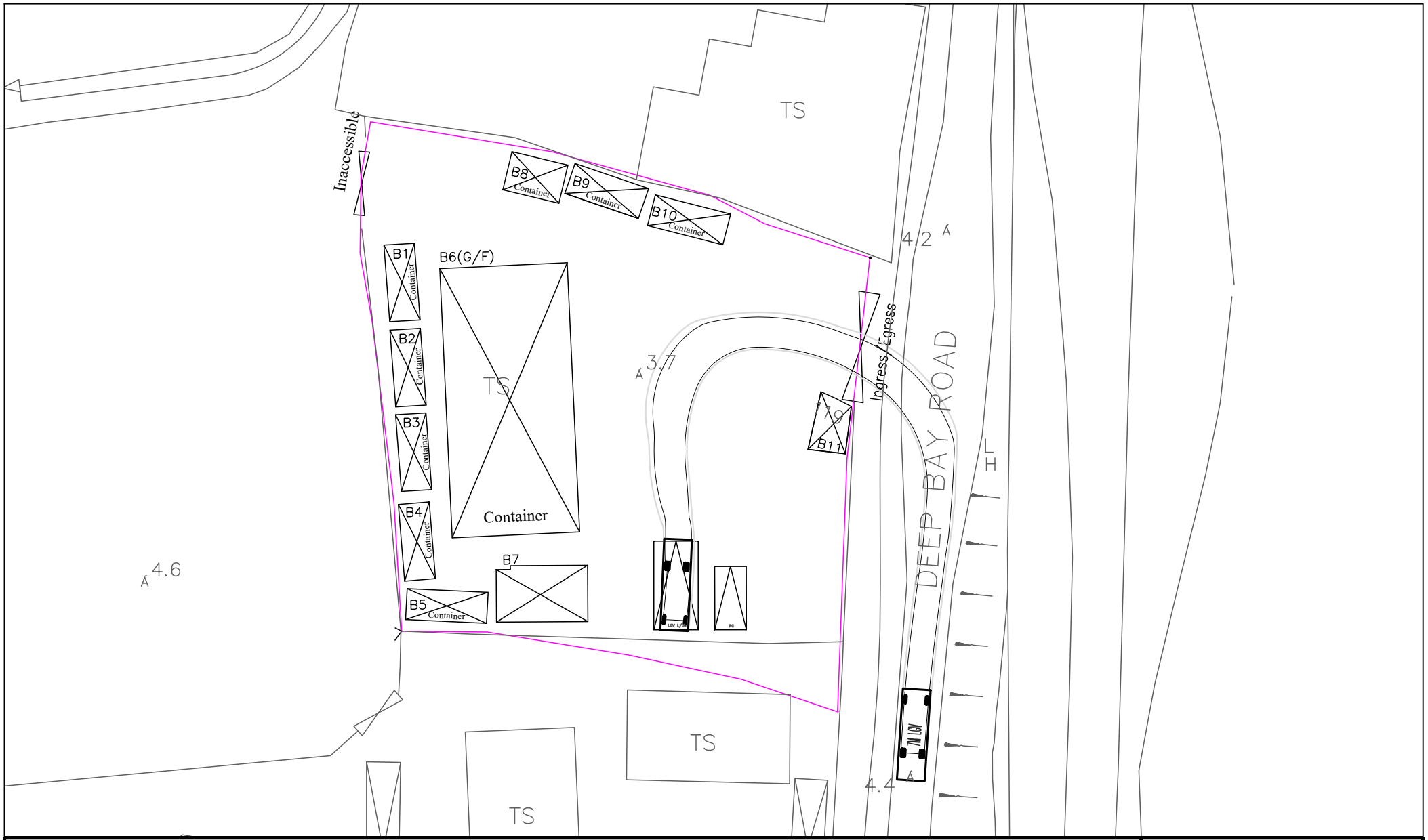


PROJECT TITLE

PROPOSED TEMPORARY WAREHOUSE FOR STORAGE OF METAL WARE,SPARE PARTS AND WIRES WITH ANCILLARY OFFICE FOR A PERIOD OF 3 YEARS AT LOT NOS 2393 RP(PART) AND 2394 RP IN D.D129,LAU FAU SHAN,YUEN LONG,N.T

FIGURE SP-1.1

DATE	SCALE	DRAWING TITLE
SEP 2025	N.T.S	SWEPT PATH ANALYSIS FOR LIGHT GOODS VEHICLE
DRAWN	PROJECT NO.	
SF	–	

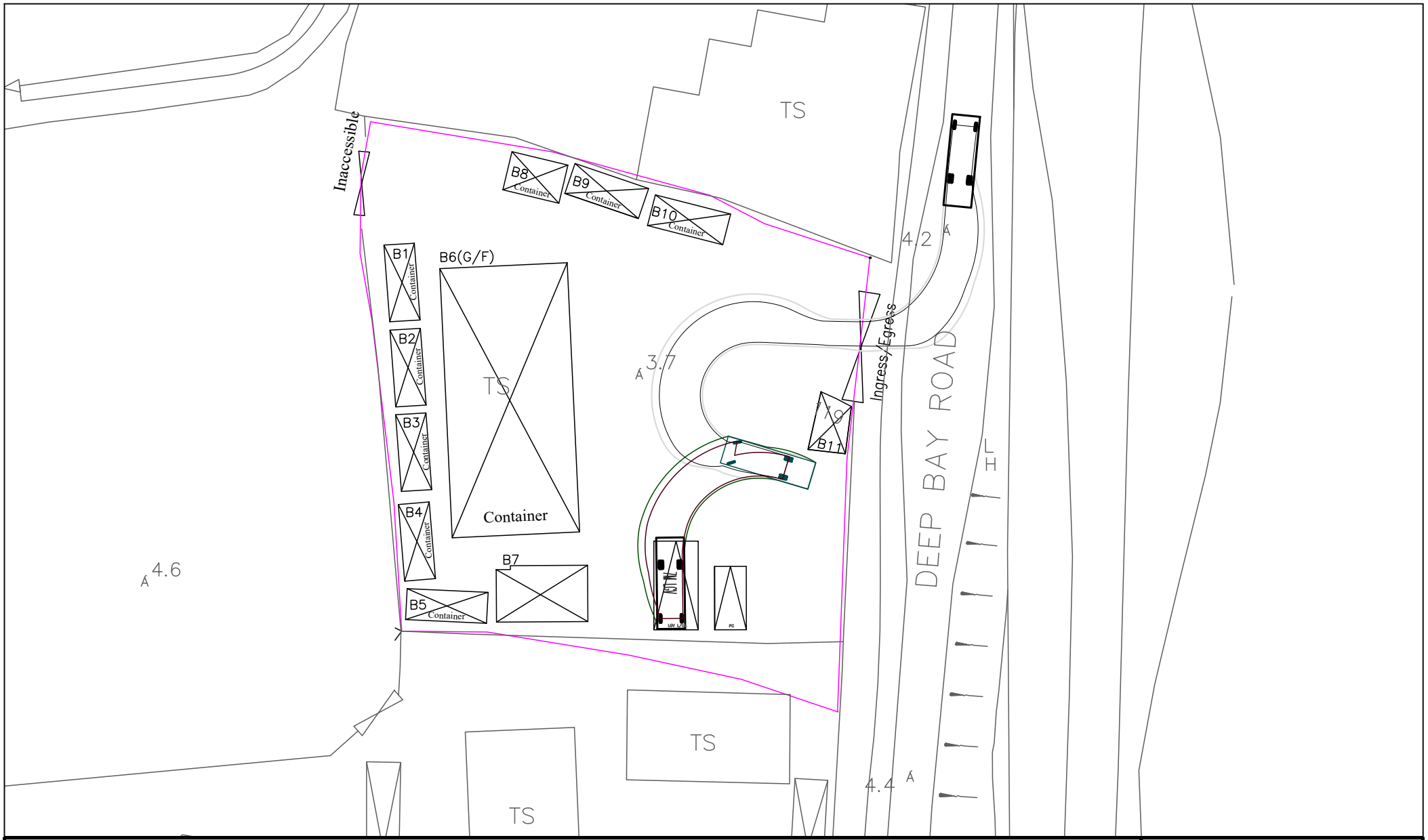


PROJECT TITLE

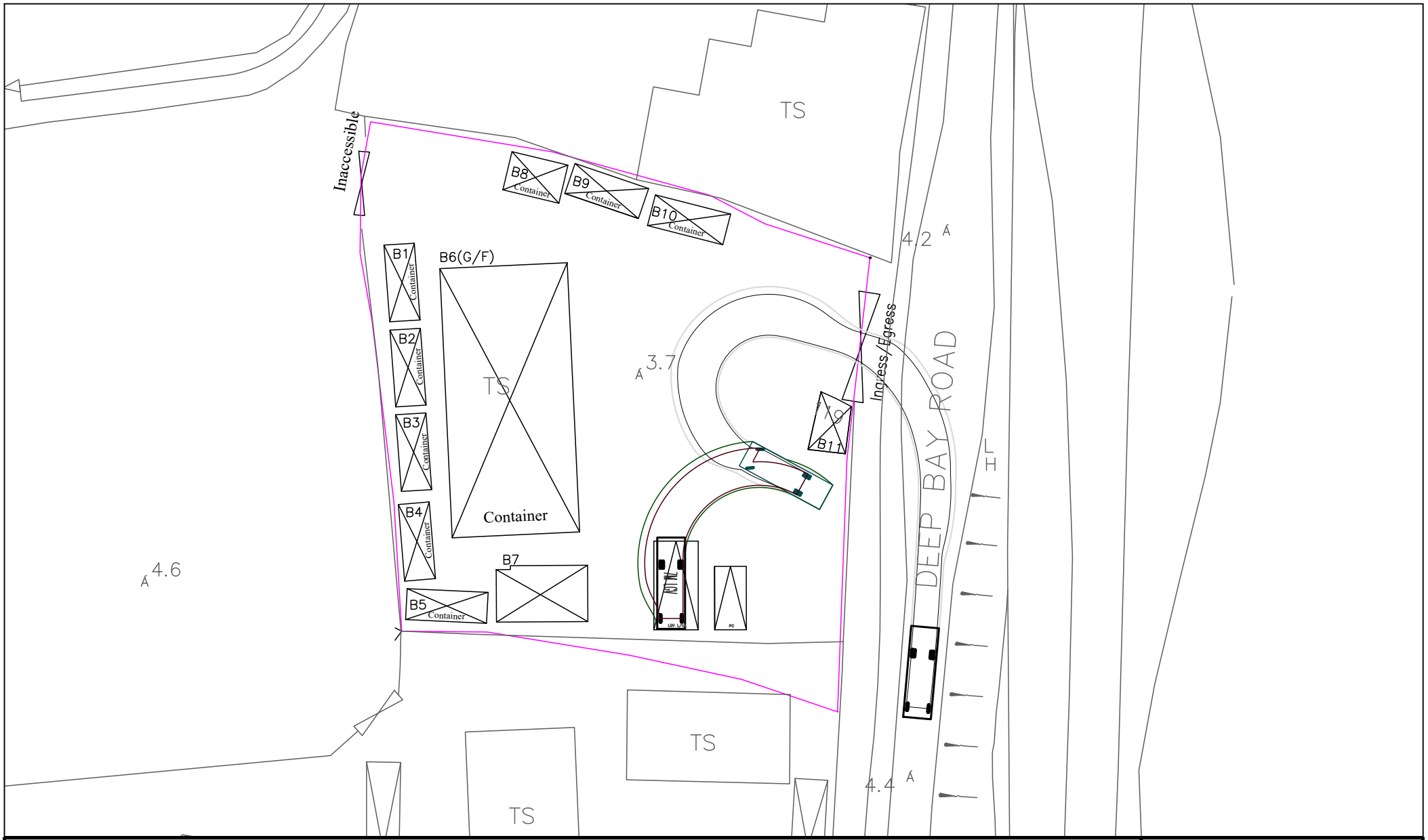
PROPOSED TEMPORARY WAREHOUSE FOR STORAGE OF METAL WARE,SPARE PARTS AND WIRES WITH ANCILLARY OFFICE FOR A PERIOD OF 3 YEARS AT LOT NOS 2393 RP(PART) AND 2394 RP IN D.D129,LAU FAU SHAN,YUEN LONG,N.T

FIGURE SP-1.2

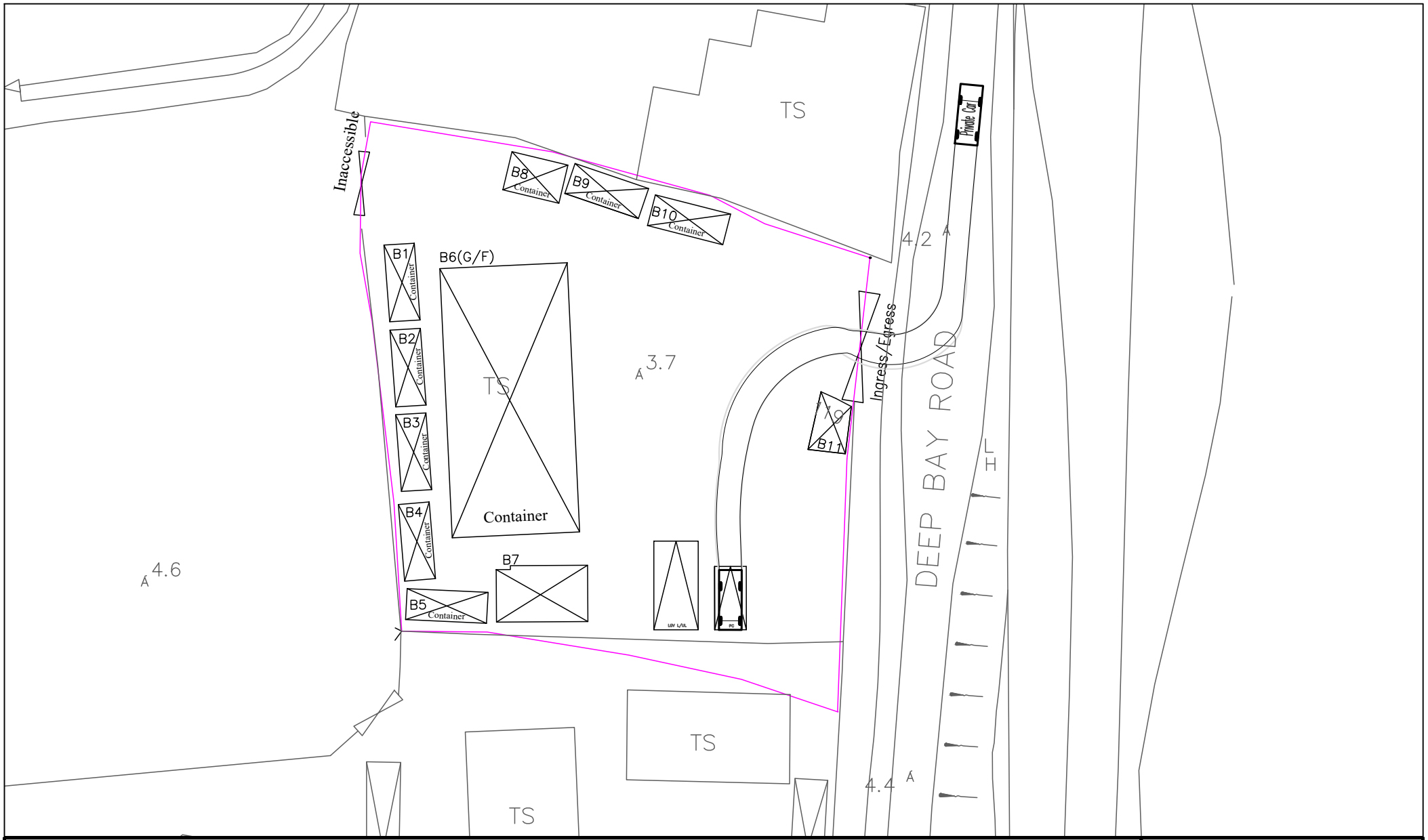
DATE	SCALE	DRAWING TITLE
SEP 2025	N.T.S	SWEPT PATH ANALYSIS FOR LIGHT GOODS VEHICLE
DRAWN	PROJECT NO.	
SF	–	



PROJECT TITLE PROPOSED TEMPORARY WAREHOUSE FOR STORAGE OF METAL WARE,SPARE PARTS AND WIRES WITH ANCILLARY OFFICE FOR A PERIOD OF 3 YEARS AT LOT NOS 2393 RP(PART) AND 2394 RP IN D.D129,LAU FAU SHAN,YUEN LONG,N.T		**FIGURE SP-1.3**
DATE SEP 2025	SCALE N.T.S	DRAWING TITLE SWEPT PATH ANALYSIS FOR LIGHT GOODS VEHICLE
DRAWN SF	PROJECT NO. –	



PROJECT TITLE PROPOSED TEMPORARY WAREHOUSE FOR STORAGE OF METAL WARE,SPARE PARTS AND WIRES WITH ANCILLARY OFFICE FOR A PERIOD OF 3 YEARS AT LOT NOS 2393 RP(PART) AND 2394 RP IN D.D129,LAU FAU SHAN,YUEN LONG,N.T		**FIGURE SP-1.4**
DATE SEP 2025	SCALE N.T.S	DRAWING TITLE SWEPT PATH ANALYSIS FOR LIGHT GOODS VEHICLE
DRAWN SF	PROJECT NO. –	

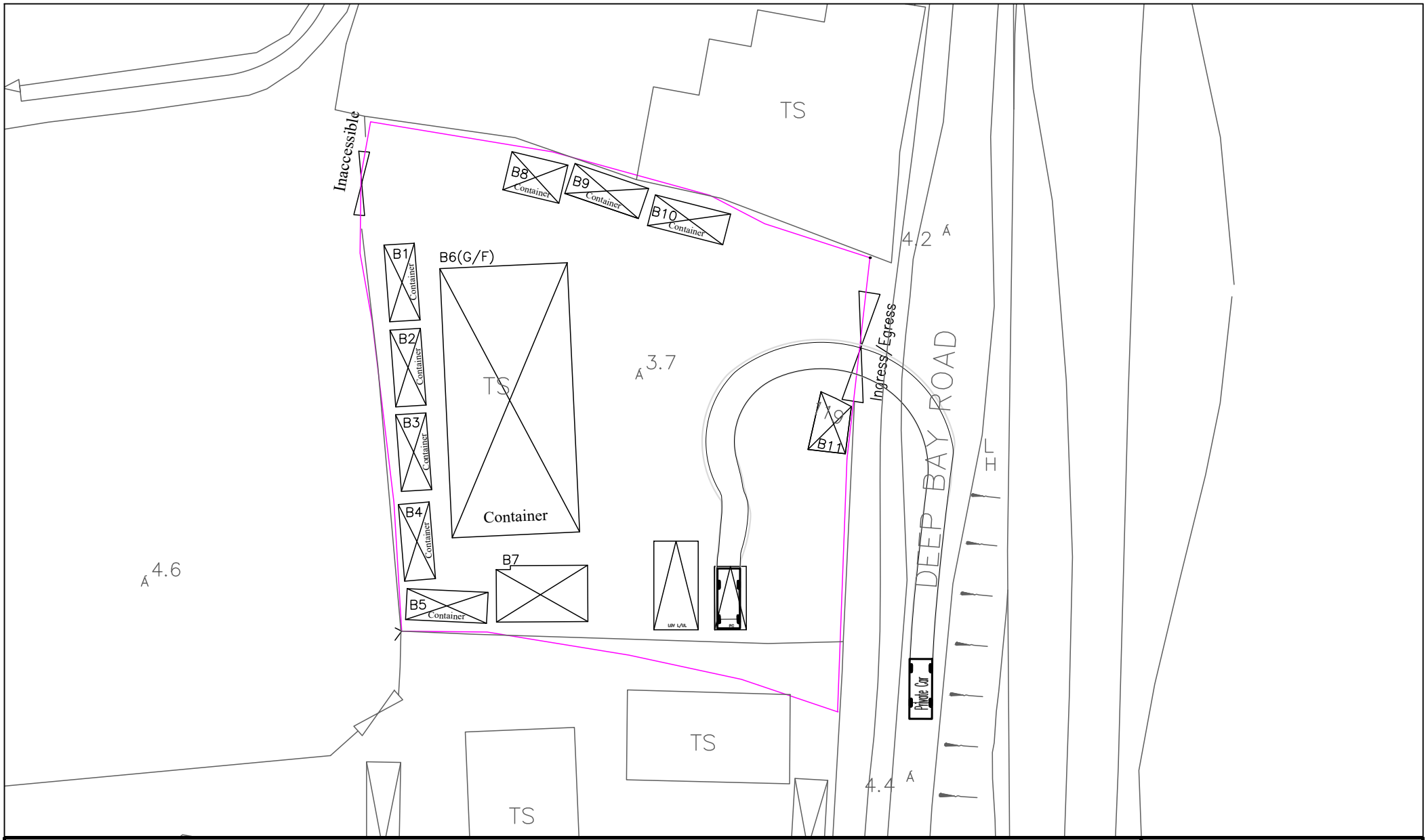


PROJECT TITLE

PROPOSED TEMPORARY WAREHOUSE FOR STORAGE OF METAL WARE,SPARE PARTS AND WIRES WITH ANCILLARY OFFICE FOR A PERIOD OF 3 YEARS AT LOT NOS 2393 RP(PART) AND 2394 RP IN D.D129,LAU FAU SHAN,YUEN LONG,N.T

FIGURE SP-1.5

DATE	SCALE	DRAWING TITLE
SEP 2025	N.T.S	SWEPT PATH ANALYSIS FOR PRIVATE CAR
DRAWN	PROJECT NO.	
SF	–	

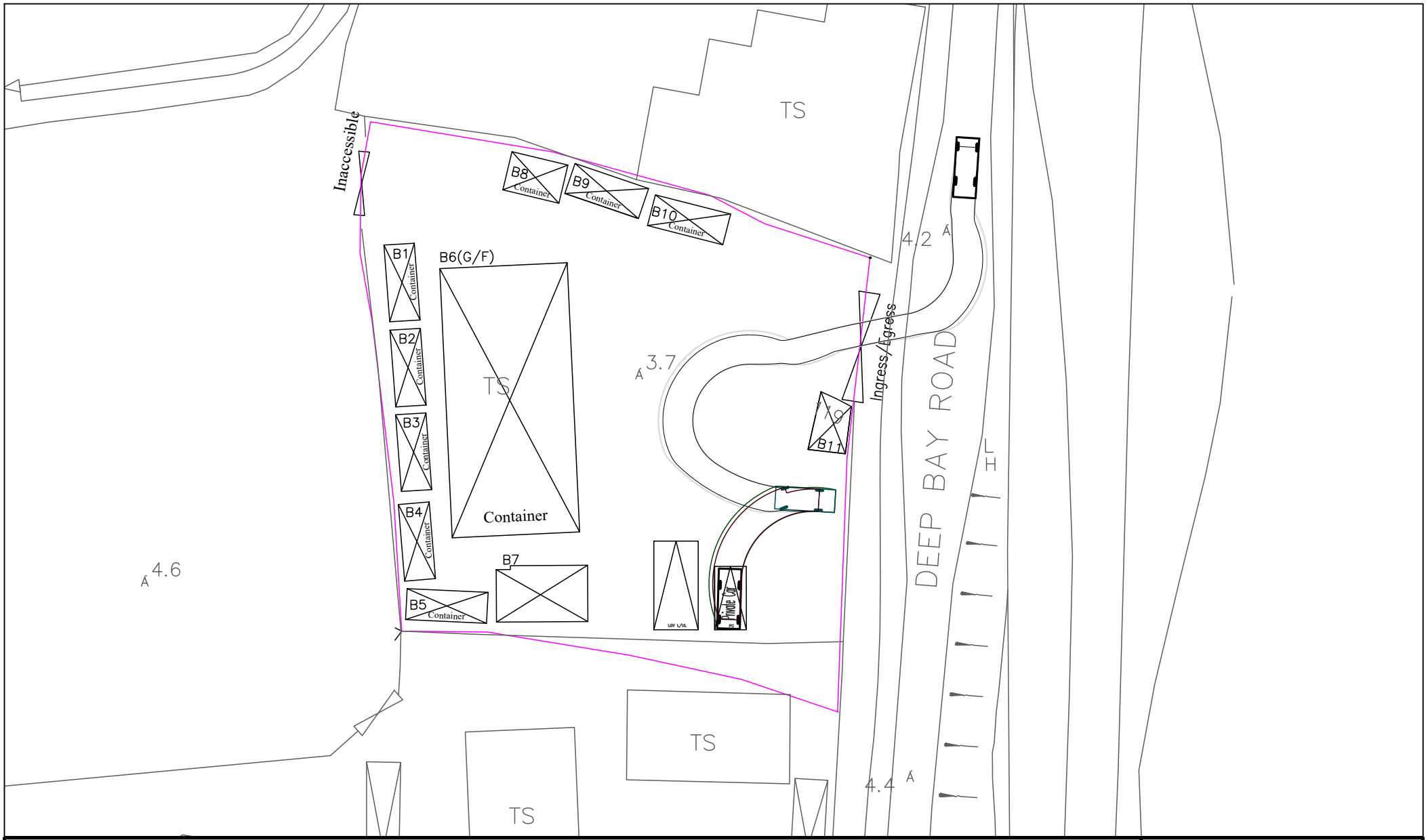


PROJECT TITLE

PROPOSED TEMPORARY WAREHOUSE FOR STORAGE OF METAL WARE,SPARE PARTS AND WIRES WITH ANCILLARY OFFICE FOR A PERIOD OF 3 YEARS AT LOT NOS 2393 RP(PART) AND 2394 RP IN D.D129,LAU FAU SHAN,YUEN LONG,N.T

FIGURE SP-1.6

DATE	SCALE	DRAWING TITLE
SEP 2025	N.T.S	SWEPT PATH ANALYSIS FOR PRIVATE CAR
DRAWN	PROJECT NO.	
SF	–	

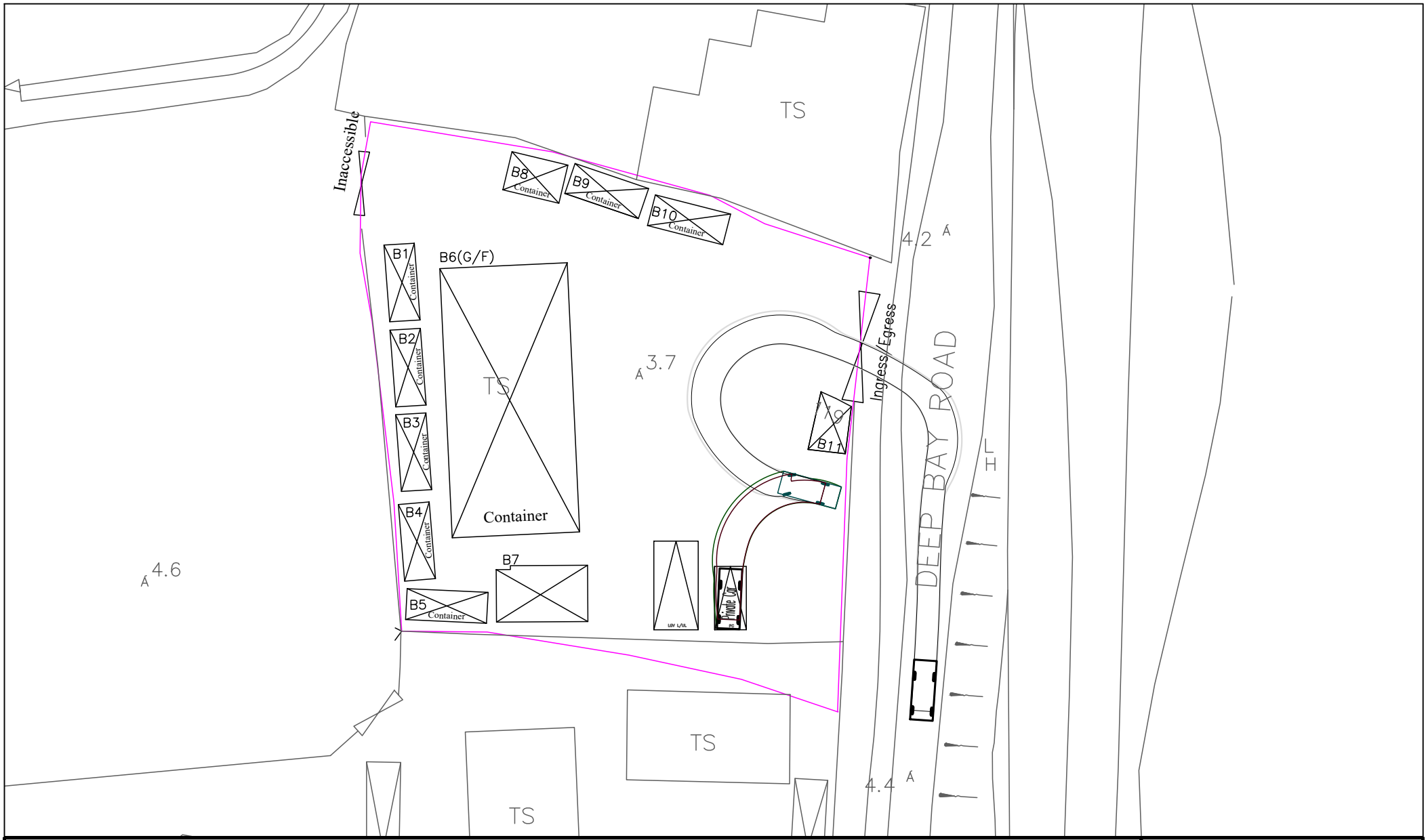


PROJECT TITLE

PROPOSED TEMPORARY WAREHOUSE FOR STORAGE OF METAL WARE,SPARE PARTS AND WIRES WITH ANCILLARY OFFICE FOR A PERIOD OF 3 YEARS AT LOT NOS 2393 RP(PART) AND 2394 RP IN D.D129,LAU FAU SHAN,YUEN LONG,N.T

FIGURE SP-1.7

DATE	SCALE	DRAWING TITLE
SEP 2025	N.T.S	SWEPT PATH ANALYSIS FOR PRIVATE CAR
DRAWN	PROJECT NO.	
SF	–	



PROJECT TITLE PROPOSED TEMPORARY WAREHOUSE FOR STORAGE OF METAL WARE,SPARE PARTS AND WIRES WITH ANCILLARY OFFICE FOR A PERIOD OF 3 YEARS AT LOT NOS 2393 RP(PART) AND 2394 RP IN D.D129,LAU FAU SHAN,YUEN LONG,N.T		**FIGURE SP-1.8**
DATE SEP 2025	SCALE N.T.S	DRAWING TITLE SWEPT PATH ANALYSIS FOR PRIVATE CAR
DRAWN SF	PROJECT NO. –	

Annex 6

Drainage Proposal

SUBMISSION REPORT
FOR
DRAINAGE PROPOSAL DESIGN
FOR TEMPORARY WAREHOUSE FOR STORAGE OF METAL WARE, SPARE PARTS AND WIRES WITH ANCILLARY OFFICE FOR A PERIOD OF 3 YEARS IN "RESIDENTIAL (GROUP D)" ZONE, LOTS 2393 RP AND 2394RP IN D.D.129, LAU FAU SHAN, YUEN LONG, NEW TERRITORIES

Date : September 2025

TABLE OF CONTENTS

APPENDIX

REFERENCES

1. Stormwater Drainage Manual, Planning Design and Management by DSD
2. Geotechnical Manual for Slopes by GEO
3. Standard Drawings by DSD

1. Introduction

This proposal is prepared for the proposed stormwater drainage works for the proposed temporary warehouse at lots 2393 RP and 2394RP in D.D.129, Lau Fau Shan, Yuen Long, New Territories

2. Existing Drainage Condition

A plan showing the existing catchments are enclosed in **Appendix B**. Currently, the surface runoff collected from the site is discharging to the existing government catchpit no. SCH1031309 as shown in **Appendix A**. As per the existing site condition, additional peripheral U-channels area considered necessary for the proposed development. Drainage proposal is required to be carried out for the proposed development.

3. Design Parameters & Assumptions

The design criteria to be used for the modeling assessment are based on the standards set out in the Stormwater Drainage Manual, Fifth Edition (SDM). According to Section 6.6.1 of the SDM, the existing village drainage system in the vicinity of the development is classified as main rural catchment drainage system. Table 10 of the SDM recommends to be adopted a 50 year design return period storm event for the main rural drainage branch system.

Stormwater Runoff (Q)

The rate of stormwater runoff used in this assessment report is estimated by the "Rational method" in which the peak runoff is calculated from the formula:

$$Q = K \times i \times A / 3600$$

where Q = maximum runoff (L/s)

i = design mean intensity of rainfall (mm/hr)

A = area of catchment (m^2)

K = runoff coefficient

Time of Concentration (tc)

The time of concentration is defined as the time required for stormwater runoff to flow from the most remote part of the catchment area to the point in the drainage system under consideration. Based on the assumptions adopted in the Rational Method, this is the time taken for the peak runoff to become established at the considered section.

The time of concentration comprises the time for water flowing within natural catchments and along the man-made drainage pipes/channels. For natural catchments, the time of concentration is estimated by the modified form of the Brandsby William's equation.

$$t_o = \frac{0.14465L}{H^{0.2} A^{0.1}}$$

Where t_o = time of concentration of a natural catchment (min.)

A = catchment area (m^2)

H = average slope (m per 100m), measured along the line of natural flow, from the summit of the catchment to the point under consideration

L = distance (on plan) measured on the line of natural flow between the summit and the point under consideration (m)

Mean Rainfall Intensity (i)

Mean rainfall intensity-duration curves attached in this report are based on the Statistical analysis of long term rainfall records from the Hong Kong Observatory. A return period of 50 years is adopted.

Runoff Coefficient (K)

The value of K is taken as 1 for developed area. For vegetated ground, the value of K is taken as 0.3.

4. Proposed Stormwater Drainage

The proposed stormwater drainage works include surface U-channels at the peripheral of the site collecting the runoff from catchments within the site. The U-channels will connect and discharge the surface runoff to the existing government catchpit. Catchpits with 300mm sump are proposed at the discharged points of proposed U-Channel to desilt the surface water before discharging to the drainage outside. The proposed stormwater drainage layout plan is shown in **Appendix A**.

5. Effect on Drainage Characteristics and Potential Drainage Impact

The drainage design of the proposed U-channel are presented in **Appendix B**.

6. Conclusion

Peripheral channels are to be provided along the site boundary where necessary to intercept runoff from crossing the site. The drainage conditions of adjacent areas will not be adversely affected.

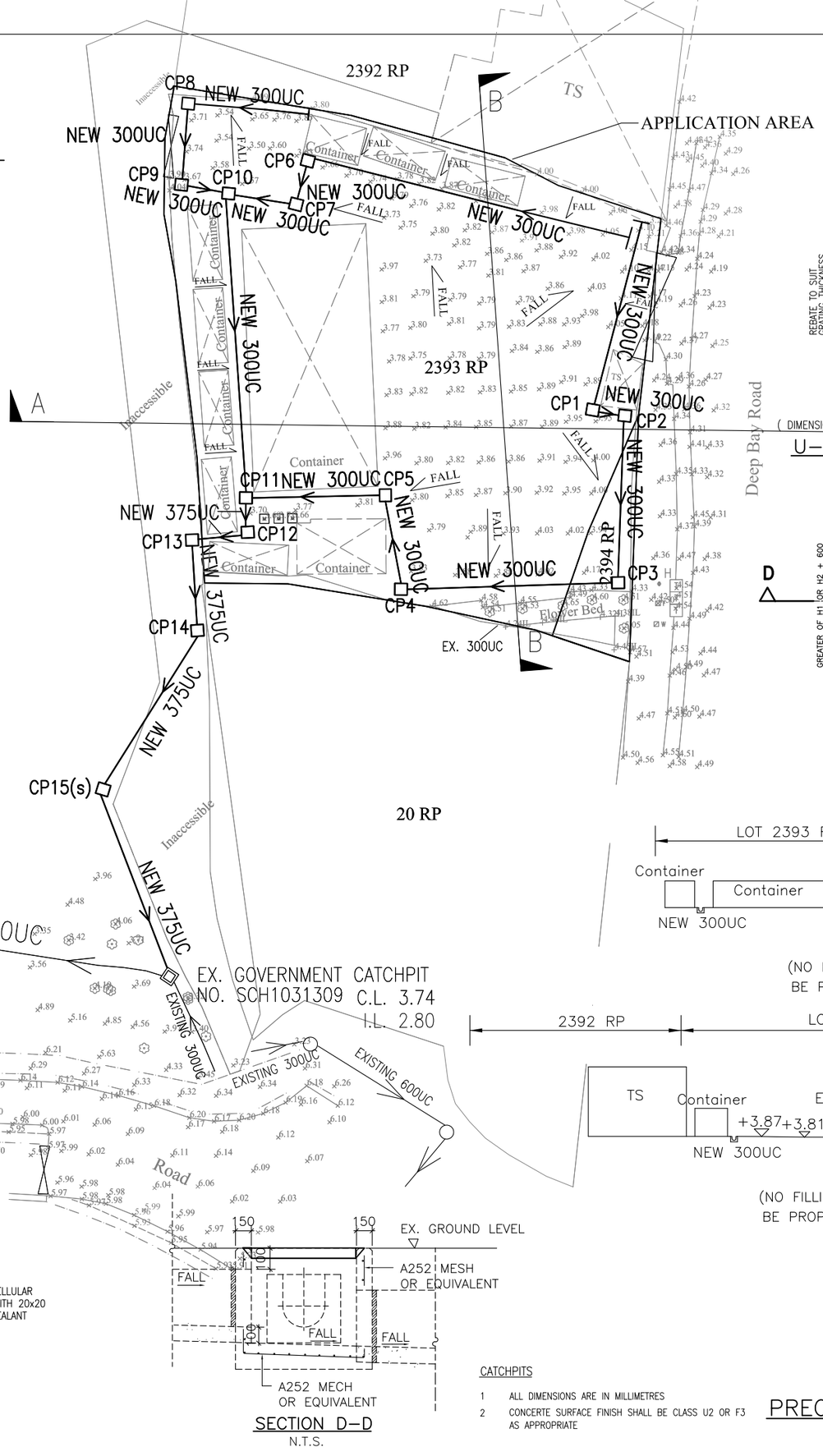
Appendix A

Stormwater Drainage Proposal Plan

PROPOSED CATCHPIT SCHEDULE

CATCHPIT NO.	C.L. (mPD)	I.L. (mPD)
CP1	3.95	3.55
CP2	3.95	3.54
CP3	4.17	3.47
CP4	3.83	3.38
CP5	3.81	3.34
CP6	3.63	3.23
CP7	3.63	3.21
CP8	3.71	3.31
CP9	3.67	3.28
CP10	3.57	3.19
CP11	3.70	3.07
CP12	3.70	2.99
CP13	3.70	2.97
CP14	3.96	2.92
CP15(s)	3.96	2.86

ALL PROPOSED DRAINAGE WORKS SHOULD BE MAINTAINED BY THE APPLICANTS (i.e. LOT OWNERS)



SECTION D – D WITH DESILTED TRAP

COMPLY WITH CEDD'S DRAWING NO. DS C2405 AND C2406I

SECTION D–D

N.T.S.

CATCHPITS

1 ALL DIMENSIONS ARE IN MILLIMETRES

2 CONCERTE SURFACE FINISH SHALL BE CLASS U2 OR F3 AS APPROPRIATE

LEGEND:

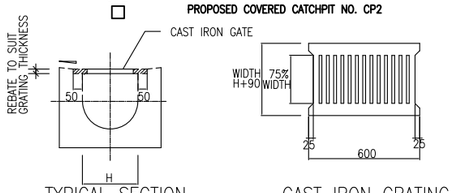
+3.82 EXISTING GROUND LEVEL AT +3.82mPD

NEW 300UC PROPOSED 300mm U–CHANNEL WITH GRATING AT FALL 1: 200 (MIN)

NEW 375UC PROPOSED 375mm U–CHANNEL WITH GRATING AT FALL 1: 200 (MIN)

CP15(s) PROPOSED COVERED DESILTED CATCHPIT NO. CP15

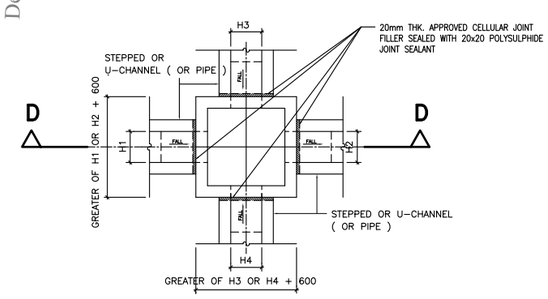
CP2 PROPOSED COVERED CATCHPIT NO. CP2



TYPICAL SECTION CAST IRON GRATING

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

U–CHANNEL WITH CAST IRON GRATING



PLAN

TYPICAL DETAILS OF CATCHPIT

GENERAL NOTE

1. THE PROPOSED DRAINAGE WORK, WHETHER WITHIN OR OUTSIDE THE LOT BOUNDARY, SHOULD BE CONSTRUCTED AND MAINTAINED BY THE LOT OWNER AT HIS OWN EXPENSE. FOR WORKS TO BE UNDERTAKEN OUTSIDE THE LOT BOUNDARY, PRIOR CONSENT AND AGREEMENT FROM DLO AND/OR RELEVANT PRIVATE LOT OWNER SHOULD BE SOUGHT.

CONCRETE STRENGTH AND STEEL REINFORCEMENT SPECIFICATION FOR DRAINAGE DETAILS

1. CONCRETE GRADE FOR CATCHPITS AND U–CHANNEL SHALL BE 30D DESIGN IN COMPLIANCE WITH CS1 : 2010 FOR BLINDING LAYER SHALL BE 15D, DESIGN COMPLY WITH CS1–2010.
2. ALL MAIN BARS TO BE HOT ROLLED HIGH YIELD STEEL DEFORMED BAR COMPLM WITH CS2 : 2012
   Y – HIGH YIELD BAR 500 MPa
   M – MILD STEEL BAR 250 MPa
3. CONCRETE COVER TO MAIN REINFORCEMENT TO BE 50mm.
4. LAP LENGTH FOR ALL BARS TO BE 46x DIAMETER OF LARGER BAR TO BE LAPPED.
5. REACTIVE ALKALI CONTENT EXPRESSED IN SODIUM OXIDE PER CUBIC METER OF CONCRETE SHOULD NOT EXCEED 3KG AS PER PNAP APP–74.

HALF ROUND, U, AND STEPPED – CHANNELS

1 ALL DIMENSIONS ARE IN MILLIMETERS

2 CONCRETE SURFACE FINISHING SHALL BE CLASS U2 OR F2 AS APPROPRIATE

3 FOR HALF ROUND AND U – CHANNEL, SPACING OF EXPANSION JOINT IN CHANNELS, BERMS AND APRON TO BE 10m MAXIMUN. FOR STEPPED CHANNELS, EXPANSION JOINTS TO BE PROVIDED AT A MAXIMUN SPACING OF 10m.

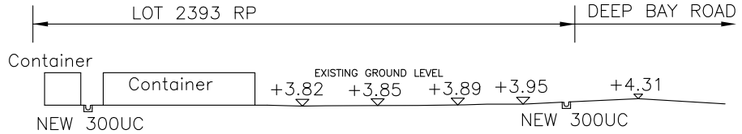
4 DIMENSIONS FOR HALF ROUND AND U–CHANNELS SEE TABLE 1.

5 THE COVER FOR U–CHANNELS AND CATCHPIT SHALL COMPLY WITH CEDD'S STANDARD DRAWINGS NO. C2405 TO C2407 AND C2412.

6 ALL PROPOSED U–CHANNELS SHALL BE COVERED WITH GRATING

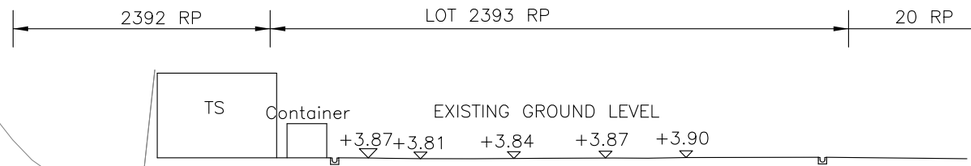
TABLE 1 : DIMENSION OF U–CHANNEL AND HALF–ROUND CHANNEL

NORMAL SIZE H	T	B	REINFORCING
<300	100	100	NIL
375 – 675	150	150	NIL
750 – 900	175	175	A252 MESH PLACED CENTRALLY



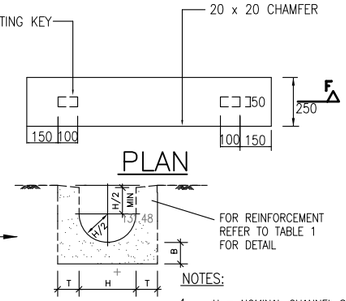
SECTION A–A

(NO FILLING AND EXCAVATION WOULD BE PROPOSED IN THIS APPLICATION)



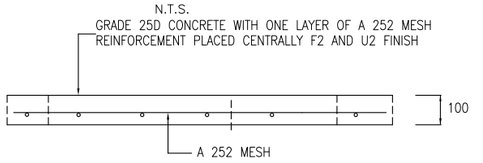
SECTION B–B

(NO FILLING AND EXCAVATION WOULD BE PROPOSED IN THIS APPLICATION)



U–CHANNEL

COMPLY WITH FIG 8.11 OF GEOTECHNICAL MANUAL FOR SLOPES



PRECAST CONCRETE COVERS FOR CATCHPIT

N.T.S.

REV	DESCRIPTION	CHECKED	APPROVED	DWN	DATE
	DLO SUBMIT	RC	AY	RY	AUG 25

PROJECT TITLE:

STORMWATER DRAINAGE PROPOSAL

LOT NO. 2393RP IN D.D.129

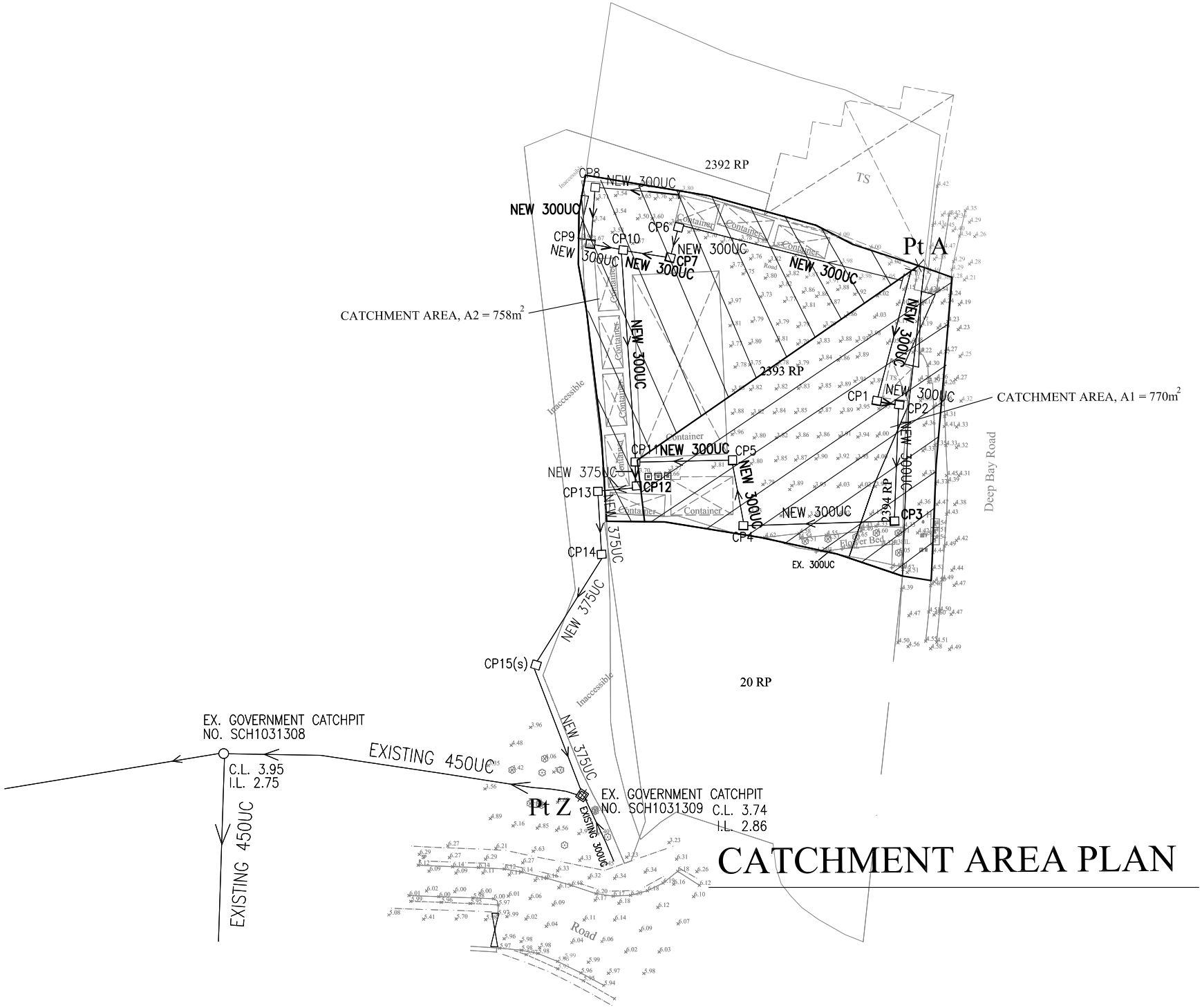
DRAWING TITLE:

DRAINAGE PROPOSAL PLAN AND TYPICAL DETAILS

SCALE :	N.T.S.		CAD FILE: CAD_REF
DRAWN	RY		DRAWING NO.
S.D	RY		SDP001
DESIGNED	RC		
CHECKED	AY		
			B.D. REF. NO.:

Appendix B

Surface Drainage Design



CATCHMENT AREA PLAN

Drainage Design at lot 2393RP in
Project No.: DD129 Date: 24-Aug-25
Prepared by: Ray Cheng

Check for the drainage capactiy of proposed 300UC for Catchment Area A1

Catchment area, A1 = 770 m^2 Assume k = 1.0 for paved surface

Use Rational Method from Geo-Manual

$Q = kiA/3600$ where,

Q = Maximum runoff (lit/sec)
k = Runoff coefficient
i = Design mean intensity of rainfall (mm/hr)
A = Total catchment area (m^2)

Longest distance from summit point to outlet, CP11 (Ld) = 67.00 m
Shortest distance from summit point to outlet, CP11 (Ls) = 40.00 m

Elevation of remote point (Pt A) = 4.46 mPD
Elevation of outlet point, CP11 = 3.07 mPD

Average fall, H = $(z_1-z_2)/L_s$ x 100
= 3.48 m per 100m

T_c = $0.14465 \times L_d / (H^{0.2} \times A^{0.1})$
= 3.89 min

Assume a 1 in 50 year design rainfall return period for rural area
From SDM Corrigendum No. 1/2024

i = 240 mm/hr
Q = kiA/60 x 1.16
3573 lit/min

From TGN 43A1
For proposed 300 UC with 1 in 200 gradient

Maximum capacity	=	6000	lit/min	>	3573	o.k.
The corresponding velocity	=	1.25	m/s	<	4	o.k.

Drainage Design at lot 2393RP in
Project No.: DD129 Date: 24-Aug-25
Prepared by: Ray Cheng

Check for the drainage capactiy of proposed 300UC for Catchment Area A2

Catchment area, A2 = 758 m^2 Assume k = 1.0 for paved surface
0.3 for unpaved surface

Use Rational Method from Geo-Manual

$Q = kiA/3600$ where,

Q = Maximum runoff (lit/sec)
k = Runoff coefficient
i = Design mean intensity of rainfall (mm/hr)
A = Total catchment area (m^2)

Longest distance from summit point to outlet, CP11 (Ld) = 61.50 m
Shortest distance from summit point to outlet, CP11 (Ls) = 40.00 m

Elevation of remote point (Pt A) = 4.46 mPD
Elevation of outlet point, CP11 = 3.07 mPD

Average fall, H = $(z_1-z_2)/L_s$ x 100
= 3.48 m per 100m

T_c = $0.14465 \times L_d / (H^{0.2} \times A^{0.1})$
= 3.57 min

Assume a 1 in 50 year design rainfall return period for rural area
From SDM Corrigendum No. 1/2024

i = 245 mm/hr
Q = kiA/60 x 1.16
3590 lit/min

From TGN 43A1
For proposed 300 UC with 1 in 200 gradient

Maximum capacity	=	6000	lit/min	>	3590	o.k.
The corresponding velocity	=	1.25	m/s	<	4	o.k.

Drainage Design at lot 2393RP in
Project No.: DD129 Date: 24-Aug-25
Prepared by: Ray Cheng

Check for the drainage capactiy of proposed 375UC

Catchment area,	A1	=	770	m^2	Assume k = 1.0 for paved surface
	A2	=	758	m^2	
	Total Area A1+A2	=	1528	m^2	

Use Rational Method from Geo-Manual

$Q = kiA/3600$ where,

Q = Maximum runoff (lit/sec)
k = Runoff coefficient
i = Design mean intensity of rainfall (mm/hr)
A = Total catchment area (m^2)

Longest distance from summit point to outlet, Pt Z (Ld) = 110.00 m
Shortest distance from summit point to outlet, Pt Z (Ls) = 72.00 m

Elevation of remote point (Pt A)	=	4.46	mPD
Elevation of outlet point, Pt Z	=	2.86	mPD
Average fall, H	=	$(z_1-z_2)/L_s$ x 100	
	=	2.22	m per 100m

T_c = $0.14465 \times L_d / (H^{0.2} \times A^{0.1})$
= 6.52 min

Assume a 1 in 50 year design rainfall return period for rural area
From SDM Corrigendum No. 1/2024

i	=	220	mm/hr
Q	=	kiA/60	x 1.16
		6499	lit/min

From TGN 43A1
For proposed 375 UC with 1 in 200 gradient

Maximum capacity	=	10000	lit/min	>	6499	o.k.
The corresponding velocity	=	1.40	m/s	<	4	o.k.

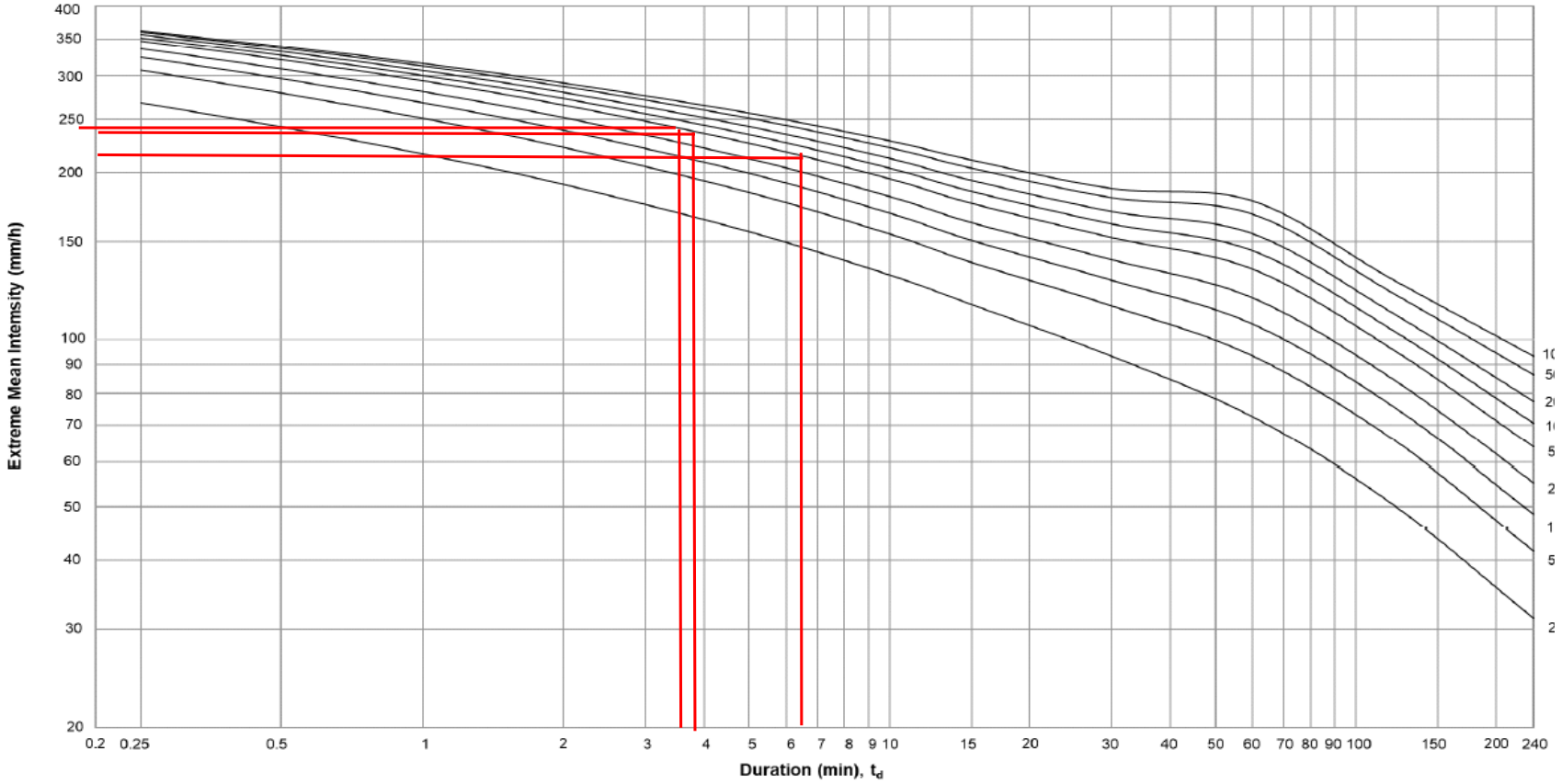


Figure 4a – Intensity-Duration-Frequency Curves of HKO Headquarters
(for durations not exceeding 4 hours)

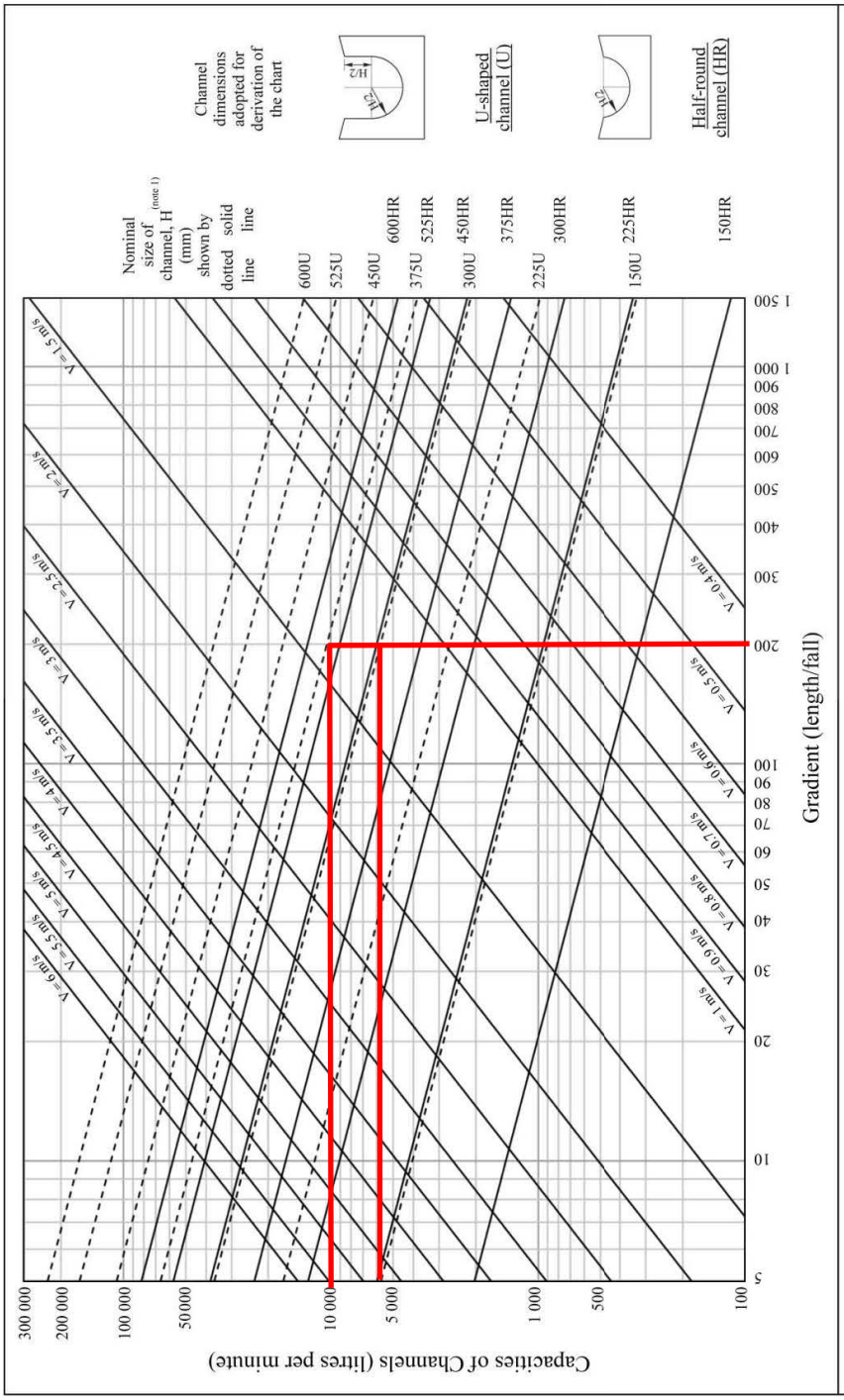


Figure 1 - Chart for the rapid design of U-shaped and half-round channels up to 600 mm

Note: (1) Refer to the latest CEDD Standard Drawings for the details of U-shaped (U) and half-round (HR) channels.

ANNEX T

Annex 7

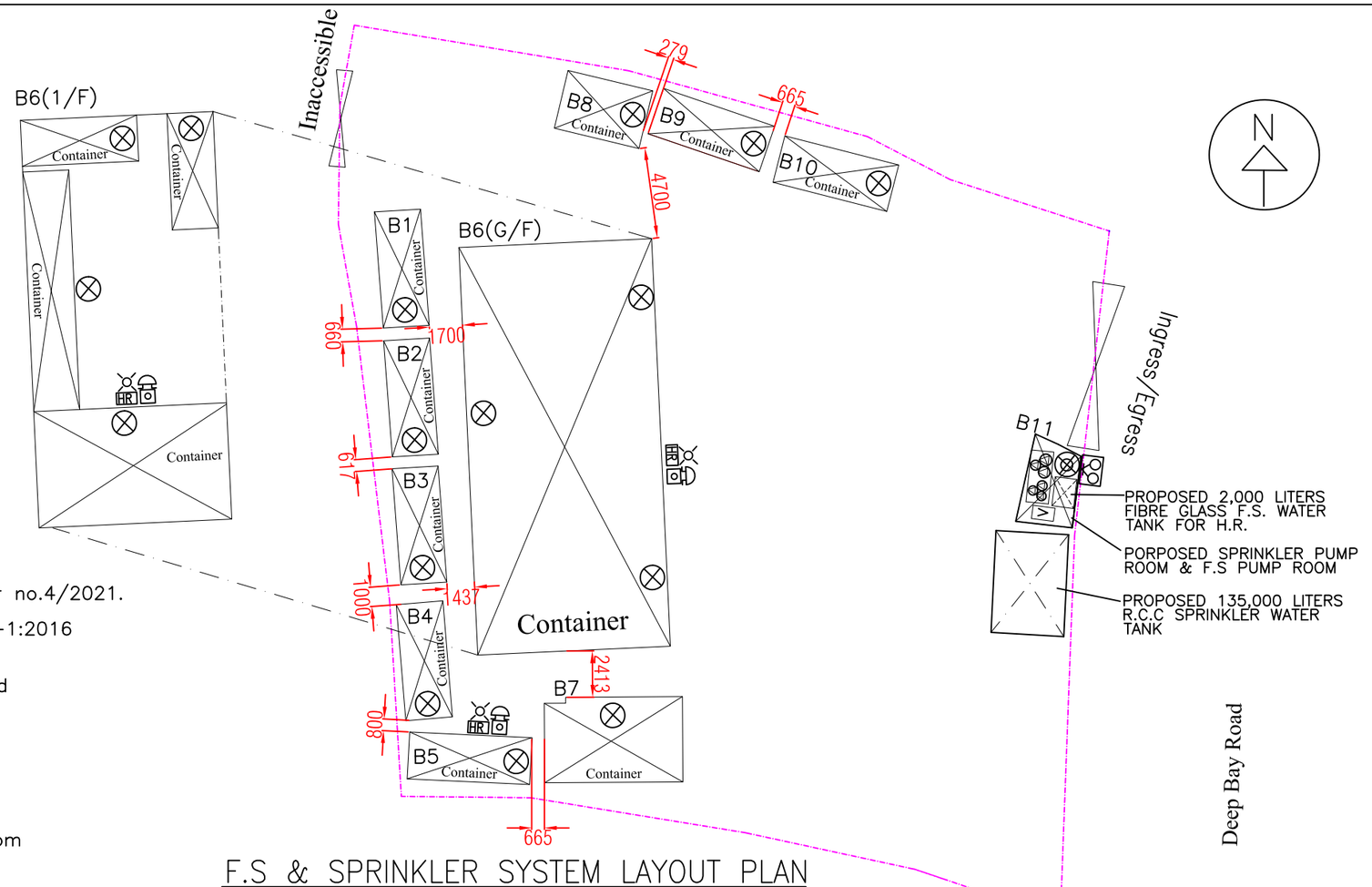
Fire Service Installations Layout Plan

LEGEND

- FLASHING LIGHT
- FIRE ALARM BELL
- MFA CALL POINT
- HOSE REEL SET (30M LENGTH)
- SPRINKLER INLET
- SPRINKLER CONTROL VALVE GROUP
- 4KG DRY POWDER TYPE FIRE EXTINGUISHER
- 5KG CO2 GAS TYPE FIRE EXTINGUISHER
- SPRINKLER PUMP & H.R PUMP SET
- NEW INSTALLATIONS
- BOUNDARY LINE
- GFA

Fire Notes:

1. Sufficient emergency lighting shall be provided throughout the entire building in accordance with BS 5266–1:2016 , BS EN 1838:2013 and FSD Circular Letter no.4/2021.
2. Sufficient directional and exit sign shall be provided in accordance with BS 5266:–1:2016 and FSD Circulasr letter 5/2008.
3. Sufficient portable hand–operated approved appliance shall be provided as required by occupancy and as marked on plans.
4. An Automatic Sprinkler System Supplied by135 m3 Sprinkler Water Tank and Hazard Class OH 3 shall be provided to the building/structure B1–B7. in accordance with BS EN 12845:2015 and FSD Circular Letter No.5/2020. The Sprinkler Inlet and Sprinkler Control Valve Group as marked on plans. & the sprinkler water tank,F.S water tank, sprinker pump room and F.S pump room as marked on plans too.
5. The storage configuration is ST1:free standing or block stacking with reference to the section 6.3.2 of B.S 12845.and storage pattern is the maximum storage heights shall not exceed 4 m & the maximum storage areas shall be 50m2 for any single block.with no less than 2.4m clearance around the block as Ordinary Hazard Group 3 in accordance with LPC BS EN 12845.(Storage Category : Category I)
6. A hose reel system should be supplied by 2.0m3 F.S Water tank. There shall be sufficient hose reel to ensure that every part of each buillding can be reached by a length of not more than 30m of hose reel tubing.The F.S water tank, F.S pump room and hose reel shall be clearly marked on plans.
7. Fire alarm system shall be provided throughout the entire building in accordance with BS 5839–1:2017 and FSD Circular Letter no 6/2021. One actuation point and one audio warning device to be located at each hose reel point.The actuation point should include facilities for fire pump start and audio/visual warning device initiation.
8. The Sprinkler Tank & F.S water supply pipe be connected to Town Main.
9. The Sprinkler pump (SP1,SP2,JP) & F.S Hose Reel pump(HP1,HP2,JP) shall be provided at Sprinkler pump Room & F.S Pump Room.
10. Sourse of secondary power supply for the proposed FSIs shall be provided.



F.S & SPRINKLER SYSTEM LAYOUT PLAN

NO.	Structure Content	Covered Area (sq.m) (About)	Storey	Height (m) (About)	GFA (sq.m) (About)
B1	Storage	14.6	1	2.59	14.6
B2	Storage	14.6	1	2.59	14.6
B3	Storage	14.6	1	2.59	14.6
B4	Container-Type F.Toilet	14.6	1	2.59	14.6
B5	Container-Type M.Toilet	14.6	1	2.59	14.6
B6	G/F: Storage 1/F: Office & Storage	214.15	2	5.18	335.0
B7	Office & Storage	31.7	1	2.59	31.7
B8	Storage	14.0	1	2.59	14.0
B9	Storage	14.6	1	2.59	14.6
B10	Storage	14.6	1	2.59	14.6
B11	F.S Pump Room	12.0	1	2.59	12.0

INTERCEPT FIRE & SECURITY TECHNICIANS LIMITED

Registered Address :

Shop 25, G/F, Man Fung Building, YLTL 329, Fung Kwan Street, Yuen Long, N.T.
Tel : 9263 7766 Fax : 2428 5932

Business Address :

8 / F, Block L, Phase 2, Wah Fung Industrial Centre, 33 – 39 Kwai Fung Street, Kwai Chung, N.T., H.K.
Tel : 2425 5404 Fax : 2428 5932

Project :

PROPOSED TEMPORARY WAREHOUSE FOR STORAGE OF METAL WARE,SPARE PARTS AND WIRES WITH ANCILLARY OFFICE FOR A PERIOD OF 3 YEARS AT LOT NOS 2393 RP(PART) AND 2394 RP IN D.D129,LAU FAU SHAN,YUEN LONG,N.T

TITLE :

PROPOSED FIRE SERVICE INSTALLATION LAYOUT PLAN.

Drawn By:	W.C WONG
Date:	2025–09–10
Scale:	1:300 @A3
Ref No:	TPB/A/YL–LFS/
Drawing No:	2025–FS/23