Appendix I

Accepted Drainage Impact Assessment

under Previous Application No. A/HSK/510

By Fax (2323 3662) & 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

2 October 2024

來函檔號 Your Reference
本署檔號 Our Reference ( ) in TPB/A/HSK/510
電話號碼 Tel. No. : 2158 6295
傳真機號碼 Fax No. : 2489 9711

[redacted]

(Attn.: Mr. Louis TSE)

Dear Sir/Madam,

Compliance with Approval Condition (a)
Planning Application No. A/HSK/510

I refer to your submission dated 2.9.2024 regarding the submission of a drainage impact assessment for compliance with captioned approval condition. The relevant department has been consulted on your submission. Your submission is considered:

☑ Acceptable. The captioned condition has been complied with.

☐ 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, please contact Ms. Vicky SY (Tel: 2300 1347) of the Drainage Services Department direct.

Yours faithfully,

(Ms. Sherry KONG)
for District Planning Officer/
Tuen Mun and Yuen Long West
Planning Department

c.c. CE/MN, DSD (Attn: Ms. Vicky SY)
Internal CTP/TPB2

R-Riches
Property Consultants Ltd.

盈卓物業
顧問有限公司

Our Ref. : DD129 Lot 2959 & VL
Your Ref. : TPB/A/HSK/510

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

By Email

02 September 2024

Dear Sir,

Compliance with Approval Condition (a)

Temporary Logistic Centre with Ancillary Office and Canteen for a Period of 3 Years in "Government, Institution or Community", "Residential (Group B) 2", "Open Space" Zones and area shown as 'Road', Various Lots in D.D. 129 and Adjoining Government Land, Lau Fau Shan, Yuen Long, New Territories

(S.16 Planning Application No. A/HSK/510)

We are writing to submit a drainage impact assessment (DIA) for compliance with approval condition (a) of the subject application, i.e. *the submission of a DIA* (**Appendix I**).

Should you require more information regarding the application, please contact our Mr. Danny NG at (852) 2339 0884 / dannyng@r-riches.com.hk or the undersigned at your convenience. Thank you for your kind attention.

Yours faithfully,

For and on behalf of
R-riches Property Consultants Limited

Matthew NG
Planning and Development Manager

cc DPO/TMYLW, PlanD (Attn.: Ms. Moon KOK email: mlkok@pland.gov.hk)

[redacted]

Proposed Temporary Logistics Centre with Ancillary Office and Canteen for a Period of 3 Years at Various Lots in D.D.129 and Adjoining Government Land, Lau Fau Shan, Yuen Long, New Territories

Drainage Impact Assessment Report

(for Approval Condition (a) of
Planning Application no. A/HSK/510)

August 24

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1. Introduction

1.1 Background

1.1.1 Reference is made to the approval on planning application no. A/HSK/, in which the applicant seeks planning permission for a proposed temporary logistics centre with ancillary office and canteen for a Period of 3 Years at the application site.

1.1.2 This Drainage Impact Assessment aim to discharge/fulfil the planning approval condition (a) and to support the development in drainage aspect.

1.2 The Site

1.2.1 The Application Site situate near Lau Fau Shan Road. It has an area of about 18,505 m^2. The site is currently a Temporary Logistics Centre and fully hard-paved. The site location plan is shown in **Figure 1**.

1.2.2 The existing site ground levels is about +4.1 mPD to +4.7 mPD. There is no filling of land proposed.

1.2.3 An existing nullah is beside the west of the site which flowing toward north. Existing Drainage Plan are shown in **Figure 2** for reference.

1.2.4 The site is currently surrounded by existing drainage channels. The existing drainage system with size and gradient is shown in **Figure 3** for reference.

2. Development Proposal

2.1 The Existing Development

2.1.1 The total site area is approximately 18,505 m^2. The existing development parameters are summarized in **Table 1** below for technical assessment purpose. The catchment plan is shown in **Figure 4**.

Existing Development	
Total Site Area (m^2)	18,505
Paved Area (m^2) Assume all proposed site area as paved area for assessment purpose	18,505

Table 1 - Key Development Parameters

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)

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. Drainage System Review

4.1. Existing Drainage System

4.1.1 The existing site is fully paved. As there is no change in connection point and pave:unpaved ratio, no drainage impact is anticipated.

4.1.2 The existing drainage system consists of 525mm channels and 800mm channels surrounding the site. Please refer to **Figure 3** for existing drainage system. The utilizations of existing channels are checked in **Appendix A**.

4.1.3 According to the design review in **Appendix A**, the utilizations of existing channels are less than 86%. The existing system is capable to serve the existing temporary logistics centre.

4.1.4 The layout of the site is shown in **Appendix B** for reference.

5. Conclusion

5.1.1 Drainage impact assessment has been conducted for the existing development. As there is no change in connection point and pave:unpaved ratio, no drainage impact is anticipated.

- End of Text -

FIGURES

LEGEND:

APPLICATION SITE BOUNDARY
(FOR IDENTIFICATION PURPOSE ONLY)

APPLICATION SITE BOUNDARY
(FOR IDENTIFICATION PURPOSE ONLY)

LAU FAU SHAN ROAD

TIN WAH ROAD

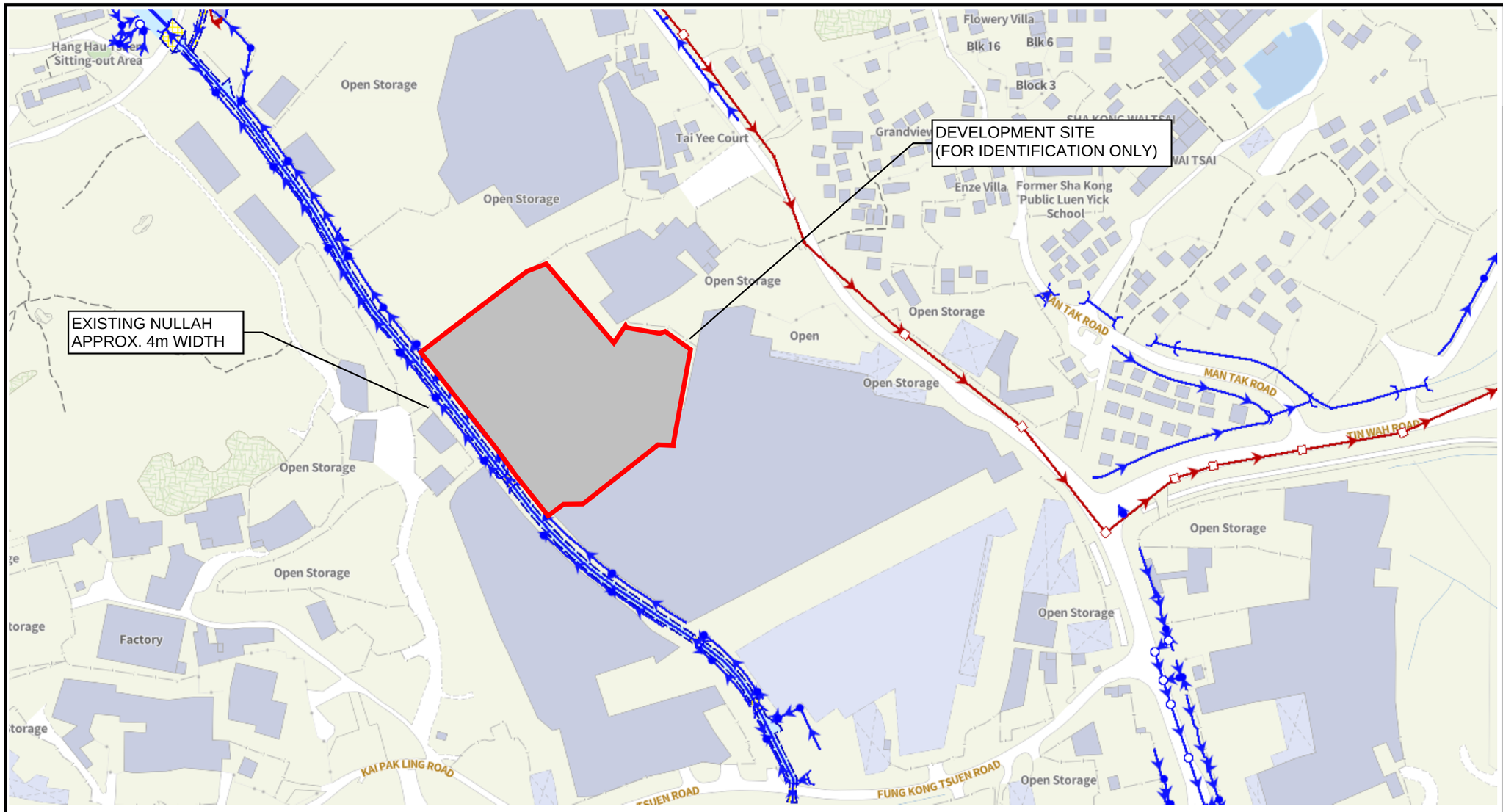
SHA KONG WAI TSAI

PROJECT:
Proposed Temporary Logistics Centre with Ancillary Office and Canteen for a Period of 3 Years at Various Lots in D.D.129 and Adjoining Government Land, Lau Fau Shan, Yuen Long, New Territories

REV	DESCRIPTION	DATE

DRAWING TITLE
SITE LOCATION PLAN

DRAWING NUMBER
FIGURE 1



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 Logistics Centre with Ancillary Office and Canteen for a Period of 3 Years at Various Lots in D.D.129 and Adjoining Government Land, Lau Fau Shan, Yuen Long, New Territories

REV	DESCRIPTION	DATE

DRAWING TITLE
EXISTING DRAINAGE PLAN

DRAWING NUMBER
FIGURE 2

LEGEND:

SITE BOUNDARY
(FOR IDENTIFICATION PURPOSE ONLY)

EXISTING PIT

EXISTING CHANNEL

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.COVER LEVELS AND CONNECTION LEVELS ARE APPROXMIATE ONLY AND SHOULD BE CHECKED ON SITE.
4.CATCHPIT LOCATIONS ARE APPROXMIATE ONLY.

LAU FAU SHAN ROAD

SHA KONG WAI TSAI

ADJACENT DEVELOPMENT
WITH OWN DRAINAGE SYSTEM

SP2

CP1.5

CONNECTION TO
EXISTING NULLAH

ADJACENT DEVELOPMENT
WITH OWN DRAINAGE SYSTEM

CP1.8

CP1.6

CP1.4

CP1.2

L-1

CP1.7

CP1.9 WITH
DESILTING
FACILITY

CP1.3

CP1.1

SP1

ADJACENT DEVELOPMENT
WITH OWN DRAINAGE SYSTEM

CP1.15

SP3

CP1.14

CP1.10

CP1.12

CP1.11

CP1.13

ADJACENT DEVELOPMENT
WITH OWN DRAINAGE SYSTEM

NAH ROAD

DRAINAGE SCHEDULE

US MH/PIT	DS MH/PIT	US GL	DS GL	Size mm	Gradient 1 in	US IL	DS IL	U/S MH/PIT TYPE #	Length m	Remark
SP1	CP1.1	4.7	4.7	525	150	4.18	4.04	SP	20.41	#SP: Start Point
CP1.1	CP1.2	4.7	4.7	525	180	4.04	3.90	CP	25.14	
CP1.2	CP1.3	4.7	4.7	525	180	3.90	3.81	CP	15.83	
CP1.3	CP1.4	4.7	4.7	525	180	3.81	3.62	CP	34.99	
CP1.4	CP1.5	4.7	4.1	525	130	3.62	3.30	CP	40.68	
CP1.5	CP1.6	4.1	4.1	800	105	3.30	2.90	CP	41.54	
CP1.6	CP1.7	4.1	4.1	800	106	2.90	2.61	CP	31.48	
CP1.7	CP1.8	4.1	4.1	800	106	2.61	2.59	CP	1.98	
CP1.8	CP1.9	4.1	4.1	800	100	2.59	2.30	CP	28.91	
CP1.9	Existing Discharge Point	4.1	4.1	800	100	2.10	2.05	CP	5	
SP2	CP1.5	4.7	4.1	800	105	3.90	3.30	SP	60.26	
SP3	CP1.10	4.7	4.7	800	105	3.90	3.51	SP	41.43	
CP1.10	CP1.11	4.7	4.7	800	115	3.51	3.22	CP	32.27	
CP1.11	CP1.12	4.7	4.7	800	110	3.22	3.09	CP	14.34	
CP1.12	CP1.13	4.7	4.7	800	145	3.09	3.04	CP	8.42	
CP1.13	CP1.14	4.7	4.7	800	103.4	3.04	2.68	CP	37.2	
CP1.14	CP1.15	4.7	4.7	800	160	2.68	2.37	CP	48.67	
CP1.15	CP1.9	4.7	4.1	800	190	2.37	2.10	CP	51.9	

PROJECT:

Proposed Temporary Logistics Centre with Ancillary Office and Canteen for a Period of 3 Years at Various Lots in D.D.129 and Adjoining Government Land, Lau Fau Shan, Yuen Long, New Territories

REV	DESCRIPTION	DATE

DRAWING TITLE
EXISTING DRAINAGE SYSTEM

DRAWING NUMBER
FIGURE 3

LEGEND:

SITE BOUNDARY
(FOR IDENTIFICATION PURPOSE ONLY)

FALL

B1: 5,400 m²

A1: 18,505 m²

PROJECT:
Proposed Temporary Logistics Centre with Ancillary Office and Canteen for a Period of 3 Years at Various Lots in D.D.129 and Adjoining Government Land, Lau Fau Shan, Yuen Long, New Territories

REV	DESCRIPTION	DATE

DRAWING TITLE
CATCHMENT PLAN

DRAWING NUMBER
FIGURE 4

APPENDIX

Appendix A: Review of Existing System

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

Catchment Area Table (Area in m^2)

Catchment	A1	B1												
Total Area	18505	5400												
Hard Paved Area	18505	5400												
Unpaved Area	0	0												
Equival. Area	17579.75	5130												

Pavement Type	Hard Paved	Green
Runoff Coefficient	0.95	0.35

Calculation Table

US MH/PIT	DS MH/PIT	US GL	DS GL	Size mm	Gradient 1 in	US IL	DS IL	U/S MH/PIT TYPE #	Length m	V m/s	Capacity m^3/s	Catchment ID1	Catchment ID2	Total Equivalent Area	ToC	Intensity mm/hr	Total Discharge m^3/s	Utilitization	Remark
SP1	CP1.1	4.7	4.7	525	150	4.18	4.04	SP	20.41	1.82	0.50	B1		5130.00	3.00	236	0.34	67.0%	
CP1.1	CP1.2	4.7	4.7	525	180	4.04	3.90	CP	25.14	1.67	0.46	B1		5130.00	3.19	234	0.33	72.6%	
CP1.2	CP1.3	4.7	4.7	525	180	3.90	3.81	CP	15.83	1.67	0.46	B1		5130.00	3.44	230	0.33	71.4%	
CP1.3	CP1.4	4.7	4.7	525	180	3.81	3.62	CP	34.99	1.67	0.46	B1		5130.00	3.60	228	0.32	70.8%	
CP1.4	CP1.5	4.7	4.1	525	130	3.62	3.30	CP	40.68	1.96	0.54	B1		5130.00	3.95	223	0.32	58.9%	
CP1.5	CP1.6	4.1	4.1	800	105	3.30	2.90	CP	41.54	2.89	1.85	A1	B1	22709.75	4.29	219	1.38	74.8%	
CP1.6	CP1.7	4.1	4.1	800	106	2.90	2.61	CP	31.48	2.87	1.84	A1	B1	22709.75	4.53	216	1.37	74.2%	
CP1.7	CP1.8	4.1	4.1	800	106	2.61	2.59	CP	1.98	2.87	1.84	A1	B1	22709.75	4.71	214	1.35	73.5%	
CP1.8	CP1.9	4.1	4.1	800	100	2.59	2.30	CP	28.91	2.96	1.89	A1	B1	22709.75	4.73	214	1.35	71.4%	
CP1.9	Existing Discharge Point	4.1	4.1	800	100	2.10	2.05	CP	5	2.96	1.89	A1	B1	22709.75	4.89	212	1.34	70.8%	
SP2	CP1.5	4.7	4.1	800	105	3.90	3.30	SP	60.26	2.89	1.85	B1		5130.00	3.00	236	0.34	18.2%	
SP3	CP1.10	4.7	4.7	800	105	3.90	3.51	SP	41.43	2.89	1.85	A1		17579.75	3.00	236	1.16	62.5%	
CP1.10	CP1.11	4.7	4.7	800	115	3.51	3.22	CP	32.27	2.76	1.77	A1		17579.75	3.24	233	1.14	64.4%	
CP1.11	CP1.12	4.7	4.7	800	110	3.22	3.09	CP	14.34	2.82	1.81	A1		17579.75	3.43	230	1.12	62.3%	
CP1.12	CP1.13	4.7	4.7	800	145	3.09	3.04	CP	8.42	2.46	1.57	A1		17579.75	3.52	229	1.12	71.1%	
CP1.13	CP1.14	4.7	4.7	800	103	3.04	2.68	CP	37.2	2.91	1.86	A1		17579.75	3.58	228	1.11	59.9%	
CP1.14	CP1.15	4.7	4.7	800	160	2.68	2.37	CP	48.67	2.34	1.50	A1		17579.75	3.79	225	1.10	73.5%	
CP1.15	CP1.9	4.7	4.1	800	190	2.37	2.10	CP	51.9	2.15	1.37	A1		17579.75	4.14	221	1.08	78.6%	

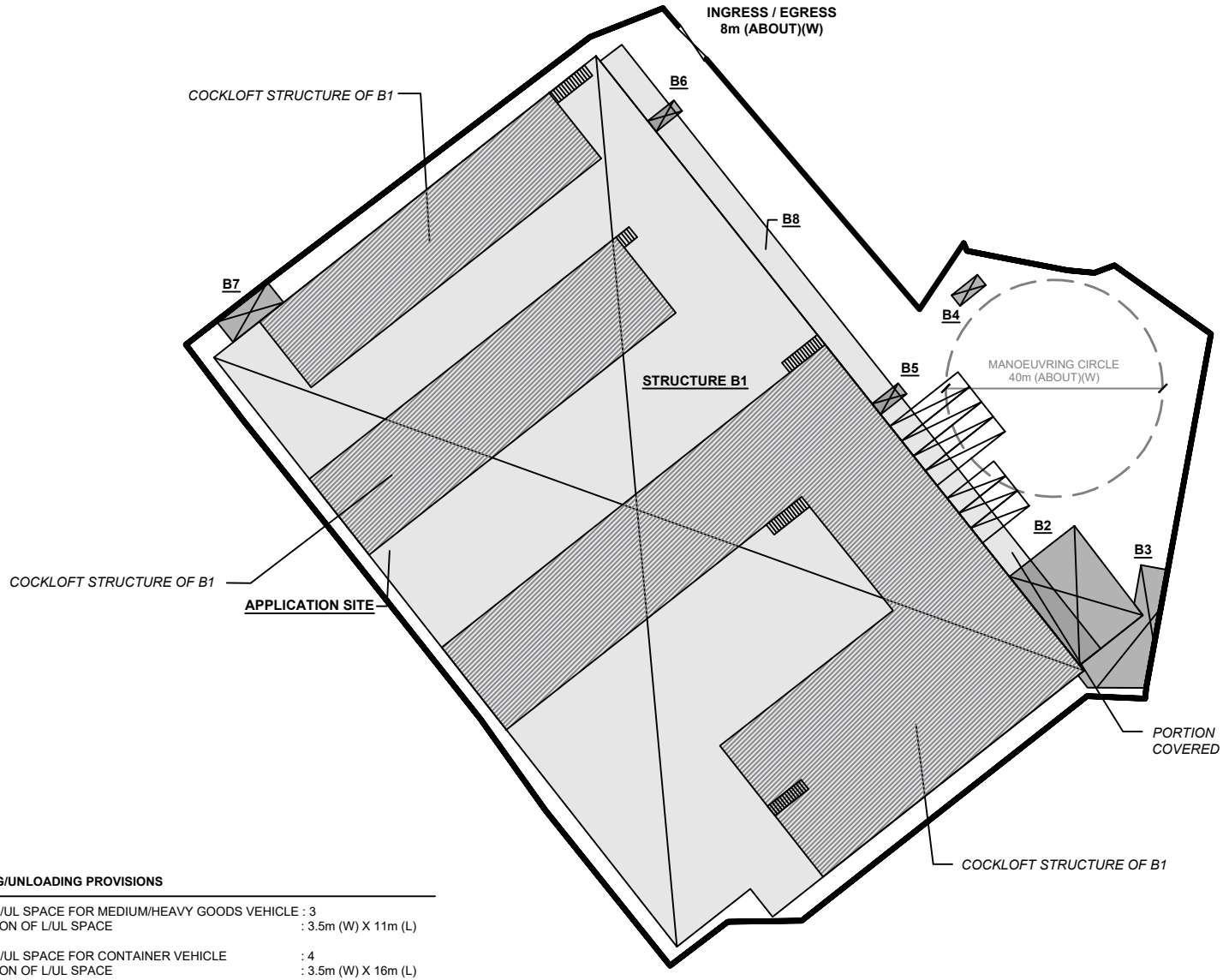
#SP: Start Point

DEVELOPMENT PARAMETERS

APPLICATION SITE AREA	: 18,505m^2 (ABOUT)
COVERED AREA	: 14,076m^2 (ABOUT)
UNCOVERED AREA	: 4,429m^2 (ABOUT)
PLOT RATIO	: 0.96 (ABOUT)
SITE COVERAGE	: 76% (ABOUT)
NO. OF STRUCTURE	: 8
DOMESTIC GFA	: N/A
NON-DOMESTIC GFA	: 17,759m^2 (ABOUT)
BUILDING HEIGHT	: 3m - 12m (ABOUT)
NO. OF STOREY	: 1 - 2

STRUCTURE	USE	COVERED AREA	GFA	BUILDING HEIGHT
B1	LOGISTIC CENTRE	12,917m^2 (ABOUT)	16,287m^2 (ABOUT)	12m (ABOUT)(2-STOREY)
B2	SITE OFFICE	313m^2 (ABOUT)	626m^2 (ABOUT)	6m (ABOUT)(2-STOREY)
B3	STAFF CANTEEN	167m^2 (ABOUT)	167m^2 (ABOUT)	3.5m (ABOUT)(1-STOREY)
B4	SITE OFFICE	15m^2 (ABOUT)	15m^2 (ABOUT)	3m (ABOUT)(1-STOREY)
B5	SITE OFFICE	15m^2 (ABOUT)	15m^2 (ABOUT)	3m (ABOUT)(1-STOREY)
B6	SITE OFFICE	15m^2 (ABOUT)	15m^2 (ABOUT)	3m (ABOUT)(1-STOREY)
B7	FS WATER TANK	56m^2 (ABOUT)	56m^2 (ABOUT)	5m (ABOUT)(1-STOREY)
B8	RAIN SHELTER	578m^2 (ABOUT)**	578m^2 (ABOUT)**	6.2m (ABOUT)(1-STOREY)
		14,076m^2 (ABOUT)	17,759m^2 (ABOUT)	

**EXCLUDING COMMON AREA OF B2, B5 AND B6



LOADING/UNLOADING PROVISIONS

NO. OF L/UL SPACE FOR MEDIUM/HEAVY GOODS VEHICLE	: 3
DIMENSION OF L/UL SPACE	: 3.5m (W) X 11m (L)
NO. OF L/UL SPACE FOR CONTAINER VEHICLE	: 4
DIMENSION OF L/UL SPACE	: 3.5m (W) X 16m (L)

LEGEND

- APPLICATION SITE
- STRUCTURE (ENCLOSED)
- 1/F OF STRUCTURE B1
- STRUCTURE (CANOPY)
- LOADING / UNLOADING SPACE
- INGRESS / EGRESS

NORTH
W E
S

Appendix B
Proposed Layout Plan

PLANNING CONSULTANT
R-RICHES PROPERTY CONSULTANTS LIMITED

PROJECT
PROPOSED TEMPORARY LOGISTIC CENTRE WITH ANCILLARY OFFICE AND CANTEEN FOR A PERIOD OF 3 YEARS

SITE LOCATION
VARIOUS LOTS IN D.D. 129, AND ADJOINING GL LAU FAU SHAN, YUEN LONG, NEW TERRITORIES

SCALE	1 : 1200 @ A4
DRAWN BY	MN
DATE	15.12.2021
REVISED BY	LT
DATE	10.04.2024
APPROVED BY	
DATE	
DWG. TITLE	LAYOUT PLAN
DWG NO.	PLAN 1
VER.	003

Appendix II

Fire Service Installations Proposal

F.S.NOTES:

1. GENERAL

1.1 FIRE SERVICE INSTALLATIONS SHALL BE PROVIDED IN ACCORDANCE WITH THE CODES OF PRACTICE FOR MINIMUM FIRE SERVICE INSTALLATIONS AND EQUIPMENT AND INSPECTION, TESTING AND MAINTENANCE OF INSTALLATIONS AND EQUIPMENT 2022 (COP 2022), FSD CIRCULAR LETTERS AND THE HONG KONG WATERWORKS STANDARD REQUIREMENTS.

1.2 ALL TUBES AND FITTINGS SHALL BE G.M.S. TO BS1387 MEDIUM GRADE WHERE PIPEWORK UP TO ø150mm.

1.3 ALL TUBES AND FITTINGS SHALL BE DUCTILE IRON TO BS EN545 K12 WHERE PIPEWORK ABOVE ø150mm.

1.4 ALL DRAIN PIPES SHALL BE DISCHARGED TO A CONSPICUOUS POSITION WITHOUT THE POSSIBILITY OF BEING SUBMERGED.

1.5 ALL PUDDLE FLANGES SHALL BE MADE OF DUCTILE IRON

1.6 SMOKE EXTRACTION SYSTEM(S) SHALL NOT BE PROVIDED AS THE AGGREGATE AREA OF OPERABLE WINDOW OF STRUCTURE B1 EXCEEDS 6.25% OF THE FLOOR AREA OF THE COMPARTMENT.

1.7 VENTILATION/AIR CONDITIONING SYSTEM NOT TO BE PROVIDED.

2. HOSE REEL SYSTEM

2.1 NEW FIRE HOSE REEL SHALL BE PROVIDED AS INDICATED ON PLAN TO ENSURE THAT EVERY PART OF THE BUILDING CAN BE REACHED BY A LENGTH OF NOT MORE THAN 30m HOSE REEL TUBING.

2.2 THE WATER SUPPLY FOR HOSE REEL SYSTEM WILL BE FED FROM A NEW 2m^3 F.S. FIBREGLASS WATER TANK VIA TWO HOSE REEL PUMPS (DUTY/STANDBY) LOCATED INSIDE FS PUMP ROOM AT EXTERNAL AREA.

2.3 HOSE REEL PUMPS SHALL BE STARTED BY ACTUATION OF ANY BREAKGLASS UNIT FITTED ASIDE EACH HOSE REEL SETS

2.4 ALL FIRE HOSE REEL OUTLETS SHOULD BE HOUSED IN GLASS FRONTED CABINET SECURED UNDER LOCK & KEY.

2.5 ALL FIRE HOSE REEL SHOULD BE PROVIDED WITH FSD APPROVED TYPE INSTRUCTION PLATE & WSD WARNING PLATE

2.6 SECONDARY ELECTRICITY SUPPLY DIRECTLY TEE OFF BEFORE CLP'S INCOMING MAIN SWITCH SHALL BE PROVIDED FOR THE FH/HR PUMPS.

3. AUTOMATIC SPRINKLER SYSTEM

3.1 NEW AUTOMATIC SPRINKLER SYSTEM SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH LPC RULES FOR AUTOMATIC SPRINKLER INSTALLATIONS INCORPORATING BS EN 12845: 2015 (INCLUDING TECHNICAL BULLETINS, NOTES, COMMENTAR AND RECOMMENDATIONS) AND FSD CIRCULAR LETTER NO. 5/2020. THE CLASSIFICATION OF THE OCCUPANCIES WILL BE ORDINARY HAZARD GROUP III.

3.2 ONE NEW 135m^3 SPRINKLER WATER TANK WILL BE PROVIDED AS INDICATED ON PLAN. THE TOWN MAIN WATER SUPPLY WILL BE FED FROM SINGLE END.

3.3 TWO NEW SPRINKLER PUMPS (DUTY/STANDBY) AND ONE JOCKEY PUMP SHALL BE PROVIDED IN FS PUMP ROOM LOCATED AT EXTERNAL AREA.

3.4 NEW SPRINKLER CONTROL VALVE SET AND SPRINKLER INLET SHALL BE PROVIDED AS INDICATED ON PLAN.

3.5 A TEST VALVE SHALL BE PROVIDED FOR EACH ZONE OF SPRINKLER PIPE. THIS VALVE SHALL BE AT A CONSPICUOUS POSITION THAT WATER CAN BE DRAINED AWAY EASILY.

3.6 ALL SUBSIDIARY STOP VALVES TO BE ELECTRIC MONITORING TYPE.

3.7 ALL ELECTRIC TYPE VALVES SHOULD GIVE VISUAL SIGNALS TO FIRE SERVICE MAIN SUPERVISORY CONTROL PANEL TO INDICATE THE STATUS (OPEN/CLOSE) OF THE VALVES.

3.8 SECONDARY ELECTRICITY SUPPLY DIRECTLY TEE OFF BEFORE CLP'S INCOMING MAIN SWITCH SHALL BE PROVIDED FOR THE SPRINKLER PUMPS.

3.9 THE SPRINKLER SYSTEM DESIGN IS BASED ON THE FOLLOWINGS:
HAZARD CLASS : ORDINARY HAZARD GROUP III
TYPE OF STORAGE : POST-PALLET (ST2)
STORAGE CATEGORY : CATEGORY I
MAXIMUM STORAGE HIEGHT : 3.5m
SPRINKLER PROTECTION : CEILING PROTECTION ONLY
THE MAXIMUM STORAGE AREAS SHALL BE 50m^2 FOR SINGLE BLOCK
THE MINIMUM CLEARANCE AROUND EACH SINGLE STORAGE CLOCK : 2.4m

4. FIRE ALARM SYSTEM

4.1 NEW FIRE ALARM SYSTEM SHALL BE PROVIDED IN ACCORDANCE WITH BS 5839-1:2017 AND FSD CIRCULAR LETTERS NO. 6/2021.

4.2 NEW BREAKGLASS UNITS AND FIRE ALARM BELLS SHALL BE PROVIDED AT ALL[3] NEW FIRE HOSE REEL POINTS. THE FIRE ALARM INTALLATION WILL BE INTEGRATED WITH THE HOSE REEL SYSTEM.

5. EMERGENCY LIGHTING

5.1 EMERGENCY LIGHTING SHALL BE PROVIDED IN ACCORDANCE WITH "BS 5266-1 :2016 AND BS EN 1838 :2013", AND THE FSD CIRCULAR LETTER NO. 4/2021, COVERING ALL AREA. EMERGENCY LIGHTINGS SHALL BE BACKED UP BY BUILT-IN BATTERY AND CAPABLE OF MAINTAINING FUNCTION OF NOT LESS THAN 2 HOURS IN CASE OF POWER FAILURE

6. EXIT SIGN

6.1 ALL EXIT SIGNS/DIRECTIONAL EXIT SIGNS SHALL BE PROVIDED IN ACCORDANCE WITH BS 5266-1 :2016 AND FSD CIRCULAR LETTER NO. 5/2008, FOR THE BUILDING. EXIT SIGNS/DIRECTIONAL EXIT SIGNS SHALL BE BACKED UP BY BUILT-IN BATTERY AND CAPABLE OF MAINTAINING FUNCTION OF NOT LESS THAN 2 HOURS IN CASE OF POWER FAILURE.

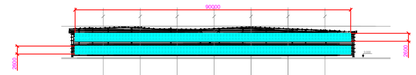
7. PORTABLE APPLIANCES

7.1 PORTABLE HAND OPERATED APPLIANCES SHALL BE PROVIDED AS INDICATED ON PLAN.

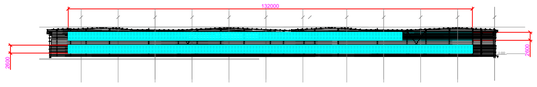
GF of Structure B1 Openable Windows Calculation
Area of GF Structure B1 = 12917 sq.m.
Area of High Bay Window (H.B.W.) = 2.6m(H) x 312m(total length) = 811.2 sq.m.
Total openable window area = 811.2 sq.m.
= 6.28% of floor area

1F of Structure B1 Openable Windows Calculation
Area of 1F Structure B1 = 12917sq.m.
Area of High Bay Window (H.B.W.) = 2.6m(H) x 312m(total length) = 811.2 sq.m.
Total openable window area = 811.2 sq.m.
= 6.28% of floor area

STRUCTURE	USE	COVERED AREA	GROSS FLOOR AREA	BUILDING HEIGHT
B1	LOGISTICS USE CENTRE AND STOREAGE	12,917 m^2 (ABOUT)	25,834 m^2 (ABOUT)	15 m (ABOUT)(2-STOREY)
B2	RAIN SHELTER FOR LUL	706 m^2 (ABOUT)	706 m^2 (ABOUT)	6.2 m (ABOUT)(1-STOREY)
B3	FS WATER TANK	56 m^2 (ABOUT)	56 m^2 (ABOUT)	5 m (ABOUT)(1-STOREY)
B4	OFFICE, CANTEEN AND WASHROOM	225 m^2 (ABOUT)	450 m^2 (ABOUT)	12 m (ABOUT)(2-STOREY)
B5	GUARD ROOM	15 m^2 (ABOUT)	15 m^2 (ABOUT)	3 m (ABOUT)(1-STOREY)
	TOTAL	13,979 m^2 (ABOUT)	27,061 m^2 (ABOUT)	



Section drawing of window opening for the structure B1



Section drawing of window opening for the structure B1

Section drawing of window opening for the structure B1

LEGEND

- HR HOSE REEL
- BREAK GLASS UNIT
- FIRE ALARM BELL
- EMERGENCY LIGHT
- EXIT EXIT SIGN
- NON-RETURN VALVE
- FE 5KG CO2 FIRE EXTINGUISHER
- 5KG DRY POWDER FIRE EXTINGUISHER
- SUBSIDIARY VALVE / FLOW SWITCH
- SPRINKLER CONTROL VALVE SET
- GATE VALVE
- GATE TYPE (With MONITORING)
- PUMP SET
- Y-TYPE STRAINER
- SPRINKLER INLET
- PRESSURE GAUGE
- SPRINKLER HEAD (ON PLAN)

PROJECT :	DRAWING TITLE :	ARCHITECT :
TEMPORARY LOGISTICS CENTRE WITH ANCILLARY OFFICE AND CANTEEN FOR A PERIOD OF 3 YEARS VARIOUS LOTS IN D.D. 129 AND ADJOINING GOVERNMENT LAND, LAU FAU SHAN, YUEN LONG, NEW TERRITORIES	**F.S. Notes, Legend, Fire Service Installation Layout Plan**	

REV	DESCRIPTION	DATE

CONSULTANT :

FIRE SERVICE CONTRACTOR :
Century Fire Service Engineering Co., Ltd.

	NAME	DATE
DRAWN BY	C.K.NG	22 May 2025
CHECKED BY		
APPROVED BY		

DRAWING NO : **FS-01** REV. **0**
SCALE : 1 : 1000 (A1)
SOURCE : B.O.O. Ref. BD
F.S.D. Ref. FP