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主旨: s16 : A/NE-MUP/220 -回應部門的意見 (請以此電郵為準**)
附件: DD 38 Lot 25 & 26_測量圖.pdf; DD38_25_Layout_Plan_20251230.pdf; 申請表格_P.5.pdf;
申請表格_P.11.pdf; 附件1 : A_NE-MUP_220_Temporary Drainage Proposal.pdf; 附件2 :
A_NE-MUP_220_FS Plan.pdf; 附件3.pdf; A_NE-MUP_220_回應部門意見_20251230.pdf
類別: Internet Email

城規會 / 規劃處 :

現附上規劃申請 : A/NE-MUP/220 回應部門的意見 , 請查收 。

這電郵將取代 2025 年 12 月 23 日 的電郵 , 謝謝 。

如有什麼問題 , 請隨時聯絡我 , 謝謝 。

Ms Chong
([REDACTED])

**Temporary Logistics Centre and Associated Filling of Land
Various Lots and Adjoining Government Land, Sha Tau Kok, N.T.
(Application No. A/NE-MUP/220)**

Supplementary Information

- 有關這個規劃申請，其中有 2 個地段 (Lot 25 and 26 in D.D. 38) 已進行分契
請看附件的分地圖)，申請範圍和界線沒有改變，但有新的地段號碼，現時
新的申請地點如下：

新界沙頭角丈量約份第 38 約地段第 25 號 A 分段、第 26 號 A 分段及第 27
號 (部分)、丈量約份第 46 約地段第 804 號 (部分)、第 806 號、第
807 號、第 808 號、第 809 號、第 811 號、第 812 號、第 813 號、第 823
號 B 分段餘段、第 824 號 B 分段餘段、第 825 號、第 826 號 (部份)、第
827 號、第 828 號 B 分段餘段和毗連政府土地

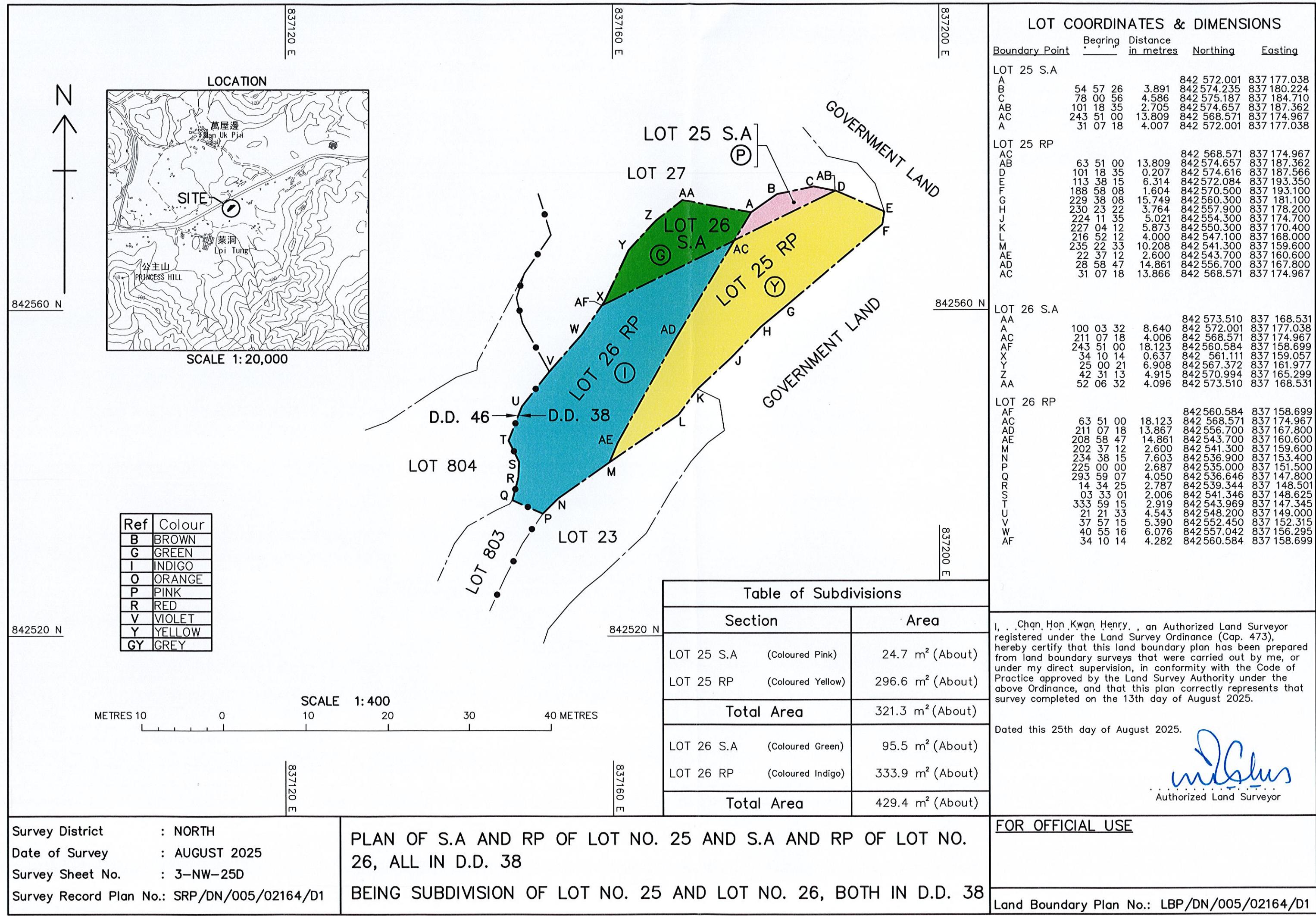
Lots 25 S.A, 26 S.A and 27 (Part) in DD. 38, Lots 804 (Part), 806, 807, 808, 809, 811,
812, 813, 823 S.B RP, 824 S.B RP, 825, 826 (Part), 827, 828 S.B RP in D.D. 46 and
Adjoining Government Land (GL), Sha Tau Kok, New Territories

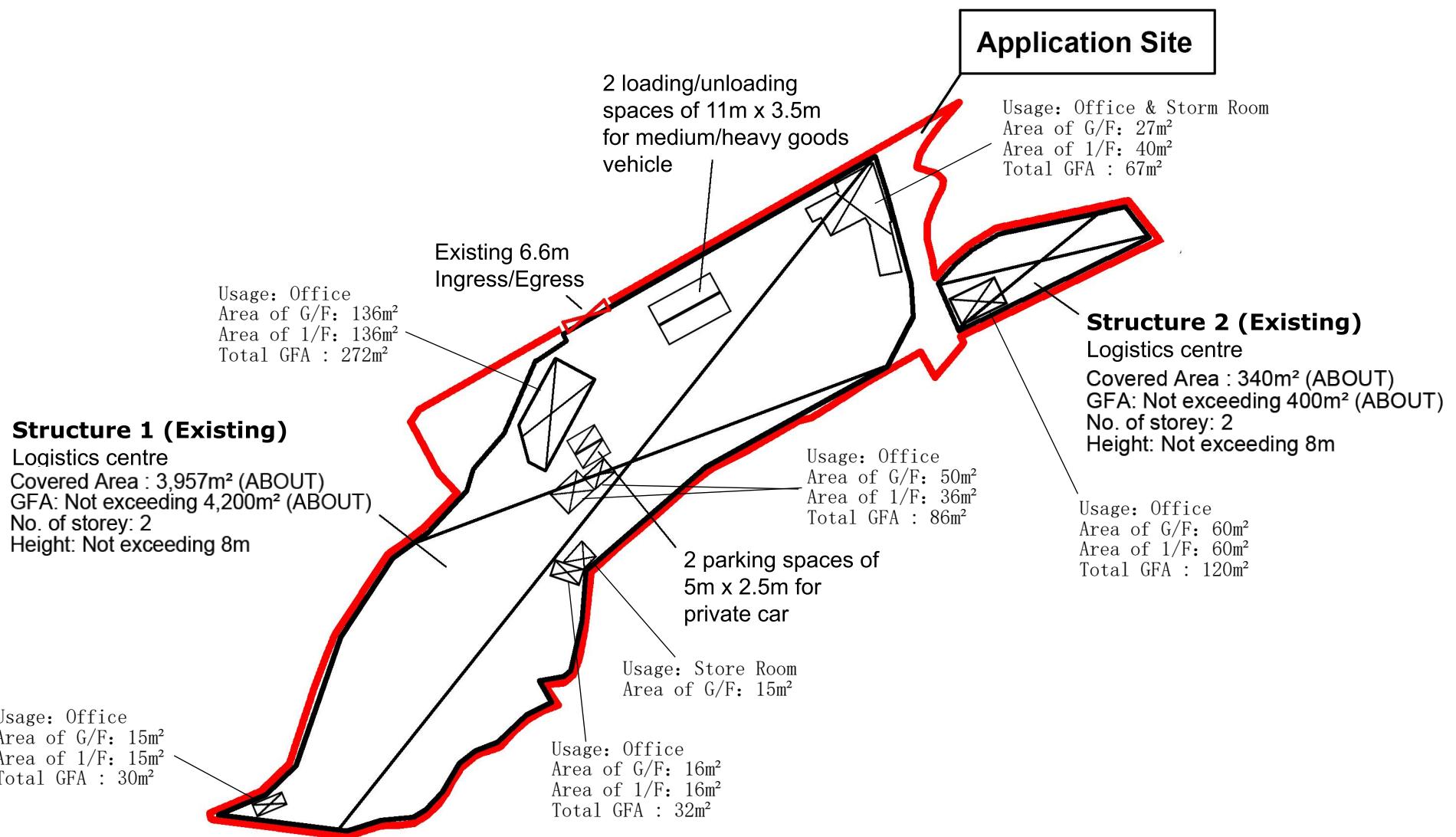
- 申請地點涉及一個先前的規劃申請：A/NE-MUP/193，由於之前因為早前申請人未能如期履行規劃許可附帶的規劃條件（未能落實車輛通道出入口、渠務工程及消防工程；車輛通道出入口建議、排水建議書及消防裝置的建議書已遞交），在 18 個月後申請就被撤銷，不夠時間落實車輛通道出入口、渠務工程及消防工程，於是申請人重新提交本申請 (A/NE-MUP/220) 以要求城市規劃委員會批准為期三年的規劃許可，希望貴處能重新考慮，申請人承諾這次會履行所有附帶條件，並遞交排水建議書（附件 1）、消防裝置的建議書（附件 2），以及落實車輛通道出入口的文件（請看附件 3），並已找承建商落實渠務和消防工程。
- 申請地點的東南邊有少許範圍和規劃申請 A/NE-MUP/215 重疊，申請人知悉並會和業主再協商。
- 如獲城規會批准後，申請人確認現場會按照批准的 Layout 執行。

**Temporary Logistics Centre and Associated Filling of Land
Various Lots and Adjoining Government Land, Sha Tau Kok, N.T.
(Application No. A/NE-MUP/220)**

Table A: Responses to Departmental Comments

	Departmental Comments	Responses
	Comment from EPD	
(1)	<p>It is noted that 6-8 staff will be working on the site during operating hours . The applicant should advise whether any sewage treatment facilities will be provided within the site and provide detailed information for their reference.</p>	申請地點內設有洗手間讓職員使用，也已設置化糞池，並會安排清潔公司定期來吸糞。





6. Type(s) of Application 申請類別

(A) Temporary Use/Development of Land and/or Building Not Exceeding 3 Years in Rural Areas or Regulated Areas

位於鄉郊地區或受規管地區土地上及/或建築物內進行為期不超過三年的臨時用途/發展

(For Renewal of Permission for Temporary Use or Development in Rural Areas or Regulated Areas, please proceed to Part (B))

(如屬於鄉郊地區或受規管地區臨時用途/發展的規劃許可續期，請填寫(B)部分)

(a) Proposed use(s)/development 擬議用途/發展	擬議臨時物流中心及相關填土工程 Proposed Temporary Logistics Centre and Associated Filling of Land (Please illustrate the details of the proposal on a layout plan) (請用平面圖說明擬議詳情)
(b) Effective period of permission applied for 申請的許可有效期	<input checked="" type="checkbox"/> year(s) 年 3 <input type="checkbox"/> month(s) 個月

(c) Development Schedule 發展細節表

Proposed uncovered land area 擬議露天土地面積	823 sq.m	□ About 約
Proposed covered land area 擬議有上蓋土地面積	4297 sq.m	□ About 約
Proposed number of buildings/structures 擬議建築物／構築物數目	2	□ About 約
Proposed domestic floor area 擬議住用樓面面積	0 sq.m	□ About 約
Proposed non-domestic floor area 擬議非住用樓面面積	4600 sq.m	□ About 約
Proposed gross floor area 擬議總樓面面積	4600 sq.m	□ About 約

Proposed height and use(s) of different floors of buildings/structures (if applicable) 建築物/構築物的擬議高度及不同樓層的擬議用途 (如適用) (Please use separate sheets if the space below is insufficient) (如以下空間不足，請另頁說明)

構築物1：臨時物流中心，2層高，上蓋面積約3957平方米，總樓面面積約4200平方米，高度不多於8米。

構築物2：臨時物流中心，2層高，上蓋面積約340平方米，總樓面面積約400平方米，高度不多於8米。

Proposed number of car parking spaces by types 不同種類停車位的擬議數目

Private Car Parking Spaces 私家車車位	2
Motorcycle Parking Spaces 電單車車位	0
Light Goods Vehicle Parking Spaces 輕型貨車泊車位	0
Medium Goods Vehicle Parking Spaces 中型貨車泊車位	0
Heavy Goods Vehicle Parking Spaces 重型貨車泊車位	0
Others (Please Specify) 其他 (請列明)	0

Proposed number of loading/unloading spaces 上落客貨車位的擬議數目

Taxi Spaces 的士車位	0
Coach Spaces 旅遊巴車位	0
Light Goods Vehicle Spaces 輕型貨車車位	0
Medium Goods Vehicle Spaces 中型貨車車位	0
Heavy Goods Vehicle Spaces 重型貨車車位	0
Others (Please Specify) 其他 (請列明)	2個中型貨車及重型貨車車位

(i) Gross floor area and/or plot ratio 總樓面面積及／或地積比率		sq.m 平方米	Plot Ratio 地積比率
	Domestic 住用	0 <input type="checkbox"/> About 約 <input type="checkbox"/> Not more than 不多於	0 <input type="checkbox"/> About 約 <input type="checkbox"/> Not more than 不多於
	Non-domestic 非住用	4600 <input checked="" type="checkbox"/> About 約 <input type="checkbox"/> Not more than 不多於	0.898 <input checked="" type="checkbox"/> About 約 <input type="checkbox"/> Not more than 不多於
(ii) No. of blocks 幢數	Domestic 住用	0	
	Non-domestic 非住用	2	
(iii) Building height/No. of storeys 建築物高度／層數	Domestic 住用	0 <input type="checkbox"/> (Not more than 不多於) m 米	
		0 <input type="checkbox"/> (Not more than 不多於) Storeys(s) 層	
	Non-domestic 非住用	8 <input checked="" type="checkbox"/> (Not more than 不多於) m 米	
		2 <input checked="" type="checkbox"/> (Not more than 不多於) Storeys(s) 層	
(iv) Site coverage 上蓋面積		83.9 %	<input checked="" type="checkbox"/> About 約
(v) No. of parking spaces and loading / unloading spaces 停車位及上落客貨車位數目	Total no. of vehicle parking spaces 停車位總數		2
	Private Car Parking Spaces 私家車車位		2
	Motorcycle Parking Spaces 電單車車位		0
	Light Goods Vehicle Parking Spaces 輕型貨車泊車位		0
	Medium Goods Vehicle Parking Spaces 中型貨車泊車位		0
	Heavy Goods Vehicle Parking Spaces 重型貨車泊車位		0
	Others (Please Specify) 其他 (請列明)		0

	Total no. of vehicle loading/unloading bays/lay-bys 上落客貨車位／停車處總數		2
	Taxi Spaces 的士車位		0
	Coach Spaces 旅遊巴車位		0
	Light Goods Vehicle Spaces 輕型貨車車位		0
	Medium Goods Vehicle Spaces 中型貨車位		0
	Heavy Goods Vehicle Spaces 重型貨車車位		0
	Others (Please Specify) 其他 (請列明)		0
	2個中型貨車及重型貨車車位		

TEMPORARY DRAINAGE PROPOSAL

APPLICATION SITE OF PROPOSED TEMPORARY LOGISTICS CENTRE FOR A PERIOD OF 3 YEARS AND FILLING OF LANDS AT LOT 25 (PART), 26 (PART) & 27 IN D.D.38, LOTS 802 (PART), 804 (PART), 806, 807, 808, 809, 811, 812, 813, 823 S.B RP, 824 S.B RP, 825, 826, 827, 828 S.B RP IN D.D.46 AND ADJOINING GOVERNMENT LAND, SHA TAU KOK, NEW TERRITORIES

Application No.:

Project No.: ALPL/TDM/001

Revision No.: 0

20 October 2024

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2 Introduction

2.1 Background

This report presents the Drainage Proposal for supporting the Proposed Temporary Logistics Centre for a Period of 3 Years at and filling of lands a Lot 25(part), 26(part) & 27 in D.D.38, Lots 802(part), 804(part), 806, 807, 808, 809, 811, 812, 813, 823 S.B RP, 824 S.B RP, 825, 826, 827, 828 S.B RP in D.D.46 and adjoining government land, Sha Tau Kok, New Territories.

2.2 Objectives of the Report

This report shall be prepared to include the following:

- Identify the potential drainage impact assessment from the proposed Application Site
- Recommend and implement all necessary measures to mitigate adverse drainage impacts arising from the application site

2.3 Report Structure

The report contains the following sections:

- Section 1 on Introduction;
- Section 2 on Development Proposal;
- Section 3 on Assessment Criteria;
- Section 4 on Potential Drainage Impact; and
- Section 5 on Conclusion.

3 Development Proposal

3.1 Location of the Application Site

The application Site is located within the Sha Tau Kok, with an area of around 5240m² (including Government Land of about 228m²) and ground level varying between + 23.5mPD and + 26.6mPD. The layout plan is provided in **Appendix B**.

This application site is "Agriculture" zoning, the type of application is the Temporary Use/Development in Rural Areas for a Period of 3 Years.

There is a existing Drainage Service Department 900mm diameter U-channel (feature no.: SUP1022140) vicinity of the application site, with reference to Geoinfo Map, the location and site photos of the existing U-channel are provided in **Appendix C**.

4 Assessment Criteria

4.1 Design Return Periods

The drainage system in the Application site is to collect surface flows and convey to downstream village drain. The recommended design return periods based on the flood levels for the various drainage systems depend on the drainage system, land use, hazard to public safety and community expectations.

The recommended design return period is reproduced in Table 4-1 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 4-1 Recommended Design Return Periods based on Flood Levels

As per Storm Drainage Manual (SDM) Section 6.6.2 Urban Drainage Branch and Urban Drainage Trunk Systems “An ‘Urban Drainage Branch System’ is defined as a group or network of connecting drains collecting runoff from the urban area and conveying stormwater to a trunk drain, river or sea. For a simple definition, the largest pipe size or the equivalent diameter in case of a box culvert in a branch system will normally be less than 1.8m.

An ‘Urban Drainage Trunk System’ collects stormwater from branch drains and/or river inlets, and conveys the flow to outfalls in river or sea. Pipes with size or diameter equal to or larger than 1.8m are normally considered as trunk drains.”

As per SDM, since the proposed U-channels are sized smaller than 1.8m, the drainage system would be defined as an urban drainage branch with recommended design return period of 50 years.

The 50 years design return period will be considered to ensure adequacy of the stormwater drainage system.

4.2 Calculation Methodology for Runoff

Peak instantaneous runoff values before and after the development were calculated based on the Rational Method and with recommended physical parameters including runoff coefficient (C) and storm constants for different return periods referred to the SDM, based on the following equation:

$$Q_p = 0.278 C i A$$

where

Q_p	=	Peak Runoff, m^3/s
C	=	Runoff Coefficient
i	=	Rainfall Intensity, mm/hr
A	=	Catchment Area, km^2

The paved area of the site will account for 5240m². For conservative, the runoff coefficient of 0.9 is assumed, such that the all the run-off would be collected from the catchment area without any infiltration as the critical scenario.

Based on the storm constants for 50-year return period recommended in the SDM, the appropriate rainfall intensities (i) are calculated as detailed in Appendix D

4.3 Calculation Methodology for Pipe Capacity Checking

Due to the catchment areas are less than 1ha, U-channels are recommended to be constructed to collect the stormwater runoff of the open area within the site. For the catchment area within the roofing of the one-story warehouse, stormwater would be collected by the gutter, and then be diverted to U-channel system at ground level via downpipe. The collected stormwater should finally be diverted to the downstream via the proposed U-channel system.

For the worst-case scenario, bad condition of concrete pipe is assumed for the Manning's roughness coefficient (coefficient value is 0.016) for calculating capacities of concrete U-channel using Manning's Equation.

Manning's Equation for calculating the channel and pipe capacities is adopted.

5 Potential Drainage Impact

5.1 Existing Site Condition

The application Site is located within the Sha Tau Kok with an area of around 5240m² and ground level varying between + 23.5mPD and + 26.6mPD.

5.2 Changes in Drainage Characteristics

Since the ground level of application site is generally higher than the adjacent ground surface. No external catchment shall be considered in the calculation.

The characteristics of the sub-catchment areas are altered due to the proposed application, which are changed from unpaved site area to paved area. The change in sub-catchment is summarized in Table 5-1.

	Before	After
Grassland (m ²)	0	0
Paved Area (m ²)	5240	5240
External Catchment Area(m ²)	0	0
Total Catchment Area (m ²)	5240	5240

Table 5-1 Change in sub-catchment within the site

5.3 Potential Drainage Impact

The details of the proposed drainage works are illustrated in **Appendix C**.

To effectively convey stormwater away from the application site and minimize the potential impact to the drainage infrastructure of the village area, drainage works consists of U-channels, are proposed to convey the stormwater runoff to the terminate catchpit with sand trap (TCP).

The runoff within application site divided to two portion, roofing area and open area. For the roofing area runoff, it collected by surrounding gutter and then be conveyed to the U-channel system by the 150mm dia. downpipe to the ground level U-channel system. For the open are of the application site, runoff would be collected by 300mm U-channels along the open area and convey to the terminate catchpit with sand trap (TCP), before discharge to the existing DSD 900mm dia. U-channel at the northwest direction of the application site, and eventually discharge to the further downstream as indicated in the **Appendix C**.

The 4nos. of 300 mm U-channel receives stormwater from the open area and roofing area. For Conservative, the critical scenario is considered for collecting all the flow leading to the 300mm U-channel. The design calculation of the proposed drainage is provided in **Appendix D**. The design calculation is summarized in Table 4-2.

Drainage System	Estimated Flow (L/min)	Capacity (L/min)	Reserve Capacity
300mm u-channel U1	1062.5	7000	85%
300mm u-channel U2	1793.6	7000	74%
300mm u-channel U3	1509.6	7000	78%
300mm u-channel U4	2524.7	7000	64%

Table 4-2 Design calculation of the proposed drainage work

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1. Rainfall increase due to climate change at the end of 21st century is considered according to stormwater drainage manual Table 28.
2. The reserve capacity is calculated by assuming that the U-channel reach its full capacity.

The design runoff arise from the proposed Application Site is to be discharged into the proposed terminate catchpit with the runoff anticipated to be 1062.5-2524.7L/min, which is within the drainage capacity of the proposed 300mm u-channel of 7000L/min, the minimum reserve capacity is 64%.

It is considered that the drainage discharge from the Application Site will not cause adverse impact to the entire downstream drainage system.

All u-channels & catch pits will be constructed according to the CEDD's standard drawings, please refer to the **Appendix E**.

6 Construction Stage

6.1 Temporary Drainage Arrangements

Proper measures shall be taken to maintain the existing drainage characteristics of the catchment areas and to minimize drainage impacts associated with the construction works. The principal drainage impacts which are associated with construction of the works have been identified as follows:

- (i) Erosion of ground materials;
- (ii) Sediment transportation to existing downstream drainage system; and
- (iii) Obstruction to drainage systems.

Regular inspections shall be carried out to ensure integrity of the works. These inspections shall cover works under construction as well as recently completed areas.

To ensure proper operation of the site drainage channels and desilting facilities, inspection of the perimeter drains shall be carried out on a weekly basis and the desilting facilities shall be cleaned on a daily basis.

If excavated materials are not possible to transport away the excavated material within the same day, the material should be covered by tarpaulin/impervious sheets. Stockpiles of construction materials (for examples aggregate, fill materials) of more than 50 m³ in an open area shall also be covered with tarpaulin or similar fabric during rainstorms.

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All runoff discharged into the existing drainage system will be settled in a silt trap to ensure no sediment will be discharged into the channel. Silt traps will normally be provided along the site drainage immediately upstream of the proposed discharge point to the existing Site. The silt traps will be inspected daily and immediately after each rainstorm.

Liaison will be carried out with relevant parties regarding temporary drainage arrangements to ensure that the drainage system is functioning adequately.

7 Conclusions

7.1 Conclusions

The analysed catchment area of 5240m² consists of the site area of the proposed Application Site only and no external catchment area had been identified.

U-channels are proposed to convey runoff from the application site for collection. The proposed U-channels are located along the open area and receive the stormwater from the roofing area which is subject to change to suit the building layout.

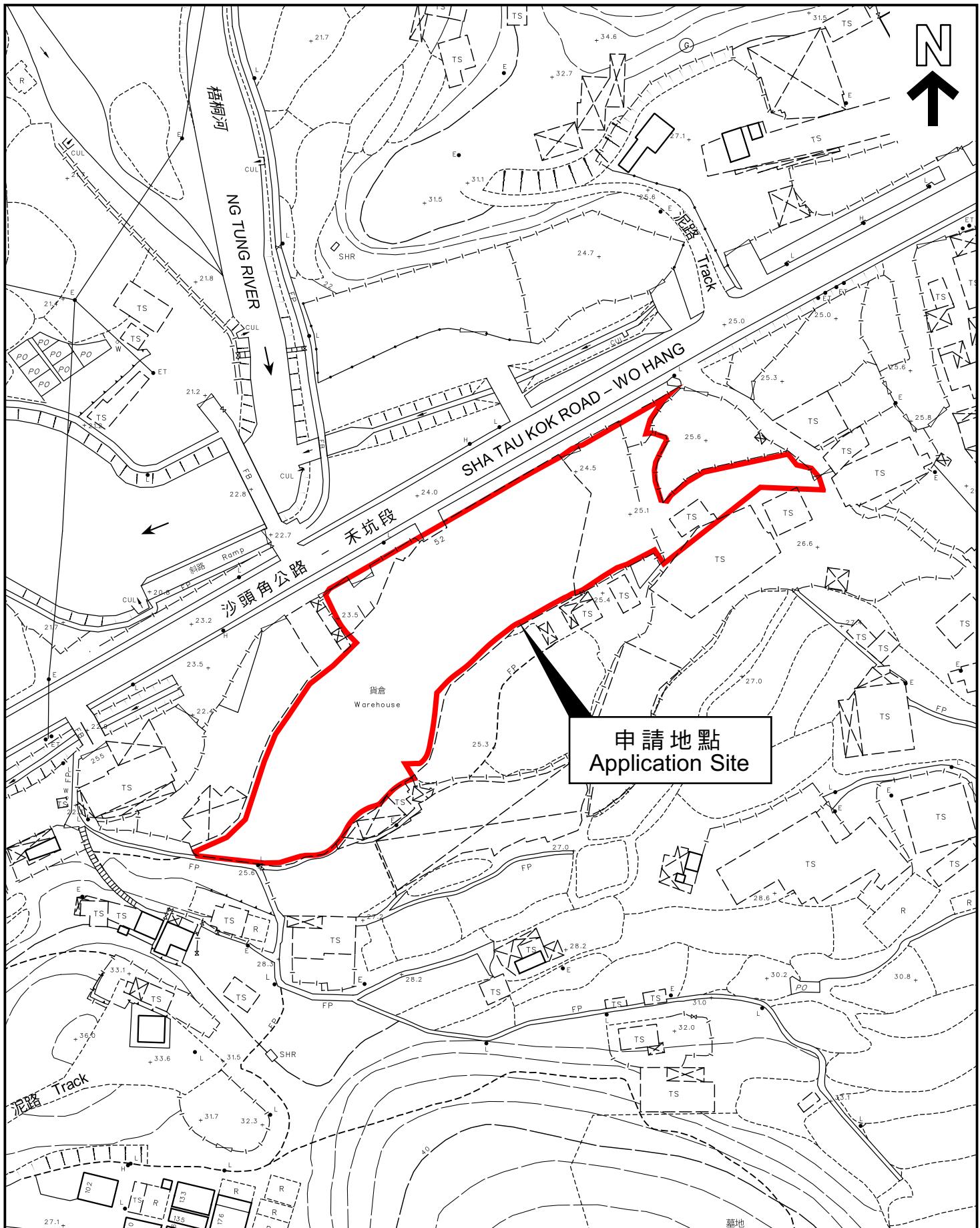
The assessment reviews the drainage pipe have the sufficient capacity to cater for the drainage flow from the Application Site.

Mitigation measures are proposed during the construction period and to ensure that the existing drainage system within the site will not be affected during the construction stage.

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APPENDIX A

SITE LAYOUT PLAN



平面圖 SITE PLAN

本摘要圖於2023年8月21日擬備，
所根據的資料為測量圖編號
3-NW-25B及25D
EXTRACT PLAN PREPARED ON 21.8.2023
BASED ON SURVEY SHEETS No.
3-NW-25B & 25D

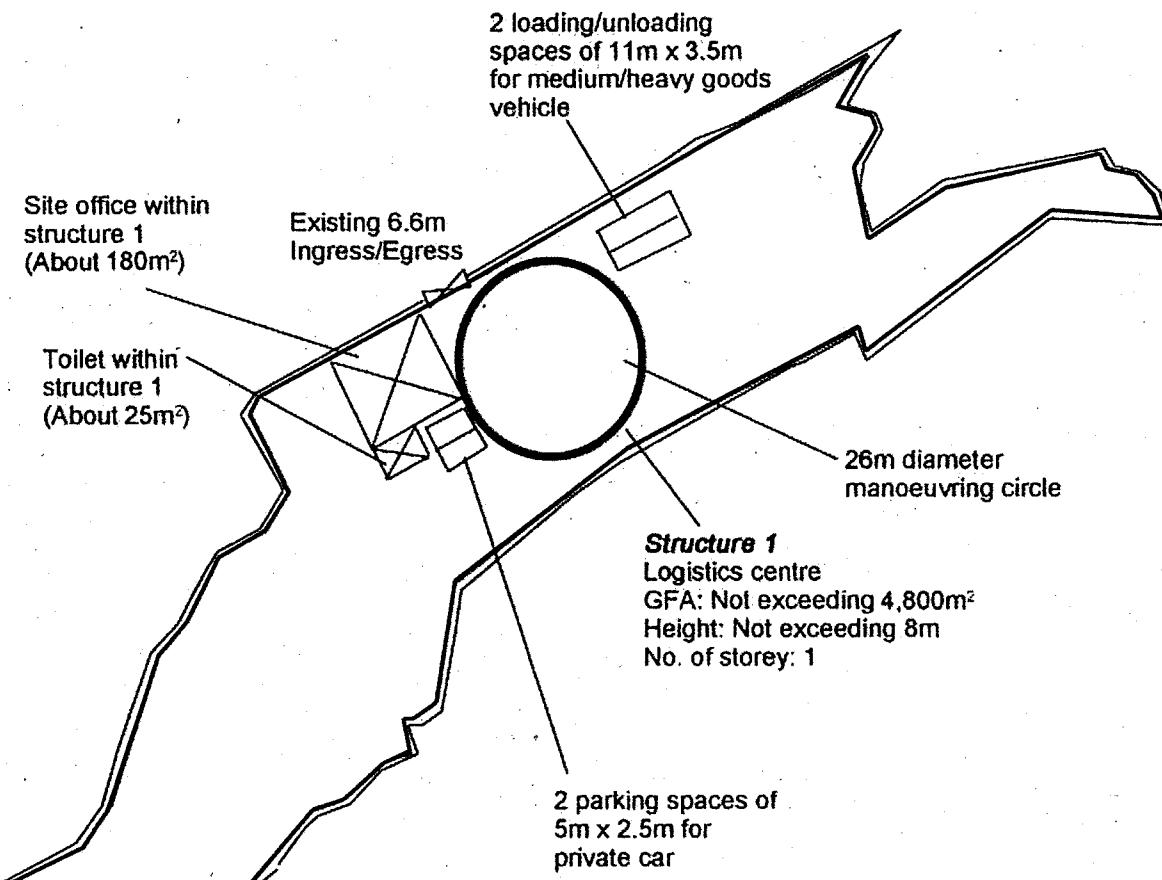
申請地點界線只作識別用
APPLICATION SITE BOUNDARY
FOR IDENTIFICATION PURPOSE ONLY

參考編號
REFERENCE No.
A/NE-MUP/193

APPENDIX B

LAYOUT PLAN

N
▲



申請編號 Application No. : A / NE-MUP / 193

此頁摘自申請人提交的文件。

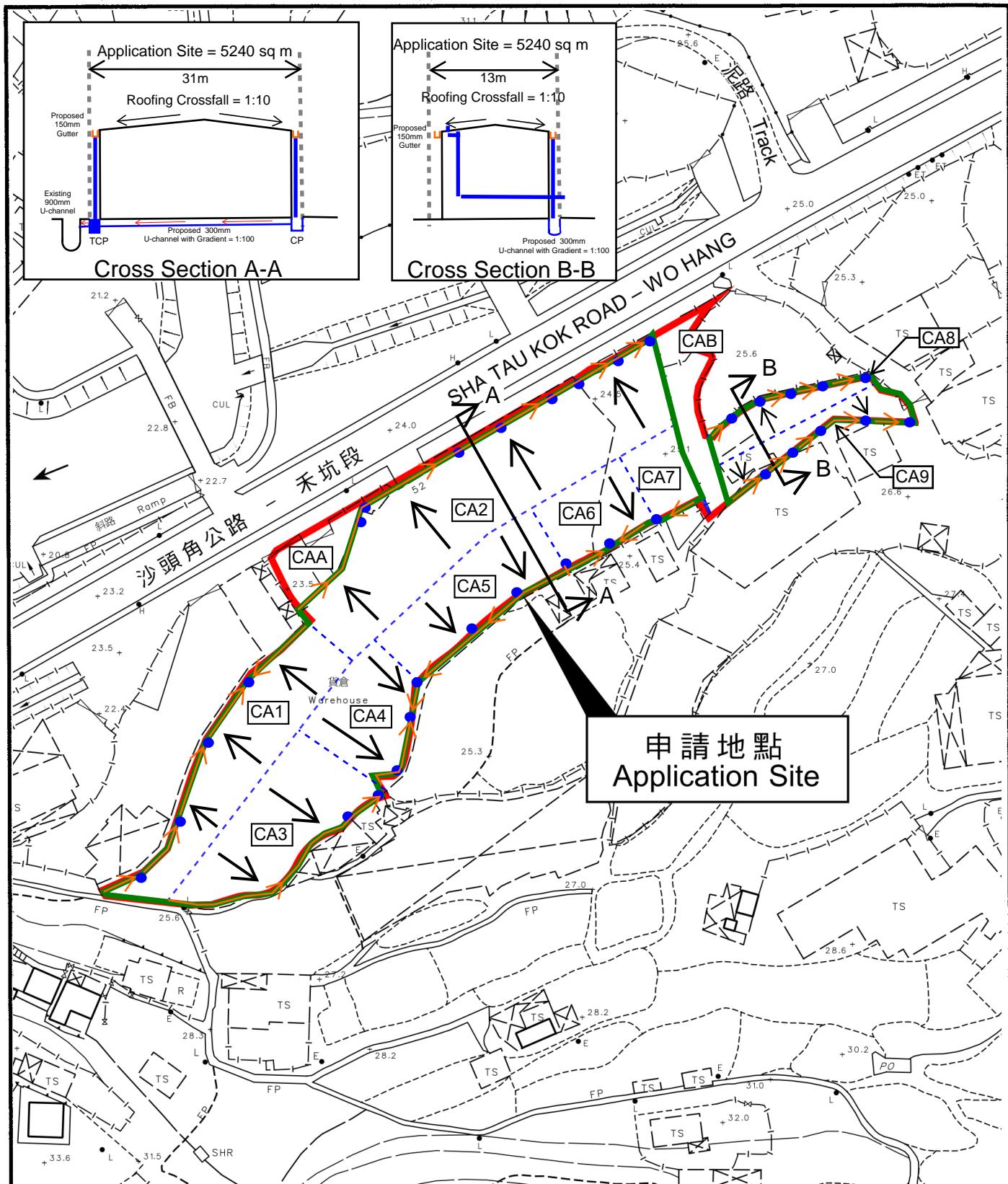
This page is extracted from applicant's submitted documents.

Project 項目名稱: Proposed Temporary Logistics Centre for a Period of 3 Years and Filling of Land at Lots 25 (Part), 26 (Part) & 27 in D.D.38, Lots 802 (Part), 804 (Part), 806, 807, 808, 809, 811, 812, 813, 823 S.B RP, 824 S.B RP, 825, 826, 827, 828 S.B RP in D.D.46 and Adjoining Government Land, Sha Tau Kok Road – Wo Hang Section, N.T.	Drawing Title 畫目: Proposed Layout Plan	Remarks 備註: <input type="checkbox"/> Structre 1
Drawing No. 圖號: Figure 2	Scale 比例: 1:1000	

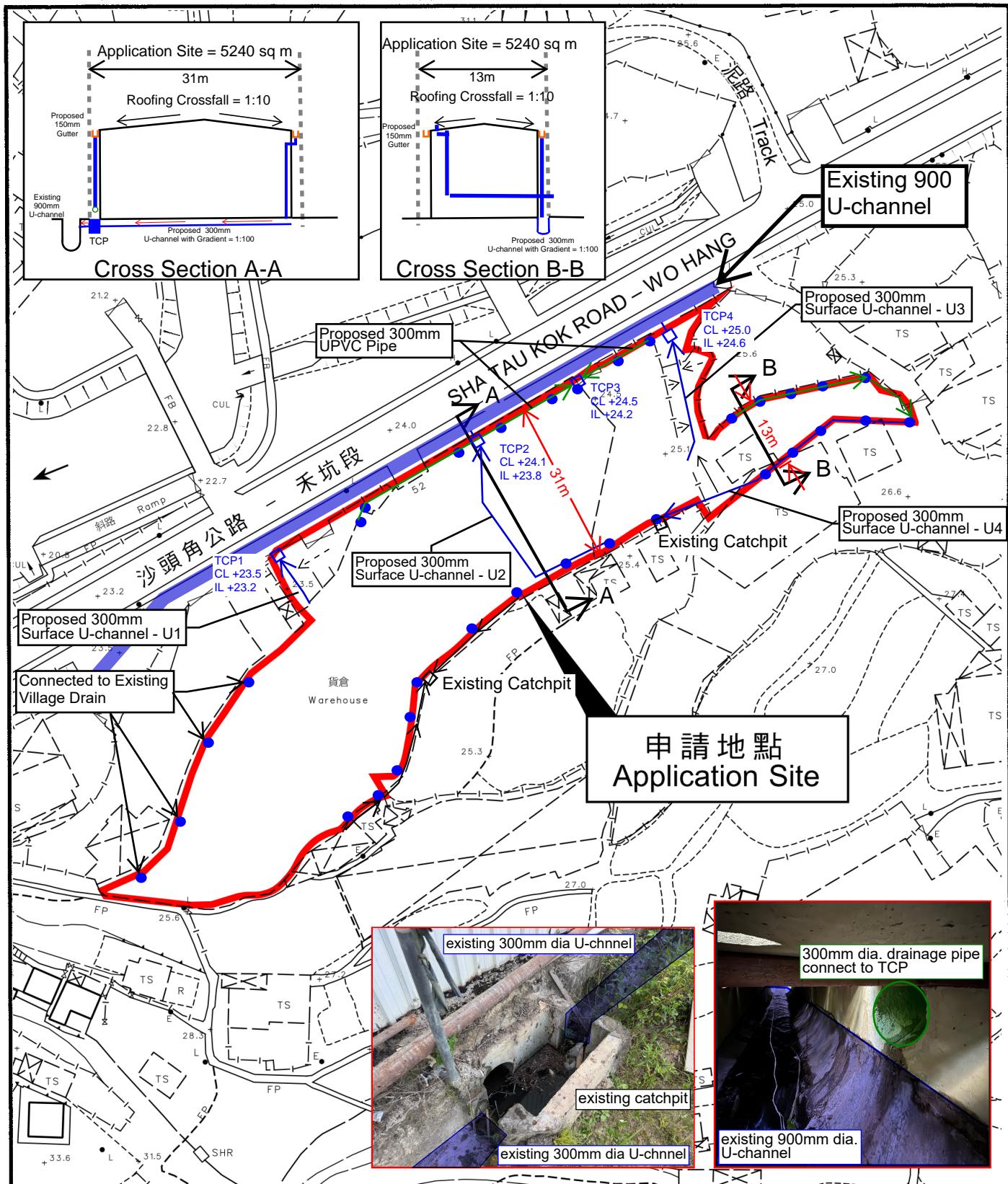
TEMPORARY DRAINAGE PROPOSAL

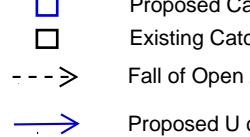
APPENDIX C

PROPOSED DRAINAGE PLAN



<p>Project 項目名稱:</p> <p>Proposed Temporary Logistics Centre for a Period of 3 Years and Filling of Land at Lots 25 (Part), 26 (Part) & 27 in D.D.38, Lots 802 (Part), 804 (Part), 806, 807, 808, 809, 811, 812, 813, 823 S.B RP, 824 S.B RP, 825, 826, 827, 828 S.B RP in D.D.46 and Adjoining Government Land, Sha Tau Kok Road – Wo Hang Section, N.T.</p>	<p>Drawing Title 圖目:</p> <p>Proposed Drainage Layout Plan- Roof Level</p>	<p>Remarks 備註:</p> <p> Roofing Area</p> <p> Fall of Roofing</p> <p> 150 mm Gutter</p> <p> Downpipe</p>
	<p>Drawing No. 圖號:</p> <p>Figure 6</p>	<p>Scale 比例:</p>



Project 項目名稱:	Drawing Title 圖目:	Remarks 備註:
<p>Proposed Temporary Logistics Centre for a Period of 3 Years and Filling of Land at Lots 25 (Part), 26 (Part) & 27 in D.D.38, Lots 802 (Part), 804 (Part), 806, 807, 808, 809, 811, 812, 813, 823 S.B RP, 824 S.B RP, 825, 826, 827, 828 S.B RP in D.D.46 and Adjoining Government Land, Sha Tau Kok Road – Wo Hang Section, N.T.</p>	<p>Proposed Drainage Layout Plan- Ground Level</p>	
Drawing No. 圖號:		Scale 比例:
Figure 7		

APPENDIX D

DESIGN CALCULATION OF THE PROPOSED DRAINAGE SYSTEM

PROJECT: APPLICATION SITE OF PROPOSED TEMPORARY LOGISTICS CENTRE FOR A PERIOD OF 3 YEARS
AND FILLING OF LANDS AT SHA TAU KOK, NEW TERRITORIES

JOB NO : ALPL/TDM/001

TITLE : *Temporary Drainage Design Calculation*

Revision : 0

Date : 18-Oct-24

Prepare By: JW

DETERMINE THE CATCHMENT OF AREA

CA1	=	746	(m ²)
CA2	=	1546	(m ²)
CA3	=	660	(m ²)
CA4	=	399	(m ²)
CA5	=	529	(m ²)
CA6	=	307	(m ²)
CA7	=	183	(m ²)
CA8	=	209	(m ²)
CA9	=	223	(m ²)
CAA	=	182	(m ²)
CAB	=	258	(m ²)

DETERMINE THE INLET TIME AND INTENSITY

Section	A = Catchment of Area (m ²)	Level of remote point (mPD)	Level of inlet point (mPD)	L (m)	H (m/100m)	t _e = Time of Natural flow (min)	Assumed Flow (m/s)	t _f (min)	t _c (min)	I (mm/hr)	Remarks
1	CA1	746	33.1	31.7	14	10.00	0.66	1.5	0.16	0.81	390
2	CA2	1546	33.1	31.7	17	8.24	0.77	1.5	0.19	0.96	390
3	CA3	660	33.1	31.7	16	8.75	0.78	1.5	0.18	0.96	390
4	CA4	399	33.1	31.7	19	7.37	1.01	1.5	0.21	1.22	390
5	CA5	529	33.1	31.7	18	7.78	0.92	1.5	0.20	1.12	390
6	CA6	307	33.1	31.7	14	10.00	0.72	1.5	0.16	0.88	390
7	CA7	183	33.1	31.7	14	10.00	0.76	1.5	0.16	0.91	390
8	CA8	209	33.6	32.9	7.5	9.33	0.41	1.5	0.08	0.49	390
9	CA9	223	33.6	33.1	5.5	9.09	0.30	1.5	0.06	0.36	390
A	CAA	182	23.5	23.3	10.5	1.90	0.79	1.5	0.12	0.91	390
B	CAB	258	25.1	25.05	3	1.67	0.22	1.5	0.03	0.26	390

Ref.: Brandsby Williams Equation

Note:	t _e	=	$\frac{0.14465L}{H^{0.2} \cdot A^{0.1}}$
	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).
	t _f	=	Flow time = L / assumed flow velocity
	t _c	=	Time of concentration = t _f + t _e (Min. t _c = 1 min. for conservative design)
I = Intensity	=		Refer to the extracted Figure 8.2 - Curves Showing Duration and Intensity of Rainfall in H.K. for Various Return Periods (Geotechnical Manual for Slopes P.248)

DETERMINE THE SIZE AND QUANTITIES OF DOWNPipe

1	2	3	4	5	6	7	8	9	10
Section No.	Dia. of Downpipe (m)	Sectional Area of Gutter (m ²)	v (m/s)	No. of Downpipe Provided	Capacity (l/min)	A (m ²)	I (mm/hr)	Runoff (l/min)	Remark
CA1	0.15	0.02	2.00	4	8482	746	390	4366	O.K.
CA2	0.15	0.02	2.00	8	16965	1546	390	9042	O.K.
CA3	0.15	0.02	2.00	2	4241	660	390	3861	O.K.
CA4	0.15	0.02	2.00	2	4241	399	390	2335	O.K.
CA5	0.15	0.02	2.00	3	6362	529	390	3093	O.K.
CA6	0.15	0.02	2.00	2	4241	307	390	1794	O.K.
CA7	0.15	0.02	2.00	1	2121	183	390	1068	O.K.
CA8	0.15	0.02	2.00	5	10603	209	390	1220	O.K.
CA9	0.15	0.02	2.00	5	10603	223	390	1304	O.K.

Note: v = Velocity of flow in downpipe
A = Catchment Area
K = Runoff coefficient = 0.9 refer to Character of Surface (refer DSD(2013))

DETERMINE THE RUNOFF OF OPEN AREA

1	2	3	4	5	6	7	8
Section No.	Ldr (m)	Lh (m)	L (m)	Gradient (1 in)	Site area (m ²)	I (mm/hr)	Runoff (l/min)
CAA	0.15	13.00	13.00	86.67	182	390	1062.5
CAB	0.40	36.00	36.00	90.00	258	390	1509.6

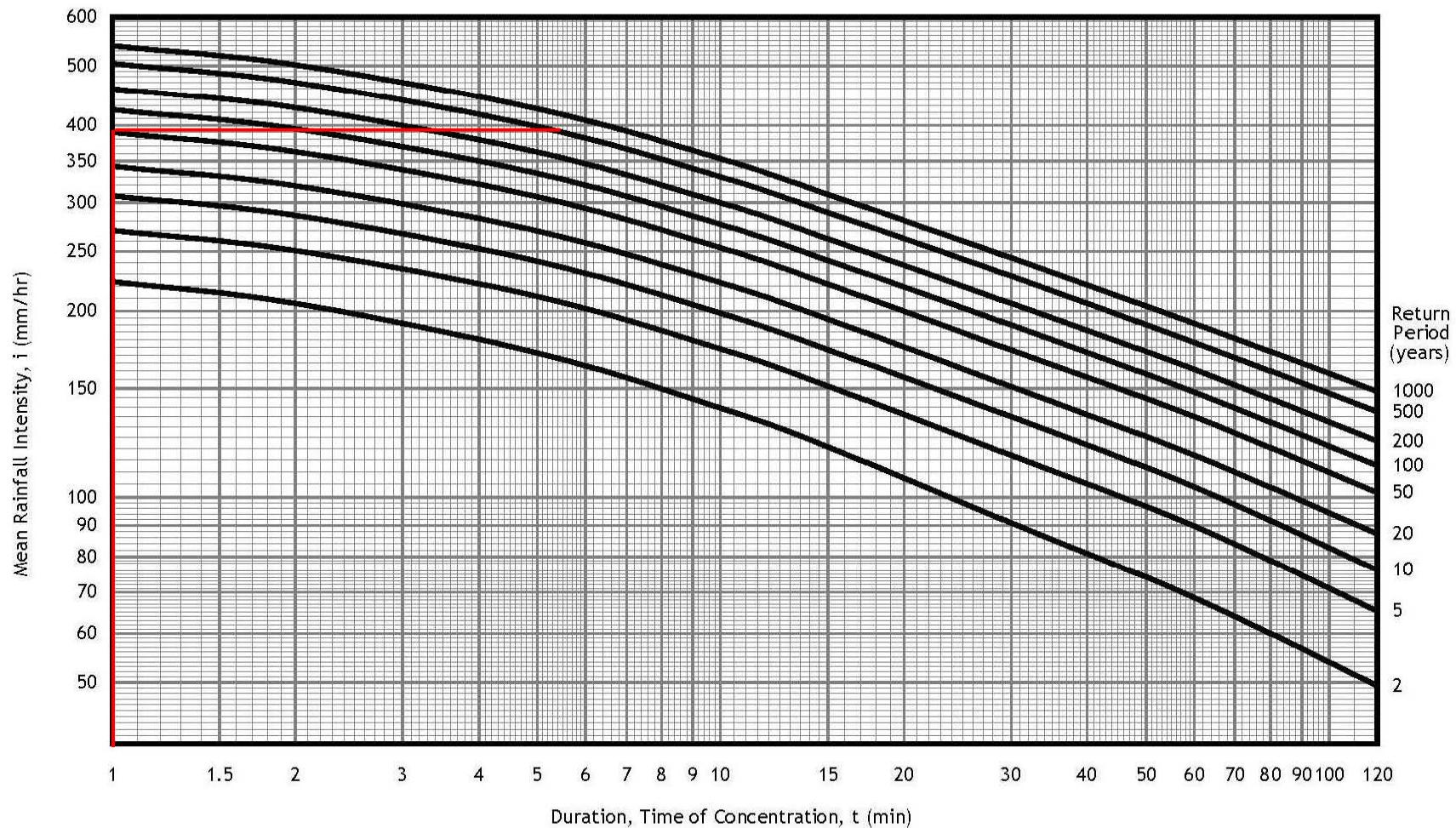
DETERMINE THE SIZE OF STEPPED / U-CHANNEL

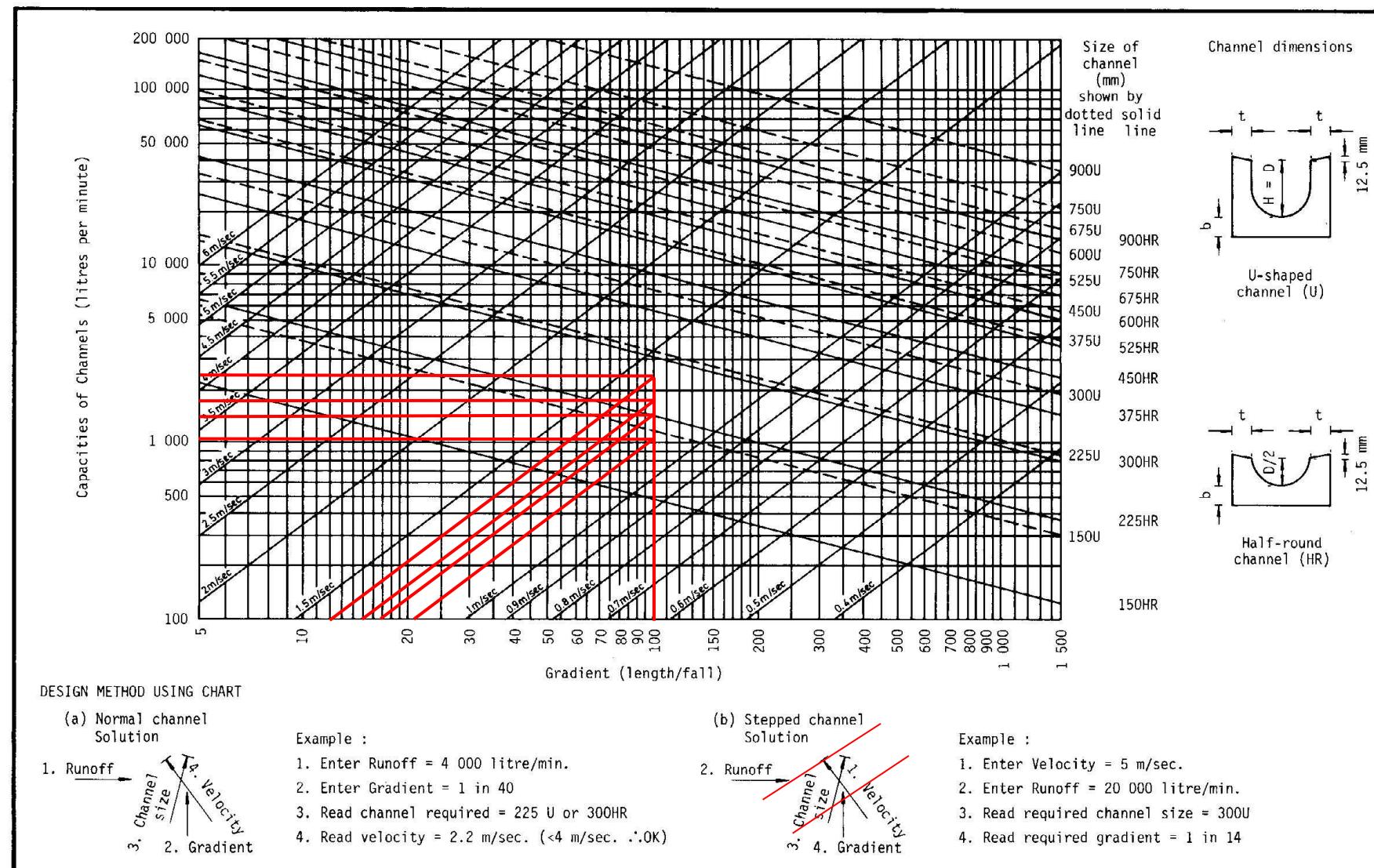
1	2	3	4	5	6	7	8	9	Remark		
U Channel No.	Carchment Area Section	Total area (m ²)	channel size (mm)	Assumed Flow	I (mm/hr)	Runoff (l/min)	Ldr (m)	Lh (m)	L (m)	Gradient (1 in)	Capacity (l/min)
U1	A	182	300	1.50	380.00	1062.5	0.1	12	12.00	120.00	7000
U2	6	307	300	1.50	380.00	1793.6	0.4	43	43.00	107.50	7000
U3	B	258	300	1.50	380.00	1509.6	0.2	25	25.00	125.00	7000
U4	8, 9	432	300	1.50	380.00	2524.7	0.5	51	51.00	102.00	7000

Required 150U, provide 300U with 1:100 gradient
Required 225U, provide 300U with 1:100 gradient
Required 225U, provide 300U with 1:100 gradient
Required 225U, provide 300U with 1:100 gradient

Note: Ldr = Different level between U-channel section
Gradient = 1 in (Lh/Ldr)
Total area = Site area + others area
A=Cumulative area = Total area + others section area
Capacity = Refer to the extracted Figure 8.7 - Chart for the Rapid Design of Channels (Geotechnical Manual for Slopes P.253)
Assumed flow velocity = Assumed velocity of runoff
Actual Flow velocity = Refer to the extracted Figure 8.7 - Chart for the Rapid Design of Channels (Geotechnical Manual for Slopes P.253)
Design Return Period = 50 years
Runoff = K.I.A./3600 (l/s) = K.I.A./60 (l/min)

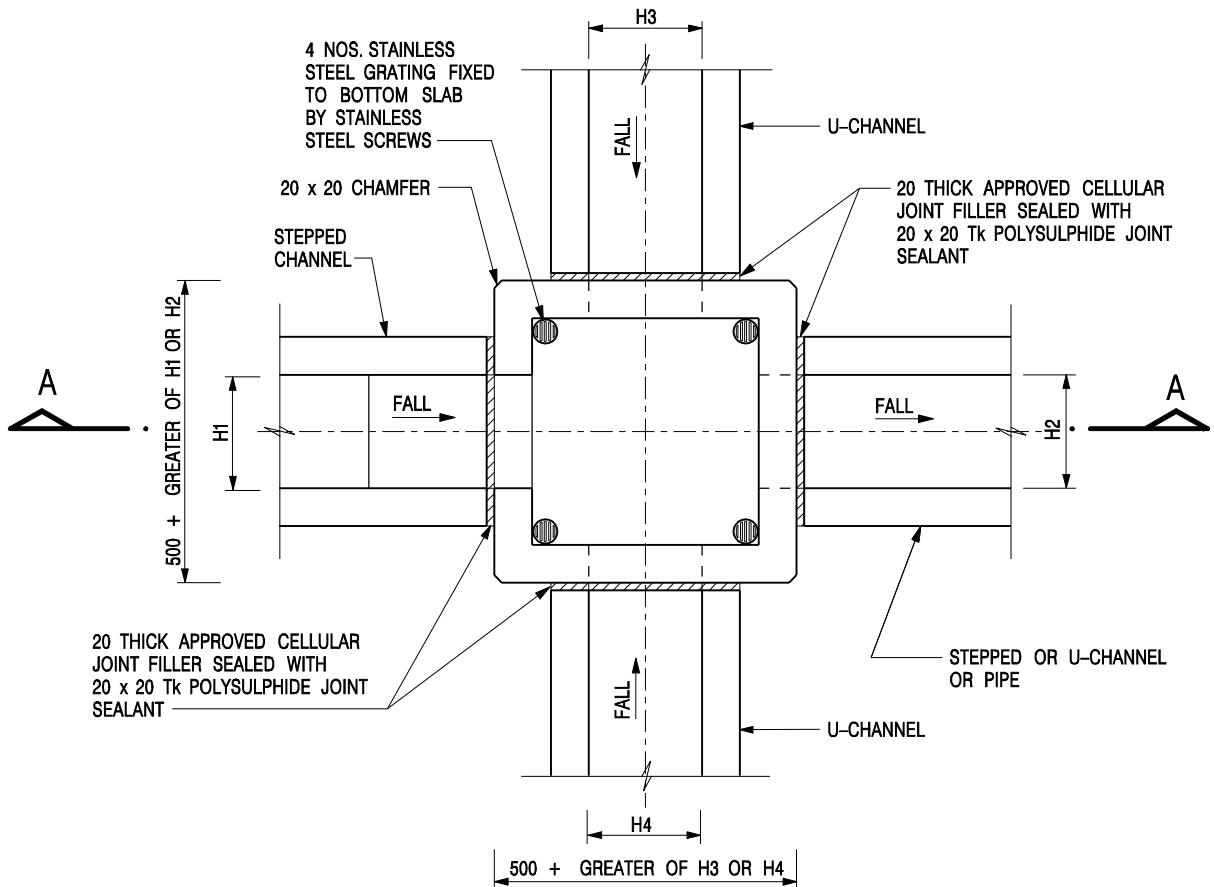
For section no. U1 , Actual Flow Velocity = 1.20 m/s < 4m/s, O.K.
For section no. U2 , Actual Flow Velocity = 1.30 m/s < 4m/s, O.K.
For section no. U3 , Actual Flow Velocity = 1.27 m/s < 4m/s, O.K.
For section no. U4 , Actual Flow Velocity = 1.40 m/s < 4m/s, O.K.





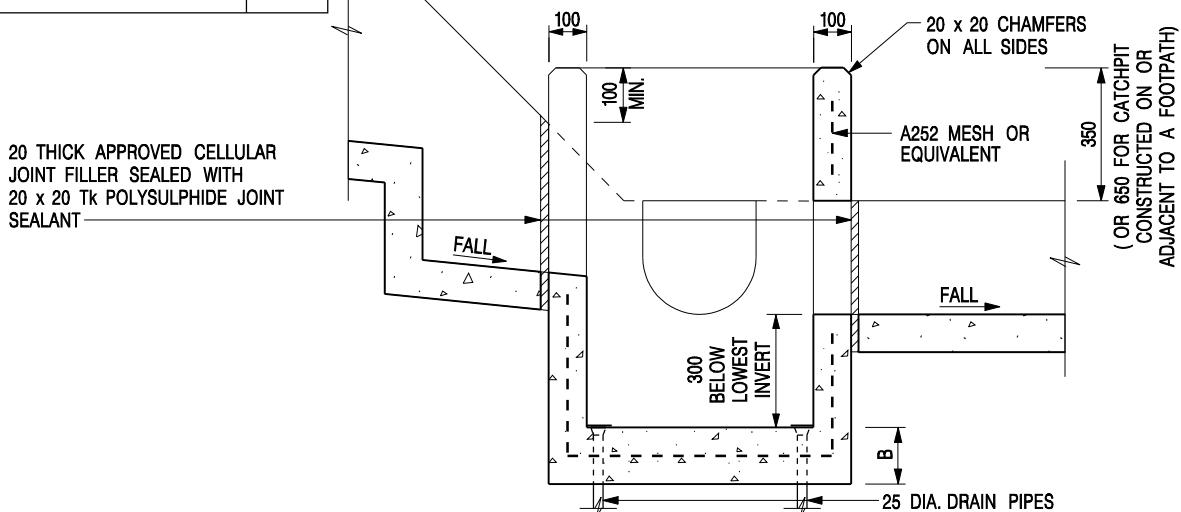
APPENDIX E

TYPICAL STANDARD DRAWINGS OF U-CHANNEL AND CATCHPIT (EXTRACTED FROM CEDD, FOR REFERNCE ONLY)



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

PLAN



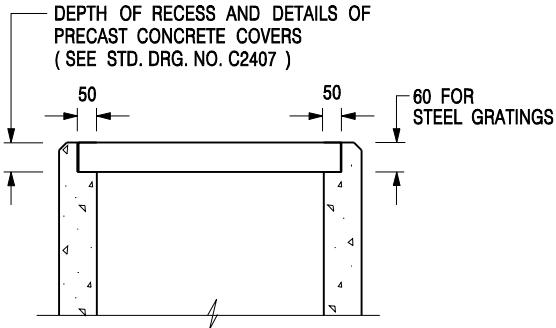
SECTION A - A

NOTES:

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

CATCHPIT WITH TRAP
(SHEET 1 OF 2)

-	FORMER DRG. NO. C2406J.	Original Signed	03.2015
REF.	REVISION	SIGNATURE	DATE
 CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT			
SCALE 1:20		DRAWING NO.	
DATE JAN 1991			C2406 /1



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.

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

CATCHPIT WITH TRAP
(SHEET 2 OF 2)

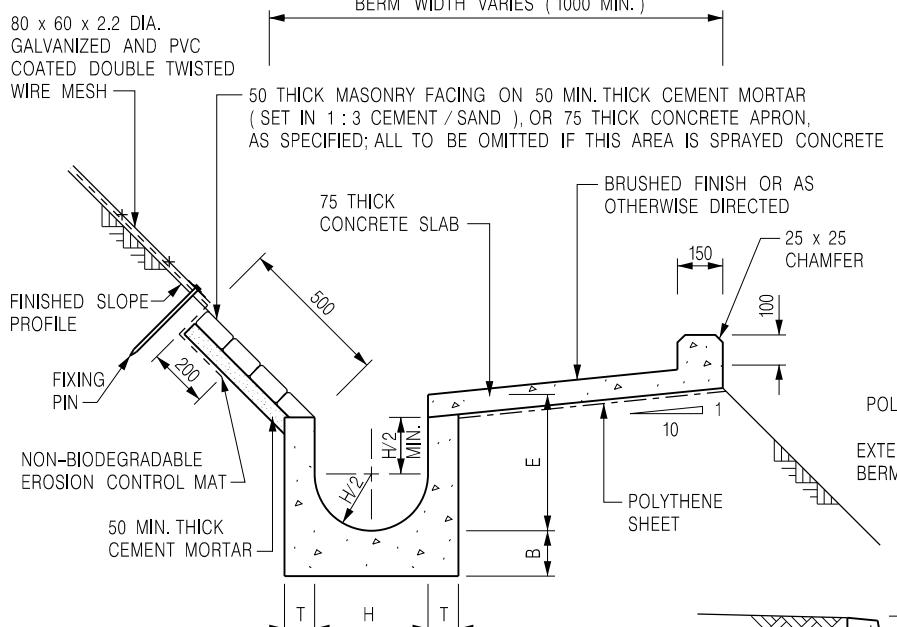


CIVIL ENGINEERING AND
DEVELOPMENT DEPARTMENT

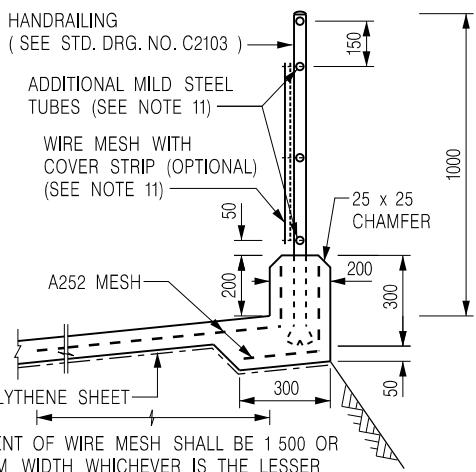
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DATE JAN 1991

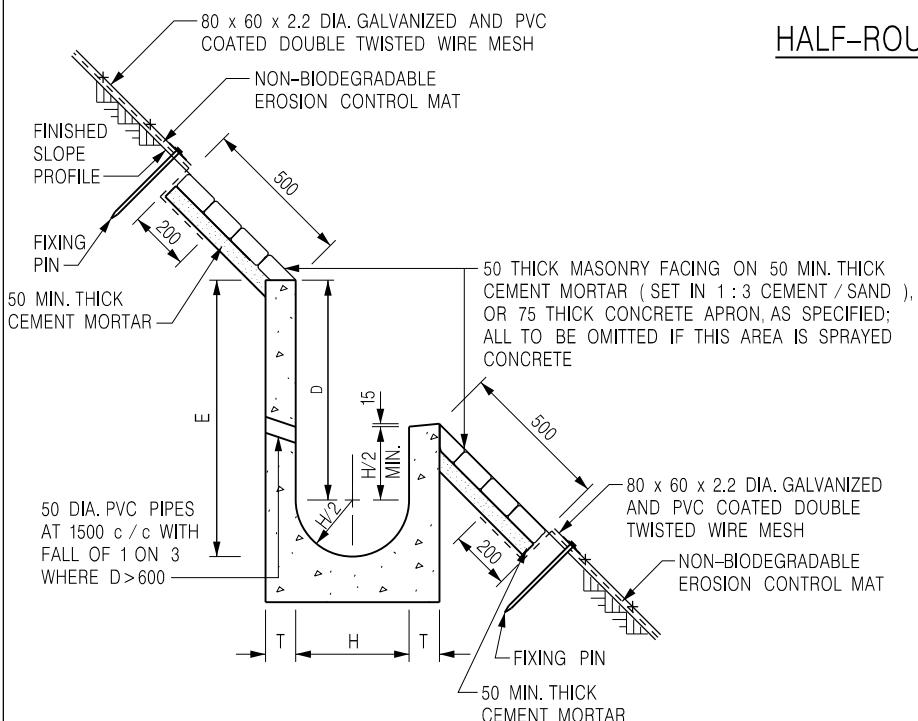
DRAWING NO.
C2406 /2A



U-CHANNELS CONSTRUCTED
ON BERM



DETAILS OF BERM
WITH HANDRAILING



U-CHANNELS NOT CONSTRUCTED
ON BERM

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

HALF-ROUND CHANNEL

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/E.
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 WIRE MESH ON BERM. (SEE STD DRG. NO. C2511/E)
11. THE WIRE MESH ON HANDRAILING IS OPTIONAL. THE COVER STRIP AND ADDITIONAL MILD STEEL TUBES ARE NEEDED ONLY IF WIRE MESH IS PROVIDED. (SEE STD. DRG. NO. C2103)

J	DETAILS OF HANDRAILING AMENDED.	Original Signed	08.2024
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
REF.	REVISION	SIGNATURE	DATE

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

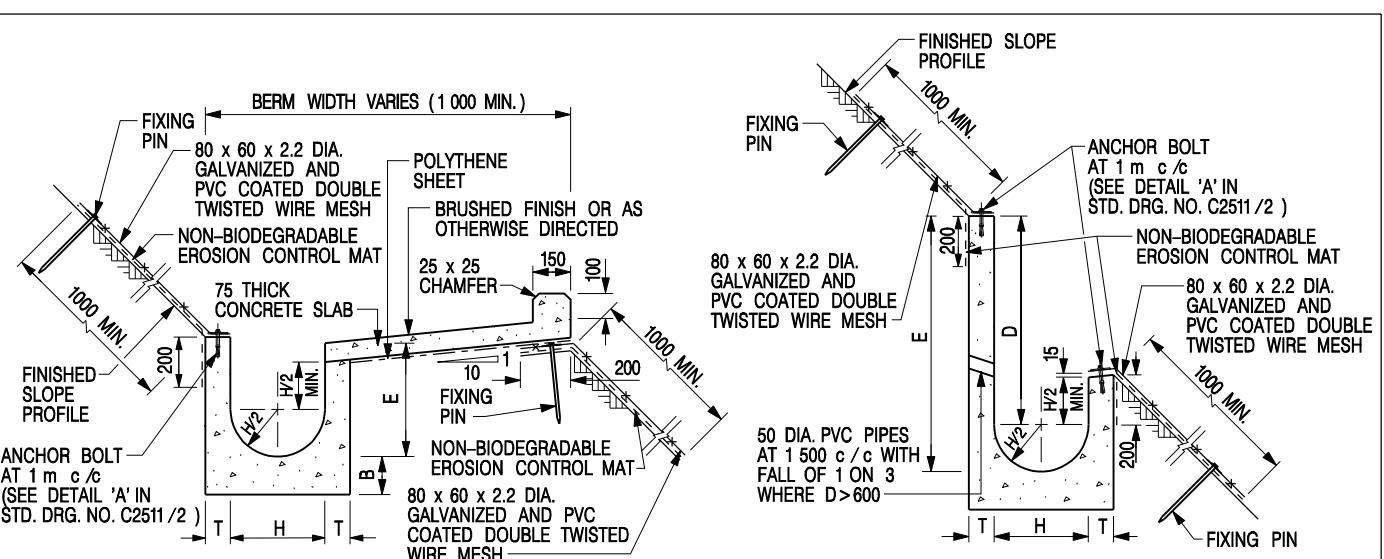


**CIVIL ENGINEERING AND
DEVELOPMENT DEPARTMENT**

SCALE 1:25

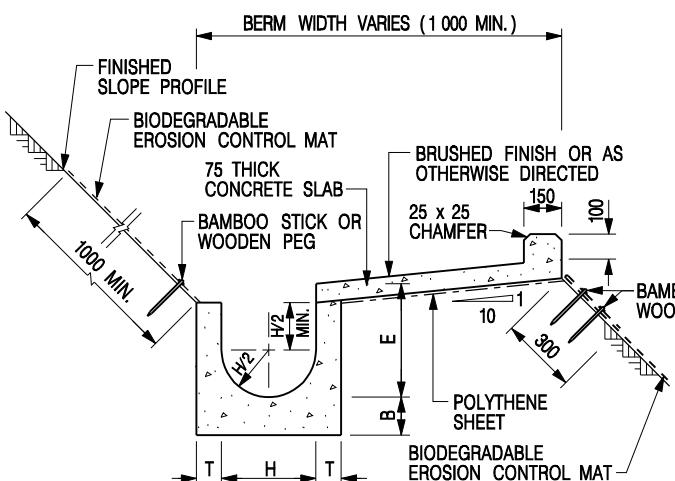
DATE JAN 1991

**DRAWING NO.
C2409J**

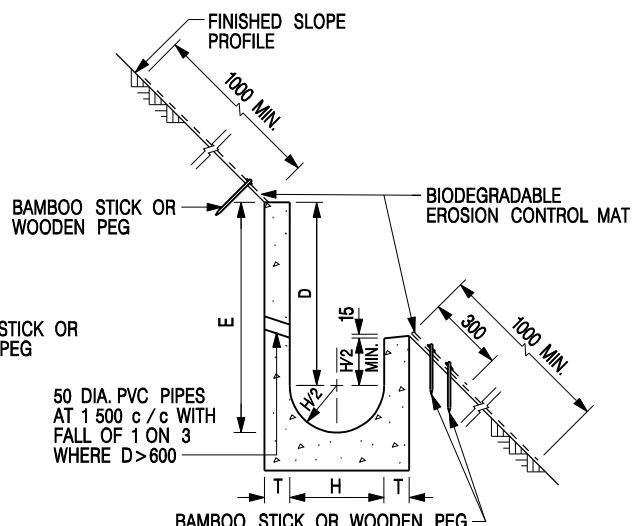


**U-CHANNELS CONSTRUCTED ON BERM
WITH NON-BIODEGRADABLE
EROSION CONTROL MAT**

**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

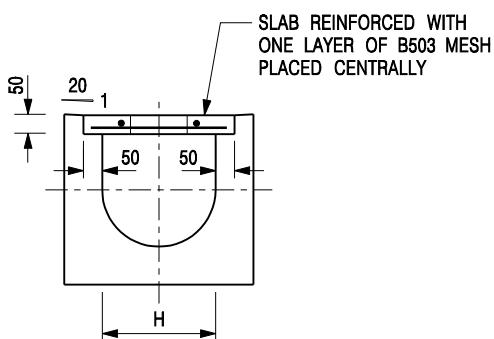
I	MINOR AMENDMENT.	Original Signed	07.2018
H	FIXING DETAILS OF BIODEGRADABLE EROSION CONTROL MAT ADDED.	Original Signed	12.2017
G	DIMENSION TABLE AMENDED.	Original Signed	01.2005
F	MINOR AMENDMENT.	Original Signed	01.2004
E	GENERAL REVISION.	Original Signed	12.2002
D	MINOR AMENDMENT.	Original Signed	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
REF.	REVISION	SIGNATURE	DATE

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

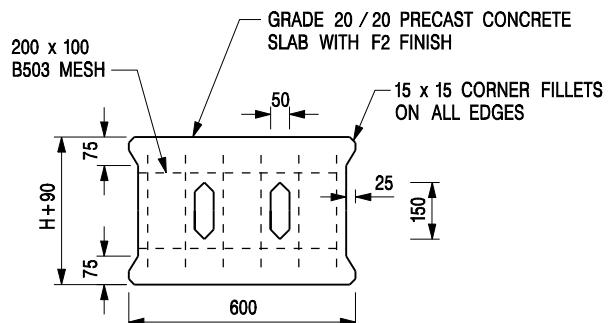


**CIVIL ENGINEERING AND
DEVELOPMENT DEPARTMENT**

SCALE	DIAGRAMMATIC	DRAWING NO.
DATE	JAN 1991	C24101



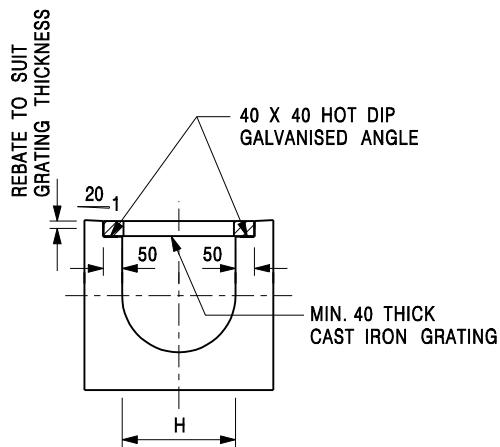
TYPICAL SECTION



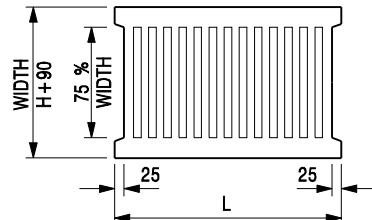
PLAN OF SLAB

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)

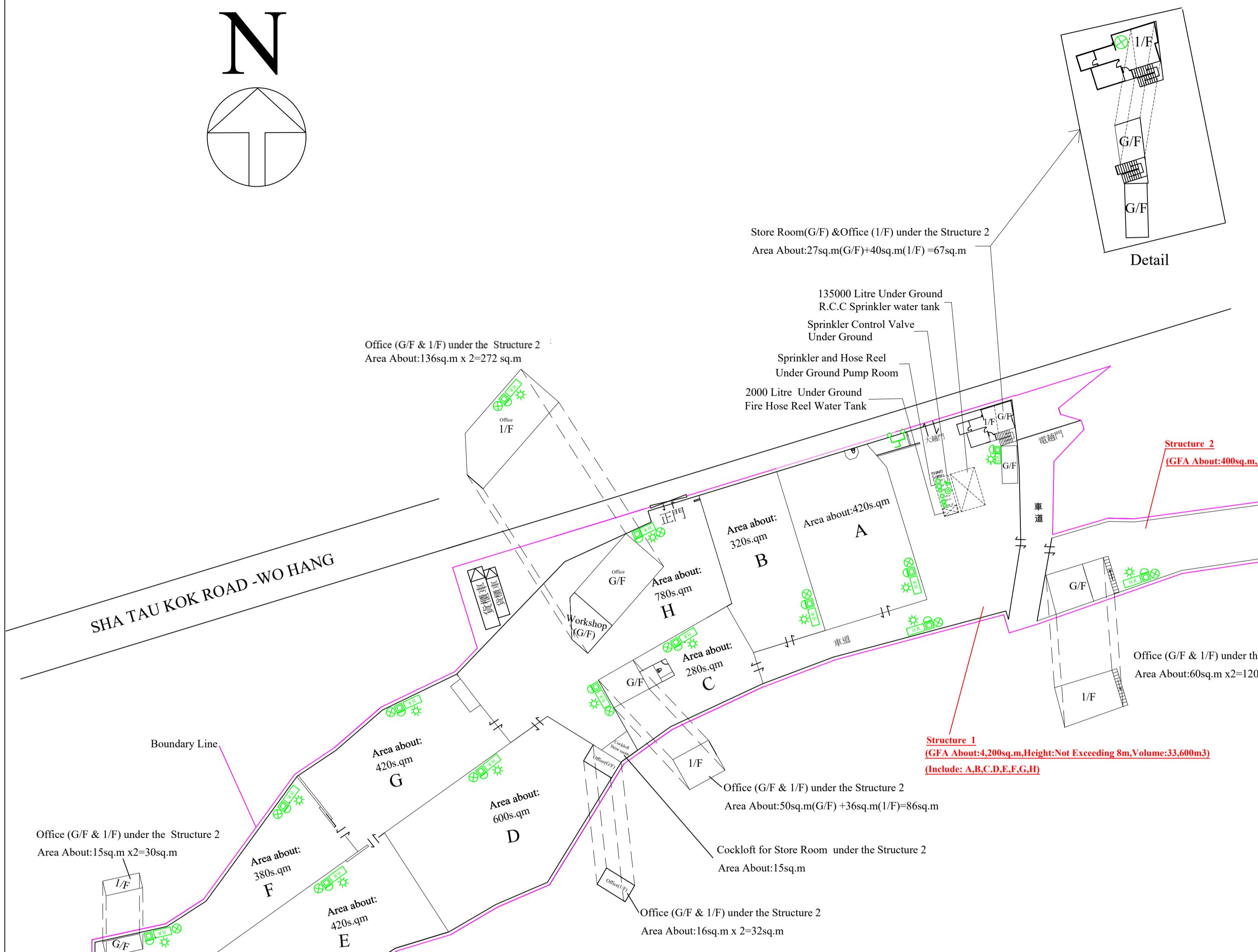
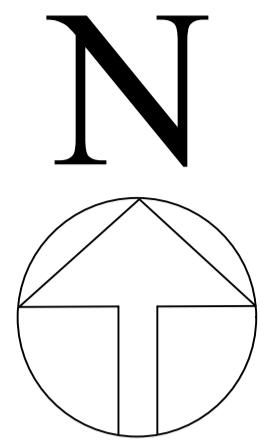
NOTES:

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.

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
REF.	REVISION	SIGNATURE	DATE

**COVER SLAB AND CAST IRON
GRATING FOR CHANNELS**





LEGEND

	Gate Valve
	Non Return Valve
	Pump Set c/w Motor
	Sprinkler Control Valve
	Sprinkler Inlet
	Fire Hose Reel Set c/w Break
	Glass and Alarm Bell & Visual Alarm Device
	JP
	SP-1,SP-2
	HR-P1,HR-P2
	4.0 kg Dry Powder type fire extinguisher
	5.0 kg CO2 type fire extinguisher
	Boundary Line

F.S.Notes:

1. Sufficient emergency lighting shall be provided throughout the entire buildings/structures in accordance with B.S.5266-1:2016 and EN 1838:2013 and FSD Circular Letter No.4/2021
2. Sufficient directional and exit sign shall be provided in accordance with B.S.5266:Part 1 and FSD circular letter 5/2008 .
3. Sufficient Portable hand-operated Approved appliances shall be provided as required by occupancy and as marked on plans.
4. An Automatic sprinkler system supplied by 135,000L sprinkler water tank and Hazard class: OH III should be provided to the structure 1 & structure 2 in accordance with BS EN 12845: 2015 and FSD circular 5/2020 . The sprinkler water tank, sprinkler pump room, sprinkler inlet, sprinkler control valve group shall be clearly marked on plans.
5. The storage configuration is ST1 & ST2.
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 height 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 I)
ST2:Post pallets in single rows,with aisles not less than 2.4m wide with reference to be section 6.3.2 of B.S 12845. Maximum storage heights shall not exceed 3.5m & Aisles between rows shall be not less than 2.4m wide as Ordinary Hazard Group 3 in accordance with LPC BS EN 12845(Storage Category:Category I)
6. A modified hose reel system supplied by a 2000 litre FS water tank shall be provided There shall be sufficient hose reels to ensure that every part of each building can be reached by a length of not more than 30m of hose reel tubing. The FS water tank, FS 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 audio warning devices to be located at each hose reel point.This actuation point should include facilities for fire pump start and audio/visual warning device initiation.
8. The Sprinkler water Tank & F.S water Tank water supply pipe should be connected to Town Main. .
9. Source of secondary power supply shall be provided.
10. Static or dynamic smoke extraction system is not provided.The openable windows of Structure"1" with aggregate area exceeding 6.25% of the floor area as marked on plans.(Detail see openable window layout plan)
11. Any intended storage or use of dangerous goods as defined in Chapter 295 of the Laws of Hong Kong should be notified to the Director of Fire Services.

**INTERCEPT FIRE & SECURITY
TECHNICIANS LTD.**

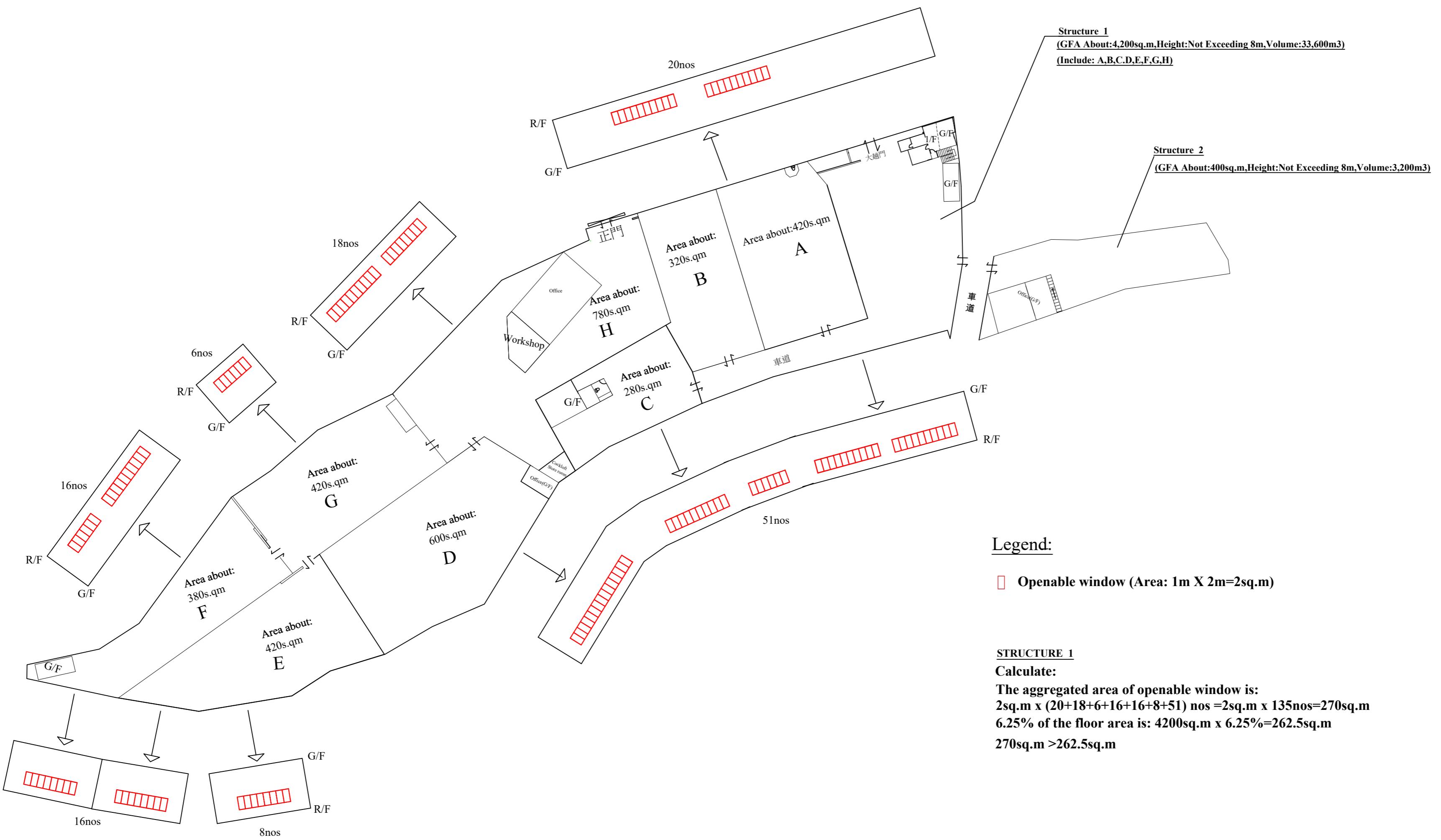
Project :

Temporary Logistics Centre for a Period of 3 Years and Filling of Land at Lots 25(Part),26(Part) &27 in D.D 38,Lots 802(Part),804(Part),806,807,808,809,811,812,813,823 S. B RP,824 S.B RP,825,826,827,828 S.B RP in D.D 46 and Adjoining Government Land,Sha Tau Kok Road-Wo Hang Section,N.T

Title :

Proposed Automatic Sprinkler and Modified Hose Reel System

Drawn By :	W.C WONG
Date :	2025-02-06
Scale :	1 : 500 @A1
Ref. No :	TPB/A/MUP/193
Revise Date:	2025-02-06



OPENABLE WINDOWS LAYOUT OF STRUCTURE 1 (Side Elevation)

**INTERCEPT FIRE & SECURITY
TECHNICIANS LTD.**

[REDACTED]

Project :

Temporary Logistics Centre for a Period of 3 Years and Filling of Land at Lots 25(Part),26(Part) &27 in D.D 38,Lots 802(Part),804(Part),806,807,808,809,811,812,813,823 S. B RP,824 S.B RP,825,826,827,828 S.B RP in D.D 46 and Adjoining Government Land,Sha Tau Kok Road-Wo Hang Section,N.T

Title :
Proposed Openable window
Layout Plan

Drawn By :	W.C WONG
Date :	2025-02-06
Scale :	1 : 500 @A2
Ref. No :	TPB/A/MUP/193
Revise Date:	2025-02-06

附件 3：落實車輛通道出入口圖片

