

Total: 12 pages

Date: 26 May 2026

TPB Ref.: A/YL-LFS/607

By Email

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

Dear Sir,

Proposed Temporary Open Storage of Construction Materials for a Period of 3 Years at Lots 2035 RP (Part), 2036 RP (Part), 2037 (Part), 2038 (Part), 2039 (Part), 2040 RP, 2042 RP (Part), 2044 RP (Part), 2048 (Part), 2049 (Part), 2050, 2051, 2052, 2054 (Part), 2055 (Part), 2058 (Part) in D.D. 129 & Adjoining Government Land, Lau Fau Shan, Yuen Long, N.T.

We are glad to submit the drainage proposal and FSI proposal herewith in support of the captioned application.

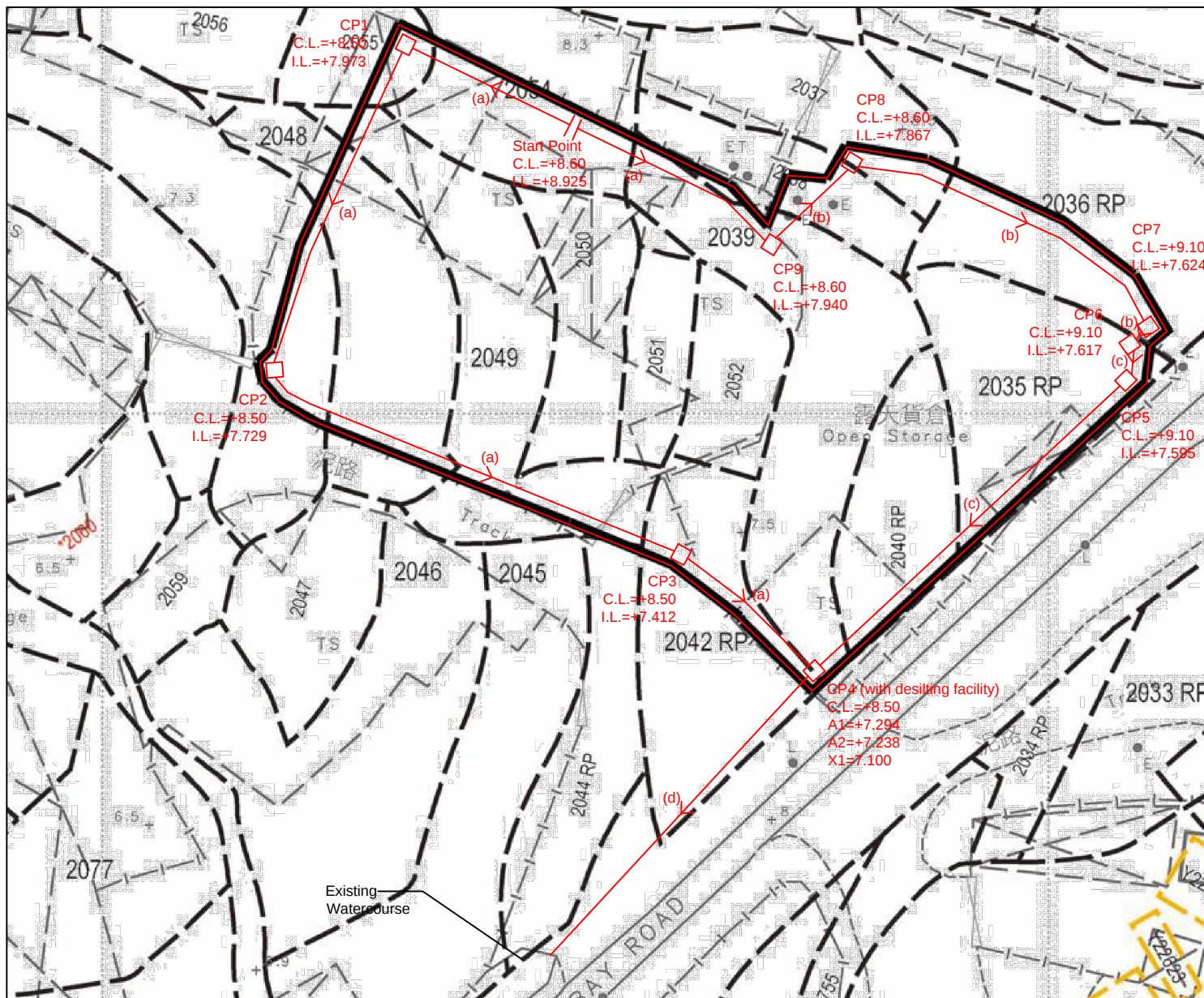
Should you have any enquiries, please feel free to contact our Mr. Patrick Tsui at [REDACTED] at your convenience.

Yours faithfully,



Patrick Tsui

c.c. Tuen Mun and Yuen Long West District Planning Office (Attn: Ms. Christina LEE) – By Email



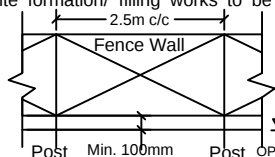
Note:

1. Catchpits (CP4) with desilting facility shall follow CEDD standard drawing No. C2406I.

2. Catchpit and UC follows Typical Details of Geotechnical Manual for Slope Fig.8.10 and Fig.8.11 respectively.

3. Fence Wall to be erected (if any) shall be Open-bottom type.

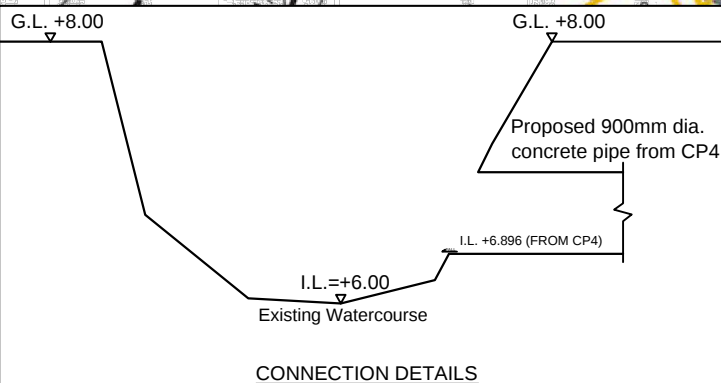
4. No site formation/ filling works to be carried out.



TYPICAL DETAIL OF
OPEN-BOTTOM TYPE FENCE WALL

LEGEND

- Proposed CatchPit
- Proposed 450UC (1:150) with Cast Iron Cover
- Proposed 525UC (1:150) with Cast Iron Cover
- Proposed 600UC (1:125) with Cast Iron Cover
- Proposed 900mm dia. concrete pipe (1:250)



CONNECTION DETAILS

正宏工程顧問公司

CHING WAN ENGINEERING CONSULTANT COMPANY

Project:

Proposed Temporary Open Storage of Construction Materials for a Period of 3 Years at Lots 2035 RP (Part), 2036 RP (Part), 2037 (Part), 2038 (Part), 2039 (Part), 2040 RP, 2042 RP (Part), 2044 RP (Part), 2048 (Part), 2049 (Part), 2050, 2051, 2052, 2054 (Part), 2055 (Part) and 2058 (Part) in D.D. 129, Lau Fau Shan, Yuen Long, New Territories (Application Number:)

Title:

Drainage Proposal - LAYOUT

D01-1

Drawn by:

DM

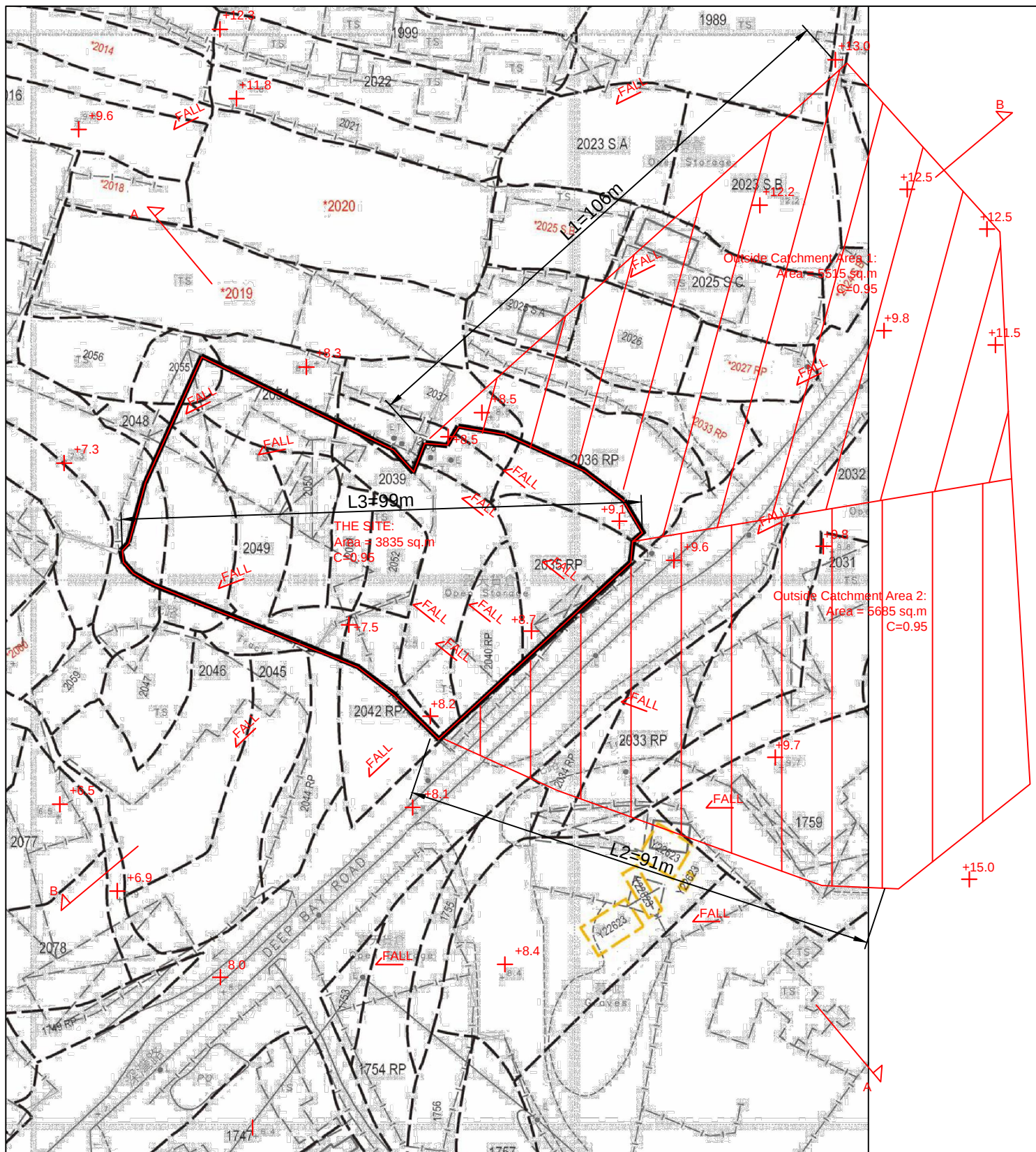
Date:

6-3-2026

Check by:

DM

Scale:



正宏工程顧問公司

CHING WAN ENGINEERING CONSULTANT COMPANY

Project:

Proposed Temporary Open Storage of Construction Materials for a Period of 3 Years at Lots 2035 RP (Part), 2036 RP (Part), 2037 (Part), 2038 (Part), 2039 (Part), 2040 RP, 2042 RP (Part), 2044 RP (Part), 2048 (Part), 2049 (Part), 2050, 2051, 2052, 2054 (Part), 2055 (Part) and 2058 (Part) in D.D. 129, Lau Fau Shan, Yuen Long, New Territories (Application Number:)

Title:

Drainage Proposal -
CATCHMENT AREA PLAN

D02

Drawn by:

DM

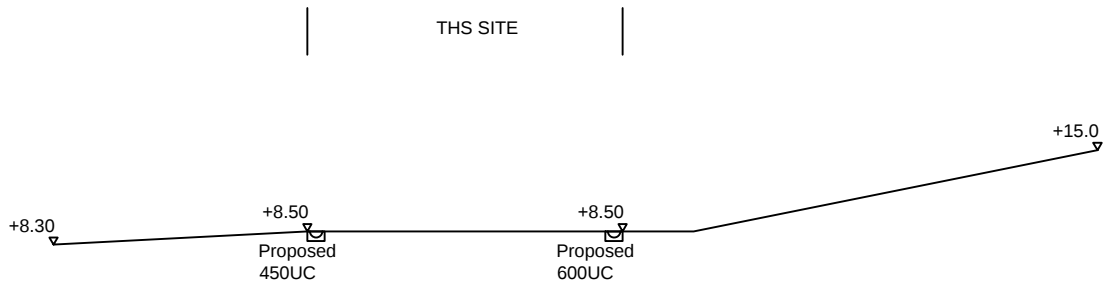
Date:

6-3-2026

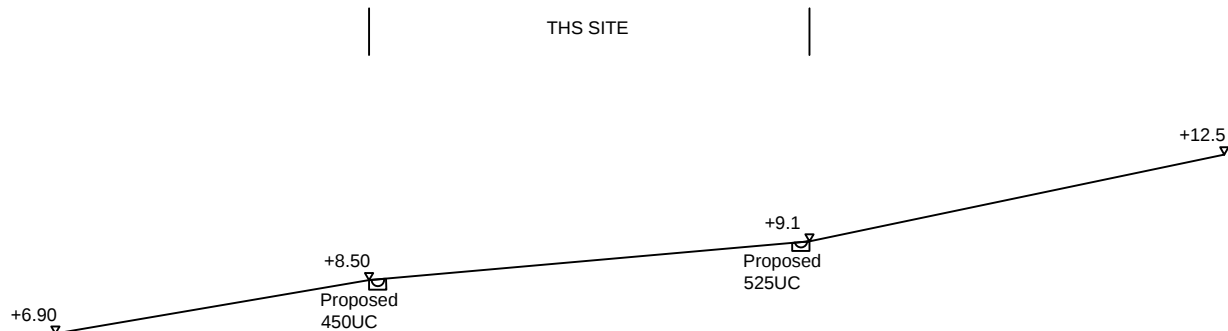
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SECTION A-A



SECTION B-B

正宏工程顧問公司

CHING WAN ENGINEERING CONSULTANT COMPANY

Title:

Drainage Proposal -
SECTIONS

D03

Drawn by:

DM

Date:

6-3-2026

Check by:

DM

Scale:

Project:

Proposed Temporary Open Storage of Construction Materais for a Period of 3 Years at Lots 2035 RP (Part), 2036 RP (Part), 2037 (Part), 2038 (Part), 2039 (Part), 2040 RP, 2042 RP (Part), 2044 RP (Part), 2048 (Part), 2049 (Part), 2050, 2051, 2052, 2054 (Part), 2055 (Part) and 2058 (Part) in D.D. 129, Lau Fau Shan, Yuen Long, New Territories (Application Number:)

Outside Catchment Area 1, Area	= 5515	m ²	(C= 0.95)	L1= 106	m
Outside Catchment Area 2, Area	= 5685	m ²	(C= 0.95)	L2= 91	m
THE SITE, Area	= 3835	m ²	(C= 0.95)	L3= 99	m

Calculation of Design Runoff of the Proposed Development,

For the design runoff from Outside Catchment Area 1

$$\Sigma Q = \Sigma 0.278 C i A$$

$$\begin{aligned} A &= 5515 \text{ m}^2 \\ &= 5515 \\ &= 0.005515 \text{ km}^2 \end{aligned}$$

$$\begin{aligned} t &= 0.14465 L1 / H^{0.2} A^{0.1} \\ &= 0.14465 * 106 / 1^{0.2} * 5515^{0.1} \\ &= 6.478 \text{ min} \end{aligned}$$

$$\begin{aligned} i &= 1.16 * a / (t+b)^c \quad (50 \text{ yrs return period, Table 3a, Corrigendum 2024, SDM) and (16\% increase due to climate change)} \\ &= 1.16 * 505.5 / (6.478 + 3.29)^{0.355} \\ &= 261.1 \text{ mm/hr} \end{aligned}$$

$$\begin{aligned} \text{Therefore, } Q1 &= 0.278 * 0.95 * 261.1 * 0.005515 \\ &= 0.3803 \text{ m}^3/\text{sec} \\ &= \mathbf{22817} \text{ lit/min} \end{aligned}$$

Calculation of Design Runoff of the Proposed Development,

For the design runoff from Outside Catchment Area 3

$$\Sigma Q = \Sigma 0.278 C i A$$

$$\begin{aligned} A &= 5685 \text{ m}^2 \\ &= 5685 \\ &= 0.005685 \text{ km}^2 \end{aligned}$$

$$\begin{aligned} t &= 0.14465 L2 / H^{0.2} A^{0.1} \\ &= 0.14465 * 91 / 1^{0.2} * 5685^{0.1} \\ &= 5.545 \text{ min} \end{aligned}$$

$$\begin{aligned} i &= 1.16 * a / (t+b)^c \quad (50 \text{ yrs return period, Table 3a, Corrigendum 2024, SDM) and (16\% increase due to climate change)} \\ &= 1.16 * 505.5 / (5.545 + 3.29)^{0.355} \\ &= 270.6 \text{ mm/hr} \end{aligned}$$

$$\begin{aligned} \text{Therefore, } Q2 &= 0.278 * 0.95 * 270.6 * 0.005685 \\ &= 0.4062 \text{ m}^3/\text{sec} \\ &= \mathbf{24374} \text{ lit/min} \end{aligned}$$

For the design runoff from The Site

$$\Sigma Q = \Sigma 0.278 C i A$$

$$\begin{aligned} A &= 3835 \text{ m}^2 \\ &= 3835 \\ &= 0.003835 \text{ km}^2 \end{aligned}$$

$$\begin{aligned} t &= 0.14465 L3 / H^{0.2} A^{0.1} \\ &= 0.14465 * 99 / 1^{0.2} * 3835^{0.1} \\ &= 6.27 \text{ min} \end{aligned}$$

$$\begin{aligned} i &= 1.16 * a / (t+b)^c \quad (50 \text{ yrs return period, Table 3a, Corrigendum 2024, SDM) and (16\% increase due to climate change)} \\ &= 1.16 * 505.5 / (6.27 + 3.29)^{0.355} \\ &= 263.1 \text{ mm/hr} \end{aligned}$$

$$\begin{aligned} \text{Therefore, } Q3 &= 0.278 * 0.95 * 263.1 * 0.003835 \\ &= 0.2664 \text{ m}^3/\text{sec} \\ &= \mathbf{15986} \text{ lit/min} \end{aligned}$$

For the design of drains from CP9 to CP6, Q1

$$\begin{aligned} Q &= Q1 \\ &= \mathbf{22817} \text{ lit/min} \end{aligned}$$

Provid 525UC(1:150)

For the design of drains from CP6 to CP4, Q1+Q2

$$\begin{aligned} Q &= Q1 + Q2 \\ &= 22817 + 24374 \\ &= \mathbf{47191} \text{ lit/min} \end{aligned}$$

Provid 600UC(1:125)

For the design of drains from Start Point to CP9 and Start Point to CP4 via CP1, Q3

$$\begin{aligned} Q &= Q3 \\ &= \mathbf{15986} \text{ lit/min} \end{aligned}$$

Provid 450UC(1:150)

For the design of drains outfall from the site, All Runoff (Q from Portion 2 + Portion 3)

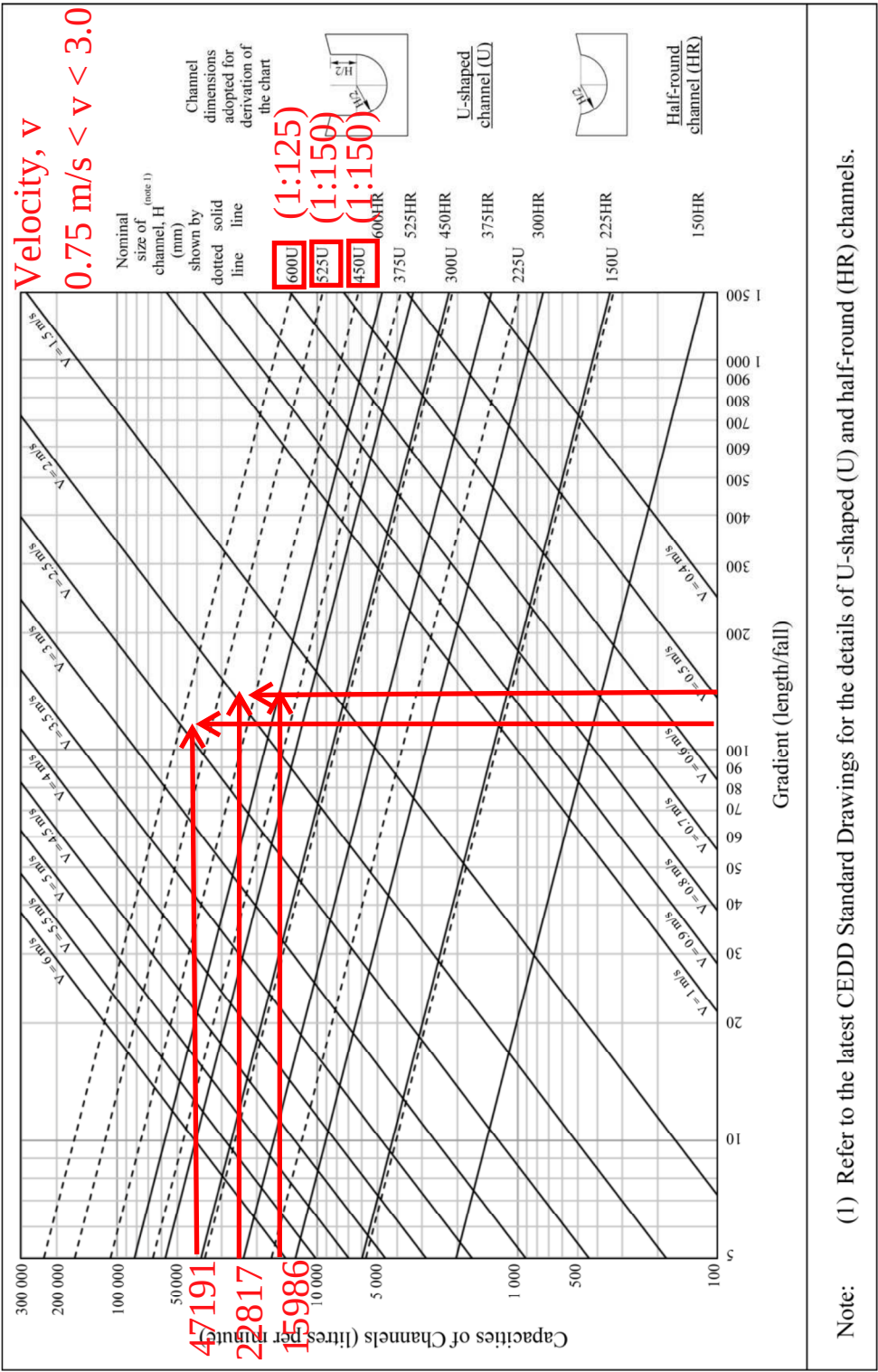
$$\begin{aligned} Q &= Q1 + Q2 + Q3 \\ &= 22817 + 24374 + 15986 \\ &= \mathbf{63177} \text{ lit/min} \end{aligned}$$

Provid 900mm dia. concrete pipe (1:250)

GEO Technical Guidance Note No. 43 (TGN 43)
Guidelines on Hydraulic Design of U-shaped and Half-round Channels on Slopes

Issue No.: 1	Revision: -	Date: 05.06.2014	Page: 3 of 3
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Figure 1 - Chart for the rapid design of U-shaped and half-round channels up to 600 mm



Check 900mm dia. Pipes by Colebrook-White Equation

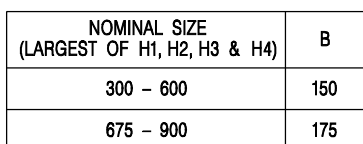
$$V = -\sqrt{(8gDs)} \log\left(\frac{ks}{3.7D} + \frac{2.51v}{D\sqrt{(2gDs)}}\right)$$

where :

V	=		mean velocity (m/s)
g	=	9.81	m/s ² gravitational acceleration (m/s ²)
D	=	0.9	m internal pipe diameter (m)
ks	=	0.00006	m hydraulic pipeline roughness (m) (Table14, from DSD SDM 2018, concrete pipe)
v	=	1.14E-06	m ² /s kinematic viscosity of fluid (m ² /s)
s	=	0.004	hydraulic gradient (1: 250)

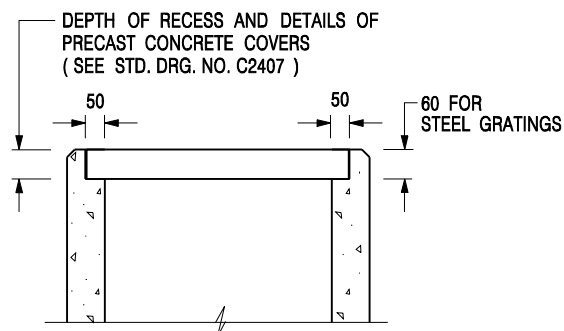
Therefore, design V of pipe capacity = 2.40 m/s

Q= 0.8VA	(0.8 factor for sedimentation)
= 1.224	m ³ /s
= 73416	lit/min
> 63177	lit/min Ok



- 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**

SCALE 1 : 20

DATE JAN 1991

DRAWING NO.

C2406 /2A

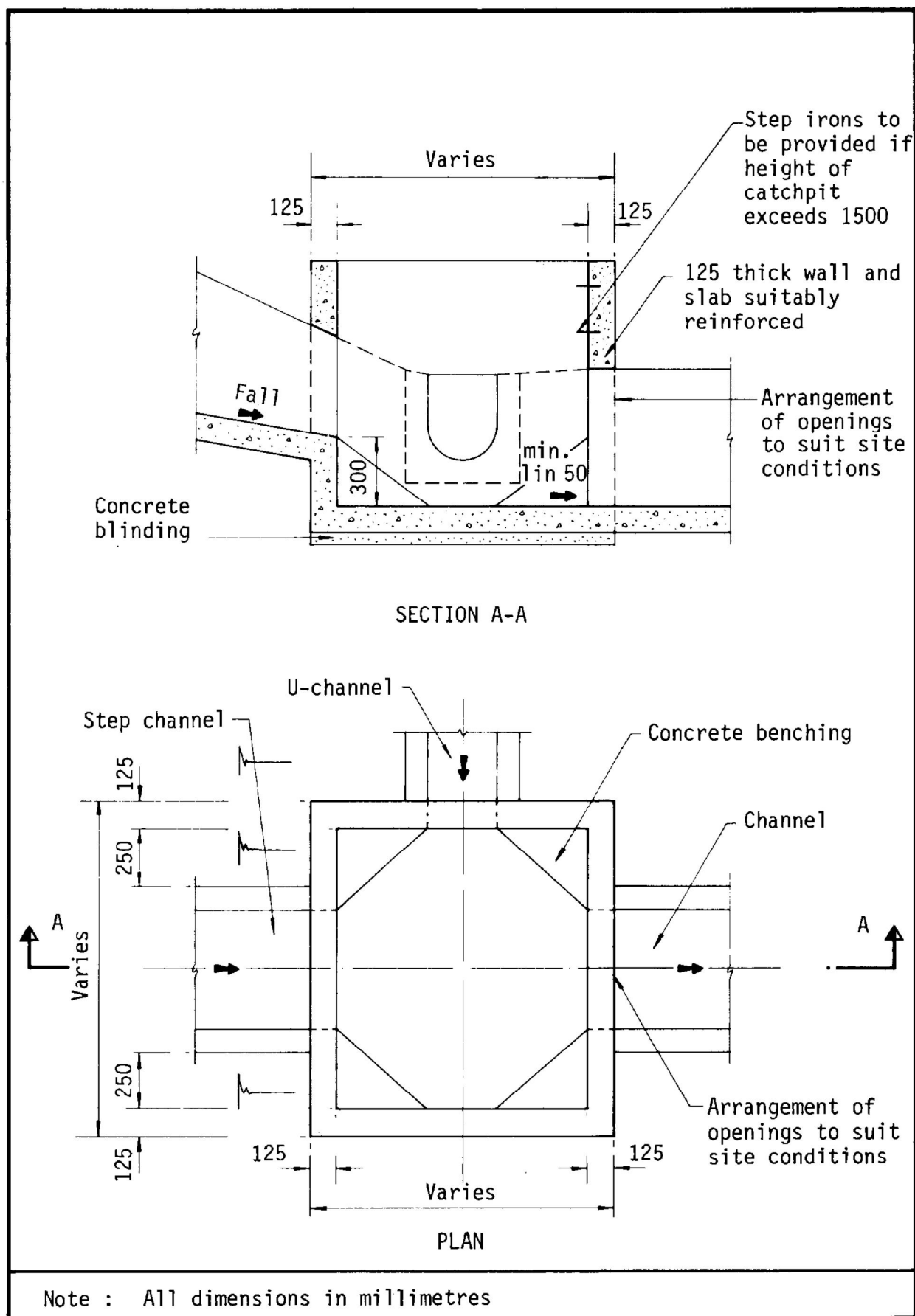
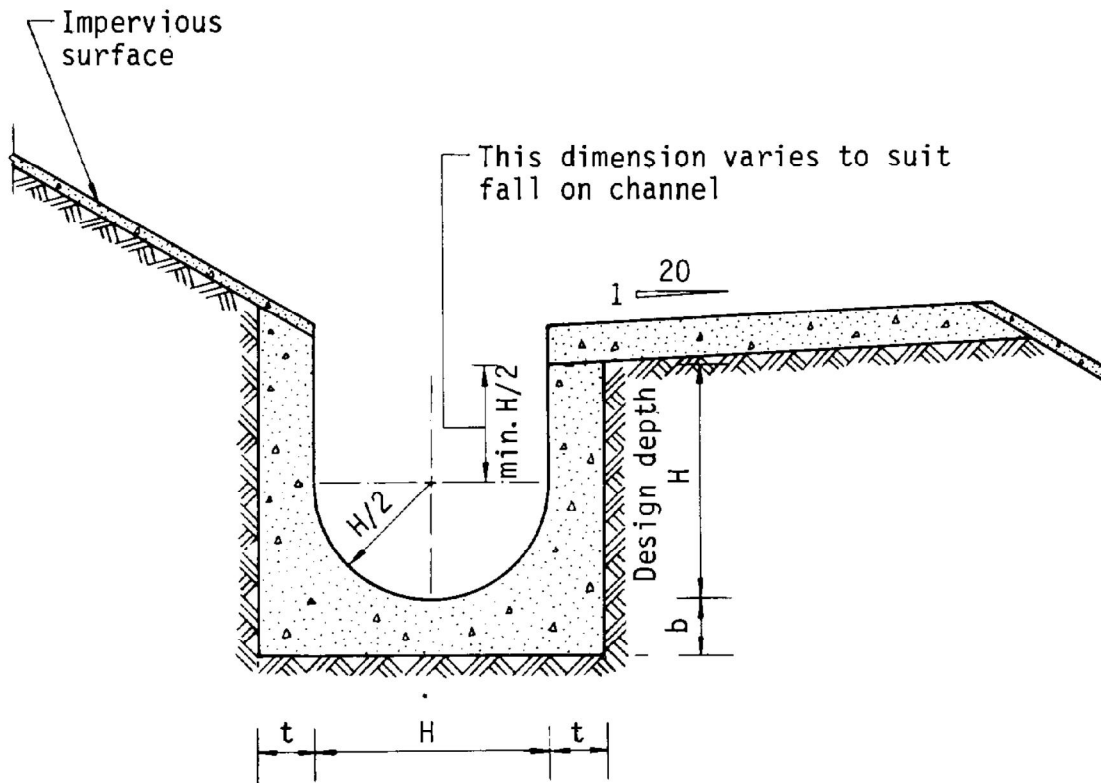


Figure 8.10 - Typical Details of Catchpits



Dimensions of U - channel

Nominal size of channel H (mm)	Thickness t (mm)	Thickness b (mm)
225 to 600	150	150
675 to 1200	175	225

Figure 8.11 - Typical U-channel Details

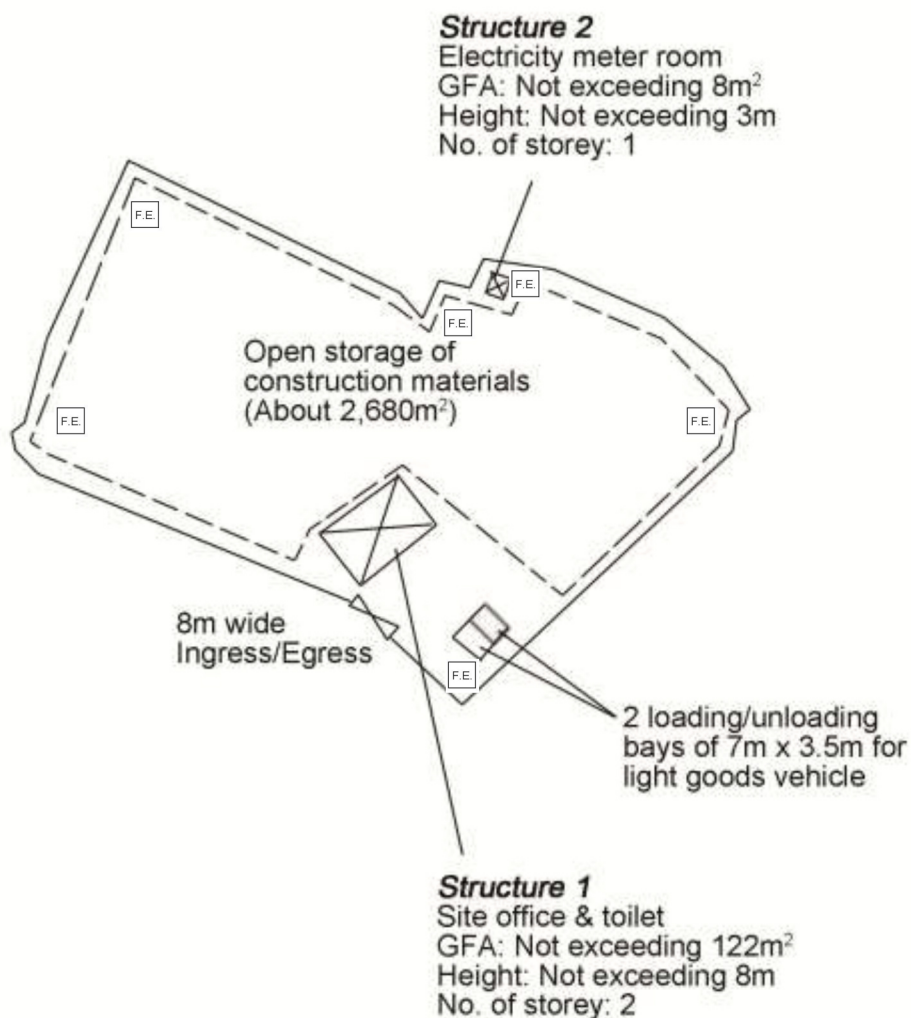
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Structure 1
G/F



Structure 1
1/F



F.S.NOTES:

- 1 THE STAND-ALONE FIRE DETECTOR SHALL BE PROVIDED IN ACCORDANCE WITH THE "STAND-ALONE FIRE DETECTOR GENERAL GUIDELINES ON PURCHASE, INSTALLATION & MAINTENANCE [SEP 2021]"
- 2 PORTABLE FIRE FIGHTING APPLIANCES SHALL BE PROVIDED AT POSITIONS AS INDICATED ON LAYOUT PLAN. IN ACCORDING TO CODES OF PRACTICE FOR MINIMUM FIRE SERVICES INSTALLATIONS AND EQUIPMENT.

Project 項目名稱:

Proposed Temporary Open Storage of Construction Materials for a Period of 3 Years at Lots 2035 RP (Part), 2036 RP (Part), 2037 (Part), 2038 (Part), 2039 (Part), 2040 RP, 2042 RP (Part), 2044 RP (Part), 2048 (Part), 2049 (Part), 2050, 2051, 2052, 2054 (Part), 2055 (Part), 2058 (Part) in D.D. 129 & Adjoining Government Land, Lau Fau Shan, Yuen Long, N.T.

Drawing Title 圖目:

Fire Service Installations Proposal

Drawing No. 圖號:

Figure 1

Remarks 備註:

 5kg carbon dioxide fire extinguisher

★ Stand alone battery type smoke detector

Scale 比例:

1:1000