

## **LIST OF APPENDICES**

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## **Appendix I**

### Details of the Original Premises

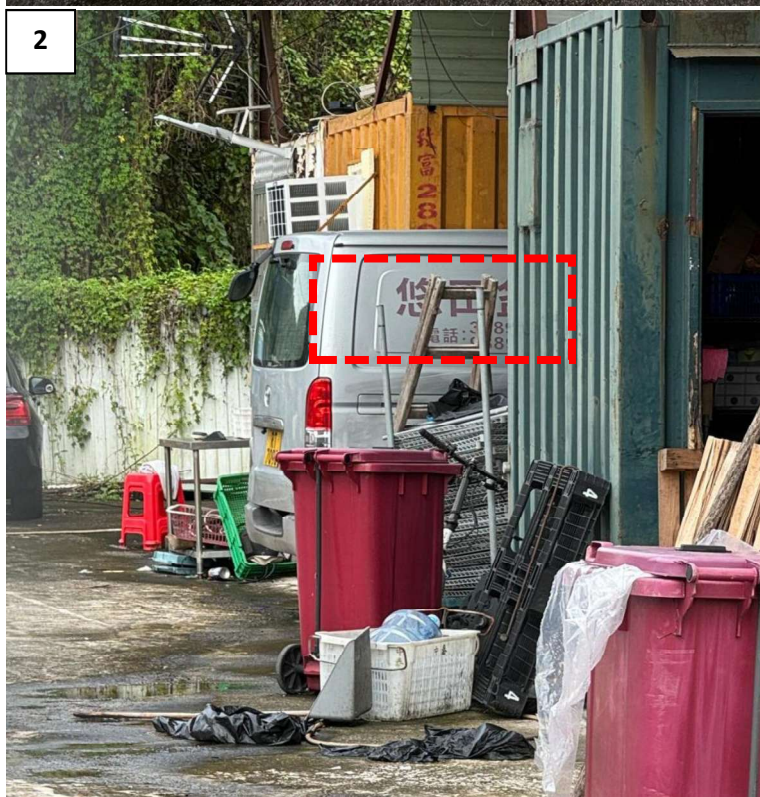




1



2



Letter from the Lands Department dated 15.9.2023

電話 Tel: 3690 8806  
圖文傳真 Fax: 3547 1578  
電郵地址 Email: leylp4\_2@landsd.gov.hk  
本署檔號 Our Ref.: (3) in LD YLPT/YRN/21/25/2019Y  
來函檔號 Your Ref.:

覆函請註明本署檔號  
Please quote our reference in your reply



地政總署  
土地徵用組  
元朗工程項目小組  
'UEN LONG PROJECTS TEAM  
ACQUISITION SECTION  
LANDS DEPARTMENT

我們矢志努力不懈，提供盡善盡美的土地行政服務。  
We strive to achieve excellence in land administration.

新界屯門海榮路22號屯門中央廣場18樓1801-1807室  
Units 1801-1807, 18/F., Tuen Mun Central Square,  
22 Hoi Wing Road, Tuen Mun, New Territories.

網址 Website: www.landso.gov.hk

掛號郵遞

悠田盆菜有限公司  
(經辦人: 黃先生 / 陳先生)

黃先生 / 陳先生:

工務計劃項目第B874CL號  
元朗十八鄉公營房屋發展之工地平整和基礎設施工程  
丈量約份第116約地段第5189號  
露天／戶外業務(悠田盆菜)

貴公司在上址經營的露天／戶外業務，因上述工務計劃影響而須清拆。根據現行政策，在上址經營露天／戶外業務的經營者，如經調查確定符合資格後，將可獲發特惠津貼。其他未符合資格的人士，則不會獲發任何特惠津貼。

故現請貴公司於2023年10月6日或之前向本署提供下列文件的副本，以便評核貴公司是否符合資格申領特惠津貼。

- (1) (a) 經營人之香港身份證 (b) 合夥人之香港身份證  
(c) 香港公司註冊證書
- (2) 有關業務在清拆前登記日(即2023年1月6日)前2年的營運單據：
  - (a) 報稅單或繳稅單 (b) 營業損益表
  - (c) 火險保單單據 (d) 僱員保險單據
  - (e) 器材保養單據 (f) 商業登記證
  - (g) 供電單據 (h) 電話單據
  - (i) 供水單據 (j) 資訊服務單據
- (3) 其他有效證明文件

本署將於稍後時間再與你聯絡以便查閱上述文件的正本。如有需要，本署可能要求貴公司提供一切其他所需資料及文件。

如貴公司對此事有任何查詢，請於辦公時間內致電 [REDACTED] 與本信代行人聯絡。

地政總署  
總產業測量師(土地徵用)

(鄧子豪  代行)

經理/ 地政總署清拆(二)辦事處  
[REDACTED]

傳真: [REDACTED]

2023 年 9 月 15 日

## **Appendix II**

### Details of alternative sites for relocation



## Appendix II – Details of alternative sites for relocation

| Alternative Sites/<br>Application Site     | Site 1                                                                                                                                                                       | Site 2                                                                                                                                                                                      | Site 3                                                                                                                                                                                                       | Site 4                                                                                                                                                                                                                   | Site 5                                                                                                                                                                                                                                  | Application Site                                                                                                                                                               |
|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Location</b>                            | Various Lots in D.D. 103,<br>Kam Tin, Yuen Long,<br>New Territories                                                                                                          | Various Lots in D.D. 124,<br>Lam Tei, Tuen Mun,<br>New Territories                                                                                                                          | Various Lots in D.D. 104,<br>Ngau Tam Mei, Yuen Long,<br>New Territories                                                                                                                                     | Various Lots in D.D. 106,<br>Kam Tin, Yuen Long,<br>New Territories                                                                                                                                                      | Various Lots in D.D. 122,<br>Ping Shan, Yuen Long,<br>New Territories                                                                                                                                                                   | Lot 1439 (Part) in D.D. 118,<br>Tai Tong, Yuen Long,<br>New Territories                                                                                                        |
| <b>Site Area</b>                           | 540 m <sup>2</sup> (about)                                                                                                                                                   | 2,753 m <sup>2</sup> (about)                                                                                                                                                                | 530 m <sup>2</sup> (about)                                                                                                                                                                                   | 2,230 m <sup>2</sup> (about)                                                                                                                                                                                             | 2,815 m <sup>2</sup> (about)                                                                                                                                                                                                            | 476 m <sup>2</sup> (about)                                                                                                                                                     |
| <b>Accessibility</b>                       | Accessible from Kam Tin<br>Road via a local access                                                                                                                           | Accessible from Tin Ha Road<br>via a local access                                                                                                                                           | Accessible from Ngau Tam Mei<br>Road via a local access                                                                                                                                                      | Accessible from Kam Sheung<br>Road via a local access                                                                                                                                                                    | Accessible from Long Ping Road<br>via a local access                                                                                                                                                                                    | Accessible from Tai Shu Ha<br>Road West via a local access                                                                                                                     |
| <b>Distance from<br/>Original Premises</b> | 5.8 km (about)                                                                                                                                                               | 9 km (about)                                                                                                                                                                                | 9 km (about)                                                                                                                                                                                                 | 6.9 km (about)                                                                                                                                                                                                           | 6.1 km (about)                                                                                                                                                                                                                          | 2.9 km (about)                                                                                                                                                                 |
| <b>Outline Zoning Plan</b>                 | Approved Kam Tin South OZP<br>No. S/YL-KTS/15                                                                                                                                | Draft Hung Shui Kiu OZP<br>No. S/HSK/3                                                                                                                                                      | Approved Ngau Tam Mei OZP<br>No. S/YL-NTM/16                                                                                                                                                                 | Approved Kam Tin South OZP<br>No. S/YL-KTS/15                                                                                                                                                                            | Approved Ping Shan OZP No.<br>S/YL-PS/22                                                                                                                                                                                                | Approved Tai Tong OZP No.<br>S/YL-TT/20                                                                                                                                        |
| <b>Zoning</b>                              | "Agriculture"                                                                                                                                                                | "Village Type Development"                                                                                                                                                                  | "Green Belt"                                                                                                                                                                                                 | "Agriculture"                                                                                                                                                                                                            | "Conservation Area"                                                                                                                                                                                                                     | "Agriculture"                                                                                                                                                                  |
| <b>Existing Condition</b>                  | Vacant and covered with<br>vegetation                                                                                                                                        | Hard paved and occupied by<br>temporary structures                                                                                                                                          | Hard paved and occupied by<br>temporary structures                                                                                                                                                           | Vacant and covered with<br>vegetation                                                                                                                                                                                    | Woodland and partly vacant                                                                                                                                                                                                              | Vacant and generally flat                                                                                                                                                      |
| <b>Surrounding Area</b>                    | Surrounded by open storage,<br>some GIC uses, woodland<br>and residential structures                                                                                         | Surrounded by warehouse,<br>open storage, workshop,<br>logistic centre and residential<br>use                                                                                               | Surrounded by greenhouse and<br>agricultural use                                                                                                                                                             | Surrounded by open storage,<br>some GIC uses, woodland and<br>residential use                                                                                                                                            | Surrounded by woodland and<br>graves                                                                                                                                                                                                    | Surrounded by temporary<br>structures for brownfield<br>operations and residential<br>dwellings                                                                                |
| <b>Suitability for<br/>Relocation</b>      | <u>Not suitable</u> for relocation:<br>- in close proximity to<br>residential<br>developments<br>- tree felling is required<br>- not compatible with the<br>surrounding area | <u>Not suitable</u> for relocation:<br>- 144% larger than the<br>original premises<br>- tenancy for portion of<br>the site is not feasible<br>- not compatible with the<br>surrounding area | <u>Not suitable</u> for relocation:<br>- active agricultural<br>activities in the vicinity<br>- tree felling is required<br>within the "Green Belt"<br>zone<br>- not compatible with the<br>surrounding area | <u>Not suitable</u> for relocation:<br>- 98% larger than the<br>original premises<br>- tenancy for portion of the<br>site is not feasible<br>- tree felling is required<br>- not compatible with the<br>surrounding area | <u>Not suitable</u> for relocation:<br>- 150% larger than the<br>original premises<br>- tenancy for portion of the<br>site is not feasible<br>- not compatible with the<br>surrounding area<br>- within the "Conservation<br>Area" zone | <u>Comparatively Suitable</u> for<br>relocation:<br>- flat and vacant<br>- easily accessible<br>- no agricultural activity<br>- in close proximity to the<br>original premises |

### **Appendix III**

#### **Fire service installations proposal**

#### DEVELOPMENT PARAMETERS

|                       |                      |         |
|-----------------------|----------------------|---------|
| APPLICATION SITE AREA | : 476 m <sup>2</sup> | (ABOUT) |
| COVERED AREA          | : 228 m <sup>2</sup> | (ABOUT) |
| UNCOVERED AREA        | : 248 m <sup>2</sup> | (ABOUT) |
| PLOT RATIO            | : 0.48               | (ABOUT) |
| SITE COVERAGE         | : 48 %               | (ABOUT) |
| NO. OF STRUCTURE      | : 1                  |         |
| DOMESTIC GFA          | : NOT APPLICABLE     |         |
| NON-DOMESTIC GFA      | : 228 m <sup>2</sup> | (ABOUT) |
| TOTAL GFA             | : 228 m <sup>2</sup> | (ABOUT) |
| BUILDING HEIGHT       | : 8 m                | (ABOUT) |
| NO. OF STOREY         | : 1                  |         |

#### PARKING AND LOADING / UNLOADING (L/UL) PROVISIONS

|                                           |                       |
|-------------------------------------------|-----------------------|
| NO. OF PRIVATE CAR PARKING SPACE          | : 1                   |
| DIMENSIONS OF PARKING SPACE               | : 5 m (L) x 2.5 m (W) |
| NO. OF L/UL SPACE FOR LIGHT GOODS VEHICLE | : 1                   |
| DIMENSIONS OF L/UL SPACE                  | : 7 m (L) x 3.5 m (W) |

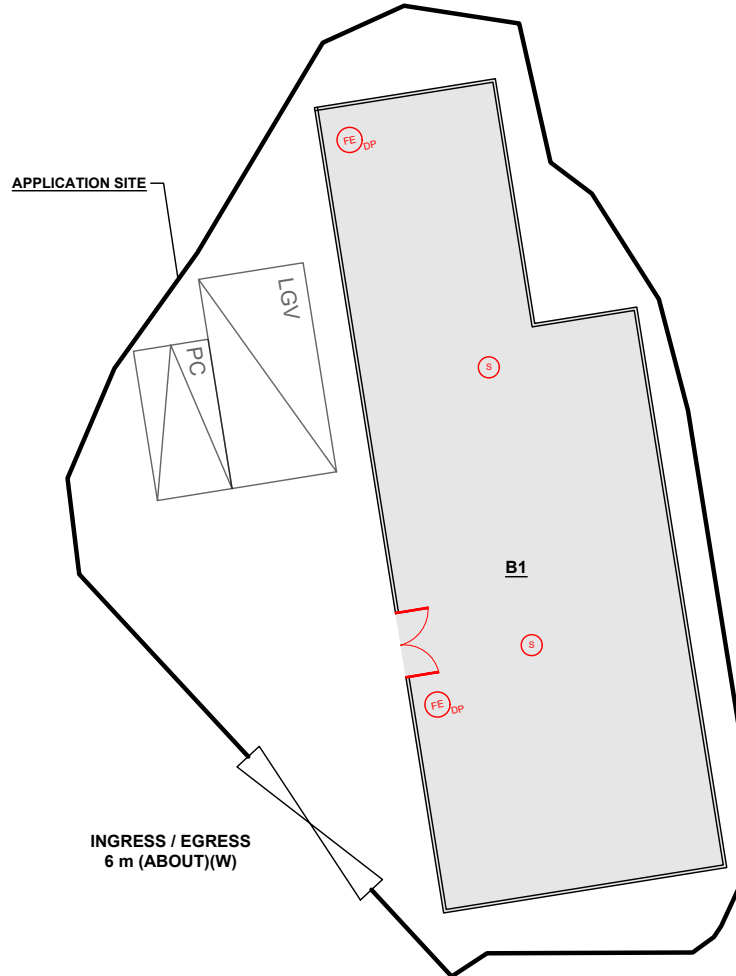
#### FIRE SERVICE INSTALLATIONS

-  STAND-ALONE BATTERY TYPE FIRE DETECTOR
-  4 KG DRY POWDER TYPE FIRE EXTINGUISHER

#### FS NOTES:

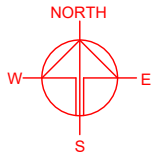
- SUFFICIENT STAND-ALONE FIRE DETECTOR SHALL BE PROVIDED THROUGHOUT THE ENTIRE BUILDING IN ACCORDANCE WITH "STAND-ALONE FIRE DETECTOR GENERAL GUIDELINES ON PURCHASE, INSTALLATION & MAINTENANCE [SEP 2021]".
- IN RELATION TO 1) ABOVE, WHERE TWO OR MORE STAND-ALONE FIRE DETECTORS ARE INSTALLED IN AN ENCLOSED STRUCTURE, ALL STAND-ALONE DETECTORS SHALL BE INTERCONNECTED (EITHER WIRED OR WIRELESSLY) SUCH THAT WHEN ONE OF THE STAND-ALONE FIRE DETECTOR IS TRIGGERED, ALL CONNECTED STAND-ALONE FIRE DETECTORS SHALL SOUND AN ALARM SIMULTANEOUSLY.
- PORTABLE HAND-OPERATED APPROVED APPLIANCE SHALL BE PROVIDED AS REQUIRED BY OCCUPANCY.
- ACCESS IS PROVIDED FOR EMERGENCY VEHICLE TO REACH 30m OF ALL PART OF STRUCTURES.

| STRUCTURE | USE                                            | COVERED AREA               | GFA                        | BUILDING HEIGHT       |
|-----------|------------------------------------------------|----------------------------|----------------------------|-----------------------|
| B1        | WAREHOUSE (EXCL. D.G.G), SITE OFFICE, WASHROOM | 228 m <sup>2</sup> (ABOUT) | 228 m <sup>2</sup> (ABOUT) | 8 m (ABOUT)(1-STOREY) |
| TOTAL     |                                                | 228 m <sup>2</sup> (ABOUT) | 228 m <sup>2</sup> (ABOUT) |                       |



#### LEGEND

-  APPLICATION SITE
-  STRUCTURE
-  PARKING SPACE (PC)
-  L/UL SPACE (LGV)
-  INGRESS / EGRESS



PLANNING CONSULTANT



PROJECT

PROPOSED TEMPORARY WAREHOUSE (EXCLUDING DANGEROUS GOODS GODOWN) WITH ANCILLARY FACILITIES AND ASSOCIATED FILLING OF LAND FOR A PERIOD OF 3 YEARS

SITE LOCATION

LOT 1439 (PART) IN D.D. 118, TAI TONG, YUEN LONG, NEW TERRITORIES

SCALE

1 : 250 @ A4

|             |           |
|-------------|-----------|
| DRAWN BY    | DATE      |
| MN          | 20.7.2026 |
| REVISED BY  | DATE      |
| APPROVED BY | DATE      |

DWG. TITLE

FSIs PROPOSAL

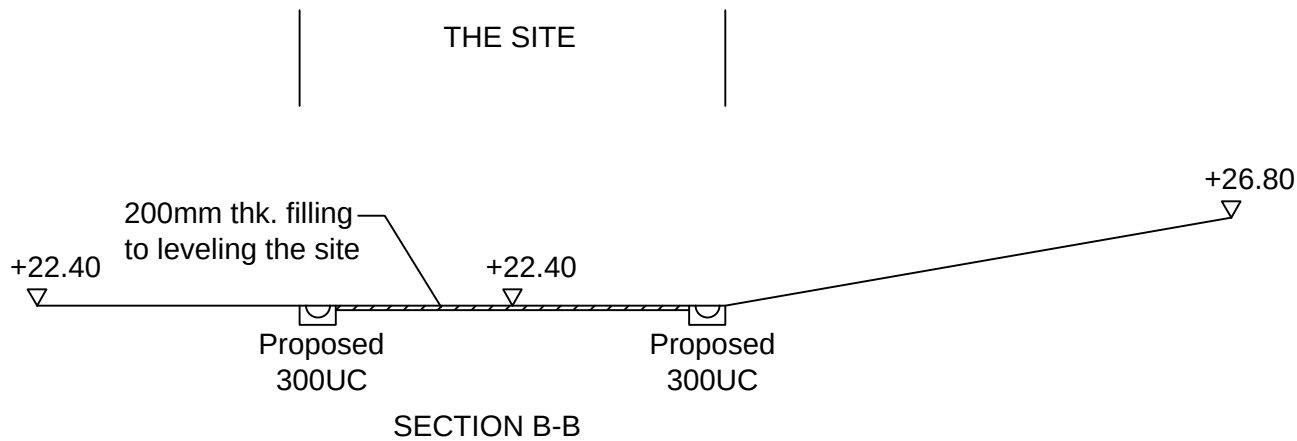
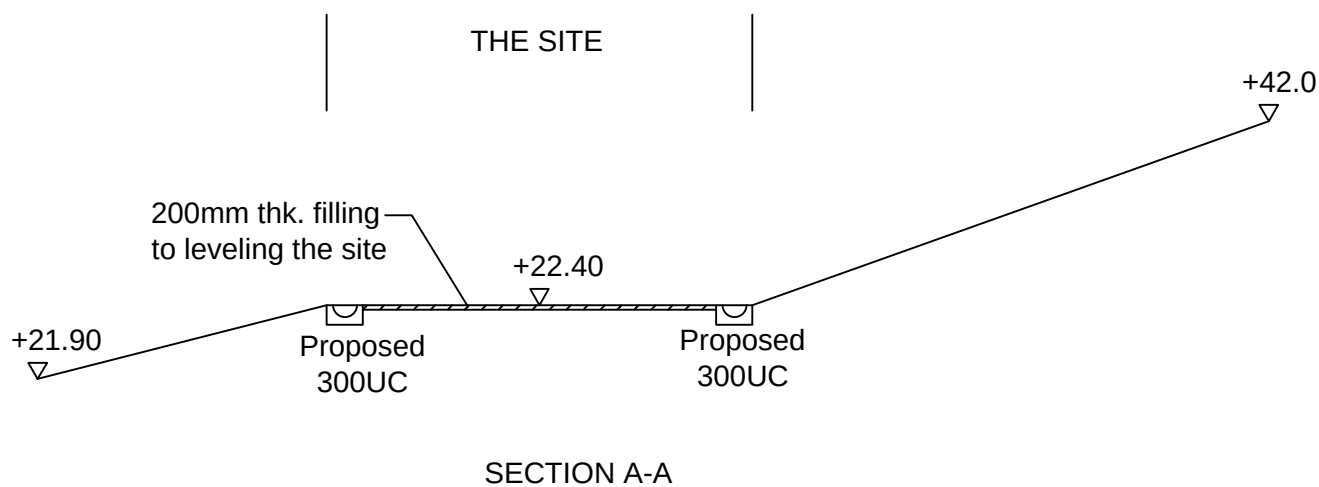
|              |      |
|--------------|------|
| DWG NO.      | VER. |
| APPENDIX III | 001  |

\*SITE BOUNDARY FOR IDENTIFICATION PURPOSE ONLY.



**Appendix IV**  
Drainage proposal





正宏工程顧問公司

CHING WAN ENGINEERING CONSULTANTS CO.

Project:  
**Proposed Temporary Warehouse (Excluding Dangerous Goods Godown) with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land at Lot 1439 (Part) in D.D. 118, Tai Tong, Yuen Long, New Territories**

(Application No.:A/YL-TT/671)

Title:

SECTIONS

D02

Drawn by:

DM

Date:

17-4-2026

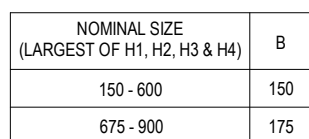
Check by:

DM

Scale:

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|                                                                                                                        |                |                                                               |                     |                                                    |             |
|------------------------------------------------------------------------------------------------------------------------|----------------|---------------------------------------------------------------|---------------------|----------------------------------------------------|-------------|
| The site, Area                                                                                                         | = 541          | m <sup>2</sup>                                                | (C= 0.95 )          |                                                    |             |
| (Same as Outside Catchment Area 3 under submission of A/YL-TT/782)                                                     |                |                                                               |                     |                                                    |             |
| Outside Catchment Area 2, Area                                                                                         | = 1517         | m <sup>2</sup>                                                | (C= 0.25 )          | L3= 130.08 m,                                      | H3= 13.53 m |
| <b>Calculation of Design Runoff of the Proposed Development.</b>                                                       |                |                                                               |                     |                                                    |             |
| <b>For the design of drains inside the site</b>                                                                        |                |                                                               |                     |                                                    |             |
|                                                                                                                        | $\Sigma Q$     | = $\Sigma 0.278 C i A$                                        |                     |                                                    |             |
|                                                                                                                        | A              | = 541+1517                                                    | m <sup>2</sup>      |                                                    |             |
|                                                                                                                        |                | = 2058                                                        |                     |                                                    |             |
|                                                                                                                        |                | = 0.002058                                                    | km <sup>2</sup>     |                                                    |             |
|                                                                                                                        | t              | = 0.14465 L3/ H3 <sup>0.2</sup> A <sup>0.1</sup>              |                     |                                                    |             |
|                                                                                                                        |                | = 0.14465*130.08/13.53 <sup>0.2</sup> *2335 <sup>0.1</sup>    |                     |                                                    |             |
|                                                                                                                        |                | = 5.211                                                       | min                 |                                                    |             |
|                                                                                                                        | i              | = 1.16*a/(t+b) <sup>c</sup>                                   |                     | (50 yrs return period, Table 3a, Corrigendum 2024, |             |
|                                                                                                                        |                | = 1.16*505.5/(5.211+3.29) <sup>0.355</sup>                    |                     | SDM) and (16% increase due to climate change)      |             |
|                                                                                                                        |                | = 274.3                                                       | mm/hr               |                                                    |             |
| Therefore,                                                                                                             | Q1             | = 0.278*0.25*274.3*0.001517/0.9+0.278*0.95*274.3*0.000541/0.9 |                     | (0.9 factor is adopted for sediment)               |             |
|                                                                                                                        |                | = <b>0.0757</b>                                               | m <sup>3</sup> /sec |                                                    |             |
| <b>Manning Equation</b>                                                                                                | V              | = R <sup>2/3</sup> *S <sub>f</sub> <sup>0.5</sup> /n          |                     |                                                    |             |
| where                                                                                                                  | R              | = ( $\pi r^2/2+2r^2$ )/( $\pi r+2r$ )                         |                     | r= 0.15 m                                          |             |
|                                                                                                                        |                | = 0.1042                                                      | m                   | A= 0.0803 m <sup>2</sup>                           |             |
|                                                                                                                        | n              | = 0.012                                                       | s/m <sup>1/3</sup>  | (Talbe 13 of Stormwater Drainage Manual)           |             |
|                                                                                                                        | S <sub>f</sub> | = 0.01                                                        | (1:100)             |                                                    |             |
| Therefore,                                                                                                             | V              | = 0.1042 <sup>2/3</sup> *0.01 <sup>0.5</sup> /0.012           |                     |                                                    |             |
|                                                                                                                        |                | = 1.845                                                       | m/sec               |                                                    |             |
| Maximum Capacity (Qmax)                                                                                                | = V*A          |                                                               |                     |                                                    |             |
|                                                                                                                        |                | = <b>0.148</b>                                                | m <sup>3</sup> /sec |                                                    |             |
|                                                                                                                        |                | > <b>0.0757</b>                                               | m <sup>3</sup> /sec |                                                    |             |
| % utilization                                                                                                          | =              | <b>51%</b>                                                    |                     |                                                    |             |
| <b>Provide 300UC (1:100) is OK</b>                                                                                     |                |                                                               |                     |                                                    |             |
| <b>*Design checking for downstream refers to Appendix A: Drainage Proposal under Planning Application A/YL-TT/782)</b> |                |                                                               |                     |                                                    |             |

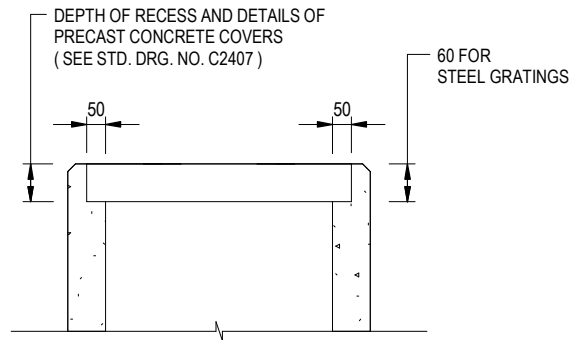


- SECTION A - A

|             |                         |                  |             |
|-------------|-------------------------|------------------|-------------|
| A           | BIM OBJECT REVISION.    | Original Signed  | 12.2025     |
| —           | FORMER DRG. NO. C2406J. | Original Signed  | 03.2015     |
| <b>REF.</b> | <b>REVISION</b>         | <b>SIGNATURE</b> | <b>DATE</b> |

# CATCHPIT WITH TRAP (SHEET 1 OF 2)

|                                                                                                                                             |                                            |
|---------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|
|  <b>CIVIL ENGINEERING AND<br/>DEVELOPMENT DEPARTMENT</b> |                                            |
| <b>SCALE</b> 1 : 20                                                                                                                         | <b>DRAWING NO.</b><br><br><b>C2406 /1A</b> |
| <b>DATE</b> JAN 1991                                                                                                                        |                                            |



## 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 1000 mm MIN. MEASURED FROM THE ADJACENT GROUND LEVEL.
10. MINIMUM INTERNAL CATCHPIT WIDTH SHALL BE 1000 mm FOR CATCHPITS WITH A HEIGHT EXCEEDING 1000 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.

|      |                         |                 |         |
|------|-------------------------|-----------------|---------|
| B    | BIM OBJECT REVISION.    | Original Signed | 12.2025 |
| 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 /2B**

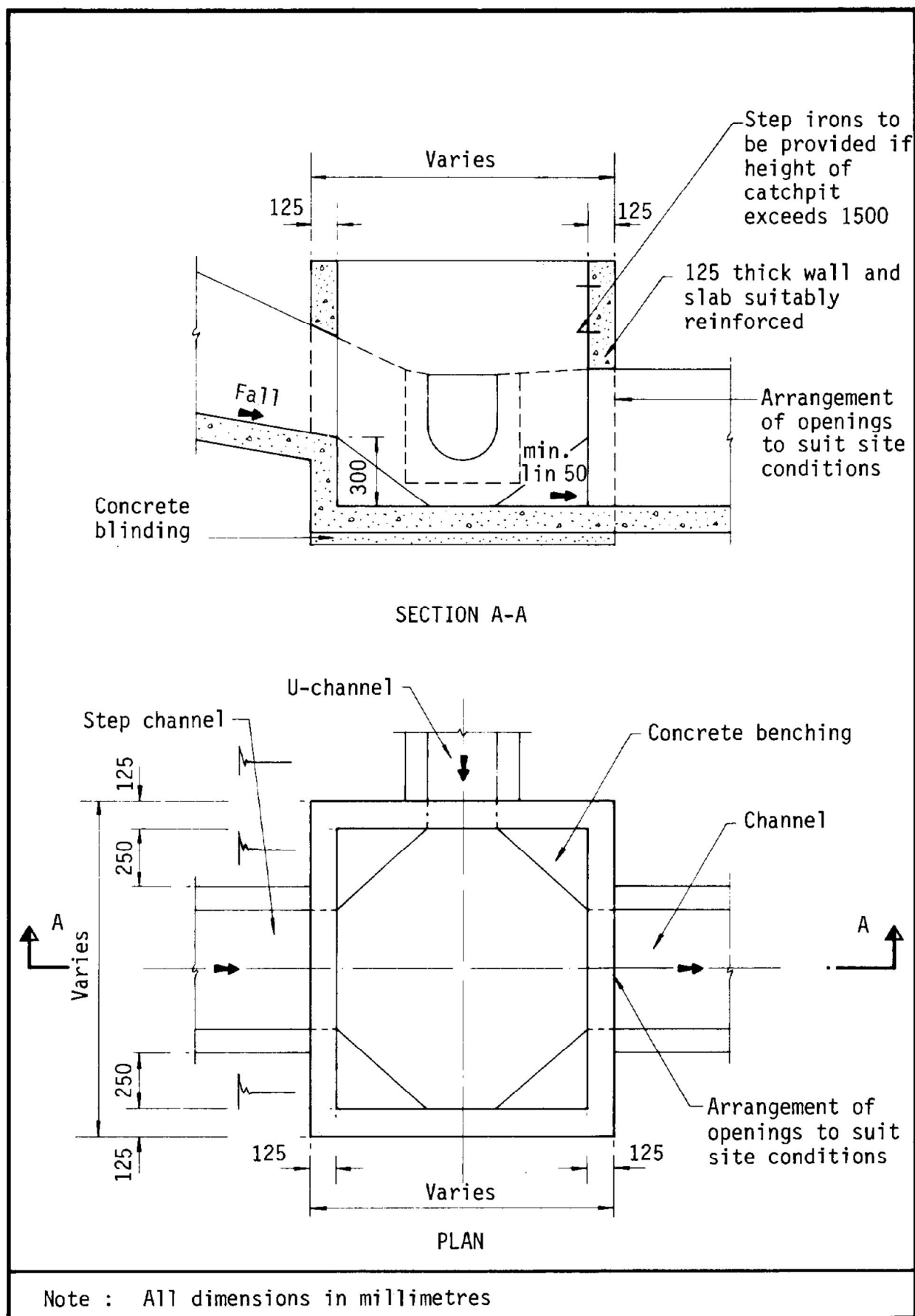
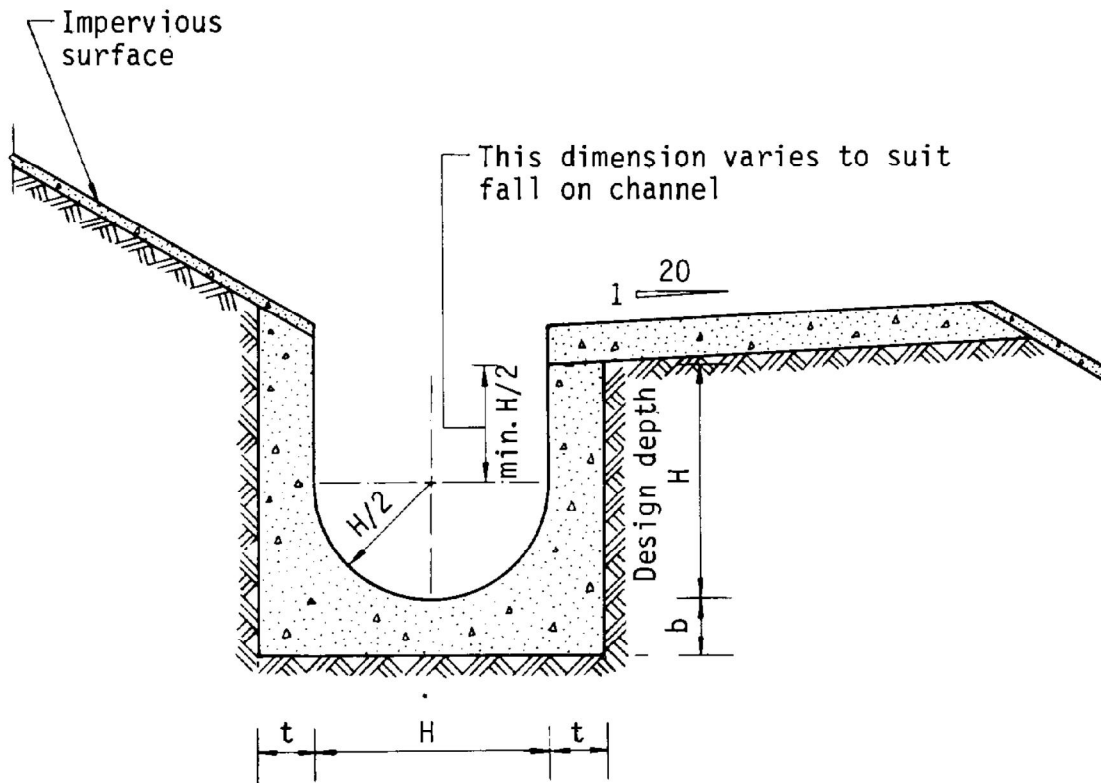


Figure 8.10 - Typical Details of Catchpits





Dimensions of U - channel

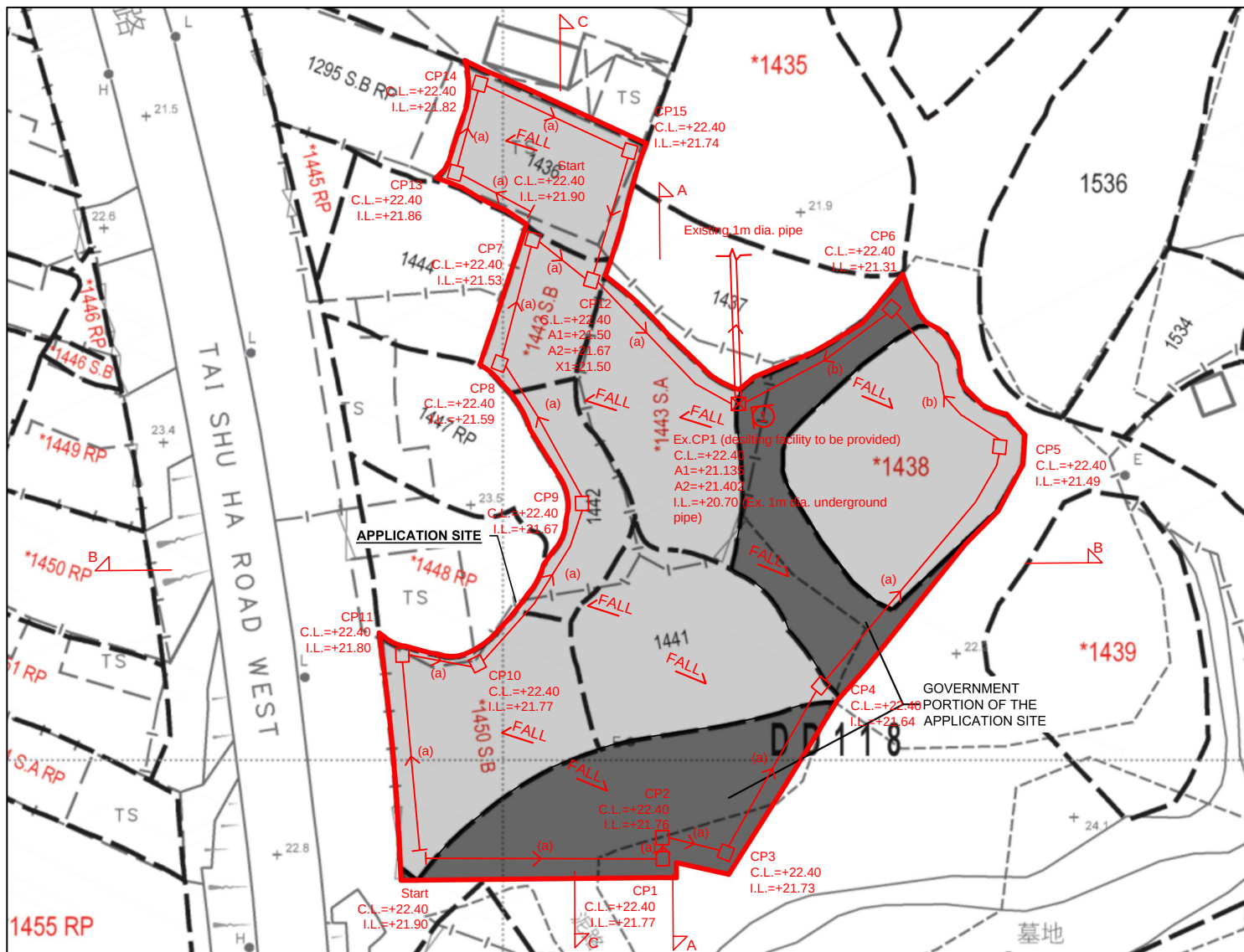
| Nominal size of channel $H$ (mm) | Thickness $t$ (mm) | Thickness $b$ (mm) |
|----------------------------------|--------------------|--------------------|
| 225 to 600                       | 150                | 150                |
| 675 to 1200                      | 175                | 225  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

Figure 8.11 - Typical U-channel Details

## Appendix A

Drainage Proposal under Planning Application

A/YL-TT/782



#### Note:

1. Existent Catchpits (CP1) shall be modified to provided desilting facility

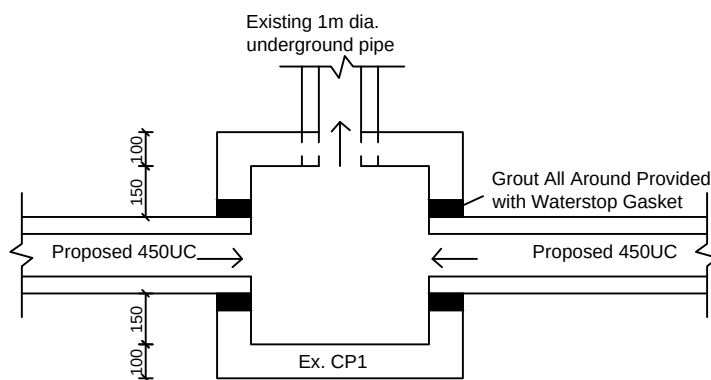
2. Catchpit and UC follows Typical Details of Geotechnical Manual for Slope Fig.8.10 and Fig.8.11 respectively.

3. Adjacent area which is developed or occupied, which has their stormwater collection syste.

4. Minor filling works to be carried out. Existing Formation Level is +22.20mPD. Proposed Formation Level is +22.40mPD. The cover level of proposed UC shall be flush with adjoining ground.

#### LEGEND

- ☐ CP Proposed CatchPit
- ☒ CP Existing CatchPit
- (a) Proposed 450UC (1:200) with Cast Iron Cover
- (b) Proposed 450UC (1:100) with Cast Iron Cover
- Existing 1m dia. underground pipe
- Photo Viewport



CONNECTION DETAILS

正宏工程顧問公司

CHING WAN ENGINEERING CONSULTANTS CO.

#### Project:

Proposed Temporary Warehouse (Excluding Dangerous Goods Godown) with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land at Various Lots in D.D. 118 and Adjoining Government Land, Tai Tong, Yuen Long, New Territories (Application No.:A/YL-TT/782)

#### Title:

Drainage Proposal - LAYOUT

D01

#### Drawn by:

DM

#### Date:

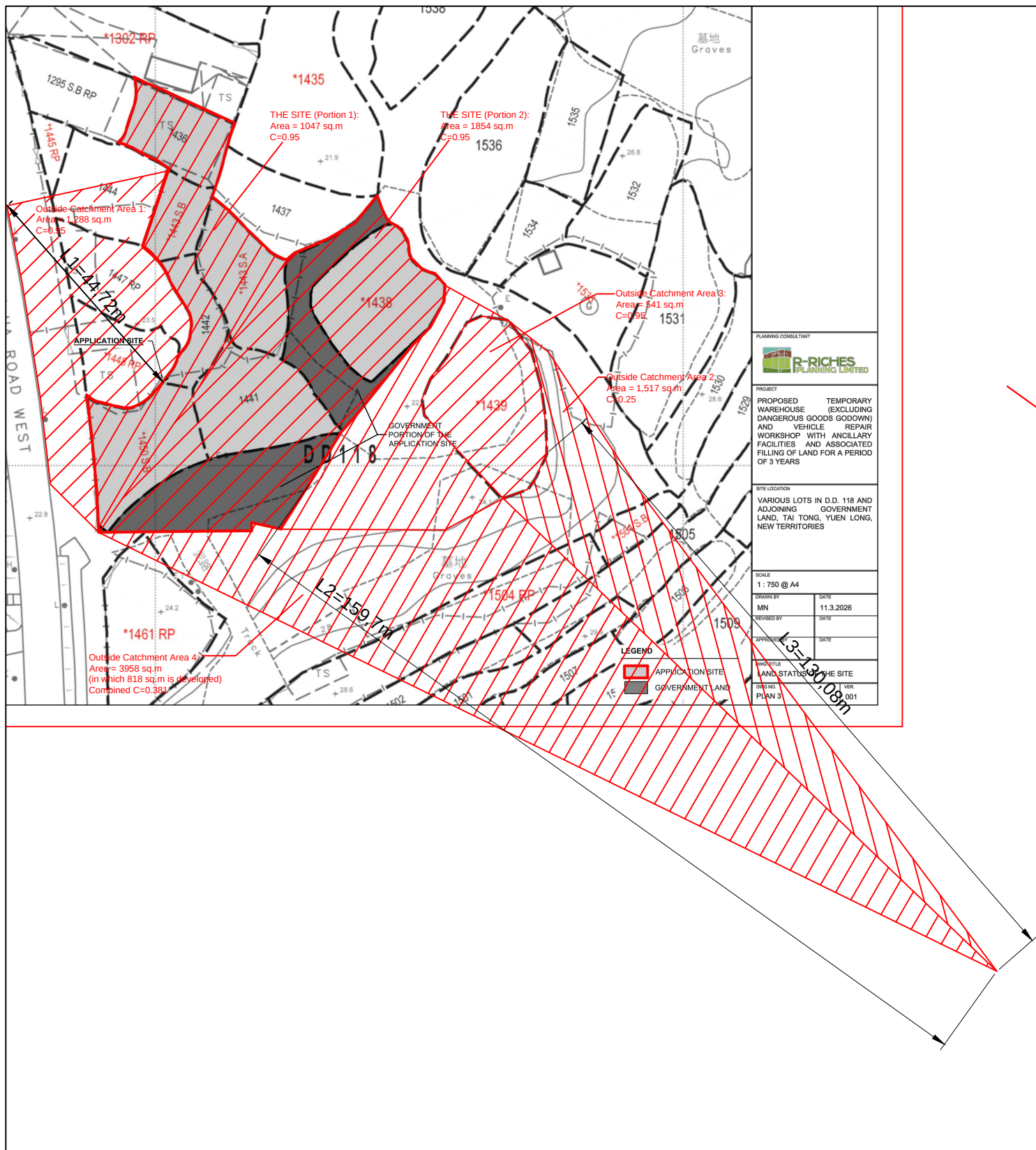
25-6-2026

#### Check by:

DM

#### Scale:

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正宏工程顧問公司

CHING WAN ENGINEERING CONSULTANTS CO.

Project:

**Proposed Temporary Warehouse (Excluding Dangerous Goods Godown) with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land at Various Lots in D.D. 118 and Adjoining Government Land, Tai Tong, Yuen Long, New Territories**  
(Application No.:A/YL-TT/782)

Title:

Drainage Proposal  
(Catchment Area Plan)

D02

Drawn by:

DM

Date:

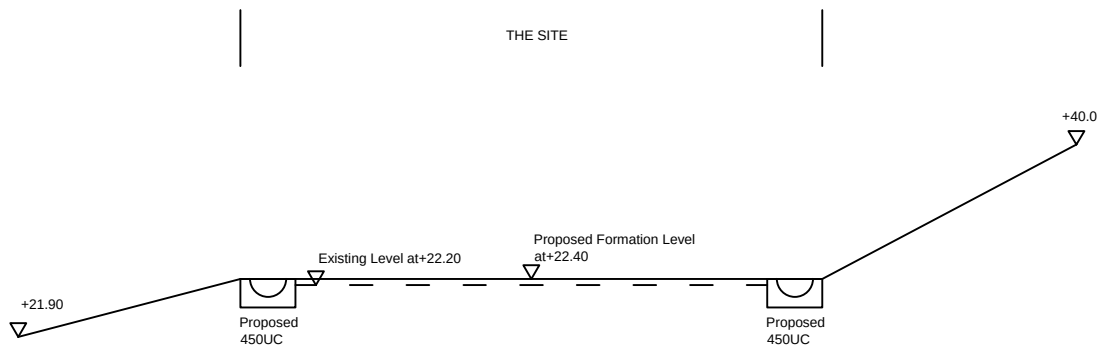
25-6-2026

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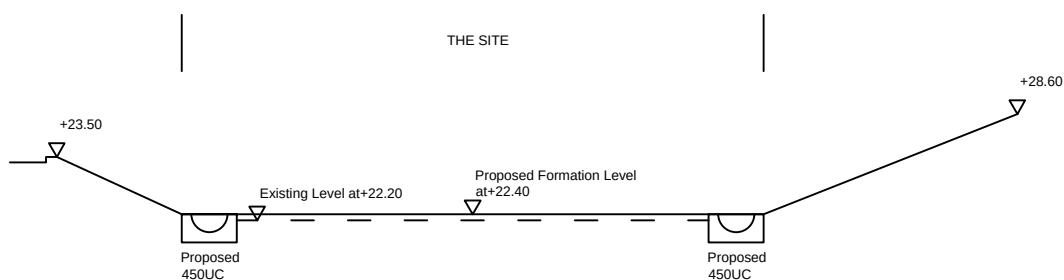
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Scale:

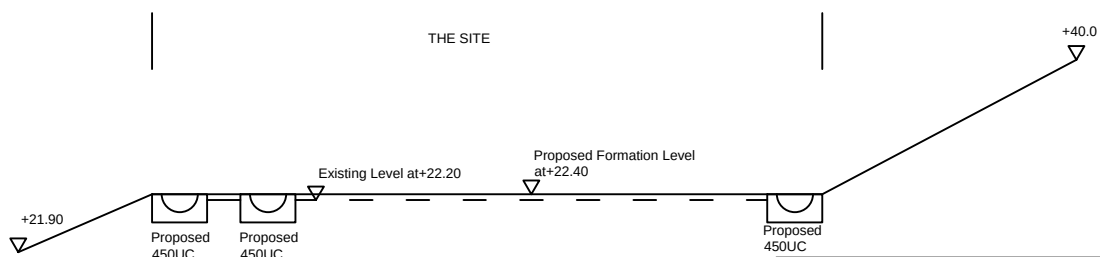
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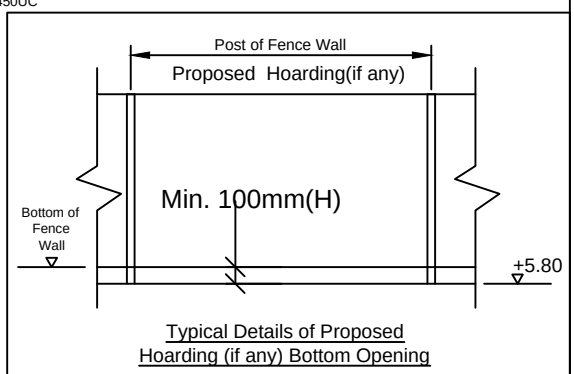
SECTION A-A



SECTION B-B



SECTION C-C



正宏工程顧問公司

CHING WAN ENGINEERING CONSULTANTS CO.

Project:  
**Proposed Temporary Warehouse (Excluding Dangerous Goods Godown) with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land at Various Lots in D.D. 118 and Adjoining Government Land, Tai Tong, Yuen Long, New Territories**  
 (Application No.:A/YL-TT/782)

Title:

Drainage Proposal - SECTIONS

D03

Drawn by:

DM

Date:

25-6-2026

Check by:

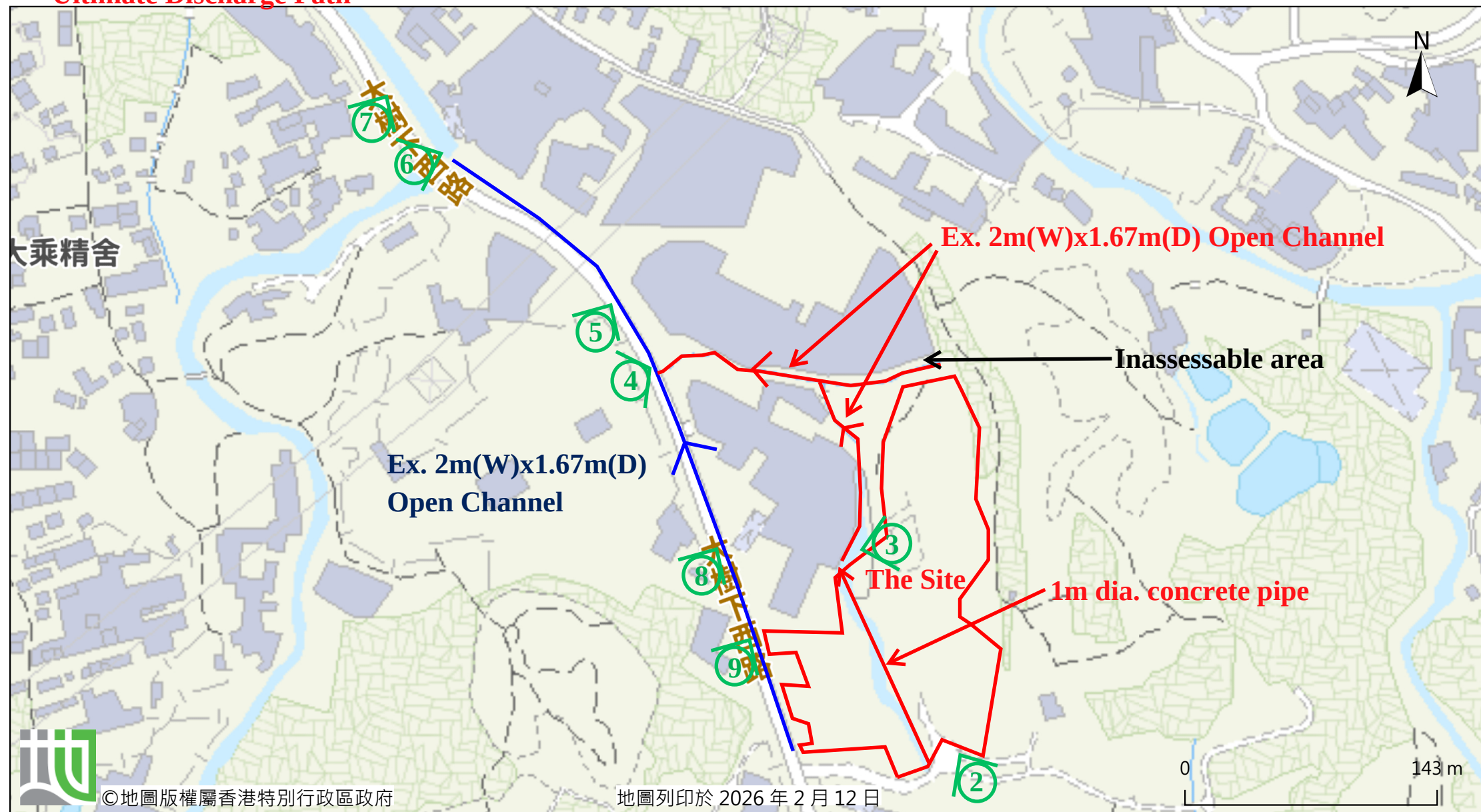
DM

Scale:

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## Ultimate Discharge Path





**Photo 1**



**Photo 1a**





**Photo 2 - 1m dia. pipe**



**Photo 3 - approximate 3m(w)x1.m(D) watercourse**





**Photo 4 - Approximate 1mx1m open channel**



**Photo 5 - Approximate 1mx1m open channel**





**Photo 6**



**Photo 7**



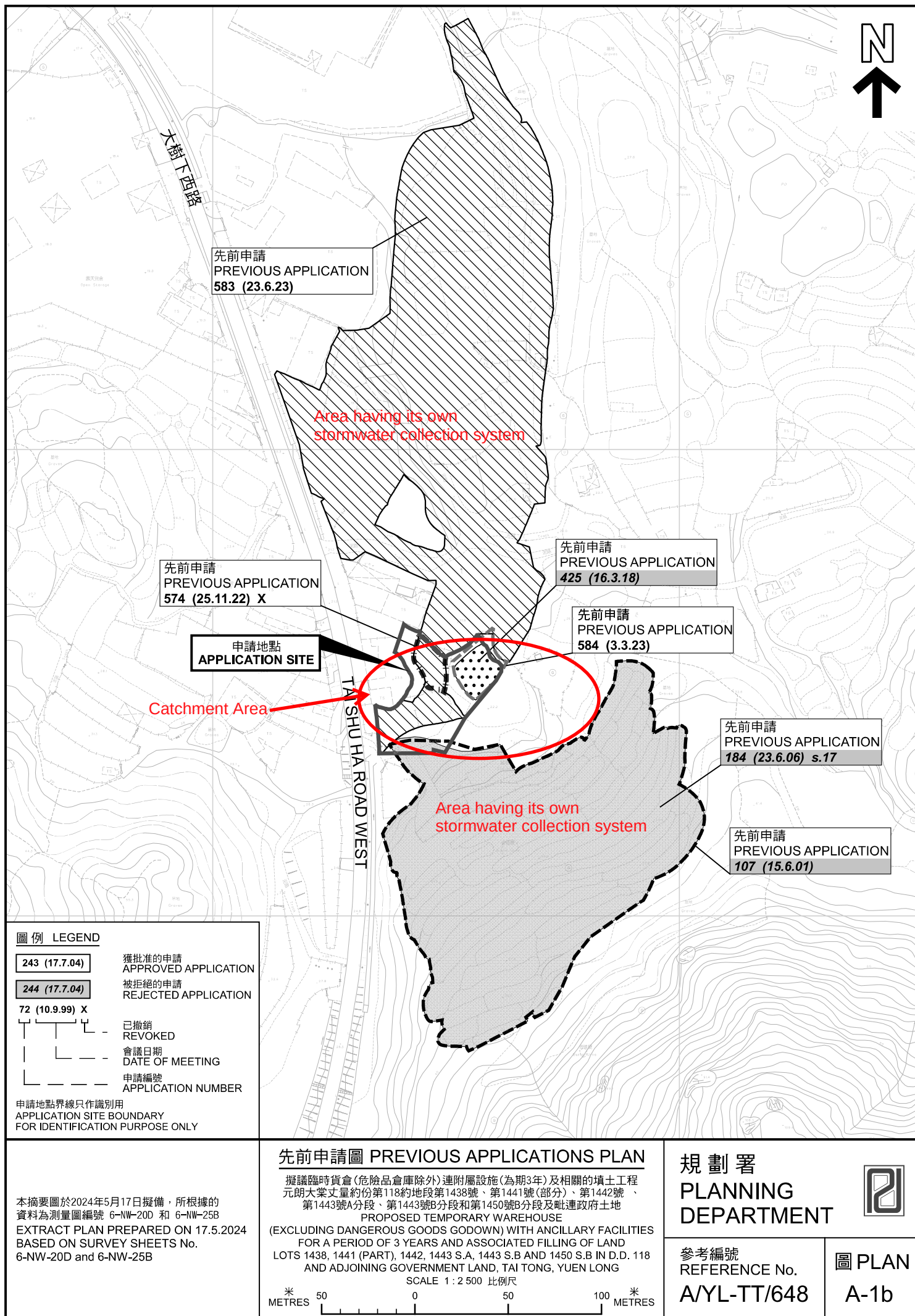


**Photo 8**



**Photo 9**









Justification of C value



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|                                                                                                                       |        |                                                         |                     |                                                                                                  |
|-----------------------------------------------------------------------------------------------------------------------|--------|---------------------------------------------------------|---------------------|--------------------------------------------------------------------------------------------------|
| Outside Catchment Area 1, Area                                                                                        | = 1288 | m <sup>2</sup>                                          | (C= 0.95 )          | L1= 44.72 m, H1= 1 m                                                                             |
| Outside Catchment Area 2, Area                                                                                        | = 1517 | m <sup>2</sup>                                          | (C= 0.25 )          | L2= 159.7 m, H2= 11.02 m                                                                         |
| Outside Catchment Area 3, Area                                                                                        | = 541  | m <sup>2</sup>                                          | (C= 0.95 )          | where H2= (40+22.4)*100/159.7                                                                    |
| Outside Catchment Area 4, Area                                                                                        | = 4371 | m <sup>2</sup>                                          | (C= 0.381 )         |                                                                                                  |
| THE SITE (Portion 1), Area                                                                                            | = 1047 | m <sup>2</sup>                                          | (C= 0.95 )          | L3= 130.08 m, H3= 13.53 m                                                                        |
| THE SITE (Portion 2), Area                                                                                            | = 1854 | m <sup>2</sup>                                          | (C= 0.95 )          | where H3= (40+22.4)*100/130.08                                                                   |
| <b>Calculation of Design Runoff of the Proposed Development.</b>                                                      |        |                                                         |                     |                                                                                                  |
| <b>For the design of drains from Start Point to Ex. CP1 via CP11, The Site (Portion 1) + Outside Catchment Area 1</b> |        |                                                         |                     |                                                                                                  |
| $\Sigma Q$                                                                                                            | =      | $\Sigma 0.278 C i A$                                    |                     |                                                                                                  |
| A                                                                                                                     | =      | 1047+1288                                               | m <sup>2</sup>      |                                                                                                  |
|                                                                                                                       | =      | 2335                                                    |                     |                                                                                                  |
|                                                                                                                       | =      | 0.002335                                                | km <sup>2</sup>     |                                                                                                  |
| t                                                                                                                     | =      | 0.14465 L1/ H1 <sup>0.2</sup> A <sup>0.1</sup>          |                     |                                                                                                  |
|                                                                                                                       | =      | 0.14465*44.72/1 <sup>0.2</sup> *2335 <sup>0.1</sup>     |                     |                                                                                                  |
|                                                                                                                       | =      | 2.978                                                   | min                 |                                                                                                  |
| i                                                                                                                     | =      | 1.16*a/(t+b) <sup>c</sup>                               |                     | (50 yrs return period, Table 3a, Corrigendum 2024, SDM) and (16% increase due to climate change) |
|                                                                                                                       | =      | 1.16*505.5/(2.978+3.29) <sup>0.355</sup>                |                     |                                                                                                  |
|                                                                                                                       | =      | 305.6                                                   | mm/hr               |                                                                                                  |
| Therefore, Q1                                                                                                         | =      | 0.278*0.95*305.6*0.002335/0.9                           |                     | (0.9 factor is adopted for sediment)                                                             |
|                                                                                                                       | =      | <b>0.2094</b>                                           | m <sup>3</sup> /sec |                                                                                                  |
| <b>Manning Equation</b>                                                                                               |        |                                                         |                     |                                                                                                  |
| V                                                                                                                     | =      | $R^{2/3} * S_f^{0.5} / n$                               |                     |                                                                                                  |
| where R                                                                                                               | =      | $(\pi r^2 / 2 + 2r^2) / (\pi r + 2r)$                   | r= 0.225 m          |                                                                                                  |
|                                                                                                                       | =      | 0.1563                                                  | m                   | A= 0.1808 m <sup>2</sup>                                                                         |
| n                                                                                                                     | =      | 0.012                                                   | s/m <sup>1/3</sup>  | (Talbe 13 of Stormwater Drainage Manual)                                                         |
| S <sub>f</sub>                                                                                                        | =      | 0.005                                                   | (1:200)             |                                                                                                  |
| Therefore, V                                                                                                          | =      | 0.1563 <sup>2/3</sup> *0.005 <sup>0.5</sup> /0.012      |                     |                                                                                                  |
|                                                                                                                       | =      | 1.710                                                   | m/sec               |                                                                                                  |
| Maximum Capacity (Qmax)                                                                                               | =      | V*A                                                     |                     |                                                                                                  |
|                                                                                                                       | =      | <b>0.309</b>                                            | m <sup>3</sup> /sec |                                                                                                  |
|                                                                                                                       | >      | <b>0.2094</b>                                           | m <sup>3</sup> /sec |                                                                                                  |
| % utilization                                                                                                         | =      | <b>68%</b>                                              |                     |                                                                                                  |
| <b>Provide 450UC (1:200) is OK</b>                                                                                    |        |                                                         |                     |                                                                                                  |
| <b>Calculation of Design Runoff of the Proposed Development.</b>                                                      |        |                                                         |                     |                                                                                                  |
| <b>For the design of drains Start Point to CP5 , The Site (Portion 2) + Outside Catchment Area 4</b>                  |        |                                                         |                     |                                                                                                  |
| $\Sigma Q$                                                                                                            | =      | $\Sigma 0.278 C i A$                                    |                     |                                                                                                  |
| A                                                                                                                     | =      | 1854+4371                                               | m <sup>2</sup>      |                                                                                                  |
|                                                                                                                       | =      | 6225                                                    |                     |                                                                                                  |
|                                                                                                                       | =      | 0.006225                                                | km <sup>2</sup>     |                                                                                                  |
| t                                                                                                                     | =      | 0.14465 L2/ H2 <sup>0.2</sup> A <sup>0.1</sup>          |                     |                                                                                                  |
|                                                                                                                       | =      | 0.14465*159.7/11.02 <sup>0.2</sup> *6225 <sup>0.1</sup> |                     |                                                                                                  |
|                                                                                                                       | =      | 5.967                                                   | min                 |                                                                                                  |
| i                                                                                                                     | =      | 1.16*a/(t+b) <sup>c</sup>                               |                     | (50 yrs return period, Table 3a, Corrigendum 2024, SDM) and (16% increase due to climate change) |
|                                                                                                                       | =      | 1.16*505.5/(5.967+3.29) <sup>0.355</sup>                |                     |                                                                                                  |
|                                                                                                                       | =      | 266.1                                                   | mm/hr               |                                                                                                  |
| Therefore, Q2                                                                                                         | =      | 0.278*0.381*266.1*0.004371+0.278*0.95*266.1*0.001854    |                     |                                                                                                  |
|                                                                                                                       | =      | 0.2535                                                  | m <sup>3</sup> /sec |                                                                                                  |
|                                                                                                                       | =      | <b>15211</b>                                            | lit/min             |                                                                                                  |
| <b>Manning Equation</b>                                                                                               |        |                                                         |                     |                                                                                                  |
| V                                                                                                                     | =      | $R^{2/3} * S_f^{0.5} / n$                               |                     |                                                                                                  |
| where R                                                                                                               | =      | $(\pi r^2 / 2 + 2r^2) / (\pi r + 2r)$                   | r= 0.225 m          |                                                                                                  |
|                                                                                                                       | =      | 0.1563                                                  | m                   | A= 0.1808 m <sup>2</sup>                                                                         |
| n                                                                                                                     | =      | 0.012                                                   | s/m <sup>1/3</sup>  | (Talbe 13 of Stormwater Drainage Manual)                                                         |
| S <sub>f</sub>                                                                                                        | =      | 0.005                                                   | (1:200)             |                                                                                                  |
| Therefore, V                                                                                                          | =      | 0.1563 <sup>2/3</sup> *0.005 <sup>0.5</sup> /0.012      |                     |                                                                                                  |
|                                                                                                                       | =      | 1.710                                                   | m/sec               |                                                                                                  |
| Maximum Capacity (Qmax)                                                                                               | =      | V*A                                                     |                     |                                                                                                  |
|                                                                                                                       | =      | <b>0.309</b>                                            | m <sup>3</sup> /sec |                                                                                                  |
|                                                                                                                       | >      | <b>0.2535</b>                                           | m <sup>3</sup> /sec |                                                                                                  |
| % utilization                                                                                                         | =      | <b>82%</b>                                              |                     |                                                                                                  |
| <b>Provide 450UC (1:200) is OK</b>                                                                                    |        |                                                         |                     |                                                                                                  |

**For the design of drains from CP5 to EX. CP1, Outside Catchment Area (2+3) + Q2**

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

$$\begin{aligned} A &= 1517+541 \quad \text{m}^2 \\ &= 2058 \\ &= 0.002058 \quad \text{km}^2 \end{aligned}$$

$$\begin{aligned} t &= 0.14465 L^3 / H^3 \cdot A^{0.1} \\ &= 0.14465 * 130.08 / 13.53^{0.2} * 2058^{0.1} \\ &= 5.21 \quad \text{min} \end{aligned}$$

$$\begin{aligned} i &= 1.16 * a / (t+b)^c \quad (50 \text{ yrs return period, Table 3a, Corrigendum 2024, SDM) and (16\% increase due to climate change)} \\ &= 1.16 * 505.5 / (3.61+3.29)^{0.355} \\ &= 274.3 \quad \text{mm/hr} \end{aligned}$$

$$\begin{aligned} \text{Therefore, } Q_3 &= 0.278 * 0.25 * 274.3 * 0.001517 + 0.278 * 0.95 * 274.3 * 0.000541 + Q_2 \\ &= \mathbf{0.3216} \quad \text{m}^3/\text{sec} \end{aligned}$$

**Manning Equation**

$$V = R^{2/3} * S_f^{0.5} / n$$

$$\begin{aligned} \text{where } R &= (\pi r^2 / 2 + 2r^2) / (\pi r + 2r) \quad r = 0.225 \quad \text{m} \\ &= 0.1563 \quad \text{m} \quad A = 0.1808 \quad \text{m}^2 \end{aligned}$$

$$n = 0.012 \quad \text{s/m}^{1/3} \quad (\text{Table 13 of Stormwater Drainage Manual})$$

$$S_f = 0.010 \quad (1:100)$$

$$\begin{aligned} \text{Therefore, } V &= 0.1563^{2/3} * 0.01^{0.5} / 0.012 \\ &= 2.418 \quad \text{m/sec} \end{aligned}$$

$$\begin{aligned} \text{Maximum Capacity (Qmax)} &= V * A \\ &= \mathbf{0.437} \quad \text{m}^3/\text{sec} \\ &> \mathbf{0.3216} \quad \text{m}^3/\text{sec} \end{aligned}$$

$$\% \text{ utilization} = \mathbf{74\%}$$

**Provide 450UC (1:100) is OK**

**For the design of drains outfall from the site, Q1+Q3**

$$\begin{aligned} Q &= Q_1 + Q_3 \\ &= 0.2094 + 0.3216 \\ &= \mathbf{0.5310} \quad \text{lit/min} \end{aligned}$$

Check Ex. 1m dia. Pipes by Colebrook-White Equation

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

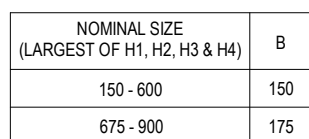
where :

$$\begin{aligned} V &= \text{mean velocity (m/s)} \\ g &= 9.81 \quad \text{m/s}^2 \quad \text{gravitational acceleration (m/s}^2\text{)} \\ D &= 1 \quad \text{m} \quad \text{internal pipe diameter (m)} \\ ks &= 0.00006 \quad \text{m} \quad \text{hydraulic pipeline roughness (m)} \quad (\text{Table14, from DSD SDM 2018, concrete pipe}) \\ v &= 1.14E-06 \quad \text{m}^2/\text{s} \quad \text{kinematic viscosity of fluid (m}^2/\text{s)} \\ s &= 0.005 \quad \text{hydraulic gradient} \quad (1: 200) \end{aligned}$$

$$\begin{aligned} \text{Therefore, design V} &= 2.88 \quad \text{m/s} \\ \text{of pipe capacity} & \end{aligned}$$

$$\begin{aligned} Q &= 0.8VA \quad (0.8 \text{ factor for sedimentation}) \\ &= \mathbf{1.809} \quad \text{m}^3/\text{s} \\ &> \mathbf{0.5310} \quad \text{m}^3/\text{s} \quad \text{Ok} \\ \% \text{ utilization} &= \mathbf{29\%} \end{aligned}$$

**Exiisting 1m dia. concrete pipe (1:200) is OK**



- SECTION A - A

|             |                         |                  |             |
|-------------|-------------------------|------------------|-------------|
| A           | BIM OBJECT REVISION.    | Original Signed  | 12.2025     |
| —           | FORMER DRG. NO. C2406J. | Original Signed  | 03.2015     |
| <b>REF.</b> | <b>REVISION</b>         | <b>SIGNATURE</b> | <b>DATE</b> |

# CATCHPIT WITH TRAP (SHEET 1 OF 2)


**CIVIL ENGINEERING AND  
DEVELOPMENT DEPARTMENT**

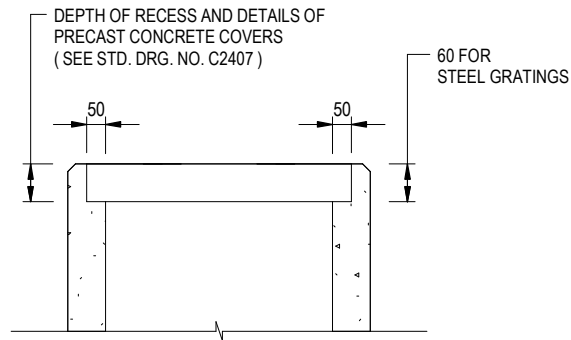
**SCALE** 1 : 20

|      |          |
|------|----------|
| DATE | JAN 1991 |
|------|----------|

|                    |
|--------------------|
| <b>DRAWING NO.</b> |
|--------------------|

C2406 /1A





## 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 1000 mm MIN. MEASURED FROM THE ADJACENT GROUND LEVEL.
10. MINIMUM INTERNAL CATCHPIT WIDTH SHALL BE 1000 mm FOR CATCHPITS WITH A HEIGHT EXCEEDING 1000 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.

|      |                         |                 |         |
|------|-------------------------|-----------------|---------|
| B    | BIM OBJECT REVISION.    | Original Signed | 12.2025 |
| 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 /2B**

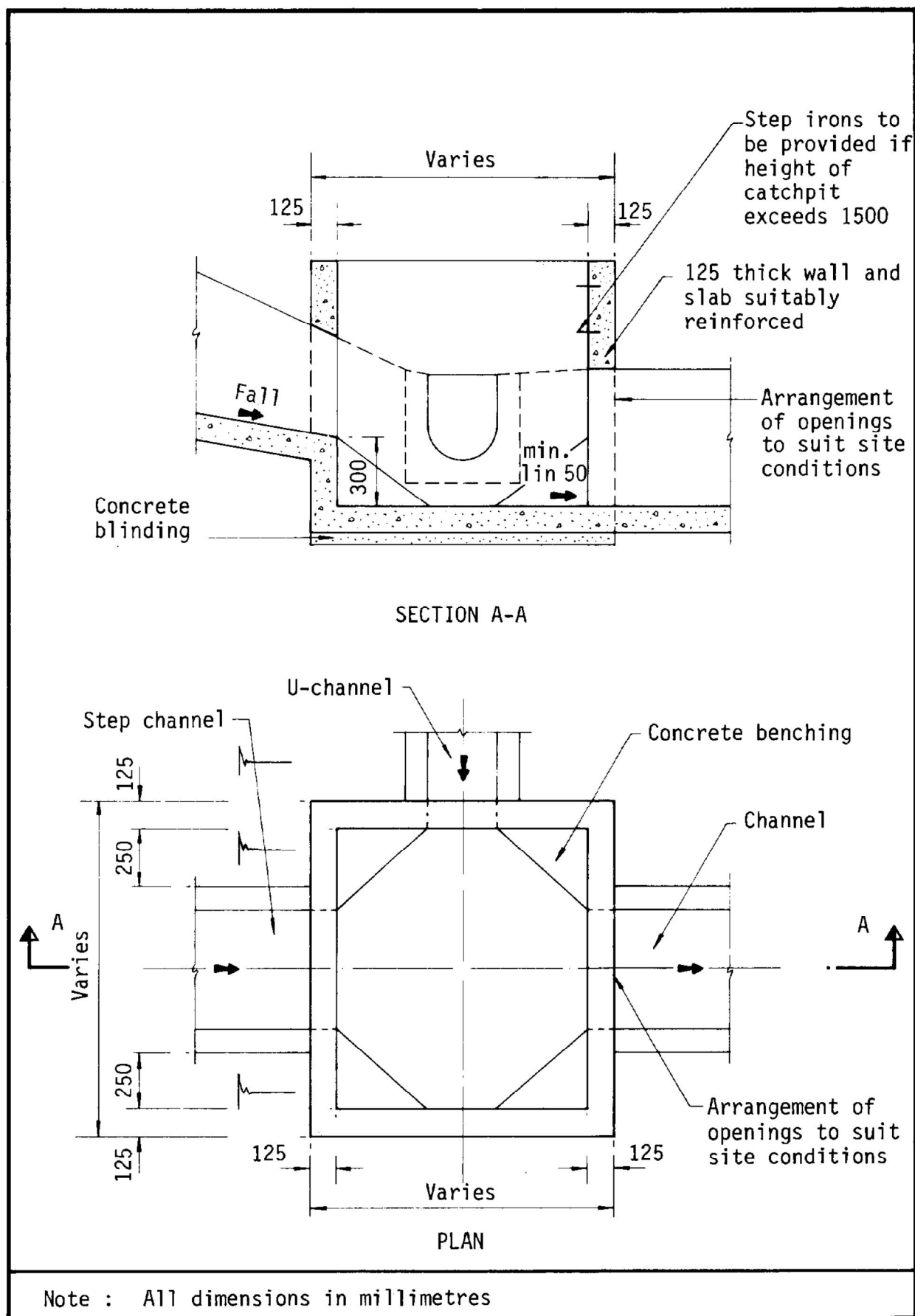
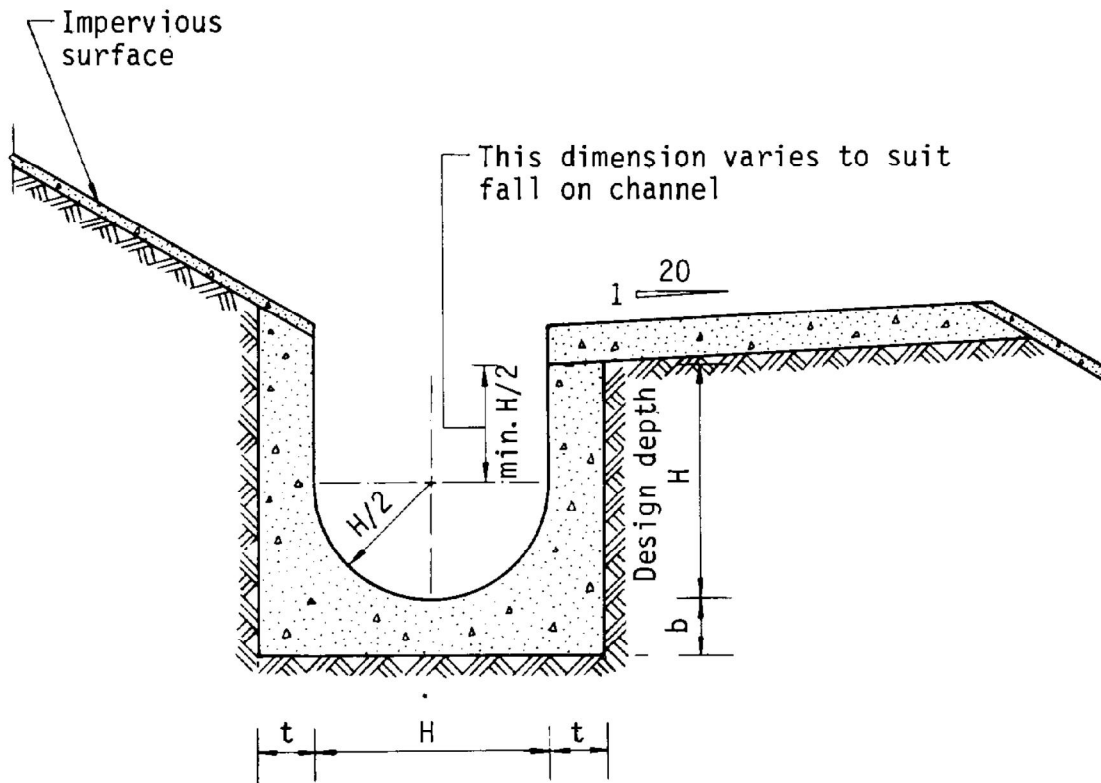


Figure 8.10 - Typical Details of Catchpits



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