

Temporary Open Storage of Construction Machinery and Construction Materials, Recycling Materials and Used Electrical Appliances with Ancillary Workshop for a Period of 3 Years

at

Lots 366 RP (Part), 371 S.B (Part), 372 S.A, 372 S.B, 373, 374, 375 RP (Part), 376 (Part), 377 (Part), 378 (Part), 379, 380, 381 RP (Part), 458 (Part), 459, 460, 461, 462, 463, 464, 471, 472, 1323 (Part), 1324, 1325 (Part), 1337 (Part), 1338 (Part), 1339, 1340 (Part), 1341, 1342, 1344 (Part), 1345 (Part), 1346 (Part), 1349 (Part), 1350 (Part), 1351 (Part), 1353 (Part), 1354, 1355 (Part), 1356 S.A (Part), 1356 S.B, 1357, 1358 RP, 1359, 1360, 1361, 1362, 1363 RP, 1365 (Part), 1366 RP (Part) in D.D.119 & Adjoining Government Land, Yuen Long, N.T.

Annex 1 Estimated Traffic Generation

- 1.1 The application site is accessible via a vehicular access leading from Kung Um Road. Having mentioned that the site is intended for open storage with ancillary workshop only, traffic generated by the proposed development is not significant
- 1.2 The estimated average traffic generation and traffic generation rate at peak hours are as follow:

| Type of Vehicle | <u>Average</u> Traffic Generation Rate (pcu/hr) | <u>Average</u> Traffic Attraction Rate (pcu/hr) | Traffic Generation Rate at <u>Peak Hours</u> (pcu/hr) | Traffic Attraction Rate at <u>Peak Hours</u> (pcu/hr) |
|----------------------------|---|---|---|---|
| Medium/heavy goods vehicle | 2.25 | 2.25 | 0 | 0 |

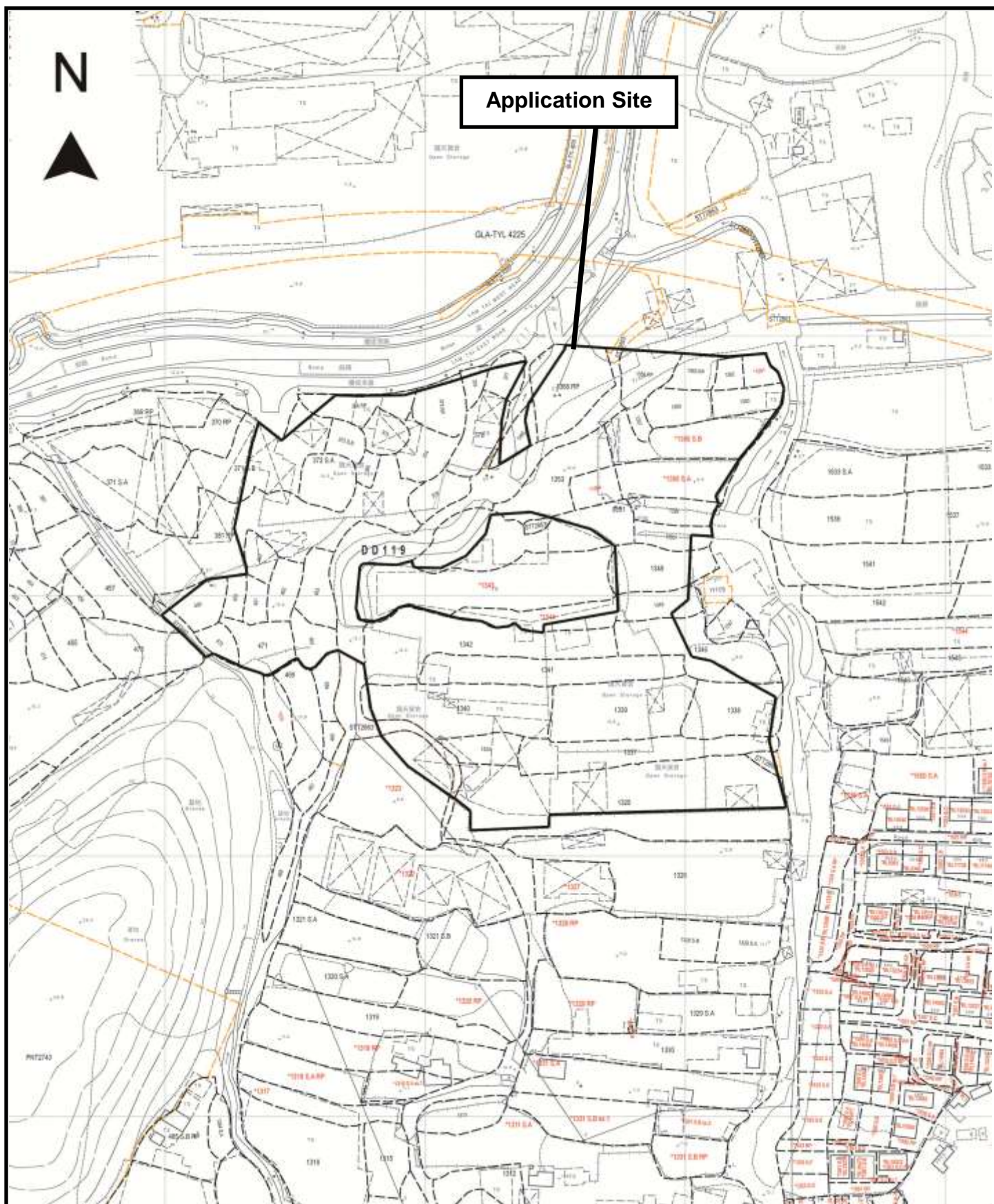
Note 1: The opening hour of the proposed development is restricted to 9:00 a.m. to 5:00 p.m. from Mon days to Saturdays. No operation will be held on Sundays and public holidays.

Note 2: The pcu of medium goods vehicle is taken as 2.

Note 3: Morning peak is defined as 7:00a.m. to 9:00a.m. whereas afternoon peak is defined as 5:00p.m. to 7:00p.m.

- 1.3 As shown in the above estimation, it is estimated that the proposed development would not generate significant amount of traffic. It would not affect the traffic condition of Kung Um Road especially that the application site is not a green site development. It is subject to nine previous planning permissions since 1998 approved for similar use.

- 1.4 In association with the intended purpose, adequate space for manoeuvring of vehicle would be provided within the warehouse and queueing up of traffic would not be the result especially that the traffic generated is insignificant. The negligible increase in traffic would not aggravate the traffic condition of Kung Um Road and nearby road networks.



Project 項目名稱:

Temporary Open Storage of Construction Machinery and Materials, Recycling Materials and Used Electrical Appliances with Ancillary Workshop for a Period of 3 Years at Various Lots in D.D. 119 & Adjoining Government Land, Yuen Long, N.T.

Drawing Title 圖目:

Site Plan

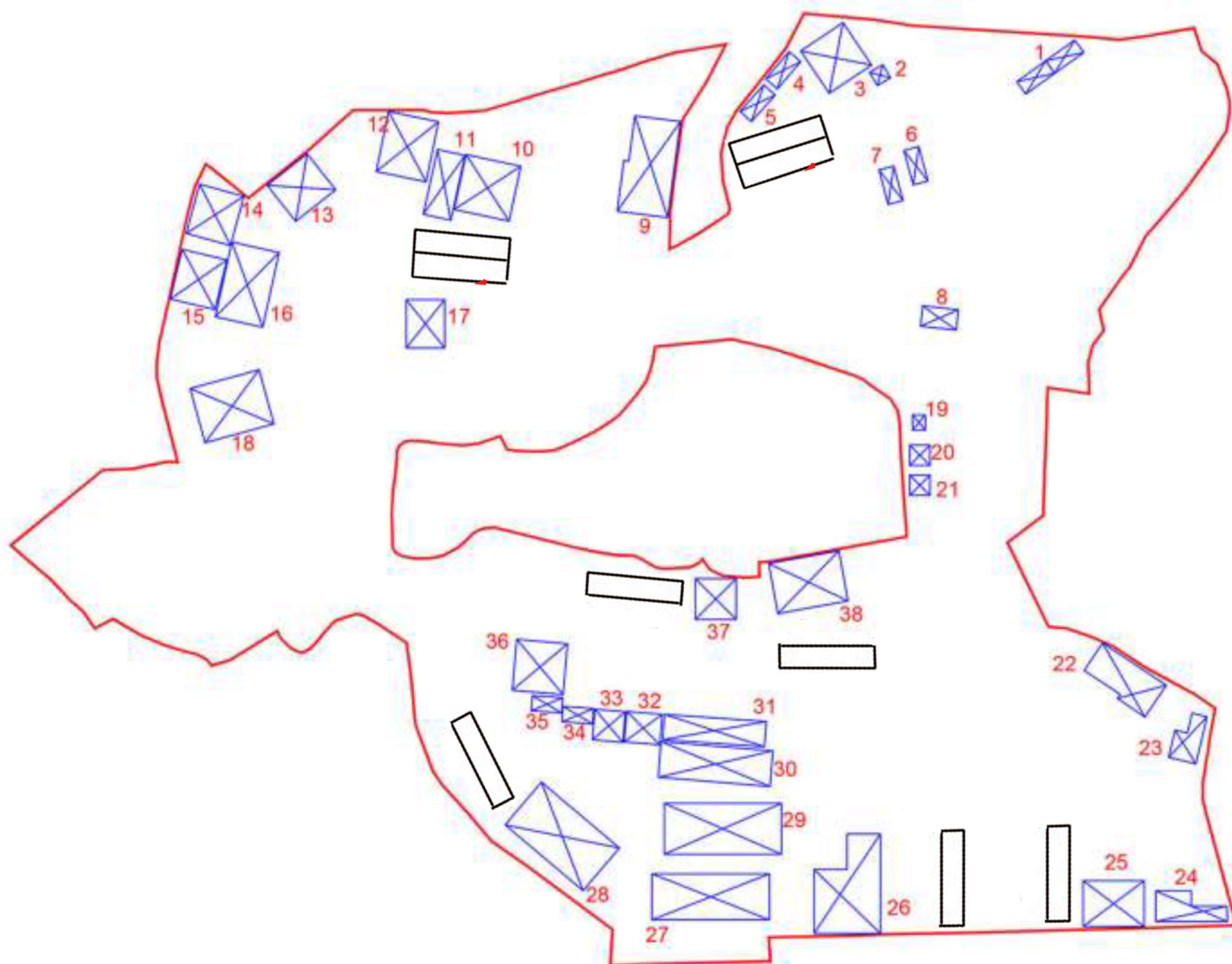
Drawing No. 圖號:

Figure 1

Remarks 備註:

Scale 比例:

1:2000



Project 項目名稱:

Temporary Open Storage of
Construction Machinery and
Construction Materials, Recycling
Materials and Used Electrical
Appliances with Ancillary Workshop for
a Period of 3 Years at Various Lots in
D.D. 119 & Adjoining Government Land,
Yuen Long, N.T.

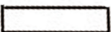
Drawing Title 圖目:

Proposed Layout Plan

Drawing No. 圖號:

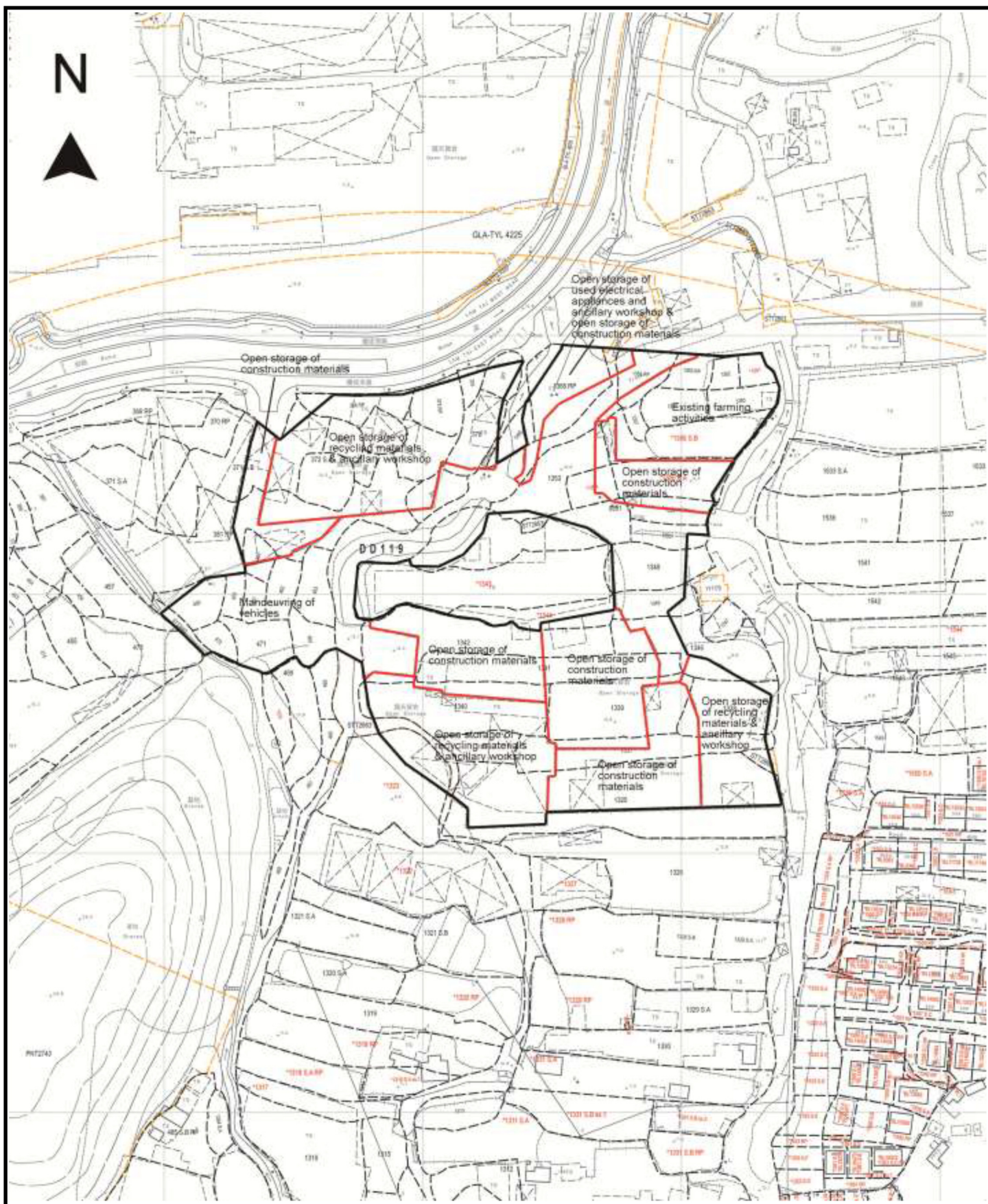
Figure 2

Remarks 備註:

 11m x 3.5m loading/
unloading space for
medium/heavy goods
vehicle

Scale 比例:

1:1500



Project 項目名稱:

Temporary Open Storage of Construction Machinery and Construction Materials, Recycling Materials and Used Electrical Appliances with Ancillary Workshop for a Period of 3 Years at Various Lots in D.D. 119 & Adjoining Government Land, Yuen Long, N.T.

Drawing Title 圖目:

Proposed Land Use Plan

Drawing No. 圖號:

Figure 3

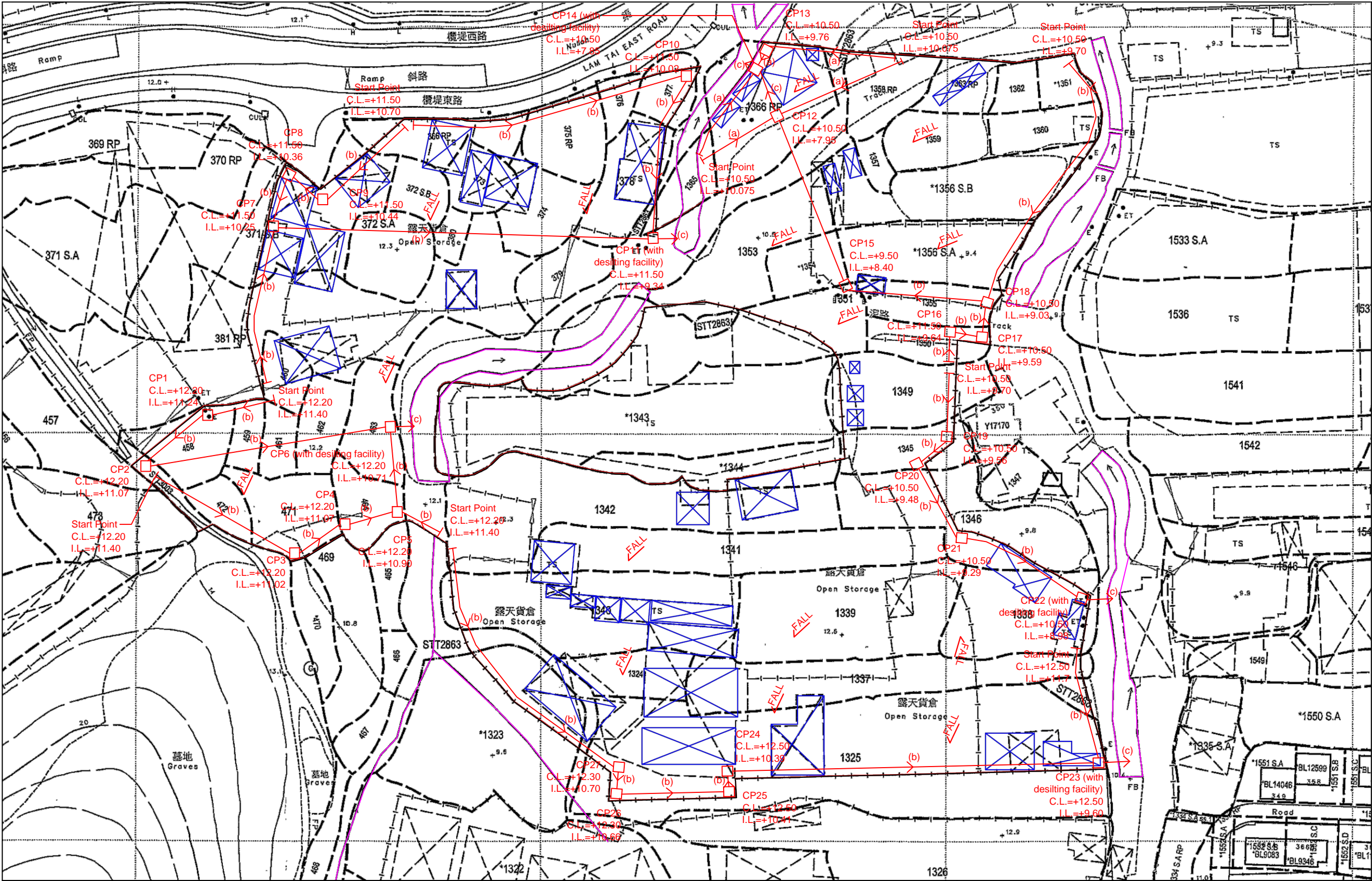
Remarks 備註:

Scale 比例:

1:2000

Table 1: Details of structures at the application site

| Structure | Proposed use | GFA (m ²) | Covered area (m ²) | Height (m) | No. of storey |
|-----------|-------------------------|-----------------------|--------------------------------|------------|---------------|
| 1 | Guard room & Meter room | 42 | 42 | 4 | 1 |
| 2 | meter room | 9 | 9 | 3 | 1 |
| 3 | workshop | 100 | 100 | 9 | 1 |
| 4 | Site office | 21 | 21 | 4 | 1 |
| 5 | Site office | 21 | 21 | 4 | 1 |
| 6 | storage | 21 | 21 | 4 | 1 |
| 7 | storage | 21 | 21 | 4 | 1 |
| 8 | Storage | 28 | 28 | 4 | 1 |
| 9 | workshop | 181 | 181 | 9 | 1 |
| 10 | workshop | 121 | 121 | 9 | 1 |
| 11 | Site office | 143 | 71.5 | 7 | 2 |
| 12 | workshop | 120 | 120 | 9 | 1 |
| 13 | workshop | 90 | 90 | 9 | 1 |
| 14 | workshop | 90 | 90 | 9 | 1 |
| 15 | workshop | 90 | 90 | 9 | 1 |
| 16 | workshop | 143 | 143 | 9 | 1 |
| 17 | Storage | 150 | 150 | 6 | 1 |
| 18 | Site office & workshop | 154 | 154 | 9 | 1 |
| 19 | meter room | 7.5 | 7.5 | 4 | 1 |
| 20 | meter room | 16 | 16 | 4 | 1 |
| 21 | Pump room | 16 | 16 | 4 | 1 |
| 22 | Site office & workshop | 208 | 104 | 8 | 2 |
| 23 | Storage | 143 | 143 | 9 | 1 |
| 24 | workshop | 6 | 6 | 4 | 1 |
| 25 | workshop | 108 | 108 | 9 | 1 |
| 26 | workshop | 208 | 208 | 9 | 1 |
| 27 | workshop | 207 | 207 | 9 | 1 |
| 28 | workshop | 220 | 220 | 9 | 1 |
| 29 | workshop | 230 | 230 | 9 | 1 |
| 30 | workshop | 154 | 154 | 9 | 1 |
| 31 | workshop | 100 | 100 | 9 | 1 |
| 32 | Site office & workshop | 84 | 42 | 9 | 2 |
| 33 | Site office & workshop | 72 | 36 | 9 | 2 |
| 34 | workshop | 18 | 18 | 9 | 1 |
| 35 | Staff break room | 36 | 18 | 9 | 2 |
| 36 | Site office & storage | 200 | 100 | 9 | 2 |
| 37 | workshop | 64 | 64 | 9 | 1 |
| 38 | workshop | 140 | 140 | 9 | 1 |
| Total | | 3,782.5 | 3,411 | | |



- LEGEND**
- CP Proposed CatchPit
 - (a) Proposed 375UC (1:100) with Cast Iron Cover
 - (b) Proposed 750UC (1:100) with Cast Iron Cover
 - (c) Proposed 750mm dia. (1:150) underground concrete pipe
 - Existing Stream

- Note:**
- Catchpits (CP6, CP11, CP14 CP22 & CP23) with desilting facility shall follow CEDD standard drawing No. C2406I.
 - Catchpit and UC follows Typical Details of Geotechnical Manual for Slope Fig.8.10 and Fig.8.11 respectively.
 - Open-bottom Type Fence Wall to be erected..

Project:
Temporary Open Storage of Construction Machinery and Materials, Recycling Materials and Used Electrical Appliances with Ancillary Workshop for a Period of 3 Years at Various Lots in D.D. 119 and Adjoining Government Land, Tong Yan San Tsuen, Yuen Long, New Territories

(Application No.:)

Title:
Drainage Proposal - LAYOUT

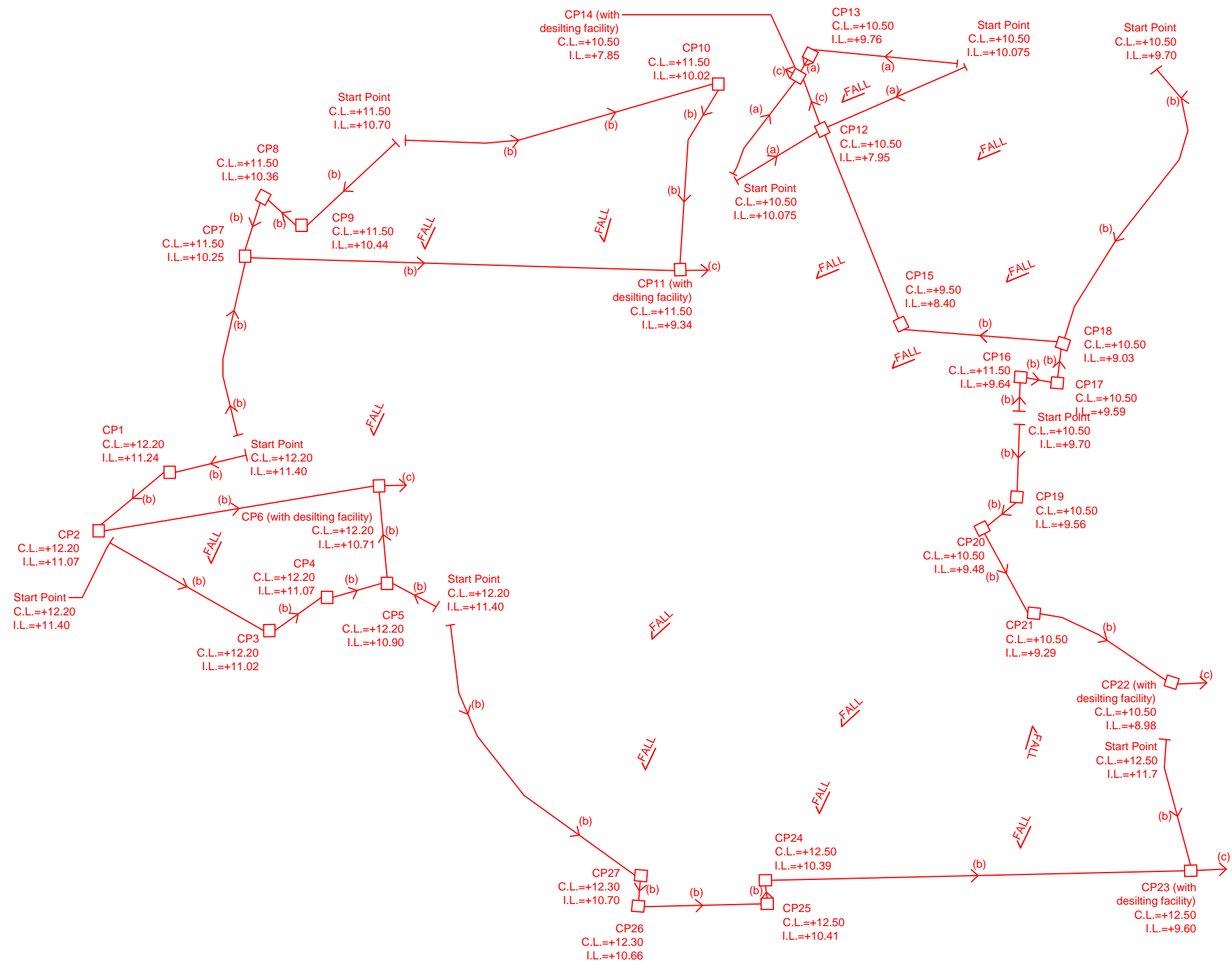
Drawn by:
DM

Check by:
DM

Date:
5-7-2025

Drawing No:
D01

正宏工程顧問公司
CHING WAN ENGINEERING CONSULTANT COMPANY



LEGEND

□ CP Proposed CatchPit

(a) Proposed 375UC (1:100) with Cast Iron Cover

(b) Proposed 750UC (1:100) with Cast Iron Cover

(c) Proposed 750mm dia. (1:150) underground concrete pipe

→ Existing Stream

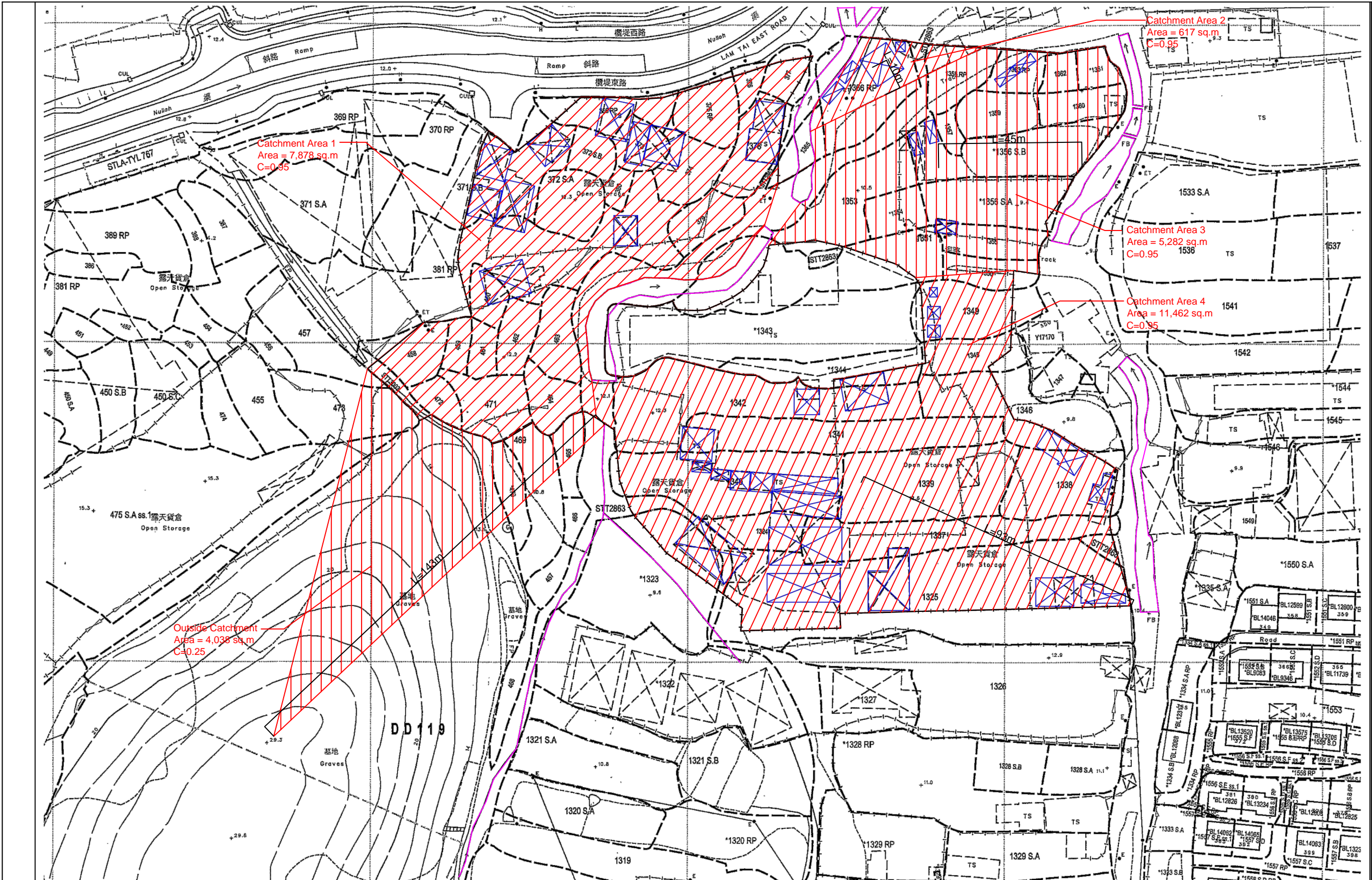
Note:

1. Catchpits (CP6, CP11, CP14 CP22 & CP23) 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. Open-bottom Type Fence Wall to be erected..

| | | | | |
|---|---|----------------------------|-------------------------------|--|
| Project Temporary Open Storage of Construction Machinery and Materials, Recycling Materials and Used Electrical Appliances with Ancillary Workshop for a Period of 3 Years at Various Lots in D.D. 119 and Adjoining Government Land, Tong Yan San Tsuen, Yuen Long, New Territories (Application No.:) | Title: Drainage Proposal - LAYOUT (without base map) | Drawn by: DM | Date: 5-7-2025 | 正宏工程顧問公司 CHING WAN ENGINEERING CONSULTANT COMPANY |
| | | Check by: DM | Drawing No: D02 | |



- LEGEND**
- CP Proposed CatchPit
 - (a) Proposed 375UC (1:100) with Cast Iron Cover
 - (b) Proposed 750UC (1:100) with Cast Iron Cover
 - (c) Proposed 750mm dia. (1:150) underground concrete pipe
 - Existing Stream

Note:

- Catchpits (CP6, CP11, CP14 CP22 & CP23) with desilting facility shall follow CEDD standard drawing No. C2406I.
- Catchpit and UC follows Typical Details of Geotechnical Manual for Slope Fig.8.10 and Fig.8.11 respectively.
- Open-bottom Type Fence Wall to be erected..

Project:
Temporary Open Storage of Construction Machinery and Materials, Recycling Materials and Used Electrical Appliances with Ancillary Workshop for a Period of 3 Years at Various Lots in D.D. 119 and Adjoining Government Land, Tong Yan San Tsuen, Yuen Long, New Territories

Title:
Drainage Proposal -
Catchment Area Plan

Drawn by:
DM

Check by:
DM

Date:
5-7-2025

Drawing No:
D03

正宏工程顧問公司
CHING WAN ENGINEERING CONSULTANT COMPANY

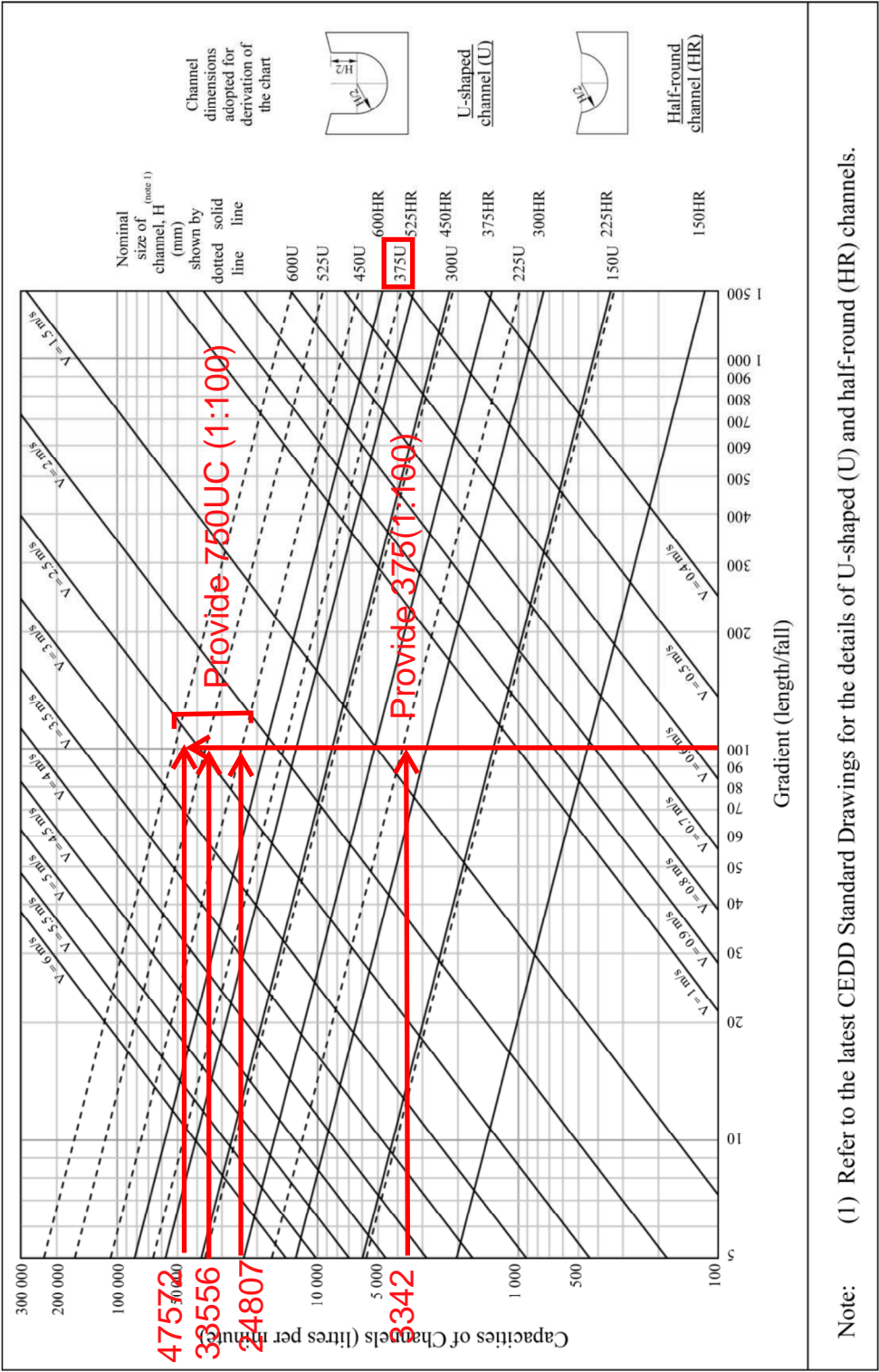
(Application No.:)

| | | | | |
|--|---|---|---------------------|--|
| Catchment Area 1, Area | = | 7878 | m ² | (C= 0.95) |
| Catchment Area 2, Area | = | 617 | m ² | (C= 0.95) |
| Catchment Area 3, Area | = | 5282 | m ² | (C= 0.95) |
| Catchment Area 4, Area | = | 11462 | m ² | (C= 0.95) |
| Outside Catchment Area 1, Area | = | 4038 | m ² | (C= 0.25) |
| Calculation of Design Runoff of the Proposed Development. | | | | |
| For the design of drains inside catchment area 1, Catchment Area 1 + outside catchment area | | | | |
| ΣQ | = | $\Sigma 0.278 C i A$ | | |
| A | = | 7878+4038 | m ² | |
| | = | 11916 | | |
| | = | 0.011916 | km ² | |
| t | = | $0.14465 L / H^{0.2} A^{0.1}$ | | |
| | = | $0.14465 * 143 / 1^{0.2} * 11916^{0.1}$ | | |
| | = | 8.092 | min | |
| i | = | $1.111 * a / (t + b)^c$ | | (50 yrs return period, Table 3a, Corrigendum 2024, SDM) and (11.1% increase due to climate change) |
| | = | $1.111 * 505.5 / (8.092 + 3.29)^{0.355}$ | | |
| | = | 236.9 | mm/hr | |
| Therefore, Q | = | $0.278 * 0.25 * 236.9 * 0.004038 + 0.278 * 0.95 * 236.9 * 0.007878$ | | |
| | = | 0.5593 | m ³ /sec | |
| | = | 33556 | lit/min | |
| Provide 750UC (1:100) is OK | | | | |
| For the design of drains inside catchment area 2, Catchment Area 2 | | | | |
| ΣQ | = | $\Sigma 0.278 C i A$ | | |
| A | = | 617 | m ² | |
| | = | 0.000617 | km ² | |
| t | = | $0.14465 L / H^{0.2} A^{0.1}$ | | |
| | = | $0.14465 * 10 / 1^{0.2} * 617^{0.1}$ | | |
| | = | 0.761 | min | |
| i | = | $1.111 * a / (t + b)^c$ | | (50 yrs return period, Table 3a, Corrigendum 2024, SDM) and (11.1% increase due to climate change) |
| | = | $1.111 * 505.5 / (0.761 + 3.29)^{0.355}$ | | |
| | = | 341.8 | mm/hr | |
| Therefore, Q | = | $0.278 * 0.95 * 341.8 * 0.000617$ | | |
| | = | 0.0557 | m ³ /sec | |
| | = | 3342 | lit/min | |
| Provide 375UC (1:100) is OK | | | | |
| For the design of drains inside catchment area 3, Catchment Area 3 | | | | |
| ΣQ | = | $\Sigma 0.278 C i A$ | | |
| A | = | 5282 | m ² | |
| | = | 0.005282 | km ² | |
| t | = | $0.14465 L / H^{0.2} A^{0.1}$ | | |
| | = | $0.14465 * 45 / 1^{0.2} * 5282^{0.1}$ | | |
| | = | 2.762 | min | |
| i | = | $1.111 * a / (t + b)^c$ | | (50 yrs return period, Table 3a, Corrigendum 2024, SDM) and (11.1% increase due to climate change) |
| | = | $1.111 * 505.5 / (2.762 + 3.29)^{0.355}$ | | |
| | = | 296.4 | mm/hr | |
| Therefore, Q | = | $0.278 * 0.95 * 296.4 * 0.005282$ | | |
| | = | 0.4135 | m ³ /sec | |
| | = | 24807 | lit/min | |
| Provide 750UC (1:100) is OK | | | | |
| For the design of drains inside catchment area 4, Catchment Area 4 | | | | |
| ΣQ | = | $\Sigma 0.278 C i A$ | | |
| A | = | 11462 | m ² | |
| | = | 0.011462 | km ² | |
| t | = | $0.14465 L / H^{0.2} A^{0.1}$ | | |
| | = | $0.14465 * 93 / 1^{0.2} * 11462^{0.1}$ | | |
| | = | 5.283 | min | |
| i | = | $1.111 * a / (t + b)^c$ | | (50 yrs return period, Table 3a, Corrigendum 2024, SDM) and (11.1% increase due to climate change) |
| | = | $1.111 * 505.5 / (5.283 + 3.29)^{0.355}$ | | |
| | = | 261.9 | mm/hr | |
| Therefore, Q | = | $0.278 * 0.95 * 261.9 * 0.011462$ | | |
| | = | 0.7929 | m ³ /sec | |
| | = | 47572 | lit/min | |
| Provide 750UC (1:100) is OK | | | | |

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 |
|--------------|-------------|------------------|--------------|

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



Check 750mm dia. Pipes by Colebrook-White Equation

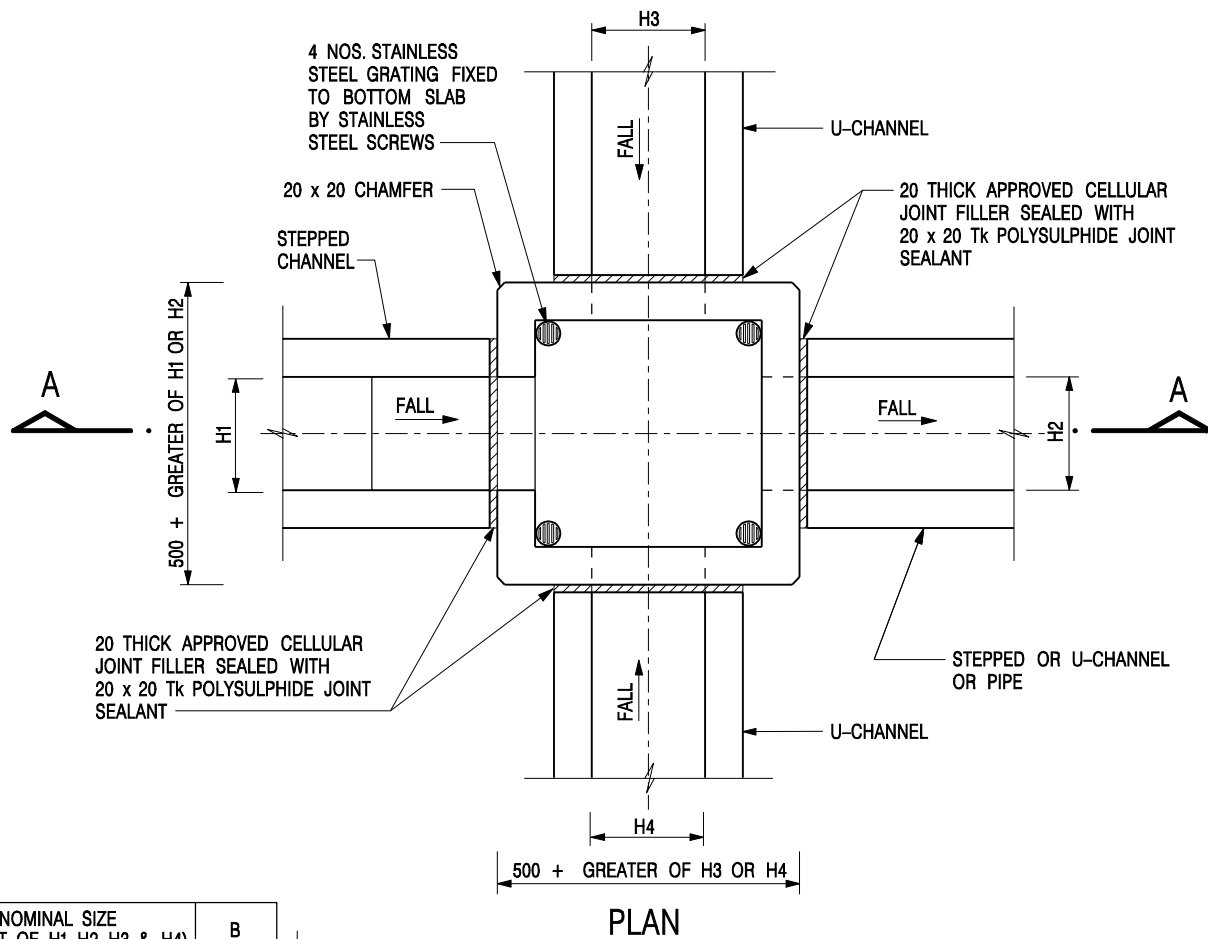
$$V = -\sqrt{(8gDs)} \log\left(\frac{ks}{3.7D} + \frac{2.51v}{D\sqrt{(2gDs)}}\right)$$

where :

| | | | | |
|----|---|----------|--|---|
| V | = | | mean velocity (m/s) | |
| g | = | 9.81 | m/s ² gravitational acceleration (m/s ²) | |
| D | = | 0.75 | m internal pipe diameter (m) | |
| ks | = | 0.00015 | 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 | = | 0.006667 | hydraulic gradient | |

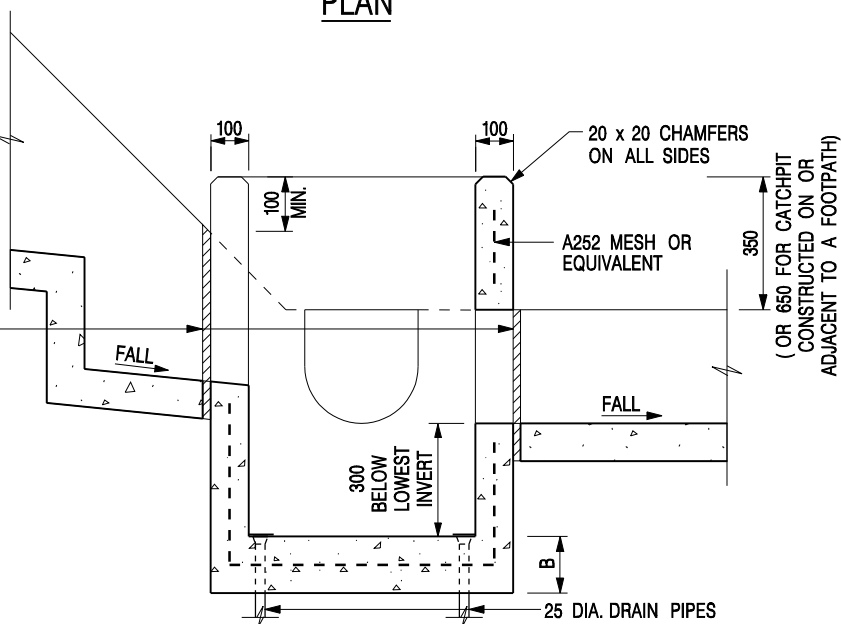
Therefore, design V of pipe capacity = 2.6177 m/s

| | | |
|----------|-------------------|--------------------------------|
| Q= 0.8VA | | (0.8 factor for sedimentation) |
| = 0.925 | m ³ /s | |
| = 55511 | lit/min | |
| > 47572 | lit/min | Ok |



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


20 THICK APPROVED CELLULAR JOINT FILLER SEALED WITH 20 x 20 Tk POLYSULPHIDE JOINT SEALANT

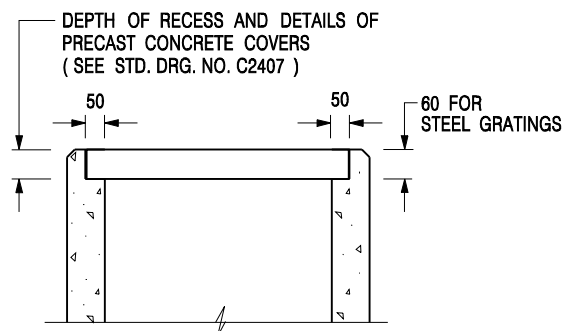


NOTES:

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 DATE JAN 1991 | |
| | | DRAWING NO. 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

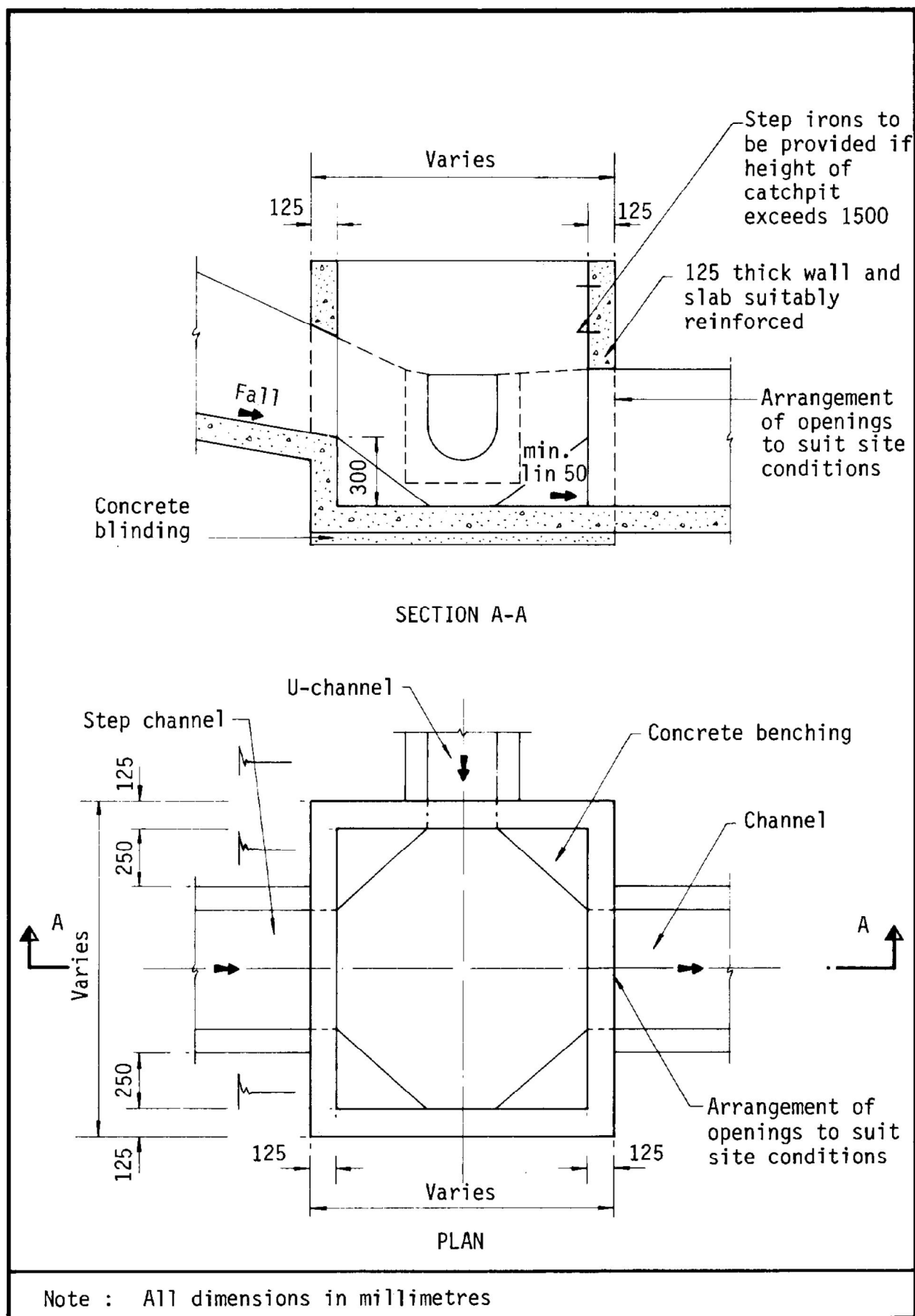
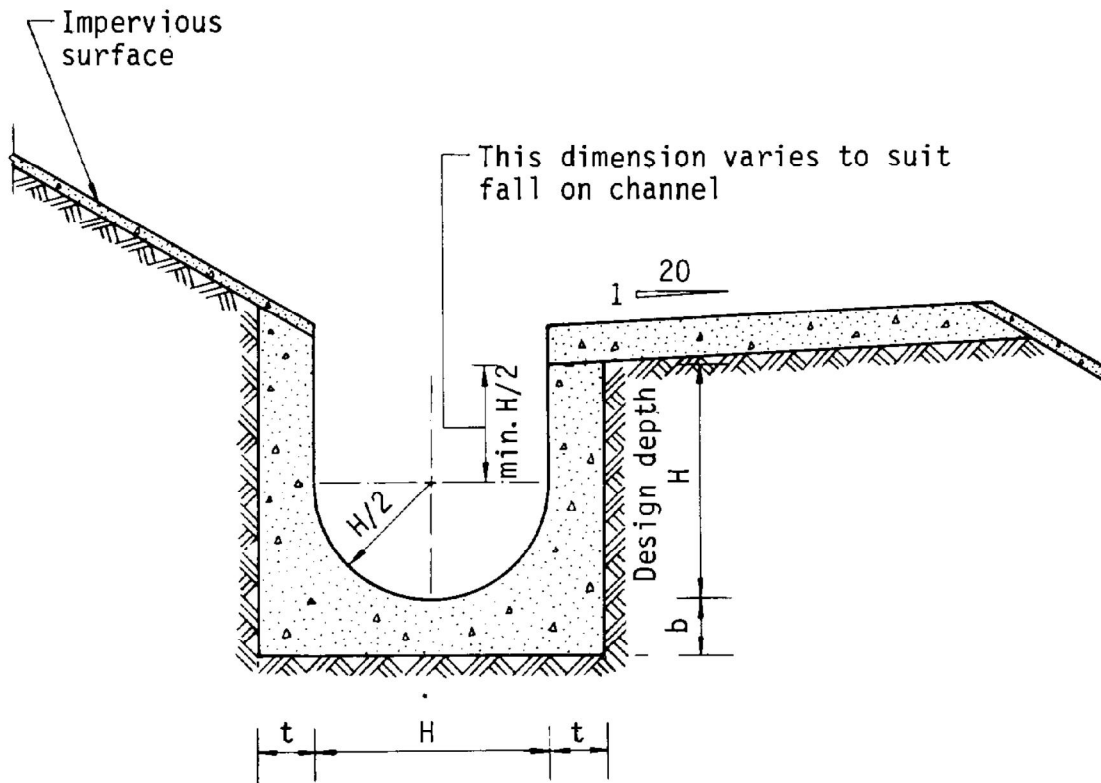


Figure 8.10 - Typical Details of Catchpits



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