

# **Proposed Temporary Warehouse (Non-dangerous Goods) & Associated Filling of Land for a Period of 3 Years**

**at**

**Lots 953 S.B, 953 S.C, 956 (Part), 960RP (Part), 961 RP (Part), 1065 (Part), 1072, 1074, 1075, 1077 (Part), 1081 S.A RP, 1081 S.B RP, 1082 (Part), 1086 & 1088 in D.D. 107 & Adjoining Government Land, Kam Tin, Yuen Long, New Territories**

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## **Section 1 Background**

### **1.1 Introduction**

- 1.1.1 This planning application is submitted by Chun Sing Air-Sea Worldwide Limited (駿成國際集運有限公司) who is the occupier of the Lots 953 S.B, 953 S.C, 956 (Part), 960RP (Part), 961 RP (Part), 1065 (Part), 1072, 1074, 1075, 1077 (Part), 1081 S.A RP, 1081 S.B RP, 1082 (Part), 1086 & 1088 in D.D. 107 & Adjoining Government Land, Kam Tin, Yuen Long, New Territories. The applicant seeks planning permission for proposed temporary warehouse (non-dangerous goods) for a period of 3 years Lots 953 S.B, 953 S.C, 956 (Part), 960RP (Part), 961 RP (Part), 1065 (Part), 1072, 1074, 1075, 1077 (Part), 1081 S.A RP, 1081 S.B RP, 1082 (Part), 1086 & 1088 in D.D. 107 & Adjoining Government Land, Kam Tin, Yuen Long, New Territories. **(Figure 1)** Although the proposed use is neither a Column 1 nor 2 use in the “AGR” zone, the covering Notes of the OZP stipulate that temporary use or development of any land or buildings not exceeding a period of 3 years within the zone requires planning permission from Town Planning Board notwithstanding that the use or development is not provided for under the Notes of the OZP. Significant portion of the application site is currently vacant.
- 1.1.2 The current application is to facilitate relocation of their warehouse business from Hung Shui Kiu and Ha Tsuen New Development Area. The previous occupation falls within the Hung Shui Kiu and Ha Tsuen New Development Area (HSK & HT NDA) and the concerned lot (i.e. Lots 1290 (Part), 1291 (Part), 1292, 1293 (Part), 1294 (Part), 1295 RP (Part), 1296, 1297, 1298, 1299, 1300, 1301, 1302 (Part), 1303 (Part), 1304, 1305 RP, 1306 RP (Part), 1343 (Part), 1344 (Part), 1345, 1346, 1347, 1348, 1349, 1350, 1351 (Part), 1352 (Part) and 1353 (Part) in D.D. 125 and Adjoining Government Land, Ha Tsuen, Yuen Long, New Territories) **(Figure 5)** had already been resumed by the Government. Thus, there is an imminent need for the applicant to secure a relocation site to continue the affected business operation.
- 1.1.3 The representative of the applicant of this planning application has approached Development Bureau for seeking the advice for the relocation of his business to a suitable location. Development Bureau agreed that the application site may be a suitable location for the relocation of applicant’s business subject to the provision of appropriate technical proposals.

- 1.1.4 The application site is abutting Mei Fung Road and it is connected to Sam Tam Road via Mei Fung Road.

## **Section 2 Planning Justifications**

### **2.1 Thorough Site Selection Process**

- 2.1.1 The applicant had undergone a thorough site selection process in identifying a suitable relocation site for their affected operation. The process had been difficult as land within Categories 1 and 2 areas of the Town Planning Board Guidelines for “Application for Open Storage and Port Back-up Uses” (TPB PG-No. 13G) were either unaffordable or have been occupied by other operators.
- 2.1.2 Six prospective sites in Yuen Long, Tai Po and North districts has been reviewed and were found to be unsuitable due to various shortcomings such as too large for the relocation, incompatible with other adjoining uses, traffic concerns and etc. The details of alternative sites for relocation of applicant’s business and why they are not feasible is shown in the following:
- 2.1.3 Alternative Site 1 – Lot 1671 in D.D.129, Lau Fau Shan - There is longstanding concern on heavy vehicle traffic generated from any new developments on Deep Bay Road from traffic engineering and road safety perspectives. Unless the traffic issue could be overcome or satisfactorily resolved, we foresee there would be considerable technical difficulty to further pursue your proposal at the subject site.
- 2.1.4 Alternative Site 2 - Lots 645 RP and 647 in D.D. 76, Hok Tau - The site is not involved in any previous planning approval for similar use. It is situated in an area of rural landscape character and surrounded predominately by active and fallow agricultural land with a "Green Belt" ("GB") zone located immediately to its west and Pak Sin Leng Country Park to its further northwest across Hok Tau Wai village. The site forms part of a large tract of dense and undisturbed woodland, unpolluted lowland river (e.g. Tan Shan River) and areas of high scenic value. No similar planning application has been approved in the same "AGR" zone.
- 2.1.5 Alternative Site 3 - Lots 788, 792 and 796 RP in D.D. 82, Kan Tau Wai - It is noted that the long-term planning of the area is currently under investigation by the “Planning and Engineering Study for New Territories North New Town and Man Kam To – Investigation” and subject to further study under the Northern Metropolis Development Strategy mentioned in Policy Address 2021.
- 2.1.6 Alternative Site 4 - Lot 859 S.B RP in D.D. 96, Ma Tso Lung San Tsuen, Sheung Shui - The subject site appears to be under active cultivation and is being categorised as 'Cluster A' under the ‘Consultancy Study on the Designation of Agricultural Priority Areas’ where active farmland is found within/near the site. Clearance of active farmland at the subject site would likely attract objection from the Agriculture, Fisheries and Conservation Department. To the immediate



north across the stream is Ma Tso Lung San Tsuen, where strong local concerns on the proposed use are also anticipated. It is also noted that the northern and western portions of the subject site encroach onto a natural stream, which should be excluded from the development site. The subject site is located in an area of rural landscape character dominated by village houses of Ma Tso Lung San Tsuen and active/fallow agricultural land. The subject site is not involved in any previous application for similar use, and no similar application has been approved by the TPB in the same “AGR” zone. The proposed use is considered not compatible with the surrounding environment/ land uses. The subject site falls within Zone 1 of the Study Area under the ‘Ma Tso Lung Area and Other Sites in Kwu Tung North New Development Area (KTN NDA) and North District - Feasibility Study’. The study is expected to commence in November 2022 for completion in 24 months. According to the Northern Metropolis Development Strategy (NMDS), Ma Tso Lung and its surrounding areas can serve as an intersection linking the Hong Kong-Shenzhen Innovation and Technology Park and the KTN NDA, providing information and technology enterprises with convenient community services and daily life support. While detailed land use proposals of the Ma Tso Lung area have yet to be formulated under the study, the proposed use appears not in line with the NMDS for the area.

- 2.1.7 Alternative Site 5 - Lots 2464, 2465 and 2466 in D.D. 39, Shek Chung Au, Luk Keng - The site is located in an area of rural landscape character and close to some "Coastal Protection Area" to its south and east in Yim Tso Ha and Wu Shek Kok facing Starling Inlet (i.e. Sha Tau Kok Hoi) and Pat Sin Leng Country Park to its further south in Luk Keng. The surrounding natural landscape, comprising large tracts of dense and undisturbed woodlands, has generally been maintained in good condition. The attractive landscape and unique ecological features in the area, as well as its proximity to the Country Park, is conducive to recreational development with institutional uses oriented towards conservation and ecological interests. Such planning intention is further echoed by the recent opening up of the Sha Tau Kok Public Pier within the Frontier Closed Area for eco-tourism and local culture sharing. The site is also adjacent to Shek Chung Au village settlement within the "V" zone, where local objection/concerns on the proposed operation is envisaged. Moreover, to the immediate northwest of the Site is Law Uk and its Ancillary Block in Shek Chung Au, both Grade 3 historic buildings. Comments from the Antiquities and Monuments Office would be relevant. No damage / disturbance should be caused on the graded buildings in the process of carrying out any works at the site. While the site is currently mostly vacant and hard paved, it is the subject of an active enforcement case for unauthorised storage use in early 2022. Although there are a few existing open storage yards and informal industrial workshops scattered along Sha Tau Kok Road, they are mostly existing uses (i.e. uses established in the distant past and continued to the present) situated within the "Recreation" zone, where the planning intention is to gradually phase out such non-conforming uses for recreation and tourism/eco-tourism uses. While any intensive development in the area may not be sustainable and is subject to technical feasibility being established, the site is currently served by Sha Tau Kok Road with limited capacity. Furthermore, Drainage Services Department has previously advised that some parts of the area, including Yim Tso Ha, fall within the

floodplain which is susceptible to overland flow and flooding. As such, development proposals involving extensive earth-filling and paving should generally be avoided. No similar application for warehouse use has been approved in the Luk Keng area. Approval of the current proposal (and the effect it may have in encouraging other similar applications) may result in a general degradation of the environment of the area. Overall, the suitability of the subject site for re-provisioning the proposed operation would likely be subject to considerable debate by the TPB, rendering the chances of obtaining planning approval uncertain. In view of the above, there is reservation on using the subject site for re-provisioning the proposed operation from district planning point of view.

2.1.8 Alternative Site 6 - Lots 357 S.B, 358, 361, 362 and 366 in D.D. 16, Chuen Pei Lung, Lam Tsuen - A small northwestern portion of the Site encroaches into the riverbank of Lam Tsuen River, and should be excluded from any development proposal. The Site is located in a rural landscape character area dominated by active/fallow agricultural land and tree groups with some warehouses and temporary structures to the west across Lam Tsuen River. It is also located within the upper indirect water gathering ground, to which the Water Supplies Department and Environmental Protection Department may have concern from water quality and environmental aspects. The Site appears to be largely covered with vegetation and clusters of tree groups with some temporary structures. There are also active agricultural activities in the northern portion of the Site. To the east of site across Ngau Kwu Leng Path is the University Farm of the City University of Hong Kong, and to the west of the site across Lam Tsuen River is a large piece of land zoned "Agriculture" which is being categorised as one of the priority areas under the 'Consultancy Study on the Designation of Agricultural Priority Areas' where active farmland is found within/near the Site. The Agriculture, Fisheries and Conservation Department may have reservation on the proposal due to clearance of active farmland. The Site abuts on Ngau Kwu Leng Path and is accessible from Lam Kam Road via Lam Tsuen Heung Kung Sho Road. Proposed vehicular access to the Site as well as its traffic impact to the surrounding areas should be addressed in the proposal for Transport Department's consideration. According to Planning Department's record, similar applications for temporary warehouse uses in the area had received strong local objection from Hang Ha Po Village (to the further southeast of the Site), mainly on the grounds of potential adverse environmental impact and pollution to the adjacent Lam Tsuen River. The project proponent should take cognizance of the local sentiments on the proposal. Though the suitability of using the Site for re-provisioning of brownfield operation would be subject to assessments on technical feasibility, in view of the above considerations, the applicant is informed that the Site is not recommended for the proposed relocation.

2.1.9 The Site at the application site is deemed suitable for relocation as it is highly accessible and abutting a local vehicular access. The site area of the site at the application site (i.e. 10,000m<sup>2</sup>) is the most closely to the area of the original site at Ha Tsuen (i.e. approximately 18,120m<sup>2</sup>). All the above six sites were deemed too small for the relocation of applicant's business.

## **2.2 The Site is Unsuitable for Agricultural Rehabilitation**

- 2.2.1 The application site has been vacant for a long period of time and it has not been rehabilitated for agricultural activities. The proposal, which is abutting a vehicular access, would put scarce land resources into a better use.

## **2.3 Importance to Local Construction Industry**

- 2.3.1 Significant portion of the applicant's warehouse has been occupied for the storage of construction materials. Successful relocation of the Site would help sustain the operation and help support the upcoming development projects, such as those in Northern Metropolis Development Strategy.

## **2.4 No Adverse Traffic Impacts**

- 2.4.1 Only medium goods vehicle will access to site to deliver the non-dangerous goods to and from the application site. Also, the operation hours of the development will be limited to 9:00a.m. to 7:00p.m. from Mondays to Saturdays and no operation will be held on Sundays and public holidays. The operation will only bring negligible amount of traffic to the area as shown in the estimated traffic generation and attraction in Annex 2. The approval of the current application would bring negligible amount of traffic because the site is intended for long term storage of non-dangerous goods.
- 2.4.2 The proposed development is a warehouse for storage of non-dangerous goods. No visitors will be allowed to visit the site. As such, the approval of the current application would not bring significant amount of traffic to the area.

## **2.5 No Adverse Environmental and Visual Impacts**

- 2.5.1 The applicant undertakes that the operation hours of the development will be limited to 9:00a.m. to 7:00p.m. from Mondays to Saturdays and no operation will be held on Sundays and public holidays. That is to say no operation will be held during the sensitive hours. Secondly, the proposed development is a warehouse for storage of non-dangerous goods. No workshop activities are proposed within the application site and all the storage of non-dangerous goods will be carried out within the enclosed structures. Storage use is inert and static in nature so that it would not affect the nearby residents. More, the applicant proposed to cover the site with a five warehouses. No operation use will be held at the application site which may generate noise or visually eyesore to the nearby residents. Lastly, the applicant agreed to undertake the "Code of Practice on Handling the Environmental Aspects of Temporary Uses and Open Storage Use" and the Professional Persons Environmental Consultative Committee Practice Notes No. 1/23 to upkeep the environment of the application site. The applicant is full of confidence that the proposed development would not generate environmental nuisance to the nearby residents.

- 2.5.2 The applicant will make the warehouse by the material with a density higher than 7kg/m<sup>2</sup>. All the windows will be closed during the operation hours.

## **2.6 No Adverse Drainage Impacts**

- 2.6.1 The applicant has submitted a drainage proposal in support of the current application and the result of the proposal demonstrated that the drainage impact of the proposed development would be minimal.

## **2.7 No Undesirable Precedent**

- 2.7.1 The proposed relocation of the applicant's operation to the application site is a direct result of the Government's land resumption of land for the HSK & HT NDA. Successful relocation of the operation would help to maintain a stable supply of construction materials in Hong Kong and should be considered unique from any other temporary development proposals in the subject "AGR" zone. Approval of the application would not create an undesirable precedent.

## **Proposed Temporary Warehouse (Non-dangerous Goods) & Associated Filling of Land for a Period of 3 Years**

at

**Lots 953 S.B, 953 S.C, 956 (Part), 960RP (Part), 961 RP (Part), 1065 (Part), 1072, 1074, 1075, 1077 (Part), 1081 S.A RP, 1081 S.B RP, 1082 (Part), 1086 & 1088 in D.D. 107 & Adjoining Government Land, Kam Tin, Yuen Long, New Territories**

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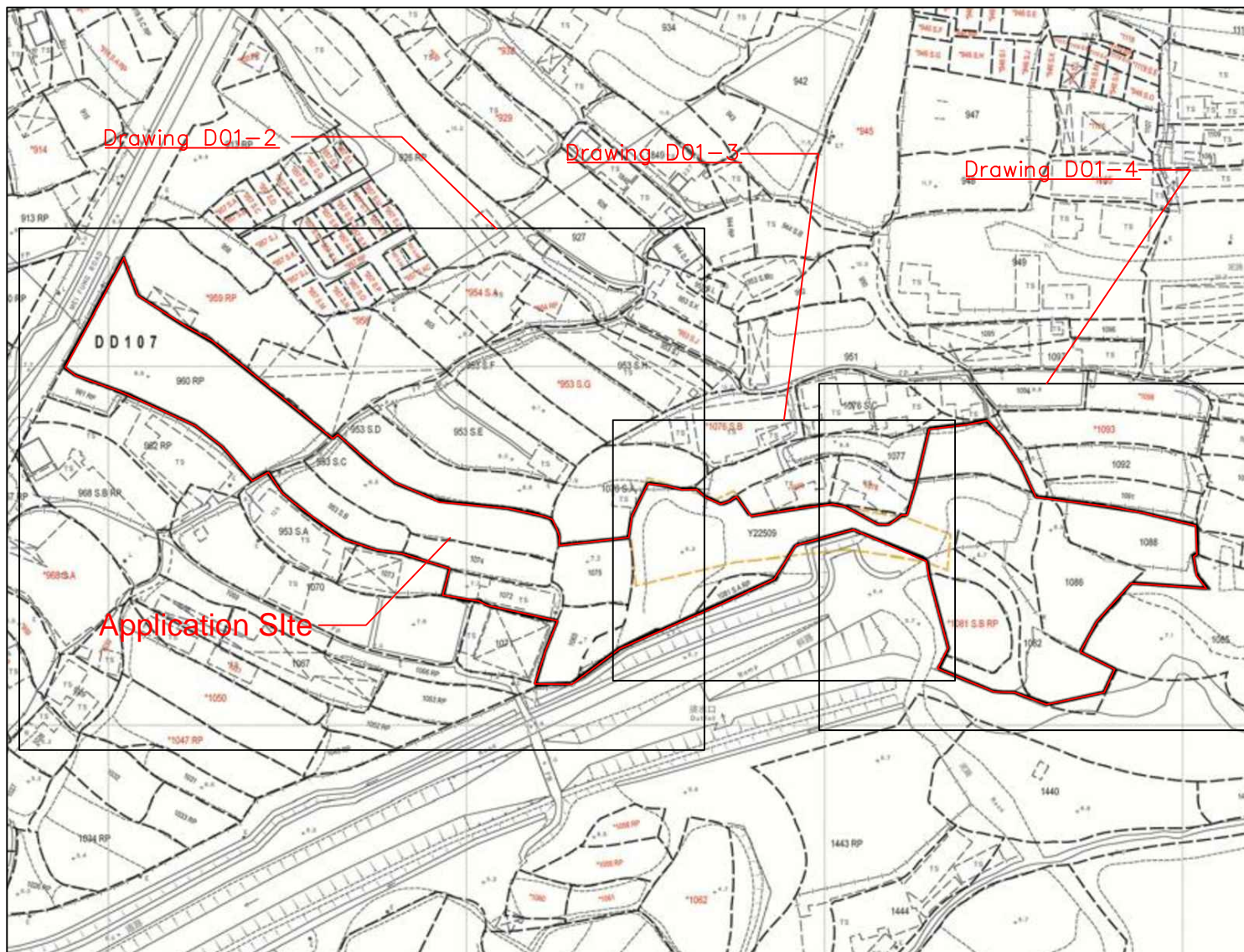
### **Annex 1 Estimated Traffic Generation**

- 1.1 The application site is abutting Mei Fung Road. It is intended to serve the long term storage of non-dangerous goods such as construction materials so that the traffic generated by the proposed development is insignificant. The vehicular track leading to the application site is shown in **Figure 2**.
- 1.2 The proposed loading/unloading space at the application site would only be opened to staff and no visitor is allowed to visit the proposed development.
- 1.3 There will be 4 loading/unloading bays for medium goods vehicle. No container trailer/tractor will access the site. The estimated traffic generation/attraction rate is shown below:

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 goods vehicle	0.8	0.8	4	2

Note:

1. The operation hours of the proposed development is from 9:00a.m. to 7:00p.m. from Mondays to Saturdays. No operation will be carried out on Sundays and public holidays.
  2. The pcu of medium goods vehicle is taken as 2; &
  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.
- 1.4 In association with the intended purpose, adequate space for manoeuvring would be provided within the application site. Sufficient space within the application site is provided so that no queueing up of vehicle would be occurred outside the application site.



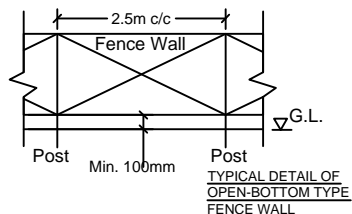
**Note:**

1. Catchpits (CP2) 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.



**LEGEND**

- ☐ CP Proposed CatchPit
- (a) Proposed 375UC (1:200) with Cast Iron Cover
- (b) Proposed 525UC (1:200) with Cast Iron Cover
- (c) Proposed 525UC (1:100) with Cast Iron Cover
- (d) Proposed 600UC (1:100) with Cast Iron Cover

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CHING WAN ENGINEERING CONSULTANT COMPANY

**Project:**

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**Title:**

Drainage Proposal - LAYOUT

D01-1

**Drawn by:**

DM

**Date:**

15-10-2025

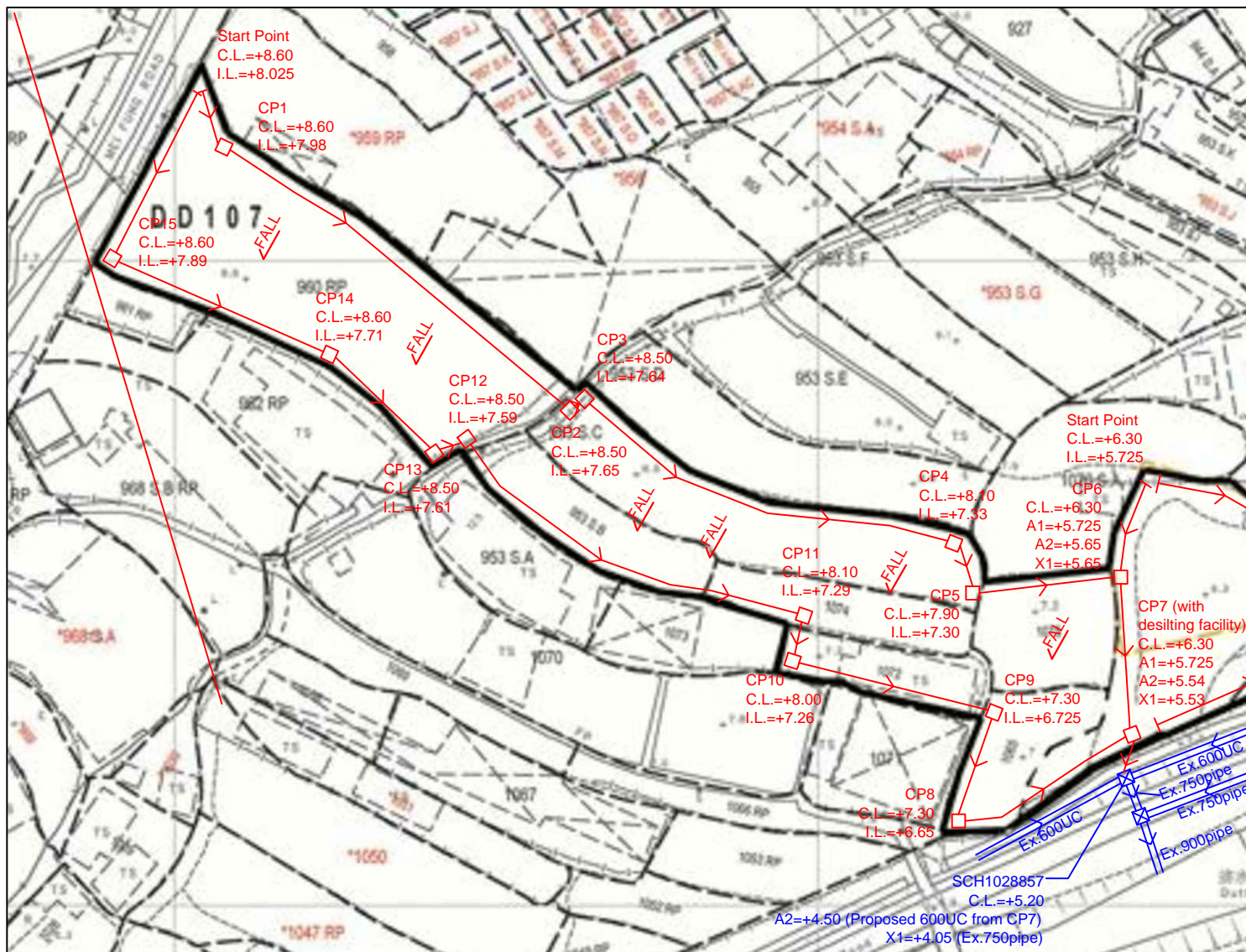
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DM

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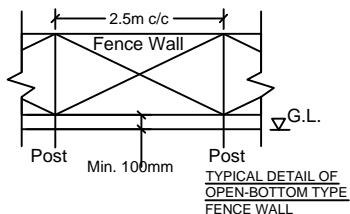
#### Note:

1. Catchpits (CP7) 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.

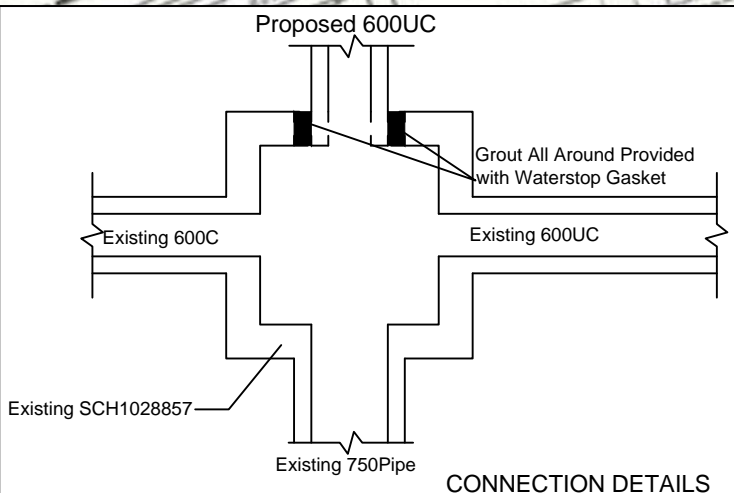
3. Fence Wall to be erected (if any) shall be Open-bottom type.

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



#### LEGEND

- ☐ CP Proposed CatchPit
- (a) Proposed 375UC (1:200) with Cast Iron Cover
- (b) Proposed 525UC (1:200) with Cast Iron Cover
- (c) Proposed 525UC (1:100) with Cast Iron Cover
- (d) Proposed 600UC (1:100) with Cast Iron Cover
- ☒ CP Existing CatchPit/Manhole
- Existing Drain (size as shown)



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#### Title:

Drainage Proposal - LAYOUT

D01-2

#### Drawn by:

DM

#### Date:

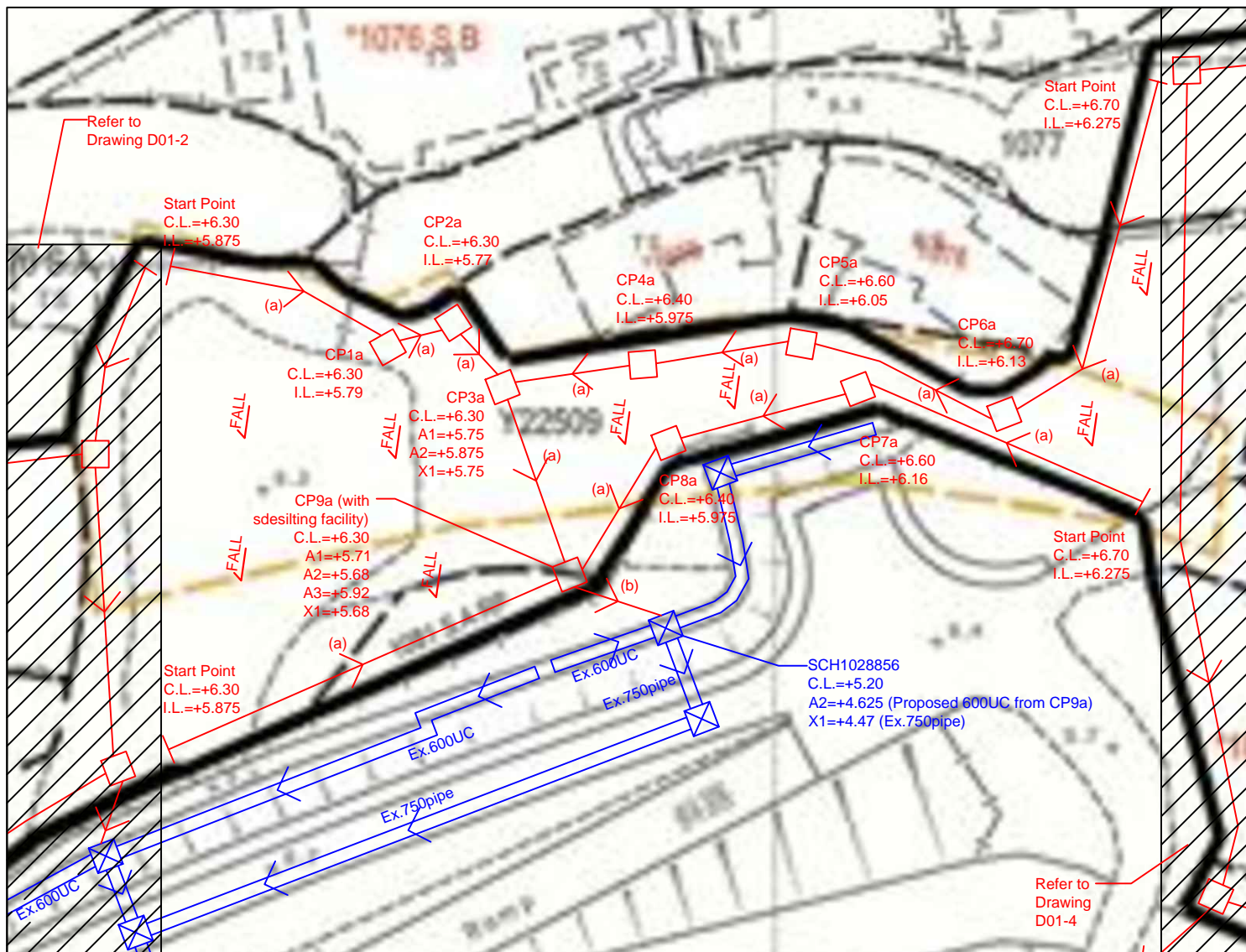
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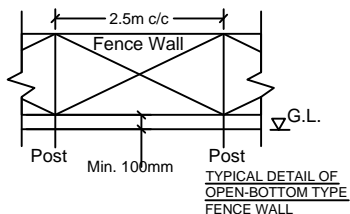
**Note:**

1. Catchpits (CP9a) 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.

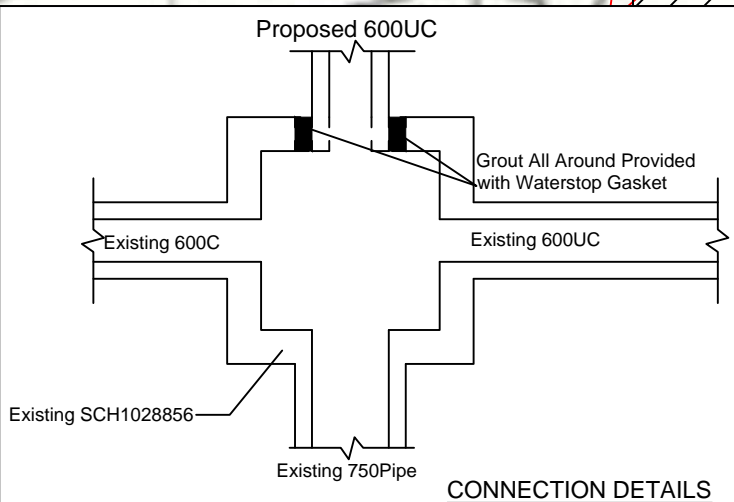
3. Fence Wall to be erected (if any) shall be Open-bottom type.

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



**LEGEND**

- CP Proposed CatchPit
- (a) Proposed 375UC (1:200) with Cast Iron Cover
- (b) Proposed 525UC (1:200) with Cast Iron Cover
- (c) Proposed 525UC (1:100) with Cast Iron Cover
- (d) Proposed 600UC (1:100) with Cast Iron Cover
- CP Existing CatchPit/Manhole
- Existing Drain (size as shown)



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**Title:**

Drainage Proposal - LAYOUT

D01-3

**Drawn by:**

DM

**Date:**

15-10-2025

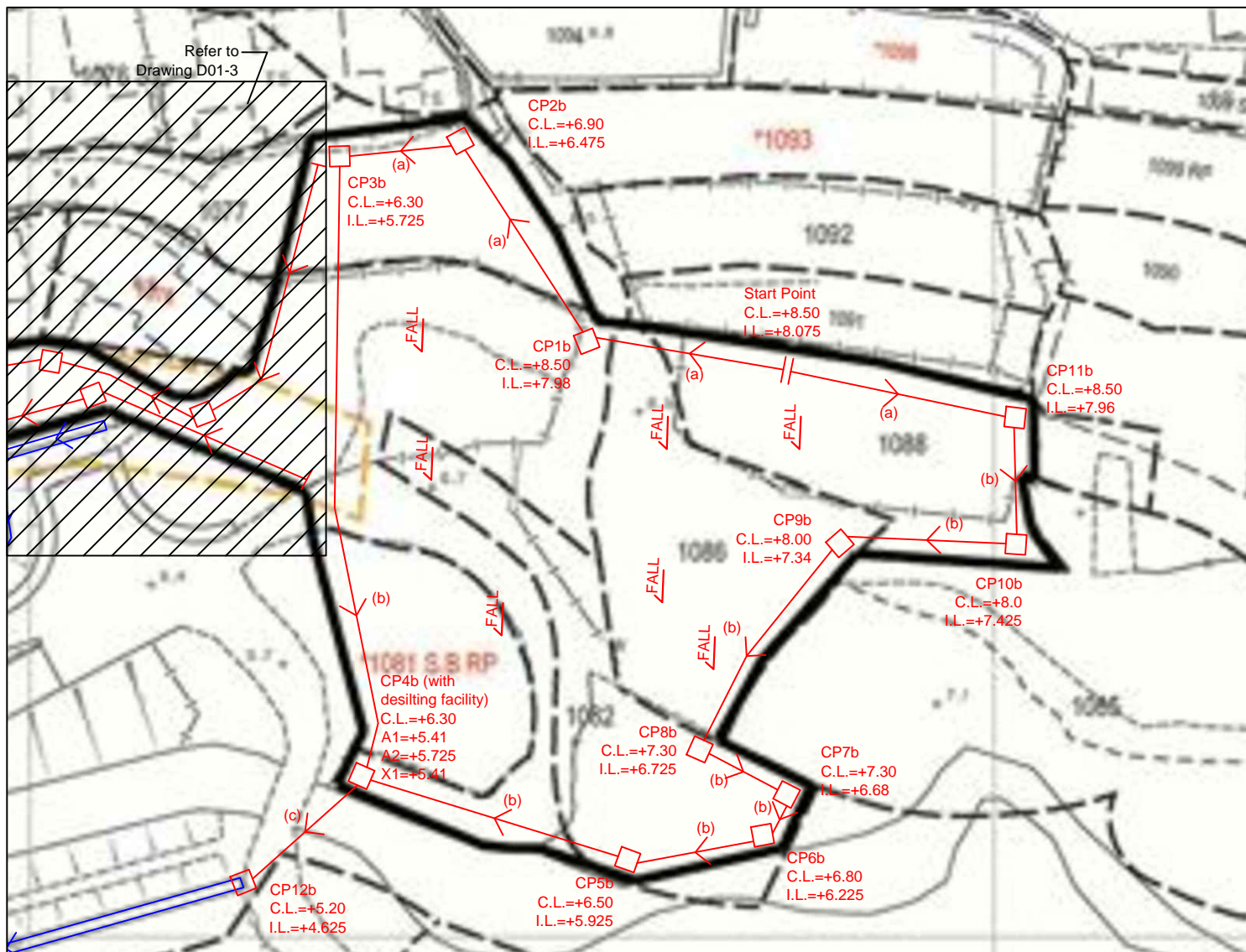
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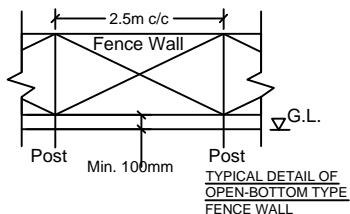
**Note:**

1. Catchpits (CP12b) 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.

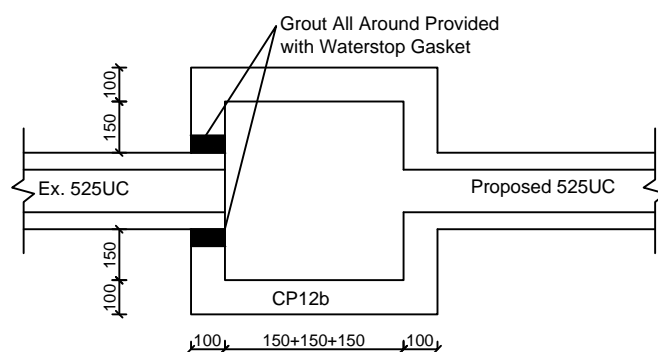
3. Fence Wall to be erected (if any) shall be Open-bottom type.

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



**LEGEND**

- ☐ CP Proposed CatchPit
- (a) Proposed 375UC (1:200) with Cast Iron Cover
- (b) Proposed 525UC (1:200) with Cast Iron Cover
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- (d) Proposed 600UC (1:100) with Cast Iron Cover
- ☒ CP Existing CatchPit/Manhole
- Existing Drain (size as shown)



**CONNECTION DETAILS**

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**Title:**

Drainage Proposal - LAYOUT

D01-4

**Drawn by:**

DM

**Date:**

15-10-2025

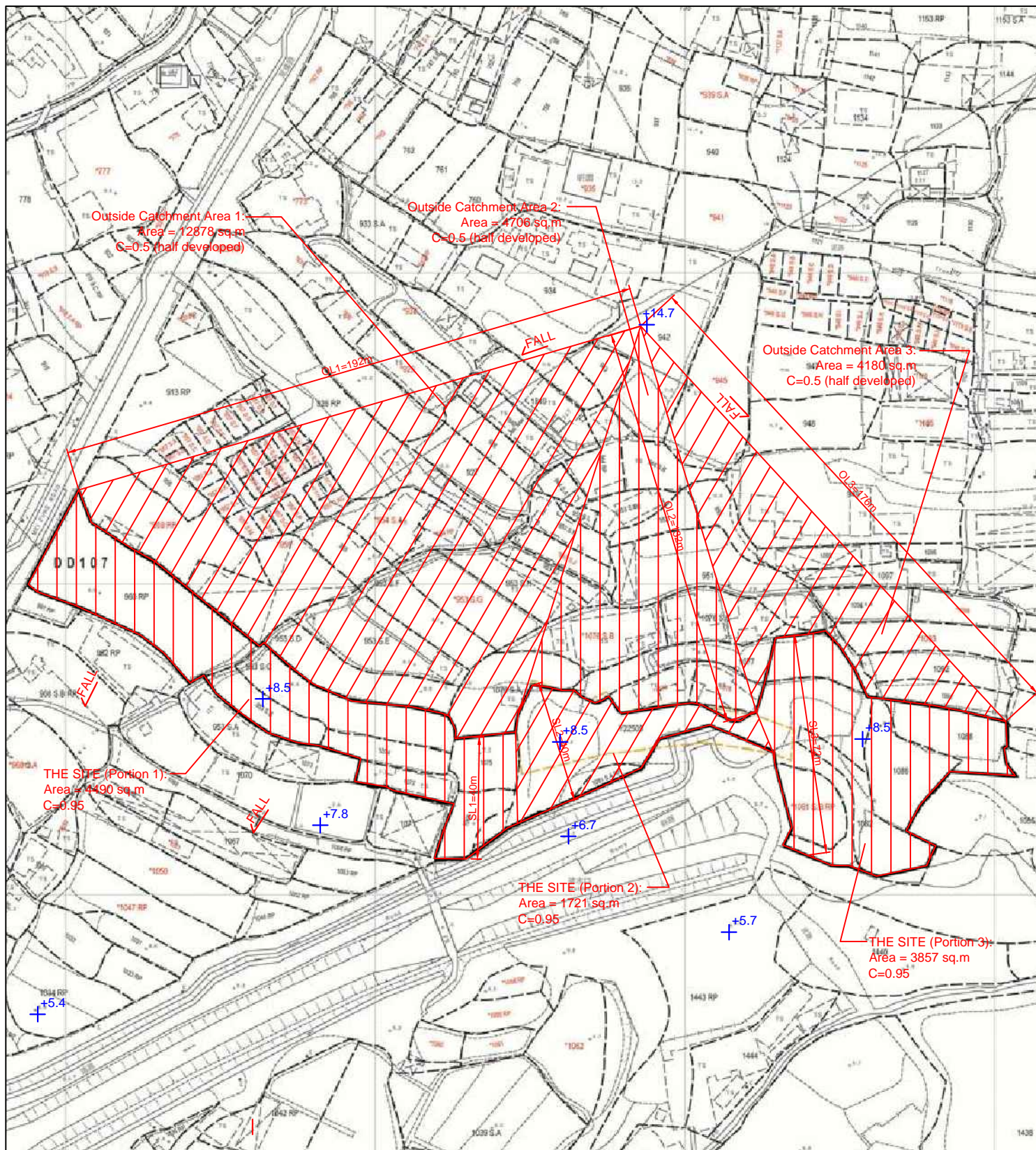
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Title:

Drainage Proposal -  
CATCHMENT AREA PLAN

D02

Drawn by:

DM

Date:

15-10-2025

Check by:

DM

Scale:

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Outside Catchment Area 1 , Area	=	12878	m <sup>2</sup>	(C= 0.5 )	OL1=	192 m
Outside Catchment Area 2 , Area	=	4706	m <sup>2</sup>	(C= 0.5 )	OL2=	132 m
Outside Catchment Area 3 , Area	=	4180	m <sup>2</sup>	(C= 0.5 )	OL3=	176 m
The Site, (Portion 1), Area	=	4490	m <sup>2</sup>	(C= 0.95 )	SL1=	40 m
The Site, (Portion 2), Area	=	1721	m <sup>2</sup>	(C= 0.95 )	SL2=	40 m
The Site, (Portion 3), Area	=	3857	m <sup>2</sup>	(C= 0.95 )	SL3=	72 m

**Calculation of Design Runoff of the Proposed Development,**  
**For the design of drains at northern side of The Site (Portion 1), Outside Catchment Area 1**

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

A

=

12878

m<sup>2</sup>

=

12878

km<sup>2</sup>

=

0.012878

km<sup>2</sup>

t

=

0.14465 OL1/ H<sup>0.2</sup> A<sup>0.1</sup>

=

0.14465\*192/1<sup>0.2</sup>\*12878<sup>0.1</sup>

=

10.780

min

i

=

1.16\*a/(t+b)<sup>c</sup>

=

1.16\*505.5/(10.78+3.29)<sup>0.355</sup>

=

229.4

mm/hr

(50 yrs return period, Table 3a, Corrigendum 2024, SDM) and (16% increase due to climate change)

Therefore, Q

=

0.278\*0.5\*229.4\*0.012878

=

0.4106

m<sup>3</sup>/sec

=

24635

lit/min

Provide 525UC (1:200) is OK

**For the design of drains at southern side of The Site (Portion 1), The Site (Portion 1)**

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

A

=

4490

m<sup>2</sup>

=

4490

km<sup>2</sup>

=

0.00449

km<sup>2</sup>

t

=

0.14465 SL1/ H<sup>0.2</sup> A<sup>0.1</sup>

=

0.14465\*40/1<sup>0.2</sup>\*4490<sup>0.1</sup>

=

2.495

min

i

=

1.16\*a/(t+b)<sup>c</sup>

=

1.16\*505.5/(2.495+3.29)<sup>0.355</sup>

=

314.4

mm/hr

(50 yrs return period, Table 3a, Corrigendum 2024, SDM) and (16% increase due to climate change)

Therefore, Q

=

0.278\*0.95\*314.4\*0.00449

=

0.3729

m<sup>3</sup>/sec

=

22373

lit/min

Provide 525UC (1:200) is OK

**For the design of Outfall from The Site (Portion 1), The Site (Portion 1) + Outside Catchment Area 1**

Q

=

24635

+

22373

=

47007

lit/min

Provide 600UC (1:100) is OK

**Calculation of Design Runoff of the Proposed Development,**

**For the design of drains at northern side of The Site (Portion 2), Outside Catchment Area 2**

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

$$\begin{aligned} A &= 4706 && \text{m}^2 \\ &= 4706 \\ &= 0.004706 && \text{km}^2 \end{aligned}$$

$$\begin{aligned} t &= 0.14465 \text{ OL}/H^{0.2} A^{0.1} \\ &= 0.14465 * 132/1^{0.2} * 4706^{0.1} \\ &= 8.196 && \text{min} \end{aligned}$$

$$\begin{aligned} i &= 1.16 * a/(t+b)^c && (50 \text{ yrs return period, Table 3a, Corrigendum 2024,} \\ &= 1.16 * 505.5/(8.196+3.29)^{0.355} && \text{SDM) and (16\% increase due to climate change)} \\ &= 246.5 && \text{mm/hr} \end{aligned}$$

$$\begin{aligned} \text{Therefore, } Q &= 0.278 * 0.5 * 246.5 * 0.004706 \\ &= 0.1612 && \text{m}^3/\text{sec} \\ &= \mathbf{9675} && \text{lit/min} \end{aligned}$$

**Provide 375UC (1:200) is OK**

**For the design of drains at southern side of The Site (Portion 2), The Site (Portion 2)**

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

$$\begin{aligned} A &= 1721 && \text{m}^2 \\ &= 1721 \\ &= 0.001721 && \text{km}^2 \end{aligned}$$

$$\begin{aligned} t &= 0.14465 \text{ SL}/H^{0.2} A^{0.1} \\ &= 0.14465 * 40/1^{0.2} * 1721^{0.1} \\ &= 2.747 && \text{min} \end{aligned}$$

$$\begin{aligned} i &= 1.16 * a/(t+b)^c && (50 \text{ yrs return period, Table 3a, Corrigendum 2024,} \\ &= 1.16 * 505.5/(2.747+3.29)^{0.355} && \text{SDM) and (16\% increase due to climate change)} \\ &= 309.7 && \text{mm/hr} \end{aligned}$$

$$\begin{aligned} \text{Therefore, } Q &= 0.278 * 0.95 * 309.7 * 0.001721 \\ &= 0.1408 && \text{m}^3/\text{sec} \\ &= \mathbf{8447} && \text{lit/min} \end{aligned}$$

**Provide 375UC (1:200) is OK**

**For the design of Outfall from The Site (Portion 1), The Site (Portion 1) + Outside Catchment Area 1**

$$\begin{aligned} Q &= 9675 && + && 8447 \\ &= \mathbf{18121} && \text{lit/min} \end{aligned}$$

**Provide 525UC (1:200) is OK**

**Calculation of Design Runoff of the Proposed Development,**

**For the design of drains at northern side of The Site (Portion 3), Outside Catchment Area 3**

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

$$\begin{aligned} A &= 4180 && \text{m}^2 \\ &= 4180 \\ &= 0.00418 && \text{km}^2 \end{aligned}$$

$$\begin{aligned} t &= 0.14465 \text{ OL3/ } H^{0.2} A^{0.1} \\ &= 0.14465 * 176 / 1^{0.2} * 4180^{0.1} \\ &= 11.059 && \text{min} \end{aligned}$$

$$\begin{aligned} i &= 1.16 * a / (t + b)^c && (50 \text{ yrs return period, Table 3a, Corrigendum 2024,} \\ &= 1.16 * 505.5 / (11.059 + 3.29)^{0.355} && \text{SDM) and (16\% increase due to climate change)} \\ &= 227.8 && \text{mm/hr} \end{aligned}$$

$$\begin{aligned} \text{Therefore, } Q &= 0.278 * 0.5 * 227.8 * 0.00418 \\ &= 0.1323 && \text{m}^3/\text{sec} \\ &= \mathbf{7941} && \text{lit/min} \end{aligned}$$

**Provide 375UC (1:200) is OK**

**For the design of drains at southern side of The Site (Portion 3), The Site (Portion 3)**

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

$$\begin{aligned} A &= 3857 && \text{m}^2 \\ &= 3857 \\ &= 0.003857 && \text{km}^2 \end{aligned}$$

$$\begin{aligned} t &= 0.14465 \text{ SL3/ } H^{0.2} A^{0.1} \\ &= 0.14465 * 72 / 1^{0.2} * 3857^{0.1} \\ &= 4.561 && \text{min} \end{aligned}$$

$$\begin{aligned} i &= 1.16 * a / (t + b)^c && (50 \text{ yrs return period, Table 3a, Corrigendum 2024,} \\ &= 1.16 * 505.5 / (4.561 + 3.29)^{0.355} && \text{SDM) and (16\% increase due to climate change)} \\ &= 282.2 && \text{mm/hr} \end{aligned}$$

$$\begin{aligned} \text{Therefore, } Q &= 0.278 * 0.95 * 282.2 * 0.003857 \\ &= 0.2874 && \text{m}^3/\text{sec} \\ &= \mathbf{17245} && \text{lit/min} \end{aligned}$$

**Provide 525UC (1:200) is OK**

**For the design of Outfall from The Site (Portion 1), The Site (Portion 1) + Outside Catchment Area 1**

$$\begin{aligned} Q &= 7941 && + && 17245 \\ &= \mathbf{25185} && \text{lit/min} \end{aligned}$$

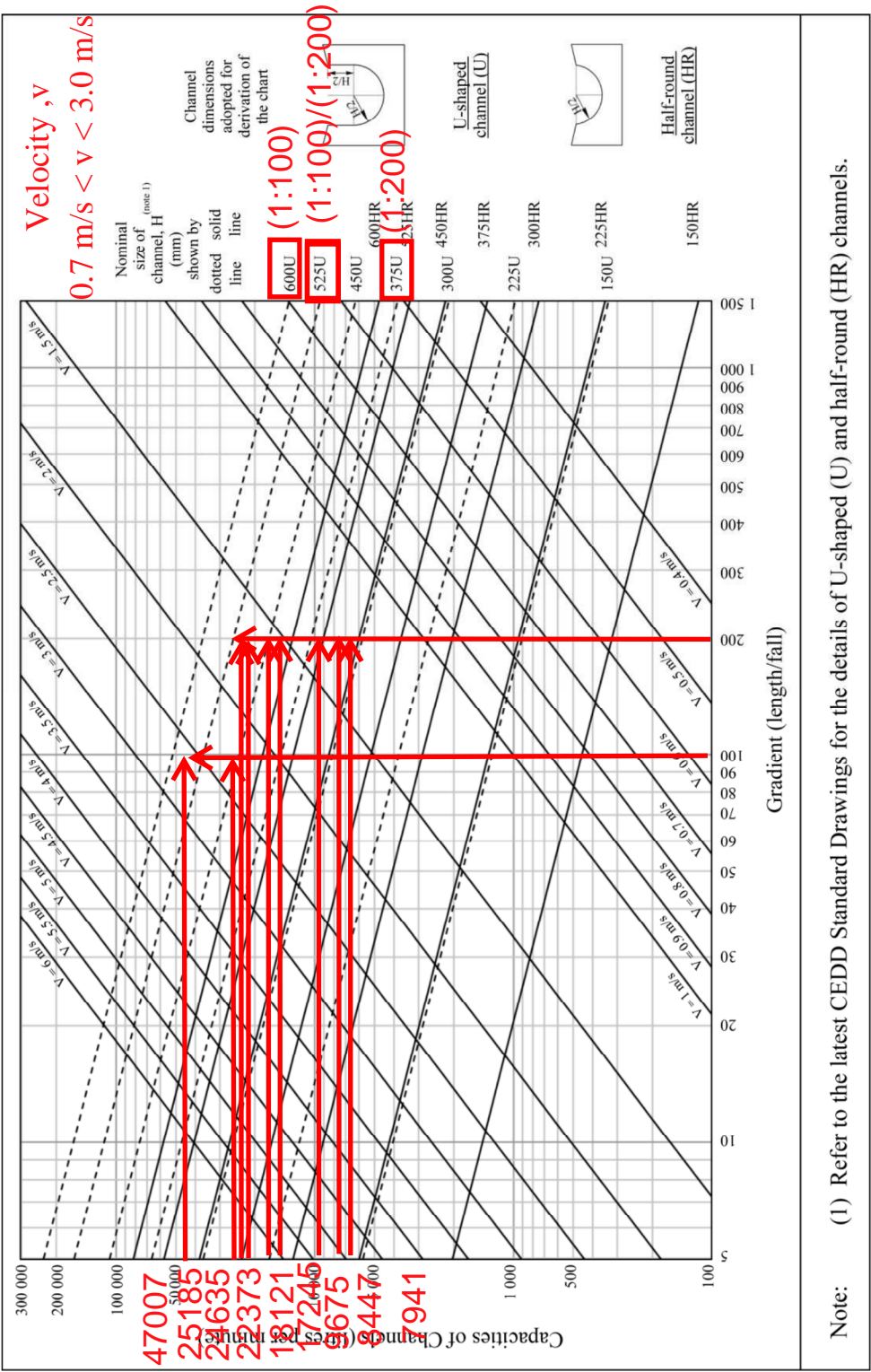
**Provide 525UC (1:100) is OK**

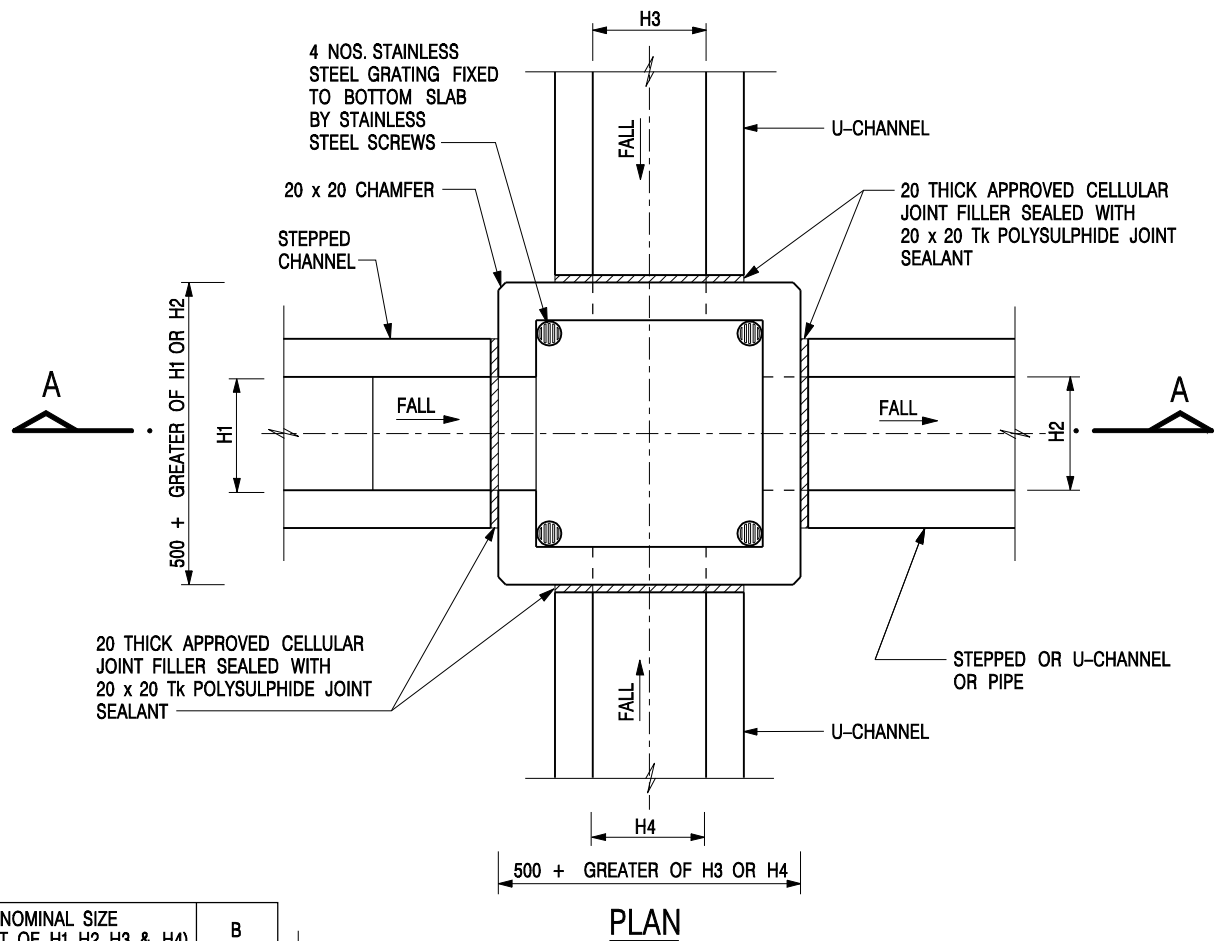


GEO Technical Guidance Note No. 43 (TGN 43)  
Guidelines on Hydraulic Design of U-shaped and Half-round Channels on Slopes

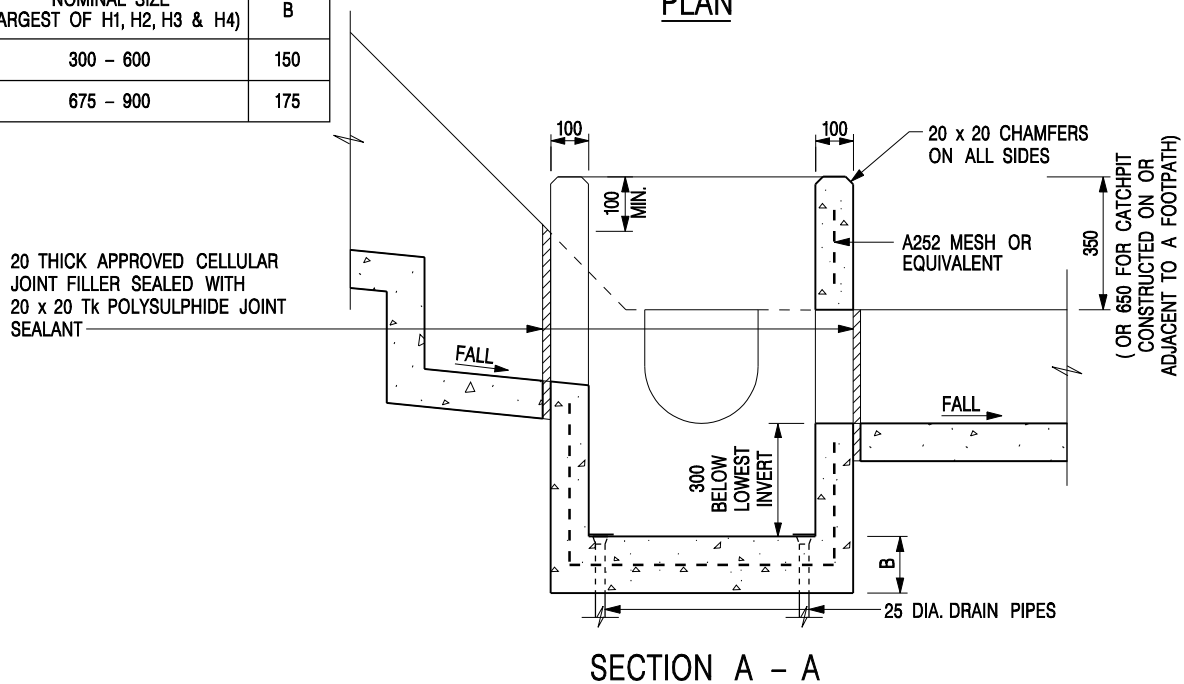
Issue No.: 1	Revision: -	Date: 05.06.2014	Page: 3 of 3
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Figure 1 - Chart for the rapid design of U-shaped and half-round channels up to 600 mm






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

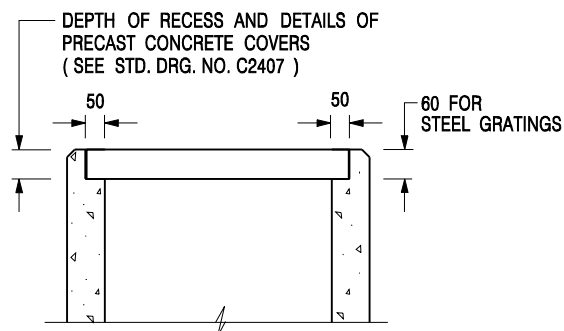


**NOTES:**

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



### 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
<b>REF.</b>	<b>REVISION</b>	<b>SIGNATURE</b>	<b>DATE</b>

**CATCHPIT WITH TRAP  
(SHEET 2 OF 2)**



**CIVIL ENGINEERING AND  
DEVELOPMENT DEPARTMENT**

**SCALE** 1 : 20

**DATE** JAN 1991

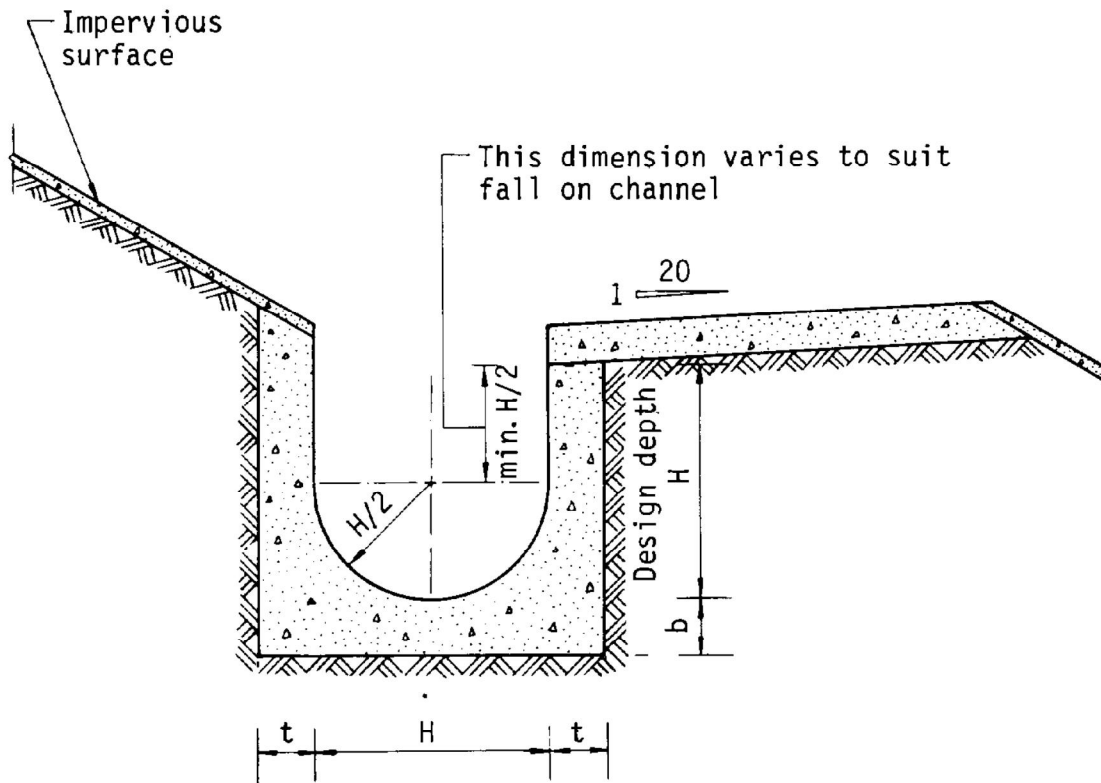
**DRAWING NO.**

**C2406 /2A**





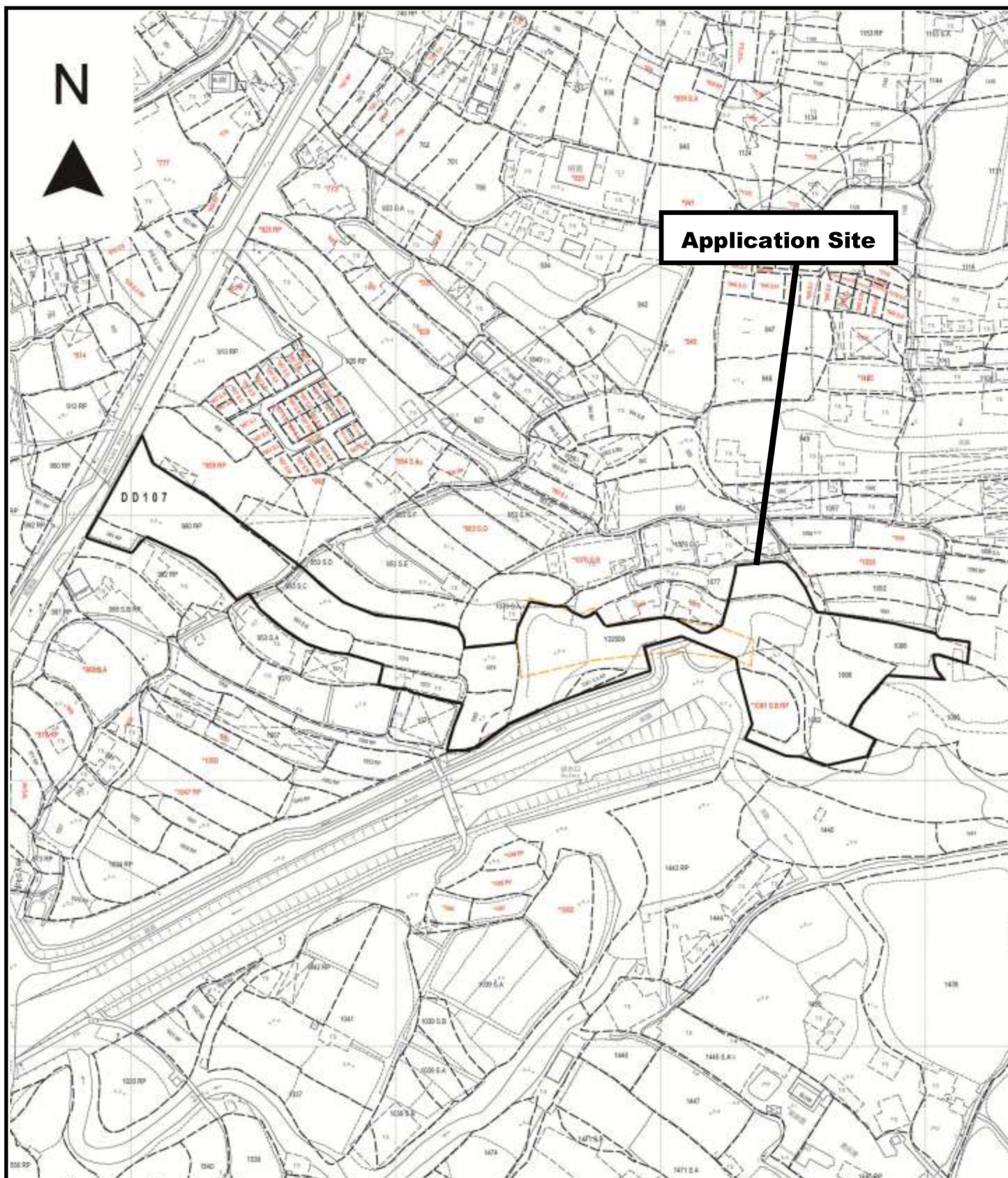
Figure 8.10 - Typical Details of Catchpits



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



Project 項目名稱:

Proposed Temporary Warehouse (Non-dangerous Goods) & Associated Filling of Land for a Period of 3 Years at Lots 953 S.B, 953 S.C, 956 (Part), 960RP (Part), 961 RP (Part), 1065 (Part), 1072, 1074, 1075, 1077 (Part), 1081 S.A RP, 1081 S.B RP, 1082 (Part), 1086 & 1088 in D.D. 107 & Adjoining Government Land, Kam Tin, Yuen Long, New Territories

Drawing Title 圖目:

Site Plan

Drawing No. 圖號:

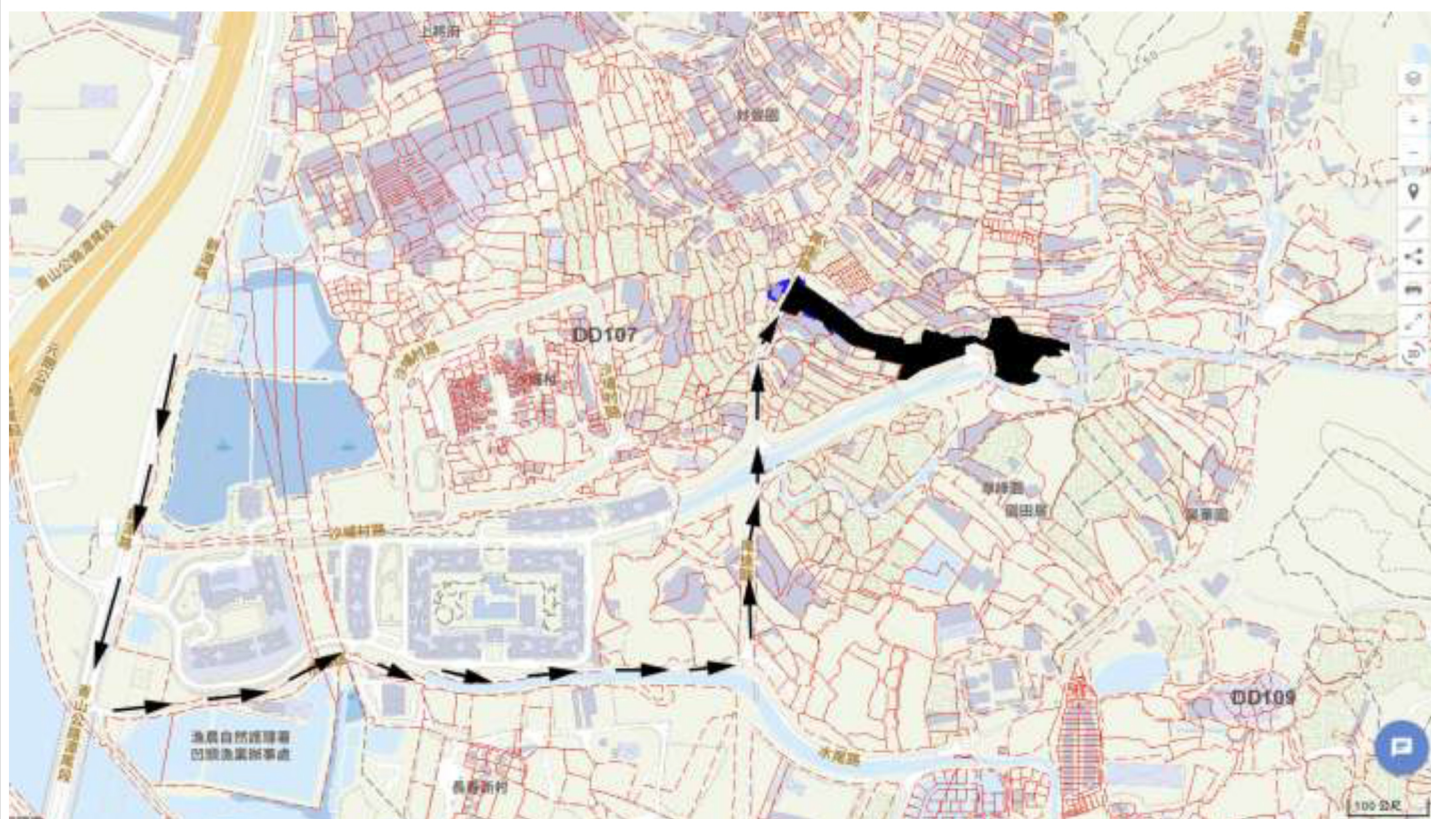
Figure 1

Remarks 備註:

Scale 比例:

1:2000





Project 項目名稱:

Proposed Temporary Warehouse (Non-dangerous Goods) & Associated Filling of Land for a Period of 3 Years at Lots 953 S.B, 953 S.C, 956 (Part), 960RP (Part), 961 RP (Part), 1065 (Part), 1072, 1074, 1075, 1077 (Part), 1081 S.A RP, 1081 S.B RP, 1082 (Part), 1086 & 1088 in D.D. 107 & Adjoining Government Land, Kam Tin, Yuen Long, New Territories

Drawing Title 圖目:

Proposed Vehicular Access Plan

Drawing No. 圖號:

Figure 2

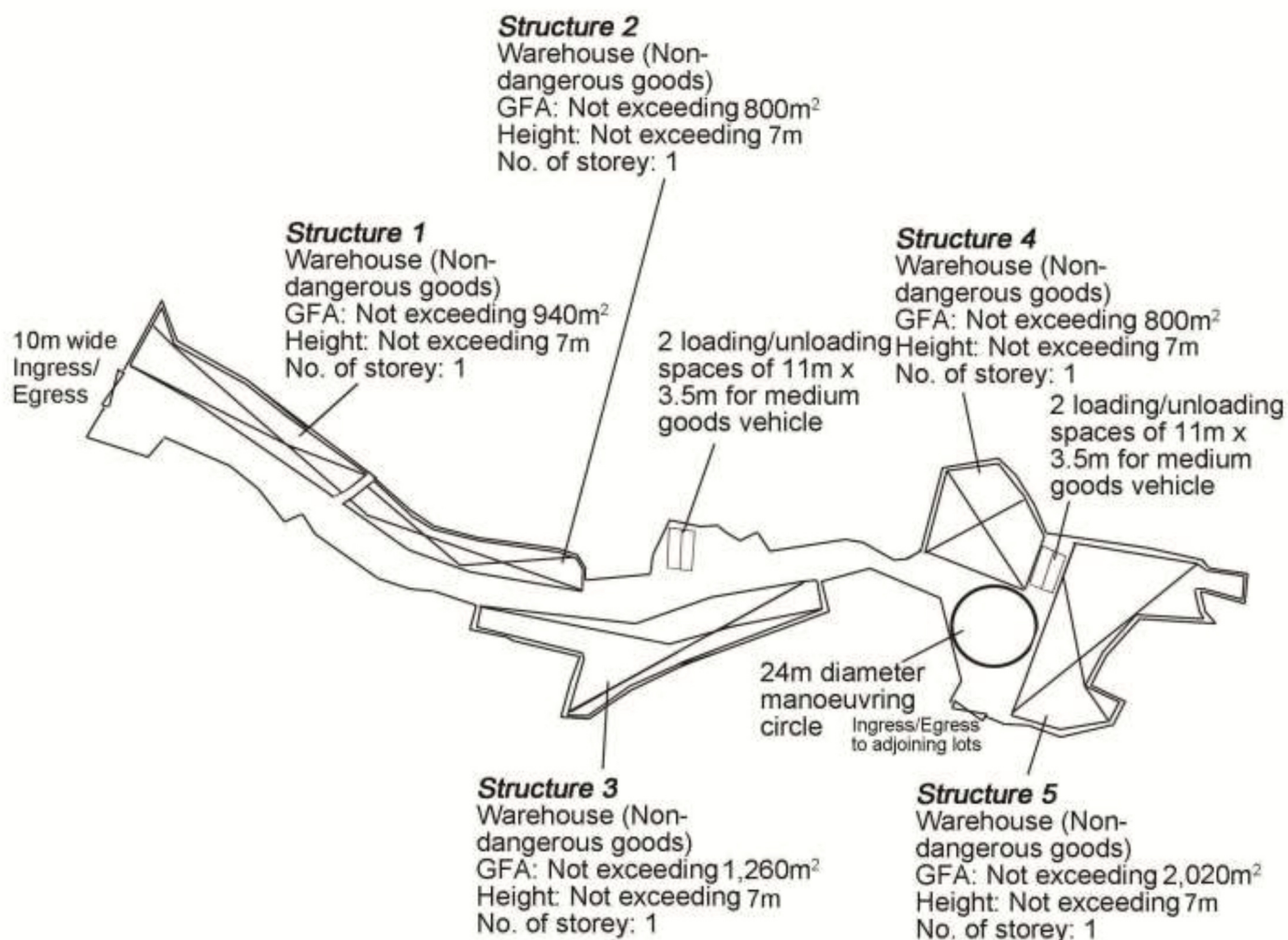
Remarks 備註:

→ Vehicular access leading from Mei Fung Road

Scale 比例:

Refer to the scale bar

N



Project 項目名稱:

Proposed Temporary Warehouse (Non-dangerous Goods) & Associated Filling of Land for a Period of 3 Years at Lots 953 S.B, 953 S.C, 956 (Part), 960RP (Part), 961 RP (Part), 1065 (Part), 1072, 1074, 1075, 1077 (Part), 1081 S.A RP, 1081 S.B RP, 1082 (Part), 1086 & 1088 in D.D. 107 & Adjoining Government Land, Kam Tin, Yuen Long, New Territories

Drawing Title 圖目:

Proposed Layout Plan

Drawing No. 圖號:

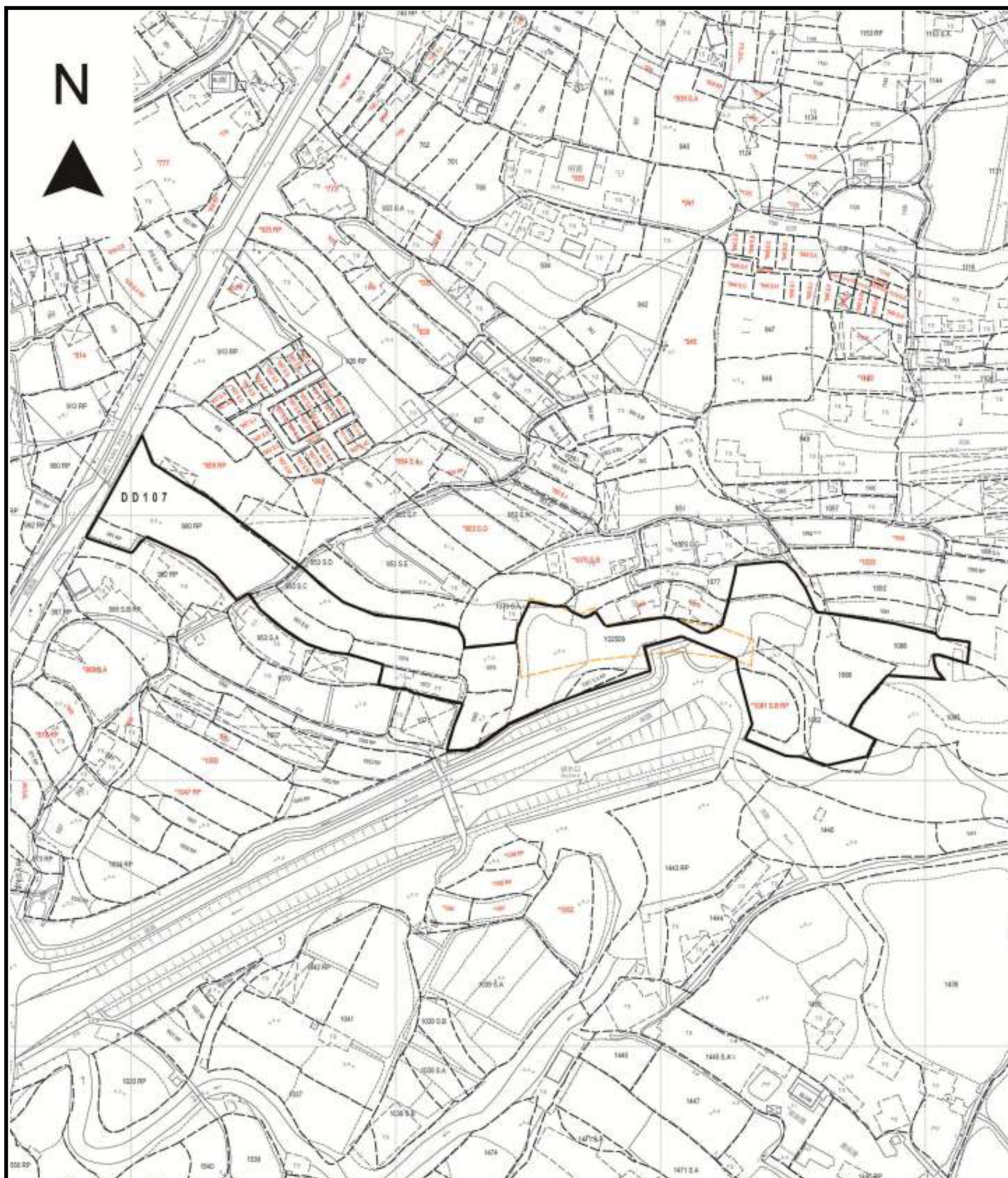
Figure 3

Remarks 備註:

Scale 比例:

1:2000





Project 項目名稱:

Proposed Temporary Warehouse (Non-dangerous Goods) & Associated Filling of Land for a Period of 3 Years at Lots 953 S.B, 953 S.C, 956 (Part), 960RP (Part), 961 RP (Part), 1065 (Part), 1072, 1074, 1075, 1077 (Part), 1081 S.A RP, 1081 S.B RP, 1082 (Part), 1086 & 1088 in D.D. 107 & Adjoining Government Land, Kam Tin, Yuen Long, New Territories

Drawing Title 圖目:

Proposed Land Filling Plan

Drawing No. 圖號:

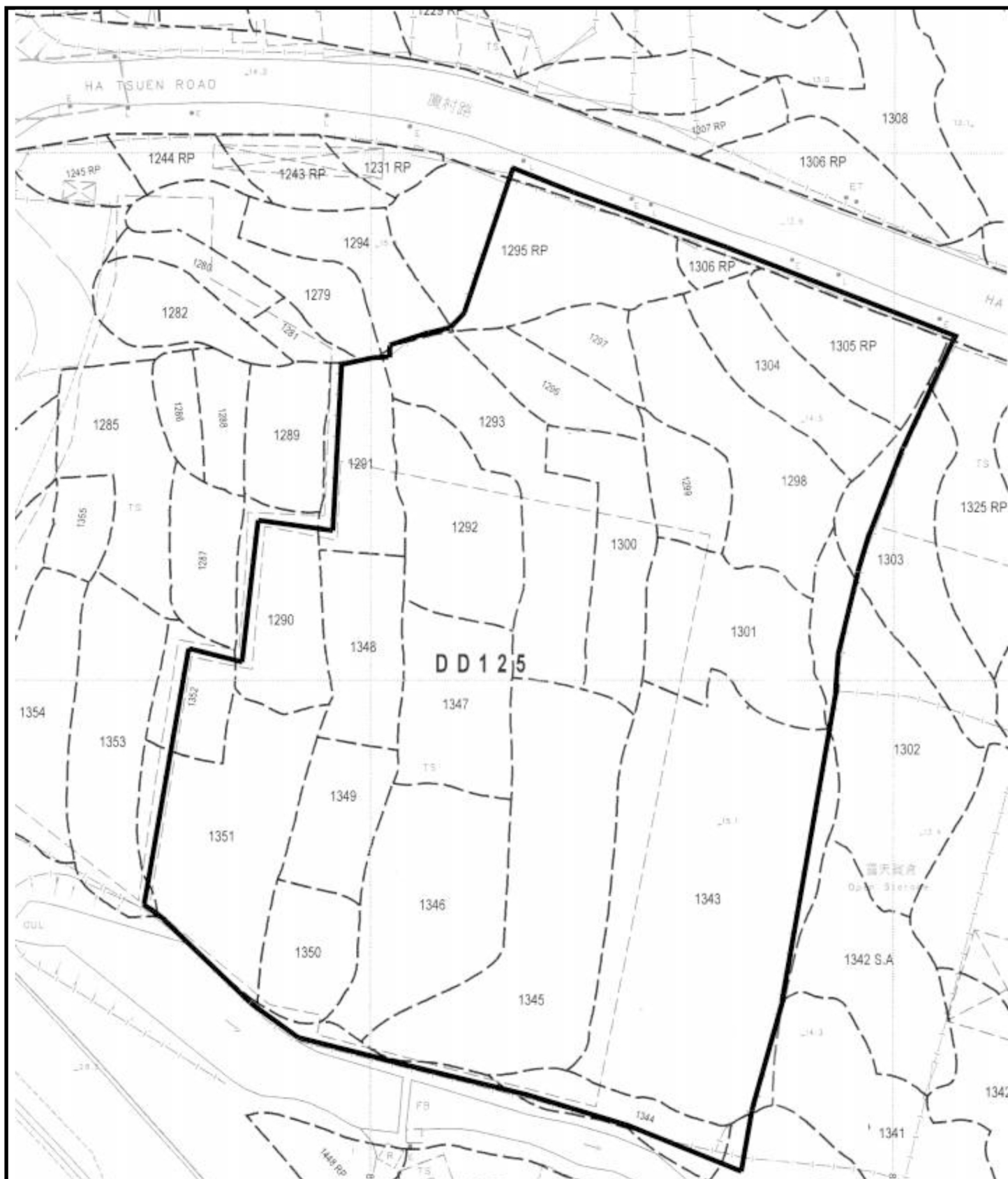
Figure 4

Remarks 備註:

☐ Proposed filling of land by concrete of 0.2m

Scale 比例:

1:2000



Project 項目名稱:

Proposed Temporary Warehouse  
(Non-dangerous Goods) & Associated  
Filling of Land for a Period of 3 Years at  
Lots 953 S.B, 953 S.C, 956 (Part), 960RP  
(Part), 961 RP (Part), 1065 (Part), 1072,  
1074, 1075, 1077 (Part), 1081 S.A RP,  
1081 S.B RP, 1082 (Part), 1086 & 1088 in  
D.D. 107 & Adjoining Government Land,  
Kam Tin, Yuen Long, New Territories

Drawing Title 圖目:

The Resumed Site in Ha  
Tsuen (D.D.125), N.T.

Drawing No. 圖號:

Figure 5

Remarks 備註:

Scale 比例:

Not to scale