

Our Ref.: DD82 Lot 1114 & VL
Your Ref.: TPB/A/NE-TKL/761

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

By Email

7 August 2024

Dear Sir,

1st Further Information

**Proposed Temporary Open Storage of Construction Material and Machinery with
Ancillary Facilities for a Period of 3 Years and Associated Filling of Land
in “Agriculture” Zone, Various Lots in D.D. 82, Ta Kwu Ling, New Territories**

(S.16 Planning Application No. A/NE-TKL/761)

We are writing to submit further information to address departmental comments of the subject application (**Appendix I**).

Should you require more information regarding the application, please contact our Mr. Danny NG [REDACTED] or the undersigned at your convenience. Thank you for your kind attention.

Yours faithfully,

For and on behalf of
R-riches Property Consultants Limited

Louis TSE
Town Planner

cc DPO/STN, PlanD

(Attn.: Mr. Timothy WU

email: twpwu@pland.gov.hk)

(Attn.: Ms. Katie LEUNG

email: kyyleung@pland.gov.hk)



Responses-to-Comments

Proposed Temporary Open Storage of Construction Material and Machinery with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land in “Agriculture” Zone, Various Lots in D.D. 82, Ta Kwu Ling, New Territories

(Application No. A/NE-TKL/761)

(i) A RtoC Table:

Departmental Comments		Applicant’s Responses
1. Comments of the Commissioner for Transport (C for T)		
(a)	The applicant shall advise the management/control measures to be implemented to ensure no queuing of vehicles outside the subject site	As the application site (the Site) is proposed for ‘open storage’ use with no shopfront, no visitor is anticipated at the Site and only the applicant’s fleets will be allowed to enter/exit the Site. As the vehicular trips could be strictly controlled by the applicant, queuing of vehicles outside the Site will not be anticipated. Staff will also be deployed at the ingress/egress of the Site to direct vehicles entering and exiting the Site. Sufficient space is also reserved for smooth manoeuvring within the Site to ensure that no queuing of vehicle outside the Site at any time during the planning approval period.
(b)	The applicant shall advise the provision and management of pedestrian facilities to ensure pedestrian safety; and	Staff will be deployed by the applicant to direct vehicle entering/exiting the Site. ‘Beware of pedestrians’ signs would also be erected to ensure pedestrian safety to/from the Site.
(c)	The proposed vehicular access between Ping Che Road and the application site is not managed by TD. The applicant should seek comments from the responsible party.	Noted.
2. Comments of the Chief Engineer/Mainland North, Drainage Services Department (CE/MN, DSD)		
(a)	Flooding complaints have been recorded based on our records. It is revealed that the area adjoining the application site is subject to overland flows and/or regular flooding.	A drainage proposal is prepared by the applicant to mitigate the flooding susceptibility of the area (Annex I). According to the result of the drainage proposal, with

	Unless the applicant can submit satisfactory drainage proposal to mitigate the flooding susceptibility of the area to my satisfaction, I do not support the application.	the implementation of the proposed drainage system, adverse drainage impact to the surrounding area is <u>not</u> anticipated.
(b)	The site is in an area where public sewerage connection is not available. EPD should be consulted regarding the sewage impact assessment and sewage treatment/disposal facilities for the proposed development.	Majority of the Site is proposed of 'open storage' use, while the remaining area is proposed for circulation of vehicles. Please be informed that no structure and washroom is proposed at the Site, therefore, adverse sewerage impact to the surrounding area should not be anticipated.

3. Comments of the Director of Agriculture, Fisheries and Conservation (DAFC)

(a)	The subject site falls within the "AGR" zone and is generally abandoned. The agricultural activities are active in the vicinity, and agricultural infrastructures such as road access and water source are also available. The subject site can be used for agricultural activities such as open-field cultivation, greenhouses, plant nurseries, etc. As the subject site possesses potential for agricultural rehabilitation, the proposed development is not supported from agricultural perspective.	The Site has been left vacant for decades without agricultural use. Although agricultural infrastructures are available in the vicinity of the Site, portion of the Site has been hard-paved, which is considered not suitable for agricultural activities. Therefore, approval of the current application on a temporary basis of 3 years would better utilize deserted agricultural land in the New Territories and would not frustrate the long-term planning intention of the "Agriculture" zone. The applicant will reinstate the Site to a state that is suitable for agricultural use after the planning approval period.
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4. Comments of the Chief Town Planner/Urban Design and Landscape, Planning Department (CTP/UD&L, PlanD)

Comments received on 23/07/2024

(a)	Having reviewed the submitted RtC by the applicant, it is noted that there is no old and valuable tree or protected species identified within the site. All existing trees within the site are proposed to be felled, however, no information and proposed treatment on existing trees are provided. 4 nos. of new trees (i.e. Senna surattensis) are proposed along the east and west periphery boundary of the site C as shown in Annex II – Landscape Proposal.	A revised landscape proposal is submitted by the applicant to provide landscape mitigation measures for the proposed development (Annex II).
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(b)	The applicant is advised to provide basic information (e.g. numbers, species, size, general conditions and tree photos) on existing trees within and along the site boundary, and proposed tree treatments for TPB's consideration.	
(c)	Annex II Landscape Proposal – "1" is indicated at "No. of new trees will be planted" and is inconsistent with the illustration of trees (i.e. N1 to N4) on plan. Please review and rectify.	It is revised accordingly.
(d)	The applicant is advised to provide larger tree pit (i.e. around 1.2m (W) x 1.2m (L) x 1.2m (D)) to sustain the growth of new trees wherever appropriate. As tree N2 and N3 are close to each other, the applicant is advised to provide continuous soil trench/planter for better root growth.	Larger tree pit (i.e. around 1.2m (W) x 1.2m (L) x 1.2m (D)) will be provided to sustain the growth of new trees. Continuous soil trench for tree N2 and N3 will also be provided for better root growth.
(e)	The applicant should be advised that approval of the application does not imply approval of tree works such as pruning, transplanting and felling. The applicant is reminded to seek approval for any proposed tree works from relevant authority prior to commencement of the works.	Noted.
Comments received on 08/07/2024		
(a)	<p><u>Landscape Observations and Comments</u></p> <p>With reference to the aerial photo of 2023, the application site is located in an area of rural inland plains landscape character comprising of open storages, temporary structures, vegetated areas, clusters of tree groups, and woodlands within the "Green Belt" zones at the northeast. Based on our site records taken on 20.6.2024, the portion of application site to the west is mainly occupied by self-seeded vegetation, wild grasses and some temporary structures.</p>	<p>According to our site visit conducted in June 2024, no old and valuable tree or protected species has been identified at the Site. Due to the proposed hard-paving works for open storage and circulation purpose, all existing trees will be affected, and it is not proposed to retain any of the existing trees at the Site.</p> <p>A landscape proposal is submitted by the applicant to provide landscape mitigation measures for the proposed development</p>

	<p>The portion of application site in the middle is covered by self-seeded vegetation, wild grasses and trees of undesirable and common species. The portion of application site to the east is mostly hard paved with some trees of common species within site boundary. A medium to large sized tree, <i>Celtis sinensis</i>, is observed at the western periphery of the eastern site. However, tree information, proposed tree treatment and landscape treatment/mitigation measures are not provided. Potential impact on the landscape resources cannot be reasonably ascertained.</p>	<p>(Annex II). <u>4</u> new trees (N1 to N4) are proposed to be planted along the east and west periphery boundary of Site C as indicated on plan, to minimise adverse visual impact to the adjoining receivers. All these new trees within the Site will be maintained by the applicant during the planning approval period.</p>
(b)	<p>Detailed Comment / Advisory Comment</p> <p>The applicant is advised to provide basic information (e.g. species, size, general conditions and tree photos) on existing trees within and along the site boundary, proposed tree treatments and mitigation measures for TPB’s consideration.</p>	
(c)	<p>According to the application form and Plan 6, the entire application site is proposed to be filled with concrete. The applicant is advised to review the extent of land filling to avoid damage to the existing trees as far as practicable.</p>	
(d)	<p>With reference to Para. 3.5 of the Supplementary Statement, 2.5m high solid metal wall are proposed along the site boundary. The applicant is reminded to offset the proposed metal wall from the existing trees to avoid damage to the trees.</p>	
(e)	<p>The applicant should be advised that approval of the application does not imply approval of tree works such as pruning, transplanting and felling. The applicant is reminded to seek approval for any proposed tree works from relevant</p>	

	departments prior to commencement of the works.	
5. Comments of the District Lands Officer/North, Lands Department (DLO/N, LandsD)		
(a)	She has adverse comments on the application.	Noted. The unauthorized structures erected on the concerned lot (i.e. Lot 1110 S.A in D.D.82) will be demolished by the applicant after planning approval has been obtained from the Town Planning Board to facilitate the proposed scheme. The applicant will strictly follow the proposed scheme, no structure will be erected on the application site during the planning approval period.
(b)	The Site comprises Old Schedule Agricultural Lots held under the Block Government Lease which contains the restriction that no structures are allowed to be erected without the prior approval of the Government. No right of access via Government land is granted to the application site.	
(c)	Her office noted that no structure is proposed in the subject planning application but unauthorized structures are erected on the Site as mentioned below:	
(d)	The following irregularity covered by the subject planning application has been detected by her office: Unauthorized structures within Lot No. 1110 S.A in D.D 82 covered by the planning application.	
(e)	LandsD has reservation on the planning application since there are unauthorized structures on Lot No. 1110 S.A in D.D 82 which are already subject to lease enforcement actions according to case priority. The lot owner should rectify the lease breaches as demanded by LandsD.	

Proposed Temporary Open Storage of Construction Material and Machinery with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land in “Agriculture” Zone, Various Lots in D.D. 82, Ta Kwu Ling, New Territories
Drainage Proposal

Proposed Temporary Open Storage of Construction Material and Machinery with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land in “Agriculture” Zone, Various Lots in D.D. 82, Ta Kwu Ling, New Territories

Drainage Proposal

Jul 2024

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1. Introduction

1.1 Background

- 1.1.1 The applicant seeks planning permission from the Town Planning Board (the Board) to use Lots 1110 S.A (Part), 1114 (Part), 1118 (Part) and 1119 S.A in D.D. 82, Ta Kwu Ling, New Territories (the Site) for 'Proposed Temporary Open Storage of Construction Material and Machinery with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land'.
- 1.1.2 This Drainage Proposal aim to support the development in drainage aspect.

1.2 The Site

- 1.2.1 The Sites are in vicinity of Ping Che Road. It has a total area of about 2,255m². The sites are already fully paved. The site location plan is shown in **Figure 1**.
- 1.2.2 The existing site ground levels are +9.4 mPD. The site is proposed to maintain the current site levels.
- 1.2.3 There is an existing U-channel at the south of Site A. An existing steam is running from east to the west at the south of Site B and Site C. Existing Drainage Plan are shown in **Figure 2** for reference.
- 1.2.4 Proposed Development Layout plan is shown in **Appendix B** for reference.

2. Development Proposal

2.1 The Proposed Development

2.1.1 The total site area is approximately 2,255 m². The indicative development schedule is summarized in **Table 1** below for technical assessment purpose. The catchment plan is shown in **Figure 4**.

Proposed Development	
Total Site Area (m ²)	2,255
- Site A (m ²)	487
- Site B (m ²)	924
- Site C (m ²)	844

Table 1 - Key Development Parameters

3. Assessment Criteria

3.1.1 The Recommended Design Return Period based on Flood Level from SDM (Table 10) is adopted for this DIA. The recommendation is summarized in **Table 2** below.

Description	Design Return Periods
Intensively Used Agricultural Land	2 – 5 Years
Village Drainage Including Internal Drainage System under a polder Scheme	10 Years
Main Rural Catchment Drainage Channels	50 Years
Urban Drainage Trunk System	200 Years
Urban Drainage Branch System	50 Years

Table 2– Design Return Periods under SDM

3.1.2 The proposed drainage system intended to collect runoff from internal site and external catchment. 1 in 10 years return period is adopted for the drainage design.

3.1.3 Stormwater drainage design will be carried out in accordance with the criteria set out in the Stormwater Drainage Manual published by DSD. The proposed design criteria to be adopted for design of this stormwater drainage system and factors which have been considered are summarised below.

1. Intensity-Duration-Frequency Relationship – The Recommended Intensity-Duration-Frequency relationship is used to estimate the intensity of rainfall. It can be expressed by the following algebraic equation.

$$i = \frac{a}{(t_d + b)^c}$$

The site is located within the North District Zone. Therefore, for 10 years return period, the following values are adopted.

a	=	454.9
b	=	3.44
c	=	0.412

(Corrigendum_No.1_2024)

2. The peak runoff is calculated by the Rational Method
i.e. $Q_p = 0.278CiA$

where	Q_p	=	peak runoff in m ³ /s
	C	=	runoff coefficient (dimensionless)
	i	=	rainfall intensity in mm/hr
	A	=	catchment area in km ²

3. The run-off coefficient (C) of surface runoff are taken as follows:

1. Paved Area: C = 0.95
2. Unpaved Area: C = 0.35

4. Manning's Equation is used for calculation of velocity of flow inside the channels:

$$\text{Manning's Equation: } v = \frac{R^{\frac{1}{6}}}{n} R^{\frac{1}{2}} S_f^{\frac{1}{2}}$$

Where,

V = velocity of the pipe flow (m/s)

S_f = hydraulic gradient

n = manning's coefficient

R = hydraulic radius (m)

5. Colebrook-White Equation is used for calculation of velocity of flow inside the pipes:

$$\text{Colebrook-White Equation: } \frac{v}{R} = -\sqrt{32gRS} \log \log \left(\frac{k_s}{14.8R} + \frac{1.255v}{R\sqrt{32gRS}} \right)$$

where,

V	=	velocity of the pipe flow (m/s)
S _f	=	hydraulic gradient
k _r	=	roughness value (m)
v	=	kinematics viscosity of fluid
D	=	pipe diameter (m)
R	=	hydraulic radius (m)

4. Proposed Drainage System

4.1. Proposed UChannel

- 4.1.1 Proposed U-channels are designed for collection of runoff within and near the Development Site. Please refer to the **Figure 4** for proposed catchment plan. The U-channels are proposed to be connect and discharge to existing channel/stream. The design calculations of proposed UChannels are shown in **Appendix A**.
- 4.1.2 The alignment, size, gradient and details of the proposed drains are shown in **Figure 3**.
- 4.1.3 The reference standard drawings of drains are shown in **Appendix C**.

5. Conclusion

- 5.1.1 Drainage study has been conducted for the Proposed Development. With implementation of proposed drainage system, no adverse drainage impact is anticipated.

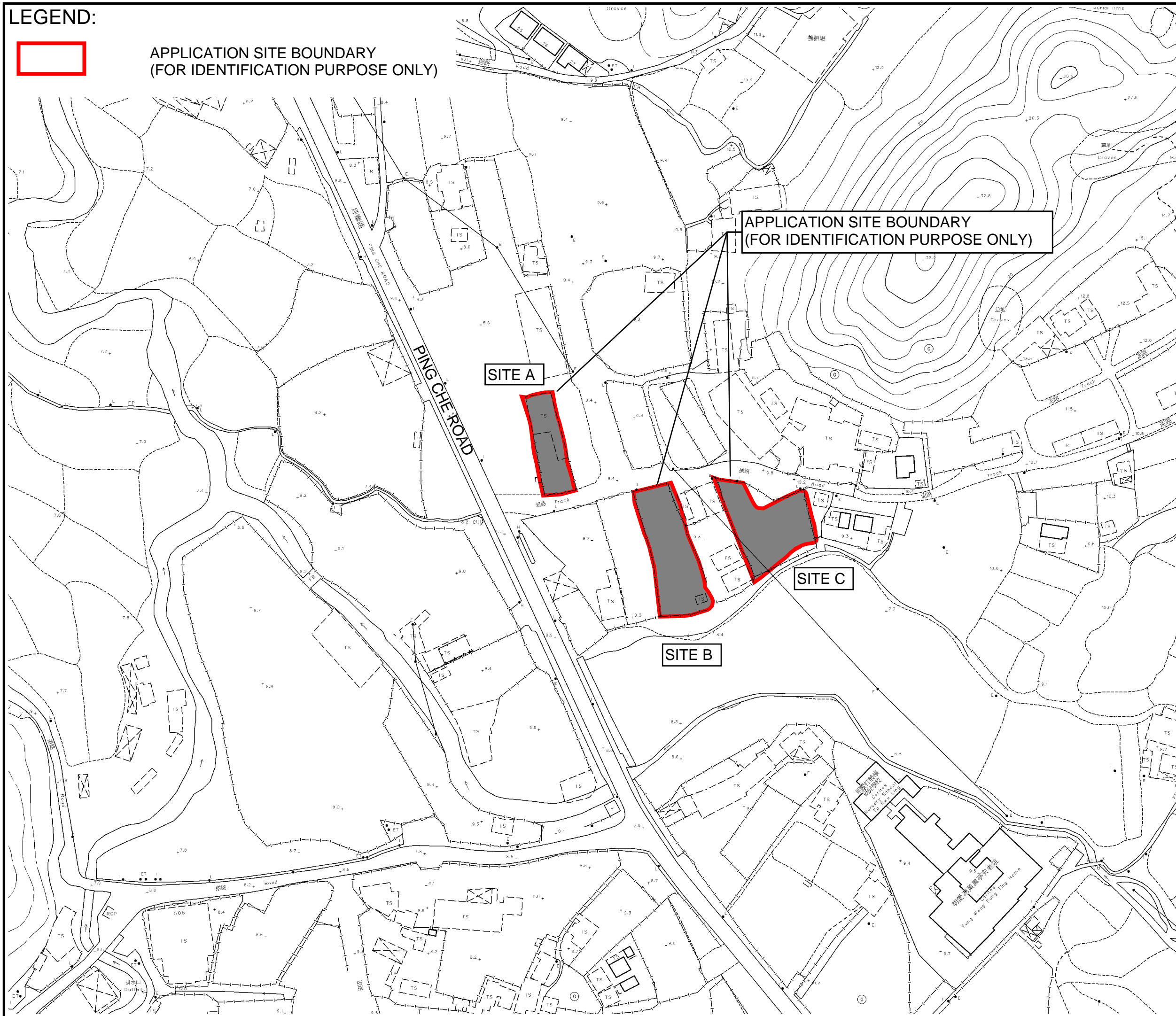
- End of Text -

FIGURES

LEGEND:



APPLICATION SITE BOUNDARY
(FOR IDENTIFICATION PURPOSE ONLY)



APPLICATION SITE BOUNDARY
(FOR IDENTIFICATION PURPOSE ONLY)

SITE A

SITE B

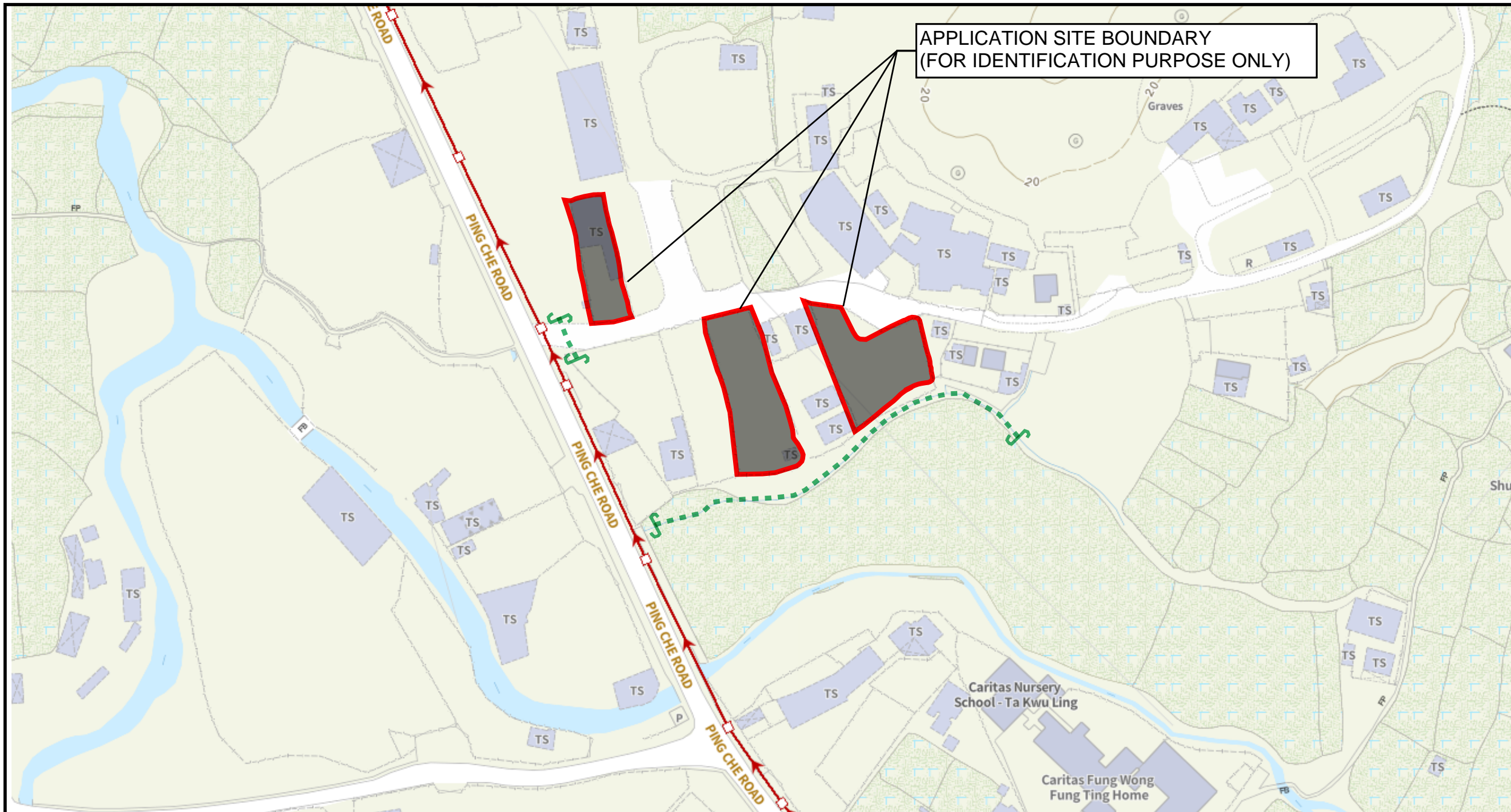
SITE C

PROJECT:
Proposed Temporary Open
Storage of Construction Material
and Machinery with Ancillary
Facilities for a Period of 3 Years
and Associated Filling of Land in
"Agriculture" Zone, Various Lots
in D.D. 82, Ta Kwu Ling, New
Territories

REV	DESCRIPTION	DATE

DRAWING TITLE
SITE LOCATION PLAN

DRAWING NUMBER
FIGURE 1



PROJECT:
 Proposed Temporary Open Storage of Construction Material and Machinery with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land in "Agriculture" Zone, Various Lots in D.D. 82, Ta Kwu Ling, New Territories

LEGEND:

	Combined Manhole		Tapping Point (Sewer)		Tapping Point (Storm)
	Overflow (Combined)		Sewer Terminal Manhole		Storm Water Terminal Manhole
	Pipe (Combined)		Catchpit		Tunnel Protection Zone (100m / 200m)
	Interface Valve Chamber		Inlet		Tunnel Protection Zone (General Range)
	Sewer Manhole		Storm Water Manhole		Tunnel / Box Culvert (Sewer)
	Oil / Petrol Interceptor		Outlet		Tunnel / Box Culvert (Storm)
	Overflow (Sewer)		Pipe (Storm)		EXISTING CHANNEL/STREAM
	Pipe (Sewer)		Sand Trap		

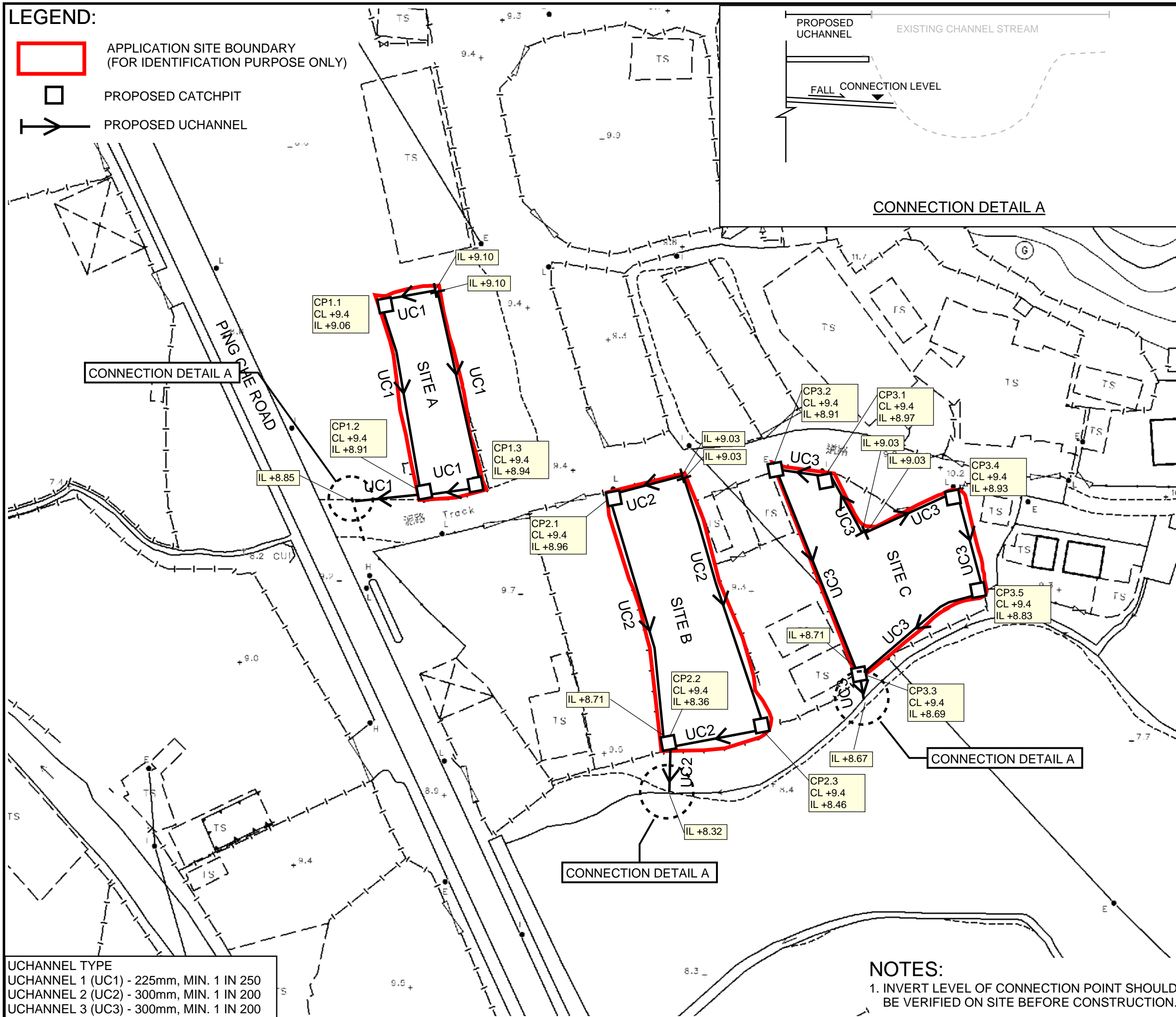
REV	DESCRIPTION	DATE

DRAWING TITLE
EXISTING DRAINAGE PLAN

DRAWING NUMBER
FIGURE 2

LEGEND:

- APPLICATION SITE BOUNDARY (FOR IDENTIFICATION PURPOSE ONLY)
- PROPOSED CATCHPIT
- PROPOSED UCHANNEL



PROJECT:
 Proposed Temporary Open Storage of Construction Material and Machinery with Ancillary Facilities for a Period of 3 Years and Associated Filling of Land in "Agriculture" Zone, Various Lots in D.D. 82, Ta Kwu Ling, New Territories

UCHANNEL TYPE
 UCHANNEL 1 (UC1) - 225mm, MIN. 1 IN 250
 UCHANNEL 2 (UC2) - 300mm, MIN. 1 IN 200
 UCHANNEL 3 (UC3) - 300mm, MIN. 1 IN 200

NOTES:
 1. INVERT LEVEL OF CONNECTION POINT SHOULD BE VERIFIED ON SITE BEFORE CONSTRUCTION.

REV	DESCRIPTION	DATE

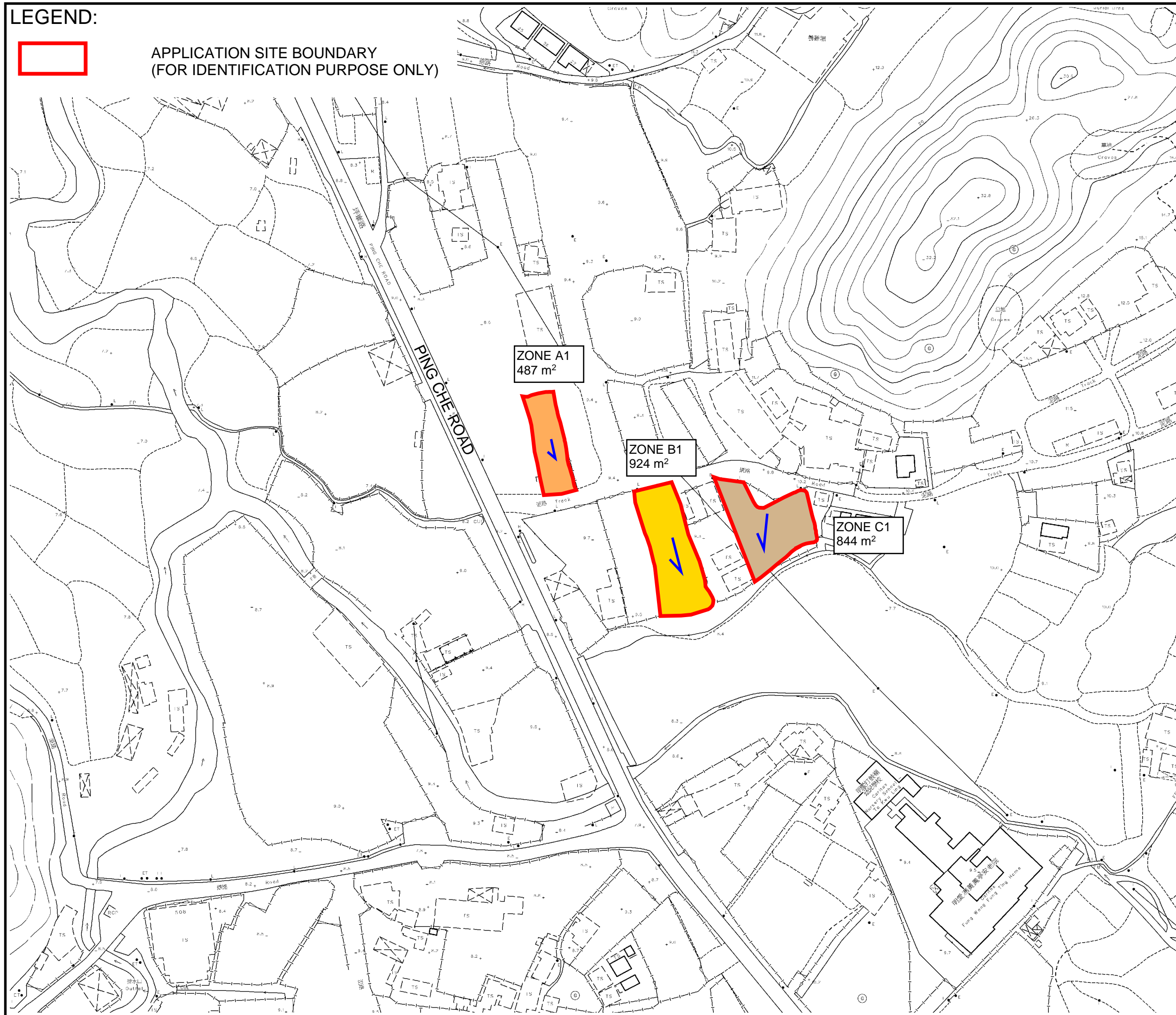
DRAWING TITLE
PROPOSED DRAINAGE SYSTEM

DRAWING NUMBER
FIGURE 3

LEGEND:



APPLICATION SITE BOUNDARY
(FOR IDENTIFICATION PURPOSE ONLY)



PROJECT:
Proposed Temporary Open
Storage of Construction Material
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REV	DESCRIPTION	DATE

DRAWING TITLE
CATCHMENT PLAN

DRAWING NUMBER
FIGURE 4

APPENDIX

Appendix A - Channel Design Calculation

U Channel 1 (Zone A1)

Runoff Estimation

Design Return Period		1 in	10	years
Paved Area	487 =		487	(m ²)
Unpaved Area			0	(m ²)
Total Equivalent Area	487 x 0.95 + 0 x 0.35 =		463	(m ²)
Time of Concentration			5	min
Rainfall Intensity, I *			189	mm/hr
Design Discharge Rate, Q	0.278 x 463 x 189 / 1000000 =		0.024	m ³ /s

$$i = \frac{a}{(t_d + b)^c}$$

U Channel

Channel Size		1 in	225	(mm)
Gradient			250	
Area	$\pi \times 0.23^2 / 8 + 0.23 \times 0.23 / 2 =$		0.045	(m ²)
Wetted Perimeter	$\pi \times 0.23 / 2 + 0.23 / 2 \times 2 =$		0.578	(m)
R	0.045 / 0.578 =		0.104	(m)
Velocity			0.72	m/s
Capacity			0.033	m ³ /s

Utilization $0.024 / 0.033 = 74.42$ %

OK (less than 90%, for 10% siltation allowance)

U Channel 2 (Zone A2)

Runoff Estimation

Design Return Period		1 in	10	years
Paved Area	924 =		924	(m ²)
Unpaved Area			0	(m ²)
Total Equivalent Area	924 x 0.95 + 0 x 0.35 =		878	(m ²)
Time of Concentration			5	min
Rainfall Intensity, I *			189	mm/hr
Design Discharge Rate, Q	0.278 x 878 x 189 / 1000000 =		0.046	m ³ /s

$$i = \frac{a}{(t_d + b)^c}$$

U Channel

Channel Size		1 in	300	(mm)
Gradient			200	
Area	$\pi \times 0.3^2 / 8 + 0.3 \times 0.3 / 2 =$		0.080	(m ²)
Wetted Perimeter	$\pi \times 0.3 / 2 + 0.3 / 2 \times 2 =$		0.771	(m)
R	0.08 / 0.771 =		0.104	(m)
Velocity			0.98	m/s
Capacity			0.079	m ³ /s

Utilization $0.046 / 0.079 = 58.64$ %

OK (less than 90%, for 10% siltation allowance)

U Channel 3 (Zone A3)

Runoff Estimation

Design Return Period		1 in	10	years
Paved Area	844 =		844	(m ²)
Unpaved Area			0	(m ²)
Total Equivalent Area	844 x 0.95 + 0 x 0.35 =		802	(m ²)
Time of Concentration			5	min
Rainfall Intensity, I *			189	mm/hr
Design Discharge Rate, Q	0.278 x 802 x 189 / 1000000 =		0.042	m ³ /s

$$i = \frac{a}{(t_d + b)^c}$$

U Channel

Channel Size		1 in	300	(mm)
Gradient			200	
Area	$\pi \times 0.3^2 / 8 + 0.3 \times 0.3 / 2 =$		0.080	(m ²)
Wetted Perimeter	$\pi \times 0.3 / 2 + 0.3 / 2 \times 2 =$		0.771	(m)
R	0.08 / 0.771 =		0.104	(m)
Velocity			0.98	m/s
Capacity			0.079	m ³ /s

Utilization $0.042 / 0.079 = 53.57$ %

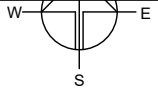
OK (less than 90%, for 10% siltation allowance)

Appendix B - Proposed Development Layout Plan

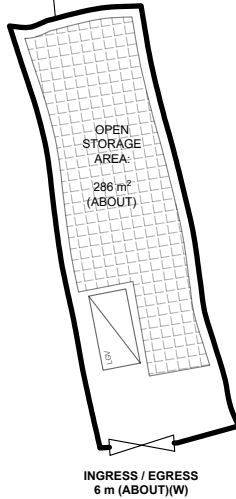
DEVELOPMENT PARAMETERS

APPLICATION SITE AREA : 2,255 m² (ABOUT)
 COVERED AREA : NOT APPLICABLE
 UNCOVERED AREA : 2,255 m² (ABOUT)

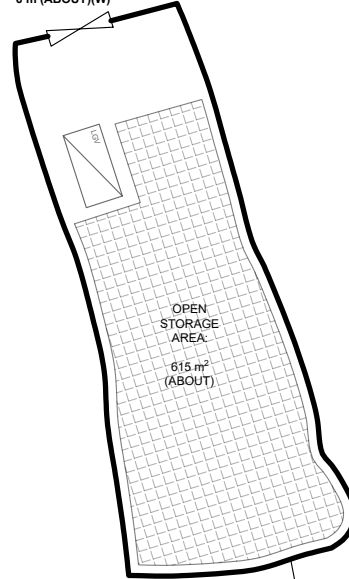
* NO STRUCTURE IS PROPOSED AT THE APPLICATION SITE



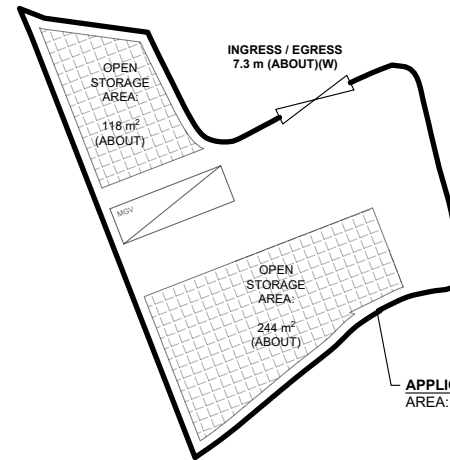
APPLICATION SITE (A)
 AREA: 487 m² (ABOUT)



INGRESS / EGRESS
6 m (ABOUT)(W)



APPLICATION SITE (B)
 AREA: 924 m² (ABOUT)



APPLICATION SITE (C)
 AREA: 844 m² (ABOUT)

PARKING AND LOADING/UNLOADING PROVISIONS

NO. OF L/UL SPACE FOR LIGHT GOODS VEHICLE : 2
 DIMENSION OF L/UL SPACE : 7 m (L) X 3.5 m (W)

NO. OF L/UL SPACE FOR MEDIUM GOODS VEHICLE : 1
 DIMENSION OF L/UL SPACE : 11 m (L) X 3.5 m (W)

PLANNING CONSULTANT



PROJECT

PROPOSED TEMPORARY OPEN STORAGE OF CONSTRUCTION MATERIAL AND MACHINERY WITH ANCILLARY FACILITIES FOR A PERIOD OF 3 YEARS AND ASSOCIATED FILLING OF LAND

SITE LOCATION

VARIOUS LOTS IN D.D. 82, TA KWU LING, NEW TERRITORIES

SCALE

1 : 700 @ A4

DRAWN BY MN	DATE 16.5.2024
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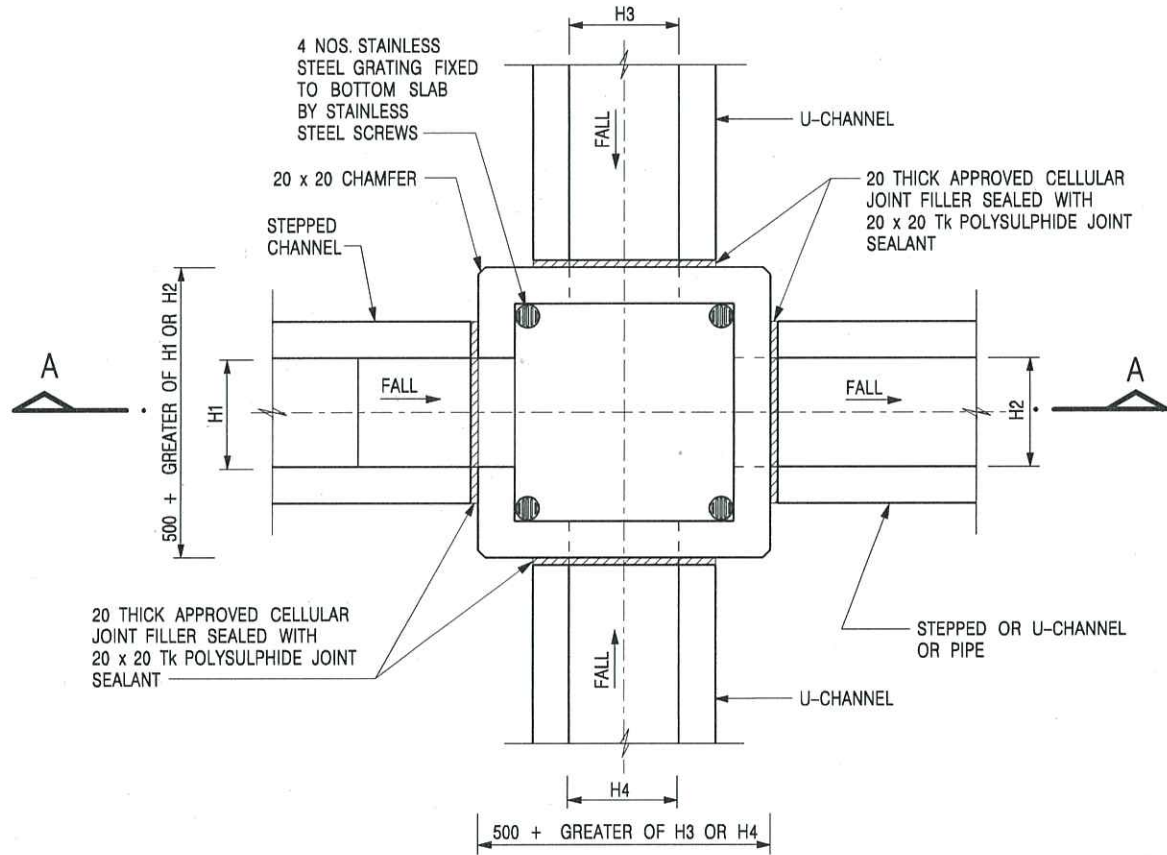
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APPROVED BY	DATE
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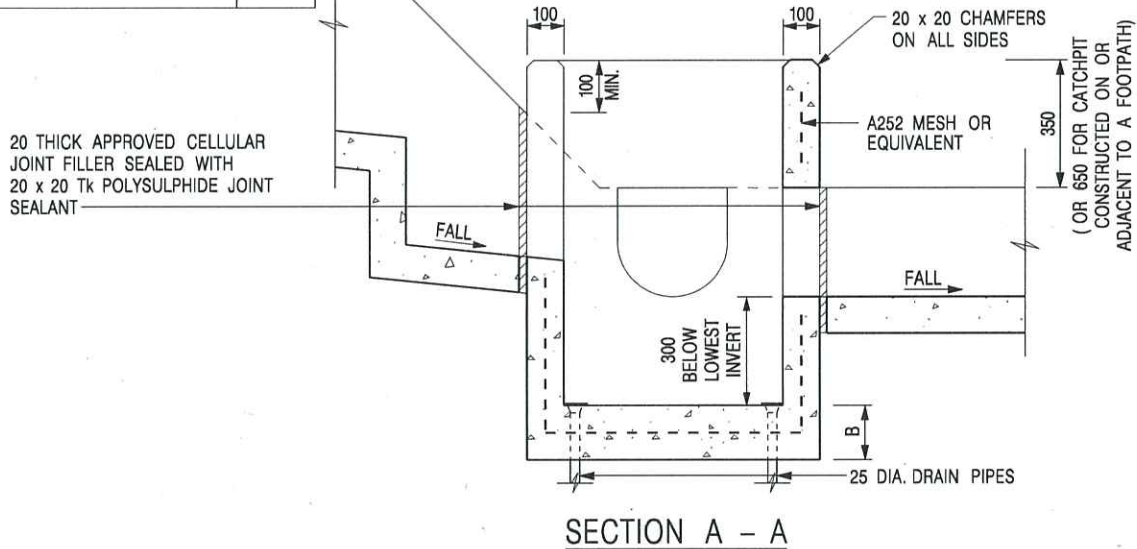
DWG. TITLE
LAYOUT PLAN

DWG NO. PLAN 5	VER. 001
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Appendix C - Reference Drawings



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.

-	FORMER DRG. NO. C2406J.	Original Signed	03.2015
REF.	REVISION	SIGNATURE	DATE

CATCHPIT WITH TRAP
(SHEET 1 OF 2)



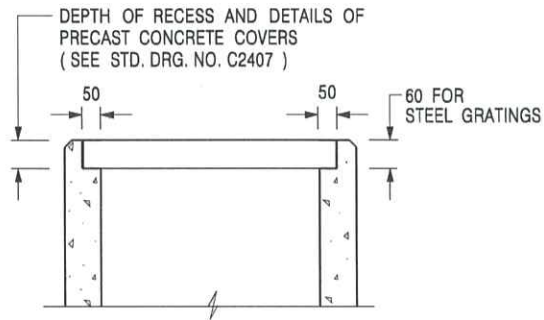
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

SCALE 1 : 20

DRAWING NO.

DATE JAN 1991

C2406 /1



ALTERNATIVE TOP SECTION
FOR PRECAST CONCRETE COVERS / GRATINGS

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. ALL CONCRETE SHALL BE GRADE 20 /20.
3. CONCRETE SURFACE FINISH SHALL BE CLASS U2 OR F2 AS APPROPRIATE.
4. FOR DETAILS OF JOINT, REFER TO STD. DRG. NO. C2413.
5. CONCRETE TO BE COLOURED AS SPECIFIED.
6. UNLESS REQUESTED BY THE MAINTENANCE PARTY AND AS DIRECTED BY THE ENGINEER, CATCHPIT WITH TRAP IS NORMALLY NOT PREFERRED DUE TO PONDING PROBLEM.
7. UPON THE REQUEST FROM MAINTENANCE PARTY, DRAIN PIPES AT CATCHPIT BASE CAN BE USED BUT THIS IS FOR CATCHPITS LOCATED AT SLOPE TOE ONLY AND AS DIRECTED BY THE ENGINEER.
8. FOR CATCHPITS CONSTRUCTED ON OR ADJACENT TO A FOOTPATH, STEEL GRATINGS (SEE DETAIL 'A' ON STD. DRG. NO. C2405 /2) OR CONCRETE COVERS (SEE STD. DRG. NO. C2407) SHALL BE PROVIDED AS DIRECTED BY THE ENGINEER.
9. IF INSTRUCTED BY THE ENGINEER, HANDRAILING (SEE DETAIL 'J' ON STD. DRG. NO. C2405 /5; EXCEPT ON THE UPSLOPE SIDE) IN LIEU OF STEEL GRATINGS OR CONCRETE COVERS CAN BE ACCEPTED AS AN ALTERNATIVE SAFETY MEASURE FOR CATCHPITS NOT ON A FOOTPATH NOR ADJACENT TO IT. TOP OF THE HANDRAILING SHALL BE 1 000 mm MIN. MEASURED FROM THE ADJACENT GROUND LEVEL.
10. MINIMUM INTERNAL CATCHPIT WIDTH SHALL BE 1 000 mm FOR CATCHPITS WITH A HEIGHT EXCEEDING 1 000 mm MEASURED FROM THE INVERT LEVEL TO THE ADJACENT GROUND LEVEL. AND, STEP IRONS (SEE DSD STD. DRG. NO. DS1043) AT 300 c/c STAGGERED SHALL BE PROVIDED. THICKNESS OF CATCHPIT WALL FOR INSTALLATION OF STEP IRONS SHALL BE INCREASED TO 150 mm.
11. FOR RETROFITTING AN EXISTING CATCHPIT WITH STEEL GRATING, SEE DETAIL 'G' ON STD. DRG. NO. C2405 /4.
12. SUBJECT TO THE APPROVAL OF THE ENGINEER, OTHER MATERIALS CAN ALSO BE USED AS COVERS / GRATINGS.

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

CATCHPIT WITH TRAP
(SHEET 2 OF 2)



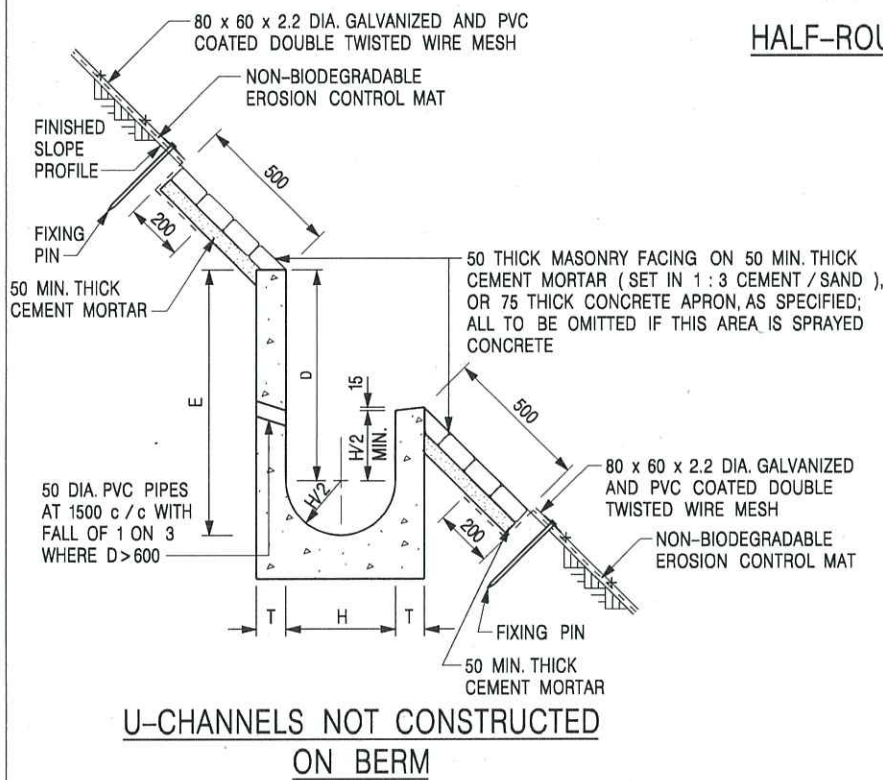
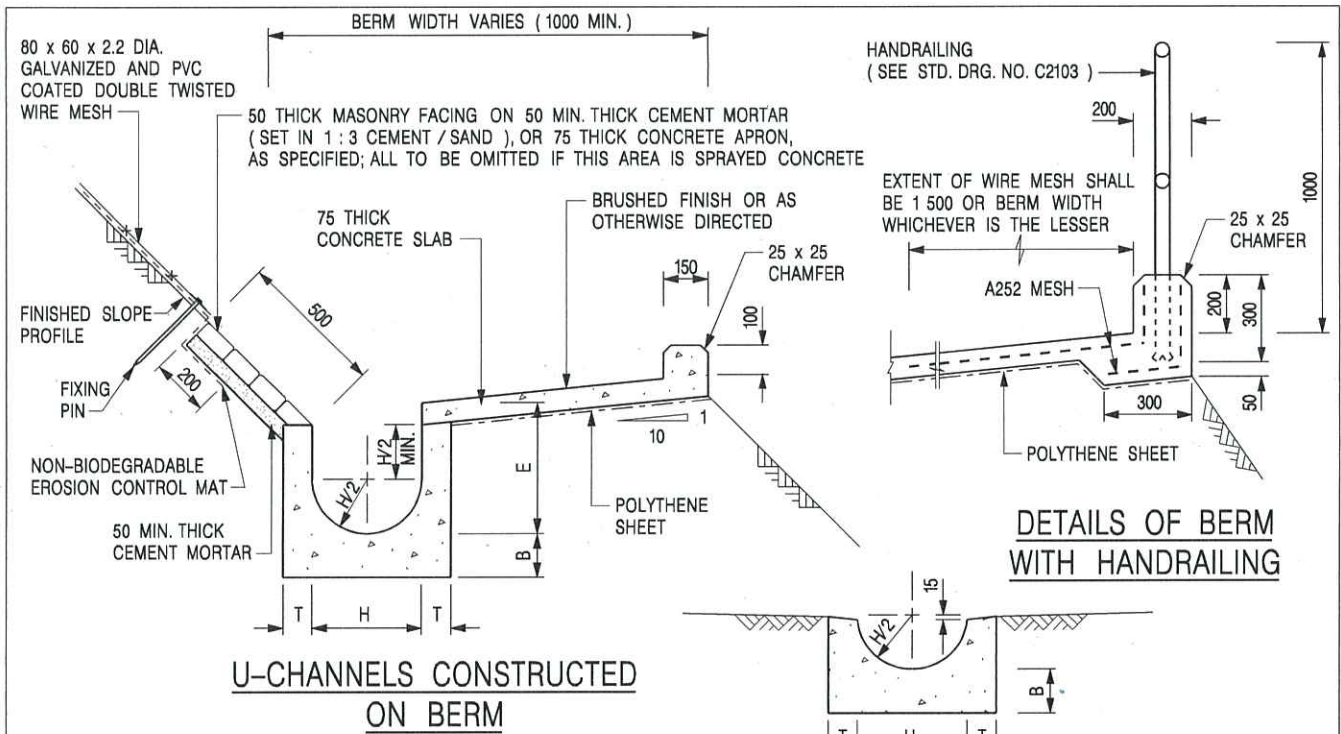
**CIVIL ENGINEERING AND
DEVELOPMENT DEPARTMENT**

SCALE 1 : 20

DRAWING NO.

DATE JAN 1991

C2406 /2A



NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. ALL CONCRETE TO BE GRADE 20 / 20.
3. CONCRETE SURFACE FINISH SHALL BE CLASS U2, F2 OR BRUSHED FINISH AS DIRECTED.
4. SPACING OF EXPANSION JOINT IN CHANNELS, BERM SLABS AND APRONS TO BE 10 METRES MAXIMUM, SEE STD. DRG. NO. C2413 FOR DETAILS.
5. JOINTS FOR CHANNELS, BERM SLABS, APRONS AND WALLS, ETC. TO BE ON THE SAME ALIGNMENT.
6. FOR DIMENSIONS T, H, & B, SEE TABLE BELOW.
7. BIODEGRADABLE EROSION CONTROL MAT IF REQUIRED, SEE STD. DRG. NO. C2511/E.
8. CONCRETE TO BE COLOURED AS SPECIFIED.
9. CONCRETE U-CHANNEL CAN BE CAST IN-SITU OR PRECAST CONCRETE SUBJECT TO THE ENGINEER'S AGREEMENT ON THE DETAILS.
10. DETAILS OF EROSION CONTROL MAT AND WESH MESH ON BERM. (SEE STD DRG. NO. C2511/E)

NOMINAL SIZE H	T	B	REINFORCEMENT
300	80	100	A252 MESH PLACED CENTRALLY AND T=100 WHEN E > 650
375 - 600	100	150	
675 - 900	125	175	A252 MESH PLACED CENTRALLY

REF.	REVISION	SIGNATURE	DATE
I	MINOR AMENDMENT.	Original Signed	07.2018
H	THICKNESS OF MASONRY FACING AMENDED.	Original Signed	01.2005
G	MINOR AMENDMENT.	Original Signed	01.2004
F	GENERAL REVISION.	Original Signed	12.2002
E	DRAWING TITLE AMENDED.	Original Signed	11.2001
D	MINOR AMENDMENT.	Original Signed	08.2001
C	150 x 100 UPSTAND ADDED AT BERM.	Original Signed	6.99
B	MINOR AMENDMENTS.	Original Signed	3.94

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



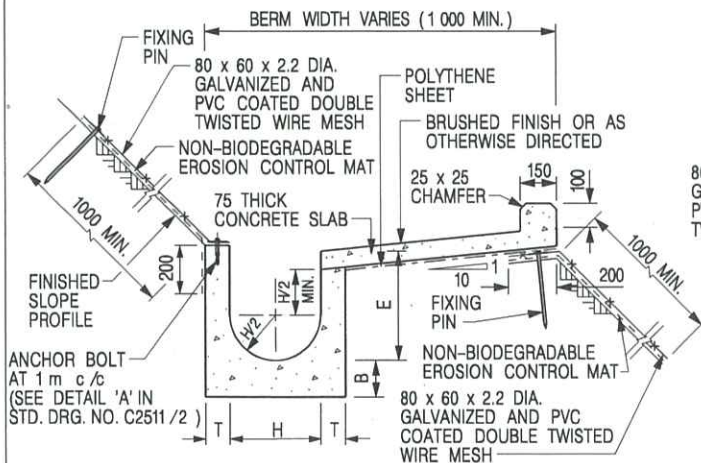
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

SCALE 1 : 25

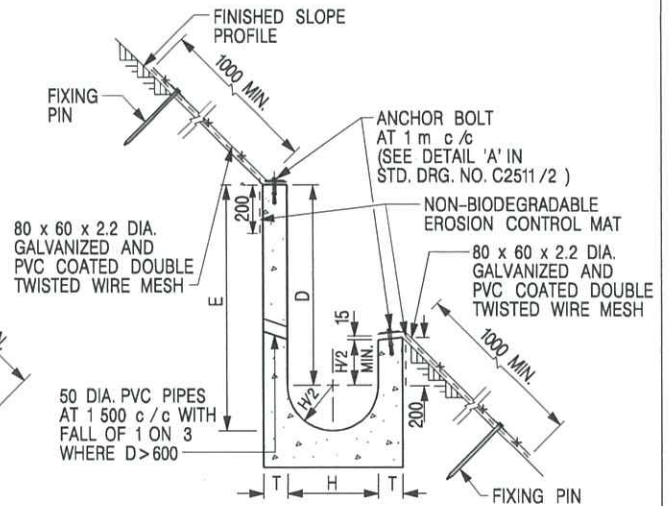
DRAWING NO.

DATE JAN 1991

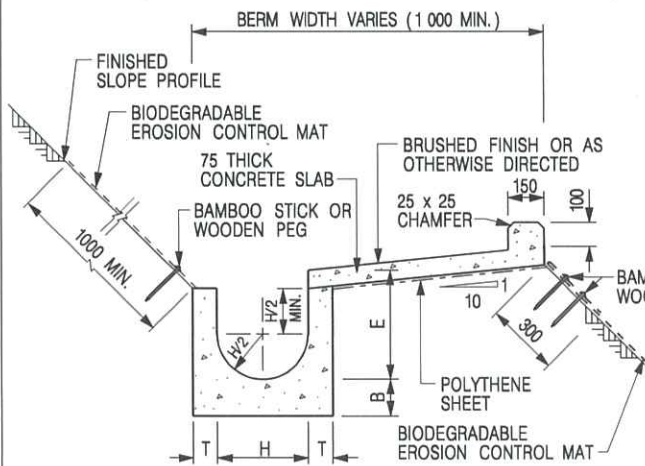
C24091



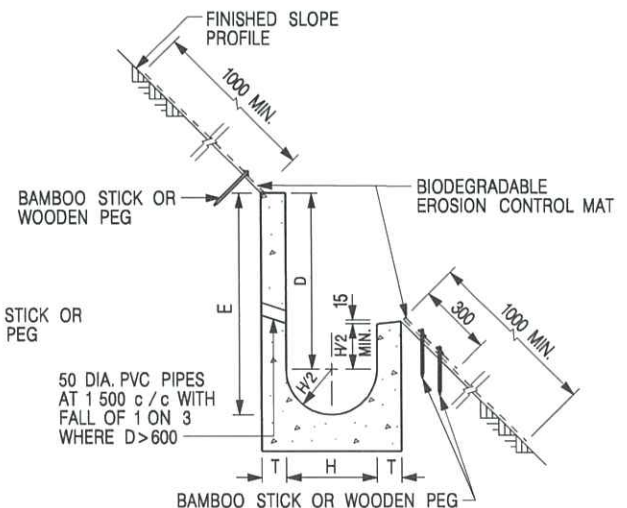
U-CHANNELS CONSTRUCTED ON BERM WITH NON-BIODEGRADABLE EROSION CONTROL MAT



U-CHANNELS NOT CONSTRUCTED ON BERM WITH NON-BIODEGRADABLE EROSION CONTROL MAT



U-CHANNELS CONSTRUCTED ON BERM WITH BIODEGRADABLE EROSION CONTROL MAT



U-CHANNELS NOT CONSTRUCTED ON BERM WITH BIODEGRADABLE EROSION CONTROL MAT

NOTES:

- ALL DIMENSIONS ARE IN MILLIMETRES.
- ALL CONCRETE TO BE GRADE 20 /20.
- CONCRETE SURFACE FINISH SHALL BE CLASS U2, F2 OR BRUSHED FINISH AS DIRECTED.
- SPACING OF EXPANSION JOINT IN CHANNELS, BERM SLABS AND APRONS TO BE 10 METRES MAXIMUM, SEE STD. DRG. NO. C2413 FOR DETAILS.
- JOINTS FOR CHANNELS, BERM SLABS, APRONS AND WALLS, ETC. TO BE ON THE SAME ALIGNMENT.
- FOR DIMENSIONS T, H, & B, SEE TABLE BELOW.
- FOR TYPICAL FIXING PIN DETAILS, SEE STD. DRG. NO. C2511/2.
- MINIMUM SIZE OF 25 x 50 x 300mm SHALL BE PROVIDED FOR WOODEN PEG.
- MINIMUM SIZE OF 10mm DIAMETER WITH 200mm LONG SHALL BE PROVIDED FOR BAMBOO STICK.
- THE FIXING DETAILS OF NON-BIODEGRADABLE AND BIODEGRADABLE EROSION CONTROL MATS ON EXISTING BERM SHALL REFER TO STD. DRG. NO. C2511/1.

NOMINAL SIZE H	T	B	REINFORCEMENT
300	80	100	A252 MESH PLACED CENTRALLY AND T=100 WHEN E > 650
375 - 600	100	150	
675 - 900	125	175	A252 MESH PLACED CENTRALLY

REF.	REVISION	SIGNATURE	DATE
I	MINOR AMENDMENT.	Original Signed	07.2018
H	FIXING DETAILS OF BIODEGRADABLE EROSION CONTROL MAT ADDED.	Original Signed	12.2017
G	DIMENSION TABLE AMENDED.	Original Signed	01.2005
F	MINOR AMENDMENT.	Original Signed	01.2004
E	GENERAL REVISION.	Original Signed	12.2002
D	MINOR AMENDMENT.	Original Signed	08.2001
C	150 x 100 UPSTAND ADDED AT BERM.	Original Signed	6.99
B	MINOR AMENDMENT.	Original Signed	3.94
A	MINOR AMENDMENT.	Original Signed	10.92

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



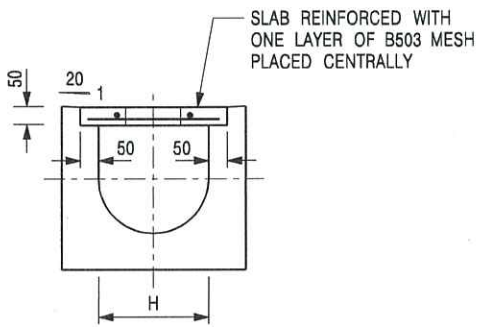
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

SCALE DIAGRAMMATIC

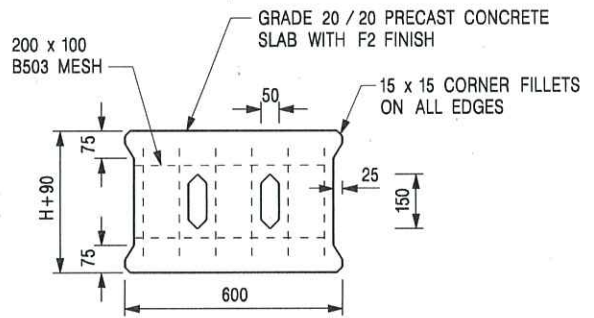
DRAWING NO.

DATE JAN 1991

C24101



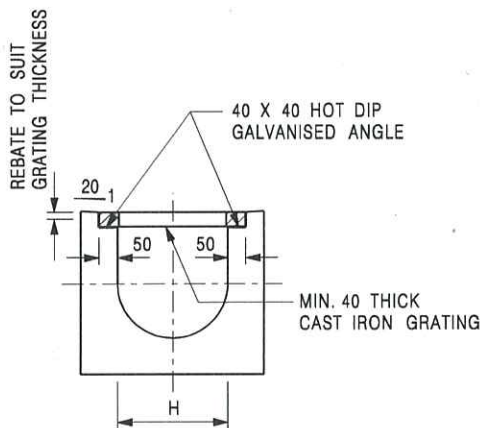
TYPICAL SECTION



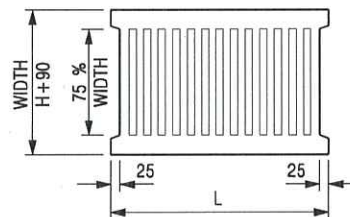
PLAN OF SLAB

U-CHANNELS WITH PRECAST CONCRETE SLABS

(UP TO H OF 525)



TYPICAL SECTION



L = 600mm FOR H ≤ 375mm
L = 400mm FOR H > 375mm

CAST IRON GRATING

(DIMENSIONS ARE FOR GUIDANCE ONLY, CONTRACTOR MAY SUBMIT EQUIVALENT TYPE)

U-CHANNEL WITH CAST IRON GRATING

(UP TO H OF 525)

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES.
2. H=NOMINAL CHANNEL SIZE.
3. ALL CAST IRON FOR GRATINGS SHALL BE GRADE EN-GJL-150 COMPLYING WITH BS EN 1561.
4. FOR COVERED CHANNELS TO BE HANDED OVER TO HIGHWAYS DEPARTMENT FOR MAINTENANCE, THE GRATING DETAILS SHALL FOLLOW THOSE AS SHOWN ON HyD STD. DRG. NO. H3156.

REF.	REVISION	SIGNATURE	DATE
E	NOTES 3 & 4 AMENDED.	Original Signed	12.2014
D	NOTE 4 ADDED.	Original Signed	06.2008
C	MINOR AMENDMENT. NOTE 3 ADDED.	Original Signed	12.2005
B	NAME OF DEPARTMENT AMENDED.	Original Signed	01.2005
A	CAST IRON GRATING AMENDED.	Original Signed	12.2002

COVER SLAB AND CAST IRON
GRATING FOR CHANNELS



CIVIL ENGINEERING AND
DEVELOPMENT DEPARTMENT

SCALE 1 : 20

DRAWING NO.

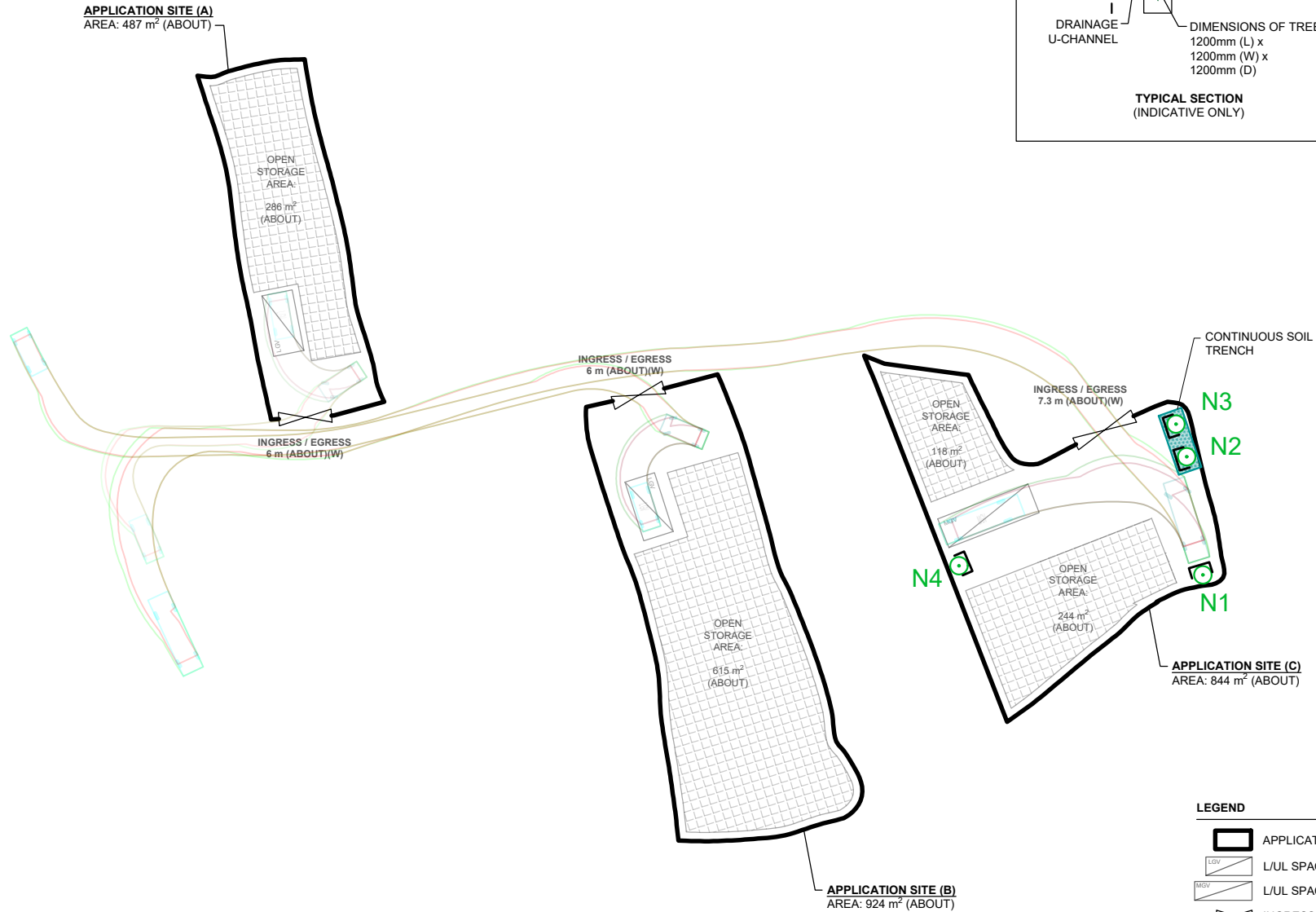
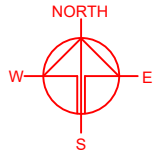
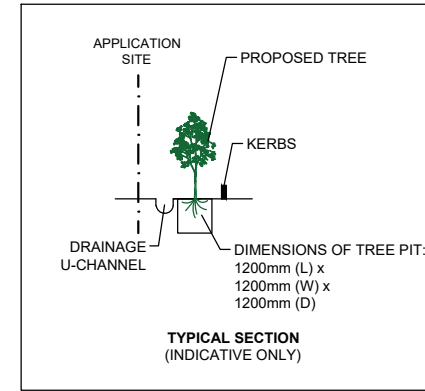
DATE JAN 1991

C2412E

LANDSCAPE PROPOSAL

APPLICATION SITE AREA : 2,255 m² (ABOUT)
 COVERED AREA : NOT APPLICABLE
 UNCOVERED AREA : 2,255 m² (ABOUT)

NO. OF NEW TREES WILL BE PLANTED : 4 (N1 TO N4)
 SPECIES OF NEW TREES : *SENNA SURATTENSIS*
 HEIGHT OF NEW TREES : NO LESS THAN 2.75 m
 SPACING OF NEW TREES : NOT MORE THAN 4 m
 DIMENSION OF TREE PITS : 1.2 m (W) X 1.2 m (L) X 1.2 m (D)



NOTES:

- 1) THE APPLICANT WILL MAINTAIN TREES IN GOOD CONDITION DURING THE PLANNING APPROVAL PERIOD.
- 2) THE APPLICANT WILL REPLACE TREES WHICH ARE DYING OR DEAD DURING THE PLANNING APPROVAL PERIOD.
- 3) THE APPLICANT WILL PROVIDE ADEQUATE IRRIGATION FOR TREES.

LEGEND

- APPLICATION SITE
- L/LU SPACE (LGV)
- L/LU SPACE (MGV)
- INGRESS / EGRESS
- MEDIUM/LIGHT GOODS VEHICLE
- SWEEP PATH OF VEHICLE
- PROPOSED NEW TREES

PLANNING CONSULTANT



PROJECT

PROPOSED TEMPORARY OPEN STORAGE OF CONSTRUCTION MATERIAL AND MACHINERY WITH ANCILLARY FACILITIES FOR A PERIOD OF 3 YEARS AND ASSOCIATED FILLING OF LAND

SITE LOCATION

VARIOUS LOTS IN D.D. 82, TA KWU LING, NEW TERRITORIES

SCALE

1 : 700 @ A4

DRAWN BY: LT DATE: 16.7.2024

CHECKED BY: DATE:

APPROVED BY: DATE:

DWG. TITLE
LANDSCAPE PROPOSAL

DWG NO. ANNEX II VER. 001