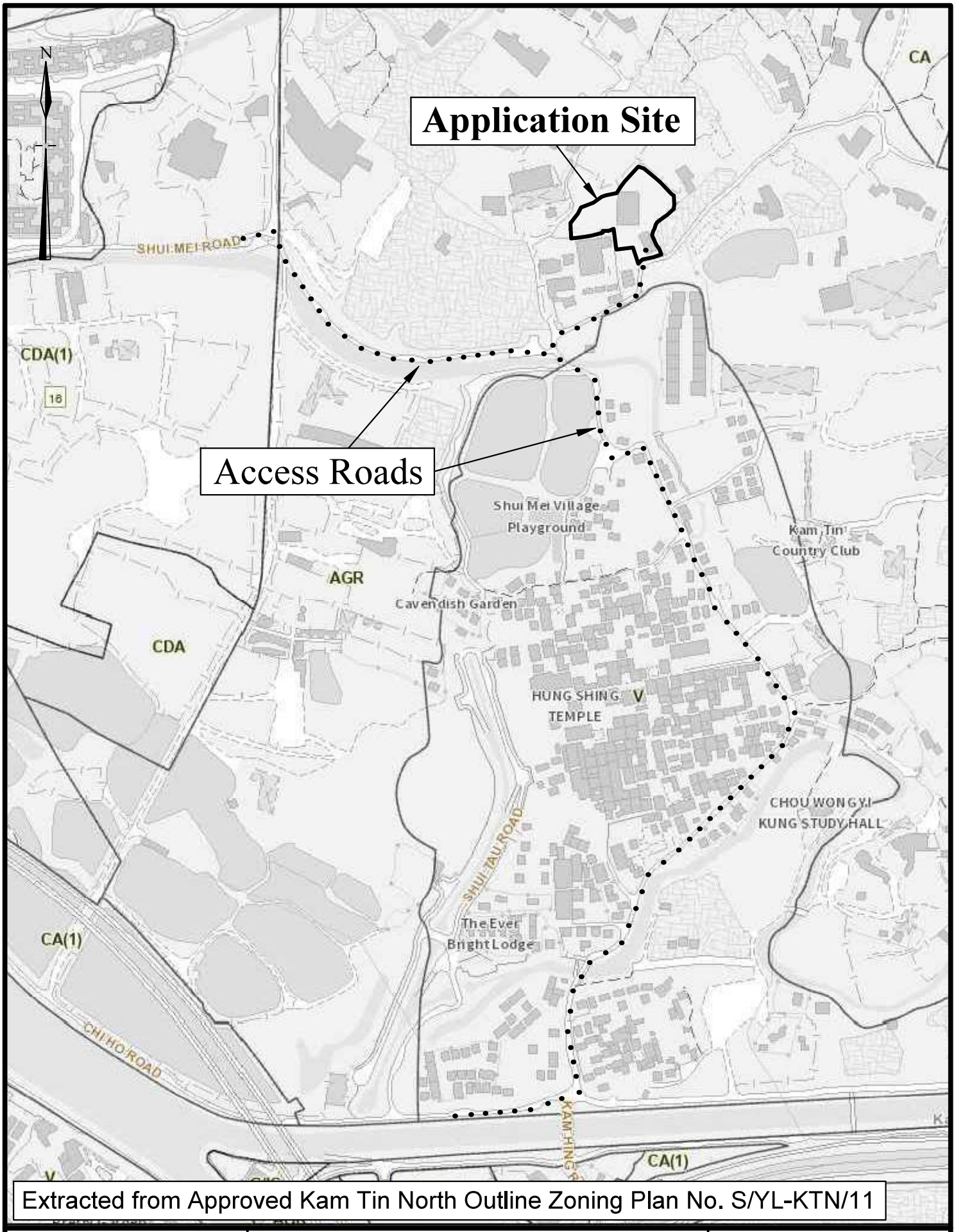
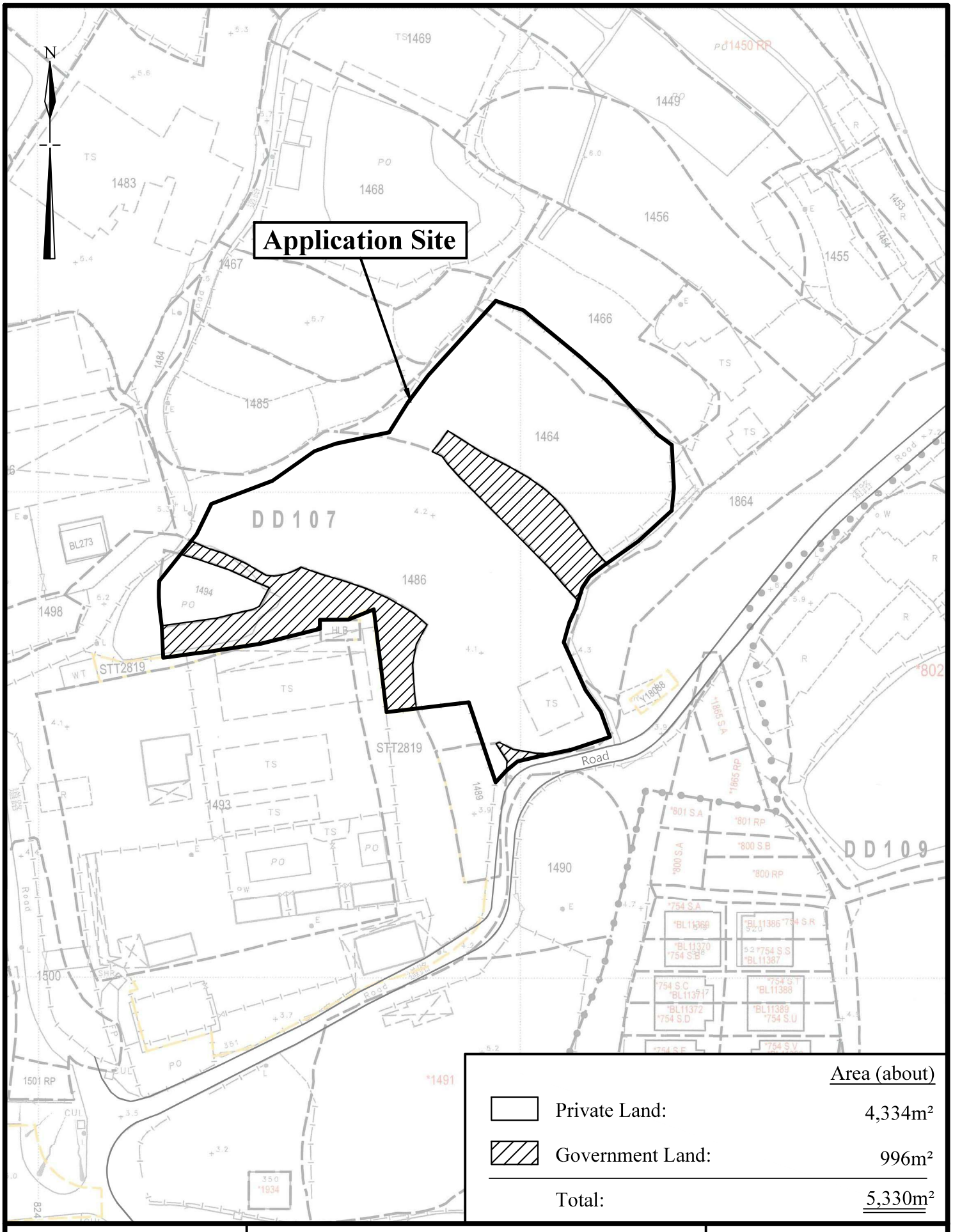
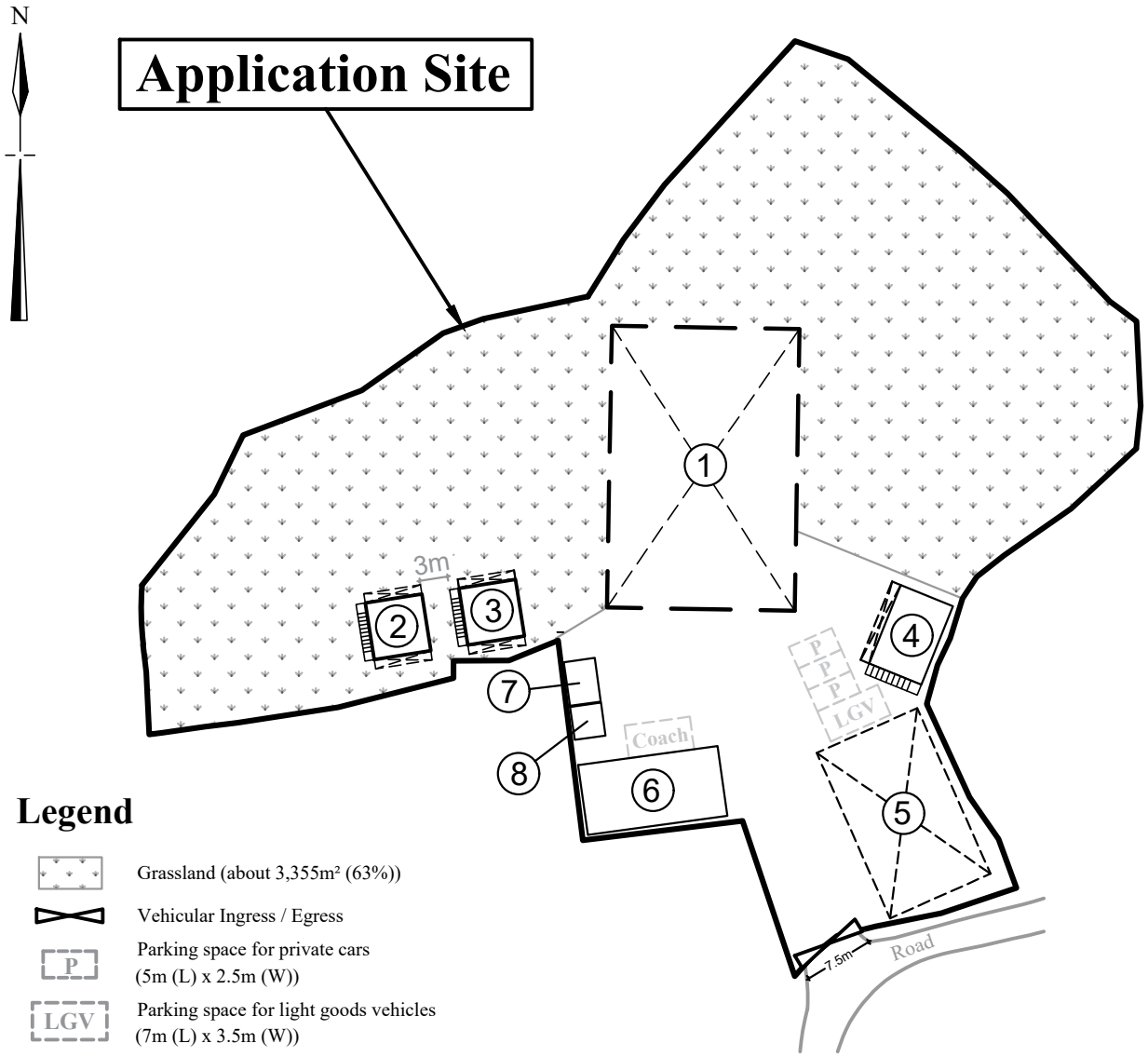


Extracted from Approved Kam Tin North Outline Zoning Plan No. S/YL-KTN/11

Not to Scale	**Location Plan** **Lots 1464(part), 1466(part), 1486(Part), 1489(Part), 1494(part) and adjoining Government Land in D. D. 107 Yuen Long, New Territories**	**Goldrich Planners & Surveyors Ltd.**
August 2025		**Plan 1 (P 22034)**



1 : 1000	**Lot Index Plan** Lots 1464(part), 1466(part), 1486(Part), 1489(Part), 1494(part) and adjoining Government Land in D. D. 107 Yuen Long, New Territories	Goldrich Planners & Surveyors Ltd.
August 2025		Plan 2 (P 22034)



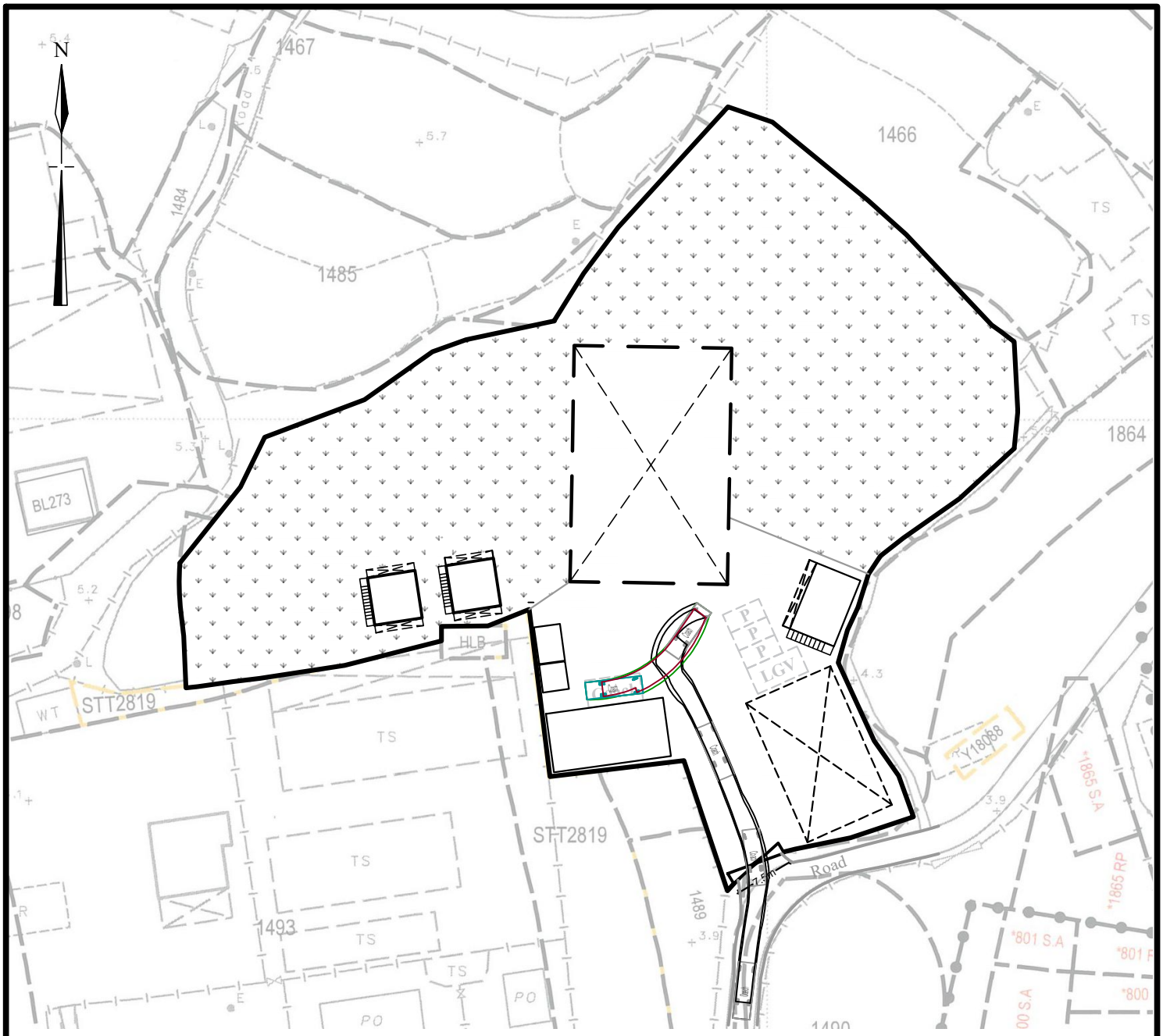
Legend

- Grassland (about 3,355m² (63%))
- Vehicular Ingress / Egress
- P — Parking space for private cars (5m (L) x 2.5m (W))
- LGV — Parking space for light goods vehicles (7m (L) x 3.5m (W))
- Coach — Parking space for coaches (7m (L) x 3.5m (W))

Site Area: about 5,330m²

No.	Structure / Use	Floor Area (about)	Covered Area (about)	Height	No. of Storeys
1	Open Shed	600m²	600m²	7m	1
2	G/F: Multi-function Room (Animal activity room, social event room and ancillary office)	56m²	56m²	7m	2
	1/F: Roof	37m²			
3	G/F: Multi-function Room (Animal activity room, social event room and ancillary office)	56m²	56m²	7m	2
	1/F: Roof	37m²			
4	G/F: Multi-function Room (Animal activity room, social event room and ancillary office)	67m²	67m²	7m	2
	1/F: Roof	58m²			
5	Open Shed	226m²	226m²	7m	1
6	Multi-function Room (Animal activity room, social event room and ancillary office)	225m²	112.5m²	7m	2
7	Toilet	15m²	15m²	5m	1
8	Toilet	12m²	12m²	5m	1
	Total:	1,389m²	1,144.5m²		

1 : 750	**Layout Plan**	Goldrich Planners & Surveyors Ltd.
August 2025	Lots 1464(part), 1466(part), 1486(Part), 1489(Part), 1494(part) and adjoining Government Land in D. D. 107 Yuen Long, New Territories	Plan 3 (P22034)



Legend

- Vehicular Ingress / Egress
- P — Parking space for private cars (5m (L) x 2.5m (W))
- LGV — Parking space for light goods vehicles (7m (L) x 3.5m (W))
- Coach — Parking space for coaches (7m (L) x 3.5m (W))
- Coach (7m (L) x 2.5m (W))

1 : 750	**Swept Path Analysis**	**Goldrich Planners & Surveyors Ltd.**
August 2025	**Lots 1464(part), 1466(part), 1486(Part), 1489(Part), 1494(part) and adjoining Government Land in D. D. 107 Yuen Long, New Territories**	**Plan 4 (P22034)**

Legend

- Catch pit
- Catch pit with trap
- Covered U-channel
- U-channel
- U-Channel with C.I. Cover
- Covered pipe
- Grassland
- Hoarding with 100mm opening or no hoarding
- Viewpoint of Drainage Photo

Application Site

Existing Ditch (about 500mm wide) 1:300

To Existing 500mm wide Ditch

Existing 300UC 1:200

Low Kerb

Existing 300UC 1:300

Existing 300UC with C.I cover

Existing 300UC 1:200

Existing 500mm covered UC 1:300

Existing 500 covered UC 1:300

Existing 500 underground pipe 1:300

Ex. CP1 G.L. 4.10 I.L. 2.62

Ex. CP2 G.L. 4.12 I.L. 3.49

Ex. CP3 G.L. 4.10 I.L. 2.58

Ex. CP4 G.L. 3.3 I.L. 2.48

Ex. CP5 G.L. 3.3 I.L. 2.34

Ex. 500 UC 1:300

Existing 500 UC 1:300

Existing 750 Local Ditch 1:300

Existing 750 Public UC SUP1019842

Existing 450 Public UC SUP1019840

CUL SCH1028764

CUL SCH1028762

CUL

Planning Application No. A/YL-KTN/1074 with existing drainage system

Existing low fence wall

Existing Raised Platform

350mm UC

POND

Existing catchpit SCH1028740

Existing catchpit SCH1028741

Existing 600 underground Pipe SWD1065681

Existing 600 Pipe underground SWD1065682

SHUI MEI ROAD

Ramp

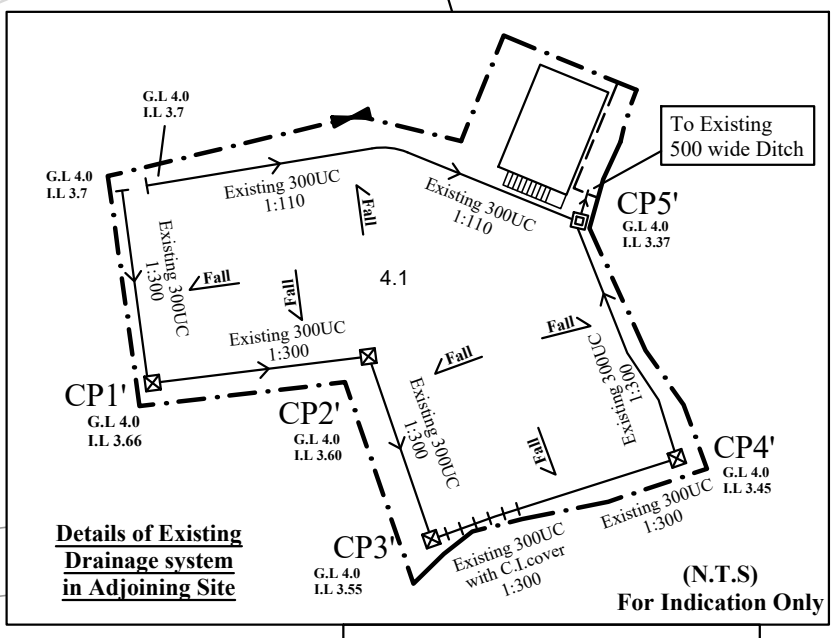
Road

尾路

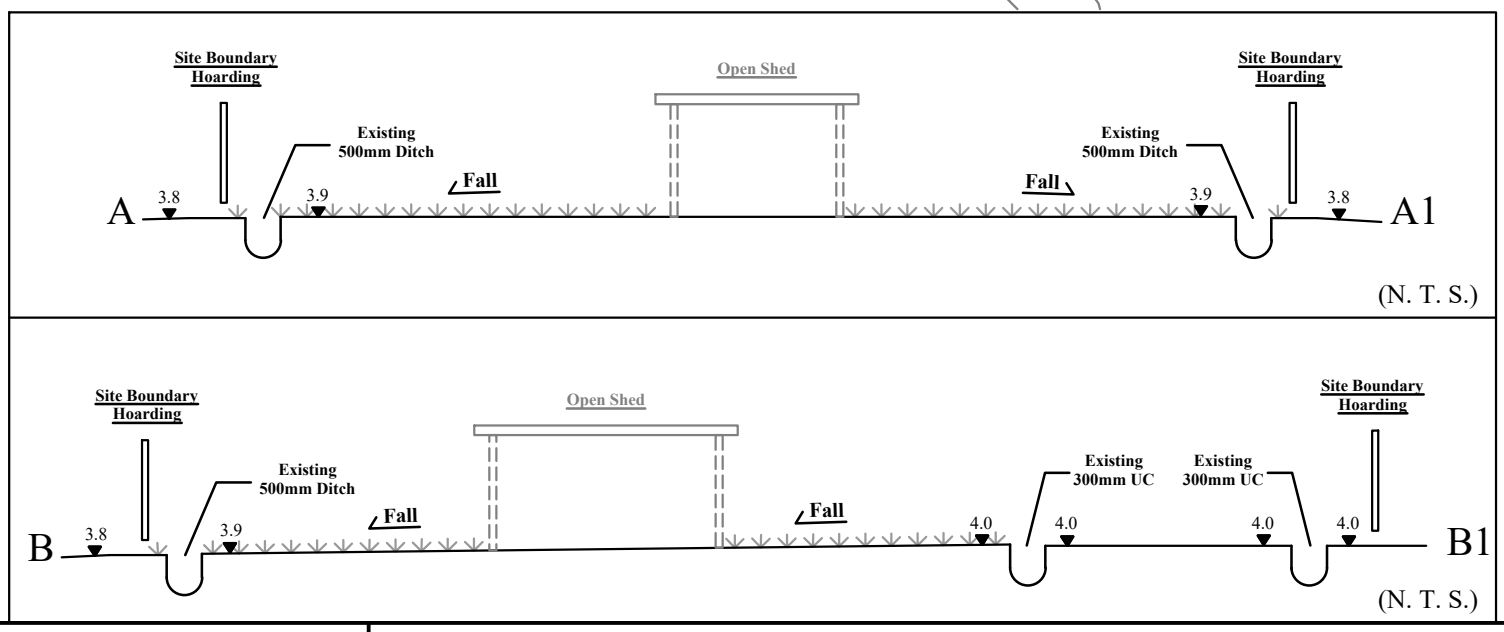
Grass

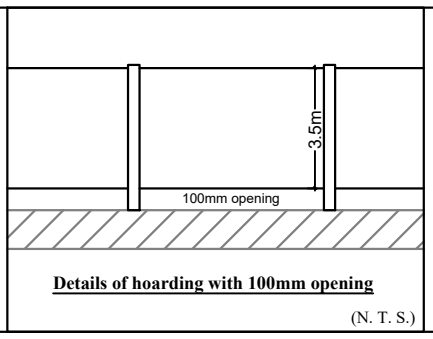
N.T.S

Details of Existing Drainage system in Adjoining Site



(N.T.S)
For Indication Only

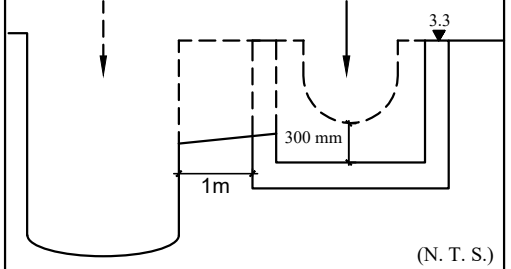




Details of hoarding with 100mm opening

(N. T. S.)

Connection details of proposed outfall between CP5 and existing 750 local ditch



(N. T. S.)

1:750 (A3)	**Drainage Proposal** Lots 1464(part), 1466(part), 1486(Part), 1489(Part), 1494(part) and adjoining Government Land in D. D. 107 Yuen Long, New Territories	Goldrich Planners & Surveyors Ltd.
August 2025		Plan 5.1 (P 22034)

N

Legend

- Catch pit
- Catch pit with trap
- Covered U-channel
- U-channel
- U-Channel with C.I. Cover
- Underground pipe

Subject Site
Catchment Area C
Concrete Paving
Area(about) : 906m²
Flat Grassland
Area(about) : 3,355m²

The runoff of this site flows to the east

The runoff of this site flows to the local track at the west

The runoff of this site flows to the local track at the east

Catchment Area D
Concrete Paving
Area(about) : 2,458m²

Planning Application
No. A/YL-KTN/987 with
existing drainage system

Planning Application
No. A/YL-KTN/1058 with
existing drainage system

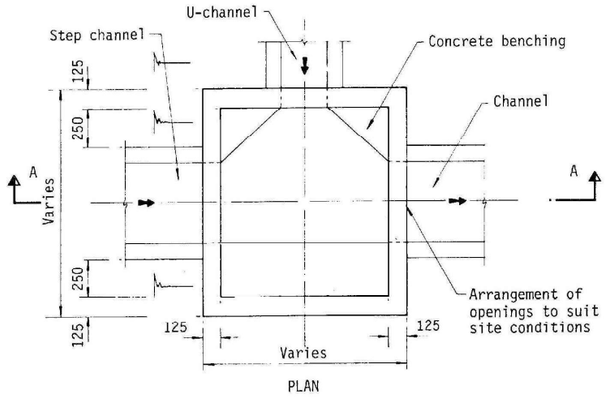
Planning Application
No. A/YL-KTN/1074 with
existing drainage system

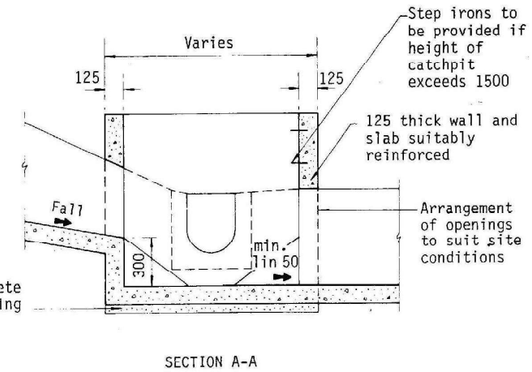
Catchment Area A
Concrete Paving(about) : 746m²
Catchment Area B
Concrete Paving(about) : 341m²

Catchment Area E
Concrete Paving
Area(about) : 1,081m²

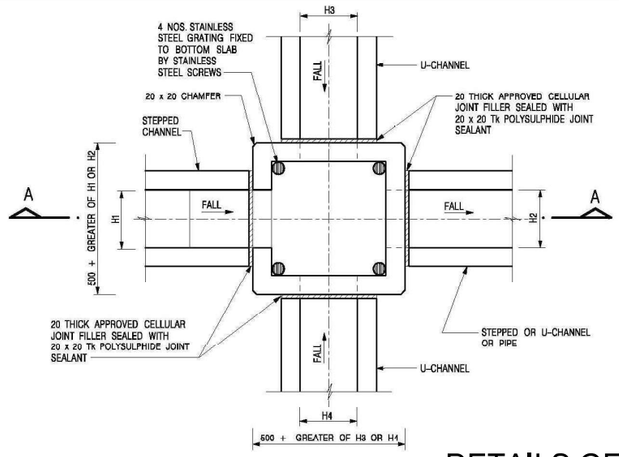
AREA OF CATCHMENT
(N.T.S)

N.T.S	**Drainage Proposal** Lots 1464(part), 1466(part), 1486(Part), 1489(Part), 1494(part) and adjoining Government Land in D. D. 107 Yuen Long, New Territories	Goldrich Planners & Surveyors Ltd.
August 2025		Plan 5.2 (P 22034)

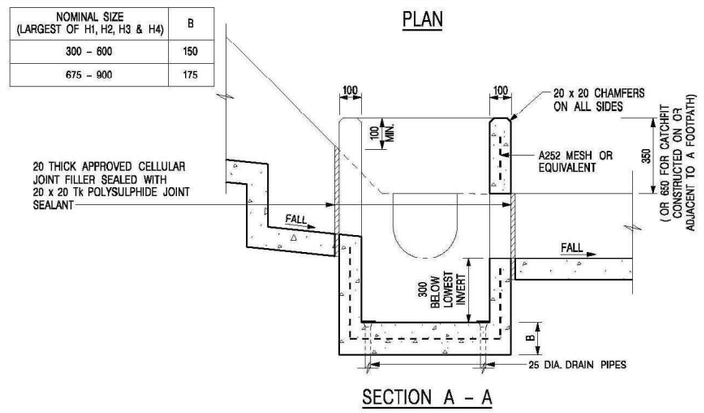




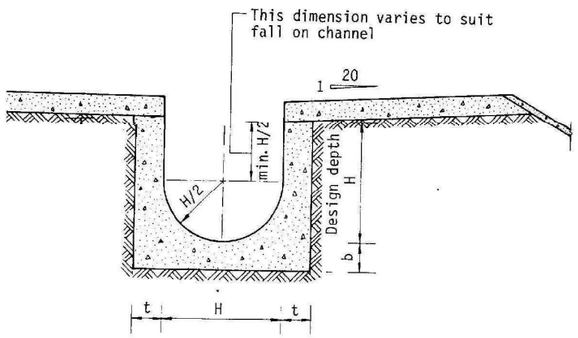
TYPICAL DETAILS OF CATCHPIT



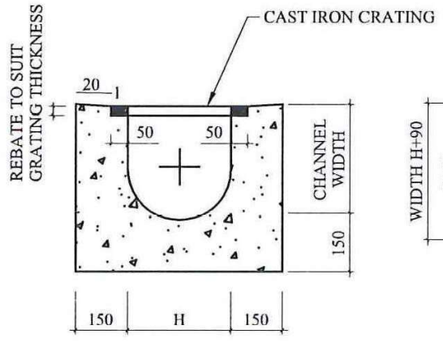
NOMINAL SIZE (LARGEST OF H1, H2, H3 & H4)	B
300 – 600	150
675 – 900	175



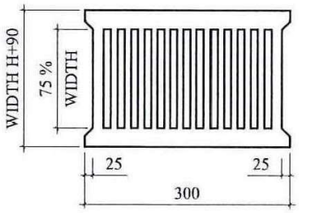
DETAILS OF CATCHPIT WITH TRAP
(REFER TO CEDD'S STANDARD DWG. C2406/1)



TYPICAL DETAILS OF U CHANNEL



TYPICAL SECTION OF U-CHANNEL WITH COVER
(N.T.S.)



CAST IRON CRATING
(HEAVY DUTY)

N.T.S	**Drainage Proposal** Lots 1464(part), 1466(part), 1486(Part), 1489(Part), 1494(part) and adjoining Government Land in D. D. 107 Yuen Long, New Territories	Goldrich Planners & Surveyors Ltd.
August 2025		Plan 5.3 (P 22034)

1 For Catchment Area A

Ref.

Area, A	=	**742**	m^2	
Average slope, H	=	0.1	m per 100m	
Distance on the line of natural flow, L	=	**21**	m	

Time of concentraction, t_o = $0.14465L / (H^{0.2}A^{0.1})$ = 0.14465 (21) / (0.1^0.2*742^0.1) = 2.5 min — SDM 7.5.2 (d)

2 For Existing U-Channel in catchment area A

	From	To
Ground level (mPD)	**4.00**	**4.00**
Invert level (mPD)	**3.70**	**3.37**

Width of u-channel, w	=	**300**	mm
Length of u-channel, L_c	=	**97.8**	m
Depth of vertical part of u-channel, d	=	476	mm
Gradient of u-channel, S_f	=	(3.7-3.374)/97.8 = 0.0033	

Cross-Section Area, a = $0.5 \pi r^2 + w d$ = 0.5 x 3.14 x 150^2 + 300 x 476 = 0.178 m^2

Wetted Perimeter, p = $\pi r + 2 d$ = 3.14 x 150 + 2 x 476 = 1.423 m

Hydralic radius, R = a / p = 0.125 m — SDM 8.2.1

3 Use Manning Equation for estimating velocity of stormwater

Take n = 0.016 for concrete lined channels:- — SDM Table 13

Allowable velocity, v = $R^{1/6} x (RS_f)^{1/2}/n$ = (0.125)^1/6 x (0.125 x 0.003)^1/2 / 0.016 = 0.90 m/s — SDM Table 12

Time of flow, t_f = 1.8 min

4 Use "Rational Method" for calculation of design flow

Design intensity, i = $a / (t_o + t_f + b)^c$ — SDM 4.3.2

= 505.5 / (2.9+0.5+3.29)^0.35 for return period T = 50 years — Corrigendum 1/2024

= 246 — SDM Table 3a

Type of surface	Runoff Coefficient C	Catchment Area A (m^2)	C x A
Flat Glassland(heavy soil)	0.25	**0.0**	0.0
Concrete Paving	0.95	**742.0**	704.9
		SUM =	704.9

SDM 7.5.2 (b)

Upstream flow, Q_u = **0** m^3/s

Design flow, Q_d = $0.278i \Sigma C_j A_j + Q_u$ where A_j is in km^2 — SDM 7.5.2 (a)

= 0.278 x 246 x 704.9 / 1000000 + 0

= 0.048 m^3/s

Allowable flow, Q_a = a x v

= 0.178 x 0.9

= 0.161 m^3/s

> Q_d (O.K.)

Reference was made to Stormwater Drainage Manual (SDM) by DSD

Scale: NA	**Hydraulic Calculation**	Goldrich Planners & Surveyors Ltd.
December 2024	Lots 1464 (Part), 1486 (Part), 1489 (Part), 1494 (Part) and adjoining Government Land in D. D. 107 Yuen Long, N. T.	Page 1 (P22034)

1 For Catchment Area B

				Ref.
Area, A	=	**343**	m^2	
Average slope, H	=	0.1	m per 100m	
Distance on the line of natural flow, L	=	**25**	m	
Time of concentraction, t_o	=	$0.14465L / (H^{0.2}A^{0.1})$ = 0.14465 (25) / (0.1^0.2*343^0.1)		SDM 7.5.2 (d)
	=	3.2	min	

2 For Existing U-Channel in catchment area B

	From	To
Ground level (mPD)	**4.00**	**4.00**
Invert level (mPD)	**3.70**	**3.37**

Width of u-channel, w	=	**300**	mm	
Length of u-channel, L_c	=	**36.2**	m	
Depth of vertical part of u-channel, d	=	480	mm	
Gradient of u-channel, S_f	=	(3.7-3.37)/36.2 = 0.009		
Cross-Section Area, a	=	$0.5 \pi r^2 + w d$ = 0.5 x 3.14 x 150^2 + 300 x 480		
	=	0.179	m^2	
Wetted Perimeter, p	=	$\pi r + 2 d$ = 3.14 x 150 + 2 x 480		
	=	1.431	m	
Hydralic radius, R	=	a / p		SDM 8.2.1
	=	0.125	m	

3 Use Manning Equation for estimating velocity of stormwater

Take n	=	0.016	for concrete lined channels:-	SDM Table 13
Allowable velocity, v	=	$R^{1/6} x (RS_f)^{1/2}/n$ = (0.125)^1/6 x (0.125 x 0.009)^1/2 / 0.016		SDM Table 12
	=	1.49	m/s	
Time of flow, t_f	=	0.4	min	

4 Use "Rational Method" for calculation of design flow

Design intensity, i	=	$a / (t_o + t_f + b)^c$		SDM 4.3.2
	=	505.5 / (2.9+0.5+3.29)^0.35	for return period T = 50 years	Corrigendum 1/2024
	=	255		SDM Table 3a

SDM 7.5.2 (b)

Type of surface	Runoff Coefficient C	Catchment Area A (m^2)	C x A
Flat Glassland(heavy soil)	0.25	**0.0**	0.0
Concrete Paving	0.95	**343.0**	325.9
		SUM =	325.9

Upstream flow, Q_u	=	**0**	m^3/s	
Design flow, Q_d	=	$0.278i \Sigma C_j A_j + Q_u$ where A_j is in km^2		SDM 7.5.2 (a)
	=	0.278 x 255 x 325.85 / 1000000 + 0		
	=	0.023	m^3/s	
Allowable flow, Q_a	=	a x v		
	=	0.179 x 1.49		
	=	0.268	m^3/s	
	>	Q_d (O.K.)		

Reference was made to Stormwater Drainage Manual (SDM) by DSD

1 For Catchment Area C

Ref.

Area, A = **3944** m^2
Average slope, H = 0.1 m per 100m
Distance on the line of natural flow, L = **66** m

Time of concentration, t_o = $0.14465L / (H^{0.2}A^{0.1})$ = 0.14465 (66) / (0.1^0.2*3944^0.1) — SDM 7.5.2 (d)
= 6.6 min

2 For Existing Ditch in catchment area C

	From	To
Ground level (mPD)	**4.00**	**3.90**
Invert level (mPD)	**3.37**	**2.68**

Width of u-channel, w = **500** mm
Length of u-channel, L_c = **206.7** m
Depth of vertical part of u-channel, d = 969 mm
Gradient of u-channel, S_f = (3.37-2.681)/206.7 = 0.0033

Cross-Section Area, a = $0.5 \pi r^2 + w d$ = 0.5 x 3.14 x 250^2 + 500 x 969
= 0.583 m^2
Wetted Perimeter, p = $\pi r + 2 d$ = 3.14 x 250 + 2 x 969
= 2.723 m
Hydraulic radius, R = a / p — SDM 8.2.1
= 0.214 m

3 Use Manning Equation for estimating velocity of stormwater

Take n = 0.0225 for earth lined channels:- — SDM Table 13
Allowable velocity, v = $R^{1/6} x (RS_f)^{1/2}/n$ = (0.214)^1/6 x (0.214 x 0.003)^1/2 / 0.0225 — SDM Table 12
= 0.92 m/s
Time of flow, t_f = 3.8 min

4 Use "Rational Method" for calculation of design flow

Design intensity, i = $a / (t_o + t_f + b)^c$ — SDM 4.3.2
= 505.5 / (2.9+0.5+3.29)^0.355 for return period T = 50 years — Corrigendum 1/2024
= 200 — SDM Table 3a

Type of surface	Runoff Coefficient C	Catchment Area A (m^2)	C x A
Flat Glassland(heavy soil)	0.25	**2765.0**	691.3
Concrete Paving	0.95	**1179.0**	1120.1
		SUM =	1811.3

— SDM 7.5.2 (b)

Upstream flow, Q_u = **0.071** m^3/s

Design flow, Q_d = $0.278i \Sigma C_j A_j + Q_u$ where A_j is in km^2 — SDM 7.5.2 (a)
= 0.278 x 200 x 1811.3 / 1000000 + 0.071
= 0.172 m^3/s

Allowable flow, Q_a = a x v
= 0.583 x 0.92
= 0.535 m^3/s

> Q_d (O.K.)

Reference was made to Stormwater Drainage Manual (SDM) by DSD

1 For Catchment Area between Existing Ditch and CP2

Ref.

Area, A = **0** m^2
Average slope, H = 0.1 m per 100m
Distance on the line of natural flow, L = **0** m

Time of concentraction, t_o = $0.14465L / (H^{0.2}A^{0.1})$ = 0.14465 (0) / (0.1^0.2*0^0.1) — SDM 7.5.2 (d)
= 0.0 min

2 For Existing U-Channel between Existing Ditch and CP2

	From	To
Ground level (mPD)	**3.90**	**4.10**
Invert level (mPD)	**2.68**	**2.59**

Width of u-channel, w = **500** mm
Length of u-channel, L_c = **27.7** m
Depth of vertical part of u-channel, d = 1260 mm
Gradient of u-channel, S_f = (2.68-2.59)/27.7 = 0.0033

Cross-Section Area, a = $0.5\ \pi r^2 + w\ d$ = 0.5 x 3.14 x 250^2 + 500 x 1260
= 0.728 m^2
Wetted Perimeter, p = $\pi\ r + 2\ d$ = 3.14 x 250 + 2 x 1260
= 3.305 m
Hydralic radius, R = a / p — SDM 8.2.1
= 0.220 m

3 Use Manning Equation for estimating velocity of stormwater

Take n = 0.0160 for concrete lined channels:- — SDM Table 13
Allowable velocity, v = $R^{1/6} x (RS_f)^{1/2}/n$ = (0.22)^1/6 x (0.22 x 0.003)^1/2 / 0.016 — SDM Table 12
= 1.31 m/s
Time of flow, t_f = 0.4 min

4 Use "Rational Method" for calculation of design flow

Design intensity, i = $a / (t_o + t_f + b)^c$ — SDM 4.3.2
= 505.5 / (2.9+0.5+3.29)^0.355 for return period T = 50 years — Corrigendum 1/2024
= 319 — SDM Table 3a

Type of surface	Runoff Coefficient C	Catchment Area A (m^2)	C x A
Flat Glassland(heavy soil)	0.25	**0.0**	0.0
Concrete Paving	0.95	**0.0**	0.0
		SUM =	0.0

SDM 7.5.2 (b)

Upstream flow, Q_u = **0.172** m^3/s

Design flow, Q_d = $0.278i\ \Sigma\ C_jA_j + Q_u$ where A_j is in km^2 — SDM 7.5.2 (a)
= 0.278 x 319 x 0 / 1000000 + 0.172
= 0.172 m^3/s

Allowable flow, Q_a = a x v
= 0.728 x 1.31
= 0.951 m^3/s

> Q_d (O.K.)

Reference was made to Stormwater Drainage Manual (SDM) by DSD

1 For Catchment Area between CP2 and CP3

Ref.

Area, A = **0** m^2
Average slope, H = **0.1** m per 100m
Distance on the line of natural flow, L = **0** m

Time of concentraction, t_o = $0.14465L / (H^{0.2}A^{0.1})$ = 0.14465 (0) / (0.1^0.2*0^0.1) — SDM 7.5.2 (d)
= 0.0 min

2 For Underground Pipe between CP2 and CP3

Size(Diameter) w = **500** mm
Length of Pipe = **3.6** m
Design the pipe to 9/10 full bore capactity, then
Area of ventilated portion = 0.1 of pipe area
$½ r^2 \theta - ½ r^2 \sin(\theta) = 0.1 \pi r^2$
$\theta - \sin(\theta) = 0.2 \pi$
θ = 1.63 rad = 93.4^O (By trial and error)

Area A = $0.9 \pi r^2$
= 0.9 x 3.14 x 500^2 — SDM 8.2.1
= 0.707 m^2

Wetted Perimeter P = $2 \pi r - r \theta$ = 2327 mm
Hydralic radius R = A/P
303.7 mm

3 Use Manning Equation for estimating velocity of stormwater

Fall S = 1: **300**
Take n = 0.016 for concrete lined channels:- — SDM Table 13
Allowable velocity, v = $R^{1/6} x (RS_f)^{1/2}/n$ = (303.7)^1/6 * (303.7/300)^1/2 / 0.016 — SDM Table 12
= 1.35 m/s
Time of flow, t_f = 0.04 min

4 Use "Rational Method" for calculation of design flow

Design intensity, i = $a / (t_o + t_f + b)^c$ — SDM 4.3.2
= 505.5 / (2.9+0.04+3.29)^0.355 for return period T = 50 years — Corrigendum 1/2024
= 330 — SDM Table 3a

Type of surface	Runoff Coefficient C	Catchment Area A (m^2)	C x A
Flat Glassland(heavy soil)	0.25	**0.0**	0.0
Concrete Paving	0.95	**0.0**	0.0
Macadam Roadways	0.425	**0.0**	0.0
Wooded Areas	0.105	**0.0**	0.0
		SUM =	0.0

SDM 7.5.2 (b)

Upstream flow, Q_u = **0.172** m^3/s

Design flow, Q_d = $0.278i \Sigma C_j A_j + Q_u$ where A_j is in km^2 — SDM 7.5.2 (a)
= 0.278 x 330 x 0 / 1000000 + 0.172
= 0.172 m^3/s

Allowable flow, Q_a = 0.9 x a x v (10% reduction in flow area due to deposition of sediment)
= 0.9 x 0.3974 x 1.35
= 0.856 m^3/s

> Q_d (O.K.)

Reference was made to Stormwater Drainage Manual (SDM) by DSD

1 For Catchment Area D

Ref.

Area, A = **2458** m^2
Average slope, H = 0.1 m per 100m
Distance on the line of natural flow, L = **33** m

Time of concentraction, t_o = $0.14465L / (H^{0.2}A^{0.1})$ = 0.14465 (33) / (0.1^0.2*2458^0.1) — SDM 7.5.2 (d)
= 0.0 min

2 For U-channel between Existing CP3 and CP5

	From	To
Ground level (mPD)	**4.10**	**3.30**
Invert level (mPD)	**2.58**	**2.34**

Width of u-channel, w = **500** mm
Length of u-channel, L_c = **71.1** m
Depth of vertical part of u-channel, d = 710 mm
Gradient of u-channel, S_f = (2.58-2.34)/71.1 = 0.0034

Cross-Section Area, a = $0.5\ \pi r^2 + w\ d$ = 0.5 x 3.14 x 250^2 + 500 x 710
= 0.453 m^2
Wetted Perimeter, p = $\pi\ r + 2\ d$ = 3.14 x 250 + 2 x 710
= 2.205 m
Hydralic radius, R = a / p — SDM 8.2.1
= 0.205 m

3 Use Manning Equation for estimating velocity of stormwater

Take n = 0.0160 for concrete lined channels:- — SDM Table 13
Allowable velocity, v = $R^{1/6} x (RS_f)^{1/2}/n$ = (0.205)^1/6 x (0.205 x 0.003)^1/2 / 0.016 — SDM Table 12
= 1.26 m/s
Time of flow, t_f = 0.9 min

4 Use "Rational Method" for calculation of design flow

Design intensity, i = $a / (t_o + t_f + b)^c$ — SDM 4.3.2
= 505.5 / (2.9+0.5+3.29)^0.355 for return period T = 50 years — Corrigendum 1/2024
= 303 — SDM Table 3a

Type of surface	Runoff Coefficient C	Catchment Area A (m^2)	C x A
Flat Glassland(heavy soil)	0.25	**0.0**	0.0
Concrete Paving	0.95	**2458.0**	2335.1
		SUM =	2335.1

SDM 7.5.2 (b)

Upstream flow, Q_u = **0.172** m^3/s

Design flow, Q_d = $0.278i \Sigma C_jA_j + Q_u$ where A_j is in km^2 — SDM 7.5.2 (a)
= 0.278 x 303 x 2335.1 / 1000000 + 0.172
= 0.369 m^3/s

Allowable flow, Q_a = a x v
= 0.453 x 1.26
= 0.573 m^3/s

> Q_d (O.K.)

Reference was made to Stormwater Drainage Manual (SDM) by DSD

1 For Catchment Area E

Ref.

Area, A = **1081** m^2
Average slope, H = 0.1 m per 100m
Distance on the line of natural flow, L = **33** m

Time of concentraction, t_o = $0.14465L / (H^{0.2}A^{0.1})$ = 0.14465 (33) / (0.1^0.2*1081^0.1) — SDM 7.5.2 (d)
= 3.8 min

2 For Existing Local Ditch in catchment area E

	From	To
Ground level (mPD)	**3.30**	**4.30**
Invert level (mPD)	**2.34**	**2.16**

Width of u-channel, w = **750** mm
Length of u-channel, L_c = **53** m
Depth of vertical part of u-channel, d = 1765 mm
Gradient of u-channel, S_f = (2.34-2.16)/53 = 0.0034

Cross-Section Area, a = $0.5 \pi r^2 + w d$ = 0.5 x 3.14 x 375^2 + 750 x 1765
= 1.545 m^2
Wetted Perimeter, p = $\pi r + 2 d$ = 3.14 x 375 + 2 x 1765
= 4.708 m
Hydralic radius, R = a / p — SDM 8.2.1
= 0.328 m

3 Use Manning Equation for estimating velocity of stormwater

Take n = 0.016 for concrete lined channels:- — SDM Table 13
Allowable velocity, v = $R^{1/6} x (RS_f)^{1/2}/n$ = (0.328)^1/6 x (0.328 x 0.003)^1/2 / 0.016 — SDM Table 12
= 1.73 m/s
Time of flow, t_f = 0.5 min

4 Use "Rational Method" for calculation of design flow

Design intensity, i = $a / (t_o + t_f + b)^c$ — SDM 4.3.2
= 505.5 / (2.9+0.5+3.29)^0.355 for return period T = 50 years — Corrigendum 1/2024
= 246 — SDM Table 3a

Type of surface	Runoff Coefficient C	Catchment Area A (m^2)	C x A
Flat Glassland(heavy soil)	0.25	**0.0**	0.0
Concrete Paving	0.95	**1081.0**	1027.0
		SUM =	1027.0

— SDM 7.5.2 (b)

Upstream flow, Q_u = **0.369** m^3/s

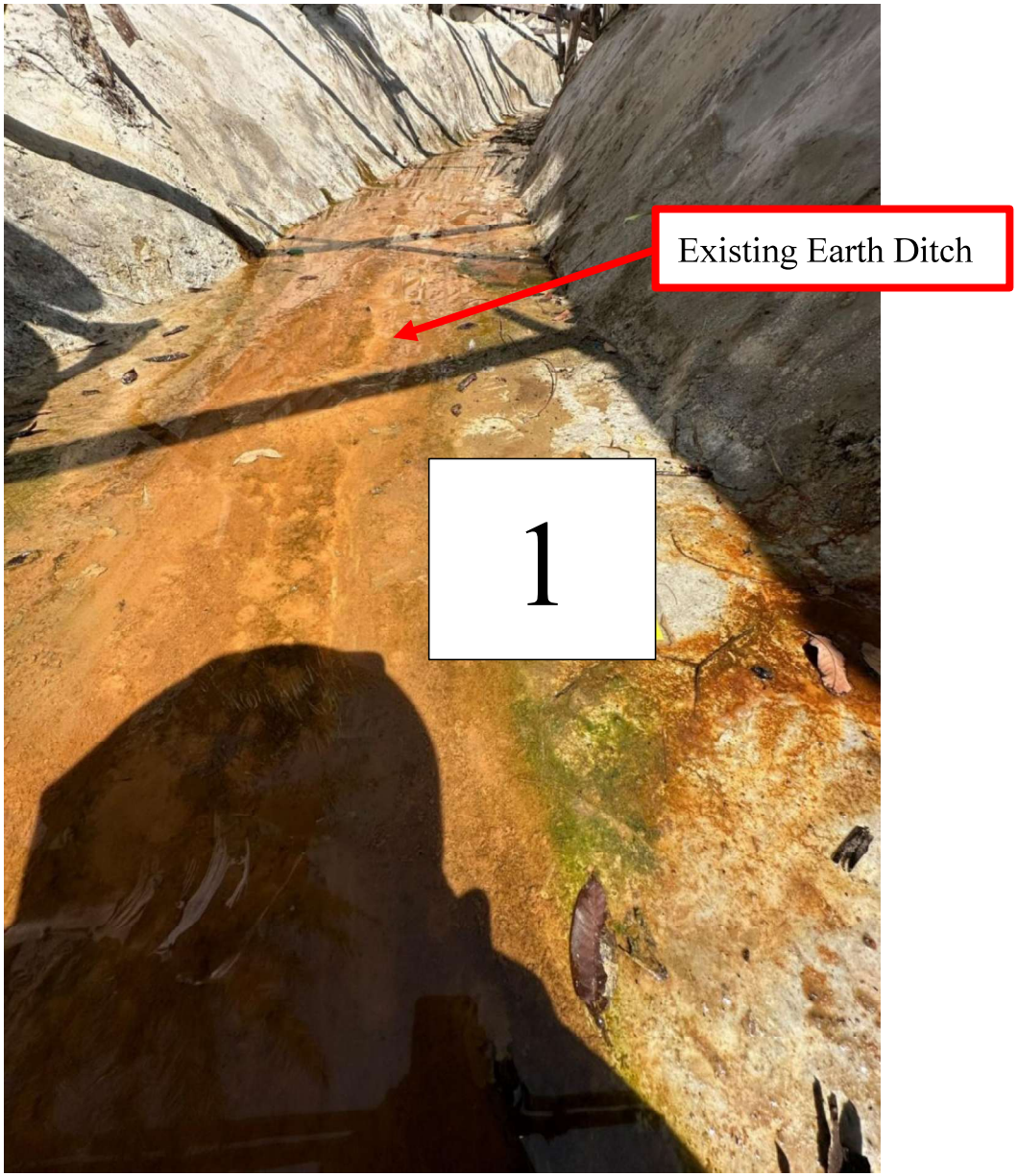
Design flow, Q_d = $0.278i \Sigma C_j A_j + Q_u$ where A_j is in km^2 — SDM 7.5.2 (a)
= 0.278 x 246 x 1026.95 / 1000000 + 0.369
= 0.439 m^3/s

Allowable flow, Q_a = a x v
= 1.545 x 1.73
= 2.676 m^3/s

> Q_d (O.K.)

Reference was made to Stormwater Drainage Manual (SDM) by DSD

Viewpoint 1



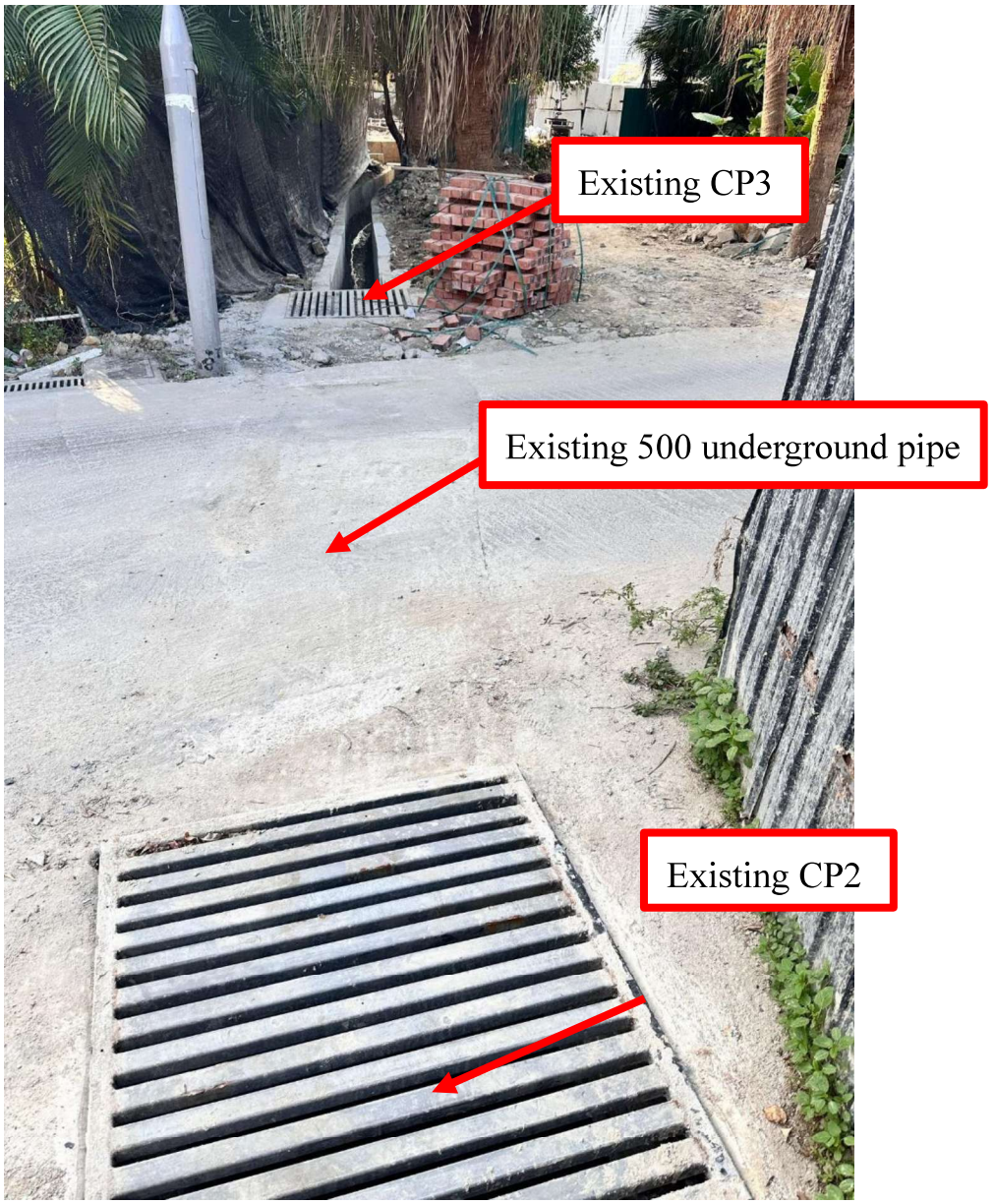
Viewpoint 2

Viewpoint 3

Viewpoint 4

Viewpoint 5

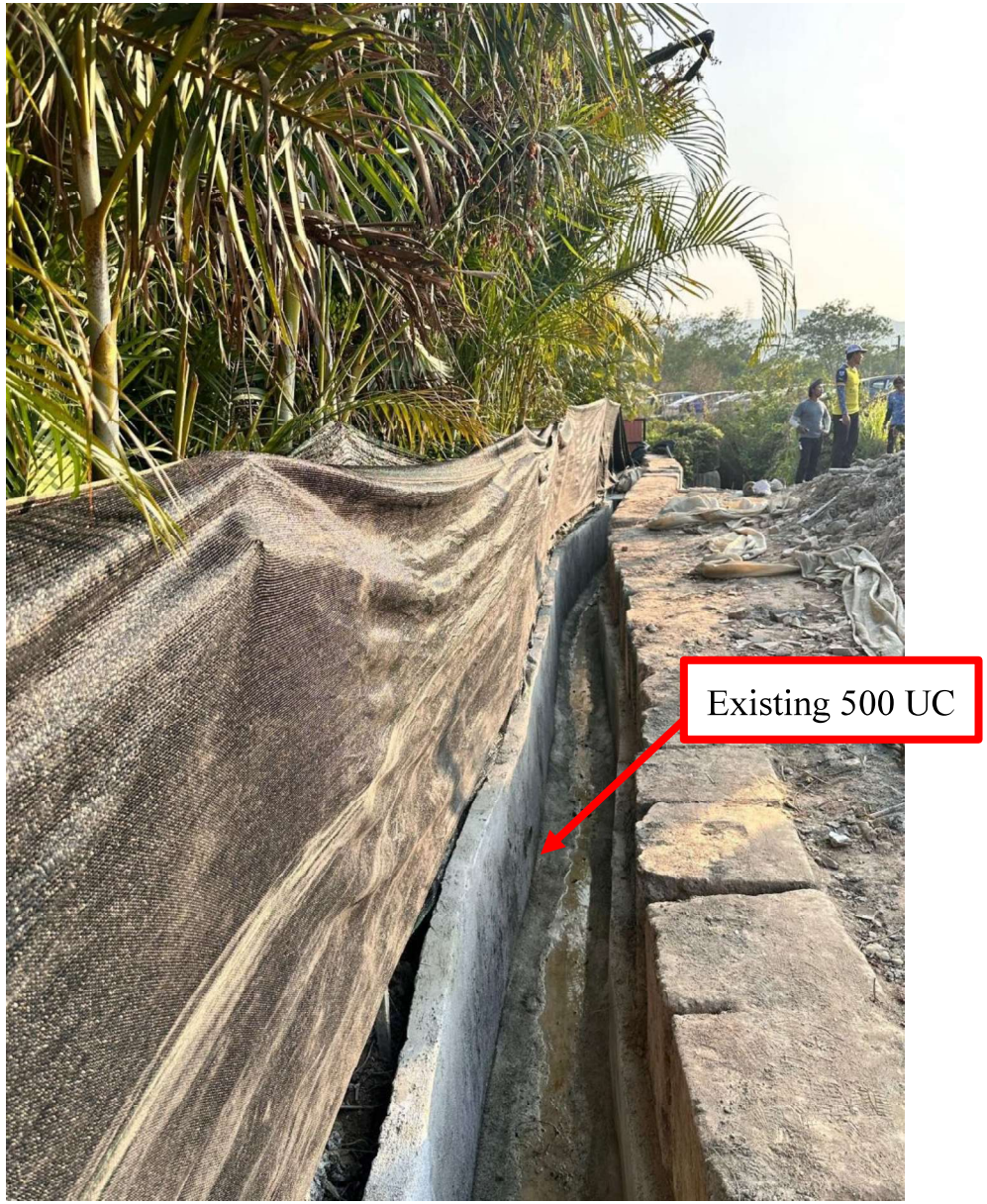
Viewpoint 6



Viewpoint 7

Viewpoint 8

Viewpoint 9



Viewpoint 10

Viewpoint 11

Viewpoint 12

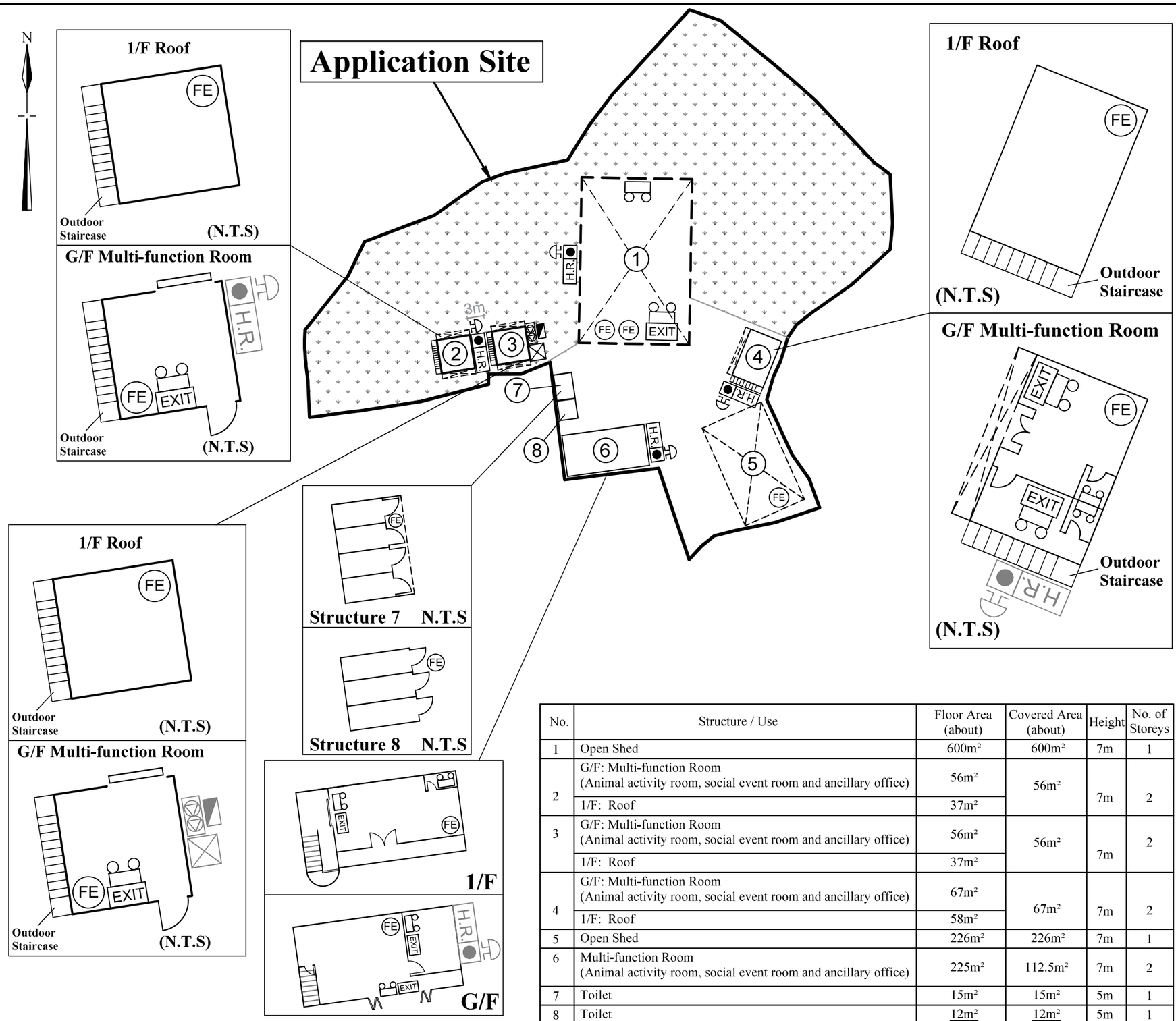
Viewpoint 13

Viewpoint 14

Viewpoint 15

Viewpoint 16

Viewpoint 17



FS NOTES:

(i) Sufficient emergency lighting shall be provided in accordance with BS 5266-1:2016, BS EN 1838:2013 and the FSD Circular Letter No. 4/2021

(ii) Sufficient directional and exit sign shall be provided in accordance with BS 5266: Part 1 and FSD Circular Letter 5/2008.

(iii) Portable hand-operated approved appliances shall be provided as required by occupancy.

(iv) Fire alarm system shall be provided throughout the entire building in accordance with BS 5839-1:2017 and FSD Circular Letter 6/2021. One actuating point and one audio warning device to be located at each hose reel point. This actuation point should include facilities for fire pump start and audio/visual warning device initiation.

(v) A modified hose reel system supplied by $2m^3$ FS water tank shall be provided. There shall be sufficient hose reels to ensure that every part of each building can be reached by a length of not more than 30m of hose reel tubing.

(vi) Duplicated power supplies for all fire Service Installations comprising a cable connected from electricity mains and other teed off before the main switch shall be provide.

Legend:

FE	5.0kg CO2 Gas type Fire Extinguisher	x13
	Emergency Light	x12
EXIT	Exit Sign	x8
	Break Glass Call Point	x4
	Fire Alarm Bell	x4
H.R.	Fire Hosereel	x4
	F.S pump room	x1
	$2m^3$ FS Water Tank	x1
	Fire Alarm / Hosereel Pump Control Panel	x1
	Sliding Door	
	Canopy / Open Shed	

No.	Structure / Use	Floor Area (about)	Covered Area (about)	Height	No. of Storeys
1	Open Shed	600m²	600m²	7m	1
2	G/F: Multi-function Room (Animal activity room, social event room and ancillary office)	56m²	56m²	7m	2
	1/F: Roof	37m²			
3	G/F: Multi-function Room (Animal activity room, social event room and ancillary office)	56m²	56m²	7m	2
	1/F: Roof	37m²			
4	G/F: Multi-function Room (Animal activity room, social event room and ancillary office)	67m²	67m²	7m	2
	1/F: Roof	58m²			
5	Open Shed	226m²	226m²	7m	1
6	Multi-function Room (Animal activity room, social event room and ancillary office)	225m²	112.5m²	7m	2
7	Toilet	15m²	15m²	5m	1
8	Toilet	12m²	12m²	5m	1
	Total:	1,389m²	1,144.5m²		

1:750 (A3)

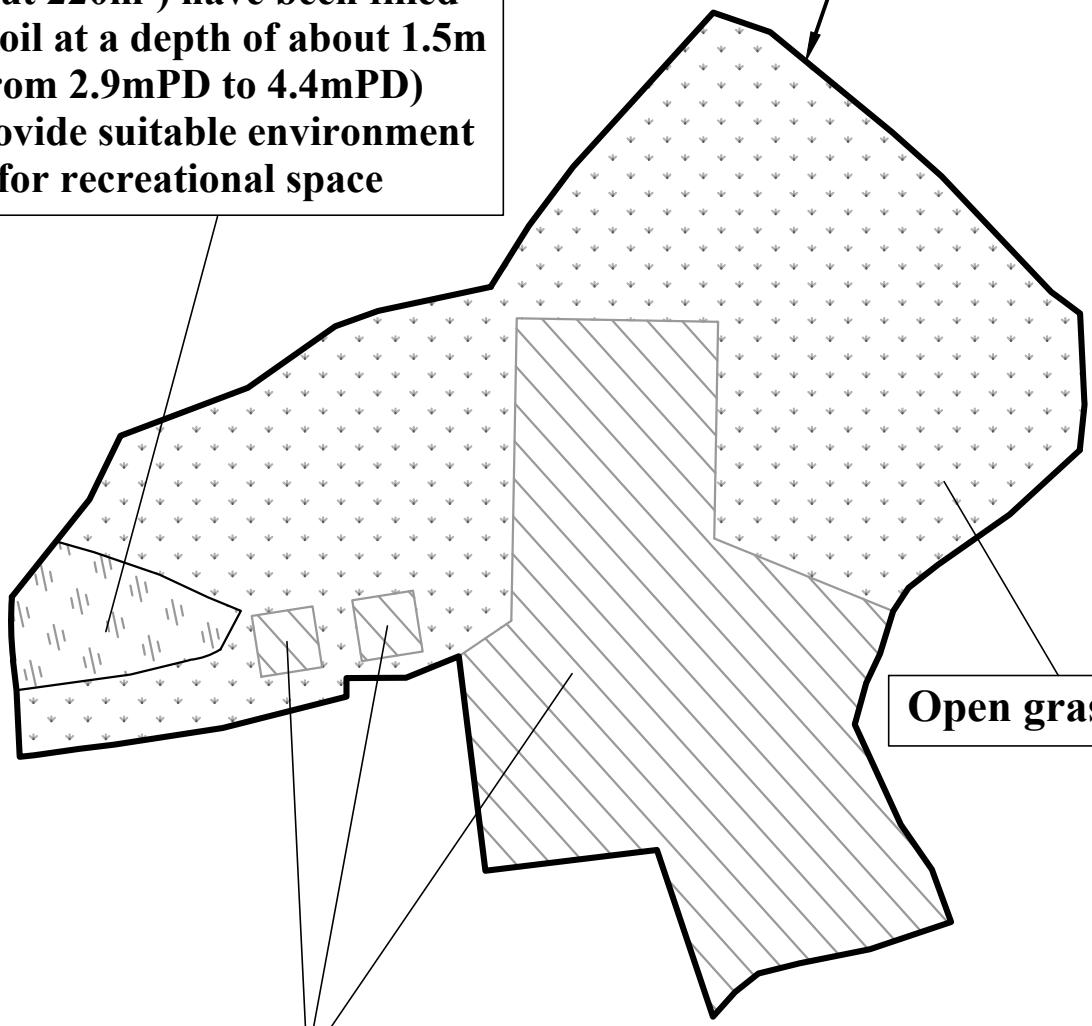
August 2025

Fire Service Installation Proposal

Lots 1464(part), 1466(part), 1486(Part), 1489(Part), 1494(part) and adjoining Government Land in D. D. 107 Yuen Long, New Territories

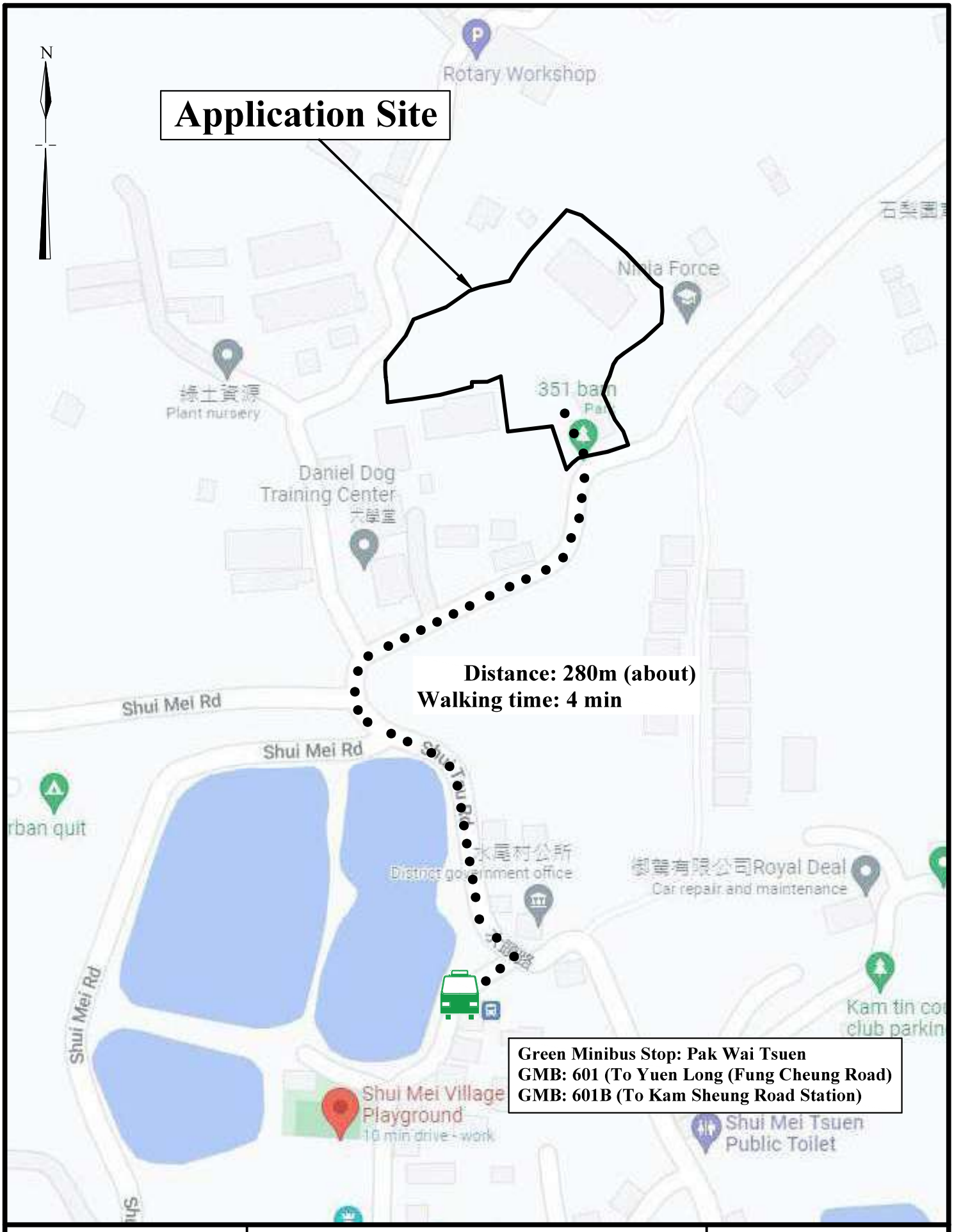
Goldrich Planners & Surveyors Ltd.

Plan 6 (P 22034)



	Filled Pond Area(about) :	220m² (4%)
	Open Grass Land(about) :	3,135m² (59%)
	Paved Area(about) :	1,975m² (37%)
	Total Site Area(about) :	5,330m² (100%)

N.T.S	**Plan Showing Existing Filling of Land and Pond**	Goldrich Planners & Surveyors Ltd.
August 2025	Lots 1464(part), 1466(part), 1486(Part), 1489(Part), 1494(part) and adjoining Government Land in D. D. 107 Yuen Long, New Territories	Plan 7 (P22034)



N.T.S	**Plan Showing The Nearest Public Transport Services** Lots 1464(part), 1466(part), 1486(Part), 1489(Part), 1494(part) and adjoining Government Land in D. D. 107 Yuen Long, New Territories	**Goldrich Planners & Surveyors Ltd.**
August 2025		**Plan 8** **(P 22034)**