Gold Rich planners & surveyors LTD.



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Your Ref.: A/TM/592

Our Ref.: P22015/TL24429

3 October 2024

司

The Secretary Town Planning Board 15/F., North Point Government Offices 333 Java Road, North Point, Hong Kong <u>By Post and E-mail</u> tpbpd@pland.gov.hk

Dear Sir,

Submission of Further Information (FI)

Temporary Place of Recreation, Sports or Culture (Barbecue Area and Ancillary Kiddie Ride Area) and Holiday Camp (Private Tent Camping Ground) for a Period of 6 Years, Lots 788 (Part), 790 (Part), 793, 794 and 801 RP in D.D. 381 and <u>Adjoining Government Land, Tuen Mun, New Territories</u>

We would like to submit further information to respond to the comments from the Drainage Services Department dated 13.8.2024 and Lands Department dated 19.8.2024.

Internal layout and height of structures are updated to reflect the actual situation. No. of structures, site coverage and total floor area remain unchanged. Please refer to updated plans and justifications for your consideration.

Yours faithfully, For and on behalf of Goldrich Planners & Surveyors Ltd.

Low

Francis Lau

Encl.

Our Ref.: P22015

Comments from Drainage Services Department dated 13.8.2024 Contact Person: Mr. Anson NG; Tel: 2300 1258

	Comments	Responses
a.	It appears that the stormwater drainage proposal for Lots 788 (Part) & 790 (Part) were missing from the submission. Please provide.	The applicant undertakes to construct drainage facilities along the site boundary of lots 788 (Part) and 789 (Part) in D.D. 381. A revised drainage proposal will be submitted for approval after the planning application is approved.
b.	The applicant shall be reminded that the existing 450mm U-channel located at the toe of a slope to the northern end of the Lot No. 794 for collecting runoff from the grassland area of the site is not DSD's facility based on our drainage record. Consent should be sought from the relevant owners or parties who are responsible for the maintenance of the drainage facilities concerned for any proposed works.	Noted.
c.	Section 7.4 – DSD noticed that the proposed drainage connection(s) to the surrounding/downstream areas(s) will run through other private lot(s). The developer/AP shall demonstrate that the proposed drainage construction/improvement/modification works and the operation of the drainage can be practicably implemented on Site. Please note that the u-channel system and the existing stream connected by the u-channel system are not DSD's facilities. Consent should be sought from relevant departments/parties.	Noted.
d.	The developer is required to ensure that no construction debris, silt and sediments, or cementitious materials will be discharged to or deposited inside the public drains or sewers from the Site and no blockage would be induced to the natural stream to increase flooding risk.	Noted.
e.	The AP is reminded that the sewerage impact should meet the full satisfaction of Environmental Protection Department, the planning authority of sewerage infrastructure.	Noted.

	Comments	F	Responses
f.	The applicant shall be reminded that he is required to maintain his	1	Noted.
	drainage facilities/system properly and rectify them if they are found to		
	be inadequate or ineffective during operation. The applicant shall also		
	be liable for and shall indemnity claims and demands arising out of any		
	damage and /or nuisance caused by failure of his facilities /system.		

Comments from DLO/TM dated 19.8.2024

	Comments		Responses				
2.	A site inspection conducted on 31.7.2024 revealed that all unauthorized	1	The layout plan is updated. Structure nos. 2 to 9 are updated to be the same				
	miscellaneous items on Government land identified during the site inspections on 19.4.2024 and 27.6.2024 respectively had been removed.	to 8 has been removed The updates are as follows:				in side) of structures 4	
	As regards an unauthorized porch not covered by the subject planning application and the discrepancy between the built-over area of the unauthorized structures covered by the subject application as shown on	Structures no(s).	BOA in Plan 3a (Previous plan)	Measurement by applicant on 13.8.2024	BOA in Plan 3b (Updated plan and current situation)		
	the layout plan provided by the applicant (i.e. structures nos. 2 to 9 as		2 and 3	58m ²	$72m^2$	$72m^2$	
	shown in Plan 3b (P 22015) dated July 2024) and our on-site measurement						
	in DLOTM 14/MAT/23 dated 6.5.2024 [note to applicant: please refer to para.2 of DLO/TM's comments vide PlanD's email dated 8.5.2024], the applicant is required to clarify the discrepancy and rectify the		4, 5, 6, 7 and 8	173m ²	270.91m ²	223.5m ² (after removal of portion of porch)	
	unauthorized porch not covered by the subject planning application (see		9	60m ²	<u>42.09m²</u>	42.09m ²	
	attached plan).				<u>313.00m²</u>		
	[See attachment "Plan A_TM_592 FI dd 26.7.2024.pdf"]		Note: BOA (Built-over area)				
			Please refer to upda	ated layout plan (P	lan 3b) for detai	ils.	
3.	It is noted from the revised Form No. S16-1 attached to the FI that the proposed building height of each structure is revised to 6m from 4m while the proposed no. of storey remains at 1 storey, such proposed building height of 6m (about) for one- storey structure is considered excessive, please request the applicant to justify. You may also wish to note that from our recent on-site measurement, the building height of the existing structures covered by the subject planning application varies from 2.5m to 4.5m (approximate).	The building height of the structures is updated. Please refer to update layout plan (Plan 3b) for details.				ease refer to updated	

	Comments	Responses
4.	Please notify the applicant of our comments as stated above. In view of no permission has been given for erection of for the said unauthorized structures which are not covered by the planning application and discrepancy on the measurement of the total B.O.A., the comments contained in our memo under ref. (84) in DLOTM 14/MAT/23 dated 6.5.2024 in particular paras. 3 to 6 in Part A thereof are still valid [note to applicant: please refer to para 3 to 6 of DLO/TM's comments vide	Noted.
	PlanD's email dated 8.5.2024]. For a better utilization of the GL adjoining the Application Site, I must emphasize that there is no guarantee that the STT would cover the GL within the Application Site as now shown on the Lot Index Plan (Plan 2b (P22015)) attached to the FI.	
5.	As regards the drainage calculation which is technical in nature, this office shall defer to relevant departments including DSD to comment.	Noted.





1 Eo	r Catabrant Araa A				Dof	
ТГС	or Calchiment Area A				Ref.	
	Area,	А Ц	= 462 m ²			
Dist	ance on the line of natural flow,	L	= 19.5 m			
	Times of some system of item			0*40040 4)		
	Time of concentraction,	ι _ο	$= 0.14465(19.5)/(0.1^{0}.)$ = 2.4 min	2"462^0.1)	SDM 7.5.2 (d)	
2 Eo	r Proposed II Channel in cr	atch	nent area A			
210						
	Ground level (mPD)	Fro 3.8	n <u>To</u> 3.87			
	Invert level (mPD)	3.70	3.39			
	Width of u-channel,	w	= 300 mm			
	Length of u-channel,	L_{c}	= 46.8 m			
De	pth of vertical part of u-channel,	d	= 330 mm			
	Gradient of u-channel,	S_{f}	= (3.7-3.39)/46.8 = 0.007			
	Cross-Section Area	а	$= 0.5 \pi r^2 + w d = 0.5 \times 3.14 \times 150^{2} + 300 \times 330$			
		u	$= 0.134 \text{ m}^2$			
	Wetted Perimeter	р	π r + 2 d = 3.14 x 150 + 2 x 330			
		F	= 1.131 m			
	Hydralic radius,	R	= a/p		SDM 8.2.1	
			= 0.119 m			
3 Us	e Manning Equation for est	ima	ing velocity of stormwater			
	Taka	n	- 0.016 for concrete lined channels:		SDM Table 13	
	Allowable velocity	v	$= R^{1/6} x (RS.)^{1/2} / n = (0.119)^{1/6} x (0.119 x 0.007)^{1/2}$	/ 0.016	SDM Table 13	
	Allowable velocity,	v	= 1.23 m/s	7 0.010		
	Time of flow,	t _f	= 0.6 min			
4 Us	se "Rational Method" for cal	cula	ion of design flow			
	Design intensity	i	$= a / (t_{a} + t_{f} + b)^{c}$		SDM 4 3 2	
	Dooigh interiorly,	•	= 505.5 / (2.4+0.6+3.29)^0.35 for return period T = 50	vears	SDM Table 3(a)	
			= 262	5		
	Type of surface		Runoff Coefficient C Catchment Area A (m^2)	C×Δ	SDM 7 5 2 (b)	
	Flat Glassland(heavy soil)		0.25 0.0	0.0	ODW 7.0.2 (0)	
	Concrete Paving		0.95 462.0	438.9		
	-		SUM =	438.9		
	Upstream flow,	Q.,	= 0 m ³ /s			
	· · ·	u				
	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)	
			$= 0.278 \times 262 \times 438.9 / 1000000 + 0$			
			= 0.032 m [°] /s			
	Allowable flow	\circ				
		Q a	$= 0.134 \times 1.23$			
			= 0.165 m ³ /s			
> Q _d (O.K.)						
Re	Reference was made to Stormwater Drainage Manual (SDM) by DSD					
				Goldrich P	lanners &	
	Scale: NA	1	Drainage Calculation	Surveyo	ors Ltd.	
		Lot	793, 794 and 801 RP in D.D. 381 and Adjoining Government Land.	Рад	e 1	
	June 2024		Tuen Mun, New Territories	(P22)	015)	

1 For Catchment Area B				Ref.	
Area,	A =	431 m ²			
Average slope, Distance on the line of natural flow	H =	0.1 m per 100m 24 m			
Distance on the line of natural now,	L -	24 111			
Time of concentraction,	t _o = =	$0.14465L / (H^{0.2}A^{0.1}) = 0.14465 (24) / (0.1^{0.2})$ 3.0 min	431^0.1)	SDM 7.5.2 (d)	
2 For Proposed U-Channel in ca	tchm	ent area B			
	From	То			
Ground level (mPD) Invert level (mPD)	3.87 3.39	3.87 3.23			
<u></u>	0.00				
Width of u-channel,	w =	300 mm			
Depth of vertical part of u-channel	L _c –	23.4 III 490 mm			
Gradient of u-channel	u – S₄ =	(3 39-3 23)/23 4 = 0.007			
	U I	0.00 0.20,20.1 0.001			
Cross-Section Area,	a =	$0.5 \ \pi r^2 + w d = 0.5 x 3.14 x 150^2 + 300 x 490$			
	=	0.182 m ²			
Wetted Perimeter,	р =	π r + 2 d = 3.14 x 150 + 2 x 490			
Likedes Barrow Bree	_ =	1.451 m		0014 0 0 4	
Hydralic radius,	к = =	a/p 0.126 m		SDM 8.2.1	
		0.120 m			
3 Use Manning Equation for esti	matin	g velocity of stormwater			
Take	n =	0.016 for concrete lined channels:-		SDM Table 13	
Allowable velocity,	v =	$R^{1/6}x (RS_f)^{1/2}/n = (0.126)^{1/6} x (0.126 \times 0.007)^{1/6}$	2 / 0.016	SDM Table 12	
	=	1.30 m/s			
Time of flow,	t _f =	0.3 min			
4 Use "Rational Method" for cald	culatio	on of design flow			
Design intensity	i =	$a / (t_{a} + t_{f} + b)^{c}$		SDM 4 3 2	
Dooigh interiory,	. =	$505.5 / (3+0.3+3.29)^{0.35}$ for return period T = 50	vears	SDM Table 3(a)	
	=	259	, ,	ζ,	
Type of surface	R	unoff Coefficient C Catchment Area A (m^2)	СхА	SDM 7 5 2 (b)	
Flat Glassland(heavy soil)	<u></u>	0.25 0.0	0.0	ODW 7.0.2 (0)	
Concrete Paving		0.95 431.0	409.5		
		SUM =	409.5		
Upstream flow,	Q _u =	0.032 m ³ /s			
		<u>,</u>			
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 259 x 409.45 / 1000000 + 0.032			
	=	0.061 m³/s			
Allowable flow	Q. =	аху			
	<u></u> =	0.182 x 1.3			
	=	0.236 m ³ /s			
$> Q_d (O.K.)$					
Reference was made to Stormwater Drainage Manual (SDM) by DSD					
			Goldrich P	lanners &	
Scale: NA		Drainage Calculation	Surveyo	ors Ltd.	
	Lota 70	2 704 and 901 DD in DD 291 and Adjoining Commune (1 1	D		
June 2024	Lots 79	Tuen Mun, New Territories	(P220	015)	

1 For Catchment Area C		Ref.			
Area, Average slope, Distance on the line of natural flow,	$\begin{array}{rcl} A & = & 407 \text{ m}^2 \\ H & = & 0.1 \text{ m per } 100 \text{m} \\ L & = & 16.5 \text{ m} \end{array}$				
Time of concentraction,	$t_{o} = 0.14465L / (H^{0.2}A^{0.1}) = 0.14465 (16.5) / (0.1^{0.2*407^{0.1}})$ = 2.1 min	SDM 7.5.2 (d)			
2 For Proposed U-Channel in ca	tchment area C				
Ground level (mPD) Invert level (mPD)	From To 3.87 3.87 3.23 2.90				
Width of u-channel, Length of u-channel, Depth of vertical part of u-channel, Gradient of u-channel,	w = 300 mm $L_{c} = 50.1 \text{ m}$ d = 820 mm $S_{f} = 3.23-2.9)/50.1 = 0.007$				
Cross-Section Area,	a = 0.5 π r ² + w d = 0.5 x 3.14 x 150 ² + 300 x 820 = 0.281 m ²				
Wetted Perimeter, Hydralic radius,	$p = \pi r + 2 d = 3.14 \times 150 + 2 \times 820$ = 2.111 m R = a/p = 0.122 m	SDM 8.2.1			
3 Use Manning Equation for est	mating velocity of stormwater				
Take Allowable velocity,	n = 0.016 for concrete lined channels:- v = $R^{1/6}x (RS_f)^{1/2}/n = (0.133)^{1/6} x (0.133 \times 0.007)^{1/2} / 0.016$ = 1.32 m/s	SDM Table 13 SDM Table 12			
Time of flow,	t _f = 0.6 min				
4 Use "Rational Method" for cald	ulation of design flow				
Design intensity,	i = $a / (t_o + t_f + b)^c$ = 505.5 / (2.1+0.6+3.29)^0.355 for return period T = 50 years = 268	SDM 4.3.2 SDM Table 3(a)			
<u>Type of surface</u> Flat Glassland(heavy soil) Concrete Paving	Runoff Coefficient CCatchment Area A (m^2) C x A0.250.00.00.95407.0 386.7 SUM = 386.7	SDM 7.5.2 (b)			
Upstream flow,	$Q_u = 0.061 \text{ m}^3/\text{s}$				
Design flow,	$\begin{array}{rl} Q_{d} &=& 0.278 i \; \Sigma \; C_{j} A_{j} + Q_{u} & \text{where } A_{j} \; \text{is in } km^{2} \\ &=& 0.278 \; x \; 268 \; x \; 386.65 \; / \; 1000000 \; + \; 0.061 \\ &=& 0.090 \; m^{3} / s \end{array}$	SDM 7.5.2 (a)			
Allowable flow,	$Q_a = a \times v$ = 0.281 x 1.32 = 0.372 m ³ /s				
> Q _d (O.K.)					
Reference was made to Stormwater Drainage Manual (SDM) by DSD					
Scale: NA	Drainage Calculation Goldrich P Surveyo	lanners & ors Ltd.			
June 2024	Lots 793, 794 and 801 RP in D.D. 381 and Adjoining Government Land, Tuen Mun, New Territories (P220	e 3 015)			

1 For Catchment Area D			Ref.		
Area, Average slope, Distance on the line of natural flow,	A H L	= 290 m ² = 0.1 m per 100m = 27.8 m			
Time of concentraction,	t _o	$= 0.14465L / (H^{0.2}A^{0.1}) = 0.14465 (27.8) / (0.1^{0.2} + 290^{0.1})$ = 3.6 min	SDM 7.5.2 (d)		
2 For Proposed U-Channel in ca	itchr	nent area D			
	Fror	n To			
Ground level (mPD)	3.87	3.87			
Invert level (mPD)	3.04	2.90			
Width of u-channel,	w	= 300 mm			
Length of u-channel.	L	= 20.7 m			
Depth of vertical part of u-channel,	ď	= 820 mm			
Gradient of u-channel,	S _f	= (3.04-2.9)/20.7 = 0.007			
Cross-Section Area,	а	= 0.5 π r ² + w d = 0.5 x 3.14 x 150 ² + 300 x 820			
		= 0.281 m ²			
Wetted Perimeter,	р	$= \pi r + 2 d = 3.14 \times 150 + 2 \times 820$			
		= 2.111 m			
Hydralic radius,	R	= a/p	SDM 8.2.1		
		= 0.133 m			
3 Use Manning Equation for esti	mati	ng velocity of stormwater			
Take	n	= 0.016 for concrete lined channels:-	SDM Table 13		
Allowable velocity,	v	= $R^{1/6}x (RS_f)^{1/2}/n$ = (0.133)^1/6 x (0.133 x 0.007)^1/2 / 0.016	SDM Table 12		
		= 1.34 m/s			
Time of flow,	t _f	= 0.3 min			
4 Use "Rational Method" for cald	culat	on of design flow			
Design intensity,	i	= a / (t _o + t _f +b) ^c = 505.5 / (3.6+0.3+3.29)^0.355for return period T = 50 years = 251	SDM 4.3.2 SDM Table 3(a)		
Type of surface		Runoff Coefficient C Catchment Area A (m^2) C x A	SDM 7 5 2 (b)		
Flat Glassland(heavy soil)		0.25 0.0 0.0	ODW 7.0.2 (D)		
Concrete Paving		0.95 290.0 275.5			
C C		SUM = 275.5			
Upstream flow,	Q_{u}	= 0 m ³ /s			
Design flow,	Q_d	= 0.278i Σ C _j A _j + Q _u where A _j is in km ² = 0.278 x 251 x 275 5 / 1000000 + 0	SDM 7.5.2 (a)		
		= 0.019 m ³ /s			
Allowable flow,	Q_a	= axv			
		= 0.281 x 1.34			
		= 0.377 m ³ /s			
	:	→ Q _d (O.K.)			
Reference was made to Stormwater Drainage Manual (SDM) by DSD					
Scale: NA		Drainage Calculation	Foldrich Planners &		
	-				
June 2024	Lo	ts 793, 794 and 801 RP in D.D. 381 and Adjoining Government Land, Tuan Mun New Termitories	Page 4		
		i uch mun, new remnones	(P22015)		

1 For Channel Section S1				Ref.
Area, Average slope,	A = H =	0 m ² 0.1 m per 100m		
Distance on the line of natural flow,	L =	• 0 m		
Time of concentraction,	t _o = =	$= 0.14465L / (H^{0.2}A^{0.1}) = 0.14465 (0) / (0.1^{0.2})^{0.1}$ = 0.0 min	` 0.1)	SDM 7.5.2 (d)
2 For Proposed U-Channel Sect	ion S	1		
	From	То		
Ground level (mPD)	3.87	3.87		
	2.90	2.88		
Width of u-channel,	w =	300 mm		
Length of u-channel,	L _c =	2 m		
Depth of vertical part of u-channel,	d =	840 mm		
Gradient of u-channel,	S _f =	(2.9-2.88)/2 = 0.010		
Cross-Section Area,	a =	$0.5 \pi r^2 + w d = 0.5 x 3.14 x 150^2 + 300 x 840$		
Wetted Perimeter.	- с =	π r + 2 d = 3.14 x 150 + 2 x 840		
· · · · · · · · · · · · · · · · · · ·	=	2.151 m		
Hydralic radius,	R =	a / p		SDM 8.2.1
	=	e 0.134 m		
3 Use Manning Equation for esti	mati	ng velocity of stormwater		
Take	n =	0.016 for concrete lined channels:-		SDM Table 13
Allowable velocity,	v =	$R^{1/6}x (RS_f)^{1/2}/n = (0.134)^{1/6} x (0.134 \times 0.01)^{1/6}$ = 1.63 m/s	2 / 0.016	SDM Table 12
Time of flow,	t _f =	• 0.02 min		
4 Use "Rational Method" for calc	ulati	on of design flow		
Design intensity,	i =	$a / (t_o + t_f + b)^c$		SDM 4.3.2
	=	$505.5 / (0+0+3.29)^{0.355}$ for return period T = 50	years	SDM Table 3(a)
	=	330		
Type of surface	F	Support Coefficient C Catchment Area A (m^2)	СхА	SDM 7 5 2 (b)
Flat Glassland(heavy soil)	÷	0.25 0.0	0.0	021111012 (0)
Concrete Paving		0.95 0.0	0.0	
		SUM =	0.0	
	~	a (aa 3)		
Upstream flow,	$Q_u =$	0.109 m [°] /s		
Decign flow	o -	$0.278i \Sigma C \Lambda \pm 0$ where Λ is in km ²		
Design now,	Q _d -	$0.270 \times 0.270 \times 0.1000000 \pm 0.1000000 \pm 0.1000000000000$		SDIVI 7.5.2 (a)
	_	$0.278 \times 330 \times 071000000 \pm 0.109$		
	-	0.109 11/5		
Allowable flow, $Q_a = a x v$				
	=	0.287 x 1.63		
	=	0.469 m ³ /s		
> Q _d (O.K.)				
Reference was made to Stormwater Drainage Manual (SDM) by DSD				
			Goldrich P	lanners &
Scale: NA		Drainage Calculation	Survey	ors Ltd
	τ.	702 704 1 801 DD: DD 201 1 4 11 11 C	n	
June 2024	Lots	Land, Tuen Mun, New Territories	Pag (P22	e 5 015)

1 For Catchment Area E		Ref.		
Area, Average slope, Distance on the line of natural flow,	A = 287 m^2 H = 0.1 m per 100m _ = 15.8 m			
Time of concentraction,	$H_0 = 0.14465L / (H^{0.2}A^{0.1}) = 0.14465 (15.8) / (0.1^0.2*287^0.1)$ = 2.1 min	SDM 7.5.2 (d)		
2 For Proposed U-Channel in ca	chment area E			
Ground level (mPD) Invert level (mPD)	From To 3.87 3.87 3.69 3.48			
Width of u-channel, Length of u-channel, Depth of vertical part of u-channel, Gradient of u-channel,	w = 300 mm -c = 31.5 m d = 240 mm $S_{f} = 3.69-3.48)/31.5 = 0.007$			
Cross-Section Area,	a = $0.5 \pi r^2 + w d = 0.5 \times 3.14 \times 150^2 + 300 \times 240$ = $0.107 m^2$			
Wetted Perimeter, Hydralic radius,	$p = \pi r + 2 d = 3.14 x 150 + 2 x 240$ = 0.951 m R = a/p	SDM 8.2.1		
3 Use Manning Equation for esti	= 0.113 m			
Take	n = 0.016 for concrete lined channels:-	SDM Table 13		
Allowable velocity,	$V = R^{10} x (RS_f)^{12}/n = (0.113)^{1/6} x (0.113 x 0.007)^{1/2} / 0.016$ = 1.19 m/s x = 0.4 min	SDM Table 12		
4 Use "Rational Method" for calculation of design flow				
Design intensity,	i = $a / (t_o + t_f + b)^c$ = 505.5 / (2.1+0.4+3.29)^0.355 for return period T = 50 years = 271	SDM 4.3.2 SDM Table 3(a)		
<u>Type of surface</u> Flat Glassland(heavy soil) Concrete Paving	Runoff Coefficient CCatchment Area A (m^2) C x A0.250.00.00.95287.0272.7SUM = 272.7	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 = 0.278 x 271 x 272.65 / 1000000 + 0 = 0.021 m ³ /s	SDM 7.5.2 (a)		
Allowable flow,	$Q_a = a \times v$ = 0.107 x 1.19 = 0.128 m ³ /s			
	> Q _d (O.K.)			
Reference was made to Stormwater Drainage Manual (SDM) by DSD				
Scale: NA	Drainage Calculation Goldr	ich Planners & rveyors Ltd.		
June 2024	Lots 793, 794 and 801 RP in D.D. 381 and Adjoining Government Land, Tuen Mun, New Territories	Page 6 (P22015)		

1 For Catchment Area F		Ref.		
Area, Average slope, Distance on the line of natural flow,	$\begin{array}{rcl} A &=& 605 \text{ m}^2 \\ H &=& 0.1 \text{ m per 100m} \\ L &=& 9 \text{ m} \end{array}$			
Time of concentraction,	$t_o = 0.14465L / (H^{0.2}A^{0.1}) = 0.14465 (9) / (0.1^0.2*605^0.1)$ = 1.1 min	SDM 7.5.2 (d)		
2 For Proposed U-Channel in ca	tchment area F			
Ground level (mPD) Invert level (mPD)	From To 3.87 3.87 3.48 2.90			
Width of u-channel, Length of u-channel, Depth of vertical part of u-channel, Gradient of u-channel,	$w = 300 \text{ mm}$ $L_{c} = 88.3 \text{ m}$ $d = 820 \text{ mm}$ $S_{f} = (3.48-2.9)/88.3 = 0.007$			
Cross-Section Area,	a = $0.5 \pi r^2 + w d = 0.5 \times 3.14 \times 150^2 + 300 \times 820$ = $0.281 m^2$			
Wetted Perimeter, Hydralic radius	$p = \pi r + 2d = 3.14 \times 150 + 2 \times 820$ = 2.111 m R = a/n	SDM 8 2 1		
Tryurane radius,	= 0.133 m	001010.2.1		
3 Use Manning Equation for esti	mating velocity of stormwater			
Take Allowable velocity,	n = 0.016 for concrete lined channels:- v = $R^{1/6}x (RS_f)^{1/2}/n = (0.133)^{1/6} x (0.133 \times 0.007)^{1/2} / 0.016$ = 1.32 m/s	SDM Table 13 SDM Table 12		
Time of flow,	$t_f = 1.1 \text{ min}$			
4 Use "Rational Method" for calc	ulation of design flow			
Design intensity,	i = $a / (t_o + t_f + b)^c$ = 505.5 / (1.1+1.1+3.29)^0.355 for return period T = 50 years = 276	SDM 4.3.2 SDM Table 3(a)		
<u>Type of surface</u> Flat Glassland(heavy soil) Concrete Paving	Runoff Coefficient C 0.25 Catchment Area A (m²) 0.0 C x A 0.0 0.95 0.0 0.0 SUM = 574.8	SDM 7.5.2 (b)		
Upstream flow,	$Q_u = 0.021 \text{ m}^3/\text{s}$			
Design flow,	$\begin{array}{llllllllllllllllllllllllllllllllllll$	SDM 7.5.2 (a)		
Allowable flow,	Q _a = a x v			
	= 0.281×1.32 = $0.372 \text{ m}^3/\text{s}$			
	> Q _d (O.K.)			
Reference was made to Stormwater Drainage Manual (SDM) by DSD				
Scale: NA	Drainage Calculation Goldrich Pl Surveyor	anners & rs Ltd.		
June 2024	Lots 793, 794 and 801 RP in D.D. 381 and Adjoining Government Land, Tuen Mun, New Territories (P220	e 7 015)		

1 For Channel Section S2				Ref.	
Area, Average slope, Distance on the line of natural flow,	A = H = L =	0 m ² 0.1 m per 100m 0 m			
Time of concentraction,	t _o =	0.14465L / (H ^{0.2} A ^{0.1}) = 0.14465 (0) / (0.1^0.2*0) 0.0 min	^0.1)	SDM 7.5.2 (d)	
2 For Proposed U-Channel Sect	ion S	2			
	From	То			
Ground level (mPD)	3.87	3.87			
	2.90	2.88			
Width of u-channel,	w =	300 mm			
Length of u-channel,	L _c =	2 m			
Depth of vertical part of u-channel,	d =	840 mm			
Gradient of u-channel,	S _f =	(2.9-2.88)/2 = 0.010			
Cross-Section Area,	a = _	$0.5 \ \pi \ r^2 + w \ d = 0.5 \ x \ 3.14 \ x \ 150^2 + 300 \ x \ 840$			
Wetted Perimeter.	— = а	π r + 2 d = 3.14 x 150 + 2 x 840			
	- =	2.151 m			
Hydralic radius,	R =	a/p		SDM 8.2.1	
	=	0.134 m			
3 Use Manning Equation for esti	matir	ng velocity of stormwater			
Take	n =	0.016 for concrete lined channels:-		SDM Table 13	
Allowable velocity,	v =	$R^{1/6}x (RS_f)^{1/2}/n = (0.134)^{1/6} x (0.134 \times 0.01)^{1/2}$	2 / 0.016	SDM Table 12	
	=	1.63 m/s			
Time of flow,	t _f =	0.02 min			
4 Use "Rational Method" for calc	culatio	on of design flow			
Design intensity,	i = = =	a / (t _o + t _f +b) ^c 505.5 / (0+0+3.29)^0.355 for return period T = 50 330	years	SDM 4.3.2 SDM Table 3(a)	
Type of surface	P	upoff Coefficient C Catchment Area A (m^2)	CXA	SDM 7 5 2 (b)	
Flat Glassland(beavy soil)	<u>11</u>			3DIVI 7.3.2 (b)	
Concrete Paving		0.95 0.0	0.0		
		SUM =	0.0		
Upstream flow,	Q _u =	0.065 m³/s			
Design flow	0. =	$0.278i \Sigma C.A. + O where A is in km2$		SDM 7 5 2 (a)	
Design now,	v d =	$0.278 \times 330 \times 0 / 1000000 + 0.065$		ODW 7.5.2 (a)	
	_	$0.065 \text{ m}^3/\text{s}$			
	_	0.003 111/3			
Allowable flow,	Q _a =	axv			
	=	0.287 x 1.63			
	=	0.469 m ³ /s			
> O(OK)					
Reference was made to Stormwater Drainage Manual (SDM) by DSD					
Scale: NA		Drainage Calculation	Goldrich P	Planners &	
			Surveyo	ors Ltd.	
June 2024	Lots	793, 794 and 801 RP in D.D. 381 and Adjoining Government	Pag	e 8	
5 and 2021		Land, I uen Mun, New Territories	(P22	015)	



1:750 (A4)		LayoutPlan							Goldrich Plan Surveyors I		
							18 Paved V	Valkway with Hand Rails	; 70m ²		- -
							No. S	Structure / Use	Area (about)	Heig	ght Storey
9	Function Room	42.09m ²	42.09m ²	4m			Total:	<u>776m²</u>	<u>776m²</u>		
8	Storage		56.25m ²			17	Function Room		44.01m ²		
7	Storage	223.5m ²	33m ²		n 1	16	Storage	206.02m ²	28.9m ²	4m	1
6	Staff Pantry		45m ²	4.5m		15	Function Room		61.41m ²		
5			33m ²			14	Storage		29.6m ²		
4			56.25m ²			13	Function Room		42.1m ²		
3	Service Counter	33m ²	33m ²			12	Tollets		18m ²	5.5111	
2	Service Counter	39m ²	39m ²			11	Toileta	Tailata 199.39m ²	18m ²	3.5m	
1	Office	33m ²	33m ²	6m		10	Open Shed		163.39m ²	4m	
Jo.	Structure / Use	Covered Area (about)	Floor Area (about)	Height	No. of storey	No.	Structure / Use	Covered Area (about)	Floor Area (about)	Height	No. of storey

Lot No. 788(part), 790(part), 793, 794 & 801 RP in D. D. 381

and Adjoining Government Land

Tuen Mun, New Territories

ners & Ltd. ÷y

Plan 3b (P 22015)

August 2024

Justifications

1. Applied Use

1.1. The applied use is "Proposed Temporary Place of Recreation, Sports or Culture (Barbecue Area) and Temporary Holiday Camp (Private Tent Camping Ground)" for a Period of 6 Years.

2. Location

The application site is on Lots 788 (Part), 790 (Part), 793, 794 and 801R.P. in D.D.
 381 and Adjoining Government Land (not yet occupied), Tuen Mun, New Territories.

3. Site Area

3.1. The site area is about $4,009 \text{ m}^2$ which includes 497 m² of Government Land.

4. Town Planning Zoning

- 4.1. The application site falls within the area zoned "Open Space" ("O") and "Government, Institution or Community" ("G/IC") on the Draft Tuen Mun Outline Zoning Plan (OZP) No. S/TM/38.
- 4.2. The planning intention of this "O" zone is primarily for the provision of outdoor open-air public space for active and/or passive recreational uses serving the needs of local residents as well as the general public.
- 4.3. This planning intention of this "G/IC" zone is intended primarily for the provision of Government, institution or community facilities serving the needs of the local residents and/or a wider district, region or the territory. It is also intended to provide land for uses directly related to or in support of the work of the Government, organizations providing social services to meet community needs, and other institutional establishments.
- 4.4. Proposed Temporary Place of Recreation, Sports or Culture (Barbecue Area) and Temporary Holiday Camp (Private Tent Camping Ground) are in line with the planning intention of this zone.

5. Development parameters

Operation Hours

5.1. The operation hours for barbecue activities are from 10 a.m. to 11 p.m., including Sundays and public holidays. The operation hours for tent camping activities are 24 hours every day, including Sundays and public holidays.

Estimated number of visitors

5.2. About 40 visitors is anticipated during weekends and holidays and about 20 visitors during weekdays. The maximum number of visitors will be about 40 persons per day.

Proposed Structures

5.3. There are 17 temporary 1-storey structures with a total floor area of about 776 m² at a height of about 4m to 6m. All structures are built of temporary material, including metal sheets and container-converted structures. Please refer to the Layout Plan (Plan 3b) for details.

No.	Structure	Floor Area (about)	Covered Area (about)	Height (about)	No. of storey
1.	Office	33 m ²	33 m ²	6 m	
2.	Service Counter	39 m ²	39 m ²		
3.	Service Counter	33 m ²	33 m ²		
4.		56.25 m ²		4.5 m	
5.	Staff Pantry	33 m ²	223.5 m^2		
6.		45 m ²			
7.	Storage	33 m ²			
8.	Storage	56.25 m ²	-		
9.	Function Room	42.09 m ²	42.09 m ²	4 m	1
10.	Open Shed	163.39 m ²		4 m	
11.	Toilata	18 m ²	199.39 m ²	3.5 m	
12.	Tonets	18 m ²	-		
13.	Function Room	42.1 m ²		4 m	
14.	Storage	29.6 m ²			
15	Function Room	61.41 m ²	206.02 m^2		
16	Storage	28.9 m ²			
17	Function Room	44.01 m ²			
	Total	<u>776 m²</u>	<u>776 m²</u>		

Proposed Structures

Proposed paved walkway with hand rails

18	Paved walkway with hand rails	70 m ²	70 m ²	-	-
	with hund fulls				

Site Management

- 5.4. The waste will be collected by covered rubbish bins. Rubbish bags will be dumped to the refuse collection point at Ching Lai Road by hand twice a week depending on the amount of rubbish found.
- 5.5. No public announcement system or any form of audio amplification system will be used at the site.
- 5.6. No shower facilities will be provided at the site.
- 5.7. There will be no barbecue activity after 11:00 p.m.

- 5.8. At 11:00 p.m., the main lights will be turned off. Some street lights of a lower illumination will remain turned on along the footpath to provide light for walking within the site.
- 5.9. After 11:00 p.m., staff will remind customers to lower their voice and manage the order in the site.

6. Similar Applications in Vicinity

6.1. There are a few similar approved cases in the vicinity in Siu Lam area (under a different OZP no. S/TM-SKW/14).

Application No.	Applied Use	Decision		
A/TM-SKW/42	Temporary Barbecue Area with Structures for a Period of 3 Years	Approved on 28.5.2004		
A/TM-SKW/47	Temporary Barbecue Area with Structures for a Period of 3 Years	Approved on 10.3.2006		
A/TM-SKW/48	Temporary Barbecue Area for a period of 3 years	Approved on 23.6.2006		
A/TM-SKW/54	Temporary Barbecue Area for a Period of 3 Years	Approved on 28.9.2007		
A/TM-SKW/57	Temporary Barbecue Area for a Period of 3 Years	Approved on 9.5.2008		
A/TM-SKW/63	Temporary Barbecue Area with Structures for a Period of 3 Years	Approved on 24.7.2009		
A/TM-SKW/67	Temporary Barbecue Area For a Period of 3 Years	Approved on 17.6.2011		
A/TM-SKW/78	Temporary Barbecue Area For a Period of 3 Years	Approved on 1.3.2013		
A/TM-SKW/93	Temporary Barbecue Area for a Period of 3 Years	Approved on 18.12.2015		
A/TM-SKW/94	Temporary Barbecue Area for a Period of 3 Years	Approved on 4.3.2016		
A/TM-SKW/101	Temporary Barbecue Area for a Period of 3 Years	Approved on 31.5.2019		
A/TM-SKW/114 Renewal of Planning Approval f Temporary Barbecue Area for Period of 3 Years		Approved on 20.5.2022		

7. Justifications

Planning Intention of the "O" and "G/IC" zone

- 7.1. The planning intention of this "O" zone is primarily for the provision of outdoor open-air public space for active and/or passive recreational uses serving the needs of local residents as well as the general public. Proposed Temporary Place of Recreation, Sports or Culture (Barbecue Area) and Temporary Holiday Camp (Private Tent Camping Ground) are in line with the planning intention of this zone.
- 7.2. This planning intention of this "G/IC" zone is intended primarily for the provision of Government, institution or community facilities serving the needs of the local residents and/or a wider district, region or the territory. It is also intended to provide land for uses directly related to or in support of the work of the Government, organizations providing social services to meet community needs, and

other institutional establishments. Open space for vehicular access and manuevouring does not jeopardize the planning intention of this zone.

Compatibility with surrounding environment

7.3. The proposed use is compatible with the surrounding uses that are comprised of mainly open areas. Residential uses of 3-storey houses are further away to the east and west. In view of the restricted operation hours for the barbecue activities and existing landscaping. No significant impact to the surrounding area is anticipated.

No adverse environmental impact

Drainage

7.4. The site is at the highest point of the piece of land between Castle Peak Road – Tai Lam and the sea. Surface water from the north is intercepted by a public u-channel system. Surface water will flow downwards to the river at the east and the sea via the woodland to the south.

Sewerage

- 7.5. Replaceable waste tank portable toilet will be used on site. When the waste tank is full, the waste tank will be taken out and sealed by a cover. The waste tank will be taken by hand to the loading/unloading space on Lot 790 in D.D. 381 and collected by professional contractor. An empty waste tank will be placed to the replaceable waste tank portable toilet. It does not involve any construction work for the operation.
- 7.6. No construction debris, silt and sewage will be discharged to or deposited inside the public drains from the site and no blockage will be induced to the natural stream to increase flooding risk.

Traffic

- 7.7. The site is accessible via a staircase connecting to Castle Peak Road Tai Lam. No parking space is provided. Visitors come to the site by public transport.
- 7.8. A loading/unloading space for light goods vehicles is proposed on Lot 790 in D.D. 381. Goods for operation will be unloaded on this lot and delivered to the site by hand. It is estimated that a total of 2 trips (1 in and 1 out) will be generated per week.

8. Planning Gain

- 8.1. The site is desirable for family and friends to spend quality time together with barbecue and tent camping activities.
- 8.2. The proposed use provides valuable employment opportunities in the local area.

- END -