Supplementary Note for the Changes of Development Traffic Generation and the Changes of Parking Provision

Introduction

The report of the Traffic Impact Assessment ("TIA") for Section 16 Planning Application (No. A/YL-NSW/314) was accepted in principle by the Transport Department (TD) in October 2023. However, in order to meet with the Agriculture, Fisheries and Conservation Department's (AFCD) comments on the proposed wetland area, amendments to the original Master Layout Plan (MLP) and development parameters (the revised MLP scheme) have been made accordingly as presented in **Annex A**.

In view of the above, this supplementary note presents: (1) the changes of development traffic generation; and (2) the changes of parking provision.

Proposed Development Schedule

Under the revised MLP scheme, the proposed number of residential units will be reduced by 23 units, i.e., from 113 units in the original scheme (**Figure 2.1**) to 90 units in the present revised scheme (**Figure 2.1a**). The total residential GFA remains unchanged. The key development parameters of the present revised scheme are summarised in **Table 1**.

Table 1 - Proposed Development Parameters

	Accepted TIA Scheme ⁽¹⁾ (Submitted in Oct 2023)			Present Revised MLP Scheme			
	Average Flat Size (sqm)	No. of Units	GFA (sqm)	Average Flat Size (sqm)	No. of Units	GFA (sqm)	
Northeast part	174.49	89	15,530	about 239	65	about 15,530	
Southwest part	196	25	4,900	196	25	about 4,900	
Total	-	114	20,430	-	90	about 20,430	

Note:

(1) Information is based on Table 2.1 – Development Parameters in the TIA report (October 2023).

Development Traffic Generations

Trip generations due to the above changes have been estimated in accordance with the relevant trip rates as tabulated in the Transport Planning Design Manual (TPDM). **Table 2** summarizes the adopted trip rates of the revised development scheme.

Table 2 - Adopted Trip Rates of Proposed Development

	Trip Rates (pcu/hr/flat) (1)					
Private Housing	AM	Peak	PM Peak			
	Gen	Att	Gen	Att		
R(C), Average flat size = 180m ²	0.2772	0.4760	0.4625	0.2204		
per units, Mean rate	0.2772	0.1769	0.1635	0.2394		
R(C), Average flat size = 240m ²	0.3012	0.2189	0.2235	0.3234		
per units, Mean rate,	0.3012	0.2169	0.2255	0.3234		

Note: (1) Information is based on Table 4.4 – Estimated Trip Rates of Proposed Development in the TIA report (October 2023) and the trip rates are extracted from TPDM.

Based on the above revised development parameters given in **Table 1** above and the adopted trip rates as indicated in **Table 2**, the total traffic generation and attraction of the present proposed development under the accepted TIA scheme and the revised MLP scheme are summarized in **Tables 3** and **4** respectively.

Table 3 - Estimated Trip Generation and Attraction of Proposed Development under the Accepted TIA Scheme⁽¹⁾

Assessed TIA Colonia	Trip Rates (pcu/hr/flat)				Trip Generations (pcu/hr)			
Accepted TIA Scheme	AM Peak		PM Peak		AM Peak		PM Peak	
(114 Units)	Gen	Att	Gen	Att	Gen	Att	Gen	Att
89 houses with an average flat size 174.5m ² (Northeast part of Application Site)	0.2772	0.1769	0.1635	0.2394	25	16	15	22
25 houses with an average flat size 196m² (Southwest part of Application Site)	0.3012	0.2189	0.2235	0.3234	8	6	6	9
Total (2-way)				5	5	5	52	

Note: (1) Information is based on Table 4.4 – Estimated Trip Rates of Proposed Development and Table 4.5 – Estimated Trip Generation and Attraction of Proposed Development in the TIA report (October 2023) and the trip rates are extracted from TPDM.

Table 4 - Estimated Trip Generation and Attraction of Proposed Development under the Revised MLP Scheme

Davids at MALD Calcass	Trip Rates (pcu/hr/flat)				Trip Generations (pcu/hr)			
Revised MLP Scheme	AM Peak		PM Peak		AM Peak		PM Peak	
(90 Units)	Gen	Att	Gen	Att	Gen	Att	Gen	Att
65 houses with an average flat size about 239m² (Northeast part of Application Site)	0.3012	0.2189	0.2235	0.3234	20	15	15	22
25 houses with an average flat size about 196m² (Southwest part of Application Site)	0.3012	0.2189	0.2235	0.3234	8	6	6	9
Total (2-way)					4	9	5	52

The net differences of traffic generation/attraction between the accepted TIA scheme and the revised MLP scheme due to the proposed amendments to the original MLP and development parameters are presented in **Table 5**.

Table 5 – Net Differences of Traffic Generation/ Attraction due to the Proposed Amendments to the Original Development Parameters in the Subject Site

	Trip Generations (pcu/hr) (2-way)				
	AM Peak	PM Peak			
Accepted TIA Scheme [a] ⁽¹⁾	55	52			
Revised MLP Scheme [b] (2)	49	52			
Net Difference [b] – [a]	-6	0			

Note: (1) Refer

(1) Refer to **Table 3**.(2) Refer to **Table 4**.

Compared to the two-way development traffic flows under the accepted TIA scheme and the revised MLP scheme as shown in **Table 5**, it has indicated that there is a decrease in development traffic flows under the revised MLP scheme, i.e., reduced by 6 pcu for AM peak. No change is found at PM peak.

In view of the above findings, it is considered that the traffic trip generation adopted in the accepted TIA report (October 2023 version) can represent the conservative side of the traffic trip generation under the present revised MLP scheme. As such, all relevant traffic forecasts, and the results of junction and road link assessment adopted in the accepted TIA report (October 2023 version) can still be valid for and applicable to the present revised MLP scheme from the traffic engineering standpoint.

Parking Provision

The parking and loading/unloading provisions for the revised development scheme are proposed in accordance with the Hong Kong Planning Standards and Guidelines "HKPSG" (August 2021 Edition). **Tables 6** and **7** provide the breakdown of the calculations of the proposed provisions under the accepted TIA scheme and the revised MLP scheme respectively.

Table 6 - Proposed Internal Transport Facility under the Accepted TIA Scheme (9)

David anniant Calcadala	Internal Transport		HKPSG Requirement	
Development Schedule	Facilities	Use	Min.	Max.
Residential - Total GFA: ~20,430m ² - Actual Plot Ratio: 0.4 ⁽¹⁾	Private Car	Private Housing (i) Residential Units flat size between 130 –160m² (2)	66	115
- Total No. of Units: 114 (i) Flat size between	Parking Spaces (5)	(ii) Residential Units flat size over 160m ^{2 (3)}	65	144
130 – 160m²: 64		Sub-total	131	229
nos.		Required Accessible car parking spaces (4)	2	3
160m²: 50 nos.	Motorcycle Parking Spaces ⁽⁶⁾	Total	1	2
No. of houses: 114Assuming 1house for every	Loading/ Unloading Bay (7)	Total	3	3
	Bicycle Parking (8)	Total	4	4

Notes:

- (1) For Domestic Plot Ratio (PR) between 0 1, adjustment ratio of 1.3 would be applied for calculating the required private car parking spaces.
- (2) For flat size between 130 160 m², 1 private car parking space would be provided for every 0.56 0.98units.
- (3) For flat size over $160m^2$, 1 private car parking space would be provided for every 0.44 0.77units.

The standard for the developments of flat size greater than 160m² is a minimum requirement. Request for provision beyond the standard will be considered by Transport Department on a case-by-case basis.

- (4) For total 1-50 nos. of car parking spaces in lot, 1 accessible car parking space is required.
 - For total 51-150 nos. of car parking spaces in lot, 2 accessible car parking spaces are required.
 - For total 151 250 nos. of car parking spaces in lot, 3 accessible car parking spaces are required
- (5) Please be advised that there is no specific requirement in provision of visitor parking for houses, thus no visitor parking is proposed, or as determined by the Authority.
- (6) In the case of private housing, the calculation shall be based on 1 motorcycle parking space per 100-150 flats excluding non-residential elements
- (7) Please be advised that there is no specific requirement in provision of loading / unloading bay for houses, thus 3 no. of loading / unloading bay is proposed, or as determined by the Authority.
- (8) For residential developments outside a 2km radius of rail station, 1 bicycle parking space for every 30 flats with flat size smaller than 70m².
- (9) Information is based on Table 2.2 Proposed Internal Transport Facility in the TIA report (October 2023).

Table 7 - Proposed Internal Transport Facility under the Revised MLP Scheme

David anni ant Calcadala	Internal Transport		HKPSG Requirement	
Development Schedule	Facilities	Use	Min.	Max.
<u>Residential</u>		Private Housing		
- Total GFA: ~about 20,430m²	Private Car	(iii) Residential Units flat size between 130 –160m ^{2 (2)}	28	49
- Actual Plot Ratio: 0.4 (1)	Parking Spaces (5)	(iv) Residential Units flat size over 160m ^{2 (3)}	82	144
- Total No. of Units: 90 (iii) Flat size between		Sub-total	110	193
130 – 160m²: 27		Required Accessible car parking spaces (4)	2	3
	Motorcycle Parking Spaces ⁽⁶⁾	Total	1	1
	Loading/ Unloading Bay (7)	Total	3	3
Assuming 1 house for every 1 flat	Bicycle Parking (8)	Total	4	4

Notes:

- (1) For Domestic Plot Ratio (PR) between 0 1, adjustment ratio of 1.3 would be applied for calculating the required private car parking spaces.
- (2) For flat size between $130 160 \text{ m}^2$, 1 private car parking space would be provided for every 0.56 0.98 units.
- (3) For flat size over 160m², 1 private car parking space would be provided for every 0.44 0.77units.

The standard for the developments of flat size greater than 160m² is a minimum requirement. Request for provision beyond the standard will be considered by Transport Department on a case-by-case basis.

- (4) For total 1-50 nos. of car parking spaces in lot, 1 accessible car parking space is required.
 - For total 51 150 nos. of car parking spaces in lot, 2 accessible car parking spaces are required.
 - For total 151 250 nos. of car parking spaces in lot, 3 accessible car parking spaces are required
- (5) Please be advised that there is no specific requirement in provision of visitor parking for houses, thus no visitor parking is proposed, or as determined by the Authority.
- (6) In the case of private housing, the calculation shall be based on 1 motorcycle parking space per 100-150 flats excluding non-residential elements.
- (7) Please be advised that there is no specific requirement in provision of loading / unloading bay for houses, thus 3 no. of loading / unloading bay is proposed, or as determined by the Authority.
- (8) For residential developments outside a 2km radius of rail station, 1 bicycle parking space for every 30 flats with flat size smaller than 70m².

The parking and loading/unloading provisions for the present revised comprehensive development scheme are summarised in **Table 8**.

Table 8 - Proposed Parking Provision

Internal Transport Facilities	Proposed Provision			
	Accepted TIA Scheme (4)	Revised MLP Scheme		
Private Car Parking Spaces	229	193		
Visitor Parking Spaces	10 ⁽¹⁾	10		
Motorcycle Parking Spaces	23 ⁽²⁾	20		
Loading/ Unloading Bay for heavy goods vehicle	3	3		
Bicycle Parking	14 ⁽³⁾	14		

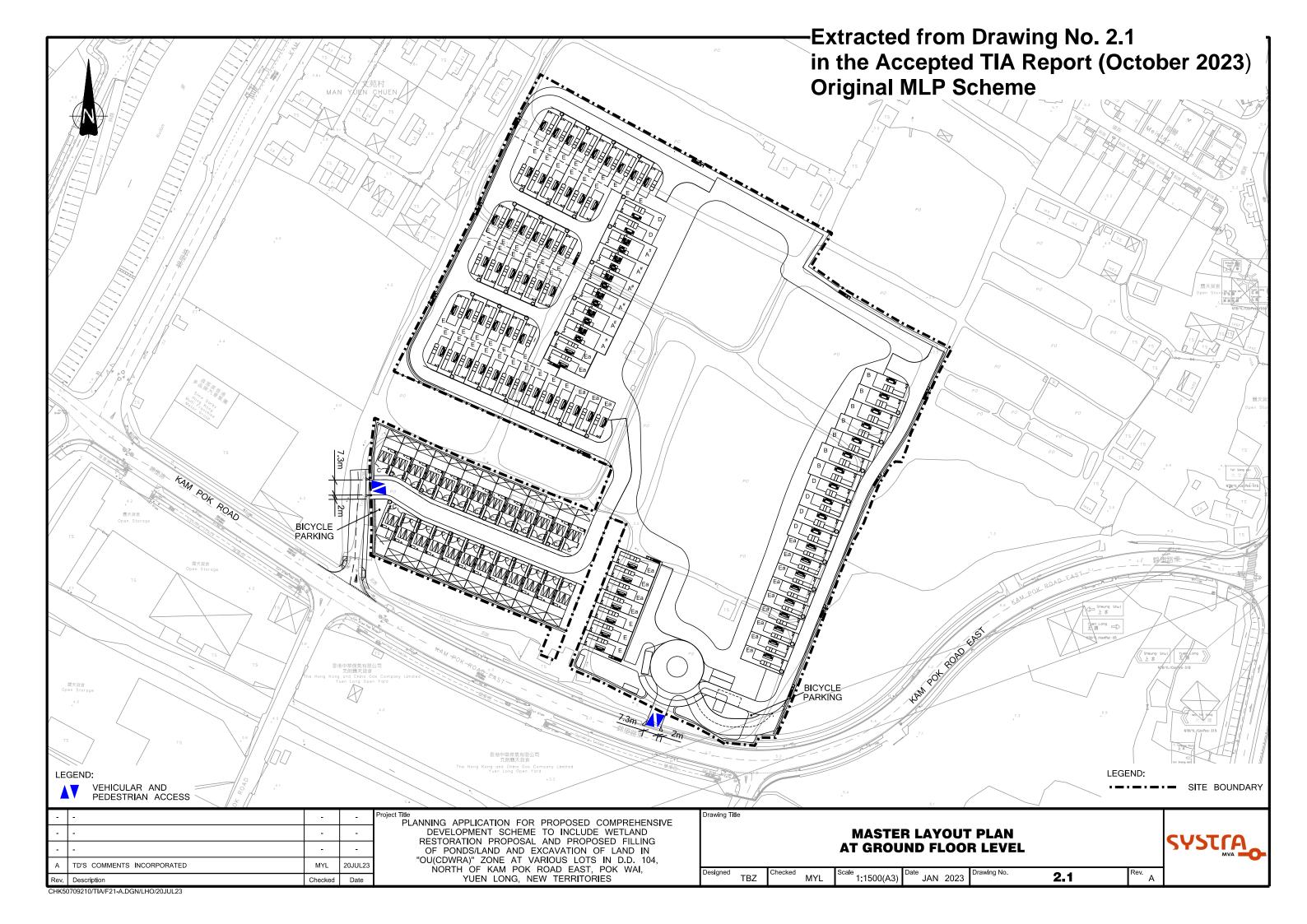
Notes:

- (1) Based on HKSPG requirement for house type, no provision is required for the provision of parking for visitor parking. As requested by TD, additional 10 visitor parking spaces are proposed.
- (2) As requested by TD, additional 21 motorcycle parking spaces are proposed (up to a ratio of 10% of number of private car parking space).
- (3) As requested by TD, additional 10 bicycle parking spaces are proposed.
- (4) Information is based on Table 2.3 Proposed Parking Provision in the TIA report (October 2023).

Conclusion

To conclude, the present changes to development traffic generation and parking provision due to the proposed amendments to the original MLP and development parameters are minimal from traffic engineering point of view.

Annex A MLP



Revised MLP Scheme (December 2023) Given from Fruit Design & Build Ltd.

