

Appendix 4-6

Sensitivity Test on Traffic Noise Impact

A1 Introduction

A sensitivity testing with considering the traffic forecast of an adjacent approved planning application has been prepared. This sensitive test is prepare to demonstrate that the proposed development under anther approved traffic forecast by Transport Department would also be complying with the relevant traffic noise standard.

A1.1 Road Characteristics

The trunk road (i.e. San Tin Highway and Castle Peak Road) and the local road (i.e. Kam Pok Road) nearby are considered as the major noise sources potentially affecting the proposed development. The Ha Chuk Yuen Road, Fung Chuk Road and the Ha Shan Wai Road are minor rural roads; and there are very limited vehicles using them as observed. Therefore, it is expected that these roads would not arise any unacceptable traffic noise impact and therefore are not considered in the assessment.

The information on projected traffic volume and percentage of heavy vehicle using these roads in year 2028 under an approved planning for a planned development site, were collected. Transport Department had no comment on the worst case assumption and the traffic forecast. The traffic forecast has taken into account the tentative operation information of the residential development projects along Kam Pok Road and Yau Pok Road as well as the future Kam Pok Road Extension.

To be conservative, a 1% annual traffic flow growth rate has been adopted in order to represent peak hour traffic flow in the assessment year of this Project (i.e. year 2034).

Table A1 Road Characteristics in Year 2034

Road Name	Surface type	Year 2028 *		Year 2034 **	
		Traffic volume (veh/hr)	% of Heavy Vehicle	Traffic volume (veh/hr)	% of Heavy Vehicle
Fairview Park Boulevard	Impervious	1750	25.8	1858	25.8
Castle Peak Road N	Impervious	1000	33.4	1062	33.4
San Tin Highway Slip Road N – North Bound	Impervious	800	30.2	849	30.2
San Tin Highway Slip Road N – South Bound	Impervious	600	41.5	637	41.5
San Tam Road N	Impervious	800	39.9	849	39.9
San Tin Highway Slip Road S – South Bound	Impervious	1300	23.5	1380	23.5
San Tin Highway Slip Road S – North Bound	Impervious	600	49.3	637	49.3
Castle Peak Road S	Impervious	450	66.1	478	66.1
Kam Pok Road	Impervious	450	23.7	478	23.7
Yau Pok Road	Impervious	150	19.0	159	19
San Tin Highway (North Bound)	Pervious	2850	47.5	3025	47.5
San Tin Highway (South Bound)	Pervious	2950	58.5	3131	58.5

Remark: * Projected traffic flow data based on the approved planning application A/YL-MP/170.

** Projected year 2034 traffic flow data based on 1% annual traffic flow growth rate.

A1.2 Noise Sensitive Receiver

The location of the representative traffic noise sensitive receivers is shown in the Figure 4-3 of the Main EIA report.

A1.3 Assessment Result

Results shown in **Table A2** indicated that, all noise sensitive receivers would comply with the traffic noise standard, resulting that the compliance rate is 100%. The proposed development would not be subject to unacceptable traffic noise impact.

Appendix 4-6 – Traffic Noise Impact Assessment

Table A2 Predicted Traffic Noise Level at the Representative NSRs

NSR	Noise Level (L10 dB(A))	NSR	Noise Level (L10 dB(A))	NSR	Noise Level (L10 dB(A))
N1	63	N6	64	N12a	70
N2a	66	N7	67	N12b	70
N2b	66	N8a	68	N13a	70
N3	65	N8b	68	N13b	70
N4a	68	N9	64	N14a	69
N4b	69	N10	65	N14b	69
N5a	69	N11a	69	N15a	63
N5b	70	N11b	70	N15b	63