## APPENDIX 4D Determination of Maximum Permissible SWL for Fixed Plant Noise

July 2021 Binnies

## Appendix 4D - Determination of Maximum Permissible SWL for Fixed Plant Noise

## **Day-time and Evening**

NSR ID	Description	Area Sensitive Rating	Attected by	Background Noise Measurement Location	Noise Criteria (Day-time and Evening), dB(A)			Approx.	Distance	Tonality		Maximum
					ANL -5, dB(A)	Lowest Background Noise Level	Adpoted Noise Criterion	Horizontal Distance , m	Attenuation, dB(A)	Correction, dB(A) [1]	Façade Correction, dB(A)	Permissible SWL, dB(A)
NSR 1	Block B, Peninsula Heights	С	No	M1	65	74	65	136	-51	3	3	110
NSR 2	Block 1, Meridian Hill	С	No	M1	65	74	65	121	-50	3	3	109
NSR 3	Chun Sing House, Tin Ma Court	В	No	M2	60	60	60	91	-47	3	3	101
NSR 4	Chun Wai House, Tin Ma Court	В	No	M2	60	60	60	87	-47	3	3	101
NSR 5	Grace Methodist Church Kindergarten	В	No	M3	60	68	60	107	-49	3	3	103
NSR 6	Wang King House, Tin Wang Court	В	No	M4	60	70	60	214	-55	3	3	109
NSR 7	Block 6, Tsui Chuk Garden	В	No	M5	60	58	58	168	-53	3	3	105

Night-time

NSR ID	Description	Area Sensitive Rating	Affected by	Background Noise	Noise Criteria (Night-time), dB(A)			Approx.	Distance	Tonality		Maximum
				Measurement Location	ANL -5, dB(A)	Lowest Background Noise Level	Adpoted Noise Criterion	Horizontal Distance , m	Attenuation, dB(A)	Correction, dB(A) [1]	Façade Correction, dB(A)	Permissible SWL, dB(A)
NSR 1	Block B, Peninsula Heights	С	No	M1	55	70	55	136	-51	3	3	100
NSR 2	Block 1, Meridian Hill	С	No	M1	55	70	55	121	-50	3	3	99
NSR 3	Chun Sing House, Tin Ma Court	В	No	M2	50	56	50	91	-47	3	3	91
NSR 4	Chun Wai House, Tin Ma Court	В	No	M2	50	56	50	87	-47	3	3	91
NSR 5	Grace Methodist Church Kindergarten	В	No	M3	50	59	50	107	-49	3	3	93
NSR 6	Wang King House, Tin Wang Court	В	No	M4	50	58	50	214	-55	3	3	99
NSR 7	Block 6, Tsui Chuk Garden	В	No	M5	50	51	50	168	-53	3	3	97

Lowest Max Permissible SWL, dB(A)

Lowest Max Permissible SWL, dB(A)

91

101

## Note:

<sup>[1]</sup> As conservative approach, +3 dB(A) of tonality correction is applied. The fixed noise sources associated with the Project should be free of the characteristics of tonality, impulsiveness and intermittency. If the noise exhibits any tonality, intermittency or impulsiveness characteristics during the operation of the plant, the noise design limit (Maximum Permissible SWL) should be reduced to absorb these corrections in accordance with the recommendation given in IND-TM.