馬草壟
MA TSO LUNG

馬草壟新村
MA TSO LUNG SAN TSUEN

N

F1-8

F1-2

F1-5

R1501

35m

95m

140m

F1-1

R2848

580m

F1-4

240m

180m

W

Sports Ground /
Sports Complex

155m

510m

430m

F1-6

G1-1

380m

415m

R9021

S

50m

F1-7

F1-3

270m

香港警察-羅湖總靶場
Hong Kong Police-Lo Wu Range

G1-2

D1-14

G1-9

0

100m

Project: 25278 Agreement No. CE61/2007 (CE) North East New Territories New Development Areas Planning and Engineering Study
Tilte: Predicted Sound Pressure Level from Crowd noise and PA system (Sports Ground / Complex & Sports Centre KTN F1-1)

Sound Power Level from Crowd Noise and PA System

Spectator	Measured SPL [1], dB(A)	Dimensions, m		Spectator Area , m^2	Area Correction dB(A)	SWL, dB(A)
		L	W			
S	73	80	9	720	29	102
W	73	120	9	1080	30	103

Note: Noise data was made reference to approved Main Arena of the 2008 Olympic Equestrian Event EIA Report.

Predicted SPL at NSRs

NSR	AP [1]	Spectator	SWL, dB(A)	Distance, m	Dimensions, m		Conformal Area		Correction, dB(A)			Predicted SPL dB(A)	Daytime Criteria, dB(A) [5]	Compliance [Y/N]
					L	W	Area m^2	Correction	Facade	Screening [2], [3]	Directivity [4]			
KTN F1-3	R2848	S	102	180	80	9	203678	-53	3	-5	0	46		
		W	103	160	120	9	181391	-53	3	-5	0	49		
Predicted Total SPL dB(A)												51	54	Y
KTN-45	R1501	S	102	240	80	9	343761	-55	3	-5	0	44		
		W	103	140	120	9	144751	-52	3	-5	0	50		
Predicted Total SPL dB(A)												51	54	Y
KTN H1-1	R9021	S	102	50	80	9	24321	-44	3	-10	-5	46		
		W	103	155	120	9	171854	-52	3	-10	0	44		
Predicted Total SPL dB(A)												48	54	Y

Note: [1] Refer to the attached drawing.
[2] Screening correction of 5 dB(A) is applied with the assumption of screening roof structure.
[3] Screening correction of 10 dB(A) is applied when the spectator is totally screened by the building stucture.
[4] Directivity correction of 5dB(A) is applied when the spectator is at more than 90 degree from the NSR.
[5] Only day time criteria is assessed as the worst case scenario. For the night time criteria, noise impact assessment should be conducted in detail design stage.
[6] Only 80% hemispherical conformal area correction is applied.

Cumulative impacts from Lo Wu Classification Range KTN G1-1 and KTN G1-2

Noise Source	AP [1]	Spectator	SWL, dB(A)	Distance, m	Dimensions, m		Conformal Area		Correction, dB(A)			Predicted SPL dB(A)	Daytime Criteria, dB(A) [5]	Compliance [Y/N]
					L	W	Area m^2	Correction	Facade	Screening [2], [3]	Directivity [4]			
KTN F1-1	R2848	S	102	180	80	9	203678	-53	3	-5	0	46		
		W	103	160	120	9	181391	-53	3	-5	0	49		
KTN G1-1		-	121	430	-	-	-	-61	3	-10	-5	49		
KTN G1-2		-	109	380	-	-	-	-60	3	0	0	52		
KTN F1-2		-	76	95	-	-	-	-48	3	0	0	31		
Predicted Total SPL dB(A)												56	54	N
KTN F1-1	R1501	S	102	240	80	9	343761	-55	3	-5	0	44		
		W	103	140	120	9	144751	-52	3	-5	0	50		
KTN G1-1		-	121	580	-	-	-	-63	3	-10	0	51		
KTN G1-2		-	109	510	-	-	-	-62	3	-10	0	40		
KTN F1-2		-	76	35	-	-	-	-39	3	0	0	40		
Predicted Total SPL dB(A)												54	54	Y
KTN F1-1	R9021	S	102	50	80	9	24321	-44	3	-10	-5	46		
		W	103	155	120	9	171854	-52	3	-10	0	44		
KTN G1-1		-	121	415	-	-	-	-60	3	-10	-5	49		
KTN G1-2		-	109	270	-	-	-	-57	3	-10	-5	40		
Predicted Total SPL dB(A)												52	54	Y

Note: [1] Refer to the attached drawing.
[2] Screening correction of 5 dB(A) is applied with the assumption of screening roof structure.
[3] Screening correction of 10 dB(A) is applied when the spectator / shooting range is totally screened by the building stucture.
[4] Directivity correction of 5dB(A) is applied when the spectator / shooting range is at more than 90 degree from the NSR.
[5] Only day time criteria is assessed as the worst case scenario. For the night time criteria, noise impact assessment should be conducted in detail design stage.
[6] SWL of Lo Wu Classification Range KTN G1-1 and KTN G1-2 includes people correction, shoot correction and impulsiveness correction.