CALDECOTE FARM NEWPORT PAGNELL : MILTON KEYNES

APPENDIX 9

ENVIRONMENTAL STATEMENT

NOISE AND VIBRATION

APPENDIX 9.4
ROAD TRAFFIC NOISE PREDICTIONS
AND ASSESSMENT



Appendix 9.4 Road Traffic Noise Predictions and Assessment

Table 1 Road traffic noise calculation results and assessment – Daytime L_{Aeq,16h} dB

Receptor	Predicted Road Traffic Noise Level (L _{Aeq,16h} dB free-field)				2023 DS - 2020 Baseline		2023 DS – 2023 DM		
	2020 Baseline	2023 Do Minimum	2023 Do Something	2023 DS Exposure Level	Noise change dB(A)	Impact Magnitude	Noise change dB(A)	Impact Magnitude	Significant Effect?
R1 Tabard Gardens GF	62.3	62.6	61.4	Between LOAEL and SOAEL	-0.9	Negligible	-1.2	Negligible	No
R2 Caldecote Lane GF	62.5	62.7	62.6	Between LOAEL and SOAEL	+0.1	Negligible	-0.1	Negligible	No
R3 Pyms Stables GF	67.5	67.8	67.9	Above SOAEL	+0.5	Negligible	+0.1	Negligible	No
R4 27-29 London Road GF	74.0	74.2	74.4	Above SOAEL	+0.5	Negligible	+0.2	Negligible	No
R5 Holiday Inn GF	67.9	68.2	68.3	Above SOAEL	+0.4	Negligible	+0.1	Negligible	No
R5 Holiday Inn FF	68.8	69.0	69.1	Above SOAEL	+0.3	Negligible	+0.1	Negligible	No
R6 Dolben Court GF	62.6	62.8	62.8	Between LOAEL and SOAEL	+0.3	Negligible	0.0	No Change	No
R7 Traveller Site GF	65.5	65.8	63.4	Above SOAEL	-2.1	Minor Beneficial	-2.4	Minor Beneficial	Yes
R8 Glenfield 1 GF	59.6	59.9	57.3	Between LOAEL and SOAEL	-2.3	Negligible	-2.6	Negligible	No
R9 Glenfield 2 GF	63.4	63.8	59.2	Between LOAEL and SOAEL	-4.2	Minor Beneficial	-4.6	Minor Beneficial	No
R10 Proposed Resi 1 GF	66.9	67.3	64.4	Above SOAEL	-2.5	Minor Beneficial	-2.9	Minor Beneficial	Yes
R11 Proposed Resi 2 GF	66.4	66.8	62.7	Between LOAEL and SOAEL	-3.7	Minor Beneficial	-4.1	Minor Beneficial	No
Note: GF = Ground Floor (receptor height = 1.5m), FF = First Floor (receptor height 4.5m)									

Table 2 Road traffic noise calculation results and assessment – Night-time $L_{Aeq,8h}\,dB$

	Predicted Road Traffic Noise Level (L _{Aeq,8h} dB Free-field)				2023 DS - 2020 Baseline		2023 DS – 2023 DM		
Receptor	2020 Baseline	2023 Do Minimum	2023 Do Something	2023 DS Exposure Level	Noise change dB(A)	Impact Magnitude	Noise change dB(A)	Impact Magnitude	Significant Effect?
R1 Tabard Gardens FF	58.3	58.6	57.5	Above SOAEL	-0.8	Negligible	-1.1	Minor Beneficial	Yes
R2 Caldecote Lane FF	57.7	57.9	58.8	Above SOAEL	+1.1	Minor Adverse	+0.9	Negligible	No
R3 Pyms Stables FF	64.7	64.9	65.6	Above SOAEL	+0.9	Negligible	+0.7	Negligible	No
R4 27-29 London Road FF	69.8	70.1	70.8	Above SOAEL	+1.0	Negligible	+0.7	Negligible	No
R5 Holiday Inn GF	63.6	63.8	64.4	Above SOAEL	+0.9	Negligible	+0.6	Negligible	No
R5 Holiday Inn FF	64.4	64.6	65.2	Above SOAEL	+0.8	Negligible	+0.6	Negligible	No
R6 Dolben Court FF	59.3	59.5	59.1	Above SOAEL	-0.2	Negligible	-0.4	Negligible	No
R7 Traveller Site GF	59.6	59.8	58.0	Above SOAEL	-1.6	Minor Beneficial	-1.8	Minor Beneficial	Yes
R8 Glenfield 1 FF	56.0	56.3	54.8	Between LOAEL and SOAEL	-1.2	Minor Beneficial	-1.5	Minor Beneficial	No
R9 Glenfield 2 FF	59.1	59.4	56.2	Above SOAEL	-2.9	Minor Beneficial	-3.2	Moderate Beneficial	Yes
R10 Proposed Resi 1 FF	61.3	61.5	60.7	Above SOAEL	-0.6	Negligible	-0.8	Negligible	No
R11 Proposed Resi 2 FF	61.0	61.3	59.3	Above SOAEL	-1.7	Minor Beneficial	-2.0	Minor Beneficial	Yes