

ROAD TRAFFIC NOISE CALCULATIONS

Job No: JAL 5201
 Job Title: AWE Hydrus
 Client: Atomic Weapons Establishment
 Traffic Data Supplied By: RPS Newbury

Date: 03/11/2009
 Consultant: DG
 Checked by: RM

CRTN CALCULATIONS FOR NOISE CHANGE - 18-hour Flows (06:00 - 24:00 hours)

1. Baseline 2008							
No	Road Section	Link Name	Total 18-hr	HGV	Speed (kph)	LA10 (18 hr)	LAeq (16 hr)
1	Aldermaston Village	1 - Aldermaston Village	11103	5.25%	50.0	68.6	66.6
2	Paices Hill	2 - Paices Hill*	9281	5.54%	64.6	69.3	67.3
3	Link Road	3 - Link Road	1314	2.26%	81.0	59.7	59.6
4	B3051	4 - B3051 (east of Heath End RBT)	10550	1.66%	81.0	70.5	68.5
5	Heath End Road	5 - Heath End Road	7038	1.25%	50.0	65.3	63.3
6	A340	6 - A340 (south of Aldermaston Gate)	8289	5.63%	50.0	67.4	65.4
7	Aldermaston Road	7 - Aldermaston Road*	15987	3.38%	54.1	70.0	68.0
8	Mulfords Hill (A340)	8 - A340 (Mulfords Hill)	16051	3.12%	50.0	69.5	67.5
9	Reading Road	9 - Reading Road (north of Main Gate)*	7840	2.79%	72.9	68.7	66.7
10	Soke Road	10 - Soke Road (nr Red Ln)	1816	1.26%	70.0	60.5	59.5
11	Reading Road	11 - Reading Road (South of Soke Rd RBT)	9152	2.74%	70.0	69.1	67.1
12	Soke Road	12 - Soke Road (South of RBT)	3434	1.32%	70.0	64.2	62.3
13	Welshmans Road	13 - Welshmans Road	3189	0.79%	70.0	63.8	61.9
14	Reading Road	14 - Reading Road (North of Welshmans Rd)	9280	2.56%	70.0	69.0	67.0
15	Red Lane	15 - Red Lane	3460	0.63%	70.0	64.0	62.1
16	Red Lane	16 - Red Lane (North of BHG)*	2464	1.35%	63.6	61.8	60.2

2. Without Construction Traffic Baseline 2014							
No	Road Section	Link Name	Total 18-hr	HGV	Speed (kph)	LA10 (18 hr)	LAeq (16 hr)
1	Aldermaston Village	1 - Aldermaston Village	13268	5.45%	50.0	69.4	67.4
2	Paices Hill	2 - Paices Hill*	10758	5.62%	64.6	70.0	68.0
3	Link Road	3 - Link Road	1463	2.26%	81.0	60.6	60.1
4	B3051	4 - B3051 (east of Heath End RBT)	12120	1.62%	81.0	71.1	69.1
5	Heath End Road	5 - Heath End Road	8074	1.24%	50.0	65.9	63.9
6	A340	6 - A340 (south of Aldermaston Gate)	9714	5.45%	50.0	68.0	66.0
7	Aldermaston Road	7 - Aldermaston Road*	17985	3.48%	54.1	70.5	68.5
8	Mulfords Hill (A340)	8 - A340 (Mulfords Hill)	18715	3.18%	50.0	70.3	68.3
9	Reading Road	9 - Reading Road (north of Main Gate)*	9216	3.08%	72.9	69.5	67.5
10	Soke Road	10 - Soke Road (nr Red Ln)	2538	2.58%	70.0	63.2	61.5
11	Reading Road	11 - Reading Road (South of Soke Rd RBT)	11160	3.23%	70.0	70.0	68.0
12	Soke Road	12 - Soke Road (South of RBT)	4181	1.88%	70.0	65.5	63.5
13	Welshmans Road	13 - Welshmans Road	3387	0.83%	70.0	64.0	62.1
14	Reading Road	14 - Reading Road (North of Welshmans Rd)	10842	2.70%	70.0	69.8	67.8
15	Red Lane	15 - Red Lane	4087	0.59%	70.0	64.9	62.9
16	Red Lane	16 - Red Lane (North of BHG)*	3225	2.39%	63.6	63.6	61.7

3. Construction Traffic Peak 2014							
No	Road Section	Link Name	Total 18-hr	HGV	Speed (kph)	LA10 (18 hr)	LAeq (16 hr)
1	Aldermaston Village	1 - Aldermaston Village	13326	5.85%	50.0	69.6	67.6
2	Paices Hill	2 - Paices Hill*	10816	6.11%	64.6	70.1	68.1
3	Link Road	3 - Link Road	1463	2.26%	81.0	60.6	60.1
4	B3051	4 - B3051 (east of Heath End RBT)	12122	1.62%	81.0	71.1	69.1
5	Heath End Road	5 - Heath End Road	8075	1.24%	50.0	65.9	63.9
6	A340	6 - A340 (south of Aldermaston Gate)	9716	5.45%	50.0	68.0	66.0
7	Aldermaston Road	7 - Aldermaston Road*	18014	3.61%	54.1	70.6	68.6
8	Mulfords Hill (A340)	8 - A340 (Mulfords Hill)	18742	3.31%	50.0	70.3	68.3
9	Reading Road	9 - Reading Road (north of Main Gate)*	9218	3.07%	72.9	69.5	67.5
10	Soke Road	10 - Soke Road (nr Red Ln)	2538	2.58%	70.0	63.2	61.5
11	Reading Road	11 - Reading Road (South of Soke Rd RBT)	11162	3.23%	70.0	70.0	68.0
12	Soke Road	12 - Soke Road (South of RBT)	4181	1.88%	70.0	65.5	63.5
13	Welshmans Road	13 - Welshmans Road	3387	0.83%	70.0	64.0	62.1
14	Reading Road	14 - Reading Road (North of Welshmans Rd)	10843	2.70%	70.0	69.8	67.8
15	Red Lane	15 - Red Lane	4087	0.59%	70.0	64.9	62.9
16	Red Lane	16 - Red Lane (North of BHG)*	3225	2.39%	63.6	63.6	61.7

APPENDIX D.4.2 - CONSTRUCTION TRAFFIC NOISE ASSESSMENT

CONSTRUCTION ROAD TRAFFIC NOISE CALCULATIONS

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No	Road Section	Link Name	2. Without Construction Traffic Baseline 2014	3. Construction Traffic Peak 2014	3. Construction Traffic Peak 2014
			minus	minus	minus
			1. Baseline 2008	1. Baseline 2008	2. Without Construction Traffic Baseline 2014
1	Aldermaston Village	1- Aldermaston Village	0.8	1.0	0.2
2	Paices Hill	2 - Paices Hill*	0.7	0.8	0.1
3	Link Road	3 - Link Road	0.8	0.8	0.0
4	B3051	4 - B3051 (east of Heath End RBT)	0.6	0.6	0.0
5	Heath End Road	5 - Heath End Road	0.6	0.6	0.0
6	A340	6 - A340 (south of Aldermaston Gate)	0.6	0.6	0.0
7	Aldermaston Road	7 - Aldermaston Road*	0.5	0.6	0.1
8	Mulfords Hill (A340)	8 - A340 (Mulfords Hill)	0.8	0.8	0.0
9	Reading Road	9 - Reading Road (north of Main Gate)*	0.8	0.8	0.0
10	Soke Road	10 - Soke Road (nr Red Ln)	2.6	2.6	0.0
11	Reading Road	11 - Reading Road (South of Soke Rd RBT)	0.9	0.9	0.0
12	Soke Road	12 - Soke Road (South of RBT)	1.2	1.2	0.0
13	Welshmans Road	13 - Welshmans Road	0.2	0.2	0.0
14	Reading Road	14 - Reading Road (North of Welshmans Rd)	0.8	0.8	0.0
15	Red Lane	15 - Red Lane	0.8	0.8	0.0
16	Red Lane	16 - Red Lane (North of BHG)*	1.8	1.8	0.0