

APPENDIX 8.1 NOISE SURVEY AND MODEL DATA**Table A8.1 Survey Details**

Attended		Unattended	
Date	Locations	Date	Location
4 February 2004	S61, S62, S63, S64, S65, S66	4 – 5 February 2004	S61
10 February 2004	S13, S14, S15, S16, S17, S18, S67, S68, S69, S70, S71, S72	10 – 11 February 2004	S13, S67
11 February 2004	S01, S02, S03, S04, S05, S06, S31, S32, S33, S34, S35, S36	11 – 12 February 2004	S01, S31
12 February 2004	S19, S20, S21, S22, S23, S24, S25, S26, S27, S28, S29, S30	12 – 13 February 2004	S19, S25
13 February 2004	S37, S38, S39, S40, S41, S42, S43, S44, S45, S46, S47, S48, S49, S50, S51, S52, S53, S54	13 – 14 February 2004	S37, S43, S49
17 February 2004	S07, S08, S09, S10, S11, S12	17 – 18 February 2004	S07
18 February 2004	S55, S56, S57, S58, S59, S60	18 – 19 February 2004	S60
23 March 2004	S73, S74, S75, S76, S77, S78, S79, S80, S81, S82, S83, S84	23 – 24 March 2004	S73, S79
24 March 2004	S85, S86, S87, S88, S89, S90	24 – 25 March 2004	S84

Table A8.2 Shortened Measurement Results and Derived $L_{A10(18\text{hour})}$ Values

Survey Location Reference	Stop Time	Measured Noise Levels (dB re. 2×10^{-5} Pa)			Derived dB $L_{A10(18\text{hour})}$
		L_{Aeq}	L_{A90}	L_{A10}	
S01	13:22	67	42	65	64
	14:21	69	44	66	
	15:22	60	43	65	
S02	10:21	55	45	58	56
	11:21	53	42	56	
	12:21	55	44	58	
S03	10:42	50	43	51	46
	11:41	48	36	45	
	12:42	49	38	45	
S04	10:58	47	40	47	45
	12:00	43	37	45	
	12:59	46	38	45	
S05	13:41	49	34	46	50
	14:41	60	38	62	
	15:45	41	36	44	
S06	14:02	52	41	50	52
	15:02	55	41	54	
	16:05	59	44	57	
S07	13:44	39	30	39	44
	14:46	45	38	48	
	15:42	51	39	47	
S08	10:22	52	41	55	53
	11:22	50	40	54	
	12:26	50	39	54	
S09	10:44	58	38	51	49
	11:42	49	37	51	
	12:45	45	38	47	
S10	11:03	47	38	50	46
	12:07	47	37	48	
	13:05	42	37	44	
S11	13:26	39	31	42	42
	14:28	40	33	42	
	15:24	43	31	44	
S12	14:07	40	29	41	39
	15:05	39	31	42	
	16:02	36	30	38	
S13	14:11	50	40	52	48
	15:08	46	40	47	
	16:05	48	41	50	
S14	10:19	61	39	56	43
	11:24	36	32	38	
	12:25	38	32	40	

Table A8.2 (Cont'd) Shortened Measurement Results and Derived $L_{A10(18hour)}$ Values

Survey Location Reference	Stop Time	Measured Noise Levels (dB re. 2×10^{-5} Pa)			Derived dB $L_{A10(18hour)}$
		L_{Aeq}	L_{A90}	L_{A10}	
S15	10:44	59	37	45	41
	11:47	37	31	39	
	12:45	40	35	42	
S16	11:06	46	40	49	46
	12:07	46	36	46	
	13:03	44	36	47	
S17	13:33	53	41	53	52
	14:31	53	43	53	
	15:27	49	43	52	
S18	13:51	47	42	49	49
	14:50	49	43	51	
	15:47	48	42	50	
S19	13:43	44	37	46	45
	14:42	44	37	44	
	15:43	47	38	50	
S20	10:18	54	38	49	49
	11:18	51	39	49	
	12:19	57	38	53	
S21	10:38	73	52	77	75
	11:38	72	51	75	
	12:41	72	50	75	
S22	10:56	63	43	57	52
	11:55	53	43	52	
	13:00	54	44	52	
S23	13:21	57	42	49	51
	14:22	58	42	54	
	15:21	50	44	52	
S24	14:03	51	37	49	48
	15:01	57	40	52	
	16:02	46	40	48	
S25	13:45	52	43	55	53
	14:40	50	42	54	
	15:40	49	39	53	
S26	10:16	44	37	47	49
	11:17	50	41	53	
	12:18	48	43	50	
S27	10:36	51	42	54	53
	11:45	51	44	55	
	12:42	51	44	54	
S28	10:57	49	42	52	52
	11:59	50	43	53	
	12:56	50	43	53	

Table A8.2 (Cont'd) Shortened Measurement Results and Derived $L_{A10(18\text{hour})}$ Values

Survey Location Reference	Stop Time	Measured Noise Levels (dB re. 2×10^{-5} Pa)			Derived dB $L_{A10(18\text{hour})}$
		L_{Aeq}	L_{A90}	L_{A10}	
S29	13:24	60	46	55	51
	14:01	51	45	52	
	15:00	49	41	50	
S30	13:24	60	46	55	52
	14:20	52	43	55	
	15:21	46	41	49	
S31	14:52	48	35	52	47
	15:03	45	35	50	
	16:55	40	36	42	
S32	10:10	51	39	54	54
	12:00	64	42	58	
	12:10	53	42	53	
S33	10:29	42	31	43	43
	11:32	43	35	45	
	12:27	44	36	46	
S34	10:56	46	40	49	47
	11:11	49	40	51	
	12:46	42	38	44	
S35	14:00	52	44	56	55
	15:49	52	43	56	
	16:04	53	44	57	
S36	14:30	53	37	51	46
	15:23	56	33	44	
	16:30	57	34	46	
S37	10:41	46	33	50	43
	11:02	41	30	44	
	12:43	44	29	40	
S38	10:00	40	30	42	40
	11:21	44	30	43	
	12:21	49	31	39	
S39	10:20	48	31	48	43
	11:40	47	28	42	
	12:02	52	29	44	
S40	14:40	50	29	41	40
	15:00	35	25	37	
	16:49	47	27	44	
S41	13:56	37	30	41	41
	15:40	38	30	41	
	15:59	40	31	44	
S42	14:16	45	25	48	48
	15:21	44	29	47	
	16:28	50	30	53	

Table A8.2 (Cont'd) Shortened Measurement Results and Derived $L_{A10(18\text{hour})}$ Values

Survey Location Reference	Stop Time	Measured Noise Levels (dB re. 2×10^{-5} Pa)			Derived dB $L_{A10(18\text{hour})}$
		L_{Aeq}	L_{A90}	L_{A10}	
S43	14:15	33	24	35	36
	15:19	34	26	36	
	16:21	36	30	39	
S44	11:10	49	29	48	43
	12:22	48	26	44	
	13:21	36	25	39	
S45	11:38	51	36	50	50
	12:40	47	28	51	
	13:38	48	30	52	
S46	12:02	40	29	40	42
	13:08	57	27	50	
	13:57	42	26	39	
S47	14:41	42	27	46	45
	15:39	39	27	39	
	16:39	48	30	51	
S48	14:59	38	27	42	38
	16:00	34	24	37	
	17:02	37	26	36	
S49	15:07	54	44	58	57
	16:02	54	44	58	
	17:00	57	50	60	
S50	12:22	51	33	45	46
	13:23	45	35	47	
	11:20	44	35	48	
S51	11:40	37	33	39	41
	12:43	42	35	45	
	13:43	40	33	42	
S52	12:02	45	34	49	46
	13:03	40	31	44	
	14:02	45	33	49	
S53	14:30	51	37	57	50
	15:26	45	36	46	
	16:21	46	39	49	
S54	14:49	62	40	66	65
	15:43	62	35	67	
	16:40	61	38	66	
S55	14:59	57	43	56	59
	16:01	59	38	52	
	17:02	71	45	71	
S56	10:15	46	43	47	46
	11:14	49	41	47	
	12:15	45	40	47	

Table A8.2 (Cont'd) Shortened Measurement Results and Derived $L_{A10(18hour)}$ Values

Survey Location Reference	Stop Time	Measured Noise Levels (dB re. 2×10^{-5} Pa)			Derived dB $L_{A10(18hour)}$
		L_{Aeq}	L_{A90}	L_{A10}	
S57	10:34	52	42	54	53
	11:34	53	44	54	
	12:36	52	40	53	
S58	10:52	55	46	57	56
	11:51	53	44	57	
	12:54	56	44	58	
S59	14:15	46	33	49	47
	15:18	48	35	49	
	16:22	43	38	45	
S60	14:38	45	30	43	46
	15:37	47	31	50	
	16:47	47	30	49	
S61	14:52	57	45	54	52
	15:56	53	43	53	
	17:11	50	41	52	
S62	10:16	46	40	49	49
	11:20	48	42	51	
	12:24	49	43	52	
S63	10:39	44	40	47	46
	11:43	44	40	46	
	12:47	46	41	48	
S64	10:57	45	40	47	49
	12:02	47	42	50	
	13:06	51	45	53	
S65	14:14	59	48	56	52
	15:15	53	40	49	
	16:17	60	47	56	
S66	14:34	52	44	54	51
	15:35	50	41	49	
	16:48	55	45	54	
S67	15:01	48	43	50	50
	16:02	50	43	53	
	17:01	50	43	51	
S68	10:16	53	46	56	57
	11:20	57	50	60	
	12:23	57	51	60	
S69	10:35	69	44	73	73
	11:39	70	48	74	
	12:44	69	47	74	
S70	10:56	51	41	47	48
	11:59	48	43	49	
	13:05	48	45	50	

Table A8.2 (Cont'd) Shortened Measurement Results and Derived $L_{A10(18hour)}$ Values

Survey Location Reference	Stop Time	Measured Noise Levels (dB re. 2×10^{-5} Pa)			Derived dB $L_{A10(18hour)}$
		L_{Aeq}	L_{A90}	L_{A10}	
S71	14:16	79	58	84	84
	15:23	81	60	85	
	16:21	81	61	86	
S72	14:41	52	45	53	52
	15:44	51	46	53	
	16:41	52	45	53	
S73	15:05	45	36	46	43
	16:05	41	37	43	
	17:03	41	38	43	
S74	10:23	52	38	49	48
	11:25	48	38	50	
	12:24	48	38	47	
S75	10:45	53	36	49	48
	11:44	48	36	48	
	12:46	50	37	50	
S76	11:03	68	50	72	66
	12:03	69	48	72	
	13:06	54	39	56	
S77	14:16	46	29	48	48
	15:27	49	39	50	
	16:25	47	39	49	
S78	14:43	55	39	54	52
	15:45	52	41	54	
	16:43	55	42	53	
S79	15:00	42	37	44	44
	16:00	44	39	47	
	17:03	43	38	46	
S80	10:15	42	37	43	44
	11:18	47	39	50	
	12:31	41	39	42	
S81	10:34	51	37	52	46
	11:52	43	39	45	
	12:49	48	38	45	
S82	10:57	48	38	51	47
	12:10	50	41	47	
	13:10	49	37	47	
S83	14:16	47	38	51	48
	15:20	46	39	49	
	16:25	44	38	47	
S84	14:38	49	39	53	49
	15:41	46	41	50	
	16:44	44	40	47	

Table A8.2 (Cont'd) Shortened Measurement Results and Derived $L_{A10(18\text{hour})}$ Values

Survey Location Reference	Stop Time	Measured Noise Levels (dB re. 2×10^{-5} Pa)			Derived dB $L_{A10(18\text{hour})}$
		L_{Aeq}	L_{A90}	L_{A10}	
S85	14:59	42	38	44	45
	15:55	44	38	46	
	16:55	45	38	47	
S86	11:15	58	39	56	60
	12:16	60	39	58	
	13:18	66	41	70	
S87	11:33	60	40	59	62
	12:33	58	40	58	
	13:37	73	54	71	
S88	11:52	48	39	50	50
	12:52	51	40	51	
	14:00	49	38	51	
S89	14:22	43	39	46	46
	15:18	49	42	51	
	16:18	43	37	44	
S90	14:40	49	41	51	47
	15:35	45	39	47	
	16:35	43	34	45	

Table A8.3 24-Hour Monitoring Results at Survey Location S01(24hr)

Time Period	Measured Noise Levels (dB re.2x10 ⁻⁵ Pa)		
	L _{Aeq}	L _{A90}	L _{A10}
16:00 – 17:00	62	44	66
17:00 – 18:00	59	40	63
18:00 – 19:00	62	39	62
19:00 – 20:00	60	36	61
20:00 – 21:00	57	34	60
21:00 – 22:00	56	30	57
22:00 – 23:00	54	27	52
23:00 – 00:00	53	28	50
00:00 – 01:00	49	23	41
01:00 – 02:00	49	22	42
02:00 – 03:00	49	21	41
03:00 – 04:00	52	22	47
04:00 – 05:00	55	29	54
05:00 – 06:00	58	33	58
06:00 – 07:00	63	47	67
07:00 – 08:00	63	49	68
08:00 – 09:00	65	45	67
09:00 – 10:00	64	43	67
10:00 – 11:00	61	41	66
11:00 – 12:00	63	43	66
12:00 – 13:00	64	43	66
13:00 – 14:00	66	43	67
14:00 – 15:00	62	43	67
15:00 – 16:00	61	43	67
Derived value of L _{A10(18hour)}		63	
Derived value of L _{den}		63	

Table A8.4 24-Hour Monitoring Results at Survey Location S07(24hr)

Time Period	Measured Noise Levels (dB re.2x10 ⁻⁵ Pa)		
	L _{Aeq}	L _{A90}	L _{A10}
16:00 – 17:00	52	38	48
17:00 – 18:00	47	36	45
18:00 – 19:00	49	35	45
19:00 – 20:00	48	32	42
20:00 – 21:00	39	31	41
21:00 – 22:00	36	29	38
22:00 – 23:00	41	28	40
23:00 – 00:00	32	26	35
00:00 – 01:00	35	26	36
01:00 – 02:00	30	25	33
02:00 – 03:00	34	25	36
03:00 – 04:00	35	25	38
04:00 – 05:00	37	26	40
05:00 – 06:00	38	27	42
06:00 – 07:00	44	36	44
07:00 – 08:00	52	38	46
08:00 – 09:00	53	37	48
09:00 – 10:00	44	38	47
10:00 – 11:00	48	38	49
11:00 – 12:00	55	39	55
12:00 – 13:00	43	31	42
13:00 – 14:00	46	36	49
14:00 – 15:00	52	37	47
15:00 – 16:00	45	37	47
Derived value of L _{A10(18hour)}		45	
Derived value of L _{den}		49	

Table A8.5 24-Hour Monitoring Results at Survey Location S013 (24hr)

Time Period	Measured Noise Levels (dB re.2x10 ⁻⁵ Pa)		
	L _{Aeq}	L _{A90}	L _{A10}
18:00 – 19:00	47	44	49
19:00 – 20:00	52	37	51
20:00 – 21:00	46	35	46
21:00 – 22:00	39	32	42
22:00 – 23:00	38	28	42
23:00 – 00:00	36	26	40
00:00 – 01:00	35	25	38
01:00 – 02:00	31	22	35
02:00 – 03:00	25	22	27
03:00 – 04:00	24	22	25
04:00 – 05:00	29	23	32
05:00 – 06:00	33	27	36
06:00 – 07:00	39	30	41
07:00 – 08:00	56	42	58
08:00 – 09:00	58	44	60
09:00 – 10:00	57	43	56
10:00 – 11:00	56	40	57
11:00 – 12:00	52	39	53
12:00 – 13:00	52	40	53
13:00 – 14:00	49	39	48
14:00 – 15:00	49	41	51
15:00 – 16:00	47	41	49
16:00 – 17:00	49	41	50
17:00 – 18:00	48	41	48
Derived value of L _{A10(18hour)}		50	
Derived value of L _{den}		52	

Table A8.6 24-Hour Monitoring Results at Survey Location S19 (24hr)

Time Period	Measured Noise Levels (dB re.2x10 ⁻⁵ Pa)		
	L _{Aeq}	L _{A90}	L _{A10}
17:00 – 18:00	50	41	54
18:00 – 19:00	52	37	52
19:00 – 20:00	46	37	48
20:00 – 21:00	46	39	49
21:00 – 22:00	46	37	48
22:00 – 23:00	43	36	44
23:00 – 00:00	49	35	44
00:00 – 01:00	45	35	44
01:00 – 02:00	37	33	39
02:00 – 03:00	33	31	34
03:00 – 04:00	32	28	34
04:00 – 05:00	31	27	33
05:00 – 06:00	34	28	37
06:00 – 07:00	38	32	40
07:00 – 08:00	48	40	50
08:00 – 09:00	52	40	51
09:00 – 10:00	50	40	51
10:00 – 11:00	47	39	49
11:00 – 12:00	49	40	52
12:00 – 13:00	47	38	50
13:00 – 14:00	46	37	49
14:00 – 15:00	48	38	50
15:00 – 16:00	47	39	50
16:00 – 17:00	48	39	51
Derived value of L _{A10(18hour)}		49	
Derived value of L _{den}		51	

Table A8.7 24-Hour Monitoring Results at Survey Location S25 (24hr)

Time Period	Measured Noise Levels (dB re.2x10 ⁻⁵ Pa)		
	L _{Aeq}	L _{A90}	L _{A10}
16:00 – 17:00	50	43	53
17:00 – 18:00	49	42	52
18:00 – 19:00	48	40	50
19:00 – 20:00	48	39	51
20:00 – 21:00	49	38	51
21:00 – 22:00	46	37	49
22:00 – 23:00	50	32	49
23:00 – 00:00	43	31	46
00:00 – 01:00	40	29	44
01:00 – 02:00	34	27	36
02:00 – 03:00	38	27	40
03:00 – 04:00	36	27	37
04:00 – 05:00	39	30	43
05:00 – 06:00	42	35	45
06:00 – 07:00	51	42	52
07:00 – 08:00	50	44	53
08:00 – 09:00	47	40	50
09:00 – 10:00	47	40	49
10:00 – 11:00	48	42	50
11:00 – 12:00	47	41	51
12:00 – 13:00	51	43	52
13:00 – 14:00	50	41	51
14:00 – 15:00	47	40	50
15:00 – 16:00	47	41	50
Derived value of L _{A10(18hour)}		51	
Derived value of L _{den}		52	

Table A8.8 24-Hour Monitoring Results at Survey Location S31 (24hr)

Time Period	Measured Noise Levels (dB re.2x10 ⁻⁵ Pa)		
	L _{Aeq}	L _{A90}	L _{A10}
16:00 – 17:00	54	36	57
17:00 – 18:00	45	33	46
18:00 – 19:00	40	–	37
19:00 – 20:00	40	–	36
20:00 – 21:00	46	–	38
21:00 – 22:00	31	–	34
22:00 – 23:00	44	–	37
23:00 – 00:00	31	–	33
00:00 – 01:00	31	–	–
01:00 – 02:00	31	–	–
02:00 – 03:00	31	–	–
03:00 – 04:00	31	–	–
04:00 – 05:00	31	–	32
05:00 – 06:00	36	–	37
06:00 – 07:00	48	36	50
07:00 – 08:00	49	36	54
08:00 – 09:00	48	39	53
09:00 – 10:00	51	35	56
10:00 – 11:00	49	35	53
11:00 – 12:00	49	36	55
12:00 – 13:00	49	36	53
13:00 – 14:00	53	37	56
14:00 – 15:00	49	35	55
15:00 – 16:00	47	35	53
Derived value of L _{A10(18hour)}		48	
Derived value of L _{den}		49	

Table A8.9 24-Hour Monitoring Results at Survey Location S37 (24hr)

Time Period	Measured Noise Levels (dB re.2x10 ⁻⁵ Pa)		
	L _{Aeq}	L _{A90}	L _{A10}
17:00 – 18:00	33	27	33
18:00 – 19:00	34	25	34
19:00 – 20:00	28	25	31
20:00 – 21:00	29	25	31
21:00 – 22:00	32	25	32
22:00 – 23:00	26	23	31
23:00 – 00:00	29	24	29
00:00 – 01:00	25	22	26
01:00 – 02:00	24	22	27
02:00 – 03:00	26	22	26
03:00 – 04:00	24	22	26
04:00 – 05:00	24	22	26
05:00 – 06:00	27	23	26
06:00 – 07:00	48	33	47
07:00 – 08:00	41	33	45
08:00 – 09:00	50	35	44
09:00 – 10:00	41	34	43
10:00 – 11:00	43	32	41
11:00 – 12:00	44	32	43
12:00 – 13:00	42	31	38
13:00 – 14:00	39	33	39
14:00 – 15:00	37	32	40
15:00 – 16:00	42	33	43
16:00 – 17:00	42	32	41
Derived value of L _{A10(18hour)}		38	
Derived value of L _{den}		46	

Table A8.10 24-Hour Monitoring Results at Survey Location S43 (24hr)

Time Period	Measured Noise Levels (dB re.2x10 ⁻⁵ Pa)		
	L _{Aeq}	L _{A90}	L _{A10}
16:00 – 17:00	41	31	43
17:00 – 18:00	32	26	34
18:00 – 19:00	40	24	33
19:00 – 20:00	27	23	30
20:00 – 21:00	28	24	30
21:00 – 22:00	30	24	32
22:00 – 23:00	28	22	30
23:00 – 00:00	28	21	27
00:00 – 01:00	25	21	28
01:00 – 02:00	24	20	26
02:00 – 03:00	25	20	27
03:00 – 04:00	24	21	24
04:00 – 05:00	23	21	25
05:00 – 06:00	26	21	26
06:00 – 07:00	47	32	46
07:00 – 08:00	42	33	44
08:00 – 09:00	52	34	43
09:00 – 10:00	42	33	44
10:00 – 11:00	45	31	43
11:00 – 12:00	43	29	44
12:00 – 13:00	41	26	40
13:00 – 14:00	38	26	38
14:00 – 15:00	39	28	39
15:00 – 16:00	43	31	42
Derived value of L _{A10(18hour)}		38	
Derived value of L _{den}		45	

Table A8.11 24-Hour Monitoring Results at Survey Location S49 (24hr)

Time Period	Measured Noise Levels (dB re.2x10 ⁻⁵ Pa)		
	L _{Aeq}	L _{A90}	L _{A10}
16:00 – 17:00	56	49	59
17:00 – 18:00	55	46	58
18:00 – 19:00	53	45	57
19:00 – 20:00	50	37	54
20:00 – 21:00	50	39	55
21:00 – 22:00	50	33	55
22:00 – 23:00	48	27	53
23:00 – 00:00	44	24	48
00:00 – 01:00	46	23	50
01:00 – 02:00	43	22	44
02:00 – 03:00	42	22	42
03:00 – 04:00	44	22	43
04:00 – 05:00	46	23	49
05:00 – 06:00	52	31	56
06:00 – 07:00	55	45	59
07:00 – 08:00	56	50	59
08:00 – 09:00	60	48	60
09:00 – 10:00	60	48	61
10:00 – 11:00	55	47	58
11:00 – 12:00	54	46	57
12:00 – 13:00	54	46	57
13:00 – 14:00	55	47	58
14:00 – 15:00	54	45	57
15:00 – 16:00	55	48	58
Derived value of L _{A10(18hour)}		57	
Derived value of L _{den}		57	

Table A8.12 24-Hour Monitoring Results at Survey Location S55 (24hr)

Time Period	Measured Noise Levels (dB re.2x10 ⁻⁵ Pa)		
	L _{Aeq}	L _{A90}	L _{A10}
16:00 – 17:00	63	44	62
17:00 – 18:00	59	39	54
18:00 – 19:00	58	28	51
19:00 – 20:00	56	26	45
20:00 – 21:00	57	26	51
21:00 – 22:00	48	29	37
22:00 – 23:00	48	30	39
23:00 – 00:00	46	27	34
00:00 – 01:00	31	28	33
01:00 – 02:00	33	27	37
02:00 – 03:00	32	26	36
03:00 – 04:00	32	26	37
04:00 – 05:00	46	28	37
05:00 – 06:00	52	31	43
06:00 – 07:00	60	42	59
07:00 – 08:00	61	44	58
08:00 – 09:00	66	40	63
09:00 – 10:00	63	40	60
10:00 – 11:00	61	38	55
11:00 – 12:00	63	41	58
12:00 – 13:00	62	40	56
13:00 – 14:00	66	43	64
14:00 – 15:00	60	41	57
15:00 – 16:00	69	46	69
Derived value of L _{A10(18hour)}		54	
Derived value of L _{den}		63	

Table A8.13 24-Hour Monitoring Results at Survey Location S61 (24hr)

Time Period	Measured Noise Levels (dB re.2x10 ⁻⁵ Pa)		
	L _{Aeq}	L _{A90}	L _{A10}
16:00 – 17:00	50	44	53
17:00 – 18:00	50	43	53
18:00 – 19:00	54	45	56
19:00 – 20:00	46	33	49
20:00 – 21:00	51	34	43
21:00 – 22:00	39	33	42
22:00 – 23:00	37	31	40
23:00 – 00:00	34	28	35
00:00 – 01:00	46	35	49
01:00 – 02:00	40	33	43
02:00 – 03:00	35	28	38
03:00 – 04:00	31	26	34
04:00 – 05:00	32	28	35
05:00 – 06:00	34	30	36
06:00 – 07:00	49	35	46
07:00 – 08:00	52	41	48
08:00 – 09:00	54	38	52
09:00 – 10:00	52	38	55
10:00 – 11:00	54	40	53
11:00 – 12:00	55	44	58
12:00 – 13:00	57	47	61
13:00 – 14:00	56	47	59
14:00 – 15:00	53	43	55
15:00 – 16:00	53	44	56
Derived value of L _{A10(18hour)}		51	
Derived value of L _{den}		53	

Table A8.14 24-Hour Monitoring Results at Survey Location S67 (24hr)

Time Period	Measured Noise Levels (dB re.2x10 ⁻⁵ Pa)		
	L _{Aeq}	L _{A90}	L _{A10}
17:00 – 18:00	50	45	52
18:00 – 19:00	48	44	50
19:00 – 20:00	51	43	50
20:00 – 21:00	46	42	49
21:00 – 22:00	46	41	49
22:00 – 23:00	50	32	46
23:00 – 00:00	41	32	44
00:00 – 01:00	39	31	43
01:00 – 02:00	40	31	42
02:00 – 03:00	40	32	43
03:00 – 04:00	43	32	47
04:00 – 05:00	43	33	47
05:00 – 06:00	46	38	49
06:00 – 07:00	51	46	54
07:00 – 08:00	63	51	71
08:00 – 09:00	51	46	53
09:00 – 10:00	54	44	57
10:00 – 11:00	51	45	54
11:00 – 12:00	51	45	53
12:00 – 13:00	50	44	51
13:00 – 14:00	50	46	52
14:00 – 15:00	50	45	52
15:00 – 16:00	51	44	51
16:00 – 17:00	51	46	53
Derived value of L _{A10(18hour)}		52	
Derived value of L _{den}		55	

Table A8.15 24-Hour Monitoring Results at Survey Location S73 (24hr)

Time Period	Measured Noise Levels (dB re.2x10 ⁻⁵ Pa)		
	L _{Aeq}	L _{A90}	L _{A10}
09:00 – 10:00	47	40	49
10:00 – 11:00	45	38	46
11:00 – 12:00	43	39	45
12:00 – 13:00	45	38	48
13:00 – 14:00	45	37	48
14:00 – 15:00	46	39	49
15:00 – 16:00	47	41	49
16:00 – 17:00	44	40	46
17:00 – 18:00	44	41	46
18:00 – 19:00	45	41	47
19:00 – 20:00	45	39	47
20:00 – 21:00	40	37	42
21:00 – 22:00	40	37	43
22:00 – 23:00	40	37	42
23:00 – 00:00	41	37	43
00:00 – 01:00	41	37	44
01:00 – 02:00	40	36	42
02:00 – 03:00	38	35	40
03:00 – 04:00	35	30	38
04:00 – 05:00	37	31	41
05:00 – 06:00	44	35	46
06:00 – 07:00	43	37	46
07:00 – 08:00	46	39	47
08:00 – 09:00	47	41	48
Derived value of L _{A10(18hour)}		46	
Derived value of L _{den}		48	

Table A8.16 24-Hour Monitoring Results at Survey Location S79 (24hr)

Time Period	Measured Noise Levels (dB re.2x10 ⁻⁵ Pa)		
	L _{Aeq}	L _{A90}	L _{A10}
19:00 – 20:00	47	38	47
20:00 – 21:00	41	35	43
21:00 – 22:00	41	35	41
22:00 – 23:00	38	35	40
23:00 – 00:00	43	31	43
00:00 – 01:00	42	31	39
01:00 – 02:00	35	29	37
02:00 – 03:00	37	29	36
03:00 – 04:00	40	30	40
04:00 – 05:00	35	30	37
05:00 – 06:00	41	35	40
06:00 – 07:00	45	39	48
07:00 – 08:00	47	43	49
08:00 – 09:00	48	42	48
09:00 – 10:00	46	40	47
10:00 – 11:00	47	40	48
11:00 – 12:00	49	41	48
12:00 – 13:00	46	39	48
13:00 – 14:00	42	37	45
14:00 – 15:00	44	39	46
15:00 – 16:00	46	40	48
16:00 – 17:00	44	39	46
17:00 – 18:00	44	40	47
18:00 – 19:00	48	39	46
Derived value of L _{A10(18hour)}		46	
Derived value of L _{den}		49	

Table A8.17 24-Hour Monitoring Results at Survey Location S85 (24hr)

Time Period	Measured Noise Levels (dB re.2x10 ⁻⁵ Pa)		
	L _{Aeq}	L _{A90}	L _{A10}
10:00 – 11:00	48	41	47
11:00 – 12:00	49	42	49
12:00 – 13:00	48	39	49
13:00 – 14:00	43	39	45
14:00 – 15:00	44	40	48
15:00 – 16:00	44	39	47
16:00 – 17:00	46	39	46
17:00 – 18:00	44	39	48
18:00 – 19:00	47	38	48
19:00 – 20:00	45	37	46
20:00 – 21:00	42	33	42
21:00 – 22:00	42	36	39
22:00 – 23:00	39	36	41
23:00 – 00:00	44	32	44
00:00 – 01:00	40	32	40
01:00 – 02:00	33	27	38
02:00 – 03:00	37	27	34
03:00 – 04:00	40	30	38
04:00 – 05:00	36	30	37
05:00 – 06:00	42	36	40
06:00 – 07:00	47	40	49
07:00 – 08:00	46	45	50
08:00 – 09:00	47	41	50
09:00 – 10:00	47	39	46
Derived value of L _{A10(18hour)}		46	
Derived value of L _{den}		49	

Table A8.18 Comparison of Measured and Predicted Values for $L_{A10(18\text{hour})}$ at Assessment Locations

Location Reference	NPL L_{A10} dB	Predictor L_{A10} dB	Difference dB
A07	60	61	+1
A24	63	62	-1
A30	68	68	0
A43	59	58	-1
A51	63	62	-1
A68	58	59	+1
B04	59	57	-2
B12	57	58	+1
B25	53	55	+2
B36	62	63	+1
B46	56	57	+1
C04	62	60	-2
C14	61	62	+1
C23	67	66	-1
C38	64	63	-1
C51	67	65	-2

Table A8.19 Details of Receiver Locations

Receiver Location Reference	Grid Reference	
	E	N
A01	258,044	115,873
A02	258,038	116,360
A03	257,934	116,416
A04	258,000	116,581
A05	258,278	116,682
A06	258,283	116,953
A07	258,789	117,676
A08	258,504	117,746
A08a	258,447	117,777
A08b	258,433	117,805
A09	258,451	118,014
A10	258,421	118,126
A11	258,780	118,526
A12	258,596	119,037
A13	258,146	119,059
A14	258,340	119,605
A15	257,796	119,549
A16	258,071	120,134
A17	257,355	120,195
A18	257,055	121,152
A19	257,184	121,273
A20	256,899	121,387
A21	256,929	121,544

Table A8.19 (Cont'd) Details of Receiver Locations

Receiver Location Reference	Grid Reference	
	E	N
A22	256,743	122,087
A23	256,725	122,307
A24	256,875	122,357
A25	256,659	122,482
A26	256,602	123,041
A27	257,026	123,395
A28	257,107	123,839
A29	256,981	123,952
A30	256,856	124,034
A31	256,814	124,284
A32	257,105	124,418
A33	256,612	124,786
A34	256,883	124,969
A35	256,893	124,994
A36	256,918	125,006
A37	256,524	125,077
A38	256,873	125,256
A39	256,518	125,293
A40	256,814	125,681
A41	256,528	125,892
A42	256,345	125,991
A43	256,301	126,662
A44	255,657	127,747
A45	255,394	128,233
A46	254,897	128,563
A47	253,450	128,852
A48	253,237	129,540
A49	252,694	130,558
A50	251,919	132,038
A51	251,919	132,723
A52	252,084	133,861
A53	251,669	133,935
A54	252,072	134,218
A55	251,589	134,317
A56	251,600	134,510
A57	251,553	135,463
A58	251,816	135,663
A59	251,701	135,674
A60	251,436	137,248
A61	251,788	137,483
A62	251,533	137,513
A63	251,751	137,535
A64	251,771	138,524
A65	251,318	138,738
A66	251,330	139,509
A67	251,249	139,703
A68	251,429	140,044
A69	251,637	140,970
A70	251,554	141,547
A71	251,773	141,775
A72	250,998	142,188
A73	250,762	143,106
A74	251,167	143,186

Table A8.19 (Cont'd) Details of Receiver Locations

Receiver Location Reference	Grid Reference	
	E	N
B01	250,816	143,665
B02	251,207	143,754
B03	250,756	145,019
B04	251,929	145,971
B05	252,244	146,587
B06	251,827	147,207
B07	252,577	146,782
B08	252,588	147,661
B09	252,318	147,873
B10	252,846	148,351
B11	253,326	148,324
B12	253,559	148,525
B13	253,888	148,905
B14	254,002	149,652
B15	254,417	149,986
B16	255,029	149,863
B17	254,915	150,142
B18	255,715	149,971
B19	255,931	150,458
B20	256,181	150,654
B21	256,368	151,617
B22	257,052	151,901
B23	256,340	152,023
B24	257,035	152,664
B25	257,312	152,721
B26	257,401	153,095
B27	257,034	153,086
B28	257,985	153,156
B29	257,434	153,580
B30	258,144	153,825
B31	259,289	155,187
B32	259,826	154,710
B33	260,243	154,751
B34	260,590	155,428
B35	260,783	155,455
B36	261,154	155,818
B37	260,792	155,982
B38	261,413	156,070
B39	261,219	156,179
B40	261,605	156,099
B41	261,551	156,545
B42	257,317	154,283
B43	256,699	154,658
B44	256,133	154,651
B45	255,734	155,143
B46	255,417	154,976
B47	255,402	155,109
B48	255,182	155,347
B49	254,487	155,458
B50	254,246	155,651
B51	254,756	155,985
B52	253,441	156,211
B53	253,544	156,668

Table A8.19 (Cont'd) Details of Receiver Locations

Receiver Location Reference	Grid Reference	
	E	N
B54	252,830	156,742
B55	252,678	156,535
B56	252,388	156,650
C01	262,261	156,339
C02	261,952	156,925
C03	262,445	156,594
C04	262,525	157,237
C05 (Derelict House)	263,376	157,391
C06	263,668	157,939
C07	263,947	157,951
C08	263,968	157,965
C09	264,166	158,038
C10	264,011	158,205
C11	263,922	158,267
C12	264,774	158,410
C13	264,555	158,954
C14	264,919	158,786
C15	265,440	159,155
C16	265,402	159,435
C17	265,372	159,515
C18	265,206	159,579
C19	265,164	159,765
C20	266,216	160,419
C21	265,796	160,603
C22	266,151	160,526
C23	265,842	160,652
C24	265,823	161,010
C25	266,282	160,998
C26	266,233	161,261
C27	266,198	161,634
C28	266,832	161,818
C29	266,357	162,051
C30	266,817	162,512
C31	266,056	162,586
C32	266,501	162,828
C33	266,579	163,072
C34	266,959	163,103
C35	266,971	163,388
C36	266,720	163,471
C37	267,193	163,494
C38	267,139	163,680
C39	267,504	165,257
C40	267,849	165,359
C41	267,454	165,429
C42	268,011	166,612
C43	267,610	166,724
C44	267,907	166,728
C45	267,962	167,314
C46	268,153	167,844
C47	268,842	167,956
C48	269,177	168,451
C49	269,178	168,501
C50	269,378	168,281

Table A8.19 (Cont'd) Details of Receiver Locations

Receiver Location Reference	Grid Reference	
	E	N
C51	269,501	168,472
C52	269,427	168,711
C53	269,711	168,843
C54	270,606	169,358

Table A8.20 Summary of Traffic Speeds as used in the Noise Model

Road Classification	Traffic Speed (km/h)
Roads not subject to a speed limit of less than 60 mph	
Special Roads (rural) excluding slip roads	108
Special Roads (urban) excluding slip roads	97
All purpose dual carriage ways excluding slip roads	97
Single carriageways more than 9 metres wide	88
Single carriageways 9 metres wide or less (Slip roads are to be estimated individually)	81
Roads subject to a speed limit of 50 mph	
Dual carriageways	80
Single carriageways	70
Roads subject to speed limit of less than 50 mph but more than 30 mph	
Dual carriageways	60
Single carriageways	50
Roads subject to a speed limit of 30 mph or less	
All carriageways	50

Default Modelling Speeds from CRTN Paragraph 14.2