

M25 junction 10/A3 Wisley interchange TR010030 6.5 Environmental Statement: Appendix 6.2 Baseline noise monitoring

Regulation 5(2)(a)
Planning Act 2008
Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009





Infrastructure Planning

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (as amended)

M25 junction 10/A3 Wisley interchange

The M25 junction 10/A3 Wisley interchange Development Consent Order 202[x]

6.5 ENVIRONMENTAL STATEMENT: APPENDIX 6.2 BASELINE NOISE MONITORING

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Appendix 6.2 Baseline Noise Monitoring



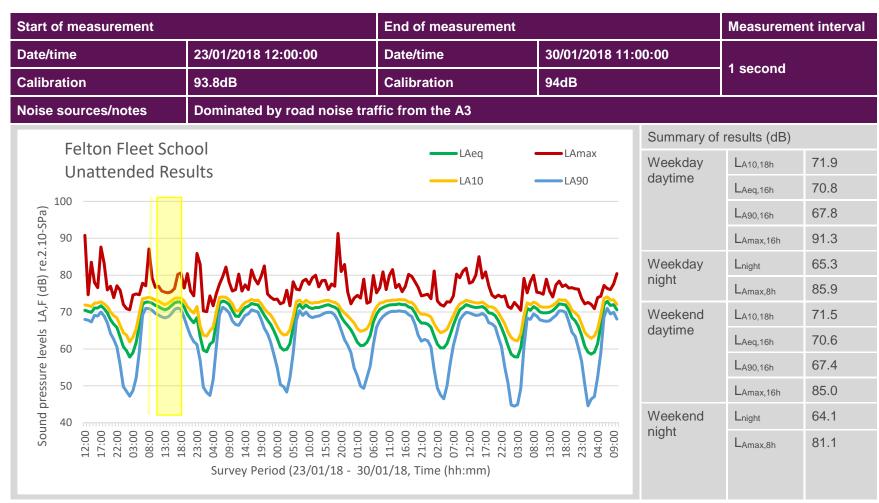
6.1 Introduction

- 6.1.1 This document presents detailed results from the baseline noise monitoring undertaken for the Scheme. The baseline noise monitoring consisted of long-term unattended measurements at three locations and short-term attended measurements at ten locations. A map showing the locations of the baseline noise monitoring positions is provided in Figure 6.3 in Volume 3 of the ES.
- 6.1.2 The measured noise levels at the long-term unattended noise monitoring sites are provided in section 6.2 below, showing how the noise levels fluctuated throughout the monitoring period. A summary of the measured noise levels is provided for each site, indicating how the noise levels changed between daytime and night-time periods, and weekdays and weekends.
- 6.1.3 A weather station was installed alongside the long-term unattended noise monitoring equipment to document the weather conditions throughout the measurement period. Time periods where unfavourable weather occurred (precipitation and wind speeds exceeding 5 m/s) have been excluded from the assessment. The time periods corresponding to adverse weather conditions are highlighted in yellow on the graphs shown for each monitoring site.
- 6.1.4 The measured noise levels at the short-term attended monitoring sites are provided in section 6.3. The results are supplemented with a commentary on the noise sources that were audible at each site and the weather conditions during the measurements.
- 6.1.5 For details regarding the survey methodology, please refer to Chapter 6 (Noise and Vibration) of the ES Volume 1. The calibration certificates for the instrumentation used to undertake the noise monitoring are provided in Appendix 6.1.



6.2 Long-term unattended noise monitoring

Table 6.2.1: Site L1: Felton Fleet School





Start of measurement		End of measurement	End of measurement				
Date/time	23/01/2018 12:00:00	Date/time	30/01/2018 11:00:00	- 1 second			
Calibration	93.8dB	Calibration	Calibration 94dB				
Noise sources/notes	Dominated by road noise traffic from the A3						





Table 6.2.2: Site L2: No.1 Fellside Cottage

Start of measurement		End of measurement			Measureme	nt interval
Date/time	23/01/2018 14:00:00	Date/time	30/01/2018 12:0	00:00	1 second	
Calibration	94.3dB	Calibration	94dB			
Noise sources/notes	Dominated by road noise tra	affic from the A3				
Follsido Cottago				Summary of re	esults (dB)	
_	Fellside Cottage — LAeq — LAmax Unattended Results — LA10 — LA20					60.9
		LA10	——LA90	daytime	L _{Aeq,16h}	60.8
90 ————————————————————————————————————					L _{A90,16h}	58.4
80	<u> </u>	A A A A A B B B B B B B B B B	۸. ۸		L _{Amax,16h}	86.1
	Λ Λλ	/\n/\	M P	Weekday	Lnight	54.9
(g) (W) (g)	. / VV / / WM /	/	The last	night	L _{Amax,8h}	75.1
Š 60 A				Weekend	L _{A10,18h}	60.9
evels	M M			daytime	L _{Aeq,16h}	60.6
<u>ə</u> 50	M M	V	Y		LA90,16h	58.4
OP 00 00 00 00 00 00 00 00 00 00 00 00 00	V U				L _{Amax,16h}	81.2
Sound pressure levels LA,F (dB) re.2.10.SPa) 09 02 08 08 14:00 00:00 00:00 05:00 15:00 15:00 15:00 05:00 15:	01:00 06:00 11:00 16:00 21:00 02:00 07:00 12:00 17:00 22:00	08:00 13:00 18:00 23:00 04:00 09:00 14:00 19:00 00:00	10:00 15:00 20:00 01:00 06:00	Weekend	Lnight	54.8
S	Survey Period (23/01/18 - 31	/01/18, Time (hh:mm)		night	L _{Amax,8h}	78.8



Start of measurement		End of measurement	End of measurement				
Date/time	23/01/2018 14:00:00	Date/time	30/01/2018 12:00:00	1 000000			
Calibration	94.3dB	Calibration	94dB	─ 1 second			
Noise sources/notes	Dominated by road noise to	raffic from the A3					





Table 6.2.3: Site L3: Close Court Farm

Start of measurement		End of measurement	Measurement interval						
Date/time	20/03/2018 12:00:00	Date/time	27/03/2018 12:00:00	- 1 second					
Calibration	94.2dB	93.8dB	i second						

Dominated by nearby road traffic from the A3/M25. Birdsong could also be heard during collection. Noise sources/notes Summary of results (dB) Close Court Farm -LAmax LAea 65.4 Weekday LA10.18h **Unattended Results** daytime LA10 LA90 64.6 L_{Aeq,16h} 110 Sound pressure levels, LA,F (dB) re.2.10.SPa) L_{A90,16h} 62.4 100 95.6 L_{Amax,16h} 90 Weekday 57.2 Lnight night L_{Amax.8h} 84.0 80 Weekend 64.8 LA10,18h daytime 64.1 L_{Aeq,16h} 60 61.8 LA90.16h 50 84.3 L_{Amax,16h}

16:00 21:00 03:00 08:00 13:00

11:00

Survey Period (20/03/18 - 27/03/18, Time (hh:mm)

23:00 04:00 09:00

14:00 19:00 00:00 05:00 10:00

12:00 17:00 03:00 03:00 08:00 08:00 13:00 04:00 09:00 09:00 09:00 00:00 00:00 00:00 00:00 00:00 00:00 00:00 00:00

57.4

71.1

Weekend

night

Lnight

L_{Amax.8h}



Start of measurement		End of measurement	End of measurement					
Date/time	20/03/2018 12:00:00	Date/time	Date/time 27/03/2018 12:00:00					
Calibration	94.2dB	Calibration	93.8dB	1 second				
Noise sources/notes	a sources/notes Dominated by nearby road traffic from the A3/M25. Birdsong could also be heard do							





6.3 Short-term attended noise monitoring

Table 6.3.1: Site S1: Ockham Common

		Weather			Noise le						
Date	Time	Duration	Wind speed (m/s)	Wind direction	Temperature (°C)	L _{Aeq}	L _{A10}	L _{A90}	L _{A01}	L _{Amax}	Comments
11/01/2018	14:03	15 min	0.3	South East	10	69.6	71.1	67.2	73.7	69.6	Distant road traffic noise
11/01/2018	15:09	15 min	0.3	South East	10	70.1	71.6	67.9	75.2	70.1	Distant road traffic noise
11/01/2018	16:02	15 min	0.3	South East	10	71.2	73.3	69.8	74.7	71.2	Distant road traffic noise, faint birdsong





Table 6.3.2: Site S2: Near Old Lane, Ockham

			Weather			Noise levels					
Date	Time	Duration	Wind speed (m/s)	Wind direction	Temperature (°C)	L _{Aeq}	L _{A10}	L _{A90}	L _{A01}	L _{Amax}	Comments
11/01/2018	13:18	15 min	0.3	South east	10	55.1	56.0	54.6	69.2	55.1	Distant road traffic noise
11/01/2018	14:28	15 min	0.3	South east	10	62.2	57.1	54.8	96.6*	62.2	* The L _{Amax} value shown was caused by a dog barking and is not considered representative of the noise climate.
11/01/2018	15:38	15 min	0.3	South east	10	57.6	58.3	55.9	78.0	57.6	Distant road traffic noise, bird squawking





Table 6.3.3: Site S3: Ockham Lane, Cobham

				Weather			levels				
Date	Time	Duration	Wind speed (m/s)	Wind direction	Temperature (°C)	L _{Aeq}	L _{A10}	L _{A90}	L _{A01}	L _{Amax}	Comments
20/03/2018	13:30	15 min	4	North	8	56.8	58.4	52.3	67.1	71.1	Car engine idling
20/03/2018	14:24	15 min	4	North	8	56.8	59.2	52.8	65	73.6	Distance road traffic M25, aircraft flyover, birdsong, distance noise like saw/grass cutter
20/03/2018	15:31	15 min	4	North	8	57.7	59.7	52.6	68.2	74.2	Rustling of wind





Table 6.3.4: Site S4: Pointers Road, Cobham

			Weather			Noise levels					
Date	Time	Duration	Wind speed (m/s)	Wind direction	Temperature (°C)	L _{Aeq}	L _{A10}	L _{A90}	L _{A01}	L _{Amax}	Comments
20/03/2018	13:58	15 min	4	North	8	62.2	63.4	60.5	64.7	82.1	
20/03/2018	14:50	15 min	4	North	8	63.7	64.4	61.7	68.2	82.9	Aircraft flyover, car engine idling, gate opening and closing
20/03/2018	16:00	15 min	4	North	8	63.8	64.7	62.7	65.7	71.4	







Table 6.3.5: Site S5: Wisley Common

Start calibration		113.8dB			End calibration					113.8dB	
		Time Duration	Weather			Noise	levels	(dB)			
Date	Time		Wind speed (m/s)	Wind direction	Temperature (°C)	L _{Aeq}	L _{A10}	L _{A90}	L _{A01}	L _{Amax}	Comments
23/04/2018	12:10	15 min	1	East	13	58.9	62.1	46.2	72.7	73.6	Local and distant road traffic noise, aircraft flyover, beeper, dog bark
23/04/2018	13:05	15 min	1	East	13	59.5	63.3	47.3	76.5	77.3	Local and distant road traffic noise, birdsong
23/04/2018	13:59	15 min	1	East	13	60.3	64.8	47.5	72.9	73.4	Local and distant road traffic noise, birdsong, siren, mechanical plant, car start/idling









Table 6.3.6: Site S6: Ockham Road North, Ockham

Start calibration		113.8dB			End calibration					113.8dB	
			Weather			Noise	levels ((dB)			
Date	Time	Duration	Wind speed (m/s)	Wind direction	Temperature (°C)	L _{Aeq}	L _{A10}	L _{A90}	L _{A01}	L _{Amax}	Comments
23/04/2018	11:30	15 min	2	East	12	65.8	69.5	50.7	80.0	92.5	Local road traffic noise (Ockham Road North) and distant road traffic noise from the A3, birdsong
23/04/2018	12:41	15 min	2	East	12	65.0	69.3	49.8	77.6	79.4	Local road traffic noise (Ockham Road North) and distant road traffic noise from the A3, birdsong
23/04/2018	13:36	15 min	2	East	12	68.1	72.9	50.0	84.5	88.1	Local road traffic noise (Ockham Road North) and distant road traffic noise from the A3, birdsong, circular saw on metal/DIY









Table 6.3.7: Site S7: Gothic Temple, Painshill Park

Start calibration			93.7dB			End calibration					93.8dB
			Weather			Noise	levels ((dB)			
Date	Time	Duration	Wind speed (m/s)	Wind direction	Temperature (°C)	L _{Aeq}	L _{A10}	L _{A90}	L _{A01}	L _{Amax}	Comments
28/06/2018	15:08	15 min	0.9	North	26	50.0	51.2	47.4	57.6	62.7	Distant road traffic noise, birdsong, people, pushchair along path, aircraft flyover
28/06/2018	15:49	15 min	0.9	North	30	49.7	50.9	48.2	54.5	60.8	Distant road traffic noise, birdsong, people
28/06/2018	16:29	15 min	0.9	North	30	51.3	53.0	48.0	58.7	64.7	Distant road traffic noise, birdsong, people











Table 6.3.8: Site S8: Near Great Cedar, Painshill Park

Start calibration		93.7dB			End calibration					93.8dB	
			Weather			Noise	levels (dB)			
Date	Time Dura	Duration	Wind speed (m/s)	Wind direction	Temperature (°C)	L _{Aeq}	L _{A10}	L _{A90}	L _{A01}	L _{Amax}	Comments
28/06/2018	14:45	15 min	0.9	North	26	52.0	53.7	49.4	59.1	66.2	Distant road traffic noise, birdsong, wind, distant aircraft flyover
28/06/2018	15:29	15 min	0.9	North	26	52.6	54.5	50.0	59.3	63.4	Distant road traffic noise, birdsong
28/06/2018	16:09	15 min	0.9	North	30	51.5	52.9	49.4	57.2	62.2	Distant road traffic noise, birdsong











Table 6.3.9: Site S9: Temple of Bacchus, Painshill Park

Start calibra	Start calibration		93.7dB			End calibration					93.7dB
			Weather			Noise I	evels (d	dB)			
Date	Time	Duration	Wind speed (m/s)	Wind direction	Temperature (°C)	L _{Aeq}	L _{A10}	L _{A90}	L _{A01}	L _{Amax}	Comments
28/06/2018	11:17	15 min	0.8	North	25	56.4	57.9	54.9	59.4	65.3	Distant road traffic noise, birdsong, construction work at back of monument – a couple of noises at the start of the measurement
28/06/2018	12:09	15 min	0.8	North	25	56.5	57.9	54.6	59.8	65.3	Distant road traffic noise, birdsong, leaves rustling, aircraft flyover
28/06/2018	12:56	15 min	0.8	North	25	56.9	58.7	55.1	60.9	64.4	Distant road traffic noise, birdsong, a person walking on pebbles towards the temple, buggy vehicle, engine and reversing alarm











Table 6.3.10: Site S10: Gothic Tower, Painshill Park

Start calibration		93.7dB			End calibration					93.7dB	
	Time	Duration	Weather			Noise	levels ((dB)			
Date			Wind speed (m/s)	Wind direction	Temperature (°C)	L _{Aeq}	L _{A10}	L _{A90}	L _{A01}	L _{Amax}	Comments
28/06/2018	11:46	15 min	0.8	North	25	62.2	63.5	60.5	64.5	66.8	Road traffic noise from the A3, aircraft flyover, insects, leaves rustling
28/06/2018	12:33	15 min	0.8	North	25	62.5	63.8	61.0	64.8	74.2	Road traffic noise from the A3, aircraft flyover, leaves rustling
28/06/2018	13:20	15 min	0.8	North	25	62.3	63.8	60.6	64.9	67.7	Road traffic noise from the A3, insects, leaves rustling







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