

Preliminary Environmental Information Report

Appendix 14.1

Baseline Noise Survey Report 2023

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Baseline Noise Survey Report 2023

1 Introduction

1.1 Noise surveys

- 1.1.1 Baseline noise surveys have been completed along the River Thames between Wraysbury and Teddington to inform the Environmental Impact Assessment (EIA) for the River Thames Scheme (RTS).
- 1.1.2 The scope and methodology for the surveys and assessment is presented in Section 14.2 of the RTS EIA Scoping Report (GB, October 2022) ('the EIA Scoping Report').
- 1.1.3 The baseline noise surveys are to determine the existing sound environment to inform the noise assessment for the EIA. This includes assessment of:
 - potential temporary effects of noise and vibration from construction activity on nearby noise sensitive residential and non-residential receptors;
 - potential temporary effects of changes to road traffic noise in the local area as a result of construction of the project on nearby noise sensitive residential and non-residential receptors; and
 - potential adverse effects of noise during maintenance activities and use of the site during operation on noise sensitive residential and non-residential receptors.
- 1.1.4 The baseline noise surveys involved short-term attended measurements at the majority of locations. Longer term unattended measurements were carried out at three locations.
- 1.1.5 The baseline noise survey exercise commenced in 2019 but was paused in early 2020 due to the Covid 19 pandemic. The pandemic caused atypical noise levels as a result of national lockdown measures and reduced activity from March 2020 onwards. 24 attended measurements and three unattended measurements had been completed prior to the pause.
- 1.1.6 The baseline noise surveys recommenced in 2023 and a further 33 attended surveys were carried out between April and May 2023. This report presents the results of all the measurements.

1.1.7 This survey report does not include surveys related to the assessment of the adverse disturbance to designated site interest features (e.g. birds) and other terrestrial and aquatic protected species from noise and vibration. For further information relating to that assessment see Chapter 8: Biodiversity of the Preliminary Environmental Information Report (PEIR). Noise effects upon heritage receptors is considered in Chapter 9: Cultural Heritage, Archaeology and Built Heritage of the PEIR in respect of increase traffic movements,

1.2 Noise Sensitive Receptors

- 1.2.1 For the purpose of the PEIR, a study area for the assessment of direct noise or vibration effects includes residential and non-residential receptors within 300m of construction or operational activities associated with the project. Beyond this distance effects are unlikely to be significant. Explanation of the noise and vibration study area can be found in Section 14.2.3 of the EIA Scoping Report.
- 1.2.2 The surveys were undertaken in six boroughs at locations chosen to represent the noise climate at identified residential and non-residential noise sensitive receptors.
- 1.2.3 A list of receptors identified for the noise and vibration assessment for the full extent of the project is presented in the PEIR, Volume 3, Figure 14.1.

1.3 Noise Sources

- 1.3.1 The noise climate along the project is characterised by road noise from the surrounding roads, railways and air traffic (primarily associated with Heathrow Airport) when present.
- 1.3.2 This includes the M25 between Staines by-pass and Thorpe, the M3 in Runnymede and Spelthorne, the A308 Thames Street between Hampton and Molesey, the A310 Kingston Road in Teddington, and A320 Chertsey Lane/Staines Road between Staines and Chertsey, as well as other local roads.
- 1.3.3 Railway noise is prevalent near to the Staines to Windsor line, Waterloo to Reading line, and the South West Main Line.
- 1.3.4 Other sources of noise include river traffic, open channel weirs, passing pedestrians, school and recreation-related noise.

2 Standards and Guidance

2.1 British Standard 7445 'Description and Measurement of Environmental Noise'

Part 1: Guide to quantities and procedures

- 2.1.1 This part of British Standard 7445 Part 1 (BS 7455-1:2003)¹ defines the basic quantities to be used for the description of noise in community environments and describes basic procedures for the determination of these quantities.
- 2.1.2 The methods and procedures described in this British Standard are intended to be applicable to sounds from all sources, individually and in combination, which contribute to the total noise at a site.

Part 2: Guide to the acquisition of data pertinent to land use

- 2.1.3 This part of BS 7445² describes methods for the acquisition of data which provide descriptors that enable:
 - a) a description of the environmental noise in a specified area of land to be made in a uniform way; and
 - b) the compatibility of any land use activity or projected activity to be assessed with respect to existing or predicted noise.
- 2.1.4 Using the data as a basis, authorities may establish a system for selecting the appropriate land use, as far as levels of noise are concerned, for a specified area, or the sources of noise, existing or planned, which are acceptable with respect to land use, existing or planned.

3 Baseline Monitoring Method

- 3.1 Outline
- 3.1.1 Noise and vibration impacts from RTS have the potential to lead to effects on local receptors including residential receptors (dwellings) and nonresidential receptors such as schools, hospitals, hotels and offices etc.

¹ British Standards Institute (BSI), (2003): 'BS 7445 – Description and Measurement of Environmental Noise. Part 1: Guide to Quantities and Procedures'. BSI, London.

² British Standards Institute (BSI), (1991): 'BS 7445 – Description and Measurement of Environmental Noise. Part 2: Guide to the acquisition of data pertinent to land use'. BSI, London.

Figure 14.1, Volume 3 in the PEIR shows the locations of currently identified noise sensitive receptors within the noise and vibration study area.

- 3.1.2 To assess the potential noise and vibration effects of the project during both construction and operation, baseline noise surveys were undertaken to determine the conditions around the RTS. The baseline methodology for the surveys is presented in Section 14.2 of the RTS Scoping Report.
- 3.1.3 The baseline data contains relevant information on the conditions at receptors in the vicinity of project and descriptions of the noise environment at sensitive receptors.
- 3.1.4 The surveys allow the noise environment to be classified within a set of assessment categories in accordance with the ABC method from BS5228: Part 1 (2009+A1:2014)³ shown in Table 1. This is applied to residential receptors and represents the baseline noise climate in the measurement locations.

Assessment category and	Threshold Value, in decibels (dB) (L _{Aeq,T})						
threshold value period	Category A ^{A)}	Category B ^{B)}	Category C ^{C)}				
Night time (23:00 – 07:00)	45	50	55				
Evening and Weekends D)	55	60	65				
Daytime (07:00 – 19:00) and Saturdays (07:00 – 13:00)	65	70	75				

Table 1 - ABC criteria from BS5228: Part 1 (2009+A1:2014)

NOTE 1 A potential significant effect is indicated if the $L_{Aeq, T}$ noise level arising from the site exceeds the threshold level for the category appropriate to the ambient noise level.

NOTE 2 If the ambient noise level exceeds the Category C threshold values given in the table (i.e. the ambient noise level is higher than the above values), then a potential significant effect is indicated if the total *L*_{Aeq, T} noise level for the period increases by more than 3 dB due to site noise NOTE 3 Applied to residential receptors only.

NOTE 4 The acoustic character of the area will be considered along with the ambient noise level when assigning a category.

A) Category A: threshold values to use when ambient noise levels (when rounded to the nearest 5 dB) are less than these values.

B) Category B: threshold values to use when ambient noise levels (when rounded to the nearest 5 dB) are the same as category A values.

C) Category C: threshold values to use when ambient noise levels (when rounded to the nearest 5 dB) are higher than category A values.

D) 19.00–23.00 weekdays, 13.00–23.00 Saturdays and 07.00–23.00 Sundays.

³ British Standard 5228-1: 2009 + A1:2014 Code of practice for noise and vibration control on construction and open sites – Part 1: Noise

3.1.5 To assign an assessment category to each noise sensitive receptor, those within a similar noise environment (based on their proximity to local noise sources) were grouped. Each survey location represents a group of noise sensitive receptors. The majority of construction works will occur during daytime hours, so attended measurements were completed for receptors in the vicinity of these proposed works. All measurements were completed to comply with BS7445-2: 1991 'Description and measurement of Environmental Noise'. All measurements include a measurement of LAeq,T LAFmax, LA10 and LA90 (see Section 4 for definitions) and local meteorological conditions.

3.2 Attended Surveys

- 3.2.1 Attended measurements were carried out using a calibrated sound level meter located 1.5m above local ground at a location representative of the sound environment at the relevant receptor(s). Measurements covered 3 hours duration typically between 10am and 5pm usually using shorter (e.g. 15 minute) samples within each hour when considered suitably representative of the full one-hour period.
- 3.2.2 The sound level meter was installed and set to measure continuous octave band and A-weighted measurements of L_{Aeq,T}, L_{AFmax}, L_{A10} and L_{A90}. The local weather conditions were noted on a survey sheet. The local noise climate and any significant noise events were noted.

3.3 Unattended Surveys

- 3.3.1 Unattended measurements were carried out using a calibrated sound level meter located 1.5m above local ground at a location representative of the sound environment at the relevant receptor(s). Measurements covered up to seven days duration with 15-minute measurement periods.
- 3.3.2 The sound level meter was installed and set to measure continuous octave band and A-weighted measurements of LAeq,T, LAFmax, LA10 and LA90. The meter was also set up to record 1 minute of audio at the start of each hour. The local weather conditions were noted on a survey sheet when the meter was set up. The continuous weather data over the recording period was provided by the local weather stations.

3.4 Equipment

The equipment used is detailed in Table 2. Certificates of periodic verification of the equipment traceable to national and international standards within the last two years prior to the measurements for the noise meters are available on request.

Manufacturer	Monitor	Serial Number	Calibration Date
Rion	NL-52-1	510141	07/02/2022
Rion	NL-52-2	410086	28/01/2022
Rion	NA-28-2	680885	07/02/2022
Rion	NA-28-3	881067	28/01/2022
Rion	NA-28-4	1260205	21/12/2017 ⁴
Rion	NA-28-5	1170653	22/02/2022
Rion	NC-74 Calibrator	34773047	24/09/2022

Table 2 - Equipment List

3.5 Survey measurement locations

3.5.1 The survey measurement locations are shown on the receptor maps within the PEIR (Figure 14.1, Volume 3).

4 Baseline Monitoring Results

4.1 Definitions of Results

4.1.1 The measurements of the L_{Aeq,T}, L_{AFmax}, L_{A10} and L_{A90} were carried out at each measurement position.

LAeq,T

4.1.2 LAeq,T is the 'A' frequency weighted, equivalent continuous sound level. T denotes the time period over which the fluctuating sound levels were averaged. In these results, T is the 15-minute period of the measurement. For attended measurements, this is the arithmetic average of the three measured 15-minute periods and is assumed to be representative of the 12-hour daytime LAeq 07:00-19:00. For unattended measurements this is the calculated LAeq over the time period stated for each day of the

⁴ Sound level meter not used in 2023 surveys.

measurement, then the separate days are arithmetically averaged to give a typical result for that period.

LAFmax

4.1.3 L_{AFmax} is the maximum Sound Level with 'A' frequency weighting and Fast Time weighting during the measurement period. For attended measurements, this is the arithmetic average of the three measured 15minute periods and is assumed to be representative of the 12-hour daytime. For unattended measurements this is the average plus one standard deviation of the 15-minute results measured during the period.

L_{A10}

4.1.4 L_{A10} is the noise level exceeded for 10% of the measurement period with 'A' frequency weighting. For attended measurements, this is the arithmetic average of the three measured 15-minute periods and is assumed to be representative of the 12-hour daytime. No calculations were completed for the unattended measurements as the parameter is only used for analysis of the attended measurements.

La90

4.1.5 L_{A90} is the noise level exceeded for 90% of the measurement period with 'A' frequency weighting. For attended measurements, this is the arithmetic average of the three measured 15-minute periods and is assumed to be representative of the 12-hour daytime. For unattended measurements this is the average of the separate days' minimum measured during the relevant period.

ABC Category

4.1.6 This represents the category that the baseline noise climate falls into according to Table 1 using the measured daytime L_{Aeq,T}.

4.2 Attended Survey Results

4.2.1 The results from the 57 attended measurement positions are presented in the Table 3 below. The table shows the arithmetic average of each of the parameters measured. A detailed breakdown of the measurements at each survey location are included in Appendix A.

Table 3 Attended Survey Results									
Measurement Location ID	Local Planning Authority	Daytime L _{Aeq,⊤} dB	Daytime L _{Amax} dB	Daytime L _{A10} dB	Daytime L _{A90} dB	ABC category	Meter ID		
MW0004	Elmbridge	66	81	70	53	В	NL-52-1		
MW0005	Elmbridge	58	79	60	51	А	NA-28-3		
MW0006	Elmbridge	56	79	57	45	А	NA-28-5		
SW0001	Elmbridge	59	75	60	57	А	NL-52-2		
SW0004	Elmbridge	60	81	62	54	А	NA-28-2		
CS0302	Elmbridge	72	86	76	59	С	NA-28-3		
CS0307	Elmbridge	68	88	72	45	С	NL-52-1		
CS0311	Elmbridge	55	77	58	42	А	NL-52-1		
CS0314	Elmbridge	53	76	54	38	А	NL-52-2		
CS0315	Elmbridge	64	80	66	59	В	NL-52-1		
CS0316	Elmbridge	75	93	78	63	С	NL-52-2		
CS0320	Elmbridge	49	72	50	40	А	NA-28-5		
CS0321	Elmbridge	57	76	58	52	А	NA-28-5		
CS0501	Elmbridge	62	82	65	44	А	NA-28-2		
CS0502	Elmbridge	56	82	57	47	А	NA-28-5		
TW0005	Kingston	55	75	57	46	А	NA-28-2		
TW0001	Richmond	59	83	63	48	А	NA-28-5		
TW0002	Richmond	55	75	57	46	А	NA-28-5		
TW0003	Richmond	52	82	54	48	А	NA-28-5		
TW0004	Richmond	49	73	50	44	А	NA-28-2		
TW0006	Richmond	56	77	59	43	А	NA-28-2		
TW0007	Richmond	60	79	62	57	А	NA-28-2		
MW0001	Richmond	69	78	72	63	С	NA-28-5		
MW0002	Richmond	57	82	59	51	А	NA-28-2		

Table 3	Attended	Survey	Results

Measurement Location ID	Local Planning Authority	Daytime L _{Aeq,T} dB	Daytime L _{Amax} dB	Daytime L _{A10} dB	Daytime L _{A90} dB	ABC category	Meter ID
MW0003	Richmond	57	80	59	47	А	NA-28-5
MW0007	Richmond	71	85	74	65	С	NA-28-5
CS0201	Runnymede	58	78	60	52	А	NA-28-3
CS0203	Spelthorne	58	69	60	54	А	NA-28-3
CS0301	Spelthorne	58	80	61	44	А	NL-52-2
CS0304	Spelthorne	57	79	58	39	А	NL-52-1
CS0305	Spelthorne	58	74	61	52	А	NL-52-1
CS0306	Spelthorne	60	85	62	42	А	NL-52-2
CS0308	Spelthorne	54	75	56	43	А	NL-52-2
CS0312	Spelthorne	69	82	71	65	С	NL-52-1
CS0313	Spelthorne	54	71	55	49	А	NL-52-1
SW0002	Spelthorne	65	81	69	56	В	NL-52-1
SW0003	Spelthorne	56	79	57	41	А	NL-52-2
CS0204	Runnymede	55	75	55	51	А	NA-28-4
CS0205	Runnymede	56	76	56	49	А	NA-28-5
CS0206	Runnymede	64	81	68	53	В	NA-28-4
CS0207	Runnymede	75	85	79	66	С	NL-52-2
CS0208	Runnymede	60	79	61	56	А	NA-28-5
CS0211	Runnymede	56	70	59	52	А	NL-52-2
CS0212	Runnymede	53	78	54	44	А	NA-28-3
CS0213	Runnymede	52	74	55	42	А	NA-28-5
CS0214	Runnymede	53	76	54	40	А	NA-28-5
CS0215	Runnymede	52	75	52	42	А	NA-28-3
CS0216	Runnymede	53	77	52	37	А	NA-28-2

Measurement Location ID	Local Planning Authority	Daytime L _{Aeq,⊤} dB	Daytime L _{Amax} dB	Daytime L _{A10} dB	Daytime L _{A90} dB	ABC category	Meter ID
CS0401	Runnymede	55	70	57	52	А	NA-28-3
CS0402	Runnymede	54	74	55	50	А	NA-28-2
CS0122	Spelthorne	61	80	63	56	А	NA-28-5
CS0317	Spelthorne	71	87	76	54	С	NA-28-2
CS0318	Spelthorne	70	85	74	53	С	NA-28-3
CS0319	Spelthorne	54	76	54	43	А	NA-28-3
CS0322	Spelthorne	73	87	77	54	С	NA-28-2
CS0111	Windsor and Maidenhead	63	80	67	41	В	NA-28-5
CS0123	Windsor and Maidenhead	57	69	58	56	А	NA-28-3

4.3 Unattended Survey Results

 4.3.1 The three unattended measurement locations, CS0202, CS0210 and CS0303 are presented in Table 4 below. Each table shows the L_{Aeq,T}, Typical L_{Amax}, and the Typical Lowest L_{A90} for the day, evening, and night time periods. A detailed breakdown of the measurements at each survey location are in Appendix A.

Table 4 Summary of Unattended Survey Results

Measurement Location ID	Local Planning Authority	L _{Aeq,T} , dB			Турі	ical L _{Amax} , dB		Typical Lowest L _{A90} , dB			Meter ID
		Day 0700 - 1900	Eve 1900 - 2300	Night 2300 - 0700	Day 0700 - 1900	Eve 1900 - 2300	Night 2300 - 0700	Day 0700 - 1900	Eve 1900 - 2300	Night 2300 - 0700	
CS0202	Runnymede	57	57	49	63	64	51	50	45	40	NL-52-2
CS0210	Runnymede	61	61	55	66	66	59	55	52	40	NA-28-3

Measurement Location ID	Local Planning Authority	L _{Aeq,T} , dB			Турі	Гурісаl L _{Amax} , dB		Typical Lowest L _{A90} , dB			Meter ID
		Day 0700 - 1900	Eve 1900 - 2300	Night 2300 - 0700	Day 0700 - 1900	Eve 1900 - 2300	Night 2300 - 0700	Day 0700 - 1900	Eve 1900 - 2300	Night 2300 - 0700	
CS0303	Spelthorne	44	40	48	66	64	45	35	39	34	NA-28-3

Appendix A Measurements per Survey Location

Measurement Location: Royal Borough of Richmond upon Thames Coordinates: 516518, 171447										
Date of measurem	Date of measurement:13/04/2023Number of measurements:3									
	Weasured Noise Levels									
Measured Noise Levels										
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}					
13/04/2023	10:45	59	62	49	84					
13/04/2023	11:15	61	64	49	84					
13/04/2023	12:00	59	63	48	81					
		Overall calculat	ted noise levels							
Infe	ormation		Sc	ound Level dB(A)					
L _{Aeq} Arith	metic Aver	age		59						
L _{A10} Arith	metic Aver	age		63						
	metic Aver	•		48						
	nmetic Ave	U C		83						
Subjective description of sound climate at monitoring location Dominated by road traffic when present. Other perceptibly audible items include bird song, pedestrians, steady flow of single lane traffic heading south along Manor Road, distant construction sound audible, talking audible from houses opposite measurement location. Helicopter passed overhead (11:18). Weather Conditions Mild, sunny, intermittent gusts.										

Measurement Loc		Borough of	Measurement Location ID: TW0002						
Richmond upon T Coordinates: 517									
Date of measure	nent: 17/04/	/2023	Number of me	easurements: 3	3				
	Measured Noise Levels								
		Measured I	Noise Levels						
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}				
17/04/2023	10:26	54	56	46	74				
17/04/2023	11:26	54	57	46	74				
17/04/2023	12:26	56	58	46	78				
	C	Overall calcula	ited noise levels						
	Information			Sound Level dB(A)					
In	formation		So	ound Level dB(/	۹)				
	formation hmetic Avera	ge	So	bund Level dB(<i>i</i> 55	4)				
L _{Aeq} Arit		-	So		A)				
L _{Aeq} Arit L _{A10} Arit L _{A90} Arit	hmetic Avera hmetic Avera hmetic Avera	ge ge	Sc	55 57 46	A)				
L _{Aeq} Arit L _{A10} Arit L _{A90} Arit	hmetic Avera hmetic Avera hmetic Avera thmetic Avera	ge ge age		55 57 46 75	A)				

people playing football about 100m away. Weather Conditions

Mild, light breeze.

Measurement Location: Royal Borough of Measurement Location ID: TW0003										
Richmond upon Th										
Coordinates: 5167	Coordinates: 516742, 171604									
Date of measurem	nent: 13/04	4/2023	Number of measurements: 3							
Measured Noise Levels										
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}					
13/04/2023	12:37	52	53	49	84					
13/04/2023	13:40	53	54	48	86					
13/04/2023	14:40	52	54	47	76					
		Overall calculat	ted noise levels							
Inf	ormation		Sound Level dB(A)							
L _{Aeq} Arith	metic Aver	age		52						
L _{A10} Arith	metic Aver	age		54						
L _{A90} Arith	metic Aver	age		48						
L _{Amax} Arith	nmetic Ave	rage	82							
LAmax Arithmetic Average82Subjective description of sound climate at monitoring locationDominated by leaves rustling, as large area of foliage behind measurement position and screeching noise emitted by the nearby gate locking system. Aeroplane passing overhead north westerly direction (12:55). School playground faintly audible to the north of the site. Low frequency distant construction sound audible. Thunder strike (13:27). Fairly busy walkway for pedestrians.Weather Conditions										
		nunderstorm. Li								

Coordinates: 516	958, 171657				
Date of measurer	nent: 13/04/	2023	Number of me	easurements: 3	i
		Measured N	loise Levels		
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}
13/04/2023	12:35	50	51	46	75
13/04/2023	13:40	50	49	44	77
13/04/2023	14:40	46	48	43	65
	C	overall calcula	ted noise levels		
In	formation		S	ound Level dB(A	\)
L _{Aeq} Arit	hmetic Avera	ge	49		
L _{A10} Arithmetic Average 50					
	L _{A90} Arithmetic Average 44				
L _{A90} Arit				73	
L _{A90} Arit	thmetic Avera		opitori n a le estis		

Overcast, fairly cool. Light drizzle for around 1 min (14:05).

Measurement Loc Thames	ation: Kings	ston upon	Measurement	Location ID: TW	/0005
Coordinates: 517	911, 170652	2			
Date of measure	ment: 17/04	1/2023	Number of me	easurements: 3	
			Noise Levels		
Date	Time	L _{Aeq}	L _{A10}	L_{A90}	L _{Amax}
17/04/2023	10:50	55	59	41	77
17/04/2023	11:50	55	58	41	76
17/04/2023	12:52	56	59	40	75
		Overall calcula	ted noise levels		
In	formation		Sound Level dB(A)		
L _{Aeq} Arit	hmetic Avera	age		55	
L _{A10} Arit	hmetic Avera	age		59	
L _{A90} Arithmetic Average		age		41	
L _{Amax} Arithmetic Average			76		
		ugo			
			onitoring locatio		

Weather Conditions Fairly mild, sunny, mostly clear skies.

Measurement Loca Richmond upon Th	ames		Measurement	Location ID: TW	/0006
Coordinates: 516	973, 171826				
Date of measuren	nent: 13/04	2023	Number of me	easurements: 3	5
		Measured N	Noise Levels		
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}
13/04/2023	10:46	57	58	43	91*
13/04/2023	11:01	56	60	44	68
13/04/2023	12:00	55	60	43	71
	(Overall calcula	ted noise levels		
Inf	ormation		Sound Level dB(A)		
L _{Aeq} Arith	metic Avera	ge		56	
· · · ·	metic Avera	-	59		
L _{A90} Arith	metic Avera	ge		43	
L _{Amax} Arit	hmetic Avera	age		70	
Subjective descrip	tion of soun	d climate at m	onitoring locatio	n	
Birdsong constant		gly dominant, o	occasional cyclis	st. River and dis	tant power
tool faintly audible. Weather Condition					
Fairly cool, gentle l	oreeze.	sentative due to			

*excluded from average as unrepresentative due to gust of wind

Richmond upon Tl	ation: Royal hames	Borough of	Measurement	Location ID: MV	V0001
Coordinates: 515	282, 168796				
Date of measurer	ment: 19/04/	2023	Number of me	easurements: 3	6
			Second Law .	and the second second	
		Measured N	Noise Levels		
Date	Time	Measured N L _{Aeq}	Noise Levels	L _{A90}	L _{Amax}
Date 19/04/2023	Time 10:30			L _{A90} 65	L _{Amax} 78
		L _{Aeq}	L _{A10}		
19/04/2023	10:30	L _{Aeq} 70	L _{A10} 73	65	78
19/04/2023 19/04/2023	10:30 11:08 12:02	L _{Aeq} 70 70 68	L _{A10} 73 72	65 64	78 80
19/04/2023 19/04/2023 19/04/2023	10:30 11:08 12:02	L _{Aeq} 70 70 68	L _{A10} 73 72 71 ted noise levels	65 64	78 80 77
19/04/2023 19/04/2023 19/04/2023 In	10:30 11:08 12:02	L _{Aeq} 70 70 68 Overall calcula	L _{A10} 73 72 71 ted noise levels	65 64 60	78 80 77
19/04/2023 19/04/2023 19/04/2023 In L _{Aeq} Arit	10:30 11:08 12:02 formation	L _{Aeq} 70 70 68 Overall calcula	L _{A10} 73 72 71 ted noise levels	65 64 60 Dund Level dB(A	78 80 77
19/04/2023 19/04/2023 19/04/2023 In L _{Aeq} Arith L _{A10} Arith	10:30 11:08 12:02 formation hmetic Avera	L _{Aeq} 70 70 68 Overall calcula ge	L _{A10} 73 72 71 ted noise levels	65 64 60 Dund Level dB(A 69	78 80 77
19/04/2023 19/04/2023 19/04/2023 In L _{Aeq} Aritt L _{A10} Aritt L _{A90} Aritt	10:30 11:08 12:02 formation hmetic Avera hmetic Avera	L _{Aeq} 70 70 68 Overall calcula ge ge ge	L _{A10} 73 72 71 ted noise levels	65 64 60 Dund Level dB(A 69 72	78 80 77
19/04/2023 19/04/2023 19/04/2023 In L _{Aeq} Aritl L _{A10} Aritl L _{A90} Aritl L _{Amax} Arit	10:30 11:08 12:02 formation hmetic Avera hmetic Avera hmetic Avera hmetic Avera	L _{Aeq} 70 70 68 Overall calculat ge ge ge del climate at me	L _{A10} 73 72 71 ted noise levels So	65 64 60 bund Level dB(A 69 72 63 79 n	78 80 77
19/04/2023 19/04/2023 19/04/2023 In L _{Aeq} Aritl L _{A10} Aritl L _{A90} Aritl L _{Amax} Arit	10:30 11:08 12:02 formation hmetic Avera hmetic Avera hmetic Avera hmetic Avera hmetic Avera thmetic Avera	L _{Aeq} 70 70 68 Overall calculat ge ge ge d climate at me traffic noise of	L _{A10} 73 72 71 ted noise levels So onitoring locatio n Hampton Cou	65 64 60 bund Level dB(A 69 72 63 79 n	78 80 77

Measurement Loca Richmond upon Th Coordinates: 5154	ames		Measurement	Location ID: MV	V0002
Date of measuren	n ent: 19/04	4/2023	Number of me	easurements: 3	6
		Measured N	loise Levels		
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}
19/04/2023	10:38	60*	62*	53*	87*
19/04/2023	11:40	56	59	51	82
19/04/2023	12:42	55	56	50	77
		Overall calculat	ted noise levels		
Inf	ormation		S	ound Level dB(A	٨)
L _{Aeq} Arith	metic Aver	age		56	
L _{A10} Arith	metic Aver	age		58	
L _{A90} Arith	metic Aver	age		51	
L _{Amax} Arit	hmetic Ave	rage		80	
Subjective descrip			-		
Dominated by cont by at (10:40, 10:42 Weather Condition Mild, slightly overce	, 10:40, 11 s	:00, 11:06, 11:2			

Mild, slightly overcast, moderate breeze.

*excluded from average as unrepresentative due to lawn mower pass bys.

Measurement Loc Borough Council	ation: Elmbri	dge	Measurement	Location ID: MW	/0003
Coordinates: 514	718, 168950				
Date of measure	ment: 19/05/	2023	Number of me	easurements: 4	
		Measured N	oise Levels		
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}
19/05/2023	10:30	56	57	47	79
19/05/2023	11:07	58	61	47	76
19/05/2023	11:42	58	60	47	82
	12:57	56	59	47	85
19/05/2023					
19/05/2023	C	verall calculate	ed noise levels		
	C	verall calculate		ound Level dB(A	\)
In				ound Level dB(A 57	N)
In L _{Aeq} Arit	formation	ge			N)
In L _{Aeq} Arit L _{A10} Arit	formation hmetic Avera	ge ge		57	\)
In L _{Aeq} Arit L _{A10} Arit L _{A90} Arit	formation hmetic Averag hmetic Averag	ge ge ge		57 59	\)
In L _{Aeq} Arit L _{A10} Arit L _{A90} Arit	formation hmetic Averag hmetic Averag hmetic Averag thmetic Averag	ge ge ge ige	Sc	57 59 47 80	\)

Weather Conditions Fairly cool, overcast.

Measurement Loca Borough Council	ation: Elmbr	idge	Measurement	Location ID: MV	/0005
Coordinates: 514	885, 168789				
Date of measurer	n ent: 19/05/	2023	Number of me	easurements: 3	
		Measured I	Noise Levels		
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}
19/04/2023	10:34	58	59	51	82
19/04/2023	11:34	59	62	51	78
19/04/2023	12:37	58	60	52	77
	C	verall calcula	ted noise levels		
Int	ormation		Sc	ound Level dB(A	()
L _{Aeq} Arith	nmetic Avera	ge	58		
L _{A10} Arith	nmetic Avera	ge		60	
L _{A90} Arith	nmetic Avera	ge		51	
	hmetic Avera	-		79	
Subjective descrip					
Dominated by cont cyclists and boats					ng past,

Cool, overcast, little to no wind. Light drizzle from 11:15-11:21.

Measurement Loc		sor and	Measurement	Location ID: CS	0111
Maidenhead Boro Coordinates: 501		3			
	-				
Date of measurer	ment: 25/04	/2023	Number of mo	easurements: 3	
		Measured	Noise Levels		
Date	Time	L_{Aeq}	L _{A10}	L _{A90}	L_{Amax}
25/04/2023	13:45	63	66	43	82
25/04/2023	14:01	63	68	41	78
25/04/2023	15:02	63	68	39	80
		Overall calcu	ated noise levels		
In	formation		S	ound Level dB(A	N)
L _{Aeq} Arit	hmetic Avera	age		63	
L _{A10} Arit	hmetic Avera	age		67	
L _{A90} Arit	hmetic Avera	age		41	
L _{Amax} Ari	hmetic Aver	age		80	
	ntion of sour	nd climate at i	nonitoring locatio	n	
Subjective description			normoring locatio		

Mild, sunny, moderate cloud coverage.

Measurement Loca Borough Council	ation: Spelt	horne	Measurement	Location ID: CS	0122
Coordinates: 5023	357, 173216	6			
Date of measurem	nent: 25/04	/2023	Number of me	easurements: 3	}
		Measured N	Noise Levels		
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}
25/04/2023	10:34	60	62	56	79
25/04/2023	11:35	61	52	55	80
25/04/2023	13:16	62	65	58	81
		Overall calcula	ted noise levels		
Inf	ormation		Sound Level dB(A)		
L _{Aeq} Arith	metic Avera	age		61	
· · ·	metic Avera			63	
L _{A90} Arith	metic Avera	age		56	
	nmetic Aver	-		80	
Subjective descrip	tion o <u>f sour</u>	nd climate at m	onitoring locatio	n	
Train pass-bys don traffic. Weather Condition Warm, light breeze	S		nerwise, birdson	g, aircraft (dista	nt) and M25

Warm, light breeze, slight overcast.

Measurement Loca Maidenhead Borou Coordinates: 5014	gh Council		Measurement	Location ID: CS	0123
Date of measurem			Number of me	easurements: 3	5
		Measured N	loise Levels		
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}
25/04/2023	13:38	57	59	56	69
25/04/2023	14:50	57	58	56	70
25/04/2023	15:56	56	57	56	70
	(Overall calcula	ted noise levels		
Info	ormation		Sc	ound Level dB(A	٨)
L _{Aeq} Arith	metic Avera	ige		57	
L _{A10} Arith	metic Avera	ige		58	
L _{A90} Arith	metic Avera	ige		56	
L _{Amax} Arith	metic Avera	age		69	
Subjective descript	tion of soun	d climate at mo	onitoring location	n	

operation. Train horn audible from across road (Station Road), car door slam (measurement number 2 and 3).

Weather Conditions

Fairly mild, light breeze.

Measurement Loca Borough Council	ation: Runn	ymede	Measurement	Location ID: CS	0212
Coordinates: 504	738, 16921	6			
Date of measurem	nent: 19/05	5/2023	Number of me	easurements: 3	}
		Measured N	loise Levels		
Date	Time	L_{Aeq}	L _{A10}	L _{A90}	L _{Amax}
26/05/2023	10:30	54	55	45	73
26/05/2023	11:30	54	54	43	87
26/05/2023	12:30	52	54	43	74
		Overall calculat	ted noise levels		
Inf	ormation		Sound Level dB(A)		
L _{Aeq} Arith	metic Aver	age	53		
L _{A10} Arith	metic Aver	age		54	
L _{A90} Arithmetic Average 44					
L _{A90} Arith				70	
	nmetic Avei	age		78	

Measurement Loca Borough Council	tion: Runn	ymede	Measurement I	_ocation ID: CS	0213	
Coordinates: 5043	385, 168924					
Date of measurem	nent: 19/05/	2023	Number of me	asurements: 3	}	
		Measured I	Noise Levels			
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}	
26/05/2023	10:33	52	55	42	74	
26/05/2023	11:33	54	57	43	75	
26/05/2023	12:33	52	54	42	72	
	C	Overall calcula	ted noise levels			
Inf	ormation		Sound Level dB(A)			
L _{Aeq} Arith	metic Avera	ge	52			
L _{A10} Arith	metic Avera	ge	55			
L _{A90} Arith	metic Avera	ge		42		
L _{Amax} Arith	nmetic Avera	age		74		
Subjective descrip	tion of sound	d climate at m	onitoring locatior	ו		
Dominated by birds Distant road traffic the rest passenger	noise audibl	e. Occasional	vehicle driving of	lown private roa	ad (1 HGV,	

Weather Conditions

Warm and sunny, clear skies, slight breeze.

Measurement Loc Borough Council	ation: Runny	/mede	Measurement I	Location ID: CS	0214
Coordinates: 502	2447, 169466				
Date of measure	ment: 25/04	/2023	Number of me	asurements: 2	
		Measured I	Noise Levels		
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}
25/04/2023	11:01	53	51	37	76
25/04/2023	12:06	53	56	43	75
-	-	-	-	-	-
	(Overall calcula	ted noise levels		
Ir	formation		Sc	ound Level dB(A	N)
L _{Aeq} Arit	hmetic Avera	ige		53	
	hmetic Avera	•		54	
	hmetic Avera	•		40	
L _{Amax} Ari	thmetic Avera	age		76	
Subjective descri	ption of soun	d clima <u>te at m</u>	onitoring locatior	ר <u> </u>	
Dominated by the movement around		rom nearby in	dustrial site (~60	m away). Occas	sional car

Relatively warm, slight overcast.

Measurement Location: Runnymede Measurement Location ID: CS0215 Borough Council							
Coordinates: 502356, 169054							
Date of measurement: 25/04/2023 Number of measurements: 2							
		Measured N	loise Levels				
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}		
25/05/2023	11:00	53	52	42	75		
25/05/2023	12:08	52	52	43	75		
-	-	-	-	-	-		
	(Overall calculat	ed noise levels				
Info	ormation		Sc	ound Level dB(A	A)		
L _{Aeq} Arithr	netic Avera	ge		52	<u>`</u>		
	netic Avera	-		52			
L _{A90} Arithr	netic Avera	ge		42			
L _{Amax} Arith	metic Avera	age		75			
Subjective description	ion of soun	d climate at mo	onitoring location	n			

Dominated by birdsong and constant M25 traffic. Playing fields opposite measurement location being used by children, loud shouting audible. Other noise sources included distant agricultural lawn mower in use, graveyard visitors pass-bys and leaves rustling. Weather Conditions

Relatively mild, light but consistent wind.

Boroug	ation: Runn Ih Council	lymede	Measurement L	ocation ID: CS	0216
Coordinates: 504	967, 168244				
Date of measuren	nent: 25/05/	2023	Number of mea	asurements: 3	}
	×.	Measured I	Noise Levels		
Date	Time	Measured I L _{Aeq}	Noise Levels	L _{A90}	L _{Amax}
Date 25/05/2023	Time 11:02			L _{A90} 37	L _{Amax} 77
		L _{Aeq}	L _{A10}		
25/05/2023	11:02	L _{Aeq} 53	L _{A10} 54	37	77
25/05/2023 25/05/2023	11:02 12:04 13:06	L _{Aeq} 53 52 54	L _{A10} 54 53	37 38	77 73
25/05/2023 25/05/2023 25/05/2023	11:02 12:04 13:06	L _{Aeq} 53 52 54	L _{A10} 54 53 50 ated noise levels	37 38	77 73 80
25/05/2023 25/05/2023 25/05/2023 Inf	11:02 12:04 13:06	L _{Aeq} 53 52 54 Overall calcula	L _{A10} 54 53 50 ated noise levels	37 38 38	77 73 80
25/05/2023 25/05/2023 25/05/2023 Inf L _{Aeq} Arith	11:02 12:04 13:06 C	L _{Aeq} 53 52 54 Overall calcula	L _{A10} 54 53 50 ated noise levels	37 38 38 und Level dB(A	77 73 80
25/05/2023 25/05/2023 25/05/2023 Inf L _{Aeq} Arith L _{A10} Arith	11:02 12:04 13:06 Cormation	L _{Aeq} 53 52 54 Overall calcula ge	L _{A10} 54 53 50 ated noise levels	37 38 38 und Level dB(A 53	77 73 80
25/05/2023 25/05/2023 25/05/2023 Inf L _{Aeq} Arith L _{A10} Arith L _{A90} Arith	11:02 12:04 13:06 formation metic Avera	L _{Aeq} 53 52 54 Overall calcula ge ge	L _{A10} 54 53 50 ated noise levels	37 38 38 und Level dB(<i>F</i> 53 52	77 73 80
25/05/2023 25/05/2023 25/05/2023 Inf L _{Aeq} Arith L _{A10} Arith L _{A90} Arith	11:02 12:04 13:06 formation metic Avera metic Avera metic Avera metic Avera metic Avera metic Avera metic Avera metic Avera metic Avera	L _{Aeq} 53 52 54 Overall calcula ge ge ge ge	L _{A10} 54 53 50 ated noise levels Sou	37 38 38 38 und Level dB(A 53 52 37 77	77 73 80 A)

Measurement Location: Spelthorn Borough Measurement Location ID: CS0317 Council								
Coordinates: 509392, 166115								
Date of measurement: 26/05/2023 Number of measurements: 4								
Measured Noise Levels								
Date	Date Time L _{Aeq} L _{A10} L _{A90} L _{Amax}							
26/05/2023	10.44	71	76	54	86			
26/05/2023	11.22	72	76	55	88			
26/05/2023	12.22	71	75	53	87			
26/05/2023	13.02	71	76	53	85			
		Overall calcula	ated noise leve	ls				
In	formation			Sound Level dB	(A)			
L _{Aeq} Arit	hmetic Aver	age		71				
	hmetic Aver	-		76				
L _{A90} Arithmetic Average 54								
L _{Amax} Ari	thmetic Ave	rage		87				
-	Subjective description of sound climate at monitoring location							
Dominated by birdsong and Chertsey Road traffic. When there is an absence of road traffic on Chertsey Road, constant M3 traffic audible.								
Weather Conditions								

Relatively warm, little to no wind.

Measurement Loc Borough Council	ation: Spe	lthorn	Measurement	Location ID: C	S0318		
Coordinates: 506517, 166777							
Date of measurement:26/05/2023Number of measurements:3							
Measured Noise Levels							
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}		
17/05/2023	13:44	69	73	48	83		
17/05/2023	14:47	71	75	55	86		
17/05/2023	15:15	70	74	56	85		
		Overall calcula	ated noise level	S			
Inf	ormation		S	Sound Level dE	B(A)		
L _{Aeq} Arith	nmetic Ave	rage		70			
L _{A10} Arith	nmetic Ave	rage		74			
L _{A90} Arithmetic Average 53							
L _{Amax} Arithmetic Average 85							
Subjective descrip	otion of sou	ind climate at m	nonitoring locati	ion			
Constant traffic noise from Chertsey Road. Birdsong during quieter moments of traffic. M3 in the distance and constant.							
Weather Condition							
Relatively warm, n	noderate cl	oud coverage,	little to no wind				

Measurement Loc Council	ation: Speli	thorn Borough	Measurement	Location ID: C	S0319	
Coordinates: 506	967, 16616	63				
Date of measurement:17/05/2023Number of measurements:3						
Measured Noise Levels						
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}	
17/05/2023	10:06	55	54	42	78	
17/05/2023	12:07	52	51	42	72	
17/05/2023	12:39	53	53	43	73	
		Overall calcula	ated noise level	s		
l Ini	formation		Ś	Sound Level dE	B(A)	
L _{Aeq} Arith	nmetic Ave	rage		53		
L _{A10} Arith	nmetic Ave	rage		53		
L _{A90} Arith	nmetic Ave	rage		42		
L _{Amax} Arit	hmetic Ave	rage		74		
Subjective descrip Dominated by birc chatting on the oth distance.	lsong and N her side of t	//3 traffic. Peop	le working with	power and gar		
Weather Condition	าร					

Mild, gentle breeze, low cloud coverage.

Measurement Loc Borough Council			Measurement	Location ID: C	S0401	
Coordinates: 499	916, 16697	'3				
Date of measurement:30/05/2023Number of measurements:3						
Measured Noise Levels						
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}	
30/05/2023	10:37	55	57	52	73	
30/05/2023	11:39	55	57	51	68	
30/05/2023	12:39	55	57	52	68	
		Overall calcula	ated noise level	S		
In	formation		S	Sound Level dE	3(A)	
L _{Aeq} Aritl	nmetic Aver	age		55		
L _{A10} Aritl	nmetic Aver	age		57		
L _{A90} Aritl	nmetic Aver	age		52		
L _{Amax} Arithmetic Average 70						
Subjective descri	ption of sou	nd climate at m	nonitoring locati	on		
Dominated by M3 barking in caravar Weather Condition	n park, occa					
Warm, light breez		cloudy.				

Measurement Loc Richmond upon T		l Borough of	Measuremen	t Location ID: T	W0007
Coordinates: 51	7015, 17146	69			
Date of measure	ment: 01/0	6/2023	Number of m	neasurements:	3
		Measured	Noise Levels		
Date	Time	L_{Aeq}	L _{A10}	L _{A90}	L _{Amax}
01/06/2023	10:16	61	62	59	78
01/06/2023	11:57	61	62	58	80
01/06/2023	13:00	59	60	54	79
		Overall calcula	ated noise leve	ls	
In	formation		:	Sound Level dE	3(A)
L _{Aeq} Arit	hmetic Avera	age		60	
L _{A10} Arit	hmetic Avera	age		62	
L _{A90} Arit	hmetic Avera	age		57	
L _{Amax} Ari	thmetic Aver	rage		79	
Subjective descri	ption of sou	nd climate at m	nonitoring locat	ion	
	ntinuous wei	r sound, pedes			
Dominated by cor Aircraft noise inclu 10:18 - Motorboat barge (no change Weather Conditio	uding helicop t passed-by, e in dB), 13:4	13:20 - motork	oat (63dB), 13	3:24 - motorboa	t (63dB), 13:26

Relatively cool, overcast.

Measurement Loc Borough Council Coordinates: 508			Measurement	Location ID: C	:S0320
Date of measure	ment: 01/0	06/2023	Number of m	easurements:	3
		Measured	Noise Levels		
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}
01/06/2023	11:05	50	53	41	74
01/06/2023	12:06	46	48	40	66
01/06/2023	13:19	51	49	40	76
		Overall calcula	ated noise level	S	
Int	formation		S	Sound Level dB	B(A)
L _{Aeq} Arith	nmetic Ave	rage		49	
L _{A10} Arith	nmetic Ave	rage		50	
L _{A90} Arith	nmetic Ave	rage		40	
L _{Amax} Arit	hmetic Ave	erage		72	
Subjective descrip	otion of sou	und climate at m	nonitoring locati	on	
A DPD van idling i van driving off (11 Car idling in front o Overhead low flyin	:12). Tenni of gate with ng airtraffic	s courts in cons car stereo play	stant use (childr	ens class, follo second measu	wed by adults). rement.

measurement from 13:30.

Weather Conditions

Warm and sunny, slight overcast, gentle breeze.

Measurement Loc Borough Council	cation: Elm	bridge	Measurement	Location ID: CS	50302
Coordinates: 50	8321, 1655	56			
Date of measure	ment: 17/0)5/2023	Number of m	easurements:	3
		Measured	Noise Levels		
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}
17/05/2023	13:24	72	77	57	87
17/05/2023	14:25	72	76	60	82
17/05/2023	15:36	72	76	59	90
		Overall calcula	ated noise level	S	
l Ir	formation		ç	Sound Level dB((A)
L _{Aeq} Arit	hmetic Ave	rage		72	
L _{A10} Arit	hmetic Ave	rage		76	
L _{A90} Arit	hmetic Ave	rage		59	
-	thmetic Ave			86	
Subjective descr	iption of sou	und climate at m	nonitoring locati	on	

Mild, slight overcast, little to no wind.

Measurement Loca	ation: Dur	nymodo	Mossuramont	Location ID: C	S0102
Borough Council		Inymede	weasurement		30402
Coordinates: 499	9534, 1668	48			
Date of measurer	nent: 19/0	4/2023	Number of m	easurements:	4
		Measured	Noise Levels		
Date	Time	L_{Aeq}	L _{A10}	L _{A90}	L _{Amax}
26/04/2023	10:18	54	56	51	68
26/04/2023	11:04	54	55	51	78
26/04/2023	12:05	53	55	49	74
		Overall calcula	ated noise level	S	
Inf	ormation		S	Sound Level dB	(A)
L _{Aeq} Arith	metic Ave	rage		54	
L _{A10} Arith	metic Ave	rage		55	
L _{A90} Arith	metic Ave	rage		50	
L _{Amax} Aritl	nmetic Ave	rage		73	
Subjective descrip Dominated by cons rustling leaves, bin Weather Condition	stant M3 tr dsong, and	affic, otherwise	relatively quiet		ources included

Borough Council	ation: Elmb	oridge	Measurement	Location ID: C	S0321
Coordinates: 51	0090, 1672	50			
Date of measure	ment: 04/0	5/2023	Number of m	easurements:	3
		Measured I	Noise Levels		
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}
04/05/2023	12:46	56	57	52	76
	13:46	58	58	53	80
04/05/2023					
04/05/2023 04/05/2023	14:46	56	59	52	74
	14:46	56 Overall calcula			74
04/05/2023	14:46 formation		ited noise level		
04/05/2023 In		Overall calcula	ited noise level	S	
04/05/2023 In L _{Aeq} Arith	formation	Overall calcula	ited noise level	s Sound Level dB	
04/05/2023 In L _{Aeq} Arith L _{A10} Arith	formation hmetic Aver	Overall calcula age age	ited noise level	s Sound Level dB 57	
04/05/2023 In L _{Aeq} Arith L _{A10} Arith L _{A90} Arith	formation hmetic Aver hmetic Aver	Overall calcula age age age	ited noise level	s Sound Level dB 57 58	

Weather Conditions

Moderately warm, occasional gusts.

Measurement Loc Borough Council	ation: Spel	thorn	Measurement	Location ID: C	S0322
Coordinates: 506	6353, 1680	08			
Date of measurer	nent: 20/0	4/2023	Number of m	easurements:	3
		Measured	Noise Levels		
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}
20/04/2023	13:42	72	77	54	92
20/04/2023	14:01	72	77	53	84
20/04/2023	15:03	74	78	55	86
		Overall calcula	ated noise level	S	
Inf	ormation		Ś	Sound Level dB	(A)
L _{Aeq} Arith	nmetic Aver	age		73	
	nmetic Aver	-		54	
L _{A90} Arith	nmetic Aver	age		77	
L _{Amax} Arit	hmetic Ave	rage		87	
Subjective descrip Road traffic noise Weather Condition Fairly mild, overca	on Littleton	Lane, birdsong			

Measurement Loc Borough Council	ation: Runn	ymede	Measurement	Location ID: M	W0007
Coordinates: 514	4305, 16942	25			
Date of measurer	ment: 04/0	5/2023	Number of m	easurements:	3
			A		
		Measured N	loise Levels		
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}
04/05/2023	10:44	71	74	66	81
04/05/2023	11:19	71	73	65	88
04/05/2023	12:04	71	73	66	85
		Overall calcula	ted noise level	S	
Int	formation		Ę	Sound Level dB	(A)
L _{Aeq} Arith	nmetic Aver	age		71	
L _{A10} Arith	nmetic Aver	age		65	
L _{A90} Arith	nmetic Aver	age		74	
L _{Amax} Arit	hmetic Ave	rage		85	
	otion of sou				

Measurement Loca Council	tion: Elmbri	dge Borough	Measurement	Location ID: SW	/0004
Coordinates: 5103	373, 168054				
Date of measurem	nent: 20/04	/2023	Number of me	easurements: 3	i
		Measured N	loise Levels		
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}
20/04/2023	10:17	60	62	54	81
20/04/2023	11:19	60	61	54	79
20/04/2023	12:07	60	62	54	83
	(Overall calculat	ted noise levels		
Infe	ormation		Sc	ound Level dB(A	N)
L _{Aeq} Arith	metic Avera	age		60	
L _{A10} Arith	metic Avera	age		54	
	metic Avera	-		62	
	nmetic Aver	U	phitoring leasting	81	
Subjective descrip Dominated by conti intermittent. Other a users, leave rustling Weather Conditions Cool, gentle breeze	inuous weir, audible nois g, kayaker a s	river sound an	d birdsong. Traf	fic on Ford Brid	

Measurement Loca Council	ition: Elmbr	idge Borough	Measurement I	Location ID: MV	V0006
Coordinates: 5141	186, 169158	3			
Date of measurem	nent: 17/04	/2023	Number of me	easurements: 2	2
		Measured N	loise Levels		
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}
17/04/2023	15:16	55	56	45	78
17/04/2023	16:16	58	58	45	79
-	-	-	-	-	-
		Overall calculat	ted noise levels		
Inf	ormation		Sc	ound Level dB(A	۹)
L _{Aeq} Arith	metic Avera	age		56	
L _{A10} Arith	metic Avera	age		45	
L _{A90} Arith	metic Avera	age		57	
L _{Amax} Arith	nmetic Aver	age		79	
Subjective descrip Dominated by cont use of playground, helicopter pass. Weather Conditions Sunny, fairly warm.	inuous A30 pedestrians s	8 traffic and bir	dsong. Other au	idible noise sou	

Council	ation: Elmbri	dge Borough	Measurement I	Location ID: CS	0501
Coordinates: 514	200, 166270)			
Date of measurer	ment: 19/04	/2023	Number of me	easurements: 3	}
	14084	Measured N	loise Levels		
	Time				
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}
Date 19/04/2023	14:45	L _{Aeq} 62	L _{A10} 66	L _{A90} 44	L _{Amax} 81
19/04/2023	14:45	62	66	44	81
19/04/2023 19/04/2023	14:45 15:45 16:45	62 62 62	66 65	44 44	81 80
19/04/2023 19/04/2023 19/04/2023	14:45 15:45 16:45	62 62 62	66 65 64 ted noise levels	44 44 45	81 80 85
19/04/2023 19/04/2023 19/04/2023 In	14:45 15:45 16:45 formation	62 62 62 Dverall calcula	66 65 64 ted noise levels	44 44 45 bund Level dB(A	81 80 85
19/04/2023 19/04/2023 19/04/2023 In L _{Aeq} Aritl	14:45 15:45 16:45 formation	62 62 62 Overall calculat	66 65 64 ted noise levels	44 44 45 Dund Level dB(A 62	81 80 85
19/04/2023 19/04/2023 19/04/2023 In L _{Aeq} Aritl L _{A10} Aritl	14:45 15:45 16:45 formation	62 62 0verall calculations age	66 65 64 ted noise levels	44 44 45 bund Level dB(A	81 80 85
19/04/2023 19/04/2023 19/04/2023 In L _{Aeq} Aritl L _{A10} Aritl L _{A90} Aritl	14:45 15:45 16:45 formation hmetic Avera	62 62 62 Overall calcula age age	66 65 64 ted noise levels	44 44 45 0und Level dB(A 62 65	81 80 85
19/04/2023 19/04/2023 19/04/2023 In L _{Aeq} Aritl L _{A10} Aritl L _{A90} Aritl	14:45 15:45 16:45 formation hmetic Avera hmetic Avera hmetic Avera	62 62 62 Overall calculating age age	66 65 64 ted noise levels Sc	44 44 45 0und Level dB(A 62 65 44 82	81 80 85
19/04/2023 19/04/2023 19/04/2023 In L _{Aeq} Aritl L _{A10} Aritl L _{A90} Aritl L _{Amax} Arit	14:45 15:45 16:45 formation hmetic Avera hmetic Avera hmetic Avera thmetic Avera thmetic Avera thmetic Avera	62 62 62 Overall calculation age age age d climate at me	66 65 64 ted noise levels Sc	44 44 45 bund Level dB(A 62 65 44 82	81 80 85 A)

Sunny, light breeze, relatively warm.

Measurement Loca Council			weasurement	Location ID: CS	50502
Coordinates: 513					
Date of measurer	nent: 19/04/	2023	Number of me	easurements:	3
		Measured N	Noise Levels		
Date	Time	L_{Aeq}	L _{A10}	L _{A90}	L _{Amax}
19/04/2023	14:51	56	58	47	78
19/04/2023	15:55	54	57	47	76
19/04/2023	16:57	59	54	47	92
	C	verall calcula	ted noise levels		
Int	formation		S	ound Level dB(A)
L _{Aeq} Arith	nmetic Avera	ge		56	,
L _{A10} Arith	nmetic Avera	ge		57	
L _{A90} Arith	nmetic Avera	ge		47	
	hmetic Avera	<u> </u>		82	
Subjective descrip Dominated by road	d traffic and b ance playing	oirdsong, othei and dogs bar	rwise tranquil. C king. Manual foo	ther audible so	es used in

	tion: Runnyn	nede	Measurement		
Coordinates: 5029	938, 170701				
Date of measurem	nent: 9/12/20	019	Number of me	asurements:	3
				a.	
	TTT				
	H	Measured N	loise Levels		
Date	Time	Measured N L _{Aeq}	loise Levels L _{A10}	L _{A90}	L _{Amax}
Date 09/12/2019	Time 11:04			L _{A90} 52	L _{Amax} 80
		L _{Aeq}	L _{A10}		
09/12/2019	11:04	L _{Aeq} 57	L _{A10} 57	52	80
09/12/2019 09/12/2019	11:04 12:01 13:45	L _{Aeq} 57 57 61	L _{A10} 57 59	52 52	80 75
09/12/2019 09/12/2019 09/12/2019	11:04 12:01 13:45	L _{Aeq} 57 57 61	L _{A10} 57 59 63 red noise levels	52 52 51	80 75 79
09/12/2019 09/12/2019 09/12/2019 Infe	11:04 12:01 13:45 O	L _{Aeq} 57 57 61 overall calculat	L _{A10} 57 59 63 red noise levels	52 52 51 bund Level dB(/	80 75 79
09/12/2019 09/12/2019 09/12/2019 Info L _{Aeq} Arith	11:04 12:01 13:45 O ormation metic Averag	L _{Aeq} 57 57 61 everall calculat	L _{A10} 57 59 63 red noise levels	52 52 51 ound Level dB(<i>i</i> 58	80 75 79
09/12/2019 09/12/2019 09/12/2019 Info L _{Aeq} Arith L _{A10} Arith	11:04 12:01 13:45 O ormation metic Averag metic Averag	L _{Aeq} 57 57 61 overall calculat	L _{A10} 57 59 63 red noise levels	52 52 51 bund Level dB(/	80 75 79
09/12/2019 09/12/2019 09/12/2019 Info L _{Aeq} Arith L _{A10} Arith L _{A90} Arith	11:04 12:01 13:45 O ormation metic Averag	L _{Aeq} 57 57 61 everall calculat	L _{A10} 57 59 63 red noise levels	52 52 51 ound Level dB(<i>i</i> 58 60	80 75 79

present. Weather Conditions Cold and Dry.

Measurement Loca	ation: Spelth	norne	Measurement	Location ID: CS	60203
Coordinates: 503	609, 170102	2			
Date of measurer	nent: 9/12/	2019	Number of me	asurements: 3	
		Measured I	Noise Levels		
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}
09/12/2019	14:18	59	61	55	78
09/12/2019	15:44	60	62	54	62
09/12/2019	16:00	56	57	54	67
		Overall calcula	ted noise levels		
	formation				
In	onnation		Sc	ound Level dB(A	.)
	nmetic Avera	age	Sc	ound Level dB(A	.)
L _{Aeq} Arith		•	So		.)
L _{Aeq} Arith L _{A10} Arith	nmetic Avera	age	So	58	.)
L _{Aeq} Arith L _{A10} Arith L _{A90} Arith	nmetic Avera	age age	Sc	58 60	.)
L _{Aeq} Arith L _{A10} Arith L _{A90} Arith	nmetic Avera nmetic Avera nmetic Avera hmetic Avera btion of sour	age age rage nd climate at m	onitoring location	58 60 54 69	

Cold and Dry.

	ation: Runnyr	mede	Measurement L	ocation ID: C	S0204
Coordinates: 503	355, 170052				
Date of measuren	ment: 13/12/	2019	Number of me	asurements:	3
		Measured N	loise Levels		
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}
13/12/2019	10:45	55	56	51	73
13/12/2019 13/12/2019	10:45 11:00	55 54	56 54	51 51	73 72
13/12/2019	11:00 12:00	54 57	54	51	72
13/12/2019 13/12/2019	11:00 12:00	54 57	54 54 ted noise levels	51	72 79
13/12/2019 13/12/2019 Inf	11:00 12:00	54 57 Overall calculat	54 54 ted noise levels	51 51	72 79
13/12/2019 13/12/2019 Inf L _{Aeq} Arith	11:00 12:00 C	54 57 Overall calculat ge	54 54 ted noise levels	51 51 und Level dB(72 79
13/12/2019 13/12/2019 Inf L _{Aeq} Arith L _{A10} Arith	11:00 12:00 formation	54 57 Overall calculat ge ge	54 54 ted noise levels	51 51 und Level dB(55	72 79
13/12/2019 13/12/2019 Inf L _{Aeq} Arith L _{A10} Arith L _{A90} Arith	11:00 12:00 formation nmetic Avera	54 57 Overall calculat ge ge	54 54 ted noise levels	51 51 und Level dB(55 55	72 79

frequent. Weather Conditions

Cold and Dry.

Measurement Loca	tion: Runny	mede	Measurement	Location ID: CS	60205
Coordinates: 5034	169, 169318				
Date of measurem	nent: 13/12	/2019	Number of me	easurements: 3	i
		Measured N	Noise Levels		
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}
13/12/2019	10:45	55	58	50	73
13/12/2019	11:00	55	56	49	76
13/12/2019	12:00	56	54	48	78
	(Overall calcula	ted noise levels		
Inf	ormation		So	ound Level dB(A	N)
L _{Aeq} Arith	metic Avera	ige		56	
L _{A10} Arith	metic Avera	ige		56	
L _{A90} Arith	metic Avera	ige		49	
L _{Amax} Arith	nmetic Avera	age		76	
Subjective descrip	tion of soun	d climate at m	onitoring location	n	
Noise climate domi always present. Ro distance and veget	ad to the so ation covera	outh has infreq	uent and quiet re	oad traffic noise	

Weather Conditions Cold and Dry.

Measurement Loc	ation: Runny	mede	Measurement	Location ID: CS	60206
Coordinates: 503	702, 169126	i			
Date of measure	ment: 13/12	/2019	Number of me	easurements: 3	1
		X			
		Measured N	Noise Levels		
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}
13/12/2019	13:45	64	68	54	81
13/12/2019	14:00	64	68	54	81
13/12/2019	15:00	64	69	52	80
	(Overall calcula	ted noise levels		
In	formation		So	ound Level dB(A	()
L _{Aeq} Arit	hmetic Avera	ige		64	
L _{A10} Arit	hmetic Avera	ige		68	
L _{A90} Arit	hmetic Avera	ige		53	
L _{Amax} Ari	thmetic Avera	age		81	
Subjective descrip Noise climate is de					minant when
present. When the other noise.					

other noise. Weather Conditions Cold and Dry.

	ation: Runnyr	mede	Measurement	Location ID: CS	0207
Coordinates: 504	008, 168239				
Date of measuren	nent: 18/12/	2019	Number of me	easurements: 3	
	202				
		Measured N	Noise Levels		
Date	Time	Measured N L _{Aeq}	Noise Levels	L _{A90}	L _{Amax}
Date 18/12/2019	Time 10:41			L _{A90} 65	L _{Amax} 85
		L _{Aeq}	L _{A10}		
18/12/2019	10:41	L _{Aeq} 75	L _{A10} 79	65	85
18/12/2019 18/12/2019	10:41 11:00 12:00	L _{Aeq} 75 75 76	L _{A10} 79 80	65 62	85 85
18/12/2019 18/12/2019 18/12/2019	10:41 11:00 12:00	L _{Aeq} 75 75 76	L _{A10} 79 80 80 ted noise levels	65 62	85 85 86
18/12/2019 18/12/2019 18/12/2019 Inf	10:41 11:00 12:00	L _{Aeq} 75 75 76 Overall calcula	L _{A10} 79 80 80 ted noise levels	65 62 73	85 85 86
18/12/2019 18/12/2019 18/12/2019 Inf L _{Aeq} Arith	10:41 11:00 12:00 formation	L _{Aeq} 75 75 76 Overall calcula	L _{A10} 79 80 80 ted noise levels	65 62 73 Dund Level dB(A	85 85 86
18/12/2019 18/12/2019 18/12/2019 Inf L _{Aeq} Arith L _{A10} Arith	10:41 11:00 12:00 formation	L _{Aeq} 75 75 76 Overall calcula ge	L _{A10} 79 80 80 ted noise levels	65 62 73 bund Level dB(A 75	85 85 86
18/12/2019 18/12/2019 18/12/2019 Inf L _{Aeq} Arith L _{A10} Arith L _{A90} Arith	10:41 11:00 12:00 formation nmetic Avera	L _{Aeq} 75 75 76 Overall calcula ge ge	L _{A10} 79 80 80 ted noise levels	65 62 73 Dund Level dB(A 75 79	85 85 86

perceptible during low periods of traffic flow. Location is near Thorpe Park when it was not operating. It is not expected that this would affect the noise climate substantially as it is dominated by road traffic; however, if there is any variation, the conditions measured are expected to be worst case (i.e. lower) than during Thorpe Park operation.

Weather Conditions

Cold and Dry.

Measurement Loc	ation: Runnyr	nede	Measurement I	Location ID: CS	60208
Coordinates: 504	334, 168475				
Date of measure	ment: 13/12/2	2019	Number of me	easurements: 3	
		Measured N	Noise Levels		
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}
13/12/2019	13:45	61	61	56	82
13/12/2019	14:00	60	62	56	78
13/12/2019	15:00	60	60	56	76
	0	verall calcula	ted noise levels		
In	formation		Sc	ound Level dB(A	\)
L _{Aeq} Arit	hmetic Avera	ge		60	
L _{A10} Arit	hmetic Avera	ge		61	
L _{A90} Arit	hmetic Averag	ge		56	
L _{Amax} Ari	thmetic Avera	ge		79	
Subjective descrip			-		
Noise climate is do end of road so roa pedestrians walkin Weather Condition	d traffic noise ng past. Birds	s are minima	I but there is noi:	se associated w	

Cold and Dry.

Measurement Loca	ation: Runn	ymede	Measurement	Location ID: C	S0211
Coordinates: 504	361, 16724	7			
Date of measuren	n ent: 18/12	2/2019	Number of me	easurements: 3	3
		Measured N	loise Levels		
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}
18/12/2019	10:45	58	62	53	73
18/12/2019	11:00	54	56	52	65
18/12/2019	12:00	55	58	52	74
		Overall calculat	ted noise levels		
Inf	ormation		So	ound Level dB(۹)
L _{Aeq} Arith	nmetic Aver	age		56	
L _{A10} Arith	nmetic Aver	age		59	
L _{A90} Arith	nmetic Aver	age		52	
L _{Amax} Arit	hmetic Ave	rage		70	
Subjective descrip Aircraft dominant v Construction noise level. People walki Weather Condition Cold and Dry.	when preser was minim ng past and	nt. Road traffic i al in surveys co	minimal but dom bllected and only	ninant when pre	ct on noise

Measurement Loca	ation: Spelthe	orne	Measurement	Location ID: CS	60301
Coordinates: 5072	288, 167617				
Date of measuren	nent: 17/09/	2019	Number of me	easurements: 3	1
		Measured I	Noise Levels		
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}
17/09/2019	12:25	64	68	46	85
17/09/2019	13:00	57	60	42	80
17/09/2019	14:02	53	55	44	74
	C	Overall calcula	ted noise levels		
Inf	ormation		So	ound Level dB(A	()
L _{Aeq} Arith	imetic Avera	ge		58	
L _{A10} Arith	imetic Avera	ge		61	
L _{A90} Arith	metic Avera	ge		44	
L _{Amax} Aritl	nmetic Avera	age		80	
Subjective descrip			-		
Noise climate dom and very distant tra Weather Condition	affic on M3 m				ees rustling



Weather Conditions

	ation: Speltho	orne	Measurement I	Location ID: CS	\$0305
Coordinates: 507	757, 167309				
Date of measuren	nent: 02/10/	2019	Number of me	asurements: 3	
		Cente			
n a	Trease Incold Provide		and the second second second second	Many data within a line of the data	
		Measured N	oise Levels		
Date	Time	Measured N L _{Aeq}	oise Levels	Lago	L _{Amax}
Date 02/10/2019	Time 10:04			L _{A90} 53	L _{Amax} 77
		L _{Aeq}	L _{A10}		
02/10/2019	10:04	L _{Aeq} 59	L _{A10} 61	53	77
02/10/2019 02/10/2019	10:04 11:02 12:00	L _{Aeq} 59 58 58	L _{A10} 61 61	53 51	77 74
02/10/2019 02/10/2019 02/10/2019	10:04 11:02 12:00	L _{Aeq} 59 58 58	L _{A10} 61 61 60 ed noise levels	53 51	77 74 71
02/10/2019 02/10/2019 02/10/2019 Inf	10:04 11:02 12:00	L _{Aeq} 59 58 58 58 Overall calculate	L _{A10} 61 61 60 ed noise levels	53 51 53	77 74 71
02/10/2019 02/10/2019 02/10/2019 Inf L _{Aeq} Arith	10:04 11:02 12:00 formation	L _{Aeq} 59 58 58 Overall calculate	L _{A10} 61 61 60 ed noise levels	53 51 53 ound Level dB(A	77 74 71
02/10/2019 02/10/2019 02/10/2019 Inf L _{Aeq} Arith L _{A10} Arith	10:04 11:02 12:00 formation	L _{Aeq} 59 58 58 Overall calculate ge ge	L _{A10} 61 61 60 ed noise levels	53 51 53 bund Level dB(A 58	77 74 71
02/10/2019 02/10/2019 02/10/2019 Inf L _{Aeq} Arith L _{A10} Arith L _{A90} Arith	10:04 11:02 12:00 formation metic Avera	LAeq 59 58 58 Overall calculate ge ge	L _{A10} 61 61 60 ed noise levels	53 51 53 ound Level dB(A 58 52	77 74 71

Weather Conditions Warm and Dry.

Measurement Loca	tion: Spelth	orne	Measurement	Location ID: CS	50306
Coordinates: 5073	366, 166269				
Date of measurem	nent: 18/09/	/2019	Number of me	easurements: 3	}
		Measured I	Noise Levels		
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}
18/09/2019	10:38	60	63	42	83
18/09/2019	11:00	60	63	42	83
18/09/2019	12:00	61	60	41	90
	C	Overall calcula	ted noise levels		
Inf	ormation		So	ound Level dB(A	۹)
L _{Aeq} Arith	metic Avera	ge		60	
L _{A10} Arith	metic Avera	ge		62	
L _{A90} Arith	metic Avera	ge		42	
L _{Amax} Arith	nmetic Avera	age		85	
Subjective descrip					
Aircraft occasionall Noise from the gym	n (not music)				iir noise.
Weather Conditions	S				

Measurement Loca	ation: Elmbrid	ge	Measurement L	Location ID: CS	50307
Coordinates: 507	870, 165900				
Date of measuren	nent: 18/09/2	2019	Number of me	asurements: 3	5
		Measured N	Noise Levels		
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}
18/09/2019	13:40	66	71	44	84
18/09/2019	14:02	69	73	44	89
18/09/2019	15:00	68	72	48	91
	0	verall calcula	ted noise levels		
Inf	formation		Sc	ound Level dB(A	٨)
L _{Aeq} Arith	nmetic Averaç	je		68	
L _{A10} Arith	nmetic Averaç	je		72	
L _{A90} Arith	nmetic Averag	je		45	
L _{Amax} Arit	hmetic Avera	ge		88	
Subjective descrip			-		
Traffic, aircraft and Weather Condition		noise during t	he first two mea	surements.	
Warm and Dry.					

Measurement Loc	ation: Speltho	orne	Measurement	Location ID: CS	50300
Coordinates: 508	334, 166601				
Date of measure	nent: 18/09/2	2019	Number of me	easurements: 3	3
	and the second				
		Measured N	oise Levels		
Date	Time	Measured N L _{Aeq}	oise Levels L _{A10}	L _{A90}	L _{Amax}
Date 18/09/2019	Time 13:32			L _{A90} 42	L _{Amax} 78
		L _{Aeq}	L _{A10}		
18/09/2019	13:32	L _{Aeq} 54	L _{A10} 54	42	78
18/09/2019 18/09/2019	13:32 14:00 15:02	L _{Aeq} 54 57 53	L _{A10} 54 58	42 43	78 78
18/09/2019 18/09/2019 18/09/2019	13:32 14:00 15:02	L _{Aeq} 54 57 53	L _{A10} 54 58 57 ed noise levels	42 43	78 78 70
18/09/2019 18/09/2019 18/09/2019 In	13:32 14:00 15:02	L _{Aeq} 54 57 53 overall calculat	L _{A10} 54 58 57 ed noise levels	42 43 42	78 78 70
18/09/2019 18/09/2019 18/09/2019 In L _{Aeq} Arit	13:32 14:00 15:02 O formation	L _{Aeq} 54 57 53 everall calculate	L _{A10} 54 58 57 ed noise levels	42 43 42 Dund Level dB(A	78 78 70
18/09/2019 18/09/2019 18/09/2019 In L _{Aeq} Arit L _{A10} Arit	13:32 14:00 15:02 O formation	L _{Aeq} 54 57 53 overall calculat	L _{A10} 54 58 57 ed noise levels	42 43 42 bund Level dB(A 54	78 78 70
18/09/2019 18/09/2019 18/09/2019 In L _{Aeq} Arit L _{A10} Arit	13:32 14:00 15:02 O formation hmetic Averag	L _{Aeq} 54 57 53 verall calculate ge ge ge	L _{A10} 54 58 57 ed noise levels	42 43 42 bund Level dB(A 54 56	78 78 70

fairly quiet building work on two houses in the cul-de-sac. Weather Conditions Warm and Dry.

Measurement Loca	ation: Elmbr	idge	Measurement	Location ID: CS	S0311				
Coordinates: 508	791, 16625 ⁻	7							
Date of measuren	n ent: 19/09	9/2019	Number of me	easurements: 3	3				
		Measured N	Noise Levels						
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}				
19/09/2019	10:38	56	57	41	84				
19/09/2019	11:43	55	58	41	73				
19/09/2019	12:00	56	58	43	74				
		Overall calcula	ted noise levels						
Inf	ormation		So	ound Level dB(A	۹)				
L _{Aeq} Arith	metic Aver	age		55					
L _{A10} Arith	metic Aver	age		58					
L _{A90} Arith	metic Aver	age		42					
L _{Amax} Arit	hmetic Ave	rage		77					
Subjective descrip				n traffic on Walto	n Lano				

Noise climate dominated by regular aircraft. Occasional road traffic on Walton Lane consisting of mostly cars, no HGVs. Traffic on Walton Lane mostly cars turning around off main road. Other noise sources include people walking by and fishing on river and occasional boat. Birdsong.

Weather Conditions

Measurement Loc	ation: Spelthc	orne	Measurement	Location ID: CS	S0312		
Coordinates: 509	207, 166540						
Date of measurer	ment: 02/10/2	2019	Number of me	easurements: 3	5		
Measured Noise Levels							
		Measured N	loise Levels				
Date	Time	Measured N L _{Aeq}	Noise Levels	L _{A90}	L _{Amax}		
Date 02/10/2019	Time 12:43			L _{A90} 65	L _{Amax} 77		
		L _{Aeq}	L _{A10}				
02/10/2019	12:43	L _{Aeq} 69	L _{A10} 71	65	77		
02/10/2019 02/10/2019	12:43 13:00 14:00	L _{Aeq} 69 69 69	L _{A10} 71 71	65 65	77 86		
02/10/2019 02/10/2019 02/10/2019	12:43 13:00 14:00	L _{Aeq} 69 69 69	L _{A10} 71 71 71 71 ted noise levels	65 65	77 86 84		
02/10/2019 02/10/2019 02/10/2019 In	12:43 13:00 14:00	L _{Aeq} 69 69 69 verall calculat	L _{A10} 71 71 71 71 ted noise levels	65 65 65	77 86 84		
02/10/2019 02/10/2019 02/10/2019 In L _{Aeq} Aritl	12:43 13:00 14:00 O formation	L _{Aeq} 69 69 69 overall calculat	L _{A10} 71 71 71 71 ted noise levels	65 65 65 Dund Level dB(A	77 86 84		
02/10/2019 02/10/2019 02/10/2019 In L _{Aeq} Aritl L _{A10} Aritl	12:43 13:00 14:00 formation	L _{Aeq} 69 69 69 overall calculat	L _{A10} 71 71 71 71 ted noise levels	65 65 65 Dund Level dB(A 69	77 86 84		
02/10/2019 02/10/2019 02/10/2019 In L _{Aeq} Arith L _{A10} Arith L _{A90} Arith	12:43 13:00 14:00 formation hmetic Average	LAeq 69 69 69 overall calculat	L _{A10} 71 71 71 71 ted noise levels	65 65 65 Dund Level dB(A 69 71	77 86 84		

levels during periods of low traffic.

Weather Conditions

Measurement Location: Spelthorne Measurement Location ID: CS0313								
Coordinates: 5094	181, 166737	7						
Date of measurement:02/10/2019Number of measurements:3								
		Measured N	Noise Levels					
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}			
02/10/2019	12:45	54	55	49	73			
02/10/2019	13:01	55	57 49 71	71				
02/10/2019	14:00	52	54	49	69			
		Overall calcula	ted noise levels					
Inf	ormation		So	ound Level dB(A	A)			
L _{Aeq} Arith	metic Avera	age		54				
L _{A10} Arith	metic Avera	age		55				
L _{A90} Arith	metic Avera	age		49				
L _{Amax} Arith	nmetic Aver	age		71				
Subjective descrip	tion o <u>f so</u> ur	nd climate at m	onitoring location	n				
Noise climate domi infrequent road trai rustling and intermi Weather Condition	fic on Perry ttent domes	Lane and inte						

Measurement Loc	ation: Elmbrid	lge	Measurement	Location ID: CS	60314			
Coordinates: 509	623, 166499							
Date of measurement:19/09/2019Number of measurements:3								
		Measured N	Noise Levels					
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}			
19/09/2019	13:39	52	53	37	74			
19/09/2019	14:00	55	55	39	80			
19/09/2019	15:00	52	55	39	75			
	0	verall calcula	ted noise levels					
In	formation		Sc	ound Level dB(A	A)			
L _{Aeq} Arit	hmetic Avera	ge		53				
L _{A10} Arit	hmetic Averag	ge		54				
L _{A90} Arit	hmetic Averag	je		38				
L _{Amax} Ari	thmetic Avera	ge		76				
Subjective description Noise climate dominante domin	ninated by reg	ular aircraft n		nt Road (private				

with very low traffic flow. Distant road traffic noise from Bridge Street audible at measurement location. Light distant construction noise present during measurement 1. Birdsong.

Weather Conditions

Measurement Loca	tion: Elmbri	dge	Measurement	Location ID: CS	0315			
Coordinates: 5095	530, 166357							
Date of measurem	nent: 19/09	/2019	Number of me	asurements: 3				
11.0 Here	vy 62022 Marchy Germani	Measured I	Noise Levels	Ng data (6002) - prived Kargdan				
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}			
19/09/2019	13:45	64	66	59	81			
19/09/2019	14:00	64	66	59	86			
19/09/2019	15:00	63	66	59	72			
	(Overall calcula	ted noise levels					
Inf	ormation		Sc	ound Level dB(A	.)			
L _{Aeq} Arith	metic Avera	ige		64				
L _{A10} Arith	metic Avera	ige		66				
L _{A90} Arith	metic Avera	ige		59				
L _{Amax} Arith	nmetic Avera	age		80				
Subjective descrip Road traffic domina audible.			-		nally just			

Measurement Loca	ation: Elmbi	ridge	Measurement I	Location ID: CS	\$0316			
Coordinates: 509385, 166103								
Date of measurement:19/09/2019Number of measurements:3								
Date of measurement: 19/09/2019 Number of measurements: 3								
1		I manufig limming program bellevering bill & belle	and a state of the second seco	Security May Arci (2002) (In-me) Specificati				
		Measured N	loise Levels	Sroay, May Acts 402023				
Date	Time	Measured N L _{Aeq}	Noise Levels	Strang May Aris 60203	L _{Amax}			
Date 19/09/2019	Time 10:47			LA90 62	L _{Amax} 87			
		L _{Aeq}	L _{A10}					
19/09/2019	10:47	L _{Aeq} 75	L _{A10} 79	62	87			
19/09/2019 19/09/2019	10:47 11:02 12:01	L _{Aeq} 75 75 75 75	L _{A10} 79 78	62 63	87 102			
19/09/2019 19/09/2019 19/09/2019	10:47 11:02 12:01	L _{Aeq} 75 75 75 75	L _{A10} 79 78 78 ted noise levels	62 63	87 102 92			
19/09/2019 19/09/2019 19/09/2019 Inf	10:47 11:02 12:01	L _{Aeq} 75 75 75 Overall calcula	L _{A10} 79 78 78 ted noise levels	62 63 63	87 102 92			
19/09/2019 19/09/2019 19/09/2019 Inf L _{Aeq} Arith	10:47 11:02 12:01 ormation	L _{Aeq} 75 75 75 Overall calcula	L _{A10} 79 78 78 ted noise levels	62 63 63 Dund Level dB(A	87 102 92			
19/09/2019 19/09/2019 19/09/2019 Inf L _{Aeq} Arith L _{A10} Arith	10:47 11:02 12:01 ormation	L _{Aeq} 75 75 75 Overall calcula age	L _{A10} 79 78 78 ted noise levels	62 63 63 bund Level dB(A 75	87 102 92			
19/09/2019 19/09/2019 19/09/2019 Inf L _{Aeq} Arith L _{A10} Arith L _{A90} Arith	10:47 11:02 12:01 ormation metic Aver	L _{Aeq} 75 75 75 Overall calcula age age	L _{A10} 79 78 78 ted noise levels	62 63 63 Dund Level dB(A 75 78	87 102 92			
19/09/2019 19/09/2019 19/09/2019 Inf L _{Aeq} Arith L _{A10} Arith L _{A90} Arith	10:47 11:02 12:01 ormation metic Aver metic Aver metic Aver metic Aver	L _{Aeq} 75 75 75 Overall calcula age age age rage	L _{A10} 79 78 78 ted noise levels So	62 63 63 0und Level dB(A 75 78 63 93	87 102 92			

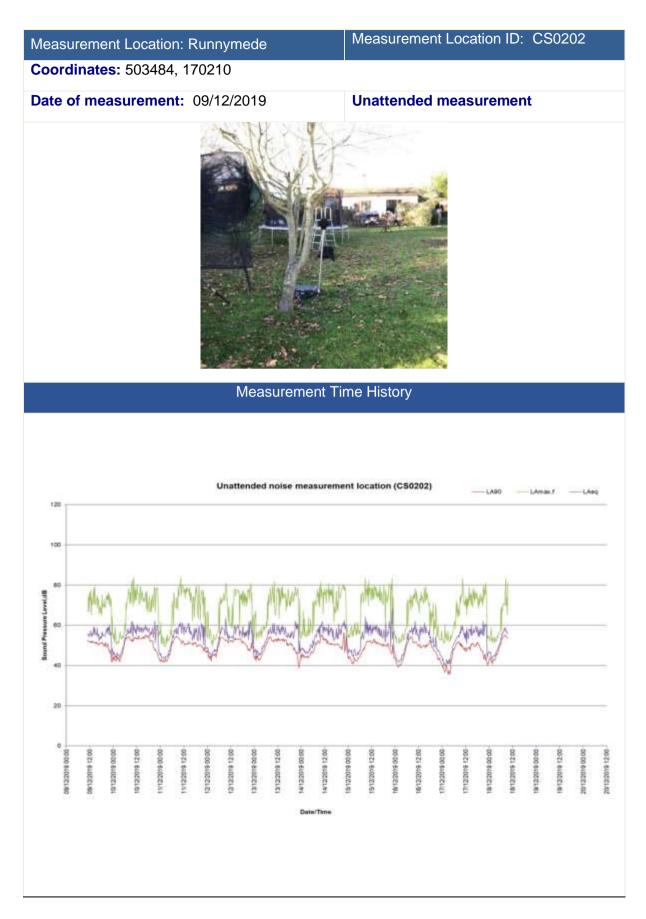
Measurement Location: Elmbridge Measurement Location ID: MW0004									
Coordinates: 515169, 168390									
Date of measurement:20/09/2019Number of measurements:3									
		Measured N	loise Levels						
Date Time L _{Aeq} L _{A10} L _{A90} L _{Amax}									
Date	Time	LAeq	LA10	L _{A90}	LAmax				
20/09/2019	13:42	LAeq 66	69	L _{A90} 52	L _{Amax} 85				
20/09/2019	13:42	66	69	52	85				
20/09/2019 20/09/2019	13:42 14:19 15:00	66 66 67	69 70	52 52	85 79				
20/09/2019 20/09/2019 20/09/2019	13:42 14:19 15:00	66 66 67	69 70 70 ted noise levels	52 52	85 79 80				
20/09/2019 20/09/2019 20/09/2019	13:42 14:19 15:00	66 66 67 Overall calcula	69 70 70 ted noise levels	52 52 56	85 79 80				
20/09/2019 20/09/2019 20/09/2019 Info L _{Aeq} Arith	13:42 14:19 15:00 ormation	66 66 67 Overall calculat	69 70 70 ted noise levels	52 52 56 Dund Level dB(A	85 79 80				
20/09/2019 20/09/2019 20/09/2019 Inf L _{Aeq} Arith L _{A10} Arith	13:42 14:19 15:00 ormation	66 66 67 Overall calculat age age	69 70 70 ted noise levels	52 52 56 bund Level dB(# 66	85 79 80				
20/09/2019 20/09/2019 20/09/2019 Inf L _{Aeq} Arith L _{A10} Arith L _{A90} Arith	13:42 14:19 15:00 ormation metic Avera	66 67 Overall calcula age age	69 70 70 ted noise levels	52 52 56 Dund Level dB(A 66 70	85 79 80				
20/09/2019 20/09/2019 20/09/2019 Inf L _{Aeq} Arith L _{A10} Arith L _{A90} Arith	13:42 14:19 15:00 ormation ametic Avera ametic Avera ametic Avera ametic Avera ametic Avera	66 67 Overall calcular age age age rage	69 70 70 ted noise levels So	52 52 56 bund Level dB(A 66 70 53 81	85 79 80				

Measurement Loca	ation: Elmbri	dge	Measurement L	ocation ID: SV	V0001
Coordinates: 510	539, 168048				
Date of measuren	nent: 20/09/	/2019	Number of me	asurements: 3	
	Inagery 62223 Planks	Google Intransis phytoism (2018)	Ag Marar Technologues, The Dested ormanics Des	up. May den 10103 - Frend Freydon	
	imagary 62023 Blandy	Goode Measured	Noise Levels	ng, Migi dana 40003 - serina Tereshari	
Date	Time	Google Measured L _{Aeq}	Noise Levels	LA90	L _{Amax}
Date 20/09/2019	Time 13:34			L _{A90} 57	L _{Amax} 70
		L _{Aeq}	L _{A10}		
20/09/2019	13:34	L _{Aeq} 58	L _{A10} 59	57	70
20/09/2019 20/09/2019	13:34 14:04 15:00	L _{Aeq} 58 60 60	L _{A10} 59 60	57 57	70 78
20/09/2019 20/09/2019 20/09/2019	13:34 14:04 15:00	L _{Aeq} 58 60 60	L _{A10} 59 60 61 ated noise levels	57 57	70 78 77
20/09/2019 20/09/2019 20/09/2019 Inf	13:34 14:04 15:00	L _{Aeq} 58 60 60 Overall calcula	L _{A10} 59 60 61 ated noise levels	57 57 57	70 78 77
20/09/2019 20/09/2019 20/09/2019 Inf L _{Aeq} Arith	13:34 14:04 15:00 formation	L _{Aeq} 58 60 60 Overall calcula	L _{A10} 59 60 61 ated noise levels	57 57 57 57 ound Level dB(A	70 78 77
20/09/2019 20/09/2019 20/09/2019 Inf L _{Aeq} Arith L _{A10} Arith	13:34 14:04 15:00 formation	L _{Aeq} 58 60 60 Overall calcula ge	L _{A10} 59 60 61 ated noise levels	57 57 57 ound Level dB(A 59	70 78 77
20/09/2019 20/09/2019 20/09/2019 Inf L _{Aeq} Arith L _{A10} Arith L _{A90} Arith	13:34 14:04 15:00 formation nmetic Avera	L _{Aeq} 58 60 60 Overall calcula ge ge	L _{A10} 59 60 61 ated noise levels	57 57 57 ound Level dB(A 59 60	70 78 77

aircraft pass-bys dominated by continuous water nowing over weir in maries. Regular aircraft pass-bys dominant when present. Very low traffic flow on waterside drive. Distant leisure noise from nearby athletics club. Birdsong. Weather Conditions

Measurement Loc	ation: Spelth	orne	Measurement I	Location ID: SV	V0002
Coordinates: 510	433, 168252				
Date of measure	ment: 20/09/	/2019	Number of me	asurements: 3	6
		Measured	Noise Levels		
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}
20/09/2019	10:37	66	69	56	83
20/09/2019	11:15	65	69	56	78
20/09/2019	12:00	66	69	57	83
	(Overall calcul	ated noise levels		
In	formation		Sc	ound Level dB(A	٨)
L _{Aeq} Arit	hmetic Avera	ge		65	
L _{A10} Arit	hmetic Avera	ge		69	
L _{A90} Arit	hmetic Avera	ge		56	
L _{Amax} Ari	thmetic Avera	age		81	
Subjective descri	otion of soun	d climate at r	nonitoring location	۱	
Continuous road t pedestrians walkin Weather Condition	ng by. Birdsor		ominant. Regular	aircraft pass-by	s. Occasional

Measurement Loc	ation: Speltho	orne	Measurement I	Location ID: S	W0003
Coordinates: 510)282, 168334				
Date of measure	ment: 20/09/	2019	Number of me	asurements: 3	3
		Gogle		Danver den of	
C areas	enagery would lifesing, bernage	Measured	Noise Levels	LUC, Meep Santa WAALS CONSECTIONS	<u></u>
Date	Time	L _{Aeq}	L _{A10}	L _{A90}	L _{Amax}
20/09/2019	10:40	57	57	40	83
20/09/2019	11:00	55	56	41	76
20/09/2019	12:00	57	57	42	77
	C	verall calcula	ated noise levels		
lr	formation		Sc	ound Level dB(A)
L _{Aeq} Arit	hmetic Avera	ge		56	
L _{A10} Arit	hmetic Avera	ge		57	
L _{A90} Arit	hmetic Avera	ge		41	
L _{Amax} Ari	thmetic Avera	ige		79	
Subjective descri	-		-	า	
Aircraft and occas Weather Condition		ffic from Mon	tford Road.		
Warm and Dry.					



Measurement I	_ocation: Runnym	ede	Measurement Location ID: CS0202						
		Measured Nois	e Levels						
L _{Aeq, 0700-1900}	L _{Aeq, 1900-2300}	L _{Aeq, 2300-0700}	LAeq, 0700-23:00						
57	49	49	58						
Typical	Typical	Typical	Typical Min	Typical Min	Typical Min				
L _{Amax, 0700-1900}	L _{Amax} , 1900-2300	L _{Amax, 2300-0700}	La90, 0700-1900	La90, 1900-2300	La90, 2300-0700				
78	79	64	50	44	40				
Subjective des	scription of sound	climate at monit	oring location						
noise dominant boats are the o were the same	Subjective description of sound climate at monitoring location Noise climate dominated by road traffic from Chertsey Lane to the north west. Aircraft noise dominant when present with two different flight paths. Birdsong and occasional boats are the only other noise sources. Upon collection of the meter all noise sources were the same and the meter showed no sign of disturbance.								
Weather Condi				· · ·					
No data is cons been excluded	sidered to have be	een adversely af	fected by rain o	or wind, so no	data has				

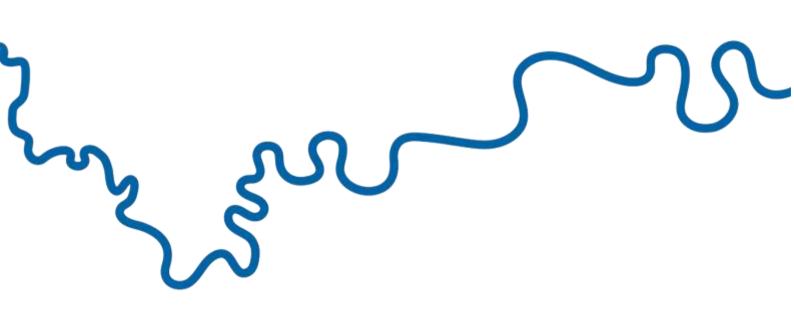


Measurement I	_ocation: Runnym	ede	Measurement Location ID: CS0210		
		Measured Nois	se Levels		
L _{Aeq} , 0700-1900	L _{Aeq, 1900-2300}	L _{Aeq} , 2300-0700	L _{Aeq, 0700-23:00}		
61	61	55	62		
Typical	Typical	Typical	Typical Min	Typical Min	Typical Min
L _{Amax, 0700-1900}	L _{Amax} , 1900-2300	L _{Amax, 2300-0700}	La90, 0700-1900	La90, 1900-2300	La90, 2300-0700
78	76	66	55	52	40
Subjective des	scription of sound	climate at monit	oring location		
so screening is from the road a despite proximi Upon collection sign of disturba		ter placed away the western faç birdsong can b	from the fence cade. Aircraft is e heard in perio	that is screen dominant whe ods of reduced	ing the noise on present I traffic.
Weather Condi	itions sidered to have be				

No data is considered to have been adversely affected by rain or wind, so no data has been excluded.



Measurement Location: Spelthorne			Measurement Location ID: CS0303		
		Measured Nois	se Levels		
LAeq, 0700-1900	L _{Aeq, 1900-2300}	L _{Aeq} , 2300-0700	L _{Aeq, 0700-23:00}		
56	53	48	56		
Typical	Typical	Typical	Typical Min	Typical Min	Typical Min
L _{Amax} , 0700-1900	L _{Amax, 1900-2300}	L _{Amax} , 2300-0700	La90, 0700-1900	La90, 1900-2300	La90, 2300-0700
77	75	70	35	39	34
Subjective description of sound climate at monitoring location					
audible. Occas	lominated by rust ional overflight by and the meter sh	jet aircraft. Upo	on collection of		
Weather Condi	tions	, , , , , , , , , , , , , , , , , , ,			
No data is cons been excluded.	sidered to have be	een adversely af	fected by rain o	or wind, so no	data has





The River Thames Scheme represents a new landscape-based approach to creating healthier, more resilient and more sustainable communities by reducing the risk of flooding and creating high quality natural environments.

River Thames Scheme