## Rosefield Solar Farm

## **Environmental Statement**

Volume 4 Appendix 13.1: Baseline Noise Survey

EN010158/APP/6.4 September 2025 Rosefield Energyfarm Limited APFP Regulation 5(2)(a)
Planning Act 2008

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

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#### 1. Introduction

#### 1.1. Purpose of the Report

1.1.1. This Baseline Noise Report has been prepared on behalf of Rosefield Energyfarm Limited ('the Applicant') to present the likely significant effects on noise and vibration in relation to the Development Consent Order (DCO) application for the construction, operation (including maintenance) and decommissioning of Rosefield Solar Farm (hereafter referred to as the 'Proposed Development').

#### 1.2. The Order Limits

1.2.1. The extent of the Order Limits is shown in Location, Order Limits and Grid Coordinate Plans [EN010158/APP/2.1] and the Proposed Development is described in full in ES Volume 1, Chapter 3: Proposed Development Description [EN010158/APP/6.1] and shown spatially on the Works Plans [EN010158/APP/2.3].

#### 1.3. The Proposed Development

- 1.3.1. The Proposed Development comprises the construction, operation (including maintenance), and decommissioning of solar photovoltaic ('PV') development and energy storage, together with associated infrastructure and an underground cable connection to the National Grid East Claydon Substation.
- 1.3.2. The Proposed Development would include a generating station with a total exporting capacity exceeding 50 megawatts ('MW').
- 1.3.3. The location of the Proposed Development is shown on ES Volume 3, Figure 1.1: Site Location Plan [EN010158/APP/6.3] and described in ES Volume 1, Chapter 2: Location of the Proposed Development [EN010158/APP/6.1]. The Proposed Development would be located within the Order Limits (the land shown on the Works Plans [EN010158/APP/2.3] within which the Proposed Development can be carried out). The Order Limits plan is provided as ES Volume 3, Figure 1.2: Order Limits [EN010158/APP/6.3]. Land within the Order Limits is known as the 'Site'.
- 1.3.4. The principal components of the Proposed Development include:
  - Solar PV development consisting of:
    - Ground mounted Solar PV generating station. The generating station would include Solar PV modules and mounting structures; and
    - Balance of Solar System (BoSS) which comprises: Inverters;
       Transformers; Switchgear; Combiner Boxes; acoustic barriers and cabling.



- A project substation (the 'Rosefield Substation') compound comprising:
   Transformers; Switchgear; reactive power compensation bays;
   disconnectors; circuit breakers; busbars; control equipment; lightning
   surge arrestors; building(s) including office, control, functions, material
   storage, material laydown areas and welfare facilities; firewalls; fencing
   and acoustic barriers; a security cabin; parking as well as wider
   monitoring, maintenance and emergency equipment;
- A Main Collector Compound and two Satellite Collector Compounds comprising: Switchgear; Transformers; ancillary equipment; operation and maintenance and welfare facilities; material storage; material laydown areas; fencing and acoustic barriers; and security cabins;
- Battery Energy Storage System (BESS) compound comprising: batteries and associated Inverters; Transformers; Switchgear, ancillary equipment and their containers; office, control and welfare buildings; fencing and acoustic barriers; monitoring, maintenance and emergency systems; air conditioning; electrical cables; fire safety infrastructure; operation (including maintenance) security facilities; material storage; and material laydown areas;
- Interconnecting Cabling Corridor(s) to connect the Solar PV modules and the BESS to the Satellite and Main Collector Compounds to the Rosefield Substation;
- A Grid Connection Cable Corridor to connect the Rosefield Substation to the National Grid East Claydon Substation via 400kV cabling;
- Ancillary infrastructure works comprising: boundary treatment; security
  equipment; lighting; fencing; landscaping; internal access tracks; works
  to facilitate vehicular access; earthing devices; earthworks; surface
  water management; utility connections and diversions; and any other
  works identified as necessary to enable the Proposed Development;
- Green and blue infrastructure, recreation and amenity works comprising: landscaping; habitat management; biodiversity enhancement; the creation of three permissive footpaths; and works to permanently divert four PRoW Footpaths in five instances;
- Site-wide operational monitoring and security equipment; and
- Highways infrastructure improvements and safety works comprising: minor junction improvement works; road widening; passing places; and works to facilitate vehicular access to the Site.
- 1.3.5. The majority of the Site is currently used as agricultural land. There are also a number of farms and residential properties located adjacent to the Order Limits.
- 1.3.6. In the north-east corner of the Site, there is the existing National Grid East Claydon Substation.



1.3.7. The study area is shown in **ES Volume 3**, **Figure 13.1**: **Study Area and Receptors** [EN010158/APP/6.3].



### 2. Baseline Noise Survey

#### 2.1. Methodology

- 2.1.1. A baseline noise survey has been undertaken to define the predevelopment noise levels across the development site. The resulting measurement data has been used to inform the assessment. The survey comprised unattended measurements at ten locations representative of the nearest noise sensitive receptors to the Proposed Development. The measurements were taken between 06 March 2024 and 04 April 2024.
- 2.1.2. The measurement locations are summarised in **Table 1** and are presented in **ES Volume 3**, **Figure 13.2: Baseline Survey Locations** [EN010158/APP/6.3]. Photographs of the measurement locations are provided in **Annex 1**.

**Table 1: Proposed Monitoring Locations** 

ID	Dogantor	Lo	cation	Massurament Dates
ID	Receptor	Easting	Northing	Measurement Dates
MP1	Sion Hill Farm <sup>1</sup>	475943	226058	06/03/24 - 20/03/24
MP2	Bernwood Farm	473413	224475	25/03/24 - 04/04/24
MP3	Borshaw Farm	473735	223234	06/03/24 - 14/03/24
MP4	Dry Leys Farm	473091	221837	06/03/24 - 18/03/24
MP5	Finmere Hill House	471608	222451	06/03/24 - 20/03/24
MP6	Knowlhill Farm	470837	223635	06/03/24 - 20/03/24
MP7	Catherine Cottages	471005	224855	06/03/24 - 20/03/24
MP8	Pond Farm	469982	224828	20/03/24 - 04/04/24
MP9	Dwelling on Brickhill Way	468907	224367	06/03/24 – 20/03/24
MP10	Muxwell Farm	471694	223911	25/03/24 - 04/04/24

<sup>&</sup>lt;sup>1</sup> Proxy location used for Sion Hill Farm due to limited access

2.1.3. Noise measurements were undertaken under free field conditions i.e. with the microphone positioned at least 3.5m away from any significant vertical reflecting surfaces and 1.2 to 1.5m above the ground. Noise monitoring was undertaken using the following equipment in **Table 2**.



Table 2: Noise monitoring equipment

Equipment	Туре	Serial Number	Calibration Date
Sound level meter	Rion NL-52	197783	24/01/2023
Sound level meter	Rion NL-52	976245	21/12/2023
Sound level meter	Rion NL-52	976247	25/08/2023
Sound level meter	Rion NL-52	142653	25/08/2022
Sound level meter	Rion NL-52	1265456	26/09/2023
Sound level meter	Rion NL-52	1276553	01/02/2023
Sound level meter	Rion NL-52	876025	25/01/2024
Sound level meter	Fusion	14598	30/05/2022
<b>Acoustic Calibrator</b>	Rion NC-74	34615260	03/05/2023
<b>Acoustic Calibrator</b>	Rion NC-74	34167506	14/08/2023

- 2.1.4. The sound level meters used conform to the Class 1 requirements of British Standard (BS) EN 61672-1:2013 'Electroacoustics. Sound level meter, Specifications'. The calibrator used conforms to the Class 1 requirements of BS EN IEC 60942:2018 'Electroacoustics, Sound calibrators'.
- 2.1.5. The equipment used has a calibration history that is traceable to a certified calibration institution. The calibration of the sound level meters was checked before and after the measurements, with no significant calibration drift noted i.e. within a +/- 0.5dB tolerance.

#### Weather Conditions

- 2.1.6. Weather information throughout the duration of the noise survey has been obtained via 2 Davis Vantage Pro 2 weather stations installed in the vicinity of monitoring locations MP4 and MP7. The weather information has been summarised in **Table 3** and **Table 4**.
- 2.1.7. Periods of precipitation and/or high wind speeds (above 5m/sec) have been excluded from the assessment.

Table 3: Weather data – located near MP4

Date	Average temperature (°C)	Average wind speed (m/s)	Total precipitation (mm)	Prevailing wind direction
06/03/2024	10.6	0.2	0.2	S
07/03/2024	6.1	1.5	0.0	SE
08/03/2024	6.0	2.1	0.0	SSE



Date	Average temperature (°C)	Average wind speed (m/s)	Total precipitation (mm)	Prevailing wind direction
09/03/2024	8.2	2.1	0.0	SSE
10/03/2024	7.6	0.6	10.2	SSE
11/03/2024	6.9	0.3	0.2	SE
12/03/2024	9.5	2.2	13.4	ENE
13/03/2024	11.2	1.8	0.0	NNE
14/03/2024	11.5	1.6	0.4	NNE
15/03/2024	11.2	2.0	0.4	E
16/03/2024	8.3	1.0	8.0	NNE
17/03/2024	10.9	1.7	4.4	E
18/03/2024	9.6	8.0	0.0	NE
19/03/2024	11.4	1.3	0.0	NE
20/03/2024	13.8	0.4	1.4	NE

Table 4: Weather data – located near MP7

Date	Average temperature (°C)	Average wind speed (m/s)	Total precipitation (mm)	Prevailing wind direction
21/03/2024	11.6	3.0	0.6	SW
22/03/2024	9.0	3.1	0.2	WNW
23/03/2024	6.1	4.1	0.0	WSW
24/03/2024	7.5	2.9	0.0	WNW
25/03/2024	8.0	2.3	0.2	SSE
26/03/2024	9.4	1.6	10.2	Е
27/03/2024	6.6	3.3	3.4	S
28/03/2024	7.2	5.7	10.8	SSW
29/03/2024	9.0	4.5	0.0	SSW
30/03/2024	9.3	2.0	0.0	SSW
31/03/2024	7.8	2.4	0.0	E
01/04/2024	9.8	2.5	2.8	SW
02/04/2024	10.2	2.9	2.6	SSW
03/04/2024	10.6	4.6	0.0	SW



Date	Average temperature (°C)	Average wind speed (m/s)	Total precipitation (mm)	Prevailing wind direction
04/04/2024	10.8	3.4	7.0	SW

#### **Survey Observations**

2.1.8. The following observations were noted in **Table 5** with regards to the dominant noise sources at each monitoring location during the deployment/collection of the unattended noise monitoring equipment during daytime hours.

Table 5: Noise survey observations

Table 5: NO	oise survey observations	
ID	Receptor	Observations
MP1	Sion Hill Farm (proxy location)	Noise from natural sources such as windblown foliage dominant. Occasional noise from livestock to the north audible.
MP2	Bernwood Farm	Road traffic noise from Quainton Road to the north and Claydon Road to the east audible, with some gardening noise audible from neighbouring fields/gardens.
MP3	Borshaw Farm	Road traffic noise from Claydon Road to the east audible.
MP4	Dry Leys Farm	Noise from sheep in the surrounding fields and dogs barking. Occasional road traffic noise audible from Claydon Road to the east.
MP5	Finmere Hill House	Bird noise from nearby wooded area dominant. A low level hum from HS2 works/ Greatmoor Energy from Waste (EfW) facility to the west audible.
MP6	Knowlhill Farm	Dominant noise sources included bird noise, overhead planes, livestock noise with occasional noise associated with farming activities (including tractors) audible.  Distant hum of HS2 and Greatmoor EfW facility to the south.
MP7	Catherine Cottages	Road traffic noise from Calvert Road to the north audible.
MP8	Pond Farm	Road traffic noise audible from Calvert Road to the north and noise from foliage



ID	Receptor	Observations
		the dominant source in absence of car pass-bys.
MP9	Dwelling on Brickhill Way	Dominant noise sources included constant drone with occasional banging from HS2 works including site compound noise to the north and cement works to the south, and bird noise also audible.
MP10	Muxwell Farm	HS2 works, the Greatmoor EfW facility and road traffic noise to the west. Overhead planes/gliders also audible.



## 3. Noise Monitoring Results

#### 3.1. Measured Noise Levels

3.1.1. A summary of the measured noise levels at each monitoring location are presented below in **Figures 3** to **12**. Tabulated results at each location are presented in **Annex 2**.



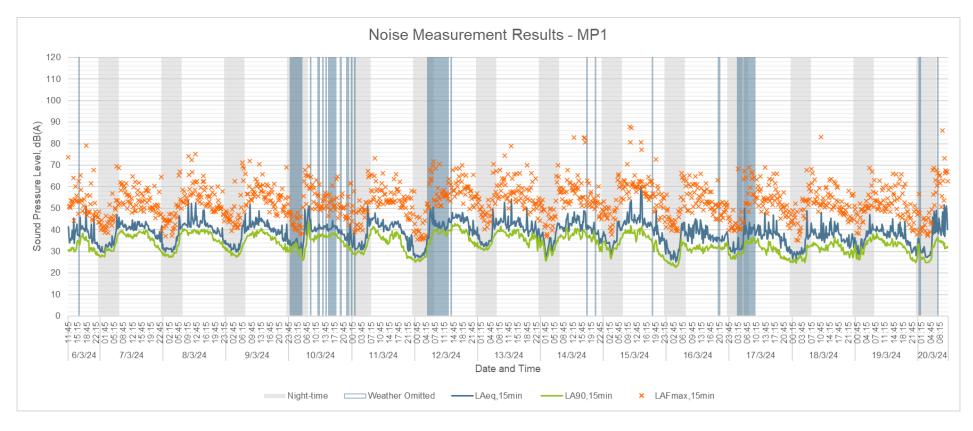


Figure 3: Noise measurement results – MP1



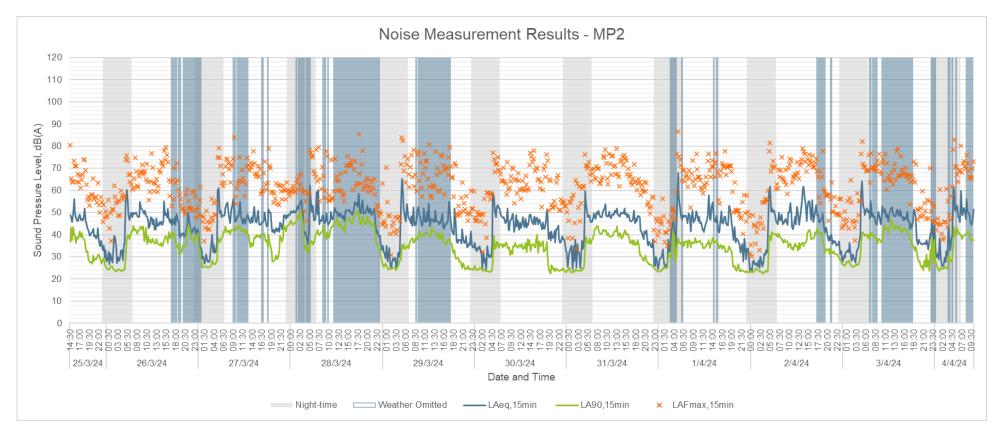


Figure 4: Noise measurement results – MP2



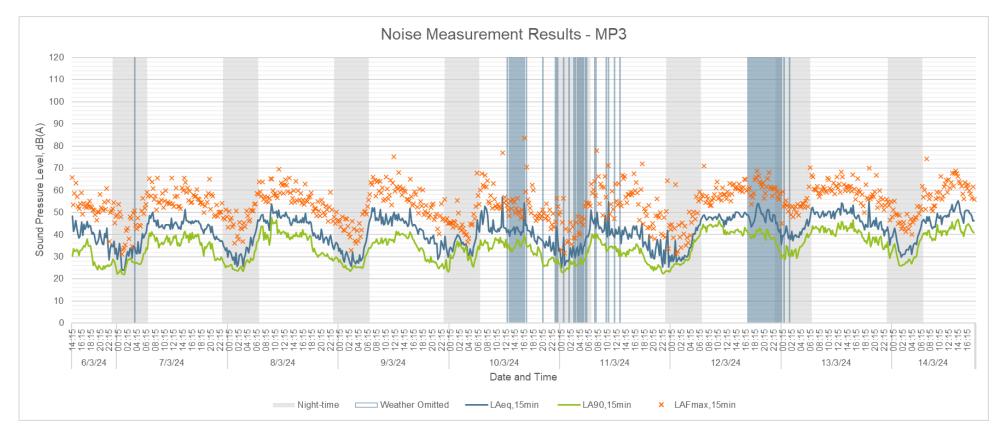


Figure 5: Noise measurement results – MP3



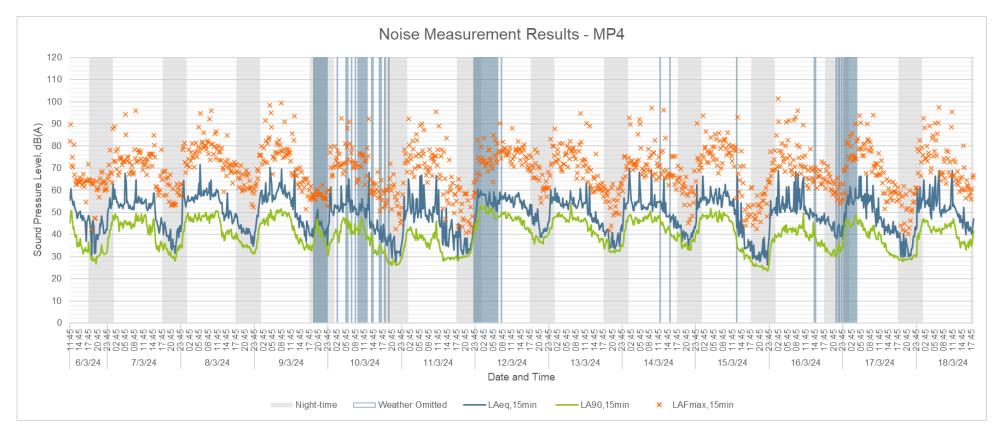


Figure 6: Noise measurement results – MP4



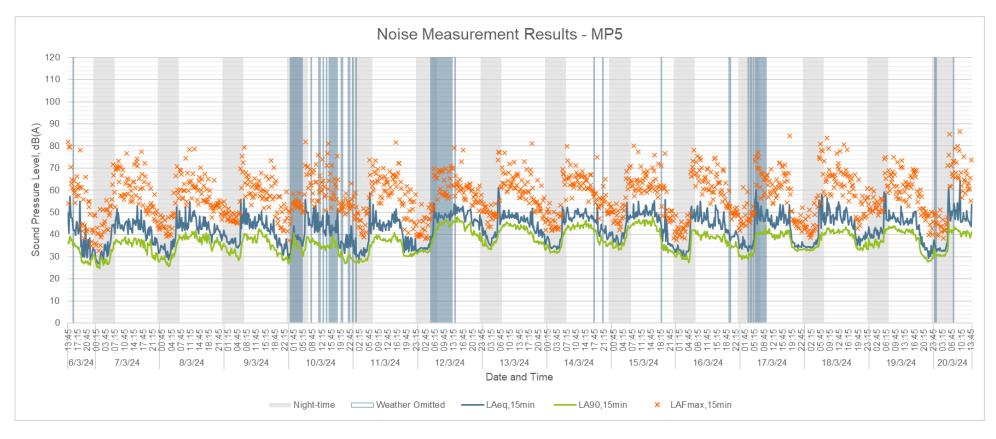


Figure 7: Noise measurement results – MP5



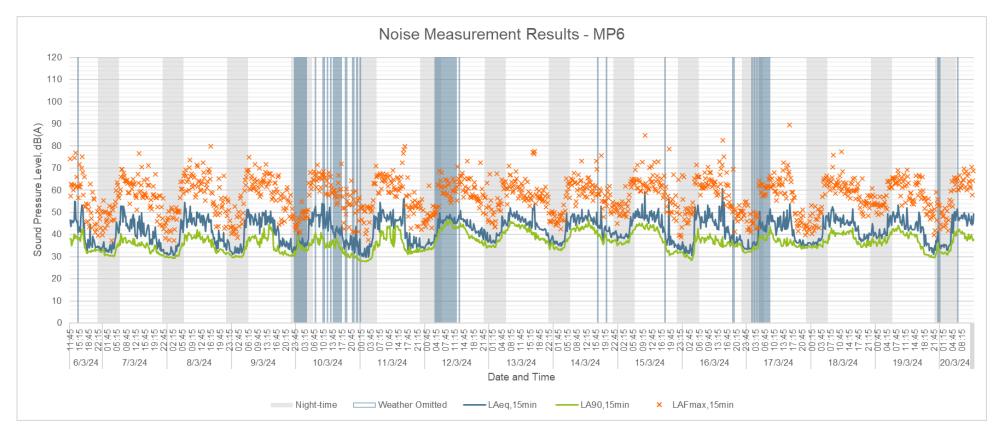


Figure 8: Noise measurement results – MP6



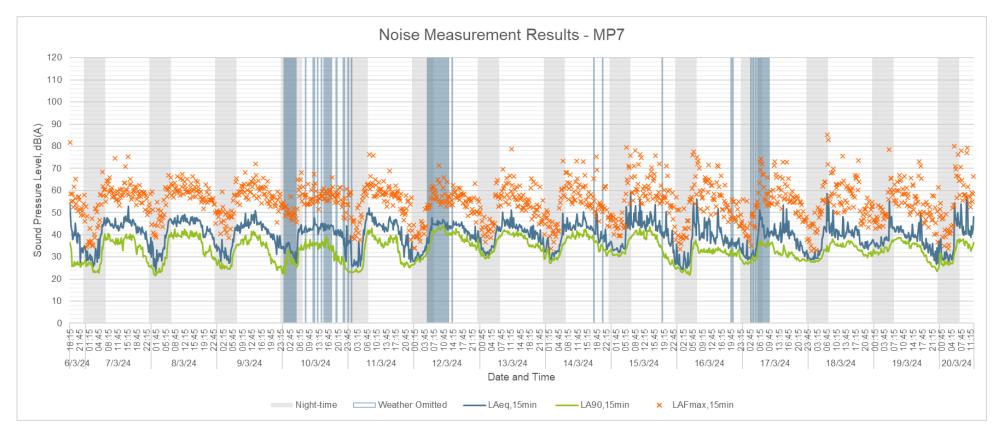


Figure 9: Noise measurement results – MP7



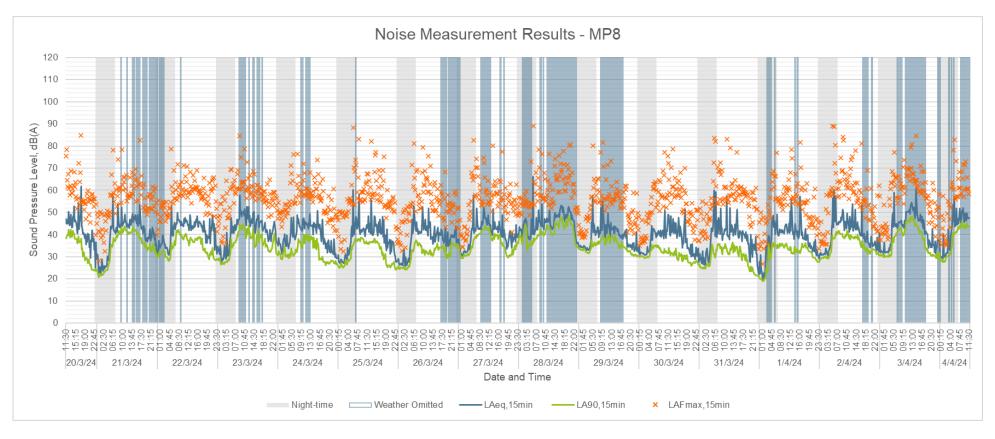


Figure 10: Noise measurement results – MP8



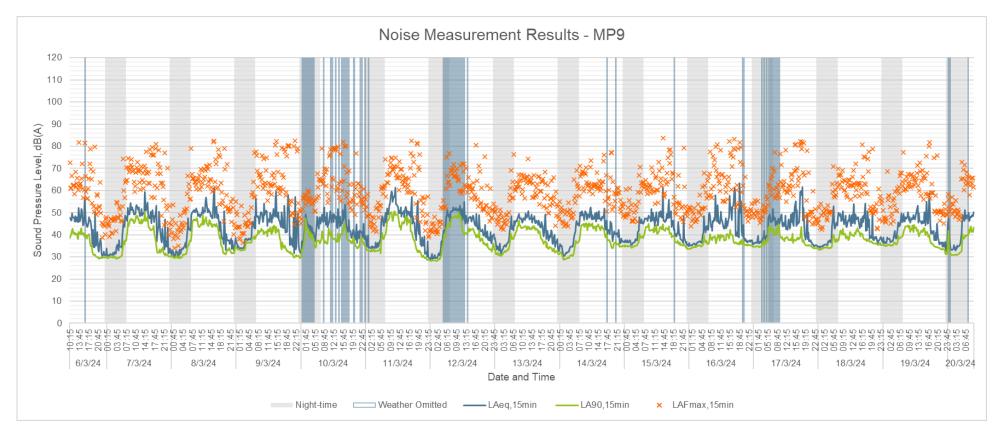


Figure 11: Noise measurement results - MP9



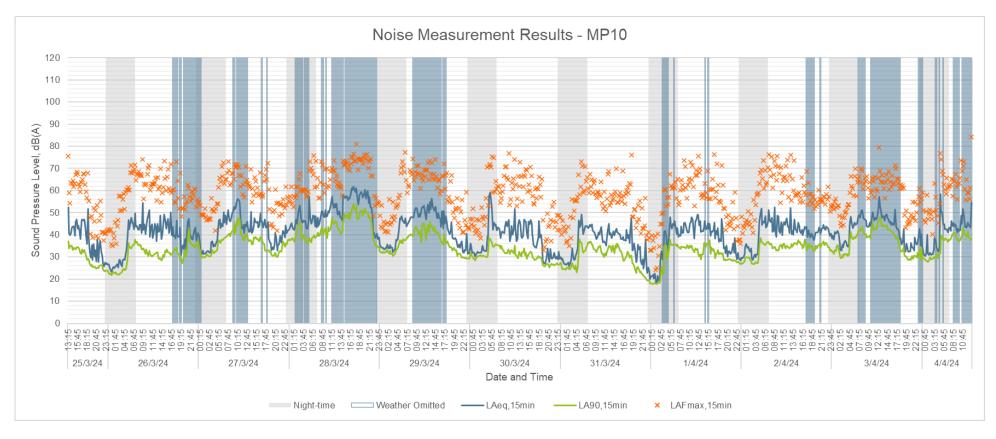


Figure 12: Noise measurement results – MP10



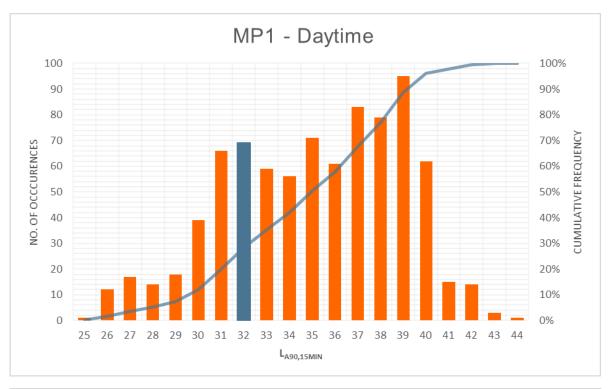
#### 3.2. Background Sound Levels

- 3.2.1. BS 4142:2014+A1:2019 'Methods for rating and assessing industrial and commercial sound' defines the methods for rating and assessing noise from industrial or commercial sources. The prescribed methodology requires the noise levels generated by the development to be assessed against the measured pre-development background sound levels at the surrounding receptor locations. Typically, the greater the difference between the rating level and the background sound level, the greater the magnitude of the impact.
- 3.2.2. **Table 6** presents the representative background sound levels at the 10 measurement locations along with **Figures 13** to **22**. These levels have been determined through the statistical analysis of background (LA90,T) measurements recorded during the noise survey to provide a representative background sound level at each measurement location for both daytime (07:00 to 23:00) and night-time (23:00 to 07:00), in line with the guidance provided within BS 4142:2014+A1:2019. This excludes periods where weather conditions were unsuitable for noise monitoring.

Table 6: Measured background sound levels

	3	Daytime	Night-time
ID	Receptor		Representative L <sub>A90,15min</sub> (dB)
MP1	Sion Hill Farm	32	30
MP2	Bernwood Farm	34	30
MP3	Borshaw Farm	29	24
MP4	Dry Leys Farm	36	29
MP5	Finmere Hill House	33	29
MP6	Knowlhill Farm	32	30
MP7	Catherine Cottages	31	23
MP8	Pond Farm	29	25
MP9	Brickhill Way	34	30
MP10	Muxwell Farm	29	27





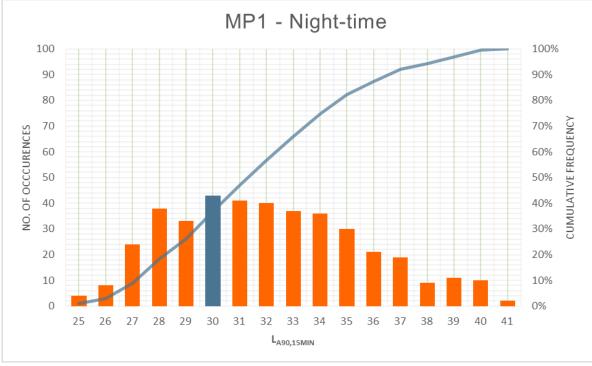
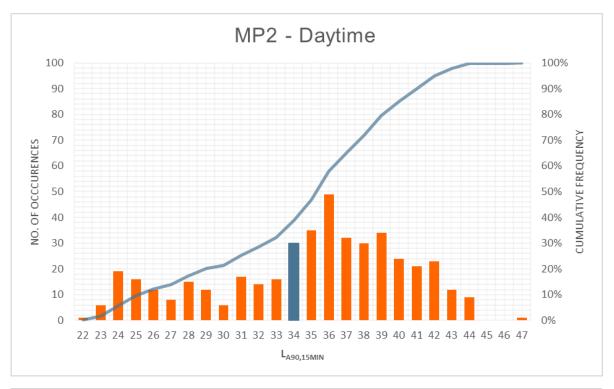


Figure 13: Statistical analysis - MP1





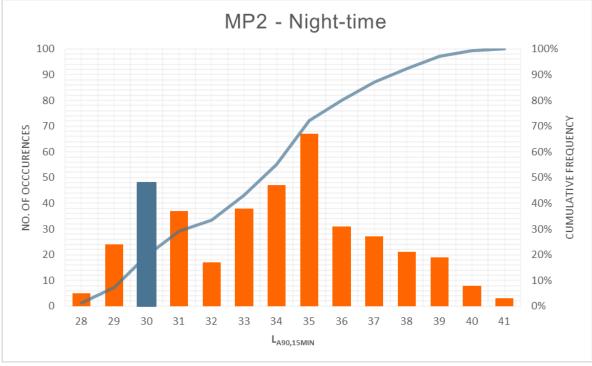
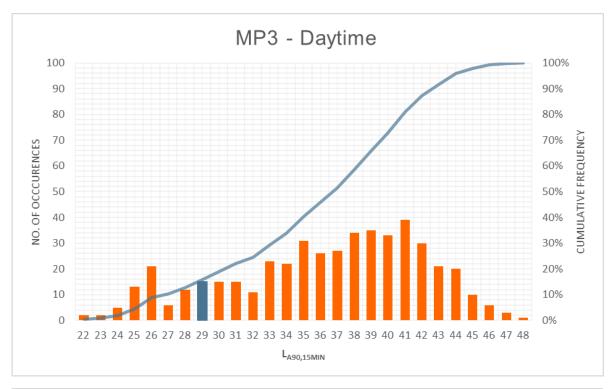


Figure 1: Statistical analysis - MP2





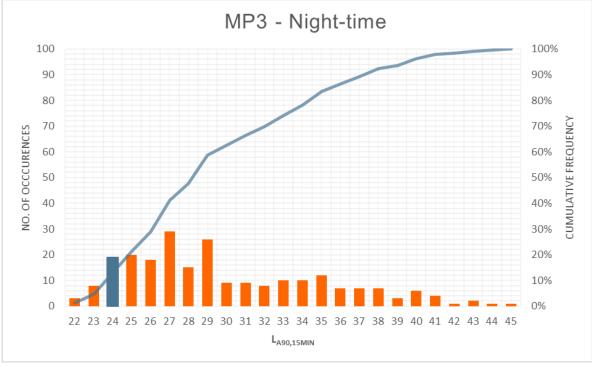
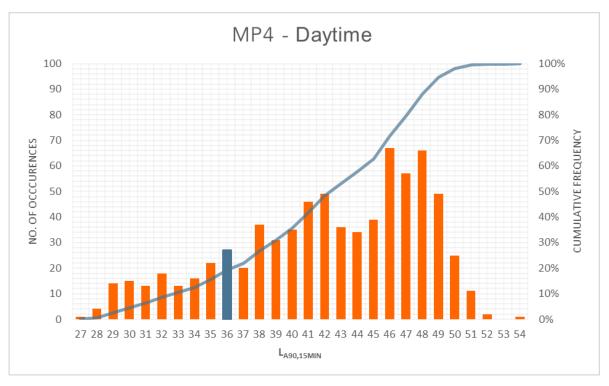


Figure 2: Statistical analysis – MP3





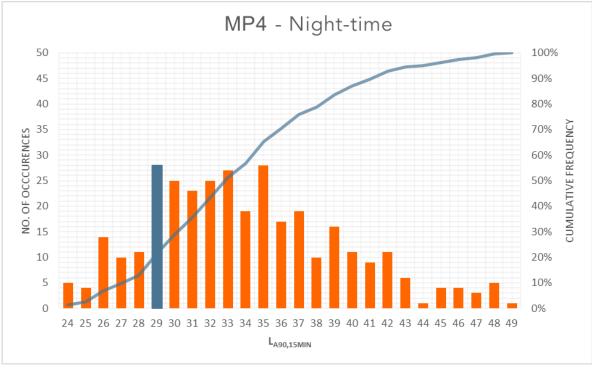
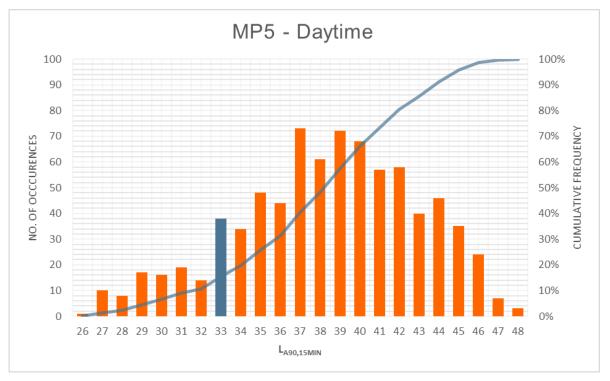


Figure 3: Statistical analysis - MP4





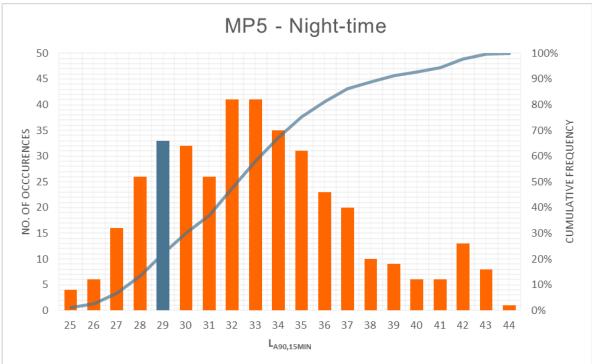
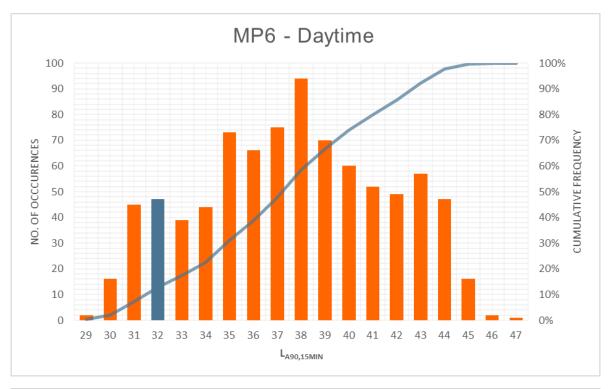


Figure 4: Statistical analysis – MP5





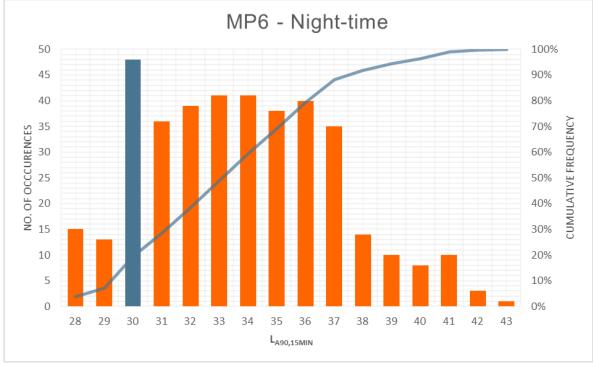
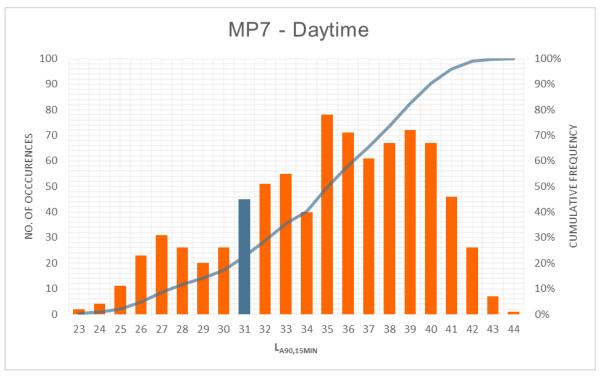


Figure 5: Statistical analysis – MP6





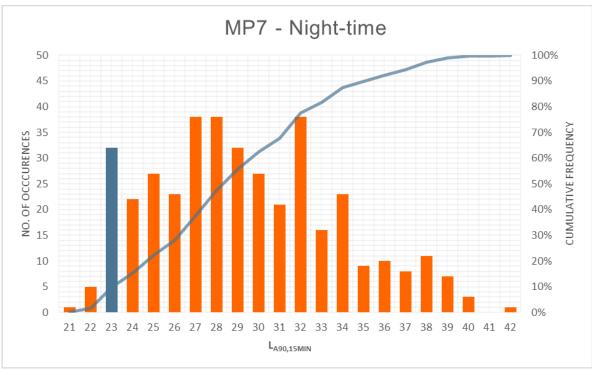
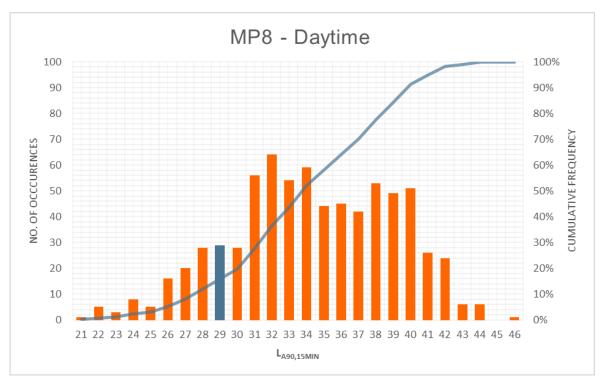


Figure 6: Statistical analysis – MP7





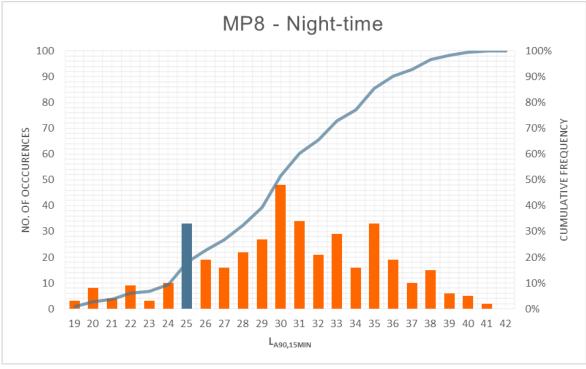
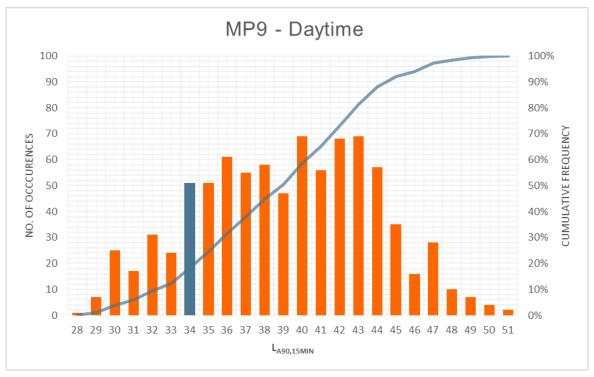


Figure 7: Statistical analysis – MP8





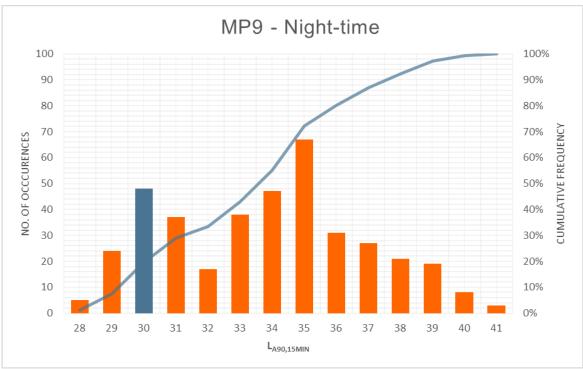
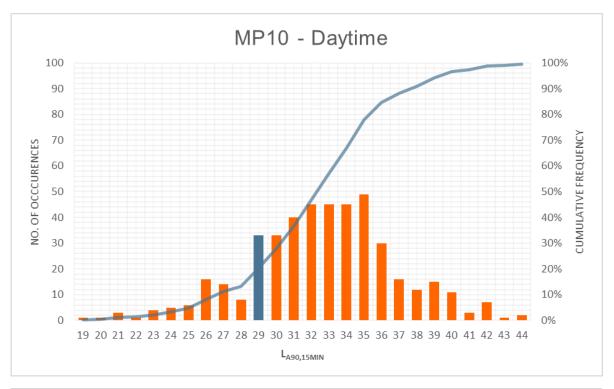


Figure 8: Statistical analysis - MP9





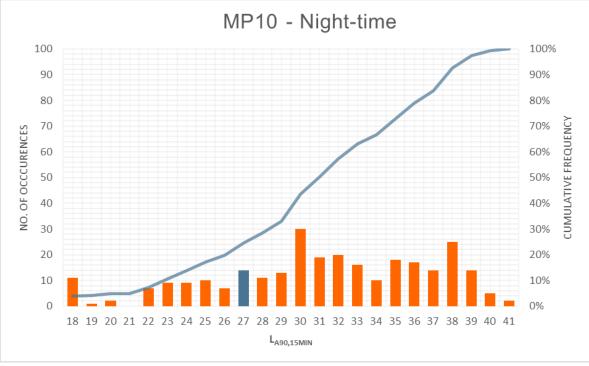


Figure 9: Statistical analysis - MP10

# **Annex 1**Noise Survey Photographs





## Annex 1: Noise Survey Photographs





Figure A1.1 Noise survey photographs – MP1





Figure A1.2 Noise survey photographs – MP2







Figure A1.3 Noise survey photographs – MP3

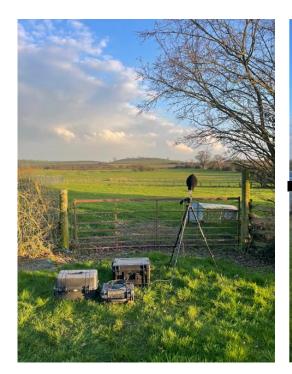




Figure A1.4 Noise survey photographs – MP4







Figure A1.5 Noise survey photographs – MP5





Figure A1.6 Noise survey photographs – MP6







Figure A1.7 Noise survey photographs – MP7



Figure A1.8 Noise survey photographs – MP8







Figure A1.9 Noise survey photographs – MP9





Figure A1.10 Noise survey photographs – MP10

## **Annex 2 Noise Measurement Results**





## **Annex 2: Noise Measurement Results**

Table A2.1 Noise measurement results - MP1

TADIO AZ. I INUI	se measurement	Measured soun	d levels, dB	
Date	Time Period	Average L <sub>Aeq,T</sub>		Average L <sub>A90,T</sub>
06/03/2024	11:45-23:00	41	79	33
00/00/2024	23:00-07:00	37	69	31
07/03/2024	07:00-23:00	42	69	37
01700/2024	23:00-07:00	37	67	30
08/03/2024	07:00-23:00	44	75	38
00/00/2024	23:00-07:00	36	71	30
09/03/2024	07:00-23:00	43	72	37
03/03/2024	23:00-07:00	39	69	31
10/03/2024	07:00-23:00	42	69	36
10/03/2024	23:00-07:00	40	67	31
11/03/2024	07:00-23:00	42	73	35
11/03/2024	23:00-07:00	40	70	29
12/03/2024	07:00-23:00	44	72	39
12/03/2024	23:00-07:00	39	70	33
13/03/2024	07:00-23:00	44	79	38
13/03/2024	23:00-07:00	37	70	32
14/03/2024	07:00-23:00	43	83	37
14/03/2024	23:00-07:00	38	66	32
15/03/2024	07:00-23:00	47	88	36
15/03/2024	23:00-07:00	36	66	27
16/03/2024	07:00-23:00	39	66	32
16/03/2024	23:00-07:00	38	68	30
17/03/2024	07:00-23:00	40	69	31
17/03/2024	23:00-07:00	36	68	27
40/02/2024	07:00-23:00	39	83	32
18/03/2024	23:00-07:00	38	69	32
40/02/2024	07:00-23:00	39	66	33
19/03/2024	23:00-07:00	38	69	28



**20/03/2024** 07:00-23:00 46 86 34

Table A2.2 Noise measurement results – MP2

		Measured soun	d levels, dB	
Date	Time Period	Average L <sub>Aeq,T</sub>	Highest L <sub>AFmax,T</sub>	Average L <sub>A90,T</sub>
25/03/2024	14:30-23:00	47	80	34
23/03/2024	23:00-07:00	48	76	28
26/03/2024	07:00-23:00	48	80	38
20/03/2024	23:00-07:00	49	79	32
27/03/2024	07:00-23:00	49	84	39
21103/2024	23:00-07:00	53	79	42
28/03/2024	07:00-23:00	51	85	44
20/03/2024	23:00-07:00	52	84	29
29/03/2024	07:00-23:00	47	81	36
29/03/2024	23:00-07:00	49	77	27
30/03/2024	07:00-23:00	46	78	32
30/03/2024	23:00-07:00	48	76	28
31/03/2024	07:00-23:00	48	79	37
31/03/2024	23:00-07:00	54	87	30
01/04/2024	07:00-23:00	48	78	33
01/04/2024	23:00-07:00	50	81	28
02/04/2024	07:00-23:00	51	79	36
02/04/2024	23:00-07:00	51	82	31
03/04/2024	07:00-23:00	48	79	38
03/04/2024	23:00-07:00	51	83	31
04/04/2024	07:00-10:00	50	76	39



Table A2.3 Noise measurement results – MP3

		Measured soun	d levels, dB	
Date	Time Period	Average L <sub>Aeq,T</sub>	Highest L <sub>AFmax,T</sub>	Average L <sub>A90,T</sub>
06/03/2024	14:15-23:00	42	66	30
00/03/2024	23:00-07:00	37	59	27
07/03/2024	07:00-23:00	45	66	36
01/03/2024	23:00-07:00	38	64	27
08/03/2024	07:00-23:00	47	70	38
00/03/2024	23:00-07:00	36	58	27
09/03/2024	07:00-23:00	46	75	35
09/03/2024	23:00-07:00	39	68	31
10/03/2024	07:00-23:00	45	84	34
10/03/2024	23:00-07:00	39	63	28
11/03/2024	07:00-23:00	43	78	32
11/03/2024	23:00-07:00	39	64	30
12/03/2024	07:00-23:00	49	71	41
12/03/2024	23:00-07:00	44	70	34
13/03/2024	07:00-23:00	49	70	41
13/03/2024	23:00-07:00	39	66	31
14/03/2024	07:00-17:45	49	59	42



Table A2 4 Noise measurement results – MP4

Table A2.4 Noise measurement results – MP4				
		Measured soun	id levels, dB	
Date	Time Period	Average L <sub>Aeq,T</sub>	Highest L <sub>AFmax,T</sub>	Average L <sub>A90,T</sub>
06/03/2024	17:00-23:00	52	90	38
00/03/2024	23:00-07:00	48	78	33
07/03/2024	07:00-23:00	57	96	44
0110312024	23:00-07:00	52	81	34
08/03/2024	07:00-23:00	59	96	46
00/03/2024	23:00-07:00	46	76	36
09/03/2024	07:00-23:00	60	99	45
03/03/2024	23:00-07:00	50	80	37
10/03/2024	07:00-23:00	55	93	40
10/00/2024	23:00-07:00	45	78	30
11/03/2024	07:00-23:00	56	96	36
11/00/2024	23:00-07:00	50	83	35
12/03/2024	07:00-23:00	56	90	48
12/00/2024	23:00-07:00	51	83	40
13/03/2024	07:00-23:00	55	95	45
10/00/2024	23:00-07:00	47	75	35
14/03/2024	07:00-23:00	58	97	45
	23:00-07:00	51	90	38
15/03/2024	07:00-23:00	57	94	43
10.00.2021	23:00-07:00	45	77	28
16/03/2024	07:00-23:00	58	101	41
	23:00-07:00	48	82	35
17/03/2024	07:00-23:00	57	94	40
	23:00-07:00	50	83	31
18/03/2024	07:00-23:00	58	97	42
- 3. 3 3 <del></del>	23:00-07:00	44	67	37



Table A2 5 Noise measurement results – MP5

Table A2.5 Noise measurement results – MP5				
		Measured soun	id levels, dB	
Date	Time Period	Average L <sub>Aeq,T</sub>	Highest L <sub>AFmax,T</sub>	Average L <sub>A90,T</sub>
06/03/2024	11:45-23:00	47	82	32
00/03/2024	23:00-07:00	37	72	29
07/03/2024	07:00-23:00	45	77	36
01703/2024	23:00-07:00	40	71	30
08/03/2024	07:00-23:00	46	79	38
00/03/2024	23:00-07:00	43	75	33
09/03/2024	07:00-23:00	46	79	36
03/00/2024	23:00-07:00	45	82	33
10/03/2024	07:00-23:00	45	81	34
10/00/2024	23:00-07:00	44	74	29
11/03/2024	07:00-23:00	45	82	36
11/00/2024	23:00-07:00	43	70	34
12/03/2024	07:00-23:00	49	79	44
12/00/2024	23:00-07:00	49	78	37
13/03/2024	07:00-23:00	47	81	42
10/00/202-	23:00-07:00	42	70	34
14/03/2024	07:00-23:00	48	80	42
	23:00-07:00	44	70	37
15/03/2024	07:00-23:00	49	80	42
	23:00-07:00	43	78	32
16/03/2024	07:00-23:00	47	76	38
	23:00-07:00	48	77	32
17/03/2024	07:00-23:00	47	85	39
,	23:00-07:00	48	81	35
18/03/2024	07:00-23:00	48	84	39
. 0. 00. 2027	23:00-07:00	48	75	37
19/03/2024	07:00-23:00	46	75	38



	23:00-07:00	49	85	33
20/03/2024	07:00-14:00	53	87	41

Table A2.6 Noise measurement results – MP6

		Measured soun	id levels, dB	
Date	Time Period	Average L <sub>Aeq,T</sub>	Highest L <sub>AFmax,T</sub>	Average L <sub>A90,T</sub>
06/03/2024	12:45-23:00	46	77	36
00/03/2024	23:00-07:00	37	64	32
07/03/2024	07:00-23:00	45	77	35
0110312024	23:00-07:00	38	64	31
08/03/2024	07:00-23:00	46	80	37
00/03/2024	23:00-07:00	41	69	31
09/03/2024	07:00-23:00	46	75	36
03/03/2024	23:00-07:00	40	68	33
10/03/2024	07:00-23:00	47	72	35
10/03/2024	23:00-07:00	39	71	30
11/03/2024	07:00-23:00	48	80	37
11/00/2024	23:00-07:00	40	69	35
12/03/2024	07:00-23:00	46	73	42
12/00/2024	23:00-07:00	42	67	37
13/03/2024	07:00-23:00	47	78	42
10/00/2024	23:00-07:00	40	65	35
14/03/2024	07:00-23:00	47	76	41
14/00/2024	23:00-07:00	42	65	37
15/03/2024	07:00-23:00	48	85	40
10/00/2024	23:00-07:00	44	72	32
16/03/2024	07:00-23:00	48	83	37
10/00/2024	23:00-07:00	40	64	34
17/03/2024	07:00-23:00	45	90	37
17700/2024	23:00-07:00	41	67	35
18/03/2024	07:00-23:00	46	77	39
10/00/2027	23:00-07:00	43	64	37
19/03/2024	07:00-23:00	45	69	37



	23:00-07:00	42	66	33
20/03/2024	07:00-13:30	48	70	40

Table A2.7 Noise measurement results – MP7

		Measured soun	id levels, dB	
Date	Time Period	Average L <sub>Aeq,T</sub>	Highest L <sub>AFmax,T</sub>	Average L <sub>A90,T</sub>
06/03/2024	18:15-23:00	44	82	28
00/03/2024	23:00-07:00	38	68	27
07/03/2024	07:00-23:00	45	75	36
0110312024	23:00-07:00	39	67	27
08/03/2024	07:00-23:00	46	67	38
00/03/2024	23:00-07:00	36	64	27
09/03/2024	07:00-23:00	44	72	35
09/03/2024	23:00-07:00	38	68	28
10/03/2024	07:00-23:00	43	67	34
10/03/2024	23:00-07:00	40	63	26
11/03/2024	07:00-23:00	45	76	35
11/03/2024	23:00-07:00	38	62	31
12/03/2024	07:00-23:00	44	71	40
12/03/2024	23:00-07:00	38	65	33
13/03/2024	07:00-23:00	44	79	38
10/00/2024	23:00-07:00	38	73	31
14/03/2024	07:00-23:00	44	75	38
14/03/2024	23:00-07:00	42	79	33
15/03/2024	07:00-23:00	48	78	37
13/03/2024	23:00-07:00	42	78	26
16/03/2024	07:00-23:00	44	75	32
10/03/2024	23:00-07:00	40	74	30
17/03/2024	07:00-23:00	43	73	32
11/03/2024	23:00-07:00	44	85	29
18/03/2024	07:00-23:00	43	83	34
10/03/2024	23:00-07:00	43	78	33
19/03/2024	07:00-23:00	41	73	34



	23:00-07:00	43	80	29
20/03/2024	07:00-12:15	48	79	36

Table A2.8 Noise measurement results – MP8

Date         Time Period         Average L <sub>Aeq,T</sub> Highest L <sub>AFmax,T</sub> Average L <sub>Aeq,T</sub> Average L <sub>Aeq,T</sub> Highest L <sub>AFmax,T</sub> Average L <sub>Aeq,T</sub> </th <th>erage L<sub>A90,T</sub></th>	erage L <sub>A90,T</sub>
20/03/2024 23:00-07:00 43 78 26 21/03/2024 07:00-23:00 46 83 39 23:00-07:00 41 79 32 22/03/2024 07:00-23:00 45 72 36 23:00-07:00 39 69 30 23/03/2024 07:00-23:00 47 85 39 23:00-07:00 40 76 31 24/03/2024 07:00-23:00 43 76 33 23:00-07:00 46 88 29 07:00-23:00 45 83 34	
23:00-07:00 43 78 26  21/03/2024 07:00-23:00 46 83 39  23:00-07:00 41 79 32  22/03/2024 07:00-23:00 45 72 36  23:00-07:00 39 69 30  23/03/2024 07:00-23:00 47 85 39  23:00-07:00 40 76 31  24/03/2024 07:00-23:00 43 76 33  23:00-07:00 46 88 29  07:00-23:00 45 83 34	
21/03/2024       23:00-07:00       41       79       32         22/03/2024       07:00-23:00       45       72       36         23:00-07:00       39       69       30         23/03/2024       07:00-23:00       47       85       39         23:00-07:00       40       76       31         24/03/2024       07:00-23:00       43       76       33         23:00-07:00       46       88       29         07:00-23:00       45       83       34	
23:00-07:00 41 79 32 07:00-23:00 45 72 36 23:00-07:00 39 69 30 23/03/2024 07:00-23:00 47 85 39 23:00-07:00 40 76 31 24/03/2024 07:00-23:00 43 76 33 23:00-07:00 46 88 29 07:00-23:00 45 83 34	
22/03/2024 23:00-07:00 39 69 30 23/03/2024 07:00-23:00 47 85 39 23:00-07:00 40 76 31 24/03/2024 07:00-23:00 43 76 33 23:00-07:00 46 88 29 07:00-23:00 45 83 34	
23:00-07:00 39 69 30 07:00-23:00 47 85 39 23:00-07:00 40 76 31 24/03/2024 07:00-23:00 43 76 33 23:00-07:00 46 88 29 07:00-23:00 45 83 34	
23/03/2024 23:00-07:00 40 76 31 07:00-23:00 43 76 33 23:00-07:00 46 88 29 07:00-23:00 45 83 34	
23:00-07:00 40 76 31 07:00-23:00 43 76 33 23:00-07:00 46 88 29 07:00-23:00 45 83 34	
24/03/2024 23:00-07:00 46 88 29 07:00-23:00 45 83 34	
23:00-07:00 46 88 29 07:00-23:00 45 83 34	
07:00-23:00 45 83 34 <b>25/03/2024</b>	
23:00-07:00 41 81 27	
07:00-23:00 43 79 33 <b>26/03/2024</b>	
23:00-07:00 44 83 33	
<b>27/03/2024</b> 07:00-23:00 45 80 38	
23:00-07:00 52 89 38	
07:00-23:00 48 81 43 <b>28/03/2024</b>	
23:00-07:00 44 80 34	
<b>29/03/2024</b> 07:00-23:00 43 82 36	
23:00-07:00 38 64 31	
<b>30/03/2024</b> 07:00-23:00 43 79 31	
23:00-07:00 48 84 28	
07:00-23:00 44 83 31 31/03/2024	
23:00-07:00 40 69 27	
07:00-23:00 45 82 33	
23:00-07:00 49 89 32	
<b>02/04/2024</b> 07:00-23:00 45 84 37	



Date	Time Period	Measured soun Average L <sub>Aeq,T</sub>	d levels, dB Highest L <sub>AFmax,T</sub>	Average L <sub>A90,T</sub>
	23:00-07:00	46	77	33
03/04/2024	07:00-23:00	49	85	40
03/04/2024	23:00-07:00	46	83	33
04/04/2024	07:00-23:00	49	73	44

Table A2.9 Noise measurement results – MP9

Date         Time Period         Average Laeq,T         Highest LaFmax,T         Average Laefmax,T           06/03/2024         12:45-23:00         47         82         36           23:00-07:00         38         74         31           07/03/2024         07:00-23:00         50         81         41           23:00-07:00         38         67         31           08/03/2024         07:00-23:00         51         83         41           23:00-07:00         40         77         35           09/03/2024         07:00-23:00         50         82         38           23:00-07:00         43         68         37           10/03/2024         07:00-23:00         47         82         38           23:00-07:00         41         62         34           11/03/2024         07:00-23:00         52         82         41           12/03/2024         07:00-23:00         48         80         41           13/03/2024         07:00-23:00         46         76         40           13/03/2024         07:00-23:00         38         69         32	
06/03/2024       23:00-07:00       38       74       31         07/03/2024       07:00-23:00       50       81       41         08/03/2024       23:00-07:00       38       67       31         08/03/2024       07:00-23:00       51       83       41         23:00-07:00       40       77       35         09/03/2024       07:00-23:00       50       82       38         23:00-07:00       43       68       37         10/03/2024       07:00-23:00       47       82       38         23:00-07:00       41       62       34         11/03/2024       07:00-23:00       52       82       41         23:00-07:00       42       75       33         12/03/2024       07:00-23:00       48       80       41         13/03/2024       07:00-23:00       46       76       40         13/03/2024       23:00-07:00       38       69       32	A90,T
07/03/2024       23:00-07:00       38       74       31         07/03/2024       07:00-23:00       50       81       41         08/03/2024       07:00-23:00       51       83       41         08/03/2024       07:00-23:00       40       77       35         09/03/2024       07:00-23:00       50       82       38         10/03/2024       07:00-23:00       47       82       38         10/03/2024       07:00-23:00       47       82       34         11/03/2024       07:00-23:00       52       82       41         12/03/2024       07:00-23:00       48       80       41         13/03/2024       07:00-23:00       46       76       40         13/03/2024       07:00-23:00       38       69       32	
07/03/2024       23:00-07:00       38       67       31         08/03/2024       07:00-23:00       51       83       41         23:00-07:00       40       77       35         09/03/2024       07:00-23:00       50       82       38         23:00-07:00       43       68       37         10/03/2024       07:00-23:00       47       82       38         23:00-07:00       41       62       34         11/03/2024       07:00-23:00       52       82       41         12/03/2024       07:00-23:00       48       80       41         23:00-07:00       40       69       34         13/03/2024       07:00-23:00       46       76       40         13/03/2024       07:00-23:00       38       69       32	
23:00-07:00 38 67 31  08/03/2024 07:00-23:00 51 83 41  23:00-07:00 40 77 35  09/03/2024 07:00-23:00 50 82 38  23:00-07:00 43 68 37  10/03/2024 07:00-23:00 47 82 38  23:00-07:00 41 62 34  11/03/2024 07:00-23:00 52 82 41  11/03/2024 23:00-07:00 42 75 33  12/03/2024 07:00-23:00 48 80 41  13/03/2024 07:00-23:00 40 69 34  13/03/2024 07:00-23:00 46 76 40  23:00-07:00 38 69 32	
08/03/2024       23:00-07:00       40       77       35         09/03/2024       07:00-23:00       50       82       38         23:00-07:00       43       68       37         10/03/2024       07:00-23:00       47       82       38         23:00-07:00       41       62       34         11/03/2024       07:00-23:00       52       82       41         23:00-07:00       42       75       33         12/03/2024       07:00-23:00       48       80       41         23:00-07:00       40       69       34         13/03/2024       07:00-23:00       46       76       40         23:00-07:00       38       69       32	
23:00-07:00 40 77 35  09/03/2024 07:00-23:00 50 82 38  23:00-07:00 43 68 37  10/03/2024 07:00-23:00 47 82 38  23:00-07:00 41 62 34  11/03/2024 23:00-07:00 42 75 33  12/03/2024 07:00-23:00 48 80 41  23:00-07:00 40 69 34  13/03/2024 07:00-23:00 46 76 40  23:00-07:00 38 69 32	
09/03/2024       23:00-07:00       43       68       37         10/03/2024       07:00-23:00       47       82       38         23:00-07:00       41       62       34         11/03/2024       07:00-23:00       52       82       41         23:00-07:00       42       75       33         12/03/2024       07:00-23:00       48       80       41         23:00-07:00       40       69       34         13/03/2024       07:00-23:00       46       76       40         23:00-07:00       38       69       32	
10/03/2024       23:00-07:00       41       62       34         11/03/2024       07:00-23:00       52       82       41         23:00-07:00       42       75       33         12/03/2024       07:00-23:00       48       80       41         23:00-07:00       40       69       34         13/03/2024       07:00-23:00       46       76       40         23:00-07:00       38       69       32	
$ \begin{array}{c} 23:00\text{-}07:00 & 41 & 62 & 34 \\                                 $	
11/03/2024       23:00-07:00       42       75       33         12/03/2024       07:00-23:00       48       80       41         23:00-07:00       40       69       34         13/03/2024       07:00-23:00       46       76       40         23:00-07:00       38       69       32	
23:00-07:00 42 75 33 12/03/2024 07:00-23:00 48 80 41 23:00-07:00 40 69 34 13/03/2024 07:00-23:00 46 76 40 23:00-07:00 38 69 32	
12/03/2024       23:00-07:00       40       69       34         13/03/2024       07:00-23:00       46       76       40         23:00-07:00       38       69       32	
23:00-07:00 40 69 34 07:00-23:00 46 76 40 23:00-07:00 38 69 32	
<b>13/03/2024</b> 23:00-07:00 38 69 32	
23:00-07:00 38 69 32	
07:00-23:00 47 77 41 <b>14/03/2024</b>	
23:00-07:00 41 71 36	
07:00-23:00 49 84 40	
<b>15/03/2024</b> 23:00-07:00 40 68 35	
07:00-23:00 52 83 38	
<b>16/03/2024</b> 23:00-07:00 42 67 37	



	Measured sound levels, dB			
Date	Time Period	Average L <sub>Aeq,T</sub>	Highest L <sub>AFmax,T</sub>	Average L <sub>A90,T</sub>
17/03/2024	07:00-23:00	50	82	38
	23:00-07:00	42	71	35
18/03/2024	07:00-23:00	47	81	39
16/03/2024	23:00-07:00	42	69	36
19/03/2024	07:00-23:00	48	82	39
19/03/2024	23:00-07:00	43	73	34
20/03/2024	07:00-13:30	49	68	42

Table A2.10 Noise measurement results – MP10

		Measured sound levels, dB		
Date	Time Period	Average L <sub>Aeq,T</sub>	Highest L <sub>AFmax,T</sub>	Average L <sub>A90,T</sub>
25/03/2024	13:15-23:00	43	76	30
	23:00-07:00	39	71	26
26/03/2024	07:00-23:00	45	74	33
	23:00-07:00	41	73	33
27/03/2024	07:00-23:00	48	73	37
	23:00-07:00	48	76	39
28/03/2024	07:00-23:00	56	81	46
	23:00-07:00	42	77	34
29/03/2024	07:00-23:00	49	74	38
29/03/2024	23:00-07:00	48	75	32
30/03/2024	07:00-23:00	42	77	30
30/03/2024	23:00-07:00	40	73	28
31/03/2024	07:00-23:00	40	76	31
31/03/2024	23:00-07:00	40	67	26
01/04/2024	07:00-23:00	43	76	32
	23:00-07:00	42	74	30
02/04/2024	07:00-23:00	45	76	35
	23:00-07:00	42	70	34
03/04/2024	07:00-23:00	47	79	39



		Measured sound levels, dB		
Date	Time Period	Average L <sub>Aeq,T</sub>	Highest L <sub>AFmax,T</sub>	Average L <sub>A90,T</sub>
	23:00-07:00	45	77	32
04/04/2024	07:00-13:00	46	84	39



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