



APPENDIX 12-6

***BASELINE NOISE SURVEY FOR
GRID CONNECTION***

APPENDIX 12-6. BASELINE NOISE SURVEY FOR GRID CONNECTION

An environmental noise survey was conducted at six locations in order to quantify the existing noise environment in the vicinity of the proposed underground cable route. The survey was conducted in general accordance with ISO 1996: 2017: Acoustics – Description, measurement and assessment of environmental noise.

Noise Measurement Locations

The noise measurement locations were selected to represent the noise environment at the NSLs along the underground cable route.

The monitoring locations for this survey are described below and illustrated in Figure 12-9-1.

Table A12-9-1 Noise Monitoring Coordinates

Name	ITM Coordinates	
	N	E
AT1	508835	666923
AT2	507361	665184
AT3	506837	662793
AT4	505220	660430
AT5	505441	656953
AT6	505327	653908

Personnel and Instrumentation

The noise survey was undertaken by AWN Consulting using Rion NL-52 and Rion NL-53 sound level meters and were calibrated using Rion NC-75 and Bruel & Kjaer 4231 type calibrators. The specific equipment details are summarised in Table 2-2.

Table A12-9-2. Noise Monitoring Equipment

Type	Manufacturer	Equipment Model	Serial Number	Calibration Date
Sound Level Meter	Rion	NL-52	1076328	22/09/2022
Calibrator	Bruel & Kjaer	Type 4231	2236026	20/2/2024

Figure A12-6-1 Noise Survey Locations



Survey Results

The survey results for the attended monitoring locations are presented in Table A12-6-3.

Table A12-6-3. Attended Noise Monitoring Results

Location	Date	Period	Time	Measured Noise Levels (dB re.2x10 ⁻⁵ Pa)	
				L _{Aeq}	L _{A90}
AT1	12 June 2024	Day	09:53	48	28
			11:13	54	32
			12:24	47	39
AT2	12 June 2024	Day	09:29	35	29
			10:51	50	32
			12:02	52	31
AT3	12 June 2024	Day	09:06	61	29
			10:21	64	33
			11:39	63	34
AT4	12 June 2024	Day	13:06	48	37
			14:33	40	36
			15:55	44	38
AT5	12 June 2024	Day	13:34	51	35
			14:58	57	36
			16:18	57	35
AT6	12 June 2024	Day	14:03	44	36
			16:25	39	35
			16:41	43	37

Location AT1

Audible noise sources noted location AT1 were local road traffic, distant traffic, birdsong, and foliage rustling. Ambient daytime noise levels were measured in the range of 48 to 54 dB L_{Aeq, 15min}. Background daytime noise levels were in the range 28 to 39 dB L_{A90, 15min}.

Location AT2

Audible noise sources noted location AT2 were local road traffic, distant traffic, birdsong, and foliage rustling and dogs howling. Ambient daytime noise levels were measured in the range of 35 to 52 dB L_{Aeq, 15min}. Background daytime noise levels were in the range 29 to 31 dB L_{A90, 15min}.

Location AT3

Audible noise sources noted location AT3 were local road traffic, distant traffic, birdsong, and foliage rustling and low-level steady noise from a nearby milking parlour, along with other agricultural machinery. Ambient daytime noise levels were measured in the range of 61 to 64 dB L_{Aeq, 15min}. Background daytime noise levels were in the range 29 to 34 dB L_{A90, 15min}.

Location AT4

Audible noise sources noted location AT4 included a domestic wind turbine along with local road traffic, distant traffic. Ambient daytime noise levels were measured in the range of 40 to 48 dB $L_{Aeq, 15min}$. Background daytime noise levels were in the range 36 to 38 dB $L_{A90, 15min}$.

Location N5

The main noise sources at location N5 were local road traffic with distance road traffic audible during lulls. Ambient daytime noise levels were measured in the range of 51 to 57 dB $L_{Aeq, 15min}$. Background daytime noise levels were in the range 35 to 36 dB $L_{A90, 15min}$.

Location N6

The main noise sources at location N6 were local road traffic with distant road traffic audible during lulls. Ambient daytime noise levels were measured in the range of 39 to 44 dB $L_{Aeq, 15min}$. Background daytime noise levels were in the range 35 to 37 dB $L_{A90, 15min}$.