

APPENDIX 9-4. 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	587305	840371
AT2	587045	839908
AT3	584146	834482
AT4	581889	830173
AT5	580095	828169
AT6	577239	824989

Personnel and Instrumentation

The noise survey was undertaken by AWN Consulting using Bruel & Kjaer Type 2250 sound level meter and calibrated using Bruel & Kjaer Type 4231 calibrator. The specific equipment details are summarised in Table A12-5-2.

Table A12-5-2. Noise Monitoring Equipment

Type	Manufacturer	Equipment Model	Serial Number	Calibration Date
Sound Level Meter	Bruel & Kjaer	2250	2818091	November 2023

Survey Results

The survey results for the attended monitoring locations are presented in Table A12-6-3. The survey was carried out on 2 December 2025.

Table A12-6-3. Attended Noise Monitoring Results

Location	Time	Measured Noise Levels (dB re.2x10 ⁻⁵ Pa)	
		L _{Aeq}	L _{A90}
AT1	11:40	57	52
	13:00	53	51
	14:16	53	50
AT2	12:06	67	40
	13:23	65	37
	14:38	68	41
AT3	12:31	50	35
	13:42	55	34
	15:00	49	34
AT4	15:28	62	36
	16:46	62	43
	18:03	58	31
AT5	15:51	60	40
	17:09	60	40
	18:25	57	40
AT6	16:17	41	34
	17:34	39	32
	18:49	43	32

Location AT1

Audible noise sources noted location AT1 were intermittent local road traffic, birdsong, running water and a chainsaw operating during the first measurement period. Ambient daytime noise levels were measured in the range of 53 to 57 dB L_{Aeq, 15min}. Background daytime noise levels were in the range 50 to 52 dB L_{A90, 15min}.

Location AT2

Audible noise sources noted location AT2 were local road traffic, distant traffic, and birdsong. Ambient daytime noise levels were measured in the range of 65 to 68 dB L_{Aeq, 15min}. Background daytime noise levels were in the range 37 to 40 dB L_{A90, 15min}.

Location AT3

Audible noise sources noted location AT3 were local road traffic, distant traffic, birdsong, and foliage rustling and a degree of construction noise at a private residence. Ambient daytime noise levels were measured in the range of 49 to 55 dB L_{Aeq, 15min}. Background daytime noise levels were in the range 34 to 35 dB L_{A90, 15min}.

Location AT4

Audible noise sources noted location AT4 i local road traffic, distant traffic and birdsong. Ambient daytime noise levels were measured in the range of 58 to 62 dB $L_{Aeq, 15min}$. Background daytime noise levels were in the range 31 to 43 dB $L_{A90, 15min}$.

Location AT5

The main noise sources at location AT5 was running water with intermittent local road traffic and dogs barking. Ambient daytime noise levels were measured in the range of 57 to 60 dB $L_{Aeq, 15min}$. Background daytime noise levels were of the order of 40 dB $L_{A90, 15min}$.

Location AT6

The main noise sources at location AT6 was running water with intermittent local road traffic, birdsong and dogs barking. Ambient daytime noise levels were measured in the range of 39 to 43 dB $L_{Aeq, 15min}$. Background daytime noise levels were in the range 32 to 34 dB $L_{A90, 15min}$.