

Annex R - Noise

January 2023



APPENDIX A – BASELINE SURVEY DATA

Figure A.1 Site Location Plan

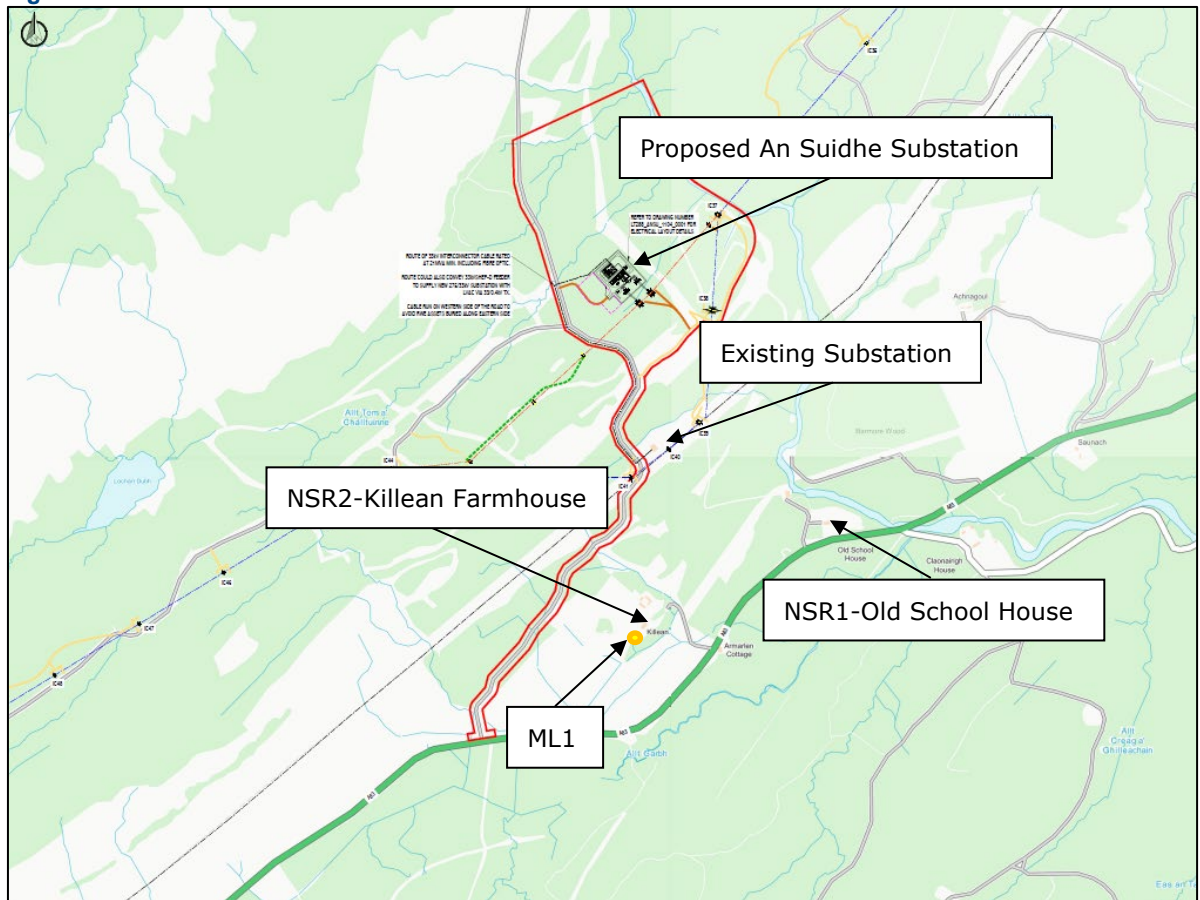


Plate A.2 Sound Level Meter Location ML1 for An Suidhe





Figure A.3 – Meteorological Conditions for An Suidhe

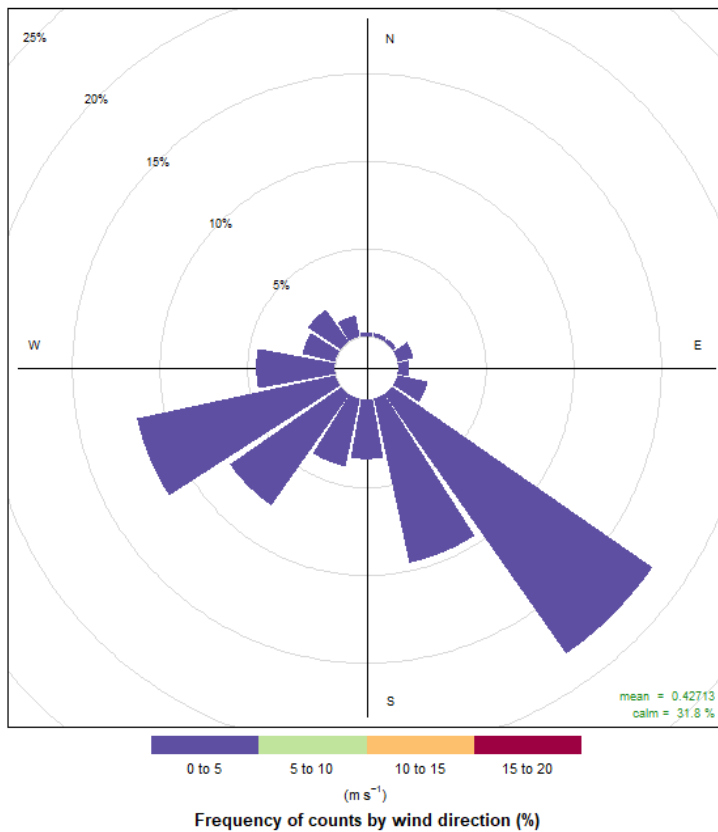
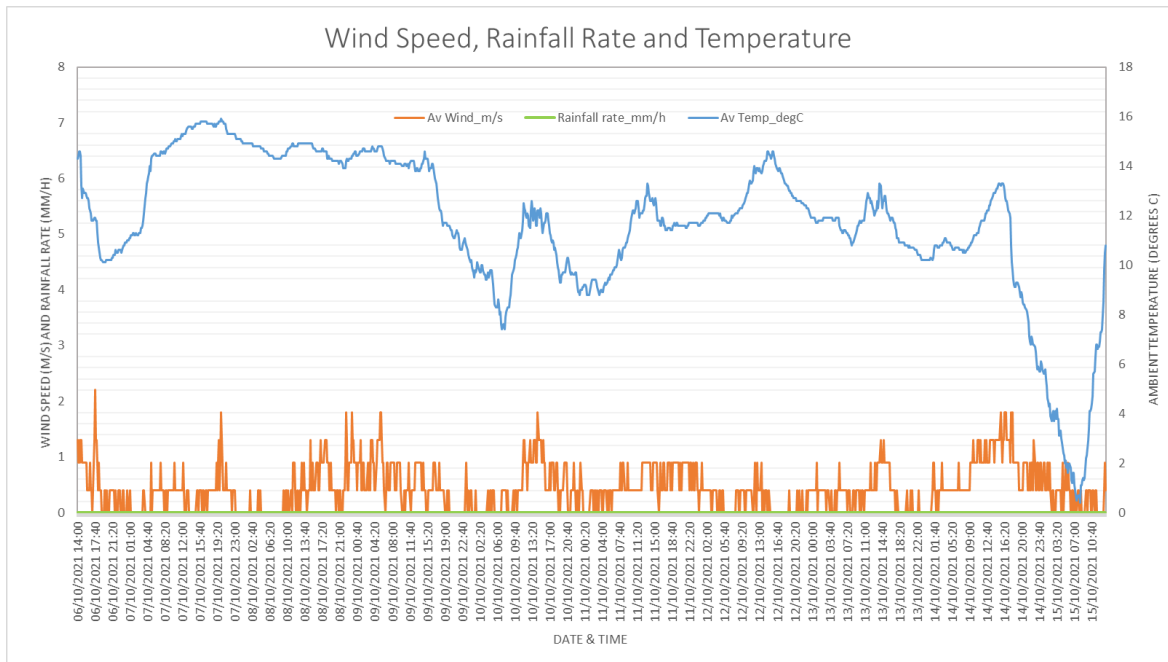


Figure A.4 Measured Sound Level Data

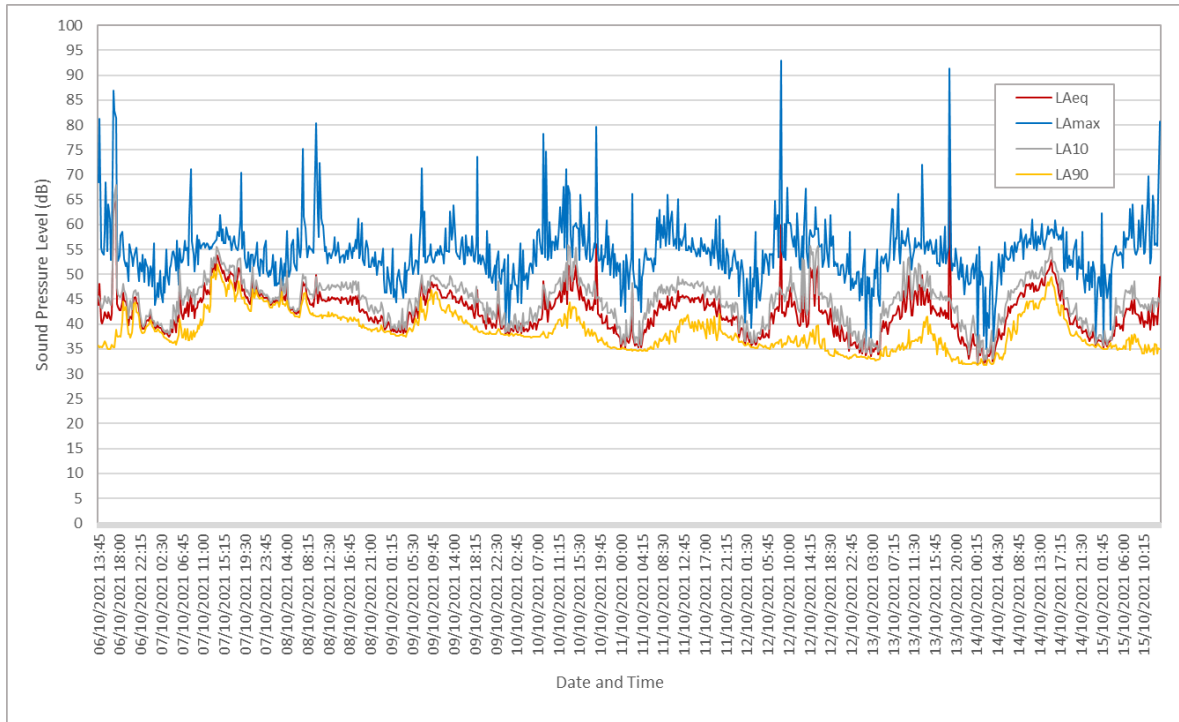


Figure A.5 Daytime Sound Level Distribution

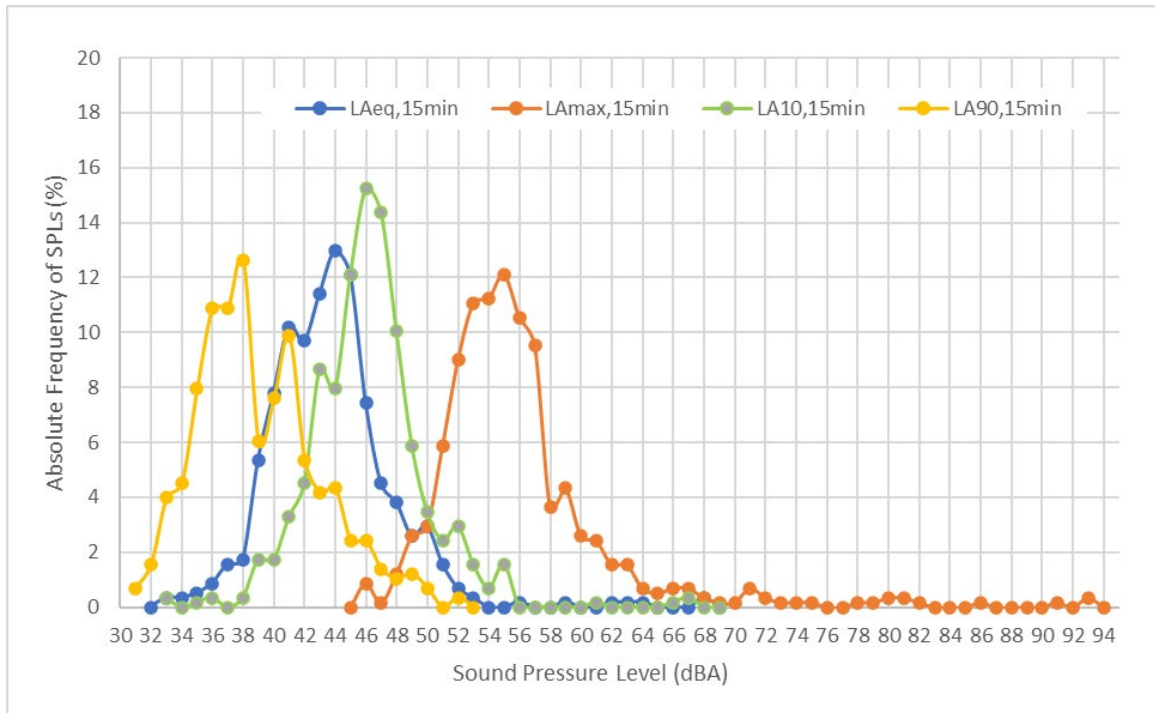
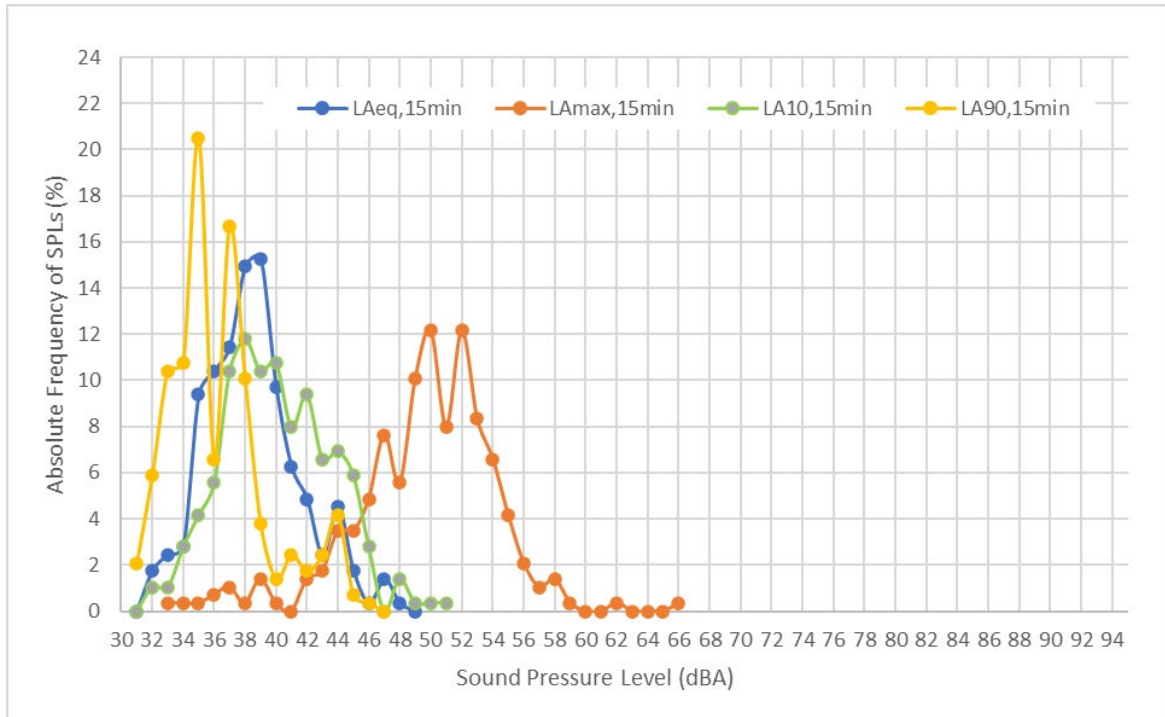


Figure A.6 Night-Time Sound Level Distribution



APPENDIX B – TRAFFIC DATA

Table B.1 Average Annual Daily Flow

Site	Year	Count Method	Pedal Cycles	Two wheeled motor vehicles	Cars and Taxis	Buses and Coaches	Light Goods Vehicles	Heavy Good Vehicles	All motor vehicles
A83	2019	Automatic counter	1	20	2144	29	677	281	3151

Table B.2 Monthly Estimate of Construction Vehicle Numbers for the Proposed Development

Task	Month																								Total		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		Months 25 to 30	
Forestry Machine Delivery	4																										4
Forestry Operations	4																										4
Earthworks Platform							280	280	280																		840
Earthworks Site Compound	125	125																									250
Concrete										38	38	38	38	38	38												228
Building/ Civils work										10	10	10	10	10	10	10	10	10									90
Electrical Equipment												11	11	11	11	11	11	11	11	11	11	11	11	11	11	11 per month	198
Transformer																			1					1		2	
Total HGVs (Two-way trips)	133	125					280	280	280	48	48	48	59	59	59	21	21	21	12	11	11	11	11	11	12	11 per month	1,616
Car/ Light Goods Vehicle	880	880	880	880	880	880	880	880	880	880	880	880	880	880	880	880	880	880	880	880	880	880	880	880	880	880 per month	26,400
Total Vehicles (Two-way trips)	1013	1005	880	880	880	880	1160	1160	1160	928	928	928	939	939	939	901	901	901	892	891	891	891	891	891	892	891 per month	28,016

Table B.3 Estimate of General Construction Vehicle Numbers for the Associated Development

Construction Task	Vehicle Type	Approximate No. of Loads
Earthworks Access track and Tower Compounds	20T Tipper lorry	250
Concrete for foundations	Concrete wagon (6m ³ carry capacity)	120
Excavation plant/tower steel work/Cable drums/ equipment	HGV Trailer	120
Personnel to and from site	Car/ Light Goods Vehicle	660
Total No. of HGVs and LGVs (Two-way trips)		1,150

APPENDIX C – PLANT NOISE SPECTRUM

Plant	Sound Power Level SWL (dBA)	Octave Band Sound Power Level SWL (dB)							
		63 Hz	125 Hz	250 Hz	500 Hz	1 kHz	2 kHz	4 kHz	8 kHz
1no. 120 MVA 275/132kV Grid Transformer	78	70	93	77	67	66	56	49	38
1no. Transformer Cooler	83	56	68	84	78	78	77	72	64

APPENDIX D – SOUND PROPOGATION MODELLING PLOTS

Figure D.1 Sound Propagation Plot

