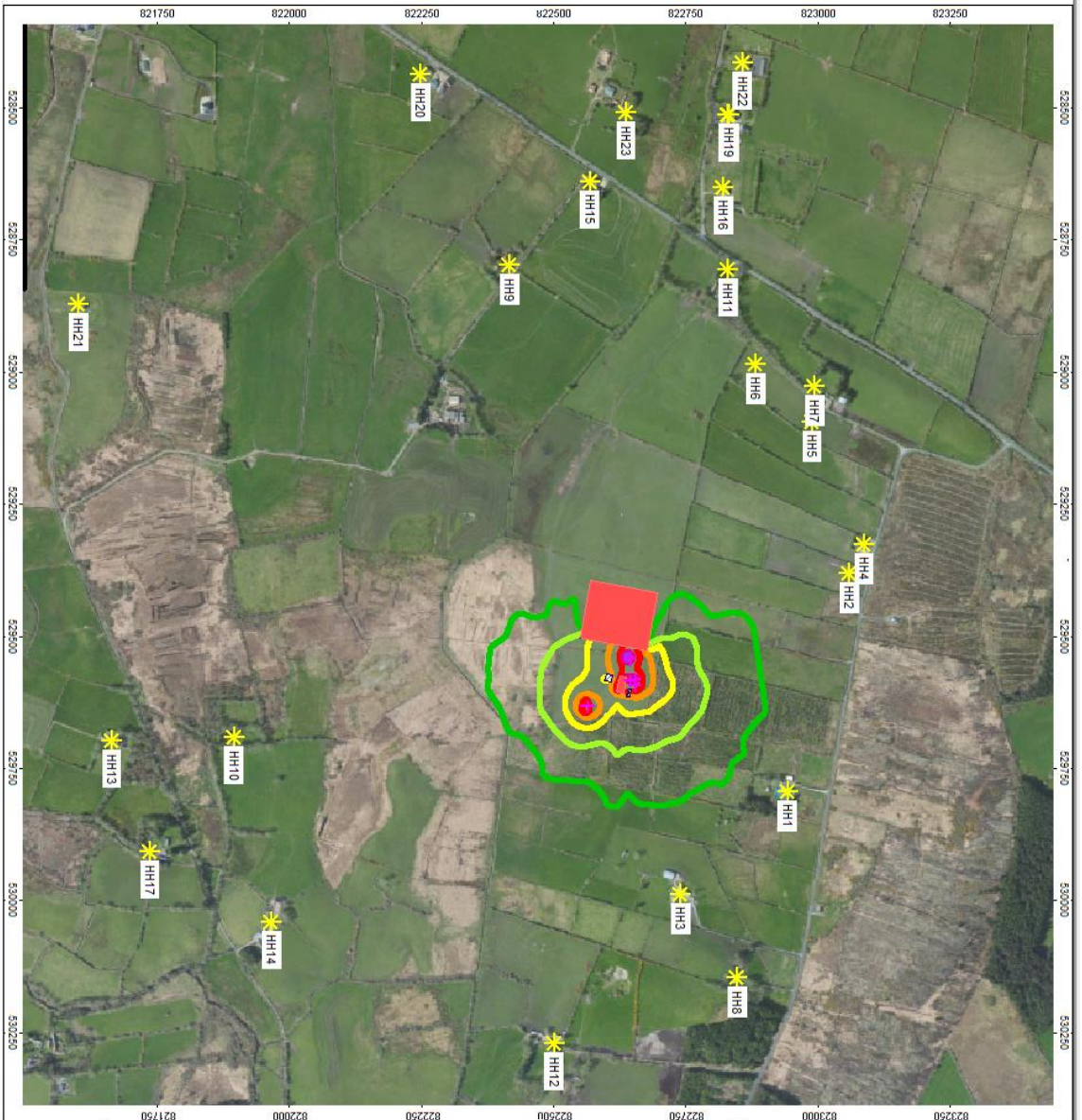


Item 7c Noise levels without Firlough



Customer:
Jennings O'Donovan
Project: Firlough Green Hydrogen Project
Project-No: 2022177

JENNINGS O'DONOVAN
 CONSULTING ENGINEERS

Map
1

Bonniconlon Hydrogen Site
Normal Operation

- Levels Ld**
 In dB(A)
- 35.0
 - 40.0
 - 45.0
 - 50.0
 - 55.0
 - 60.0
 - 65.0
 - 70.0
 - 75.0
- Signs and symbols**
- Point receiver
 - Industrial building
 - Noise calculation area
 - Geometry setback
 - Source
 - Main building
 - Facade as source
 - Road as source
 - Boundary/line

Length scale 1:7309

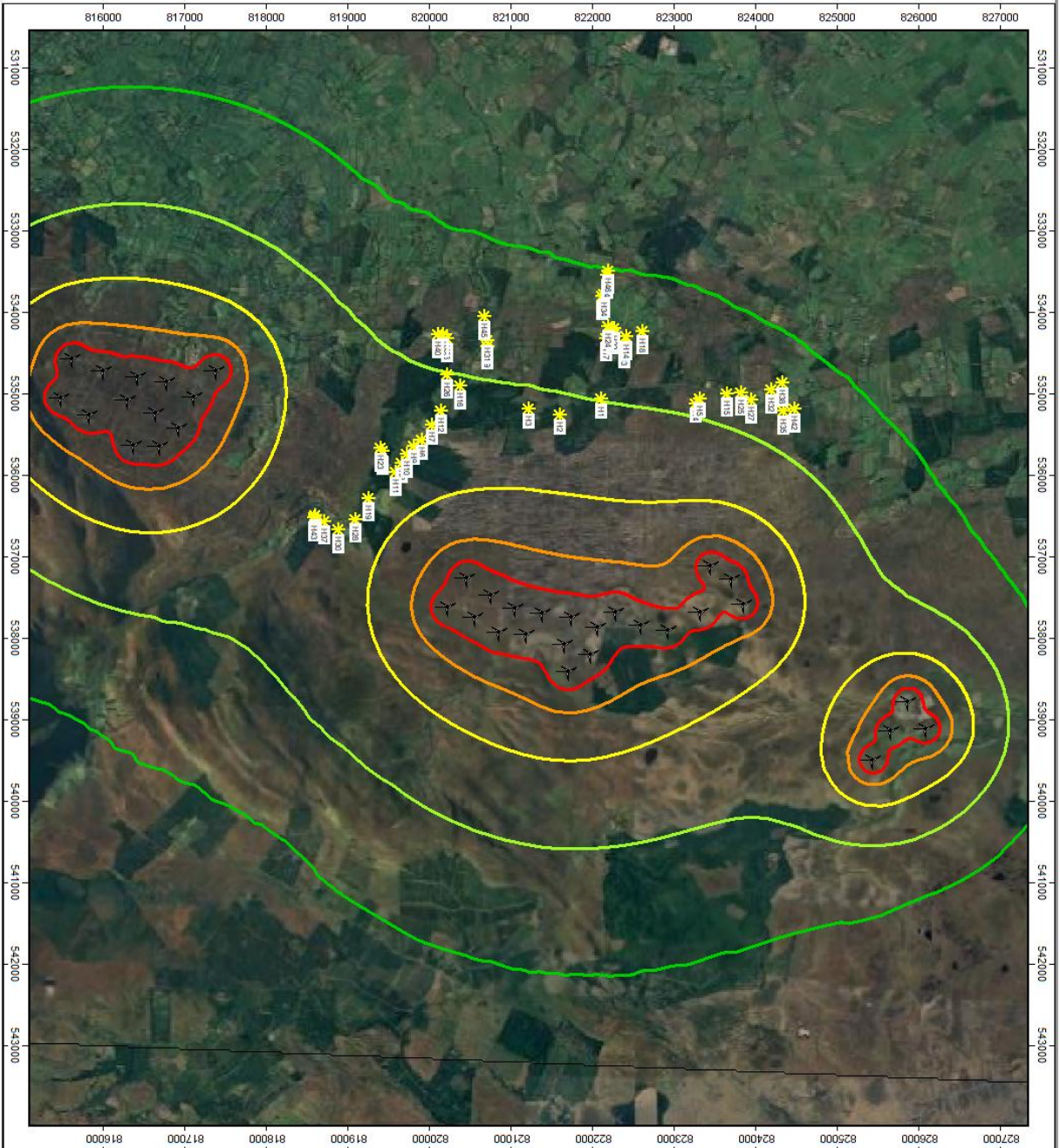
0 50 100 200 300 400 m

IRWIN CARR CONSULTING

Item 7C: Predicted Cumulative Noise Levels as LA90 at Varying Wind Speeds without Firlough WF

	ITM	ITM	4m/s	5m/s	6m/s	7m/s	8m/s	9m/s	10m/s
House ID	Easting	Northing	dBA	dBA	dBA	dBA	dBA	dBA	dBA
H1	535070	822103	24.0	24.0	26.9	28.9	30.8	32.2	32.9
H2	535267	821598	24.5	24.5	27.7	29.7	31.8	33.2	33.9
H3	535188	821210	24.1	24.1	27.5	29.5	31.6	33.1	33.8
H4	535124	823263	25.1	25.1	27.1	28.8	30.5	31.7	32.4
H5	535061	823316	24.9	24.9	26.8	28.6	30.3	31.5	32.2
H6	535574	819899	24.5	24.5	28.3	30.5	32.6	34.1	34.9
H7	535387	820024	24.2	24.2	27.9	30.1	32.2	33.7	34.5
H8	535857	819660	25.0	25.0	28.8	31.0	33.1	34.6	35.4
H9	535644	819809	24.6	24.6	28.4	30.6	32.7	34.2	35.0
H10	535747	819724	24.8	24.8	28.7	30.8	33.0	34.4	35.2
H11	535966	819584	25.2	25.2	29.1	31.2	33.4	34.9	35.7
H12	535210	820136	23.8	23.8	27.5	29.6	31.7	33.2	34.0
H13	534401	822381	21.9	21.9	24.7	26.6	28.6	29.9	30.6
H14	534306	822410	21.6	21.6	24.4	26.3	28.3	29.6	30.3
H15	534999	823644	24.6	24.6	26.4	28.1	29.8	31.0	31.6
H16	534907	820371	22.0	22.0	25.5	27.6	29.6	31.1	31.9
H17	534321	822162	21.5	21.5	24.4	26.3	28.3	29.7	30.4
H18	534233	822602	21.4	21.4	24.1	26.0	27.9	29.3	30.0
H19	536282	819253	25.4	25.4	29.3	31.4	33.6	35.1	35.9
H20	534230	822231	21.3	21.3	24.1	26.1	28.0	29.4	30.1
H21	535711	819425	22.8	22.8	26.5	28.6	30.7	32.2	33.0
H22	534198	822255	21.2	21.2	24.0	26.0	27.9	29.3	30.0
H23	535670	819393	22.6	22.6	26.3	28.4	30.5	32.0	32.8

	ITM	ITM	4m/s	5m/s	6m/s	7m/s	8m/s	9m/s	10m/s
House ID	Easting	Northing	dBA	dBA	dBA	dBA	dBA	dBA	dBA
H24	534175	822187	21.1	21.1	24.0	25.9	27.9	29.3	30.0
H25	534988	823817	24.4	24.4	26.2	27.9	29.5	30.7	31.3
H26	534775	820212	21.4	21.4	24.9	27.0	29.0	30.5	31.3
H27	535082	823941	24.7	24.7	26.4	28.1	29.7	30.8	31.4
H28	536542	819091	24.1	24.1	28.0	30.1	32.3	33.8	34.6
H29	534421	820709	21.0	21.0	24.3	26.4	28.4	29.8	30.6
H30	536673	818878	23.4	23.4	27.3	29.5	31.7	33.2	33.9
H31	534352	820705	20.8	20.8	24.1	26.2	28.2	29.7	30.4
H32	534961	824183	24.0	24.0	25.7	27.4	29.0	30.1	30.7
H33	533812	822112	20.1	20.1	22.9	24.9	26.9	28.3	29.0
H34	533788	822143	20.0	20.0	22.8	24.8	26.8	28.2	28.9
H35	535220	824333	24.9	24.9	26.3	28.0	29.5	30.6	31.2
H36	534326	820215	20.1	20.1	23.5	25.6	27.7	29.1	29.9
H37	536569	818707	22.4	22.4	26.4	28.6	30.7	32.2	33.0
H38	534868	824326	23.5	23.5	25.2	26.9	28.5	29.6	30.2
H39	534270	820167	21.8	21.8	25.4	27.6	29.7	31.2	32.0
H40	534280	820106	19.9	19.9	23.3	25.4	27.5	28.9	29.7
H41	536492	818590	24.8	24.8	28.8	31.0	33.2	34.7	35.5
H42	535188	824469	24.5	24.5	26.0	27.7	29.2	30.3	30.9
H43	536527	818584	21.8	21.8	25.8	28.0	30.1	31.6	32.4
H44	533553	822169	19.4	19.4	22.2	24.2	26.2	27.6	28.3
H45	534052	820668	21.1	21.1	24.7	26.8	28.9	30.3	31.1
H46	533495	822184	19.3	19.3	22.1	24.1	26.1	27.5	28.2



Customer:
Jennings O'Donovan
 Project: Firfough WF
 Project-No. 2021021



Map
3

Firfough WF - Cumulative ex Firfough

N149 turbines operating at 6m/5 at all wind farms considered within the cumulative assessment with turbines operating at max sound power level.

Levels shown are LAeq, as per ETSU-R-97 Guidance. LA90 = LAeq - 2.

Project engineer: Jack Collins
 Project No: 2021021
 Assessed: 13th Oct 2024
 Processed with SoundPLAN 9.0, Update 28/02/2024

- Levels Ld**
 In dB(A)
- █ = 30
 - █ = 35
 - █ = 40
 - █ = 45
 - █ = 50
- Signs and symbols**
- Point receiver
 - Wind turbine
 - Elevation point
 - Noise calculation area



IRWIN CARR
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