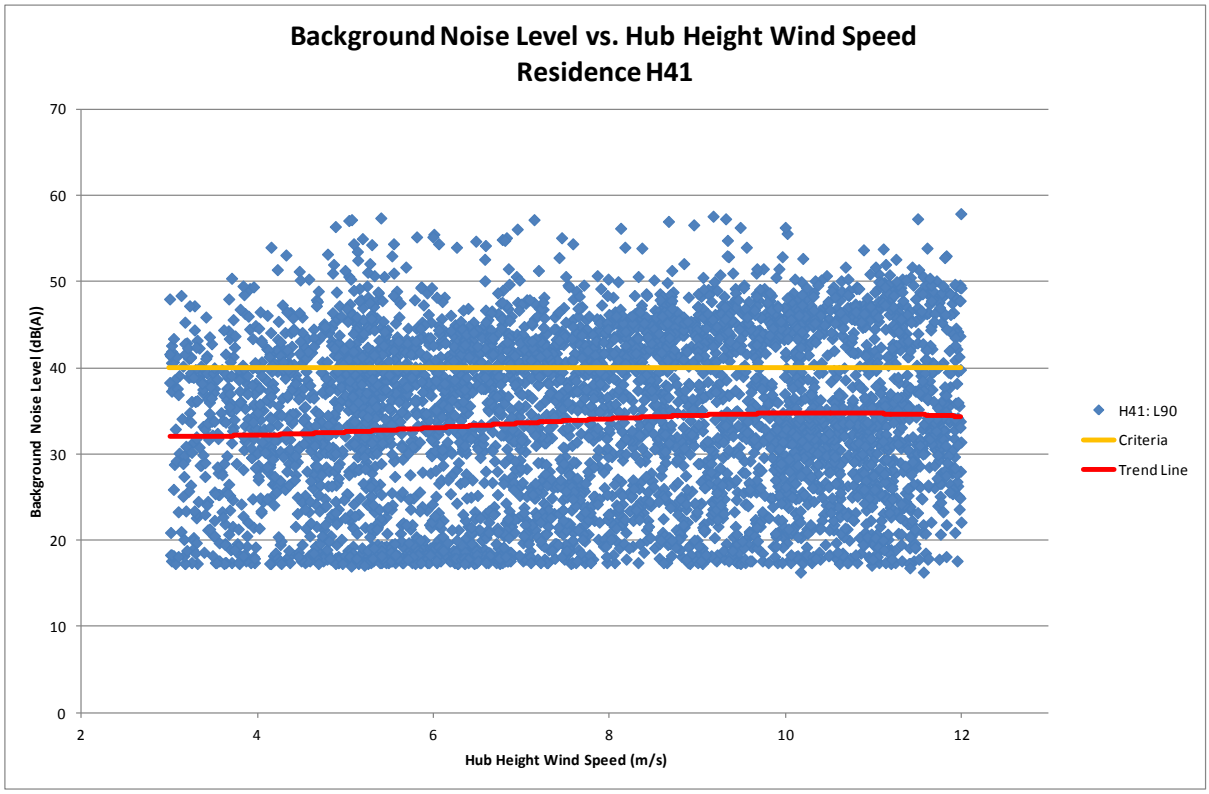
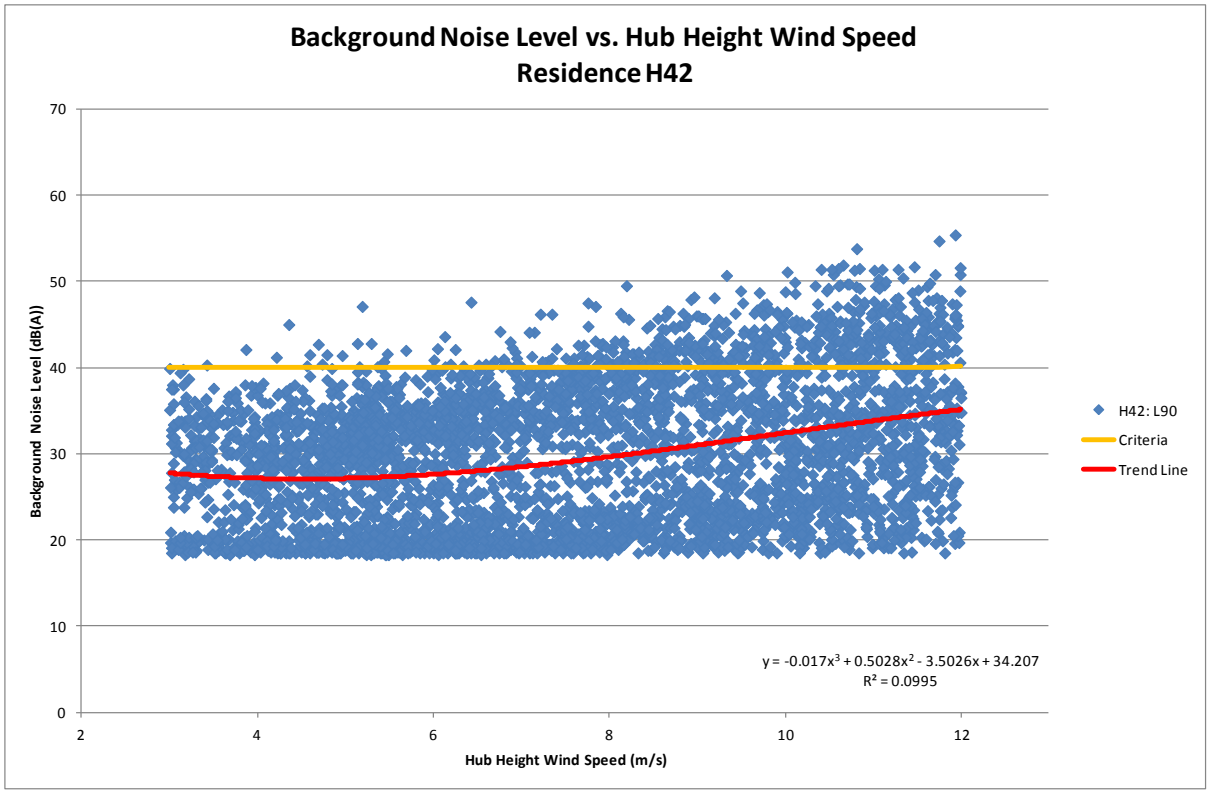
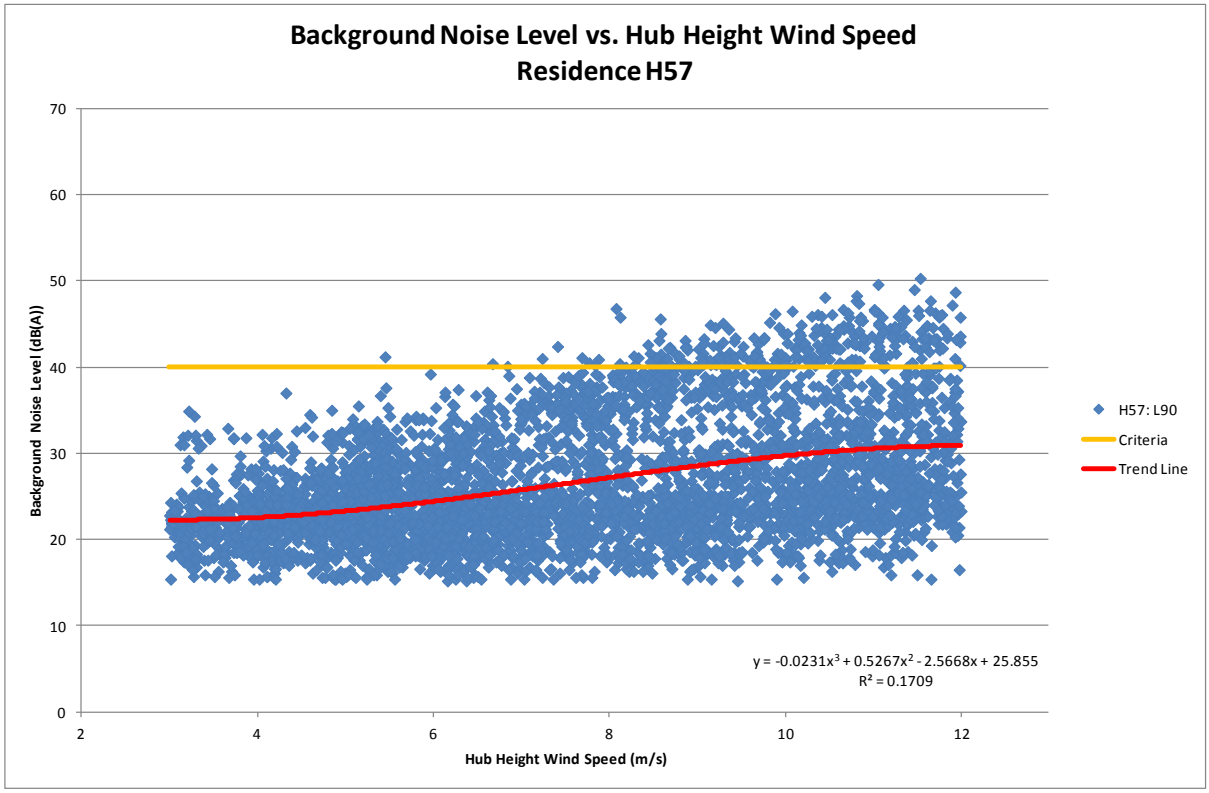
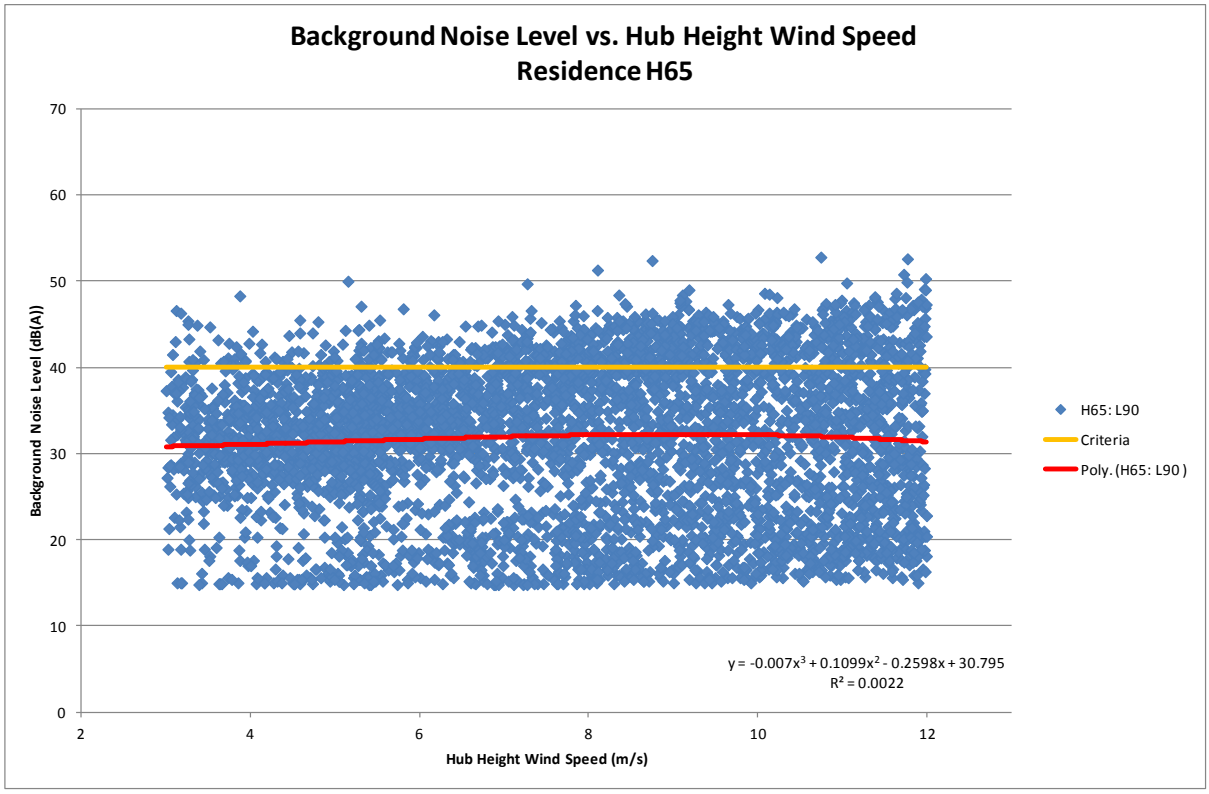
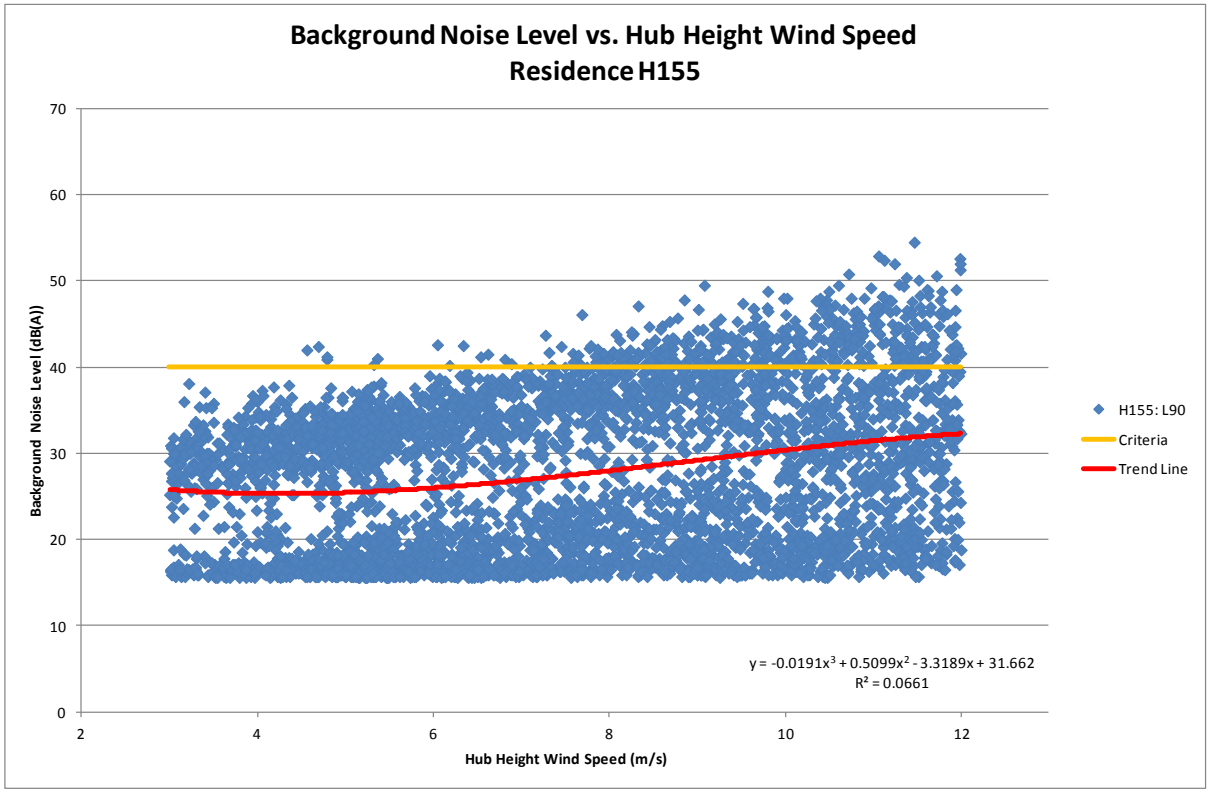
Appendix D: Noise Correlations

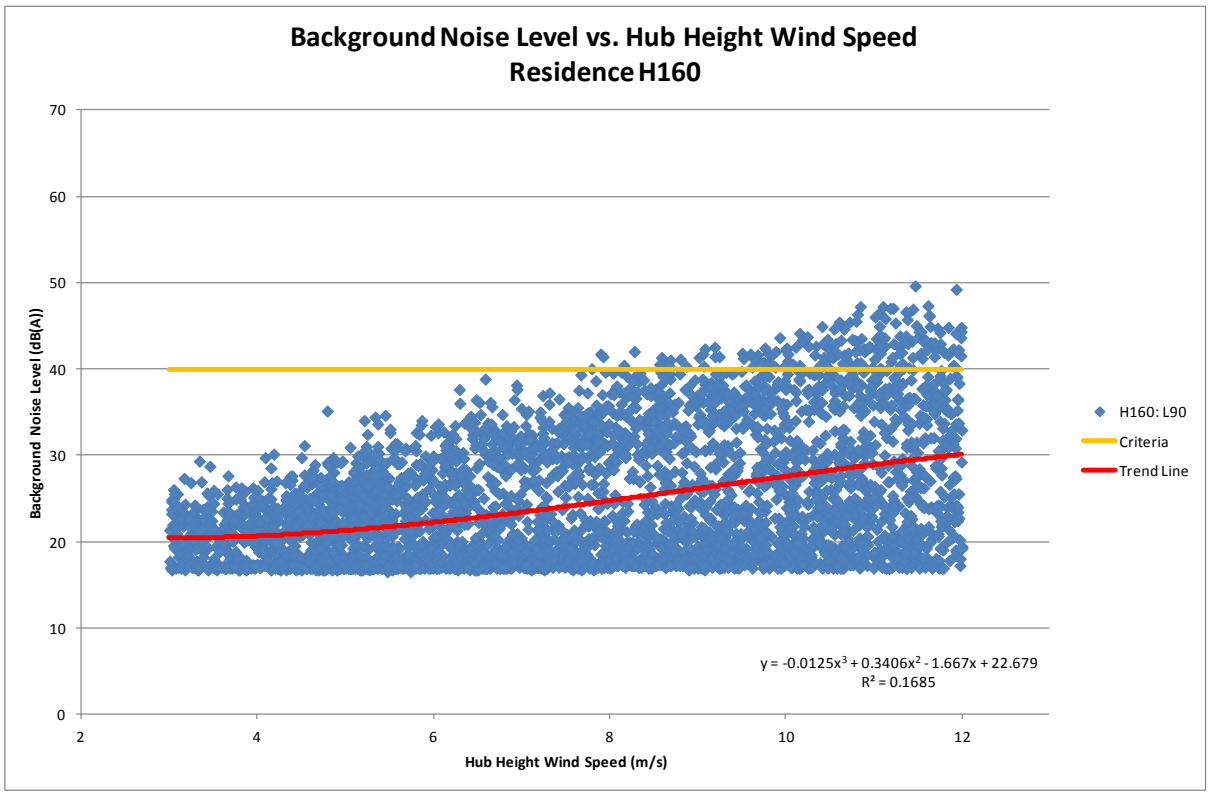


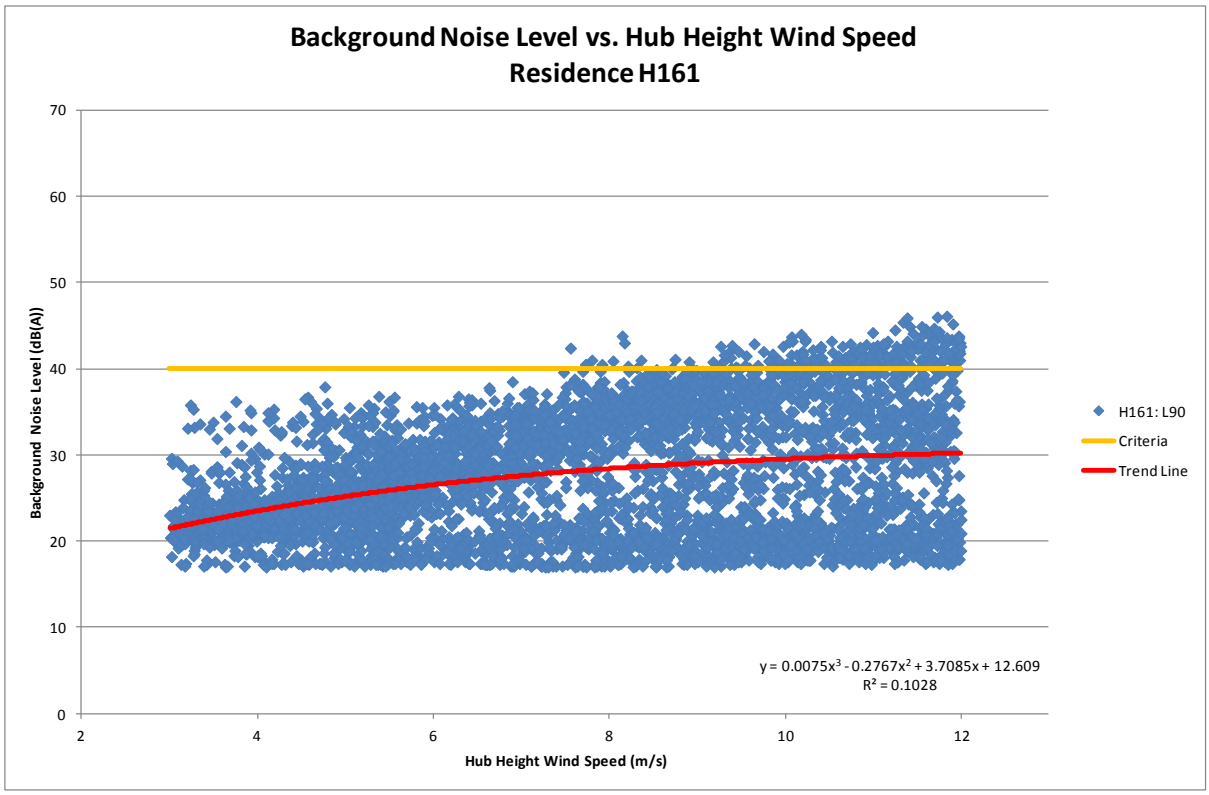



Background Noise Level vs. Hub Height Wind Speed
Residence H57
Background Noise Level (dB(A))
Hub Height Wind Speed (m/s)
y = -0.0231x³ + 0.5267x² - 2.5668x + 25.855
R² = 0.1709
H57: L90
Criteria
Trend Line


Background Noise Level vs. Hub Height Wind Speed
Residence H65
Background Noise Level (dB(A))
Hub Height Wind Speed (m/s)
y = -0.007x³ + 0.1099x² - 0.2598x + 30.795
R² = 0.0022
H65: L90
Criteria
Poly. (H65: L90)


Background Noise Level vs. Hub Height Wind Speed
Residence H155
Background Noise Level (dB(A))
Hub Height Wind Speed (m/s)
y = -0.0191x³ + 0.5099x² - 3.3189x + 31.662
R² = 0.0661
H155: L90
Criteria
Trend Line


Background Noise Level vs. Hub Height Wind Speed
Residence H160
Background Noise Level (dB(A))
Hub Height Wind Speed (m/s)
y = -0.0125x³ + 0.3406x² - 1.667x + 22.679
R² = 0.1685
H160: L90
Criteria
Trend Line

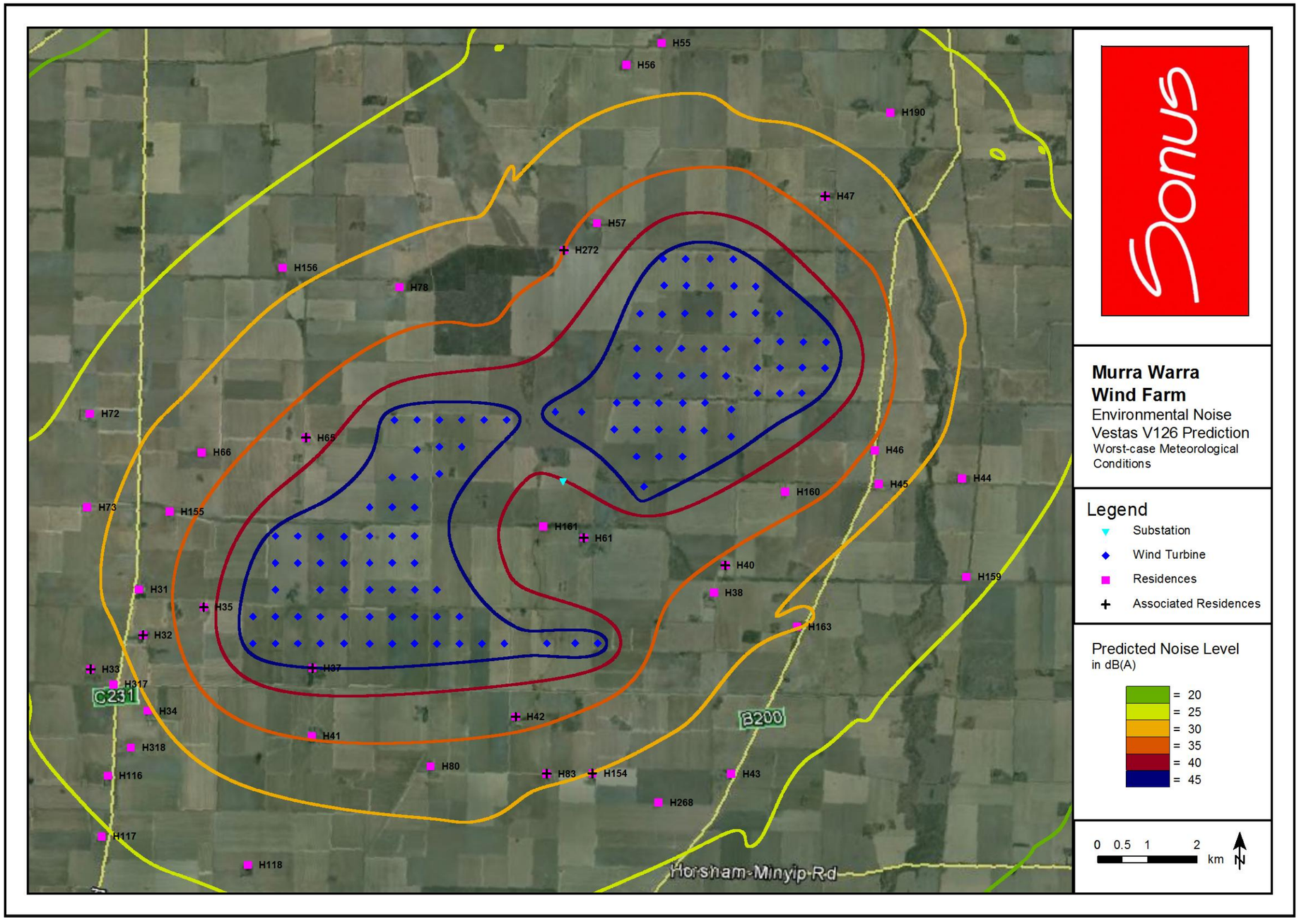

Background Noise Level vs. Hub Height Wind Speed
Residence H161
Background Noise Level (dB(A))
Hub Height Wind Speed (m/s)
0
10
20
30
40
50
60
70
2
4
6
8
10
12
y = 0.0075x³ - 0.2767x² + 3.7085x + 12.609
R² = 0.1028
H161: L90
Criteria
Trend Line

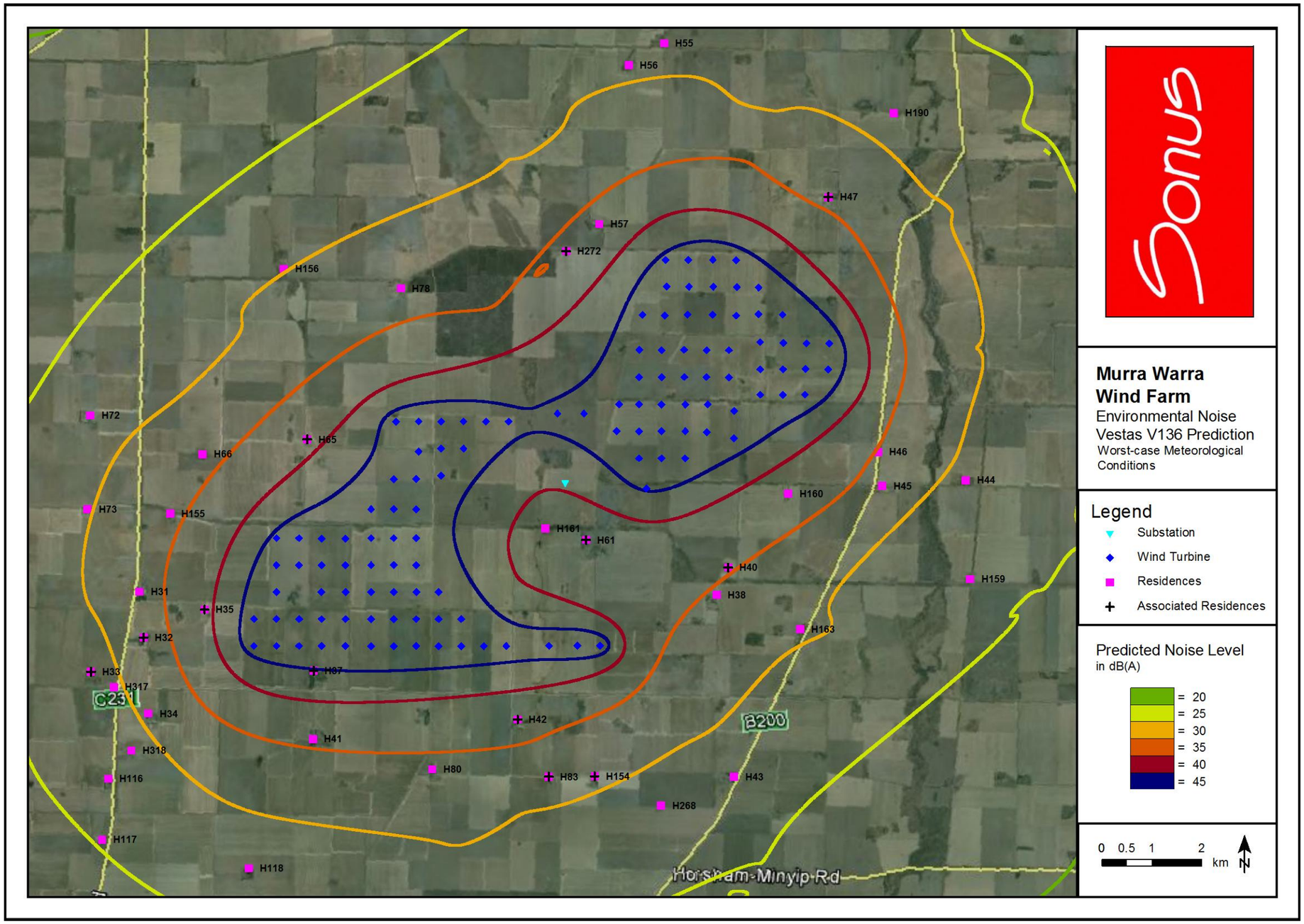
Appendix E: Predicted Wind Farm Noise and Relevant Criteria

Residence	Associated	4m/s			5m/s			6m/s			7m/s			8m/s			9m/s			10m/s			11m/s			12m/s		
		Criteria	V126 Prediction	V136 Prediction	Criteria	V126 Prediction	V136 Prediction	Criteria	V126 Prediction	V136 Prediction	Criteria	V126 Prediction	V136 Prediction	Criteria	V126 Prediction	V136 Prediction	Criteria	V126 Prediction	V136 Prediction	Criteria	V126 Prediction	V136 Prediction	Criteria	V126 Prediction	V136 Prediction	Criteria	V126 Prediction	V136 Prediction
H31	NO	40	17	25	40	18	25	40	23	26	40	25	29	40	29	31	40	31	33	40	32	34	40	33	34	40	33	34
H32	YES	40	17	24	40	18	24	40	22	26	40	24	28	40	28	31	40	31	33	40	31	33	40	32	33	40	32	33
H33	YES	40	13	19	40	14	20	40	18	22	40	20	24	40	24	26	40	26	28	40	27	29	40	28	29	40	28	29
H34	NO	40	15	21	40	16	22	40	20	24	40	22	26	40	26	29	40	29	31	40	29	31	40	30	31	40	30	31
H38	NO	40	18	25	40	19	25	40	23	27	40	25	29	40	29	32	40	32	34	40	32	34	40	33	34	40	33	34
H40	YES	40	19	26	40	20	26	40	24	28	40	26	30	40	30	33	40	33	35	40	33	35	40	34	35	40	34	35
H41	NO	40	20	27	40	21	27	40	25	29	40	28	31	40	31	34	40	34	36	40	35	36	40	36	36	40	36	36
H42	YES	40	21	27	40	22	28	40	26	29	40	28	32	40	32	34	40	35	36	40	35	37	40	36	37	40	36	37
H43	NO	40	11	18	40	12	18	40	17	20	40	18	22	40	22	24	40	24	26	40	25	27	40	26	27	40	26	28
H44	NO	40	13	20	40	14	21	40	19	22	40	21	25	40	24	27	40	27	29	40	27	29	40	29	30	40	29	30
H45	NO	40	16	23	40	17	24	40	22	25	40	24	28	40	28	30	40	31	32	40	31	33	40	32	33	40	32	33
H46	NO	40	19	26	40	20	26	40	24	28	40	27	30	40	30	33	40	33	35	40	34	35	40	35	35	40	35	35
H47	YES	40	17	24	40	18	24	40	23	26	40	25	29	40	29	31	40	31	33	40	32	33	40	33	34	40	33	34
H55	NO	40	12	21	40	13	20	40	18	21	40	20	24	40	23	26	40	26	28	40	27	29	40	28	29	40	28	29
H56	NO	40	13	21	40	14	21	40	19	22	40	20	24	40	24	27	40	27	29	40	27	29	40	29	30	40	29	30
H57	NO	40	21	28	40	22	28	40	26	30	40	28	32	40	32	35	40	35	37	40	36	37	40	36	37	40	37	37
H61	YES	40	22	29	40	23	29	40	27	31	40	29	33	40	33	36	40	36	38	40	37	38	40	37	38	40	37	38
H65	YES	40	22	30	40	23	29	40	28	31	40	30	34	40	34	36	40	37	38	40	37	38	40	38	38	40	38	39
H66	NO	40	18	26	40	19	25	40	23	27	40	25	29	40	29	32	40	32	34	40	32	34	40	33	34	40	33	34
H72	NO	40	10	17	40	11	18	40	16	19	40	18	22	40	21	24	40	24	26	40	25	27	40	26	27	40	26	27

Residence	Associated	4m/s			5m/s			6m/s			7m/s			8m/s			9m/s			10m/s			11m/s			12m/s		
		Criteria	V126 Prediction	V136 Prediction	Criteria	V126 Prediction	V136 Prediction	Criteria	V126 Prediction	V136 Prediction	Criteria	V126 Prediction	V136 Prediction	Criteria	V126 Prediction	V136 Prediction	Criteria	V126 Prediction	V136 Prediction	Criteria	V126 Prediction	V136 Prediction	Criteria	V126 Prediction	V136 Prediction	Criteria	V126 Prediction	V136 Prediction
H73	NO	40	14	22	40	15	21	40	19	23	40	21	25	40	25	27	40	27	29	40	28	30	40	29	30	40	29	30
H78	NO	40	17	25	40	18	25	40	23	26	40	24	28	40	28	31	40	31	33	40	31	33	40	33	33	40	33	34
H80	NO	40	18	24	40	19	25	40	23	27	40	25	29	40	29	31	40	32	34	40	32	34	40	33	34	40	33	34
H83	YES	40	15	22	40	16	23	40	21	24	40	23	27	40	26	29	40	29	31	40	30	31	40	31	32	40	31	32
H116	NO	40	11	18	40	12	19	40	17	20	40	18	22	40	22	25	40	25	27	40	25	27	40	27	28	40	27	28
H117	NO	40	9	16	40	10	17	40	15	18	40	16	20	40	20	23	40	23	25	40	23	25	40	25	26	40	25	26
H118	NO	40	11	18	40	12	19	40	17	20	40	18	22	40	22	25	40	25	27	40	25	27	40	27	27	40	26	28
H154	YES	40	15	22	40	16	22	40	20	24	40	22	26	40	26	29	40	29	31	40	29	31	40	30	31	40	30	31
H155	NO	40	18	26	40	19	26	40	24	27	40	26	30	40	29	32	40	32	34	40	33	34	40	34	34	40	34	35
H156	NO	40	14	22	40	15	21	40	20	23	40	21	25	40	25	27	40	27	29	40	28	30	40	29	30	40	29	30
H159	NO	40	10	17	40	11	18	40	16	19	40	18	22	40	21	24	40	24	26	40	24	26	40	26	27	40	26	27
H160	NO	40	22	29	40	23	29	40	27	31	40	29	33	40	33	36	40	36	38	40	36	38	40	37	38	40	37	38
H161	NO	40	22	29	40	23	29	40	27	31	40	29	33	40	33	36	40	36	38	40	37	38	40	37	38	40	38	38
H163	NO	40	15	23	40	16	22	40	21	24	40	22	26	40	26	29	40	29	31	40	29	31	40	30	31	40	30	31
H190	NO	40	12	20	40	13	20	40	18	22	40	20	24	40	24	26	40	26	28	40	27	29	40	28	29	40	28	29
H268	NO	40	12	19	40	13	20	40	18	21	40	19	23	40	23	26	40	26	28	40	26	28	40	27	28	40	27	29
H272	YES	40	19	26	40	21	27	40	25	28	40	27	31	40	31	33	40	34	35	40	34	36	40	35	36	40	35	36
H317	NO	40	13	20	40	15	21	40	19	22	40	21	25	40	25	27	40	27	29	40	28	30	40	29	30	40	29	30
H318	NO	40	13	20	40	14	20	40	18	22	40	20	24	40	24	27	40	27	29	40	27	29	40	28	29	40	28	29

APPENDIX F: Noise Level Contours for Vestas V126 & V136 Turbines at 10m/s Hub Height Wind Speed


H55
H56
H190
H47
H57
H272
H156
H78
H72
H65
H66
H46
H45
H44
H160
H73
H155
H161
H61
H40
H159
H31
H38
H35
H163
H32
H33
H37
H317
C231
H34
H42
B200
H41
H318
H80
H83
H154
H43
H116
H268
H117
H118
Horsham-Minyip Rd
Murra Warra
Wind Farm
Environmental Noise
Vestas V126 Prediction
Worst-case Meteorological Conditions
Legend
Substation
Wind Turbine
Residences
Associated Residences
Predicted Noise Level
in dB(A)
= 20
= 25
= 30
= 35
= 40
= 45
0 0.5 1 2
km
N


H55
H56
H190
H47
H57
H272
H156
H78
H72
H65
H66
H46
H45
H44
H160
H73
H155
H161
H61
H40
H159
H31
H35
H38
H32
H163
H33
H317
H87
C231
H34
H42
B200
H41
H318
H80
H83
H154
H43
H116
H268
H117
H118
Horsham-Minyip Rd
Murra Warra
Wind Farm
Environmental Noise
Vestas V136 Prediction
Worst-case Meteorological Conditions
Legend
Substation
Wind Turbine
Residences
Associated Residences
Predicted Noise Level
in dB(A)
= 20
= 25
= 30
= 35
= 40
= 45
0 0.5 1 2
km
N