Appendix 9.1 – Calculated Noise Immission Levels

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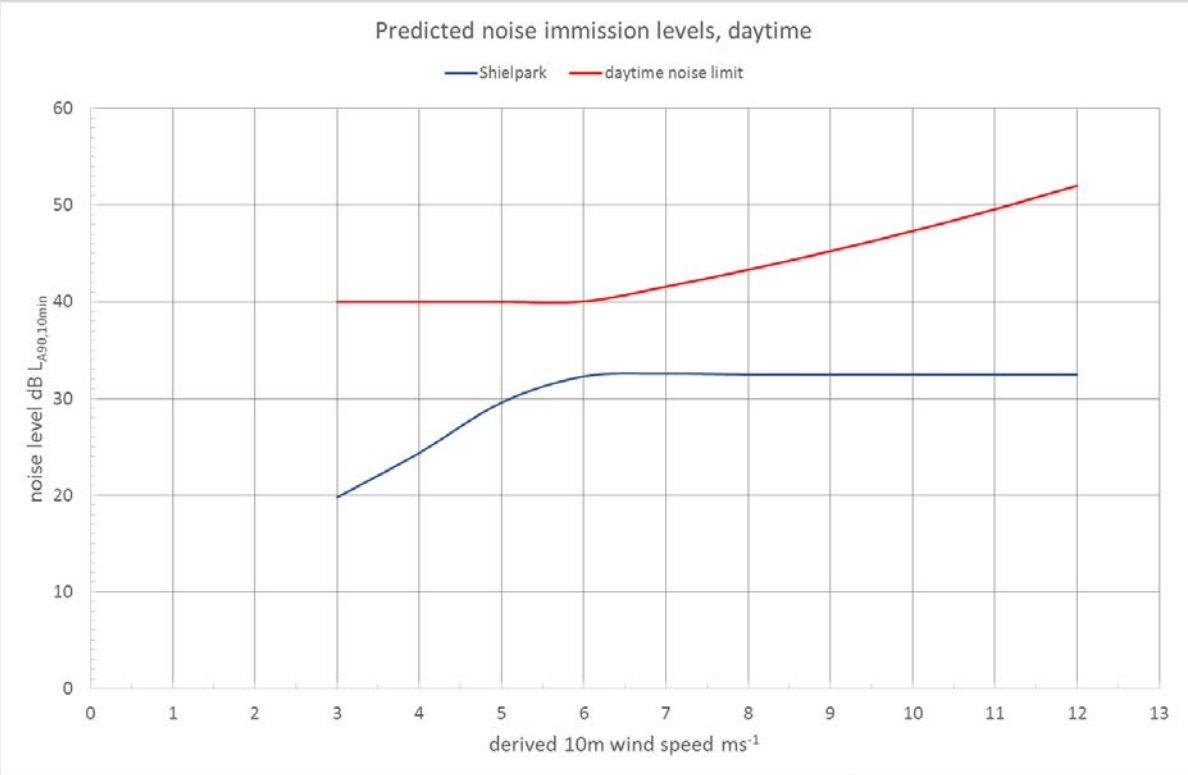
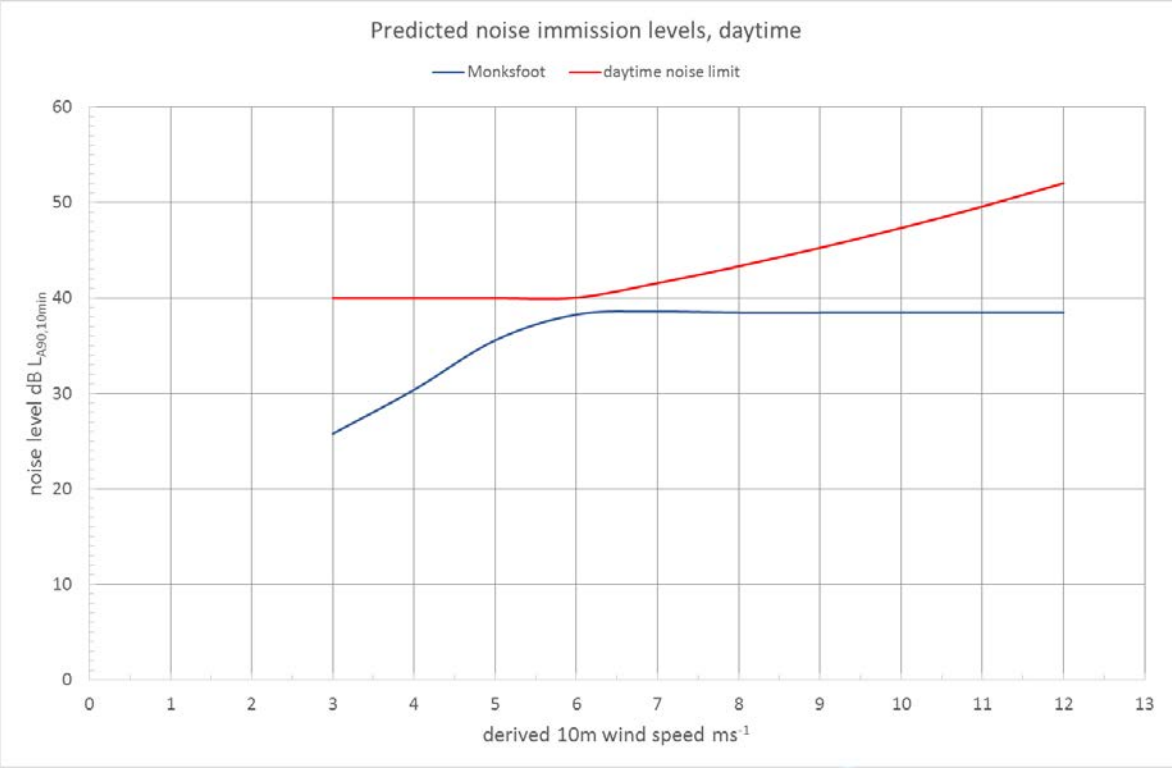
Appendix 9.1: Calculated Noise Immission Levels

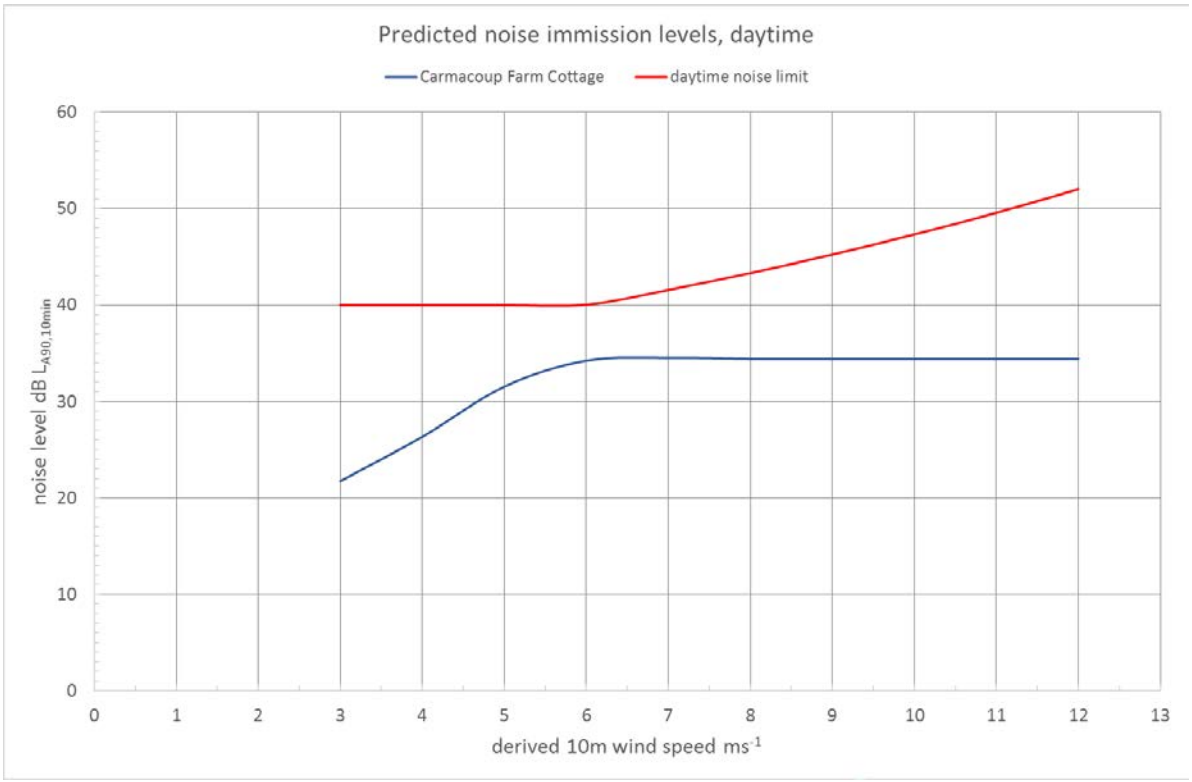
Introduction

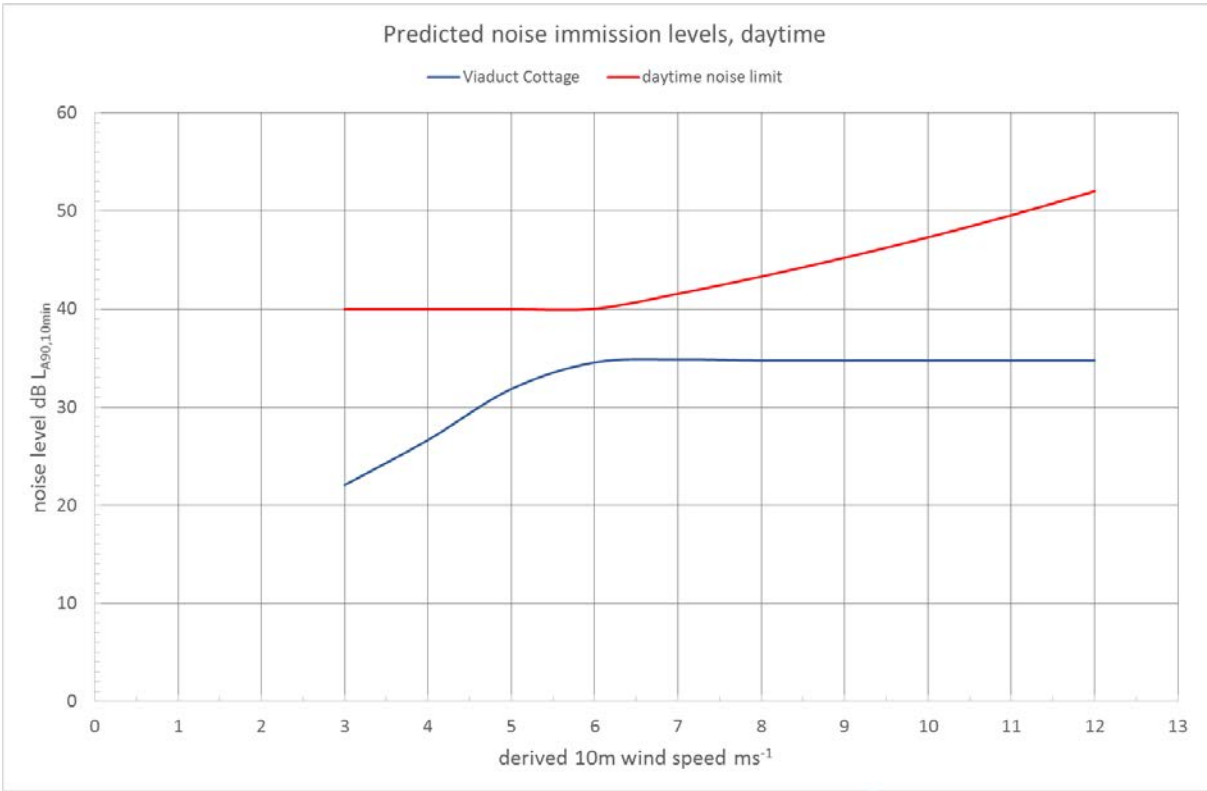
The graphs presented show the calculated noise immission levels in terms of dB $L_{A90,10min}$ against the derived wind speed at 10 m height for each of the 13 prediction locations. The results are the worst-case levels according to the recommendations of the IOA Good Practice Guide. The proposed *solus* noise limits are also shown in each case.

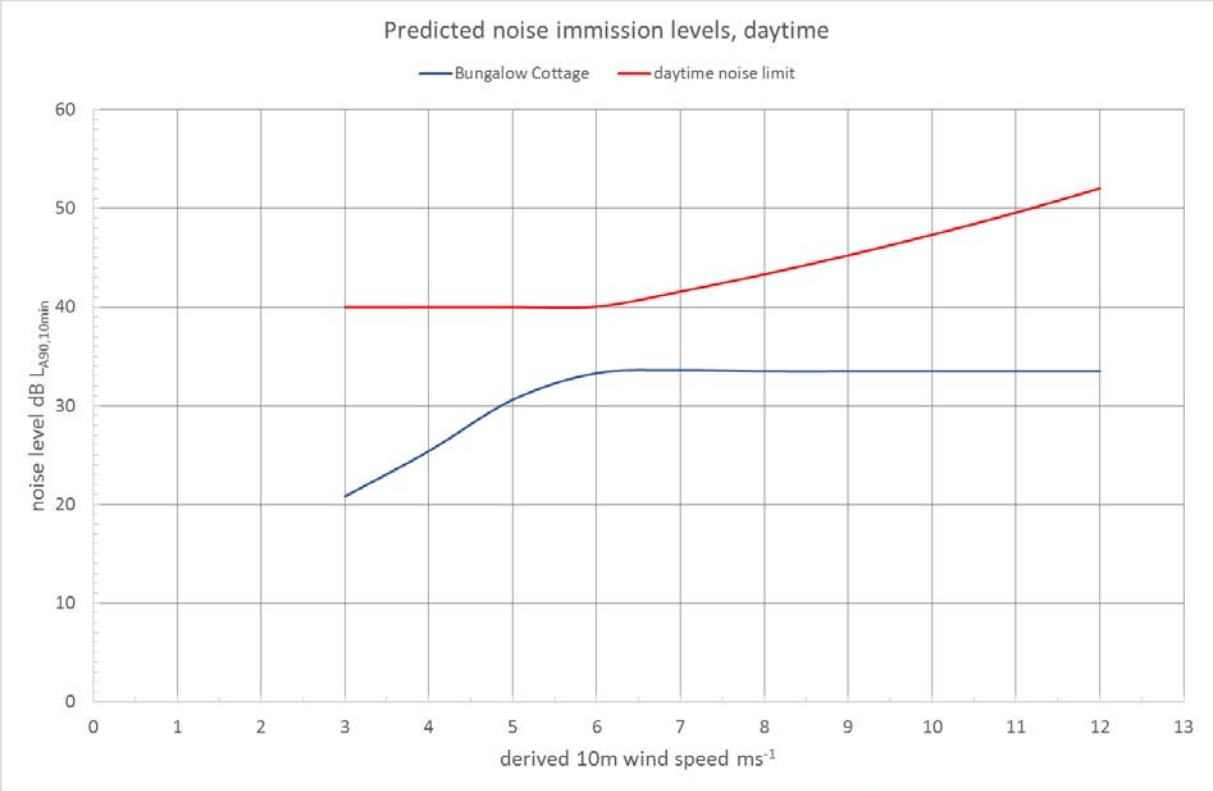
Figure 1 – Noise Immission Levels against Wind Speed, Daytime

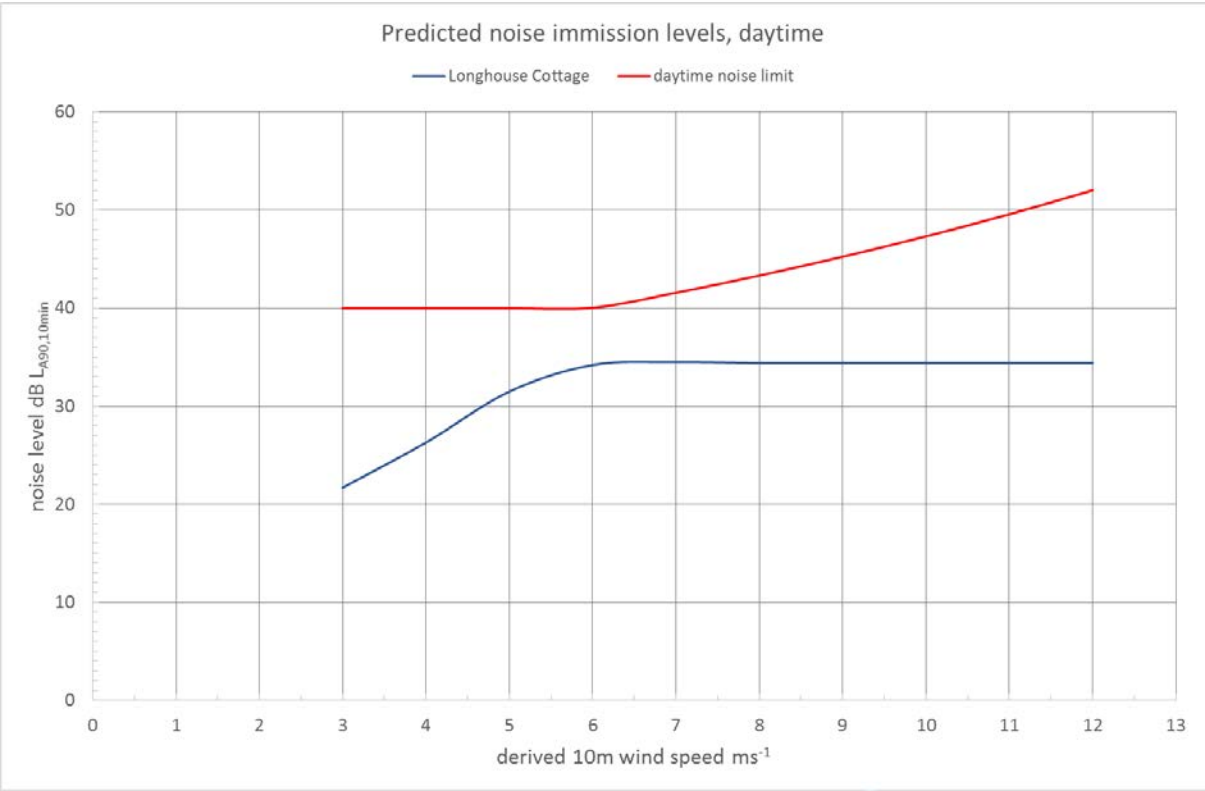


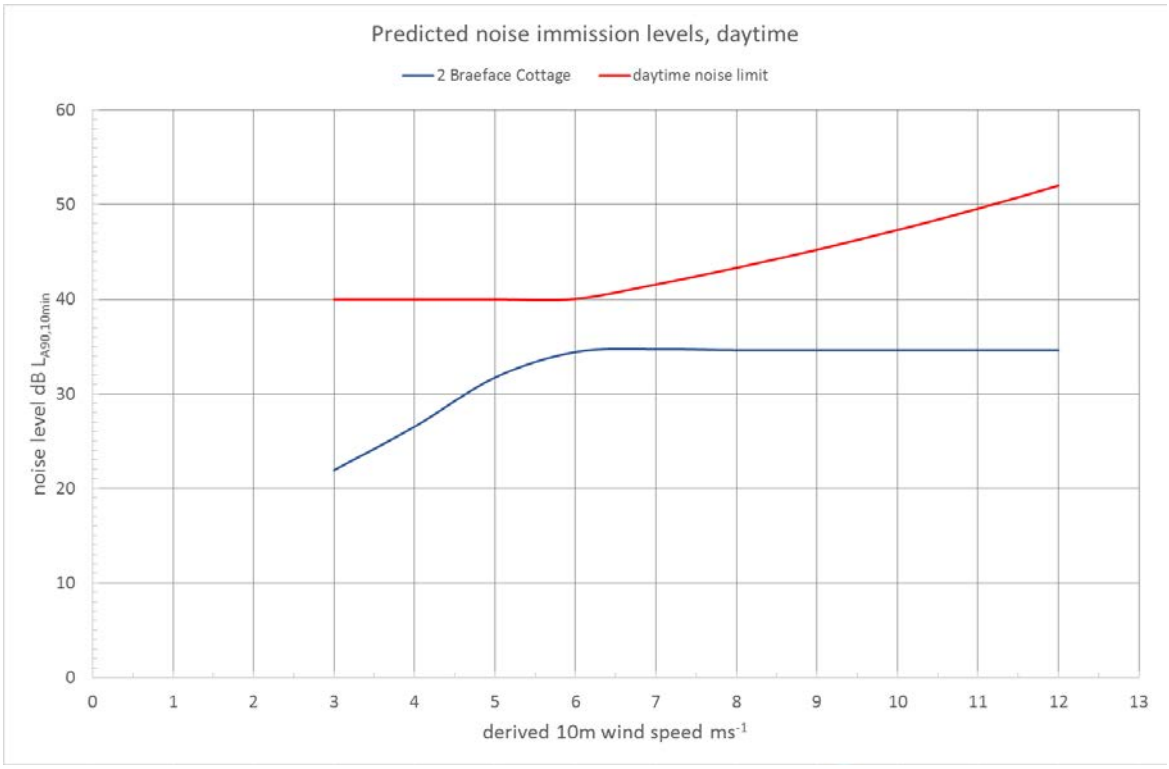


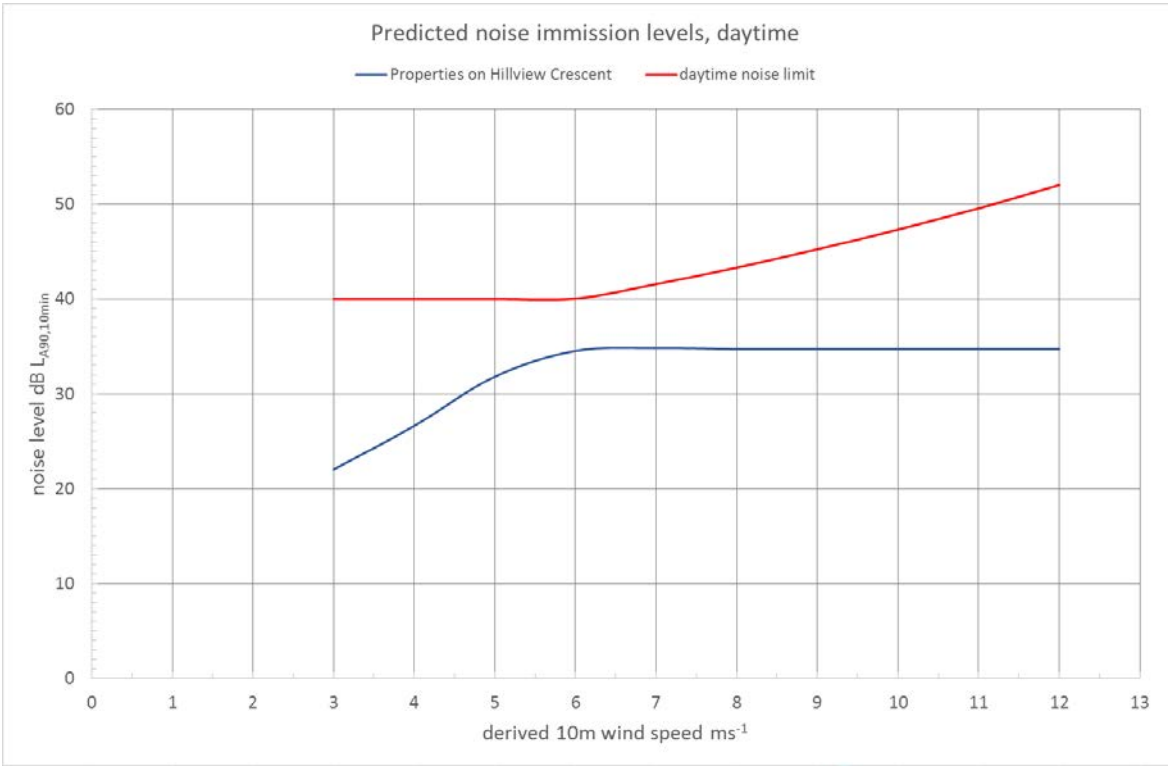

Predicted noise immission levels, daytime
Carmacoup Farm Cottage
daytime noise limit
noise level dB $L_{A90,10min}$
derived 10m wind speed ms^{-1}
0
10
20
30
40
50
60
0
1
2
3
4
5
6
7
8
9
10
11
12
13

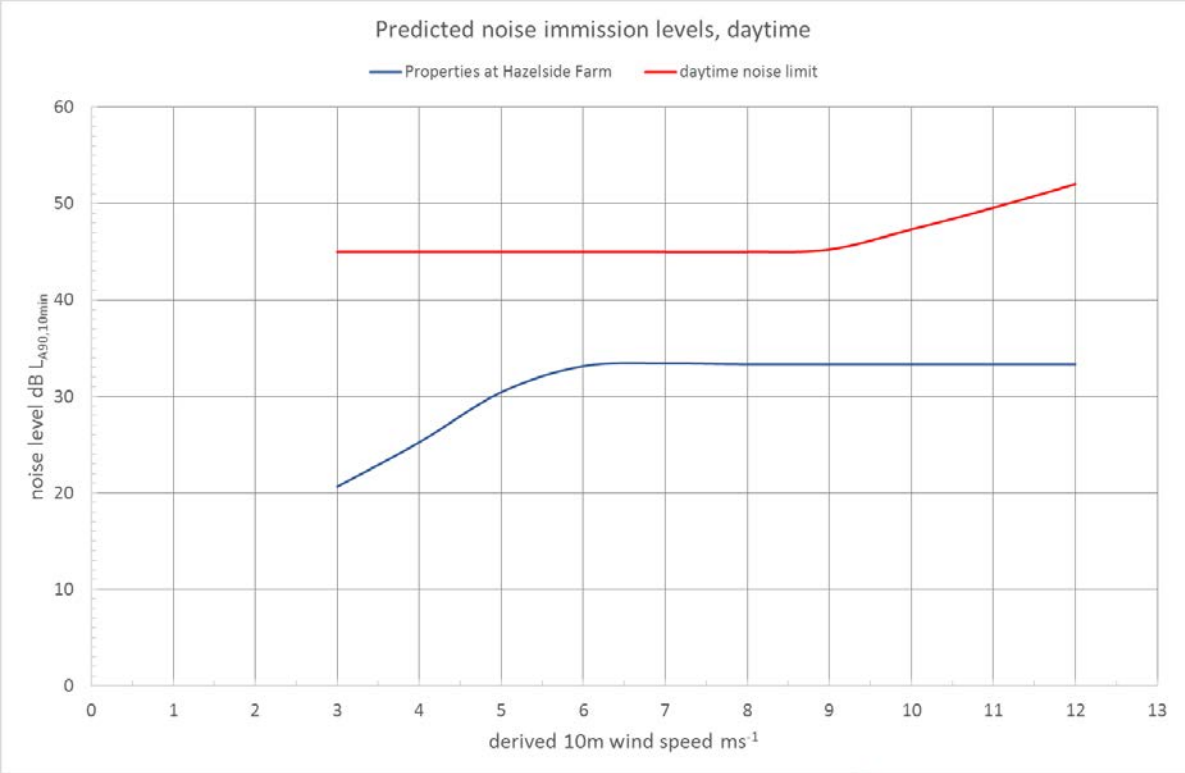

Predicted noise immission levels, daytime
Viaduct Cottage
daytime noise limit
noise level dB $L_{A90,10min}$
derived 10m wind speed ms^{-1}
0
10
20
30
40
50
60
0
1
2
3
4
5
6
7
8
9
10
11
12
13

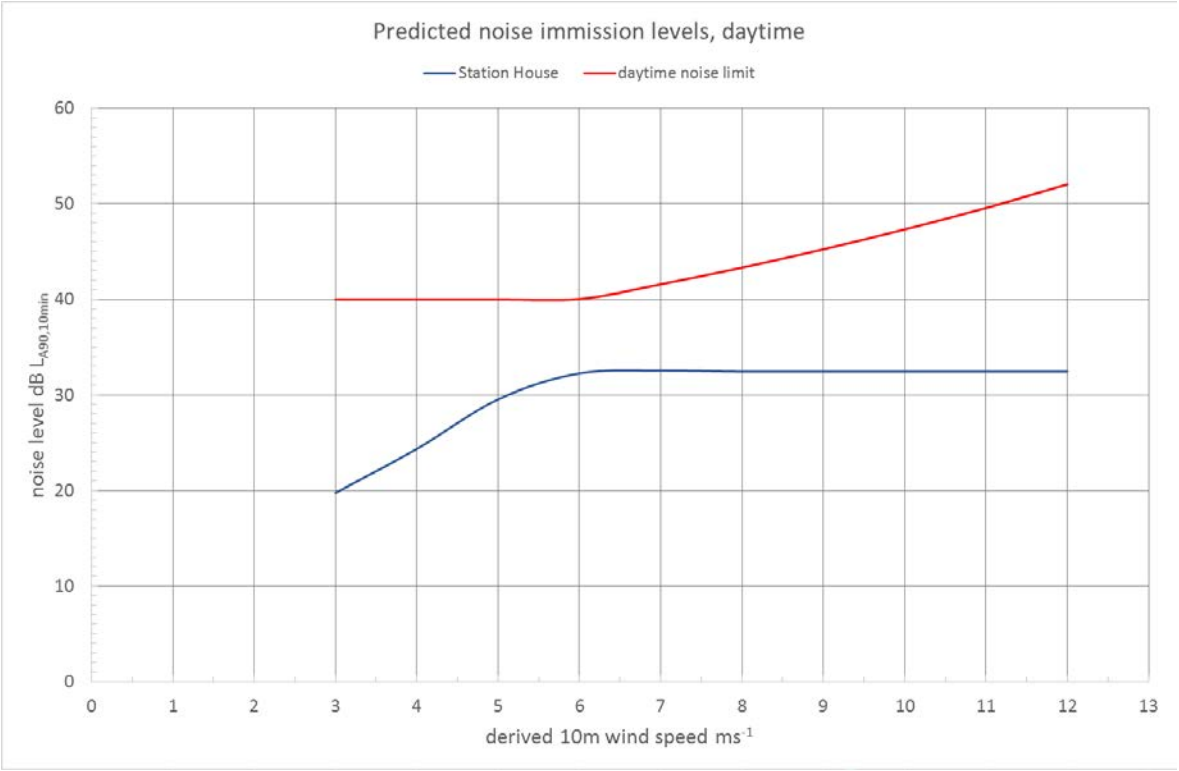

Predicted noise immission levels, daytime
Bungalow Cottage
daytime noise limit
noise level dB $L_{A90,10min}$
derived 10m wind speed ms^{-1}
0
10
20
30
40
50
60
0
1
2
3
4
5
6
7
8
9
10
11
12
13

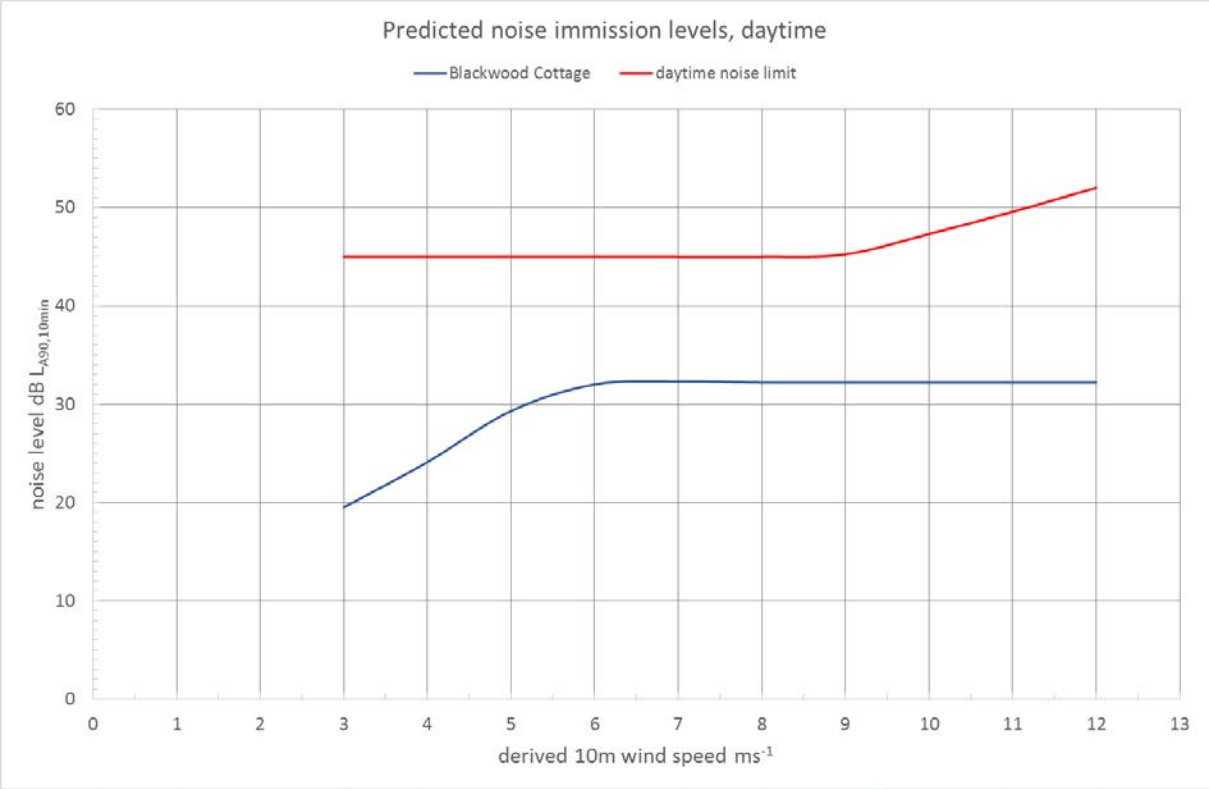

Predicted noise immission levels, daytime
Longhouse Cottage
daytime noise limit
noise level dB $L_{A90,10min}$
derived 10m wind speed ms^{-1}
0
10
20
30
40
50
60
0
1
2
3
4
5
6
7
8
9
10
11
12
13


Predicted noise immission levels, daytime
2 Braeface Cottage
daytime noise limit
noise level dB $L_{A90,10min}$
derived 10m wind speed ms^{-1}
0
10
20
30
40
50
60
0 1 2 3 4 5 6 7 8 9 10 11 12 13


Predicted noise immission levels, daytime
Properties on Hillview Crescent
daytime noise limit
noise level dB $L_{A90,10min}$
derived 10m wind speed ms^{-1}
0
10
20
30
40
50
60
0 1 2 3 4 5 6 7 8 9 10 11 12 13


Predicted noise immission levels, daytime
Properties at Hazelside Farm
daytime noise limit
noise level dB $L_{A90,10min}$
derived 10m wind speed ms^{-1}
0
10
20
30
40
50
60
0 1 2 3 4 5 6 7 8 9 10 11 12 13


Predicted noise immission levels, daytime
Station House
daytime noise limit
noise level dB $L_{A90,10min}$
derived 10m wind speed ms^{-1}
0
10
20
30
40
50
60
0 1 2 3 4 5 6 7 8 9 10 11 12 13


Predicted noise immission levels, daytime
Blackwood Cottage
daytime noise limit
noise level dB $L_{A90,10min}$
derived 10m wind speed ms^{-1}
0
10
20
30
40
50
60
0
1
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3
4
5
6
7
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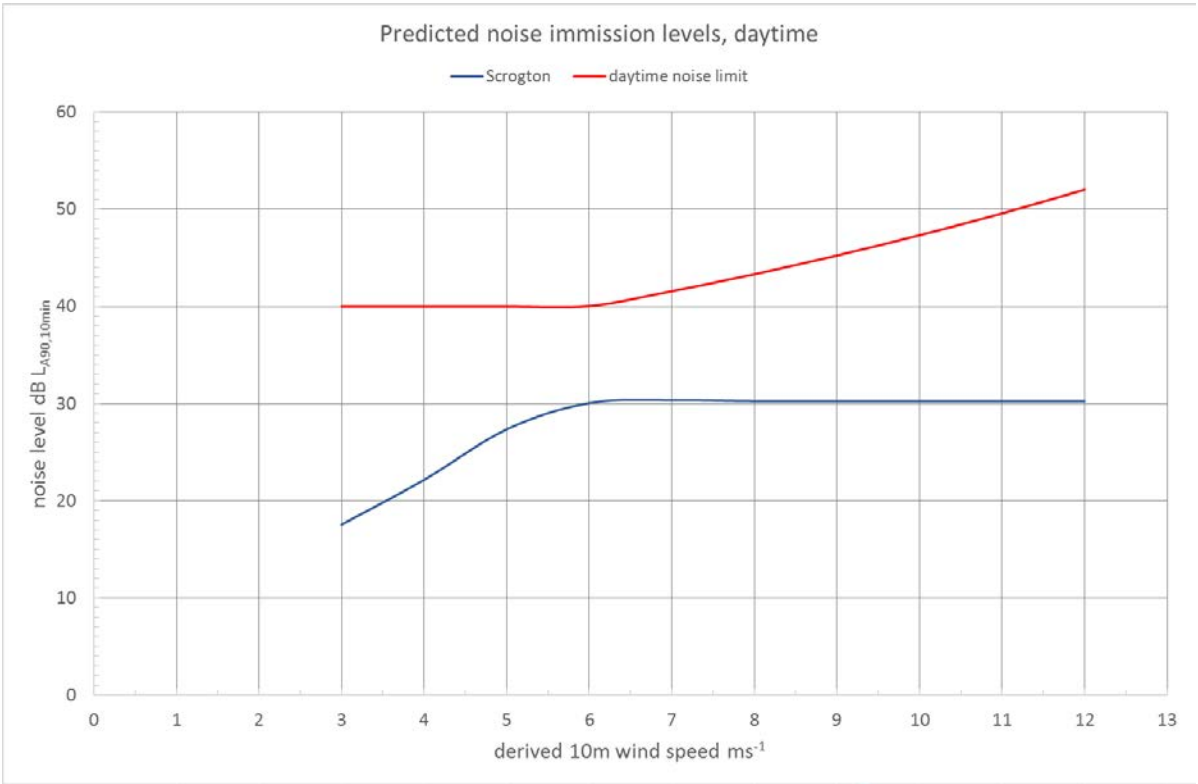
10
11
12
13


Predicted noise immission levels, daytime
Scrogton
daytime noise limit
noise level dB $L_{A90,10min}$
derived 10m wind speed ms^{-1}
0
10
20
30
40
50
60
0
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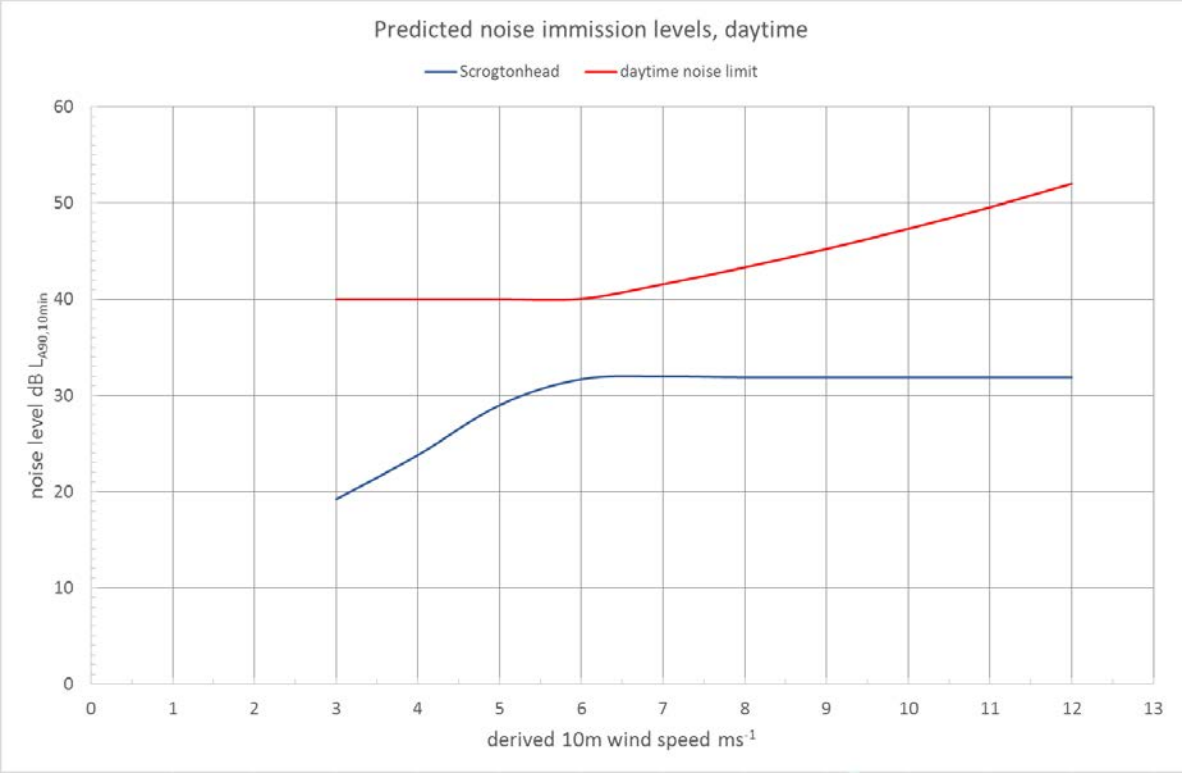
Predicted noise immission levels, daytime
Scrogtonhead
daytime noise limit
noise level dB $L_{A90,10min}$
derived 10m wind speed ms^{-1}
0
10
20
30
40
50
60
0
1
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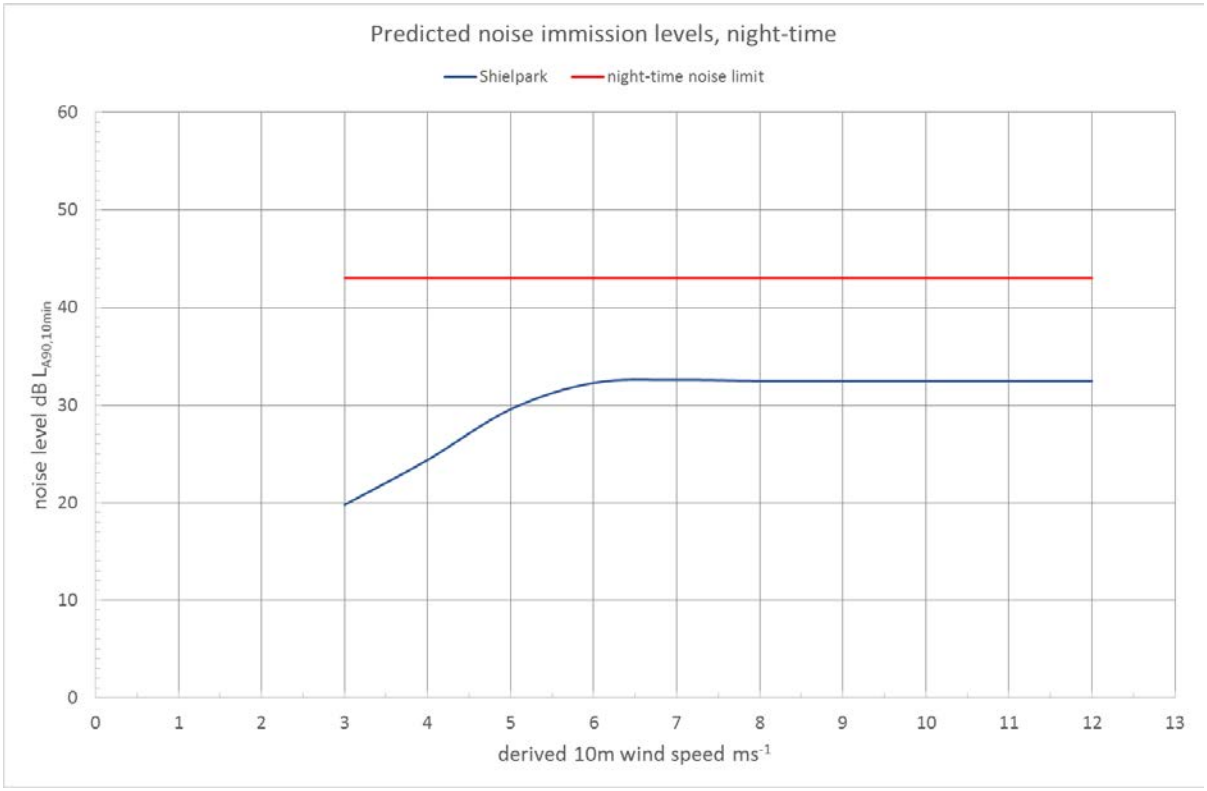
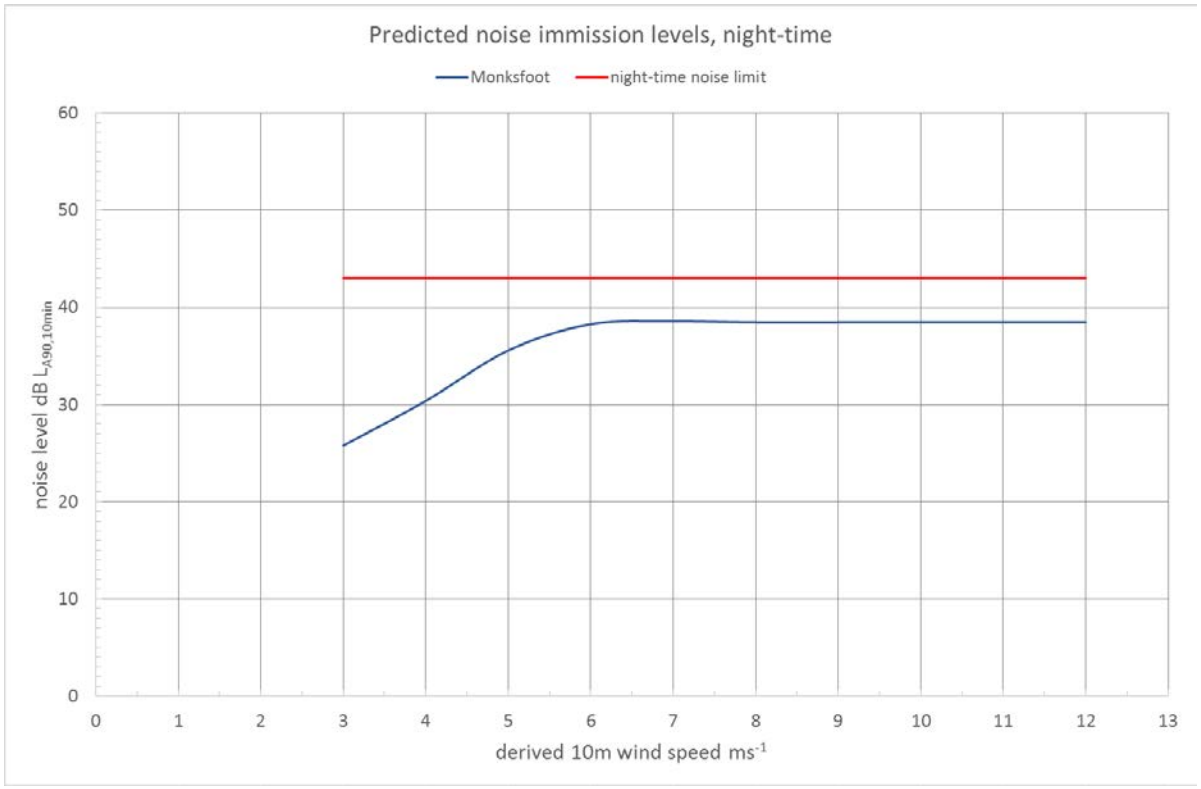
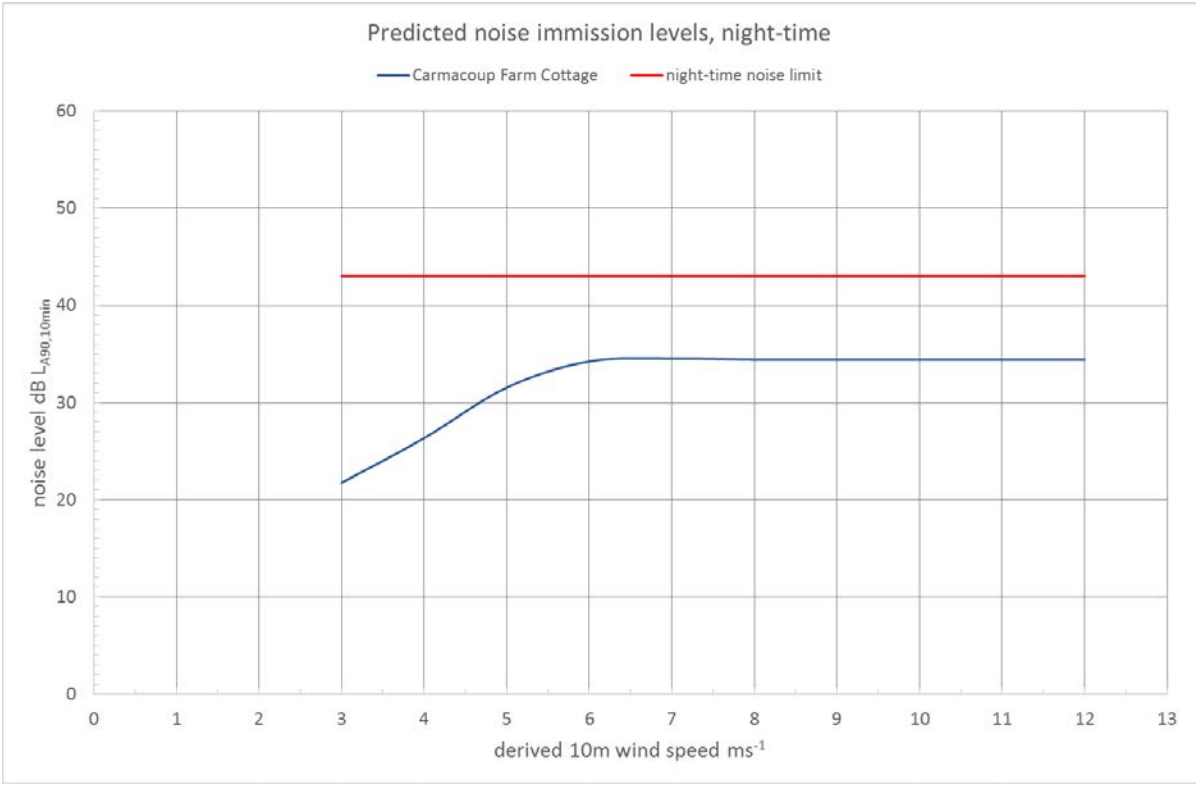
Figure 2 –Noise Immission Levels against Wind Speed, Night-time






Predicted noise immission levels, night-time
Carmacoup Farm Cottage
night-time noise limit
noise level dB $L_{A90,10min}$
derived 10m wind speed ms^{-1}
0
10
20
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40
50
60
0
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6
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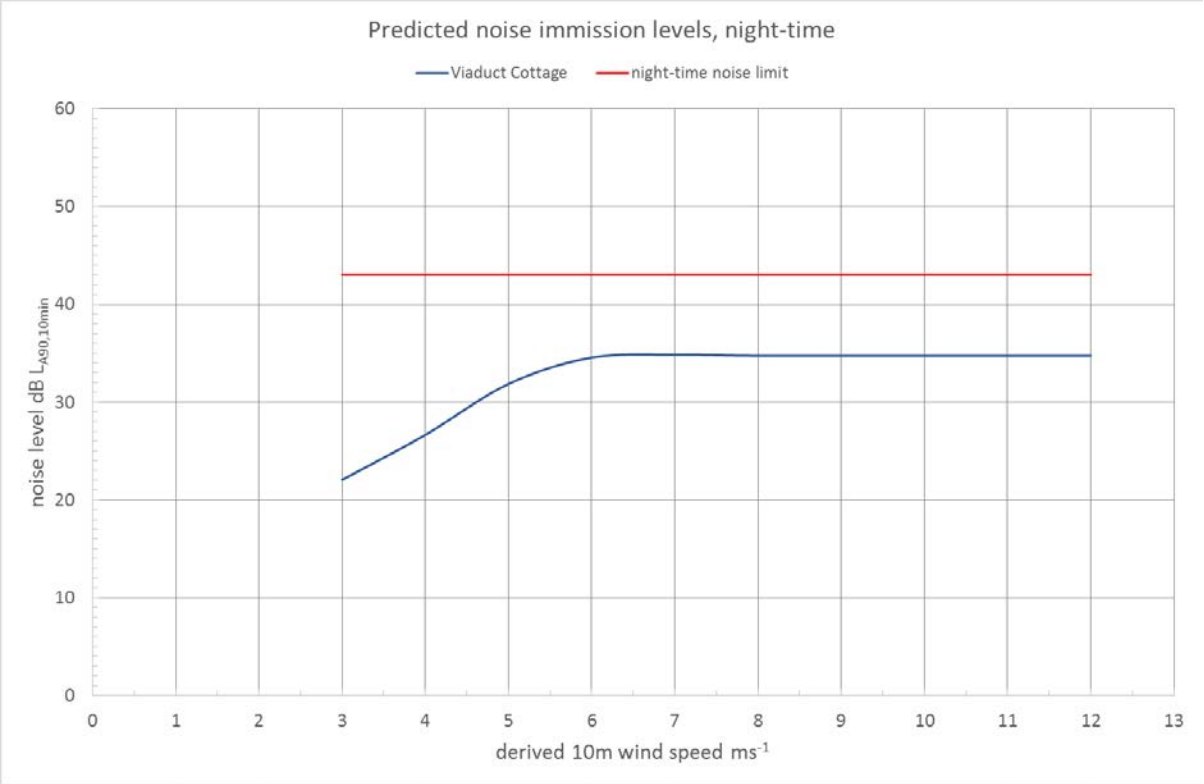
13


Predicted noise immission levels, night-time
Viaduct Cottage
night-time noise limit
noise level dB $L_{A90,10min}$
derived 10m wind speed ms^{-1}
0
10
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30
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50
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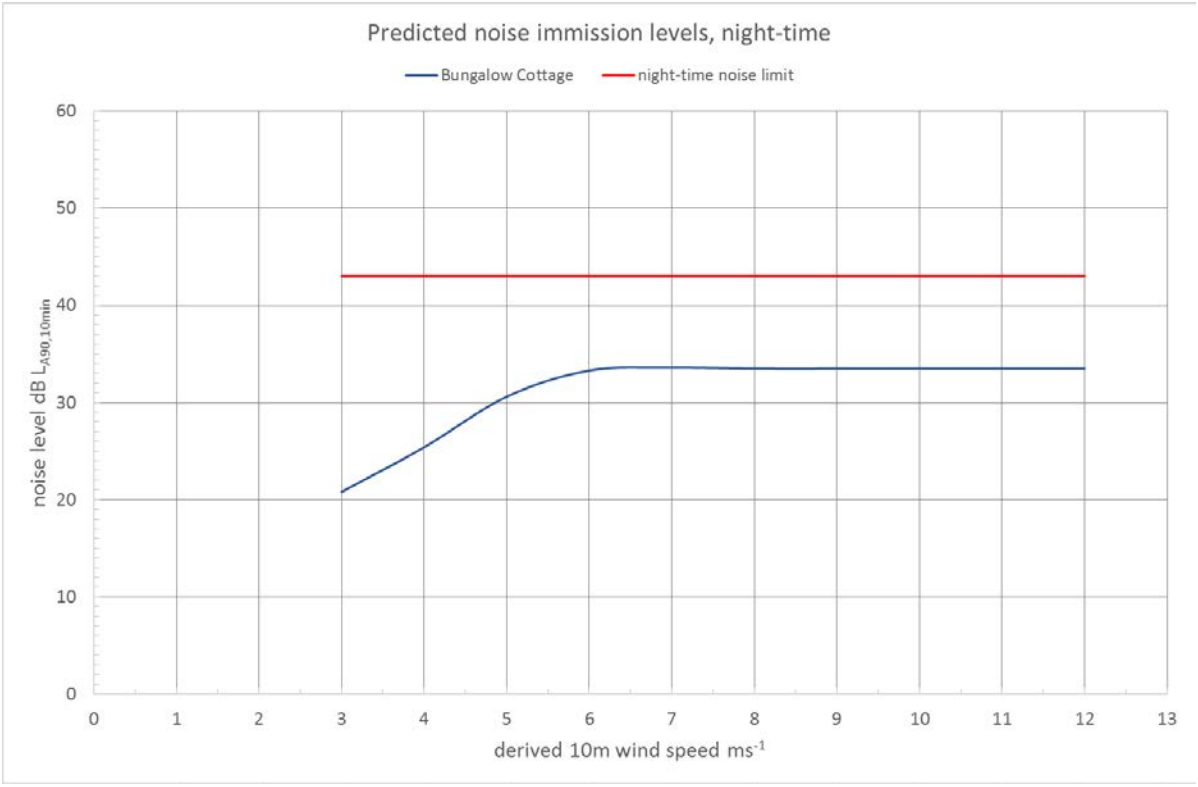
Predicted noise immission levels, night-time
Bungalow Cottage
night-time noise limit
noise level dB $L_{A90,10min}$
derived 10m wind speed ms^{-1}
0
10
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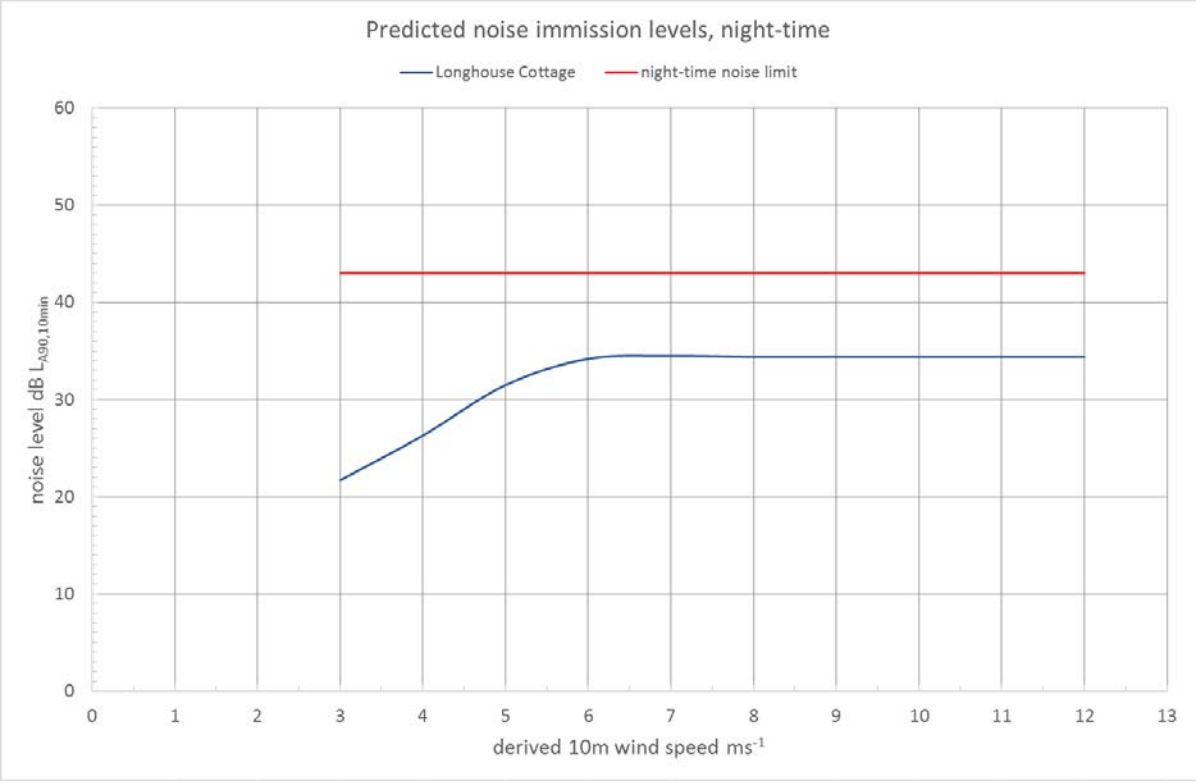
Predicted noise immission levels, night-time
Longhouse Cottage
night-time noise limit
noise level dB $L_{A90,10min}$
derived 10m wind speed ms^{-1}
0
10
20
30
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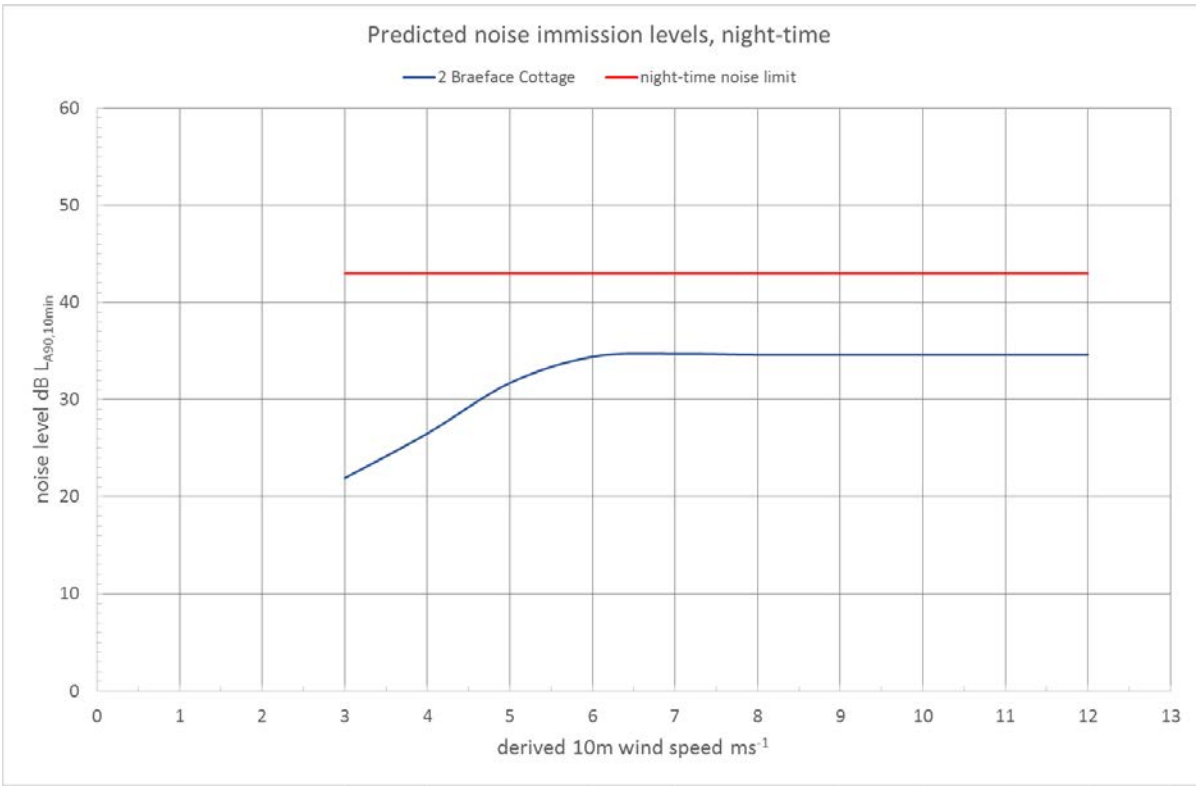
Predicted noise immission levels, night-time
2 Braeface Cottage
night-time noise limit
noise level dB $L_{A90,10min}$
derived 10m wind speed ms^{-1}
0
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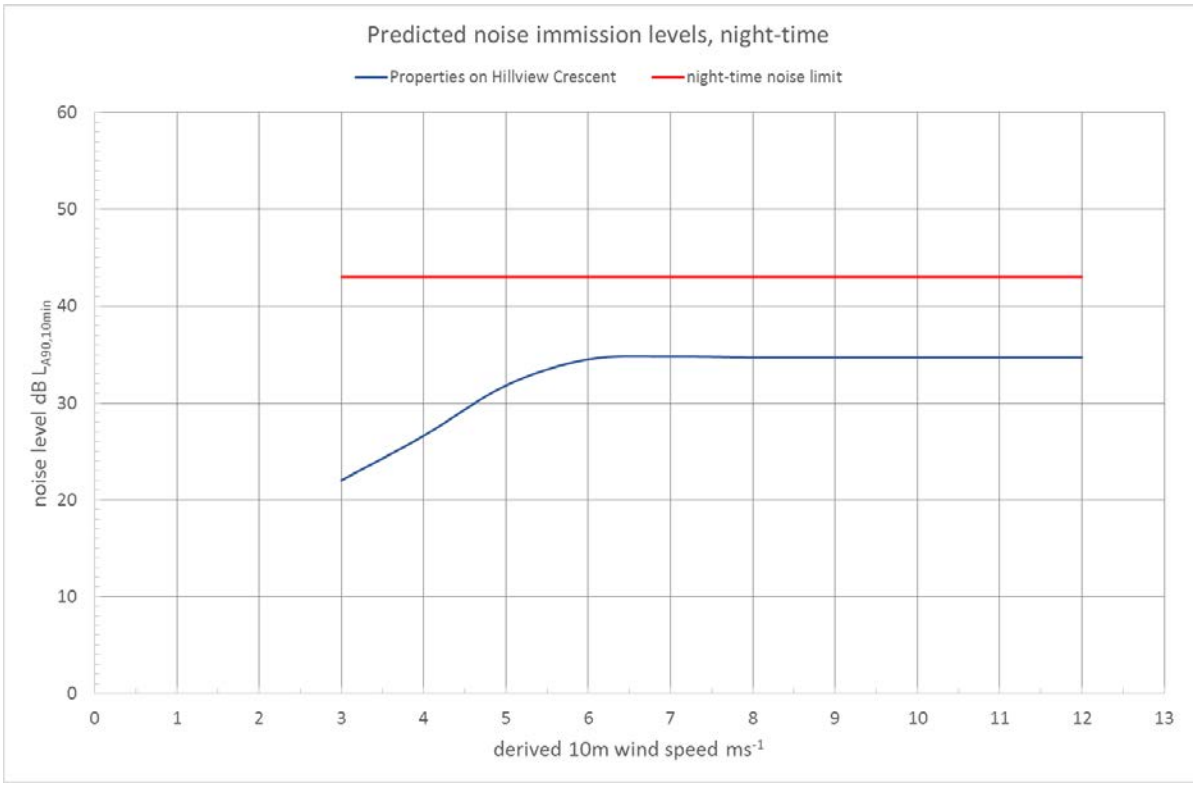
Predicted noise immission levels, night-time
Properties on Hillview Crescent
night-time noise limit
noise level dB $L_{A90,10min}$
derived 10m wind speed ms^{-1}
0
10
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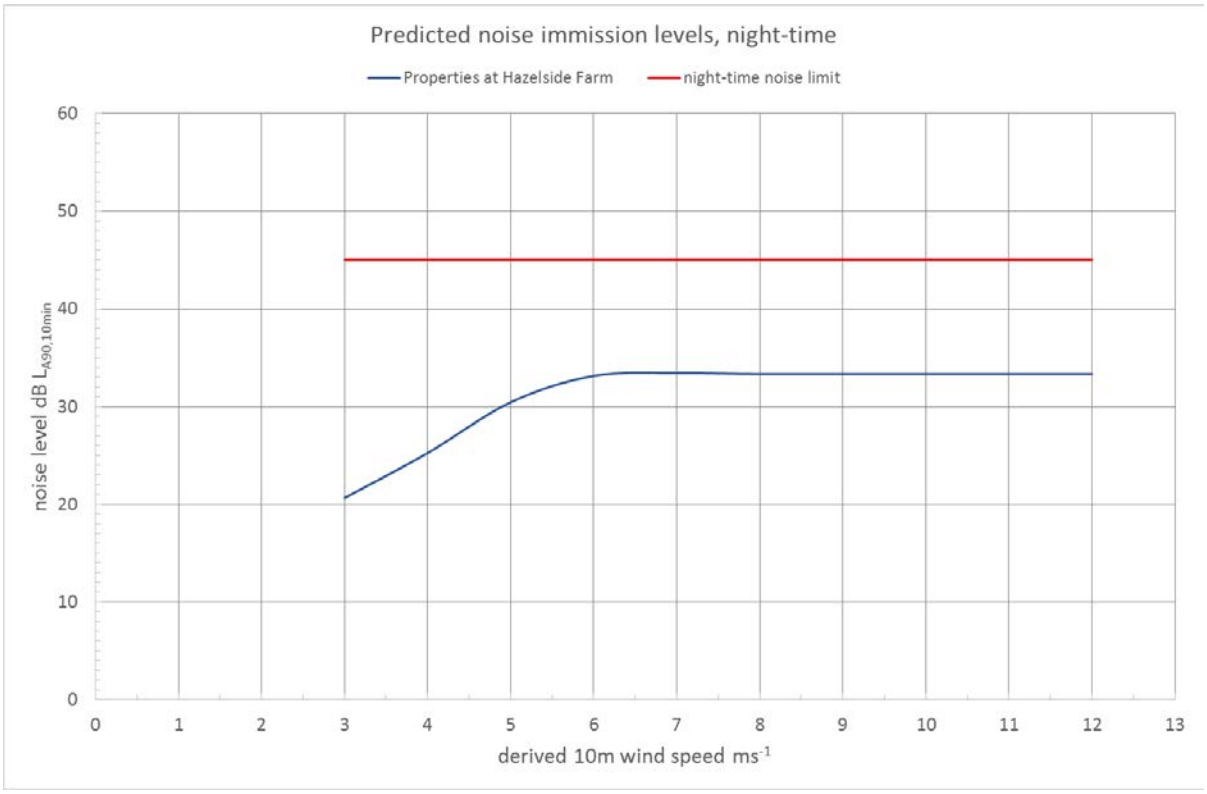
Predicted noise immission levels, night-time
Properties at Hazelside Farm
night-time noise limit
noise level dB $L_{A90,10min}$
derived 10m wind speed ms^{-1}
0
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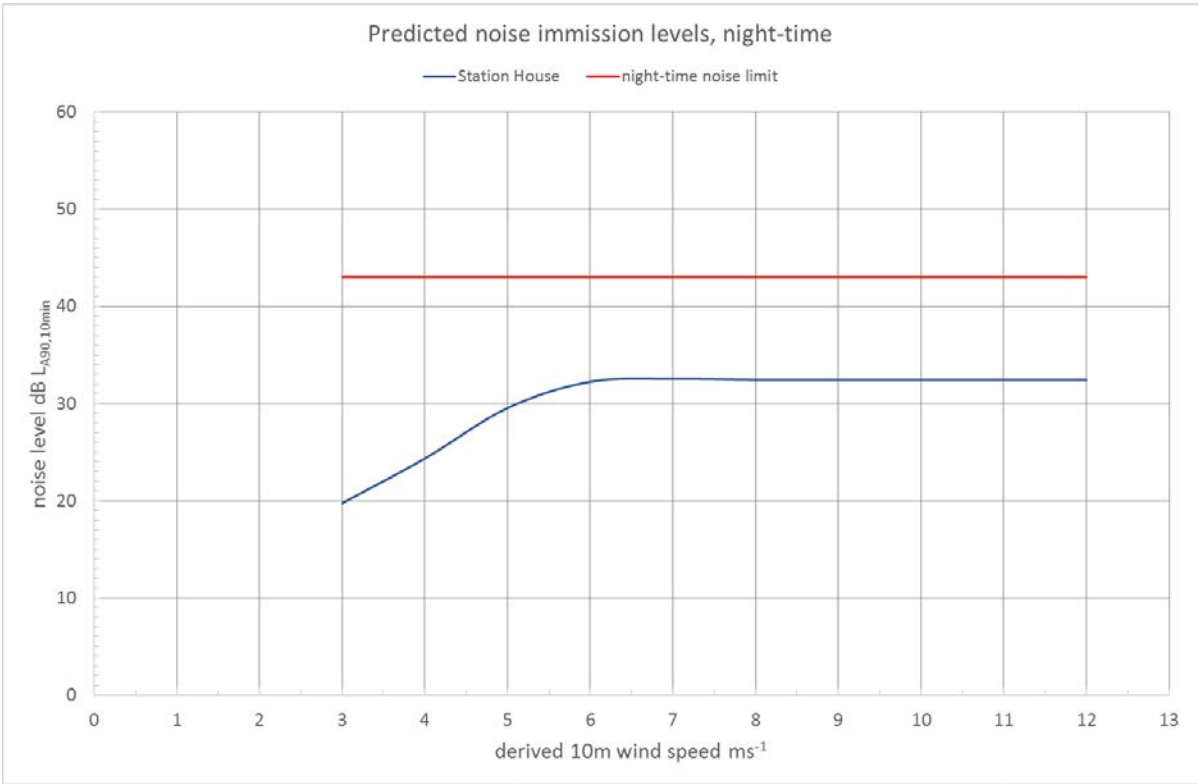
Predicted noise immission levels, night-time
Station House
night-time noise limit
noise level dB $L_{A90,10min}$
derived 10m wind speed ms^{-1}
0
10
20
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40
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5
6
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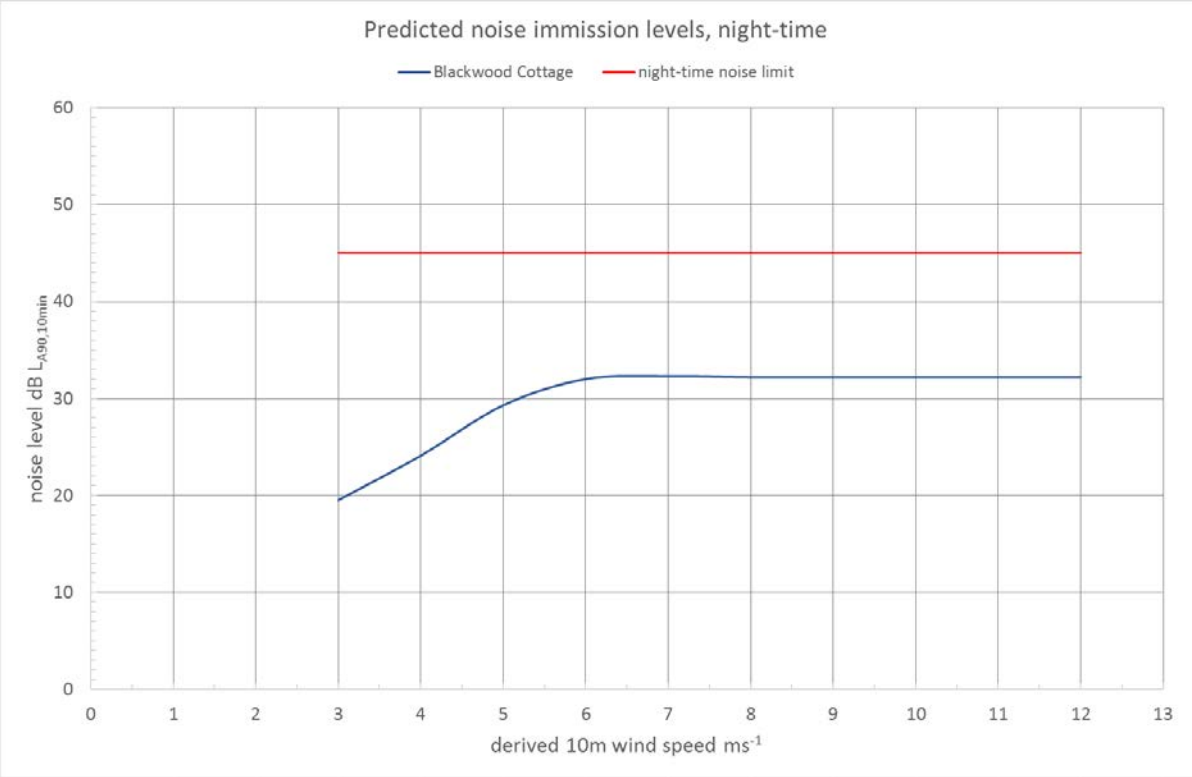
13


Predicted noise immission levels, night-time
Blackwood Cottage
night-time noise limit
noise level dB $L_{A90,10min}$
derived 10m wind speed ms^{-1}
0
10
20
30
40
50
60
0
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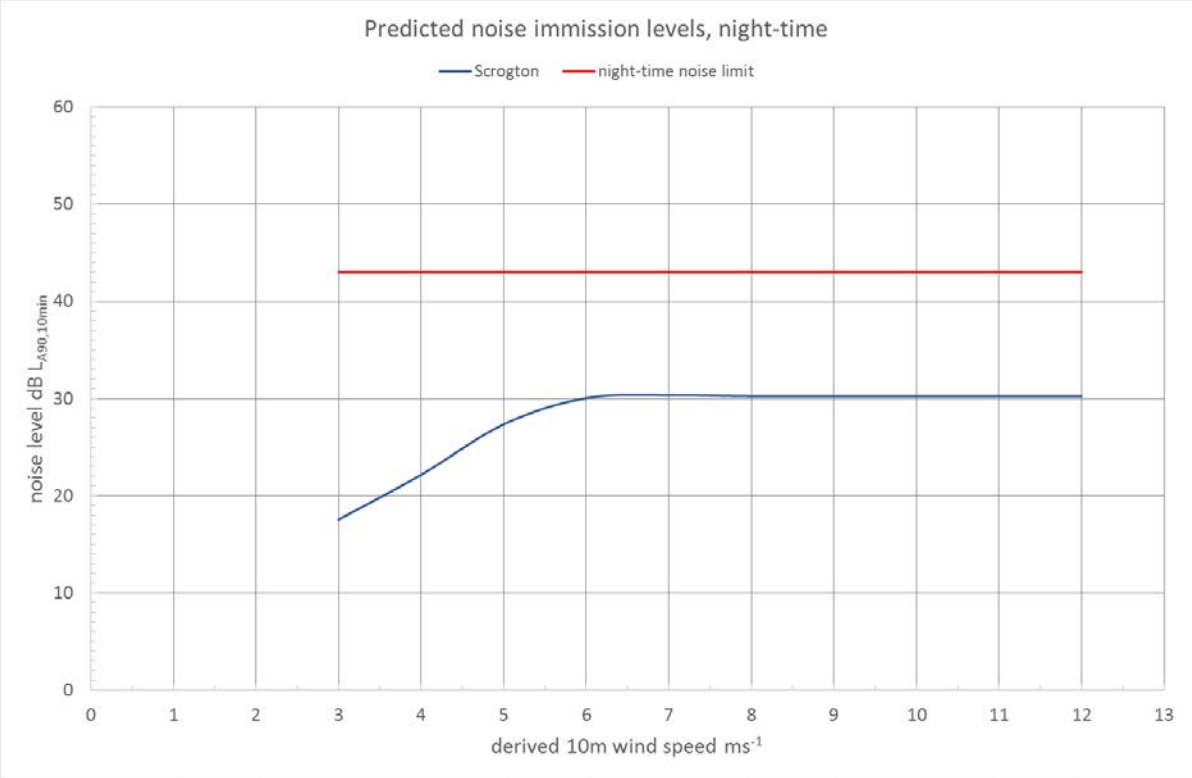
13


Predicted noise immission levels, night-time
Scrogton
night-time noise limit
noise level dB $L_{A90,10min}$
derived 10m wind speed ms^{-1}
0
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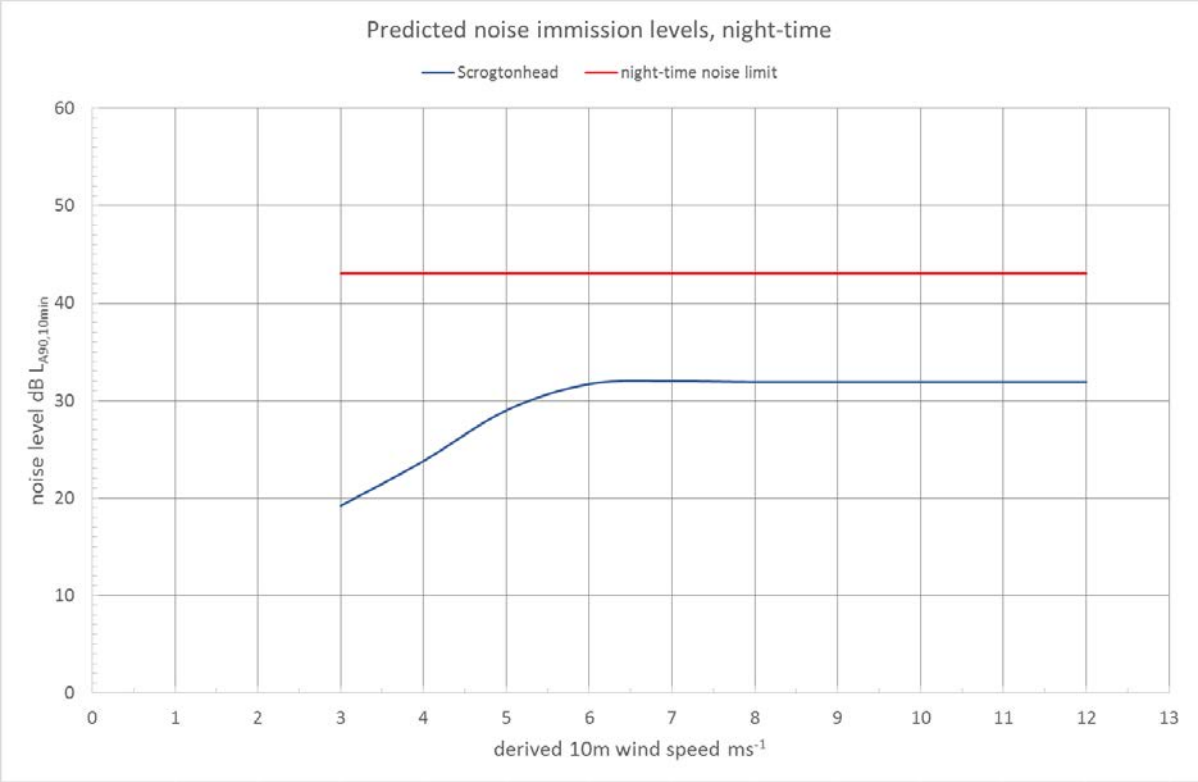
20
30
40
50
60
0
1
2
3
4
5
6
7
8
9
10
11
12
13


Predicted noise immission levels, night-time
Scrogtonhead
night-time noise limit
noise level dB $L_{A90,10min}$
derived 10m wind speed ms^{-1}
0
10
20
30
40
50
60
0
1
2
3
4
5
6
7
8
9
10
11
12
13