



Appendix 10.2

Measured Noise Level Data

Appendix 10.2

Measured Noise Level Data

Noise Measurement Position 1

The table below presents the measured noise levels from the road traffic noise measurement completed for Redbourn Road.

Table 1.

Measurement Position	Period	Measured Sound Pressure Level, dB		Measurement Distance to Centre of Road (m)
		L _{Aeq,T}	L _{Amax,fast}	
1	Daytime	78.0		22
	Night-time	74.3	84.2*	
*10 th highest L _{Amax,fast}				

Noise Measurement Position 2

The table below presents the measured noise levels from the road traffic noise measurement completed for the M1 Motorway.

Table 2.

Period start	Measured Sound Pressure Level, LAeq,30mins (dB)
07/01/2025 12:30	80.7
07/01/2025 13:00	80.3
07/01/2025 13:30	79.5
07/01/2025 14:00	80.6
07/01/2025 14:30	81.2
07/01/2025 15:00	81.2
07/01/2025 15:30	81.2
07/01/2025 16:00	78.2
07/01/2025 16:30	75.4
07/01/2025 17:00	74
07/01/2025 17:30	74.6
07/01/2025 18:00	72.9
07/01/2025 18:30	76.1
07/01/2025 19:00	80
07/01/2025 19:30	80.2
07/01/2025 20:00	80.1
07/01/2025 20:30	79.4
07/01/2025 21:00	78.9
07/01/2025 21:30	78.8

07/01/2025 22:00	78.2
07/01/2025 22:30	78.5
08/01/2025 07:00	81.4
08/01/2025 07:30	81.7
08/01/2025 08:00	81.4
08/01/2025 08:30	82
08/01/2025 09:00	81.6
08/01/2025 09:30	81.5
08/01/2025 10:00	81.4
08/01/2025 10:30	81.3
08/01/2025 11:00	81.6
08/01/2025 11:30	81.7
08/01/2025 12:00	81.7

Noise Measurement Position 3

Table 3 below presents the measured noise levels from the background noise measurement.

Table 3.

Period start	Measured Sound Pressure Level, LAeq,T (dB)	
	LAeq, 15mins	LA90, 15mins
07/01/2025 13:15	49.4	37.1
07/01/2025 13:30	49.5	37.1
07/01/2025 13:45	42.6	37.3
07/01/2025 14:00	47.2	37.7
07/01/2025 14:15	43.8	36.7
07/01/2025 14:30	50.5	41.6
07/01/2025 14:45	64.9	44.8
07/01/2025 15:00	52.7	40.5
07/01/2025 15:15	49.5	40.7
07/01/2025 15:30	51.3	40.2
07/01/2025 15:45	52.8	38.9
07/01/2025 16:00	73.9	44.9
07/01/2025 16:15	54.1	38.7
07/01/2025 16:30	49.8	38.7
07/01/2025 16:45	52	39
07/01/2025 17:00	50.1	38.3
07/01/2025 17:15	49.9	38.2
07/01/2025 17:30	52.5	38.3
07/01/2025 17:45	51.2	37.9
07/01/2025 18:00	50.8	37.1
07/01/2025 18:15	50.5	38
07/01/2025 18:30	49.4	37.9
07/01/2025 18:45	47.2	37.8
07/01/2025 19:00	47.4	37.7
07/01/2025 19:15	40.2	36.4

07/01/2025 19:30	45.6	35.9
07/01/2025 19:45	44.4	35.9
07/01/2025 20:00	43	35.5
07/01/2025 20:15	52.4	36.1
07/01/2025 20:30	47.7	35.3
07/01/2025 20:45	42.4	34.6
07/01/2025 21:00	43.1	35.1
07/01/2025 21:15	40	34.7
07/01/2025 21:30	53.3	35.4
07/01/2025 21:45	45.8	35
07/01/2025 22:00	49.8	36.5
07/01/2025 22:15	44.5	35.1
07/01/2025 22:30	41.2	35
07/01/2025 22:45	44.8	36.5
07/01/2025 23:00	40.3	34.9
07/01/2025 23:15	39.5	35.9
07/01/2025 23:30	37	35.5
07/01/2025 23:45	36.7	34.4
08/01/2025 00:00	54.9	36.3
08/01/2025 00:15	49.2	37.6
08/01/2025 00:30	40.9	37.4
08/01/2025 00:45	41.8	39.1
08/01/2025 01:00	39.3	37.2
08/01/2025 01:15	39.6	37.8
08/01/2025 01:30	40.4	38.8
08/01/2025 01:45	42.3	39
08/01/2025 02:00	41	38.1
08/01/2025 02:15	41.3	39
08/01/2025 02:30	40.3	37.9
08/01/2025 02:45	42.8	40
08/01/2025 03:00	42.5	40.6
08/01/2025 03:15	41.5	39.6
08/01/2025 03:30	42	40.4
08/01/2025 03:45	42.5	40.8
08/01/2025 04:00	42.8	40.6
08/01/2025 04:15	46.3	42.5
08/01/2025 04:30	46.1	44.2
08/01/2025 04:45	47.5	45.9
08/01/2025 05:00	47.3	45.7
08/01/2025 05:15	50.5	46.7
08/01/2025 05:30	50.4	48.9
08/01/2025 05:45	52.5	49.9
08/01/2025 06:00	51.8	49.7
08/01/2025 06:15	57.8	49.6
08/01/2025 06:30	51.2	48.6
08/01/2025 06:45	65.8	49.8

08/01/2025 07:00	52.4	50.8
08/01/2025 07:15	63.2	48.8
08/01/2025 07:30	53.2	49.4
08/01/2025 07:45	51.3	48.4
08/01/2025 08:00	52.9	49.2
08/01/2025 08:15	53.2	47.9
08/01/2025 08:30	54.2	50.3
08/01/2025 08:45	54.2	50.8
08/01/2025 09:00	56.3	53.2
08/01/2025 09:15	54.2	51.9
08/01/2025 09:30	55.7	53.6
08/01/2025 09:45	55.7	53.4
08/01/2025 10:00	55.4	53.6
08/01/2025 10:15	56.6	54.5
08/01/2025 10:30	58.2	56.4
08/01/2025 10:45	59.8	57.4
08/01/2025 11:00	59.7	58.2
08/01/2025 11:15	59	55.1
08/01/2025 11:30	56.8	55.5
08/01/2025 11:45	57.5	56.5
08/01/2025 12:00	59	57.5
08/01/2025 12:15	60.4	59.3
08/01/2025 12:30	59.1	57.4
08/01/2025 12:45	59.9	58.1

Table 4 below presents the measured noise levels from the school noise measurement. The wider noise measurement is presented in Table 3 above and the below noise levels are from the periods when noise was audible.

Table 4.

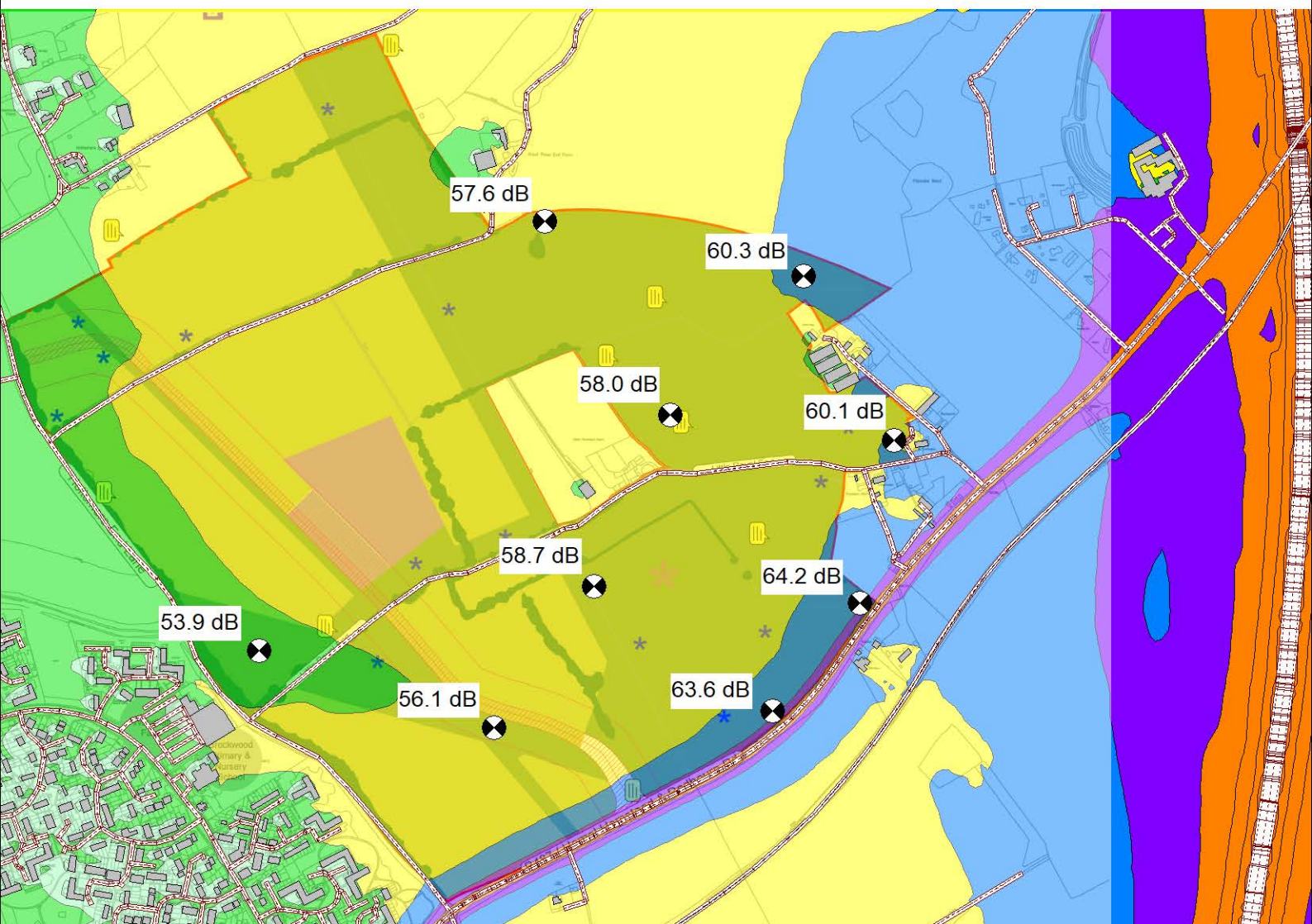
Period start	Measured School Noise Level LAeq,T (dB)	Measured Ambient Noise Level Prior to School Noise Becoming Audible, LAeq,T (dB)
07/01/2025 14:00	47.2	48.1
07/01/2025 14:15	43.8	
Overall	45.8	
Period start	Measured School Noise Level LAeq,T (dB)	Measured Ambient Noise Level Prior to School Noise Becoming Audible, LAeq,T (dB)
08/01/2025 12:15	60.4	58.2
08/01/2025 12:30	59.1	
08/01/2025 12:45	59.9	
Overall	59.8	

Noise Measurement Position 4

Table 5 below presents the measured noise levels for the electricity substation.

Table 5.

Period start	Measured Sound Pressure Level, LAeq,T (dB)
	LAeq,T
08/01/2025 13:25	57.9
08/01/2025 13:26	57.4
Overall	57.7



Noise Map Objects

- Point Source
- Road
- Railway
- Building
- Barrier
- Receiver
- Calculation Area

Level LAeq 16hr in dB(A)

- < 50.0 Negligible
- 50.0 - 55.0 Low
- 55.0 - 60.0 Low
- 60.0 - 65.0 Medium
- 65.0 - 70.0 Medium
- > 70.0 High

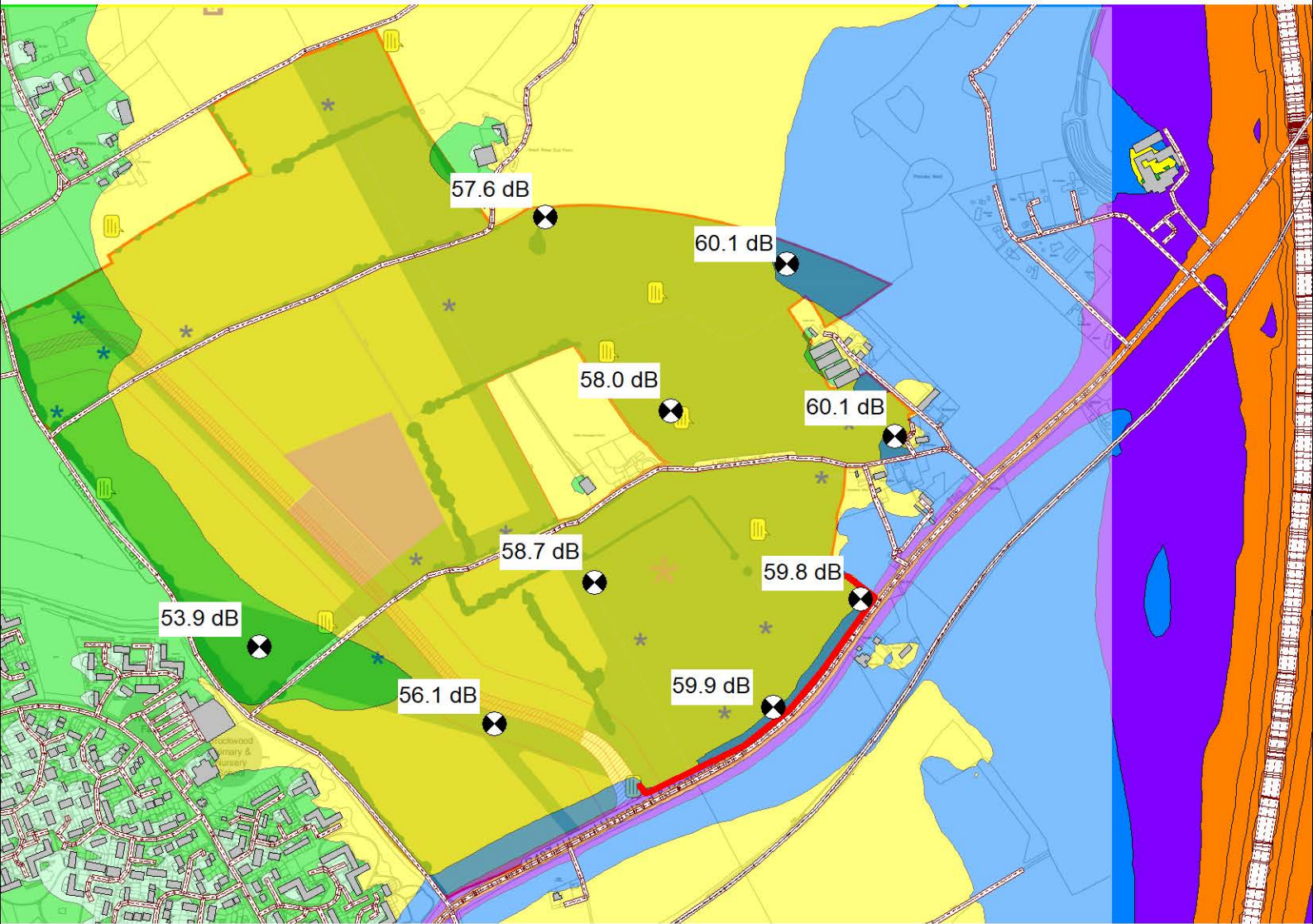
Title :
Daytime Grid Noise Map
1.5m above ground level
Road Traffic Noise

Date : 11/09/2025

Built by: SR

Checked by: JG

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Noise Map Objects

- Point Source
- Road
- Railway
- Building
- Barrier
- Receiver
- Calculation Area

Barrier Height (m)

2.5

Level LAeq 16hr in dB(A)

- < 50.0 Negligible
- 50.0 - 55.0 Low
- 55.0 - 60.0 Low
- 60.0 - 65.0 Medium
- 65.0 - 70.0 Medium
- > 70.0 High

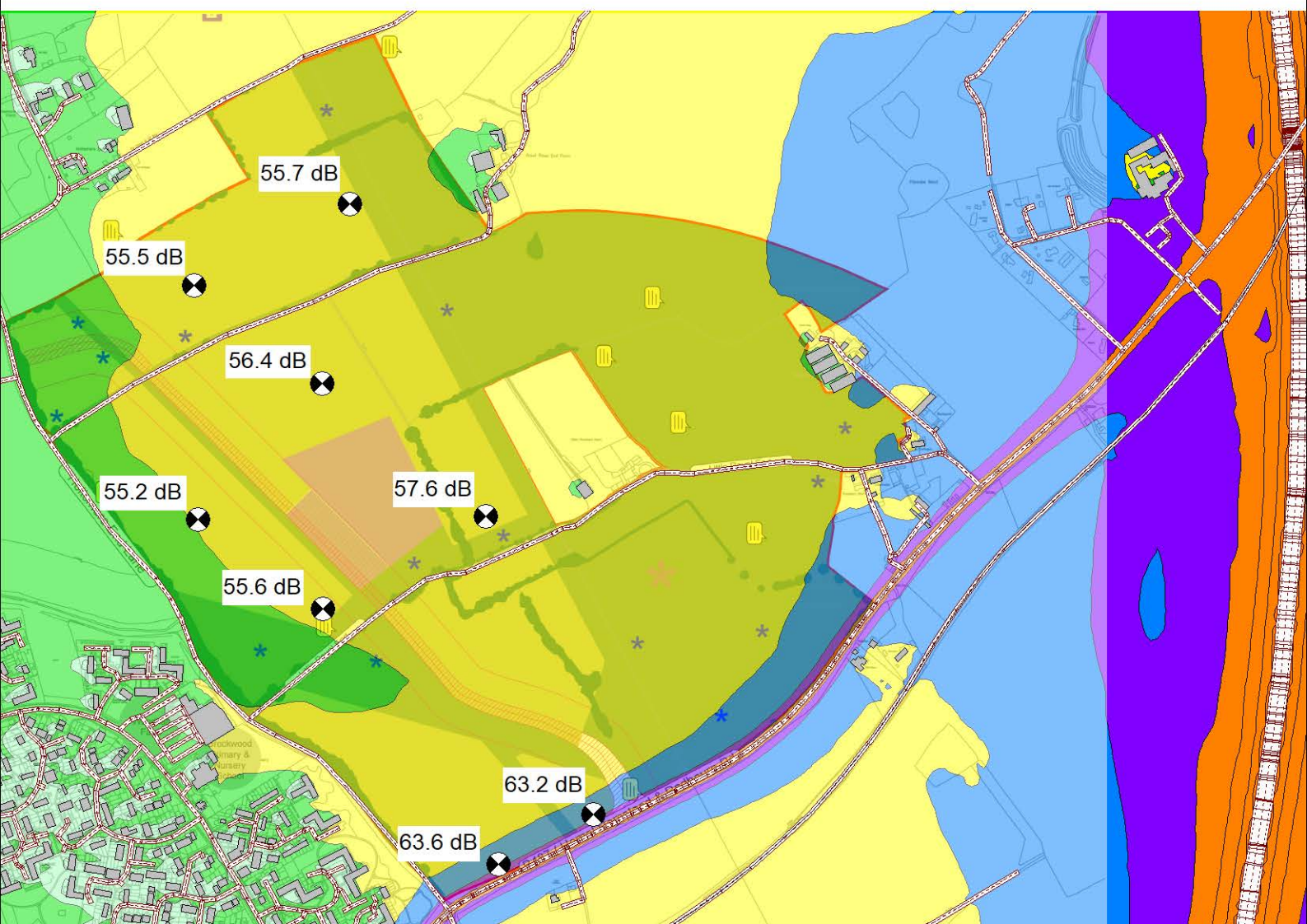
Title:
Daytime Grid Noise Map
1.5m above ground level
Road Traffic Noise
with Mitigation

Date : 11/09/2025

Built by: SR

Checked by: JG

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Noise Map Objects

-  Point Source
-  Road
-  Railway
-  Building
-  Barrier
-  Receiver
-  Calculation Area

Level LAeq 16hr in dB(A)

-  < 50.0 Negligible
-  50.0 - 55.0 Low
-  55.0 - 60.0 Low
-  60.0 - 65.0 Medium
-  65.0 - 70.0 Medium
-  > 70.0 High

Title :

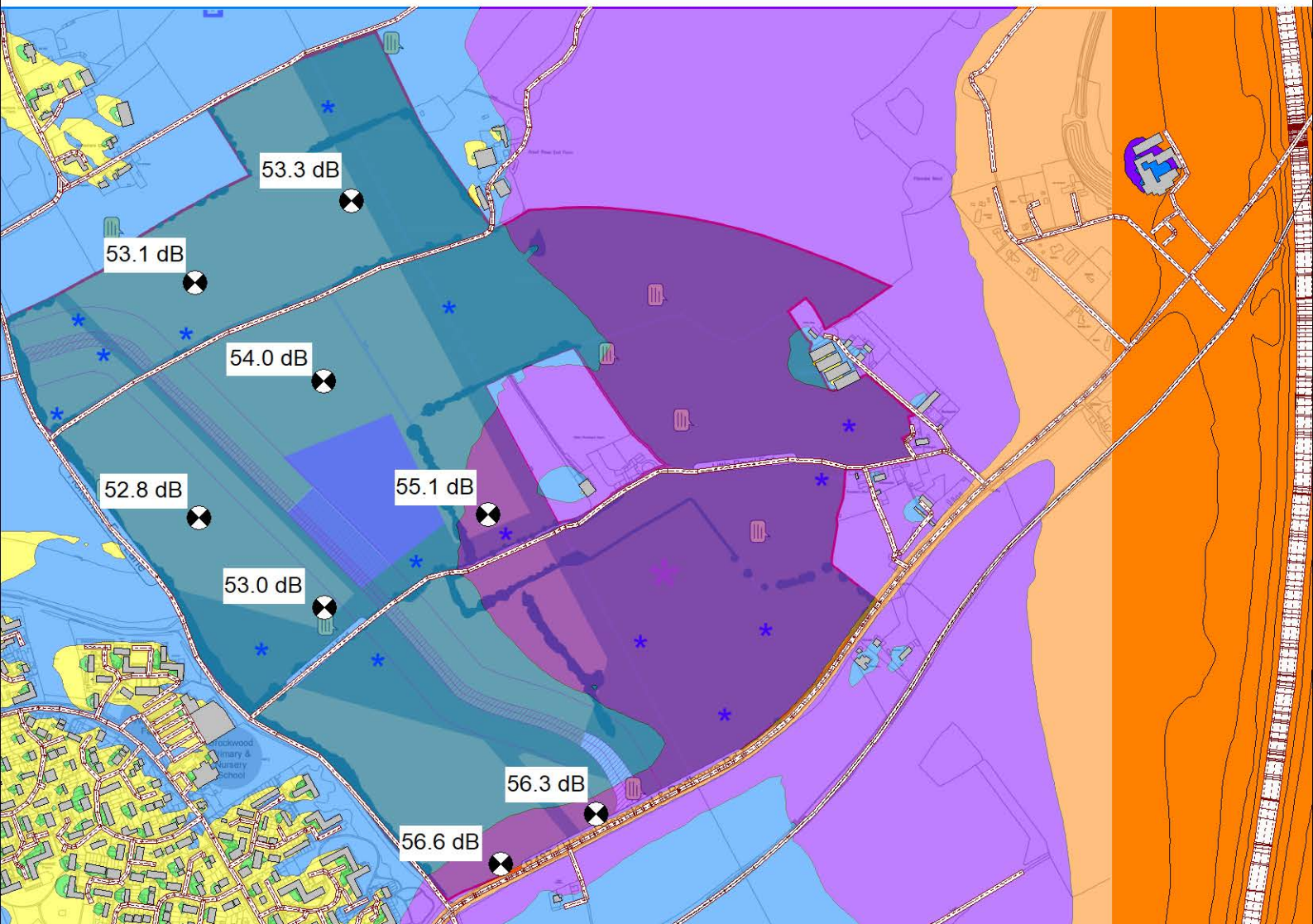
Daytime Grid Noise Map
1.5m above ground level
Road Traffic Noise

Date : 11/09/2025

Built by: SR

Checked by: JG

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Noise Map Objects

-  Point Source
-  Road
-  Railway
-  Building
-  Barrier
-  Receiver
-  Calculation Area

Level LAeq 8hr in dB(A)

-  < 40.0 Negligible
-  45.0 - 45.0 Low
-  45.0 - 50.0 Low
-  50.0 - 55.0 Medium
-  55.0 - 60.0 Medium
-  > 60.0 High

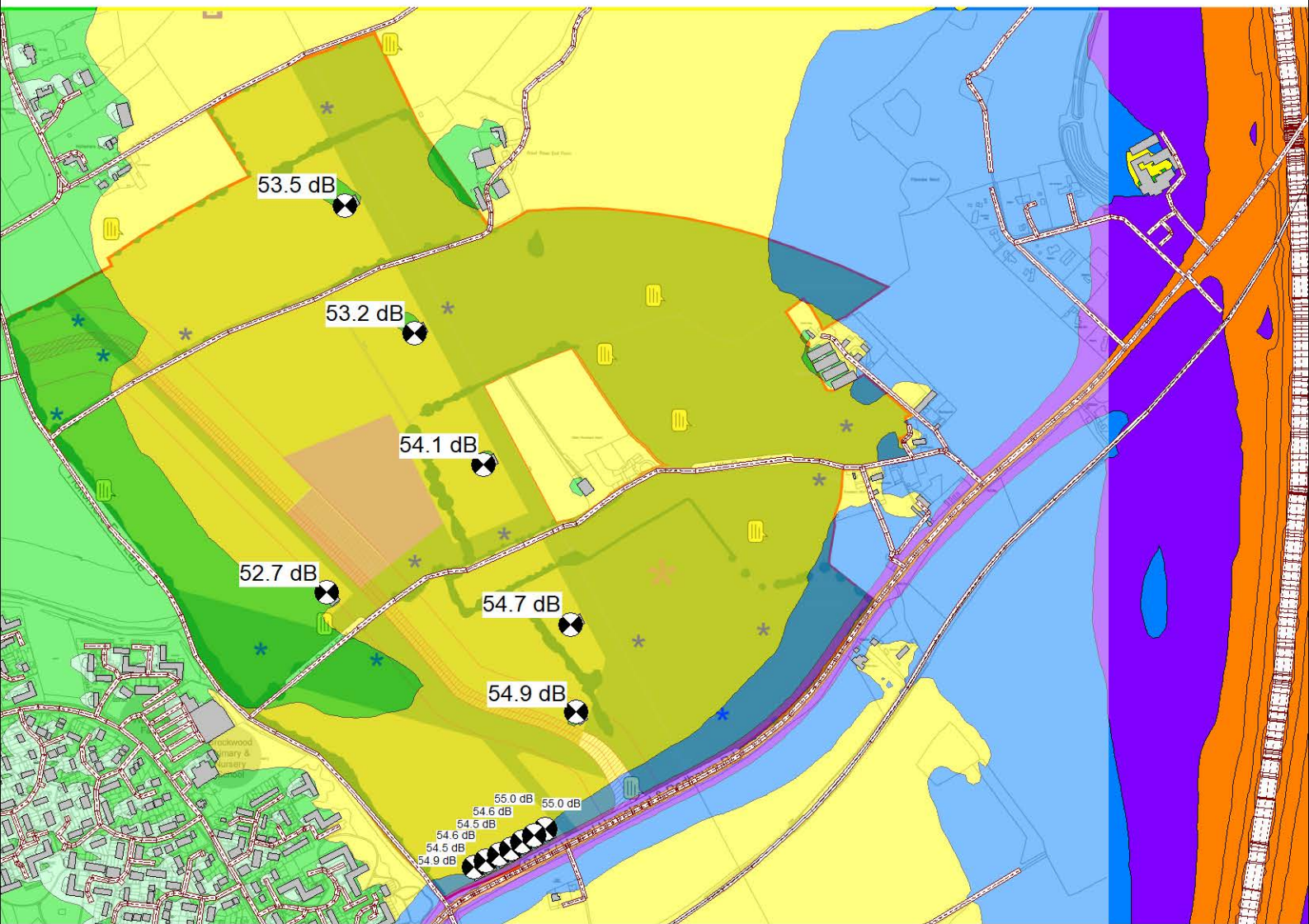
Title :
Night-Time Grid Noise Map
4.5m above ground level
Road Traffic Noise

Date : 11/09/2025

Built by: SR

Checked by: JG

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Noise Map Objects

-  Point Source
-  Road
-  Railway
-  Building
-  Barrier
-  Receiver
-  Calculation Area

Level LAeq 16hr in dB(A)

-  < 50.0 Negligible
-  50.0 - 55.0 Low
-  55.0 - 60.0 Low
-  60.0 - 65.0 Medium
-  65.0 - 70.0 Medium
-  > 70.0 High

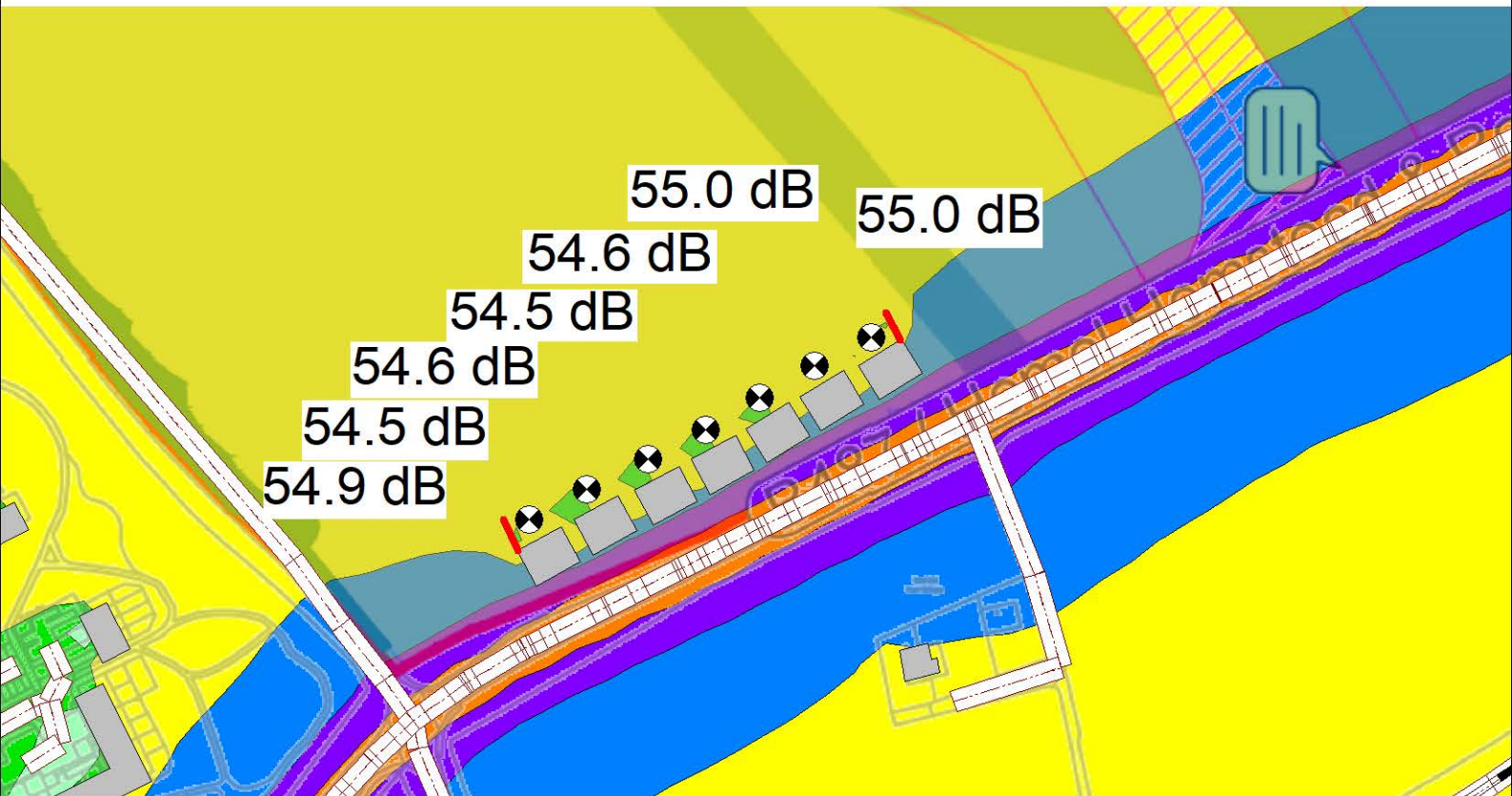
Title:
Daytime Grid Noise Map
1.5m above ground level
Road Traffic Noise
with Mitigation

Date : 11/09/2025

Built by: SR

Checked by: JG


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Noise Map Objects  Point Source  Road  Railway  Building  Barrier  Receiver  Calculation Area	Level LAeq 16hr in dB(A)  < 50.0 Negligible  50.0 - 55.0 Low  55.0 - 60.0 Low  60.0 - 65.0 Medium  65.0 - 70.0 Medium  > 70.0 High	Title: Daytime Grid Noise Map 1.5m above ground level Road Traffic Noise with Mitigation	Built by: SR Checked by: JG
Barrier Height (m)  2.7		Date : 11/09/2025	



Noise Map Objects

-  Point Source
-  Road
-  Railway
-  Building
-  Barrier
-  Receiver
-  Calculation Area

Level LAeq 1hr in dB(A)

-  ... < 22.0
-  22.0 <= ... < 25.0
-  25.0 <= ... < 27.0
-  27.0 <= ... < 30.0
-  30.0 <= ... < 33.0
-  33.0 <= ... < 36.0
-  36.0 <= ... < 39.0
-  39.0 <= ... < 42.0
-  42.0 <= ... < 45.0
-  45.0 <= ... < 48.0
-  48.0 <= ... < 51.0
-  51.0 <= ... < 54.0
- 54.0 <= ...

Title :
Daytime Grid Noise Map
1.5m above ground level
Commercial Noise

Date : 11/09/2025

Built by: SR

Checked by: JG

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Noise Map Objects

-  Point Source
-  Road
-  Railway
-  Building
-  Barrier
-  Receiver
-  Calculation Area

Level LAeq 15min in dB(A)

-  ... < 22.0
-  22.0 <= ... < 25.0
-  25.0 <= ... < 27.0
-  27.0 <= ... < 30.0
-  30.0 <= ... < 33.0
-  33.0 <= ... < 36.0
-  36.0 <= ... < 39.0
-  39.0 <= ... < 42.0
-  42.0 <= ... < 45.0
-  45.0 <= ... < 48.0
-  48.0 <= ... < 51.0
-  51.0 <= ... < 54.0
- 54.0 <= ...

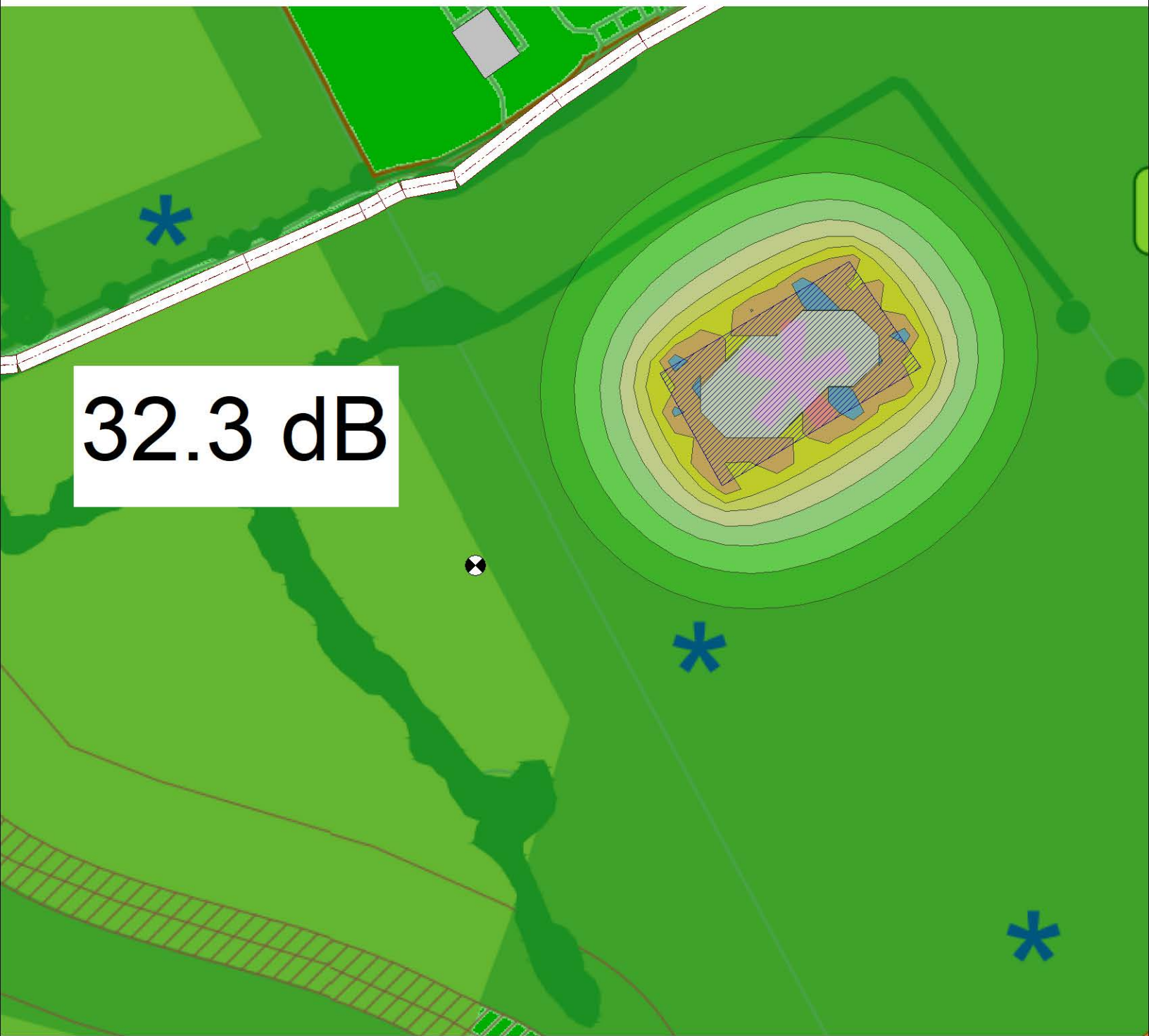
Title :
Night-Time Grid Noise Map
4.5m above ground level
Commercial Noise

Date : 11/09/2025

Built by: SR

Checked by: JG


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Noise Map Objects

-  Point Source
-  Area Source
-  Road
-  Railway
-  Building
-  Barrier
-  Receiver
-  Calculation Area

Level LAeq 1hr in dB(A)

-  ... < 37.5
-  37.5 <= ... < 40.0
-  40.0 <= ... < 42.5
-  42.5 <= ... < 45.0
-  45.0 <= ... < 47.5
-  47.5 <= ... < 50.0
-  50.0 <= ... < 52.5
-  52.5 <= ... < 55.0
-  55.0 <= ... < 57.5
-  57.5 <= ... < 60.0
-  60.0 <= ... < 62.5
-  62.5 <= ... < 65.0
-  65.0 <= ...

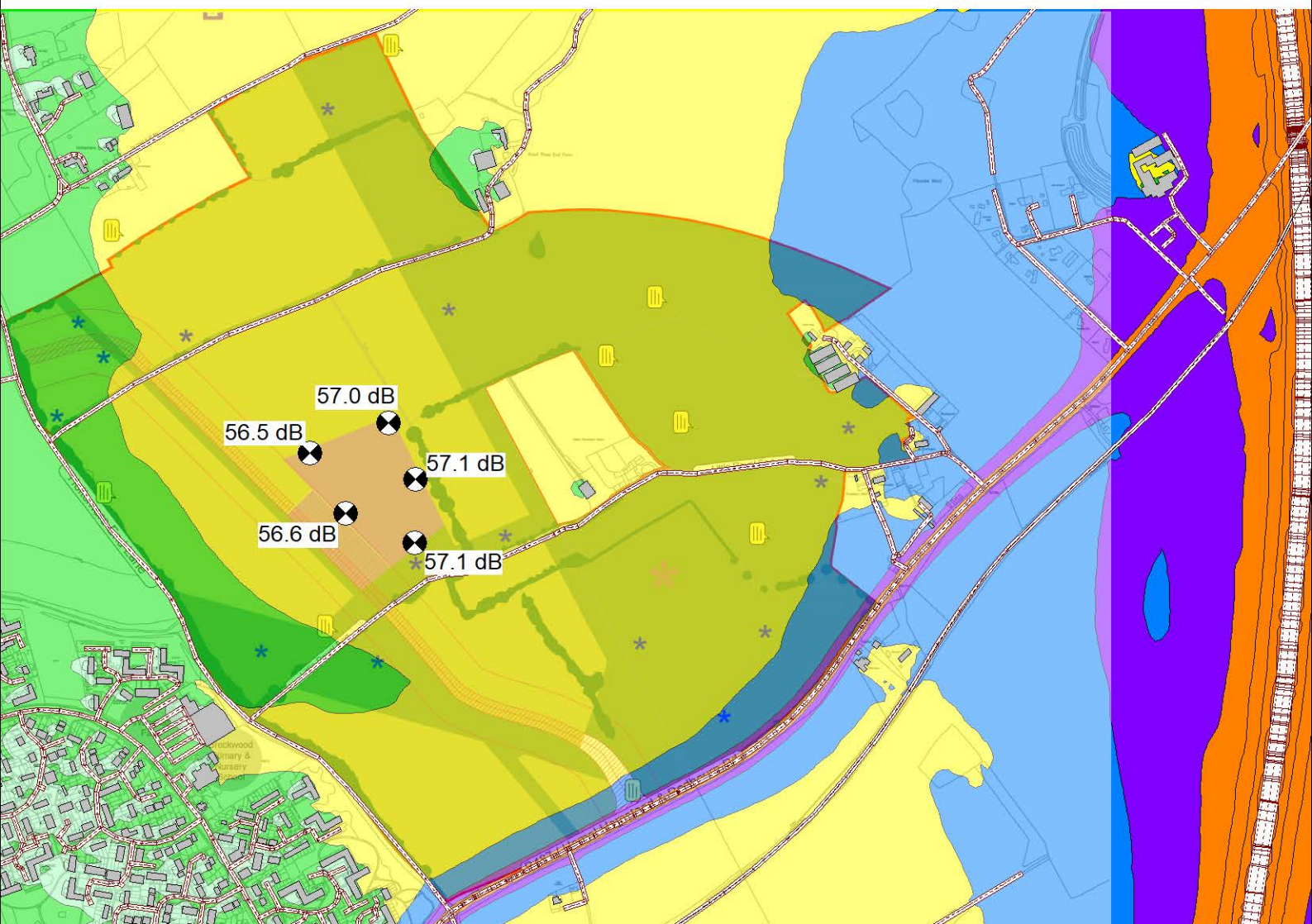
Title :
Daytime Grid Noise Map
1.5m above ground level
Pitch Noise

Date : 20/10/2025

Built by: SR

Checked by: JG


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Noise Map Objects

- + Point Source
- Road
- Railway
- Building
- Barrier
- ⊗ Receiver
- Calculation Area

Level LAeq 16hr in dB(A)

- < 50.0 Negligible
- 50.0 - 55.0 Low
- 55.0 - 60.0 Low
- 60.0 - 65.0 Medium
- 65.0 - 70.0 Medium
- > 70.0 High

Title :
Daytime Grid Noise Map
1.5m above ground level
Road Traffic Noise

Date : 11/09/2025

Built by: SR

Checked by: JG

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