Noise & Vibration Consultants Ltd.

Suite 2717
37 Westminster Buildings
Theatre Square
Nottingham NG1 6LG
Nottingham NG1 6LG
Tel No: 01773 603331

E-mail: nvc.acoustics@btopenworld.com

Axis
Well House Barns
Chester Road
Bretton
Flintshire
CH4 0DH

Date: 28th January 2026
Our Ref: TN260102/1/DRK

For the Attention of Tom Roseblade

PINS Ref: APP/D3505/W/25/3370515
LPA Ref: DC/23/056656

APPEAL AGAINST REFUSAL OF PLANNING PERMISSION FOR PROPOSED DEVELOPMENT OF A PHOTOVOLTAIC SOLAR ARRAY ON LAND AT GROVE FARM, BENTLEY

Technical Note

Due to minor changes to the layout of the Proposed Development, we have been asked to update the noise prediction models to reflect the latest design and report any changes to the resultant noise levels and conclusions.

We have considered the following information in our noise review:

Information References:

a) NVC Noise Impact Assessment report for the Proposed Development (ref. R23/0708/DRK dated 31st August 2023.
b) BS4142: 2014+A1:2019 `Methods for rating and assessing industrial and commercial sound'.
c) Axis General Arrangement Drawing nos. 3223-01-03a Sheet 1 of 2; 3223-01-03b Sheet 2 of 2; and
d) Axis Landscape Proposals Drawing no. 3223-01-13 Rev A.

The minor changes relate to change in Solar PV Array layout and Landscape proposals.

The results of the re-modelling of the Site for the daytime and sunrise operating periods are provided in Appendix 1 attached. The noise information has been presented in the maps accompanying this note so as to (1) remove the colour from the OS baseline mapping, and (2) remove the inverter notations shown with blue crosses in the original noise report, in order to aid clarity of interpretation of the noise results.

Figure 1 attached shows the location of receptors taken from the NVC Noise Impact Assessment (ref. R23/0708/DRK) for ease of reference and Table 1 shows the comparison of the original analysis and the latest predictions using the latest design layout (with the original predictions taken from Table 6.1. of the NVC report).

Figure 1: Noise Measurement Locations, Receptors & Site Position

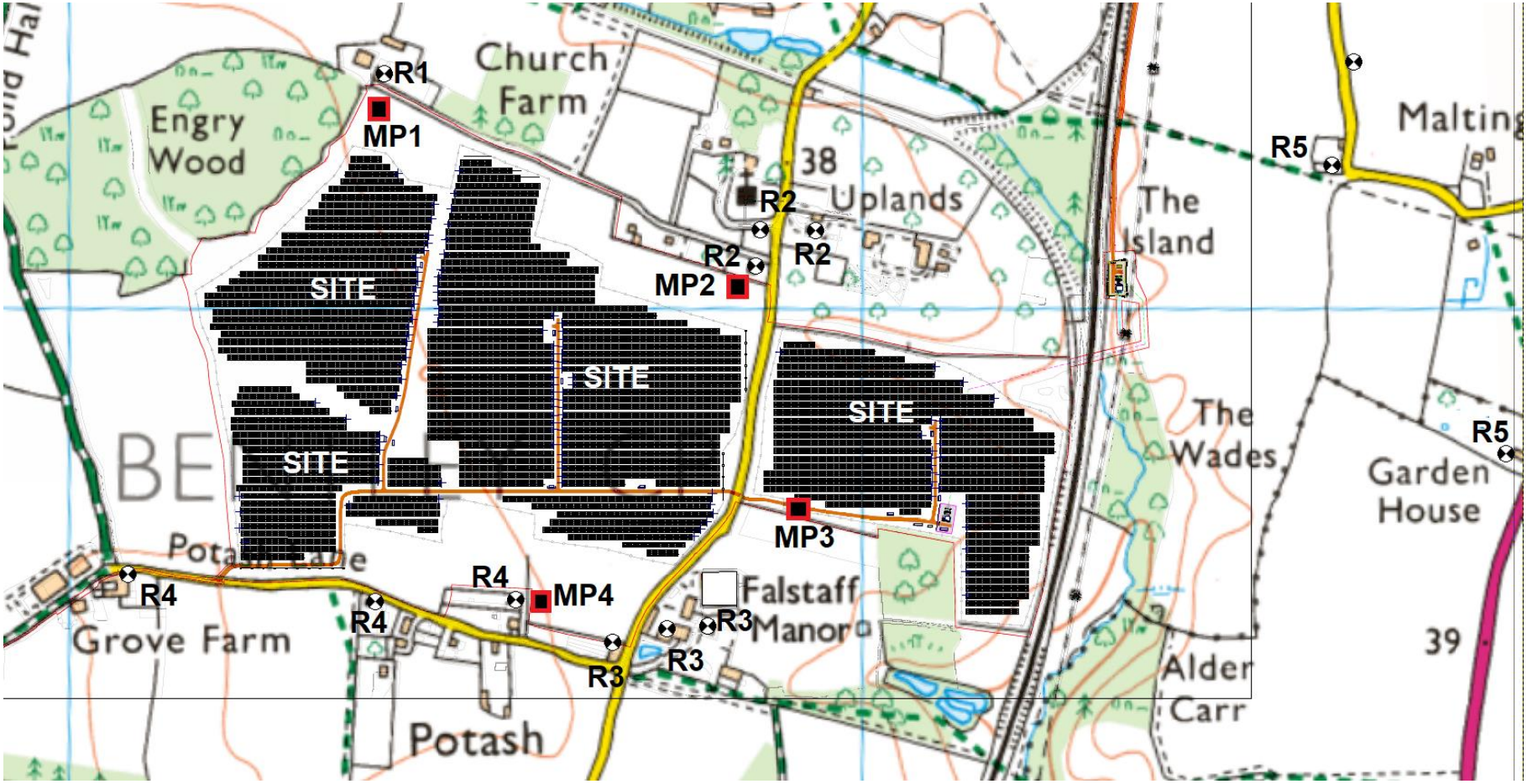


Table 1: Predicted Noise from Proposed Solar Farm

Receptor Position (Refer to Figure 1)	Representative Background Sound Level [LAeq] L_{A90} dB	Original Layout Predicted highest rating[2] noise level L_{Aeq} (dB)	New Layout Predicted highest rating[2] noise level L_{Aeq} (dB)	Level Difference Between Columns 4 & 3 dB(A)	Level Difference dB(A)[3]	Impact Magnitude BS4142
Daytime						
R1: Church Farm (north)	33 [45]	**26**	**26**	0	-7	**Low**
R2: Uplands (East)	35 [46]	**28-29**	**28**	0 to -1	-7	**Low**
R3. Falstaff Manor & Church Road (south)	32 [44]	**27-28**	**27-28**	0	-5 to -4	**Low**
R4. Potash Lane receptors (south to southwest)	32 [46]	**24-30**	**24-30**	0	-8 to -2	**Low**
R5. Malting Farm/ Garden House (east)	32[1] [44]	**22-24**	**21-24**	-1 to 0	-10 to -8	**Low**
Sunrise						
R1: Church Farm (north)	31 [40]	**29**	**29**	0	-2	**Low**
R2: Uplands (East)	32 [44]	**30-31**	**30-31**	0	-2 to -1	**Low**
R3. Falstaff Manor & Church Road (south)	30 [44]	**30**	**30**	0	0	**Low**
R4. Potash Lane receptors (south to southwest)	33 [44]	**27-32**	**27-32**	0	-6 to -1	**Low**
R5. Malting Farm/ Garden House (east)	32[1] [39]	**24-26**	**24-26**	0	-8 to -6	**Low**

[1]Baseline levels assumed to be similar to R4 (Posn MP3).
[2] Noise characteristics at receptor locations do not include a penalty as this would be controlled by mitigation and design.
[3] Column 5 is the subtraction of column 4 from column 2.

The results of the latest noise model predictions and re-analysis show either marginal increase (i.e. up to +0.2dB), no change or a marginal improvement in the noise levels (i.e. up to -0.7dB) at NSRs. When rounding the levels there is no change or there is a 1dB improvement.

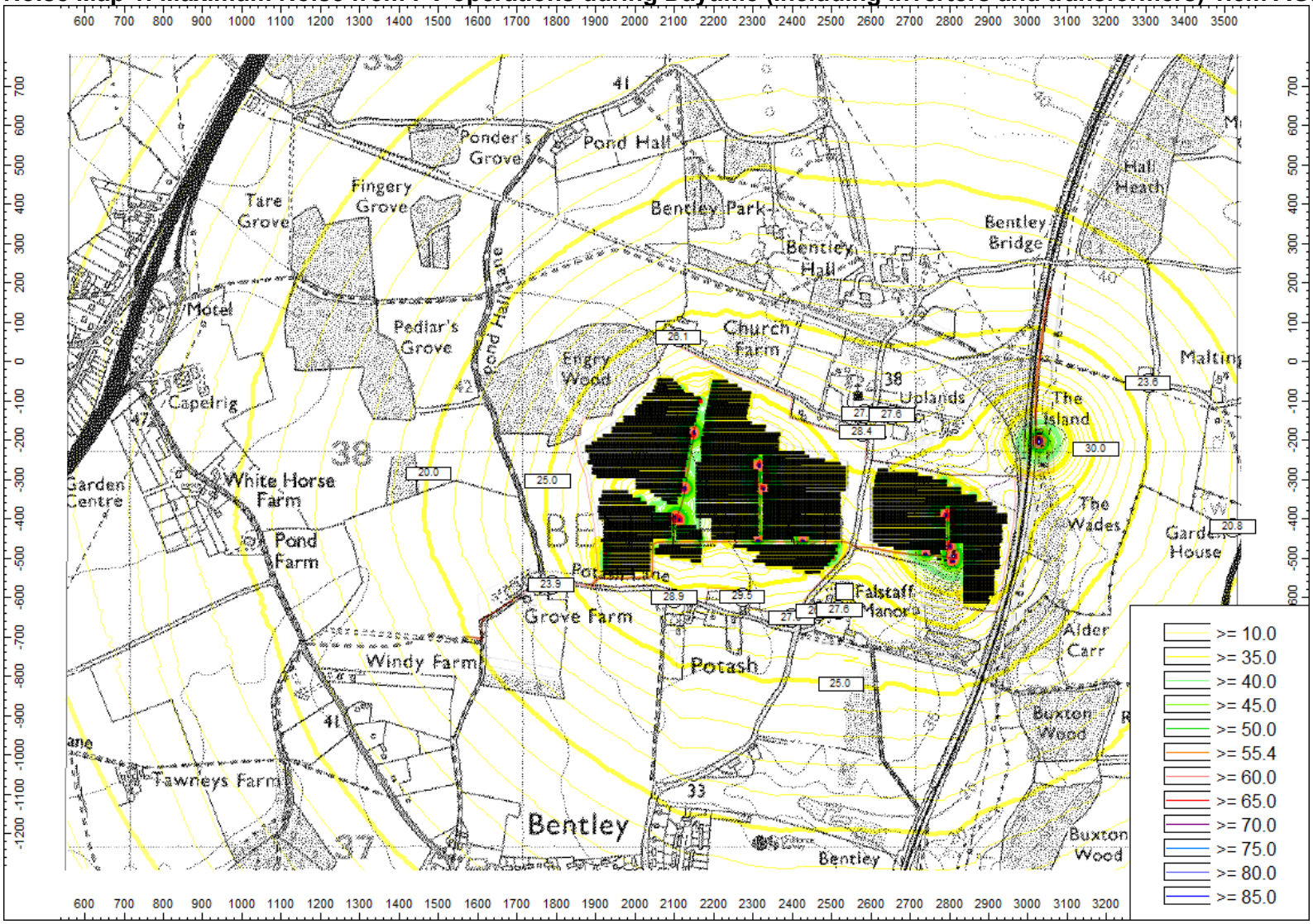
According to BS4142: 2014+A1:2019, the rating level during daytime or sunrise operating periods relative to the assessment representative baseline sound levels would indicate a **low impact** at NSRs.

We conclude that the minor changes to the design layout does not have any significant impact on the predicted noise levels and therefore the conclusions of the NVC Noise Impact Assessment report remain valid.

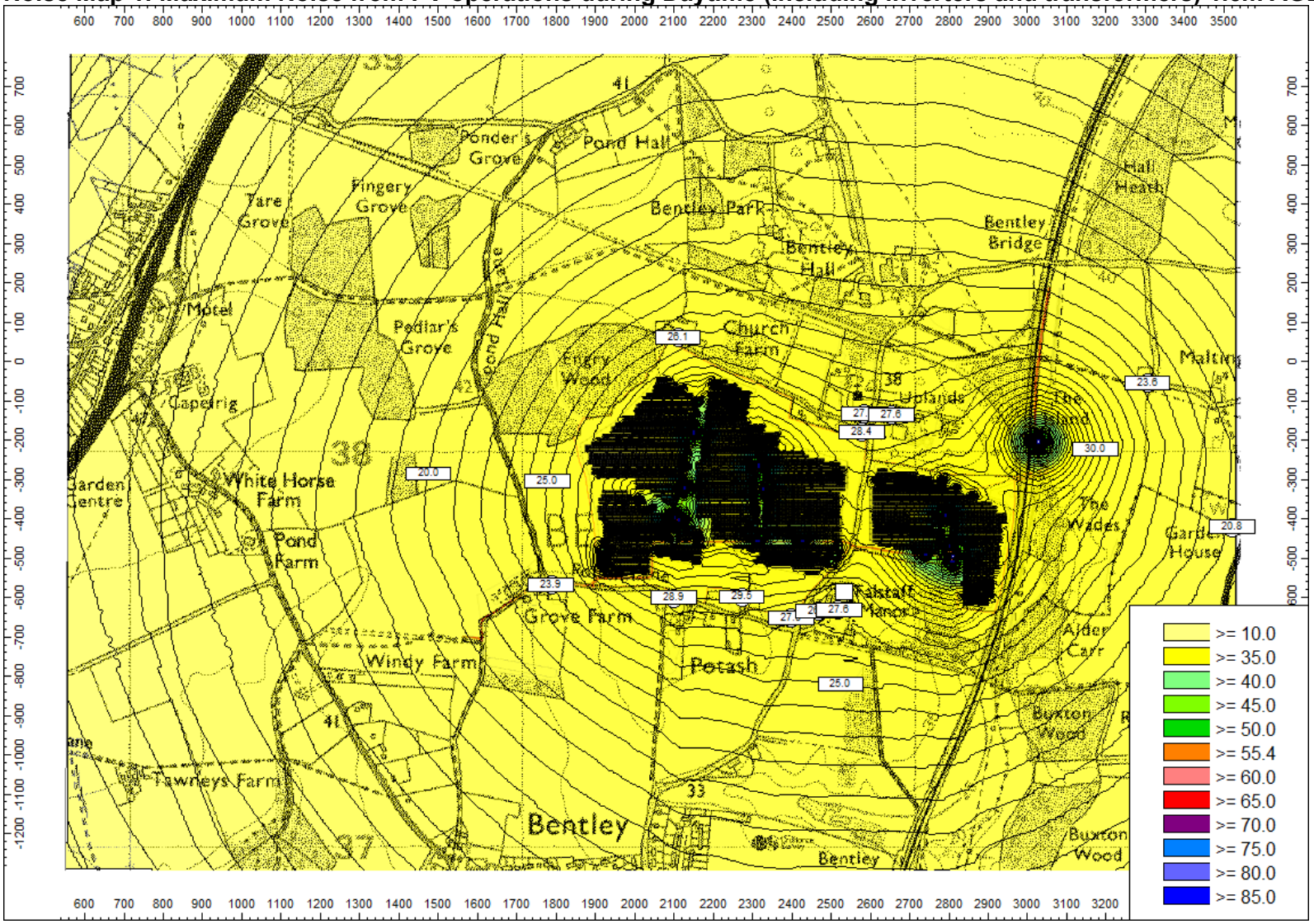
APPENDIX 1

Noise Mapping Results

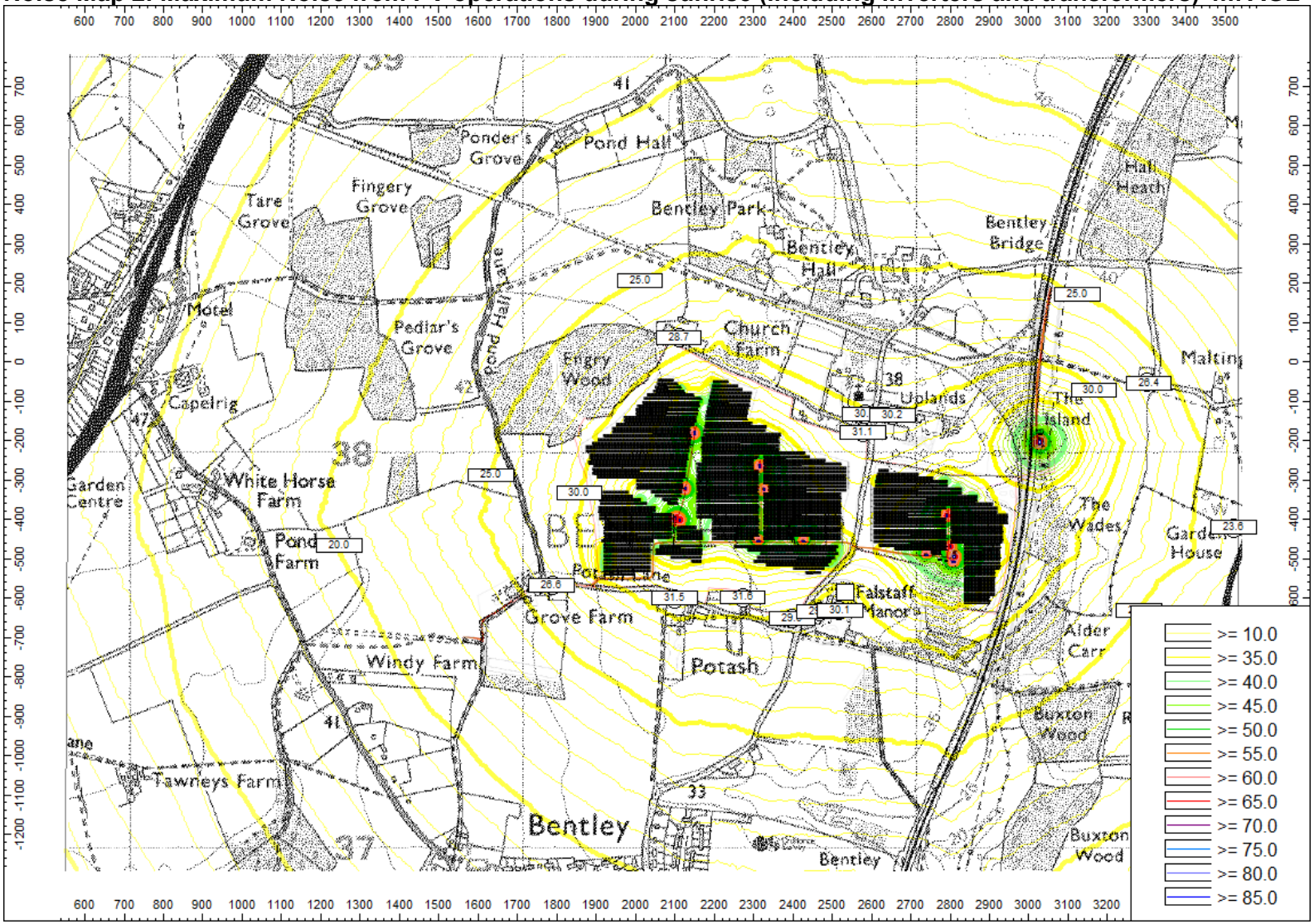
Noise Map 1: Maximum Noise from PV operations during Daytime (including inverters and transformers) 1.5m AGL



Noise Map 1: Maximum Noise from PV operations during Daytime (including inverters and transformers) 1.5m AGL



Noise Map 2: Maximum Noise from PV operations during sunrise (including inverters and transformers) 4m AGL



Noise Map 2: Maximum Noise from PV operations during sunrise (including inverters and transformers) 4m AGL