

# Comparison main ES/AP<sub>4</sub> noise levels – Burton Green

Assessment location ID	Number of dwellings	Noise levels Proposed Scheme only (day): ES (dB)	Noise levels Proposed Scheme only (day): AP <sub>4</sub> (dB)	Reduction in HS <sub>2</sub> noise level	Noise change: ES design		Noise change: AP <sub>4</sub> design	
					Day	Night	Day	Night
204193	4	43	43	0	1	1	1	1
204223	4	44	44	0	2	1	2	1
204255	6	48	43	-5	3	2	1	1
204647	10	51	44	-7	5	3	2	1
204672	10	44	45	+1	2	1	2	1
204916	4	49	48	-1	4	1	3	1
204998	5	46	39	-7	2	0	0	0
205051	6	47	43	-4	2	0	1	0
205176	10	43	43	0	1	1	2	1
205246	10	44	43	-1	1	1	1	0
205259	1	53	42	-11	5	2	1	0
206392	13	55	54	-1	2	3	2	2
206457	1	51	48	-3	2	3	1	2
206515	5	53	53	0	2	2	2	2

Key for noise change columns

Negligible Impact

Minor Impact

Moderate Impact

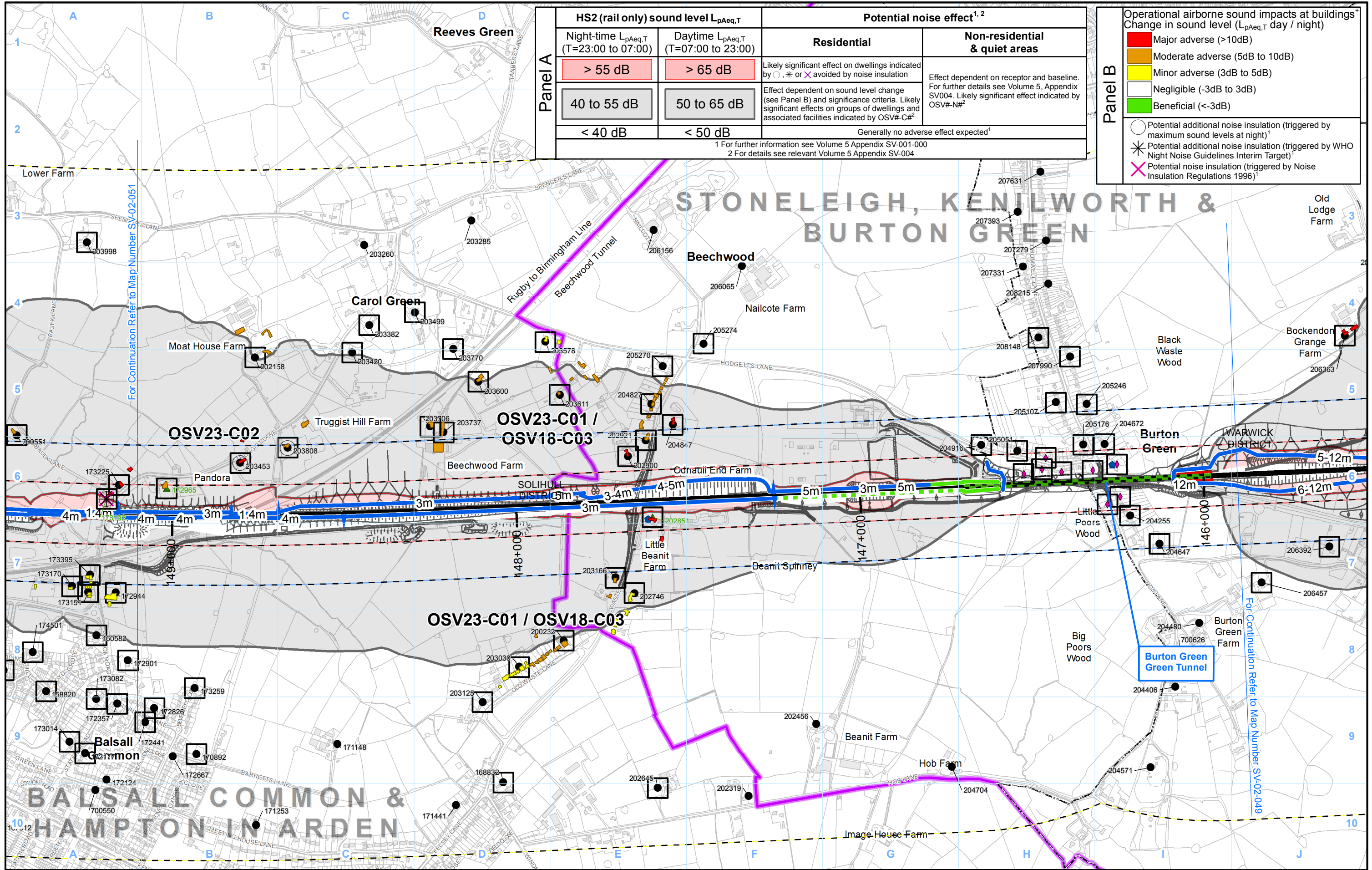
Major Impact

Panel A	HS2 (rail only) sound level L <sub>pAeq,T</sub>		Potential noise effect <sup>1,2</sup>	
	Night-time L <sub>pAeq,T</sub> (T=23:00 to 07:00)	Daytime L <sub>pAeq,T</sub> (T=07:00 to 23:00)	Residential	Non-residential & quiet areas
	> 55 dB	> 65 dB	Likely significant effect on dwellings indicated by ○, * or ✕ avoided by noise insulation	Effect dependent on receptor and baseline. For further details see Volume 5, Appendix SV004. Likely significant effect indicated by OSV#-N# <sup>2</sup>
	40 to 55 dB	50 to 65 dB	Effect dependent on sound level change (see Panel B) and significance criteria. Likely significant effects on groups of dwellings and associated facilities indicated by OSV#-C# <sup>2</sup>	Generally no adverse effect expected <sup>1</sup>
< 40 dB	< 50 dB			

1 For further information see Volume 5 Appendix SV-001-000  
2 For details see relevant Volume 5 Appendix SV-004

Panel B	Operational airborne sound impacts at buildings* Change in sound level (L <sub>pAeq,T</sub> day / night)
Red	Major adverse (>10dB)
Orange	Moderate adverse (5dB to 10dB)
Yellow	Minor adverse (3dB to 5dB)
White	Negligible (-3dB to 3dB)
Green	Beneficial (<-3dB)

○ Potential additional noise insulation (triggered by maximum sound levels at night)<sup>1</sup>  
\* Potential additional noise insulation (triggered by WHO Night Noise Guidelines Interim Target)<sup>1</sup>  
✕ Potential noise insulation (triggered by Noise Insulation Regulations 1996)<sup>1</sup>



**Legend - General features**

- Route in bored tunnel
- Route in green tunnel
- Route on surface
- Depot, station, headhouse or portal building
- Community forum boundary
- District/Borough boundary
- County boundary

**Legend - Sound related features**

Engineering earthworks:

- Embankment
- Cutting
- L<sub>Amax</sub> >= 60dB façade \*\*

Non engineering earthworks:

- Embankment
- Cutting

\* Residential buildings only  
\* Labeled with total barrier height above rail level  
\*\* ES/SES HS2 train only L<sub>Amax</sub> + 2.5dB façade correction

**Legend - Sound related features**

- Committed developments (label as CFA#/#) - SV Only
- Envisaged mitigation to avoid / reduce significant noise effects:
  - Landscaping and/or fence barriers\*
  - Engineering e.g. cuttings (green tunnels separately marked)
- Envisaged measures further reducing noise effects:
  - Other environmental e.g. landscaping
  - Engineering e.g. cuttings
- Airborne sound study area

Ground-borne sound & vibration study area (residential and non-residential)

Ground-borne sound & vibration study area (highly sensitive non-residential)

- Airborne sound assessment location
- Airborne sound and vibration assessment location
- Ground-borne sound and/or vibration assessment location
- Airborne sound, ground-borne sound and vibration assessment location
- Minor ground-borne noise or vibration impact\*

Map Number: SV-02-050a

Map Name: Operational Airborne Noise and Vibration Impacts and Likely Significant Effects (with Assessment Locations) SES1 and AP2 ES

Community Forum Area CFA18: Stoneleigh, Kenilworth & Burton Green

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