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Comparison main ES/AP4 noise levels – Burton Green

Assessment location ID	Number of dwellings	Noise levels Proposed Scheme only (day): ES (dB)	Noise levels Proposed Scheme only (day): AP4 (dB)	Reduction in HS2 noise level	Noise change: ES design		Noise change: AP4 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
[illegible]7	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

HOC/10016/0004

hs2 engine for growth

Panel A

HS2 (rail only) sound level $L_{pAeq,T}$		Potential noise effect[1, 2]	
Night-time $L_{pAeq,T}$ (T=23:00 to 07:00)	Daytime $L_{pAeq,T}$ (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#[2]
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#[2]	
< 40 dB	< 50 dB	Generally no adverse effect expected[1]	

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 ($L_{pAeq,T}$ day / night)

- Major adverse (>10dB)
- Moderate adverse (5dB to 10dB)
- Minor adverse (3dB to 5dB)
- Negligible (-3dB to 3dB)
- Beneficial (<-3dB)

- ◯ Potential additional noise insulation (triggered by maximum sound levels at night)[1]
- ✳ Potential additional noise insulation (triggered by WHO Night Noise Guidelines Interim Target)[1]
- ✕ Potential noise insulation (triggered by Noise Insulation Regulations 1996)[1]

STONELEIGH, KENILWORTH & BURTON GREEN

BALSALL COMMON & HAMPTON IN ARDEN

Reeves Green
Lower Farm
Carol Green
Moat House Farm
Truggist Hill Farm
Pandora
Beechwood
Nailcote Farm
Beechwood Farm
Odnall End Farm
Little Beanit Farm
Beanit Spinney
Beanit Farm
Hob Farm
Image House Farm
Old Lodge Farm
Black Waste Wood
Bockendon Grange Farm
Burton Green
Little Poors Wood
Big Poors Wood
Burton Green Farm
Balsall Common

Rugby to Birmingham Line
Beechwood Tunnel
Burton Green Green Tunnel

OSV23-C02
OSV23-C01 / OSV18-C03
OSV23-C01 / OSV18-C03

For Continuation Refer to Map Number SV-02-051
For Continuation Refer to Map Number SV-02-049

SOLIHULL DISTRICT
WARWICK DISTRICT

147+000
148+000
149+000
146+000

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

Engineering earthworks: Embankment, Cutting
Non engineering earthworks: Embankment, Cutting
LAmax >= 60dB façade **

+ Residential buildings only
* Labelled with total barrier height above rail level
** ES/SES HS2 train only LAmax + 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

Scale at A3: 1:10,000

0 100 200 300 400 Metres

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