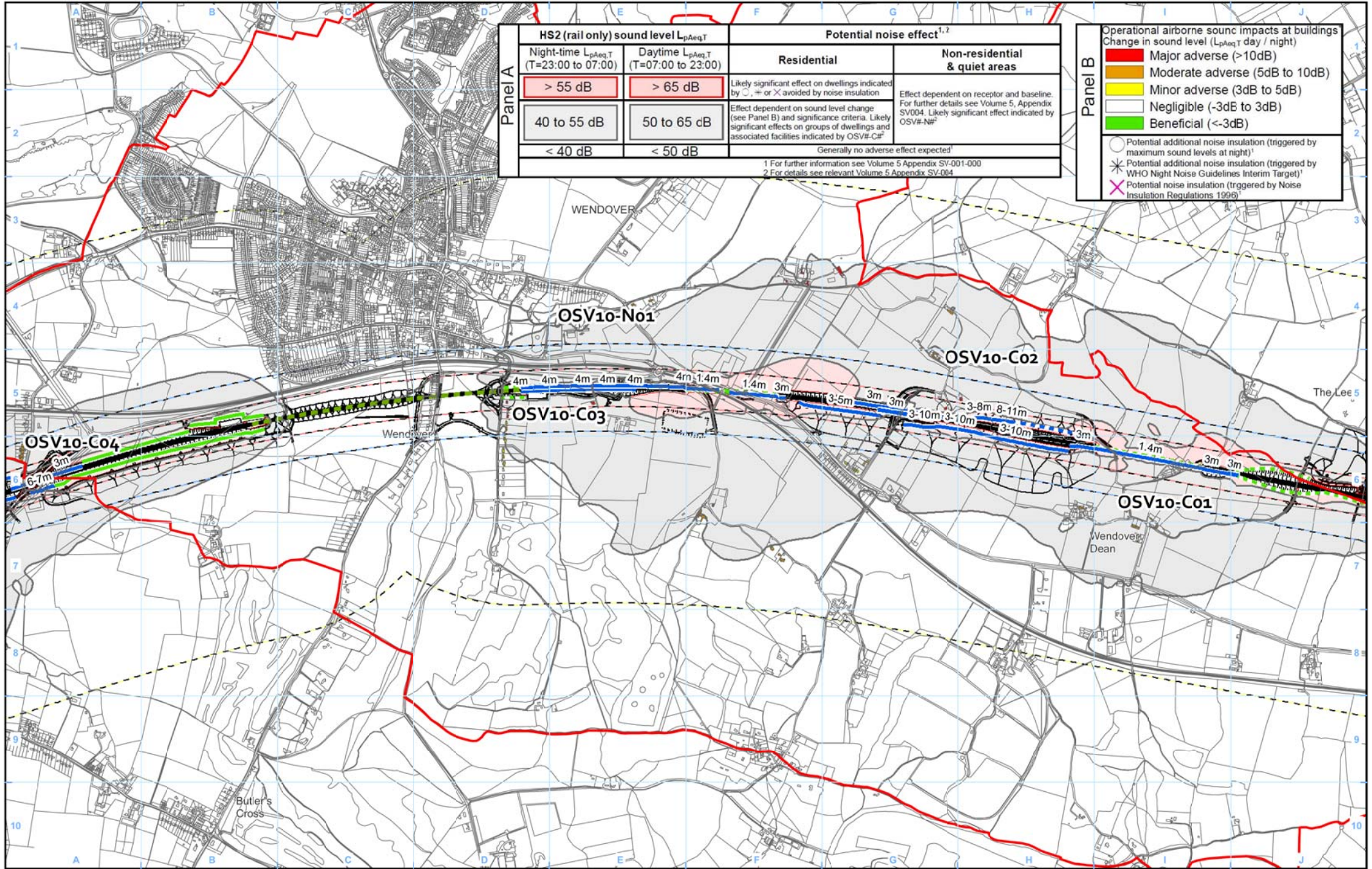


HS2 (rail only) sound level $L_{pAeq,T}$		Potential noise effect ^{1,2}	
Night-time $L_{pAeq,T}$ (T=23:00 to 07:00)	Daytime $L_{pAeq,T}$ (T=07:00 to 23:00)	Residential	Non-residential & quiet areas
> 55 dB	> 65 dB	Likely significant effect on dwellings indicated by ○, ⊕ or ✕ avoided by noise insulation	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

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 1999) ²



Legend

Envisaged mitigation to avoid/reduce significant noise effects

- Landscaping and/or fence barriers
- Engineering e.g. cuttings

Envisaged measures further reducing noise effects

- Environmental e.g. landscaping
- Engineering e.g. cuttings

Airborne sound study area

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

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

Parish boundary

Route on surface

Route in green tunnel

Engineering earthworks: Non engineering earthworks:

- Embankment
- Cutting
- Embankment
- Cutting

Operational Noise and Vibration Impacts and Likely Significant Effects

Petitioner name
Wendover Parish Council

Petition number
HS2-HS2-HY-PET-001512

hs

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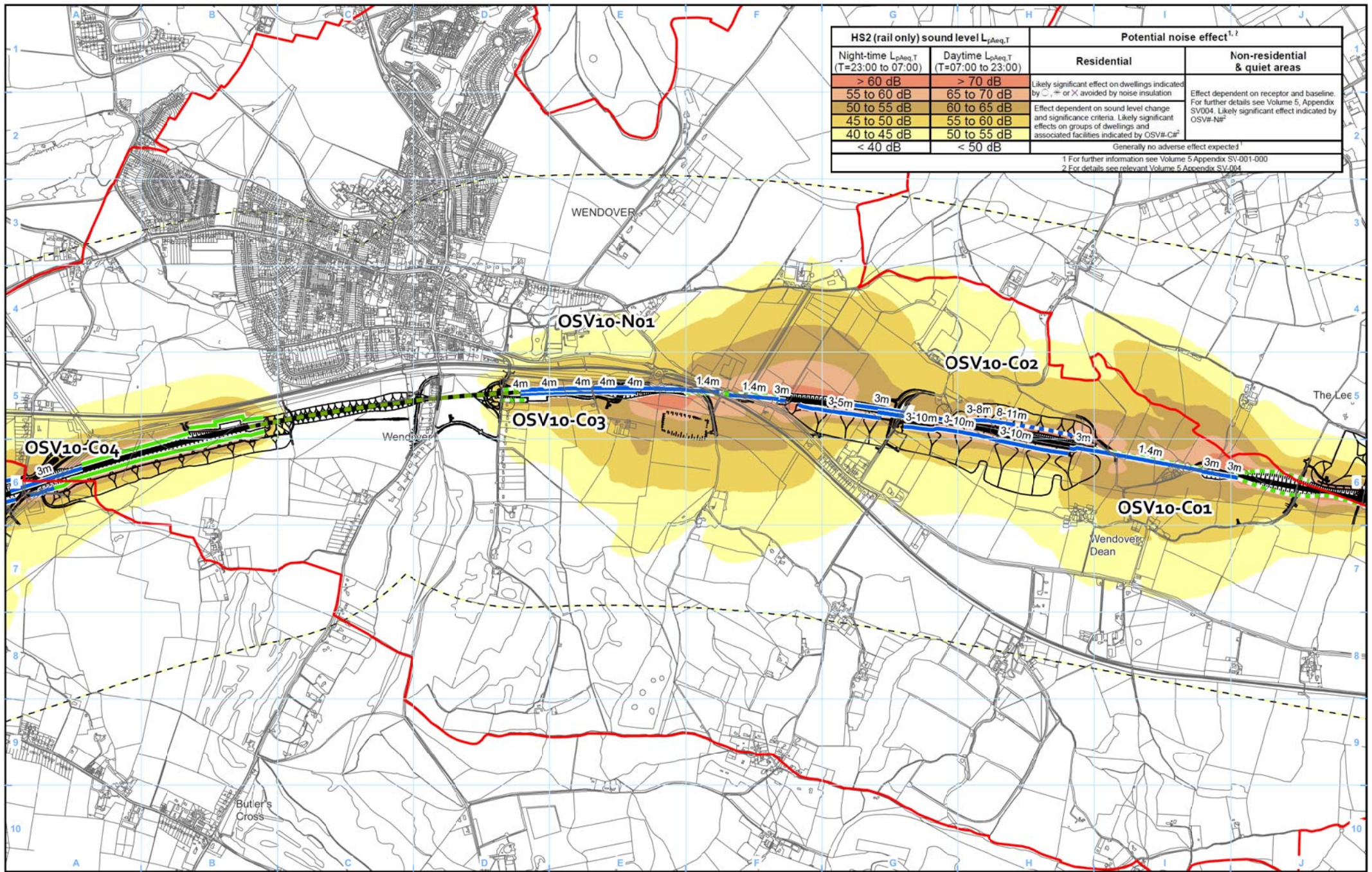
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Scale at A3: 1:16,000

0 100 200 300 400 Metres

HOC/00106/0026

P7497



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
> 60 dB	> 70 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 SV-004. Likely significant effect indicated by OSV#-N#
55 to 60 dB	65 to 70 dB	Effect dependent on sound level change and significance criteria. Likely significant effects on groups of dwellings and associated facilities indicated by OSV#-C#	Generally no adverse effect expected ³
50 to 55 dB	60 to 65 dB		
45 to 50 dB	55 to 60 dB	1 For further information see Volume 5 Appendix SV-001-000	
40 to 45 dB	50 to 55 dB	2 For details see relevant Volume 5 Appendix SV-004	
< 40 dB	< 50 dB		

- Legend**
- Envisaged mitigation to avoid/reduce significant noise effects
 - Landscaping and/or fence barriers
 - Engineering e.g. cuttings
 - Envisaged measures further reducing noise effects
 - Environmental e.g. landscaping
 - Engineering e.g. cuttings

- Airborne sound study area
- Potential additional noise insulation (triggered by maximum sound levels at night)
- Wendover Parish boundary
- Route on surface
- Route in green tunnel

- Engineering earthworks:**
- Embankment
 - Cutting
- Non engineering earthworks:**
- Embankment
 - Cutting

Operational Sound Contour Maps and Likely Significant Effects

Petitioner name
Wendover Parish Council

Petition number
HS2-HS2-HY-PET-001512

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Scale at A3: 1:16,000

Doc Number: P1C-HS2-HY-MAP-020-000012

HOC/00106/0027

P7498

Wendover – Summary of predicted operational noise effects and impacts against options being considered

	Residential	Non-Residential			Cost +£m
Bill Scheme position:	Larkfield, Long Meadow and Cobwebs, Bacombe Lane, all likely to be eligible for improved noise insulation during construction and operation. Likely to remove significant effect	St Mary's Church as a concert hall : LAMax 65/70 dB v impact level 60 or Leq day 51 v impact level 50 Identified as likely significant effect	St Mary's Church as a meeting place for religious worship : Leq day 51 dB v impact level of 50	Wendover House Special School, accounting for teaching and weekly boarding of young people with protected characteristics : LAMax 66/71 dB v impact level of 60 as a conventional dwelling house Leq day 53 dB v impact level of 50 for a conventional school	0
Enhanced trackside mitigation : existing 3 and 4 metre high noise fence barriers increased to 5 metres between south portal and viaduct	No change	LAMax 63/68 dB Leq 49 dB Likely significant effect caused by LAMax only	Leq 49 dB Likely to remove impact	LAMax 62/66 dB Leq 51 dB Impact reduced but not removed	0.5
Enhanced receptor mitigation feasible	n/a	Yes – likely to remove significant effect assuming 5dB reduction	n/a	Yes – likely to remove impact assuming 5dB reduction	0.5
Tunnel extension to north	No change	No change	No change	No change	37
Tunnel extension to south – over A413 and existing railway	Likely to remove significant effect	Likely to remove significant effect	Likely to remove impact	Likely to remove impact	37
Tunnel extension to south – under A413 and existing railway	Likely to remove significant effect	Likely to remove significant effect	Likely to remove impact	Likely to remove impact	150

Note: the residential properties listed above are the only dwellings identified in the Environmental Statement for this area where maximum operational noise levels caused by the Proposed Scheme are likely to result in a significant adverse noise effect, with affected buildings likely to be eligible for improved noise insulation. See ES Vol 5 sv-001-000 and HS2 Information Paper E20 for further details of the criteria and methodology.

half a mile or one mile, but three miles. One of the things they did was that survey of agents, but they also did one of these sales prices and volume studies, page 159, and they used the Land Registry data. In this particular instance, it will have the same problem that there will be some people who won't have crystallised the losses, which will downplay the result, and also it will have EHS cases in it. Of course, an EHS case will have been valued at full price, because the unblighted price would have been paid, so that will have lifted the figure.

149. Nevertheless, it's quite interesting, because what it shows is that, within half a kilometre, there was actually a 6.9% fall in prices compared to five miles away, a bit like the CBRE one, an 11.2% rise. You've got this 18.1% effect, which interestingly is not so dissimilar from the adjusted one we had from CBRE.

150. SIR PETER BOTTOMLEY: Can I just interrupt for a second? Go back one page to 311(54). This is not to contradict anything that's been said, but it's to add to what we've been hearing. Can someone read out the last sentence of the conclusion, please?

151. MS CLUTTEN: Yes, of course. 'If the experience of HS1 and other infrastructure projects which threaten to blight landscapes hold true, these markets will return to normal and the negative impact will not be as significant as feared.'

152. SIR PETER BOTTOMLEY: The problem we're facing is it's particularly between now and some years after this scheme's been concluded. It's a transition problem.

153. MS WHARF: Except that of course PwC didn't feel it was quite like that. Different people come up with different –

154. SIR PETER BOTTOMLEY: I didn't say I was trying to contradict something; I was just trying to add.

155. MS CLUTTEN: Now, I think that covers all the actual points about the percentage of blight. There is one last point on this slide that I wanted to ask you about and that is in terms of the other points. I said earlier that they were relatively straightforward, but actually I'm not quite so sure now. There's one that says, 'Inertia means low take-up of schemes.' In what context was that statement made and what does it mean?

156. MS WHARF: As I think I mentioned, two crucial assumptions in any of these

Survey of Agents

We conducted a survey among buying and lettings agents in the vicinity of the proposed route in order to gauge the effect the HS2 scheme is having now and expectations of how the local markets are likely to behave in future. While the sample size is quite small the results still give an insight into the market from those closest to it.

The results echo the experience of HS1 in that it is the areas closest to the line which are most affected. Unlike HS1, the route will not follow a motorway until it approaches Birmingham so there is potentially more to lose, but this is offset by more tunnelling. The tunnelling will mitigate the effect on the landscape after completion, but disruption from construction while the work is ongoing will remain.

The survey results suggest that the areas further up the route towards Birmingham are less likely to see an impact, which is not surprising given that these areas are less densely populated. Overall respondents were sanguine about the current effect of HS2 on the local housing markets. Most respondents did not think there is any effect on markets right now, with the exception of those areas closest to the route. Here the uncertainty about the impact on the view is paramount. This uncertainty

will continue until the route is mapped out in detail (there may yet be alterations to account for engineering) and may continue to distort markets for longer than is desirable.

Looking ahead, respondents expected any impact to be largely confined to a three mile radius. There was a notable and interesting exception to this which revealed an expectation that residents may move within the locality but just further away from the line

There was a broad consensus that about a quarter of enquiries to buy property raised questions about HS2. In the area closest to the proposed route, unsurprisingly, this rose to three quarters. The factors of most concern were construction disruption, blight from potential noise and spoiled views. In terms of the effect on prices, the results were difficult to interpret as it is sensitive to the precise location. Respondents did report, however, that properties closest to the line were proving difficult to sell. Those properties within half a mile but with no view of the line were estimated to have between a 5-10 per cent discount. Homes within half a mile with a disrupted view were discounted by closer to 25 per cent.

Apart from the areas closest to the line there was little evidence that existing residents were keen to sell. Disruption caused by construction work was

mentioned in almost every case as a reason to consider moving away or not move in. One respondent said that this was the only factor affecting markets, implying that the effect is temporary and conditions will return to normal on completion of the line.

Overall, the survey results broadly confirm that housing markets in the vicinity of HS2 in Buckinghamshire will be affected in a similar way to the experience in areas close to the HS1 route where there was no additional transport benefit. Uncertainty is clearly a critical factor creating fear about the potential costs in terms of the levels of disruption and the eventual effect on the landscape. This uncertainty has frozen markets to an extent and caused prices to fall in the areas closest to the line, as was the case in HS1. The fear of blight seems to have had a bigger effect on the HS2 route, probably because, unlike HS1, it does not follow an existing motorway. Looking ahead, the fears associated with other infrastructure projects turned out to be overplayed and this may well turn out to be the case with HS2. One quote from an office closest to the line sums it up well. "The number of posters/banners [relating to HS2] everywhere is also not helping."

Conclusion

The experience of HS1 construction teaches us some things about what we should expect with HS2. The lack of access to stations means that unlike HS1 there was no uplift in prices in anticipation of benefits of better transport. Instead, like the Detling and

Harrietsham example all of the risks are skewed to the downside.

Unlike HS1, the HS2 route does not follow an existing motorway so the risks to the landscape are even more negative. Undoubtedly this would lead us to expect a larger effect on local housing

markets in the early stages and that seems to be the case. If the experience of HS1 and other infrastructure projects which threaten to blight landscapes hold true, these markets will return to normal and the negative impact will not be as significant as feared.

Compensation Schemes

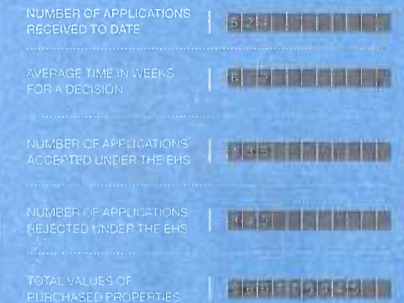
Statutory Blight

Once the route was confirmed home owners whose properties fall wholly or partly within the defined 'safeguarded' area (approximately 60m of the route) were able to serve a statutory blight notice requesting the Government to purchase the property. Statutory Blight Claims entitle the owner to the un-blighted value of their property plus a home-loss payment of 10% of its value (up to £47,000) and reasonable moving costs. Even though the owner is entitled to compensation, there is still uncertainty about how much of a discount the blight causes.

Exceptional Hardship Scheme and Discretionary

The Exceptional Hardship Scheme (EHS) is designed for those who, for reasons of exceptional hardship, have an urgent need to sell but have not been able to without substantially discounting their property, as a direct result of the announcement of HS2. Qualification is on a case by case basis which adds to the uncertainty. The same uncertainties about the level of discount as seen in Statutory Blight apply.

The Exceptional Hardship Scheme



The Route

The current proposed route comprises the following broad elements:

- ▶ A London terminus station at Euston;
- ▶ An interchange station at Old Oak Common in West London;
- ▶ The main route of the high speed line. This would run in a tunnel from near Euston, surfacing in West London and leaving London via a tunnel at Northolt until it resurfaces at West Ruislip. It would then proceed largely in a tunnel from the M25 as far as Hyde Heath. The line then continues to the west of Wendover and Aylesbury, partly in tunnel and partly following the existing A413 and Chiltern Line corridor, with an infrastructure maintenance depot near Calvert. The next section would broadly utilise the largely preserved track bed of the former Great Central Railway, passing to the east of Brackley before continuing in a North-Westerly direction to pass between Kenilworth and Coventry to near Water Orton. Here the line would divide with one arm serving Birmingham city centre (partly in a tunnel and with a rolling stock depot at Washwood Heath) and the other connecting with the West Coast Main Line north of Lichfield.
- ▶ Spurs to accommodate the routes to Leeds and Manchester;
- ▶ An interchange station on the outskirts of Birmingham;
- ▶ A central Birmingham terminus station at Curzon Street in the Eastside regeneration area.