part; I should have thanked Tom. I thank him many times, but he has done a wonderful, professional job getting to grips with the detail in a way that a lot of other colleagues, constituency office staff will have done, and it is hugely appreciated, thoroughly professional job, thank you.

- 62. MR CLIFTON-BROWN: Mr Speaker, before you go, there is one group of people who have not been thanked who I think desperately ought to be thanked; that's Neil and our other clerks who have done the backbone of the organisation of all this Committee, exemplary efficiency and I think they deserve our huge thanks.
- 63. MR BERCOW: Yes. And I've had many dealings with Neil, both in relation to this matter, on many other matters, not least during my time to date as speaker, and Geoffrey, I absolutely vouch for what you have said. Their efforts, and indeed their technical competence, in my experience, can't be faulted, thank you.
- 64. CHAIR: Okay. Thank you very much. We're now back to Wendover who are I'm sorry I missed your presentation this morning. I'm told you've nearly finished anyway? Is that true?

## Wendover Society (cont'd)

- 65. MR BOB LEWIS: Yes, I think so.
- 66. CHAIR: Is there anything more you want to add before we go to the promoter, you've got some more points?
- 67. MR BOB LEWIS: It's Mr Strachan's turn, I think.
- 68. CHAIR: Okay, Mr Strachan.
- 69. MR WATTS: Nothing from me at the moment.
- 70. MR STRACHAN QC (DfT): I'm just going to respond to the various points that were made about the AP5. Can I just start; this is a petition from the Wendover Society petitioning AP5, although, in fact many of the points that were made before the lunch adjournment, were actually repetitions of a case that's previously been put by these petitioners and others for a bored tunnel, throughout the Chilterns, or a longer green tunnel and we the further points were repetition of information that's already

been put to the Committee.

- 71. I refer you back to our earlier evidence on all those points, so I'm not going to traverse it all again. I'm going to try and just concentrate on AP5. P15583, please. Just to remind the Committee of AP5 and the Committee will recall that we presented our case on the hybrid Bill and the effects on Wendover. The principle mitigation for Wendover is, of course, a green tunnel, which runs to the south of Wendover, or south west, and that is the, as you'll see in a moment, the piece of engineering which avoids a significant noise effect on the population of Wendover.
- 72. We presented our case on the hybrid Bill and the Select Committee came back with some requests for us to consider an extension to the green tunnel and additional mitigation, which is precisely what we did. And we came forward with a number of proposals and put forward some costings of other proposals. You'll recall we've initially put forward an enhanced noise mitigation scheme that consisted of noise barriers of six metres on either side, and then we came forward with an extension to the green tunnel, which is just at the southern end here, the extension's in this location, at 100 metres. And then additional noise mitigation alongside the railway and the heights of the barriers, and the same at the northern end in terms of additional noise mitigation for the noise barriers.
- 73. And just to be clear, the petitioner referred to differences between the initial scheme and that which has been promoted in AP5, and we have done a lot of work in seeking to arrive at the optimum solution for this proposal. In the original draft enhanced scheme, which didn't take into account an extension to the green tunnel at this end, we had noise barriers of six metres.
- 74. As part of this proposal, we have looked at providing appropriate noise barriers, and at the northern end, this end here, they run from six metres down to one metre, so they tail off, in order to balance noise with visual effects, as part of the AP5 scheme, and that was a consequence in terms of what's then modelled.
- 75. Can I just show you then how that translates into the scheme effects, in terms of noise on the residents of Wendover, and you can see that best from looking at the noise contour plans, P15588, which deals with the northern end, so again, we're at the northern end. The main settlement of Wendover is in this location, and you can see at

once, how effective the green tunnel with the mitigation we proposed is, in mitigating the scheme from the vast majority of residents in Wendover and the noise contours obviously start to emerge from where the green tunnel portal comes out and then the noise barriers have been added in to screen that noise portal towards the north.

- 76. And then if we look to the other end, P15590, you can see a similar picture. You're going to hear a bit more about the church, St Mary's church you've heard about that before and the church council are coming in, I think shortly, and you can hear a bit more about the proposals there, but you're looking at the wider picture in terms of the protection of Wendover, you can see again how the railway scheme, with the revisions of AP5 mitigate the effects of the project on Wendover.
- 77. There are a number of miscellaneous points made about noise. To be clear, the Committee will be well aware of the policy set out in information paper E20 and the approach of where there are still noise levels in excess of LOAEL, the general policy are seeking to reduce those noise effects down to LOAEL where reasonably practicable, and that's enshrined in information paper E20. And that continues to be our approach.
- 78. There was a criticism made of various plans; I'm not going to take a lot of time on that but one of the criticisms appears to be about a cloud which appears on the plans. As is shown on the AP5 plans, and this is common practice with all the APs, to enable people to see where changes have been made; you'll recall there cloud-like lines which allow you to focus in on the area. They're not noise contours as appears to have been suggested, they're explained as simply drawing attention for those who are interested in the changes, drawing immediate attention on the page to what change has been made on the page; you can see it immediately.
- 79. The noise table that was referred to if I just go back to the slides that were presented this morning, A20818; we have done noise assessment works for the predicted operational noise. The draft enhanced scheme, is the scheme we initially proposed without a tunnel extension and with six metre noise barriers, and that's what's drawn attention to by the petitioners in this proposal, that had the effect of bringing down the numbers of properties above LOAEL to 103, as compared with the hybrid Bill scheme of 392. The AP5 scheme is 122, and the slight change relates to integration of the noise barriers at the north end, where if one goes from six down to one metre, which is a

balance being struck with integrating what are quite high noise barriers and reducing them appropriately. But you can see from this, that there are 270 properties, in consequence of AP5 and the Select Committee's recommendations, there are 270 properties that will come out of the above LOAEL level to below, and that's the consequence of AP5.

- 80. On the same screen, you can see in summary form, other information that we provide to the Committee, a draft surface enclosure which was, for example, putting a structure over the Small Dean viaducts, which would have its own visual effects, but that, we have costed as costing an extra £40 million, and of course, a draft I say draft, when we looked at it in draft, the mined tunnel option that was being suggested was £275 million and you can see perhaps more pertinently that the corresponding effects, in terms of actual noise levels drops off sharply, if completely. So, one doesn't get corresponding benefits for spending very, very large sums of money, for example, for the mined tunnel, as compared with the green tunnel with the additional noise enhancements that we've presented.
- 81. And so we've sought very much to assess, in the normal way, what are the effects of spending more money and do they result in proportionate benefits. And that's why we've presented AP5 in the way we have.
- 82. Can I just pick up on some noise points? If you look at A208 sorry, I should say I'll just correct myself; the £40 million would have taken one to the Small Dean viaduct in terms of enclosing the line up to the Small Dean viaduct. It would have been even more expensive to have gone further onto the Small Dean viaduct, and it would have been a larger structure to have the separation distances I think you've heard about that previously.
- 83. Sorry, going back to where I was, A281(12), Mr Thornely-Taylor will be giving evidence later on in relation to St Mary's church so if there are any technical points you want to raise with him, he'd be very happy to answer them, but this is a table relied upon by the petitioners, taken from some of the background material that's set out in the full in the technical appendices in the Environmental Statement. As I think we've previously explained before, certainly Mr Thornely-Taylor has; this is merely a graph which shows noise readings from different types of trains in different conditions,

atmospheric conditions, to give a very crude spread of the noise readings.

- 84. In the technical appendices document, in figure 1 of volume 5, there is actually a table which shows the noise predictions of HS2 correlated to the actual levels of noise from operational railways such as LGV Est and the TGV, and they demonstrate that the very strong correlation between our noise modelling predictions, and actual levels based on proximity to the line, be it 20 metres out to further, I think, up to a 1000 metres. And so this graph is not a helpful document to use in the way the petitioners have sought to do, and indeed, it's selective because they haven't referred to the correct documents where the true correlation is shown for our noise readings. All of which is available to them in the technical appendices and has been explained by Mr Thornely-Taylor.
- 85. I think that brings me onto the costs assessments of the options. We have provided and a criticism that was made before lunch was lack of transparency on costs, we have provided additional material on costs. For example, if I take you to P15698, you can see a response, I think, to a request sorry about the tight font, but inevitably it all fits onto one page, you can see we've provided costings of the option A, which is our proposed scheme, and you can see our green tunnel costs approximately £230.72 million. That's divided into the various headings you can see above. We've identified the extra over costs of a Wendover bored tunnel, which would cost a total of £476.13 million, and that's, if you go down the page a little bit, a net increase in cost of £267 million, and a mined tunnel would cost £275.53 million. And we've provided the breakdown of those costs in these columns. If the Committee has any questions about them, I'm sure Mr Smart can address them for you. But we have provided the additional material which was requested.
- 86. I'm not going to get into any of the wider issues about the costs of a further bored tunnel through the Chilterns. The necessary requirements for such a tunnel, including boring one way, which was costed at, I think, £460 million, all of that is information you've already had; it's been tested, it's been examined, and poured over, before you previously. Including, for example tunnelling rates which were raised again today.
- 87. And I will simply refer back to the previous answers; there was a lot of criticism made of Mr Mould and his summary of the position on the tunnels and I reject that criticism and you can look back at what Mr Mould said by way of summary, it's an

accurate summary of the position and it identified the sorts of things which are frequently omitted when petitioners pursue alternative proposals such as a twin bored tunnel. Such as the need, as we have identified, for a one kilometre intervention gap in the vicinity of Wendover. And that is all material that has been traversed previously in some depth.

- 88. So, for all of those reasons, if one focuses back on what this petition was meant to be about, namely AP5, does AP5 achieve benefits for Wendover? It certainly does in the way we've identified. We have looked at alternatives, and for the reasons we have shown, those alternatives do not result in proportionate benefits, and on a mature reflection, if one looks at the scheme and its effects on Wendover, we say, it is a well mitigated scheme which ensures that the vast majority of residents are protected from the noise consequences of the operational railway in this location.
- 89. CHAIR: Okay. Brief final comments?
- 90. MR BOB LEWIS: Indeed. I have in front of me, chairman, a print out from the Hansard recording and I quoted verbatim what Mr Mould had said, so I'm afraid I reject entirely Mr Strachan trying to get Mr Mould...
- 91. SIR PETER BOTTOMLEY: Ok, 15 all, we'll leave that.
- 92. MR BOB LEWIS: Right, yes. The costs, you were not present before lunch, we defer to Mr Avery who's appearing for the church, so the costs ones we're not commenting on. The noise graphs, I'll certainly comment on and my colleague will perhaps comment on some of the rest.
- 93. CHAIR: No we won't because we only have one person give brief final comments.
- 94. MR BOB LEWIS: I see, right, well, the noise slides, I'm seething about. They portray everything as wonderful, in child-like simplicity, but what they've shown, yet again, is average noise. Nobody, sir, hears average noise. We've said that so many times. What we hear, average noise is just a mathematical construction, average over time. What we hear is real noise, we hear LAmax and worse than that, we hear peak noise which is another 3dB above that. So why do they illustrate average noise? Well,

they do it because if they showed the real position, the actual peak noise, some parts of Wendover would be awash with serious noise issues and the rest of us would certainly hear it.

- 95. Now, they have they won't listen of course, to that, because they have selected deafness about anything that challenges their interpretation.
- 96. MR STRACHAN QC (DfT): Sorry, can I put up P15591, which is the graph I showed you a moment ago; I was talking about Lmax levels, just to be clear, I don't quite know why this point's been made, but I don't think it's helpful for those sorts of comments to be made. I was referring to the Lmax levels. You can see for Leq levels, we're already a well mitigated scheme as it stands.
- 97. CHAIR: Continue, continue with your point.
- 98. MR BOB LEWIS: Well, with respect, it doesn't they're graphically trying to show, with child-like simplicity that all is well; all is not well. We have to be seriously considered considerations of maximum noise, that's the thing that we'll hear, that's the thing that will cause the disruption. Average noise is not a concept that we hear.
- 99. I think our major comment is that what we've asked for is an independent verification of noise and cost estimates. We cannot emphasise that enough; that they won't engage with us, they won't listen, and therefore we raise issues, we find errors and omissions, and they simply revert to the fact that they're always right and we don't believe that they're always right.
- 100. So, we remain of the same opinion, sir, we do not believe that this meets your criteria, it's not a very convincing solution to Wendover's problems, and we stand by everything we said before lunch. Thank you.
- 101. CHAIR: Okay thank you, thank you both. Right, we now move onto AP520, Aylesbury Vale District Council, represented by Sharpe Pritchard. Right, Mr Lewis.

## **Aylesbury Vale District Council**

102. MR ALASTAIR LEWIS: Good afternoon, sir. What was already going to be a relatively short presentation is made much shorter by the intervention of Mr Speaker. I