

MINUTES OF ORAL EVIDENCE

taken before the

HIGH SPEED RAIL BILL COMMITTEE

on the

HIGH SPEED RAIL (WEST MIDLANDS – CREWE) BILL

Tuesday, 15 September 2020 (Morning)

In Committee Room 4a
(Hybrid Proceeding)

PRESENT:

Lord Hope of Craighead (Chair)
Lord Brabazon of Tara
Lord Goddard of Stockport
Lord Haselhurst
Lord Horam
Lord Liddle
Lord Snape

IN ATTENDANCE:

Timothy Mould QC, Lead Counsel, Department for Transport
Jacqueline Lean, Counsel, Department for Transport

WITNESSES:

Trevor Parkin, Trevor Gould and Michael Byng (Yarnfield and Cold Meece
Parish Council, Stone Town Council and Chebsey Parish Council)
Tim Smart (HS2 Ltd)
Peter Miller (HS2 Ltd)

IN PUBLIC SESSION

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(At 10.30 a.m.)

1. THE CHAIR: Good morning, everyone. Welcome to this hybrid meeting of the Select Committee on the High Speed Rail (West Midlands – Crewe) Bill. We are meeting today in hybrid fashion. Some of us are present in a committee room in the House of Lords observing social distancing while others will be dialling in.
2. Today, besides myself, we have in the room Lord Brabazon, Lord Horam and Lord Liddle and we also have Tim Mould QC and Jacqueline Lean, counsel for HS2 and Trevor Parkin and Trevor Gould for the petitioners.
3. It may be helpful if I were now to set out how this session will work. All of our remote participants are on the Zoom call and we can all see each other. You may need to switch to gallery view to do so. Remote participants will be muted at the start of the meeting. You may control your own muting but please remember to unmute before speaking. You may receive a prompt on your screen inviting you to do that.
4. As far as possible, we will follow a pre-determined order of speaking as set out in my brief which has been shared with all participants. Unless anticipated in the brief, you should wait to be called before speaking. If you wish to intervene at any point, please physically raise your hand so that it can be seen on the screen and I will then call you to speak at an appropriate point. In order to allow for interventions, I suggest that speakers should pause from time to time which will enable me then to call on somebody to speak who wants to ask a question or invite the speaker just to continue.
5. We will finish this morning's session by 1.00 p.m. The participants should have the exhibit bundles open and available to them. For this session, these are bundles A20, R58, R108, R114, R115 and P38. We will navigate the documents using the numbers in the bottom left-hand corner of each page.
6. We shall now begin with petition 23 in the name of Yarnfield and Cold Meece Parish Council, Stone Town Council and Chebsey Parish Council. Mr Mould, would you be good enough to open the proceedings for us?

Yarnfield and Cold Meece, Stone and Chebsey Councils

7. MR MOULD QC (DfT): My Lord, I shall, thank you very much. If we may, if I

can ask you to refer first of all to the petition of the Yarnfield and Cold Meece Parish Council and others. You will find that at R58. This petition has a single primary objective and that objective is that the infrastructure maintenance base-rail, the IMB-R, which is the single most significant operational element of this Bill scheme, other than the railway line itself, that that facility be relocated from its proposed location at Stone in Staffordshire to an alternative location known as Aldersey's Rough, which is some kilometres to the north of the Stone location, a location essentially lying between Keele motorway services on the M6 and the alignment of the West Coast Main Line as it passes through the area that you were concerned with yesterday; that is to say, the area to the east of the village of Woore.

8. THE CHAIR: I wonder if you're right about that, with great respect, Mr Mould. You've made the point in correspondence that we're not in a position to make the additional provision which would be required if the IMB-R were to be relocated and the House of Commons have already gone through the process and approved, in principle, that the IMB-R is in the right place.

9. I was interested in the last paragraph of a letter which is R115 which Mr Fraser, the parish clerk, wrote and it's a letter which raises a number of detailed points in relation to the design of the IMB-R and facilities around it and how it's to be developed and at the second last paragraph, under the heading of 'Engagement', I think, very helpfully, Mr Fraser has identified what is really an issue of principle which is between you and the petitioner because he says, 'We understand HS2 believes that a limited level of design detail information on these various points is all that is required for the parliamentary stage of the Bill process. However, we disagree'.

10. And it's for that reason that he wants to explore, in considerable detail, the various matters which are listed in that letter and a previous one about matters such as the design of the haul roads, the quantities of material, the ground conditions at the IMB-R and so on. Of course, you're right, that the logical position they reach is that the thing is so unsatisfactory, it should be relocated but we can't deal with that now.

11. MR MOULD QC (DfT): No.

12. THE CHAIR: It has to be where it is and you should assume that that is our position and, indeed, Mr Parkin should assume that we cannot consider moving it

elsewhere. So what we are doing is looking at IMB-R, the Stone railhead, but there is this issue of principle and I wonder whether you would say something about that because that stream seems to me to be the key, whether we go into fine detail on all these points or whether we do it at a different level of detail and, if so, what is your justification for dealing with it in the way to which Mr Parkin takes exception?

13. MR MOULD QC (DfT): Yes. Well, first of all, I'm grateful for the indication that your Lordship has given about the question of examining the comparative credentials of Aldersey's Rough. The reason I began with that was because I wanted to draw out what is actually said in the petition itself.

14. THE CHAIR: Right.

15. MR MOULD QC (DfT): As I understand it, in so far as the petition seeks this Committee's intervention in relation to the location of the railhead and the IMB-R in Stone, the petition, in expressing its request to the Committee, does so in paragraph 3.15 on R58 page 6 because that paragraph is the fallback, if you like. The logic is, if you're not with us on our primary objective then please will you do the following, and what they say is they would ask you, in the event that the hybrid Bill is not amended to relocate the IMB-R to Aldersey's Rough, 'Significant mitigation measures will be required to protect the safety and wellbeing of residents and reduce congestion at the range of locations in the parish of Yarnfield and Cold Meece, Stone and Chebsey'.

16. Well, my Lord, I draw your attention to that paragraph because it perhaps is important to see what Mr Fraser said in his letter to which you referred me, in the context of what the petitioner is actually asking for by way of direction from this Committee. This Committee's function is, in the final analysis, to decide whether it should intervene in order to give further relief to the petitioners, beyond that which is set out in the Bill or in assurances that have been offered.

17. Now, I hope I don't speak unfairly to the petitioner when I say that I have not been able to discover any specific mitigation or remediation measures that the Committee is being asked to consider in order to give effect to the general aspiration that is set out in paragraph 3.15 of the petition. You will not find in the exhibits, you will not find in the extensive correspondence that's taken place between ourselves and these petitioners over the course of the last year which is in the documents before you, you will not find

any menu of further measures that the petitioner has said it wishes to see introduced.

18. THE CHAIR: Well, I think, one of the letters, and I can't remember which one it is, indicated that that would all be made clear to us at this hearing.

19. MR MOULD QC (DfT): Well, –

20. THE CHAIR: And in anticipation of that, but I just wanted to be very clear at the beginning, really for Mr Parkin's benefit, that the fallback position is not available and he has to adjust his presentation in the knowledge that we simply cannot make a recommendation for the IMB-R to be moved elsewhere. It's very important that that is absolutely understood.

21. MR MOULD QC (DfT): My Lord, I'm grateful for that and, as I say, on the basis that that is the Committee's position, certainly at the outset of this hearing, the reason I draw your attention to paragraph 3.15 in the petition and I make the point that I do about the absence of any detailed proposals to give effect to that general objective of, if you will, mitigating or improving the performance of the Stone location, it being fixed, it may be that things are going to be said during the course of the next two or three hours about that but we have not received any forewarning of that.

22. And so if it is to be said, for example, that there are measures that should be introduced to limit traffic or something of that kind, those are not matters that have been raised with us. The focus of the debate that has taken place in the course of correspondence between October of last year and, really, up until a couple of weeks ago, has had this flavour.

23. The petitioners have raised questions about the adequacy of HS2's underlying analysis and evidence base to support the design of the construction arrangements at Stone and the operational facility itself, for example, the degree to which it will generate traffic that will need to go through the temporary slip roads on the M6; the degree to which it will generate traffic that will need to be accommodated on local roads; the degree to which it will affect passenger services on the Norton to Stone railway line once the facility comes into operation and ballast trains and so forth have to run.

24. We have sought to respond to those requests for information and, as you will see,

we may need to go through it in some detail. As you will see, there is a correspondence schedule at page 38(44), P38(44), which gives a helpful summary of the exchanges and identifies, amongst other things, the various reports that have been provided to the petitioners over the course of the last year in order to seek to respond to and elucidate the questions and answers the issues that they have raised.

25. But it has never been the case during that period that the petitioners have come forward and said, 'In the light of that, will you please make the following changes or provide the following mitigation?' Had they done so, we would have sought to respond and to see whether either we could accept it or, if we couldn't, to explain whether we could accept it to some degree or whether there were reasons why we couldn't.

26. So I am full of anticipation, speaking as I do now, to see what it is that is going to be sought from your Committee in fulfilment, if you will, of paragraph 3.15 of the petition.

27. Now, having said that, let me come to the question that your Lordship posed to me.

28. THE CHAIR: Yes.

29. MR MOULD QC (DfT): It is well established that where a national project of this kind, a national railway project, is promoted through a specific piece of government legislation, in this case the Phase 2A hybrid Bill, the West Midlands to Crewe hybrid Bill, that in order to enable Parliament to scrutinise whether that scheme is acceptable and ought to be given powers, and in order in particular to assess the environmental effects of the scheme both during its construction and operational phase, in fulfilment of the requirements of standing orders 27A in the other place, that a certain level of detail must be provided.

30. For example, the engineering design must be developed to the degree necessary to enable a traffic impact assessment to be undertaken. The operation of the scheme and the arrangements for noise mitigation to protect residential properties that are affected by noise from the railway, demands that a noise impact assessment is carried out and design policies need to be formulated for that purpose to specify noise levels and matters of that kind and one can imagine that there is a whole raft of measures.

31. But what is not required, and what has never been required, is that the scheme should be developed to the level of detailed design that would enable contracts to be let for the railway, for the project, once powers have been conferred by the enactment of the Bill. It has always been recognised that that level of detail is unnecessary and can be left over to the stage following the enactment of the Bill.

32. THE CHAIR: You've used the word 'enabling' a number of times and it occurred to me that the Bill is essentially an enabling Bill and, for example, you've got in schedule 17 various things that follow the deemed planning permission –

33. MR MOULD QC (DfT): Precisely.

34. THE CHAIR: Which, plainly, require further investigation by the planning authorities and so on but that detail is worked through as the scheme is developed after Royal Assent. So it's enabling to the extent of enabling that process to start but we're not in a position to assess whether it's reached the stage of the detail, as you say, for letting contracts or enabling the work to begin, because plainly there's a lot of work to be done after Royal Assent before any work can start. Am I right about that?

35. MR MOULD QC (DfT): My Lord, with respect, your Lordship is entirely correct about that. I was going to draw attention to the planning schedule because that's an obvious, as your Lordship says, that's a very clear example of Parliament's judgment in previous Bills of this kind that there's a balance to be struck. Parliament needs to be able to say that the impacts of the railway project that is being proposed have been assessed to the degree necessary to ensure that appropriate mitigation either is in place or can be developed through the operation of the planning schedule and, in the case of these schemes, the environmental minimum requirements of which you've heard mention in the past. But it has never been the case, as it were, that the level of detail that one would expect with a full planning application, that that should be provided. Indeed, schedule 17 would be otiose if that were the position.

36. THE CHAIR: Perhaps that's quite a good analogy. One's got permission in principle which, for big schemes not going through a parliamentary process, one normally starts with and then there is detailed planning permission that follows thereafter.

37. MR MOULD QC (DfT): Yes.

38. THE CHAIR: Is that the analogy?

39. MR MOULD QC (DfT): It is a fair analogy and it's one that is drawn in the statutory guidance with the Secretary of State promulgated under the corresponding planning schedule on the London to West Midlands Act. He drew the analogy broadly between an outline planning permission and the Bill and the reserved matters stage in relation to an outline planning permission and the schedule 17 process. He acknowledged that the analogy is not entirely strict but there are some differences but it's sufficient as a broad analogy for the purposes that your Lordship has put forward.

40. And, indeed, it would be entirely wrong to underestimate the significance of the schedule 17 process which embraces, amongst other things, control of construction impacts and control of traffic through the traffic routing regime that your Lordship has heard about and the powers conferred on local authorities to approve traffic routes and so forth.

41. The reason I say that is this. The Court of Appeal on 31 July of this year gave an important judgment in a case brought by Hillingdon Borough Council, one of the qualifying authorities under the Phase One Act, in which the Court of Appeal emphasised the importance that Parliament had given to local control of detailed planning matters through enacting the corresponding planning schedule in the London and West Midlands Act to that which is before you in schedule 17.

42. And so, put it another way, the Court of Appeal expressly recognised that Parliament had vouchsafed to local planning authorities who had signed the undertaking so as to become qualifying authorities and have the broader range of controls that is conferred upon qualifying authorities under the schedule, Parliament had vouchsafed to those, entrusted to them an important task in correlating the impacts of the Bill to the detailed regime for environmental control that fell within the scope of the planning schedule.

43. THE CHAIR: Could you give the name again of the case?

44. MR MOULD QC (DfT): It's Hillingdon Borough Council v The Secretary of

State for Transport.

45. THE CHAIR: Sorry, which borough council?

46. MR MOULD QC (DfT): Hillingdon.

47. THE CHAIR: Hillingdon, thank you.

48. MR MOULD QC (DfT): Hillingdon in north-west London and Ms Lean has been able to retrieve the neutral citation number. It's [2020] EWCA Civ 1005.

49. THE CHAIR: That's very helpful. Thank you very much.

50. MR MOULD QC (DfT): Now that case is presently the subject of an application for permission to appeal to the Supreme Court which has been made by HS2 Ltd as interested party. The Secretary of State for Transport and the Secretary of State for Communities, who are the joint decision makers in the decision that was the subject of the judicial review claim, neither of those secretaries of state has sought permission from the Supreme Court. So it is, to that degree, subject to further – it's inchoate in that sense but, as things stand, it's an important decision and I suspect that the general observations of the Court of Appeal as regards the importance of local control that is vouchsafed to a qualifying authority under that schedule, I suspect that that is not the matter that is likely to be controversial, even if the matter does proceed to a hearing in the Supreme Court.

51. Now, what in fact has happened in the present case, in relation to this petition, is that information has been provided to the petitioners which goes considerably beyond that which would ordinarily be sought or provided by petitioners at this stage in the process. The promoter has not objected to providing that information. Indeed, the promoter, HS2 Ltd, has been keen to seek to allay the concerns that the petitioner has maintained. I'm not sure that HS2 Ltd have been entirely successful in that objective but you will see that when information has been sought, it has invariably been provided in the form of source documentation and indeed bespoke reports such as the December 2019 report which is in the bundle before you.

52. So I hope that is helpful. One question that no doubt you and your colleagues on the Committee will want to consider is the degree to which you will be assisted by

drilling down into very significant detail. We don't shy away from it but, as I say, given that the schedule of correspondence that is at P38(44) is backed by 170 pages, I think it is, of detailed information provision effectively by the promoter, there is a question as to how far, as it were, you need to scrutinise that process.

53. THE CHAIR: Can we leave that question in the air? I'm anxious that Mr Parkin should have as much time as possible and I wonder if there's more you need to say by way of introduction at the moment.

54. MR MOULD QC (DfT): No, no.

55. THE CHAIR: We really pass over to him because he has a lot to deal with and perhaps it's better we start with him now.

56. MR MOULD QC (DfT): I've nothing more to say.

57. THE CHAIR: So thank you very much for that introduction. Mr Parkin, it's over to you now for your presentation, please.

Submissions by Mr Parkin

58. MR PARKIN: Morning, your Lordships. I listen with great interest to what Mr Mould has said and I take issue with a large amount of what he's actually said but I'd like to start by reading a statement on behalf of our parish councils if that's okay with you.

59. THE CHAIR: Yes.

60. MR PARKIN: On behalf of Stone Town Council and Yarnfield and Cold Meece and Chebsey Parish Councils, thank you very much for the opportunity you've given us to speak to you today. The three of us who are appearing in front of you today are very conscious that we are representing a sizeable community totalling around 20,000 people and we take that responsibility very seriously.

61. By way of brief introduction, I would like you to be aware that we have been involved with HS2 Phase 2A for nearly four years. If HS2 Ltd had stayed with its original proposal to build a railhead and infrastructure maintenance facility on brownfield land at Basford sidings, it is very doubtful whether our community would

have ever have objected to the construction of the HS2 railway through our neighbourhood.

62. We are not anti-HS2 and recognise the importance of building important transport infrastructure to improve connectivity across the country. Indeed, the team in front of you today includes enthusiasts of the railway industry and supporters of the principles of high-speed rail. However, from the outset, when the shock news was delivered that HS2 had failed to secure the land it required at Stone and instead proposed to build a three kilometre long, 250-metre-wide industrial facility on greenfield land near Stone and, most importantly, close the main link between the town and the village of Yarnfield for a period of three years, we knew we had to do something to persuade HS2 to change its mind.

63. Instead of creating an action group to simply oppose HS2's proposals, as has happened all along the route, members of our parish council, together with a team of professionals with a diverse range of skills, have formed the Stone Railhead Crisis Group to try and work with HS2 to modify its proposals. Thanks to my colleague, Trevor Gould, we quickly identified a viable alternative solution and carried out a RAG analysis, that's a red, amber, green analysis, to test its suitability on a wide range of engineering, environmental and economic grounds.

64. We shared these ideas with HS2 in January 2017. Sadly, despite great optimism at the start, all of our efforts have been met with resistance from the company. Initially, resistance to talk and to meet was followed by resistance to listen and even more resistance to consider anyone else's opinion other than its own. Although the two sides met four times during 2017, it was evident that HS2 was only paying lip-service to stakeholder engagement and had actually fixed its position, long before we sat down together for the first time.

65. Undaunted but repeatedly disappointed by the company's uncompromising and dismissive attitude, along with its production of information that has too often been based on questionable and erroneous claims and assumptions, we have continued to investigate and challenge both the engineering feasibility and cost of HS2 Ltd's proposals for the Stone railhead IMB-R as well as its fitness for purpose as a long-term maintenance base for HS2. In so doing, we have accumulated a wealth of factual

evidence that will show that HS2's proposals for Stone are not viable and, if pursued, will threaten its ability to deliver the entire Phase 2A project.

66. We are therefore left with a simple choice. Do we, as HS2 clearly wants and Mr Mould has eloquently said just now, simply give up and allow the unrealistic and severely flawed proposal to go ahead with all the negative consequences for Yarnfield, Stone, Staffordshire, the UK, the taxpayer, the Government and even HS2 itself, or do we continue to try and present our case in the hope that people who can influence the decision-making process will intervene and seek an impartial and independent investigation of the evidence and then consider the alternatives? Our parish councils have chosen the latter.

67. So, what can we do? Well, from the beginning of 2018 we have known that the hybrid Bill process does not permit the House of Lords to make recommendations that require an additional provision. We understand and respect the reasons for this and therefore are not asking this Committee to make any recommendations in that regard. However, there is an alternative approach that lies in the gift of the Secretary of State for Transport to take forward. Of course, and quite rightly, he would only do so if he was persuaded that it was in the best interests of the project, the department for transport, the Government and the UK taxpayer to do so. We believe that we have the evidence that will persuade the Secretary of State to make that call.

68. However, we do not have access to the Right Honourable Grant Shapps MP or to the HS2 Minister to present our case directly to him and therefore we are asking your Lordships to hear the strengths of our arguments instead. We understand that it is your position that it would be highly unlikely that you could be persuaded to break with precedent and make a recommendation in favour of an order under the Transport and Works Act 1992 so our task is clearly a difficult one, but we believe that we can rise to that challenge. We just need the opportunity to be able to put our evidence across.

69. So therefore we appeal to your Lordship's sense of fair play and respectfully request that you grant us time to present our compelling evidence to demonstrate that the Stone railhead IMB-R should be abandoned in favour of a far more practical, cheaper and environmentally sensitive alternative, to Aldersey's Rough. That is the basis of most of the evidence we wanted to present today and we believe that we can get

through that evidence in the morning session.

70. However, you have heard, and you made the point yourself, your Lordship, about the others matters which are covered under item 3.15 of our petition. There are three elements to that and I take issue with the claims made by Mr Mould on behalf of HS2 that we have not actually entered into any kind of dialogue, that we actually haven't presented any information on all three of these issues previously. In fact, we have given evidence at the House of Commons on these issues and we got very little time to do so.

71. So we would like to present in the afternoon, and it won't take very long, maybe 20 minutes, three items of mitigation which will dramatically change the situation for the people of Yarnfield if, and we hope this isn't the case, we fail to persuade the Secretary of State that a transport and works order is the right way to go and to change the position on Stone. We wouldn't be doing this lightly and, as I said before, we are not objectors to HS2. We're the only people who've tried to actually work with this company and we have been frustrated now for nearly four years and so I please request that we be allowed to give our evidence.

72. THE CHAIR: Well, of course, we have time available for you to do that although time is not unlimited. You will appreciate that. But you mentioned three items of mitigation. Would you be kind enough to reveal what these three items are so at least we know where we're going to?

73. MR PARKIN: Yes. Two of them relate to Yarnfield Lane, the first of which is – and you heard evidence from Cycling UK on 28 July regarding the need to adequately future proof the detail of what HS2 is proposing over Yarnfield Lane to enable a cycle path and footpath to be provided between the village of Yarnfield and Stone. We have got more information on that today which has been provided by Cycling UK and an organisation that works closely with them.

74. The second element of that relates to HS2's proposal for the railhead and particularly the IMB-R permanent access involves building a dangerous access point on a cutting that is created by building the re-aligned Yarnfield Lane. That design is an infringement of all technical standards and I've heard the debate made about schedule 17 and relying on the county council or others to basically make changes to a scheme beyond Royal Assent. There is no reason why that has to be delayed. That is an unsafe

junction which will actually result in harm to our residents.

75. THE CHAIR: The junction is a road junction, is that right?

76. MR PARKIN: It's a road junction which HS2 is proposing, I'll point out the details when I can, it's a road junction on to the re-aligned Yarnfield Lane which HS2 is creating in a deep cutting, on a slope without the proper visibility splays.

77. And the third element was also raised by Cycling UK in evidence on 28 July and relates to the A34-A51 junction at Stone. Without going into too much detail, HS2 is proposing to relieve congestion that it is creating at that junction by building a free flow lane between the A51 and the southbound A34 which my colleague, who was the former head of urban transportation projects, and unfortunately can't be here today, of Staffordshire County Council, described as a 'killing zone for cyclists'.

78. So those are the three elements but we would like to spend the morning taking you through why the Stone railhead is actually not a viable engineering option and I'm an engineer. I've been involved in environmental impact assessments for 30-odd years and I can tell you that the idea that you don't need to provide sufficient detail in order to prove that something can work and then take it through an environmental impact assessment, is a false one. HS2 cannot prove that the Stone railhead is a viable option and we have mountains of evidence to support our claims.

79. THE CHAIR: Yes. Well, just to see where we're going to, as far as timing is concerned, we've set aside until 1.00 p.m. for you but we have another petitioner coming at 3.30, the Newcastle Road residents, and we must give them a full opportunity this afternoon. So we can't go beyond 3.30 p.m. with you, allowing for a lunch break. So you'll have to tailor your presentation within these time limits, please.

80. MR PARKIN: We hopefully have timed our presentation and if we can proceed quickly through our presentations, as I said, I would hope that we would be able to conclude all of the Stone and Aldersey's Rough issues by 1.00 p.m.

81. THE CHAIR: Yes.

82. MR PARKIN: I will then only need at 2.00 p.m., 15 minutes to go through those mitigation elements.

83. THE CHAIR: Right.

84. MR PARKIN: And then I understand after that, that Mr Mould will want to have his chance to comment and bring his witnesses in and obviously your Lordships will want to ask questions, maybe throughout our presentation.

85. THE CHAIR: And you'll have a final right of –

86. MR PARKIN: And that we would be able to have some final word and I would actually like, if possible, if there is time, to be able to cross-examine the witnesses on behalf of HS2 if there is opportunity to do so.

87. THE CHAIR: Well, let's see how we go. But I was going to pause there anyway to ask members of the Committee whether they have any questions arising from what you've said. Lord Horam has one, I know.

88. LORD HORAM: Well, it's not a question. I think we should have a short break about 12.00 p.m. if you don't mind.

89. THE CHAIR: Yes.

90. LORD HORAM: We don't want to go for two and a half hours without any break whatsoever.

91. THE CHAIR: Yes.

92. MR PARKIN: I will rattle through this as quickly as possible and my colleagues will as well.

93. THE CHAIR: I have to be sure that the Committee is content that we proceed to hear the evidence. Lord Brabazon?

94. LORD BRABAZON OF TARA: Lord Chairman, it sounds to me as if we're being asked to recommend a Transport and Works Act order which we can't really do.

95. THE CHAIR: Well, we've made our position clear on that. I think there is still a question whether we just simply say that the project is unviable. We can express that view without saying what the consequences would be. Mr Mould will tell us that that leads nowhere but I think we just simply listen to the evidence and then the way it's

summed up by Mr Parkin. But, for myself, I suggest we just proceed to hear the evidence but does any member of the Committee want to take objection to that? Very well, on you go, Mr Parkin. Yes, Mr Mould?

96. MR MOULD QC (DfT): My Lord, might I just say this? For reasons that I needn't explain to you in the light of your ruling in July, and what has been said yesterday and today, I am not in a position to provide a detailed response to a case which essentially asserts that the Stone railhead is, in principle, unviable or that it needs to be moved for the kind of fundamental reasons which I believe you're likely to hear. I will be able to ask Mr Smart and Mr Miller to give you a very, very high-level explanation of certain aspects of the case that was decided by the Select Committee in the other place in April of 2018 but I thought I ought to mention that to you now. We have obviously not prepared a case on the basis that we thought the line of argument that I think you're now going to hear is shading pretty close to being an abuse of process. I've no objection to your Lordships hearing the evidence.

97. THE CHAIR: I don't really want to prolong this.

98. MR MOULD QC (DfT): No.

99. THE CHAIR: At the very beginning, I indicated there was an issue of principle between you and it's really that point, I think. You're not prepared to go to the level of detail which is being suggested.

100. MR MOULD QC (DfT): No.

101. THE CHAIR: Mr Parkin is going to address us with a good deal of detail to persuade us that we should accept his argument and I think we just listen to him and see where it takes us.

102. MR MOULD QC (DfT): Absolutely

103. THE CHAIR: And we will break, just for everybody's convenience, just shortly around 12.00 p.m., just for five minutes to give people a chance to stretch their legs. Mr Parkin, over to you please.

104. MR PARKIN: Thank you very much. As I said, the order of evidence that I

would like to give is I will be giving an introduction to the Stone railhead and to Aldersey's Rough. I'll then be calling on Mr Byng, who is operating virtually, to answer some questions that I would like to ask him and then Mr Gould will be giving you evidence related to the railway specific issues.

105. So if I may start with A22, please, or slide 2. I don't know how you want to reference these documents. This is a drawing that we received out of the blue in September 2016 and showed what HS2 wanted to do at Yarnfield, so you can get your bearings on what you can see there. On the top right-hand corner, that is Stone, on the left-hand side of that drawing is Yarnfield, the blue line is the M6, the shaded area and the solid blue line in a straight line is HS2's proposals for the railhead and you can see that it crosses, at right angles, Yarnfield Lane, the Norton Bridge to Stone railway and Eccleshall Road.

106. Yarnfield Lane is the vital artery between Yarnfield and not only Stone but all services, A34, Stafford to the south, Stoke-on-Trent to the north and the motorway travelling north from junction 15.

107. HS2 carried out an options appraisal at some time to justify bringing this railhead and IMB-R to Stone and that options appraisal apparently had seven alternative options to Basford and Crewe. Six of those were variants on what you see before you on this slide. The seventh one is at Madeley which is pretty close to where we propose to have Aldersey's Rough. Unfortunately, HS2 has never provided its options appraisal for any kind of scrutiny, claiming back in early 2017 that it couldn't release it under regulation 12(4)(d) of the Environmental Information Regulations 2004, following a freedom of information request from one of our members.

108. If I can move on to slide A23, this is a drawing which we've put together which shows all the different elements of the Stone railhead IMB-R at construction stage, on one plan. HS2's plans are all divided up into little pieces so it's very difficult to understand what you can see. And I'll just pick out a few things for you to be able to observe.

109. I obviously haven't got a cursor that I can control but the main body of that grey slab area that you can see, at the right-hand end of it, which is actually the southern end, that is a 12-metre high embankment located in a flood plain which HS2 is going to

construct.

110. The new sidings will be connected to a very busy railway line, the Norton Bridge to Stone railway, and they extend for the total distance of the site to 2.9 kilometres, nearly three kilometres.

111. The Yarnfield north embankment transfer node, it's shaded a sort of light brown colour, is on the immediately south side of the Yarnfield Lane and then you've got various other satellite compounds, worker accommodation for 240 people, a viaduct launching yard, a concrete batching plant, new access points on to the M6, which is a very important point which I will be coming back to, and Yarnfield Lane, interestingly, move over 50 metres to the north of its current position on a brand new bridge over the M6, raised 12 metres above ground level on the western side, together with the diversion of Eccleshall Road.

112. It's no surprise, HS2 in 2016 thought it was okay to shut our lane for three years and that was opposed by our MP, Sir Bill Cash, and was taken up by Chris Grayling, the then Secretary of State, and that has led to the change which is now the design we've currently got.

113. If I can move on to slide – I'll be coming back to that. One thing I would like to point out is the blue highlighted area which is next to Stone. That's a housing development of 560 homes which we won't find on any HS2 drawing.

114. Moving on to slide 40(24), I just want to quickly draw your attention to where Yarnfield is on this slide, relative to HS2's mainline and various other locations. We're all to the west –

115. THE CHAIR: You said 40?

116. MR PARKIN: A20(4).

117. THE CHAIR: Yes.

118. MR PARKIN: And the only purpose for putting this slide up, this is an HS2 slide, is to show you, if you can see the village of Yarnfield, Yarnfield and Cold Meece are to the west of the railway line and all the roads that HS2 are going to use and put transport

on, effectively cut us off from the A34 and all the services that we enjoy in Stone, Stafford, Stoke-on-Trent etc.

119. If I can move on now to slide A25, from the outset, HS2 has tried to underplay the impacts of the proposals of the Stone railhead on Yarnfield Lane and it is still doing so. On 17 March, Tim Smart gave your Lordships a teach-in presentation. Now, we have many issues with what Mr Smart has given in evidence, both previously in the House of Commons and as recently as yesterday, but the point I want to make here is that this slide gives the impression that the impacts on Yarnfield Lane are about histogram 17, which is located near the A34. I won't go into the details of what's in tables K and L but I can tell you that they are a work of fiction.

120. If I could move on to slide A26, this is the slide that your Lordships were presented with on 17 March and you can see the title of it says, 'Proposed scheme Yarnfield Lane between A34, The Fillybrooks and the HS2 Route' and you can see you've got pretty low levels of HGVs using Yarnfield Lane for a period of 15 months. That's the only slide that was presented to you.

121. What I want to present to you now is slide A27 which shows what HS2 produced about its traffic levels on HGVs on Yarnfield Lane where the overbridge is at AP1, which dates back to when we gave evidence in July 2018. And the key point to draw out of this is that the red zone is when HS2 traffic was going to be using Yarnfield Lane with the public and the green zone was going to be when they were using the re-aligned Yarnfield Lane and you can see from that slide that there is at peak levels, many, many months of 432 HGVs a month using our lane while we're using it.

122. The 432 is a number which was capped, I think, from the original ES because if you now look at slide A28, the cat is really out of the bag now about the number of HGVs. HS2 came up with a plan that it could use Yarnfield Lane as a haul road during the construction. We don't think that's feasible but you can see suddenly the number of HGVs per month are over 1,000. In fact, the peak number there is somewhere in the region of 1,050 which actually is not an accurate number either and the reason why they've said that this is now okay is because that phase in the middle, Phase Two, is when HS2 will be using the existing lane as a haul road and we will be using the re-aligned lane. But if you look at Phase Three, they've demolished the existing bridge

over Yarnfield Lane, they're no longer using the existing Yarnfield Lane as a haul road and now we're all using the same road together and you can see that they've got peak numbers of over 300 HGVs a day. So the information that was provided to your Lordships in March, I think, was misleading.

123. If I can go to slide A29, this shows what we're talking about in terms of the number of HGVs and a peak of 1,100 HGVs a day is one HGV every 33 seconds travelling into our transfer node on Yarnfield Lane. I'll leave that slide; I won't go into any more detail on that for now.

124. Now, I'd like you to look at A20(10). This is a plan that HS2 produced in 2018 to demonstrate how it was going to operate its haul roads to build the Stone railhead and to access the M6 and I think if you look at the yellow lines, these are the haul roads. You can see that they plan to cross the Norton Bridge railway with a haul road on the embankment and bridge that will be constructed as part of the works to access the railhead in future, and then you can see a dead straight line coming from the middle of the page down to an embankment near Whitmore Farm which is the existing Yarnfield Lane and that was HS2 claiming how, then, it thought it might be able to access the M6 northbound carriageway.

125. Now I would just like to say at this point that even if HS2 is able to use the existing Yarnfield Lane as a haul road, 50% of everything that comes into our transfer node and satellite compounds, worker accommodation etc, has to travel across the M6 to get back to the carriageway. If you come from the north, you come on the southbound, you deliver materials, you're going to have to go back on the northbound which means crossing the M6. If you come from the southbound, you do it exactly the same but in reverse.

126. Now if I can now turn to slide A20(11), this is the situation at AP2 and we gave evidence on this, or actually before this plan was produced, but this was produced in late 2019 and we're zooming in now on HS2's proposals for haul roads. I want to pull out a few things here for you to note because I'm going to come back to them. The first thing is that that dark brown shaded area with the red squares or the rectangles in the middle, that is the Yarnfield north embankment transfer node. That is where all of the bulk materials that HS2 needs to construct this railhead, and the railway adjacent to it, needs

to be imported and waste exported. That is where you're going to be receiving one HGV every 30 seconds in and one HGV every 30 seconds out.

127. On the other side of the road you can see more clearly now the worker accommodation which is the red area. You can see the orange area is another satellite compound. The two light blue areas are the batching plant and the launching yard and what's actually off the drawing to the left-hand side is another satellite compound, the M6 Meaford satellite compound. You can also see from this drawing more clearly how HS2's re-aligned road is now 50 metres to the north of the existing road and once it comes over the bridge, the M6, it dives into a deep cutting which is up to 12 metres below the railhead and you can see there in that cutting, about a third of the way down from where the motorway is, you can see the access which HS2 believes it should have as a permanent access which I will come back to.

128. You can also see on this plan, the two M6 slip roundabouts: one on the southbound which is more into the middle of the plan and the one at the bottom of the plan is on the northbound M6 and, most interestingly, you can see HS2's new proposals for trying to make access on to the M6. We challenged HS2 in evidence at the House of Commons in 2019 and said it was not feasible to build an access on to the M6 and still use the existing Yarnfield Lane because they were going to bury the existing Yarnfield Lane under many, many metres of fill in order to build the embankment to build the re-aligned Yarnfield Lane. I hope you're staying with me, it's quite complicated. I'm going to come back to that particular issue because we have grave concerns about whether that is remotely feasible or safe in terms of the construction.

129. But I want to return now to the number of HGVs which are proposed for the Yarnfield north transfer node and the two satellite compounds. So if you look at A20(12), this is an extract from HS2's volume 5 transport assessment addendum, which is in support of AP2, so it's the latest version of this plan and I've tried to highlight, it's probably not that clear, but if you look at transfer node, which is the third row down, if you go over to the right-hand side, you'll see 1,886 to 2,329 HGVs a day. Now those are HS2's numbers; they're not my numbers. They don't tally with that histogram, the latest histogram that I showed you either. Just to explain, 1,886 HGVs means that 943 are going to come in, and 943 are going to go out. That is the average over what they call their busy period of five months. The peak is the 2,329, which they are saying is

going to happen in August 2022. If you look back at the same table that they produced in the environmental statement in 2017, those numbers were approximately half. That means HS2 has increased the number of HGVs that are using our transfer node by double. That causes us great concern.

130. The environmental statement, which accompanies the original application via the hybrid Bill, should be accurate. It is not accurate. HS2 will constantly say to your Lordships, and I heard them say it many times yesterday, that they look at a 'reasonable worst case'. We don't accept that they've ever looked at a reasonable worst case when it comes to Stone. At best, they've looked at an optimistic case, or probably a very optimistic case when it comes to road transport issues.

131. If I can go now on to A20(13), I'm putting the transfer node that we've got in context with the transfer node along the rest of Phase 2A. You can see I've highlighted the Yarnfield north embankment transfer node. They're the numbers from AP2. They are the numbers for all the other transfer nodes which are along the entire route of HS2. I have to tell you, I have produced some big reports on borrow pits. I will be publishing them very shortly. I heard it said yesterday that HS2 has managed to reduce the number of HGV movements. I think there was some questions about how they managed to do it from your Lordships. They've done it because they are claiming that they can move more materials along the trace than is actually physically possible. The point of this slide is to emphasise the magnitude of what's proposed at Stone compared to other transfer nodes. Some of these transfer nodes, particularly the A53 at Whitmore South and the one at Basford cutting are going to be supplied with materials from this transfer node.

132. If I can now turn to A20(14). Actually, rather than A20(14) I think it might even be more useful to look at slide P38(20), which is what HS2 produced as part of its evidence pack in response to our parish council's.

133. THE CHAIR: That's under tab 2 in our big bundle.

134. MR PARKIN: P38(20). HS2 – and Mr Mould actually mentioned this, about how helpful HS2 has been with us. I have to concur when it comes to this particular plan because it actually demonstrates that what it proposes in this transfer node is completely unfeasible. What it shows – and it's quite difficult to read so I'll do my best

to try and explain it. What it actually shows is how they actually think this transfer node is going to be operated, bearing in mind that it's going to be taking up to 1,200 HGVs in a day, one every 30 seconds. What you can see there is that with the HGV operations, they will enter from the yellow road on the bottom left-hand corner.

135. They're actually shown by these turquoise lines; I don't know if you can pick them out. They're quite difficult to read but they are the lines which show the movements through that transfer node by HS2's HGVs. You can see they circle to the left; they go in a clockwise direction, possibly over a weighbridge, possibly not, depending on how HS2 wants to manage its internal movements of materials. Certainly, if you're importing materials from commercial locations, you'd want to go over a weighbridge on the way in and over a weighbridge on the way out. Then there's a wheel wash. I don't know if you can pick out the wheel wash, the writing is so faint and small but it's a sort of square box in a turquoise green.

136. You normally wheel wash vehicles on the way out, not on the way in, but hey-ho. Anyway, the vehicles would rotate round and then enter into those red box zones from the topside of the plan. If you look at the right-hand side of this plan you can see there's an arrow pointing to ADT access. Now, an ADT is an articulated dump truck, not an HGV. These are off-road going dump trucks. The ones that HS2 is proposing are 45 tonnes. Now, 45 tonnes is actually American tonnes. It refers to the actual carrying capacity. When fully laden, these things weight 72 tonnes, compared to an HGV, which weighs 38 tonnes, 40 tonnes. They are all going to be operating down in the excavation areas and they're going to be covered in dirt. They're going to be coming in and loading up into this area, at the same time as you're going to be trying to load out HGVs. Because they can carry twice as much as an HGV, instead of having one every 30 seconds, you're going to get one every minute.

137. But you can't load or unload a vehicle in that space of time. It's going to take five minutes, 10 minutes, possibly longer to do these operations. Particularly when you have to wash wheels. You have to weigh things. You have to have tickets. You have to have health and safety arrangements in place. You have to back in to locations where you can be unloaded and loaded. You're going to have what's here; it's going to be, I would say, a carousel of chaos. You're going to have so many HGVs coming in; you just literally can't get them back out again. All these HGVs are going to have to travel

back to other transfer nodes or to other destinations where they have to be reloaded and come back. One every 30 seconds. I showed this to a friend of mine who's managed civil engineering operations and he laughed at this. It is just not feasible and yet this is what wants to be imposed on us at Yarnfield.

138. I would also say that when you operate a site, if you've ever been on a site – and I've been on many civil engineering sites and in fact, much dirtier sites than even most civil engineering sites. Keeping the site clean is virtually impossible, particularly when you're mixing vehicles which are coming from the field with vehicles which are not from the field. You have to keep them completely separate. The situation here is that this is going to be operating for at least four and a half years. It's going to have to go through many winters. The winter conditions on sites are horrendous. You've got less hours. You've got inclement weather. You have vehicles being covered in mud from the excavations. We've all followed a tractor down a road when it's pulled out of a field in the autumn, let alone the winter. You know what the roads are going to be like. HS2 has no ability to operate this transfer node whatsoever. That is just the start of their problems.

139. Throughout this process, and Mr Mould touched on it earlier, we have been asking for HS2 to verify its HGV numbers. I've already explained to you how the numbers have completely transformed and changed. HS2 is admitting more and more and more to increases in number of HGVs. In fact, if you look at the latest histograms that it presented in its evidence pack, we don't need to go over them but 24-27, if you want, of A38. They've increased the numbers further still. We have said to HS2, and it's common practice, by the way, in any major civil engineering operations, that the developer, the promoter in this case, would actually produce what's called a transport logistics profile where at every single location where it interacts with the road network it would actually identify. It's effectively a big spread-sheet. It's a spread-sheet which actually has the programme across the top and all the tasks down the side. We have asked for three years for HS2 to support their claims about the number of HGVs with a transport logistics profile.

140. If you look through all that correspondence which was being talked about earlier, which we've had, we have repeatedly asked them all the way through the year. They keep saying the same thing, 'It's not something that needs to be addressed prior to Royal

Assent.’ Without a transport logistics profile, and given the history of the fact that HS2 has changed its position on multiple occasions about the number of HGVs, including what you heard yesterday from the people of Woore, none of their numbers can be believed unless they provide the evidence.

141. Let’s have a look at the ability of HS2 to actually navigate back on to the northbound M6, which it has claimed that it’s able to do. If you could go to slide A20(15) please, this is what HS2 provided us two weeks before we went and gave evidence to the House of Commons Select Committee for the third occasion on 7 May 2019. We used this in evidence against them. This plan, you can see how poor the resolution is. You can’t read virtually where Yarnfield Lane is but we actually know that Yarnfield Lane crosses the M6 in a dead straight line. Yet, miraculously, when this plan was produced it was suddenly offset by six degrees to the south, Yarnfield Lane, enabling them to show to the Committee, the House of Commons Committee, that they could U-turn and get underneath their new Yarnfield Lane and access the M6.

142. At the time, we challenged this and said, ‘We don’t believe it. You’re burying Yarnfield Lane under huge amounts of embankment. Please provide us with an engineering drawing.’ Unfortunately, we didn’t get the engineering drawing until November 2019. That was not only six months later, it was three months after the Bill had got its Third Reading and come to the Lords. So we’ve not got, if you turn to A20(16), HS2 have produced this in its evidence as well. This is HS2’s plan on how it’s going to get from the existing Yarnfield Lane as a haul road, underneath the realigned Yarnfield Lane and join on to the permanent access for the motorway, which is coming back off Yarnfield Lane, on to a roundabout that it’s creating on the northbound side.

143. Now, there’s some pretty interesting things about this. The first thing to note is that that embankment which the new Yarnfield Lane is on is 12 metres high. You can see that at the western end of it, which is at the bottom end of the drawing, it is actually completely burying the existing lane, which is what we knew was going to happen. HS2’s yellow road, or the yellow brick road as we like to call it, actually has a very, very tight U-bend. The only way that it can physically actually get that to stand up under that embankment is for it to put piling in. In fact, it’s got over 200 metres of retaining walls. That’s going to cost a fortune for a temporary road. Technically, it might be feasible but it’s going to be a very, very expensive operation and it’s going to

have to be removed.

144. You will also see, at the roundabout you'll see a yellow road joining that roundabout. That is a road from the Swynnerton north cutting site to north of where we are. It's about four kilometres away. I'm going to come back to that point because it's a very useful thing to know but if you go back to the yellow brick road, it is 200 metres long, has a gradient of 5%, is only seven to eight metres wide at the straight point. It's wider on the curves. In wet, icy conditions, it's going to be a nightmare. It's particularly going to be a nightmare because we've asked HS2 repeatedly to say whether it plans to bring articulated dump trucks along that yellow road and along to that roundabout, around the roundabout and along the yellow brick snaking road. It has refused to do so. In fact, it has allowed, in its calculations for the importation of 220,000 cubic metres of granular fill from the Swynnerton north cutting. Those numbers are not included in its HGV numbers.

145. If you put articulated dump trucks on that snaking road, which have all come from a long distance away on an unsurfaced haul road, they're going to be absolutely filthy, particularly in the winter. Then you're going to be trying to mix them with HGVs on a road that is not wide enough, which is incredibly slippery. It is a recipe for chaos and casualty. It will end up with people being hurt. They won't be members of the public in this case; they will be HS2 operatives, people who drive their trucks. I can give you the references for these various things but I'm conscious of time so I want to move on.

146. I want to now move on to the geological situation which HS2 has not resolved and which will further demonstrate that the Yarnfield or the Stone railhead IMB-R is simply not a feasible operation. The drawing A20(17) are drawings which have been produced by HS2 which I have put on a slide for you. They show a typical HS2 embankment and the different types of material that need to be used to build an embankment. The important things to know from this is that it requires what's called granular material. Granular material is basically decent rock. However, the better it is the more it can be used higher up the profile of the HS2 embankment. HS2 needs to bring a phenomenal quantity of granular material into the Yarnfield north transfer node. If you now look at A20(18) you will see that this is another plan helpfully provided by HS2 to us which is a plan of the geology of the Stone railhead in relation to where the railhead is located.

147. Again, I don't expect you to be geological experts but essentially this whole site, this whole area in fact, a good section of this railway from the M6 south through most of South Staffordshire, is going to be constructed using – or it's actually constructed over something called the Mercia mudstone. If you go to drawing four, A20(19) there's a helpful photograph of what Mercia mudstone looks like when it comes out of one of HS2's trial pits. It's basically weak clay. In fact, if you look at any of the HS2 borehole logs, which I have, the drillers describe it as 'exceptionally weak'. Now, to make matters worse, if we go to A20(20) this is a cross-section taken from the same plan as A20(18) which shows the Mercia mudstone as the under lying geology. What you can also see, do you see the railway where it is quite a long way away from the ground level in the valley there? That is where the Stone railhead is going to be built. You can see they've highlighted the Norton Bridge to Stone railway viaduct.

148. What this geology plan says, and by the way this is a geology plan which is not updated by HS2's own boreholes, so ignore all these borehole references. They were all done for the motorway back in 1994. They've got nothing to do with HS2's current investigations. But you'll see a little upturned saucer of yellow and orange. That's basically showing us that they've got metres of alluvium underlain by glacial material underneath where they want to build the highest part of the Yarnfield north embankment of the Stone railhead and the railway embankment next to a very large viaduct, which they're building over the railway.

149. If you go to A20(21), this is another plan of HS2's, we've superimposed the actual footprint of the highest part of the Stone railhead. That is in the bottom right-hand corner. That's the grey slab area. You can see the number of actual investigation holes that HS2 has got underneath the footprint of that. Basically, they're building that railhead out of Mercia mudstone, that red stuff that you've seen, clay, on top of 10 metres or more of rubbish underlying the site. It's basically glacial material or alluvium. It's very, very soft. It's not going to stay there.

150. HS2 think it's okay to have a handful of boreholes. We asked HS2 a long time ago to provide us with its ground investigation because we can interpret geological plans produced by the BGS. If I had seen a plan like those ones HS2 has produced I would have been extremely worried and I would have peppered that grey area with boreholes. They've got five. Three of those are actually along the railway.

151. THE CHAIR: Mr Parkin, I wonder whether this might be a moment to pause just for five minutes so that people can –

152. MR PARKIN: Can I just do the next couple of slides?

153. THE CHAIR: Yes. Yes, if that's convenient.

154. MR PARKIN: Yes, because I then get on to a different point. If that's okay.

155. THE CHAIR: Right.

156. MR PARKIN: So A20(22), I've summarised the results from HS2's five boreholes in this location. You can refer back at your leisure to A20(21) where they're located. But the bottom line here is that they have artesian water underneath the site as well. Now, if you're not familiar with artesian water, that basically means you dig a hole and suddenly water comes flying up at you because the ground water is under pressure. So they not only have very poor ground conditions with very weak materials, they also have artesian water. You couldn't wish for a worse mix of materials to start with. But if you look at borehole CR137, they didn't actually find the Mercia mudstone to a depth of 13 metres and 11 metres of that is what's called 'head'. Head is glacial material which you would never in your right mind try and build anything structurally on top of without having some very serious foundations constructed.

157. If you look at CR102, they didn't even find the Mercia mudstone; they gave up because of artesian water. Yet, HS2 thinks this is sufficient in order to design and put forward, as Mr Mould has already said, the largest part of their construction project on Phase 2A, the Stone railhead. They had no idea what the ground conditions were when they came up with this plan, or they should have done because the BGS information said it was bad. Everything that they've received in their own investigation says it's worse than even the BGS thought it was going to be.

158. HS2's proposals for dealing with this is in A20(23) if you'd like to have a quick look at that. That, basically, the shaded area, HS2's great plan for dealing with this weak material is to dig out two metres of material, bearing in mind they've got up to 10 or 12 to 13 metres of weak material underneath them and replace it with granular material. That is not adequate. That will never be adequate. That's also under their

own railway embankment. A railway which is going to be taking trains travelling at 360 kilometres an hour. This is a recipe for disaster. HS2, when we've challenged this, they've come up with the idea, 'Well, we might do some ground mixing.'

159. Ground mixing is a technique which is not particularly well tested in the UK as far as I understand that basically involves auguring a bit of material, ground material and chuck in a bit of cement in and mixing it together and seeing whether that will make the ground a bit firmer. They have no idea whether that's going to work. Yet, they think it's sufficient to be able to put this through to Royal Assent with absolutely no idea whether this thing can be built. We don't think that's acceptable and that's why we have constantly challenged the technical details that HS2 has been providing. You've heard from Mr Mould that they have done so, they say gladly. Well, I would say, if you look at the correspondence, highly reluctantly. But we've gradually got more and more information out of them. Every time they provide us with more information it further undermines their engineering case.

160. Now, we're happy for anybody, independent engineers, to look at this and see whether they think all of these factors make this development feasible. We say not. I will pause there if that's okay. We can pick up the other –

161. THE CHAIR: Yes. We'll pause for five minutes. I would be grateful if everybody could be back as promptly as they can in five minutes' time at 12 o'clock.

Sitting suspended

On resuming –

162. THE CHAIR: Yes, Mr Parkin?

163. MR PARKIN: Yes, can we look now at slide A20(24)? This is an HS2 slide again. This shows their railway embankment in more simple terms, where they call it 'high quality material'. That's granular fill that I've mentioned before. That's rock, effectively. And what they describe as 'normal quality cohesive fill'. There's nothing normal quality about the Mercia mudstone. It's not good material. That's the only point I want to make on that.

164. If we can return to A20(3) first of all, this plan is, as I say, the stitched together

plan that I've shown you before. It just shows you the massive extent of the Yarnfield proposals, particularly the fact that you've got this very large strip covering three kilometres. Therefore, in order to build the railhead and to move materials around the site, it requires materials to be moved from the south and the north into that central area between Yarnfield Lane and Norton Bridge railway, where the highest part of the railhead embankment is going to be located.

165. If we can now turn to A20(25), this drawing here shows – we've simplified what you saw on A20(3). If I can just explain. Again, you've got the internal haul roads here but the blue or the turquoise blue areas, are the areas where they cut, where HS2 will excavate material. The green areas are where they fill. You can see that most of that fill area is between Yarnfield Lane and the Norton Bridge railway. If I can just emphasise the quantities of materials that are required to do this. In A20(26) you've got a summary. Now, these numbers have been taken from the report that we received from HS2 in December 2019 together with information that has come to light since.

166. And I just want to emphasise what exactly we're involved in here in building this thing. This table has separate columns for granular and cohesive. Remember, the granular material is the solid rock. The cohesive is the Mercia mudstone and the head and the alluvium, which is not much use. You can see that the fill requirements HS2 needs for the Stone railhead IMB-R essentially are 1.828 million cubic metres of which only 344,000, it says, is granular. The rest is cohesive. It then needs, in addition to that, 790,000 cubic metres for the adjacent railway embankments of granular. The cohesive material in this case is just material that they think they're going to landscape with on the sides. That takes the total requirement of stone to build this of 2.3 million cubic metres of materials. Just to emphasise exactly why so many HGVs are required because so much of this material needs to be imported.

167. HS2 have never been transparent, as I have said to you, about how they've calculated the number of HGVs. But we have to assume that the number of HGVs that it's told us most recently correspond with the figures that were given to us in December 2019 and March 2020. But there are some key elements that seem to be missing. I've highlighted those at the bottom. They need 129,000 cubic metres to be transported. They've admitted this is the way it's going to go, from the site, across the existing Yarnfield Lane bridge – the existing one while the public is using it – to build the

embankment of the realigned Yarnfield Lane bridge. I've estimated that most of that they think they can use cohesive. They will certainly need a certain amount of granular.

168. They've admitted to us, in the letter of 17 April, that they need another 160,000 for five different sites. I won't go into the detail. We also think that we've got considerable reasons to believe they've never included 185,000 cubic metres that they need to replace the original 449 metre long viaduct which was going to cross the Norton Bridge railway and the Filly Brook valley with extended embankment. And, I said to you before, that they've only treated two metres of ground over part of the site. If they treated two metres of ground over the rest of the site where they're going to build their embankments, they would need another 160,000. That's 525,000 cubic metres of granular fill, which I don't think are in their numbers. That is another 105,000 HGV movements.

169. We've already demonstrated that this site cannot cope. It cannot deal with the amount of traffic that's going to be imposed upon it, either at the transfer node or indeed the means of getting it there. I would then draw your attention to the next slide, 17.

170. THE CHAIR: It can't be 17.

171. MR PARKIN: Sorry, A20(27), apologies. That is a picture of the Norton Bridge to Stone railway. They need to cross the Norton Bridge to Stone railway both by the HS2 mainline but also with their haul road to bring all that material from the south, which I showed you in drawing 25, into the site. That railway is electrified. It sits on a small embankment and it currently has six passenger trains an hour. Despite what was said in the House of Commons in April 2018, six passenger trains an hour use that. HS2 need to build a haul road over the top of that. We have no idea what that haul road looks like, how they're going to build it but we do have an indication that it is going to be used as part of the reception tracks to get into the site.

172. If you look at their programme, which I think they helpfully provided at A38(5), it needs the Norton Bridge to Stone railway underbridge to be built and the adjacent embankments and haul roads either side and part of the stone embankment to enable it to get across this railway. If you look at that Norton Bridge underbridge, you'll see that it's not actually completed until the end of 2024. Yet, HS2's peak transport movements in from these cuttings to the south happen in August 2022. It's another example of how

their scheme just simply doesn't add up, it doesn't work, and why it needs to be re-examined.

173. Finally, I turn you to A20(28) on this particular section which is a haul road. Now, I've spent my career dealing with some pretty big sites, which involve building unsurfaced haul roads. The Health and Safety Executive have certain stipulations about how these roads should be built and how they should be operated. You need basically three and a half times the width of dump truck in order to have a running track. Then you need two berms either side in order to make sure the trucks don't roll off the side. You need to build this unsurfaced road out of good quality material, granular material ideally, at least 1-1.2 metres off the ground.

174. If you look at HS2's plans they don't have wide enough haul roads anywhere but if you actually were to build this you would need a cross-sectional area of 25 metres squared. The road between the Swynnerton north cutting and the M6 northbound roundabout, which HS2 has shown on its plans, is four kilometres long. It will require 100,000 cubic metres of granular fill to build that road. HS2 has a railway which is 57 kilometres long, nearly 58, which has haul roads along its entire length, and sometimes on both sides. In total, that's 1.5 million cubic metres of granular fill, which is nowhere to be seen in any of their calculations. We have actually asked HS2 repeatedly about this point. They recently gave us a response to reassure us that this granular fill was included in its calculations. My message to HS2 is, 'Show us the evidence.'

175. I've finished talking about Stone railhead at this point. I would like to introduce Aldersey's Rough, our alternative scheme, if that's okay.

176. THE CHAIR: Well, I don't think you should. You've got a lot of other material but we're not prepared to consider that or make any recommendation about it. That will have to be dealt with – I mean obviously you've got the material there but really, in view of the other things you've got to cover, I think you should spend your time on that rather than on something we simply cannot consider.

177. MR PARKIN: Well, it's fundamental to our case.

178. THE CHAIR: I know you think it is but equally fundamental is we simply cannot deal with it. I mean, really, I'm anxious that you shouldn't waste your time in material

we simply cannot deal with.

179. MR PARKIN: I did say in my introduction and the ruling that you had issued to us was that it was highly unlikely that you would make a recommendation. And if you cannot make a recommendation we would at least like you to report on what you hear about Aldersey's Rough because it's fundamental to our case.

180. THE CHAIR: I don't think we're likely to do that. It's really a question of your use of time. You've got other things to cover. You should concentrate on that. You can come back to that if you've got some spare time at the end if you think you want to but I would much rather you dealt with the issues. We've got three things on the table which you wanted us to make recommendations about. We've not yet heard about them.

181. MR PARKIN: I was going to deal with those this afternoon because I've got Mr Byng waiting. Mr Byng is going to be letting you know that he has undertaken a cost analysis of the construction of building the Stone railhead, in comparison to Aldersey's Rough. The proposals that we are wanting to put on the table would essentially save HS2, and the UK government, £93 million. That's why we think you should listen to the evidence on Aldersey's Rough.

182. THE CHAIR: All I can do is issue warnings to you that we're tight for time. You put these three things about Yarnfield Lane, which I think we do need to hear about. I would like you to make sure that you've got enough time, if you want to pursue these three points, so that we can actually assess whether there's something which we need to have a reply from Mr Mould on.

183. MR PARKIN: Okay, well I can cover those points now. Then, maybe if there's time I can come back.

184. THE CHAIR: I think it might be helpful. It will give Mr Mould reasonable notice of the things that he has to cover.

185. MR PARKIN: Okay, in which case I would like to move to slide A20(54). this is the first point that we want to make about Yarnfield Lane in the event that the railhead, obviously, gets constructed. I've already mentioned the number of HGVs that will be

on Yarnfield Lane. Particularly, the realigned Yarnfield Lane during the construction period, Phase Three, which was over 300 a day and an average of more than 200 a day. If you look at this slide, you'll see that HS2's own technical standards require it to actually build a road which takes more than a certain amount of traffic to a width of at least six metres, for occasional use by buses or heavy goods vehicles and 6.8 metres for roads where buses or heavy goods vehicles are likely to pass each other on a regular basis. I would argue that having 200 to 300 HGVs on the realigned Yarnfield Lane fits the criteria that it should be 6.8 metres.

186. Contrary to what Mr Mould has said earlier, we gave evidence on this and we have constantly made the point that the road should be made to be 6.8 metres where they're using HGVs. In fact, back in 2018, we actually said that we think it should be temporarily that width and then reduced to the normal width once HS2 construction has finished. Then we have a path or a cycle track. Things have moved on since then. If I show you A20(55).

187. THE CHAIR: Before you move on, do any buses use Yarnfield Lane?

188. MR PARKIN: Yes, they do.

189. THE CHAIR: They do?

190. MR PARKIN: Yes. School buses and buses between the village and Stone and actually go on to Stoke-on-Trent and Stafford.

191. THE CHAIR: What sort of frequency?

192. MR PARKIN: To be honest, I don't know the frequency. The buses we have obviously, we have a school in Yarnfield. We've got 2,000 people that live in Yarnfield. They travel to the high school in Stone and the middle schools in Stone because we have a three tier system. So at the beginning and the end of the day we'll have school buses. We actually also have the bus which is the public service. I suspect it is, at the moment it's probably reduced but it probably was one every two hours or something. I don't know for sure. I can get back to you with that information.

193. THE CHAIR: Thank you very much.

194. MR PARKIN: A20(55) is a slide, which again we've previously produced. I won't dwell on it other than to say that we were supported by the county council in our request for having a wider road when HS2 were putting hundreds of HGVs on it. A20(56) is HS2's response to us. I think you've heard evidence on this subject from Cycling UK where it proposes in this document, which was produced in March, to actually have a six-metre-wide carriageway. So not 6.8 metres, and a verge of 2.5 metres on either side on the new M6 overbridge and, for one of the underbridges, a three-metre-wide verge. That is not adequate. In fact, it doesn't cover the other underbridge and it doesn't cover the cutting, which I've shown you previously, or the embankment which would be for the new realigned Yarnfield Lane.

195. We have been in discussions with our friends at Cycling UK and a company called Greenways and Cyclerooutes Ltd, who work with Cycling UK a lot. They have produced a plan which I think would have been given in evidence to you had it been ready in time. This shows Yarnfield Lane and it shows you their recommendations for a cycle path and footway. If I can just summarise that, section four is the overbridge. What they're suggesting is that we have a six-metre-wide carriageway. We use what HS2 is offering, a six-metre-wide carriageway, a one-metre-wide verge on one side but a three-metre-wide track on the other side so that cyclists have a safe place to ride.

196. I won't go through the details. You can look at them yourselves but section 3 covers the underbridges. Section 2 covers the cuttings and section 5, the western embankment which is from Moss Lane up to the M6 motorway overbridge where we would require a – it's 550 metres long, by the way, that section – a 2.5-metre-wide path to be provided on the north side of the road with a protective verge. This is because cyclists need to be protected from traffic and particularly from heavy goods traffic. It wouldn't actually add to HS2's costs in relation to the underbridge and the overbridge. It would just mean that they would offset the track on one side rather than the other. However, we do need that provision to be included for the entire length of the realigned Yarnfield Lane.

197. We also gave in evidence to HS2 that Yarnfield, unlike probably many other communities, is probably going to suffer the greatest disruption from this whole proposal, and Stone too. Therefore we request that a cycle track be included along the entire length of Yarnfield Lane. There is a very steep section of Yarnfield Lane at the

eastern end, which would need to be bypassed, which is shown on that drawing. Again, there is a proposal there from Cycling UK as to what we would like to see provided. Is there any questions on that particular item?

198. THE CHAIR: The diversion, is that the kink at the top of the line?

199. MR PARKIN: The red kink, that embankment there, that wooded embankment, you may have driven up it when you had your site visit, it's about one in seven, one in six. It's very narrow, very steep.

200. THE CHAIR: Yes.

201. MR PARKIN: We're suggesting that there would be a track taken at a suitable grade, one in 20, down the slope, offline. That would require additional land unfortunately but the rest of this work, certainly the works on the realigned Yarnfield Lane, can all be done within the Bill limits.

202. THE CHAIR: Yes, I think you can proceed. I don't think there are any other questions.

203. MR PARKIN: Okay. If I can then turn to the second point, which is about the junction in the cutting, the new IMB-R cutting and new IMB-R junction. If you refer back to slide A20(11), again, we've made these points to HS2 repeatedly so I'm not quite sure why Mr Mould thinks he hasn't heard about it. But the situation is that that access is coming out on to a slope of six degrees, which is about one in 16. If you look at slide A20(58) this is recommendations about vertical alignment in the current guidance on building junctions, highways, etc, TD4295. This, contrary to what HS2 has said in its report, has not been superseded. It is still the current guidance. You can see that the recommendation there is that you should not be building a new junction on a gradient where the approaches exceed two percent. HS2's gradient here is six percent. Actually, even if the new guidance had been issued, and it's been withdrawn, CD 123 is what it's called. It actually has the same provision. So first of all, it's not a safe place to put a junction based on the vertical alignment.

204. I'd then like to talk about design speed of the road. There's been quite a considerable amount of debate between us about design speed. If you look at A20(59),

HS2's defence of its position on this is that its carried out some ATC surveys. Now, they're automatic traffic counts. They do record the speed of vehicles crossing over a tube. You've probably seen the tubes in the road. They do not record free flow speed. They will only record vehicles travelling at the slowest vehicle in the line. The point to make here is that TSL107, you can see, is actually on the other side of that steep, wooded embankment we've just talked about where you've just come off the A34 or just come down a steep bank before the A34. Traffic will not be travelling at the normal speed of Yarnfield Lane at that point. TSL107 is irrelevant.

205. Of the other two, it's important to note, if you look at A20(60), that when the surveys were carried out – if you look at TSL29, it was actually carried out in December 2015. So it's the wrong survey at the wrong time of year. People don't travel as fast in December as they would potentially do when it's dry conditions other times of the year. But you still see that the average speed on that section, even with the idea that it's the wrong kind of methodology, was 44.8 miles per hour and an 85th percentile statistical analysis of 51.7. A more relevant number, if there is one, although again it's still an ATC, is TSJ5, which is actually our side of the motorway. That 85th percentile, 55.3 miles per hour, I'm told by our traffic specialist that that would warrant a design speed of 60 miles per hour anyway.

206. This is a de-restricted road. It has people travel at 60 miles per hour. Some people travel faster than the speed limit. So the design speed for this junction should be based on 60 miles per hour. If you now turn to A20(61), you can see, this is again extracts from TD4295, it shows a typical bell-mouth like HS2 is proposing in the little drawing on the left-hand side of that. You can see that it refers to an X-distance, which is the distance that you have your visibility splayed back from the carriageway. The widest, and this is the distance that you should be able to look. If I'm a driver sitting here I want to be able to look in both directions before I turn out. The visibility splay is also important for vehicles approaching the junction. That's what the guidance refers to. It talks about the minimum stopping sight distance.

207. A20(62) is further elements of their guidance. You can see that the design speed of 60 miles per hour is actually 100 kilometres per hour, because they now use metric units. That requires a Y-distance of 215 metres. The level below that is 160 metres, but that's a 50 mile/hour road. We have a 60 mile/hour road. We have a 60 mile/hour

design speed requirement. If you did a free flow assessment that's it would show, we believe. If you look at paragraph C in the black box about that, you'll see that it normally talks about having an X-distance of nine metres. That then can be relaxed, in paragraph 7.8 on the right-hand side of that slide, to 4.5 metres for 'likely traffic simple junctions' and 'only in exceptionally difficult circumstances' to 2.4 metres back from the junction.

208. HS2 are building a brand new junction on a brand new road. And yet they have decided, unilaterally as it seems, that they're going to build a junction with a visibility span of 2.5 metres – so they're looking for the maximum exemption – and only 160 metres long. And they say, 'Oh, this will all be sorted out with the highway authority in due course', remembering the fact that this junction is actually on a slope which is greater than 2%. That's not safe. People now ride quickly, or ride bikes, particularly motorbikes, or drive cars on Yarnfield Lane faster than they should. What HS2's doing is creating a straight downhill section with a dangerous junction; this will result in accidents. And we have requested that this needs to be addressed and the only way of addressing it is that that junction cannot be built at that location.

209. And if you go back to the map of where it could – which would probably be A20(3) – the only place that you could sensibly build a junction would be to the east of the HS2 mainline where there is flat ground and where HS2 has within its Bill limits. That would mean that they would have to find a way underneath another route, underneath their mainline railway, but that's the only safe location you could put that junction.

210. That's all I wanted to say – well actually you can see that junction on A20(63) in more detail should you wish – that's the finished article of HS2's proposal. I then finally want to turn to A20(64) which is the issue we have with the A34/A51 roundabout. And again, contrary to what's been said, we gave evidence on this back in 2019. We haven't got so many slides on this. This is an aerial view of the A51/A34 roundabout. On the left-hand side, you can see the Brooms Road, and that's known as the Stone Business Park; that's the big employment centre of our town. On the top side of that drawing, you can see – it's actually a cemetery. And the A51, which HS2's vehicles will be travelling along, will be coming from the right of that drawing to the roundabout, travelling west towards the A34 and then turning south, mostly turning

south, to access the Yarlet construction site. Now what HS2's proposals do, because it's going to create considerable congestion at this junction, it is proposed to build a free-flow lane between the A51 west and the A34 south, which will effectively allow vehicles to be able to come round that corner without stopping.

211. You can see on A20(65) what that junction looks like at ground level. You can also see that there is an uncontrolled access across the A51 there; you can see where the kerbs are down and just where that – I think it's a BMW – that car is shown in that left-hand lane, that's the existing arrangement. HS2's planning to put another lane in there, on the right-hand side of that photograph, and effectively allow its HGVs and all other traffic to just go straight on to the A34 without stopping. As part of the debate on this, HS2 – and I think you might have had it when you heard from Cycling UK who are very opposed to what's being proposed here – HS2 think the solution here is a pedestrian crossing where riders of bikes will actually get off their bike, actually get on to the A34 pedestrian way, walk around to a pedestrian crossing, press the light, walk their bikes across, walk across the crossing and then at some point try and get back on the A34.

212. Cyclists are road users like everybody else; they're entitled to ride a bike on the A34 dual carriageway southbound from south, or from the Brooms Park where people work, they're entitled to ride a bike round that roundabout and to do so safely. HS2's proposals will not allow that; they're reducing their congestion problem that they're creating by – again I will quote my colleague, Gordon Wilkinson, on this – 'by creating a killing zone for cyclists'. But so far, the debate between themselves and Staffordshire County Council seems to be on the idea that a pedestrian crossing is the solution; it's not the solution, it is anything but the solution. And both ourselves and Cycling UK want to have this issue re-examined, and Cycling UK have asked for ourselves to be present in discussions with the Department for Transport, with HS2, and Staffordshire County Council, because we just don't think the interests of the population of Stone are going to be served if neither ourselves or Cycling UK are there.

213. So that's our request. And just at A20(66) to illustrate the point about HS2 having got the wrong end of the stick, they produced this drawing in evidence when Cycling UK – or these two drawings – when Cycling UK were giving evidence. And you can see they're referring to National Cycle Network route 5 as being what cyclists should be using, and that that means heading down the canal towpath, way to the east of where the

A34 and the business park is, and then that somehow again is the solution to the problem. This is not about leisure cyclists per se, who might well use that route, and HS2 should make provision if they're going to upset that route. This is about the safe building of a roundabout between two A roads at Stone.

214. That's all the evidence that I want to give on those three matters, Your Lordships. So I don't know how –

215. THE CHAIR: Yes, well thank you.

216. MR PARKIN: We're still requesting we give evidence on Aldersey's Rough after lunch, if that's possible.

217. THE CHAIR: At least it's out on the table for us to look at later, when Mr Mould replies; thank you very much.

218. MR PARKIN: Just one other point, I've just been reminded by my colleague, Mr Gould, Mr Gould has evidence in his section, which I was going to go to after Mr Byng, about Stone which is in addition to what I've got to say, as does Mr Byng. So it's not all about Aldersey's Rough, the bits that we haven't done yet.

219. THE CHAIR: Yes. Well before on, an opportunity for any members of the Committee to ask questions on these three points.

220. LORD HORAM: One, on your second point about a new junction, does that involve additional provision?

221. MR PARKIN: No.

222. LORD HORAM: Are you sure about that because you're asking that the junction be placed in a different place?

223. MR PARKIN: Are you talking about the junction of the Yarnfield, sorry the Stone IMB-R?

224. LORD HORAM: Yes.

225. MR PARKIN: Yes, if you look back at A20(3), which is our stitched together drawing of the entire Stone railhead, you can see that that junction is entirely within the

pink area of the railhead, IMB-R; so it wouldn't. And our alternative would be to the east side of the HS2 mainline which, again, is in the pink area because the pink area extends all the way up to where the transfer node is. There's a roundabout on the left.

226. LORD HORAM: But surely that involves additional provision?

227. MR PARKIN: No.

228. THE CHAIR: So it's on the east side of the railway within the –

229. MR PARKIN: Within the building.

230. THE CHAIR: Within the line.

231. MR PARKIN: Yes.

232. THE CHAIR: Within the build.

233. MR PARKIN: Yes, that's where we would suggest they put the junction. And they're building a junction, they're building a whacking great roundabout where the existing lane and the realigned lane meet, and then they're taking it out again.

234. THE CHAIR: Good. Any other questions? Oh, I think you can proceed then. Where do we go to next?

235. MR PARKIN: Oh, if I can return to the slide – hang on, I'll just find my bearings if that's okay – so if I can go to A20(29), and I will give a brief introduction of Aldersey's Rough.

236. THE CHAIR: No, you're moving into forbidden territory, are you?

237. MR PARKIN: I thought you said I could just restart.

238. THE CHAIR: No, no.

239. MR PARKIN: I thought you said I could restart. Are you saying I can't restart?

240. THE CHAIR: Well, I've already made our position clear that we are not going to make any recommendations.

241. MR PARKIN: In which case, I'll call Mr Byng.

242. THE CHAIR: So I think it might be better; yes, if you'd like to take your evidence now. So Mr Byng, you'd like to introduce to us, would you?

243. MR PARKIN: Yes. So let me just get my notes on that. I think Mr Byng's probably best placed to introduce himself. Michael, are you there? Presumably, you're there.

244. MR BYNG: I am there, Trevor.

245. MR PARKIN: Good.

246. MR BYNG: And Lords also, Your Lordships also, okay?

247. MR PARKIN: Yes. Michael has been advising us for a while and we asked him to look at the feasibility and costs of building the Stone railhead in comparison to Aldersey's Rough. And I'd just like him to explain some of the work that he's done. So if I could ask him some questions. First of all, Michael, could you introduce yourself and your qualifications and experience and your knowledge of HS2?

Evidence of Mr Byng

248. MR BYNG: Firstly, I'm a chartered quantity surveyor, I'm a member of the Royal Institution of Chartered Surveyors, the Australian Institute of Quantity Surveyors and the Association for Advancement of Cost Engineering in the United States and Untec in France, as well as being a member of the Permanent Way Institution in the UK. I'm a past chairman of the RICS QS Division worldwide, and I've spent most of my career developing methods of measurement and valuation for major infrastructure works, as well as helping the Chartered Institute of Building on occasion with guidance over estimating practice.

249. MR PARKIN: Thank you, Michael. Were you involved in the Oakervee review, Michael, and what was your role?

250. MR BYNG: Yes, I was. At the request of Mr Douglas Oakervee, I was invited to a meeting at the House of Lords on 6 September 2019 to share my work on the costs at the time for delivery of the HS2 project in its entirety. I did initially do so by presenting

my estimate of costs, which is in the public domain now, to Mr Oakervee's panel in the company of three senior executives of HS2, on 4 October 2019. Following that meeting, I worked with civil servants from the Department for Transport and KPMG advised DfT to reconcile HS2's estimate of costs with my own. And for that work, I was thanked in writing by DfT on behalf of Mr Oakervee for my contribution to the panel.

251. MR PARKIN: Okay, Michael, and can I just ask you, in relation to the funding envelope of £55.7 billion for HS2, what was the figure you came up with for constructing the site, constructing the project?

252. MR BYNG: The fourth quarter 2015 price, I estimated the cost to be £106.564 billion. What I've since done is uplifted it to second quarter 2020, using the indices provided by the Office for National Statistics, that suggests that the HS2 project in its entirety, save rolling stock, will cost in the order of £127.5 billion at current prices.

253. MR PARKIN: Michael, are you very well-qualified then to advise on the cost of building the Stone railhead IMB-R and our alternative at Aldersey's Rough?

254. MR BYNG: I believe that I'm as qualified as any other senior quantity surveyor would be because I work using the common costs language we've created to provide that sort of evidence.

255. MR PARKIN: And you mention the RMM costing methodology. Can you just elaborate on what that is and where it's used?

256. MR BYNG: The RMM is an acronym for the rail method of measurement which has been developed by Network Rail and all of its industry partners, including HS2 Ltd and the majority of HS2's supply chain, to provide a common cost language for the industry. If I may, Your Lordships, quote from the foreword to the 2018 edition of RMM, 'The establishment of such a measurement framework for the rail industry is fundamental to our ability to illustrate what rail infrastructures should cost, will cost and why. Illustrating what railway streams should cost on an acceptable tolerance is a perennial challenge and, in order to provide a coherent answer, common language is needed to instil cross-industry consistencies and support domestic and international analysis and benchmarking'. This was a process in which HS2 have cooperated with

Network Rail from 2014 onwards.

257. MR PARKIN: Okay, and this method is used by Network Rail to cost its railways?

258. MR BYNG: It's now used by Network Rail; it forms the basis of their cost allocation framework and their uniform cost modelling system, and it's being rolled out across the whole of the network.

259. MR PARKIN: And is HS2 using this methodology, Michael?

260. MR BYNG: Well, this is where there's a difficulty. Your Lordships, I also teach construction economics for the industry and, according to professional colleagues, quantity surveyors and cost engineers working within HS2 and its supply chain who support my use, it has been used in part but it is in widespread use within HS2.

261. MR PARKIN: Right. And do you know how HS2 has prepared its cost estimates given that, and do you believe them to be accurate?

262. MR BYNG: Well, let me go how I've done the indication. Firstly, I'm going to quote from the Oakervee review in which I've participated, for which I originally asked the DfT for a non-disclosure agreement for me to sign. They declined to have – well they wouldn't let me sign an NDA – they left me open to use whatever I wanted. So I'm not breaking confidence in telling you what I found. Basically, from contact again with the same colleagues within HS2 Ltd, HS2 appears to rely on a series of interlinked Excel spreadsheets, not connected to any professional management system, which is populated by various quotations or tenders from suppliers. Now if my colleagues got it right, that was actually borne out by the presentations made by HS2's executive, at which I think Mr Smart was present, on 4 October 2019, when the company claimed its estimate was based on a series of linked Excel spreadsheets populated with prices from suppliers. To answer your final question, I do not believe the process and operation of HS2 could offer an accurate or reliable estimate. Of course, the linked quotations do not share the common cost languages in the way they're created, provided in the RMM suite, nor does the process address risk, if at all, in a consistent manner.

263. MR PARKIN: Thank you, Michael. So turning to the complexity of the Stone

railhead and the costs that you've allocated there, and in the report, which is part of our evidence, you've compared that to our alternative site, how would you describe the Stone railhead in terms of complexity of construction?

264. MR BYNG: Well, even if the ground conditions were favourable to build it, it is an extremely complicated process to build. It seems to have to me an unnecessary mixture of separate activities, major engineering activities, which will cause conflict, delay and escalate costs. I think it is, personally, an unnecessarily complicated layout for Stone, and that's reflected in my estimate of costs.

265. MR PARKIN: Thank you. And that's in the pricing criteria that you've used, when their Lordships look at the evidence that you've provided, you've come up with different percentages for various elements on the basis of the complexity; is that correct?

266. MR BYNG: That's correct, that is correct.

267. MR PARKIN: Right. Turning to slide A20(80), can you just say what's on that page in terms of the cost of constructing the Stone IMB-R in your opinion?

268. MR BYNG: The cost – just bear with me so I get it right – my estimate of cost for constructing the Stone IMB-R is just over £371 million, £371.26 million. And it would take – sorry.

269. MR PARKIN: And is that at the quarter four 2015 pricing?

270. MR BYNG: That's the quarter four 2015 prices.

271. MR PARKIN: Yes. And how much would be added to that with inflation to 2020?

272. MR BYNG: Basically, just over 11%; it would take it up to £92.88 million.

273. MR PARKIN: That will be the difference though, Michael. So 11% on £371 million would add another £40 million, wouldn't it?

274. MR BYNG: Well, no, the reduction in time, if you were to go to Aldersey's Rough, cost and time is just over £83.53 billion. If you then adjust the net reduction, if the proposal was adopted using ONS construction indices, the save in cost increases to

£92.88 million.

275. MR PARKIN: Right, okay. And you mentioned there the reduction in construction time. The construction period that HS2 has identified for the Stone railhead is four and a half years. What is the construction period that you've estimated for the Stone railhead?

276. MR BYNG: Five years.

277. MR PARKIN: And in your belief, we could build Aldersey's Rough in how long?

278. MR BYNG: In two years, 104 weeks. It's because the complexity of the operations at Stone, plus the fact the ground conditions which have now been identified, very difficult ground conditions at Stone, similar to those which the HS2 Chairman stocktake report referred to in 2019 over the admissions HS2 did about the enhanced cost of the project.

279. MR PARKIN: Michael, I don't know if you heard the evidence that was given yesterday by the petitioners from Woore Parish Council, but they had a proposal to use the Keele services as a means of access into the general area of the northern part of the Phase 2A, and particularly to potentially relieve the congestion that would otherwise occur, and the number of HGVs, which would go through Woore on the A51 and then turn right and on to the A525 to service sites at Madeley. Their proposal which was heard yesterday, I believe, was to use Keele services and then potentially the former Norton Bridge to Stone railway line to gain access to the west side of the west coast mainline. If we were able to build a railhead in two years instead of five, presumably we could import material by rail, rather than by road for the construction. And I do believe that that was a question that was actually asked by one of their Lordships during the teach-in sessions in March. I think it was Lord Snape, or maybe Lord Horam, but I can't be sure on that.

280. So would you consider that to be a major advantage in terms of the ability to build and reduce the number of HGVs, not just in the area of Stone but across the whole northern end of Phase 2A, and particularly at Whitmore, Baldwin's Gate, Woore, and mostly importantly, junction 15 of the M6, where we've already given evidence that that motorway junction is going to be severely congested?

281. MR BYNG: I mean I've looked at this proposal to use an access to Keele services and also the railway from Market Drayton to Stoke. Looking at it, and what I've done is I've considered it along with my experience of East West Rail, Phase One, Oxford to Bicester, where we used haul roads there to produce material. Now I think if one was to consider Aldersey's Rough, it could be used as a plant and materials railhead for the remainder of HS2, Phase 2A contract period, and for a period of an extra three years, 356 weeks. In addition to the savings we would deliver in using Aldersey's Rough rather than Stone, I do believe it would offer some considerable savings in the cost of HS2 Phase 2A, but I've not been instructed to value the wider saving cost or any additional reduction in the time of the project. But I do think it has collateral benefits to the rest of Phase 2A.

282. MR PARKIN: Do you mean Phase 2B or Phase 2A?

283. MR BYNG: Phase 2B. Effectively, it's providing you a haul road, which otherwise would not exist.

284. MR PARKIN: But when we gave evidence back in 2016, 2017, sorry, or 2018, we advocated that part of our evidence, Your Lordships, was about the relative location of the railheads, and at that time HS2 had no proposals to build any railhead or any IMB-R on Phase 2B West – that's the bit from Crewe to Manchester – because it could all be done by Stone.

285. THE CHAIR: Am I right in thinking that the proposal that Mr Byng has been talking about would require additional land?

286. MR PARKIN: Aldersey's Rough; yes, it would require additional land.

287. THE CHAIR: Because that was the problem that came up yesterday.

288. MR PARKIN: Yes, but I think it was mentioned yesterday, our understanding of a Transport and Works Act order, and I know it's an area we shouldn't go to, is that compulsory purchase arrangements and the acquisition of land are part of that process.

289. THE CHAIR: We've been over that ground already.

290. MR PARKIN: Mr Byng wants to talk.

291. MR BYNG: Finally, Your Lordship, if I could make a few comments about the land acquisition, the rail method of measurement, unlike a lot of building methods of measurement, includes the cost of acquiring land on a permanent or temporary basis and the fees associated with doing so. In my estimates, it includes the land take for both sites, Stone and Aldersey's Rough. At Aldersey's Rough, I have made enquiries of local landowners and believe that the land required there could be acquired by private treaty without resort to compulsory purchase powers. And the land could be acquired at RICS red book valuation figures, rather than the government's compensation code, which is causing so much trouble with HS2 Phase One.

292. MR PARKIN: Thank you, Michael. One other point I want to ask you is about, it's been previously said that locating any facility further north, and particularly between the two tunnels of Whitmore and Madeley, would cause unnecessary construction risk. And yet, as you know, the Stone railhead is going to be located between the A34 dual carriageway and the M6 viaduct at Meaford, which is a 208 metre long construction which takes four and a half years to construct. Do you see any significant construction risk of building a railhead further north than Stone and between the two tunnels?

293. MR BYNG: No, I don't. I think, basically – there are risks but they're under the control of the works contractors who don't have to contend with the problems of dealing with the M6 on one side and a railway on the other side. The risk tends to be under the contractors' control rather than having to rely upon third parties. So I can't see how there can be any greater construction risks than those already identified in the HS2 Chairman stocktake report, including the estimates upon which my report is based.

294. MR PARKIN: And presumably a two-year timescale, compared to a five, allows you plenty of time even if there were some things that went wrong.

295. MR BYNG: One of the great benefits of being about to reduce time – let's move away from cost for a moment – if you can make yourself some time, it's amazing how much risk you can manage if you've got extra time to do so. It's like all of us. When we're put under pressure to do something in time, we make mistakes – our risks are up. If you create more time for yourself, which is what this proposal would do, you give yourself time to think and manage.

296. MR PARKIN: Thank you, Michael. I have no more questions for you.

297. THE CHAIR: We're approaching 1 o'clock. Mr Mould, you put your hand up.

298. MR MOULD QC (DfT): I wondered if I could just ask three questions –

299. THE CHAIR: Yes.

300. MR MOULD QC (DfT): Before 1 o'clock.

301. THE CHAIR: I think that might be convenient. Would that suit you, Mr Parkin, I think, and then we would finish this evidence and break off for lunch?

302. MR PARKIN: Yes, and if I could just say that we haven't finished Mr Gould's evidence about Stone, so if we could do that after lunch.

303. THE CHAIR: I understand that, of course.

304. MR PARKIN: Thank you.

305. THE CHAIR: Yes, well Mr Mould, if you could ask your questions.

306. MR MOULD QC (DfT): Thank you very much. Mr Byng, you were asked a question about the cost estimate that you have set out on page A20(80) for the Stone IMB-R of £371,258,000.

307. MR BYNG: Yes.

308. MR MOULD QC (DfT): That number is not broken down at all in the report that is being produced in evidence, has it? We don't find a breakdown of that global figure anywhere in that report.

309. MR BYNG: No, we don't, Mr Mould.

310. MR MOULD QC (DfT): Thank you.

311. MR BYNG: But it supported by measured approximate estimates of about 1200 pages.

312. MR MOULD QC (DfT): And I don't know whether you're aware of it, but on 30 April 2018, before the House of Commons Select Committee issued its decision on the issue that was live before it as to whether or not the railhead and infrastructure

maintenance depot should be relocated under this Bill from Stone to Aldersey's Rough, on 30 April it received in evidence a comparative cost breakdown, which was broken down into constituent elements, from the promoter which showed a difference in cost of £55.1 million in favour of Stone. And it was that evidence which was before the Select Committee in the other place when it took its decision. Are you familiar with that breakdown from 30 April 2018?

313. MR BYNG: I am, Mr Mould, and I've also considered how it was put together. May I reply?

314. MR MOULD QC (DfT): I wanted to know whether you had – you haven't attempted to critique that cost breakdown in the report that you've presented to this committee, have you?

315. MR BYNG: No.

316. MR MOULD QC (DfT): Thank you very much. My final question relates to the work that you say you did for the Oakervee review. If we can put up please R116, and I think members of the committee have that, which is the Oakervee review.

317. THE CHAIR: R116; I wonder whether we do. We've got 115, 114.

318. MR MOULD QC (DfT): I wonder, My Lord, if I could – it's just one paragraph – I wonder if I can just read it out; it's only a short paragraph because it does relate to the work done by Mr Byng, to which he referred you. Paragraph 7.13 on page – it's R116(60) – that is 7.13 of the published Oakervee review, it reads as follows: 'The review considered a cost estimate of the HS2 project that has been developed by an external consultant. This estimate sets out a total cost of £106.6 billion in quarter four 2015 prices for the HS2 project.' Footnote 47 identified the external consultant as Mr Byng.

319. It continued, 'The review commissioned a comparative analysis of this external consultant's cost estimate and the cost estimates developed by HS2 Ltd for Phase One. Evidence provided by Network Rail to the review indicated that major rail infrastructure cost plans generally exhibit certain characteristics. Such characteristics were not evident in the estimate developed by the external consultant in that it seemed to the

review that the amounts allocated towards major construction works were too low, and the amounts allocated towards rail systems seemed too high. This view was confirmed by evidence provided to the review by Network Rail’.

320. In a nutshell, Mr Byng, the reported conclusion of the Oakervee review is that your cost plan evidence was not reliable, wasn’t it?

321. MR BYNG: I wouldn’t agree with that; no.

322. MR MOULD QC (DfT): Thank you very much indeed; that’s all my questions.

323. MR PARKIN: I notice that Mr Mould wouldn’t let Mr Byng give a fulsome response to the last two points. Perhaps it would be in the Lordships’ interests that we heard what Mr Byng had to say about those points. He just shut him down.

324. THE CHAIR: Where’s it going to take us to?

325. MR PARKIN: Well, I don’t know. Mr Byng, I can imagine, could answer both of those questions in a matter of a few minutes, but he wasn’t given the opportunity to speak by Mr Mould.

326. THE CHAIR: I understand why. Mr Mould, he wanted particular answers which he’s going to develop to an argument. He got the answers he wanted.

327. MR PARKIN: Okay, so will I be able to ask Mr Byng these questions again then?

328. THE CHAIR: Well, the question is where is it going to take us to? I’m not sure that I see any benefit.

329. MR PARKIN: The two points that Mr Byng was asked, he was asked about this particular document which was produced 30 April 2018 – it was actually produced several days late by HS2 – under an agreement that we had at the time in the House of Commons with the chairman of that committee where HS2 had said – and Mr Mould’s words and I think you can actually see it in Hansard – was this was just a matter of presentation. There was never any great substance to this. In fact, we asked for detailed spreadsheets and we asked for detailed cost methodology to back it up. Now Mr Byng, before he was shut down from answering that point, he said he actually had 1,200 pages of modelling software and results which support the figures that he’s produced in

relation to Stone. So I think that clarification would be useful.

330. And on the second point, Mr Byng was going to explain, or answer the point about the Oakervee review and his role in that, and he was just simply not given the opportunity.

331. THE CHAIR: I think the best thing for us to do, since we've gone past 1 o'clock, is to break for lunch and what I'd like you to do is reflect on the time you've got left to you. We're going to have to finish this session at about 3 o'clock to make room for the Newcastle Road residents, and Mr Mould has to reply to your presentation and then you may have a chance to reply to him. So time is extremely short. And, Mr Mould, I don't know how long you think you would require for your reply; can you give us some idea?

332. MR MOULD QC (DfT): I hope I could respond to you within about 20/25 minutes.

333. THE CHAIR: Let's say 25 minutes for his reply. Well there you are.

334. MR PARKIN: That should be sufficient time for Mr Gould to make the points he wants to make, and for us to respond to Mr Mould.

335. THE CHAIR: I think we should break now and proceed in that way. I think I'm simply searching for the most efficient use of your time. We'll break now and we'll come back at 2 o'clock please.

336. MR PARKIN: I'm grateful to you; thank you.