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#### 00:13

Good morning, everyone. I can see that the panel have now come back into the room on now hand over to Mr. Andrew Parkin to proceed with the with the rest of this issue Pacific earring.

# 00:26

Thank you Mr. Williams. Welcome back, everyone. I hope you enjoyed your short break. We're on looking at Agenda item C for today, which is the potential mitigation effects on the integrity of the SAIC. We are running over slightly in terms of time. So I'm slide if you just bear with me a moment I was intended to skip skip over this this item, leave it to you've got the full findings of the surveys, and then we can even come to that in due course. So I was pretending to move on to to item D. But before that slyness, I'm very happy to hear from you.

# 01:11

Scott Lyness as for the applicant, sir, just going back to the earlier agenda items and you want to move on, but just for some clarification in relation to the use. Wash sec. We've been looking at the the HRA report, and the citation is included in appendix B to that report. And the reference is document app, Dash 233. And we've also had a look at the matrices and Appendix D to that report, which are included in table in table two. And we just want to get some clarification if possible as to what more you are looking for because the matrices and Appendix D do address the sole qualifying feature for the SA C which is the spines. Lotion, we weren't sure exactly what more information you were looking for. Beyond what is in those matrices. If we if we're missing anything, sir. Oh, see, we'll go back and check on that. But I thought we just raised that to to check whether there's anything in particular, you thought were missing based on those appendices?

## 02:34

Yeah. Did you say Appendix B where the citation was?

## 02:38

Yes, Appendix B. Sir,

# 02:41

an app two citations. It seems to be there for the special areas of conservation. But I didn't I didn't notice it for the special protection airy.

#### 02:54

CSPA serves out

# 02:59

all the wrong stuff.

## 03:02

Right. Well, that's conduct that think that's understood. And then if one goes down to Appendix D, within the document if you're working off a PDF, so it's page 143, of 166. There's a screening matrix for the who's wash. Essay cspn rounds are starting at table two. And as you see that table that works through SPCA, annex one species and migratory species and SPCA, international important waterfalls, and if you scroll down on to the second page of page 144, there's a sa C species, which is spined loach. So obviously, there's information provided and matrices. We just want to clarify with you if that was a sufficient response to your question, whether you're looking for anything more, more fine grained?

## 04:09

Well, I don't really want to repeat what what we talked about previously, what the point I was making was that the screening matrices, tables one and two in in the no significant effects reports have combined the the different designations, which have different qualifying features and different characteristics and potentially different impacts. And reasonably, you know, I do understand the point that the primary issue was the distance from the deal to limits and therefore limiting the effect but they are different effects. And they are different qualifying things. So I'd rather if we could just perhaps, like ask you to look at perhaps disaggregating those between the different European designations that would be helpful. I don't really want to go back and sort through it again.

## 05:09

Very well, Scott Lyness, the outcomes will take me I think the difficulties, we thought that they had been split out in the tables. But obviously, we'll go away and review what you said. So the answers may be the same, but there's not going to change the ultimate. It's not going to change the ultimate information that's contained in that table by splitting it out or disaggregating. The only further way but rather rather than spend time at no server, we'll take that away.

#### 05:36

Thank you Mr Lyness Thank you. We know really started in the second session of issue specific hearing for Mr. Williams. Apologies. I should have done this earlier. I can just confirm everybody who is intended to be here has rejoined the meeting.

## 06:01

I can confirm that they have joined the meeting. Oh, thank you

#### 06:05

Mr Mawdsley Thank you. Okay, moving back to the agenda. Item de identified bad crossings. The the evidence identified six proposed back crossings for the proposed development, which won't go through at this stage, line by line. There's also a number of other crossings that are identified are part of the proposed development but which haven't been identified as bad crossings. If I could perhaps come to the applicant first. And ask just a little bit about why some of the proposed bridges and underpasses I'm thinking here of the total and road overpass on environmental management plan, master plan sheet 11, the pedestrian footbridge on sheet eight of the environmental must be 1046 bridge on sheet six, and all

the buffered Road bridge on sheet three, which haven't been identified as potential backcrossing points. And so I understand like to understand a little bit about the thinking behind that. But also, one of the crossing points that is identified is the East Coast East Coast Railway, mainline under the under there, so I'd also be interested in why that was identified as a potential crossing point for bats. So it's the largest country first perhaps

## 07:42

Scott Lyness, for the Applicant have asked Mr. Wade to pick up those questions and turn please.

## 07:49

Max Wade for the for the applicant. And perhaps to draw attention to miss nettles comments that we are discussing mitigation in our meetings with with Natural England. And so at this stage, we haven't sort of come to that that hasn't sort of resolved these issues. I'm more than happy to sort of talk talk through them. But just to just to make you aware of that.

#### 08:22

Thank you, Mr. Wade I don't only if it's going to be a very long answer, then perhaps it is something that you could return to once you've had these discussions. But what I'm interested in understanding is the rationale for why the East Coast Main Line bridge was identified as a crossing point for the bats. And why other bridges haven't been identified as crossing points. It's a way of summarising how you you got to that position. That'd be helpful.

#### 08:52

Yes, certainly, Max Wade for the Applicant Yes, certainly. So I can I will endeavour to do that. So. So the there is results of the applicant surveys back to using the scheme and the landscape around it. Really these have shown that that bat movements across this landscape there the scheme at very low levels, most most of the proposed route and this is particularly pronounced at the eastern section of the scheme. This is this is not unexpected, given a landscape of intensive arable agriculture with large fields for quality hedgerows. The exceptions are the two crossing points the river grey twos and the hedgerows between St John's Wood and boys wood which had significant numbers of bats and also of species number of species. So, again, this is explained by the landscape and these these locations are the corridor of a large river and the The only section of the scheme with with significant woodlands including the St. John's Wood County wildlife site. So the proposed mitigation in terms of crossing points responds to these findings with crossing points at the to to location that I've mentioned. So, I think moving on from that it's anticipated that the pattern of that movement will change in time as a result of substantial habitat that will be created as part of the scheme in large measure replacing the the arable fields. So given the anticipated increase in bat activity, the scheme includes three additional crossing points. And one of those is the East Coast mainline railway bridge, which is well situated at that western section where there is more bat activity generally, and also affords very good permeability through the through the scheme. There's also hand Brook underpass, and the Westbrook or pillar plantation and the past, which located along the scheme also provide future proofing, if you like, for movements of bats in the future. So additionally, the movement of bats East West is facilitated by the proposed scheme, and also the legacy a four to eight, we need to remember that the bats will be moving in various directions, including east west as well as sort of generally north south. And this will

remain as a sort of a strong corridor for that movement in those particular areas. But obviously, without the without the traffic. So the remaining crossing points that you mentioned, in in terms of the foot bridges and so on. These are additional features that bats would be able to use identified them as specifically necessary within the scheme. And I think that would that would sort of summarise our view.

#### 12:20

I think that's that's helpful. Just if I could go back to the East Coast Main Line, though, debates currently travel along the East Coast Main Line north south think through the order limits

## 12:37

to a significant extent No,

#### 12:39

no, I'm just thinking how attractive crossing points it would be if there are a high speed trains travelling along the East Coast mainline.

#### 12:50

Well, that's that's do use railway lines as corridors of movement, the space that is available to them at this particular crossing point is quite considerable to habitat on either side of the of the railway line provide is suitable for them in terms of moving along along the railway line. So it has it has good potential in the future for for banks to be able to use it.

#### 13:23

Okay, thank you. Do do Natural England or any of the local authorities have any particular views on Okay, the Cambridge councils have made some comments in relation to the multi purpose underpasses, such as those that have proposed that that one is proposed a handbook. And perhaps I'll open it up to Cambridge for councils perhaps to to elaborate on that, and then perhaps come back to you, Mr. Wade

#### 14:01

So thank you, Francis Tyrrell on behalf came to councils Mrs Ahmad to speak shortly. But the the concern is principally in relation to the assumptions that have been made about some of these underpasses bridges, which also serve another function as you as you've alluded to, will cover tomorrow, issues of design. And so I don't want to repeat necessarily what we'll do with tomorrow about design, in particular design of nmu routes and making sure they function as best they might do are attractive, but there's a concern that the authorities have about a lack of a holistic approach really in relation to routes, which are intended to provide bat mitigation on the one hand, but also to provide an MMU routes on the other and the inconsistencies that that may pose. If we look for example, in relation to document rep 3007, which is the the applicants response or comments on our response to the first written questions. particular question 113. Three, it's clarified, for example, that there will be no lighting in relation to the underpasses, in order to make sure that they are attractive to bats for the bats to be used, we'll see that in many respects is inconsistent with the use particularly we're thinking of unbroken, also, the plantation plantation with our uses and attractive nmu facility as well. They are sufficient length some of these underpasses that a normal design approach for them as an nmu user would require

lighting or light wells, for example, it within the middle of them. So this is, I suppose, a two fold concern, really one is, are the assumptions that are being made in terms of the suitability for these routes where they are multipurpose for bats? Are they are they felt well founded? How are we know that they're succeeding or not succeeding, but also the design point which perhaps we can touch on tomorrow, but looking at the design principles, which are set out in red 3014? There's nothing in that which indicates to us how we'll be guided some make sure that both attractiveness for an amuse is a design principle, but also function for bats is a design principle and how they'll be balanced insofar as they may be inconsistent. So just aren't I to ask Miss Ahmed, to add anything that she would like to add to that.

## 16:27

Thank you. Deborah Ahmad from the came sure authorities? Yeah, it's basically what Francis has said, just to make sure that the design, if it's designed for bats, it's going to work for the other aspects as well. We also haven't really seen that much detail in terms of how they're positioned if they are going to be effective as bats tunnels or underpasses. So the bats have quite strong flight lines. And there's been examples, which I've referenced, in relation to responses to a question 2.3 point one, C, which is rep for 059, in terms of, there's evidence to say that if you put about crossing nearby and not on the actual flight line of the for the bats, the bats won't relocate, they'll just continue to cross at that point. And likewise, if the heights different to the height that they're flying out, there might also be issues with them using it, they might just hop over the road as well. And dependent on the species that might be a bit of a somewhat use tunnels or underpasses more than others. So we haven't seen that relationship of how, where these points are, how they relate to the landscape features and the landscape designs, for example, the cross sections to understand if they're in the right location. And then, in terms of the Max was describing the landscape that we do have a lot of low activity of bats across it, I don't think that should include any additional structures, because that is the nature of our landscape. And that there will be these key points where there's a couple with higher bat activity. But I don't think we should solely focus on just providing connectivity at that point. Because as Max said, there's going to be increased benefits of this game in terms of bat habitat. And we should really be trying to protect crossings where we have there has been identified as bats crossing, not necessarily at high numbers, because otherwise it will just sever that linkage. And if there's only low numbers crossing and they're all crossing over the bridge, then that will obviously not be on the road that would have a impact on that population.

#### 18:51

No, thank you, Mrs Ahmad That's helpful. What I'd like to do if we can appreciate this is all relevant to the to the agenda item we've had, if we could cover the detailed aspects of the design and potentially how it fits in the landscape at tomorrow's hearing. But I will first ask Mr. Wade on behalf of the applicant, if you'd like to respond briefly in terms of the points that have been raised thus far in relation to what I'm saying that has just been said Mr. Tyrrell.

## 19:26

Thanks so much again for the for the applicant and picking up the points in relation to the key points that I think was how it was referred to there we have ensured that the bats and their flight paths are will be uninterrupted in terms of for example, passing into the battle boys wooden surgeons were and and I certainly agree wholeheartedly with that. In terms of the the uses to which The underpasses are put that we'll use, there is good evidence of bats using underpasses and similar sorts of structures along

with sort of human human activity as well. So from that point of view, we then need to make sure that the the bats are encouraged to use those underpasses handblock Creek, for example, there are significant booms along hen Brook but the pillar plantation they all need to be habitat provided that will encourage the bats to use that underpass. The the other point in terms of design there's quite a degree of flexibility in terms of the the lighting, for example, Mr. mentioned, whereby fats and so human usage can be combined, both in terms of the sort of quality of the light, the mechanisms, turning lights on and off, and so on. At this present time, it's it's not intended to the design does not include any any lighting. But in terms of informing so discussions on any news, etc. There is a degree of flexibility bearing in mind that bats are using the tunnel at at night. And therefore, there's sort of little relative little conflict from the outset. But without sort of going into sort of further detail, I'll probably leave it there. So

## 21:48

thank you, Mr. Wade. Mrs Banham I think you've got your hand raised, if you'd like to speak now.

#### 21:57

Thank you, Katharine Banham Bedford Borough Council, just very briefly, the back channel that's been referred to in the vicinity of St. John's wort is within Bethabara council area. And whilst we do have a structure for that, and some detail, what we're missing is how it links to the wider landscape. Now there are hedgerows in that wide landscape and in the landscaping plans, but actually, how it will be facilitated in time is missing as well. So those hedgerows that lead into the tunnel are they to be kept, are they to be removed and then replaced, if there to be replaced? It will be a very small hedgerow. And that's something that we've been asking to be included in the second iteration of the MP environmental management plan. And we haven't got that information yet. Or information about monitoring of that feature, and how successful it is. Thank you.

#### 23:02

Thank you span and I think that's likely something to be talked about in a bit more detail tomorrow when we talk about the detailed design of post development. But I think everyone's heard what you've said today. Mr. Wade, is there anything you'd like to say in response now

# 23:24

and Max Wade on behalf of the applicant they just listened to us no did noted that down and we would certainly concur that those are necessary features in order to ensure that the the effort and expense of the tunnel is achieved its objectives. And yes, there will be monitoring post in the operational phase to check that these these structures are are working there landscaping is developed as planned, and any fencing etc. Is is providing the necessary direction that the bats need to use the features that we're providing for them across the scheme.

## 24:08

Thank you, Mr. Wade. Just to sort of pick up the point that this farm that mentioned there in terms of will it be picked up in a second iteration environmental management plan then just just just the clarity for that subtle and potentially for the other identify crossing points a lot level of detail be included

# 24:32

Yes, we will ensure that that's included.

#### 24:38

Thank you Mr. Wade, Mrs Nuttall. So you've got your hand raised.

#### 24:44

Thank you, Janet. Nuttall Natural England. Yeah, just just noting that helpful comments provided by Max and that we also support the comments raised by the council's which is why we are continuing ongoing discussions with national highways, as I mentioned previously, on the on the crossing structures and the associated mitigation and monitoring. It's complicated.

## 25:13

Sure. Thank you. Mrs Nuttall, thank you, Mr. Tyrrell, briefly if you continue.

## 25:21

Thanks. So I just have two points very, very briefly, just to flag and it may be something we pick up on tomorrow. But just in terms of today, in terms of certainty that the underpasses and bridges which are proposed, and RC, I note that the key ones we raised, I think we're referenced by Mr. Wade as being for future proofing. So perhaps that the status is lessened. But the the design principle document, which is rep 314, in its design principles for the structures. So if we look at the appendix at the back, enrich two pillar plantation on rush to Hambrook, nowhere in the design principles, do we talk about trying to ensure that it works for back mitigation, and it strikes me that that is an important design principle for these structures, if that's to be part of their purpose. And equally tomorrow, obviously, arrays about similar importance in terms of it being suitable and picking up on the principles elsewhere in that document in terms of an amuse and such, like so that design constraint in terms of functioning well, application isn't really recorded anywhere, doesn't seem to be not sure whether or not that is the concern of those structures or not looking at that document. That was the first point. Secondly, on that point, because we would suggest that those sorts of principles ought to be captured so that we're clear as we move forward through design process and detailed design, what what the principles for each, so

# 26:49

I appreciate that. I mean, this is these are design issues that we will be covering tomorrow. So if you could

# 26:56

purchase. I mean, the relevance for today, obviously, is if we're relying upon its back mitigation, then that needs to be captured. Secondly, the second point for today is obviously, we the authorities fully appreciate that Natural England is the lead in terms of the bat issues in this regard. However, obviously thinks needs to be discussed between Natural England and national highways, given the need for these structures to work in a holistic manner and the potential for some of the things that may be necessary for an amusing such like to diminish the role for bat mitigation. We do think the authorities need to be involved in those discussions now. So as as they are develops in terms of the suitability and design of these structures.

## 27:41

Thank you so lucky. Mr Lyness and Mr Wade's anything you want to say in response to the stage

## 27:51

Scott Lyness applicant? Novice stage? No, thank you, sir. Thank you.

#### 27:58

I am mindful of time, I mean, hopefully we've given this a reasonable airing today. But obviously, we'll be talking about aspects of it tomorrow as well during the design design stage, but at the moment, I propose we move on now to to item E on the agenda, which is his title implications for the environmental statements of the different biodiversity net gain scores obtained using the Defra 2.0 metric in both quantitative and qualitative terms, and just to briefly introduce this biodiversity net gain score of plus 20.5% is in the evidence using national highways metric and a by an biodiversity net gain score of plus 16.48% habitat units plus 9.96% River units and minus 31.66% hydro units using the Defra 2.0 metric. These scores do not seem to be consistent. I will seem to show that the proposed development which results in a net loss of biodiversity based on simple aggregation of around 5% and applicants and Natural England Natural England requested that's the environmental statement, biodiversity chapter and findings be updated to reflect the fact that what the Defra 2.0 metrics said in this regard and the new effects and new assessment of the effects on the proposed developments on biodiversity is undertaken. This is in route four, slash zero 70. So applicant and Natural England if possible. Can we briefly summarise what The differences are between the two metrics and why they produce such significantly different results. And if I could also raise the question of whether from either either Natural England or the applicant, there is any evidence that either of the metrics have been used in other nationally significant infrastructure projects, or throat schemes. So perhaps we can start with the applicant first. So this line is Mr. Wade, I assume

# 30:31

Scott Lyness the applicant? Yes, I'll ask Mr. Wade to deal with the particular points about the metrics themselves. I note, though, that the question is put in terms of how the proposed development will lead will meet NPS objectives. And there's a point I'd like to read at some stage on the way that question is put, but it's not directly relevant to the particular question you've asked. So I may come back to it later on, if that's acceptable. Okay. Yeah. But in that context, last Mr. Wade to explain the metrics and the differences between them please.

#### 31:12

Thank you, sir. Max Wade, for the for the applicant. So I think it's it's probably initially important to put the the metrics into context. They are the beginning of quantifying biodiversity net change. And the metric two is a development on from the highways England metric, which was the original one we used on the on the scheme. That was because it was the only one that at that time that was was available. So within that, I think it's important to identify coming to metric two, we were using data that was was collected for other purposes, in terms of the environmental assessment, as Mr. Lyness is somewhat referred to alluded to. So, we took a highly precautionary approach in terms of the, the way in which we enter the data into into the metric. And with that, I'm happy to go into further detail. But I think that would explain to a significant extent, why the headrow metric came out as as as low as it did on the

minus side. And making some sort of modifications in terms of the way that the data were entered, would would give you a slight positive net gain in terms of hedgerows. I do think it's important, though, not to see these as the three metrics within two point naught as being able to be aggregated, you really cannot just add them up divide by three, or in some sort of way they they've been developed to be more sensitive to that. And I in so discussions with Natural England, I think we have identified that the the most significant metric part of the metric is in relation to habitats. And you also do have a somewhat similar score in terms of both the highways England metric and the metric two point naught. But I hope that gives you some sort of insight into explaining if you like the results that we that we've obtained. Thank you.

#### 33:44

Thank you, Mr. Wade, and Mrs Nuttall. Continue, natural England's perspective on the differences between the two metrics, and why, why we've got why we've got this this significantly different scores. And how, you know, Is there truth in what Mr. Wade has suggested that you can't simply aggregate them together and come up with a score? How comfortable are they?

#### 34:11

Janet Nuttall Natural England? Yeah, unfortunately, I can't really comment on that. I mean, it's not it's not really within natural, natural England's remit to delve into the detail of the the calculation and the differences between the two. I think really, our comments on this are limited to what we provided in our response to the segment written questions, which was that Natural England supports the applicant in preparing the death rate to metric and we are satisfied that that has been able to demonstrate his significant biodiversity net gain from the overall scheme through the overall scheme.

## 34:49

Sorry, just to clarify that you're saying that the findings of the different metric that the applicants have taken do show biodiversity net gain

#### 35:00

Yes, that's, that's my understanding.

#### 35:06

Okay. Mrs Banham you got your hand raised, you want to speak.

# 35:13

Thank you, Katharine Banham Bedford Borough Council. So in the use of their different metric, as Mr. Wade has said, it's not designed that the three different calculations are taken as they need to be taken as three separate calculations. For a scheme to be able to say it is providing a net gain, each one of those needs to provide an individual net gain. So you can have a net gain of habitat units. That is separate from providing a net gain in hydro units, and in this case, is the hydro units that are showing a significant loss. So you can't have a net gain overall, when you have one unit, which is showing lots.

## 36:00

That's interesting. Was Mrs Ahmad, so you've got your hands raised?

## 36:06

Yeah, it's just to confirm this point, what Katharine was explaining, associated a company in the Defra 2.0 metric, there's a user guide. And within there, there's six clear rules in terms of what you can and what you can't do with a metric in terms of the assumptions and interpretation. And, as Katherine has said, there are three separate habitat qualities or, um, that's where they've been separated. And if you look at Rule four as a metric, it said that the Bioversity unit values generated by metric 2.0 are unique to the metric. Sorry that I'm reading the wrong one. Yeah, I can, in the rules, it says that they have to be separate by these three categories, and they can't be combined.

#### 36:56

Okay. That's interesting, document in the in the evidence before us,

## 37:02

it isn't, it's part of the calculation. So when you calculate the different metric is on their website, so when you look at the metric calculations in order to understand it and interpret it, and it should be interpreted as part of the bng report, which it was provided out our EP 3012. But these rules haven't really been reflected within that report. But it should be reflected within the assessment really, is just a technical document to for the user assessor to refer to

#### 37:38

thank you, Mrs Ahmad. I mean, as the point that's been made, on many occasions, in this examination is that if it's not in the examination library, we won't be having regard to it, because it's not before us. So if you want to, if either Miss Bannon or yourself want to make the points that you've just been made speaking to, we will need we will need that in writing and by the next deadline and with with the evidence that supports it. Really?

# 38:06

Yeah, that's setting. That's yeah, that's certainly possible.

# 38:10

Mr .Parkin, I have a question for both Mrs Banham and Mrs Ahmad. So then, if What if what you're saying then do you agree with Mrs Nuttall Miss Nuttall's conclusion that there is a biodiversity net gain from development,

#### 38:28

I would say Deborah Ahmad that can show authorities I would say not at this stage, it's not been fully justified within our EP 3012 In terms of habitat area loss. So sorry, in terms of there is justification in terms of the hedgerows, and why there could be a potential net gain. But that's not really reflected within the calculations, because it says they shouldn't just be based on error, it needs to have this value associated with them. But the biggest concern we've got is to do with the area calculations, which is was not or has said and parking as well, that there's an overall positive in area of 25%, or whatever that is, but that, again, doesn't take into account the roles and what because when you look at the calculation documentation, which is RFP 302013. On page seven, it shows you all the highlights in red,

all the habitats which haven't been adequately compensated for. So their habitats which are of high priority distinctiveness, I think this comes on to the next point and medium distinctiveness and because those haven't been compensated for there is going to be an overall net loss of high quality habitat. Even though there's the figures calculate this net gain. It hasn't met this rule within the within the day For us the guidelines, which is that you should have, you can't trade down habitat, you can't create large numbers of low quality habitat to offset higher quality habitat that's been lost.

## 40:12

Okay, thank Thank you Mrs Ahmad. I think Mr. Parkin there are new answers here, which we might need to cover and written questions. So I, in the interest of time, my suggestion would be that we perhaps just that's very, very helpful information. But that is based on the assessment that Mrs Banham is not all Mrs Ahmed and Mr. Wade have made with respect to the Defra 2.0 metric. But of course, what's before us in the examination is a different calculation metric. What rather both of them are before us an examination of what's included in the ies is a different metric. So I think we as exotic thority will probably need to explore that and nuance it in our written questions a bit more. So my suggestion would be Mr. Parkin, if he could perhaps move on now and cover the the other aspects of this agenda item?

#### 41:13

Yep, that's fine. Thank you. So yeah, in light of that, the Cambridge councils have also questioned how the applicant is as used as applied to the deputy deputy port metric, in terms of not including the 2021 field surveys and or considering the actual condition of habitats assessed. Perhaps you can put that to Mr. Lyness and and to Mrs Nuttall and see, see what your response is to that place.

## 41:56

Scott Lyness, the applicant? I can ask Mr. Wade to do that. Sir, of course, on there, this is another matter of subtlety that is impact on the renovations we're going to cover other agenda items in any event, but subject to ask Mr. Wade to deal with that.

# 42:20

So Max Wade, for the for the applicant, I can certainly provide a sort of an overview of in terms of of answering those points. So, taking first of all the 2021 surveys. So, the results of these base data the calculation of biodiversity net gain using two point naught. So, on analysing the survey results, they showed no significant change in habitat area and or condition, and hence, there was no value we determined in redoing the calculation again, a relatively small change was a decreasing condition of the variable margins, which might have increased the habitat measure whether panel to consider reworking the calculations as necessary this this can certainly be undertaken in terms of the loss of habitats in terms of medium high distinctiveness and the implications of that in terms of the calculations. So again, both chapter eight in terms of biodiversity and both highways England and the different calculations have concluded there'll be significant enhancement of biodiversity in terms of habitat, increase habitat for the areas and further on site or off site conversation is not required. So for high distinctiveness habitats, that metric has not taken into account the significant areas of woodland plantation, which are of lower distinctiveness than woodland habitats they're replacing. This is a limitation of the metric. And it is it's impossible to claim creation of areas of lowland mixed deciduous woodland semi semi natural

woodland through planting metric to point north trading rules are our guide to recommend which habitats should be provided in compensation for losses. But in in certain instances, there may be ecological justification for why this is not feasible. So the increase of 60 plus hectares of woodland planting is sufficient to mitigate for the loss of the high and medium distinctiveness woodland habitats, which would sort of explain overall the results and I hope that's useful.

## 44:57

Thank you, Mr. Wade. Yes, I think this is something that we want to We're totally pick up in some of the more detail written points. As we go forward. There is one thing I'd like to put to both both the applicants and and to Natural England, which is, in your experiences has the different 2.0 metric been used to assess by by to estimate gain for the nationally significant infrastructure projects, typically road schemes. Now, appreciate you may not have this off the top of your head, but if this is something you could perhaps come back to us by deadline six. That'd be much appreciated.

# 45:37

Scott Lyness, sorry, sorry, sorry, Scott Lyness for the applicant? Yes, I think it's probably best if we come back to a deadline to text. We're not aware of any but it's probably best that we check the position, see how the accurate details by deadline six.

#### 45:54

Thank you. And if not all of you could perhaps also look at it from your side as well. Much appreciated.

#### 46:01

Janet Nuttall natural England. Yes, I will do that. I mean, I would think almost certainly deputy metric would have been used another nationally significant infrastructure projects, but I'll check that out with our national transport leads.

# 46:17

Just given the relative newness of the different 2.0 metric, is it worth checking if the previous version of the calculation metric has been used for other transport concepts as well?

#### 46:32

Squat lounge for the applicant? I'm sure we can include that within the scope of our research, ma'am.

# 46:41

And we cannot be Mr. Lyness and Mr. Parkin, if it's okay, I just like to open up this question to the local authorities as well, because because of the Insight given by Mrs Banham, and Mrs Ahmad, I think their input in this matter would be very helpful.

#### 46:58

As Mom's got minus for the applicant serves to, obviously there'll be further material coming forward to confirm the position one way or the other. I just want to give in the interest of time, we don't want to prolong this agenda at all, necessarily. But within that response. From the applicants point of view, we would like just to provide some further representations on the proper approach under the policy to

biodiversity and the metric. It's implied in the question the agenda item, but rather than cover it now, I think there are some points we'd like to raise on the relationship between the metric and the last chapter. And what policy is asking us to do as far as biodiversity is concerned, but we can we can cover that in writing rather than Polonius Genda item this morning. Yeah.

#### 47:51

That was very much a part of the this agenda item but we are reducing that in the interest of time. Mr. Parkin there are a few hands raised, but I'll let you try that.

## 48:02

No, that's fine. I think Mrs Ahmad as your hunters first and then Mrs Nuttall sort of comes to you in that order.

#### 48:08

Yeah, certainly, within Cambridgeshire, we haven't had any Encik road schemes come forward, since the different a 2.0 metric has been in place, but I can have a see if there's any other local authorities who are aware and feedback to you on that. Just previously, in any other Battroid races, Max was describing how to the scheme will offset high or medium quality habitat with local a lot bigger area of low quality woodland. i The only concern I have with that approach is that the reason they're called high distinctive habitats the or or given that grading is because they're priority habitats. So as priority habitats under the nurkic, they have due regard to have consideration of them in the planning system, in terms of government sector 08206 2005. And there are material considerations. So by flagging it up in this biodiversity metric and the loss of these priority habitats. It's reflected within the metric but it's not reflected very well within the IES chapter. So within table eight point 10 of the biodiversity chapter, which is a pp 077. It says that for woodland, there'll be an overall slight benefits in terms of the effect, but I would question that to say, well, there might be a benefit of low quality woodland, but I don't I don't understand how the loss of priority habitat has been incorporated into that. And that's for the other habitat which has been identified within the metric as having a loss. So wood pasture, and reedbeds which hasn't been reflected within that table within the Within the chapter, okay, all right. Thank you very much. So

#### 50:08

Mrs Nuttall. Do you want to say something?

# 50:12

Janet Nuttall Natural England. I just wanted to clarify in case there is any confusion that the current Defra metric is a Defra three metric that that is the new recently introduced Defra metric. I can't remember exactly when it was introduced, but it was beyond summer of this year. So that's the death

#### 50:32

July I believe.

#### 50:36

Yes, thank you. Yeah, the deputy metric has been in place for several years, I believe.

## 50:41

Right. Thank you. Thank you for clarifying that. Yes. Okay.

## 50:49

Still,

## 50:51

thanks for answering on behalf of the authorities, I'll be very brief just wanted to check in terms of what you'd like to see from us and what we could be sort of helpful with, I made a note, obviously, to provide the user guide for the Deaf metric 2.0, which sets out the rules that Islam has been referring to. And we can also explain in that, as well as it'd be useful our view on the status of those rules, terms of how they fit with the environment act, but also in terms of policy, that'd be useful. We can also in that just mob experiences, Mrs Ahmad said are both in Cambridgeshire and also more widely set out any, any tips that have used either metric, one metric 1.0 2.0. On that, would it be useful? We can simply email across to the applicant, the schemes were aware of, and then they can combine that with their note, I'm just thinking that might be more useful to you. I'm not sure that we'll come up with anything the applicant and the team isn't aware of anyway, but we can just certainly check those out them. If that would be helpful and saves us then. I don't think you need multiple examples from different sources was all I was thinking. So we'll we'll take a note to fire those across. Probably won't add anything to Mr. Lyness isn't his team's knowledge anyway. But we'll do so. But separately, we'll just provide the rules and our our view on the rules if that would be helpful. It would thank you.

## 52:17

Or, sorry, Scott Lyness the applicant. Obviously, we've got we've gone out in the interest of keeping documentation down the stage and examination, I'm sure that would be helpful to receive that before we prepare a document, as we're happy to receive that information. Thank you.

## 52:31

Okay, Mr. Parkin, if I could just say one thing here. It's absolutely I think that's a very sensible suggestion. But the the policy assessment, I think, because there are two different positions, one from the applicant about the use of one's kind of metric and how that satisfies the policy requirement. And indeed, one from other parties who are promoting the use of a different metric, both of which have slightly different results. That I think if that is a submission that comes to us separately, yes. Then of course that that provides two ends of the argument so I'm sure that was clear but it's worth clarifying. That's all for me Mr. Parkin.

# 53:13

Versus anyone else have any final comments on this on this matter? Thank you very much for appreciate we've we've perhaps gone through it slightly quicker than we would have liked in an ideal world but we've got the written submissions to to fall back on as well. So I think will will give us satisfactory covering. Okay. In that case, we shall now very quickly move on to Item four of the agenda which is flood risk, including interactions between different sources and groundwater D water and perhaps if I could ask the applicant and the operative local authorities to remain in the virtual room and

for the Environment Agency also to join join us for this for this item. Thank you. So item for first first part of it, which we're looking at is the management and drainage proposed by Kathy interchange. So, the Environmental Agency has raised concerns regarding the effects of concealing the a one blackcat junction to prevent significant groundwater ingresses on flows along Southbrook under suggested that further modelling and sensitivity testing is is required. This is in their deadline for submission route four dash 068. Mr Lyness if your Mr. Paxton. If I could perhaps ask you if you could provide an update in relation to the points raised by the by the EIA in their deadline for response in terms of the modelling and retention work if and when it'll be undertaken and completed? And if so, how and when will it be reported?

#### 55:09

Scott Lyness, for the applicant? Thank you, sir. Alaska, Mr. Smart to explain. The work has been done. But in short, sort of answer your question, we anticipate submitting a technical note on these matters. Deadlines six

# 55:27

capsulize.

#### 55:29

If that's if you need any more information about the work that's been done, I can ask Mr. Smart to explain our general position. But in short, that's how we propose to address the questions have been raised on modelling and sensitivity testing.

## 55:46

Okay, thank you. That's helpful for for us see whether we need to go into any more detail perhaps if I could just come to Mr. Benn or Mrs Gough, from the Valentine's to one of your colleagues. And just just to get your your views on what Mr Lyness has just said there. In relation to the issue that you talked about.

## 56:07

Neville Benn that Environment Agency. We have received the technical notes in last few days, we have reviewed it, we gave our comments back to the app. We would like to more specific information on the details of the fluvial progress and go to Louise Foreman. If it's regarding the watering aspects, they're not hand over to Graham Phillips, but in terms of the groundwater flooding issue is brought to comment. So I'm Louise Foreman. Thank you,

#### 56:44

Louise Foreman for the environmental agency. And so we have reviewed the the updated technical note in submitted. And this indicates that very very

## 57:02

sorry, if you're breaking up there, I can't I can't hear you.

#### 57:14

If during a maximum scenario, it would only be a very small increase in flows in Southwark. And we therefore considered that is very unlikely there would be a significant impact on fluvial flows or flood levels. And in addition, some sensitivity testing for flows has already been undertaken as part of the modelling for Southbrook. We no longer consider that further sensitivity testing or hydraulic modelling is required in relation to fluvial flood risk. Thank you.

#### 58:01

Any other comments that you want to brings that Mr. Benn from eating?

## 58:07

I've nothing further to add to loads as long as his comments.

#### 58:14

As long as there's anything you'd like to say in response, obviously, you've got this technical notes prepared and it's been submitted and it's kind of a waiting. It's ongoing discussions between the environmental agency and yourselves.

#### 58:27

At Scott Lyness, the applicant? Yes, we're contented at the discussions run their courses have said we anticipate putting the technical note and examination deadline six. Unless you're doubting it. Mr. Smart wants to add and particularly don't think we need to say anything more at this stage?

#### 58:45

No, I've got nothing to add.

#### 58:48

I suppose the only the only point I'd be sort of interested in particularly is how and when if these findings are significant, they will be incorporated into the overall risk assessment for the development.

#### 59:02

Scott Lyness as for the applicant, we're going to ask Mr. Paxton to explain but as we understand it, we'll put in an FR a technical note the deadline sex as well to explain the relationship between the work in the FRA that's been conducted. So you'd have all that information and while at the same time, sir.

# 59:25

I should say that it doesn't. It's not going to alter the conclusions of the FRA but we understand we need the technical note just to tie that loose and as it were. Yeah.

## 59:37

Thank you. Any Anybody got any further comments? Mr. Graham? Mr. Phillips?

# 59:49

Yeah. Hello Graham Phillips for the Environment Agency. I just like to back up what we said that we have received that technical note. We've reviewed the we've received documentation in the model and

review that and We're generally satisfied that the model looks robust subjected to some minor confirmation that the calibration is appropriate and we'd be happy with that model

1:00:14

okay

## 1:00:19

but don't know if anyone here from either Cambridge Council, Bedford Borough Council or central Bedfordshire council here because under the flooding water management act, I'm thinking of your groundwater flood risk management responsibilities and if you've got any comments in relation to this

#### 1:00:48

so we have Ollie Ewington presence Sorry ,Alistair Wren bad FUBAR accounts. So we have our flood officer Ollie Ewington available, who may be able to help you.

## 1:01:01

So only your income Bedford Borough Council flood risk, much of the proposed new interchange is within the Bedfords. IDB. So they would need to comment on discharge. So the groundwater rates going into surface water we have responsibility as lead local flood authority for big or big brewery Brook, which is further north than where Southbrook is. So it's some distance away

## 1:01:34

yeah, it was the general groundwater management so you're saying that it's not something that use a lot of I have to consider it's, it's an organisation

#### 1:01:45

it would need to be paid for the internal drainage board who agreed rates within their drainage area

## 1:02:00

this alliance Have you been in touch with the Bedford internal drainage board regarding the groundwater?

#### 1:02:12

Scott Lyness need to take instructions on that, sir, perhaps up could be something else we come back to you on today. I can check that with the rest of the team.

#### 1:02:22

Thank you Mr Lyness. Mr Tyrrell, I appreciate that. We've talked endlessly about the blackcat interchange, but it's whether there are other interchanges in Cambridgeshire and whether you're satisfied with the grandmas reproaches there as well. So it's water.

# 1:02:42

So, we have no greater authority seven eight specific points raised on this issue, I think in the written questions, we we did previously just mentioned that there were other junctions of a similar nature then

we would want further information about that, but I have no instructions that we have any points to raise on these matters today. Okay, thank you.

## 1:03:05

Does anyone else got any comments they wanted to raise on this matter okay. So, moving on to a to b, which is the adequacy of the proposed drainage and flood risk management arrangements. We have covered some of this ground to some extent already. Generally speaking, if I could speak put this the environmental agency undelete local foot authorities, I you satisfied that there are adequate drainage and flood risk management arrangements for the proposed scheme. It's the bankruptcy to continue first.

#### 1:03:50

So, yes level bed environment I see I will hand it over to my colleague Louise Foreman

## 1:03:57

Louise Foreman from the government agency. In general we are satisfied that adequate flood mitigation measures will be put in place over the technical note that we recently received has addressed some of the issues that we raised in our relevant representations to a certain extent, but it has not fully addressed all those issues. And we would also like we have recommended that a couple of requirements are included in the DCO to address our concerns in relation to the detailed design of the scheme. And in particular, we are still concerned that to site compounds and soil storage areas are shown to be partly located within flood zone three. And local proposed mitigation measures have been put forward in relation to those

## 1:05:03

Thank you Mr Lyness put those those points to

# 1:05:09

Alaska, Scott Lyness for the applicant, economic Mr. Smart to deal with those or Mr. Paxton, I'm not sure which one's better place to do it. But either way, so I suspect most efficient way of dealing with this is that as I said discussions will continue. But with the Environment Agency, and to the extent that when we put in the technical note or deadlines, Section Eight to address these issues, we will make sure that it does that. I don't know if Mr. Smart has anything to add to add,

# 1:05:44

grandparent and beyond applicant? It'll be more probably in my domain. Okay. Thank you. Yeah, as Scott has indicated, we will certainly address look, look at the items that have been raised more than 180 and try and see if we can address those items in the submission of the deadline six. So yeah, we will take them born and look, look into those items. Definitely.

## 1:06:08

Thank you. So, again, it's the lead local authorities. So don't necessarily see you're still you're still on the screen. So if parts come to you first, but we'd like some response from Bedford Council and central Bedfordshire council as well, if possible.

## 1:06:29

So thank you. We I have no specific points to raise on this matter beyond those that were originally set out in the written representations, we'll see some of which have moved on. The only other thing to note is in relation to the technical note referred to any other technical notes that may be applicable and obviously the chemical authorities would be grateful for sight of those insofar as they've not seen.

# 1:06:55

Thank you. So Mr. Ewington

#### 1:07:00

So only going to and Bethabara. Counsel. I concur with the environmental agencies comments, follow our lead local flood authority area, but obviously kind of DBS drainage area, which is where the main bit of the interchanges yeah

## 1:07:23

thank you see you in Mrs Redway. Hi. I'm like to add from a bit of a bit of context to blackcat ran about it's got significantly less ground water ingress to it than was originally potentially going to be predicted but this still might be some so I assume that any flood risk technical note will incorporate any potential groundwater ingress into that. That that round about backcountry underpass as taken into account in the groundwater modelling. I seen a flood risk note in the groundwater modelling well interlink

#### 1:08:14

I'm the slightest possible and guilty and could respond to

#### 1:08:18

Scott Lyness is applicant to see Mr. Smart nodding, perhaps I can ask him to confirm.

## 1:08:24

Yes, the the MOT the model, and we've done to assess the quantities of groundwater which will now flow into the blackcat underpass will be used by the fluttery steam to order assessment discharges. And I'm sure Mr. Paxton can add any further comments may have

## 1:08:47

Grant Paxton and VR therapy and I agree is just Mr Smart. We have already done some form of assessment and check on the groundwater and flows and given comment and the A is responding to those as I said earlier, we will take any further comments on board and address those if need be. But certainly the groundwaters assessment that's been done has been in already incorporated and taken like we've passed and will be in the deadline six submission they will be full coordination between the two.

# 1:09:18

Thank you Mr. Paxton us Is there anything any anyone else wishes to raised regarding this item at the moment? This right away you still have your hand raised on the function so if you do have it we'd like to

thank you. So it does anyone else have any comments on flood risk and groundwater dewatering at this stage are we can we move on? We can move on Okay, good. Okay, so the next day agenda item is item number five, which is the assessment of alternatives. If I could ask the applicants, Bedford Borough Council and Historic England to join me in the virtual room now, that would be very helpful

#### 1:10:30

thank you all. So, agenda item number five is the assessment of alternatives. So what we're seeking here is further clarification on the option development and selection process for the blackcat junction that led to the selection of the preferred option and involve the demolition of Brook constitutes. We have touched on this a number of times in the past and the applicant has put in some, some additional, quite detailed information in particular, and not exclusively in the invite in the examination library documents at 035072 Up to four seven, rep four dash 032 and direct four dash 033 It will probably be useful for you to have those those documents reasonably close to handled. So the examining authority is is considering the alternatives with respect to the blackcat junction and the consequent demolition of Brook cottages in three related but distinct areas, environmental impact assessment, EIA, the loss of the historic assets and in the compulsory acquisition on the Human Rights Act, in particular article one of the first protocol and article eight of the European Convention on Human Rights. Your governing authority expects the case of alternatives to be justified in all three areas with specific reference to the relevant policy tests. Case for alternatives will be tested at this hearing in relation to the loss of historic assets. And the essay will testify again. It's compulsory acquisition hearing to on Thursday second of December, from the point of view of human rights and compulsory acquisition. In terms of heritage, great weight should be given to the conservation of a designated heritage assets. substantial harm or loss or grade two listed building should be exceptional. And any harm to a designated heritage asset requires clear and convincing justification. Strong national policy statement on national networks paragraph 5.131. In response to the examining authorities written questions and requests for further information, the applicant has set out its justification for selective justification and provided historical evidence in rep four Dash 03 204 Dash 033. Examining authorities looking for clarifications and further evidence sources to substantiate the applicant's case to demonstrate that there is clear and convincing justification for the demolition of reconstitutes. So, after that lengthy introduction, rather lengthy introduction, we can move on to the next question, which is Mr. Lyness is to the applicant. So, to your one of your team. In light of that, what further evidence can you provide for the examining authority in terms of the clear and convincing justification, for instance, looking at the stage two junction options, table four, four in four dash 032. With these works up in sufficient detail, given that the somewhat equivocal and sometimes differing assessments of the effects of the proposal at the non statutory consultation stage.

## 1:14:06

So Scott Lyness for the, for the applicant, and going to ask Mr. Wade to deal with that point, specifically in the context of the stage two options, but I'd be grateful if I could just make a couple of introductory points on the approach to alternatives, generally, given that you mentioned paragraph 531, in particular, in your introduction, sir. The question refers to the issue of alternatives being considered in the context of EAA, as well as historic asset policy and compulsory acquisition and human rights. And I will obviously come on to compulsory acquisition, human rights and a letter bear hearing. But I think it's important at the outset to distinguish between the EAA and the policy requirements relating to loss of

historic assets, the obligation Under the IAEA regs is for us to describe the reasonable alternatives that we studied, that does not impose any tests, which would involve a judgement about the availability of other preferable alternatives as part of any doctrine. That's an obligation not to describe what we have done. If one turns then to the policy relating to the loss, historic assets, we accept that in principle alternatives can be relevant in the way that we have put our case. And if one looks at paragraph 131, insofar as references made to the clear and convincing justification for the last historic asset, that must be read in the context of paragraph 5133. Where if one goes through the test that applies a substantial harm in particular, we say that is the clear and convincing justification that is required by virtue of 5131. So we've accepted that our proposals, insofar as they would involve the loss of cottages would engage 5133. And to that extent, we would have to demonstrate substantial harm is necessary in order to deliver substantial public benefits. And we've accepted in line without this question of necessity, involves the consideration of potential relevant alternatives. As part of that test. We for the avoidance of doubt, are not relying upon paragraph 4.27 of the MPs simply to say that you can be satisfied options were considered unstopped. There we we've always accepted, you need to apply the policy test within 5133. And alternatives are potentially relevant. In that context. I say nothing about the compulsory acquisition or human rights aspect of this because it's it's for it's for another another day. So that's that's the that's the context, as far as the question of looking at alternatives is concerned, particularly as far as the policy at relating to loss of historic assets. This is a few introductory points that Mr. Wayles will I'm sure come back to along with Mr. With Mr. Doherty. And there are these that these are the two real equations of overall approach and concepts. I think the first point, sir, is that it's necessary to recognise on a scheme of this scale covering such a wide area, there will be inevitably a refinement of options as one progresses through the consideration of the scheme, starting from a relatively high level consideration, which becomes more detailed as one progresses. So in the case of a highway scheme, such as this one, as illustrated by the need to look at a broad route, which covers a long distance with a large study area. And one would naturally expect matters, including cultural heritage, but amount are generally to be considered by references to broader considerations, broader sweeps of land when one's looking particularly at at route options. And that would progress to different levels of detail as one goes through the process. It's an iterative process. So the second point following on from that is that insofar as there's reference made in the agenda items to equivocal or particularly equivocal references to some of the assessment work,

#### 1:18:40

we don't accept any implication and not that that's somehow negative, or it's an issue but a subject of criticism as part of the approach. That that simply reflects the fact that there is a sifting process that takes place, and that as one works through that process, there will be options which fall away for reasons including Highway Safety, but other options remain effectively open to further consideration. So what might be seen by farmers equivocal references simply means that options haven't been ruled out and they're going to be considered at a later stage. The third point is that that sifting process needs to take place in the context where it can't be expected at all options are going to be worked up to the same level of detail at every single stage, or that matters which were rejected at one stage or necessarily going to be revisited at another. That's not the way that the sifting process works, particularly when one is looking at matters such as highway safety. So there's nothing as far as our case is concerned to indicate that there's anything wrong with adopting a process whereby one has a look at the root options, conducts a set where one rejects options that aren't working, moves on

keeping options open, and then comes to look at junction arranged as part of that Edward of process. And what has happened here just focused to begin to focus on the question that you raised, sir, is that the the work that's been done needs to be seen in its context are 50 route options, considered, first of all, based on the ability to meet identified problems, deliverability feasibility, there was a sifting process which led to 16 taken forward, they were then assessed in more detail, resulting in three route options and 12 blackcat junction options, which I'll come on to. And it's important to say that those 12 blackcat, junction options were worked up in initially to D concept designs. And that's actually as we'll hear from Mr. Wayles, a higher number of options that wouldn't normally be expected at stage two. And that was reflective of the fact that the blackcat junction arrangements and an understanding of the lengths that we needed to go to to meet the technical requirements for the for the junction and the complexities that are involved. So we are at that stage, we were going beyond what normally happened before. And we did consider options that would have avoided Brook cottage, but they were rejected for safety reasons that we can come on to explain. And unimportant point, sir, is that there's been new evidence contradicting that finding in any substantial or serious way, and not only did we look at options, which would avoid demolition, within that 12 Junction options assessment. After the non statutory consultation, we looked again at Option C, plus, based on again further rhetoric of work, after the the annex to the T AR and the stage two e AR. That was based on 3d work, further detailed work, it was being carried out, we looked again at whether there's an option which would avoid brick cottages. And again, we rejected that on the grinder significant safety and technical issues. So again, our point is that there isn't any evidence we say to suggest that there is any contradictions, the options which we did look out to avoid brick colleges and the rationale for rejecting that there aren't any reasonable alternatives before the panel, which suggests hybrid colleges could be avoided as far as the scheme

## 1:22:46

is concerned, which would deliver the fundamental requirements that the scheme must meet. So I think I just wanted to set out that context in terms of confirming the validity of the sifting approach and why we don't think that references to so called equivocal references and documents should be regarded as pejorative in the way that the question might be taken to imply. And secondly, to confirm that we have looked at options which avoided brick cottages at appropriate stage of the process. Once other options had been properly rejected, it was necessary for us to go back and reinvent the wheel based on the number of work that the amount of work had been done. And thirdly, that there isn't any evidence before this examination of another reasonable alternative, which could be provided instead. So I think I just wanted to set the scene that that way, sir. And in that context, can I ask Mr. Wayles to deal with the first bullet on this agenda item, which was whether or not as part of that process the 12 stage two options were sufficiently detailed NASSCOM to elaborate please.

## 1:24:02

Yes, Phil Wayles on behalf of the applicant. And thank you for that comprehensive summary. Yes, we believe that the 12 options were developed in an appropriate level of detail proportion to the stage of development of the scheme. 12 is often more than you would have at this stage, but I think that's a reflection of the complexity but also the highly constrained nature of that area constrained not only by cultural heritage sites, but also the there was the floodplain of the river Southbrook etc. We have got the air one corridor itself, which is highly constrained and those all had an influence on the development of options which is Mr. Lyness said were all developed in 2d which again is normal and

proportionate for that stage to enable informed assessment to be undertaken, which covers safety, traffic, economics, environmental aspects to enable And the decision making be taken a bit about which options can be sifted out. And your reference table for for in your introduction is that. And that contains quite detailed information based on a thorough assessment don't have all of those 12 options. And this was covered in the ragged table that was included in Appendix C. For this, right, that's in the alternatives report, which was read for 032. And it was on the basis of that you can see the decision was made around from the sifting process which options were discounted, as Mr. Lyness said, generally, predominantly on safety reasons because of the nature of the complexity of the junction that was suggested. But also the factors came in, particularly around the user awareness of the maybe has a non standard layout, and it was the decisions were down to the three options. As also mentioned, what you have at that stage B to D is there is always going to be some uncertainty around the overall design for the scheme. And I'm thinking here of the slip road arrangements particularly and more importantly, for the there's a free flow link, which is a segregated left turn lane from the air four to one to the air, one northbound. And that that carries a considerable amount of traffic. And it's only when you get the detailed traffic analysis and look at it in more detail, which happened when the three D model layouts were started to be developed, following the non statue consultation that you understand the impact of that slip road in particular, which is obviously very important here because it's the one in the vicinity and passes, cottages. So once that more detailed assessment had been done in 3d, when you understand a look at the slip road alignment in more detail, rather than the high concept design that was presented in a lot of the early sifting process and the non statutory consultation, you then get a better feel for the overall Lantech that is required to deliver the scheme. And partly this is also not just the outline of the scheme is how you deliver it safely as well to construct it safely. And, for instance, at the statutory consultation, we delivered and developed some information present to console t so they could see how we're going to keep the traffic moving during construction, which was in one of the visit models we had there. But the 3d design was further developed based on the road safety audit to ensure that we took on board comments about suitable weaving distance from the point where the cigarette left turn lane and the slip road as it as it leaves the circulator carriageway where they're joined to maximise the distance before you merge on to the air one northbound carriageway, and it was for that reason trying to maximise the length that that increased the overall lantic to make sure we had a safe solution for the blackcat junction, but in particular, the northbound on slip road

#### 1:28:24

Sorry Mr Wayles. Is that stuff that you've just referenced there in the in the examination library.

## 1:28:31

And, yes, also the 3d plans are shown in various documents, though they're shown in the stage two Environmental Assessment Report. They were actually included in just saying it'll be Appendix D. In rep.

#### 1:28:50

Sorry, just just pick up. I thought you said the 3d reports came after the non statutory consultation. So the three the design of the Stage C report with a fix that was the case?

# 1:29:02

I think there was some shown in the in the stage two assessment. I'm just looking at one of my colleagues here. I believe they were shown in the in the stage two report.

## 1:29:12

Well, I mean, we'll obviously have to come up come onto this in a bit more detail, perhaps after lunch, but I'm just slightly confused by the fact that you said that the 3d modelling isn't done until after the stage two works been done. And then you're now saying that you did some 3d modelling for the stage two works. Is that in the evidence before us? Yeah, I

#### 1:29:32

believe that is in the evidence before you.

#### 1:29:35

Can you point me to it place

## 1:29:38

one second. I'm working on one screen which is quite tricky. So Mr. Doherty is just telling me that it's in section four of the Black Cat junctions report. And it's certainly in

#### 1:30:18

the examination law be referenced on the for that. Just just the votes of

#### 1:30:23

is that 247?

#### 1.30.33

Up to four seven Yes.

## 1:30:47

Yeah, you want to commend Mr Doherty

## 1:30:51

Good afternoon, Ted Doherty representing the applicant. Yeah, just wanted to confirm that the stage to work did develop some 3d arrangements for the options A, B, and C, as part of their sort of post nonstatic consultation process that is included details of that included in the blackout junction options report in that section for and that further verify the the fact that the three junctions impacted on book cottages. And there that is, again, are highlighted in that options report.

## 1:31:34

So, at that stage, what Mr. Wayles was saying about not understanding the traffic flows from the a 41 to the 81 northbound or understanding the significance of the slip road that would have been considered at that stage. Is that what you're saying?

#### 1:31:49

I think it was a lot of it. Because as I Ted Doherty representing the applicant, I think, as Mr. Lyness has said, you know, there's a developing process, there was a stage two traffic model, there was an understanding of the traffic flows and traffic impacts at that stage. I think, you know, the principle of the pre fo Link was established at stage two, I accept these, you got to appreciate that these these 3d designs are developed, developed based on information available at that time. So, you know, it's it's a developing process. And yes, but I, it, as you go through the process, you get more detail, and you firm up and get a better understanding of the impact.

#### 1:32:32

Okay. And it was partly because of the the, the assessment that had been done at that point, sorry, Phil wells on behalf the applicant, it was because of the assessment that has been done. For those concept level joins that we include in the non statue consultation, that further work was undertaken to understand the impact on Brook cottages and other receptors in constraints in the area of the Black Cat junction.

# 1:33:01

Okay, yes, what? Thank you. That's, that's interesting. I think we'll probably come back to this in a bit more detail after lunch. So we've we've, again, been been seen for some time now. Just before we do, though, what I'd quite like to do is, is have a question put to bed for counsel. I'm not sure who it is in Mr Wren, if you're leading on whether it or whether it's you or Mrs Mrs MacLeod, and who's best placed to answer it. It's just whether or not you've got an update for us from action point five, from NSH. Three, to look at the broad brush alternatives that may have obtained cottages.

# 1:33:52

Yes, so we, we've had a discussion and we've considered alternatives, we haven't been able to identify a reasonable alternative to the scheme that's been put forward, resulting in the loss of Brook cottage. Okay. We don't have schematics or plans or anything on that. What we've done is use the applicants previous submissions and our knowledge of the area, the information we have available. And we've reached that conclusion that there isn't a reasonable alternative. We've been able to identify the apologies that wasn't put in writing it deadline five.

#### 1:34:37

So, okay, well, that's that's interesting. That's, that's something that would support that would support what the applicants been saying and say thank you for undertaking that workouts. That's helpful to do. Mr. Eve, I appreciate Historic England. Not highway engineers. And so we're unable to make comments in that regard. And I just wanted to code any general comments on what you've heard so far.

#### 1:35:12

Yes, David Eve for Historic England, that's a really useful comment from the from the borrower there. Obviously, as you say, we're not really able to comment on the scheme itself, but it's very useful to hear that they effectively can concur with the applicant. I mean, the most of the rest of what's in these documents really comes down to the justification for dismissing those two alternatives which didn't require the demolition, which really rests on highway safety issues, which, again, are not common things that we were able to criticise. So I suppose essentially come down to a weighing of

## 1:35:51

mystery. I think we might be able to just sneak in another question just before lunch of if we can. So again, to Mr Lyness or one of your team. So looking at the 12, stage to concept options, none of none of these options concluded that Brooke costume must be demolished. And this is, this is in partly the equivocation. In terms of the findings of that. And I appreciate what you've said in terms of perhaps you haven't gone to the the great detail of the that's required to do that. Over 10 of the total options, it was considered likely. So there's obviously a degree of work done in that case. The two options were demolition was not thought likely, were options, one D and one E. And these were discounted on road safety grounds, amongst other things. And this is, again in Table four, for up for Dash 032. I just wondered if you if there was any evidence to support the discounting of those two options, particularly on terms of road safety?

#### 1:37:02

Scott Lyness for the applicant, Alaska, Mr. Wayles and Mr Doherty to deal with that for me. Sir, we'll please.

# 1:37:13

Yeah, Mr. Wayles on behalf of the applicant. Yeah, consideration was was given. And this is covered in the in the rag table around the number of conflict points that there are on some of these manoeuvres. There's obviously safety issues, from a user perception point of view around non standard layouts, they can obviously be deemed to be unsafe, but actually broad calculation of some of those those movements going from say, west to east or Western North, you end up going through up to 16 potential collision points through these, which everyone has a potential and there's a risk of a collision at all of those. And it's just the number of roundabouts and other links that there were to make some of these manoeuvres and those considered with together with the non standard layout, gave those safety concerns to the team who were doing that sifting process.

## 1:38:10

Sorry, I'm not really following you there. You said this was a relatively high level to you looked at 2d modelling for the stage two designs. Are you saying that there wasn't really enough information in that in those 3d models for you to come to a realistic view as to the performance of the different options?

# 1:38:31

No, no, there was sufficient information to enable that sifting and decision making to be to be made. But looking across all of the the options that were available, some had more straightforward manoeuvres and involve less conflict points in making the manoeuvres from say north to south or north, west to it to north. And it's true that that the assessment was taken in a qualitative point of view when this has been done to to make a judgement on the number of risky at risk points there were for people travelling between through those junctions on those two options. Okay, and there were fewer on the others,

# 1:39:12

there weren't similar numbers of conflict points on on the other options that weren't weren't discounted.

## 1:39:18

Some did have similar numbers, but potentially for other reasons as well, that they were maybe preferable if the judgement was taken across a number of criteria, which is covered in the in the rag table.

#### 1:39:31

Yeah, again, it'd be helpful for the governing authority to understand that read in terms of we're looking at table four four, which is in the document that was very helpfully provided by the applicant last time around. But it's a case of just you know, his whereabouts and the evidence is there that we've got no explanation as to how you came to the US 50 conclusions there. If you if you pass pointers in that direction,

#### 1:40:05

as Scott Lyness for the applicant or Mr. Wayles mentioned Appendix C to the overview report, you'll be aware that there was a separate document, appendices g 2k. And a fairly large on our Google PDF document. But Appendix C was the rag table that he's referred to which gives further information on on the judgments that were reached on those options. Okay,

## 1:40:34

apologies Mr. Parkin. For the interruption. Mr. Scriven is having some it difficulties. And I'm aware that his input on this particular aspect of questioning was crucial. So I just wondered how you might want to deal with this.

## 1:40:53

Yeah, perhaps, perhaps we could pause now for lunch and have a break now. And perhaps hopefully, the ghosts in the machine will have vanished. Nice afternoon. It's not ideal, but I think it probably is, is best, perhaps, in the circumstances for us to do that if everyone's got no real objections to that sort of approach. Okay. Well, thank you all very much so far. I mean, I think we probably all could do with having a lunch break anyway. So if we could perhaps pause things now and come back to lunch. We're on a slightly different timescale than there was in there was in the published agenda. But if we come back to lunch at two o'clock, would that be sufficient for everybody to have time to reasonable break?

## 1:41:42

Yeah. Fine. Excellent.

## 1:41:45

Thank you very much, and we'll see you all back at two o'clock.