

M5 Junction 10 Improvements Scheme

Applicant Response to Interested Parties

Deadline 4 Submissions

TR010063 - APP 9.78

Rules 8 (k)

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M5 Junction 10 Improvements Scheme Development Consent Order 202[x]

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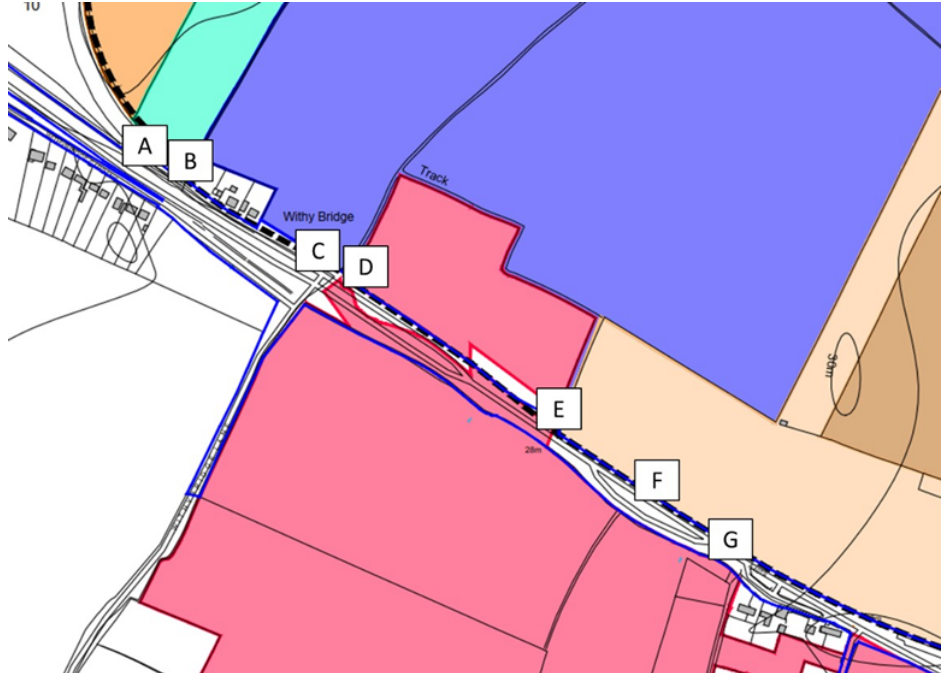
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1. Introduction

- 1.1.1. This document (TR010063/APP/9.78) provides the Applicant's response to submissions made by interested parties at Deadline 4 including:
- REP4-045 Gowling WLG (UK) LLP on behalf of Bloor Homes and Persimmon Homes Limited
 - REP4-046 Environment Agency
 - REP4-048 Joint Councils
 - REP4-049 National Highways
 - REP4-050 Mr Hadley
- 1.1.2. Where issues raised within the IP's response have been dealt with previously by the Applicant within one of the application or other examination documents, a cross reference to that response or document is provided to avoid unnecessary duplication. The information provided in this document should, therefore, be read in conjunction with the material to which cross references are provided.
- 1.1.3. In order to assist the Examining Authority, the Applicant has not commented on every point made by Interested Parties, including for example statements which are matters of fact and those which it is unnecessary for the Applicant to respond to. However, and for the avoidance of doubt, where the Applicant has chosen not to comment on matters contained in the response, this should not be taken to be an indication that the Applicant agrees with the point or comment raised or opinion expressed.

2. REP4-045 Gowling WLG (UK) Ltd on behalf of Bloor Homes and Persimmon Homes

Response Reference	Issue	Applicants Response
ISH3 Item 4 Traffic and Transport Existing Access Arrangements		
045-01	<p>There are seven accesses into the Safeguarded Land north of the A4019 which are affected by the Scheme, labelled A – G below.</p> 	Please see Appendix B for Applicant’s combined response to Existing Access Arrangements.

Response Reference	Issue	Applicants Response
045-02	<p>Access A is an ungated track which connects from the merge of the A4019 slip road with Tewkesbury Road. It provides access to a traveller site adjacent to the M5. This access is not located on land within the control of Bloor Homes. The types of vehicles using Access A are unknown but likely to include large vans or smaller heavy goods vehicles.</p> <p>Access B is a field gate which joins the track forming Access A. The gate serves agricultural land which again is not located on land within the control of Bloor Homes. The types of vehicles using Access B are likely to include similar vehicle types to Access C (see below).</p> <p>Access C is an ungated track which adjoins the eastern end of the layby on the A4019. It serves the 'Bruton and Counsell' land of some 47Ha which is in arable crop rotations. It is the largest single land ownership within the Safeguarded Land and is within the control of Bloor Homes. It is the main access to this land and is in regular use for a wide range of agricultural machinery and articulated lorries (delivering fertiliser or removing straw). Agricultural vehicles access the land through a gateway that is currently 3.8m in width, but there is ample space at present to widen this – it should be noted that farm vehicles are increasing in size due to the need to achieve economies of scale, the largest widths at present are already 4m for current machines (as per John Deere combine harvester specifications). The gateway can presently be easily increased to accommodate larger vehicles by a small widening of the current access track, subject to the necessary permissions.</p> <p>Access D is an ungated track which immediately adjoins Access C. It is owned by Gloucestershire County Council and is in agricultural use. Usage is likely to be similar to Access C.</p> <p>Access E is a gated vehicle crossover from the A4019. It is a strip of land which continues north into the Bruton and Counsell land, serving as a secondary access which is important in that it allows an alternative if there is a traffic issue near the M5 junction and a need to go an alternative way back to the farm yard/grain stores etc. From the strip of land, a further gated access is provided on the eastern side. This provides access into the Carter owned land</p>	<p>Please see Appendix B for Applicant's combined response to Existing Access Arrangements.</p>

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	<p>(9.55Ha in agricultural use). This land is also in the control of Bloor Homes. Usage of this gate is likely to be similar to Access C.</p> <p>Access F is further east along the frontage of the Carter owned land. It is a gate but has become overgrown by hedgerow and is not believed to be currently use. It could however be opened up if required.</p> <p>Access G is further east still along the Carter land frontage. It is a vehicle crossover leading to a gated field access. Usage of this gate is likely to be similar to Access C.</p>	
ISH3 Item 4 Traffic and Transport Proposed Replacement Access		
045-03	<p>The Scheme would amalgamate Access A – G into a single signal controlled junction from the A4019 Tewkesbury Road. The single junction would split into eastern and western segments. The eastern segment would combine to replace Accesses E, F and G. The western segment would combine to replace accesses A, B, C and D, all of which are in regular use.</p>	<p>Please see Appendix B for Applicant’s combined response to Proposed Access Arrangements.</p>
045-04	<p>A vehicle tracking drawing has been provided by the Applicant of the combined farming access which highlights a vehicle track for a tractor and hay wagon with a length of 19m and width of</p> <p>However, this does not meet the landowner's access requirements for the following reasons:</p> <ul style="list-style-type: none"> (a) Farm machinery is wider than the design vehicle used and is typically in excess of 3m wide (noting also that vehicle sizes are increasing as indicated above). (b) At peak times the combined access track will be frequently used – each landowner may have 4 – 5 tractor rigs towing machinery in order to ensure constant take off from a combine harvester. <p>Inevitably therefore at certain times there would be conflicts between multiple oncoming vehicles in this area. It has not been shown that two vehicles towing machinery exceeding 3m width could pass within the access road. This could</p>	<p>Please see Appendix B for Applicant’s combined response to Proposed Access Arrangements.</p>

Response Reference	Issue	Applicants Response
	then result in conflicts within the signalised junction arrangement and in particular vehicles being 'stuck' within the junction.	
045-05	It is the landowner's view that access to its land should be provided via a direct north-south road from the junction, as opposed to the current arrangement which provides a tight corner radius which will cause operational and safety issues at peak times.	Please see Appendix B for Applicant's combined response to Proposed Access Arrangements.
045-06	This is a genuinely held view from a farm operations perspective. Although the existing access gates are simple, each landowner is able to access its land independently. With the Scheme as proposed, this will be shared via a narrow track, and there is a risk of conflict between oncoming large machinery.	Please see Appendix B for Applicant's combined response to Proposed Access Arrangements.
045-04	<p>A vehicle tracking drawing has been provided by the Applicant of the combined farming access which highlights a vehicle track for a tractor and hay wagon with a length of 19m and width of</p> <p>However, this does not meet the landowner's access requirements for the following reasons:</p> <ul style="list-style-type: none"> (c) Farm machinery is wider than the design vehicle used and is typically in excess of 3m wide (noting also that vehicle sizes are increasing as indicated above). (d) At peak times the combined access track will be frequently used – each landowner may have 4 – 5 tractor rigs towing machinery in order to ensure constant take off from a combine harvester. <p>Inevitably therefore at certain times there would be conflicts between multiple oncoming vehicles in this area. It has not been shown that two vehicles towing machinery exceeding 3m width could pass within the access road. This could then result in conflicts within the signalised junction arrangement and in particular vehicles being 'stuck' within the junction.</p>	Please see Appendix B for Applicant's combined response to Proposed Access Arrangements.

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ISH3 Item 4 Traffic and Transport Future Development of the Safeguarded Land		
045-08	With the Scheme as proposed, the design is such that future access is intended to be limited to a single location, within land owned by the Applicant. It has been confirmed by the Applicant that they intend to lever this arrangement to create a 'ransom' situation to its own benefit, whilst at the same time indicating it is reliant on funding from the Safeguarded Land to deliver the Scheme. The Applicant is therefore impeding delivery of development of the Safeguarded Land and putting into doubt the availability of funding on which it is relying. The Scheme should be facilitating not impeding delivery of the Safeguarded Land.	Please see Applicant's response to ExA WQ2 5.0.16 (TR010063/APP/9.77).
045-09	Likewise, the Applicant has yet to confirm that the future highway boundary will align with the revised boundary of land within the control of the landowner and Bloor Homes and that there will not be any retained strips of land restricting access.	Please see Applicant's response to ExA WQ2 5.0.16 (TR010063/APP/9.77).
Item 5 Funding: Need for the Scheme and Certainty of Funding		
045-10	The need for the Scheme to mitigate the transport related effects of North West Cheltenham (A4) should be determined through means of a planning application and associated transport effects. A planning application should be determined against the relevant national and local planning policies. The DCO application is decided upon a different policy framework and the considerations about need cannot be applied to individual planning applications.	The Applicant has set out its position regarding the need for the Scheme in the Need for the Scheme Technical Note submitted at Deadline 4 (REP4-042). This establishes the need for the Scheme as a result of the cumulative impacts associated with the Strategic Allocations, including those as a result of the North West Cheltenham development.
045-11	Bloor Homes and Persimmon Homes are not inviting the ExA to reach any conclusions about the need for the Scheme in relation to North West Cheltenham (A4) or the likelihood or quantum of any contribution that might arise through a S106 payment. That is a matter for a separate decision maker through the planning application process	It should be noted that the allocation of this land (as part of Strategic Allocation A4) is predicated on the mitigation measures outlined in Scenario DS7 addressing the impacts of the JCS development. This established the need for the Scheme to address the impacts of the Strategic Allocation on both the local and strategic road network in order to facilitate its development.

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Item 5 Funding: Proposed Requirement		
045-12	In respect of the suggestion by St Modwen that a requirement could be imposed on the DCO to allow further dialogue on funding matters, the Interested Parties do not consider that this would overcome or address the scheme funding issues. The Applicant's ability to fully fund the scheme is essential to the determination of the DCO application. A requirement would only apply post making of the DCO. In addition, it is doubtful that any requirement to enter into dialogue regarding funding would be workable or enforceable in practice.	The Applicant would like to reiterate its position as stated during ISH3 and CAH1 and summarised in its written summary of oral submissions (REP4-037 page 82-83, REP4-038, page 22) that there is no requirement in legislation or guidance for the Applicant to demonstrate that it has sufficient funds to deliver a Scheme during examination. What is instead required is that the applicant provide an indication of how any potential shortfalls are intended to be met. The Applicant's position is that the indication as provided in its Funding Technical Note (REP4-043) provides the indication necessary to meet this test.
CAH1: Compulsory acquisition of land for the Scheme		
045-13	The 'Guidance related to procedures for the compulsory acquisition of land' (DCLG September 2013) provides that an applicant must demonstrate how its scheme will be funded and how any funding shortfalls will be addressed (paragraph 17). The timing of the availability of funding is also a relevant factor (paragraph 18). The Applicant has failed to satisfy these requirements.	<p>The Applicant is not clear how this statement has established that it has failed to meet the requirements placed on it under paragraphs 17 and 18. The Applicant has made its position clear in this regard and the Applicant considers that the statement that the “applicant must demonstrate...how any funding shortfalls will be addressed” is not reflected in paragraph 17.</p> <p>The Applicant agrees that timing is a relevant factor as established by paragraph 18, however, it is incorrect to state that paragraph 18 makes timing a relevant factor for the capital expenditure of a project rather it establishes that adequate funding should be “likely to be available to enable the compulsory acquisition within the statutory period”. The Applicant's previous submissions in this regard confirm without doubt that sufficient funding is in place to enable compulsory acquisition within the statutory period.</p>

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045-14	<p>The Applicant acknowledges that the Scheme is not presently fully funded. It has indicated that developer contributions will be secured to meet any funding shortfalls. The Applicant has however failed to show with any certainty that such developer contributions will be capable of being secured within the time for implementation of the Scheme pursuant to the DCO or at all. In particular:</p> <p>(a) No reliance can be placed on a developer contribution being made by North West Cheltenham (A4) on the basis that this is matter for determination through a separate planning application and no such contribution has yet been agreed.</p> <p>The Applicant suggests that development of the Safeguarded Land could provide 33% of the shortfall in funding. However, given the uncertainty as to if or when development of that land may come forward, no reliance can be placed on this.</p>	<p>(a) The Applicant does not agree with the statement that no reliance can be placed on a developer contribution being made by North West Cheltenham (A4) on the basis that this is a matter for determination through a separate planning application and no such contribution has been agreed. The Applicant's position is that following continued discussions on the development of a developer contribution methodology, the reliance that A4 has on the scheme to enable that development to come forward, and that any contribution would meet the CIL s122 tests, the Applicant considers that it is an entirely reasonable position to expect s106 contributions from the developers of A4. The Applicant acknowledges that ultimately the question of quantum will be a point for determination during the planning application, however, this does not detract from the reasonableness of its assumption of the funds being made available.</p> <p>(b) Regarding the safeguarded land, the Applicant considers that for the same reasons as set out above in A4, it is reasonable to expect a contribution to be levied from the safeguarded land. The Applicant acknowledges there is a separate issue regarding timing in relation to those funds and the deadlines set by the HIF funding, but this does not detract from the position in principle that reliance sufficient for the tests set by guidance can be placed on the safeguarded funding.</p>
045-15	<p>The uncertainty as to the funding for the Scheme (including that no reliance can be placed on the Applicant receiving a developer contribution from North West Cheltenham (A4) and the Safeguarded Land) will need to be taken into account by the Examining Authority in determining whether there is a compelling case in the public interest for the compulsory acquisition of land to enable the Scheme to proceed.</p>	<p>The Applicant considers that its indication for how the shortfall in funding is to be met is sufficiently set out in its Funding Technical Note (REP4-043) to meet the tests required of it under guidance and which would be relevant to the Examining Authority in determining whether there is a compelling case in the public interest for the compulsory acquisition of land.</p>

3. REP4-046 Environment Agency

Response Reference	Issue	Applicants Response
<p>Agenda item 3 i) The ExA will explore with the EA and the Applicant their consideration of Sequential and Exception Test and the current conclusions in the Statement of Common Ground (SoCG).</p>		
<p>046-06</p>	<p>In Flood Zone 3b (functional floodplain) essential infrastructure that has passed the Exception Test, should be designed and constructed to:</p> <ul style="list-style-type: none"> • remain operational and safe for users in times of flood; • result in no net loss of floodplain storage; • not impede water flows and not increase flood risk elsewhere. <p>In principle, we would consider the scheme would pass the exception test, in relation to flood risk, as we have reviewed the updated modelling, and it is fit for purpose. There are slight increases of flood risk within the order limit, but we have been made aware that there are discussions with the landowners regarding compensation. The updated Flood Risk Assessment (FRA) provides mitigation measures on Flood Plain</p> <p>Compensation (FPC) which we will be consulted on the final designs as stated in the dDCO Requirement 13.</p>	<p>The Applicant concurs with the EA’s in-principle statement. The predicted detriments described in the FRA and ES are:</p> <ul style="list-style-type: none"> • on farmland in the River Chelt floodplain, both upstream and downstream of the Link Road, where the fields either side of the Link Road are predicted to incur a localised increase in flood level of up to 60 mm, from 160 mm to 220 mm; and • on farmland between the B4634 and Withybridge Lane, where flood depths increase in the watercourse just downstream of the road by 30-40 mm, from 140 mm to 180 mm, in the design event, with a more widespread reduction in flood depth across the fields. <p>However, at this location, the greatest impact was predicted for more frequent events, no change predicted at the 50% annual exceedance probability event (1 in 2-year return period), but a widespread 20-30 mm increase, with depths generally increasing from 100 mm to 130 mm, in 3 fields, at the 20% annual exceedance probability event (1 in 5-year return period). Negligible impacts were predicted for the 5% annual exceedance probability event (1 in 20-year return period) and above.</p> <p>Despite having no material increase on flood risk elsewhere, the Applicant is consulting with the affected landowners to demonstrate that they are fully aware of, and accept, the small increases in peak flood level. At the same time rights are also</p>

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		<p>being sought through the dDCO (through the Order Limits) for the increased flooding on the farmland. The areas are included within the DCO to acquire Permanent Rights should negotiations be unsuccessful. No land for mitigation is required outside of the DCO.</p> <p>The compensatory floodplain is secured by dDCO Schedule 2 Requirement 13(1) which requires a designed scheme for the flood compensation areas or flood storage are to be submitted to and approved in writing by the Secretary of State following consultation with the relevant planning authority, county planning authority, Environment Agency and the strategic highway authority. The REAC [REP3-031] item WE24 expands this to include the Environment Agency as a consultee on this aspect of the detailed design and compliance with the FRAP process.</p>
<p>Agenda item 3 i) The ExA will explore with the EA and the Applicant their consideration of Sequential and Exception Test and the current conclusions in the Statement of Common Ground (SoCG).</p> <p>Option two: Scheme not classified as essential infrastructure</p>		
046-07	<p>If the scheme is not classified as essential infrastructure, due to the Link Road falling outside of this definition, then according to Table 2, Flood Risk vulnerability and flood zone 'incompatibility' of paragraph 07S of the NPPG, development should not be permitted, because the scheme would then contain different elements of vulnerability and therefore the highest vulnerability category should be used.</p>	<p>The Applicant concurs that by cross reference to Table 2 at paragraph 79 of the NPPG that the Scheme's vulnerability as Essential Infrastructure is compatible with the envisaged flood risk.</p> <p>The proposed West Cheltenham development of new housing (c.9,000 homes) and employment land is proposed in the JCS as strategic and safeguarded allocations to the west and north-west of Cheltenham, these being: West Cheltenham (Golden Valley); North West Cheltenham (Elms Park); and safeguard land to the west and the north-west of Cheltenham. The proposed Link Road would provide flood free egress across the River Chelt floodplain that is currently only provided locally by the M5. Currently, during extreme flood events there is no safe means of</p>

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		<p>passing over the River Chelt within Cheltenham and if this is coincident with a flood on the Hatherley Brook then the Link Road would be the only recognisable mass evacuation route for the area between the River Chelt and Hatherley Brook floodplains. This would form a key evacuation route for the communities of Hayden and the West Cheltenham development.</p> <p>In the alternative, if parts of the Scheme are not described as essential infrastructure then it is unclear what it would be classed as none of the other classifications relate to this type of development. Of the various alternative categories, only the less vulnerable category might be applicable (being commercial development and car parks – although not transport infrastructure as such).</p> <p>If the Scheme contains different elements of vulnerability the highest vulnerability category should be used in assessing the flood zone compatibility. This is described in the Notes to Table 2 as part of paragraph 079 in the NPPG.</p> <p>Nonetheless, the Applicant concurs that the alternative classifications preclude development in Flood Zone 3b (functional floodplain – as shown in the figure appended to the SoCG with the Environment Agency submitted at Deadline 4 ref REP4-024). This non-compatibility is set out in Table 2 para 079 of the NPPG Flood Risk and Coastal Change guidance. By inference, any new river crossing would need to be Essential Infrastructure or Water Compatible Development.</p> <p>Alternatively, the impact of this decision would be a need to remove the development in Flood Zone 3b by increasing the number of culverts under the Link Road (or redesign the floodplain crossing) such that the road embankment were removed from Flood Zone 3b. The Applicant notes, however, that a previous iteration of its design did include culverts along</p>

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		<p>the full width of the design event floodplain and the detailed flood modelling, as set out in the Scheme Modelling Report [AS-048] and Flood Risk Assessment (part 1 of 2) [AS-023]. These demonstrate no increase in flood risk as a result of the encroachment of the Link Road embankment into FZ3b with its fewer culverts. Hence the presence of the Link Road embankments in Flood Zone 3b causes no material impact on flood risk elsewhere. Furthermore, the compensatory floodplain (work item 5(o)) on the eastern side of the Link Road is sized to address the loss of floodplain arising from that encroachment. A requirement to remove the current design from Flood Zone 3b would also see a reduction in the proposed compensatory floodplain by the Link Road.</p> <p>In the event that notwithstanding the lack of impact the embankment causes, or the lack of benefit the culvert gives, that the Applicant has to remove the embankment from FZ3b and replace with a culvert the Applicant is confident that it can make the necessary changes to design within the terms of the Order. As described above the removal of the embankments from the FZ3b has no material impact on flood risk elsewhere. The removal of the embankments would also remove the landscape planting at this location. This is considered not to change the landscape and visual impact assessment by introducing any materially new or different environmental effects for the Link Road. No other significant environmental effects are identified for the replacement of the embankments with culverts in this location.</p> <p>The other classifications, except highly-vulnerable (e.g. basement dwellings, police, ambulance and fire stations) which the Link Road is certainly not, are all compatible with Flood Zone 3a. Should the other classifications apply, then the fundamental requirements of development and flood risk as set out in the</p>

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		<p>NPPF still apply (development to be safe and not increase flood risk elsewhere).</p> <p>Hence, a change away from an essential infrastructure classification may simply remove the need for the Scheme to pass the Exception Test, as described in Paragraph 164 of the NPPF, and expanded in paragraph 031 of the NPPG. This said, highly-vulnerable development in Flood Zone 2, and more-vulnerable development in Flood Zone 3a, would also require the Exception Test to be passed.</p>
<p>Action – SCOUR Assessment review at detailed design stage (Environmental Statement), Appendix 8.2 WFD Compliance Assessment</p>		
046-09	<p>We will review the SCOUR Assessment once it has been completed and provide our comments at the detailed design changes. We will liaise with the applicant to provide a pragmatic approach to bank protection.</p>	<p>The Applicant agrees that the Environment Agency will be consulted on the proposed bank protection as outlined in the REAC commitment WE4:</p> <p><i>‘At the detailed design stage, further assessment (including a scour assessment) will determine the most pragmatic solution and confirm the need for bank protection, specify the materials and general arrangement which will aim to minimise and, where possible, utilise soft solutions rather than hard bank protection. This will be agreed through consultation with the Environment Agency.’</i></p>
<p>Agenda item 3 v) Phasing of attenuation basin construction and consenting process. Are the Environment Agency (EA) and JCs content that this is appropriate and that it is appropriately secured via the dDCO?</p>		
046-11	<p>The Environment Agency has no concerns regarding the construction and consenting process. However, as highlighted at the examination on 13 August 2024 we would recommend adding the wording in bold which will provide us with confidence that if any form of contamination is identified</p>	<p>The Environment Agency has requested that the text <i>‘appropriate to the sensitivity of the location which may require relevant risk assessment’</i> is added to the end of REAC item GS4. The Applicant proposes that this is added to the REAC as</p>

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	<p>additional assessments will be carried out. Wording to be added in the REAC (TR0100c3 – APP 7.4 GS4 July 2024).</p> <p><u>Action</u> - Design team to incorporate mitigation/remedial measures in the design of the Scheme to reduce impacts from contamination as required, should new sources of contamination be identified at detailed design stage. The Scheme will be operated in accordance with the relevant regulations and best practice guidance in applying Best Available Techniques and pollution prevention appropriate to the sensitivity of the location which may require relevant risk assessment.</p>	<p>part of the final submission of this document towards the end of examination.</p>
<p>Agenda item 7). Issues in respect of Mitigation Requirements</p> <p>The Applicant and the EAs views will be sought on the drafting of Requirements 8,11 and 13</p>		
046-15	<p><u>Requirement 8 - Land and groundwater contamination</u></p> <p>Action – Please see the alterations in bold.</p> <p>(1) No part of the authorised development is to commence until a contamination risk assessment in respect of controlled waters has been produced for that part which is to include details of—</p> <p>(a) any existing sources of contamination within the Order limits that may be affected by the carrying out of the authorised development.</p> <p>(b) any reasonably required protective measures to ensure that the carrying out of the authorised development does not make worse any adverse conditions or risks associated with such existing sources of contamination; and</p> <p>(c) appropriate remediation strategies and mitigation measures to address any historic contamination which is shown to be having</p>	<p>The Applicant notes that the Environment Agency has requested a substantial re-drafting of Requirement 8(3) to 8(5) of the draft DCO.</p> <p>It is the Applicant’s position that the wording proposed by the Environment Agency would have broadly the same effect as the existing Requirement 8, subject to the introduction of the ‘verification report’ (see below). However, despite the substantial change in wording requested, the Environment Agency has not provided an explanation as to why the existing wording of the draft DCO is deficient, or why their proposed wording should be preferred. It is the Applicant’s view that the existing wording of Requirement 8 is appropriate and does not need to be amended. Therefore, in absence of a compelling justification for preferring the Environment Agency’s alternative drafting, the Applicant’s position is that the existing wording of the draft DCO should be retained.</p>

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	<p>significant, unacceptable effects on the environment within the context of the proposed works, and the assessment has been submitted to and approved by the county planning authority following consultation with the Environment Agency.</p> <p>(2) The steps and measures that are identified as necessary for the purposes of carrying out the authorised development in the assessment referred to in sub-paragraph (1) must be implemented as part of the authorised development.</p> <p>(3) In the event that soil or water contamination, including groundwater, is found at any time when carrying out the authorised development, which was not previously identified it must be reported as soon as reasonably practicable to the Secretary of State, the relevant planning authority and the Environment Agency, and the undertaker must update the risk assessment and remediation strategy in consultation with the relevant planning authority and the Environment Agency on matters related to their functions.</p> <p>(4) Remediation, where necessary, must be carried out in accordance with the approved remediation strategy unless otherwise agreed in writing by the Secretary of State following consultation with the relevant planning authority and the Environment Agency on matters related to their functions.</p> <p>(5) Where remediation is necessary, no part of the authorised development is to be brought into use until for that part a verification report demonstrating the completion of the works set out in the approved remediation strategy and the effectiveness of the remediation has been submitted to and approved in writing by the Secretary of State, following consultation with the relevant planning authority and the Environment Agency on matters related to their functions. The verification report must include results of sampling and monitoring carried out in accordance with the approved details.</p>	<p>As noted above, the main impact of the Environment Agency’s proposed drafting would be to introduce a requirement, where remediation is necessary, for a ‘verification report’ to be submitted and approved prior to the authorised development being brought into use. The Applicant notes that the Environment Agency has requested a similar verification element in both their relevant representation [REP-013] (see paragraph 3.1) and their written representation [REP1-067] (see paragraph 3.3). The Applicant’s response to these requests is set out in REP1-043 (see 13.2) and REP2-008 (see 67.16). Ultimately the Applicant does not recognise that validation/verification is necessary to mitigate the impact of the development. As currently drafted, Requirement 8 already ensures that a written scheme and programme for remedial measures is to be submitted to and approved in writing by the Secretary of State following consultation with the Environment Agency, the county planning authority and the relevant planning authority. Furthermore, Requirement 8(5) provides that the remedial measures must be carried out in accordance with the scheme approved. Under section 161 Planning Act 2008, a person commits an offence if without reasonable excuse the person carries out or causes to be carried out, development in breach of the terms of an order granting development consent or otherwise fails to comply with the terms of an order. That offence carries a maximum penalty on summary conviction to a fine not subject to a maximum value within that section. The Applicant therefore considers that the regime under the Planning Act 2008 and the control within the DCO at present constitutes enough assurance that remedial measures will be carried out appropriately. In addition, it is considered that any written scheme of remedial measures will include as a matter of course a plan for verification of those remedial measures. The Applicant’s proposed method has been used in many highways DCOs previously including the proposed</p>

Response Reference	Issue	Applicants Response
		<p>M3 Junction 9 DCO 2024, A417 Missing Link DCO 2022, M25 Junction 10/A3 Wisley Interchange DCO 2022, A12 Chelmsford to A120 Widening DCO 2024, A428 Black Cat to Caxton Gibbet DCO 2022.’ It is therefore the Applicant’s view that there is no need to amend the existing wording of the requirement.</p> <p>The Applicant’s main comments on the Environment Agency’s proposed drafting is as follows:</p> <ul style="list-style-type: none"> <p>Requirement 8(3) – As currently drafted, this requirement applies from the discovery of ‘contaminated material’, which the Environment Agency proposes to change to ‘soil or water contamination’. The terms do not appear to be materially different and so this is an entirely unnecessary change. However, if the terms are in fact different, it is unclear whether the Environment Agency’s proposed wording would have the effect of widening or narrowing the scope of the requirement when compared to the existing wording.</p> <p>Requirement 8(3) – The Environment Agency’s proposed drafting for this requirement applies to contamination that was ‘not previously identified’ whereas the current wording of the draft DCO qualifies this by stating that it applies to contamination that was ‘not previously identified in the environmental statement’. It is the Applicant’s view that the Environment Agency’s proposed wording introduces significant uncertainty as to what ‘previously identified’ contamination would be, how it would be identified, and who it is that would determine whether something has been previously identified. This is in sharp contrast to the existing</p>

Response Reference	Issue	Applicants Response
		<p>wording of the requirement which makes it clear that previously identified contamination is limited to what is identified in the environmental statement, avoiding confusion and reducing the potential for disputes.</p> <ul style="list-style-type: none"> • Requirement 8(4) - The Applicant would be willing to accept the Environment Agency’s proposed wording for Requirement 8(4) if the rest of the proposed wording were to be introduced. However, it is noted that the existing Requirement 8(4) provides that the Applicant must consult with the county planning authority on the written scheme and programme for remedial measures, whereas there is no obligation to consult this body under the Environment Agency’s proposed wording for Requirement 8. It is the Applicant’s position that the county planning authority should be listed as a consultee given that they are no longer the discharging authority in the event that such wording is used. • Requirement 8(5) – Under the Environment Agency’s proposed wording, it is unclear what the term ‘part’ means in the context of the authorised development being brought into use. For example, if construed widely, it would be unduly onerous if the entire Link Road were being prevented from being brought into use until a verification report is submitted and approved, for what could be limited contamination found close to the road. The existing wording of the requirement, which refers to construction being prevented in the ‘vicinity’ contamination’ is clearer and less likely to cause

Response Reference	Issue	Applicants Response
		<p>confusion. This concern is exacerbated when considering the next two issues regarding the restriction against bringing the authorised development into use.</p> <ul style="list-style-type: none"> <p>Requirement 8(5) - The Applicant's view is that the Environment Agency's proposed wording for Requirement 8(5) is onerous and unjustified. As drafted, the existing Requirement 8(3) prevents the Applicant from continuing construction in the vicinity of the contamination, which is the most reasonable and appropriate restriction since it is during the construction where there is the greatest risk of contamination affecting receptors through the introduction of additional pathways . However, the Environment Agency's proposed wording would prevent part of the authorised development being 'brought into use' until remediation takes place. It is unclear what the justification is for this approach given that the operation of a road is likely to carry less risk of contamination spreading than its construction, which is not expressly prohibited from continuing under the Environment Agency's proposed wording. In addition, it is not considered by the Applicant, that the proposed wording is realistically workable. There are elements of the scheme which will never be offline meaning that they are not "brought into use" in the same way that a completely new development might be. For example, the proposed wording would suggest that for any works to the A4019 that where contamination is identified, the undertaker of the Order would automatically be in breach of the requirement as the</p>

Response Reference	Issue	Applicants Response
		<p>A4019 is always “in use”, and therefore the undertaker would have “brought into use” part of the authorised development without following requirement 8. In addition, it is not clear how this wording would relate to the flood compensation areas or other elements of the scheme which are passive in nature and require no physical works to take place in and of themselves and therefore are arguably “brought into use” from the carrying out of works which they are meant to compensate for.</p> <ul style="list-style-type: none"> <p>Requirement 8(5) – Following on from the point above, the Environment Agency’s proposed wording leaves uncertainty as to when the verification report will be approved. The proposed requirement does not specify a timeframe for the Secretary of State to respond to the Applicant’s verification report, nor does it require a response within a reasonable period. This has the potential to adversely affect the Applicant’s ability to bring the Scheme into operation if certain elements are prevented from being brought into use by the requirement. Of most concern is the potential for this requirement to adversely affect the Strategic Road Network, where the speed of works will be imperative. For example, there could be a situation where a completed mainline carriageway or slip roads are unable to be brought into use, despite appropriate remediation having taken place, because the Applicant is waiting for approval of its verification report.</p> <p>For the reasons set out above, the Applicant’s position is that the existing wording of the draft DCO should be preferred over the</p>

Response Reference	Issue	Applicants Response
		Environment Agency's proposed wording for Requirement 8(3) to 8(5).

4. REP4-048 and REP4-048c Joint Councils

Response Reference	Issue	Applicants Response made at 4
Applicant Response to Examining Authority's First Written Questions (ExQ1) [REP3-043]		
048-07	<p>ExQ1.10.10 Equalities Act</p> <p>(i) Whilst the Applicant has clearly taken appropriate actions such as issuing a consultation pack including a S42 Notice and acted on advice from the Traveller Liaison Support Officer at GCC and the 'Friends, Families and Travellers' charity there is nothing in the Applicants response to confirm or otherwise whether any other additional measures other than the issue of documents has taken place i.e. have any visits been made to the site or other attempts been made to engage with the travellers?, which the question appears to be asking.</p> <p>(ii) The response to this question in the Joint Councils' opinion depends on whether the obligations under part (i) of the question have been fully carried out.</p>	<p>Please refer to the Applicant's response to ExQ2 1.0.4(iii) (TR010063/APP/9.77).</p> <p>The Applicant was advised by GCC's Traveller Liaison Support Officer not to visit site without police support due to history of the site and serious incident that occurred a few years previous. Having received this advice, the Applicant considered that visiting site with police support would not result in constructive engagement and therefore a decision was taken to rely on the information pack served.</p>
048-12	<p>ExQ10.0.4 Best and Most Versatile Agricultural Land</p> <p>Response generally clarifies the question, but there may be further discussions required / questions by the Examiner on why the need for the scheme outweighs the loss of BMV land. No economic assessment has been completed to consider the loss of BMV land against the need for the scheme but the loss of BMV land is inevitable so it is either lose the BMV</p>	<p>A figure has been submitted at Deadline 5 as part of an update to Appendix 10.8 [TR010063 APP 6.15] showing the location of the best and most versatile (BMV) agricultural land in the area surrounding the Scheme. As also identified by the Joint Councils, this figure highlights that BMV cannot be avoided by any of the Link Road corridor options.</p>

Response Reference	Issue	Applicants Response made at 4
	land or cancel the scheme. Loss has been mitigated as far as practicable by minimising permanent land take and using the most direct route.	
048-19	<p>ExQ16.0.8 Flood Risk Assessment – Additional Data Sources</p> <p>No Applicant response has been provided to date to this item, however, it is understood by the Joint Councils that the sequential test for the West Cheltenham Link Road options that is referenced by the Applicant is the critical element of the sequential test with regards to M5 J10. Other aspects of the proposed works to upgrade the junction, by definition, cannot be located elsewhere.</p>	<p>West Cheltenham Link Road Route Corridor Assessment (Feb 2021) technical note [REP3-052] was submitted at Deadline 3 as requested. This document demonstrates the alternative route corridor options that were considered along with other constraints (Section 4 of the document), when developing the Scheme. This, in part, applies the sequential test by considering flood risk and guiding the Scheme to those areas at lowest flood risk. Those route options closer to the M5 motorway have a greater extent of construction in Flood Zone 3, whilst those to east less. The chosen route balances flood risk with other project considerations. There are no direct routes available for the Link Road that do not cross Flood Zone 3.</p>
048-20	<p>ExQ16.1.2 Water Framework (WFD) Assessment</p> <p>Thank you for providing the link to Rev2 of the WFD assessment and making the small number of changes. I continue to be in agreement that the assessment appropriately concludes a low risk of non-compliance with the WFD but that consultation with EA is required, during construction and following sign off of the completed scheme, in order to verify the implementation of mitigation and the effectiveness of measures cited within the assessment.</p>	<p>The REAC [REP4-018] outlines the specific items which will require Environment Agency Consultation. This includes REAC commitment WE1, WE3, WE4, WE7, WE8, WE10, WE11, WE12, WE13, WE14 which relate to operational and construction impacts to water quality (surface and ground), hydromorphology and groundwater.</p>
Applicant's Response on D2 Submissions [REP3-044]		
048-23	<p>The Joint Councils would like to make a comment on Response Reference 13.5. The Joint Councils note that the Applicant has added a statement to Section 4.3.2 of the Water Framework Directive (WFD) Compliance Assessment [REP3-028]. The Joint Councils suggest making the following change to the statement:</p>	<p>The Applicant proposes an update to the WFD assessment to add clarity to the text in this statement. The text will be updated from <i>'Preliminary design calculations estimated the stream power to be approximately 40 Wm-2 based on the 50% (1 in 2 year) annual exceedance probability (AEP) and 90 Wm-2 for the 1% (1 in 100 year) plus climate change AEP. Although this alone</i></p>

Response Reference	Issue	Applicants Response made at 4
	<p>'Although this alone may not necessitate the requirement for bank protection, information gathered from survey has shown the watercourse to be eroding both laterally and vertically meaning the river is a likely to be a high energy system and the need for bank protection is likely, along all or part of the river banks through the structure.'</p>	<p><i>may not necessitate the requirement for bank protection, information gathered from field surveys has shown the watercourse to be eroding both laterally and vertically meaning the river is a likely to be a high energy system and the need for bank protection is likely, along all or part of the river banks through the structure.'</i></p> <p>To an updated paragraph as follows:</p> <p><i>'Preliminary design calculations estimated the stream power to be approximately 40 Wm-2 based on the 50% (1 in 2 year) annual exceedance probability (AEP) and 90 Wm-2 for the 1% (1 in 100 year) plus climate change AEP. Based on Brookes (1986) this suggests the watercourse is high to very high energy with the potential to cause local to widespread erosion. Although this alone may not necessitate the requirement for bank protection, information gathered from field surveys has shown the watercourse to be eroding both laterally and vertically meaning the need for bank protection is likely, along all or part of the river banks through the structure.'</i></p> <p>Brookes, A (1986) River Channel Adjustments downstream from channelization works in England and Wales., <i>Earth Surface Processes and Landforms.</i>, Volume 12., 337-351</p> <p>Brookes, A (1987) The distribution and management of channelized streams in Denmark., <i>Regulated Rivers.</i>, 1, 3-16</p> <p>The Applicant will make this change in the final submission of the WFD assessment prior to the end of examination.</p>
<p>Register of Environmental Actions and Commitments (REAC) [REP3-031]</p>		

Response Reference	Issue	Applicants Response made at 4
048-24	<p>The Joint Councils have reviewed [REP3-031] submitted by the Applicant at D3.</p> <p>The changes made by the Applicant from the previous version submitted at D1 [REP1-030] are deemed acceptable. However, the Joint Councils wish to point out that item B4 refers to a 'precautionary method statement' for great crested newts (GCN) in the implementation of the commitment. The second iteration of the Environmental Management Plan will need to ensure compliance with the very specific requirements set out in the GCN District Licence Report [REP3- 051].</p>	<p>The Applicant notes and agrees with the Joint Councils. The EMP (2nd iteration) will ensure compliance with the GCN District Licence Report [REP3- 051].</p>
ISSUE SPECIFIC HEARING 3 (ISH3)		
Agenda Item 3 – Flood Risk, Drainage and the Water Environment		
Agenda item 3(iii) – The ExA will explore with the Applicant, the Joint Councils and the Environment Agency (EA) an understanding of the compliance with the Water Framework Directive (WFD), and the measures secured through the dDCO.		
048c-003	<p>The ExA queried the Joint Councils if they wish to provide any comment, noting that the Joint Councils have made reference to some concerns on WFD compliance in their written responses. RS1 stated that the Joint Councils have reviewed the information and assessment provided as part of the draft DCO and this indicates compliance with the WFD. The Joint Councils note that the Environmental Statement (ES) includes the embedded mitigation and the specific mitigation in the Register of Environmental Actions and Commitments (REAC). The Joint Councils have also reviewed the Pollution Prevention and Control Management Plan [AS-037]. It is however noted that there are further assessments, notably the scour assessment, to be made available at the detailed design stage.</p>	<p>The Applicant is in agreement that the scour assessment is to be made available at the detailed design stage to inform the requirement and the specifications of any bank protection. This is secured through the REAC [REP1-030] commitment WE4 '<i>At the detailed design stage, further assessment (including a scour assessment) will determine the most pragmatic solution and confirm the need for bank protection, specify the materials and general arrangement which will aim to minimise and, where possible, utilise soft solutions rather than hard bank protection. This will be agreed through consultation with the Environment Agency.</i>' and is outlined within the Environmental statement [REP1-014] and the WFD [REP1-026].</p>

Response Reference	Issue	Applicants Response made at 4
048c-004	The ExA clarified with the Joint Councils on whether they are content with their position that some elements need to be reviewed at further detailed design. RS1 confirmed this is the position of the Joint Councils.	The REAC outlines the specific items which will require further work and Environment Agency Consultation. This includes REAC [REP4-018] commitment WE1, WE3, WE4, WE7, WE8, WE10, WE11, WE12, WE13, WE14 which relate to operational and construction impacts to water quality (surface and ground), hydromorphology and groundwater.
<p>Agenda Item 4 – Traffic and Transport Agenda item 4(ii) – The ExA will explore the current position with respect to the Transport Assessment (TA) and modelling and its ability to support the examination of the DCO proposals (including need, geometric design etc).</p>		
048c-014	During ISH3, the Joint Councils offered no comments on this agenda item. However, following a review of the evidence presented during ISH3, the Joint Councils would like to submit to the Examination comments regarding the TA and modelling and its ability to support the Examination of the DCO proposals. The comments are provided in paragraphs 2.8.13 to 2.8.17 of this written submission.	Please refer to the Applicant’s responses to 071 to 073 below that address paragraphs 2.8.13 to 2.8.17 of the Joint Councils’ submission.
<p>Agenda Item 5 – Funding Agenda item 5(iii) – The Applicant will be asked to evidence if there are other sources of funding available, and the timing, and certainty of delivery to be explained. Please make reference to any alternative funding mechanisms which may be being developed.</p>		
048c-021	CK also highlighted to the ExA that the Joint Councils have been consulted by the Applicant on the proposed methodology in calculating the section 106 funding for the Scheme. However, the Joint Councils have not yet agreed the s106 methodology as currently proposed. In light of the statutory tests for s106 contributions, and other infrastructure considerations on the relevant developments such as viability, the Joint Councils’ position is that an agreed section 106 calculation methodology would be imperative. If the Applicant has agreed a funding mechanism with NH where section 106 contributions from developments approved by Local Planning Authorities are required, the Joint Councils would require	The Applicant has devised an updated methodology which has been shared with the Local Planning Authorities for approval.

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	a role of not only consultation but also approval of such agreement in light of their financial responsibilities under the Local Government Acts.	
<p>Landscape</p> <p>Agenda item (i) – Joint Councils LIR Section 3.5 Can the Applicant and Joint Councils explain the latest position in respect of Barn Farm, the Travellers Site, and properties to the south side of the A4019.</p>		
048c-030	<p>Regarding Section 3.5 of the Joint Councils Local Impact Report, the ExA asked the Joint Councils if they are seeking from the Applicant a consultation process with the residents on the design of the proposed acoustic barrier fence. DB stated that the Joint Councils' understanding from the Applicant is that the barrier will be designed in collaboration with the Local Planning Authority and interested parties and residents to achieve a vegetated design, providing additional landscape screening and aesthetic qualities for the affected residential receptors.</p>	<p>The Applicant confirms that as per item LV6 of the REAC [REP4-018], the Applicant will consult with the LPA and directly affected receptors on options for the final design of noise barriers so that they provide visual amenity and/or biodiversity values as well as noise abatement.</p> <p>With regards to the achievement of a vegetated design for the noise barriers, the Applicant has confirmed with the Joint Councils (item 9.5 of SoCG ref REP1-034) that there is room for at least climbing plants at the noise barrier locations, in some areas there may be room for narrow hedging for example</p> <p>This does not mean that a vegetated design is the intended final design for the noise barriers. It may be that a simple timber board or artwork is chosen rather than planting.</p> <p>The visual impact assessment of the noise barriers, as presented in ES Chapter 9 (Landscape and Visual) [REP1-016] has assumed a 2m high non-specific material barrier design for the noise barriers (paragraph 9.15.9). The final design for the noise barriers will be determined through consultation with the LPA and directly affected receptors.</p>
048c-032	<p>POST HEARING, DB recommends that LV6 of the REAC be modified to explicitly include the objective of implementing a vegetated solution. This is crucial, as it could prevent the adoption of a less desirable alternative, such as a painted barrier etc., which would negatively affect the visual</p>	<p>The visual impact assessment that has been made in ES Chapter 9 (Landscape and Visual) [REP1-016] has assumed the following with regards to the design of the noise barriers (paragraph 9.15.9):</p>

Response Reference	Issue	Applicants Response made at 4
	<p>amenity, impacting not only the adjacent residential areas but also the broader visual amenity of the area</p>	<p><i>The design of the noise barriers has assumed a 2m high non-specific material barrier. The precise design for these noise barriers would be determined at detailed design stage, in consultation with directly affected receptors and maintenance teams. The design may include simple timber boards, living woven planting, green wall systems or a painted design to provide as much additional amenity value as possible. The assessment assumes that the resulting design would be visually acceptable but allows for a beneficial effect in terms of screening traffic, but a neutral effect in terms of actual visual appearance of the barrier itself.</i></p> <p>Given that the ES assessment has not assumed a vegetated design for the noise barriers, then the Applicant considers that it is not appropriate to amend item LV6 of the REAC to include the objective of implementing a vegetated solution.</p>
048c-033	<p>There appears to be some ambiguity regarding the feasibility of a vegetated solution by the Applicant's design team. Modifying the language would ensure that during the consultation and detailed design phase, the discussion would focus on the methods of implementation rather than its possibility or desirability among affected residents.</p>	<p>The Applicant disagrees on the suggestion from the Joint Councils that there is ambiguity.</p> <p>In summary: ES Chapter 9 [REP1-016] assumes a 2m high non-specific material barrier design for the noise barriers (paragraph 9.15.9). SoCG item 9.5 [REP1-034] has confirmed there is room for climbing plants at the noise barrier locations. REAC item LV6 [REP4-018] states that the LPA and affected receptors will be consulted on the final design of the noise barrier.</p> <p>The Applicant's position therefore is that the preliminary design for the noise barriers is a 2m high structure with no material or finish specified. The details of the material to be used and the</p>

Response Reference	Issue	Applicants Response made at 4
		finish, will be determined at final design following consultation with the LPA and affected receptors.
048c-034	<p>CK added that the Joint Councils' concern is that substantial number of trees must be cut down for the slip roads. The affected residential receptors currently enjoy a view across farmland, which will be replaced with the acoustic barrier. The Joint Councils understand the need of the barrier but would appreciate some discussion from the Applicant with the local residents on not only the acoustic barrier but also its visual impact. The Joint Councils acknowledge that the final design of the barrier submitted to the County Planning Authority for approval will be determined by the Applicant. The Joint Councils therefore request the Applicant to consider the views of the local residents properly when designing the barrier.</p>	<p>The Applicant confirms that as per REAC item LV6 [REP4-018], the LPA and affected receptors will be consulted on the final design of the noise barrier.</p>
<p>Agenda item (ii) – The Applicant and IPs views will be sought in respect of the visualisations, and how well they represent the potential effects on the local character areas and the Green Belt?</p>		
048c-037	<p>The ExA invited the Joint Councils to make any comments on the landscape visualisations submitted by the Applicant at Deadline 2. DB provided that the Joint Councils were sent the locations of the viewpoints and provided comments to the Applicant prior to the production of the visualisations. However, the longer list of all possible viewpoint locations was never provided for the Joint Councils. The Joint Councils are content that the visualisations present the Scheme and its impacts on the local landscape character and the Green Belt well, but would like to offer the following comments:</p> <ul style="list-style-type: none"> In Landscape Visualisations Viewpoint 6 [REP2-007], the proposed acoustic fence in front of the house is portrayed as a plain timber treatment. This does not represent the conclusions reached in the Landscape and Visual Assessment (LVA) [REP1-016] that the fence is going to be a vegetated barrier, which will 	<p>Details on the basis for the selection of the visualisations were provided by the Applicant in item ISH3.34 [REP4-037]. The locations for the visualisations were selected through a review of the Scheme against the locations of the visual receptors. The locations of the visual receptors are shown on Figure 9-3 of Appendix 9.1 [REP3-030].</p> <p>The Applicant provided five locations for the visualisations for the Joint Councils to comment on and revise or add to as requested by the Planning Inspectorate in S51 advice note [PD-003]. The Joint Councils agreed the locations, and also requested a 6th (opposite Forge House on the A4019).</p> <p>Bullet 1 – the assessment in ES Chapter 9 has assumed the following regarding the noise barriers (para 9.15.9 [REP1-016]:</p>

Response Reference	Issue	Applicants Response made at 4
	<p>be aesthetically more acceptable to the residents and the receptors.</p> <ul style="list-style-type: none"> Regarding the visualisations for year 15, they sometimes present an optimistic view of vegetation growth and tree maturity. While it is recognised that such growth will occur eventually, there is some scepticism that the depicted level of growth will be realised by year 15. <p>In Landscape Visualisations Viewpoint 2 [REP2-004], the visualisations of the link road crossing the River Chelt effectively demonstrate the effects on the Green Belt and the slight reduction in openness. It also demonstrates this is not a full reduction in openness as the road can be integrated into the local landscape character and preserve views through and over the raised section of the link road.</p>	<p><i>The design of the noise barriers has assumed a 2m high non-specific material barrier. The precise design for these noise barriers would be determined at detailed design stage, in consultation with directly affected receptors and maintenance teams. The design may include simple timber boards, living woven planting, green wall systems or a painted design to provide as much additional amenity value as possible. The assessment assumes that the resulting design would be visually acceptable but allows for a beneficial effect in terms of screening traffic, but a neutral effect in terms of actual visual appearance of the barrier itself.</i></p> <p>The assessment in ES Chapter 9 has not concluded that the barrier will be a vegetated design, and the details shown in visualisation 6 [REP2-007] are therefore in line with the assessment undertaken.</p> <p>Bullet 2 – The Applicant provided a response on this item in ISH3.35 [REP4-037].</p> <p>Bullet 3 – no response required.</p>
<p>Agenda item (ii) – The Joint Councils will be asked to confirm whether they are content that sufficient baseline assessments have been carried out to inform the assessment of significance and the suitability of and security of any mitigation proposed?</p>		
048c-041	<p>The ExA asked the Joint Councils to explain their position on the archaeological assessment that have been undertaken to date and the proposals for future assessment. GK stated that the Joint Councils are content with the works that have been done by the Applicant to date from a baseline perspective. The Joint Councils still do not have the Archaeological Survey or trial trenching information that is to be undertaken by the Applicant in September 2024. GK highlighted that some of the geophysical surveys to be undertaken in September onwards may need some form of trial trenching to further identify the significance of any archaeological deposits. GK added that the Joint Councils</p>	<p>This position is now clarified in the SoCG with the Joint Councils [REP4-022]. Reference to item 11.1.</p>

Response Reference	Issue	Applicants Response made at 4
	<p>received from the Applicant on 13 August 2024 the geophysical specification and an updated addendum to the archaeological assessment that has been undertaken. The Joint Councils are content with the location of the proposed extra works and the proposed geophysical survey areas which will fulfil and inform the DCO decision going forward.</p>	
048c-042	<p>The ExA followed up with the Joint Councils on whether they are content with the information from the Applicant which gives the ExA sufficient confidence that the significance of the archaeological remains has been appropriately assessed. GK explained that the Joint Councils do not have enough information to date to make a decision on the significance of archaeological assets across the entire Scheme area, based on the fact that additional geophysical surveys have not been undertaken.</p>	<p>This position is now clarified in the SoCG with the Joint Councils [REP4-022]. Reference to item 11.1.</p>
048c-043	<p>The ExA then questioned the Joint Councils how the ExA would advise the Secretary of State (SoS) on the legal tests on whether there has been an appropriate understanding of the significance of the heritage impacts of the Scheme without information on further assessments being concluded before the end of Examination. GK explained that the Joint Councils are of the understanding that the geophysical surveys will start in September and the trial trenching are expected to continue some time after. The duration of any additional archaeological work would have to be confirmed again once the programme and location of these works are made available to the Joint Councils. GK added that the ExA would certainly need the geophysical surveys ahead of the end of Examination to assess whether the legal tests on heritage impacts have been met appropriately. The Joint Councils have a good record of the historic environment of the area around the proposed Link Road and various areas in the vicinity. However, the Joint Councils do not have a consideration of archaeology from a geophysical point of view across the wider Scheme area.</p>	<p>This position is now clarified in the SoCG with the Joint Councils. Despite all evaluation not yet having been undertaken, existing background data and professional judgement give a c. greater than 95% probability that nothing of an archaeological significance that cannot be sufficiently mitigated by record will be present in the to date in not evaluated areas.</p>

Response Reference	Issue	Applicants Response made at 4
<p>Agenda item (iii) – The Applicant and the Joint Councils will be asked for an update on the progress in updating the Archaeological Management Plan [AS-038] and any progress made on reporting geophysical surveys and trial trenches.</p>		
<p>048c-045</p>	<p>The ExA then sought views from the Joint Councils on the Applicant's timeframe, particularly in terms of whether it is possible for the County Archaeologist to provide comment within the Examination timetable and whether information from these further assessments is required in advance of the close of Examination to appropriately inform the SoS. GK explained that the Joint Councils have developed a good understanding of the archaeological baseline across the Scheme area based on the assessments completed by the Applicant to date. The Joint Councils are confident that the geophysical surveys will be undertaken and assessed within the Examination timetable, but the timeframe for the completion of trial trenching might be tight before the end of Examination in December. GK stated that the Joint Councils may be able to push the completion of trial trenching if the geophysical surveys come back with good data. However, if the result of the geophysical surveys indicates the presence of ephemeral features, ground truthing will need to be performed in these areas to assess the significance of any identified archaeological deposits.</p>	<p>This position is now clarified in the SoCG with the joint councils. Despite all evaluation not yet having been undertaken, existing background data and professional judgement give a c. greater than 95% probability that nothing of an archaeological significance that cannot be sufficiently mitigated by record will be present in the to date in non evaluated areas.</p>
<p>Action Point 33 – The Joint Councils to review on the provisions of how they will be consulted on how the acoustic barrier will be approved, and whether any necessary consultation are appropriately secured via the REAC and the DCO.</p>		
<p>048c-066</p>	<p>Taking the above review into consideration, the Joint Councils can confirm they are happy with the wording of DCO Schedule 2 Requirement 14, but would like to make the following points:</p> <ul style="list-style-type: none"> - The Joint Councils must be included in consultation regarding the design of the noise barriers and any design changes/developments in detailed design that would affect the visual amenity mitigation function of the noise barriers. - As per the wording of LV6 of the REAC, the Joint Councils consider it is imperative that the inclusion of measures to provide 	<p>1st bullet – The Applicant confirms the Joint Councils will be consulted on the design of the noise barriers, as per the wording of REAC [REP3-031] item LV6 states '<i>Consult with LPA and directly affected receptors on options for the final design of noise barriers so that they provide visual amenity and/or biodiversity values as well as noise abatement</i>'.</p> <p>2nd bullet – The assessment in ES Chapter 9 has assumed the following regarding the noise barriers (para 9.15.9 [REP1-016]:</p>

Response Reference	Issue	Applicants Response made at 4
	<p>improved visual amenity to the noise barriers is an essential mitigation commitment required to reduce visual amenity effects on the receptors identified in the ES.</p> <ul style="list-style-type: none"> - As per the Landscape and Visual Impact Assessment Chapter of the ES, The Joint Councils note that the conclusions reached regarding receptors affected by the noise barrier assume that a vegetated design solution will be provided to reduce visual amenity effects. Therefore, if a non- vegetated noise barrier is provided at detailed design, it is assumed this would give rise to new and differing visual amenity effects. - Considering the above point, The Joint Councils would like to see the wording of LV6 of the REAC amended to reference achieving a vegetated solution that will provide visual amenity as well as noise abatement. This would ensure that the conclusions reached in the Landscape and Visual Impact Assessment Chapter of the ES, which assume a vegetated noise barrier is provided, do not change and result in greater significance of visual amenity effects on the receptors. 	<p><i>The design of the noise barriers has assumed a 2m high non-specific material barrier. The precise design for these noise barriers would be determined at detailed design stage, in consultation with directly affected receptors and maintenance teams. The design may include simple timber boards, living woven planting, green wall systems or a painted design to provide as much additional amenity value as possible. The assessment assumes that the resulting design would be visually acceptable but allows for a beneficial effect in terms of screening traffic, but a neutral effect in terms of actual visual appearance of the barrier itself.</i></p> <p>Further development of the finish or materials used for the noise barriers, at detailed design stage, is not required for essential mitigation.</p> <p>3rd bullet – As detailed above the ES Chapter 9 (para 9.15.9 [REP1-016]) has not assumed a vegetated design solution for the noise barriers.</p> <p>4th bullet – As detailed in the response above to item 032, the ES assessment has not assumed a vegetated design for the noise barriers. The Applicant therefore considers that it is not appropriate to amend item LV6 of the REAC to include the objective of implementing a vegetated solution.</p>
<p>Agenda item 3(vi)</p> <p>As a follow-up response to agenda item 3(vi) (see paragraphs 2.3.6 to 2.3.8), the Joint Councils would like to make the following comments regarding the operation, maintenance and ownership responsibilities of the reservoir:</p>		
048c-068	<p>The Joint Councils view is that it should be clear (and explicitly agreed by all parties) as to which organisation(s) will hold maintenance responsibilities and any liabilities associated with a reservoir. The Joint Councils are not in a position to accept any of these responsibilities.</p>	<p>The Applicant acknowledges that Cheltenham Borough Council and Tewkesbury Borough Council are not in a position to accept any responsibilities and liabilities for the reservoir.</p>

Response Reference	Issue	Applicants Response made at 4
		<p>The Applicant's understanding is that GCC as Highways Authority will be taking on the responsibilities and liabilities for the reservoir, although the Applicant notes that details remain under discussion.</p>
<p>Agenda item 4(ii) As a follow-up response to agenda item 4(ii) (see paragraphs 2.4.1 and 2.4.2), the Joint Councils would like to provide the following comments:</p>		
048c-070	<p>The Joint Councils have received the historic multi-modal information [REP3-053] and revised TA [REP3-054]. The ExA has now requested the presentation of a without scheme scenario in the TA. The Joint Councils are also awaiting the updated plans related to the connected and wider cycle network to support the WCHAR report.</p>	<p>Appendix L of the Traffic Forecasting Report (REP4-020) contains the following output plots from the strategic modelling for Scenario Q (scenario with JCS dependant development but without the Scheme) in 2042:</p> <ul style="list-style-type: none"> • Traffic flow differences - Scenario Q vs Scenario P and Scenario R vs Scenario Q, for both AM and PM peak period. • Vehicle delay differences - Scenario Q vs Scenario P and Scenario R vs Scenario Q, for both AM and PM peak period. • Demand over capacity ratios (V/C) - Scenario Q. <p>Appendix L has been resubmitted at Deadline 5 with demand over capacity ratio (V/C) plots from the Strategic modelling for Scenario Q in 2027 during both the AM and PM peak periods added.</p> <p>Plans showing the connected and wider cycle network to support the WCHAR report has been submitted at Deadline 5 (TR010063/APP/9.80).</p>
048c-071	<p>The ExA requested further additional information as part of the ISH3 with particular information specifically related to the TA and modelling (journey time review of A4019). Some information has been provided in advance of Deadline 3 but other information remains outstanding to be provided</p>	<p>In response to National Highways concerns regarding validation of journey times in the base year strategic traffic model, the Applicant has undertaken a sensitivity test with relevant parameters adjusted such that the two westbound journey time routes in the base year model of concern meet the TAG</p>

Response Reference	Issue	Applicants Response made at 4
	<p>for Deadline 4. The information is interlinked and therefore responses will be considered in this context.</p>	<p>validation criteria at segment level whilst maintaining TAG validation compliance for all other aspects of the model.</p> <p>The results of this sensitivity test are reported in a Technical Note submitted at Deadline 5 (TR010063/APP/9.79).</p> <p>A comparison of the outputs from the 'sensitivity test' base year model with the DCO base year model shows minimal differences between them. This demonstrates that the modelled routing or assignment of traffic across the road network is reliable and the model outputs are not materially affected by whether the modelled westbound journey time along the A4019 meets the TAG validation criteria in comparison to observed journey times. Therefore, the strategic traffic modelling used to assess the Scheme is both robust and fit for purpose.</p>
048c-072	<p>The Joint Councils originally requested an additional chapter within the ES to pull together all the relevant information in a coherent and logical way which would inform all other elements of the ES,</p> <p>Compulsory Acquisition and assist the ExA in reporting to the SoS. The Joint Councils continue to review the additional supplementary information being provided by the Applicant for the TA. It is understood that a stand-alone technical note has been prepared which covers some of the points raised here and other questions from other parties. The Joint Councils are reviewing the information available in the coming weeks.</p>	<p>The Applicant continues to maintain that it is not necessary to produce a separate transport chapter within the ES. It was not requested as part of the Scoping Opinion (August 2021). Please see Applicant response to the Joint Councils submission at Deadline 2 (REP3-044) references 39.22 to 39.27, for the Applicant's position on this.</p>

5. REP4-049 National Highways

Ref	Issue	Applicant Response
<u>Submission from National Highways for Examination Deadline 4 (3 September 2024)</u>		
Consideration of the legal powers that arise from a Development Consent Order (DCO)		
049-06	National Highways does not have the expertise, funding, manpower, or resources to operate and maintain a reservoir/flood storage area (FSA).	<p>The Applicant is in discussion with National Highways on two options:</p> <ul style="list-style-type: none"> • a possible alternative whereby GCC take sole responsibility as ‘undertaker’ under the Reservoirs Act 1975 (“the Act”). • a design change to be submitted into Examination. <p>GCC as sole undertaker</p> <p>The Applicant acknowledges that under a joint undertaker role, there would be an additional liability, under the Reservoirs Act 1975, to maintain the integrity of the reservoir and failure to do so can lead to prosecution should these requirements not be met.</p> <p>In order to take responsibility as sole undertaker, it is considered that GCC would need to take primary responsibility for ensuring the safety, maintenance and repair of the reservoir. The reservoir is considered to be formed of two intrinsic parts (as defined in Sections A1(1) (a) & (b) of the Act: a “large, raised structure designed or used for collecting and storing water”; and a “large, raised lake or other area capable of storing water which is created or enlarged by artificial means”. For clarity, as they will both be used for storing water, the A4019 and M5 (including slip roads) would be deemed large, raised structures. However, this does not require GCC to become the land owner of all elements that make up the reservoir.</p> <p>The following have been identified to be the main components of the reservoir affecting the Strategic Road Network over which GCC would need to take responsibility and licence:</p>

Ref	Issue	Applicant Response
		<p>1. Piffs Elm culvert including inlet headwall, culvert and outlet headwall and associated scour protection works.</p> <p>2. The M5 embankment slopes (those parts that have been identified to be kept free from trees and shrubs).</p> <p>Regular maintenance activities of the above features are additional grass cutting and regular clearance of debris at headwalls.</p> <p>In addition to regular reservoir maintenance activities, GCC and their appointed panel engineer will inspect these components at 6month intervals to identify any maintenance or repair requirements. These inspections and any advised remedial actions will be captured in inspection reports and shared with NH. If maintenance or repair works are identified, GCC will be responsible ensuring they are carried out (to be agreed who will carried out the work on the Strategic Road Network). The details of any repairs will be agreed in consultation with the Panel Engineer, and once confirmed, will be shared with NH.</p> <p>The Applicant's Panel Engineer (and the Scheme's appointed Construction Engineer under the Reservoirs Act) considers that all the typical routine highway maintenance activities (such as pavement resurfacing, drainage, safety barriers) will be unaffected by the Scheme and can be carried out by NH as part of their periodic maintenance strategy and that no prior consents or agreements are needed from a reservoir panel engineer for these works.</p> <p>A geotechnical assessment (which include examining slope stability and internal erosion) was undertaken and reported to National Highways in the Ground Investigation Report for the scheme. This was reviewed as part PCF Stage 3 and a Geotechnical Certificate was issued by National Highways for the Strategic Road Network elements. Broadly, it concluded that there were no realistic failure modes that would lead to an uncontrolled release of water. It was however considered reasonable to expect that, when the topsoil is stripped during any proposed works, the embankment surfaces would be inspected to confirm the absence of cracks and other flaws.</p>

Ref	Issue	Applicant Response
		<p>Design change</p> <p>A design change is being progressed which seeks to remove the Strategic Road Network as forming part of the reservoir. Details to be provided in Change Application 2.</p>
049-07	Having this obligation conferred on National Highways pursuant to the DCO would impact National Highways' ability to meet its statutory commitments in relation to funding its own programme of development.	<p>See response to 049-06.</p> <p>The Applicant does not see how this statement has been substantiated with evidence for the examination. The Applicant would ask that National Highways demonstrate, with view of the above maintenance schedule, how this would impact its ability to meet its statutory commitments.</p>
049-08	Accordingly, National Highways does not believe that a justification can be made to confer on it legal obligations to operate and maintain the reservoir pursuant to the DCO where it is not currently responsible for those obligations.	See response to 049-06.
Consequences of the use on different journey times (mean/medium)		
Paragraph 4.3.2 significance		
049-13	However, the purpose to which it is being applied as part of the M5 Junction 10 DCO is a specific intervention and the approach to the calibration and validation of journey times and their appropriateness for confidence in the output of the model is different.	Please refer to Appendix A to this document which provides a response to National Highways regarding traffic modelling.
049-14	Typically, when using a general-purpose model for considering a specific intervention, a practitioner would select a suitable area from within the model that would recognise the zone of influence of the specific intervention and 'cordon down' the model to a more focused extent. They would then rerun the calibration and validation exercise on this more limited model with a greater focus on the local journey time validation as outlined in paragraph 4.3.4.	Please refer to Appendix A to this document which provides a response to National Highways regarding traffic modelling.

Ref	Issue	Applicant Response
Paragraph 4.3.4 significance		
049-15	<p>The validation of journey time in the model has been undertaken on the basis of the total route, but it is clear from paragraph 4.3.4 that there are occasions when a greater level of scrutiny should be paid to specific elements of the overall route. In this instance, given the importance of the two routes (see below for detail on route 208 and 209) that failed to achieve journey time validation, and the local nature of the significant disparities in journey time to the DCO scheme, National Highways consider it is essential that the operation of the relevant junctions is examined further to achieve the appropriate level of validation.</p>	<p>Please refer to Appendix A to this document which provides a response to National Highways regarding traffic modelling.</p>
049-16	<p>The graph, shown below in Figure 1, having been extracted from the validation information provided with the SATURN model by the Applicant, demonstrates where the significant difference is between the observed journey times and the modelled journey times. The guidance in paragraph 4.3.4 is specifically referring to exactly this situation where the difference in journey time over the whole route occurs at a localised level; in this case in about the first 10% of the journey. Resolving the issue at this segment of the journey would bring the whole route back within the appropriate 15% margin for validation.</p>	<p>Please refer to Appendix A to this document which provides a response to National Highways regarding traffic modelling.</p>
049-17	<p>The other point that becomes very clear from this graph is that the only reason the journey time variance is only marginally in excess of 15% is because of the length of the route. Considering just the journey time along the A4019, a distance of around 4km would result in a far greater variance and highlight the issue to a much greater degree. The severity of the issue is significantly masked by the reliable journey time along the M5.</p>	<p>Please refer to Appendix A to this document which provides a response to National Highways regarding traffic modelling.</p>

Ref	Issue	Applicant Response
049-19	The model has looked at a specific intervention on the basis of the validation of a general-purpose model and not a 'cordoned down' model that National Highways would expect to see used for this sort of project. This is because this methodology contradicts the approach in which is outlined in Paragraph 4.3.2 in TAG Unit M3.1 – Highway Assignment Modelling as outlined above.	Please refer to Appendix A to this document which provides a response to National Highways regarding traffic modelling.
049-20	This approach alone does not invalidate the use of the model however, in order to be considered appropriate for use, National Highways would expect the journey time validation to be calibrated and validated locally as outlined in paragraph 4.3.4 in TAG Unit M3.1 and in accordance with the approach that would be taken for the cordoned down model. That has not been done, and consequently there is concern about the validity of the model for reliably forecasting future traffic movements and journey times.	Please refer to Appendix A to this document which provides a response to National Highways regarding traffic modelling.
049-21	This failure to consider the critical segment of the route where most, if not all, of the disparity between the modelled and the observed journey times occurs is a fundamental issue that should be relatively straightforward to address in a stable model. If the GCTM model is stable, as stated by the Applicant, then making the changes to the two junctions (as detailed below) in order to achieve validation on this critical route should not make any substantive changes to the wider model.	Please refer to Appendix A to this document which provides a response to National Highways regarding traffic modelling.
049-22	Because of the potential issues with the forecast model that would be likely to occur as a result of the failure to validate these northbound journey times National Highways consider that the model outputs are unreliable and therefore the model is not currently fit for purpose.	Please refer to Appendix A to this document which provides a response to National Highways regarding traffic modelling.
049-24	If this one issue is resolved and the model remains satisfactory validated locally, then this would address National Highways concern	Please refer to Appendix A to this document which provides a response to National Highways regarding traffic modelling.

Ref	Issue	Applicant Response
	in respect to the SATURN model and potentially any residual issues associated with the Paramics model.	
Discrepancies with traffic modelling and the need for sensitivity testing		
049-25	As detailed above, paragraph 4.3.4 in TAG Unit M3.1 considers the localised aspects of the model. National Highways are of the view that the model is currently not considered to be fit for purpose due to the west/northbound journey time issues for routes 208 and 209 on the A4019. Until this issue is resolved, leading to a TAG compliant model, National Highways do not consider it a suitable model to support the DCO application. The routes are shown in Figure 9 of the aforementioned technical note that the Applicant prepared and is reproduced below.	Please refer to Appendix A to this document which provides a response to National Highways regarding traffic modelling.
049-27	In paragraph 2.4.6 of the Applicant's technical note, it is noted that the routes are between 11 km and 12 km in length and the issue results from journey time differences over a very limited length of the route. The two significant diverges of the modelled journey time from the observed journey time occur at two signal -controlled junctions on the A4019; these are identified as an 800 m section of the A4019 taking in Kingsditch roundabout (now a signal- controlled junction) and the Gallagher Retail Park junction, which are located close to the start of the route, when travelling in the west/northbound direction.	Please refer to Appendix A to this document which provides a response to National Highways regarding traffic modelling.
049-28	Within the Applicant's technical note, five alternative routes are identified that could provide for some or all of the same journey as routes 208 and 209, and confirms that these do achieve an acceptable level of validation. This is treated in the technical note as a positive reinforcement of the validity and suitability of the model, however National Highways believe this highlights how important the shortcoming of the model is in respect of the two journey times that actually travel through the location of the new junction.	Please refer to Appendix A to this document which provides a response to National Highways regarding traffic modelling.

Ref	Issue	Applicant Response
049-29	That is not to suggest that the alternative routes compliance is a problem, it is that when SATURN is making route choice decisions in the forecast scenarios it is likely that they will not be considered reliable. This is because there is the potential for traffic to be diverted away from the route through the new junction, due to the overestimation of the journey time, which will result in an overestimated journey time benefit that will be achieved by underestimating the potential traffic demand. This then has further potential repercussions for the junction and slip road design.	Please refer to Appendix A to this document which provides a response to National Highways regarding traffic modelling.
049-30	Unless the two critical junctions are adjusted to bring the journey time validation within the appropriate 15% standard, it is not possible to confirm that the forecast model is reporting future traffic conditions appropriately.	Please refer to Appendix A to this document which provides a response to National Highways regarding traffic modelling.
049-31	There is then a further section in the Applicant's technical note, paragraphs 2.14.13 to 2.14.17 considering traffic flow validation in eastbound and westbound directions along the A4019 corridor at four locations (8 traffic flows by direction). These are shown to all reach acceptable levels of validation in the AM peak, with two failing in the inter peak and one failing in the PM peak. This is again taken as a positive reinforcement of the validity and suitability of the model by the Applicant. However, again given the failure of the northbound journey time to validate, National Highways believes that this is potentially indicative of a separate issue with the model coding.	Please refer to Appendix A to this document which provides a response to National Highways regarding traffic modelling.
049-32	Without the adjustments to the two critical junctions to bring the journey time within appropriate validation limits, it is not possible to agree that the traffic flows do validate appropriately, although it may be that even with the adjustment to the junction the traffic flows will remain within validation limits. The technical note states that the traffic flow validation demonstrates the robustness of the model. If the model is suitably robust, relatively minor changes to the two junctions should	Please refer to Appendix A to this document which provides a response to National Highways regarding traffic modelling.

Ref	Issue	Applicant Response
	not have a significant or widespread impact upon the calibration and validation of the model.	
049-33	Therefore, it is considered that the failure of the two northbound route journey times to validate is a significant concern regarding the reliability of the model for forecasting purposes.	Please refer to Appendix A to this document which provides a response to National Highways regarding traffic modelling.
Remediation Required		
049-37	These two junctions require recalibration and revalidation in the base model for all three time periods (AM peak, interpeak and PM peak). While we cannot confirm what the changes to the signal timings should be, we can provide the initial advice that the intergreen times could be a focus of any sensitivity analysis undertaken by the Applicant. This is because the intergreen times are all set at 10 seconds in the model, and it is unlikely that this is correct across the whole junction. The intergreen settings should be taken from the controller settings for each junction to make the model reflective of the current road operation.	Please refer to Appendix A to this document which provides a response to National Highways regarding traffic modelling.
049-38	It is appreciated that the junction was operating under MOVA control which will vary the length of green time across the modelled time periods in response to the traffic demands for each movement. However, it will be possible to identify an appropriate set of timings from the controller logs to act as a suitable start point and this can be finessed through model runs to identify a set of timings that provide the best fit to the junction delay as experienced in the base year. It may also be appropriate to adjust some of the stop line saturation flows if these are lower than were being achieved.	Please refer to Appendix A to this document which provides a response to National Highways regarding traffic modelling.
049-39	Once the process is complete the full calibration and validation statistics from the model can be extracted to confirm that the model continues to operate satisfactorily. On the basis that the Applicant	Please refer to Appendix A to this document which provides a response to National Highways regarding traffic modelling.

Ref	Issue	Applicant Response
	considers that this is a stable model, there should not be any widespread reassignment or revision of journey times on other routes.	
049-40	The Do Minimum and Do Something models would also need to be rerun if the signal timings, and in particular the intergreens, have been taken through between the models. This will then require an update to the comparisons between the two models, and the relevant data being extracted from the models to provide updated matrices for the Paramics model. Once all of the models have been rerun, then the Transport Assessment can be updated with the new results.	Please refer to Appendix A to this document which provides a response to National Highways regarding traffic modelling.
049-41	National Highways do not consider that the recalibration of the two junctions is a particularly onerous exercise, but do appreciate that it will take time for the Applicant to rerun all of the models and update the Transport Assessment.	Please refer to Appendix A to this document which provides a response to National Highways regarding traffic modelling.
Requirement for National Highways model acceptance		
049-42	In order for National Highways to be able to accept the SATURN model as being fit for purpose, and in line with National Highways requirements, the two journey time for routes, 208 and 209 in the northbound direction both need to meet the validation criteria required by TAG Unit 3.1 overall but specifically when considering only the section from the start of the route as far as the M5 Junction 10 as this represents the most critical section of the journey.	Please refer to Appendix A to this document which provides a response to National Highways regarding traffic modelling.
049-43	The remainder of the model must also continue to meet the TAG Unit 3.1 calibration criteria.	Please refer to Appendix A to this document which provides a response to National Highways regarding traffic modelling.
Cost estimate differences		
049-44	National Highways continue to seek to understand the differences between the Applicants cost estimates as referred to in the Funding Statement [APP-036] and our high-level review discussed at ISH3.	Refer to the Applicant's response to ExAQ2 5.0.9 (TR010063/APP/9.77).

Ref	Issue	Applicant Response
	<p>The National Highways cost estimate draws its data from an assured database of costs from projects on the Strategic Road Network. National Highways wrote to the Applicant on 19th and 28th August 2024 and have also spoken with the Applicant to discuss a means to share more detailed data. Progress thus far has been limited.</p>	
049-45	<p>National Highways have proposed a methodology with the Applicant to provide a mechanism to allow National Highways to review the Applicant's cost estimate without breaching commercial sensitivities. The Applicant has previously offered to share the Bill of Quantities (excluding rates) with National Highways; this would enable the direct works component of the estimate to be verified.</p>	<p>Refer to the Applicant's response to ExAQ2 5.0.9 (TR010063/APP/9.77).</p>
049-46	<p>Further, National Highways have requested that greater detail in respect to the assumptions and/or data that supports the remainder of estimate e.g. indirect works, land, preliminaries etc. National Highways would then be in a position to review the cost estimates in a more detailed manner with the Applicant to assess the assumptions/rationale and allow for the identification of the key differences between the Applicants and National Highways estimate.</p>	<p>Refer to the Applicant's response to ExAQ2 5.0.9 (TR010063/APP/9.77).</p>
049-47	<p>National Highways recognise that there will be discrepancies in the cost estimate methodology, rates and assumptions but should the Applicant not provide further detail then National Highways would be unable to endorse the Applicants cost estimate.</p>	<p>The Applicant has demonstrated in the Funding Technical Note (REP9-043) that the cost estimate is both robust and has been verified by a third party. The Applicant does not consider that it is necessary for National Highways to endorse its cost estimate, but would note that it is in discussions with National Highways to agree a notice to proceed mechanism which would involve National Highways being satisfied that sufficient funding is in place for the works to the SRN prior to the Applicant commencing work on National Highways' network. Therefore, the Applicant considers that any concerns which National Highways may have can be dealt with and information provided as necessary in the course of that process.</p>

Ref	Issue	Applicant Response
		<p>In addition, the Applicant has provided National Highways with information to alleviate concerns regarding sufficient funding being in place to cover the development proposed on the SRN.</p>
<p>Side agreement and use of a cash bond</p>		
<p>049-48</p>	<p>National Highways standard protective provisions were submitted in the corporate response at relevant representation [RR:026] and can reconfirm the standard corporate position regarding the use of a cash bond remains.</p> <p>Further elaboration on this matter can be found later in this response under the written summary of oral representations of agenda point 5 regarding funding.</p>	<p>The Applicant has provided an updated set of protective provisions with the dDCO submitted as part of D5. Separately, the Applicant is in discussions with National Highways over the notice to proceed mechanism including appropriate security.</p>
<p>Consideration of a funding requirement</p>		
<p>049-49</p>	<p>National Highways do not believe that this is possible. Section 120 of the Planning Act 2008 provides that a DCO may impose requirements in connection with the development for which consent is granted. Requirements should be precise, enforceable, necessary, relevant to the development, relevant to planning, and reasonable in all other respects. It is unclear how a Requirement could be used to secure funding.</p> <p>Funding for a DCO should be in place and be certain prior to the grant of the order. A requirement of a DCO application is the submission of a statement explaining how it will be funded.</p> <p>Accordingly, a Requirement within a DCO is not an appropriate mechanism for how development is to progress and be funded.</p>	<p>The Applicant acknowledges National Highways position regarding a funding requirement and is in agreement but would highlight that it's statement that "funding for a DCO should be in place and be certain prior to the grant of the order" is not a position which is reflected in legislation or guidance. The Applicant would refer back to its submissions during ISH3 and CAH1 which set out its position regarding the tests required as to funding.</p>

Ref	Issue	Applicant Response
Design Panel requirements		
049-58	<p>Based on the PDR submitted as part of the DCO Application [APP 9.47], National Highways do not believe that a design review has been undertaken. It is for the designing organisation, in this case the Applicant, to decide if a Design Panel is necessary to meet the requirements of the NNNPS. National Highways have made comments on the PDR in the context of Good Road Design principles, as part of PCF reviews to assist the Applicant in the development of their application, but these do not constitute an independent design review.</p>	<p>Please note the Applicant's responses to Q7.0.1, Q7.0.2 & Q7.0.3 in Applicant Response to Examining Authority's First Written Questions [REP3-043], and also the response to the action points from ISH3 (the combined response to ISH3.31+32 [REP4-037].</p> <p>A formal Design Panel type review has not been undertaken. If it had been undertaken, this would have been reported, and the responses and outcomes to the Design Panel report would have been set out in the Project Design Report (PDR) referenced in National Highways' comment here (049-59).</p> <p>The NNNPS sets out a pragmatic approach to good design (paras 4.28-4.35). It acknowledges some of the limitations that may exist in terms of developing good design and does not seek innovative or gateway design.</p> <p>Paragraph 4.33 of the NNNPS states '<i>The use of professional, independent advice on the design aspects of a proposal should be considered, to ensure good design principles are embedded into infrastructure proposals.</i>' Therefore, independent advice is not a requirement of the NNNPS; rather the consideration of its use is the requirement; and this has happened.</p> <p>National Highways states in the second sentence of 049-59, it is for the designing organisation to decide if a Design Panel is necessary to meet the requirements of the NNNPS. The Applicant gave consideration to whether the use of professional independent advice would ensure good design principles were embedded into the proposals, and the decision was made that a Design Panel is not required for this Scheme. This decision was made on the basis of the intended design of the Scheme as something that was aligned with other infrastructure around it, and designed to embed itself into the landscape; and also not being located within a sensitive landscape. -</p>

Ref	Issue	Applicant Response
049-59	National Highways are of the view that a Design Review would be beneficial to the project in advance of the detailed design stage. A design review provides the opportunity to influence the perception and visual appearance of the scheme in the context of the surrounding landscape via consideration of aspects, such as the finish to structures.	<p>To develop the current preliminary design the Scheme has progressed through iterative design evolution to incorporate the embedded mitigation required to meet the principles of the landscape design, with the objective of the Scheme fitting into the receiving landscape.</p> <p>The detailed design for the Scheme, including finishes to structures and planting details, is to be decided at the next stage. Whilst the Applicant is of the opinion that a formal Design Review process is not required for the Scheme, collaborative consultation with National Highways will be welcomed, in particular their comments on the design finishes of those elements of the Scheme that fall within National Highways' land ownership.</p>
<u>Written Summary of ISH3</u>		
Agenda Item 3 - Flood Risk, Drainage, and the Water Environment		
The principle of the reservoir (FSA) and its practical implications:		
049-65	National Highways do not accept the principle of joint responsibility for maintenance of the reservoir, as proposed by the Applicant. The slip road proposed atop of the embankment forming the retainer of the reservoir cannot be disaggregated from the FSA itself, and on that basis National Highways will not take on responsibility for its drainage nor maintenance. It would carry a significant cost burden and have practical implications for National Highways ordinary maintenance schedule. For example, the current regime for grass cutting on verges does not fall within acceptable heights nor frequency of cutting for reservoirs. Furthermore, standard routine maintenance, such as but not limited to relating of pavement, clearance of drainage assets works, or upgrade or renewal of other highways assets, will have to be signed off by the appointed Panel Engineer under the Reservoirs Act 1975, which also has an impact on day-to-day operations, programme, resources and cost.	See response to 049-06.

Ref	Issue	Applicant Response
049-66	<p>As highlighted in National Highways' Relevant Representation [RR-026], National Highways considers that if the DCO is granted, it must be secured in the consent and approved documentation that the ownership and maintenance of the FSA (work no.7) and the M5 southbound on-slip embankment lies with the Applicant. National Highways' requirement would be that the M5 southbound on-slip embankment does not form part of the FSA, i.e. a separate bund/boundary should be provided for this purpose to provide physical separation.</p>	See response to 049-06.
049-67	<p>National Highways does not have the operational capacity to maintain any aspect of the FSA under the Reservoirs Act 1975. National Highways owns one reservoir nationally, and this was an inherited asset, with this reservoir not utilising any existing highways assets to bound the reservoir. National Highways would not design its own schemes to include a reservoir.</p>	See response to 049-06.
049-68	<p>National Highways are of the opinion that alternative drainage/flood attenuation solutions are likely to be feasible within the DCO Order limits and would encourage the Applicant to explore resolutions that do not rely upon the SRN network to form part of the feature. In the event that the FSA and the slip roads are physically separate, National Highways would want to take the drainage asset of the slip road. This is because the reliance upon the M5 southbound on-slip to form the western edge of the reservoir has the potential to increase risks to their infrastructure.</p> <p>Secondly, the stability of the slope could lead to failure of embankment causing risk to life for road users on the slip road at that time. Any failure may also lead to inundation of water/sediment on the slip road and potentially the wider SRN. Thirdly, under the Reservoirs Act 1975 it is a duty to maintain the integrity of the reservoir; failure to do so can lead to prosecution should these requirements not be met. As a result, the standard maintenance regime of the SRN e.g. the</p>	See response to 049-06.

Ref	Issue	Applicant Response
	nearside verge of the southbound on-slip, would not be sufficient should the reservoir be located in the current position – even if National Highways have no operational obligations of the reservoir itself.	
049-69	National Highways has been asked to provide its opinion on the legal position regarding a DCO conferring obligations on a third party. In this case, specifically, can the DCO make National Highways the responsible body for the reservoir, whether individually or jointly with the undertaker. The response to this question is provided separately in the response submitted for Deadline 4 in this letter above.	See response to 049-06.
Agenda Item 4 – Traffic and Transport		
Position in relation to modelling and TAG compliance:		
049-70	With regards to the SATURN model, overall, the majority of the concerns raised by National Highways have either been resolved or the additional evidence provided by the Applicant demonstrates that the model is adequate or that no further information is available which could be used to improve the model for the assessment of the scheme proposed. The one TAG compliance issue that remains to be addressed to our satisfaction is that of the journey times along the A4019. As this route is directly impacted by the scheme it is considered that further effort to ensure the base model is capable of replicating observations is a reasonable request. The model is TAG compliant in its whole - all three elements of the scheme. Compliance is a subjective matter and where most requirements are met, the model can be viewed as compliant in its sum. However, the non-compliant elements for the scheme are located on key corridors and therefore raise significant concerns, notwithstanding that the whole model can be viewed as TAG compliant. The Applicant is relying on county wide extremities within the model to get the sum of its parts to equal an acceptable whole. TAG Unit M3.1 - Highway Assignment	Please refer to Appendix B to this document which provides a response to National Highways regarding traffic modelling.

Ref	Issue	Applicant Response
	<p>Modelling explains in paragraph 4.3.2 that 'general purpose model', in which a range of journey time routes passing the thresholds is acceptable but those used for specific interventions need to include the most affected routes. Paragraph 4.3.4 then says that validation along the route should be complemented with validation on segments and links. The assessments National Highways have been given by the Applicant show that the key journey time routes fail, particularly at locations close to the primary centre of the scheme (being the M5 junction 10 works).</p>	
049-71	<p>The Applicant has provided further explanation to explain how meeting the journey time criteria can be challenging especially on routes with variable traffic signal times, as SATURN can only operate with fixed times. The Applicant acknowledges that "Refinements of signal timings to account for the variation in signal timing can lead to closer levels of simulation of traffic conditions and journey times at such locations." The Applicant further confirmed it is at two signal-controlled junctions where the journey times diverge. It is not apparent whether refining the signal times has been undertaken. This would be a proportionate and reasonable area of investigation.</p>	<p>Please refer to Appendix B to this document which provides a response to National Highways regarding traffic modelling.</p>
049-72	<p>The Applicant suggests that if average (mean) journey times had been used in the assessment as opposed to median journey times these would fall within the TAG tolerances. Mean and median journey times have been used by the Applicant to exclude the impact of extreme values (high or low) that will skew the mean. Whilst the results are not disputed, the use of mean journey times is not advisable. The Applicant does not provide any information with respect to the impact using mean as well as median journey time would have on the other journey time routes. It is not considered to be a reasonable approach to "pick and choose" the data that fits the argument.</p>	<p>Please refer to Appendix B to this document which provides a response to National Highways regarding traffic modelling.</p>

Ref	Issue	Applicant Response
049-73	The Applicant stated that National Highways request to amend the two key signal timings would have a ripple effect on the modelling. There is no evidence to support this and the work has not been carried out.	Please refer to Appendix B to this document which provides a response to National Highways regarding traffic modelling.
049-74	With regards to Paramics, in principle, National Highways have no objections to the Paramics model. However, as the Paramics model draws its data from the SATURN model, should there be a change to the SATURN model then it is likely that the Paramics model will be affected and require updating. Minor issues such as unreleased vehicles are of lesser significance and not to the extent that National Highways object to the modelling, but should any amendments be made to Paramics model then these minor issues could be addressed at that time.	Please refer to Appendix B to this document which provides a response to National Highways regarding traffic modelling.
The ability of the Transport Assessment and modelling to support the examination of the DCO:		
049-76	National Highways has undertaken a review of The Joint Councils GC3M Assessment [REP3-065]. The document concludes that the evidence presented provides a clear indication that the level of development modelled in the Full Development Scenario cannot be accommodated in the absence of a major scheme intervention. National Highways accepts that full development will create traffic impacts across a broad area. However, the JC document does not prove that the only way to address those impacts is a major scheme intervention, and even if a major scheme intervention was required, the document does not evidence that the application scheme is the only, or correct, solution. National Highways is unsighted on alternatives, per our response to written questions 1.3.1. A major improvement to M5 J10 may well be the solution required, but the JC document does not support any particular form of junction or consider whether there are alternatives that could be introduced.	<p>The Joint Councils GC3M Assessment [REP3-065] has been undertaken for other purposes and is not intended to determine the type of major scheme intervention required at M5 junction 10. Nor has it been submitted into examination as evidence directly supporting the Scheme. Consequently, the Scheme and its assessment is not in any way reliant on the GC3M modelling. However, the findings of the GC3M assessment are consistent with findings of the modelling undertaken for the JCS and the Scheme.</p> <p>The principal elements of the Scheme, i.e. the addition of south-facing slip roads at M5 junction 10, the West Cheltenham Link Road and the associated improvements to the A4019, were established by the JCS Transport Strategy and confirmed by JCS policy. The JCS was subject to examination in public and National Highways was a statutory consultee. Therefore, National Highways would have had sight of the transport evidence base for the JCS and been given the opportunity to comment.</p>

Ref	Issue	Applicant Response
049-77	<p>Additionally, National Highways would note that they have been undertaking work separately on identifying the quantum of development that can come forward in advance of the DCO scheme, and this has identified a number far higher than the deadweight assessment put forward by the Applicant. A final report on this work is due to be published this month by National Highways. The JC document does not pick up on the fact that the A40 Elmbridge Court roundabout will be subject to significant congestion unless it is improved. The 2017 scheme that was carried out is not performing as predicted due to issues with the local highway network traffic queueing back into the roundabout, an issue that is unlikely to be picked up by the SATURN model. In addition, the scheme that was identified for the roundabout and included as part of the DS7 package of measures in the JCS is not deliverable in either policy or design terms. National Highways are doing a parallel piece of work to identify an interim improvement at the A40 Elmbridge Court roundabout to provide for growth to at least 2031 and identify a larger scheme to be delivered in the next Local Plan period to provide for current and future growth.</p>	<p>In the context of this DCO it is not appropriate for the Applicant to comment on traffic modelling and related work being undertaken that is separate to this DCO examination. Furthermore, any proposed improvements to the A40 Elmbridge Court roundabout do not form part of this DCO Scheme and would need to be considered through an appropriate and separate consenting process in the future.</p> <p>The quantum of deadweight development assumed for the traffic modelling used for the assessment of the Scheme is consistent with the JCS evidence base as amended by the Golden Valley SPD. Regarding any future deadweight that is being assessed by National Highways, the Applicant is not aware that this assessment has yet been published.</p>
Departures From Standard:		
049-81	<p>In terms of the Gloucestershire County Council Departures from Standard referred to in the document, it is the decision of the local authority to determine the design standards they choose to use. If applicable, and departures are identified, these would need to be agreed by the local highway authority before National Highways provided a recommendation. With regards to road safety audits, National Highways are awaiting information from the Applicant regarding compliance with GC119 (SoCG5.46).</p>	<p>A response to the GG119 compliance question was provided as Action Point 3.21 of the Applicant Written Submission of Oral Case for Issue Specific Hearing 3 (ISH3) [REP4-037]</p>
Agenda Item 5 – Funding		

Ref	Issue	Applicant Response
Inadequacy of Applicant's scheme costs estimate:		
049-83	National Highways have undertaken a review of the cost estimate that the Applicant has prepared. Based on the limited detail provided, National Highways have not been able to reconcile a number of aspects of the estimate. It is unclear, for example, where VAT and biodiversity net gain costs are included in the Applicant's numbers.	The Applicant has held discussions with National Highways and agreed to share information to enable them to estimate costs.
049-84	National Highways utilise an assured database of actual costs from schemes delivered across the SRN network based at Q1 2019 prices. In order to compare this date with the Applicant's base of Q2 2022, National Highways applies Implied Output Price Index (IOPI) data. Whilst National Highways accepts that the Applicant's cost estimate will be based on its own tender process and the rates the Applicant was able to secure, it does seem significantly lower than what National Highways would expect to pay for the same scheme.	The Applicant has demonstrated that it has developed the scheme cost estimate from robust sources, see response to ExAQ2 5.0.9 (TR010063/APP/9.77).
049-85	National Highways, like the Applicant, uses the BCIS indices to calculate inflation cost, so it is anticipated that this component will be comparable. However, National Highways believes that the base costs underpinning the estimate are too low and if the base figures start apart, the % increase for inflation will be proportionally higher.	Whilst the Applicant is willing to share information during the examination, it is the scheme cost that relates to the contract between the Applicant and its ECI contractor that should be reconciled and used to form the basis of the Notice to Proceed.
049-86	Without further detail from the Applicant, it is not possible for National Highways to determine if or where the variances are within the scheme estimates of each party. National Highways are willing and keen to engage directly with the applicant to review the cost estimating process in order to determine where the areas of difference are.	See 049-85 above.
049-87	It is important to reconcile the difference in costs estimates between the parties because National Highways will require evidence that funding is in place for the scheme before allowing works to commence	See 049-85 above.

Ref	Issue	Applicant Response
	in the event that the Application does not put in place a bond. The Applicant's current position is that a bond will not be provided.	
Reliance Upon s.106 contributions, timing and certainty:		
049-88	National Highways has concerns regarding the reliance on s.106 contributions to fund the shortfall in Homes England funding for the scheme. There is no certainty at this stage that s.106 agreements will be entered into; if they are secured, there is no certainty that they will be at a quantum to fill the funding gap; and any contributions secured are likely to be phased and due over a long period of time. This leads to a potential cash flow problem, unless commencement of the scheme is delayed until all s.106 monies are received. There is also the uncertainty that even if s.106 agreements are entered into and planning is secured, development may not commence for a number of years, if at all, under those permissions.	<p>The Applicant highlighted in the Funding Technical Note (REP4-043) that it has the necessary <i>support</i> to secure s.106 contributions from developments that are dependent on the scheme to secure appropriate highway mitigation through JCS policy INF7.</p> <p>The applicant has also outlined in response to ExA Q5.0.10 how it has begun to explore further options for forward financing of the project through private organisations such as the UK Infrastructure Bank. The loan being important to ensure sufficient cash-flow between the end of the Homes England funding availability period and the secured receipt of s.106 contributions.</p>
Agenda Item 6 – Environmental Matters		
Independent review of design:		
049-89	<p>National Highways position is set out in the SoCG with the Applicant, submitted 30 July 2024 [REP3-038] as part of Deadline 3, Section 9.1: "National Highways confirms that its role prior to the acceptance of the DCO was to provide support to the Applicant to ensure that the application documentation met the requirements of governance for projects on the SRN at the Preliminary Design at Project Control Framework Stage 3 (PCF 3). National Highways did not review any products that have been descope from the PCF 3 process or any documents that were sent for National Highways information only at PCF 3 stage. National Highways reviews and advice at PCF 3 are intended to ensure that documents are in accordance with</p>	The Applicant notes that the Project Design Report is on the list for review by NH at PCF 3.

Ref	Issue	Applicant Response
	<p>governance requirements and include the chapters, headings and topics that should be covered. The PCF 3 review does not provide any level of technical assurance or endorsement of the scheme's viability or design, nor comment on the accuracy or acceptability of any substantive consent, simply that content is there. The PCF 3 process is to ensure that documents meet governance standards only. If it assists the examination process, a full list of which documents that National Highways reviewed at PCF 3 stage can be provided to the Examining Authority, as well as a list of documents that were de-scoped. National Highways confirms that despite reviewing a selection of documentation for PCF 3 stage, there are a number of matters which were not resolved by the Applicant and National Highways can provide the Examining Authority with further information should this be required."</p>	
<p><u>Written Summaries of Oral Submissions made on behalf of National Highways during CAH</u></p>		
<p>Agenda Item 3 – Whether there is a reasonable prospect of the requisite funds becoming available</p>		
<p>Certainty of funding, timing of availability of funding and whether the current cost estimate is realistic:</p>		
<p>049-97</p>	<p>As discussed during ISH3, National Highways base costing is much higher than Applicant's. Other than the Homes England funding, there is no certainty of additional funding being available and if it is contractually secured, when the monies will be paid. The Homes England funding is a fixed amount and it not inflation linkid, therefore any funding gap increases with time passing.</p>	<p>The Applicant has responded to ExQ2 5.0.9 and 5.0.12 which sets out its position regarding the robustness of its cost estimate and the implication of inflation (TR010063/APP/9.77).</p>
<p>Agenda Item 6 – Sections 127 and 138 of the PA2008 – the acquisition of statutory undertakers land and the extinguishment of rights and removal of apparatus of statutory undertakers</p>		
<p>Protective Provisions:</p>		

Ref	Issue	Applicant Response
049-98	Discussions are ongoing with the Applicant in relation to protective provisions. Most areas of principle are agreed. The outstanding areas of negotiation relate to security of funding - whether a bond is required or whether an alternative mechanism can be agreed to control works until monies are in place - and the payment of a commuted sum for future maintenance costs of the enhanced SRN network.	The Applicant confirms it is continuing to negotiate protective provisions and a side agreement with NH. Proposals to address the issue of security of funding and bonding are being discussed but still to be agreed. The Applicant is amending the protective provisions at D5 to address NH's concerns in relation to a commuted sum.
049-99	National Highways standard protective provisions were submitted with relevant representations. In the event that negotiated provisions cannot be agreed, National Highways would provide justification for inclusion of its preferred form of protective provision for any outstanding matters.	The Applicant confirms it is continuing to negotiate the protective provisions. In the meantime, amendments are being made to the PPs at D5 which follow NH's standard protective provisions in so far as the Applicant considers are justified in respect of the Scheme and which seek to resolve concerns raised by NH.

8. REP4-050 Mr Hadley

Ref	Issue	Applicant Response
I still have very serious concerns with regards to the schemes effect on my land for the following reasons:		
050-01	Further to the CAH on 15 August I have still not received overlay drawings from the applicant as instructed by the Inspector. These drawings will clearly need to show road widening, footpaths, cycleways, access to other green transport, etc. that connect to my site.	The overlay plan was included in Appendix B of the Applicant Written Submission of Oral Case for Compulsory Acquisition Hearing 1 (CAH1) TR010063 – APP 9.69. It was also separately shared with Mr Hadley on the 05/09/24 during a meeting to discuss the plan and by email on 18/09/24..
050-02	I have not received any date for a meeting from the CPO valuer as stated by him at that 15 August CAH. I would like to reiterate that there has been no meaningful attempt to reach agreement with me throughout the DCO process.	A Teams meeting was held with Mr Hadley and his agent on the 05/09/2024. The meeting was first requested through Mr Hadley’s agent on the 27/08/24. A further meeting was held on site with Mr Hadley on the 18/09/24. The discussions during both meetings were focused on the impact of the Scheme, the loss that will result and terms being proposed by the Applicant. The intention being to reach a voluntary agreement with Mr Hadley.
050-03	Due to the highway widening that was mentioned by the Applicant (I had previously been told there would be no road widening) and the impact on my agricultural access and egress point, making its use dangerous due to the extended distance one will have to travel across the highway with large agricultural machinery.	The road in this location is being widened on the approach to the proposed signalised junction as shown on sheet 16 of the Works Plans - Part 2 (APP-008) and specifically Work No. 6. The Applicant is not aware of any recorded evidence to suggest that wider roads are more dangerous in terms of the use of direct accesses. The B4634 will remain a two lane single carriageway at the proposed field access location. The Applicant would argue that if anything, the widened lanes would make the manoeuvre easier for large agricultural vehicles, particularly as the proposed signalised junction would create gaps in traffic flows.

Ref	Issue	Applicant Response
050-05	Presently my site is further damaged in that it takes away any chance of access/egress from the Old Gloucester Road B4634 for development purposes. This is confirmed by Highway Development Management Officers who would see <i>“a presumption against a proliferation of accesses onto a rural distributor road and conflict with the wider scheme.”</i>	It should be noted that the allocation of Mr Hadley’s land (as part of Strategic Allocation A7) is predicated on the mitigation measures outlined in Scenario DS7 addressing the impacts of the JCS development. This established the need for the link road to address the impacts of the Strategic Allocation on both the local and strategic road network in order to facilitate its development.
050-06	I have been trying to reason with GCC and their agent Carter Jonas from the onset regarding a roundabout rather than a signalled junction, following an initial highways drawing illustrating a roundabout that for some reason was not considered further. Due to the silence from both GCC and CJ no progress has been made, hence why we felt we could not progress a planning application in a robust manner.	<p>A roundabout was considered during the conceptual and route identification stages of the scheme, as was a roundabout at the northern end of the link road. However, the Stage 3 traffic modelling undertaken in the preliminary design stage identified significant increases in forecast flows and an amendment to a signalised junction design was required to avoid significant queuing at the junction.</p> <p>A signalised crossroads junction was considered at the Link road/B4634 junction to provide better active travel crossing facilities and for consistency with the A4019 junction.</p> <p>This design iteration was fixed at design fix 2 (date August 2021) and the Applicant does not consider that its application should have caused any material delay to the progress of any local applications in the allocated sites.</p>
050-07	It is only recently that we have been able to consider other possible opportunities for development at much less unit density, therefore GCC will have to compensate for the quantum loss.	Mr Hadley first raised concerns regarding the unit density which can be achieved if his land is developed following the Scheme during Issue Specific Hearing 3. The Applicant has since requested that Mr Hadley (during the meeting on the 5/9/2024) provide further information and explanation regarding his concerns. The Applicant understands that Mr Hadley believes the Scheme would restrict his ability to develop an access onto the Old Gloucester Road.

Ref	Issue	Applicant Response
		<p>If Mr Hadley seeks to develop his land independently from the wider allocation, it is the Applicant's opinion that in a no Scheme world Mr Hadley would be directed to design an access from Hayden Lane.</p> <p>The Applicant has requested that Mr Hadley provides more information and evidence to explain and support the concerns that Mr Hadley has raised. Without this the Applicant cannot assess the specifics of Mr Hadley's concerns and look to address of mitigate these. The Applicant continues to seek clarity on the points raised to ensure the impact of the Scheme is understood, but the Applicant does need more detail regarding the development that Mr Hadley seeks to achieve. The Applicant notes that to date, despite requests by the Applicant, no clear development design or layout has been provided for the land. An indicative layout is shown on a Flood Risk Assessment provided by Mr Hadley on the 5/9/2024 but it is not clear if this is representative of the development that Mr Hadley seeks to progress. No formal submission supporting Mr Hadley's intended development has been made.</p> <p>The Applicant has asked Mr Hadley to clarify why he has only recently been able to consider 'other possible opportunities for development at much less unit density' but is yet to receive a clear response.</p>
050-08	The effects of all the points above will need to be compensated for quantum loss.	<p>The Applicant is clear that the intention is to negotiate a voluntary agreement consideration which is considered in line with the Compensation Code which would apply if compulsory acquisition were used.</p> <p>The Applicant will though require substantiation and evidence from Mr Hadley to support negotiations.</p> <p>Should parties disagree regarding the value of compensation there is a clear process to resolve any dispute if it were to</p>

Ref	Issue	Applicant Response
		unfortunately arise, which would be a matter for consideration separate to the examination. That said the Applicant continues to seek to reach an agreement on terms with Mr Hadley.

Appendices



Appendix A. Response to National Highways IP4 submission – Traffic modelling

Applicant's amalgamated response to National Highways Deadline 4 comments regarding the validation of the strategic modelling and its fitness for purpose (REP4-049)

- National Highways, at page 2-3 of their response regarding TAG compliance, quote paragraph 4.3.4 of TAG which states that:

"whilst it is standard practice to use journey time validation at route level ...increasingly there is a need to take a more detailed approach and check journey time validation at the link level or for segments of the route as well. This can be very important to assess noise and air quality impacts in the detail that they are required. Where these impacts may be material, the analyst should produce some assessment of the accuracy of speeds at a finer level"

National Highways have used this paragraph to argue that *"it is essential that the operation of the relevant junctions is examined further to achieve the appropriate level of validation"*. National Highways have said that the Applicant's model has looked at a specific intervention on the basis of a general-purpose model and not a *"cordoned down"* model which they say is in contradiction to paragraph 4.3.2.
- The Applicant is not of the opinion that paragraph 4.3.2 prescribes a requirement for a *"cordoned down"* approach. The Applicant is of the view that paragraph 4.3.2 ensures that for models developed for specific interventions *"routes should include those from which it is expected traffic will be affected as well as covering the scheme itself"*. To state that this requires a *"cordoned down"* approach in a strategic model, to the Applicant, is taking paragraph 4.3.2 too far. It is also not the case that the Applicant has not used a *"cordoned down"* approach in its modelling when considered as a whole. The operational (Paramics) traffic model uses *'cordoned down'* demand matrices taken from the strategic model and covers a much more focused geographic area in the vicinity of the Scheme than the strategic traffic model, recognising its zone of influence. The Paramics 2017 base year model has been validated against observed data and all modelled traffic flows and journey times meet TAG validation criteria. It, therefore, represents a much more detailed and *'cordoned down'* traffic model which effectively negates the need for a cordoned down version of the strategic model.
- Furthermore, National Highways acknowledge that the Applicant's approach regarding its strategic model *"does not invalidate the use of the model"*, and the Applicant is unclear then how National Highways can continue to maintain that the Applicant's approach *"contradicts"* TAG, paragraph 4.3.2. Regardless of this seeming contradiction of position, National Highways state they *"would expect"* journey time validation and calibration to be done locally as outlined in paragraph 4.3.4, concluding ultimately that without such validation and calibration the model is would not be compliant with TAG. However, the Applicant is of the view that, if one returns to paragraph 4.3.4, that nothing in that paragraph explicitly requires a practitioner to validate on link level / segment level. The Applicant acknowledges that the paragraph 4.3.4 states that it *"can be very important"* for the specific purpose of *"assessing noise and air quality impacts in the detail they are required"* and *"where impacts may be material"* the analyst should produce some assessment of the accuracy of speeds. The Applicant does not consider, nor can see from the submission from National Highways, that there is any clear justification that the misalignment of validation on the relevant segments necessarily has any material impact on the model outputs. National Highways appear to point to overall outputs of the model being *"unreliable"* concluding that the model *"is not currently fit for purpose"*. However, this would seem to go beyond the concern raised in paragraph 4.3.4 which does not suggest that if link levels/segment levels are outside validation criteria then the model is not fit for purpose, but rather points to a need to consider a more detailed approach to support noise and air quality impact assessments. National Highways submission, therefore, is absent of a clear rationale for why they view the discrepancy of validation to be of such significance and notwithstanding the model could not be said to be TAG compliant.

4. National Highways has suggested some “solutions” to the problem it perceives. In response, the Applicant has shown that adjusting the inter-green times in isolation does not result in the modelled journey times westbound along the A4019 in the base year model meeting TAG validation criteria. Consequently, the signal times at the relevant junctions have been optimised in combination with applicable link speeds adjusted such that the westbound journey time routes along the A4019 meet TAG validation criteria thresholds.
5. The Applicant agrees with National Highways that the two west/northbound journey time routes on the A4019 in the base year model, that do not meet TAG validation criteria, most notably diverge from observed journey times at two junctions along the A4019 that are common to both journey time routes. The Applicant has previously confirmed that these two journey time routes do not need to fully validate for the validation of the strategic model to be compliant with TAG overall. The Applicant has also previously confirmed that validation of all journey times in the base year strategic traffic model has been undertaken against observed median journey times.
6. Nonetheless, in response to National Highways concerns regarding validation of journey times in the base year strategic traffic model, with reference to paragraphs 4.3.2 and 4.3.4 of TAG, the Applicant has undertaken a sensitivity test with relevant parameters adjusted such that the two westbound journey time routes in the base year model of concern meet the TAG validation criteria at segment level (against observed median journey times) whilst maintaining TAG validation compliance for all other aspects of the model. The results of this sensitivity test are reported in a Technical Note submitted at Deadline 5 (TR010063/APP/9.79). The purpose of the Technical Note is to demonstrate that the SATURN modelling used for the assessment of the Scheme is both robust and fit for purpose and thereby addresses National Highways’ concern in respect to validation of the SATURN model.
7. A comparison of the outputs from the ‘sensitivity test’ base year model with the DCO base year model shows minimal differences between them. This demonstrates that the modelled routing or assignment of traffic across the road network is reliable, and the model outputs are not materially affected by whether the modelled westbound journey time along the A4019 meets the TAG validation criteria in comparison to observed median journey times. Therefore, the strategic traffic modelling used to assess the Scheme is both robust and fit for purpose. The sensitivity test has demonstrated that the modelled routing or assignment of traffic across the road network is reliable and not materially affected by whether the modelled westbound journey time along the A4019 meets the TAG validation criteria. Therefore, the Applicant anticipate that the changes to the sensitivity test base year model are unlikely to result in materially different outputs for the forecast models or alter the conclusions drawn from these. However, the Applicant is currently undertaking further modelling for Scenarios P and R to confirm this and will be submitting the results of this work in an updated technical note prior to Issue Specific Hearing 4.

Appendix B. Response to Gowlings IP4 submission – Alternative access to safeguarded land

Traffic and Transport

Existing Access Arrangements

This section responds to paragraphs 1.1 to 1.13 of Gowling WLG's Deadline 4 submission on behalf of Bloor Homes Limited and Persimmon Homes Limited [REP4-045].

In its submission, Gowling states that there are currently seven accesses into the Safeguarded Land north of the A4019 which are affected by the scheme. Gowling refer to these as Accesses A to G.

For clarity, these accesses are referenced as follows in the Applicant's Streets, Rights of Way and Access Plans (REP4-005 and REP4-006):

- Access A is referred to as access F on sheet 5 Streets, Rights of Way and Access Plans;
- Access B is referred to as access E on sheet 5 Streets, Rights of Way and Access Plans;
- Access C is referred to as access J on sheet 12 Streets, Rights of Way and Access Plans;
- Access D is referred to as access K on sheet 12 Streets, Rights of Way and Access Plans;
- Access E is referred to as access L on sheet 12 Streets, Rights of Way and Access Plans;
- Access F is referred to as access M on sheet 12 Streets, Rights of Way and Access Plans; and
- Access G is referred to as access N on sheet 12 Streets, Rights of Way and Access Plans.

Each of these accesses are set out below with further information on their current use and the relevant proposals of the draft DCO (dDCO) (TR010063/APP/3.1 – Rev 5.0). Also set out below are details of the proposed replacement accesses, which the Applicant considers are an adequate alternative to the current accesses, as explained below.

It should be noted that of the seven accesses listed in Gowling's submission, only accesses J, L, M and N (as referenced in the Streets, Rights of Way and Access Plans) are in the interest of Bloor Homes as accesses F, E and K provide access to parcels of land which Bloor Homes currently have no interest in.

Access A – Referred to in the dDCO as Access F

Schedule 4, Part 4 of the dDCO notes that Access F is to be replaced with private means of access (PMA) reference "b", which is a new PMA from the northern arm of the new junction between the A4019 and the West Cheltenham Link Road for a length of 934 metres. This will provide access to fields and maintenance access for highway authorities and is shown on sheets 5 and 12 of the Streets, Rights of Way and Access Plans.

Access B - Referred to in the dDCO as Access E

Access E is currently overgrown and is not in use to access the land owned by Mary Bruton and Elizabeth Counsell.

Schedule 4, Part 3 of the dDCO notes that Access E will be stopped up with no replacement.

Access C - Referred to in the dDCO as Access J

Schedule 4, Part 4 of the dDCO notes that Access J is to be replaced with a PMA reference "b", which is a new PMA from the northern arm of the new junction between the A4019 and the West Cheltenham Link Road for a length of 934 metres. This will provide access to fields and maintenance access for highway authorities and is shown on sheets 5 and 12 of the Streets, Rights of Way and Access Plans.

Access D - Referred to in the dDCO as Access K

Schedule 4, Part 4 of the dDCO notes that Access K is to be replaced with a PMA reference "b", which is a new PMA from the northern arm of the new junction between the A4019 and the West

Cheltenham Link Road for a length of 934 metres. This will provide access to fields and maintenance access for highway authorities and is shown on sheets 5 and 12 of the Streets, Rights of Way and Access Plans.

Access E - Referred to in the dDCO as Access L

Schedule 4, Part 4 of the dDCO notes that Access L is to be replaced with PMA references "b", "k" and "l". Reference b is a field north-west of existing access which will be accessed from a new PMA reference b, as shown on sheet 12 of the Streets, Rights of Way and Access Plans.

Reference k and l are fields north and north-east of the existing access which will be accessed via the northern arm of the new junction between the A4019 and the West Cheltenham Link Road which is to be classified as public highway with new field gate positions at references k and l, as shown on sheet 12 of the Streets, Rights of Way and Access Plans.

Access F – Referred to in the dDCO as Access M

Access M is currently overgrown and not to access land owned by Gillian Moore, Harry Carter, Jacqueline Pinkerton and Shirely Carter.

Schedule 4, Part 4 of the dDCO notes that Access M will be replaced with PMA reference "m" which will be a new PMA from the new A4019 eastbound carriageway for a length of 9 metres, as shown on sheet 13 of the Streets, Rights of Way and Access Plans. It should also be noted that access to the same field will be gained from the proposed access l.

Access G – Referred to in the dDCO as Access N

Schedule 4, Part 4 of the dDCO notes that Access N is being replaced with PMA reference "m" being a new PMA from the new A4019 eastbound carriageway for a length of 9 metres, as shown on sheet 13 of the Streets, Rights of Way and Access Plans.

Proposed Replacement Access Arrangements

The replacement accesses included in the dDCO are detailed above.

In relation to Gowlings statement at paragraph 9, that the '*Scheme would amalgamate Access A – G into a single signal controlled junction from the A4019 Tewkesbury Road*', the Applicant notes that Access F (referred to as Access M in the dDCO) and Access G (referred to as Access N in the dDCO) would be replaced by proposed PMA 'm' shown on Sheet 13 of The Streets, Rights of Way and Access Plans and not the signalised junction.

In respect of the proposed private access track with PMA reference "b", the Applicant notes that the proposed track is 5m wide with 1m over-run strips on either side, which provides a total width of 7m. There is also an additional 2m width between the back of the over-run strip and the proposed boundary fence line that runs to the north of the access track, which provides a total width of 9m for passing vehicles. A full width single carriageway trunk road is 7.3m and many local roads are narrower than this.

For example, Withybridge Lane, the B4634 and Stoke Road all have an existing width of approximately 6m. These roads provide access to large agricultural holdings, alongside providing access for several thousand other public highway vehicles per day. Moreover, the width of agricultural vehicles and equipment will always be limited by the size of the road network required to access agricultural land.

It is therefore the Applicant's position that the private access track with PMA reference "b" should not be regarded as a narrow farm track as it has been designed with sufficient width for the use of current vehicles. It is also wider than some public rural highways where farm vehicles will have to share use with other vehicles.

Vehicle tracking software has been used which shows that two farm tractors pulling long trailers (heavily used during harvest) can pass each other in opposite directions travelling between the A4019 junction and the proposed Bloor Homes's field access. In addition, two combine harvesters can pass each other at the junction with the A4019 as well as being able to pass each other on the access track, given the 9m of available width discussed above. However, although such passing will be possible, the track is not designed for this purpose and does not need to be given that it will be wider than other local countryside roads in the area. It is also important to note that the Applicant considers that it is incredibly unlikely that this event would occur given that a combine harvester needs to access and egress a field just once a year. The challenge of moving combine harvesters on the road network, due to the size of the vehicles, is well understood in the agricultural sector and best practice is to use lead escort vehicles to warn and manage any conflict with other road users.

The Applicant therefore considers that the proposed design does not cause operational or safety issues that would be improved by a direct north-south route. It is also considered that the proposed replacement access arrangements are adequate as designed.

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