

A57 Link Roads

TR010034

9.74 Comments on Deadline 7 submissions

Rule 8(1)(k)

Planning Act 2008

Infrastructure Planning (Examination Procedure) Rules 2010

April 2022

Infrastructure Planning

Planning Act 2008

The Infrastructure Planning (Examination Procedure) Rules 2010

A57 Link Roads Development Consent Order 202[x]

9.74 Comments on Deadline 7 submissions

Rule Number:	Rule 8(1)(k)
Planning Inspectorate Scheme Reference	TR010034
Application Document Reference	TR010034/EXAM/9.69
Author:	A57 Link Roads Project Team, National Highways and Atkins

Version	Date	Status of Version
Rev 1.0	April 2022	Deadline 8

Table of contents

1. Introduction	4
2. REP6-039 Environment Agency Response to the Examining Authority's Written Questions (WQ2)2	5
3. REP7-036 Keith Buchan Response to REP6-017 and comments on Examining Authority's Second Written Questions (WQ2)	21
4. REP7-034 Keith Buchan on behalf of CPRE Comments on submissions for Deadline 5 and 6	55
5. RE7-035 Keith Buchan on behalf of CPRE Comments on Deadline 6 submission (REP6-033)	57
6. REP7-042 Peter Simon Comments on submissions for Deadlines 5 and 6	60

1. Introduction

1.1.1. This document provides the comments of the applicant, National Highways, in response to the Submissions made at Deadline 7 as requested by the Examining Authority in its Rule 8 letter dated 19 November 2021. Responses have been provided on the following documents:

- REP6-039 Environment Agency Response to the Examining Authority's Written Questions (WQ2)
- REP7-036 Keith Buchan Response to REP6-017 and comments on Examining Authority's Second Written Questions (WQ2)
- REP7-034 Keith Buchan on behalf of CPRE Comments on submissions for Deadline 5 and 6
- RE7-035 Keith Buchan on behalf of CPRE Comments on Deadline 6 submission (REP6-033)
- REP7-042 Peter Simon Comments on submissions for Deadlines 5 and 6

1.1.2. National Highways has sought to provide comments where it is helpful to the Examination to do so. National Highways has not responded to every submission for instance, because the submission was very short, or because it contained expressions of opinion without supporting evidence. Where National Highways has chosen not to comment this is not an indication National Highways agrees with the point or comment raised or opinion expressed.

2. REP6-039 Environment Agency Response to the Examining Authority's Written Questions (WQ2)2

Question Number	Question	IP Response	National Highways Response
1.9	<p>The Environment Agency [REP2-052 Q1.32] said that it wished to be consulted on any EMP detail to ensure mitigation for pollution prevention impacts of the construction are considered for the water environment.</p> <p>The Applicant added a provision for the Environment Agency to be consulted on the second iteration EMP, which includes the Pollution Prevention Plan and the Construction Water Management Plan.</p> <p>Does the Environment Agency have any remaining concerns regarding dDCO [REP5-006] provisions for consultation in relation to mitigation measures for pollution prevention?</p>	<p>We welcome the provision made by the applicant to require consultation with the EA on the second iteration of the EMP, as detailed as part of the requirements of dDCO Schedule 2, Part 1 sub-section 4(1) – which requires the submission of a Pollution Prevention Plan and Construction Water Management Plan.</p> <p>However, having reviewed the initial Hydrogeological risk assessment report [REP-3-024] submitted by the applicant for the link road project (as referenced with Environmental Statement - Chapter 13: Road Drainage and the Water Environment (Tracked) [REP5-020]), we are concerned that there are remaining risks / challenges associated with the development proposal which we consider may not fully addressed by the present wording / plan submission requirements of 4(1)-(2).</p> <p>Notably, for matters associated with the protection of water quality, we are concern about the volumes of groundwater likely to be handled and/or encountered as part of construction of the development proposal.</p> <p>Preferentially any groundwater encountered during construction should be re-introduced to the ground. However, given high natural groundwater levels have been identified, this may result in no / limited capacity for this action occur , which in turn may necessitate discharge to the surface water course (unless alternative suitable means of disposal can be provisioned).</p> <p>As advised under our previous response for WQ1 [REP2-052 Q11.16], where necessary, we would seek to regulate pollution control under the Environmental Permitting Regulations 2016. An environmental permit may be required should it be intended to discharge surplus or encountered groundwaters to either surface</p>	<p>National Highways is continuing to liaise with the Environment Agency (EA) and, post-hearing, the Applicant has agreed a series of meetings with the EA which are intended to resolve any outstanding issues. Please see the response to question b) under Item 2 in the Applicant's Written Summary of Issue Specific Hearing 4 (reproduced at the end of this section) which details the schedule of meetings that have been programmed with the EA.</p> <p>National Highways acknowledges the EA's concern that there are remaining risks and challenges associated with the protection of water quality not fully addressed by the Requirements 4(1) and 4(2).</p> <p>Due to the natural high groundwater levels in the area, it is anticipated that groundwater discharge will be required to surface watercourses. It is understood that an Environmental Permit may be required for this groundwater discharge based on the quality of the discharge water and/or the location(s) of the discharge.</p> <p>The EA's proposed solution of a Groundwater Management Plan (GWMP) can be discussed at this meeting. However, the Applicant believes that the probable content of a GWMP would be included in the Dewatering Management and Construction Water Management Plans for the Scheme and therefore no amendment to Requirements 4(1) and 4(2) is required.</p>

Question Number	Question	IP Response	National Highways Response
		<p>water or ground.</p> <p>A permit will not be required should it be the applicant's intention to discharge surplus or encountered groundwaters to either surface water or ground that has no discernible concentrations of contamination (which includes sediment loading or turbidity).</p> <p>To address the above the concern, at this stage in proceedings, we consider an appropriate potential solution to this issue could be to include a condition requiring the submission of a Ground Water Management Plan, or similar, (as a prior commencement requirement) either as further amendment to the wording of 4(1) or as a standalone condition.</p>	
1.14	<p>The Environment Agency [REP3-037] made recommendations regarding model procedures and good practice for contamination.</p> <p>The Applicant [REP4-006 page 20] noted the recommendations, the approach taken for the land contamination risk assessment, and referred to the adjustment to Requirement 4(1) to require consultation with the Environment Agency.</p> <p>Does the Environment Agency have any remaining concerns regarding dDCO [REP5-006] provisions in relation to model procedures and good practice for contamination?</p>	<p>We advise that the recommendations that presented within REP3-037 remain relevant.</p> <p>We have received and previously reviewed the ground investigation report associated with sec.6.3 of the Environmental Statement (Chpt. 9; Geology and Soils). We do not consider this report to contain sufficient detail / technical information to adequately / fully characterise the land area within which development proposal will be situated.</p> <p>As inferred from the additional /revised wording provided under paragraph 13.6.28 of Environmental Statement Chapter 13 [REP5-020] , it is our understanding that the present limitations in the current ground investigation (site characterisation) reporting submitted as part of the examination are also recognised by the applicant. As part of paragraph 13.6.28, it is noted that a 2021 ground investigation report which will fill data gaps in the site-specific information is to be submitted in due course. A check of the examination library confirms that submission of this further report has not yet occurred.</p>	<p>The additional 2021 ground investigation work was submitted at Deadline 7. The findings of the Supplementary Ground Investigation Report (REP7-027) do not differ greatly from those presented within Chapter 9 and 13 of the Environmental Statement. Following the submission of the Supplementary Ground Investigation Report it is considered that sufficient information has been provided to adequately characterise the soil and groundwater contamination with respect to the proposed development. Therefore, it is unlikely that a revision to Requirement 6 would be necessary.</p>

Question Number	Question	IP Response	National Highways Response
		<p>In the first instance, we would advise that the 2021 ground investigation report aforementioned is submitted to the Examining Authority (with all relevant associated appendices / data sheets).</p> <p>In connection with the above (site characterisation / reporting limitation), in the absence of sufficient reporting being submitted, we advise Examining Authority that the current wording provided within in dDCO [REP5-006] under Schedule 2, Part 1, 6(1)-(2) is not deemed sufficient.</p> <p>The present wording of 6(1) infers that's sufficient site characterisation has been achieved and that no immediate remedial action is required.</p> <p>In accordance with our previous commentary above, we consider that current wording of 6(1)-(2) would only be applicable / acceptable if sufficient full site characterisation has been achieved / confirmed.</p> <p>In the absence of further reporting achieving sufficient characterisation being submitted prior to examination conclusion, we advise that the wording of 6(1)-(2) will need to be amended to ensure that this will be requirement is realised prior to the commencement of the development. Wider matters detailed within this our wider written response notwithstanding, this will facilitate the issuing of the DCO and give provisions to address land quality issues - as per LCRM, 2019 and NPPF 2021.</p>	
1.17	Derbyshire County Council [REP4-010] said that the Lead Local Flood Authority would welcome consultation on any works that were not in accordance with an approved Flood Risk Assessment for clarity and certainty and for the opportunity to comment on or raise concerns about	<p>a&b)</p> <p>We note proposed wording of requirement 9 (1) detailed as part of the requirements for the dDCO, Schedule 2</p>	As per para 4.5.9 of the Flood Risk Assessment (REP5-010), the Applicant has committed to the submission of an updated FRA during the Detailed Design Stage to include the application of the 2021 climate change values. In an email to the Environment Agency dated 21 March 2022, the Applicant confirmed that the revised model and updated FRA

Question Number	Question	IP Response	National Highways Response
	<p>any works that may result in problems for flood risk in the wider area.</p> <p>The Environment Agency [REP3-037] recommended that they should be consulted in relation to works proposed in accordance with the flood risk assessment and otherwise in accordance with the flood risk assessment. They also stated that all works should be carried out in accordance with an approved flood risk assessment regardless of whether affected landowners accept any exceedances of flood levels. They said that the flood risk assessment must show that risks would not be increased elsewhere.</p> <p>The Applicant [REP4-006 pages 21 and 22] responded to the Environment Agency's concerns and updated the dDCO [REP5-006].</p> <p>a) Does the Environment Agency have any comments on the Applicant's updates to Requirement 9?</p> <p>Do the Environment Agency or the Lead Local Flood Authorities have any remaining concerns regarding dDCO [REP5-006] provisions in relation to flood risk assessment?</p>	<p>Part 1, submitted under Deadline 5 [REP5-006] which is as follows (<i>see italics</i>):</p> <p><i>(1) Subject to sub-paragraph (2), the authorised development must be carried out in accordance with the flood risk assessment or any update thereof approved by the Environment Agency, including the mitigation measures detailed in it, so that no part of the authorised development is predicted to result in any exceedance of the flood levels to properties and land shown in the flood risk assessment.</i></p> <p><i>(2) Sub-paragraph (1) does not apply in any circumstance where the undertaker proposes to carry out a part of the authorised development otherwise than in accordance with the flood risk assessment or demonstrates to the Environment Agency's satisfaction, in consultation with the relevant lead local flood authority, that the part of the authorised development concerned would not result in an exceedance of the flood levels shown in the flood risk assessment.</i></p> <p>As submitted, the wording outline above is not considered acceptable by the EA.</p> <p>The commentary below notwithstanding, we would advise that the current wording of 9(2) is unacceptable, the requirement of this sub-paragraph is unclear when read in connection with sub paragraph 9(1).</p> <p>The proposed wording detailed under sub-paragraph 1 suggests / indicates that the Flood Risk Assessment (FRA)</p>	<p>will be sent to the Environment Agency for their review during the week commencing 11 April 2022.</p> <p>With regards to providing the Examining Authority with confidence that the development design is feasible National Highways refers to the model outputs presented in the FRA where the Climate Change allowance of 35% has been included.</p> <p>Insert 4-5 on p32 of the FRA provides the compensatory flood storage area provision as part of the design. The total volume available within the storage area is 6200m³ but only 1600m³ is displaced by the Scheme and so there is sufficient capacity within the available compensatory storage provision to accommodate additional climate change flows.</p> <p>Insert 4-6 on p34 of the FRA shows a significant lowering of the water levels within the vicinity of the bridge crossing and several hundred metres upstream and downstream as a result of the compensatory storage provision which is also demonstrated by comparison of flood depth outlines pre and post scheme in Insert 4-4 and Insert 4-7 respectively</p> <p>A climate change sensitivity scenario of 95% increase in 100 year flow demonstrates that water levels will be below the soffit of the Etherow crossing and thus the bridge will not act as a hydraulic constraint for the July 2021 climate change values of 41% and 53% for central and higher central respectively and out of bank flow will utilise the available floodplain provision within the compensatory flood storage area and will follow a similar water profile through the structure to that within Insert 4-6.</p>

Question Number	Question	IP Response	National Highways Response
		<p>provided as part of Deadline 5 submissions [REP5-010] is acceptable.</p> <p>However, as previously highlighted (and detailed as part of the applicant's submission for Deadline 5 regarding comments on Deadline 4 [REP-5-022], page 10, response reference 9.54.15),</p> <p>we have previously advised that update to the FRA is necessary to ensure that the latest EA climate change guidance is being factored as part of the assessing flood risk associated with the proposal.</p> <p>The FRA submitted (TR010034-001090-TR010034_5.5_Flood_Risk_Assessment (4)D5_230222 Rev3) [REP-5-010] is not based on current fluvial climate change allowances. Consequently, it should not be considered / defined as part of wording of requirement 9 (1) as being acceptable as our previous concern regarding the assessment of future climate change impact remains outstanding.</p> <p>To address this issue we would advise that either of the following actions / options should occur:</p> <ol style="list-style-type: none"> 1) The FRA is updated prior to DCO determination (utilising approved modelling which factors the latest climate change guidance) and is assessed. <p style="text-align: center;">OR</p> <ol style="list-style-type: none"> 2) If the FRA cannot be updated in advance of DCO determination, then condition of 9(1) should be amended to require the submission of an updated / revised FRA (utilising latest climate change guidance) prior to commencement of 	

Question Number	Question	IP Response	National Highways Response
		<p>development.</p> <p>If option 2 outlined above is progressed, then in advance of this occurring, we recommend / advise that applicant will need to provide sufficient evidence and assurance to the Examining Authority that the development design presented is feasible (see also comments for issue topic 11.3) and there is confidence it would remain feasible once updated climate change guidance is factored i.e. would not result in requirement for what may be considered a material change to the development proposal.</p>	
11.3	<p>As above, it is noted that the modelling of the River Etherow has not yet been agreed with the Environment Agency. The Applicant has responded to the concerns of the Environment Agency [REP5-022] stating the intention to address this matter at Detailed Design Stage.</p> <p>a) Do the Environment Agency or the Lead Local Flood Authorities have any comments on the Applicant's response?</p> <p>b) What issues remain outstanding?</p> <p>Is this approach acceptable to the Environment Agency and the Lead Local Flood Authorities?</p>	<p>In accordance with paragraph 167 of the National Planning Policy Framework (NPPF), where appropriate (Flood Zone 2 /3 present), when determining an application it should be demonstrated via a site-specific Flood Risk Assessment (FRA) that the development will not result in an increased flood risk elsewhere and will be appropriately flood resistant and resilient. The EA's FRA guidance , notes the importance of ensuring that most-recent climate change allowances are factored /consider as part of the assessment of site-specific flood risk.</p> <p>In line with the above, in the first instance, we would advocate that an approach which seeks to update the current FRA [REP- 5-010] submitted (utilising a model incorporating the latest climate change guidance) in advance of determination.</p> <p>However, if the applicant's intention is to address the issues of the flood modelling (and thus the FRA) during the detailed design stage, then we advise, as part of the examination process, that the applicant provides assurance to the Examining Authority that the development design presented is feasible and there is confidence that it would remain feasible once the latest climate change guidance is factored i.e. that the compensatory flood plain storage currently proposed will be sufficient.</p>	<p>Based on a conditional response that an updated FRA is submitted at detailed design stage reflecting the July 2021 Climate Change Values, with regards to demonstrating to the Examining Authority that the development design is feasible National Highways refers to the model outputs presented in the Flood Risk Assessment (REP5-010) where the Climate Change allowance of 35% has been presented.</p> <p>Insert 4-5 on p32 of the FRA provides the compensatory flood storage area provision as part of the design. The total volume available within the storage area is 6200m³ but only 1600m³ is displaced by the scheme and so there is sufficient capacity within the available compensatory storage provision to accommodate additional climate change flows.</p> <p>Insert 4-6 on p34 of the FRA shows a significant lowering of the water levels within the vicinity of the bridge crossing and several hundred metres upstream and downstream as a result of the compensatory storage provision which is also demonstrated by comparison of flood depth outlines pre and post scheme in Insert 4-4 and Insert 4-7 respectively</p> <p>A climate change sensitivity scenario of 95% increase in 100 year flow demonstrates that water levels will be below the soffit of the Etherow crossing and thus the bridge will not act as a hydraulic constraint for the July 2021 climate change values of 41% and 53% for central and higher central respectively and out of bank flow will utilise the available floodplain provision within the compensatory flood storage area and will follow a similar water profile through the structure to that within Insert 4-6.</p>

Question Number	Question	IP Response	National Highways Response
		<p>If there is confidence from the applicant that the latest climate change allowances can be accommodated in the design without impact elsewhere (off-site), then a conditional approach for the remaining issues to be addressed as part of an updated FRA should be considered (see also comments for 1.17).</p> <p>Further to the above, we note from the applicant's response [REP5-022] 9.54.16, regarding the modelling undertaken for the River Etherow, the following comment (see italics):</p> <p><i>"previous correspondence with EA dated 12 March 2020 was that the changes made to the model were satisfactory"</i>.</p> <p>In relation to the above comment, we would advise that whilst our letter of the 12/3/2020 (our ref: SO/2019/119948/02-L01) did note as part of our second review of the flood model that changes made to the baseline model were satisfactory.</p> <p>However, in review of the modelling information, we would also clarify that as part our response / issuing email to applicant's consultant Atkins (12/03/2020 15:26), we provided additional commentary within an excel summary sheet of suggested recommendations which need to be addressed as part of subsequent modelling update. Addressing these recommendations will ensure the model's suitability for use as part of assessing flood risk / the development proposal (the issue factoring latest climate change figures notwithstanding).</p>	<p>With regards to the outstanding model review comments an updated Model review check sheet was provided to the Environment Agency via email dated 23 March 2022 demonstrating how the comments have been addressed as part of the detailed design modelling. The outstanding comments do not have a material change to the model results as they relate to model file conventions and enabling orifice option flow which is not utilised in the hydraulic calculations.</p>
	<p>The Environment Agency has identified concerns that dewatering of the below ground structures within the scheme may artificially dewater natural aquifer bodies. These groundwater bodies are known to provide sole supplies of water (from an abstraction borehole) to several private dwellings. Dewatering of the aquifer would</p>	<p>a)</p> <p>We would advise the ExA that the Hydrogeological Risk Assessment report that was presented to the</p>	<p>a) The Applicant looks forward to receiving and reviewing the Environment Agency's comments on the Hydrogeological Risk Assessment and subsequent discussion at a technical meeting.</p> <p>b) The Hydrogeological Risk Assessment (REP3-025) has quantified drawdown impacts on private groundwater abstractions using a</p>

Question Number	Question	IP Response	National Highways Response
	<p>therefore deprive the owners and abstractors of these boreholes of water.</p> <p>a) What survey information has been gathered of water features to date which would inform discussions with the Environment Agency?</p> <p>b) What additional information is required?</p> <p>c) How could this information be gathered, and within what timeframe?</p> <p>How can the ExA be satisfied that a reasonable worst case scenario has been assessed and that appropriate mitigation is secured without this information?</p>	<p>Environment Agency on 28 January 2022 (Environmental Statement - Chapter 13: Road Drainage and the Water Environment (Tracked [REP5-020]) has been reviewed and technical commentary on the report is being produced.</p> <p>Those technical comments will be shared with the applicant, and at their request, a technical meeting will be held to discuss the issues.</p> <p>b)</p> <p>The information we have to date describes the current on-site situation but does not address conditions during and after construction.</p> <p>Further site-specific groundwater information will need to be collected to populate future consideration and modelling of the site, particularly during and after construction.</p> <p>We cannot inform the ExA as to time scales at this moment.</p> <p>We continue to have concerns that the below ground structures associated with the development proposal could lead to parts of specific aquifer being drained.</p> <p>This could lead to private abstractors being deprived of their sole source of water.</p> <p>Comments made in REP4-019 remain relevant.</p> <p>c)</p> <p>To be addressed by the applicant.</p>	<p>groundwater model. This model has been constructed, based on conceptual understanding of the groundwater environment. This understanding has been informed by a review of historical and recent ground investigation data. However, drawdown impacts have been predicted using a scenario simulation that represents long-term, post-construction conditions and incorporates all the key elements of the Scheme that may impact groundwater. This model run is considered to be a reasonable worst-case scenario.</p> <p>The Applicant acknowledges the Environment Agency's ongoing concern regarding the protection of private groundwater abstractions. Potential drawdown impacts due to dewatering on private groundwater abstractions, identified within 1 km of the Scheme, have been assessed in the Hydrogeological Risk Assessment and summarised in Tables 4.4 and 4.5.</p> <p>The Applicant has responded to the comments made by the EA at Deadline 4 (REP4-019).</p> <p>c) If the Environment Agency requires additional information due to outstanding concerns on the impact of dewatering on private abstractions following their review of the Hydrogeological Risk Assessment, the Applicant will work to provide the information as soon as is practicable.</p> <p>d) With reference to a Groundwater Management Plan, please see response to 1.9. With reference to Environmental Permitting, please see response to 1.9.</p>

Question Number	Question	IP Response	National Highways Response
		<p>d)</p> <p>To address the above the concern, at this stage in proceedings, we consider an appropriate potential solution to this issue could be to include a condition requiring the submission of a Ground Water Management Plan or similar (as a prior commencement requirement) either as further amendment to the wording of the dDCO [REP5-006] Schedule 2, Part 1, 4(1) or as a standalone condition.</p> <p>Otherwise, we would look to address as our concerns through further separate discussions with the applicant to identify an appropriate a solution.</p> <p>As advised under our previous response for WQ1 [REP2-052 Q11.16], where necessary, we would seek to regulate pollution control under the Environmental Permitting Regulations 2016. An environmental permit may be required should it be intended to discharge surplus or encountered groundwaters to either surface water or ground.</p> <p>A permit will not be required should it be the applicant's intention to discharge surplus or encountered groundwaters to either surface water or ground that has no discernible concentrations of contamination (which includes sediment loading or turbidity).</p>	
11.6	<p>As above, there are concerns that the Flood Risk assessment has not been updated to reflect the latest fluvial climate change allowances that were introduced in 2021. The Applicant has responded to the concerns of the Environment Agency [REP5-022] stating the intention to address this matter at Detailed Design Stage.</p> <p>a) Does the Environment Agency or the Lead Local Flood Authorities have any comments on the Applicant's response?</p> <p>b) What issues remain outstanding?</p>	<p>a/b/c)</p> <p><i>N.B – As also noted in the EA's response to inspector topic issue 11.3.</i></p> <p>In accordance with paragraph 167 of the National Planning Policy Framework (NPPF), where appropriate (Flood Zone 2 /3 present), when determining an application it</p>	<p>Based on a conditional response that an updated FRA is submitted at detailed design stage reflecting the July 2021 Climate Change Values, with regards to providing the Examining Authority that the development design is feasible we refer to the model outputs presented in the FRA (REP5-010) where the Climate Change allowance of 35% has been presented.</p> <p>Insert 4-5 on p32 of the FRA provides the compensatory flood storage area provision as part of the design. The total volume available within the storage area is 6200m³ but only 1600m³ is displaced by the scheme and</p>

Question Number	Question	IP Response	National Highways Response
	<p>Is this approach acceptable to the Environment Agency and the Lead Local Flood Authorities?</p>	<p>should be demonstrated via a site-specific Flood Risk Assessment (FRA) that the development will not result in an increased flood risk elsewhere and will be appropriately flood resistant and resilient. The EA's FRA guidance, notes the importance of ensuring that most-recent climate change allowances are factored /consider as part of the assessment of site-specific flood risk.</p> <p>In line with the above, in the first instance, we would advocate that an approach which seeks to update the current FRA [REP- 5-010] submitted (utilising a model incorporating the latest climate change guidance) in advance of determination.</p> <p>However, if the applicant's intention is to address the issues of the flood modelling (and thus the FRA) during the detailed design stage, then we advise, as part of the examination process, that the applicant provides assurance to the Examining Authority that the development design presented is feasible and there is confidence that it would remain feasible once the latest climate change guidance is factored i.e. that the compensatory flood plain storage currently proposed will be sufficient.</p> <p>If there is confidence from the applicant that the latest climate change allowances can be accommodated in the design without impact elsewhere (off-site), then a conditional approach for the remaining issues to addressed as part of an updated FRA should be considered (see also comments for 1.17).</p> <p>Further to the above, we note from the applicant's response [REP5-022] 9.54.16, regarding the modelling undertaken for the River Etherow, the following comment (see <i>ittalics</i>):</p> <p><i>"previous correspondence with EA dated 12 March 2020 was that the changes made to the model were</i></p>	<p>so there is sufficient capacity within the available compensatory storage provision to accommodate additional climate change flows.</p> <p>Insert 4-6 on p34 of the FRA shows a significant lowering of the water levels within the vicinity of the bridge crossing and several hundred metres upstream and downstream as a result of the compensatory storage provision which is also demonstrated by comparison of flood depth outlines pre and post scheme in Insert 4-4 and Insert 4-7 respectively</p> <p>A climate change sensitivity scenario of 95% increase in 100 year flow demonstrates that water levels will be below the soffit of the Etherow crossing and thus the bridge will not act as a hydraulic constraint for the July 2021 climate change values of 41% and 53% for central and higher central respectively and out of bank flow will utilise the available floodplain provision within the compensatory flood storage area and will follow a similar water profile through the structure to that within Insert 4-6.</p> <p>With regards to the outstanding model review comments, an updated Model review check sheet was provided to the Environment Agency via email dated 23 March 2022 demonstrating how the comments have been addressed as part of the detailed design modelling. The outstanding comments do not have a material change to the model results as they relate to model file conventions and enabling orifice flow option which is not utilised in the hydraulic calculations.</p>

Question Number	Question	IP Response	National Highways Response
		<p><i>satisfactory</i>".</p> <p>In relation to the above comment, we would advise that whilst our letter of the 12/3/2020 (our ref: SO/2019/119948/02-L01) did note as part of our second review of the flood model that changes made to the baseline model were satisfactory.</p> <p>However, in review of the modelling information, we would also clarify that as part our response / issuing email to applicant's consultant Atkins (12/03/2020 15:26), we provided additional commentary within an excel summary sheet of suggested recommendations which need to be addressed as part of subsequent modelling update. Addressing these recommendations will ensure the model's suitability for use as part of assessing flood risk / the development proposal (the issue factoring latest climate change figures notwithstanding).</p>	
11.7	<p>The Environment Agency is concerned that it has not yet seen a proposed surface water drainage strategy. The Applicant has provided a Drainage Design Strategy Report [APP-188].</p> <p>a) Is this sufficient for the Environment Agency to comment on?</p> <p>b) If not, what further information is needed?</p> <p>c) Are the Lead Local Flood Authorities satisfied with the information supplied?</p> <p>If not do they have any comments?</p>	<p>We note the Drainage Strategy Report (TR010034/APP/7.7 Rev P02). Whilst this identifies the localised catchment areas along the route and basic design criteria, it has no details on discharge rates to receptors or required attenuation volumes /SuDS features necessary to ensure risk is not increased in the receptors.</p> <p>As part of the requirements for the dDCO, Schedule 2 Part, 1 submitted under Deadline 5 [REP5-006], we note that consultation with the EA is required as part of 8(1) which details requirements for the submission of written details of the surface and foul water drainage system for the development. The submission(s) made for 8(1) can be assessed to determine whether there are any concerns regards how surface-water run- off arising from the built development will be managed. We would consider this conditional requirement to address the</p> <p>limitation of the existent Drainage Design Strategy Report [APP- 188].</p>	<p>The Applicant is in the process of preparing a River Etherow Outfall Technical Note submission which will include the details of discharge rates to receptors, attenuation volumes and SuDs features. The Applicant will aim to submit the Technical Note to the Environment Agency for Deadline 9.</p>

Question Number	Question	IP Response	National Highways Response
11.10	<p>In their response to First Written Questions Q11.16 [REP2-052] The Environment Agency identified a need to address the matter of water contaminated by road salting and gritting within the Environmental Statement - Chapter 13: Road Drainage and the Water Environment.</p> <p>Particulate matter from brake and tyre wear may also be generated.</p> <p>The applicant responded to the same question in its responses to First Written Questions [REP2-021] and amended Environmental Statement - Chapter 13: Road Drainage and the Water Environment (Tracked) [REP5-020].</p> <p>a) Does the Applicant's response and amendment of Environmental Statement - Chapter 13: Road Drainage and the Water Environment satisfactorily address the Environment Agency's concerns in regard to road salt and gritting?</p> <p>b) If not, what concerns remain and how might these be addressed?</p> <p>c) Does the Environment Agency or the Applicant have any comments in regard to particulates in runoff?</p> <p>d) Should the Environmental Statement - Chapter 13: Road Drainage and the Water Environment be amended to address particulate contamination in runoff?</p> <p>Are amendments also needed to the Drainage Design Strategy Report [APP-188] to address these issues?</p>	<p>a/b /c /d)</p> <p>A check of EA's response detailed under [REP2-052 Q11.16] for the Examining Authority's First Written Questions indicates that we have not previously raised specific concern regarding water contaminated by road salt and gritting.</p> <p>However, we note and acknowledge that under paragraph 13.9.10 of ES Chapter 13 [REP6-020] it is not anticipated by the applicant that there would be any resultant deterioration to water quality as a result of runoff containing road salt or grit as the surface water drainage for the proposal would provide adequate treatment and attenuation.</p> <p>As advised under our response for WQ1 [REP2-052 Q11.16], where necessary, we would seek to regulate pollution control under the Environmental Permitting Regulations 2016. An environmental permit may be required should it be intended to discharge 'waste water' to either surface water or ground. A permit will not be required should the intention be to discharge uncontaminated water.</p> <p>In relation to the above, we note as part of the requirements for the dDCO, Schedule 2 Part 1, submitted under Deadline 5 [REP5-006] that consultation with the EA is required as part of 4(1) for the following:</p> <p>iii - Pollution Prevention Plan</p> <p>iv – Emergency Spillage Response Plan</p> <p>vii – Construction Water Management Plan</p>	<p>We are currently awaiting a response from the Environment Agency to clarify what or if a permit is required. We believe, after reviewing EA guidance, a permit is not required but we are seeking clarification.</p> <p>As noted in the Design Strategy Report all outfall flows will be restricted to pre-development greenfield rates. With vegetated SuDS used for treatment of water prior to outfall to achieve the treatment required by the HEWRAT assessment.</p> <p>We can confirm that the following documents will be submitted as required under the dDCO and the EA will be consulted on the contents:</p> <ul style="list-style-type: none"> • Pollution Prevention Plan • Emergency Spillage Response Plan • Construction Water Management Plan

Question Number	Question	IP Response	National Highways Response
		<p>We also note as part of the requirements for the dDCO, Schedule 2 Part, 1 submitted under Deadline 5 [REP5-006], that consultation with the EA is required as part of 8(1) which details requirements for the submission of written details of the surface and foul water drainage system. The submission(s) made for 8(1) can be assessed to determine whether there are any concerns regards how surface-water run-off arising from the built development will be managed.</p> <p>d) The purpose of Drainage Design Strategy Report [APP-188] appears to be a high-level overview only. As we above we would note the requirement of the dDCO Schedule 2 Part 1 8(1) for the submission of foul and surface water drainage schemes.</p>	
12.1	<p>The Draft Statement of Common Ground with Environment Agency [REP2-026] refers, at 10.1.3.3, to the presence of a number of invasive / non-native species within red line area and potential opportunity to improve ecological quality of some priority habitats currently identified as having these non-native species. The Applicant has submitted an Outline Landscape and Ecological Management and Monitoring Plan [REP5-018].</p> <p>a) Should the Applicant's documents refer to the use of best practice measures, as referred to by the Environment Agency?</p> <p>Would the Environment Agency provide comments on the suitability of the measures to control invasive non-native species contained within the above document?</p>	<p>a) Yes, it advisable for management strategies to refer to the best practice measures and guidance which has been used to inform /instruct the management approach presented.</p> <p>In the instance of the of the Landscape and Ecological Management and Monitoring Plan (LEMMP), it would be advisable to refer to all schedule 9 (Wildlife & Countryside Act 1981) INNS (Invasive Non-Native Species) identified within the development site area.</p> <p>b) The EA would only provide on comments on the suitability of the measures proposed to control INNS detailed within scheduled 9 associated with the water environment. And/or correct disposal of 'waste materials' arising from control / treatment in our role as an environmental regulator for waste management.</p> <p>Wider review / commentary on the control of any wider schedule 9 INNS identified within the development site area would need to be sought from the relevant additional competent authorities.</p>	<p>The Outline Landscape and Ecological Management and Monitoring Plan (LEMMP) has been updated in line with the comments provided by the EA referring to the inclusion of best practice measures and submitted into the examination at Deadline 8.</p>

Question Number	Question	IP Response	National Highways Response
		<p>We note that as part of the conditions for the dDCO (Schedule 2 Part 4 Second Iteration EMP) submitted under deadline 5 [REP5-006] that there is a requirement for consultation with the EA regarding the suitability of the detailed LEMMP (xvii).</p>	
12.2	<p>The applicant responded to Q12.10 in its responses to First Written Questions [REP2-021] that other mitigation measures located in the vicinity of watercourses (e.g. mammal crossings, otter fencing) have not been explicitly assessed at the current stage of design, but will be considered further during the detailed design phase.</p> <p>a) Do the Environment Agency or Natural England have any comments on the Applicant's response?</p> <p>Is this approach acceptable to the Environment Agency and the Natural England?</p>	<p>a&b)</p> <p>Based on general scheme wide approach to mammal crossings and that other positive environmental measures /interventions within water environment will be actively considered, we can confirm that we accept this approach subject to relevant further EA consultation.</p> <p>In accordance with the above, as part of the requirements for the dDCO (Schedule 2 Part 4 Second Iteration EMP) submitted under deadline 5 [REP5-006], we note the requirement for consultation with the EA on the Ecological Management Plan (xvi) and Landscape and Ecological Management and Monitoring Plan (xviii).</p>	<p>The Applicant will consult the EA on the proposed mammal crossings as part of the programme of consultation meetings outlined at the end of this response table.</p>
14.6	<p>Apart from the issues covered elsewhere in these second written questions, please could the Environment Agency summarise any remaining concerns that it has about the Applicant's consideration of transboundary effects, cumulative and combined effects, or other important and relevant considerations?</p>	<p>Further to our comments made regarding the assessment of flood risk under issue topics 11.3 and 11.6 we would highlight the point raised by the applicant within Chapter 13 of the Environmental Statement (TR010034) [REP5-011] paragraph 13.8.9 in which the following is stated (see italics):</p> <p><i>“Construction activity in the vicinity of the River Etherow, including compensatory flood storage provision, flood embankment and right bank groundworks will require careful programming. Works here would require sequencing so as not to increase risk to others. However, during construction there will be a localised risk</i></p>	<p>The Applicant acknowledges the EA's comments regarding the spatial extent and shape of the zone of influence and nature of groundwater bodies.</p> <p>The Hydrogeological Risk Assessment (REP3-027) has quantified drawdown impacts on private abstractions using a groundwater model. The boundaries of the groundwater model have been selected based on conceptual understanding of the groundwater environment. The boundaries have not been artificially constrained by the 1 km buffer around the Scheme's red line boundary.</p> <p>Conceptual understanding has been informed by a review of historical and recent ground investigation data. Geological complexity, including localised faulting, has been represented in the model where it is considered to have a significant impact on the groundwater environment.</p>

Question Number	Question	IP Response	National Highways Response
		<p><i>of flooding to the construction site whilst works the aforementioned works take place within the River Etherow floodplain. The localised risk to the construction site is considered to be a short-term/ temporary impact”</i></p> <p>We welcome the applicant’s recognition of the importance of considering temporary / localised flood risk changes as part of the delivery / construction of the A57 Link Road Scheme and therefore need to ensure careful consideration of this as part of further delivery programming (which we assume will be devised at the detailed design stage).</p> <p>In regard to above, we would welcome confirmation from the applicant as to how /where written details for this aspect (temporary flood risk variation consideration) will be provided. From our review of the most recent version of the draft Development Consent Order (dDCO) we note that as part of the Schedule 2 Requirements, Part 1, 4(1) there is a requirement as part of Second Iteration EMP submission to include a Construction Water Management plan – would this include provision of details of how this aspect has been factored?</p> <p>--</p> <p>We would advise that the impact from the link road scheme could extend wider than just the redline boundary as defined on site maps (0,5 Km for surface water features and 1 Km groundwater).</p> <p>We would also advise that the shape of the zone of influence, rather than being idealised, may vary due to the complex geology and faulting defined for the study area.</p> <p>Groundwater bodies are large and can extend a good distance away from the tight confines of the road itself.</p>	<p>The model has been calibrated using field data to ensure that it simulates well the hydrogeological environment. All the key elements of the Scheme that may impact groundwater have been incorporated into a model run that represents a reasonable worst-case scenario. This scenario run indicates that any significant drawdown impacts are entirely within the 1 km buffer of the Scheme’s red line boundary (Hydrogeological Risk Assessment, Insert 4.1).</p> <p>The Applicant acknowledges the EA’s concerns about uncontrolled groundwater discharges and looks forward to constructive discussions with the EA regarding this issue during the drafting of the Dewatering Management Plan and any required environmental permit application.</p>

Question Number	Question	IP Response	National Highways Response
		<p>For this development, the effects of uncontrolled groundwater discharges could have serious and far-reaching consequences if it is not thoroughly understood, managed and any possible risks mitigated.</p> <p>It is important for the scheme to fully understand the consequences of placing cuttings and other below ground structures in areas where high groundwater levels could lead to increased (as yet, unknown) volumes of groundwater entering the surface water network. This may lead to unexpected flooding and an inability to control discharges in a managed way.</p> <p>A technically feasible solution is possible, but the project team will need to use the additionally collected information to populate that assessment process and arrive at a suitable way forward/solution.</p> <p>Linked to this is the need for a thorough ground conditions report and complete understanding of the geology and soils throughout the link road length.</p>	

The Applicant and the EA have provisionally agreed to hold meetings between the two parties to discuss outstanding topics regarding the Scheme on the following dates:

Meeting Topic	Proposed Date/Time	Applicant Comments
Flood Risk Assessment (FRA) / Flood Modelling	Tuesday 19 April (10am – 11am)	N/A
Hydrogeological Risk Assessment / Ground Investigation	Thursday 21 April (3pm – 4:30pm)	Subject to Applicant taking receipt of EA comments on Hydrogeological Risk Assessment no later than Wednesday 13 April.
Statement of Common Ground / AOB	Friday 22 April (11am – 12:30pm)	N/A

3. REP7-036 Keith Buchan Response to REP6-017 and comments on Examining Authority's Second Written Questions (WQ2)

Reference:	IP Issue	National Highways Response
9.74.1	<p>Q3.1 There is uncertainty at this time resulting from the introduction of electric (or other alternative power trains) for vehicles, possible levels of autonomy for vehicles, the future introduction of policies intended to restrain the use of the private car and encourage transference to more sustainable modes, volatility in fuel prices, changes to working practices and other factors. These have potential to affect forecast traffic growth.</p> <p>What level of confidence can now be placed on the traffic modelling?</p> <p>What impact would this have for the case for the scheme?</p> <p>i. Despite continuing to claim high confidence in the traffic modelling, National Highways has failed to explain the spurious results in traffic flows. We and others (including the PDNPA) continue to find the data that has been used to feed the traffic model incomprehensible; the refinement of the model specifically to avoid the air pollution within Glossop and Tintwistle has been explained away by increasing the sectoral analysis when this has nothing to do with it.</p>	<p>Please refer to National Highways' comments on paragraph 9.69.114 in Comments on Deadline 5 responses (REP7-025) and paragraph 2.1.14 of Applicants comments on CPRE Peak District and South Yorkshire Written Representation (REP4-009).</p>
	<p>ii. NH responded in Q3.1 '<i>Due to the uncertainty in forecasting, DfT's Transport Analysis Guidance (TAG) requires sensitivity tests to be undertaken for high and low traffic growth assumptions when developing the case for a scheme to ensure that all schemes deliver value for money should the central or core traffic growth forecast prove to be inaccurate. These sensitivity tests have been undertaken for the Scheme and have demonstrated that it will deliver user benefits and value for money. Thus, the case for the Scheme remains strong, under both the low and high growth scenarios, with the Benefit to Cost Ratio (BCR) being 19% better for the high growth scenario and a 17% worse for the low growth scenario, compared to the core scenario.</i></p>	<p>ii) National Highways has no comment to make</p>
	<p>iii. After adjusting for the up to date values of carbon and using the low forecast, it is clear that the BCR for the scheme falls overall and does not change in the way presented originally. Our original submission contained</p>	<p>iii) Updated BCR calculations were undertaken to reflect the latest carbon prices published in September 2021. The BCR calculations have not been updated at this stage to reflect updated carbon emission factors based on Defra Emission Factor Toolkit, published in November 2021. The next point at which</p>

Reference:	IP Issue	National Highways Response
	<p>a table showing this which has not been challenged by NH. The 17% and 19% are thus no longer valid. The Central BCR is now 1.33 not 1.45. The Low traffic High carbon price results in a BCR of 0.94, a reduction of 29%. The Low traffic central Carbon value is 1.08, a reduction of 19%. While this shows the weakness of the value for money using the NH approach, neither of these address the Strategic Case issue of how the scheme fits within the overall policy of reducing carbon. This is under active discussion by DfT at the moment.</p>	<p>the BCR will be fully updated is following the completion of the detailed design and economic assessment in December 2022</p> <p>To clarify the impact of revised carbon values on the Scheme BCRs, the values of 1.33 and 1.45 quoted are correct, though these exclude the forecast values of wider economic impacts and reliability improvements. Including these elements to reflect the full value of the scheme would show that the BCR is reduced from 2.45 to 2.33 as a result of the higher carbon values. In the case of the low traffic demand scenario, the BCRs quoted could not be replicated and appear inconsistent with the appraisal. To confirm, the low growth scenario had returned a BCR of 1.20 using the older carbon values (excluding wider impacts and reliability). This reduces to 1.16 with the revised carbon values.</p>
	<p>iv. We now understand that a further lower traffic growth scenario is being tested. No details of this have been provided despite our requests. If it is lower than the previous "Low" which it most likely will be, the BCR will fall further.</p>	<p>National Highways can clarify that further traffic modelling has not been undertaken.</p> <p>Further carbon emission calculations have been undertaken for the Scheme using updated emission factors published in November 2021 (National Highways Speed Band Emission Factors based in Defra Emission Factor Toolkit v11). These calculations have used the same traffic data used for the assessment presented in the Environmental Statement and Case for the Scheme submitted in June 2021 as part of the original DCO application.</p>
	<p>v. <i>'The latest version of NTEM does not include a specific generalised allowance for transfer of journeys to more sustainable transport modes. This is because it is a national and local Government policy aspiration that is not currently backed up by firm strategies or comprehensive and coordinated schemes'</i> (See NH's answer to next question 3.3). Therefore the low growth scenario cannot reflect the future of the programmes in place to achieve 50% of all trips to be made by active travel (Government 2030) 50% by active travel and public transport (GMCA by 2038). The Examination needs to see the full results for the low growth scenario; the details of the DfT sensitivity test should be released to the Examination and interested parties, including the re-estimated BCRs.</p>	<p>The low growth scenario is based on a proportional reduction in forecast traffic demand to reflect inherent uncertainty with all traffic forecasts in accordance with Department for Transport (DfT) Transport Analysis Guidance (TAG). It does not, therefore, account for any specific policies of future scenarios.</p>
	<p>vi. Although switching to electric vehicles is essential it will not be sufficient. A1.3.9 of DfT's TAG data book shows that in 2050 37% of vehicle km would be petrol fuelled, 19% of vehicle km would be diesel fuelled and 44% of vehicle km would be electric powered. The Government target relies on a level of demand management as set out in the CCC budget and our original submission. This is because the majority of the mileage over the next decade and beyond will still be fossil fuelled. Some of this will be by people choosing not to travel (working from home</p>	<p>The Applicant agrees that, on its own, a switch to EVs would not be sufficient. The TDP seeks to avoid a car-led recovery to building back better and sets out a range of commitments, of which the commitment to transition to EVs plays an important role.</p> <p>However, the current (Nov 2021) DfT Tag databook doesn't account for the TDP, it is only for assumptions based on current policy. The Applicant would note that the TDP is an aspiration of future policy, it is not current policy.</p>

Reference:	IP Issue	National Highways Response
	<p>or doing zoom meetings), or travelling less far (going to local shop rather than out of town) and some by shifting to public transport, walking or cycling. This would mean some reallocation of road space to bus/cycle lanes or disincentives to drive – road pricing, workplace parking levies, higher car parking fees.</p>	
	<p>Q3.3 There are aspirations, both at local and national level, to transfer journeys to more sustainable transport modes.</p> <p>Is this reflected within the model?</p> <p>If so, what assumptions and allowances have been made to reflect this?</p> <p>If not, should it be?</p> <p>Aspirations to make travel more sustainable have in the last few years begun to be translated into policies and programmes. These include the Decarbonisation Strategy and its associated spending programmes. What has not yet happened is to directly connect the different groups of policies into a coherent whole. For example, the legally binding targets for overall carbon reduction require traffic growth to be slowed and possibly reversed. This is currently reflected in the use of traffic forecasting “scenarios” and the uncertainty tool kit. The issue of whether some policies are now running counter to others needs careful consideration. In areas such as Greater Manchester it is unthinkable that the transport authority would spend its budget on making road travel faster while trying to attract people to walking, cycling and public transport. This scheme is not proposed by TfGM nor does it have their active support. It is because in this case the scheme is being viewed as part of the strategic road network, and thus completely isolated from the policies which apply in Greater Manchester. It is not TfGM’s money and if it were given to them it is unthinkable that they would spend it on this scheme instead of sustainable alternatives.</p> <p>The model therefore has excluded most of Greater Manchester from the Area of Detailed Modelling, we now know that there is hardly any public transport in the model or the forecasts underlying it and it has never included walking or cycling.</p> <p>It is essential that the transfer of journeys to more sustainable transport modes are reflected in the assessment of the scheme. NH admits that <i>‘The latest version of NTEM does not include a specific generalised allowance for transfer of journeys to more sustainable transport modes.</i></p>	<p>The Governments Transport Decarbonisation Strategy post dates the assessment of the Scheme so is not accounted for in the traffic forecasting and modelling.</p> <p>Greater Manchester is included in the traffic modelling used to assess the Scheme, but in less detail than within the Area of Detailed Modelling.</p> <p>The traffic forecasting used for the traffic modelling of the Scheme is based on the most up to date Department for Transport (DfT) National Trip End Model (NTEM). NTEM does not account for the Greater Manchester Transport Strategy 2040. This is because it postdates the latest version of NTEM. The Greater Manchester Transport Strategy 2040 is a policy objective and at the time the Assessment of Link Road was undertaken, there were no confirmed schemes, such as a step change in improvements to bus services that would enable delivery of the strategy objectives, especially in the vicinity of the Scheme.</p> <p>Please see the Applicant’s written response to ISH 3 Item 2 question 1) regarding compliance with the Decarbonisation Plan and Greater Manchester Transport Strategy 2040. It is important to clarify how the overall 50% target cited from the Greater Manchester Transport Strategy 2040 relates to the Scheme. Page 84 of the Strategy records the ‘Right Mix’ targeting a 5% reduction in car mode share from 83% to 78% for the wider City Region and from 87% to 82% for City-to-City journeys:</p> <div data-bbox="1403 1304 2309 1478" style="border: 1px solid black; padding: 5px;"> <p>When it comes to the ‘Right Mix’ for City to City trips, we are targeting a 5% reduction in car mode-share, achieved through improvements to inter-urban public transport. Many City to City trips include journeys that neither start nor end in a city centre, and there is little potential for these to be made by public transport. However, we expect the major proposed improvements to inter-urban public transport to substantially reduce car use for trips that do involve travel to and from a major city centre.</p> </div> <p>(p8&9 Appendix 1 Right Mix Technical Note to GM Transport Strategy 2040) Technical note supporting the strategy acknowledges different percentages in trips by car, public transport and active means depending on spatial theme:</p>

Reference:	IP Issue	National Highways Response															
	<p><i>This is because it is a national and local Government policy aspiration that is not currently backed up by firm strategies or comprehensive and coordinated schemes'. This is simply incorrect. The Government has pledged money directly for sustainable transport and TfGM has specific plans to make change which it has modelled and published. NH claim that the scheme accounts for certain or near certain public transport schemes. But it does not – it does not account for the Government and GMCA policy of 50% of trips by active travel and/or public transport. We have not been supplied with the NH view of future public transport, despite our requests. Most independent observers would surely be forced to assume it is because it would reveal the assumption of failure in Government and TfGM policies for sustainable travel.</i></p> <p>NH then states that bus patronage is in decline and bus services are in decline due to this and funding cuts. The decline in bus services has to be a temporary phenomenon if we are to travel sustainably. If we are to take the current state of transport into account then traffic flows by car have only returned to 90% of what they were pre-pandemic. In the short term people may be more resistant to using public transport but in the longer term we should remember that the 2018 annual RAC Report on Motoring found that 59% of drivers would use their car less if public transport improved, compared to just 11% who wouldn't.</p> <p>How could this failure be addressed? We have made submissions about this previously but the issue can be summarised as follows. All the trip matrices, which are the basis for the modelling, are produced for future years using growth factors. There is some extra traffic from developments as they come on stream. In the case of programmes for sustainable travel, these can be assumed to slow down growth or negate it. There is an extensive programme in place and being delivered by TfGM. Thus it would be possible to adjust the growth factors, and thus the matrix, fairly straightforwardly and transparently. This could be run as an option without the road scheme. The problem comes in introducing the A57 scheme and assessing its impact on sustainable modes. The model can show the extent of the increased attractiveness of driving – it is overwhelmingly the amount drivers would save in terms of time. We have, using the material extracted from NH, separated out the driver savings which would have a negative impact on the TfGM programme and presented it to the Examination.</p> <p>However, at the detailed level of which bus routes would suffer lower patronage, or which present or future walking or cycling trips would move to car, the model is simply not capable of doing this. This does not mean it can or should be ignored.</p>	<p>Table V1: Allocation of trips to the spatial themes defined in the 2040 Transport Strategy</p> <table border="1"> <thead> <tr> <th>Spatial Theme</th> <th>Includes</th> <th>Except</th> </tr> </thead> <tbody> <tr> <td>Neighbourhood</td> <td>Trips less than 2km (straight line) with at least one end within Greater Manchester</td> <td> <ul style="list-style-type: none"> Trips with a non-work attraction end at Manchester Airport and surrounding developments Trips with an end within the Regional Centre </td> </tr> <tr> <td>Wider City Region</td> <td>Trips with at least one end in Greater Manchester, and both ends no more than 10km outside the Greater Manchester boundary</td> <td> <ul style="list-style-type: none"> Trips with a non-work attraction end at Manchester Airport and surrounding developments Trips with an end within the Regional Centre Trips under 2km </td> </tr> <tr> <td>Regional Centre</td> <td>Trips with an end in the Regional Centre</td> <td> <ul style="list-style-type: none"> Trips with a non-work attraction end at Manchester Airport and surrounding developments Trips with an end more than 10km outside the Greater Manchester boundary </td> </tr> <tr> <td>City to City</td> <td>Trips with one end in Greater Manchester, and the other more than 10km outside the Greater Manchester boundary</td> <td> <ul style="list-style-type: none"> Trips with a non-work attraction end at Manchester Airport and surrounding developments </td> </tr> </tbody> </table> <p>Figure V2: "Right Mix Vision" change in volume of trips by mode for 'Now' and '2040', by spatial theme</p> <p>Bus patronage was in decline for many years before the onset of the Covid-19 pandemic, particularly outside of large conurbations such as Manchester and Sheffield. Therefore, the decline in bus usage is not a temporary phenomenon.</p> <p>The Scheme is located within the Greater Manchester administrative boundary. However, it is located some distance from the Manchester City conurbation, in a semi-rural area between Mottram in</p>	Spatial Theme	Includes	Except	Neighbourhood	Trips less than 2km (straight line) with at least one end within Greater Manchester	<ul style="list-style-type: none"> Trips with a non-work attraction end at Manchester Airport and surrounding developments Trips with an end within the Regional Centre 	Wider City Region	Trips with at least one end in Greater Manchester, and both ends no more than 10km outside the Greater Manchester boundary	<ul style="list-style-type: none"> Trips with a non-work attraction end at Manchester Airport and surrounding developments Trips with an end within the Regional Centre Trips under 2km 	Regional Centre	Trips with an end in the Regional Centre	<ul style="list-style-type: none"> Trips with a non-work attraction end at Manchester Airport and surrounding developments Trips with an end more than 10km outside the Greater Manchester boundary 	City to City	Trips with one end in Greater Manchester, and the other more than 10km outside the Greater Manchester boundary	<ul style="list-style-type: none"> Trips with a non-work attraction end at Manchester Airport and surrounding developments
Spatial Theme	Includes	Except															
Neighbourhood	Trips less than 2km (straight line) with at least one end within Greater Manchester	<ul style="list-style-type: none"> Trips with a non-work attraction end at Manchester Airport and surrounding developments Trips with an end within the Regional Centre 															
Wider City Region	Trips with at least one end in Greater Manchester, and both ends no more than 10km outside the Greater Manchester boundary	<ul style="list-style-type: none"> Trips with a non-work attraction end at Manchester Airport and surrounding developments Trips with an end within the Regional Centre Trips under 2km 															
Regional Centre	Trips with an end in the Regional Centre	<ul style="list-style-type: none"> Trips with a non-work attraction end at Manchester Airport and surrounding developments Trips with an end more than 10km outside the Greater Manchester boundary 															
City to City	Trips with one end in Greater Manchester, and the other more than 10km outside the Greater Manchester boundary	<ul style="list-style-type: none"> Trips with a non-work attraction end at Manchester Airport and surrounding developments 															

Reference:	IP Issue	National Highways Response
	<p>Finally it is important to emphasise that NH have had to take an extreme position to justify their omission of the TfGM sustainable travel programme. They say, in response 9.63 that “the Scheme is not located in the vicinity of a group of towns and villages that are currently as well served by public transport as larger towns and cities”.</p> <p>This exemplifies the problem that NH refuse to see this scheme in its true context. In reality it is physically almost entirely within the Greater Manchester area and most of its traffic (84%) appears to be related to that area. It is also clearly “in the vicinity” of a National Park with its additional environmental sensitivities. Its appraisal respects neither its negative impact on TfGM (and Government) ambitions for sustainable transport to the West, nor its failure to protect and improve the National Park.</p>	<p>Longdendale and the Peak District National Park and is well beyond the M60, which encircles the City of Manchester.</p> <p>National Highways accepts that a significant proportion of the traffic that uses the A57 has origins or destinations in Manchester. Most of these trips, however, start or end in locations that are not well connected to the Manchester conurbation by public transport.</p>
	<p>Q 3.4 There are concerns, expressed by CPRE Peak District and South Yorkshire Branch in [REP5-029 paragraphs 160 and 170] and elsewhere, that public transport and active travel modes have been under-represented in the model.</p> <p>Please provide comments on the issues raised.</p> <p>If these modes have been under-represented, what effect would this have on the case for the scheme?</p> <p>Do the local highway authorities have any comments in regard to this issue?</p> <p>NH responded - a) <i>See response to WQ2 3.3 above. Consequently, the modelling of the Scheme has not under-represented public transport and active travel modes.</i></p> <p>b) <i>The number of bus passenger, pedestrian and cycle trips across the modelled road network will be very small compared to the number of vehicle driver and passenger trips. Consequently, even if public transport and active travel modes have been under-represented in the model, which is not the case, then it would be unlikely to have a material impact on the assessment of the Scheme or the case for it.</i></p>	<p>The Government’s Decarbonising Transport Plan postdates the assessment of the Scheme and is not, therefore, accounted for in the traffic forecasts and modelling.</p> <p>Section 3v Transport of the UK’s Net Zero Strategy (October 2021) sets out the Government’s 2050 vision and progressing to a net zero fleet. It states on page 154 ‘<i>Every place in the UK will have its own net zero emission transport network before 2050, serving the unique needs of its communities. Sustainability will be at the heart of levelling up</i>’. This implies that all villages, towns, cities and countryside all have different needs. The commitments of the plan do not preclude road building schemes, rather it sets out a pathway to ‘do the same things differently’ through green technology and encouraging more sustainable travel choices.</p> <p>National Highways has provided Keith Buchan with all the public transport information he has requested that CPRE has access to.</p>

Reference:	IP Issue	National Highways Response
	<p>In its response (above) NH is completely ignoring the Government's Decarbonising Transport plan and its Net Zero Strategy. Public transport and active travel modes are grossly under-represented for the future. After finally receiving some limited public transport data it is clear that most of the public transport trips in the area are not in the model. The number of bus passengers, pedestrian and cycle trips on the road network are currently small but both Government and GMCA want to see a major increase such that 50% of journeys are by active travel (Government by 2030) and 50% by sustainable means by 2038 in the case of GMCA. As the modelling of the scheme extends from 2025 to 2040 these policy impacts should be included in the modelling. We have shown the value for money of including some of these policies when we presented the BCR for the alternatives (REP4- 016). NH has not supplied sufficient data for us to complete this exercise. If these policy outcomes were included in the model, the value for money of the scheme would reduce substantially, and the costs of overcoming its adverse impacts on travelling sustainably would not be incurred.</p>	
	<p>Q3.6 Various routes have been identified onto which trips may divert to avoid delays and minimise journey times or costs as perceived by drivers. These trips pass through Tintwistle, Hollingsworth and Glossop, as well as other settlements, and may have adverse impact on relevant environmental topics. Please confirm whether, or not, the worst-case scenario for diverted trips, with maximum estimated flow, has been considered when assessing the impact of such diversions.</p> <p>NH responded – <i>'The traffic modelling used for the assessment of the Scheme provides the best indication of how future traffic demand will use the road network in response to changes in the operation of the modelled road network due to the Scheme compared to without it, whilst accounting for forecast traffic growth and other committed future modifications to the road network. For the routing of traffic across the modelled road network to significantly alter from that forecast by the traffic modelling, physical measures or schemes would need to be introduced onto the road network, such as changes in speed limits, traffic calming measures, additional traffic signals, etc., that would cause drivers to choose alternative competing routes. Any such proposed modifications to the road network would be outside of the Scheme and subject to an impact assessment prior to their implementation that would need to consider the diversionary</i></p>	<p>National Highways has nothing further to add to its response to the Examining Authority's Second Written Question 3.6 (REP6-017).</p>

Reference:	IP Issue	National Highways Response
	<p><i>impact of the physical measures or schemes on traffic and the consequential environmental effects. Consequently, the forecast traffic flows across the modelled road network are considered to represent a reasonable and appropriate worst-case scenario of the traffic impacts of the Scheme.'</i></p> <p>We do not know the worst case scenario for a number of reasons. The 2015 baseline traffic flow data used to inform the model preceded the modelled flows by a decade, despite guidance that the assessment of baseline traffic flows should be as near to the current flows as possible. Consequently the traffic data used appears to be low compared with actual traffic flows in 2019. The increases in traffic on residential streets in Glossopdale and the consequent impacts on road safety and increased crashes, on community severance, on noise and air pollution, have not been assessed. Without such information it will be difficult for the ExA to determine the planning balance.</p>	
	<p>Q3.7 Confidence limits for traffic flows on links within the National Park (A628).</p> <p>i. We support the PDNPA's dissatisfaction with the Applicant's explanation regarding confidence in traffic increase figures / screening out of effects on the A628T [REP3-028]. We too have no confidence in the screening out figures for the A628T. As we showed in REP2-069, in REP3-031 and REP5-029, and as Daniel Wimberley as shown in REP6-034 the results of the traffic modelling appear spurious on several roads when compared with observed flows in 2015.</p>	<p>National Highways is confident that the traffic modelling used to assess the Scheme is robust.</p>
	<p>Q3.9 In their written submission, including, amongst others, [REP4-016] CPRE Peak District and South Yorkshire Branch propose an alternative scheme to the proposal for car-free low carbon travel for Longdendale and Glossop.</p> <p>Has this alternative, or any of the various constituent measures, been considered previously?</p> <p>If so, what were your conclusions?</p> <p>Please provide a response to the issues raised.</p>	<p>Regarding alternatives to the proposed Scheme, National Highways has nothing further to add to its response to the Examining Authority's Second Written Question 3.9 (REP6-017).</p> <p>The Scheme includes significant enhancements for non-motorised users (NMUs). In addition to the new high quality and fully segregated pedestrian and cycle paths included in the Scheme, new 'green-man' pedestrian crossings are incorporated into several of the signal-controlled junctions, where none are currently provided, and the traffic calmed sections of the existing A57 that are by-passed by the new Link Road will substantially improve conditions for NMUs through reduced severance and intimidation from high traffic volumes, particularly from HGVs. All these measures incorporated into the Scheme will encourage local trips to be made by active modes of transport, i.e., walking and cycling.</p>

Reference:	IP Issue	National Highways Response
	<p>Do you consider that the proposal provides an alternative solution which would satisfy the same aims of the scheme, provide the same, or improved, benefits and is deliverable?</p> <p>NH responded - <i>a) Alternatives to the proposed Scheme that have previously been considered and rejected are presented in Chapter 3 of the Environmental Statement (REP2- 005). Sustainable transport measures were considered as one of the alternative options and rejected. b) The reasoning for rejection was that this alternative did not address the identified problems or the route objectives. Moreover, although considered feasible with challenge, current congestion and capacity issues experienced on the route results in a significant challenge in terms of delivering sustainable transport improvements, particularly for improvements relating to bus services. It was also decided introduction of larger scale interventions would enable the provision of complementary public transport measures.</i></p> <p>We have shown elsewhere REP2-069 that the scheme was not properly considered and prematurely rejected. We note that the PDNPA appears to share our concerns about the failure to properly examine alternatives. In REP6-038 in response to Q3.2 the NPA states ‘ <i>We are also concerned that the applicant does not appear to have undertaken a thorough assessment of alternatives to the scheme, that are not based around increasing road capacity</i>’. What sustainable transport measures were tested has never been revealed. In 2015 the implementation of our proposals may have appeared challenging but technology has developed and enabled remote HGV control systems (as in London) and traffic management.</p> <p>CPRE has clearly identified the problems and shown how the proposal would address them specifically – it is a solution tailor-made for the regional and local situation, prepared by a professional transport planner, Keith Buchan of MTRU. It also takes into account and respects (i) the geography and strong protection of the National Park, which the 2015 Feasibility Study failed to do and therefore the current scheme also fails to do; (ii) the current and future national and regional transport policy landscape; (iii) the urgent need to address climate emissions.</p>	

Reference:	IP Issue	National Highways Response
	<p>The scheme fails to meet its own objectives as we showed in REP5-028 pp2-4. The main cause of congestion is the HGVs. Once these are removed the road space would be demand managed to encourage people to choose alternatives to the car. NH also claim that large scale interventions would enable provision of complementary public transport provision. First there is no complementary public transport provision. Second we have shown that by increasing road capacity and therefore car dependency there are substantial costs incurred in encouraging public transport use. The costs of our proposal £10m provide high value for money and substantially greater social and environmental benefits. For those reasons the proposals should be implemented and seen to fail before any increase in road capacity is provided.</p> <p>NH also refers in its answer to its response to para 3.2.8 in REP2-069. <i>'The Scheme includes signalisation of the M67 roundabout; traffic calming on the de-trunked section of the A57 (that will also provide public realm improvements); and substantial enhancements for pedestrian, cyclists and equestrians. Furthermore, it does not preclude the potential future introduction of the other proposed interventions listed by CPRE outside of the Scheme should it be demonstrated that they provide adequate benefits for users and could be funded.'</i></p> <p>The A5 Link Roads scheme does not provide substantial enhancements for pedestrian, cyclists and equestrians. It provides a bridleway alongside the single carriageway and for a short stretch of the dual carriageway, and reinstates continuity for all the PRoW that are truncated by the scheme. Once the road capacity is increased, the effectiveness of our proposed interventions, if introduced, would be undermined by the scheme's encouragement of car dependency. One of these is the use of "walk with traffic" schemes designed to avoid delay to motorised traffic. These deter pedestrians and the long wait times can cause people to try and cross against the traffic signal cycle.</p>	
	<p>Q3.10 In their Local Impact Report [REP2-045], Derbyshire County Council identify concerns regarding future capacity at the junction of A57 Brookfield / Shaw Lane / Dinting Vale North and that this will result in local delays.</p>	<p>Further capacity enhancements to the Shaw Lane junction with the A57, beyond optimisation of the traffic signal timings, are not included in the Scheme and Derbyshire County Council do not currently have any confirmed plans to improve capacity at this junction. Consequently, it is not appropriate or necessary for National Highways to undertake any further traffic modelling or assessment at the Shaw Lane junction.</p>

Reference:	IP Issue	National Highways Response
	<p>Has any specific analysis of the operation of this junction been undertaken?</p> <p>Should the specific mitigation be provided to address any resultant additional?</p> <p>Has any potential mitigation been considered?</p> <p>If so, how would this be secured?</p> <p>Would an increase in junction capacity at this junction affect any driver-perceived attractiveness of the Shaw Lane / Dinting Road route for drivers?</p> <p>If so, what would be the resulting effect?</p> <p>Would any additional diversion of traffic require additional mitigation?</p> <p>In its response NH indicates that it does not consider any further mitigation at this junction is required to realise the benefits of the scheme, except for the traffic signal optimisation which is already included in the modelling. It states that this junction should be considered for operational improvements and it will liaise with DCC to investigate viable alternative solutions. It then makes the following response to e and g above advising that revised traffic modelling would need to be undertaken if the capacity at this junction increased through proposed physical change.</p> <p><i>'e) An increase in the capacity at this junction would probably have an impact on the assignment of traffic across the modelled road network, including potentially on Dinting Road and Shaw Lane. Revised traffic modelling would need to be undertaken to determine the likely redistribution of traffic if capacity at this junction was to be increased through any proposed physical changes to the junction layout.</i></p> <p><i>See response to e) above.</i></p> <p><i>g) The diversionary traffic effects of changes in the capacity at this junction would need to be assessed based on the outputs of revised traffic modelling to understand whether any additional mitigation would be required'.</i></p> <p>ii. The proposed revised traffic modelling should be done now. The adverse impacts of increased traffic and rat running on residential streets in Glossop has been established through the Examination as a direct result of the scheme. Changing capacity at the Shaw Lane/A57 junction</p>	

Reference:	IP Issue	National Highways Response
	<p>could lead to even more traffic diverting and rat running on both Dinting Road and Cemetery Road/Hadfield Road, and would lead to increased risk of road crashes, and increased road danger, and air and noise pollution.</p>	
	<p>Q3.11 & Q3.12 Average speed cameras on the Snake Pass and A628T i. We are opposed to this measure and strongly support the PDNPA's policy based approach. It would be contrary to the first National Park Statutory purpose to conserve and enhance the natural beauty wildlife, and harm the special qualities for which the Park is strongly protected.</p>	<p>The Scheme does not include any proposals for the introduction of average speed cameras on either the A57 Snake Pass or the A628T.</p>
	<p>Q3.13 car parking at the top of the Snake Pass i. We are opposed to this measure and strongly support the PDNPA's policy based approach. It would be contrary to the first National Park Statutory purpose to conserve and enhance the natural beauty, wildlife and cultural heritage, and harm the special qualities for which the Park is strongly protected.</p>	<p>National Highways has nothing further to add to its response to the Examining Authority's Second Written Question 3.13 (REP6-017).</p>
	<p>Q3.14 Concerns have been raised regarding increases to traffic flows through Bamford and the National Park [REP2-060 and REP5-027]. Please respond to the issues raised, including: - Changes to link flows; and Highway safety. Should any mitigation measures be provided to address the issues raised? If so, how would these be secured?</p> <p>In its response to Q3.14 NH quoted modelled traffic flow changes of -1% in 2025 and +1% in 2040 through Bamford and dismissed the changes as broadly neutral. However other relevant evidence challenges this result. In the 2015 Trans-Pennine Routes Feasibility Study the A6013 was included as a strategic route and shown on Figure 5-1 below. In response to the ExA's question about where traffic reroutes from to increase traffic on the Snake Pass by 38%, NH made the following response: <i>it is not possible to identify precisely where the increase in traffic has rerouted from compared</i></p>	<p>National Highways has nothing further to add to its response to the Examining Authority's Second Written Question 3.14 (REP6-017).</p>

Reference:	IP Issue	National Highways Response
	<p><i>to the Do-minimum scenario. This is because the algorithms all work with aggregate trip volumes, within which all travellers are homogenous. Nonetheless, interpreting plots from the traffic model showing the changes in traffic flow, and further link-specific analysis, indicates that the increase in traffic on the A57 Snake Road/Pass due to the Scheme is primarily because of traffic transferring from the A6/A623 route to the south (c. 50-55%), particularly for journeys between Sheffield and Manchester Airport, and from the M62 to the north (c. 20-25%). The rest of the increase (c. 20-30%) is rerouting from a variety of other alternative routes. NH has identified within the limits of the modelling that 50-55% of journeys causing increased flows on the Snake Pass would have transferred from the A623/A6 and are journeys between Sheffield and Manchester. However 20-30% of traffic would divert from a variety of routes. What is not clear is how many journeys are rerouting onto the A57 from Chesterfield or further south, to travel to northeast Manchester e.g. to the Trafford centre. These journeys would use the A623/A625/A6187/A6013/A57 and pass through Bamford on the A6013.</i></p> <p>The increase on the Snake Pass with scheme is 1,450 AADT. Taking only 20-30% of the diversionary traffic would be 250-435 AADT. NH does not give us the AADT on the A6103 but DfT's CP 57726 shows that manual counts across the previous decade have been between 5,200 and 5,400 AADT (this accords with the figure given in the 2015 Feasibility Study). An increase of 435 is an 8% increase in traffic on the A6103 through Bamford. These flows may appear small but in the village of Bamford they would have a substantial impact, increasing congestion and the risk of road crashes. The diversion of journeys from the southeast would also impact negatively on other villages along the route (using the A619 from Chesterfield the villages would be Baslow, Curbar, Froggatt, Grindleford and Hathersage; from further south other villages would increase this list). The scheme is having widespread and unacceptable impacts on the PDNP which are contrary to its statutory purposes, and should be rejected.</p>	

Reference:	IP Issue	National Highways Response
	<p>Figure 5-1 – Trans-Pennine Routing</p>	
	<p>Q3.17 Bus journey times</p> <p>i. The fact that the Glossop-Hadfield bus shows no change to journey times with the scheme questions the accuracy of these results. DCC have shown in their LIR that journey times within Glossop would increase, yet this bus journey time stays unchanged. What the bus times show overall is that the scheme does not benefit Glossop - the 237 journey between Ashton and Glossop, key for many resident who are employed in Ashton or Stalybridge, takes several minutes longer and the 341 from Glossop to Hyde sees no time saving benefits. Those reliant on the bus (50% of households in Gamesley; 30% of households in Tameside) would be disadvantaged by the scheme.</p>	<p>National Highways has nothing further to add to its response to the Examining Authority's Second Written Question 3.17 (REP6-017).</p>
	<p>Q3.18 There are aspirations, both at local and national level, to transfer journeys to more sustainable transport modes.</p> <p>Do you consider that sufficient consideration been given during the assessment of the effects of the scheme to Public Transport networks?</p>	<p>The traffic forecasting used for the traffic modelling of the Scheme is based on the most up to date Department for Transport (DfT) National Trip End Model (NTEM). NTEM does not account for the Greater Manchester Transport Strategy 2040. This is because it postdates the latest version of NTEM. The Greater Manchester Transport Strategy 2040 is a policy objective and at the time the Assessment of Link Road was undertaken, there were no confirmed schemes, such as a step change in improvements to bus services that would enable delivery of the strategy objectives, especially in the vicinity of the Scheme.</p>

Reference:	IP Issue	National Highways Response															
	<p>Is the design flexible enough to provide for any future increase in public transport usage and associated infrastructure?</p> <p>i. DCC and TMBC have both answered yes to question 3.18a). We disagree. The answer should be no. The GMCA Right Choice policy, part of the TfGM Transport Strategy 2040, has been ignored. By 2038 it requires 50% of all trips to be made by active travel and public transport. Furthermore, the highway authorities are not considering those households with no access to a car.</p>	<p>Please see the Applicant’s written response to ISH 3 Item 2 question 1) regarding compliance with the Decarbonisation Plan and Greater Manchester Transport Strategy 2040.. It is important to clarify how the overall 50% target cited from the Greater Manchester Transport Strategy 2040 relates to the Scheme. Page 84 of the Strategy records the ‘Right Mix’ targeting a 5% reduction in car mode share from 83% to 78% for the wider City Region and from 87% to 82% for City-to-City journeys:</p> <p>When it comes to the ‘Right Mix’ for City to City trips, we are targeting a 5% reduction in car mode-share, achieved through improvements to inter-urban public transport. Many City to City trips include journeys that neither start nor end in a city centre, and there is little potential for these to be made by public transport. However, we expect the major proposed improvements to inter-urban public transport to substantially reduce car use for trips that do involve travel to and from a major city centre.</p> <p>(p8&9 Appendix 1 Right Mix Technical Note to GM Transport Strategy 2040) Technical note supporting the strategy acknowledges different percentages in trips by car, public transport and active means depending on spatial theme:</p> <table border="1"> <caption data-bbox="1418 951 2288 978">Table V1: Allocation of trips to the spatial themes defined in the 2040 Transport Strategy</caption> <thead> <tr> <th data-bbox="1418 995 1567 1022">Spatial Theme</th> <th data-bbox="1567 995 1863 1022">Includes</th> <th data-bbox="1863 995 2288 1022">Except</th> </tr> </thead> <tbody> <tr> <td data-bbox="1418 1031 1567 1058">Neighbourhood</td> <td data-bbox="1567 1031 1863 1121">Trips less than 2km (straight line) with at least one end within Greater Manchester</td> <td data-bbox="1863 1031 2288 1178"> <ul style="list-style-type: none"> Trips with a non-work attraction end at Manchester Airport and surrounding developments Trips with an end within the Regional Centre </td> </tr> <tr> <td data-bbox="1418 1186 1567 1241">Wider City Region</td> <td data-bbox="1567 1186 1863 1318">Trips with at least one end in Greater Manchester, and both ends no more than 10km outside the Greater Manchester boundary</td> <td data-bbox="1863 1186 2288 1352"> <ul style="list-style-type: none"> Trips with a non-work attraction end at Manchester Airport and surrounding developments Trips with an end within the Regional Centre Trips under 2km </td> </tr> <tr> <td data-bbox="1418 1360 1567 1415">Regional Centre</td> <td data-bbox="1567 1360 1863 1415">Trips with an end in the Regional Centre</td> <td data-bbox="1863 1360 2288 1499"> <ul style="list-style-type: none"> Trips with a non-work attraction end at Manchester Airport and surrounding developments Trips with an end more than 10km outside the Greater Manchester boundary </td> </tr> <tr> <td data-bbox="1418 1507 1567 1535">City to City</td> <td data-bbox="1567 1507 1863 1640">Trips with one end in Greater Manchester, and the other more than 10km outside the Greater Manchester boundary</td> <td data-bbox="1863 1507 2288 1583"> <ul style="list-style-type: none"> Trips with a non-work attraction end at Manchester Airport and surrounding developments </td> </tr> </tbody> </table>	Spatial Theme	Includes	Except	Neighbourhood	Trips less than 2km (straight line) with at least one end within Greater Manchester	<ul style="list-style-type: none"> Trips with a non-work attraction end at Manchester Airport and surrounding developments Trips with an end within the Regional Centre 	Wider City Region	Trips with at least one end in Greater Manchester, and both ends no more than 10km outside the Greater Manchester boundary	<ul style="list-style-type: none"> Trips with a non-work attraction end at Manchester Airport and surrounding developments Trips with an end within the Regional Centre Trips under 2km 	Regional Centre	Trips with an end in the Regional Centre	<ul style="list-style-type: none"> Trips with a non-work attraction end at Manchester Airport and surrounding developments Trips with an end more than 10km outside the Greater Manchester boundary 	City to City	Trips with one end in Greater Manchester, and the other more than 10km outside the Greater Manchester boundary	<ul style="list-style-type: none"> Trips with a non-work attraction end at Manchester Airport and surrounding developments
Spatial Theme	Includes	Except															
Neighbourhood	Trips less than 2km (straight line) with at least one end within Greater Manchester	<ul style="list-style-type: none"> Trips with a non-work attraction end at Manchester Airport and surrounding developments Trips with an end within the Regional Centre 															
Wider City Region	Trips with at least one end in Greater Manchester, and both ends no more than 10km outside the Greater Manchester boundary	<ul style="list-style-type: none"> Trips with a non-work attraction end at Manchester Airport and surrounding developments Trips with an end within the Regional Centre Trips under 2km 															
Regional Centre	Trips with an end in the Regional Centre	<ul style="list-style-type: none"> Trips with a non-work attraction end at Manchester Airport and surrounding developments Trips with an end more than 10km outside the Greater Manchester boundary 															
City to City	Trips with one end in Greater Manchester, and the other more than 10km outside the Greater Manchester boundary	<ul style="list-style-type: none"> Trips with a non-work attraction end at Manchester Airport and surrounding developments 															

Reference:	IP Issue	National Highways Response																																									
		<p>Figure V2: "Right Mix Vision" change in volume of trips by mode for 'Now' and '2040', by spatial theme</p> <table border="1"> <caption>Data for Figure V2: "Right Mix Vision" change in volume of trips by mode</caption> <thead> <tr> <th>Spatial Theme</th> <th>Year</th> <th>Car or Other (%)</th> <th>Public Transport (%)</th> <th>Active Travel (%)</th> </tr> </thead> <tbody> <tr> <td rowspan="2">NEIGHBOURHOOD</td> <td>Now</td> <td>45%</td> <td>3%</td> <td>52%</td> </tr> <tr> <td>2040</td> <td>37%</td> <td>3%</td> <td>61%</td> </tr> <tr> <td rowspan="2">WIDER CITY REGION</td> <td>Now</td> <td>83%</td> <td>14%</td> <td>4%</td> </tr> <tr> <td>2040</td> <td>78%</td> <td>16%</td> <td>6%</td> </tr> <tr> <td rowspan="2">REGIONAL CENTRE</td> <td>Now</td> <td>41%</td> <td>26%</td> <td>33%</td> </tr> <tr> <td>2040</td> <td>24%</td> <td>31%</td> <td>45%</td> </tr> <tr> <td rowspan="2">CITY TO CITY</td> <td>Now</td> <td>87%</td> <td>0%</td> <td>0%</td> </tr> <tr> <td>2040</td> <td>82%</td> <td>0%</td> <td>0%</td> </tr> </tbody> </table> <p>Since occupants of households without access to a car a) cannot easily switch from using public transport to using a car instead, and b) will have no effect on traffic forecasts if using public transport, it is perfectly reasonable to exclude them from the modelling used to assess the Scheme.</p>	Spatial Theme	Year	Car or Other (%)	Public Transport (%)	Active Travel (%)	NEIGHBOURHOOD	Now	45%	3%	52%	2040	37%	3%	61%	WIDER CITY REGION	Now	83%	14%	4%	2040	78%	16%	6%	REGIONAL CENTRE	Now	41%	26%	33%	2040	24%	31%	45%	CITY TO CITY	Now	87%	0%	0%	2040	82%	0%	0%
Spatial Theme	Year	Car or Other (%)	Public Transport (%)	Active Travel (%)																																							
NEIGHBOURHOOD	Now	45%	3%	52%																																							
	2040	37%	3%	61%																																							
WIDER CITY REGION	Now	83%	14%	4%																																							
	2040	78%	16%	6%																																							
REGIONAL CENTRE	Now	41%	26%	33%																																							
	2040	24%	31%	45%																																							
CITY TO CITY	Now	87%	0%	0%																																							
	2040	82%	0%	0%																																							
	<p>QUESTIONS ON PDNP</p> <p>Q4.2 Peak District National Park Authority [REP4-012] said that the assessment methodology does not allow for an adequate judgement to be made regarding potential effects of the Proposed Development on the statutory purposes of the Peak District National Park - to conserve and enhance the natural beauty, wildlife and cultural heritage of the National Parks'.) as defined by the Environment Act 1995. Do the Applicant and Natural England consider that sufficient regard has been given to the statutory purposes of Peak District National Park, consistent with s62 of the Environment Act 1995? Please provide reasoning.</p> <p>i. In response to this question Natural England (REP6-029) has provided a clear statement that for the purposes of the Environment Act 1995 NPPF 2021 paras 176 and 177, which gives the highest status of protection for the landscape and scenic beauty of the AONBs and the National Parks, should take precedence in assessing landscape and visual amenity impacts. In that context, and as we showed in REP4-015 pp7-10, NH has failed to take full and proper account of National Park statutory purposes. It has failed to understand that enhancement is part of the first purpose</p>	<p>i) We note that Natural England in REP6-029, rather than providing 'a clear statement' simply agree with PDNPA "that for the purposes of S62 of the Environment Act 1995, the National Planning Policy Framework 2021 (paragraphs 176 and 177) which gives the highest status of protection for the 'landscape and scenic beauty' of AONBs and National Parks should take precedence in assessing Landscape and Visual Impacts." It should be noted that NPPF paragraph 177 relates specifically to "considering applications for development within National Parks.." and so cannot apply to the Scheme as it does not involve development within a National Park.</p> <p>ii) National Highways has set out its position on this matter in its Response to the Examining Authority's Second Questions (REP6-017) and in its responses to ISH3 Items 3d and 3e.</p> <p>iii) National Highways has set out its position on this matter in its Response to the Examining Authority's Second Questions (REP6-017) and in its responses to ISH3 Item 3c.</p>																																									

Reference:	IP Issue	National Highways Response
	<p>and that the second purpose is about promotion to increase not only enjoyment but also understanding.</p> <p>ii. The natural beauty, wildlife and cultural heritage must not only be conserved, it must also be enhanced. Instead NH is allowing traffic generated by its scheme to impact adversely on the first purpose. It is clear that the traffic on both the A628T and A57 is trans-Pennine through traffic. In other words the increased traffic is not about increased visitation, which is not one of CPRE's concerns, but about increased traffic on road corridors within the National Park between South Yorkshire and Greater Manchester. There is nothing in the second purpose that supports such a function. The second purpose is concerned with promotion that must encompass both understanding and enjoyment of the special qualities for which the National Park is designated. 'Understanding' covers a substantial breadth and depth. It would include in the current circumstances increasing the understanding by the public of the impacts of the climate and nature crises, and how they could when they come to enjoy the Park take measures to help address these crises – travel sustainably by active travel (quite possible as the PDNP is on the doorstep of many towns and villages surrounding it) or public transport. Today many visitors understand the impact of a visit and many try to arrive by bus or train. The second purpose makes no mention of how the Park is to be promoted except that its enjoyment is qualified by understanding, and the first purpose must also be fulfilled. NH also refers to the National Park Authority's duty to seek to foster the economic and social well-being of local communities within the Park. The Government's National Park circular para 29 (2010) states that promoting public understanding and enjoyment of the special qualities should lie at the very heart of developing a strong economy and sustaining thriving local communities.</p> <p>iii. NH appears to be arguing that through traffic should be allowed as there should be no restriction on it based on the Sandford principle. The second purpose is not about allowing unrestricted traffic. It makes no mention of it. It is not about allowing anything – it is about promoting the Parks.</p>	
	<p>Q4.3 Please could the Applicant signpost the consideration given to NPSNN Paragraphs 5.150, 5.152 and 5.154 in its application and summarise its reasoning and conclusions regarding:</p>	<p>National Highways has set out its position regarding NN NPS paragraphs 5.150, 5.152 and 5.154 in its Response to the Examining Authority's Second Questions [REP6-017] and also in its written response to ISH3 Items 3d and 3e submitted at Deadline 8.</p>

Reference:	IP Issue	National Highways Response
	<p>The “great weight” to be given to conserving landscape, scenic beauty? How is the “great weight” considered in the assessment of indirect effects and their significance?</p> <p>The need to plan the Strategic Road Network to encourage routes that avoid National Parks?</p> <p>The duty to have regard to the purposes of Peak District National Park, with the aim of avoiding compromising the purposes of designation and the need for the Proposed Development to be designed sensitively given the various siting, operational, and other relevant constraints.</p> <p>i. NH has dismissed paragraph NPSNN 5.150 based on the grounds that the scheme does not propose development within the PDNP. We rebutted NH’s approach to this issue in REP4- 015. The whole of paragraph 176 in NPPF 2021 must apply to all impacts, direct or indirect, on National Parks. All public bodies, including local planning authorities and the Planning Inspectorate, have a duty to take account of the potential effect of their decisions and activities on National Parks, including activities undertaken outside National Park boundaries which may affect land within them. Both Defra’s and Natural England’s guidance¹ make it clear that this duty applies to all decisions and activities that may affect land within an AONB or National Park and not just to those that relate to planning, countryside and related environmental issues. In this case road construction falls outside the PDNP but within the setting of the Park, and the traffic generated by the scheme impacts on land within the Park. Therefore the scheme should be rejected on the grounds of the harm it would do to National Park statutory purposes.</p> <p>ii. NH has dismissed paragraph NPSNN 5.152 based on the grounds that this paragraph applies to road building within a National Park (which the scheme avoids). However the final sentence of 5.152 is clear – Planning of the SRN should avoid National Parks. This sentence in NPSNN has interpreted the 2010 Government circular on National Parks which states:</p> <p><i>85. Improvements of main routes through the Parks are governed largely by considerations outside those relating to the Park area itself. However, there is a strong presumption against any significant road widening or the building of new roads through a Park, unless it can be shown there are compelling reasons for the new or enhanced capacity and with any benefits outweighing the costs very significantly. Any investment in trunk roads should be directed to developing routes for long distance traffic which avoid the Parks.</i></p>	

Reference:	IP Issue	National Highways Response
	<p>iii. Therefore paragraph 5.152 applies to this scheme, which should be rejected for that reason.</p> <p>iv. There is also clear evidence that the planning of the scheme impacted on the Park, contrary to NPSNN 5-152. According to ES Ch. 1-4 Introductory chapters, Table 3-3, the assessment of the A57 Link Roads was as follows: <i>'On its own did not satisfy the criteria in terms of impacts on the key problems and objectives and the impact on the remaining key problems and objectives was deemed to be marginal. Had the potential to offer further additional benefits across the Trans-Pennine routes when packaged with one of the four main options.'</i> Table 3-4 shows these four options, one of which is the Mottram- Hollingworth-Tintwistle bypass which impacts directly on the PDNP.</p>	
	<p>v. We agree with NH that paragraph 5.154 applies to the scheme. We showed in REP2-069 that the assessment of the landscape setting of the PDNP was flawed and that the impact of the scheme was incorrectly assessed. NPSNN 5.154 requires the applicant <i>'to avoid compromising the purposes of designation'</i>; this has not been achieved. As we have shown in response to NH's response to Q5.1 below the Greater Manchester Landscape Character and Sensitivity Assessment emphasises the importance of the PDNP setting and its high sensitivity to development. Where the scheme would cross the River Etherow, the wet nature of the soils limits the opportunity for road building (Dark Peak Western Fringe LCA page 13).</p>	<p>National Highways has set out its position regarding NN NPS paragraph 5.154 in its Response to the Examining Authority's Second Questions [REP6-017] and also in its written response to ISH3 Item 3d submitted at Deadline 8.</p>
	<p>Q4.4 Please could the Applicant signpost the consideration given to NPPF Paragraphs 176 and 185 in its application and summarise its reasoning and conclusions regarding:</p> <p>The "great weight" to be given to conserving and enhancing landscape, scenic beauty, wildlife, and cultural heritage in National Parks? How is the "great weight" considered in the assessment of indirect effects and their significance? What enhancement measures have been identified and how are they secured by the dDCO or other means?</p> <p>How the Proposed Development has been sensitively located to avoid or minimise adverse impacts on the National Park?</p> <p>How the Proposed Development has been designed to avoid or minimise adverse impacts on the National Park?</p>	<p>National Highways set out its position on this matter in its Response to the Examining Authority's Second Questions (REP6-017) and its written response to ISH3 Items 3d, e, I and j submitted at Deadline 8.</p> <p>Unfortunately CPRE REP4-016 makes no reference to NPPF paragraph 176 nor 185.</p>

Reference:	IP Issue	National Highways Response
	<p>In its response to this question NH claims that NPPF paras 176 and 185 do not apply to this scheme. This is incorrect. Both paragraphs apply. We showed in REP4-016 how NPPF para 176 applied. We now extend our arguments and apply them to NPPF para 185.</p> <p>NH quotes NPPF Para 5 in support of its arguments but that is not the only relevant quotation as to the relevance of NPPF. The paragraphs in NPSNN under the title of</p> <p><i>'Consistency of NPS with the National Planning Policy Framework' 1.17-1.20 are more revealing and in effect stronger.</i></p> <p><i>The overall strategic aims of the National Planning Policy Framework(NPPF) and the NPS are consistent, however, the two have differing but equally important roles to play.</i></p> <p><i>The NPPF provides a framework upon which local authorities can construct local plans to bring forward developments, and the NPPF would be a material consideration in planning decisions for such developments under the Town and Country Planning Act 1990. An important function of the NPPF is to embed the principles of sustainable development within local plans prepared under it. The NPPF is also likely to be an important and relevant consideration in decisions on nationally significant infrastructure projects, but only to the extent relevant to that project.</i></p> <p><i>However, the NPPF makes clear that it is not intended to contain specific policies for NSIPs where quite particular considerations can apply. The National Networks NPS will assume that function and provide transport policy which will guide individual development brought under it.</i></p> <p><i>In addition, the NPS provides guidance and imposes requirements on matters such as good scheme design, as well as the treatment of environmental impacts. So, both documents seek to achieve sustainable development and recognise that different approaches and measures will be necessary to achieve this.</i></p> <p>From the above we can conclude the following.</p>	

Reference:	IP Issue	National Highways Response
	<p>NPPF is considered to be an important and relevant consideration in decisions on NSIPs.</p> <p>NPPF is 'relevant' to this NSIP as the scheme impacts on a National Park.</p> <p>The 'great weight' sentence can be found in both NPPF and NPSNN (5.150), and thus avoids any confusion as to specific policies that might be dismissed under the remit of para 1.19 above.</p> <p>The NPSNN focus is on transport policy, and NPSNN 5.152 develops this theme. It is specific that planning of the SRN should avoid the National Parks, which this scheme fails to do as we have shown in response to Q4.2 above.</p> <p>NPSNN para 1.20 refers to the treatment of environmental impacts. As both NPSNN and NPPF share the same wording with respect to National Parks the treatment of environmental impacts on the Parks under either policy regime should be identical. Hence there is no danger of an error of law in applying the 'great weight' policy.</p> <p>The shared overarching goal is achieving sustainable development which would not be achieved by this scheme, whether tested against NPSNN or NPPF.</p> <p>Turning now to NH's response that NPPF paras 176 and 185 do not apply to the scheme and that any differences in approach between NPPF and NPSNN must be deliberate.</p> <p><i>NPPF para 176</i></p> <p>The rest of para 176 after the first 'great weight' sentence states:</p> <p><i>'The conservation and enhancement of wildlife and cultural heritage are also important considerations in these areas, and should be given great weight in National Parks and the Broads .The scale and extent of development within all these designated areas should be limited, while development within their setting should be sensitively located and designed to avoid or minimise adverse impacts on the designated areas.'</i></p> <p>The second sentence expands on the first 'great weight' sentence and should be read with it. The third sentence of para 176 then identifies the approach towards development within the designated area and its setting.</p> <p>In NPSNN 5.150 one sentence follows the 'great weight' first sentence:</p>	

Reference:	IP Issue	National Highways Response
	<p><i>'Each of these designated areas has specific statutory purposes which help ensure their continued protection and which the Secretary of State has a statutory duty to have regard to in decisions.'</i> Para 5.152 then extends 5.150 <i>'There is a strong presumption against any significant road widening or the building of new roads and strategic rail freight interchanges in a National Park, the Broads and Areas of Outstanding Natural Beauty, unless it can be shown there are compelling reasons for the new or enhanced capacity and with any benefits outweighing the costs very significantly. Planning of the Strategic Road Network should encourage routes that avoid National Parks, the Broads and Areas of Outstanding Natural Beauty'.</i></p> <p>The reference to the statutory purposes is equally strong as it is a legal obligation to achieve them. In addition para 5.152 extends NPPF 176 about development, requiring NH to think ahead and avoid planning routes through designated areas.</p> <p><i>NPPF para 185</i></p> <p>This states: <i>'Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should:</i></p> <p><i>mitigate and reduce to a minimum potential adverse impacts resulting from noise from new development – and avoid noise giving rise to significant adverse impacts on health and the quality of life;</i></p> <p><i>identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason; and</i></p> <p><i>limit the impact of light pollution from artificial light on local amenity, intrinsically dark</i></p> <p><i>landscapes and nature conservation'.</i></p> <p>Para 185 b) refers to tranquil areas prized for recreation and amenity values and c) refers to intrinsically dark landscapes and nature conservation. National Parks fit this description and should be protected from all the adverse impacts to which para 185 refers.</p>	

Reference:	IP Issue	National Highways Response
	<p>Clearly NPPF is an important and relevant consideration. Both paras 176 and 185 apply to this scheme but NH has yet to assess the scheme within that context.</p>	
	<p>Q4.5 Indirect effects in the vicinity of routes through the PDNP except for the Snake Pass.</p> <p>i. We support the PDNPA’s assertion in response to this question. As we showed in REP2- 069 the indirect effects of increased traffic flow have not been adequately considered by the applicant’s assessment on any route. By their own methodology (LA107 Landscape & Visual effects), landscape and visual receptor sensitivity is classed as ‘very high’. Given the ‘very high’ sensitivity of the receptors, even minor or negligible magnitudes of adverse effect have the potential to result in significant effects.</p>	<p>The significance of the effects has been determined in accordance with Table 3.8.1 of DMRB LA 104. A significance category of High or Very High, when combined with a Negligible magnitude of impact results in a Slight effect, which is not significant. Please see National Highways written summary of ISH3 Item 3e and supporting material submitted at Deadline 8.</p>
	<p>Q 4.6 PDNPA considers slight effects could be material to decision making. NH disagrees. We support the PDNPA’s view that the effects of the traffic generated by the scheme are a material consideration for decision making.</p>	<p>Please refer to National Highway’s written summary of Issue Specific Hearing 3 Item 3e, j and supporting material submitted at Deadline 8 with respect to factoring ‘great weight’ into our assessment. ‘Great weight’ has been demonstrated by the highest level of sensitivity being afforded to the PDNP receptors.</p>
	<p>Q4.7 Peak District National Park Authority [REP4-012] said that the effects arising from an increase in traffic should not be described as “no change”. It questioned the consideration given to the impact on tranquillity and on the perceptions of tranquillity from increases in traffic.</p> <p>The Applicant [REP4-008 Item 4t] has described the process by which the indirect effects of traffic were assessed, which involved the assessor applying the % change difference in traffic data and numbers to the receptor experience on site.</p> <p>Given the “great weight” and protection afforded by the NPSNN and NPPF, would it be proportionate for the assessment to provide more quantification for the assessment, including hourly increases in traffic, increases in noise and any potential increases in car parking? Please provide reasoning.</p> <p>Please could the Applicant quantify hourly increases in traffic, increases in noise and any potential increases in car parking? Could</p>	<p>Please refer to National Highway’s written summary of Issue Specific Hearing 3 Item 3, submitted at Deadline 8 with respect to how the hourly traffic data was used for noise calculation, and also informed the assessment in relation to landscape and visual receptors and tranquillity.</p>

Reference:	IP Issue	National Highways Response
	<p>that quantification then be used to update the assessment in terms of the perception of changes in noise, landscape and visual impact, tranquillity, dark skies, and other relevant considerations?</p> <p>Peak District National Park Authority [REP4-012] has raised concerns regarding the consideration of tranquillity, including in relation to light from windscreens/ bodywork, litter, exhaust fumes and noise channelling through valley?</p> <p>Please could the Applicant and Natural England comment?</p> <p>The NH response is replicated below</p> <p>The impact of hourly traffic flows on the Snake Pass is most revealing. NH's new figures show that there would a 52% increase in traffic between the morning and evening peak, the time when most people are out enjoying the Park, walking or cycling. This means that the accident risk would be highest at the time of greatest visits. This also means that increases in noise, loss of tranquillity, and adverse impacts on landscape and visual amenity, and on public enjoyment are worsened by bunching of flows between the morning and evening peaks. Although the increases on the A628T through the Park are less dramatic the same arguments would apply. These impacts are wholly unacceptable and are further evidence of the significance of the effects of the traffic generated by the scheme.</p> <p>We note that Natural England defers to (supports) the PDNPA stance on this issue. <i>'Whilst Natural England concurs that the consideration of tranquillity is a consideration as part of a Landscapes Characteristics and Visual Characteristics, we would defer to the Peak District National Park Authority in the specifics due to local knowledge and local landscape expertise in assessing tranquillity within the Peak District National Park and which abides by the National Park Management Plan.'</i></p>	
	<p>QUESTIONS ON LANDSCAPE AND GREEN BELT</p> <p>Q5.1 Please could the Applicant provide an explanation of the differences between the documents used to establish the baseline and the more recent Landscape Character Assessment prepared for Places for Everyone Joint DPD, and confirm any implications for the conclusions of the Landscape and Visual Impact assessment and update ES Chapter 7 [REP2-007] accordingly?</p>	<p>The Applicant has answered this question in REP6-017 item 5.1 where, after summarising the main differences between the Landscape Character Assessment prepared for Places for Everyone and the published assessment used in the landscape methodology, concludes that there would be no difference to the significance of effects had the Landscape Character Assessment prepared for Places for Everyone been used and that Chapter 7 does not require to be updated. That is, there are no implications for the conclusions of the Landscape and Visual Impact Assessment and no updates to the ES Chapter 7.</p>

Reference:	IP Issue	National Highways Response
	<p>NH has not answered this question; it has referred only to the methodology of the assessment, not to the implications for the <u>conclusions</u> of the LVIA. We would agree that key characteristics of the landscape and the geographical footprint are similar to the other Landscape Character Assessments used.</p> <p>The key differences between the Greater Manchester Landscape Character and Sensitivity Assessment (GMLCSA) that accompanies the <i>Places for Everyone</i> Joint Plan (August 2018) and the other LCAs are as follows. GMLCSA takes a 'Tameside' view of the landscapes. It has been prepared more recently (2018) within the context of the climate and nature crises, and the increasing need to conserve spaces that provide green space and tranquillity for people's wellbeing. Its conclusions as to sensitivity and importance of features and character reflects those priorities.</p> <p>GMLCSA finds that all three pastures are pockets of relative tranquillity and remoteness with strong visual and character connections to the upland edge of Greater Manchester and the Pennines beyond. The landscape's role here is as an immediate rural hinterland and backdrop to the adjacent urban areas but it is also the setting to the Peak District National Park. Here it is important to <i>'Ensure any new development does not adversely affect the special qualities of the Peak District National Park, including its beautiful views, sense of tranquillity and dark night skies, and the vital benefits that flow beyond its boundary'</i> (GMLCSA page 89).</p> <p>GMLCSA considers both Mottram Pastures (Open Moorlands and Enclosed upland Fringes Dark Peak) and the Etherow Valley (incised River Valley LCT) are of 'high sensitivity' to commercial/ industrial development. The scheme would destroy the field layout on Mottram Pasture that is still recognisable on the tithe map circa 1850, a feature GMLCSA (pp71-77) considers important to conserve. The single carriageway would cut across the east facing slopes above the River Etherow floodplain rising to Mottram. GMLCSA considers this prominent ridge line of high sensitivity to any scale or type of development. It is a</p>	

Reference:	IP Issue	National Highways Response
	<p>distinctive landmark from long distances and functions as an undeveloped skyline above the lower-lying urban areas set within the distant moorlands of the South Pennines and Peak District National Park (GMLCSA page 76). The River Etherow has a high scenic value with pockets of tranquillity and seclusion and a <i>'strong sense of time depth and traditional rural qualities in an urban context'</i> that are important to protect (GMLCSA pages 59 & 63).</p> <p>V. GMLCSA considers Harrop Edge Valley Pasture (Pennine Foothills Dark Peak LCT) is of moderate to high sensitivity to commercial/industrial development. Any such development should avoid Mottram Hill; protect the setting of historic landmarks such as the Grade II* church at Mottram and the wider LCT's important relative sense of tranquillity and remoteness; and ensure any new development does not adversely affect the special qualities of the Peak District National Park.</p> <p>In conclusion, GMLCSA provides more up-to-date analysis of the sensitivity and priorities for these landscapes. Therefore the impact of the scheme must be considered within the context of the GMLCSA.</p>	
	<p>Q5.3 Night time views from B6105</p> <p>i. Despite both DCC and PDNPA explaining the value of a night time view of the scheme from this point, NH is still refusing to undertake it. We agree that a night time view from this location would identify the effectiveness of the screening of the scheme and its lighting, and the ExA should insist that it is undertaken. It is not a question of how light or dark the location of the viewpoint is but how prominent the scheme would be at night from this viewpoint. In the map of tranquillity provided, NH have not given the scale of brightness. This can be found in REP4-015 on page 11 and show the location lies in a very low brightness area of 1-2 NanoWatts/cm²/sr (range >32 brightest; <0.25 darkest).</p>	<p>The addition of the Scheme will be in the context of the existing glow emanating from the mapped area and its environs. The existing baseline, coupled with the distance between the Scheme and the viewpoint will not likely result in a significant effect. Therefore, the Applicant's position remains that no further action is required.</p>
	<p>Q5.4 Modelled levels and limits of deviation</p> <p>i. We note TMBC's comments on this which indicates the impacts on landscape and visual receptors are not yet resolved. This would have implications for the impact of the scheme on the openness of the Green Belt.</p>	<p>Please refer to National Highway's written summary of Issue Specific Hearing 3 Item 7x, submitted at Deadline 8 with respect to impact on the openness of the Green Belt.</p>

Reference:	IP Issue	National Highways Response
	<p>Q5.11 Openness of the Green Belt</p> <p>Please could the Applicant clarify in greater detail, having regard to the spatial and visual components of openness, why the elevated sections of carriageway, cuttings, false cuttings, embankments, bunds, structures, and signage would not affect openness?</p> <p>Which consideration has been given to receptors near those receptors?</p> <p>Have any of the viewpoints have been prepared to show visual links between the wider</p> <p>green belt and how the Proposed Development would affect visual openness?</p> <p>What are the spatial and visual effects on the Green Belt?</p> <p>Would there be an effect on the openness of the Green Belt?</p> <p>Would there be material harm to openness?</p> <p>NH continues to maintain the scheme has no impact on the openness of the Green Belt. It uses 22 viewpoints taken from Appendix 7.1 which it claims '<i>specifically mention open views/openness</i>'. This is grossly misleading. A search of document Appendix 7.1 with the word 'open' leads to 68 occurrences, the majority of which (42) refer to the word 'opening' (year of the scheme). Of the remaining times that the word 'open' appears it refers to opening up views which increase the visibility of the scheme. There is not one reference to openness. Hence the evidence they quote is actually showing the harm the scheme would do to the openness of the Green Belt. Furthermore the openness of the Green Belt can be appreciated from many more receptors than the 22 NH has chosen to quote. From all of them the openness of the Green Belt would be harmed.</p> <p>None of the viewpoints (VPs) referred to in answer to Q5.11 support NH's claim of no impact on the openness of the Green Belt. VP4 has limited views of the scheme from Roe Cross Road that avoid the view looking west along the dual carriageway; VP5 along Old Hall Lane is an enclosed view looking south down the lane which lies outside the Green Belt and has limited views of the Green Belt as the lane is sunk below the higher level of Mottram</p>	<p>Please refer to National Highway's written summary of Issue Specific Hearing 3 Item 7x and aa, submitted at Deadline 8 with respect to impact on the openness of the Green Belt.</p>

Reference:	IP Issue	National Highways Response																
	<p>Pasture; VP7 is of the hedge on Mottram Moor which would be removed and expose the new junction; VP8 from Warhill shows the dual and single carriageways and the Mottram Moor new junction, and the profound impact the scheme would have on openness; VP13 is looking straight at the hedge alongside the A57 which would be removed to allow construction and views of the single carriageway ascending towards Mottram. None of these VPs support NH's claims of no harm to openness.</p> <p>Of those VPs that have photomontages with the scheme in place, none reflect the traffic flows that would accompany the infrastructure. The dual carriageway would be carrying 30,100 vehicles over 12 hours, with 9% HGVs. The single carriageway would be carrying 21,000 vehicles over 12 hours with 5% HGVs. The table below shows that no HGVs and only one or two cars were placed in the photomontages for the scheme.</p> <table border="1" data-bbox="409 1016 1383 1810"> <thead> <tr> <th data-bbox="409 1016 638 1184">Photomontage VP number</th> <th data-bbox="647 1016 819 1184">Year of view post opening</th> <th data-bbox="828 1016 1383 1184">Number of cars and HGVs visible on scheme in VP</th> </tr> </thead> <tbody> <tr> <td data-bbox="409 1190 638 1444" rowspan="2">1 – looking east from M67 J4</td> <td data-bbox="647 1190 819 1314">1</td> <td data-bbox="828 1190 1383 1314">3 cars on roundabout; no cars or HGVs on dual carriageway</td> </tr> <tr> <td data-bbox="647 1320 819 1444">15</td> <td data-bbox="828 1320 1383 1444">2 cars on roundabout; no cars or HGVs on dual carriageway</td> </tr> <tr> <td data-bbox="409 1451 638 1646" rowspan="2">4 – looking north on Roe Cross Road</td> <td data-bbox="647 1451 819 1520">1</td> <td data-bbox="828 1451 1383 1520">1 car on dual carriageway</td> </tr> <tr> <td data-bbox="647 1526 819 1646">15</td> <td data-bbox="828 1526 1383 1646">No cars or HGVs on dual carriageway</td> </tr> <tr> <td data-bbox="409 1652 638 1810">8 – looking east from Warhill</td> <td data-bbox="647 1652 819 1810">1 and 15</td> <td data-bbox="828 1652 1383 1810">No cars or HGVs on dual or single carriageway, or at new junction on Mottram Moor</td> </tr> </tbody> </table>	Photomontage VP number	Year of view post opening	Number of cars and HGVs visible on scheme in VP	1 – looking east from M67 J4	1	3 cars on roundabout; no cars or HGVs on dual carriageway	15	2 cars on roundabout; no cars or HGVs on dual carriageway	4 – looking north on Roe Cross Road	1	1 car on dual carriageway	15	No cars or HGVs on dual carriageway	8 – looking east from Warhill	1 and 15	No cars or HGVs on dual or single carriageway, or at new junction on Mottram Moor	
Photomontage VP number	Year of view post opening	Number of cars and HGVs visible on scheme in VP																
1 – looking east from M67 J4	1	3 cars on roundabout; no cars or HGVs on dual carriageway																
	15	2 cars on roundabout; no cars or HGVs on dual carriageway																
4 – looking north on Roe Cross Road	1	1 car on dual carriageway																
	15	No cars or HGVs on dual carriageway																
8 – looking east from Warhill	1 and 15	No cars or HGVs on dual or single carriageway, or at new junction on Mottram Moor																

Reference:	IP Issue			National Highways Response
	14 – looking north from Pennine Bridleway	1 and 15	No cars or HGVs on single carriageway	
16 – looking south from PROW below Harrop Edge	1	2 cars on dual carriageway	17 – looking north from Melandra	
	15	1 car on dual carriageway	15	
	1	No cars or HGVs on single carriageway		
	15	No cars or HGVs on single carriageway		
<p>What should have been shown in terms of traffic on these photomontages? The photomontage from VP16 shows the full length of the dual carriageway between the underpass and the M67 J4 roundabout, a distance of 900m. Assuming vehicles would be travelling at an average speed of 50mph (80kph) one would expect to see 28 vehicles of which 3 would be HGVs. However, during peak hours average speeds may only be 30mph (48kph) when one would see 47 vehicles, including 4 HGVs, on this stretch of the dual carriageway. From VP17, assuming vehicles are travelling at 30mph (48kph) and one can see ~550m of the proposed development, one would expect to see 20 vehicles, including 1HGV, on this stretch of the single carriageway. These estimates are averages. They do not present the impact of vehicle movement.</p> <p>NH has produced no evidence to show that openness of the Green Belt is not harmed. We continue to maintain that the scheme is inappropriate development in the Green Belt, the openness of which would be harmed by the infrastructure and by its associated road furniture and traffic.</p>				
	QUESTIONS ON CLIMATE CHANGE (i) We submitted a summary a paper on the scheme’s carbon emissions in REP4-031. This outlined what carbon should be counted and costed; what			(ii) National Highways notes that CPRE are still requesting that the assessment is undertaken against more recently published policies and plans. Our submission at REP5-029 clarified that there is currently no guidance from DfT supporting this approach, nor are there the data sets available. The methodology and assumptions for National Highways’ further carbon emission calculations are contained in Appendix A of this Document. The carbon emissions for each year in the 60-year appraisal

Reference:	IP Issue	National Highways Response
	<p>the real 'do minimum' for the scheme should be; the cost of undermining Government and local policy, as this scheme does; the significance of the scheme's carbon emissions and the de minimis approach. NH responded to REP4-031 in REP6-019. We have responded separately to REP6-019 for Deadline 7.</p> <p>(ii) In REP5-029 pp5-6 we anticipated NH's response to ISH2 Item c) and d) Cumulative Carbon Assessment and set out what we would expect to see for any new assessment. REP5-026 NH's response to ISH2 Item c) and d) Cumulative Carbon Assessment does not meet the standards we consider necessary for the participants in the DCO, statutory or otherwise, to have all the relevant material available to them. In REP6-033 we set out our response to both NH's response to ISH2 Item 6C & 6D – Carbon, and to the ExA's Written Questions 2 – Question 8.2. We await NH's response to REP6-033 before responding fully on the climate effects. We emphasise that the Examination has been presented only with a few headline results of the DfT sensitivity test and not with the nature of the test or the actual assessment. Much of this is available as part of the model run and full details must be supplied.</p>	<p>period, based on the latest updated Defra Emissions Factors Toolkit (EFT v11) from November 2021 are also appended at the end of this document. These values were used for the assessment presented in Table 1 in REP5-026. The Transport Decarbonisation Plan Sensitivity test emission calculation method is still subject to DfT approval. Once this has been approved the emissions for the 60-year period can be published.</p>
	<p>Q8.2 In Issue Specific Hearing 2 [EV-015 Item 6c] the ExA requested that the Applicant provide its assessment of the cumulative effects of Greenhouse Gas emissions from the Proposed Development with other existing and / or approved projects on a local, regional and national level on a consistent geographical scale (for example an assessment of the cumulative effects of the Road Investment Strategy (RIS) 1 and RIS 2 at a national level). The Applicant [REP5-026] responded at Deadline 5. Please could the local authorities comment on the Applicant's response? Has appropriate consideration been given to local policies and local or regional carbon budgets?</p> <p>No, NH has not given appropriate consideration to national, regional and regional policies or carbon budgets. We agree with TMBC in its response to this question².</p> <p>In conformity with Section 5.29 of its Licence, National Highways is directed by the Secretary of State to have due regard to relevant Government policy. NH has ignored the UK's Net Zero Strategy 2021 which is the delivery mechanism (or policy document) for net-zero and the budgets under the Climate Change Act 2008. The CCA 2008 s.13 places</p>	<p>National Highways position remains that there is no legal requirement to assess against local or regional carbon budgets.</p> <p>The assessment of this and other projects on greenhouse gases should recognise that the spatial boundary of this receptor / resource is global but that our assessment should be considered at the national level as this is the basis of UK Government carbon budgets.</p> <p>Please refer to National Highway's Written summary of Issue Specific Hearing 3 Item 6, submitted at Deadline 8 with respect to whether cumulative effects of the Scheme on climate change with other projects within a geographical area should be considered against a threshold that is set for a similar geographical area.</p>

Reference:	IP Issue	National Highways Response
	<p>a duty on the Secretary of State to prepare proposals and policies for meeting carbon budgets. CCA 2008 s.14 under the title Duty to report on proposals and policies for meeting carbon budgets provides some detail.</p> <p><i>As soon as is reasonably practicable after making an order setting the carbon budget for a budgetary period, the Secretary of State must lay before Parliament a report setting out proposals and policies for meeting the carbon budgets for the current and future budgetary periods up to and including that period.</i></p> <p><i>The report must, in particular, set out—the Secretary of State's current proposals and policies under section 13, and (b)the time-scales over which those proposals and policies are expected to take effect.</i></p> <p><i>The report must explain how the proposals and policies set out in the report affect different sectors of the economy.</i></p> <p><i>The report must outline the implications of the proposals and policies as regards the crediting of carbon units to the net UK carbon account for each budgetary period covered by the report.</i></p> <p>The UK's Net Zero Strategy states in the Executive Summary; '<i>This document sets out clear policies and proposals for keeping us on track for our coming carbon budgets, our ambitious Nationally Determined Contribution (NDC), and then sets out our vision for a decarbonised economy in 2050</i>'. Therefore this document fulfils the CCA 2008 and is the valid legitimate document against which the scheme should be assessed. Figure 21 in the Strategy has a trajectory for carbon reduction from transport and there are modal targets. The scheme's effects on climate should be tested against this trajectory.</p> <p>As we argued in REP2-069 paras 4.4.28-4.4.34 and in REP3-031 paras 63-64, the scheme can and must be assessed against regional and local carbon budgets. Although the CCA 2008 does not impose a legal duty to set carbon budgets at a smaller scale than those set out nationally i.e. regional or local budgets are not required, the Government has allocated the UK carbon budget amongst local authority areas. '<i>In September 2019, local carbon budgets were made available at district, borough and unitary authority level relative to existing practices in their respective areas. Budgets have been aggregated to produce a carbon budget for the Derbyshire County Council administrative area as well. The carbon budget for High Peak is notably higher than the other local authorities primarily</i></p>	

Reference:	IP Issue	National Highways Response						
	<p>due to the location of two carbon intensive cement plants at Hope and Tunstead. The UK carbon budget is further apportioned to local authority areas, although the budgets are not solely the local authority's responsibility. The recommended budgets reflect the actual emissions from industry and commerce, transport and domestic sectors with a suggested periodic reduction and also take account of any emissions, or emissions savings, from land use, land use change and forestry. Budgets reflect a local authority's areas' particular profile and are consistent with each area's ability to make a fair contribution to the Paris Agreement³. Thus local and regional budgets within the context of the national budget exist and the scheme should be assessed against those budgets, as required by NPSNN and the Environmental Regulations.</p>							
	<p>Q8.5 The Applicant [REP2-021 Q8.1d and REP4-008 Item 6g] refers to the case of R (Transport Action Network Limited) v Secretary of State for Transport and Highways England Company Limited(2021) EWHC 2095 (Admin). The Applicant suggests that the carbon emissions from the Proposed Development should not be considered significant if the assessment is to be consistent with that judgement. Please could the local authorities and Interested Parties comment?</p> <p>The applicant considers the judgement on the 'TAN case' still stands. We disagree. The evidence from the TAN case has been surpassed by the publication of two documents – the DfT Transport Decarbonisation Plan and the UK's Net Zero Strategy. The TAN case hearing was held on 29th and 30th June 2021 and the judgement was handed down on 26th July 2021.</p> <p>The DfT Decarbonisation Plan was published on 14th July 2021, presents a trajectory for reduction of transport's emissions and assigns savings to be made by each mode with a total saving of between 1,307MtCO₂ and 1,797MtCO₂.</p> <table border="1" data-bbox="400 1654 1377 1885"> <thead> <tr> <th data-bbox="400 1654 845 1711">Mode</th> <th data-bbox="845 1654 1377 1711">Savings MtCO₂e between 2020 and 2050</th> </tr> </thead> <tbody> <tr> <td data-bbox="400 1774 845 1810">Increasing walking and cycling</td> <td data-bbox="845 1774 1377 1810">1-6</td> </tr> <tr> <td data-bbox="400 1843 845 1879">Zero buses and coaches</td> <td data-bbox="845 1843 1377 1879">35-37</td> </tr> </tbody> </table>	Mode	Savings MtCO ₂ e between 2020 and 2050	Increasing walking and cycling	1-6	Zero buses and coaches	35-37	<p>The Net Zero Strategy: Build Back Greener was published in October 2021 and sets out the next steps to be taken to cut carbon emissions in order to meet the Sixth Carbon Budget (2033-2037), and also the UK's 2030 Nationally Determined Contribution for the purposes of the Paris Agreement on Climate Change (described in the Technical Appendix to the Net Zero Strategy publication at pp 309 – 310). The Net Zero Strategy also references the DfT's Transport Decarbonisation Plan.</p> <p>The Applicant's most recent assessment (Table 1 in REP5-026) has used the vehicle fleet mix from the latest updated Defra Emissions Factors Toolkit in November 2021 (EFT v11). This is an update from emission factors used in the environmental statement assessment and Case for the Scheme, which was based on Defra (EFT v10.1), and is considered industry best practice. These emission factors do not yet reflect the Government's policy aspirations on predicted uptake in non-combustion vehicles that would be required to meet the Government's targets taking the DfT's Transport Decarbonisation Plan and the UK's Net Zero Strategy into consideration. A sensitivity test was undertaken to illustrate how emissions may change taking the DfT's Transport Decarbonisation Plan and the UK's Net Zero Strategy into consideration.</p> <p>The Net Zero Strategy states on page 153: '<i>The pathway we have set out is not about stopping people from doing things. Rather, it's about doing the same things differently</i>'. It sets out the ambitions for removing tailpipe emissions as a priority, in accordance with the Transport Decarbonisation Plan. Neither the Net Zero Strategy or the Transport Decarbonisation Plan precludes investment in road building schemes in their key commitments.</p> <p>Please see our comment on the response to (ii) at the start of this topic, above, which provides further commentary on the sensitivity test that has been undertaken for the Scheme.</p>
Mode	Savings MtCO ₂ e between 2020 and 2050							
Increasing walking and cycling	1-6							
Zero buses and coaches	35-37							

Reference:	IP Issue	National Highways Response
	<p>Decarbonising rail 21-22</p> <p>Zero emissions fleet cars & vans 620-850</p> <p>Maritime decarbonisation 180-230</p> <p>Aviation 250-430</p> <p>Zero emissions freight 200-220</p> <p>The UK's Net Zero Strategy Nov 2021, page 154, sets a trajectory for reducing transport's carbon emissions (Figure 21) and targets for each sector including transport. <i>'Based on our whole system modelling, by 2050, total transport emissions, including international aviation and shipping, could need to drop by 76-86% compared to 2019, down to 23-40MtCO₂e. In the interim, to meet our NDC and CB6 targets, we expect they could fall by 22-33% by 2030 and 46-59% by 2035, compared to 2019 levels. These figures are based on an indicative transport sector pathway contributing to the whole-economy net zero and interim targets. Our potential pathway also indicates residual emissions from domestic transport could need to fall by around 34-45% by 2030 and 65-76% by 2035, relative to 2019 levels (see figure 21). We anticipate that international aviation and shipping emissions could need to fall by up to 12% by 2035, relative to 2019 levels (see figure 22).'</i></p> <p>The A57 Link Roads carbon emissions must now be assessed against the trajectory for carbon reduction, Figure 21 in the UK Net Zero Strategy.</p>	
	<p>QUESTIONS ON THE WATER ENVIRONMENT</p> <p>Q11.1-11.7</p> <p>i. We have two concerns with NH's approach towards the water environment; (a) postponement of key information to the detailed design stage, outwith the DCO examination and (b) the application of the Exception Test.</p>	<p>The A57 design was progressing in early 2021 and through discussion with the Environment Agency and their written agreement via email on the 19 January 2021 the climate change values to be incorporated into the flood risk assessment were those based on the July 2020 allowances. The flood risk assessment was submitted as part of the DCO in June 2021 before the publication of any new climate change values.</p> <p>The Flood Risk Assessment will be updated during the detailed design process but an updated version of the Flood Risk Assessment with the findings of the latest July 2021 climate change allowances is provided at Deadline 8 (13 April 2022).</p>

Reference:	IP Issue	National Highways Response
	<p><i>Postponement of key information</i></p> <p>According to the latest tracked version of the flood risk assessment (FRA) NH appears to be postponing the results of the updated FRA required by the Environment Agency (EA) until the detailed design stage. NH's answer to Q11.5 appears to confirm that the update to the FRA would not be available to the Examination. This means that IPs would not have a chance to see or comment on the information. Rather than withholding information, NH should be <i>'ensuring that essential information is available to affected and interested parties'</i> in an open and transparent way, in line with NH's own licence para 5.19. It is also required to ensure compliance with the Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters 1998, particularly Article 6 Public Participation in Decisions on Specific Activities. This would apply to other elements of the water environment which are also delayed in being fully assessed.</p> <p>NPSNN 5.96 supports our view that the information should be supplied. If the EA has concerns about the proposal on flood risk grounds (as it does here) these should be satisfied <i>'preferably before the application for development consent is submitted.'</i> The latest climate change allowances for flood risk were published in July 2021, so NH had 4 months before the Examination started in which to update the FRA. The updated FRA must be made available to the Examination.</p>	
	<p><i>Application of the Exception Test</i></p> <p><i>'The proposed footprint of the embanked road alignment at Woolley Bridge Junction sits within Flood Zone 3 with a resultant loss of floodplain volume of approximately 1600m3'</i> (Flood Risk Assessment 4.6.11). <i>'The Scheme is defined as "Essential Infrastructure" and parts of the Scheme lie in Flood Zones 2 and 3 but are considered to be an acceptable development within these flood zones'</i> (Flood Risk Assessment 5.1.3).</p> <p>As the project would lie in Flood Zones 2 and 3, with medium and high probability of river flooding, NPSNN 5.105 would apply. <i>'If there is no reasonably available site in Flood Zones 1 or 2, then national networks infrastructure projects can be located in Flood Zone 3, subject to the Exception Test'</i>. The Exception Test is spelt out in NPSNN para 5.108 and a scheme has to pass both elements of this:</p>	<p>With regards to the Sequential Test, its purpose is to identify alternative sites which are within an area at lower flood risk. Optioneering assessments have been undertaken on a number of proposed alignments, but flood risk was not a key deciding factor in terms of determining a preferred route. The alternative routes are all largely in Flood Zone 1, i.e. lowest flood risk level and it is only the need to tie into the existing highway network where the proposed alignment has to cross the River Etherow and its associated floodplain that the scheme options are within a higher flood risk area. Due to the need to cross the River Etherow which has extensive floodplains along its length of Flood Zone 2 and 3 it is not possible to find an alternative route alignment which is at lower risk of flooding than the proposed alignment and thus the Sequential Test has been met and an Exception Test is required in accordance with the Flood Risk Vulnerability Classification.</p> <p>With regards to the Exception Test (NN NPS paragraph 5.108) the Scheme provides clear sustainability benefits as outlined in the Case for the Scheme (REP2-016). As such the Applicant considers that the scheme meets the requirements of part (a) of the Exception Test. A flood risk assessment has been undertaken which demonstrates through the provision of compensatory storage that the flood risk levels</p>

Reference:	IP Issue	National Highways Response
	<p>It must be demonstrated that the project provides wider sustainability benefits to the community that outweigh flood risk; and</p> <p>A FRA must demonstrate that the project will be safe for its lifetime, without increasing flood risk elsewhere and, where possible, will reduce flood risk overall.</p> <p>NPSNN 5.98 states that where flood risk is a factor in determining an application for development consent – as it is for this scheme - the Secretary of State should be satisfied that the application is supported by an FRA, the sequential test has been applied and if necessary the Exception Test. We can find no reference to either test in ES Ch 13 or the FRA.</p> <p>The project would not provide wider sustainability benefits to the community that outweigh the flood risk. It benefits a number of households adjacent to the bypassed A57T and Woolley Lane but imposes profound negative impacts of increased congestion, pollution and road crashes in Glossopdale. The increased traffic would impact negatively on the public realm and people’s use of it. The increased climate emissions would make it more difficult for HPBC to achieve its goal of Net Zero carbon by 2030. The scheme would harm the openness of the Green Belt and local landscapes with loss of tranquillity, a valuable resource for the community. The impacts on the Peak District National Park are unsustainable. The failure to provide wider sustainability benefits means the scheme should not be consented for development.</p>	<p>are reduced as part of the scheme. A sensitivity testing of the 1 in 100 year plus 95% climate change allowance storm event shows that the flood level is below the proposed soffit level of the River Etherow bridge and thus the scheme will remain safe during an extreme future storm scenario. The Flood Risk Assessment, therefore, demonstrates that the scheme will be safe for its lifetime, without increasing flood risk elsewhere and actually reduces flood risk overall through the provision of compensatory storage at the River Etherow crossing and thus part (b) of the Exception Test has also been satisfied.</p>

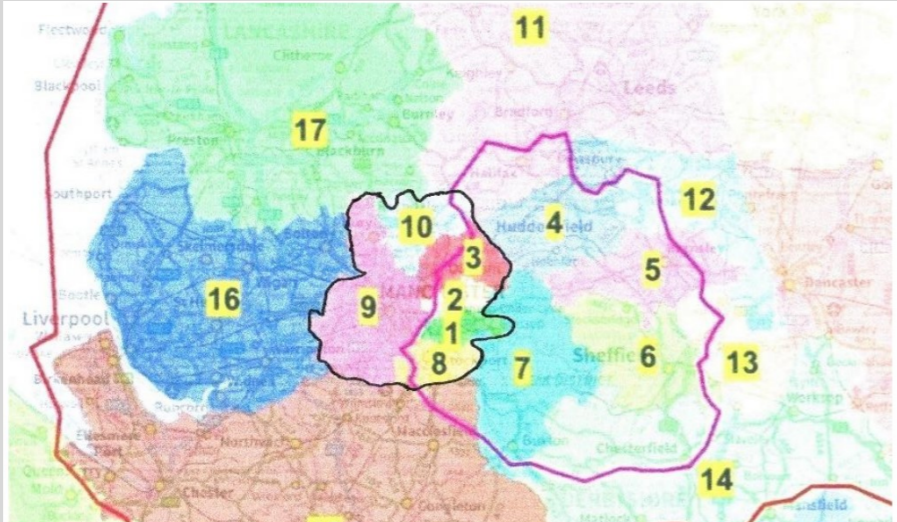
4. REP7-034 Keith Buchan on behalf of CPRE Comments on submissions for Deadline 5 and 6

Reference	IP Issue	National Highways Response
	<p>1. Introduction</p> <p>Only a limited amount of information has been received from NH on the public transport elements of the model. First it only contains full trip data for eight areas in the model: sectors 1 to 8. Trips which are produced in or attracted to these areas and end or start in the other 17 sectors have been supplied, but no other sector to sector trips.</p> <p>Secondly only 2025 data has been supplied so it is impossible to see what the model predicts for 2040 and thus whether public transport grows or falls, either in real terms or in terms of mode share. This is critical to understanding the long term impact of the scheme on both carbon and sustainable travel (which has other benefits beyond carbon reduction).</p> <p>Our work on the alternatives package revealed that some of the actual bus route data was also inaccurate but this note focusses on which public transport flows are in the model and how they are represented.</p> <p>The rest of this note is based on our analysis of the recently supplied NH data from the model.</p>	
	<p>2. How much of the public transport travel is in the model?</p> <p>It is a matter agreed with NH that only public transport trips which are made by people who have access to a car are in the model. It is hoped that the precise definition will be included in the SoCG. It was therefore clear that the model did not represent the total picture for public transport in the area. Once the data was received from NH it was possible to assess the scale of the missing trips. National Travel Survey data has been used to derive a figure for the ratio of public transport (PT) trips to car trips. In 2019 this car to PT ratio was 12.5, in other words the public transport trips were about 8%. In the model data supplied, the ratio of car to PT trips is more than ten times this figure at 130. In other words the PT trips are 0.8% or a tenth of the actual expected total.</p> <p>The significant lack of PT trips in the model means of course that the figures cannot be validated against flow data for modelling purposes in the same way that highway trips have been. Again it is important to clarify this since there was some impression at the ISH that public transport was fully included in the forecasting and modelling¹.</p> <p>As stated above, no information has been supplied on the future level of public transport use in 2040. This is important because it is impossible to test</p>	<p>“Car available” means that the demand for trips in the model only accounts for those forecast to be generated by occupiers of households where a car is available.</p> <p>The purpose of the modelling undertaken using the regional mode-choice transport model is to forecast the likely mode shift to or from car-based trips due to forecast changes in rail services and reflect this in the traffic forecasts used for the traffic modelling. Since occupants of households without access to a car a) cannot easily switch from using public transport to using a car instead, and b) will have no effect on traffic forecasts if using public transport, it is perfectly reasonable to exclude them from the modelling used to assess the Scheme.</p> <p>The regional mode-choice transport model does not take account of any potential for mode shift to or from car-based trips due to forecast changes in bus services. This is because the number of bus trips across the modelled area is tiny in comparison to the number of vehicle-based trips and there are virtually no certain or near certain planned improvements to bus services. This is particularly the case outside of the large conurbations such as Manchester and Sheffield. Consequently, it is proportionate to exclude this from the modelling for the Scheme, as any potential mode shift to or from buses will have a negligible effect on the traffic forecasts used to assess the Scheme.</p>

Reference	IP Issue	National Highways Response
	<p>how far the NH forecasts meet sustainability targets without them. It is a major gap in the information placed before the Examination Panel.</p>	
	<p>3. Where are the missing trips?</p> <p>A key question following on from this is whether the lack of trips is evenly spread. In terms of where trips are produced and where they go, the public transport and highway matrices allow analysis of the modelled flows between the different sectors. This reveals a high number of zeros for public transport trips. The figures are for 24 hours so this is very surprising.</p> <p>Of the 8 sectors which form the basis for the Area of Detailed Modelling (Sectors 1 to 8) 19 of the 56 zone pairings between them² have zero entries for “Home Based Commuting and Business” trips, and 18 of them have zeros for trips for “Other” purposes. All of the 8 Area of Detailed Modelling (ADM) sectors have at least one zero. There are a further 7 cells with less than 10 trips (Business/Commute) and 8 with less than 10 for “Other” purposes. This confirms the seriousness of the missing trips from the detailed model area and how there can be no confidence in the overall picture the public transport forecasts provide in the immediate vicinity of the scheme.</p>	<p>Because the public transport trips are rail-based, there will be some movements between sectors that are not viable by rail and, hence, the sectorised matrices will show zero trip values where this is the case.</p>
	<p>4. More trips produced than attracted</p> <p>Finally there is clearly serious asymmetry between the rows and columns (i.e. where the trips are produced and where they go to). This is particularly strong in the case of Home Based Business and Commuting where 69% more trips are produced in the 8 sectors than are attracted. This is very unusual given that many of these trips will be commuting and we now have asked NH if they have an explanation. Some small asymmetry is acceptable (for example the “travelling salesperson effect” where they leave on one day and don’t come back within 24 hours) but the scale of the issue here should have immediately alerted analysts to the problem.</p>	<p>The apparent asymmetry in the commute and home-based employers’ business trips is a consequence of the way the matrices are structured (this is a model data entry requirement). The matrices provided are in Production Attraction (PA) rather than Origin Destination (OD) format such that an entry in row X and column Y denotes morning trips from home zone X and an equal number of return trips from zone Y later in the day. There is therefore no asymmetry</p>
	<p>5. Conclusions</p> <p>The underlying problem here is that the forecasting and modelling is highway based and is not valid for public transport analysis.</p> <p>A collateral impact has been that it has not allowed for the level of analysis we had hoped for the public transport elements of the package of alternatives.</p>	<p>The traffic forecasts used for the traffic modelling have been adjusted in response to iterations with regional mode-choice transport model that has been used to forecast the likely mode shift to or from car-based trips due to forecast changes in rail services.</p>

5. RE7-035 Keith Buchan on behalf of CPRE Comments on Deadline 6 submission (REP6-033)

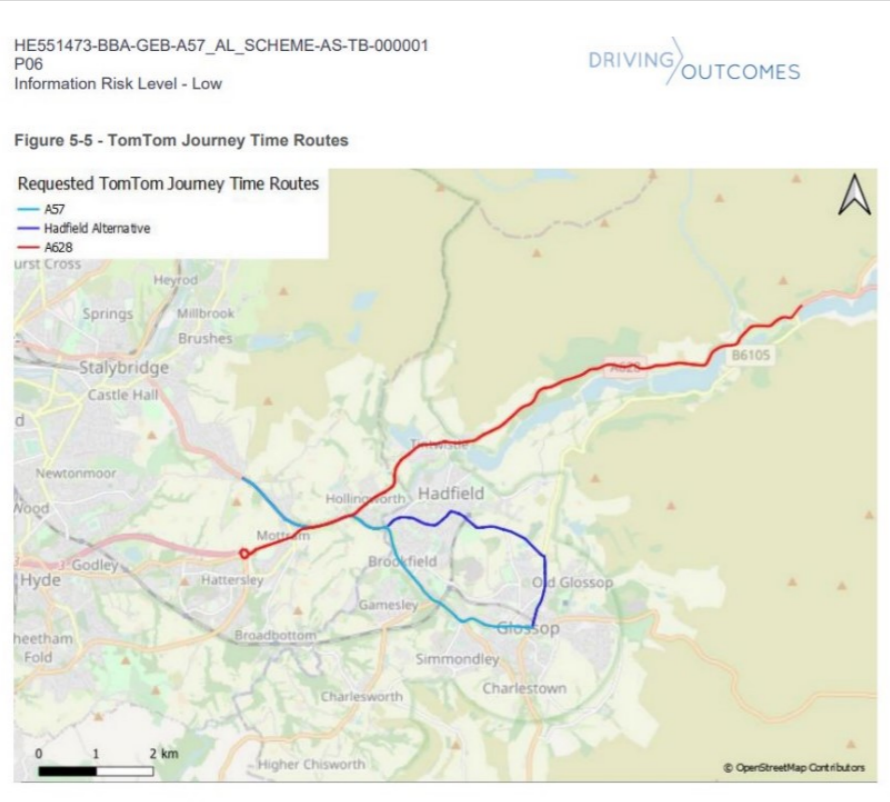
Reference	IP Issue	National Highways Response
	<p>There are several issues which we wish to address in NH's response to our REP4-031.</p> <p>1. Page 4: Calculation of the carbon cost between the Scheme and Business as Usual forecast and an alternative package without the scheme with a consequent lower level of traffic.</p> <p>NH say this approach to carbon does not meet guidance for road schemes. Specifically NH appear to be saying that the same number of trips should be used between runs.</p> <p>What is missing here is any awareness that comparisons between programmes with and without road schemes and with different levels of traffic have already to be subject to appraisal. If they weren't, appraisal of schemes for example containing road pricing (where traffic demand changes significantly) would be impossible. There are techniques for doing this but perhaps the most important comparison should be a positive one. The package of alternatives should be appraised with its lower level of traffic. The road scheme can also be appraised with its higher level of traffic. The results can then be compared, in particular for carbon emissions. It should be noted that NH do not say that the difference between these scenarios would not be real, only that it doesn't conform to the guidance they have chosen.</p> <p>This is not a simple, middle of nowhere road scheme. It is physically almost entirely within the Greater Manchester area and most of its traffic appears to be related to that area (see comment on Page 13 below).</p>	<p>The Applicant is not satisfied that the difference between these scenarios would not be realistic. The guidance has been developed as industry best practice because it is important to compare like with like.</p>
	<p>2. Page 8: Use of the carbon worksheet.</p> <p>NH are correct that I called the greenhouse gas worksheet the carbon cost toolkit. However they do not challenge the actual figures, only the use of different levels of traffic. Indeed it would be surprising if they did challenge them because the GHG worksheet uses the latest carbon cost figures at the correct discounted rate. We also gave reasons for the 2050 cut off (i.e. net zero should be achieved by then). Without it the figure for carbon costs would have been even higher. We maintain that our estimate of the difference in carbon cost between a realistic sustainable package and the scheme as presented to the Examination is the best available using the data supplied.</p>	<p>The method proposed is not a recognised methodology. Comparing the difference in emissions for the DM low growth scenario with the DS under central growth is unrealistic as it compares extreme scenarios, thus exaggerating the difference and is not appropriate.</p> <p>DM and DS comparisons should always be between data sets for the same scenario. This is recognised industry best practice.</p>
	<p>3. Page 13: The scheme is within a major conurbation.</p> <p>NH say that "the Scheme is not located in the vicinity of a group of towns and villages that are currently as well served by public transport as larger towns and cities".</p>	<p>The Scheme is located within the Greater Manchester administrative boundary. However, it is located some distance from the Manchester City conurbation, in a semi-rural area between Mottram in Longdendale and the Peak District National Park and is well beyond the M60, which encircles the City of Manchester.</p>

Reference	IP Issue	National Highways Response
	<p>In reality the Scheme is almost entirely within a Metropolitan Borough within Greater Manchester. Looking west from Mottram the Scheme connects to an urban area and most of the traffic in the Area of Detailed Modelling is, as far as the supplied data shows, related to that area.</p> <p>For example, for 24 hour Home Based Business and Commute trips originating from the study area (Sector 1) 84% are related to the sectors within Greater Manchester (Sectors 1,2,3,8,9,10). The argument that the study area is “not located in the vicinity” of Greater Manchester does not hold true merely by observation, the traffic data entirely backs this up.</p> <p>For convenience the sectors are shown below, outlined in black.</p> 	<p>National Highways accepts that a significant proportion of the traffic that uses the A57 has origins or destinations in Manchester. Most of these trips, however, start or end in locations that are not well connected to the Manchester conurbation by public transport.</p> <p>Section 3v Transport of the UK’s Net Zero Strategy (October 2021) sets out the Government’s 2050 vision and progressing to a net zero fleet. It states on page 154 ‘<i>Every place in the UK will have its own net zero emission transport network before 2050, serving the unique needs of its communities. Sustainability will be at the heart of levelling up</i>’. This implies that all villages, towns, cities and countryside all have different needs. The commitments of the plan do not preclude road building schemes, rather it sets out a pathway to ‘<i>do the same things differently</i>’ through green technology and encouraging more sustainable travel choices.</p>
	<p>4. Page 15/16: Benchmarking the significance of the carbon emissions</p> <p>NH do not appear to directly address the issues raised in the rather convoluted quote from IEMA guidance which applies to something else rather than assessing significance. The two sentences following the quote are extremely hard to understand and don’t seem to respond to the points made. Their final remark is that they “cannot comment on the robustness of the calculations”. We would like to reassure NH that they have been prepared to the highest standards within the limits of the available data. We would be happy to go through these calculations and any others in detail with NH and their consultants.</p>	<p>The carbon emissions have been considered against national carbon budgets to determine whether there would be a material effect on the achievement of the carbon targets therein. Relative to these budgets it is considered that emissions were at a ‘de minimis’ scale, and do not represent a material effect.</p> <p>The NPSNN acknowledges that the emissions from the construction and operation of a road scheme are likely to be negligible compared to total UK emissions and are unlikely to materially impact the UK Government’s ability to meet its carbon reduction targets.</p> <p>The Applicant’s reference to the revised IEMA guidance was to reinforce the point that, in considering the cumulative effects of the Scheme, the assessment of this and other projects on greenhouse gases should recognise that greenhouse gases are not geographically limited, and the spatial boundary of this receptor (the atmosphere) is global. However, our assessment has considered the effects at the national level as this is the basis of UK Government carbon budgets.</p> <p>The cumulative assessment of different projects (together with the Scheme) is inherent within the greenhouse gas emission methodology through:</p> <ul style="list-style-type: none"> inclusion of the project and other locally committed development within the traffic model; and

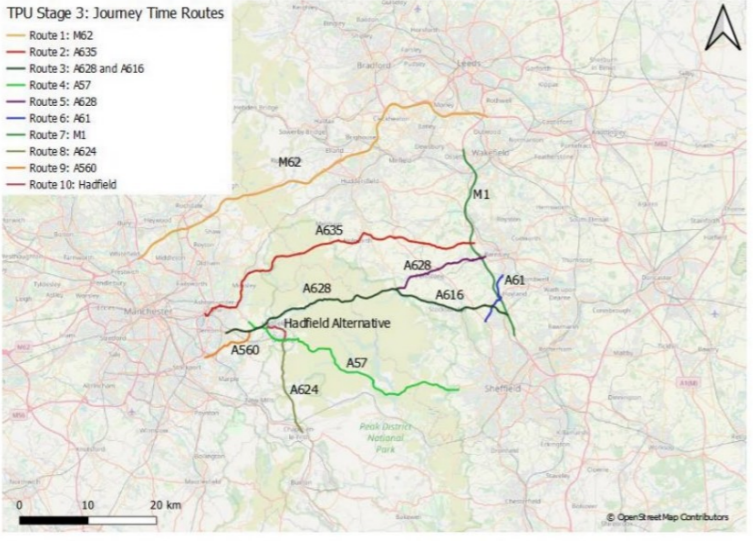
Reference	IP Issue	National Highways Response
		<ul style="list-style-type: none">• consideration of the project against the UK carbon budgets, which are inherently cumulative as they consider and report on the carbon contributions across all sectors, and not just against other RIS 2 schemes. <p>The Applicant has therefore considered the net GHG emissions by comparing the DN scenario with the DS scenario, and then assessing them on a national level, as that is the required context defined by the NPSNN. This approach to comparing the DN scenario with the DS scenario is considered industry best practice, and is consistent with the assessments undertaken for other similar schemes.</p> <p>Please refer to National Highway's written summary of Issue Specific Hearing 3 Item 6, submitted at Deadline 8 with respect to whether cumulative effects of the Scheme on climate change with other projects within a geographical area should be considered against a threshold that is set for a similar geographical area.</p>

6. REP7-042 Peter Simon Comments on submissions for Deadlines 5 and 6

Reference	IP Issue	National Highways Response
	<p>Peter Simon (A57L-001) Comments on submissions for Deadlines 5 and 6</p> <p>1. General Comments</p> <p>Several parties have now identified multiple major problems with the Scheme as well as practical impediments whilst the benefits remain largely poorly defined. Most of the impediments - for example land slip and flooding - the Applicant continues to sidestep or seek to defer to a post DCO "Detailed Design Stage". This rather than accepting that Examination begins to show there are obviously better more realistic solutions available here to the Government to relieve congestion on the national road network. Moreover the Applicant continues to maintain the dubious return of their scheme at the expense of a gratuitous erosion of irreplaceable environmental assets, both within and just outside the Peak National Park.</p> <p>The Scheme appears incompatible with National Planning Policy Framework and various other approved methods of impact appraisal and even when viewed under the Applicant's clearly favoured and insisted metrics such as the NNNPS of 2014 and the DMRB strong doubts remain over necessary compliance. In all cases much rests on the safety of the Applicant's traffic model which continues notably to lack independent peer review with only internal scrutiny/validation. (P17Deadline 6 Submission – 9.60 Applicant's response to Second Written Questions 3.1)</p>	<p>The benefits of the Scheme and how it complies with the National Planning Policy Framework (NPPF) are clearly defined in the Case for the Scheme (REP2-016).</p>
	<p>2. The A57 and North Glossopdale - incomplete traffic modelling for filtering traffic</p> <p>As regards the security of the traffic model, my particular concern has been the Applicant's self acknowledged and somewhat brazen reliance on a "rat run" filter through residential and semi-rural North Glossopdale. I have already identified a major lack of clarity around these intentions and now as a result of the "black hole" in the modelling, serious inconsistencies are starting to emerge.</p> <p>For example the Applicant claimed at D5; "The Hadfield Alternative, is not an alternative scheme. It is an existing alternative route, or rat-run, via Dinting Road and Shaw Lane in Glossopdale that traffic currently uses to avoid traffic congestion and delay on the A57 through Glossop" (TR010034-001102-TR010034_9.54.26 Applicants Comments on Deadline 4 submissions)</p> <p>However the Figure 5.5 on P333 of the CPRE submission of collected "BBA Documents" shows quite otherwise and that in fact the Hadfield Alternative is a</p>	<p>The Hadfield Alternative is not an alternative scheme. It is an existing alternative route that potentially allows traffic to bypass traffic congestion on the A57 Glossop High Street West/Dinting Vale. However the route described by National Highways in the Applicants Comments on Deadline 4 Submissions (response reference 9.54.26, REP5-022) is incorrect. The correct route referred to as the Hadfield Alternative is via the B6015 Norfolk Street/Woodhead Road, Cemetery Road, Park Road and Hadfield Road. However, the B6015 Norfolk Street, Talbot Street, Dinting Road and Shaw Lane also provides an alternative potential route for traffic to avoid traffic congestion on the A57 Glossop High Street West/Dinting Vale.</p> <p>The traffic modelling used for the assessment of the Scheme shows that with the Scheme some traffic reroutes via both the B6015 Norfolk Street, Talbot Street, Dinting Road and Shaw Lane and via the B6015 Norfolk Street/Woodhead Road, Cemetery Road, Park Road and Hadfield Road (Hadfield Alternative) to avoid traffic congestion and delay on the A57 Glossop High Street West/Dinting Vale. The increase in traffic on the B6015 Norfolk Street/Woodhead Road, Cemetery Road, Park Road and Hadfield Road (Hadfield Alternative) route due to the Scheme is up to 720 additional vehicles per day, which equates to up to a 15% increase compared to without the Scheme.</p>

Reference	IP Issue	National Highways Response
	<p>link between Brookfield and the B6105 Woodhead Road of which full interim route detail is yet to be disclosed.</p>  <p>(Page 503) CPRE Deadline 2 Submission - Cover Letter, Trans-Pennine Upgrade Stage 3 combined modelling and appraisal report, A57 Economic appraisal package, A57 Transport modelling package and A57 Transport forecasting Package reports). (See also Footnote *)</p> <p>The specifics remain to be shown by the Applicant but this does reveal a lack of command of their own evidence and their modelling to be insufficient and confused. Such discrepancies obviously have further bearing when considering the matter of the Glossopdale AQMA compliance where doubts have been raised regarding the viability of diversions. The Applicant in answer to the WQ2 7.4 asserts they have modelled the “Worst Case Scenario” (WCS) but then I think tacitly acknowledge that they have not! Obviously the true WCS is the one yet to be modelled; – “if traffic was somehow prevented or discouraged from using Dinting Road and Shaw Lane then additional traffic modelling would need to be undertaken to understand the likely traffic redistribution effects across the road network, which would not necessarily mean that traffic flows on any alternative route, such as the A57 through Glossop (including Glossop AQMA) would increase. This is because there are likely to be wider, knock-on traffic</p>	<p>As a result, there are no requirements for the Scheme to include any proposals to discourage traffic from using the B6015 Norfolk Street, Talbot Street, Dinting Road and Shaw Lane route. Consequently, there is no need in relation to the Scheme under examination for an assessment of any potential wider knock-on traffic redistribution effects arising from any restrictions on traffic using this route, since none are proposed.</p> <p>The impact and consequential effects of the additional traffic due to the Scheme on both the B6015 Norfolk Street/Woodhead Road, Cemetery Road, Park Road and Hadfield Road (Hadfield Alternative) and the B6015 Norfolk Street, Talbot Street, Dinting Road and Shaw Lane routes have been assessed by National Highways. The conclusion of this assessment is that the additional traffic on these roads due to the Scheme does not result in any adverse effects significant enough to trigger the need for any mitigation.</p>

Reference	IP Issue	National Highways Response
	<p>redistribution effects”. (Page 61 “Deadline 6 Submission -9.60 Applicant's response to Second Written Questions” 7.4)</p> <p>Obviously any “wider knock on traffic redistribution effects” that the Applicant envisages as possible in this WCS are themselves again an unknown that would need to be carefully evaluated for new adverse impacts resultant on inappropriate through traffic. Were the Scheme to be “operational” these would have clear potential to threaten community existence in an ongoing way on a possibly noncompliant basis. Also, as I described at D4, unacceptable infringements on designated Conservation areas within in the adopted HPBC Local Plan become a serious consideration. I would suggest some of these potential impacts are likely to be beyond the scope of possible “mitigation”.</p> <p>To summarise the Applicant should be able to satisfy the EA that diverting traffic could pass freely and safely through residential areas without severance issues and inflicting harm, a matter in serious doubt as HPBC have now noted; “More detailed analysis is required of the impacts of the increase in traffic using Shaw Lane and Dinting Road. The screening out of the consideration of the AQMA at Dinting is predicated on alternative routes across Glossop being readily utilised by vehicles. Our LIR questioned the suitability of the Shaw Lane and Dinting Road diversion “given this route has a higher number of roadside residential receptors” (paragraph 8.46). Even if feasible, such a diversion is likely to lead to negative impacts which have not been properly considered or mitigated. “(P44 HPBC Deadline 6 Submission – Response to the Examining Authority’s Second Written Questions (WQ2) 3.10) .</p> <p>Of course as HPBC also point out, in the WCS scenario the issue of traffic not diverting away from the Dinting AQMA remains a serious impediment to the scheme, with unacceptable exceedances in AQ then a serious possibility to be considered.</p> <p>In my view the Modelling as discussed that might clarify this situation should already have been placed before the Examination which is now at quite a late stage and there is a danger of the clock being run down to avoid scrutiny. However time does remain before the scheduled Examination close in the middle of May, so hopefully were such evidence to be commissioned it could still be duly prepared in time for full written or further oral examination.</p> <p>Footnote:</p>	

Reference	IP Issue	National Highways Response
	<p>HE551473-BBA-GEN-A57_AL_SCHEME-AS-TR-000002 P05 Information Risk Level -</p> <p>DRIVING OUTCOMES</p> <p>Figure 2-6 - Journey Time Validation Routes - PCF Stage 3</p>  <p>TPU Stage 3: Journey Time Routes</p> <ul style="list-style-type: none">Route 1: M62Route 2: A635Route 3: A628 and A616Route 4: A57Route 5: A628Route 6: A61Route 7: M1Route 8: A624Route 9: A560Route 10: Hadfield <p>(Page 117) CPRE Deadline 2 Submission - Cover Letter, Trans-Pennine Upgrade Stage 3 combined modelling and appraisal report, A57 Economic appraisal package, A57 Transport modelling package and A57 Transport forecasting Package reports)</p>	

Appendix A. Methodology and assumptions for National Highways' further carbon emission calculations

Issue	National Highways Response
<p>Provision of further details on cumulative carbon calculations undertaken in response to the request made by the ExA in Item 6c) and 6d) of the Issue Specific Hearing 2 Agenda for the A57 Link Roads project.</p>	<p>National Highways undertook further calculations of carbon following a request from the ExA in Item 6c) of the Issue Specific Hearing 2 Agenda for the A57 Link Roads project. For the operational CO2e emissions the following assumptions have been made in the calculations:</p> <ul style="list-style-type: none"> • The traffic data used for the further calculations of operational carbon is the same as that used for the CO2e emissions assessment presented in Environmental Statement Chapter 14 Climate and Case for the Scheme. • As per the Environmental Statement Chapter 14 Climate and Case for the Scheme the assessment has been undertaken for the area of detail traffic modelling as shown in Figure 2-1 (labelled in the figure as ADM cordon) and Figure 4-8 (showing the road link network) of the A57 Economic Appraisal Package (REP2-090). • As per the Environmental Statement Chapter 14 Climate and Case for the Scheme assessment calculations were undertaken for the opening year (2025) with and without the Scheme and design year (2040) with and without the Scheme. Emissions between 2025 and 2040 are interpolated between these years. Beyond 2040 emissions are held at the 2040 values. • For the further calculations National Highways speed band emission factors based on Defra Emission Factor Toolkit (EFT) v11, published in November 2021 were used. This is an update from the environmental statement which used emission factors based on EFT v10.1. However, it should be noted that EFT v11 does not fully reflect the most recent government policy and aspirations on electrification of the vehicle fleet. • EFT v11 compared to EFT v10.1: <ul style="list-style-type: none"> ○ Includes data relating to the UK vehicle fleet and associated emissions for the period between 2031 and 2050 inclusive. EFT v10.1 stopped at 2030 and emissions post 2030 were held at the 2030 values. ○ Includes greater uptake rates of electric vehicles, aligned to electric vehicle penetration rates as described in the worksheet labelled 'A1.3.9' of DfT's Databook (version 1.17, November 2021 for all road types (motorways, urban and rural) listed in the EFT. ○ However, the assumptions on greater uptake rates of electric vehicles predate announcements by the Government in 2021 on plans to increase the speed of electric vehicle uptake and do not take account of the Transport Decarbonisation Plan (TDP) published in July 2021. Assumptions in EFT v11: <ul style="list-style-type: none"> ▪ Predate the announcement by the Government in July 2021 to end the sale of new

Issue	National Highways Response
	<p>petrol and diesel vehicles by 2030, and that all new cars and vans will be required to be fully zero emission at the tailpipe by 2035. Assumptions within EFT v11 are for a phase out by the target date of 2040.</p> <ul style="list-style-type: none">▪ Predate the announcement by the Government in November 2021 to phase out new, non-zero emission heavy goods vehicles weighing 26 tonnes and under by 2035, with all new HGVs sold in the UK to be zero emission by 2040. Assumptions within EFT v11 do not include any electrification of heavy goods vehicles.• In addition to the use of National Highways speed band emission factors based on Defra EFT v11 for the update to operational carbon emissions, a sensitivity test was also undertaken based on the impact of the TDP. The sensitivity test is based on the rate of improvement as shown in Figure 2 of the TDP which has been applied to CO2e emissions calculated for the Scheme assessment. The TDP sensitivity test is intended to illustrate the impact of the Government's ambition and future vision for policy measures and targets and should not at this stage be considered to be a core scenario of projected future CO2e emissions. An upper and lower bound of CO2e emissions are calculated for the sensitivity test to reflect uncertainty until measures and targets become part of fully made Government policy and legislation.

Crown copyright (2022).

You may re-use this information (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence. To view this licence:

visit www.nationalarchives.gov.uk/doc/open-government-licence/

write to the Information Policy Team, **The National Archives, Kew, London TW9 4DU**,
or email psi@nationalarchives.gsi.gov.uk.

Printed on paper from well-managed forests and other controlled sources.

Registered office Bridge House, 1 Walnut Tree Close, Guildford GU1 4LZ
National Highways Limited registered in England and Wales number 09346363

