

A57 Link Roads

TR010034

**9.48 Outstanding comments on Written
Representations**

Rule 8(1)(c)(i)

Planning Act 2008

Infrastructure Planning (Examination Procedure) Rules 2010

February 2022

Infrastructure Planning

Planning Act 2008

The Infrastructure Planning (Examination Procedure) Rules 2010

A57 Link Roads Development Consent Order 202[x]

9.48 Outstanding comments on Written Representations

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1. Introduction

- 1.1.1. This document sets out National Highways' outstanding comments on the Written Representations submitted to the Examining Authority (ExA) on or before Deadline 2 (14 January 2022) namely;
- Anthony Rae (REP2-059)
 - Climate Emergency policy and Planning (CEPP) Written Representation and Appendices A to D (REP2-064, REP2-064, REP2-064, REP2-064, REP2-068) respectively;
 - Environment Agency (REP2-074); and
 - Paul Saunders (REP2-081).
- 1.1.2. National Highways has included its response to Anthony Rae's Deadline 3 submission 'Comments on submissions' for Deadline 2 (REP3-030) due to the strong connection of issues raised in his Written Representation and his Deadline 3 submission.
- 1.1.3. National Highways' response to CPRE Peak District and South Yorkshire Branch's Written Representation and Appendices A and B (REP2-069, REP2-070, REP2-071) is contained in a separate document, reference 9.52 'Comments on CPRE's Written Representation'.
- 1.1.4. National Highways has sought to provide comments on responses where it is helpful to the Examination to do so, for example where clarification is required on a statement made by an Interested Party or where National Highways considers that it would be appropriate for the Examining Authority to have National Highways' views in response to a matter raised by an Interested Party.
- 1.1.5. Where issues raised within the representation have been dealt with previously by National Highways, for instance in response to a question posed by the Examining Authority in its first round of written questions, National Highways response to Local Impact Reports or within one of the application documents submitted to the Examination, a cross reference to that response or document is provided. The information provided in this document should, therefore, be read in conjunction with the material to which cross references are provided.
- 1.1.6. In order to assist the Examining Authority, National Highways has not provided comments on every point made within a response, since as stated in paragraph 1.1.3 it may have been addressed already. For the avoidance of doubt, where National Highways has chosen not to comment on matters raised by Interested Parties this is not an indication National Highways agrees with the point or comment raised or opinion expressed.

2. Anthony Rae Written Rep (REP2-059)

Response reference:	Representation Issue	National Highways Response
9.48-1	<p>1 My name is Anthony Rae, and I am a transport & climate campaigner working at local to national levels. I've been a member of DfT project reference groups in the North of England for the last 2 decades and am the convener of a network of transport campaigners that over the last 4 years have engaged with Transport for the North urging them (successfully) to include a decarbonisation strategy at the core of their programme. I do not live in the scheme area (I'm based in West Yorkshire) but have a broad knowledge of the issues as a result of my membership of the DfT/TfN Trans-Pennine Tunnel reference group.</p> <p>2 This submission is confined to climate change impacts and carbon emission issues and in preparing it I've reviewed the detailed submission on that topic made by fellow campaigner Anne Robinson for CPRE Peak District/South Yorkshire. Consequently I've confined my contribution to what I believe is the essence of the argument and analysis. Within this I'm only dealing with operational, and not embedded, carbon.</p> <p>3 The argument in relation to climate change appears to rest on the quantitative evidence relating to the emissions tonnage impact of this scheme, and then the balance to be struck between statements in the National Networks NPS concerning the weight to be attached to that evidence and more recent developments in what is now the Net Zero (NZ) transport decarbonisation policy framework.</p>	
9.48-2	<p>4 The single sentence reference in NPS 5.17 – 'It is very unlikely that the impact of a road project will, in isolation, affect the ability of Government to meet its carbon reduction plan targets' - then links back to essentially identical statements in 5.16 and 3.8. The latter reference in 2014's NPS then connects back to 2013's Investing in Britain's future, whilst 5.16 establishes quite clearly how out of date is its connection to the current climate policy framework ('The Government has a legally binding framework to cut GHG emissions by at least 80% by 2050'.) It surely can be reasonably argued that 2020's adoption by government of an NZ target and then 2021's Transport Decarbonisation Plan (TDP) requires that more limited weight in general should be applied to what is essentially an assertion by a dated NPS that is not in itself supported by quantified evidence. The TDP itself acknowledges that the NPS is out of date (page 103, 2nd column) pending review. On the other hand, its emissions projections for cars (TDP figure 9), vans (figure 10) and HGVs (figure 13) establish an approximate quantification (notwithstanding the spread of the trajectory and the absence of precise data) for the major emissions reduction - around 75% - required by the scheme's 2040 design year.</p>	<p>Section 104 (2) of the Planning Act 2008 states that:</p> <p>In deciding the application the Secretary of State must have regard to—</p> <p><i>(a) any national policy statement which has effect in relation to development of the description to which the application relates (a "relevant national policy statement"),</i></p> <p><i>(aa) the appropriate marine policy documents (if any), determined in accordance with section 59 of the Marine and Coastal Access Act 2009;</i></p> <p><i>(b) any local impact report (within the meaning given by section 60(3)) submitted to the before the deadline specified in a notice under section 60(2),</i></p> <p><i>(c) any matters prescribed in relation to development of the description to which the application relates, and</i></p> <p><i>(d) any other matters which the Secretary of State thinks are both important and relevant to the Secretary of State's decision.</i></p> <p>Section 104 (3) states that:</p> <p><i>The Secretary of State must decide the application in accordance with any relevant national policy statement, except to the extent that one or more of subsections (4) to (8) applies.</i></p>

Response reference:	Representation Issue	National Highways Response
		<p>Subsections 4-8 are as follows:</p> <p><i>(4) This subsection applies if the Secretary of State is satisfied that deciding the application in accordance with any relevant national policy statement would lead to the United Kingdom being in breach of any of its international obligations.</i></p> <p><i>(5) This subsection applies if the Secretary of State is satisfied that deciding the application in accordance with any relevant national policy statement would lead to the Secretary of State being in breach of any duty imposed on the Secretary of State by or under any enactment.</i></p> <p><i>(6) This subsection applies if the Secretary of State is satisfied that deciding the application in accordance with any relevant national policy statement would be unlawful by virtue of any enactment.</i></p> <p><i>(7) This subsection applies if the Secretary of State is satisfied that the adverse impact of the proposed development would outweigh its benefits.</i></p> <p><i>(8) This subsection applies if the Secretary of State is satisfied that any condition prescribed for deciding an application otherwise than in accordance with a national policy statement is met.</i></p> <p>It is not considered that any of the subsections named in Section 104 (and set out above) are applicable as deciding the application in accordance with any relevant national policy statement would not lead to the United Kingdom being in breach of any of its international obligations; would not lead to the Secretary of State being in breach of any duty imposed on the Secretary of State by or under any enactment; would not be unlawful by virtue of any enactment; the benefits of the Scheme outweigh the adverse impacts, as demonstrated in Section 5 and 7 of the Case for the Scheme (REP2-036); and a condition prescribed for deciding an application otherwise than in accordance with a national policy statement is not met.</p> <p>Therefore whilst the Secretary of State may have regard to other matters they think are both important and relevant to their decision (including plans, strategies and policies aside from the NN NPS), it is clear the NN NPS, despite being in the process of being reviewed, remains the primary and extant policy framework for the determination of the Application and the Secretary of State must decide the application in accordance with it.</p> <p>Furthermore, the Government's Transport Decarbonisation Plan (2021) identifies that, while public transport, cycling and walking should be the first choice for those who can take it, it also states that (page 5) '<i>Our ambitious roads programme...will continue to reflect that in any imaginable circumstances the clear majority of longer journeys, passenger and freight, will be made by road; and that rural, remote areas will always depend more heavily on roads.</i>'</p>
9.48-3	<p>5 The emissions evidence for the A57 scheme is equally clear: '... in both the opening and design years the Scheme will lead to an increase in operational emissions ...' Environmental Statement (ES) 14.9.7 This increase is caused by the 'increased vehicle kilometres generated by the scheme' bid. However there are at least 2 issues associated with the precise quantification of that increase: i) what is the baseline against which that increase should be compared, and ii) that there are different versions of the 2025 and 2040 DM/DS tonnages. 14.6.4 in ES14 defines its baseline as emissions in the DM opening year i.e 2025 but it's not known</p>	<p>The Scheme introduces new sections of roads which bypass existing routes. These bypasses are longer offline routes than the current situation and in addition create capacity on the network which results in an increase in vehicle kilometres travelled and total emissions overall. Within the operational carbon emissions assessment this results in an overall dis-benefit for the Scheme.</p> <p>When considering the impact of the Scheme on operational carbon emissions the Do-Minimum (DM [without Scheme]) data should be compared to the Do-Something (DS [with Scheme]) data for both the opening year (2025) and the design year (2040).</p>

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	whether factors inside the modelling might have increased that baseline number above that of the most recent (pre-Covid) historic level e.g 2019 - an actual measured baseline - which would have the effect of reducing the scale of the subsequent increase in the DM-DS comparison.	<ul style="list-style-type: none"> Comparing DM and DS data for 2025: 737,485 and 742,808 tonnes carbon dioxide equivalent (tCO_{2e}) for operational carbon emissions respectively, gives a rise of 5325 tCO_{2e}, the equivalent of a 0.7% increase in emissions with the Scheme Comparing DM and DS data for 2040: 785,179 and 792,072 tCO_{2e} for operational emissions respectively, gives a rise of 6893 tCO_{2e}, the equivalent of a 0.9% increase in emissions with the Scheme. <p>Please refer to National Highways' response to Examining Authority's First Written Question 14.9 (REP2-021) with regards to the traffic data and vehicle emission rates used within the assessment of operational carbon.</p>
9.48-4	6 Secondly table 14-3 in the Preliminary Environmental Information Report (Nov 2020) had baseline 2025 DM tonnage for operational emissions as 761,085, increasing to 829,455 tonnes in DS 2040 - a rise of 9.0%; whereas ES14 (Nov 2021) has the equivalent figures as 2025 DM baseline 737,485 table 14.10 and DS 2040 as 792,072 - a rise of 7.4%. I cannot know the explanation for the discrepancy between the reports but the principal point to note is that carbon emissions associated with this individual scheme have increased rather than reduced, and are still higher in 2040 than in 2025 rather than lower. The traffic volume evidence from e.g. figures 4.1 and 7.1/2/5.6 from the Transport Assessment seem to indicate, but with imprecise quantification, that traffic levels as a result of the DS are higher in 2040 than in 2025.	<p>The operational GHG emission data calculations were revised for the ES, and so are not the same as those reported in the earlier assessment for the Preliminary Environmental Assessment Report (PEIR), published in November 2020. An update to the traffic modelling was undertaken for the environmental assessments reported in the ES to reflect information that became available since the traffic modelling for the PEIR was undertaken. The changes included Scheme design changes, an update to the uncertainty log to reflect latest information on future year development certainty and full rerun of the Variable Demand Response Model. Overall, the updated traffic modelling generally resulted in reduced future traffic flow, resulting in lower total traffic flows both with and without the Scheme in the 2025 opening year compared to the PEIR traffic modelling. In addition to this, the design changes made as a result of the 2020 statutory consultation, generally reduced the impact of the Scheme, resulting in a smaller change in total traffic flows with the Scheme than those expected in the PEIR traffic modelling.</p> <p>There is also a difference between the PIER and the ES referring to different reporting year that were used for background UK emissions, as reported by Department of Business, Energy and Industrial Strategy (BEIS). Under the 'National emission baseline' sub header, for the PIER, section 14.4.1 refers to the total background UK emissions for 2017 (the latest reporting year). For the Chapter 14 of the ES, section 14.6.2 refers to the total background UK emissions for 2018 (the latest reporting year). These have provided different values for the 'do-minimum' scenarios.</p> <p>Therefore, in the ES, comparing DM (without Scheme) data for the 2025 DM tonnage for operational emissions as 737,485 tCO_{2e}, increasing to 785,179 tCO_{2e} in the 2040 DM gives a rise of 6.5%. This indicates a year-on-year increase in emissions between 2025 and 2040 without the Scheme. This is because the traffic growth between 2025 and 2040 (without the Scheme) is not outweighed by improvements in the future year vehicle emissions used in the assessment (Defra Emissions Factor Toolkit (EFT v10.1). The EFT v10.1 was the latest version available at the time the carbon emissions assessment for the ES was undertaken.</p> <p>However, the Applicant would like to refer back to the response to ExAWQ1 8.13 (REP2-021):</p> <ul style="list-style-type: none"> Future year assumptions on the vehicle fleet within Defra EFT v10.1¹ predate the announcement by the Government to end the sale of new petrol and diesel 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. They also do not take account of the Transport Decarbonisation Plan (TDP) published in July 2021, which will lead to a

¹ Defra EFT 10.1 was the most recent version at the time of assessment

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		<p>substantive decrease in carbon emissions from road transport between now and 2050. The assessment of operational road traffic related carbon emissions presented in the Chapter 14: Climate of the ES (REP1-019) is therefore conservative.</p> <p>Defra published an updated Emissions Factors Toolkit in November 2021 (EFT v11), which extended emission factors for carbon to 2050. However, this update has not fully reflected the changes to fleet emissions for the accelerated move to zero emissions, nor has it reflected fleet growth assumptions for post Covid-19. National Highways' speed band emission rates based on the Defra EFT v11 became available in January 2022. Further analysis of road traffic carbon emissions using the revised EFT v11 emission factors is to be undertaken and a written response published by Deadline 6 of the DCO following a request from the Examining Authority in the Issue Specific Hearings 2 agenda (Item 6(d)).</p>
9.48-5	<p>7 It is therefore common ground that carbon emissions as a result of this scheme will increase, so the issue becomes: how should that be interpreted? - following on from NPS 5.17 etc as discussed above. We are being asked to focus on the proposition that the test to be applied is how the carbon impact of this one single road scheme compares to the quantity of the entire UK carbon budget (UKCB): hence the analysis submitted in ES 14.9.8-10. Instead I want to propose that the question of the scheme's increased carbon emissions should be examined in relation to two apparently contradictory analyses, which also bear on the ExA's identified questions at 8.3 a) and b), 8.5, and 8.14 'reducing traffic'. In each case I'm suggesting that the test should be: has the applicant provided sufficient evidence such that the apparent contradictions I'm identifying can be resolved in their favour? If not, then protecting the integrity of the UKCB pathway must prevail.</p>	
9.48-6	<p>8 Contradiction 1: that the provision of new road infrastructure by particular individual schemes resulting in increased emissions can at the same time be combined with a major reduction in overall roads emissions that national transport policy is requiring and forecasting. If this were to be the case – with increased emissions occurring at the locations of those schemes or along their corridors - at which other locations or transport modes are emissions being reduced to an even greater extent than the aggregate emissions pathway in order to compensate for the impact of that new infrastructure, bearing in mind that road emissions are almost the entirety of surface transport carbon? So emissions in those other locations/modes would need not just to reduce to the aggregate level of the TDP pathway but fall still further to allow for the increased emissions from individual road schemes.</p> <p>9 Argument: Whilst it is understood that vehicle electrification will make a substantial contribution to the aggregate transport reduction pathway, where is the evidence submitted by the applicant on both sides of the equation making up that aggregate pathway, such as: increased new road scheme emissions = X; further additional reduced emissions elsewhere = Y; therefore aggregate net emissions reductions = Z which is the emissions reduction pathway required by policy and law? If the applicant has not provided this evidence - I don't think they have - then it</p>	<p>A net increase in emissions from a particular policy or project is managed within the Government's overall strategy for meeting carbon budgets and the net zero target as part of an economy-wide transition.</p> <p>The Applicant considers the following, which is taken from the recent responses (submitted to PINS on 28 January 2022) to the SoS's consultation letter, is also relevant here:</p> <p>Overall compliance with, or attainment of, 'carbon budgets' and 'the 2050 zero target' under CCA 2008, and the 'UK's Nationally Determined Contribution' under the Paris Agreement are the responsibility of Government to manage as they are matters of national policy and not policies set at an individual scheme level.</p> <p>The NPS NN sets the national policy framework against which decision makers can evaluate the outcomes of proposed road infrastructure project. The NPS NN sets policy advice across a range of topics such as air quality, noise, biodiversity and carbon (see paragraphs 5.16 to 5.29 pages 49 and 50).</p> <p>The specific advice on the evaluation of carbon impacts from a proposed scheme and decision making considerations is set out in paragraphs 5.17 and 5.18 if the NPS NN respectively.</p> <p>“Applicant’s assessment</p> <p><i>5.17 Carbon impacts will be considered as part of the appraisal of scheme options (in the business case), prior to the submission of an application for DCO. Where the development is subject to EIA, any Environmental Statement will need to describe an assessment of any likely significant climate factors in</i></p>

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	would be reasonable for ExA to conclude that this contradiction cannot be resolved except by refusing individual new road schemes, recognising that there is a very substantial cumulative pipeline of such schemes being developed in accordance with RIS2&3	<p><i>accordance with the requirements in the EIA Directive. It is very unlikely that the impact of a road project will, in isolation, affect the ability of Government to meet its carbon reduction plan targets. However, for road projects applicants should provide evidence of the carbon impact of the project and an assessment against the Government’s carbon budgets.</i> [our emphasis].</p> <p>“Decision making</p> <p>5.18 <i>The Government has an overarching national carbon reduction strategy (as set out in the Carbon Plan 2011) which is a credible plan for meeting carbon budgets. It includes a range of non-planning policies which will, subject to the occurrence of the very unlikely event described above, ensure that any carbon increases from road development do not compromise its overall carbon reduction commitments. The Government is legally required to meet this plan. Therefore, any increase in carbon emissions is not a reason to refuse development consent, unless the increase in carbon emissions resulting from the proposed scheme are so significant that it would have a material impact on the ability of Government to meet its carbon reduction targets.</i>” [our emphasis].</p> <p>The NPS NN requires assessment against the Government’s climate reduction targets i.e. the carbon budgets which are set at a national geographical scale. It does not require assessment against any local or regional targets. This is because the Government has not identified or adopted any carbon reduction targets at a scale smaller than the UK as a whole i.e. National Carbon Budgets. The results of this comparison against carbon budgets are provided in Table 14-16 of Chapter 14 of the ES (REP1-019), and is reproduced here:</p> <div><p>Table 14.16: Project GHG emissions against relevant budgets</p><table><tr><th rowspan="2">Project stage</th><th rowspan="2">Estimated total carbon over Carbon Budget (tCO₂e)</th><th rowspan="2">Net CO₂ project GHG emissions (tCO₂e)</th><th colspan="3">Relevant Carbon Budget</th></tr><tr><th>4th Carbon budget 2023-27</th><th>5th Carbon budget 2028-32</th><th>6th Carbon budget 2033-37</th></tr><tr><td>Construction</td><td>38,970</td><td>38,970</td><td>38,970</td><td>-</td><td>-</td></tr><tr><td>Operation</td><td>9,912,678</td><td>77,371</td><td>16,286</td><td>29,235</td><td>31,850</td></tr><tr><td>Total</td><td>9,951,648</td><td>116,341</td><td>55,256</td><td>29,235</td><td>31,850</td></tr></table></div> <p>The residual (net) effect of the Scheme, due to construction, would be 38,970 tCO₂e. Over 60 years of operation, the net effect of the scheme would be 399,867 tCO₂e arising from road user emissions, and 1,160 tCO₂e other operational emissions, leading to a total net effect, including construction of 439,997 tCO₂e net emissions over the whole life cycle of the Scheme.</p> <p>With respect to the Government’s ability to meet its legislated Carbon Budgets, the overall (net) residual effect of the scheme in the Fourth Carbon Budget period is a 0.0028% contribution to the budget. The overall net effect on the Fifth Carbon Budget will be 0.0017% of the budget. The overall net effect on the Sixth Carbon</p>	Project stage	Estimated total carbon over Carbon Budget (tCO ₂ e)	Net CO ₂ project GHG emissions (tCO ₂ e)	Relevant Carbon Budget			4 th Carbon budget 2023-27	5 th Carbon budget 2028-32	6 th Carbon budget 2033-37	Construction	38,970	38,970	38,970	-	-	Operation	9,912,678	77,371	16,286	29,235	31,850	Total	9,951,648	116,341	55,256	29,235	31,850
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		Budget will be 0.0033% of the budget. This will not generate a significant impact on the UK's ability to meet its budget.
9.48-7	<p>10 Contradiction 2: That additional road capacity which is required to be provided to cater for increased traffic volumes (which have been forecasted) can at the same time be combined with the reduction in traffic volumes which other analyses are suggesting so as to be compatible with the overall roads decarbonisation pathway, recognising that vehicle electrification on its own has been demonstrated to be insufficient to meet that pathway.</p> <p>11 Argument: The academic and other analysis at the moment is indicating that vehicle electrification on its own cannot produce sufficient decarbonisation and that therefore reduction in vehicle trips/length will also be required: 'Judging by the analysis at a national level, reductions of at least 20% are appropriate for a pathway to net zero by 2050; larger reductions (perhaps 50- 60%) are necessary for a pathway to net zero by 2030'. Transport for Quality of Life The last chance saloon: we need to cut car mileage by at least 20% December 2021 and citing analyses by CREDS, Green Alliance, and Welsh and Scottish governments. So if car/vehicle mileage has to be constrained in order to deliver the emissions reduction pathway, what is the justification for providing additional road capacity that is demonstrated will induce increased road travel? Neither the applicant or the DfT in its TDP have reflected on this contradiction and how it might be resolved - in a way which might be informative to the ExA - and therefore it should be appropriate for the ExA to at least address this issue (as per its Q 8.14 'Have appropriate carbon-reduction measures been secured for the operational phase, including but not limited to... reducing traffic?')</p>	<p>The assessment in Chapter 14 of the ES (REP1-019) takes into careful consideration government policy position, including that set out in the NPSNN, to ensure that any conclusions are in line with national policy and cognisant of the UK's approach to reducing GHG emissions.</p> <p>Furthermore, carbon reduction targets have been set for the design and construction stages that are aligned with National Highways Net Zero Highways Plan as a project carbon management plan compliant with the project level requirements of PAS 2080 has been produced and implemented on the scheme. This is included as a target that has been set by the appointed Principal designer and Contractor for the Scheme (refer to section 2.2.9 of Chapter 2 of the ES (REP2-005). It is embedded into the Scheme design process to fully embed the carbon reduction hierarchy (Avoid / Prevent, Reduce, Remediate) in the project team's ways of working (refer to section 14.8.3 of Chapter 14 of the ES).</p> <p>A key part of design development is to implement the carbon reduction hierarchy (Build Nothing, Build Less, Build Clever, Build Efficiently) to identify additional opportunities for carbon savings. This is taking place for the detailed design development currently being undertaken and a range of specific opportunities are being considered and assessed. PAS 2080 is the lead technical standard for carbon reduction on infrastructure schemes, as such it is the most suitable means of minimising carbon released. This process is embedded at design stage where it is recognised that most carbon savings are achieved.</p> <p>Reducing GHG emissions has been an important consideration in the development of the Scheme, and the Environmental Statement describes embedded mitigation measures which will reduce emissions. The embedded mitigation measures for the construction and operational phase of the Scheme are provided in Table 14-11 of Chapter 14 of the ES. Additionally, specific details on these measures can be found elsewhere within the application as follows:</p> <ul style="list-style-type: none"> • creating a network of cycleways and footways that would encourage active travel and reduce the reliance on vehicle use (see National Highways' response to question 8.14 in the Examining Authority's First Written Questions REP2-021) • potential for renewable energy installations and generation (see the Applicant's response (REP3-021) to Derbyshire County Council at Deadline 3) • opportunities for habitat creation and protection in relation to offsetting and resilience (see National Highways' response to question 8.14 in the Examining Authority's First Written Questions REP2-021) • behavioural change and cooperation between local authorities, residents and businesses to reduce carbon emissions (see National Highways' response to question 8.14 in the Examining Authority's First Written Questions REP2-021)
9.48-8	<p>12 <i>Conclusion</i>: In both these cases the applicant is placing a bet on the future - that additional road capacity, induced extra traffic, and increased emissions even by 2040 can somehow be made compatible with radical carbon reductions - although there is no detailed quantification to substantiate that bet. This is also in the context, solely applicable to transport, where emissions in pre-Covid 2019 were</p>	<p>To reiterate, the Government's Transport Decarbonisation Plan (2021) identifies that, while public transport, cycling and walking should be the first choice for those who can take it, it also states that (page 5) '<i>Our ambitious roads programme...will continue to reflect that in any imaginable circumstances the clear majority of</i></p>

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	still higher than the Climate Change Act’s 1990 baseline. If the applicant’s case relating to climate impacts, and the contradictions it creates, cannot be sustained by current analysis, now in a Net Zero context, then the 2022 decisionmaker should place greater weight on providing more certainty that the surface/road transport emissions pathway of the TDP and government NZ strategy will be protected.	<i>longer journeys, passenger and freight, will be made by road; and that rural, remote areas will always depend more heavily on roads.’</i> This statement supports the need to continue to improve the road network. The National Highways Net Zero Plan states that, while road travel represents a higher carbon way to travel in the UK today, this is changing fast. The Net Zero Plan sets out National Highways aims to support how we will have net zero travel on our roads by 2050.

3. Anthony Rae Comments on Submissions for Deadline 2 (REP3-030)

Response reference:	Representation Issue	National Highways Response
9.48-9	<p>In preparing this submission I have reviewed the National Highways response to ExA questions 8.1, 8.3, 8.4, 8.5, 8.13 and 8.14 in 9.7 Applicant's response to Examining Authority's First Written Questions; and also the submission of CPRE thereon and the various documents this cites.</p> <p>Within NH 9.7 I note the following (the relevant clauses are highlighted):</p> <p>'National Highways' position is that, in accordance with the NN NPS, only a comparison with national carbon reduction budgets is relevant. Other carbon budgets, for example Local Carbon Budgets as defined by local or regional, are not defined in the relevant NN NPS, nor in the Climate Change Act or any dependent legislation. These are not therefore considered to have legal force when it comes to examining the suitability of the Scheme for its impact on ability to reduce carbon emissions.' <i>response to 8.1 c</i></p> <p>'The approach taken in Chapter 14 of the ES (REP1-019) is in line with DMRB LA 114 which, in context with the NN NPS paragraph 5.18 states it is considered unlikely that projects will in isolation conclude significant effects on climate and that <i>'the assessment of projects on climate shall only report significant effects where increases in GHG emissions will have a material impact on the ability of Government to meet its carbon reduction targets'</i>. The NN NPS therefore requires assessment against national carbon targets, and the only legislated targets are the carbon budgets. It should also be noted that there are no sectoral targets, for example for transport, that are legislated for and one sector may be balanced against another in the economy, so assessment against sectoral or sub national / local targets is outside targets that are legislated for.' 8.3 a</p> <p>'the increase in GHG emissions associated with the Scheme is not a reason to refuse development consent. The increase would have no material impact on the ability of the UK Government to meet its carbon reduction targets and so the proposed development does not give rise to any conflict with paragraph 5.18 of the NN NPS.' 8.4</p> <p>'... the High Court concluded that the total amount of carbon emissions from the schemes listed in RIS2 programme is de minimis in the context of appropriate comparators for assessing the effect on climate change objectives. Since that is the conclusion reached in relation to all schemes within RIS 2, National Highways considers that the methodology is not flawed, and the Scheme can be seen as a small part of an overall programme which is <i>de minimis</i> in terms of its impact upon carbon reduction commitments.' 8.5</p> <p>'National Highways do not consider GHG emissions from the Scheme alone, or on a cumulative basis, will have a significant effect on the UK's ability to comply with</p>	

Response reference:	Representation Issue	National Highways Response
	its carbon budgets. Based on these conclusions, the consideration of cumulative impacts across the RIS is therefore a matter for the UK Government. 8.4	
9.48-10	<p>I believe that the effect of these statements taken together, namely that:</p> <ul style="list-style-type: none"> the purposes, intentions and impacts of local or regional carbon budgets are set aside, thus undermining their implementation. with more than half the 60 year period towards the net zero target already having been passed, it is argued that it is still possible for transport emissions – still at approximately the 1990 baseline level in pre-Covid 2019 - to potentially increase because this can be compensated for by reductions in other sectors. even an acknowledged increase in emissions for an individual scheme (rather than e.g an insufficiency in the amount of reduction) is not regarded as a defect. not just the particular A57 scheme but all the schemes listed within RIS2 are regarded as having a <i>de minimis</i> effect; and that responsibility for the cumulative emissions impact of all road infrastructure schemes is regarded as a responsibility not of national highways as scheme promoter and implementer, but instead the government. <p>..... Then with all these kinds of constraints upon legitimate argument or grounds for objection, it is difficult to see how the impact of new road infrastructure on the future quantity of road vehicle emissions, as influenced by the volume of traffic induced by that infrastructure, can be considered at all for the purposes of decision-making.</p>	<p>The Applicant would like to address each bullet as follows:</p> <ul style="list-style-type: none"> Bullet 1 – The Applicant maintains that there is no requirement to assess the significance of the scheme on regional or local carbon budgets and that the NPS NN does not require such an assessment. In setting carbon budgets Parliament has not imposed any legal duty upon local authorities to attain any particular targets, whether for carbon budgets or for net zero 2050. i.e. there are no legal duties which require particular geographical areas within the UK to achieve particular reductions in carbon emissions by particular dates. The Government sets carbon budgets at a national level in accordance with the CCA 2008. Carbon budgets are not produced at a local or regional level. Bullet 2 – The Applicant does not have anything further to add Bullet 3 – The Applicant does acknowledge the importance of minimising the increase in emissions, and is actively seeking to minimise them through mitigation. DMRB LA 114 states that: <i>'Projects shall seek to minimise carbon emissions in all cases to contribute to the UK's target for net reduction in carbon emissions'</i>. This requirement applies whether or not the Scheme is anticipated to generate a significant effect on climate. By applying and fully embedding the carbon reduction hierarchy set out in LA 114: Avoid / Prevent, Reduce, Remediate, carbon reductions have been targeted and are prioritised at all stages of the development Bullet 4 and 5 – The Applicant does not have anything further to add.
9.48-11	<p>In which case, without any kind of procedural constraint or disincentive, this would have the perverse consequence of encouraging further and additional provision of road capacity, which would be likely to increase volumes of road traffic, which would in turn be likely to increase the volume of carbon emissions generated and measured on an annual basis, particularly in the 2020s when the percentage share of electric vehicles will still be limited. This would be contrary to the emissions reduction pathway of the governments Net Zero strategy And its Transport Decarbonisation Plan. It would also lead to the undermining or contradicting of transport decarbonisation plans being developed by other public authorities.</p>	<p>The main pathway element recommended by the CCC for transport and transport infrastructure is electrification of the national fleet. This will require a fit-for-purpose road network with adequate capacity. The CCC's 'core' and 'further ambition' scenarios both include an element of modal shift to non-road transport. However, road transport remains the central focus of policy and will continue to require appropriate infrastructure This is supported by the NPS NN which states that generation of emissions is in itself not a reason to refuse development consent, particularly when the magnitude of these emissions is small in comparison with the reductions which will be generated by improvements such as electrification of the fleet.</p> <p>Furthermore, the Government's Transport Decarbonisation Plan (2021) identifies that, while public transport, cycling and walking should be the first choice for those who can take it, it also states that (page 5) <i>'Our ambitious roads programme...will continue to reflect that in any imaginable circumstances the clear majority of longer journeys, passenger and freight, will be made by road; and that rural, remote areas will always depend more heavily on roads.'</i></p>

4. Climate Emergency policy and Planning (CEPP) Written Representation (Dr Andrew Boswell)

4.1. Summary of written rep

- 4.1.1. This Written Representation claims that the scheme's ES is unlawful due to the lack of assessment of the cumulative greenhouse gas (GHG) emissions, which is required by the EIA Regulations. It also claims that the traffic modelling methodology produces an underestimate for the carbon emissions associated with the Scheme.
- 4.1.2. In paragraph 61 of section 6 Conclusions of the Written Representation, Dr Boswell lists four issues that need to be addressed by the Applicant, as follows:
- A57 should be assessed against the 'domestic transport emissions' delivery pathway in the Net Zero Strategy
 - The BCR for the A57 scheme needs to be recalculated against the new carbon prices from the Government, and the three other issues that I have outlined
 - The Applicant must indicate how they have quantified and assessed cumulative carbon impacts with other developments and schemes, as distinguished from the carbon impacts of the scheme in solus, and consistent with the EIA Regulations
 - The Applicant must indicate how they have addressed local, regional and national carbon impact assessment.

4.2. National Highways response

- 4.2.1. In relation to section 1.3 of the CEPP Written Representation on relevant documents from 4 other DCO schemes, the Applicant submitted responses to the additional consultations for the DCOs that were requested by the SoS on 26 January 2022. It is the Applicant's position that these responses are also relevant to this Scheme. These are:
- A1 in Northumberland – Morpeth to Ellingham (TR010059)
 - M54 To M6 Link Road Scheme (TR010054)
 - M25 junction 10/A3 Wisley interchange improvement (TR010030)
 - M25 junction 28 improvements (TR010029)
- 4.2.2. The Applicant also responded to the SoS consultation letter for the A38 Derby Junctions (TR010022) on 2 February 2022.
- 4.2.3. Please see responses to each of the 4 issues raised by Dr Boswell in our response below.

4.3. A57 should be assessed against the ‘domestic transport emissions’ delivery pathway in the Net Zero Strategy

- 4.3.1. The assessment of operational road traffic related carbon emissions presented in the Chapter 14: Climate of the ES (REP1-019) is based on National Highways speed band emission rates which use the Defra Emissions Factors Toolkit (EFT v10.1). These emission rates were published in August 2020 and were the latest available at the time the emissions modelling was undertaken and included assumptions about future fleet mixes assumed at that time. EFT v10.1 included emission factors up to and including 2030.
- 4.3.2. Future year assumptions on the vehicle fleet within Defra EFT v10.1 predate the announcement by the Government to end the sale of new petrol and diesel 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. They also do not take account of the Transport Decarbonisation Plan (TDP) published in July 2021, which will lead to a substantive decrease in carbon emissions from road transport between now and 2050. The assessment of operational road traffic related carbon emissions presented in the Chapter 14: Climate of the ES [REP1-019] is therefore conservative.
- 4.3.3. Defra published an updated Emissions Factors Toolkit in November 2021 (v11), which extended emission factors for carbon to 2050. However, this update has not fully reflected the changes to fleet emissions for the accelerated move to zero emissions, nor has it reflected fleet growth assumptions for post Covid-19. National Highways’ speed band emission rates based on the Defra Emissions Factors Toolkit v11 became available in January 2022. Further analysis of road traffic carbon emissions using the revised EFT v11 emission factors is to be undertaken and a written response published later in the examination period following a request from the Examining Authority in the Issue Specific Hearings 2 agenda (Item 6(d)), this will be issued by Deadline 6 of the DCO.

4.4. The BCR for the A57 scheme needs to be recalculated against the new carbon prices from the Government

- 4.4.1. The assessment of operational road traffic related carbon emissions presented in the Chapter 14: Climate of the ES (REP1-019) is based on National Highways speed band emission rates which use the Defra Emissions Factors Toolkit (EFT v10.1). These emission rates were published in August 2020 and were the latest available at the time the emissions modelling was undertaken and included assumptions about future fleet mixes assumed at that time. EFT v10.1 included emission factors up to and including 2030.
- 4.4.2. Future year assumptions on the vehicle fleet within Defra EFT v10.1 predate the announcement by the Government to end the sale of new petrol and diesel 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. They also do not take account of the Transport Decarbonisation Plan (TDP) published in July 2021, which will lead to a substantive decrease in carbon emissions from road transport between now and 2050. The assessment of operational road traffic related carbon emissions

presented in the Chapter 14: Climate of the ES (REP1-019) is therefore conservative.

- 4.4.3. Government policy would likely have a positive effect on customer purchasing choices if properly supported by electric charging point infrastructure, which could reduce the operational greenhouse gas emissions. Conversely, it could result in motorists delaying the purchase of a new vehicle and continue to drive an older petrol/diesel/hybrid vehicle. However, these changes in absolute emissions would occur with or without the Scheme and it is important to note that the ES reports the change in emissions due to the Scheme.
- 4.4.4. Also, as emission rates included in EFT v10.1 were for the period to 2030 an assumption of no change in emission factors beyond 2030 was made. The assessment of design year (2040) emissions is therefore particularly conservative given the average emissions of the fleet are likely to change substantially beyond 2030.
- 4.4.5. As stated above, further analysis of road traffic carbon emissions using the revised EFT v11 emission factors is to be undertaken and this response will be issued by Deadline 6 of the DCO.
- 4.4.6. The monetised cost of the additional carbon due to road users (greenhouse gas (GHG) emissions) that is reported in the Case for the Scheme (REP2-016) was based on the DfT carbon values that were available at the time of the DCO application publication (June 2021). A high carbon sensitivity test was undertaken, as advised by DfT in lieu of the forthcoming updates, which confirmed the revised carbon value would not reduce the Scheme's benefit cost ratio (BCR) significantly. Subsequently, a sensitivity test has been undertaken using the latest carbon values as published by BEIS in September 2021, and although this results in a larger GHG disbenefit it would not significantly reduce the BCR. The BCR is currently shown as 2.45 in section 5.4 of the Case for the Scheme (APP-182), however this would reduce to 2.33 once the BEIS carbon values from September 2022 are applied to the GHG calculation. Note that sensitivity test has only considered the change in carbon values, it has not taken account of changes to the GHG emissions as a result of using EFT v11. A full update to the BCR would be undertaken at a later design stage of the Scheme. The BCR for a scheme is not normally updated at each the point that BEIS/DfT publishes revised valuation data.

4.5. The Applicant must indicate how they have quantified and assessed cumulative carbon impacts with other developments and schemes, as distinguished from the carbon impacts of the scheme in solus, and consistent with the EIA Regulations.

- 4.5.1. The greenhouse gas assessment that underpins the Scheme's effect on climate is calculated in accordance with the DMRB standards LA 114 and LA 105. Broadly, the steps that are followed consist of:
 - 1) Calculate construction-based emissions using the National Highways Carbon Tool

- 2) Calculate road user emissions consistent with DMRB LA 105
- 3) Calculate other operational emissions
- 4) Compare total emissions to UK Carbon Budgets as defined by the Government through the Climate Change Act (2008) as amended in 2019.

- 4.5.2. The assessment concludes that the Scheme will not generate a significant impact on the UK's ability to meet its budget, in isolation. This is in accordance with NPS NN, which acknowledges that the emissions from the construction and operation of a road scheme are likely to be negligible compared to total UK emissions.
- 4.5.3. Additionally, the emissions from the Scheme are considered against the national context of continuing economic activity through the comparison of the resulting emissions from construction and operation of the Scheme with the UK carbon budgets, which consider sectors across the economy. Were the Scheme to have a material effect (which it does not), it would be because, acting together with the other economic activity factored into a carbon budget, the target budget would be made significantly harder to achieve.
- 4.5.4. National Highways' position is that, in accordance with the NPS NN, only a comparison with national carbon reduction budgets is relevant. Other carbon budgets, for example Local Carbon Budgets as defined by local or regional authorities, are not defined in the relevant NPS NN, nor in the Climate Change Act or any dependent legislation. These are not therefore considered to have legal force when it comes to examining the suitability of the Scheme for its impact on ability to reduce carbon emissions.
- 4.5.5. The following is taken from the recent responses (submitted to PINS on 28 January 2022) to the SoS's consultation letter, referred to in section 1.3 of the CEPP Written Representation, that requested assessment of the cumulative effects of Greenhouse Gas emissions from the scheme 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 Roads Investment Strategy RIS 1 and RIS 2 at a national level). In responding to the CEPP Written Representation, the Applicant considers that this is relevant here, that it shows that the assessment has not been in solus, and it is consistent with the EIA Regulations.
- 4.5.6. National Highways follows the advice set out in the Design Manual for Roads and Bridges (DMRB) for the design and evaluation of the impact of any of its road schemes. This ensures consistency in how any scheme is progressed and how the outcomes are evaluated.
- 4.5.7. In respect of the assessment of cumulative effects, DMRB Chapter LA 104-Environmental assessment and monitoring² provides the following overarching advice on the assessment and evaluation of cumulative impacts on pages 17-18:
"Paragraph 3.21 Environmental assessments shall assess cumulative effects which include those from:

- 1) *a single project (e.g. numerous different effects impacting a single receptor); and*
- 2) *different projects (together with the project being assessed).*

Paragraph 3.21.2 The assessment of cumulative effects should report on:

- 1) *roads projects which have been confirmed for delivery over a similar timeframe;*
- 2) *other development projects with valid planning permissions or consent orders, and for which EIA is a requirement; and*
- 3) *proposals in adopted development plans with a clear identified programme for delivery.*

Paragraph 3.22 The assessment of cumulative effects shall:

- 1) *establish the zone of influence of the project together with other projects;*
- 2) *establish a list of projects which have the potential to result in cumulative impacts; and*
- 3) *obtain further information and detail on the list of identified projects to support further assessment."*

4.5.8. The DMRB LA 114, Climate³ describes the approach to be undertaken to assess and evaluate the climate impacts and adaptation for schemes. This is set out in Chapter 14 of the environmental statement for the Scheme.

4.5.9. The assessment of carbon dioxide (CO₂) undertaken has assessed the construction and operational effects of the Scheme as follows:

- Construction – the materials and energy required to construct the Scheme;
- Operational – emissions produced by vehicles using the completed Scheme and associated journeys from the wider road network that incorporate or have a change in their journey following opening of the scheme; emissions produced by maintenance activities over its design life (i.e. 60 years).

4.5.10. The traffic modelling for the Scheme has been undertaken in line with Transport Appraisal Guidance published⁴ by the Department for Transport (DfT). The Transport Assessment Report for the Scheme has been submitted to the DCO examination (APP-185). The traffic model used for the Scheme has been developed in line with DfT requirements and is **inherently cumulative**. This is because, in brief, traffic models used to support scheme assessment contain data about the following:

- 1) The Scheme and adjoining Strategic Road Network and local road network;
- 2) Other schemes promoted by National Highways in the near vicinity of the proposed scheme with high certainty that they are to be progressed i.e. progressed beyond preferred route announcement stage;
- 3) They are based on discussions with the relevant planning authority, of foreseeable developments promoted by third parties as likely to be developed in a similar timeline to the proposed National Highways' scheme. Knowing

⁴ <https://www.gov.uk/guidance/transport-analysis-guidance-tag>

where the proposed third party development is to be sited, the extents and types of development, and the timescales of when it is to be completed are requirements to ensure that the third party developments can be reasonably described in the traffic model; and

- 4) National government regional growth rates which include a representation of likely growth rates excluding known planning developments already included in the traffic model. This is represented by DfT's NTEM/TEMPRO⁵ growth factors for car usage, and growth in freight is derived from DfT's National Transport Model⁶.

- 4.5.11. In terms of operational carbon, when National Highways evaluates the changes in CO₂e emissions of their proposed schemes they do so by comparing changes in the road traffic on the Strategic Road Network and local road network between the 'without scheme scenario' and the 'with scheme scenario'. This takes into account the assessment of the proposed scheme and all other developments likely to have an influence on the proposed road scheme and on the area the proposed road scheme is likely to influence.

- 4.5.12. In essence, as both with and without scheme scenarios already include all likely developments and traffic growth factors, the assessment is inherently cumulative as regards operational carbon emissions. This is a state of affairs recognised in general terms in paragraph 3.4.4 of the Planning Inspectorate's Advice Note 17 ("Cumulative effects assessment relevant to nationally significant infrastructure projects"), the first two sentences of which state that:

"Certain assessments, such as transport and associated operational assessments of vehicular emissions (including air and noise) may inherently be cumulative assessments. This is because they may incorporate modelled traffic data growth for future traffic flows. Where these assessments are comprehensive and include a worst case within the defined assessment parameters, no additional cumulative assessment of these aspects is required (separate consideration may be required of the accumulation or inter-relationship of these effects on an individual set of receptors e.g. as part of a socio economic assessment)."

4.6. The Applicant must indicate how they have addressed local, regional and national carbon impact assessment

- 4.6.1. Again, the Applicant considers the following, which is taken from the recent responses (highlighted earlier, submitted to PINS on 28 January 2022 and 2 February 2022) to the SoS's consultation letter, is also relevant here.
- 4.6.2. In line with the requirements set out in Climate Change Act 2008⁷ (CCA 2008), Part 1, Section 4 (see below) parliament has set carbon budgets⁸ at the national scale.

⁵ <https://www.gov.uk/government/publications/tempo-downloads>

⁶ <https://www.gov.uk/government/publications/national-transport-model-ntmv2r-overview-of-model-structure-and-update>

⁷ https://www.legislation.gov.uk/ukpga/2008/27/pdfs/ukpga_20080027_en.pdf

⁸ <https://www.gov.uk/guidance/carbon-budgets>

“Carbon budgets

1) *It is the duty of the Secretary of State—*

(a) to set for each succeeding period of five years beginning with the period 2008-2012 (“budgetary periods”) an amount for the net UK carbon account (the “carbon budget”), and

*(b) to ensure that the **net UK carbon** account for a budgetary period does not exceed the carbon budget” [our emphasis].*

Carbon budgets cover the following 11 sectors:

- 1) Surface Transport
- 2) Buildings
- 3) Manufacture and Construction
- 4) Electricity Generation
- 5) Fuel Supply
- 6) Agriculture and land use, land use change and forestry
- 7) Aviation
- 8) Shipping
- 9) Waste
- 10) Fluorinated gases (F-gases)
- 11) Greenhouse gas removals

4.6.3. The national carbon budgets are themselves cumulative, i.e. the sum of carbon emissions from a range of sectors between now and the end of the 6th carbon budget (2037).

4.6.4. 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. Specifically:

- a) In setting carbon budgets parliament has not imposed any legal duty upon local authorities to attain any particular targets whether carbon budgets or for net zero 2050, i.e. there are no legal duties which require particular geographical areas within the UK to achieve particular reductions in carbon emissions by particular dates.
- b) Neither Parliament nor Government has identified any sectoral targets for carbon reductions related to transport, or any other sector. There is no requirement in the CCA 2008, or in Government policy, for carbon emissions for all road transport to become net zero. This was explained in the ***R(Transport Action Network) v Secretary of State for Transport*** [2021] EWHC 2095 (Admin) (“the TAN case”) in which Holgate J held that:

“...there is no sectoral target for transport, or any other sector, and that emissions in one sector, or in part of one sector, may be balanced against better performance in others. A net increase in emissions from a particular policy or project is managed within the government's overall strategy for meeting carbon budgets and the net zero target as part of “an economy-wide transition.”

- c) A net increase in emissions from a particular policy or project is thus managed within the Government's overall strategy for meeting carbon budgets and the net zero target as part of an economy-wide transition.
- 4.6.5. There is, therefore, no legal requirement to assess the impact of an individual project against the total carbon emissions from RIS 1 and RIS 2.
- 4.6.6. To conduct an impact assessment at a local or regional scale some form of baseline would need to be identified, and that baseline would need to comprise:
- a) A forecast of carbon emissions from all cumulative sources relevant to the geographic / sectoral scale being adopted;
 - b) A forecast which addresses the time frame relevant to the proposed road scheme;
 - c) A forecast which reflects existing government policy to attain the 6th carbon budget and net zero 2050; and
 - d) A forecast which does not include carbon emissions from the proposed road scheme (to avoid double counting).
- 4.6.7. The Government sets carbon budgets at a national level in accordance with the CCA 2008. Carbon budgets are not produced at a local or regional level.
- 4.6.8. National Highways is therefore unable to produce a baseline at a local or regional scale itself. Such a baseline would have to be consistent with the Government's understanding of the likely implications of its policies over time in a particular geographic area. In relation to carbon reductions, those policies are myriad and extend to matters beyond the planning system and into issues relating to the use of fiscal incentives / disincentives to manage carbon emissions across the country as a whole.
- 4.6.9. By submitting their response to requests in Item 6(d) of Issue Specific Hearing 2 (ISH2) to respond in writing with respect to the SoS's consultation letter, the Applicant considers that this will reinforce their position that the assessment of GHG has been undertaken in an adequate and compliant way, both for the effects due to the Scheme and the assessment of cumulative effects.
- 4.6.10. Relevant to this request for information is that an environmental statement is required to include such information as is reasonably required to assess the environmental effects of the development and which the applicant can reasonably be required to compile having regard to current knowledge (see *R. (Khan) v London Borough of Sutton* [2014] EWHC 3663 (Admin) and *Preston New Road Action Group v Secretary of State for Communities and Local Government* [2018] Env. L.R. 18). There is no reasonable basis upon which National Highways can assess the carbon emissions impact of the Scheme at a local or regional level and it is not required to do so by law or by the National Policy Statement for National Networks (NPS NN). Accordingly, National Highways is not in a position to provide an assessment of the cumulative effects of the greenhouse gas emissions for the Scheme for anything other than at the national level carbon budgets.

5. Environment Agency (REP2-074)

Response reference:	Representation Issue	national highways Response
9.48-12	Our Written Representation provides an update on issues previously raised and confirms our current position. We have continued to work closely with the applicant to address the issues we raised through the preparation of a Statement of Common Ground (SoCG). (Document Reference: TR010034/EXAM/XX).	
9.48-13	<p>1. Land Condition (Geology and Soils)</p> <p>We have reviewed the following sections of the Environmental Statement report:</p> <ul style="list-style-type: none"> 6.3 Environmental Statement; Chapter 9 Geology and Soils dated June 2021 6.3 Environmental Statement; Chapter 13 Road Drainage and the Water Environment dated June 2021, and 7.6 Ground Investigation Report dated June 2021. <p>The ground investigation report is informative but there is a lack critical information to enable us to fully understand the ground conditions such as borehole logs, sampling results etc.</p> <p>We also note that Arcadis have considered and used three previous ground investigations from 1995, 2004 and 2005 as well as a gap analysis from SOCOTEC in 2018. It should be noted that whilst the reports from 1995, 2004 and 2005 may be useful we would consider them out-of-date being around twenty years old now. This is especially concerning as the 2021 investigation appears to have focused entirely on information gaps rather than confirming the conditions from these much older reports – we refer to our comments of Dec 2020, which are included in table 4.1 of the Ground Investigation report.</p> <p>Therefore, as with the two environmental statement chapters, we will accept this iteration of ground investigation reporting but believe additional work will likely be needed but that it can be addressed through the recommendation for appropriate conditions through the development consent which will govern this development. We request that the applicant updates the GI report to reflect the latest ground conditions.</p> <p>The applicant is required to a submit further information to support the DCO. Further information will be required and potentially additional monitoring/sampling to be undertaken.</p> <p>We require that the Applicant should:</p> <ul style="list-style-type: none"> Follow the risk management framework provided in Guidance on Land contamination risk management (LCRM), when dealing with land affected by contamination Refer to our for the type of information that we require in order to assess risks to controlled waters from the site - the local authority can advise on risk 	<p>Following consideration of the Arcadis Ground Investigation Report (GIR) dated 2018, Atkins designed a supplementary GI to inform the design of the current Scheme and to obtain additional contamination data. Data from the Atkins 2021 ground investigation (GI) has been compiled into an addendum GIR report. The report includes a generic quantitative risk assessment and an updated conceptual site model. It is not currently available but will be submitted to the examination at deadline 6.</p> <p>In addition, please see response reference REP2-074-3 in this document below.</p> <p>The land contamination risk assessments presented in the GIR have been undertaken in general accordance with EA guidance documents and the GI was designed in general accordance with BS 10175 (and associated guidance). The land contamination risk assessments contained within the GIR report were reviewed by a Specialist in Land Condition (SiLC) and future land contamination assessments (e.g. piling risk assessment) will also be undertaken with guidance from and reviewed by a SiLC.</p>

Response reference:	Representation Issue	national highways Response
	<p>to other receptors, such as human health</p> <ul style="list-style-type: none"> Consider using the which involves the use of competent persons to ensure that land [REDACTED] contamination risks are appropriately managed Refer to the [REDACTED] pages on gov.uk for more information <p>All investigations of land potentially affected by contamination should be carried out by or under the direction of a suitably qualified competent person and in accordance with BS 10175 (2001) Code of practice for the investigation of potentially contaminated sites.</p> <p>The submissions to date do not include important details such as investigation boreholes, sampling, and chemical data. We have also identified that this information is based upon older reports from before 2005. This information may no longer accurately reflect the contemporary standard of the condition of the land. We would urge the project team to consider whether the current ground investigation adequately updates these older reports to a level that reflects current land and groundwater conditions.</p>	
9.48-14	<p>6.3 Environmental Statement - Chapter 13 - Road Drainage and the Water Environment</p> <p>The applicant will need to submit further technical information and data. This additional monitoring may be required as part of the investigation and data gathering process to support the hydrogeological risk assessment important parts of the Water Resource Act Section 32 consent we not undertaken or completed. This information is therefore missing; this makes our assessment of the wider proposals de-watering sections of the road network and the accompanying hydrogeological risk assessment very difficult to accurately assess and we may not be able to agree to the proposal without this information.</p> <p>We would recommend that the necessary information; including but not limited to a water features survey, be supplied in the first instance to the Environment Agency for its consideration.</p>	<p>The Hydrogeological Risk Assessment has been carried out and was submitted to the examination at deadline 3 as Appendix 13.2 to the Environmental Statement (REP3-025). This was based on a review of all historical ground investigation (GI) data and informed by the latest ground investigation carried out in 2021. The Hydrogeological Risk Assessment presents a detailed groundwater conceptual site model informed by these investigations. The ground investigation report for the 2021 GI will be submitted to the examination as a supporting document in due course.</p> <p>A water features survey for the Scheme was carried out in 2018 and subsequently reviewed in 2021. The receptors identified are presented in the Hydrogeological Risk Assessment.</p> <p>A recommendation from the Hydrogeological Risk Assessment is to establish a monitoring strategy for the Scheme which would be agreed with the Environment Agency. This would include for additional baseline monitoring before construction commences and monitoring during and post-construction. We anticipate that further assessment of risks to surface water quality associated with groundwater discharge may be required and would be addressed through the permit application process.</p>
9.48-15	<p>5.5 Flood Risk Assessment – Chapter 4 – Assessment of Flood Risk</p> <p>We have reviewed the FRA and require further information from the Applicant. The FRA needs to update the FRA with latest climate change allowances which were</p>	<p>As previously agreed with the EA in January 2021, the climate change guidance as set out in 'Flood risk assessments: climate change allowances', Table 1, July 2020⁹ has been used to inform the preliminary</p>

⁹ <https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances>


Response reference:	Representation Issue	national highways Response
	published in July 2021, as detailed in our letter to the Applicant on 15/11/2021 (our ref: SO/2020/120749/03-L01). The FRA should be updated to reflect the latest climate change allowances to ensure the design of the structure and proposed compensation are appropriate. We note your comment that the H95% flow figure has been assessed in relation to the bridge itself but would suggest that the latest climate change figures for the Upper Mersey catchment are considered to ensure compensatory storage is adequate.	<p>design. This is because the preliminary design of the Scheme and the associated compensatory flood storage area predate the latest Climate Change Guidance July 2021.</p> <p>As set out in previous technical correspondence associated with the modelling of the River Etherow and the flood risk management provisions the 35% Higher Central (epoc 2070-2115) was used for design with a sensitivity model run looking at the Upper end scenario of 70%.</p> <p>Since this was presented, climate change allowances were updated to include the H++ (95%) allowance. As such, the current assessment has undertaken a further sensitivity run of 95% increase in flows to examine the vulnerability of this type of development (Essential infrastructure) to future flood risk.</p> <p>We do however recognise that Climate Change guidance has changed (July 2021) since the assessment was undertaken and implementation of a flood resilient design over the lifetime of the development is important to the operator and the receptors within the environment. We will therefore look at undertaking a review of flood risk to and from the scheme based on the latest EA climate change guidance as part of Stage 5 Detail Design and an updated FRA will be provided at that stage which will support the submission for Environmental permitting. We are currently awaiting a reply from the EA on this matter which will be progressed through the SoCG between the two parties.</p>
9.48-16	6.3 Environmental Statement Chapter 13 - Road Drainage and the Water Environment Following review of the Water quality (WQ) data, we identified that the groundwater contained elevated concentrations of specific substances with an Environmental Quality Standards (EQS) including cadmium, chromium, cyanide, manganese, and total PAH, and that they were unable to demonstrate compliance with the EQS. As the proposed discharge would provide most of the flow in the stream, i.e., 60l/min discharge rate compared to 5l/min flow in the stream, there would be minimal dilution of the discharge, resulting in the stream being unsuitable for the proposed discharge. Therefore, we would recommend that alternative arrangements are sought for the disposal of the pumping test waters.	<p>Additional water quality sampling has been carried out as part of the 2021 ground investigation. Risks to water quality associated with the dewatering have been assessed based on this most recent data in the Hydrogeological Risk Assessment, ES Appendix 13.2 which was submitted to the examination at deadline 3 (REP3-025). It is anticipated that further sampling may be required and risks to surface water quality associated with discharge of abstracted groundwater would be assessed as part of the permitting process. This is discussed in the recommendations of the Hydrogeological Risk Assessment.</p> <p>During works carried out in 2021, pumping test waters were discharged to soakaway and no pumping test water was discharged to surface water courses. Recharge of pumping test waters was trialled but was not practicable as groundwater levels in the area are extremely shallow or artesian, so recharge could lead to groundwater seepage at surface.</p>
9.48-17	Statement of Common Ground (SoCG) We welcome the inclusion of a Statement of common ground and will continue to work with the applicant to address the issues highlighted above to ensure that an appropriate level of assessment is undertaken and informs the detailed design and implementation of the proposed scheme. We will also work with the Applicant to update the SoCG.	The Applicant will continue to consult the EA on the items still considered to be 'under discussion' in the draft SoCG submitted at Deadline 2 (REP2-026).
9.48-18	EA consents (Advice to Applicant) The applicant will need to apply for the relevant permits: Dewatering permit from the Environment Agency. Flood Risk Activity Permit	The Applicant will continue to consult with the EA in regard to the permits required.

6. Paul Saunders (REP2-081)

Response reference:	Representation Issue	National Highways Response
9.48-19	<p>Traffic flow not presented to public consultation</p> <p>Why were the traffic flow figures not made available for either of the public enquiries? This information must have been available as HE have used figures from 2015. Public consultations for other schemes show traffic flow figures. I made the following comment on this in my responses to the consultation in 2018 and 2020:</p> <p>Response ID ANON-GGT6-56YH-4 Submitted to Trans-Pennine Upgrade Submitted on 2018-03-24 14:35:07 27. Traffic flow figures/Peak flow figures/Traffic forecasts/Junction analysis/Journey times</p> <p>There is no mention of the traffic flow figures etc. in the documentation that has been released to the public. In previous public consultations for the bypass, the public has been shown traffic flow figures for the various roads in the area, at the consultation meetings. It is difficult to assess the merits of the proposed new road layout without these figures. Only three planning sites have been mentioned in the documentation and maps despite other large proposed residential estates both in Tameside and High Peak being known of by the local population. Surely this extra potential traffic volume must be significant.</p> <p>A document titled 'Preliminary Local Traffic Information' IS available for the A303 Public Consultation. Why is a document like this not available for the Mottram bypass consultation? We understand that this may be the subject of a 'mini enquiry' to be planned for June, but as this is the formal public enquiry response we feel this comment needs to be made now.</p> <p>Response ID ANON-C9Q5-UVNW-J Submitted to A57 Link Roads - November to December 2020 Submitted on 2020-12-16 17:07:58 17. Traffic flow figures/Peak flow figures/Traffic forecasts/Junction analysis/Journey times - A document titled 'Preliminary Local Traffic Information' was available for the A303 Public Consultation, yet this information is not available for this consultation. We understand that this information will only be available prior to the planning application (DCO) submission, this is far too late.</p>	<p>Please refer to National Highways' response RR-0880-3 to the Relevant Representations (REP1-042).</p>
9.48-20	<p>Difference in figures</p> <p>The figures published in Transport Assessment Report (TR010034/APP/7.4) are vastly different for the figures available for 2015 that are available on [redacted] . If the figures published in the document are those used to design the scheme then this design must be compromised. [refer table in full document]</p>	<p>It is acknowledged there is a difference in the Department for Transport (DfT) daily count data and the base year modelled flow. The DfT counts themselves are not used as part of the traffic model build in part because the "observed" traffic flows as stated by DfT are often extrapolated estimates from previous counts where they were not counted in that specific year. Separately commissioned traffic counts were used to develop the traffic model as part of the model calibration process. It should be noted that modelled traffic flows are based on average hourly flows by time period (AM, PM and interpeak) rather than the daily flow, hence there is scope for greater differences to develop between modelled flows and the DfT count data when factored to a full day.</p>

Response reference:	Representation Issue	National Highways Response
	In document TR010034 - 6.3 Environmental Statement para 1.2.3 it is stated “Much of this heavy traffic travels through local roads, which disrupts the lives of communities and makes it difficult and potentially unsafe for pedestrians to cross the roads. It is expected that these issues will only get worse with time if significant improvements aren’t made.”, yet the figures for 2025 for the ‘do minimum’ show very little difference from the figures in 2015 Highways England have published, how do Highways England justify that? [refer table in full document]	The Do-minimum traffic flows on several links do not significantly increase compared to the baseline traffic flows. This is because some of the road network is currently operating at or over capacity which means that where this is the case, additional traffic does not use these routes in the future due to the resultant traffic congestion and delay. It also means that some traffic is currently choosing alternative routes, including along roads that are unsuitable, to avoid traffic congestion. In the Do-minimum scenario (i.e. without the Scheme), the additional forecast traffic demand therefore results in an increasingly wide pattern of traffic displacement across the road network, often onto unsuitable roads. By reducing traffic congestion and delay on the A57, the Scheme reduces this pattern of traffic displacement onto unsuitable alternative roads.
9.48-21	How can there be a reduction on Back Moor, Roe Cross and Market Street Hollingworth with the scheme than without it? Surely the scheme would make it more attractive for vehicles travelling from Stalybridge to the M67 to go through Mottram than to use Matley Lane, indeed the figures provided by HE suggest that to be the case. It would also attract more traffic to travel over Woodhead Pass and along Market Street Hollingworth if the aim on the scheme to improve connectivity between the Manchester and Sheffield city regions is met. One might also question where the 25% increase in traffic using the M67 comes from if the scheme goes ahead. . [refer table in full document]	It is forecast that the daily traffic flows on the A6018 Roe Cross Road/Back Moor will reduce with the Scheme compared to without it. This reduction is likely to be due to traffic that uses the A6018 Roe Cross Road/Black Moor and Matley Lane to avoid traffic congestion and delay on the A57 Hyde Road and at M67 junction 4 in the Do-minimum scenario choosing to reroute via the new link road and the M67 in the Do-something scenario because of the comparative improvement in journey times via this route delivered by the Scheme. Daily traffic flows on the A628 Market Street, Hollingworth are forecast to marginally reduce with the Scheme compared to without it, but is not significant. The reason the Scheme does not attract more traffic along the A628 over the Woodhead Pass is that there is insufficient capacity at the Gun Inn junction (A628 junction with the A57) to allow traffic to use this route. This is in part due to the introduction of signal-controlled pedestrian crossings at the Gun Inn junction that use up any reserve capacity. The forecast increases in traffic on the M67 with the Scheme compared to without it is due to the improvements in journey times that the new link road provides. This causes some traffic from alternative routes across the Pennines to reroute via the A57 and M67 to take advantage of this reduced journey time compared to alternative routes.
9.48-22	Traffic ‘calming’ on Hyde Road TR010034-000299.8.2 Statement of common ground 16 January 2021 Meeting A meeting with Tameside MBC to discuss detrunking works, specifically, traffic calming, road declassification and diversion routes. Agreement to 20 mph on detrunked Hyde Road. If there are restrictions / calming on Hyde Road then even more vehicles will use Back Moor and Ashworth Lane. I understood that the policy of TMBC was only to use 20mph limits where there was a need for safety reasons. This seems to be a 20mph limit to deter vehicles from using the road.	The proposed 20mph speed limit will encourage drivers to use the new link road instead of the de-trunked section of the A57 Hyde Road. In combination with the proposed improvements to cyclist provision this will make the environment safer for cyclists and pedestrians along the de-trunked section A57.
9.48-23	Area at front of Property There has STILL been no consultation with the residents of the properties on Mottram Moor.	The Scheme proposals and the proposed changes to Mottram Moor Junction were included within the 2020 consultation. As confirmed within the Tameside MBC Statement of Common Ground (REP2-017), Tameside MBC has agreed to adopt the access road as it will be beneficial for refuse collection and routine maintenance operations, however this agreement has been made on the basis that formal parking provision is scaled back.

Response reference:	Representation Issue	National Highways Response		
	<p>It has always been said that the ‘access road’ to the properties on Mottram Moor would come under Tameside, yet the plans provided for DCO suggest that the ‘detrunking’ would only be from past the junction of Mottram Moor and Back Moor.</p> <p>The parking bays seem to have been removed from the documents that went to the public consultation.</p> <p>We now find :- in 6.3 Environmental Statement, Chapters 1-4 Introductory Chapters, Table 3-7 Changes to the Scheme design since PRA (2017) and the 2018 consultation</p> <table><tr><td>Install more off-road parking</td><td>Originally, parking bays for Mottram Moor were included in the design. Following statutory consultation and discussions with the local community they were removed from design. However, further engagement confirmed they were desired so have been added back to the design. Following consultation with Tameside MBC, the initial proposal to provide parking bays was amended to 'on street' parking, as this is considered to require less ongoing maintenance, and provided additional space for soft landscaping. <i>Environmental Benefits:</i> The design fits into the context of its surroundings and provides additional function and facilities for</td></tr></table> <p>So the views of the people who live there have been overruled by the desire for ‘less ongoing maintenance’. This makes a total mockery of any consultation, it may as well not have happened.</p> <p>There is no vehicular access to the front of our property.</p> <p>The entrance to the access road has been moved to the west nearer to the start of the left filter lane and further from the main junction.</p> <p>A new bridleway has been added with a traffic light controlled crossing almost at the point where the access road used to join the main road.</p> <p>There appear to be trees planted very close to houses and to the south blocking out light and causing potential problems to the property and services with root damage. Again NO consultation with the people who have to live here.</p>	Install more off-road parking	Originally, parking bays for Mottram Moor were included in the design. Following statutory consultation and discussions with the local community they were removed from design. However, further engagement confirmed they were desired so have been added back to the design. Following consultation with Tameside MBC, the initial proposal to provide parking bays was amended to 'on street' parking, as this is considered to require less ongoing maintenance, and provided additional space for soft landscaping. <i>Environmental Benefits:</i> The design fits into the context of its surroundings and provides additional function and facilities for	<p>Tameside MBC has also acknowledged that residential parking has been raised and the provision needs to meet the long term needs of the residents. National Highways has replaced the formal parking areas with the access road on the line of the existing A57 carriageway to discourage misuse by visitors and commuters.</p> <p>There is no existing vehicle access to the front 45 Mottram Moor due to the presence of double yellow lines which restrict waiting at any time, however the existing vehicular access to the rear of properties 45 to 57 Mottram Moor will be retained. In addition, under the scheme proposals vehicular access to the front of 53, 55 and 57 Mottram Moor will be provided.</p> <p>Current planting proposals in the vicinity of the houses are indicative only, however it is anticipated that the final proposals will be for grassland with bulbs, native hedgerow, and trees to provide visual screening. Tree planting is proposed to provide a screen to the road and would be located at a safe distance from houses. Tree species will be carefully selected to ensure they do not become over large or block light and residents will have a choice as to whether they want trees outside of their properties, or if they prefer a view of the road. The Register of Environmental Actions and Commitments (REAC) (REP1-037), which is being updated for Deadline 5, will be updated to state that planting proposals will be carefully considered so that they do not result in damage to properties or block light. This will be a commitment for the Detailed Design stage.</p>
Install more off-road parking	Originally, parking bays for Mottram Moor were included in the design. Following statutory consultation and discussions with the local community they were removed from design. However, further engagement confirmed they were desired so have been added back to the design. Following consultation with Tameside MBC, the initial proposal to provide parking bays was amended to 'on street' parking, as this is considered to require less ongoing maintenance, and provided additional space for soft landscaping. <i>Environmental Benefits:</i> The design fits into the context of its surroundings and provides additional function and facilities for			
9.48-24	<p>Visual impact of embankment from rear of our property</p> <p>There is no mention that we can find of this in the document, nor does there appear to be any mitigating measures. In Highways England’s documents the properties are described as ‘low value housing’. It would seem that the residents of the properties on the north side of Mottram Moor have not been considered. It appears as though it is more important to protect the views from Mottram Church that to consider the impact of people who live in apparently low value properties.</p>	<p>National Highways has previously discussed these matters with Mr Saunders is looking produce specific photographic images showing the proposed scheme to the rear of the Mr Saunders house. He has previously supplied images from the rear of his property to which we are looking to match the locations to produce the images.</p>		
9.48-25	<p>Noise pollution from embankment to rear of our property</p>	<p>Paragraph 11.8.29 of the noise and vibration chapter of the ES (REP3-007) states that all of the environmental noise barriers are currently designed as reflective noise barriers and are likely to have a similar</p>		

Response reference:	Representation Issue	National Highways Response
	<p>For the first time in any document from Highways England there is mention of the noise pollution to the rear of the properties on the north of Mottram Moor from the embankment.</p> <p>The mitigation measure is 2.5m high noise barriers on the embankment which is positive, but there is no description of what they are. We are assuming that they are ‘timber fencing’ like those used at the junction of the Airport Eastern link road and the A523 in Hazel Grove (see image). If this is the case then they will have a detriment impact on the visual effect from the rear of our property which could be reduced by staining the timber green.</p> 	<p>finish to a close-boarded fence construction to avoid visual impacts. The specification and material of the noise barrier would be determined during the Detailed Design of the Scheme.</p>
9.48-26	<p>Traffic Management Plan</p> <p>Paragraphs 2.6.2 and 2.7.1 both state that Mottram Moor will be reduced to only one lane eastbound. On 2nd and 3rd August 2021 the inside lane was closed at the bottom on Mottram Moor during working hours and the traffic flow was blocked back past the junction with Back Moor. If Mottram Moor is reduced to one lane eastbound during peak periods the traffic will surely jam up even further making it difficult to exit Back Moor onto Mottram Moor and causing longer delays on the A57 and M67 contrary to the stated aim 3.1.2 in the document.</p>	<p>The final TMP will detail the temporary traffic management proposals and their duration. The final TMP will be prepared prior to commencement of construction and issued to the Secretary of State for approval under Requirement 4 of the DCO. Consultation on any traffic management proposals will be held with the Local Authorities and emergency services to minimise disruption caused from any interventions.</p>

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